

Copeland™ condensing unit

Selection guide for commercial refrigeration



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C-Line Copelametic™ air-cooled condensing units	2011DS-4_C-Line	11/15
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This page will be updated each time a module is revised. We recommend it be included when ordering updated modules.

Copeland™ C-Line

Copelametic™ air-cooled condensing units



Product Information

Horsepower:	1 – 10
Temperature Applications:	Low/Medium/High
Refrigerants:	R-12, R-134a, R-404A, R-22, R-407C
Installation Applications:	A variety of applications including walk-ins

Copelametic™ air-cooled condensing units

Features	Benefits
Copeland™ Semi-hermetic Compressor Copeland Discus™ Compressor with Unique ‘Discus’ Valve Design	Reliability High Energy Efficiency
Modular Components	Replacement Serviceability
Positive Displacement Oil Pump	Application Flexibility
Low Profile	More Cooler Space, Fewer Stockouts, Application Flexibility
Low Re-expansion Volumes	Decrease Energy Costs, Greater Capacity
Lower Operating Speeds	Reduces Operating Component Stress Low Sound Lower Maintenance Costs

Resources and Support

EmersonClimate.com

- Online Product Information and Technical Data
 - Application Engineering Bulletins
 - Instruction Sheets
 - Marketing Brochures
- Where to Buy

Application Engineering Bulletins

- 4-1094 Identification of Port Locations in Heads of Copelametic™ Compressors
- 4-1135 Cooling Requirement for Copelametic Compressors
- 4-1166 Copeland™ Oil Pumps
- 4-1283 Discus™ R-22 Envelope Extended
- 4-1287 Copeland Discus™ Demand Cooling
- 4-1336 Discus™ Optimized Medium Temperature Models Bulletin
- 8-1275 Sentronic and Sentronic+ Electronic Oil Pressure Control
- 8-1376 Electronic Unit Controller
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter-Driers
- 17-1234 Low Ambient Compressor Operation
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

R-12 Med/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	50	55
90° Ambient														
CBAM-0103	KAK1-0100		5150	5780	6450	7170	7940	8750						
CBAM-0153	KAT*-0150	6540	7430	8420	9430	10500	11700	13000						
C7AB-0200	EAV*-0200		8380	9730	11100	12400	13800	15200	16600	18100	19700	21300	23000	24900
C7AB-0300	LAH1-0310		14700	16500	18400	20500	22700	25000	27500	30200	32900	35800		
CFDP-0300	2DF3F16KE	16900	19200	21800	24400	27200	30100	33200	36500	39900	43500	47300		
100° Ambient														
CBAM-0103	KAK1-0100		4700	5280	5890	6560	7260	8020						
CBAM-0153	KAT*-0150	5950	6770	7700	8650	9670								
C7AB-0200	EAV*-0200		7860	9110	10300	11600	12800	14100	15500	16800	18300	19800	21400	
C7AB-0300	LAH1-0310		13600	15300	17000	18900	21000	23200	25500	27900	30400	33100		
CFDP-0300	2DF3F16KE	15800	17900	20300	22800	25300	28100	31000	34000	37200	40600	44100		
110° Ambient														
CBAM-0103	KAK1-0100		4250	4780	5340	5940	6590	7280						
CBAM-0153	KAT*-0150	5350	6110											
C7AB-0200	EAV*-0200		7370	8510	9620	10700	11900	13000	14200	15500				
C7AB-0300	LAH1-0310		12500	14000	15600	17300	19200	21200	23300	25500	27800	30300		
CFDP-0300	2DF3F16KE	14600	16600	18900	21200	23600	26100	28800						

Capacities rated at 65°F return gas, 5°F subcooling

R-134a

Copeland air-cooled condensing units

Unit Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient																
CTAH-0100	KAJA-011E						4620	5210	5840	6510	7230	7990	8790	9630	10500	11400
CTAH-0150	KAL*-01*E						6220	7050	7930	8870	9880	10940	12050	13210	14410	15650
CNAG-0200	EAV*-021E						8120	9380	10700	12000	13500	15000	16600	18300	20100	22000
CTAM-0300	LAHA-031E					11300	13300	15400	17700	20000	22500	25200				
CFDP-0300	2DF3F16KE					16600	18900	21600	24300	27200	30300	33600	37000	40700	44700	48800
CFDP-0400	2DA3F23KE					20900	23900	27200	30700	34500	38500	42700	47100	51900	56800	62100
CFDP-0500	3DA3F28KE					29700	33900	38400	43200	48200	53500	59200	65200	71500	78100	
CFDP-0550	3DB3F33KE					34100	38900	44000	49300	55000	61000	67300	74000	81000	88300	
CFDP-0600	3DF3F40KE	12600	18600	24500	30400	36400	42500	48800	55400	62300	69600	77400	85700	94600	104100	114300
CFDP-0700	3DS3F46KE	14800	21100	27300	33500	39800	46400	53200	60300	67800	75800	84300	93400	103100	113500	124600
100° Ambient																
CTAH-0100	KAJA-011E						4230	4780	5350	5970	6630	7330	8070	8840	9650	10500
CTAH-0150	KAL*-01*E						5690	6460	7280	8170	9100	10090	11130	12210	13340	14500
CNAG-0200	EAV*-021E						7350	8530	9730	11000	12300	13800	15300	16800	18500	20300
CTAM-0300	LAHA-031E					10200	12100	14000	16100	18300	20600	23100				
CFDP-0300	2DF3F16KE					15200	17400	19900	22500	25200	28100	31100	34400	37900	41600	45500
CFDP-0400	2DA3F23KE					19200	22000	25100	28400	31900	35600	39500	43700	48200	52800	57800
CFDP-0500	3DA3F28KE					27400	31400	35600	40100	44900	49900	55200	60800	66700	72900	
CFDP-0550	3DB3F33KE					31300	35900	40800	45800	51200	56800	62700	68900	75500	82300	
CFDP-0600	3DF3F40KE	10100	16000	21800	27500	33200	39100	45000	51200	57800	64700	72000	79800	88100	97100	106700
CFDP-0700	3DS3F46KE	12200	18400	24400	30400	36500	42700	49200	55900	63000	70500	78500	87000	96100	105900	116400
110° Ambient																
CTAH-0100	KAJA-011E						3840	4340	4860	5420	6030	6660	7340	8050	8790	9550
CTAH-0150	KAL*-01*E						5130	5850	6610	7430	8300	9220	10180	11190	12250	
CNAG-0200	EAV*-021E						6590	7680	8790	9970	11200	12500	13900			
CTAM-0300	LAHA-031E					9070	10800	12600	14600	16600	18700	21000				
CFDP-0300	2DF3F16KE					13800	15900	18100	20500	23100	25800	28700				
CFDP-0400	2DA3F23KE					17400	20100	23000	26000	29300	32800	36500	40400			
CFDP-0500	3DA3F28KE					24900	28800	32800	37100	41600	46300	51300	56500	62100		
CFDP-0550	3DB3F33KE					28400	32900	37500	42300	47300	52600	58100				
CFDP-0600	3DF3F40KE	7420	13300	19000	24600	30100	35700	41400	47300	53400	59900	66800	74200	82000	90500	99600
CFDP-0700	3DS3F46KE	9550	15600	21500	27400	33200	39200	45300	51600	58300	65300	72900	80900	89500	98700	108600

Capacities rated at 65°F return gas, 5°F subcooling

Copelametic™ air-cooled condensing units

Capacity Data

R-22 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
CNAG-0100	KAJ*-01*E	2210	2660	3140	3670	4250	4870	5540	6280	7060
CLAL-0152	EADB-0200	3110	3890	4730	5640	6630	7690	8840	10100	11400
C8AL-0151	EADA-020E	3410	4180	5020	5930	6910	7960	9100	10300	11600
C8AL-0200	EAVA-021E	4120	4730	5580	6630	7850	9180	10600	12100	13500
CNAG-0200	EAV*-021E	4110	4720	5570	6620	7820	9140	10600	12000	13400
CLAL-0300	LAH*-031*	5590	6960	8570	10400	12400	14600	16900	19400	21900
100° Ambient										
CNAG-0100	KAJ*-01*E	1970	2400	2860	3360	3890	4470	5090	5780	6490
CLAL-0152	EADB-0200	2670	3390	4170	5010	5920	6910	7980	9140	10400
C8AL-0151	EADA-020E	3000	3710	4480	5320	6220	7190	8250	9380	10600
CNAG-0200	EAVA-021E	3720	4260	5030	5980	7080	8280	9560	10900	12200
C8AL-0200	EAVB-021E	3730	4270	5040	6000	7110	8320	9610	11000	12300
CLAL-0300	LAH*-031*	5060	6330	7820	9500	11400	13400	15500	17800	20100
110° Ambient										
CNAG-0100	KAJ*-01*E	1720	2130	2560	3030	3520	4050	4630		
CLAL-0152	EADB-0200	2220	2890	3610	4390	5250	6180	7190	8290	
C8AL-0151	EADA-020E	2590	3240	3940	4710	5540	6440	7420	8480	
CNAG-0200	EAVA-021E	3200	3670	4350	5200	6190	7270	8420		
C8AL-0200	EAVB-021E	3200	3680	4370	5230	6220	7310	8470		
CLAL-0300	LAH*-031*	4330	5520	6900	8450	10200	12000	14000	16100	18200

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Med Temp/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient												
C8AJ-0100	KAR*-01*E		5070	5730	6440	7220	8040	8910	9830	10800	11800	12800
C3AH-0100	KAR*-0100		5090	5760	6480	7260	8100	8980	9910	10900	11900	12900
C3AM-0100	KAM1-0100		5450	6240	7060	7930	8840	9810				
C3AM-0101	KAM*-0100		5710	6540	7410	8330	9300	10300				
C3AH-0150	KAG*-0150		6130	7040	7990	8990	10100	11200	12400	13600	14900	16300
C3AH-0203	ERA*-0200		5460	6940	8490	10100	11800	13600	15400	17200	19100	21000
C3AH-0204	KAKA-0200		7860	9280	10700	12100	13500	15000	16500	18100	19800	21600
C8AJ-0200	KAK*-02*E		7860	9280	10700	12100	13500	15000	16500	18100	19800	21600
C3AM-0203	KAKA-0200	6450	7890	9320	10730	12140	13590	15070				
C3AM-0202	ERC2-0200	7980	9100	10300	11700	13200	14800	16500				
C8AM-0202	ERCA-02*E	8010	9150	10400	11800	13300	15000	16700				
C3AH-0303	ERF*-03*0		14750	16780	18950	21300	23800	26470	29300	32290	35440	38730
C8AJ-0300	ERFA-031E		14750	16780	18950	21300	23800	26470	29300	32290	35440	38730
CFDP-0451	2DC3R53KE	19400	22600	26000	29600	33400	37400	41700	46200	50900	55900	61100
CFDP-0501	2DA3F23KE	22700	26300	30100	34100	38300	42800	47400	52300	57500	62900	68500
CFDP-0751	2DA3R89KE	32800	38300	44000	49800	55900	62200	68700	75400	82400	89600	97100
CFDP-1001	3DB3R12ME	55200	62000	69400	77200	85600	94500	104000	114100	124800	136000	147900

Capacities rated at 65°F return gas, 5°F subcooling

Copelametic™ air-cooled condensing units

Capacity Data

R-22 Med Temp/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45
100° Ambient												
C8AJ-0100	KAR*-01*E		4610	5230	5900	6620	7400	8210	9070	9960	10900	11800
C3AH-0100	KAR*-0100		4630	5260	5940	6670	7450	8280	9150	10100	11000	12000
C3AM-0100	KAM1-0100		4960	5690	6450	7260	8120	9040				
C3AM-0101	KAM*-0100		5210	5970	6780	7630	8540	9510				
C3AH-0150	KAG*-0150		5640	6490	7380	8310	9310	10400	11500	12700	13900	15200
C3AH-0203	ERA*-0200		4590	5920	7300	8770	10300	11900	13500	15200	16900	18700
C3AH-0204	KAKA-0200		7160	8540	9900	11200	12600	14000	15400	16900	18500	20200
C8AJ-0200	KAK*-02*E		7160	8540	9900	11200	12600	14000	15400	16900	18500	20200
C3AM-0203	KAKA-0200	5760	7180	8580	9940	11300	12660	14070				
C3AM-0202	ERC2-0200	7250	8260	9400	10600	12000	13500	15100				
C8AM-0202	ERCA-02*E	7290	8350	9550	10800	12200	13700	15300				
C3AH-0303	ERF*-03*0		13470	15340	17350	19520	21830	24300	26910	29680	32600	35640
C8AJ-0300	ERFA-031E		13470	15340	17350	19520	21830	24300	26910	29680	32600	35640
CFDP-0451	2DC3R53KE	17200	20300	23600	27000	30600	34400	38500	42700	47200	51900	56900
CFDP-0501	2DA3F23KE	20400	23800	27500	31300	35300	39500	43900	48600	53400	58500	63800
CFDP-0751	2DA3R89KE	29100	34500	40100	45800	51700	57700	63900	70200	76800	83600	90500
CFDP-1001	3DB3R12ME	51400	57900	64900	72300	80200	88700	97600	107100	117200	127800	139000
110° Ambient												
C8AJ-0100	KAR*-01*E		4150	4740	5370	6050	6780	7540				
C3AH-0100	KAR*-0100		4180	4770	5410	6090	6830	7610	8420			
C3AM-0100	KAM1-0100		4500	5190	5900	6660	7480	8350				
C3AM-0101	KAM*-0100		4730	5430	6180	6980	7830	8750				
C3AH-0150	KAG*-0150		5170	5960	6780	7650	8580	9560	10600			
C3AH-0203	ERA*-0200		3680	4840	6060	7360	8720	10100	11600	13100		
C3AH-0204	KAKA-0200		6440	7800	9100	10400	11700	13000	14300			
C8AJ-0200	KAK*-02*E		6440	7800	9100	10400	11700	13000	14300			
C3AM-0203	KAKA-0200	5060	6470	7830	9140	10440	11730	13040				
C3AM-0202	ERC2-0200	6510	7420	8460	9580	10800	12200	13800				
C8AM-0202	ERCA-02*E	6560	7560	8670	9870	11200	12500	14000				
C3AH-0303	ERF*-03*0		12190	13910	15740	17720	19840	22090	24490	27020	29700	32500
C8AJ-0300	ERFA-031E		12190	13910	15740	17720	19840	22090	24490	27020	29700	32500
CFDP-0451	2DC3R53KE		18000	21200	24500	27900	31600	35400	39400	43600		
CFDP-0501	2DA3F23KE			25000	28600	32400	36400	40500	44900			
CFDP-0751	2DA3R89KE			36100	41600	47300	53000	58900	64900			
CFDP-1001	3DB3R12ME		53700	60300	67300	74800	82700	91200	100100	109500	119500	130100

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Ultra Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-60	-55	-50	-45	-40	-35	-30	-25	-20
90° Ambient										
CJAU-0503	9TK2-050E	7410	9020	10800	12600	14600	16500	18500	20400	
100° Ambient										
CJAU-0503	9TK2-050E	7040	8590	10200	12000	13800	15600	17300	19000	
110° Ambient										
CJAU-0503	9TK2-050E	6630	8090	9630	11200	12800	14400	16000	17400	

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
CJAL-0100	KAJ*-01*E	2430	2900	3410	3960	4550	5190	5870	6590	7310
CNAG-0100	KAJ*-01*E	2430	2900	3410	3960	4550	5190	5870	6590	7310
CJAL-0150	KAL*-01*E	3580	4270	5000	5790	6620	7510	8450	9450	10400
CJAL-0152	KALA-016E	3470	4300	5120	5940	6790	7670	8600	9590	10600
CPAK-0150	KAL*-01*E	3690	4390	5140	5960	6830	7760	8750	9810	10900
CJAL-0151	EADB-021E	3830	4540	5330	6220	7190	8230	9370	10600	11800
C8AL-0151	EADA-020E	3850	4690	5570	6500	7490	8560	9720	11000	12300
C8AL-0200	EAVA-021E	4180	5020	6010	7120	8340	9630	11000	12400	13800
CJAL-0200	EAV*-021E	4180	5020	6010	7120	8340	9630	11000	12410	13750
CNAG-0200	EAV*-021E	4180	5020	6010	7120	8340	9630	11000	12410	13750
CJAL-0300	LAH*-032E	6790	8510	10420	12530	14820	17270	19880	22630	25370
CFDP-0300	2DF3F16KE	10800	12800	14900	17300	19800	22500	25300	28300	31200
CFDP-0350	2DL3F20KE	12800	15100	17600	20200	23100	26100	29200	32600	35900
CFDP-0400	2DA3F23KE	15000	17700	20500	23400	26600	29900	33400	37100	40800
CFDP-0500	3DA3F28KE	19000	22000	25300	29000	32900	37100	41600	46300	51200
CFDP-0550	3DB3F33KE	22200	25700	29500	33500	37800	42300	47100	52100	57300
CFDP-0600	3DF3F40KE	27800	32400	37400	42900	48800	55200	62100	69500	77200
CFDP-0700	3DS3F46KE	32100	37100	42600	48400	54600	61300	68300	75700	83500

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
100° Ambient										
CJAL-0100	KAJ*-01*E	2070	2490	2950	3450	3990	4570	5190	5850	6510
CNAG-0100	KAJ*-01*E	2070	2490	2950	3450	3990	4570	5190	5850	6510
CJAL-0150	KAL*-01*E	3050	3700	4400	5130	5910	6730	7600	8510	9390
CJAL-0152	KALA-016E	2820	3640	4430	5220	6020	6830	7680	8570	9470
CPAK-0150	KAL*-01*E	3150	3820	4540	5300	6120	6970	7890	8850	9810
CJAL-0151	EADB-021E	3250	3860	4560	5350	6230	7180	8230	9350	10500
C8AL-0151	EADA-020E	3190	4010	4840	5700	6620	7600	8660	9800	11000
C8AL-0200	EAVA-021E	3620	4370	5250	6260	7360	8540	9780	11100	12300
CJAL-0200	EAV*-021E	3620	4370	5250	6260	7360	8540	9780	11070	12290
CNAG-0200	EAV*-021E	3620	4370	5250	6260	7360	8540	9780	11070	12290
CJAL-0300	LAH*-032E	5550	7090	8830	10760	12870	15140	17570	20140	22710
CFDP-0300	2DF3F16KE	9160	11100	13200	15400	17800	20300	22900	25600	28200
CFDP-0350	2DL3F20KE	11200	13300	15700	18100	20800	23500	26400	29500	32600
CFDP-0400	2DA3F23KE	13200	15700	18400	21100	24100	27100	30300	33700	37200
CFDP-0500	3DA3F28KE	16900	19800	23000	26400	30100	34000	38100	42400	46800
CFDP-0550	3DB3F33KE	19800	23300	26900	30700	34700	38900	43300	47800	52500
CFDP-0600	3DF3F40KE	25100	29500	34200	39400	44900	50800	57200	64000	71100
CFDP-0700	3DS3F46KE	29300	34100	39200	44600	50400	56600	63000	69800	76800
110° Ambient										
CJAL-0100	KAJ*-01*E	1720	2090	2500	2950	3430	3940	4500	5100	
CNAG-0100	KAJ*-01*E	1720	2090	2500	2950	3430	3940	4500	5100	
CJAL-0150	KAL*-01*E	2440	3070	3730	4420	5140	5890	6680		
CJAL-0152	KALA-016E	2060	2890	3680	4440	5190	5950	6730	7540	8340
CPAK-0150	KAL*-01*E	2550	3200	3870	4590	5340	6130	6970	7850	8710
CJAL-0151	EADB-021E	2890	3390	3970	4650	5420	6280	7220		
C8AL-0151	EADA-020E	2530	3310	4090	4890	5720	6610	7570	8600	
C8AL-0200	EAVA-021E	3240	3870	4630	5510	6490	7540	8650		
CJAL-0200	EAV*-021E	3240	3870	4630	5510	6490	7540	8650		
CNAG-0200	EAV*-021E	3240	3870	4630	5510	6490	7540	8650		
CJAL-0300	LAH*-032E	4180	5550	7120	8870	10810	12900	15150	17550	19930
CFDP-0300	2DF3F16KE	7380	9330	11400	13500	15700	18000	20300		
CFDP-0350	2DL3F20KE	9570	11600	13800	16000	18500	21000	23600		
CFDP-0400	2DA3F23KE	11400	13800	16300	18900	21600	24400	27300		
CFDP-0500	3DA3F28KE	14400	17200	20300	23500	27000	30600	34400	38300	
CFDP-0550	3DB3F33KE	17200	20700	24200	27800	31600	35500			
CFDP-0600	3DF3F40KE	22300	26500	31000	35900	41000	46500	52400	58600	65000
CFDP-0700	3DS3F46KE	25900	30400	35300	40400	45800	51400	57400	63500	69900

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Med Temp/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient												
C8AJ-0100	KAR*-01*E	4870	5420	6110	6800	7520	8230	8900				
CJAM-0100	KAR*-010E	4900	5460	6150	6860	7590	8300	8990				
CJAM-0150	KAG*-010E	5730	6440	7240	8030	8890	9820	10850				
C8AJ-0200	KAK*-02*E	8170	9240	10300	11300	12400	13700	15100				
C8AM-0202	ERCA-02*E	9350	10570	11890	13160	14490	15900	17420				
CJAM-0300	ERFA-031E	14450	16260	18370	20520	22810	25240	27800				
C8AJ-0300	ERFA-031E	14800	16600	18800	20900	23200	25700	28300				
CFDP-0451	2DC3R53KE	22200	24900	28100	31500	35000	38800	42700	46800	51000	55400	59800
CFDP-0501	2DA3F23KE	26300	29400	32800	36400	40300	44300	48400	52700	57000	61400	65800
CFDP-0751	2DA3R89KE	39600	43900	48500	53400	58500	63800	69300	75000	81000	87100	93400
CFDP-1001		58100	64700	71900	79400	87300	95600	104300	113500	123000	133000	143400
100° Ambient												
C8AJ-0100	KAR*-01*E	4360	4850	5480	6120	6770	7430	8040				
CJAM-0100	KAR*-010E	4390	4880	5520	6170	6840	7500	8130				
CJAM-0150	KAG*-010E	5080	5730	6460	7180	7960	8810	9760				
C8AJ-0200	KAK*-02*E	7400	8390	9370	10300	11300	12400	13600				
C8AM-0202	ERCA-02*E	8270	9370	10590	11740	12950	14230	15630				
CJAM-0300	ERFA-031E	12930	14580	16510	18460	20550	22780	25130				
C8AJ-0300	ERFA-031E	13100	14900	16800	18800	21000	23200	25600				
CFDP-0451	2DC3R53KE	20000	22500	25400	28400	31700	35100	38600	42300	46200	50200	54200
CFDP-0501	2DA3F23KE	23900	26600	29700	32900	36300	39900	43600	47400	51300	55200	59200
CFDP-0751	2DA3R89KE	35900	39900	44200	48600	53200	58000	63000	68100	73500	79100	84800
CFDP-1001	3DB3R12ME	53400	59500	66000	72900	80000	87500	95300	103500	112100	121100	130400
110° Ambient												
C8AJ-0100	KAR*-01*E	3830	4250	4820	5400	6000	6590	7150				
CJAM-0100	KAR*-010E	3850	4280	4860	5450	6060	6660	7230				
CJAM-0150	KAG*-010E	4430	5010	5680	6330	7030	7800	8660				
C8AJ-0200	KAK*-02*E	6620	7510	8390	9190	10000	11000	12200				
C8AM-0202	ERCA-02*E	7190	8190	9290	10320	11410	12570	13850				
CJAM-0300	ERFA-031E	11410	12880	14620	16380	18270	20280	22410				
C8AJ-0300	ERFA-031E	11500	13100	14900	16700	18600	20700	22900				
CFDP-0451	2DC3R53KE	17900	20100	22800	25500	28400	31400	34600	38000	41500	45100	48800
CFDP-0501	2DA3F23KE	21500	23900	26600	29400	32400	35600	38800	42200			
CFDP-0751	2DA3R89KE	32200	35900	39800	43900	48000	52400	56800	61500			
CFDP-1001	3DB3R12ME	48600	54200	60200	66300	72700	79400	86400	93700	101400	109300	117700

Capacities rated at 65°F return gas, 5°F subcooling

R-407C Med Temp/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient												
CFDP-0451	2DC3R53KE	18400	20700	23500	26600	30100	34000	38300	43000	48200	53700	59600
CFDP-0501	2DA3F23KE	22600	25300	28400	31900	35800	40200	45000	50200	55900	62000	68500
CFDP-0751	2DA3R89KE	31000	35100	39800	44900	50600	56700	63400	70500	78200	86500	95200
CFDP-1001	3DB3R12ME	51000	57600	64800	72600	80900	89900	99300	109300	119900	130800	142300
100° Ambient												
CFDP-0451	2DC3R53KE		19000	21600	24500	27800	31500	35600	40100	45000	50300	56100
CFDP-0501	2DA3F23KE	21100	23400	26200	29500	33200	37300	41800	46900	52300	58200	
CFDP-0751	2DA3R89KE		32300	36700	41600	47000	52800	59200	66100	73500	81400	
CFDP-1001	3DB3R12ME	45900	52600	59800	67300	75400	83900	92800	102200	111900	122100	132600
110° Ambient												
CFDP-0451	2DC3R53KE			19900	22600	25700	29100	33000	37400			
CFDP-0501	2DA3F23KE			24400	27300	30800	34700	39000	43800			
CFDP-0751	2DA3R89KE			33800	38400	43600	49200	55300				
CFDP-1001	3DB3R12ME		46300	53500	61100	68900	77100	85600	94500	103600	113000	122700

Capacities rated at 65°F return gas, 5°F subcooling

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Models	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection
C3AH-0076-CAV	001	KAN2-007E-CAV	33.28	20	19.08	3/8 S	5/8 S
C3AH-0076-TAC	001	KAN1-0075-TAC	33.28	20	19.1	3/8 S	5/8 S
C3AH-0150-TAC	001	KAGA-0150-TAC	33.38	20	19.06	3/8 S	7/8 S
C3AH-0204-TAD	001	KAKA-0200-TAD	33.38	20	19.06	1/2 S	7/8 S
C3AH-0303-TAD	020	ERF1-0310-TAD	38.38	30	29.09	1/2 S	1-1/8 S
C3AM-0076-CAV	001	KAE2-007E-CAV	33.28	20	19.08	3/8 S	5/8 S
C3AM-0076-TAC	001	KAEI-0075-TAC	33.28	20	19.08	3/8 S	5/8 S
C3AM-0101-TAC	001	KAM1-0100-TAC	33.38	20	19.06	3/8 S	5/8 S
C3AM-0202-CAB	001	ERC2-0200-CAB	33.38	20	19.06	1/2 S	7/8 S
C7AB-0076-TAC	001	KAMI-0075-TAC	33.28	20	19.08	3/8 S	5/8 S
C7AB-0200-TAD	001	EAV1-0200-TAD	33.38	20	19.06	1/2 S	7/8 S
C7AB-0300-CAB	001	LAH1-0310-CAB	38.38	30	29.09	1/2 S	1-1/8 S
C7AB-0300-TAC	001	LAH1-0310-TAC	38.38	30	29.09	1/2 S	1-1/8 S
C7AB-0300-TAD	001	LAH1-0310-TAD	38.38	30	29.09	1/2 S	1-1/8 S
C8AJ-0076-CAV	001	KANB-007E-CAV	33.3	20	19.1	3/8 S	5/8 S
C8AJ-0076-TAC	001	KANA-007E-TAC	33.28	20	19.1	3/8 S	5/8 S
C8AJ-0100-CAV	001	KARB-010E-CAV	33.38	20	19.06	3/8 S	5/8 S
C8AJ-0100-TAC	001	KARA-010E-TAC	33.38	20	19.06	3/8 S	5/8 S
C8AJ-0100-TAD	001	KARA-011E-TAD	33.38	20	19.06	3/8 S	5/8 S
C8AJ-0200-CAV	001	KAKB-021E-CAV	33.38	20	19.06	1/2 S	7/8 S
C8AJ-0200-TAC	001	KAKA-020E-TAC	33.38	20	19.06	3/8 S	7/8 S
C8AJ-0300-TAC	001	ERFA-031E-TAC	38.32	30	29.12	1/2 S	1-1/8 S
C8AJ-0300-TAD	001	ERFA-031E-TAD	38.32	30	29.12	1/2 S	1-1/8 S
C8AL-0076-TAC	001	KAMA-007E-TAC	33.28	20	19.08	3/8 S	5/8 S
C8AL-0151-TAC	001	EADA-020E-TAC	33.38	20	19.06	3/8 S	7/8 S
C8AL-0200-TAD	001	EAVA-021E-TAD	33.38	20	19.06	1/2 S	7/8 S
C8AM-0202-TAC	001	ERCA-021E-TAC	33.29	20	19.08	1/2 S	7/8 S
C8AM-0202-TAD	001	ERCA-020E-TAD	33.38	20	19.06	1/2 S	7/8 S
CBAM-0103-TAC	001	KAK1-0100-TAC	33.38	20	19.06	3/8 S	5/8 S
CBAM-0153-TAC	001	KATA-0150-TAC	33.38	20	19.06	3/8 S	7/8 S
CFAP-0151-CAV	072	KALB-015E-CAV	33.58	20	19.08	3/8 S	7/8 S
CFAP-0200-CAV	001	EAVB-021E-CAV	33.38	20	19.08	1/2 S	7/8 S
CFDP-0300-CFB	001	2DF3F16KE-CFB	38.38	30	29.09	1/2 S	1-3/8 S
CFDP-0300-TFC	001	2DF3F16KE-TFC	38.4	30	29.1	1/2 S	1-3/8 S
CFDP-0300-TFD	001	2DF3F16KE-TFD	38.4	30	29.1	1/2 S	1-3/8 S
CFDP-0300-TFE	001	2DF3F16KE-TFE	38.4	30	29.1	1/2 S	1-3/8 S
CFDP-0350-TFC	001	2DL3F20KE-TFC	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0350-TFD	001	2DL3F20KE-TFD	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0350-TFE	001	2DL3F20KE-TFE	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0400-TFC	001	2DA3F23KE-TFC	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0400-TFD	001	2DA3F23KE-TFD	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0400-TFE	001	2DA3F23KE-TFE	38.38	30	29.09	5/8 S	1-3/8 S

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Model	Receiver Capacity* (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
C3AH-0076-CAV			24.6			10.5	15	208
C3AH-0076-TAC			24.6			7.3	15	208
C3AH-0150-TAC			24.6			9.8	15	219
C3AH-0204-TAD			24.6			5.4	15	300
C3AH-0303-TAD			63			10.4	15	415
C3AM-0076-CAV			24.6			6	15	208
C3AM-0076-TAC			24.6			7.2	15	208
C3AM-0101-TAC			24.6			8.5	15	213
C3AM-0202-CAB			24.6			15.4	20	270
C7AB-0076-TAC	27.2					6.3	15	208
C7AB-0200-TAD	27.2					6.2	15	280
C7AB-0300-CAB	69.8					23.3	30	460
C7AB-0300-TAC	69.8					17.8	20	429
C7AB-0300-TAD	69.8					9.4	15	460
C8AJ-0076-CAV			24.6	21.2		10.5	15	208
C8AJ-0076-TAC			24.6	21.2		7.3	15	208
C8AJ-0100-CAV			24.6	21.2		12.2	15	209
C8AJ-0100-TAC			24.6	21.2		8.3	15	202
C8AJ-0100-TAD			24.6	21.2		4.1	15	209
C8AJ-0200-CAV			24.6	21.2		16.2	20	209
C8AJ-0200-TAC			24.6	21.2		11.4	15	212
C8AJ-0300-TAC			63	54.8		19.9	25	388
C8AJ-0300-TAD			63	54.8		9.7	15	440
C8AL-0076-TAC			24.6	21.2		6.9	15	208
C8AL-0151-TAC			24.6	21.2		10.3	15	282
C8AL-0200-TAD			24.6	21.2		6.1	15	207
C8AM-0202-TAC			24.6	21.2		13.9	15	282
C8AM-0202-TAD			24.6	21.2		6.0	15	297
CBAM-0103-TAC	27.2					7.0	15	186
CBAM-0153-TAC	27.2					9.2	15	192
CFAP-0151-CAV	27.2	25	24.6	21.2	23.4	15.3	20	280
CFAP-0200-CAV	27.2	25	24.6	21.2	23.4	20.2	30	307
CFDP-0300-CFB	69.8	64	63	54.8	60	36.7	50	527
CFDP-0300-TFC	69.8	64	63	54.8	60	25.4	35	522
CFDP-0300-TFD	69.8	64	63	54.8	60	12.5	15	513
CFDP-0300-TFE	69.8	64	63	54.8	60	10.3	15	511
CFDP-0350-TFC	69.8	64	63	54.8	60	37.3	50	310
CFDP-0350-TFD	69.8	64	63	54.8	60	15.2	20	534
CFDP-0350-TFE	69.8	64	63	54.8	60	11.5	15	534
CFDP-0400-TFC	69.8	64	63	54.8	60	40.4	60	550
CFDP-0400-TFD	69.8	64	63	54.8	60	15.2	20	528
CFDP-0400-TFE	69.8	64	63	54.8	60	13.3	20	533

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Models	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection
CFDP-0451-TFC	001	2DC3R53KE-TFC	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0451-TFD	001	2DA3F23KE-TFD	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0500-TFC	001	3DA3F28KE-TFC	44.88	36	30.73	5/8 S	1-3/8 S
CFDP-0500-TFD	001	3DA3F28KE-TFD	44.88	36	30.73	5/8 S	1-3/8 S
CFDP-0501-TFC	001	2DA3F23KE-TFC	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0501-TFD	001	2DA3F23KE-TFD	38.38	30	29.09	5/8 S	1-3/8 S
CFDP-0550-TFC	001	3DB3F33KE-TFC	44.88	36	30.73	5/8 S	1-3/8 S
CFDP-0550-TFD	001	3DB3F33KE-TFD	44.88	36	30.73	5/8 S	1-3/8 S
CFDP-0550-TFE	001	3DB3F33KE-TFE	44.88	36	30.73	5/8 S	1-3/8 S
CFDP-0600-TFC	001	3DF3F40KE-TFC	66.9	39.13	36.26	7/8 S	1-3/8 S
CFDP-0600-TFD	001	3DF3F40KE-TFD	66	39.11	36.26	7/8 S	1-3/8 S
CFDP-0700-TFC	001	3DS3F46KE-TFC	66.9	39.13	36.26	7/8 S	1-3/8 S
CFDP-0700-TFD	001	3DS3F46KE-TFD	66	39.11	36.26	7/8 S	1-3/8 S
CFDP-0751-TFC	001	2DA3R89KE-TFC	44.88	36	31	5/8 S	1-3/8 S
CFDP-1001-TFC	001	3DB3R12ME-TFC	66.9	39.13	36.26	7/8 S	1-3/8 S
CJAL-0100-TAD	001	KAJA-011E-TAD	33.38	20	19.06	3/8 S	5/8 S
CJAL-0150-CAV	072	KALB-015E-CAV	33.58	20	19.06	3/8 S	7/8 S
CJAL-0151-CAB	072	EADB-021E-CAB	33.58	19.05	20	3/8 S	7/8 S
CJAL-0152-TAD	001	KALA-016E-TAD	33.38	20	19.06	3/8 S	7/8 S
CJAL-0200-TAE	001	EAVA-021E-TAE	33.38	20	19.06	1/2 S	7/8 S
CJAL-0300-CAB	001	LAHB-032E-CAB	38.38	30	29.09	1/2 S	1-1/8 S
CJAL-0300-TAC	001	LAHA-032E-TAC	38.31	30	29.12	1/2 S	1-1/8 S
CJAL-0300-TAD	001	LAHA-032E-TAD	38.31	30	29.12	1/2 S	1-1/8 S
CJAL-0300-TAE	001	LAHA-032E-TAE	38.32	30	29.12	1/2 S	1-1/8 S
CJAM-0076-CAV	001	KANB-007E-CAV	33.28	20	19.08	3/8 S	5/8 S
CJAU-0503-TFC	001	9TK2-050E-TFC	46.22	37.57	31.04	5/8 S	7/8 S
CLAL-0152-CAB	001	EADB-0200-CAB	33.38	20	19.06	1/2 S	7/8 S
CLAL-0300-TAC	001	LAHA-0310-TAC	38.38	30	29.09	1/2 S	1-1/8 S
CLAL-0300-TAD	001	LAHA-0310-TAD	38.38	30	29.09	1/2 S	1-1/8 S
CNAG-0076-CAV	001	KAMB-007E-CAV	33.3	20	19.1	3/8 S	5/8 S
CNAG-0100-CAV	001	KAJB-010E-CAV	33.38	20	19.06	3/8 S	5/8 S
CNAG-0100-TAC	001	KAJA-011E-TAC	33.38	20	19.06	3/8 S	5/8 S
CNAG-0200-TAC	001	EAVA-021E-TAC	33.38	20	19.06	1/2 S	7/8 S
CPAK-0150-CAV	001	KALB-015E-CAV	33.38	20	19.06	1/2 S	7/8 S
CTAH-0150-TAC	020	KALA-016E-TAC	33.38	20	19.06	3/8 S	7/8 S
CTAM-0300-TAC	001	LAHA-031E-TAC	38.38	30	29.09	1/2 S	1-1/8 S

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Model	Receiver Capacity* (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
CFDP-0451-TFC	69.8	64	63	54.8	60	32.3	50	330
CFDP-0451-TFD	69.8	64	63	54.8	60	15.4	20	520
CFDP-0500-TFC	81.6	74.8	73.8	64	70.2	42.3	60	679
CFDP-0500-TFD	81.6	74.8	73.8	64	70.2	19.5	30	550
CFDP-0501-TFC	69.8	64	63	54.8	60	32.3	50	530
CFDP-0501-TFD	69.8	64	63	54.8	60	15.5	50	530
CFDP-0550-TFC	81.6	74.8	73.8	64	70.2	43.8	70	667
CFDP-0550-TFD	81.6	74.8	73.8	64	70.2	22.5	35	661
CFDP-0550-TFE	81.6	74.8	73.8	64	70.2	15.7	20	669
CFDP-0600-TFC	101.1	92.7	91.5	79.2	87	57.6	80	965
CFDP-0600-TFD	101.1	92.7	91.5	79.2	87	25.9	35	965
CFDP-0700-TFC	101.1	92.7	91.5	79.2	87	61.3	90	952
CFDP-0700-TFD	101.1	92.7	91.5	79.2	87	28.1	40	942
CFDP-0751-TFC	81.6	74.8	73.8	64	70.2	45.7	70	601
CFDP-1001-TFC	101.1	92.7	91.5	79.2	87	63.3	90	935
CJAL-0100-TAD				21.2		4.2	15	204
CJAL-0150-CAV				21.2		15.3	20	220
CJAL-0151-CAB				21.2		15.4	20	283
CJAL-0152-TAD				21.2		5.5	15	219
CJAL-0200-TAE				21.2		4.9	15	307
CJAL-0300-CAB				54.8		25.3	35	444
CJAL-0300-TAC				54.8		20.3	25	410
CJAL-0300-TAD				54.8		9.9	15	441
CJAL-0300-TAE				54.8		7.0	15	441
CJAM-0076-CAV				21.2		9.7	15	208
CJAU-0503-TFC				64		31.1	45	732
CLAL-0152-CAB			24.6			12.3	15	240
CLAL-0300-TAC			63			17.8	20	427
CLAL-0300-TAD			63			8.9	15	421
CNAG-0076-CAV		25	24.6	21.2		9.9	15	196
CNAG-0100-CAV		25	24.6	21.2		11.5	15	190
CNAG-0100-TAC		25	24.6	21.2		8.7	15	190
CNAG-0200-TAC		25	24.6	21.2		11.1	15	286
CPAK-0150-CAV		25		21.2		14.2	20	207
CTAH-0150-TAC		25				11.2	15	212
CTAM-0300-TAC		64				15.0	15	421

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Copeland™ D-Line

Copelametic™ air-cooled and water cooled condensing units



Product Information

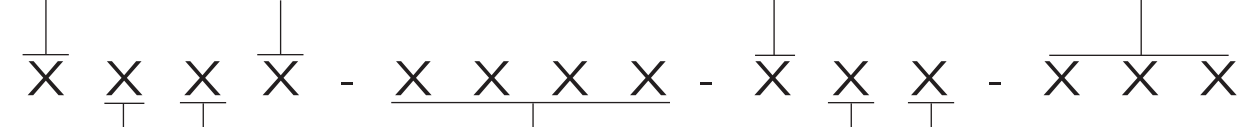
Horsepower:	3/4-3
Temperature Applications:	Low/Medium/High
Refrigerants:	R-12, R-134a, R-404A, R-22, R-407C
Installation Applications:	A variety of applications including walk-ins

Nomenclature • Semi-Hermetic Condensing Units

Temperature Application		Compressor Motor Types		
Description	Code	Phase	Description	Code
High Temperature	H	1	Capacitor Run – Capacitor Start	C
Medium Temperature	M	1	Induction Run – Capacitor Start	I
Low Temperature	L	1	Induction Run – Split Phase	S
Extended Medium Temp.	F	1	Capacitor Run – Permanent Split Capacitor	P
Extra Low Temp.	E	3	Three Phase	T
High Temperature	B	3	Wye (star) Delta	E
R22/404A LT & R134a HT	G	3	6 Lead Part Winding or Across the Line – except 575V	F
R22 HT & R404A MT	J			
R404A LT & R134a HT	K			
Two Stage	U			
Two Stage	T			

Product Variations
Numbers will be assigned as follows:

- Number –100 is standard compressor used in Copeland™ condensing units.
- Number –200 indicates a STANDARD compressor parts B/M and model no.
- Number –201 and larger will be assigned for all other variations of a given model.
- Number –800 indicates a standard replacement compressor and Component Parts B/M and model no. –240 volt control.
- Number –801 indicates a standard replacement compressor and component parts B/M and model no. –120 volt control.



Receiver Base	
Receiver Base	C
Flat Metal Base	E, D
Water Condenser Base	W
Transport Unit	T

Refrigerant	
R404A/507	J/4
R134a	T/2
R12	B/7
R22	3/M/L/C
Multiple	F
R22/407C	G
R22	9
R134a/404A/22	N
R134a/404A	P
R404A/22	8

Comp. Motor Rating	
Nominal (HP)	Code
1/2	0050
3/4	0075
1	0100
1-1/2	0150
2	0200
3	0300
4	0400
5	0500
6	0600
7-1/2	0750
9	0900
10	1000
15	1500
20	2000
22	2200
25	2500
27	2700
30	3000
40	4000
50	5000
60	6000
70	7000
80	8000

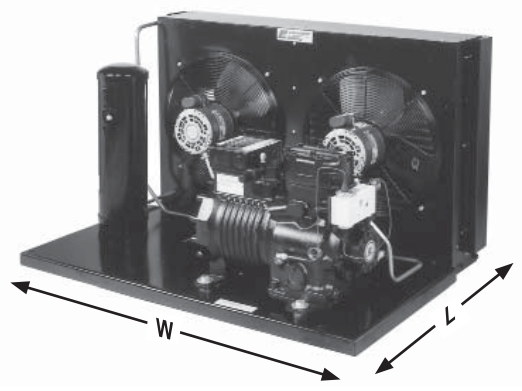
Note: Left position may be a letter indicating a revision change.

Compressor Motor Protection	
Type Protection	Code
External Inherent Protection-One Protector, (Line Break) Use with Contactor	A
Internal Inherent Protection-One Protector (Line Break) Use with Contactor	F
Internal Thermal Protectors-Electronic Sensors; and Control Module External Use with Contactor	S

Electrical Codes		
60 Hz.	50 Hz.	Code
115-1	100-1	A
230-1	-	B
208/230-3	200/220-3	C
460-3	-	D
575-3	-	E
-	230-1	G
-	380/420-3	M
208/230-1	200-1	V
-	220-3	W
-	220/240-1	Z

Note: When applicable, specific 50 Hz ratings (not necessarily identical to typical shown above) will be shown as alternate on 60 Hz rated models.

Air Cooled Steel Base	A
Air Cooled Copevap Base	E
Water Cooled Steel Base	W
Custom Base	C
Discus	D



Bill of Materials Matrix

BOM	Options															UL		
	Receiver W/ Valve	Suction Valve	Liquid Base Valve	Fan Guard	End Covers	Conduit	Power Cord	Accumulator	Fan Cycling	Pressure Controls	Filter Drier	Moisture Indicator	Solenoid Valve	Head Pressure Control Valve	Water Valve	CoreSense	Listed	Recognized
Air Cooled																		
020	X	X		X	X	X				X							X	
072	X	X		X	X	X				X	X	X					X	
212	X	X		X	X	X												X*
Water Cooled																		
020	X	X				X				X					X		X	

*These recognized models are identical to the UL Listed models except without pressure control. Need for the control is to be evaluated in the end use application. BOMs with 4 or 6 as the middle digit are OEM special units.

Copelametic™ air-cooled condensing units

Features	Benefits
Copeland™ Semi-hermetic Compressor	Reliability
Modular Components	High Energy Efficiency
Positive Displacement Oil Pump	Replacement Serviceability
Low Profile	Application Flexibility
Low Re-expansion Volumes	More Cooler Space, Fewer Stockouts, Application Flexibility
Lower Operating Speeds	Decrease Energy Costs, Greater Capacity
	Reduces Operating Component Stress Low Sound Lower Maintenance Costs

Resources and Support

EmersonClimate.com

- Online Product Information and Technical Data
 - Application Engineering Bulletins
 - Instruction Sheets
 - Marketing Brochures
- Where to Buy

Application Engineering Bulletins

- 4-1094 Identification of Port Locations in Heads of Copelametic™ Compressors
- 4-1135 Cooling Requirement for Copelametic Compressors
- 4-1166 Copeland™ Oil Pumps
- 4-1273 Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
- 4-1295 HFC-134A Refrigerant Guidelines
- 5-1174 Water flow requirement and water pressure drop for Copeland water cooled condensing units
- 8-1376 Electronic Unit Controller
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter-Driers
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

R-12 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10
90° Ambient								
DBAL-0075	KAA2-0075	1440	1790	2130	2480	2850	3280	3780
100° Ambient								
DBAL-0075	KAA2-0075	1270	1600	1920	2250	2620	3030	3510
110° Ambient								
DBAL-0075	KAA2-0075	1110	1420	1720	2030	2380	2770	

Capacities rated at 40°F return gas, 5°F subcooling

R-12 Med Temp

Copeland air-cooled condensing units

Unit Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
D7AB-0075	KAM2-0075	3460	3840	4270	4740	5260	5820	6410	7030	7680	8350
D7AB-0100	KAJ3-0100	4370	4900	5450	6050	6670	7340	8030	8750	9500	10300
D7AB-0150	KALA-0150	6300	7110	7990	8960	9980	11100	12200	13400	14700	16000
D7AB-0200	EAV1-0200	8580	9960	11300	12700	14200	15600	17200	18700	20300	22000
100° Ambient											
D7AB-0075	KAM2-0075	3270	3590	3950	4370	4830	5340	5880	6450	7050	7670
D7AB-0100	KAJ3-0100	4000	4480	4990	5530	6110	6720	7360	8020	8700	9400
D7AB-0150	KALA-0150	5850	6610	7430	8330	9290	10300	11400	12500	13700	14900
D7AB-0200	EAV1-0200	8040	9320	10600	11900	13200	14500	16000	17400	18800	20400
110° Ambient											
D7AB-0075	KAM2-0075	3020	3280	3580	3940	4350	4800	5290	5810	6370	
D7AB-0100	KAJ3-0100	3620	4060	4510	5020	5530	6080	6660	7260		
D7AB-0150	KALA-0150	5400	6090	6850	7670	8560	9500	10500	11500	12600	13700
D7AB-0200	EAV1-0200	7540	8720	9880	11100	12200	13400	14800			

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
DNAG-0200	EAV*-021E	4160	4790	5670	6770	8040	9450	11000	12500	14100
100° Ambient										
DNAG-0200	EAV*-021E	3760	4330	5130	6140	7320	8610	10000	11500	12900
110° Ambient										
DNAG-0200	EAV*-021E	3230	3730	4460	5380	6460	7640	8910	10200	

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Med Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient												
D3AH-0150	KAG*-0150		6340	7090	7950	8930	10000	11200	12400	13800	15200	16600
D3AH-0200	ERA1-0200		5550	7050	8610	10200	11900	13700	15500	17300	19200	21100
D8AJ-0200	KAKA-020E KAKB-021E		8100	9570	11000	12500	14000	15600	17200	19000	20800	22800
D3AM-0200	KAK*-0200	7290	8530	9820	11100	12500	13900	15400				
D3AM-0201	ERC1-0200	8080	9230	10500	11800	13300	14900	16700				
100° Ambient												
D3AH-0150	KAG*-0150		5810	6490	7290	8200	9220	10300	11500	12800	14200	15600
D3AH-0200	ERA1-0200		4680	6020	7440	8920	10500	12000	13700	15300	17000	18800
D8AJ-0200	KAKA-020E KAKB-021E		7380	8820	10200	11700	13100	14600	16100	17800	19500	21300
D3AM-0200	KAK*-0200	6640	7840	9070	10300	11600	12900	14300				
D3AM-0201	ERC1-0200	7350	8400	9550	10800	12200	13700	15300				
110° Ambient												
D3AH-0150	KAG*-0150		5340	5950	6690	7540	8510	9570	10700	12000		
D3AH-0200	ERA1-0200		3750	4940	6200	7520	8890	10300	11800	13300		
D8AJ-0200	KAKA-020E KAKB-021E		6650	8070	9440	10800	12200	13600	15000	16500	18100	
D3AM-0200	KAK*-0200	5980	7140	8310	9490	10700	12000	13200				
D3AM-0201	ERC1-0200	6610	7550	8600	9740	11000	12400	14000				

Capacities rated at 65°F return gas, 5°F subcooling

R-134a

Copeland air-cooled condensing units

Unit Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
DNAG-0200	EAV*-021E	8380	9710	11090	12560	14120	15770	17520	19390	21370	23480
100° Ambient											
DNAG-0200	EAV*-021E	7590	8830	10130	11490	12940	14480	16120	17870	19730	21720
110° Ambient											
DNAG-0200	EAV*-021E	6810	7960	9150	10410	11750	13180	14700	16330	18070	

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
DJAL-0075	KAMB-007E	1900	2140	2470	2870	3330	3840	4370	4910	5420
DJAL-0076	KAJB-007E	2260	2680	3120	3590	4100				
DJAL-0100	KAJB-010E	2330	2760	3220	3700	4220	4770	5350	5960	6550
DJAL-0149	KALB-015E	3440	4070	4740	5450	6200	6970	7780	8620	9410
DJAL-0150	KALA-016E	3410	4200	4990	5780	6590	7420	8300	9220	10150
DJAL-0150	KALB-015E	3410	4200	4990	5780	6590	7420	8300	9220	10150
DJAL-0151	EADA-020E	3900	4610	5410	6290	7250	8290	9410	10600	11800
DNAG-0200	EAVA-021E	4280	5170	6210	7390	8690	10090	11570	13110	14630
DNAG-0200	EAVB-021E	4280	5170	6210	7390	8690	10090	11570	13110	14630
DJAL-0300	LAHA-032E	6380	7980	9770	11700	13800	16000	18300	20700	23000
DJAL-0300	LAHB-032E	6380	7980	9770	11700	13800	16000	18300	20700	23000
100° Ambient										
DJAL-0075	KAMB-007E	1610	1830	2140	2510	2940	3400	3890	4380	4820
DJAL-0076	KAJB-007E	1900	2280	2700	3130	3590				
DJAL-0100	KAJB-010E	1990	2370	2780	3220	3700	4190	4720	5270	5810
DJAL-0149	KALB-015E	2910	3520	4150	4810	5490	6200	6940	7700	
DJAL-0150	KALA-016E	2760	3550	4310	5070	5820	6590	7390	8220	9060
DJAL-0150	KALB-015E	2760	3550	4310	5070	5820	6590	7390	8220	9060
DJAL-0151	EADA-020E	3300	3920	4620	5410	6280	7230	8260	9370	10500
DNAG-0200	EAVA-021E	3690	4470	5410	6470	7660	8930	10280	11680	13060
DNAG-0200	EAVB-021E	3690	4470	5410	6470	7660	8930	10280	11680	13060
DJAL-0300	LAHA-032E	4990	6560	8270	10100	12100	14100	16200	18400	20500
DJAL-0300	LAHB-032E	4990	6560	8270	10100	12100	14100	16200	18400	20500
110° Ambient										
DJAL-0075	KAMB-007E	1240	1450	1730	2070	2460	2880	3310		
DJAL-0076	KAJB-007E	1510	1880	2270	2660	3070				
DJAL-0100	KAJB-010E	1650	1990	2360	2750	3170				
DJAL-0149	KALB-015E	2310	2880	3470	4080					
DJAL-0150	KALA-016E	2020	2820	3570	4300	5020	5730	6470	7230	
DJAL-0150	KALB-015E	2020	2820	3570	4300	5020	5730	6470	7230	
DJAL-0151	EADA-020E	2910	3420	4010	4690	5460	6310	7250		
DNAG-0200	EAVA-021E	3290	3940	4740	5680	6720	7850	9060	10320	11550
DNAG-0200	EAVB-021E	3290	3940	4740	5680	6720	7850	9060	10320	11550
DJAL-0300	LAHA-032E	3570	5110	6750	8490	10300	12200	14100	16100	
DJAL-0300	LAHB-032E	3570	5110	6750	8490	10300	12200	14100	16100	

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Med Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25
90° Ambient								
DJAM-0150	KAGA-010E KAGB-010E	5830	6550	7380	8230	9110	10000	11000
DJAM-0200	KAKA-020E	8200	9280	10300	11300	12400	13600	15000
D8AJ-0200	KAKA-020E KAKB-021E	8410	9550	10700	11800	13000	14300	15900
D8AM-0201	ERCA-020E ERCA-021E	9800	11100	12600	14000	15400	17000	18700
D8AJ-0300	ERFA-031E	14600	16400	18400	20500	22600	25000	27400
100° Ambient								
DJAM-0150	KAGA-010E KAGB-010E	5230	5890	6650	7420	8220	9040	9860
DJAM-0200	KAKA-020E	7430	8420	9370	10300	11200	12300	13600
D8AJ-0200	KAKA-020E KAKB-021E	7630	8680	9710	10700	11800	13000	14400
D8AM-0201	ERCA-020E ERCA-021E	8670	9890	11200	12500	13800	15200	16800
D8AJ-0300	ERFA-031E	12900	14600	16500	18400	20400	22500	24800
110° Ambient								
DJAM-0150	KAGA-010E KAGB-010E	4600	5200	5890	6580	7300	8020	8740
DJAM-0200	KAKA-020E	6650	7540	8390	9180	10000	11000	12100
D8AJ-0200	KAKA-020E KAKB-021E	6840	7790	8720	9590	10500	11600	12800
D8AM-0201	ERCA-020E ERCA-021E	7550	8660	9840	11000	12200	13500	14900
D8AJ-0300	ERFA-031E	11400	12900	14600	16400	18200	20100	22100

Capacities rated at 65°F return gas, 5°F subcooling

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Unit Model	BOM	Compressor Electrical	Length	Width	Height	Liquid	Suction
D3AH-0150-TAD	020	KAGA-0150-TAD	24.38	31.5	15.09	3/8 S	7/8 S
D3AH-0200-TAD	020	ERA1-0200-TAD	28	32	15.04	3/8 S	7/8 S
D3AM-0200-CAV	020	KAKB-0200-CAV	28	32	15.04	3/8 S	7/8 S
D3AM-0200-TAC	020	KAKA-0200-TAC	28	32	15.04	3/8 S	7/8 S
D3AM-0200-TAD	020	KAKA-0200-TAD	28	32	15.04	3/8 S	7/8 S
D3AM-0201-TAC	020	ERC1-0200-TAC	28	32	15.04	3/8 S	7/8 S
D7AB-0075-CAV	020	KAM2-0075-CAV	20	23.4	11.4	3/8 S	5/8 S
D7AB-0100-CAA	020	KAJ3-0100-CAA	19.1	25.8	13.1	3/8 S	5/8 S
D7AB-0100-CAV	020	KAJ3-0100-CAV	19.1	25.8	13.1	3/8 S	5/8 S
D7AB-0100-TAC	020	KAJ1-0100-TAC	19.08	25.76	12.06	3/8 S	5/8 S
D7AB-0150-CAV	020	KALB-0150-CAV	24.38	31.5	15.09	3/8 S	7/8 S
D7AB-0150-TAC	020	KALA-0150-TAC	24.38	31.5	15.09	3/8 S	7/8 S
D7AB-0150-TAD	020	KALA-0150-TAD	24.38	31.5	15.1	3/8 S	7/8 S
D7AB-0200-CAB	020	EAV2-0200-CAB	28	32	15.07	3/8 S	7/8 S
D7AB-0200-TAC	020	EAV1-0200-TAC	28	32	15.04	3/8 S	7/8 S
D7AB-0200-TAD	020	EAV1-0200-TAD	28	32	15.04	3/8 S	7/8 S
D8AJ-0200-CAV	020	KAKB-021E-CAV	26.8	34	19	3/8 S	7/8 S
D8AJ-0200-TAC	020	KAKA-020E-TAC	26.8	34	19	3/8 S	7/8 S
D8AJ-0300-TAC	020	ERFA-031E-TAC	26.8	34	19	3/8 S	7/8 S
D8AJ-0300-TAD	020	ERFA-031E-TAD	26.8	34	19	3/8 S	7/8 S
D8AM-0201-TAC	020	ERCA-021E-TAC	27	34	19	3/8 S	7/8 S
D8AM-0201-TAD	020	ERCA-020E-TAD	27	34	19	3/8 S	7/8 S
DBAL-0075-IAA	212	KAA2-0075-IAA	19.8	23.4	11.4	3/8 S	5/8 S
DJAL-0075-CAA	020	KAMB-007E-CAA	19.8	23.4	11.4	3/8 S	5/8 S
DJAL-0075-CAA	212	KAMB-007E-CAA	19.75	22.5	11.44	3/8 S	5/8 S
DJAL-0075-CAV	212	KAMB-007E-CAV	19.5	23.4	11.54	3/8 S	5/8 S
DJAL-0076-IAA	020	KAJB-007E-IAA	19.8	22.4	11	3/8 S	5/8 S
DJAL-0149-CAV	212	KALB-015E-CAV	19	25.6	13.2	3/8 S	5/8 S
DJAL-0149-CAV	072	KALB-015E-CAV	19	25.77	13.19	3/8 S	5/8 S
DJAL-0150-TAD	020	KALA-016E-TAD	24.38	31.5	15.09	3/8 S	7/8 S
DJAL-0151-TAC	020	EADA-020E-TAC	24.25	31.5	15.1	3/8 S	7/8 S
DJAL-0300-TAD	020	LAHA-032E-TAD	26.21	34.06	18.88	3/8 S	1-1/8 S
DJAM-0150-CAV	020	KAGB-010E-CAV	24.38	31.5	15.1	3/8 S	7/8 S
DJAM-0200-TAC	020	KAKA-020E-TAC	28	32	15.04	3/8 S	7/8 S
DNAG-0200-CAV	020	EAVB-021E-CAV	26.8	34	19	3/8 S	7/8 S
DNAG-0200-TAC	020	EAVA-021E-TAC	26.8	34	19	3/8 S	7/8 S

Physical and Electrical Data

Copelametic™ air-cooled condensing units

Unit Model	BOM	R-12	R-22	R-134a	R-404A	MCA	Max Fuse	Ship Weight
D3AH-0150-TAD	020		12.9			4.6	15	243
D3AH-0200-TAD	020		12.9			5.9	15	304
D3AM-0200-CAV	020		12.9			15.6	20	295
D3AM-0200-TAC	020		12.9			10.8	15	295
D3AM-0200-TAD	020		12.9			5.2	15	
D3AM-0201-TAC	020		12.9			10.8	15	
D7AB-0075-CAV	020	8.1				8.4	15	142
D7AB-0100-CAA	020	13.2				17.7	25	
D7AB-0100-CAV	020	13.2				10.0	15	157
D7AB-0100-TAC	020	13.2				5.5	15	
D7AB-0150-CAV	020	13.2				14.7	20	243
D7AB-0150-TAC	020	13.2				9.1	15	243
D7AB-0150-TAD	020	13.2				5.1	15	243
D7AB-0200-CAB	020	13.2				14.8	20	
D7AB-0200-TAC	020	13.2				10.6	15	
D7AB-0200-TAD	020	13.2				5.9	15	
D8AJ-0200-CAV	020		12.9		11.2	15.6	20	248
D8AJ-0200-TAC	020		12.9		11.2	10.8	15	251
D8AJ-0300-TAC	020		12.9		11.2	21.3	25	342
D8AJ-0300-TAD	020		12.9		11.2	10.5	15	344
D8AM-0201-TAC	020		12.9		11.2	13.3	15	350
D8AM-0201-TAD	020		12.9		11.2	5.9	15	336
DBAL-0075-IAA	212	8.1				15.0	20	146
DJAL-0075-CAA	020				6.3	15.4	20	150
DJAL-0075-CAA	212				6.3	15.4	20	141
DJAL-0075-CAV	212				6.3	8.4	15	140
DJAL-0076-IAA	020				6.3	15.2	20	140
DJAL-0149-CAV	212				11.2	13.8	20	158
DJAL-0149-CAV	072				11.2	13.6	20	165
DJAL-0150-TAD	020				11.2	5.7	15	248
DJAL-0151-TAC	020				11.2	10.8	15	
DJAL-0300-TAD	020				11.2	10.7	15	383
DJAM-0150-CAV	020				11.2	11.7	15	243
DJAM-0200-TAC	020				11.2	10.8	15	
DNAG-0200-CAV	020		12.9	13.1	11.2	20.7	30	440
DNAG-0200-TAC	020		12.9	13.1	11.2	11.6	15	323

Copeland™ water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F)	Water flow (GPM) at evaporator temp (°F)
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Capacities rated at 65°F return gas, 5°F subcooling

R-22 Low Temp

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-20	0
D3WM-C200	KWKA-0200	2380	2910	3490	4110	4810	5600	6500	7520	8680	0.8	1.5	2.5

R-22 Med Temp

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	0	25	45
D3WH-C150	KWG*-0150		6390	7270	8310	9510	10900	12300	14000	15700	17600	19600	1.9	3.1	4.6
D3WM-C100	KWM*-0100		5560	6510	7520	8620	9810	11100					1.6	2.7	
D3WM-C150	KWKA-0200	6400	8050	9670	11300	13000	14700	16600					2.3	4.1	

R-134a

Unit Model	Compressor	0	5	10	15	20	25	30	35	40	45	0	25	45
DTWH-C150	KWLB-015E	6410	7330	8370	9520	10800	12200	13600	15200	16900	18700	1.8	3.2	4.7

R-404A Low Temp

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-20	0
DJWL-C100	KWJ*-011E	2300	2800	3360	3980	4660	5420	6250	7170	8180	0.9	1.4	2.1
DJWL-C150	KWLA-016E KWLB-015E	3110	4010	4900	5810	6750	7760	8870	10100	11400	1.1	2	3

R-404A Med Temp

Unit Model	Compressor	-5	0	5	10	15	20	25	-5	10	25
DJWM-C100	KWRA-011E	4910	5680	6440	7240	8120	9130	10300	1.5	2	2.7
DJWM-C150	KWG*-010E	5860	6740	7650	8640	9740	11000	12400	1.7	2.3	3.2
DJWM-C200	KWKA-020E	8440	9750	11000	12300	13800	15400	17400	2.5	3.5	4.7

Physical and Electrical Data

water-cooled condensing units

Unit Model Short	BOM	Compressor Electrical	Length	Width	Height	MCA	Max Fuse	Ship Weight
D3WH-C150-CAV	020	KWGB-0150-CAV	24	17	12.88	12.0	20	157
D3WH-C150-TAC	020	KWGA-0150-TAC	24	17	12.88	6.9	15	166
D3WH-C150-TAD	020	KWGA-0150-TAD	24	17	12.88	3.1	15	236
D3WM-C100-CAV	020	KWM2-0100-CAV	17	24	11.57	9.4	15	138
D3WM-C100-TAC	020	KWM1-0100-TAC	17	24	11.57	5.6	15	140
D3WM-C150-TAC	020	KWKA-0200-TAC	24	17	12.88	8.5	15	158
D3WM-C150-TAD	020	KWKA-0200-TAD	24	17	12.88	3.8	15	158
D3WM-C200-TAC	020	KWKA-0200-TAC	24.25	31.5	12.98	8.5	15	237
DJWL-C100-CAV	020	KWJB-010E-CAV	17	24	11.57	8.6	15	142
DJWL-C100-TAC	020	KWJA-011E-TAC	24	17	11.57	5.8	15	143
DJWL-C100-TAD	020	KWJA-011E-TAD	17	24	11.57	2.6	15	163
DJWL-C150-CAV	020	KWLB-015E-CAV	24	17	12.88	12.4	20	137
DJWL-C150-TAC	020	KWLA-016E-TAC	24	17	12.88	8.3	15	152
DJWL-C150-TAD	020	KWLA-016E-TAD	24	17	12.88	4.3	15	161
DJWM-C100-TAD	020	KWRA-011E-TAD	24	17	11.6	2.5	15	143
DJWM-C150-CAV	020	KWGB-010E-CAV	24	17	12.88	9.4	15	158
DJWM-C200-TAC	020	KWKA-020E-TAC	24.25	31.5	12.98	8.5	15	234
DTWH-C150-CAV	020	KWLB-015E-CAV	24	17	12.88	12.4	20	155

Physical and Electrical Data

water-cooled condensing units

Unit Model Short	BOM	Compressor Electrical	Refrigerant Connections		Water Connections		Receiver Capacity (Lbs @ 90% Volume)		
			Liquid	Suction	Inlet (NPT)	Outlet (OD)	R-22	R-134a	R-404A
D3WH-C150-CAV	020	KWGB-0150-CAV	3/8 S	7/8 S	1/2	5/8	12.9		
D3WH-C150-TAC	020	KWGA-0150-TAC	3/8 S	7/8 S	1/2	5/8	12.9		
D3WH-C150-TAD	020	KWGA-0150-TAD	3/8 S	7/8 S	1/2	5/8	12.9		
D3WM-C100-CAV	020	KWM2-0100-CAV	3/8 S	5/8 S	1/2	1/2	7.4		
D3WM-C100-TAC	020	KWM1-0100-TAC	3/8 S	5/8 S	1/2	1/2	7.4		
D3WM-C150-TAC	020	KWKA-0200-TAC	3/8 S	7/8 S	1/2	5/8	12.9		
D3WM-C150-TAD	020	KWKA-0200-TAD	3/8 S	7/8 S	1/2	5/8	12.9		
D3WM-C200-TAC	020	KWKA-0200-TAC	3/8 S	7/8 S	1/2	7/8	12.9		
DJWL-C100-CAV	020	KWJB-010E-CAV	3/8 S	5/8 S	1/2	1/2			6.4
DJWL-C100-TAC	020	KWJA-011E-TAC	3/8 S	5/8 S	1/2	1/2			6.4
DJWL-C100-TAD	020	KWJA-011E-TAD	3/8 S	5/8 S	1/2	1/2			6.4
DJWL-C150-CAV	020	KWLB-015E-CAV	3/8 S	7/8 S	1/2	5/8			11.2
DJWL-C150-TAC	020	KWLA-016E-TAC	3/8 S	7/8 S	1/2	5/8			11.2
DJWL-C150-TAD	020	KWLA-016E-TAD	3/8 S	7/8 S	1/2	5/8			11.2
DJWM-C100-TAD	020	KWRA-011E-TAD	3/8 S	5/8 S	1/2	1/2			6.4
DJWM-C150-CAV	020	KWGB-010E-CAV	3/8 S	7/8 S	1/2	5/8			11.2
DJWM-C200-TAC	020	KWKA-020E-TAC	3/8 S	7/8 S	1/2	7/8			11.2
DTWH-C150-CAV	020	KWLB-015E-CAV	3/8 S	7/8 S	1/2	5/8			13.1

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Copeland™ E-Line

Copelametic™ air-cooled and water cooled condensing units



Product Information

Horsepower:	1/2 – 1 1/2
Temperature Applications:	Low/Medium/High
Refrigerants:	R-12, R-134a, R-404A, R-22,
Installation Applications:	A variety of applications including walk-ins

Nomenclature • Semi-Hermetic Condensing Units

Receiver Base	C
Flat Metal Base	E, D
Water Condenser Base	W
Transport Unit	T

Temperature Application	
Description	Code
High Temperature	H
Medium Temperature	M
Low Temperature	L
Extended Medium Temp.	F
Extra Low Temp.	E
High Temperature	B
R22/404A LT & R134a HT	G
R22 HT & R404A MT	J
R404A LT & R134a HT	K
Two Stage	U
Two Stage	T

Compressor Motor Types		
Phase	Description	Code
1	Capacitor Run – Capacitor Start	C
1	Induction Run – Capacitor Start	I
1	Induction Run – Split Phase	S
1	Capacitor Run – Permanent Split Capacitor	P
3	Three Phase	T
3	Wye (star) Delta	E
3	6 Lead Part Winding or Across the Line – except 575V	F

Product Variations
Numbers will be assigned as follows:

- Number –100 is standard compressor used in Copeland™ condensing units.
- Number –200 indicates a STANDARD compressor parts B/M and model no.
- Number –201 and larger will be assigned for all other variations of a given model.
- Number –800 indicates a standard replacement compressor and Component Parts B/M and model no. –240 volt control.
- Number –801 indicates a standard replacement compressor and component parts B/M and model no. –120 volt control.

Refrigerant	
R404A/507	J/4
R134a	T/2
R12	B/7
R22	3/M/L/C
Multiple	F
R22/407C	G
R22	9
R134a/404A/22	N
R134a/404A	P
R404A/22	8


Comp. Motor Rating	
Nominal (HP)	Code
1/2	0050
3/4	0075
1	0100
1-1/2	0150
2	0200
3	0300
4	0400
5	0500
6	0600
7-1/2	0750
9	0900
10	1000
15	1500
20	2000
22	2200
25	2500
27	2700
30	3000
40	4000
50	5000
60	6000
70	7000
80	8000

Compressor Motor Protection	
Type Protection	Code
External Inherent Protection-One Protector, (Line Break) Use with Contactor	A
Internal Inherent Protection-One Protector (Line Break) Use with Contactor	F
Internal Thermal Protectors-Electronic Sensors; and Control Module External Use with Contactor	S

Electrical Codes		
60 Hz.	50 Hz.	Code
115-1	100-1	A
230-1	-	B
208/230-3	200/220-3	C
460-3	-	D
575-3	-	E
-	230-1	G
-	380/420-3	M
208/230-1	200-1	V
-	220-3	W
-	220/240-1	Z

Air Cooled Steel Base	A
Air Cooled Copevap Base	E
Water Cooled Steel Base	W
Custom Base	C
Discus	D

Note: Left position may be a letter indicating a revision change.



Bill of Materials Matrix

BOM	Options															UL		
	Receiver W/ Valve	Suction Valve	Liquid Base Valve	Fan Guard	End Covers	Conduit	Power Cord	Accumulator	Fan Cycling	Pressure Controls	Filter Drier	Moisture Indicator	Solenoid Valve	Head Pressure Control Valve	Water Valve	CoreSense	Listed	Recognized
Air Cooled																		
020	X	X		X	X	X				X								X
072	X	X		X	X	X				X	X	X						X
075	X	X		X	X	X				X	X	X		X				X
212	X	X		X	X	X												X*
Water Cooled																		
020	X	X				X				X					X		X	

*These recognized models are identical to the UL Listed models except without pressure control. Need for the control is to be evaluated in the end use application. BOMs with 4 or 6 as the middle digit are OEM special units.

Copelametic™ air-cooled condensing units

Features	Benefits
Copeland™ Semi-hermetic Compressor	Reliability
	High Energy Efficiency
Modular Components	Replacement Serviceability
Positive Displacement Oil Pump	Application Flexibility
Low Profile	More Cooler Space, Fewer Stockouts, Application Flexibility
Low Re-expansion Volumes	Decrease Energy Costs, Greater Capacity
Lower Operating Speeds	Reduces Operating Component Stress Low Sound Lower Maintenance Costs

Resources and Support

EmersonClimate.com

- Online Product Information and Technical Data
 - Application Engineering Bulletins
 - Instruction Sheets
 - Marketing Brochures
- Where to Buy

Application Engineering Bulletins

- 4-1094 Identification of Port Locations in Heads of Copelametic™ Compressors
- 4-1135 Cooling Requirement for Copelametic Compressors
- 4-1166 Copeland™ Oil Pumps
- 4-1273 Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
- 4-1295 HFC-134A Refrigerant Guidelines
- 5-1174 Water flow requirement and water pressure drop for Copeland water cooled condensing units
- 8-1376 Electronic Unit Controller
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter-Driers
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

R-12 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5
90° Ambient									
EBAL-A050	KAG2-0050	1090	1340	1610	1910	2210	2530	2850	3160
EBAL-A075	KAA2-0075	1430	1780	2120	2480	2860	3290	3790	
100° Ambient									
EBAL-A050	KAG2-0050	890	1140	1410	1690	1990	2280	2570	2860
EBAL-A075	KAA2-0075	1260	1590	1920	2250	2620	3040	3520	
110° Ambient									
EBAL-A050	KAG2-0050	690	940	1210	1480	1760	2040		
EBAL-A075	KAA2-0075	1090	1410	1710	2030	2380	2770	3240	

Capacities rated at 65°F return gas, 5°F subcooling

R-12 Med/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	50	55
90° Ambient														
E7AB-A050	KAN*-0050		2060	2270	2530	2830	3170	3530	3920	4330	4750	5180	5610	6040
EBAM-A050	KAE2-0050	2410	2760	3120	3480	3880	4290	4740						
E7AB-A100	KAJ1-0100		4380	4860	5410	6030	6690	7400	8140	8910	9700	10500		
EBAM-A100	KA**-0100	4520	5080	5660	6260	6910	7620	8400						
100° Ambient														
E7AB-A050	KAN*-0050		1920	2090	2300	2570	2870	3200	3560	3940	4330	4730	5130	5540
EBAM-A050	KAE2-0050	2200	2530	2870	3220	3580	3970	4400						
E7AB-A100	KAJ1-0100		4020	4460	4970	5530	6150	6810	7510	8240	8990	9740		
EBAM-A100	KA**-0100	4100	4640	5200	5780	6410	7100							
110° Ambient														
E7AB-A050	KAN*-0050		1730	1860	2040	2270	2540	2840	3160	3510	3870			
EBAM-A050	KAE2-0050	1990	2310	2630	2950	3300	3660	4060						
E7AB-A100	KAJ1-0100		3660	4050	4510	5030	5610	6220	6880					
EBAM-A100	KA**-0100	3710	4240											

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
E8AL-A050	KANB-005E	730	930	1160	1420	1710	2030	2370	2720	3080
ENAG-A050	KANB-005E	730	930	1160	1420	1710	2030	2370	2720	3080
ELAL-A075	KAMB-0075	1670	2000	2370	2790	3250	3740	4260	4820	5380
ENAG-A075	KAMB-007E	1670	2000	2370	2790	3250	3740	4260	4820	5380
E8AL-A075	KAM*-007E	1870	2300	2760	3260	3810	4390	5010	5670	6360
ENAG-A100	KAJ*-01*E	2110	2500	2950	3460	4010	4610	5260	5940	6640
ELAL-A100	KAJB-0100	2200	2650	3130	3660	4220	4830	5500	6210	6980
ELAL-A152	KAKB-0200	2630	3140	3680	4260	4900	5600	6380	7240	8200
100° Ambient										
E8AL-A050	KANB-005E	560	750	980	1230	1500	1800	2110	2440	2770
ENAG-A050	KANB-005E	560	750	980	1230	1500	1800	2110	2440	2770
ELAL-A075	KAMB-0075	1500	1810	2160	2550	2980	3430	3910	4410	4920
ENAG-A075	KAMB-007E	1500	1810	2160	2550	2980	3430	3910	4410	4920
E8AL-A075	KAM*-007E	1580	1990	2430	2910	3420	3960	4550	5170	5810
ENAG-A100	KAJ*-01*E	1860	2220	2640	3120	3630	4190	4790	5420	6070
ELAL-A100	KAJB-0100	1970	2390	2850	3340	3870	4440	5050	5720	6420
ELAL-A152	KAKB-0200	2340	2820	3320	3860	4450	5100	5830	6640	7530
110° Ambient										
E8AL-A050	KANB-005E	390	580	800	1040	1310	1580	1870		
ENAG-A050	KANB-005E	390	580	800	1040	1310	1580	1870		
ELAL-A075	KAMB-0075	1300	1590	1920	2280	2670	3090	3520		
ENAG-A075	KAMB-007E	1300	1590	1920	2280	2670	3090	3520		
E8AL-A075	KAM*-007E	1290	1680	2110	2560	3040	3550			
ENAG-A100	KAJ*-01*E	1610	1950	2340	2780	3260	3780	4330		
ELAL-A100	KAJB-0100	1720	2130	2550	3010	3500	4020	4590		
ELAL-A152	KAKB-0200	2040	2490	2950	3460	4000	4610	5280	6040	6880

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Med/High Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	50	55
90° Ambient														
E8AJ-A075	KAN*-007E		3380	3850	4340	4880	5450	6060	6710	7380	8090	8820	9580	10400
E3AH-A075	KAN*-0075		3600	4090	4620	5190	5790	6430	7110	7820	8560	9320		
E3AM-A075	KAE*-0075	3580	4060	4570	5090	5670	6290	6980						
E8AJ-A100	KAR*-01*E		4820	5440	6110	6830	7590	8400	9240	10100	11000	11900	12800	13800
E3AH-A100	KAR*-0100		5030	5670	6370	7120	7910	8750	9620	10500	11400	12400		
E3AM-A100	KAM1-0100		5400	6170	6970	7800	8680	9600						
E3AM-A101	KAM*-0100		5780	6620	7510	8450	9440	10500						
E3AH-A151	KAGB-0150		6310	7060	7910	8880	9960	11100	12400	13700	15100	16500		
100° Ambient														
E8AJ-A075	KAN*-007E		3080	3520	3980	4480	5010	5570	6170	6790	7450	8120	8820	
E3AH-A075	KAN*-0075		3280	3740	4230	4760	5320	5910	6540	7200	7880	8590		
E3AM-A075	KAE*-0075	3280	3720	4180	4670	5190	5780	6420						
E8AJ-A100	KAR*-01*E		4380	4970	5600	6270	6990	7750	8540	9350	10200			
E3AH-A100	KAR*-0100		4580	5180	5840	6540	7290	8070	8890	9740	10600			
E3AM-A100	KAM1-0100		4920	5640	6380	7160	7990	8870						
E3AM-A101	KAM*-0100		5270	6050	6870	7740	8670	9650						
E3AH-A151	KAGB-0150		5790	6460	7250	8160	9170	10300	11500	12800	14100	15500		
110° Ambient														
E8AJ-A075	KAN*-007E		2780	3180	3610	4070	4560	5080	5630	6210				
E3AH-A075	KAN*-0075		2950	3380	3830	4320	4840	5390	5970					
E3AM-A075	KAE*-0075	2970	3360	3780	4220	4710	5240	5850						
E8AJ-A100	KAR*-01*E		3950	4510	5100	5740	6410	7120						
E3AH-A100	KAR*-0100		4130	4700	5320	5980	6680	7420						
E3AM-A100	KAM1-0100		4480	5150	5840	6590	7370							
E3AM-A101	KAM*-0100		4780	5500	6270	7080	7950	8880						
E3AH-A151	KAGB-0150		5320	5930	6660	7510	8470	9520	10700	11900				

Capacities rated at 65°F return gas, 5°F subcooling

R-134a

Copeland air-cooled condensing units

Unit Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
ENAG-A050	KANB-005E	1900	2130	2380	2650	2930	3240	3560	3900	4250	4620
ETAH-A075	KAMB-007E	3630	4030	4480	4980	5530	6130	6750	7410	8100	8800
EPAK-A150	KAL*-01*E	6290	7100	7980	8940	9970	11060	12210	13410	14650	15950
100° Ambient											
ENAG-A050	KANB-005E	1740	1960	2190	2430	2700	2980	3280	3600	3930	4270
ETAH-A075	KAMB-007E	3430	3760	4150	4600	5090	5620	6200	6800	7450	8110
EPAK-A150	KAL*-01*E	5850	6600	7420	8310	9270	10290	11360	12480	13640	14850
110° Ambient											
ENAG-A050	KANB-005E	1580	1780	1990	2220	2460	2720	2990	3280	3590	
ETAH-A075	KAMB-007E	3170	3440	3770	4160	4590	5070	5600	6160	6750	
EPAK-A150	KAL*-01*E	5390	6080	6830	7650	8530	9470	10460	11490		

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
E8AL-A050	KANB-005E	880	1100	1360	1650	1970	2300	2660	3030	3370
EJAL-A050	KAN*-00*E	880	1100	1360	1650	1970	2300	2660	3030	3370
ENAG-A050	KANB-005E	880	1100	1360	1650	1970	2300	2660	3030	3370
E8AL-A075	KAM*-007E	1920	2160	2490	2900	3370	3880	4430	4990	5510
EJAL-A075	KAM*-007E	1920	2160	2490	2900	3370	3880	4430	4990	5510
ENAG-A075	KAMB-007E	1920	2160	2490	2900	3370	3880	4430	4990	5510
EJAL-A100	KAJ*-01*E	2350	2820	3310	3840	4400	4990	5630	6300	6980
ENAG-A100	KAJ*-01*E	2430	2880	3370	3900	4470	5060	5700	6370	7060
EJAL-A103	KAKB-011E	2780	3470	4070	4630	5180	5750	6410	7160	8030
EJAL-A102	KALB-015E	3430	4060	4730	5430	6170	6930	7720	8530	9340
EJAL-A150	KALA-016E	3390	4190	4980	5770	6580	7410	8280	9200	10100
EPAK-A150	KAL*-01*E	3610	4290	5020	5800	6630	7510	8450	9430	10400
EPAK-A150	KALB-015E	3610	4290	5020	5800	6630	7510	8450	9430	10400
EJAE-0175	KAT*-015E	4400	5150	5960	6820	7730				
100° Ambient										
E8AL-A050	KANB-005E	670	880	1120	1390	1680	1980	2300	2630	2920
EJAL-A050	KAN*-00*E	670	880	1120	1390	1680	1980	2300	2630	2920
ENAG-A050	KANB-005E	670	880	1120	1390	1680	1980	2300	2630	2920
E8AL-A075	KAM*-007E	1620	1850	2160	2550	2980	3460	3960	4460	4930
EJAL-A075	KAM*-007E	1620	1850	2160	2550	2980	3460	3960	4460	4930
ENAG-A075	KAMB-007E	1620	1850	2160	2550	2980	3460	3960	4460	4930
EJAL-A100	KAJ*-01*E	1990	2430	2890	3380	3890	4420	4990	5590	6200
ENAG-A100	KAJ*-01*E	2070	2480	2920	3400	3920	4460	5040	5660	6280
EJAL-A103	KAKB-011E	2340	2990	3540	4050	4540	5050	5630	6320	7120
EJAL-A102	KALB-015E	2910	3510	4140	4800	5480	6170	6890	7620	
EJAL-A150	KALA-016E	2730	3530	4300	5050	5810	6570	7370	8200	9000
EPAK-A150	KAL*-01*E	3080	3730	4410	5150	5920	6730	7590	8490	9360
EPAK-A150	KALB-015E	3080	3730	4410	5150	5920	6730	7590	8490	9360
EJAE-0175	KAT*-015E	3800	4520	5280	6060	6860				
110° Ambient										
E8AL-A050	KANB-005E	450	640	860	1100	1360	1630	1900	2180	
EJAL-A050	KAN*-00*E	450	640	860	1100	1360	1630	1900	2180	
ENAG-A050	KANB-005E	450	640	860	1100	1360	1630	1900	2180	
E8AL-A075	KAM*-007E	1250	1470	1760	2110	2510	2940	3390	3850	
EJAL-A075	KAM*-007E	1250	1470	1760	2110	2510	2940	3390	3850	
ENAG-A075	KAMB-007E	1250	1470	1760	2110	2510	2940	3390	3850	
EJAL-A100	KAJ*-01*E	1610	2020	2450	2890	3350	3830	4330	4870	
ENAG-A100	KAJ*-01*E	1720	2090	2480	2910	3370	3850	4370		
EJAL-A103	KAKB-011E	1910	2520	3020	3460	3880				
EJAL-A150	KALA-016E	1980	2780	3540	4270	4990	5700	6430		
EPAK-A150	KAL*-01*E	2470	3090	3740	4420	5130	5870	6660		
EPAK-A150	KALB-015E	2470	3090	3740	4420	5130	5870	6660		
EJAE-0175	KAT*-015E	3230	3940	4640	5340	6030				
EJAL-A102	KALB-015E	2310	2880	3470	4080					

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Med Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-5	0	5	10	15	20	25
90° Ambient								
E8AJ-A075	KAN*-007E	3090	3520	4030	4550	5100	5670	6240
EJAM-A075	KAN*-007E	3090	3520	4030	4550	5100	5670	6240
E8AJ-A100	KAR*-01*E	4810	5350	5990	6650	7320	7980	8600
EJAM-A100	KARA-010E	4850	5400	6060	6730	7420	8090	8740
100° Ambient								
E8AJ-A075	KAN*-007E	2690	3090	3560	4030	4530	5040	5550
EJAM-A075	KAN*-007E	2690	3090	3560	4030	4530	5040	5550
E8AJ-A100	KAR*-01*E	4310	4790	5370	5970	6590	7190	7760
EJAM-A100	KARA-010E	4350	4830	5430	6050	6680	7300	7890
110° Ambient								
E8AJ-A075	KAN*-007E	2300	2660	3090	3520	3960	4410	4860
EJAM-A075	KAN*-007E	2300	2660	3090	3520	3960	4410	4860
E8AJ-A100	KAR*-01*E	3780	4190	4720	5260	5820	6360	6880
EJAM-A100	KARA-010E	3820	4240	4780	5330	5910	6470	7000

Capacities rated at 65°F return gas, 5°F subcooling

Physical and Electrical Data

Copelametic™ air-cooled condensing units

MODEL	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection
E3AH-A075-CAV	020	KAN2-0075-CAV	24	17.96	13.2	3/8 S	5/8 S
E3AH-A100-CAV	020	KAR2-0100-CAV	24	17.9	13.2	3/8 S	5/8 S
E3AH-A100-CAV	212	KAR2-0100-CAV	24	17.9	13.2	3/8 S	5/8 S
E3AH-A100-TAC	020	KAR1-0100-TAC	24	17.92	13.18	3/8 S	5/8 S
E3AH-A151-CAV	020	KAGB-0150-CAV	26.4	18.65	16.1	3/8 S	7/8 S
E3AH-A151-TAC	020	KAGA-0150-TAC	26	18.61	16.1	3/8 S	7/8 S
E3AM-A075-CAA	020	KAE2-0075-CAA	24	17.96	13.2	3/8 S	5/8 S
E3AM-A075-CAV	020	KAE2-0075-CAV	24	17.96	13.2	3/8 S	5/8 S
E3AM-A075-TAC	020	KAE1-0075-TAC	24	18.1	13.2	3/8 S	5/8 S
E3AM-A100-CAV	020	KAM2-0100-CAV	24	17.96	13.2	3/8 S	5/8 S
E3AM-A100-TAC	020	KAM1-0100-TAC	24	17.96	13.2	3/8 S	5/8 S
E3AM-A100-TAD	020	KAM1-0100-TAD	24	17.9	13.2	3/8 S	5/8 S
E3AM-A101-CAV	020	KAM2-0100-CAV	26.4	18.65	16.1	3/8 S	7/8 S
E3AM-A101-TAC	020	KAM1-0100-TAC	26	18.61	16.1	3/8 S	7/8 S
E3AM-A101-TAD	020	KAM1-0100-TAD	26.4	20.3	16.2	3/8 S	7/8 S
E7AB-A050-CAV	020	KAN2-0050-CAV	19.5	16.3	12.1	1/4 S	1/2 S
E7AB-A050-TAC	020	KAN1-0050-TAC	19.5	16.3	12.1	1/4 S	1/2 S
E7AB-A100-CAV	020	KAJ3-0100-CAV	24	17.9	13.2	3/8 S	5/8 S
E7AB-A100-CAV	212	KAJ3-0100-CAV	24	17.9	13.2	3/8 S	5/8 S
E7AB-A100-TAD	020	KAJ1-0100-TAD	24	17.9	13.2	3/8 S	5/8 S
E8AJ-A075-CAV	020	KANB-007E-CAV	24	17.96	13.2	3/8 S	5/8 S
E8AJ-A075-TAC	020	KANA-007E-TAC	24	18.1	13.2	3/8 S	5/8 S
E8AJ-A100-CAV	020	KARB-010E-CAV	24	17.9	13.2	3/8 S	5/8 S
E8AJ-A100-TAC	020	KARA-010E-TAC	24	17.96	13.2	3/8 S	5/8 S
E8AJ-A100-TAD	020	KARA-011E-TAD	24	20	15.5	3/8 S	5/8 S
E8AL-A050-CAV	020	KANB-005E-CAV	19.5	16.3	12.1	1/4 S	1/2 S
E8AL-A075-CAA	020	KAMB-007E-CAA	24	17.96	13.2	3/8 S	5/8 S
E8AL-A075-TAC	020	KAMA-007E-TAC	24	18.1	13.2	3/8 S	5/8 S
EBAL-A050-CAV	020	KAG2-0050-CAV	19.5	16.3	12.1	1/4 S	1/2 S
EBAL-A075-IAA	020	KAA2-0075-IAA	24	17.9	13.2	3/8 S	5/8 S
EBAL-A075-TAC	020	KAA1-0075-TAC	24	18.1	13.2	3/8 S	5/8 S
EBAM-A050-IAA	020	KAE2-0050-IAA	19.5	16.3	12.1	1/4 S	1/2 S
EBAM-A100-TAC	020	KAK1-0100-TAC	24	17.96	13.2	3/8 S	5/8 S
EBAM-A100-TAD	020	KAK1-0100-TAD	24	17.9	13.2	3/8 S	5/8 S
EJAE-0175-CAV	020	KATB-015E-CAV	26	18.3	16.2	3/8 S	7/8 S
EJAE-0175-TAC	020	KATA-015E-TAC	26.1	18.6	16.1	3/8 S	7/8 S
EJAL-A050-CAV	020	KANB-005E-CAV	19.5	16.3	12.1	1/4 S	1/2 S
EJAL-A050-TAC	020	KANA-006E-TAC	19.5	16.3	12.1	1/4 S	1/2 S

Physical and Electrical Data

Copelametic™ air-cooled condensing units

MODEL	Receiver Capacity* (Lbs @ 90% Volume)				MCA	Max Fuse	Ship Weight
	R-12	R-22	R-134a	R-404A			
E3AH-A075-CAV		7.3			8.8	15	160
E3AH-A100-CAV		7.3			10.4	15	164
E3AH-A100-CAV		7.3			10.4	15	164
E3AH-A100-TAC		7.3			6.5	15	147
E3AH-A151-CAV		12.9			14.9	20	170
E3AH-A151-TAC		12.9			9.8	15	164
E3AM-A075-CAA		7.3			15.6	20	135
E3AM-A075-CAV		7.3			7.9	15	138
E3AM-A075-TAC		7.3			5.4	15	85
E3AM-A100-CAV		7.3			10.5	15	162
E3AM-A100-TAC		7.3			6.8	15	140
E3AM-A100-TAD		7.3			3.5	15	182
E3AM-A101-CAV		12.9			12.2	15	162
E3AM-A101-TAC		12.9			8.5	15	162
E3AM-A101-TAD		12.9			4.4	15	169
E7AB-A050-CAV	3				5.2	15	124
E7AB-A050-TAC	3				3.3	15	124
E7AB-A100-CAV	6.9				9.8	15	164
E7AB-A100-CAV	6.9				9.8	15	164
E7AB-A100-TAD	6.9				3.9	15	181
E8AJ-A075-CAV		7.3		6.3	7.9	15	138
E8AJ-A075-TAC		7.3		6.3	4.9	15	139
E8AJ-A100-CAV		7.3		6.4	10.4	15	155
E8AJ-A100-TAC		7.3		6.4	6.5	15	138
E8AJ-A100-TAD		7.3		6.4	3.2	15	156
E8AL-A050-CAV		7.3		6.4	5.1	15	121
E8AL-A075-CAA		7.3		6.3	15.6	20	140
E8AL-A075-TAC		7.3		6.3	5.2	15	135
EBAL-A050-CAV	3				5.2	15	113
EBAL-A075-IAA	8.1				14.8	20	133
EBAL-A075-TAC	8.1				4.4	15	160
EBAM-A050-IAA	3				10.9	15	112
EBAM-A100-TAC	6.9				5.3	15	162
EBAM-A100-TAD	6.9				3.6	15	154
EJAE-0175-CAV				6.4	14.9	20	162
EJAE-0175-TAC				6.4	9.2	15	163
EJAL-A050-CAV				2.4	5.2	15	126
EJAL-A050-TAC				2.4	3.5	15	114

Physical and Electrical Data

Copelametic™ air-cooled condensing units

MODEL	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection
EJAL-A075-CAA	020	KAMB-007E-CAA	24	17.96	13.2	3/8 S	5/8 S
EJAL-A075-CAV	020	KAMB-007E-CAV	24	17.96	13.2	3/8 S	5/8 S
EJAL-A075-CAV	072	KAMB-007E-CAV	24	17.72	13.25	3/8 S	1/2 S
EJAL-A075-TAC	020	KAMA-007E-TAC	24	18.1	13.2	3/8 S	5/8 S
EJAL-A100-CAV	020	KAJB-010E-CAV	24	17.9	13.2	3/8 S	5/8 S
EJAL-A100-CAV	072	KAJB-010E-CAV	24	17.95	13.19	3/8 S	5/8 S
EJAL-A100-CAV	075	KAJB-010E-CAV	24	18.81	13.19	3/8 S	5/8 S
EJAL-A100-TAD	020	KAJA-011E-TAD	24	17.9	13.2	3/8 S	5/8 S
EJAL-A102-CAV	020	KALB-015E-CAV	24	17.9	13.2	3/8 S	5/8 S
EJAL-A103-CAV	020	KAKB-011E-CAV	24	17.9	13.2	3/8 S	5/8 S
EJAL-A150-TAD	020	KALA-016E-TAD	26.4	20.3	16.2	3/8 S	7/8 S
EJAM-A075-CAV	020	KANB-007E-CAV	24	17.96	13.2	3/8 S	5/8 S
EJAM-A075-TAC	020	KANA-007E-TAC	24	18.1	13.2	3/8 S	5/8 S
EJAM-A100-TAC	020	KARA-010E-TAC	24	17.96	13.2	3/8 S	5/8 S
ELAL-A075-CAV	020	KAMB-0075-CAV	24	17.96	13.2	3/8 S	5/8 S
ELAL-A100-CAV	020	KAJB-0100-CAV	24	17.9	13.2	3/8 S	5/8 S
ELAL-A152-CAV	020	KAKB-0200-CAV	26.12	18.33	16.15	3/8 S	7/8 S
ENAG-A050-IAA	020	KANB-005E-IAA	19.5	16.3	12.1	1/4 S	1/2 S
ENAG-A075-CAV	020	KAMB-007E-CAV	24	17.96	13.2	3/8 S	5/8 S
ENAG-A100-CAV	020	KAJB-010E-CAV	24	17.9	13.2	3/8 S	5/8 S
ENAG-A100-TAC	020	KAJA-011E-TAC	24	17.96	13.2	3/8 S	5/8 S
EPAK-A150-CAV	020	KALB-015E-CAV	26.4	18.65	16.1	3/8 S	7/8 S
EPAK-A150-TAC	020	KALA-016E-TAC	26	18.61	16.1	3/8 S	7/8 S
ETAH-A075-CAV	020	KAMB-007E-CAV	24	17.96	13.2	3/8 S	5/8 S
ETAH-A075-IAA	212	KAMB-007E-IAA	24	17.9	13.2	3/8 S	5/8 S

Physical and Electrical Data

Copelametic™ air-cooled condensing units

MODEL	Receiver Capacity* (Lbs @ 90% Volume)				MCA	Max Fuse	Ship Weight
	R-12	R-22	R-134a	R-404A			
EJAL-A075-CAA				6.3	15.6	20	142
EJAL-A075-CAV				6.3	8.2	15	140
EJAL-A075-CAV				6.3	8.2	15	143
EJAL-A075-TAC				6.3	5.2	15	134
EJAL-A100-CAV				6.4	9.8	15	145
EJAL-A100-CAV				6.4	9.8	15	148
EJAL-A100-CAV				6.4	9.8	15	148
EJAL-A100-TAD				6.4	3.4	15	184
EJAL-A102-CAV				6.4	13.5	20	146
EJAL-A103-CAV				6.4	11.0	15	125
EJAL-A150-TAD				11.2	5.9	15	167
EJAM-A075-CAV				6.3	7.9	15	142
EJAM-A075-TAC				6.3	4.9	15	132
EJAM-A100-TAC				6.4	6.5	15	140
ELAL-A075-CAV		7.3			8.2	15	160
ELAL-A100-CAV		7.3			9.8	15	164
ELAL-A152-CAV		7.3			16.2	20	180
ENAG-A050-IAA		2.7	2.8	2.4	10.6	15	130
ENAG-A075-CAV		7.3	7.4	6.3	8.2	15	135
ENAG-A100-CAV		7.3	7.4	6.4	10.6	15	141
ENAG-A100-TAC		7.3	7.4	6.4	6.9	15	141
EPAK-A150-CAV			13.1	11.2	15.3	20	175
EPAK-A150-TAC			13.1	11.2	11.2	15	186
ETAH-A075-CAV			7.4		8.2	15	140
ETAH-A075-IAA			7.4		14.6	20	135

Copeland™ water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F)	Water flow (GPM) at evaporator temp (°F)
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Capacities rated at 65°F return gas, 5°F subcooling

R-22

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	0	25	45
E3WH-C075	KWN2-0075		3690	4260	4900	5610	6380	7230	8160	9170	10300	11400	1.1	1.8	2.7
E3WM-C075	KWE*-0075	3680	4260	4880	5550	6290	7110	8040					1.3	2	

R-404A

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	-40	-20	0	15	25	
EJWM-C075	KWN*-007E									3140	3670	4270	4940	5660	6450	7280			1.1	1.5	1.9
EJWL-C050	KWN*-00*E	760	1000	1290	1620	1990	2400	2860	3360	3890						0.3	0.6	1			
EJWL-C075	KWM*-007E	1450	1820	2240	2720	3250	3830	4460	5130	5860						0.5	0.9	1.5			

Physical and Electrical Data

Copelametic™ water-cooled condensing units

MODEL	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
E3WH-C075-CAV	020	KWN2-0075-CAV	24	17.92	11.57	3/8 S	5/8 S
E3WM-C075-CAV	020	KWE2-0075-CAV	24	17.92	11.57	3/8 S	5/8 S
E3WM-C075-TAC	020	KWE1-0075-TAC	24	17.92	11.57	3/8 S	5/8 S
EJWL-C050-CAV	020	KWNB-005E-CAV	24	17.08	11.57	3/8 S	1/2 S
EJWL-C050-IAA	020	KWNB-005E-IAA	24	17	11.57	3/8 S	1/2 S
EJWL-C050-TAC	020	KWNA-006E-TAC	24	17	11.57	3/8 S	1/2 S
EJWL-C075-CAV	020	KWMB-007E-CAV	24	17.92	11.57	3/8 S	5/8 S
EJWL-C075-TAC	020	KWMA-007E-TAC	24	17.92	11.57	3/8 S	5/8 S
EJWM-C075-CAV	020	KWNB-007E-CAV	24	17.92	11.57	3/8 S	5/8 S
EJWM-C075-TAC	020	KWNA-007E-TAC	24	17.92	11.57	3/8 S	5/8 S
ETWH-C050-IAA	020	KWNB-005E-IAA	24	17	11.57	3/8 S	1/2 S

Physical and Electrical Data

Copelametic™ water-cooled condensing units

MODEL	Water Connections		Receiver Capacity* (Lbs @ 90% Volume)				MCA	Max Fuse	Ship Weight
	In (MPT)	Out (OD)	R-12	R-22	R-134a	R-404A			
E3WH-C075-CAV	3/8	1/2		7.3			7.6	15	143
E3WM-C075-CAV	3/8	1/2		7.3			6.8	15	134
E3WM-C075-TAC	3/8	1/2		7.3			4.3	15	134
EJWL-C050-CAV	3/8	1/2				4.1	4.5	15	135
EJWL-C050-IAA	3/8	1/2				4.1	10.0	15	151
EJWL-C050-TAC	3/8	1/2				4.1	2.8	15	134
EJWL-C075-CAV	3/8	1/2				6.4	7.0	15	136
EJWL-C075-TAC	3/8	1/2				6.4	4.0	15	137
EJWM-C075-CAV	3/8	1/2				6.4	6.8	15	145
EJWM-C075-TAC	3/8	1/2				6.4	3.8	15	136
ETWH-C050-IAA	3/8	1/2		4.8			10.0	15	130

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Copeland™ F-Line

Air-cooled and water-cooled condensing units

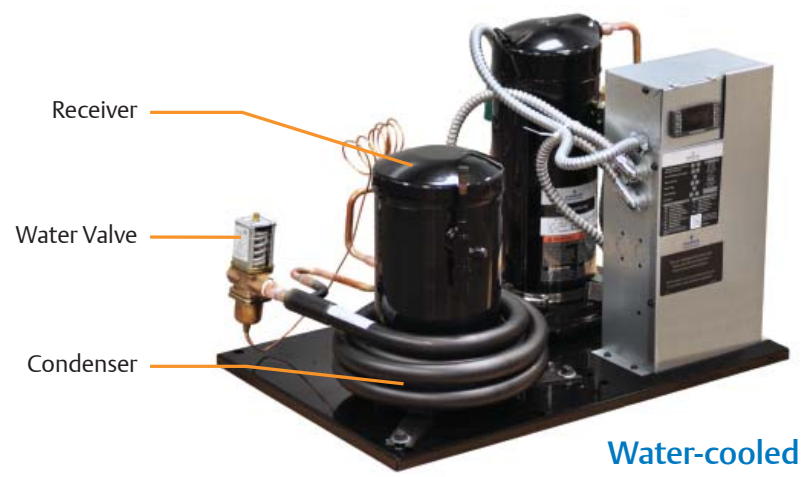
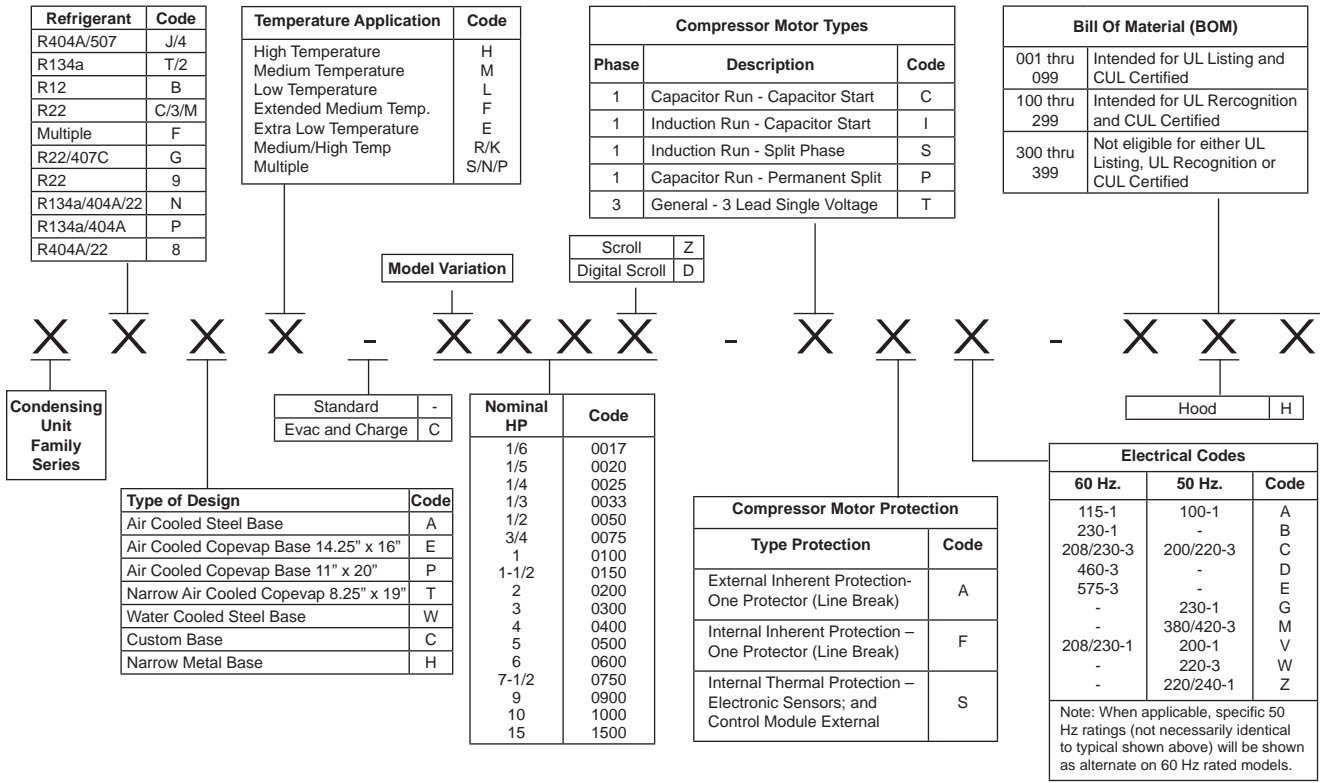


Product Information

Horsepower: 1-10

Refrigerants: R-22, R-134a, R-404A, R-407A, R-407C

Nomenclature • Welded Condensing Units



Bill of Materials Matrix

BOM		Options																UL		
Flare (Obsolete)	Sweat	Receiver W/ Valve	Suction Valve	Liquid Base Valve	Fan Guard	End Covers	Conduit	Power Cord	Accumulator†	Fan Cycling	Pressure Controls	Filter Drier	Moisture Indicator	Solenoid Valve	Crankcase Heater	Head Pressure Control Valve	Water Valve	CoreSense	Listed	Recognized
Air Cooled																				
106			X					X												X
	007	X			X	X	X				X									X
010	015	X	X		X	X	X		X	X	X				X					X
	017		X	X	X	X	X				X									X
	018				X	X	X				X									X
001**	020	X	X		X	X	X				X									X
	070	X			X	X	X		X		X	X	X							X
	071	X			X	X	X		X	X	X	X	X		X					X
	072	X			X	X	X				X	X	X							X
	073	X			X	X	X			X	X	X	X	X	X					X
	074	X			X	X	X				X	X	X	X						X
	075	X			X	X	X				X	X	X		X	X				X
	081	X			X	X	X		X	X	X	X	X		X			X		X
	102							X												X
109	103	X	X					X												X
	108/908				X	X		X												X
105	111		X	X				X												X
	118/918	X‡			X	X		X												X
	119	X						X												X
203/204	208		X	X	X	X	X													X*
201	212	X	X		X	X	X													X*
	214				X	X	X													X*
	216	X			X	X	X													X*
	272	X			X	X	X				X	X	X							X*
Water Cooled																				
001**	020	X	X				X				X						X		X	

* These recognized models are identical to the UL Listed models except without pressure control.

Need for the control is to be evaluated in the end use application.

**C-Line, W-Line, and FNAR products with a -001 BOM have sweat connections.

† Some units with Scroll compressors may have accumulators regardless of BOM.

‡ Receiver without valve.

BOMs with 4 or 6 as the middle digit are OEM special units.

Copeland Scroll™ air-cooled and water-cooled condensing units

Features	Benefits
Copeland Scroll Compressor	Reliability
Advance Diagnostics and Protection Features	High Energy Efficiency
Factory Installed EK Filter Drier & HMI Moisture Indicator	Low Sound & Vibration
Aluminum/Copper Condenser Design	Faster Trouble Shooting
Multi Refrigerant Approval for High/Med Models	Warranty Reduction
	Less Leaks, Reduce Callbacks, Lower Installation Cost, Increase Equipment Reliability, Lower Warranty
	Durability
	Application Flexibility
	Inventory Consolidation

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R-404A Low Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	Chassis	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25
90° Ambient														
FPAK-010Z	ZS09KAE	A	3410	3830	4290	4770	5290	5840	6410					
FFAP-015Z	ZS09KAE	B	3520	3980	4470	5010	5600	6230	6900	7660	8460	9320	10200	11200
FPAK-012Z	ZS11KAE	A	3950	4430	4940	5490	6060	6670	7290					
FFAP-017Z	ZS11KAE	B	4100	4630	5200	5820	6490	7210	7970	8830	9730	10700	11700	12800
FFAP-018Z	ZS13KAE	B	4720	5310	5960	6650	7400	8200	9040	9980	11000	12000	13100	14300
FFAP-020Z	ZS13KAE	C	4780	5390	6060	6780	7560	8410	9300	10300	11400	12500	13700	15000
FPAK-013Z	ZS15KAE	B	5680	6390	7150	7970	8850	9780	10800					
FFAP-022Z	ZS15KAE	C	5810	6560	7370	8250	9210	10200	11300	12600	13900	15200	16700	18300
FPAK-015Z	ZS19KAE	B	6310	7090	7930	8810	9760	10800	11800					
FFAP-030Z	ZS19KAE	C	6550	7400	8330	9340	10400	11600	12900	14300	15900	17500	19300	21100
FPAK-020Z	ZS21KAE	C	8520	9580	10700	12000	13300	14700	16100					
FFAP-032Z	ZS21KAE	C	8610	9720	10900	12200	13600	15100	16700	18500	20400	22400	24600	26900
FFAP-040Z	ZS26KAE	D	9810	11100	12500	14100	15700	17600	19600	21800	24200	26700	29500	32500
FPAK-039Z	ZS29KAE	C	10800	12100	13600	15200	16900	18700	20500					
FFAP-042Z	ZS33KAE	D	12200	13800	15500	17400	19500	21700	24200	26800	29700	32800	36100	39600
FFAP-050Z	ZS38K4E	D	14600	16400	18400	20500	22700	25100	27700	30500	33400	36500	39800	43200
100° Ambient														
FPAK-010Z	ZS09KAE	A		3560	3960	4390	4850	5340	5830					
FFAP-015Z	ZS09KAE	B		3710	4160	4650	5180	5750	6350	7040	7760	8530	9370	10300
FPAK-012Z	ZS11KAE	A		4100	4560	5030	5540	6070	6600					
FFAP-017Z	ZS11KAE	B		4310	4830	5390	5990	6640	7320	8090	8900	9770	10700	11700
FFAP-018Z	ZS13KAE	B		4950	5530	6150	6820	7540	8270	9120	10000	10900	11900	13000
FFAP-020Z	ZS13KAE	C		5020	5630	6280	6990	7750	8550	9450	10400	11400	12500	13700
FPAK-013Z	ZS15KAE	B		5940	6630	7360	8140	8970	9820					
FFAP-022Z	ZS15KAE	C		6110	6860	7650	8510	9450	10400	11500	12700	14000	15300	16700
FPAK-015Z	ZS19KAE	B		6580	7330	8120	8960	9850	10800					
FFAP-030Z	ZS19KAE	C	6120	6900	7750	8670	9660	10700	11900	13200	14600	16000	17600	19400
FPAK-020Z	ZS21KAE	C		8910	9940	11000	12200	13400	14700					
FFAP-032Z	ZS21KAE	C		9050	10100	11300	12600	13900	15300	17000	18700	20500	22400	24500
FFAP-040Z	ZS26KAE	D	9190	10400	11700	13100	14600	16300	18100	20100	22300	24600	27100	29900
FPAK-039Z	ZS29KAE	C		11300	12600	14000	15500	17200	18800					
FFAP-042Z	ZS33KAE	D	11400	12900	14500	16200	18100	20100	22300	24700	27300	30100	33100	36400
FFAP-050Z	ZS38K4E	D		15200	16900	18800	20900	23000	25300	27900	30500	33300	36300	39400
110° Ambient														
FPAK-010Z	ZS09KAE	A				3960	4350	4760	5180					
FFAP-015Z	ZS09KAE	B		3410	3820	4250	4720	5220	5750	6360	7000	7680	8430	9220
FPAK-012Z	ZS11KAE	A					4930	5380	5820					
FFAP-017Z	ZS11KAE	B			4420	4910	5440	6010	6600	7290	8000	8770	9590	10500
FFAP-018Z	ZS13KAE	B			5040	5580	6170	6790	7420	8170	8930	9740	10600	11600
FFAP-020Z	ZS13KAE	C			5150	5730	6350	7020	7720	8520	9360	10300	11200	12300
FPAK-013Z	ZS15KAE	B			6020	6650	7330	8040	8770					
FFAP-022Z	ZS15KAE	C		5630	6290	6990	7750	8580	9430	10400	11500	12600	13800	15000
FPAK-015Z	ZS19KAE	B				7310	8030	8790	9560					
FFAP-030Z	ZS19KAE	C			7110	7930	8810	9770	10800	11900	13200	14500	15900	17400
FPAK-020Z	ZS21KAE	C			9040	10000	11000	12100	13200					
FFAP-032Z	ZS21KAE	C			9270	10300	11400	12600	13800	15300	16800	18400	20100	22000
FFAP-040Z	ZS26KAE	D		9600	10800	12000	13400	14900	16500	18300	20200	22300	24600	27100
FPAK-039Z	ZS29KAE	C			11500	12700	14000	15400	16900					
FFAP-042Z	ZS33KAE	D		11900	13300	14900	16500	18400	20300	22500	24800	27300	30000	32900
FFAP-050Z	ZS38K4E	D		13800	15400	17100	18900	20800	22800	25100	27500	30000	32700	35500

* See pages 12 and 13 for chassis size comparison

Capacities rated at 40°F return gas (65°F return gas for capacities in bold), 5°F subcooling

R-404A Medium/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
FFAP-015Z	ZS09KAE	6900	7660	8460	9320	10200	11500	12400	13400	14500	15600
FFAP-017Z	ZS11KAE	7970	8830	9730	10700	11700	13100	14300	15500	16900	18500
FFAP-018Z	ZS13KAE	9040	9980	11000	12000	13100	14600	15800	17000	18200	19500
FFAP-020Z	ZS13KAE	9300	10300	11400	12500	13700	15300	16600	17900	19200	20600
FFAP-022Z	ZS15KAE	11300	12600	13900	15200	16700	18900	20600	22500	24400	26800
FFAP-030Z	ZS19KAE	12900	14300	15900	17500	19300	21600	23500	25400	27500	29600
FFAP-032Z	ZS21KAE	16700	18500	20400	22400	24600	27900	30500	33300	36400	39700
FFAP-040Z	ZS26KAE	19600	21800	24200	26700	29500	34200	37500	41000	44800	49500
FFAP-042Z	ZS33KAE	24200	26800	29700	32800	36100	40800	44800	49100	54000	59000
FFAP-050Z	ZS38K4E	27700	30500	33400	36500	39800	45400	49300	53500	57500	62000
FJAM-A60Z	ZB45KCE	33100	36600	40300	44100	48200	52400				
FNAR-070Z	ZB50KCE	37700	42200	46800	51500	56500	61700	67200	72900	78800	85000
FPAN-070Z	ZB50KCE	38200	42700	47300	52100	57100	62400				
FNAR-080Z	ZB58KCE	40700	45600	50500	55600	60900	66400	72000	77800	83600	89600
FPAN-080Z	ZB58KCE	42200	47200	52300	57600	63000	68600				
FNAR-091Z	ZB66KCE	48600	53800	59000	64400	70100	76000	82100	88400	95000	101700
FPAN-091Z	ZB66KCE	48800	54000	59200	64700	70300	76300				
FNAR-101Z	ZB76KCE	56500	62200	67800	73800	80000	86400	93000	99900	107000	114300
FPAN-101Z	ZB76KCE	56800	62500	68200	74100	80300	86800				
100° Ambient											
FFAP-015Z	ZS09KAE	6350	7040	7760	8530	9370	10600	11500	12400	13300	14300
FFAP-017Z	ZS11KAE	7320	8090	8900	9770	10700	12000	13100	14200	15500	17000
FFAP-018Z	ZS13KAE	8270	9120	10000	10900	11900	13700	14700	15800	16900	18100
FFAP-020Z	ZS13KAE	8550	9450	10400	11400	12500	14200	15300	16500	17700	19000
FFAP-022Z	ZS15KAE	10400	11500	12700	14000	15300	17400	19000	20700	22500	24700
FFAP-030Z	ZS19KAE	11900	13200	14600	16000	17600	20000	21700	23400	25300	27200
FFAP-032Z	ZS21KAE	15300	17000	18700	20500	22400	25700	28100	30700	33500	36600
FFAP-040Z	ZS26KAE	18100	20100	22300	24600	27100	31600	34600	37900	41400	45800
FFAP-042Z	ZS33KAE	22300	24700	27300	30100	33100	37800	41400	45400	49900	54500
FFAP-050Z	ZS38K4E	25300	27900	30500	33300	36300	41800	45300	49000	53000	57000
FJAM-A60Z	ZB45KCE	30200	33400	36700	40300	44000	47900				
FNAR-070Z	ZB50KCE	33800	38000	42300	46700	51300	56200	61200	66500	72000	77800
FPAN-070Z	ZB50KCE	34200	38500	42800	47200	51900	56800				
FNAR-080Z	ZB58KCE	36100	40600	45100	49700	54500	59500	64500	69700	75000	80300
FPAN-080Z	ZB58KCE	37500	42100	46800	51600	56500	61600				
FNAR-091Z	ZB66KCE	44500	49300	54000	59000	64200	69500	75100	80900	86900	93000
FPAN-091Z	ZB66KCE	44700	49500	54200	59200	64400	69800				
FNAR-101Z	ZB76KCE	51400	56600	61600	66900	72500	78200	84100	90300	96700	103200
FPAN-101Z	ZB76KCE	51700	56800	61900	67300	72800	78600				
110° Ambient											
FFAP-015Z	ZS09KAE	5750	6360	7000	7680	8430	9910	10700	11500	12300	13200
FFAP-017Z	ZS11KAE	6600	7290	8000	8770	9590	10800	11800	12900		
FFAP-018Z	ZS13KAE	7420	8170	8930	9740	10600	13000	14000			
FFAP-020Z	ZS13KAE	7720	8520	9360	10300	11200	13300	14400	15400	16500	17600
FFAP-022Z	ZS15KAE	9430	10400	11500	12600	13800	15800	17300	18800	20600	22600
FFAP-030Z	ZS19KAE	10800	11900	13200	14500	15900	18600	20100	21700	23300	25000
FFAP-032Z	ZS21KAE	13800	15300	16800	18400	20100	23300	25500	27900	30500	
FFAP-040Z	ZS26KAE	16500	18300	20200	22300	24600	28800	31600	34700	38000	42100
FFAP-042Z	ZS33KAE	20300	22500	24800	27300	30000	34500	37900	41600	45700	50000
FFAP-050Z	ZS38K4E	22800	25100	27500	30000	32700	37900	41100	44500	48100	52000
FJAM-A60Z	ZB45KCE	27100	30000	33100	36300	39700	43300				
FNAR-070Z	ZB50KCE	29600	33600	37500	41700	45900	50400	55000	59900	65000	70400
FPAN-070Z	ZB50KCE	30000	34000	38000	42100	46400	50900				
FNAR-080Z	ZB58KCE	31300	35500	39500	43700	48000	52400	56900	61500	66200	71000
FPAN-080Z	ZB58KCE	32500	36800	41000	45300	49700	54200				
FNAR-091Z	ZB66KCE	40100	44500	48900	53400	58100	62900	68000	73200		
FPAN-091Z	ZB66KCE	40300	44700	49100	53600	58300	63200				
FNAR-101Z	ZB76KCE	46100	50700	55100	59800	64700	69800	75000			
FPAN-101Z	ZB76KCE		50900	55400	60100	65000	70100				

* See pages 12 and 13 for chassis size comparison

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-134a Med/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	Chassis*	0	5	10	15	20	25	30	35	40	45
90° Ambient												
FPAK-010Z	ZS09KAE	A	4020	4520	5060	5620	6230	7100	7810	8570	9370	10200
FFAP-015Z	ZS09KAE	B	4220	4770	5360	6000	6680	7540	8340	9200	10100	11100
FPAK-012Z	ZS11KAE	A	4730	5300	5920	6560	7250	8250	9060	9910	10800	11700
FFAP-017Z	ZS11KAE	B	5000	5640	6340	7080	7880	8900	9840	10800	11900	13100
FFAP-018Z	ZS13KAE	B	5640	6350	7120	7940	8810	9930	10900	12000	13200	14400
FFAP-020Z	ZS13KAE	C	5710	6450	7240	8090	9010	10200	11200	12400	13600	14900
FPAK-013Z	ZS15KAE	B	6640	7470	8360	9300	10300	11800	13000	14200	15600	17000
FFAP-022Z	ZS15KAE	C	6810	7690	8640	9660	10800	12300	13600	15000	16500	18100
FPAK-015Z	ZS19KAE	B	7410	8330	9310	10300	11500	13100	14300	15700	17200	18700
FFAP-030Z	ZS19KAE	C	7870	8890	10000	11200	12500	14100	15600	17200	19000	20800
FPAK-020Z	ZS21KAE	C	10000	11300	12600	14000	15500	17700	19500	21400	23400	25600
FFAP-032Z	ZS21KAE	C	10400	11800	13200	14700	16400	18500	20400	22500	24700	27100
FPAK-039Z	ZS29KAE	C	11300	12800	14300	16000	17800	21300	23700	26200	28900	31800
FFAP-040Z	ZS26KAE	D	11800	13400	15100	16900	18900	22500	24800	27200	29800	32600
FFAP-042Z	ZS33KAE	D	14600	16500	18500	20700	23100	26100	29000	32000	35200	38700
FFAP-050Z	ZS38K4E	D	16600	18700	20900	23400	26000	29400	32500	35800	39300	43000
FNAR-070Z	ZB50KCE			24800	28000	31400	35100	39000	43200	47700	52500	57500
FPAN-070Z	ZB50KCE			25700	29000	32500	36300	40300	44500	48900	53600	58600
FNAR-080Z	ZB58KCE			27900	31400	35200	39300	43600	48200	53000	58100	63400
FPAN-080Z	ZB58KCE			28600	32200	36000	40200	44600	49300	54200	59400	64900
FPAN-091Z	ZB66KCE			32100	36000	40200	44800	49800	55000	60500	66200	72100
FNAR-091Z	ZB66KCE			32200	36100	40400	45000	49900	55200	60700	66400	72400
FNAR-101Z	ZB76KCE			35800	40100	44800	49800	55200	60800	66800	73000	79500
FPAN-101Z	ZB76KCE			37000	41500	46400	51600	57200	63100	69400	75900	82600
100° Ambient												
FPAK-010Z	ZS09KAE	A		4260	4750	5280	5840	6670	7340	8040	8790	9580
FFAP-015Z	ZS09KAE	B	4000	4510	5060	5660	6300	7130	7890	8690	9560	10500
FPAK-012Z	ZS11KAE	A		4980	5550	6140	6780	7740	8480	9270	10100	11000
FFAP-017Z	ZS11KAE	B	4730	5330	5980	6670	7420	8400	9280	10200	11200	12300
FFAP-018Z	ZS13KAE	B	5330	6000	6710	7470	8290	9370	10300	11300	12400	13600
FFAP-020Z	ZS13KAE	C	5410	6100	6830	7630	8480	9600	10600	11700	12800	14100
FPAK-013Z	ZS15KAE	B		7040	7870	8750	9690	11100	12200	13400	14600	16000
FFAP-022Z	ZS15KAE	C	6450	7270	8160	9110	10100	11600	12900	14200	15600	17100
FPAK-015Z	ZS19KAE	B		7840	8750	9710	10700	12300	13500	14800	16100	17600
FFAP-030Z	ZS19KAE	C	7460	8420	9450	10600	11800	13300	14700	16300	17900	19700
FPAK-020Z	ZS21KAE	C		10600	11900	13200	14600	16700	18400	20200	22100	24100
FFAP-032Z	ZS21KAE	C	9860	11100	12400	13900	15400	17400	19300	21200	23300	25500
FPAK-039Z	ZS29KAE	C	10700	12100	13500	15000	16700	20200	22400	24800	27400	30100
FFAP-040Z	ZS26KAE	D	11200	12700	14300	16000	17800	21100	23300	25600	28000	30700
FFAP-042Z	ZS33KAE	D	13800	15600	17500	19600	21800	24700	27400	30300	33300	36600
FFAP-050Z	ZS38K4E	D	15600	17600	19700	22000	24500	27800	30800	33900	37200	40700
FNAR-070Z	ZB50KCE			23100	26200	29400	32900	36600	40600	44800	49300	54100
FPAN-070Z	ZB50KCE			24100	27200	30500	34000	37800	41800	46000	50400	55100
FNAR-080Z	ZB58KCE			26200	29500	33000	36800	40900	45200	49700	54500	59500
FPAN-080Z	ZB58KCE			26800	30200	33800	37700	41800	46200	50900	55800	60900
FPAN-091Z	ZB66KCE			30000	33600	37700	42000	46600	51500	56700	62100	67700
FNAR-091Z	ZB66KCE			30100	33800	37800	42100	46800	51700	56900	62300	67900
FNAR-101Z	ZB76KCE			33400	37400	41900	46600	51700	57000	62600	68400	74500
FPAN-101Z	ZB76KCE			34600	38800	43400	48400	53700	59200	65100	71200	77600

* See pages 12 and 13 for chassis size comparison

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-134a Med/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	Chassis*	0	5	10	15	20	25	30	35	40	45
110° Ambient												
FPAK-010Z	ZS09KAE	A			4410	4900	5410	6210	6820	7470	8160	8900
FFAP-015Z	ZS09KAE	B	3750	4230	4740	5290	5880	6690	7390	8150	8970	9840
FPAK-012Z	ZS11KAE	A				5680	6260	7160	7850	8570	9350	10200
FFAP-017Z	ZS11KAE	B	4430	4990	5590	6230	6920	7860	8680	9560	10500	11500
FFAP-018Z	ZS13KAE	B			6250	6950	7700	8740	9630	10600	11600	12700
FFAP-020Z	ZS13KAE	C	5060	5700	6390	7120	7920	8990	9930	10900	12000	13200
FPAK-013Z	ZS15KAE	B			7320	8130	9000	10300	11400	12500	13600	14900
FFAP-022Z	ZS15KAE	C	6040	6810	7630	8520	9480	10900	12100	13300	14600	16100
FPAK-015Z	ZS19KAE	B			8120	9010	9950	11400	12500	13700	15000	16300
FFAP-030Z	ZS19KAE	C	7010	7900	8860	9890	11000	12500	13800	15300	16800	18400
FPAK-020Z	ZS21KAE	C			11100	12300	13600	15600	17200	18800	20600	22500
FFAP-032Z	ZS21KAE	C	9230	10400	11600	13000	14400	16300	18000	19800	21800	23800
FPAK-039Z	ZS29KAE	C			12600	14000	15600	19700	21700	23900	26200	28600
FFAP-040Z	ZS26KAE	D	10500	11900	13400	15000	16700	19000	21100	23300	25700	28300
FFAP-042Z	ZS33KAE	D	12900	14600	16400	18400	20400	23300	25800	28500	31300	34400
FFAP-050Z	ZS38K4E	D	14700	16500	18500	20700	23000	26200	29000	31900	35100	38400
FNAR-070Z	ZB50KCE				24400	27500	30800	34300	38000	42000	46200	50700
FPAN-070Z	ZB50KCE				25300	28400	31700	35300	39000	43000	47100	51500
FNAR-080Z	ZB58KCE				27500	30800	34300	38100	42100	46400	50900	55600
FPAN-080Z	ZB58KCE				28100	31500	35100	39000	43100	47500	52100	56900
FPAN-091Z	ZB66KCE				31300	35000	39100	43400	48000	52900	57900	63200
FNAR-091Z	ZB66KCE				31400	35200	39200	43600	48200	53000	58100	63400
FNAR-101Z	ZB76KCE				34800	38900	43300	48100	53100	58300	63800	69500
FPAN-101Z	ZB76KCE				36100	40400	45000	50000	55200	60700	66400	72400

* See pages 12 and 13 for chassis size comparison

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-407A Low Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	-25	-20	-15	-10	-5	0
90° Ambient							
FFAP-015Z	ZS09KAE	3360	3960	4550	5160	5780	6430
FFAP-017Z	ZS11KAE	3970	4670	5370	6080	6800	7550
FFAP-018Z	ZS13KAE	4690	5490	6290	7100	7930	8780
FFAP-020Z	ZS13KAE	4540	5350	6150	6970	7800	8660
FFAP-022Z	ZS15KAE	5480	6460	7430	8410	9430	10500
FFAP-030Z	ZS19KAE	6250	7370	8480	9620	10800	12000
FFAP-032Z	ZS21KAE	7130	8530	9990	11500	13100	14800
FFAP-040Z	ZS26KAE	8350	9950	11600	13400	15300	17300
FFAP-042Z	ZS33KAE	10700	12800	15000	17300	19700	22300
100° Ambient							
FFAP-015Z	ZS09KAE			4220	4790	5370	5970
FFAP-017Z	ZS11KAE				5640	6320	7010
FFAP-018Z	ZS13KAE			5830	6580	7350	8140
FFAP-020Z	ZS13KAE				6470	7250	8050
FFAP-022Z	ZS15KAE				7820	8760	9730
FFAP-030Z	ZS19KAE			7870	8940	10000	11200
FFAP-032Z	ZS21KAE				10500	12100	13700
FFAP-040Z	ZS26KAE			10500	12200	14100	16000
FFAP-042Z	ZS33KAE			13600	15800	18200	20700
110° Ambient							
FFAP-015Z	ZS09KAE						5520
FFAP-017Z	ZS11KAE						6480
FFAP-018Z	ZS13KAE						7510
FFAP-020Z	ZS13KAE						7440
FFAP-022Z	ZS15KAE						9000
FFAP-030Z	ZS19KAE					9290	10300
FFAP-032Z	ZS21KAE						
FFAP-040Z	ZS26KAE					13100	14900
FFAP-042Z	ZS33KAE						19500

R-407A Med/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
FFAP-015Z	ZS09KAE	6430	7130	7870	8660	9510	10700	11800	12900	14100	15400
FFAP-017Z	ZS11KAE	7550	8360	9210	10100	11100	12500	13700	15000	16300	17800
FFAP-018Z	ZS13KAE	8780	9690	10600	11700	12700	13900	15100	16500	18000	19500
FFAP-020Z	ZS13KAE	8660	9600	10600	11600	12800	14400	15700	17200	18800	20500
FFAP-022Z	ZS15KAE	10500	11600	12800	14100	15400	17400	19100	20900	22800	24900
FFAP-030Z	ZS19KAE	12000	13300	14700	16200	17800	20200	22100	24200	26500	29000
FFAP-032Z	ZS21KAE	14800	16700	18600	20600	22700	25700	28200	30700	33400	36300
FFAP-040Z	ZS26KAE	17300	19400	21800	24200	26900	30600	33700	37000	40600	44300
FFAP-042Z	ZS33KAE	22300	25100	28000	31100	34500	39200	43100	47200	51500	57000
100° Ambient											
FFAP-015Z	ZS09KAE	5970	6620	7300	8040	8820	10000	11000	12000	13100	14400
FFAP-017Z	ZS11KAE	7010	7760	8550	9380	10300	11600	12700	13900	15200	16600
FFAP-018Z	ZS13KAE	8140	8970	9850	10800	11800	12900	14100	15300	16700	18200
FFAP-020Z	ZS13KAE	8050	8910	9820	10800	11800	13400	14700	16000	17500	19100
FFAP-022Z	ZS15KAE	9730	10800	11900	13100	14300	16200	17800	19400	21200	23200
FFAP-030Z	ZS19KAE	11200	12400	13700	15100	16500	18800	20600	22600	24700	27100
FFAP-032Z	ZS21KAE	13700	15500	17300	19200	21200	24100	26400	28800	31300	33900
FFAP-040Z	ZS26KAE	16000	18100	20300	22600	25100	28600	31500	34600	37800	41300
FFAP-042Z	ZS33KAE	20700	23400	26200	29200	32300	36900	40500	44400	48500	53500
110° Ambient											
FFAP-015Z	ZS09KAE	5520	6120	6740	7410	8140	9270	10200	11100	12200	13300
FFAP-017Z	ZS11KAE	6480	7170	7890	8650	9480	10800	11800	12900	14100	15400
FFAP-018Z	ZS13KAE	7510	8270	9070	9910	10800	11900	13000	14200	15500	16800
FFAP-020Z	ZS13KAE	7440	8240	9060	9950	10900	12400	13600	14800	16200	17700
FFAP-022Z	ZS15KAE	9000	9970	11000	12100	13200	15000	16500	18000	19700	21500
FFAP-030Z	ZS19KAE	10300	11400	12600	13900	15300	17400	19100	20900	22900	25100
FFAP-032Z	ZS21KAE		14700	16400	18100	20000	22900	25000	27200	29500	32000
FFAP-040Z	ZS26KAE	14900	16900	18900	21100	23400	26800	29400	32300	35300	38500
FFAP-042Z	ZS33KAE	19500	22100	24700	27500	30400	34900	38300	41900	45700	50000

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling
Superheat restrictions apply. See AE bulletin 4-1387 for full compressor operating envelope.

R-407C Med/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
FFAP-015Z	ZS09KAE	5770	6630	7520	8440	9390	10400	11400	12500	13600	14800
FFAP-017Z	ZS11KAE		7560	8590	9640	10700	12500	13700	14900	16200	17500
FFAP-018Z	ZS13KAE	7460	8610	9770	11000	12200	13600	14900	16200	17600	18900
FFAP-020Z	ZS13KAE	7800	8980	10200	11400	12700	14000	15300	16800	18200	19700
FFAP-022Z	ZS15KAE		10900	12300	13800	15400	17300	19000	20700	22500	24400
FFAP-030Z	ZS19KAE	10800	12400	14000	15800	17600	19700	21700	23700	26100	28700
FFAP-032Z	ZS21KAE	14200	16300	18400	20600	22900	25400	27900	30400	33000	35800
FFAP-040Z	ZS26KAE	16300	18800	21300	24000	26800	30700	33800	37100	41000	45200
FFAP-042Z	ZS33KAE	19400	22300	25400	28600	31900	36300	39900	43800	47700	51900
FFAP-050Z	ZS38K4E	22200	25600	29400	33500	37800	41600	46100	50800	55500	60100
100° Ambient											
FFAP-015Z	ZS09KAE		6230	7080	7950	8850	9830	10800	11800	12800	13900
FFAP-017Z	ZS11KAE			8050	9060	10100	11800	12900	14100	15300	16500
FFAP-018Z	ZS13KAE	6890	8010	9130	10300	11400	12800	14000	15300	16500	17800
FFAP-020Z	ZS13KAE		8430	9600	10800	12000	13200	14500	15800	17200	18600
FFAP-022Z	ZS15KAE			11600	13000	14500	16400	18000	19600	21300	23100
FFAP-030Z	ZS19KAE		11600	13200	14900	16600	18700	20600	22500	24800	27300
FFAP-032Z	ZS21KAE			17300	19400	21600	24000	26300	28700	31200	33700
FFAP-040Z	ZS26KAE				22700	25300	29300	32200	35300	38900	42900
FFAP-042Z	ZS33KAE		21000	23900	27000	30100	34400	37900	41400	45200	49000
FFAP-050Z	ZS38K4E		23600	27100	30900	35000	38600	43000	47400	51900	56300
110° Ambient											
FFAP-015Z	ZS09KAE				7430	8290	9160		11100	12100	13100
FFAP-017Z	ZS11KAE					9420	10400		13200	14300	15500
FFAP-018Z	ZS13KAE		7340	8430	9520	10600	12000	13100	14300	15500	16700
FFAP-020Z	ZS13KAE				10100	11300			14900	16200	17500
FFAP-022Z	ZS15KAE				12200	13600	15400	17000	18500	20100	21700
FFAP-030Z	ZS19KAE				13900	15500	17700	19500	21300	23500	25800
FFAP-032Z	ZS21KAE				18100	20100	22500	24700	27000	29300	31700
FFAP-040Z	ZS26KAE			18900	21300	23800	27800	30600	33500	36900	40700
FFAP-042Z	ZS33KAE				25200	28200	32400	35700	39100	42600	46200
FFAP-050Z	ZS38K4E			24800	28300	32100	35600	39700	43900	48100	52400

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling
 Superheat restrictions apply. See AE bulletin 4-1387 for full compressor operating envelope.

R-22 Med/High Temp

Copeland Scroll air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
FFAP-015Z	ZS09KAE	6730	7630	8530	9450	10400	11400	12400	13600	14800	16100
FFAP-017Z	ZS11KAE		8830	9860	10900	12000	13100	14300	15600	17000	18400
FFAP-018Z	ZS13KAE		9860	11000	12200	13500	14700	16000	17400	18900	20700
FFAP-020Z	ZS13KAE	9020	10200	11500	12700	14000	15200	16600	18100	19600	21300
FFAP-022Z	ZS15KAE		12100	13500	15000	16500	18300	20000	21700	23600	25600
FFAP-030Z	ZS19KAE	12300	13900	15500	17200	19000	20800	22700	24800	27000	29400
FFAP-032Z	ZS21KAE	15900	18100	20200	22400	24700	27000	29500	32200	34900	38400
FFAP-040Z	ZS26KAE	18600	21100	23700	26300	29000	31700	34800	38100	41600	45400
FJAM-A40Z	ZB30KCE			26800	29800	33000	36500	40100	43900	48000	52200
FFAP-042Z	ZS33KAE	22800	25900	28900	32100	35400	38700	42400	46400	50500	55000
FFAP-050Z	ZS38K4E			32400	35700	39300	43100	47100	51500	55500	60500
FNAR-070Z	ZB50KCE						58300	64100	70100	76500	83200
FNAR-080Z	ZB58KCE							71300	77900	84700	91900
FNAR-091Z	ZB66KCE						74300	81200	88400	95900	103600
FNAR-101Z	ZB76KCE						85700	93500	101500	110000	118600
100° Ambient											
FFAP-015Z	ZS09KAE		7140	8010	8900	9800	10800	11800	12900	14000	15200
FFAP-017Z	ZS11KAE			9250	10300	11300	12400	13600	14800	16100	17500
FFAP-018Z	ZS13KAE				11500	12600	13900	15100	16500	17900	19600
FFAP-020Z	ZS13KAE		9610	10800	12000	13200	14400	15700	17100	18600	20200
FFAP-022Z	ZS15KAE			12700	14100	15600	17300	18900	20600	22300	24200
FFAP-030Z	ZS19KAE		13000	14600	16200	17900	19700	21500	23500	25600	27900
FFAP-032Z	ZS21KAE			18900	21100	23300	25500	27900	30400	33000	36300
FFAP-040Z	ZS26KAE		19900	22300	24800	27400	30100	33100	36200	39600	43200
FJAM-A40Z	ZB30KCE				28200	31200	34500	37900	41600	45400	49500
FFAP-042Z	ZS33KAE		24300	27300	30300	33400	36800	40300	44000	48000	52500
FFAP-050Z	ZS38K4E			30800	33900	37200	40900	44700	48700	53000	57500
FNAR-070Z	ZB50KCE						54500	60200	66100	72300	78800
FNAR-080Z	ZB58KCE					55400	61100	67100	73300	79900	86700
FNAR-091Z	ZB66KCE						70000	76600	83500	90700	98100
FNAR-101Z	ZB76KCE						80800	88100	95800	103900	
110° Ambient											
FFAP-015Z	ZS09KAE				8330	9190	10100	11100	12200	13200	
FFAP-017Z	ZS11KAE					10600	11600	12800			
FFAP-018Z	ZS13KAE						13000	14300	15500	16900	18500
FFAP-020Z	ZS13KAE				11200	12400	13600	14800	16200		
FFAP-022Z	ZS15KAE				13200	14600	16300	17800	19400	21100	22800
FFAP-030Z	ZS19KAE				15200	16800	18400	20300	22200	24200	26400
FFAP-032Z	ZS21KAE					21800	24000	26300	28700	31200	34300
FFAP-040Z	ZS26KAE			20900	23300	25800	28500	31300	34300	37500	40900
FJAM-A40Z	ZB30KCE						32400	35700	39100	42800	46600
FFAP-042Z	ZS33KAE			25500	28400	31400	34700	38100	41700	45500	49600
FFAP-050Z	ZS38K4E					35100	38600	42200	45900	49900	54000
FNAR-070Z	ZB50KCE							55800	61600	67700	
FNAR-080Z	ZB58KCE							62500	68500		

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-404A Ext Med/Low Temp

Copeland welded air-cooled condensing units

Model	Compressor	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25
90° Ambient													
FJEF-0100	RST64C1E		2670	3060	3480	3940	4430	4940	5500	6070	6670	7280	7900
FJAF-0100	RST64C1E		2560	3010	3500	4010	4550	5090	5680	6270	6860	7470	8080
FJAF-0106	RST64C1E		2750	3150	3600	4090	4610	5160	5780	6420	7080	7780	8500
FJAF-0125	RST70C1E		2710	3200	3740	4310	4930	5570	6280	7000	7750	8530	9330
FJEF-0108	RST80C1E		3090	3580	4100	4650	5220	5800	6440	7070	7720	8390	9060
FJCL-B100	RST97C1E		3280	3730	4230	4760	5320	5850					
FJAF-0108	RST80C1E		3110	3610	4130	4690	5280	5870	6520	7180	7850	8540	9230
FJAF-E108	RST80C1E		3110	3610	4130	4690	5280	5870	6520	7180	7850	8540	9230
FJAL-0105	RFT42C1E	2840	3330	3850	4390	4960	5560	6150					
FJAF-0126	RST80C1E		3260	3810	4400	5030	5690	6380	7150	7920	8740	9580	10500
FJAF-B100	RST97C1E		3540	4050	4620	5230	5890	6550	7270	7980	8680	9370	10100
FJAF-E110	RST97C1E		3540	4050	4620	5230	5890	6550	7270	7980	8680	9370	10100
FJAF-0130	RST97C1E		3790	4360	5010	5720	6490	7280	8160	9040	9940	10800	11800
100° Ambient													
FJEF-0100	RST64C1E		2380	2730	3110	3530	3980	4440	4960	5480	6020	6570	7140
FJAF-0100	RST64C1E		2230	2660	3110	3580	4070	4560	5100	5640	6180	6730	7280
FJAF-0106	RST64C1E		2440	2810	3220	3660	4150	4650	5220	5800	6410	7040	7700
FJAF-0125	RST70C1E		2330	2800	3300	3840	4410	5000	5660	6320	7010	7710	8440
FJEF-0108	RST80C1E		2710	3140	3610	4100	4620	5140	5720	6290	6880	7490	8110
FJCL-B100	RST97C1E		2850	3260	3710	4190	4690	5170					
FJAF-0108	RST80C1E		2720	3160	3630	4140	4670	5200	5800	6390	7000	7630	8270
FJAF-E108	RST80C1E		2720	3160	3630	4140	4670	5200	5800	6390	7000	7630	8270
FJAL-0105	RFT42C1E	2540	2980	3450	3940	4450	4980	5500					
FJAF-0126	RST80C1E		2850	3340	3870	4440	5060	5680	6390	7100	7850	8630	9440
FJAF-B100	RST97C1E		3080	3540	4060	4620	5220	5810	6480	7120	7760	8380	9000
FJAF-E110	RST97C1E		3080	3540	4060	4620	5220	5810	6480	7120	7760	8380	9000
FJAF-0130	RST97C1E		3300	3830	4420	5080	5780	6510	7320	8120	8950	9780	10600
110° Ambient													
FJEF-0100	RST64C1E			2420	2760	3130	3530	3940	4410	4870	5350	5850	6360
FJAF-0100	RST64C1E			2340	2740	3170	3610	4050	4530	5010	5490	5980	6460
FJAF-0106	RST64C1E		2160	2490	2850	3250	3680	4120	4640	5150	5700	6270	6860
FJAF-0125	RST70C1E		1940	2380	2840	3340	3870	4400	5000	5600	6220	6860	7510
FJEF-0108	RST80C1E			2740	3140	3570	4030	4480	5000	5510	6040	6590	7150
FJCL-B100	RST97C1E				3200	3630	4080	4510					
FJAF-0108	RST80C1E			2750	3160	3600	4070	4540	5070	5600	6150	6710	7290
FJAF-E108	RST80C1E			2750	3160	3600	4070	4540	5070	5600	6150	6710	7290
FJAL-0105	RFT42C1E		2640	3050	3480	3930	4390	4840					
FJAF-0126	RST80C1E		2480	2900	3370	3870	4410	4970	5610	6250	6930	7630	8370
FJAF-B100	RST97C1E			3050	3510	4010	4550	5080	5670	6250	6820	7390	
FJAF-E110	RST97C1E			3050	3510	4010	4550	5080	5670	6250	6820	7390	
FJAF-0130	RST97C1E		2830	3300	3830	4420	5060	5710	6440	7170	7910	8660	9400

Capacities rated at 65°F return gas and 5°F subcooling

R-134a Med/High Temp

Copeland welded air-cooled condensing units

Model	Compressor	Chassis	0	5	10	15	20	25	30	35	40	45
90° Ambient												
FTAH-C100	RRT10K1E		4300	4890	5530	6190	6890	7620	8370	9150	9950	10800
100° Ambient												
FTAH-C100	RRT10K1E			4490	5080	5710	6360	7050	7760	8490	9240	10000
110° Ambient												
FTAH-C100	RRT10K1E							6470	7130			

Capacities rated at 65°F return gas and 5°F subcooling

R-407C Med/High Temp

Copeland welded air-cooled condensing units

Model	Compressor	Chassis	0	5	10	15	20	25	30	35	40	45
90° Ambient												
FJAF-0100	RST64C1E		4840	5480	6160	6880	7650	8450	9290	10200	11100	10800
100° Ambient												
FJAF-0100	RST64C1E			5010	5640	6300	6990	7720	8480	9280		10000
110° Ambient												
FJAF-0100	RST64C1E				5100	5700	6330					

Capacities rated at 65°F return gas and 5°F subcooling

R-22 Med/High Temp

Copeland welded air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
F3AH-B100	RST64C1	4470	5020	5640	6330	7070	7870	8710	9580	10500	11400
F3AH-B105	RST70C1	5250	5920	6630	7380	8190	9060	9990	11000	12100	13200
100° Ambient											
F3AH-B100	RST64C1		4620	5200	5840	6530	7270	8060	8880	9730	10600
F3AH-B105	RST70C1		5520	6190	6910	7670	8470	9340	10300	11200	12300
110° Ambient											
F3AH-B100	RST64C1				5350	6000	6690	7430			
F3AH-B105	RST70C1			5740	6420	7130	7880	8680	9540	10500	11400

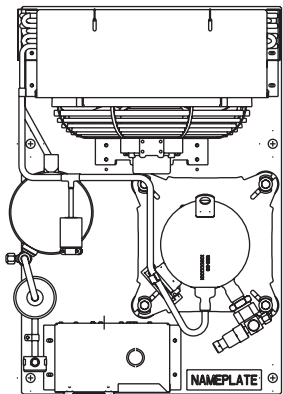
Capacities rated at 65°F return gas and 5°F subcooling

Physical and Electrical Data

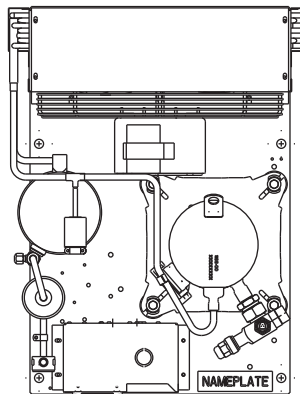
Copeland Scroll air-cooled condensing units

Model	Electricals	BOM	Compressor Electrical	Chassis	Length	Width	Height	Refrigerant Connections	
								Liquid	Suction
FFAP-015Z	CFV	072, 075	ZS09KAE-PFV	B	24	18.3	16.6	3/8 S	7/8 S
FFAP-015Z	TFC	072, 075	ZS09KAE-TF5	B	24	18.3	16.6	3/8 S	7/8 S
FFAP-015Z	TFD	072, 075	ZS09KAE-TFD	B	24	18.3	16.6	3/8 S	7/8 S
FFAP-017Z	CFV	072, 075	ZS11KAE-PFV	B	24.1	18.3	16.6	3/8 S	7/8 S
FFAP-017Z	TFC	072, 075	ZS11KAE-TF5	B	24.1	18.3	16.6	3/8 S	7/8 S
FFAP-017Z	TFD	072	ZS11KAE-TFD	B	24.1	18.3	16.6	3/8 S	7/8 S
FFAP-018Z	CFV	072	ZS13KAE-PFV	B	24.1	18.3	16.6	3/8 S	7/8 S
FFAP-020Z	CFV	071, 072	ZS13KAE-PFV	C	25.2	34	19	3/8 S	7/8 S
FFAP-020Z	TFC	071, 072	ZS13KAE-TF5	C	25.2	34	19	3/8 S	7/8 S
FFAP-020Z	TFD	071, 072	ZS13KAE-TFD	C	25.2	34	19	3/8 S	7/8 S
FFAP-022Z	CFV	071, 072	ZS15KAE-PFV	C	25.2	34	19	3/8 S	7/8 S
FFAP-022Z	TFC	071, 072	ZS15KAE-TF5	C	25.2	34	19	3/8 S	7/8 S
FFAP-022Z	TFD	071	ZS15KAE-TFD	C	25.2	34	19	3/8 S	7/8 S
FFAP-030Z	CFV	071, 072	ZS19KAE-PFV	C	25.2	34.1	19	3/8 S	7/8 S
FFAP-030Z	TFC	071, 072	ZS19KAE-TF5	C	25.2	34.1	19	3/8 S	7/8 S
FFAP-030Z	TFD	071	ZS19KAE-TFD	C	25.2	34.1	19	3/8 S	7/8 S
FFAP-032Z	CFV	071, 072	ZS21KAE-PFV	C	25.2	34.1	19	3/8 S	1 1/8 S
FFAP-032Z	TFC	071, 072	ZS21KAE-TF5	C	25.2	34.1	19	3/8 S	1 1/8 S
FFAP-032Z	TFD	071	ZS21KAE-TFD	C	25.2	34.1	19	3/8 S	1 1/8 S
FFAP-040Z	CFV	071, 072	ZS26KAE-PFV	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-040Z	TFC	071, 072	ZS26KAE-TF5	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-040Z	TFD	071	ZS26KAE-TFD	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-042Z	CFV	071, 072	ZS33KAE-PFV	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-042Z	TFC	071, 072	ZS33KAE-TF5	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-042Z	TFD	071	ZS33KAE-TFD	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-050Z	CFV	071, 072	ZS38K4E-PFV	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-050Z	TFC	071, 072	ZS38K4E-TF5	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-050Z	TFD	071	ZS38K4E-TFD	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FFAP-050Z	TFE	070	ZS38K4E-TFE	D	28.2	44.1	26.8	1/2 S	1 1/8 S
FNAR-070Z	TFC	001	ZB50KCE-TF5		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-070Z	TFD	001	ZB50KCE-TFD		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-070Z	TFE	001	ZB50KCE-TFE		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-080Z	TFC	001	ZB58KCE-TF5		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-080Z	TFD	001, 106	ZB58KCE-TFD		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-080Z	TFE	001	ZB58KCE-TFE		28.2	44.1	36.7	5/8 S	1-3/8 S
FNAR-091Z	TFC	001	ZB66KCE-TF5		28.2	44.5	36.7	5/8 S	1-3/8 S
FNAR-091Z	TFD	001	ZB66KCE-TFD		28.2	44.5	36.7	5/8 S	1-3/8 S
FNAR-101Z	TFC	001	ZB76KCE-TF5		28.2	44.5	36.7	5/8 S	1-3/8 S
FNAR-101Z	TFD	001, 105, 106	ZB76KCE-TFD		28.2	44.5	36.7	5/8 S	1-3/8 S
FNAR-101Z	TFE	001	ZB76KCE-TFE		28.2	44.5	36.7	5/8 S	1-3/8 S

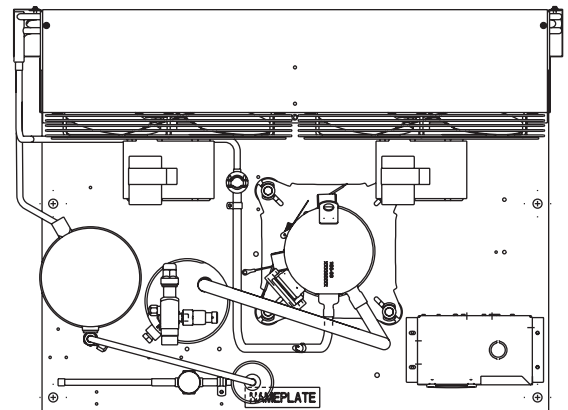
Chassis A



Chassis B



Chassis C

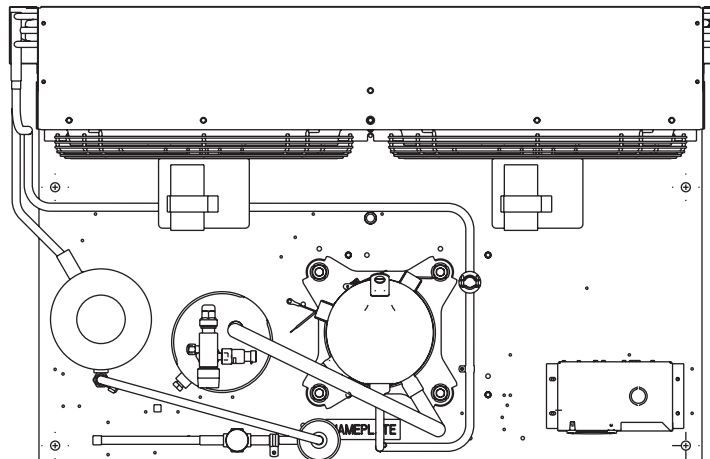


Physical and Electrical Data

Copeland Scroll air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-134a	R-22	R-404A	R-407A	R-407C			
FFAP-015Z	7.3	7.4	6.4	7.1	7.1	13.9	20	110
FFAP-015Z	7.3	7.4	6.4	7.1	7.1	11.4	15	110
FFAP-015Z	7.3	7.4	6.4	7.1	7.1	6.4	15	110
FFAP-017Z	7.3	7.4	6.4	7.1	7.1	17.2	25	114
FFAP-017Z	7.3	7.4	6.4	7.1	7.1	14.4	20	114
FFAP-017Z	7.3	7.4	6.4	7.1	7.1	7.0	15	114
FFAP-018Z	7.3	7.4	6.4	7.1	7.1	16.4	25	114
FFAP-020Z	12.9	13.1	11.2	12.4	12.3	16.8	25	186
FFAP-020Z	12.9	13.1	11.2	12.4	12.3	13.9	20	186
FFAP-020Z	12.9	13.1	11.2	12.4	12.3	7.1	15	186
FFAP-022Z	12.9	13.1	11.2	12.4	12.3	22.4	35	186
FFAP-022Z	12.9	13.1	11.2	12.4	12.3	16.1	20	186
FFAP-022Z	12.9	13.1	11.2	12.4	12.3	10	15	186
FFAP-030Z	12.9	13.1	11.2	12.4	12.3	25.3	40	192
FFAP-030Z	12.9	13.1	11.2	12.4	12.3	19.9	30	192
FFAP-030Z	12.9	13.1	11.2	12.4	12.3	11.3	15	192
FFAP-032Z	12.9	13.1	11.2	12.4	12.3	31.8	50	219
FFAP-032Z	12.9	13.1	11.2	12.4	12.3	21.8	30	219
FFAP-032Z	12.9	13.1	11.2	12.4	12.3	11.8	15	219
FFAP-040Z	21.1	21.5	18.4	20.2	20.1	33.1	50	296
FFAP-040Z	21.1	21.5	18.4	20.2	20.1	23	35	296
FFAP-040Z	21.1	21.5	18.4	20.2	20.1	11	15	296
FFAP-042Z	21.1	21.5	18.4	20.2	20.1	38.9	60	320
FFAP-042Z	21.1	21.5	18.4	20.2	20.1	31.5	50	320
FFAP-042Z	21.1	21.5	18.4	20.2	20.1	14.9	20	320
FFAP-050Z	21.1	21.5	18.4	20.2	20.1	43.4	70	320
FFAP-050Z	21.1	21.5	18.4	20.2	20.1	30.4	45	320
FFAP-050Z	21.1	21.5	18.4	20.2	20.1	14.4	20	320
FFAP-050Z	21.1	21.5	18.4	20.2	20.1	11.9	15	320
FNAR-070Z	53	53.8	46			44.8	60	486
FNAR-070Z	53	53.8	46			23.2	30	505
FNAR-070Z	53	53.8	46			17.9	20	499
FNAR-080Z	53	53.8	46			49.1	70	490
FNAR-080Z	53	53.8	46			24.9	35	493
FNAR-080Z	53	53.8	46			20.1	25	497
FNAR-091Z	53	53.8	46			51.0	70	260
FNAR-091Z	53	53.8	46			26.3	35	506
FNAR-101Z	53	53.8	46			60.8	90	521
FNAR-101Z	53	53.8	46			29.4	45	420
FNAR-101Z	53	53.8	46			21.3	30	516

Chassis D



Physical and Electrical Data

Copeland Scroll air-cooled condensing units

Model	Electricals	BOM	Compressor Electrical	Chassis	Length	Width	Height	Refrigerant Connections	
								Liquid	Suction
FPAK-010Z	CFV	072	ZS09KAE-PFV	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-010Z	TFC	072	ZS09KAE-TF5	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-010Z	TFD	072	ZS09KAE-TFD	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-012Z	CFV	072	ZS11KAE-PFV	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-012Z	TFC	072	ZS11KAE-TF5	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-012Z	TFD	072	ZS11KAE-TFD	A	24	17.1	16.6	3/8 S	5/8 S
FPAK-013Z	CFV	072, 075	ZS15KAE-PFV	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-013Z	TFC	072	ZS15KAE-TF5	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-013Z	TFD	072, 075	ZS15KAE-TFD	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-015Z	CFV	072	ZS19KAE-PFV	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-015Z	TFC	072	ZS19KAE-TF5	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-015Z	TFD	072	ZS19KAE-TFD	B	24.1	18.3	16.6	3/8 S	7/8 S
FPAK-020Z	CFV	072	ZS21KAE-PFV	C	25	34.1	19	3/8 S	1 1/8 S
FPAK-020Z	TFC	071, 072	ZS21KAE-TF5	C	25	34.1	19	3/8 S	1 1/8 S
FPAK-020Z	TFD	071, 072	ZS21KAE-TFD	C	25	34.1	19	3/8 S	1 1/8 S
FPAK-039Z	CFV	071	ZS29KAE-PFV	C	25.2	34.1	19	3/8 S	1 1/8 S
FPAK-039Z	TFC	071	ZS29KAE-TF5	C	25.2	34.1	19	3/8 S	1 1/8 S
FPAK-039Z	TFD	071	ZS29KAE-TFD	C	25.2	34.1	19	3/8 S	1 1/8 S
FPAN-070Z	TFC	071	ZB50KCE-TF5		27.96	44	36.82	5/8 S	1-3/8 S
FPAN-070Z	TFD	071, 073	ZB50KCE-TFD		28.54	44	36.82	5/8 S	1-3/8 S
FPAN-080Z	TFC	071	ZB58KCE-TF5		27.96	44	36.82	5/8 S	1-3/8 S
FPAN-080Z	TFD	071, 073	ZB58KCE-TFD		28.54	44	36.82	5/8 S	1-3/8 S
FPAN-091Z	TFC	071	ZB66KCE-TF5		28.52	44	36.83	5/8 S	1-3/8 S
FPAN-101Z	TFC	071	ZB76KCE-TF5		28.52	44	36.83	5/8 S	1-3/8 S
FPAN-101Z	TFD	071, 073	ZB76KCE-TFD		28.52	44	36.83	5/8 S	1-3/8 S

Physical and Electrical Data

Copeland welded air-cooled condensing units

Model	Electricals	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
							Liquid	Suction
F3AH-B100	CAV	072	RST64C1-CAV	24	17.19	13.38	3/8 S	5/8 S
F3AH-B100	CFA	020	RST64C1-CFA	24	17.19	13.38	3/8 S	5/8 S
F3AH-B105	CFV	020	RST70C1-PFV	24	18.3	16.2	3/8 S	5/8 S
F3AH-B105	TAC	020	RST70C1-TA5	24	18.3	16.2	3/8 S	5/8 S
FJAF-0100	CAV	020	RST64C1E-CAV	24	17.04	13.38	3/8 S	5/8 S
FJAF-0100	IAV	212	RST64C1E-IAV	24	17.04	13.38	3/8 S	5/8 S
FJAF-0106	CAV	017, 020, 208	RST64C1E-CAV	24	18.3	16.2	3/8 S	7/8 S
FJAF-0108	CFV	020, 072, 075, 212	RST80C1E-PFV	24	17.3	13	3/8 S	5/8 S
FJAF-0108	TAC	020	RST80C1E-TA5	24	17.3	13	3/8 S	5/8 S
FJAF-0125	CFV	020, 072, 075	RST70C1E-PFV	24	18.3	16.2	3/8 S	5/8 S
FJAF-0125	TAC	020, 072, 075	RST70C1E-TA5	24	18.3	16.2	3/8 S	5/8 S
FJAF-0126	CFV	020	RST80C1E-PFV	24	18.3	16.2	3/8 S	5/8 S
FJAF-0126	TAC	020	RST80C1E-TA5	24	18.3	16.2	3/8 S	5/8 S
FJAF-0130	CFV	072, 075, 212, 272	RST97C1E-PFV	24	18.3	16.2	3/8 S	5/8 S
FJAF-B100	CFV	212	RST97C1E-PFV	24	17.3	13	3/8 S	5/8 S
FJAF-E110	CFV	212	RST97C1E-PFV	24	17.3	13	3/8 S	5/8 S
FJAL-0105	CFV	020, 072, 075	RFT42C1E-PFV	24	17.3	13	3/8 S	5/8 S
FJCL-B100	CFV	212	RST97C1E-PFV	23.56	13.33	11.73	1/4 S	5/8 S
FJEF-0108	CFV	212	RST80C1E-PFV	24	17.11	13.59	3/8 S	5/8 S
FTAH-C100	CFV	020, 212	RRT10K1E-PFV	24	17.45	13	3/8 S	5/8 S

Physical and Electrical Data

Copeland Scroll air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-134a	R-22	R-404A	R-407A	R-407C			
FPAK-010Z		7.4	6.4			13.7	20	101
FPAK-010Z		7.4	6.4			11.2	15	101
FPAK-010Z		7.4	6.4			5.5	15	101
FPAK-012Z		7.4	6.4			16.9	25	103
FPAK-012Z		7.4	6.4			14.2	20	103
FPAK-012Z		7.4	6.4			6.2	15	103
FPAK-013Z		7.4	6.4			21	35	114
FPAK-013Z		7.4	6.4			14.7	20	114
FPAK-013Z		7.4	6.4			8.4	15	114
FPAK-015Z		7.4	6.4			23.9	40	117
FPAK-015Z		7.4	6.4			18.5	30	117
FPAK-015Z		7.4	6.4			9.7	15	117
FPAK-020Z		13.1	11.2			31.8	50	204
FPAK-020Z		13.1	11.2			21.8	30	204
FPAK-020Z		13.1	11.2			11.8	15	204
FPAK-039Z		13.1	11.2			35.4	50	218
FPAK-039Z		13.1	11.2			28.4	45	218
FPAK-039Z		13.1	11.2			15	20	218
FPAN-070Z		53.8	46			44.8	60	325
FPAN-070Z		53.8	46			23.2	30	375
FPAN-080Z		53.8	46			49.1	70	350
FPAN-080Z		53.8	46			24.9	35	501
FPAN-091Z		53.8	46			51.0	70	478
FPAN-101Z		53.8	46			60.8	90	350
FPAN-101Z		53.8	46			28.4	40	340

Physical and Electrical Data

Copeland welded air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-134a	R-22	R-404A	R-407A	R-407C			
F3AH-B100	6.2					12.4	20	88
F3AH-B100	6.2					20.3	30	87
F3AH-B105	11.9					11.0	15	104
F3AH-B105	11.9					7.5	15	107
FJAF-0100			5.4			12.4	20	93
FJAF-0100			5.4			12.4	20	92
FJAF-0106			5.4			12.7	20	89
FJAF-0108			5.4			12.8	20	91
FJAF-0108			5.4			8.3	15	92
FJAF-0125			10.3			11.0	15	104
FJAF-0125			10.3			8.3	15	106
FJAF-0126			10.3			13.0	20	107
FJAF-0126			10.3			8.5	15	106
FJAF-0130			10.3			13.9	20	109
FJAF-B100			5.4			13.7	20	89
FJAF-E110			5.4			13.6	20	90
FJAL-0105			5.4			11.2	15	90
FJCL-B100			5.4			13.5	20	79
FJEF-0108			5.4			12.8	20	87
FTAH-C100		6.3				11.2	15	90

Copeland Scroll™ water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F) **Water flow (GPM) at evaporator temp (°F)**

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-404A Low Temp

Model	Compressor	-30	-25	-20	-15	-10	-5	0	-30	-15	0
FFWP-015Z	ZS09KAE	3230	3670	4140	4670	5240	5890	6590	0.48	0.67	0.96
FFWP-017Z	ZS11KAE	4010	4540	5130	5790	6500	7300	8180	0.61	0.83	1.11
FFWP-020Z	ZS13KAE	4400	4990	5640	6350	7140	8010	8980	0.69	0.94	1.26
FFWP-022Z	ZS15KAE	5350	6070	6860	7720	8680	9740	10900	0.83	1.12	1.51
FFWP-030Z	ZS19KAE	6340	7190	8120	9150	10300	11500	12900	1.02	1.33	1.74
FFWP-032Z	ZS21KAE	8030	9100	10300	11600	13000	14600	16400	1.23	1.67	2.25
FFWP-040Z	ZS26KAE	9390	10600	12000	13600	15200	17100	19200	1.45	1.97	2.6
FFWP-042Z	ZS33KAE	11200	12700	14400	16200	18200	20400	22900	1.72	2.32	3.13
FFWP-050Z	ZS38K4E	14000	15800	17700	19900	22200	24800	27600	2.12	2.83	3.75
FJWM-C50Z	ZS45K4E						31900	35400			4.66

R-404A Med/HighTemp

Model	Compressor	5	10	15	20	25	30	35	40	45	0	25	45
FFWP-015Z	ZS09KAE	7370	8230	9180	10200	12300	13600	14900	16400	18000	0.96	1.57	2.15
FFWP-017Z	ZS11KAE	9150	10200	11400	12700	14400	15900	17500	19300	21100	1.11	1.8	2.5
FFWP-020Z	ZS13KAE	10000	11200	12500	13900	16800	18500	20400	22400	24600	1.26	2.12	2.92
FFWP-022Z	ZS15KAE	12200	13600	15200	16900	20400	22500	24700	27200	29900	1.51	2.56	3.52
FFWP-030Z	ZS19KAE	14500	16200	18000	20100	22900	25200	27700	30500	33400	1.74	2.84	3.96
FFWP-032Z	ZS21KAE	18300	20500	22800	25400	30700	34100	37900	42100	46700	2.25	3.85	5.47
FFWP-040Z	ZS26KAE	21400	23900	26700	29700	32900	36500	40400	44700	49300	2.6	4.11	5.85
FFWP-042Z	ZS33KAE	25600	28600	31900	35500	43000	47700	53000	58800	65300	3.13	5.34	7.62
FFWP-050Z	ZS38K4E	30600	33900	37500	41400	51600	56800	62300	68300	75700	3.75	6.53	9.26
FJWM-C50Z	ZS45K4E	39300	43500	48100	53100	58500					4.66	7.45	

R-134a Med/High Temp

Model	Compressor	0	5	10	15	20	25	30	35	40	45	0	25	45
FFWP-015Z	ZS09KAE	4070	4620	5220	5870	6590	7620	8500	9460	10500	11600	0.57	0.96	1.4
FFWP-017Z	ZS11KAE	4850	5510	6230	7010	7870	9090	10100	11300	12500	13900	0.67	1.15	1.67
FFWP-020Z	ZS13KAE	5540	6290	7110	8010	8990	10400	11600	12900	14300	15900	0.77	1.32	1.91
FFWP-022Z	ZS15KAE	6680	7590	8570	9650	10800	12500	14000	15600	17300	19100	0.92	1.57	2.28
FFWP-030Z	ZS19KAE	7540	8560	9680	10900	12200	14100	15800	17500	19500	21600	1.05	1.75	2.53
FFWP-032Z	ZS21KAE	10100	11500	13000	14600	16400	19000	21200	23600	26200	29000	1.35	2.33	3.4
FFWP-040Z	ZS26KAE	11600	13200	14900	16800	18900	21000	23500	26100	29000	32200	1.54	2.56	3.79
FFWP-042Z	ZS33KAE	14000	15800	17900	20200	22600	26100	29200	32500	36100	40000	1.86	3.21	4.67
FFWP-050Z	ZS38K4E	16000	18100	20400	23000	25800	30800	34300	38100	42300	47200	2.1	3.79	5.69

R-407A Low Temp

Model	Compressor	-25	-20	-15	-10	-5	0	5	-25	-10	5
FFWP-015Z	ZS09KAE	3330	3960	4590	5240	5910	6630	7410	0.5	0.8	1
FFWP-017Z	ZS11KAE	3980	4720	5480	6250	7060	7920	8850	0.6	0.9	1.2
FFWP-020Z	ZS13KAE	4540	5390	6250	7140	8060	9050	10100	0.7	1	1.4
FFWP-022Z	ZS15KAE	5470	6500	7540	8610	9720	10900	12200	0.8	1.2	1.6
FFWP-030Z	ZS19KAE	6180	7340	8510	9710	11000	12300	13700	1	1.4	1.8
FFWP-032Z	ZS21KAE	7160	8680	10300	11900	13700	15600	17700	1.2	1.7	2.4
FFWP-040Z	ZS26KAE	7940	9640	11400	13300	15200	17400	19600	1.3	1.9	2.6
FFWP-042Z	ZS33KAE	10400	12700	15000	17400	20000	22800	25800	1.7	2.4	3.4

R-407A Med/High Temp

Model	Compressor	10	15	20	25	30	35	40	45	10	25	45
FFWP-015Z	ZS09KAE	8250	9170	10200	12000	13300	14700	16300	18300	1.1	1.4	2.1
FFWP-017Z	ZS11KAE	9850	11000	12200	14300	15900	17600	19500	21800	1.3	1.7	2.5
FFWP-020Z	ZS13KAE	11300	12500	13900	16300	18100	20100	22200	24900	1.5	2	2.8
FFWP-022Z	ZS15KAE	13600	15100	16700	19700	21800	24200	26800	30000	1.8	2.3	3.4
FFWP-030Z	ZS19KAE	15300	17000	18900	22200	24600	27300	30200	33800	2	2.6	3.8
FFWP-032Z	ZS21KAE	19900	22300	25000	28600	31800	35300	39100	43200	2.6	3.5	5
FFWP-040Z	ZS26KAE	22100	24800	27700	32700	36400	40400	44700	49900	2.9	3.9	5.6
FFWP-042Z	ZS33KAE	29000	32600	36400	41700	46400	51500	57000	63500	3.7	5	7.1

R-407C Med/High Temp

Model	Compressor	0	5	10	15	20	25	30	35	40	45	0	25	45
FFWP-015Z	ZS09KAE	5750	6670	7620	8630	9700	11100	12300	13600	15000	16500	0.81	1.42	1.98
FFWP-017Z	ZS11KAE	6870	7960	9100	10300	11600	13300	14700	16300	18000	19700	0.98	1.68	2.34
FFWP-020Z	ZS13KAE	7840	9090	10400	11800	13200	15100	16800	18600	20500	22500	1.13	1.92	2.68
FFWP-022Z	ZS15KAE	9450	11000	12500	14200	15900	18300	20300	22400	24700	27200	1.34	2.31	3.22
FFWP-030Z	ZS19KAE			14500	16400	18500	20600	22800	25300	27800	30600		2.6	3.62
FFWP-032Z	ZS21KAE	14300	16600	19000	21500	24200	27700	30700	34000	37500	41200	1.97	3.42	4.8
FFWP-040Z	ZS26KAE	16300	18900	21600	24500	27500	30600	34000	37600	41500	45600	2.24	3.77	5.3
FFWP-042Z	ZS33KAE	19700	22900	26200	29600	33300	38100	42300	46800	51600	56800	2.71	4.71	6.61
FFWP-050Z	ZS38K4E	22500	26200	30400	35000	39900	45000	50400	55900	61500	67200	2.93	5.31	7.76

R-22 Med/High Temp

Model	Compressor	0	5	10	15	20	25	30	35	40	45	0	25	45
FFWP-015Z	ZS09KAE	6770	7740	8720	9750	10800	12100	13300	14700	16100	17700	0.92	1.51	2.14
FFWP-017Z	ZS11KAE	7890	9040	10200	11400	12700	14000	15500	17100	18800	21000	1.07	1.75	2.49
FFWP-020Z	ZS13KAE	9160	10500	11800	13200	14600	16400	18000	19900	21800	24000	1.24	2.03	2.94
FFWP-022Z	ZS15KAE	10800	12300	13900	15500	17200	19200	21200	23400	25700	28200	1.49	2.4	3.41
FFWP-032Z	ZS21KAE	6770	7740	8720	9750	10800	19200	21200	23400	25700	28200	1.65	2.69	3.82
FFWP-030Z	ZS19KAE	12200	14000	15800	17600	19600	21900	24100	26500	29200	32000	1.65	2.69	3.82
FFWP-040Z	ZS26KAE	18200	20800	23500	26200	29100	32600	35900	39500	43400	47700	2.43	3.96	5.69
FFWP-042Z	ZS33KAE	6770	7740	8720	9750	10800	44800	49400	54300	59500	65100	3.46	5.62	8.03
FFWP-050Z	ZS38K4E	26200	29300	32600	36300	40200	44800	49400	54300	59500	65100	3.46	5.62	8.03

Copeland™ welded water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F)	Water flow (GPM) at evaporator temp (°F)
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Capacities rated at 40°F return gas, 5°F subcooling

R-404A Ext Med Temp

Model	Compressor	-25	-20	-15	-10	-5	0	25	-25	0	25
FJWF-C106	RST64C1E	2490	2980	3530	4120	4750	5420	9470	0.4	0.81	1.31
FJWF-C125	RST70C1E	2490	2990	3550	4160	4830	5540	9870	0.4	0.79	1.29
FJWF-C126	RST80C1E	3080	3650	4280	4960	5710	6520	11400	0.51	0.91	1.52

R-22 Med/High Temp

Model	Compressor	0	5	10	15	20	25	30	0	15	30
F3WH-B105	RST70C1	5120	5820	6580	7410	8330	9340	10400	0.72	1.03	1.34

Physical and Electrical Data

Copeland Scroll™ water-cooled condensing units

Model	Electricals	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
							Liquid	Suction
FFWP-015Z	CFV	020	ZS09KAE-PFV	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-015Z	TFC	020	ZS09KAE-TF5	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-015Z	TFD	020	ZS09KAE-TFD	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-017Z	CFV	020	ZS11KAE-PFV	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-017Z	TFC	020	ZS11KAE-TF5	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-017Z	TFD	020	ZS11KAE-TFD	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-020Z	CFV	020	ZS13KAE-PFV	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-020Z	TFC	020	ZS13KAE-TF5	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-020Z	TFD	020	ZS13KAE-TFD	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-022Z	CFV	020	ZS15KAE-PFV	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-022Z	TFC	020	ZS15KAE-TF5	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-022Z	TFD	020	ZS15KAE-TFD	24.0	16.1	16.6	7/8 S	3/8 S
FFWP-030Z	CFV	020	ZS19KAE-PFV	24.1	16.1	16.6	7/8 S	3/8 S
FFWP-030Z	TFC	020	ZS19KAE-TF5	24.1	16.1	16.6	7/8 S	3/8 S
FFWP-030Z	TFD	020	ZS19KAE-TFD	24.1	16.1	16.6	7/8 S	3/8 S
FFWP-032Z	CFV	020	ZS21KAE-PFV	27.2	21.5	18.2	1 1/8 S	3/8 S
FFWP-032Z	TFC	020	ZS21KAE-TF5	27.2	21.5	18.2	1 1/8 S	3/8 S
FFWP-032Z	TFD	020	ZS21KAE-TFD	27.2	21.5	18.2	1 1/8 S	3/8 S
FFWP-040Z	CFV	020	ZS26KAE-PFV	27.5	21.0	21.1	1 1/8 S	1/2 S
FFWP-040Z	TFC	020	ZS26KAE-TF5	27.5	21.0	21.1	1 1/8 S	1/2 S
FFWP-040Z	TFD	020	ZS26KAE-TFD	27.5	21.0	21.1	1 1/8 S	1/2 S
FFWP-042Z	CFV	020	ZS33KAE-PFV	27.2	21.6	21.1	1 1/8 S	1/2 S
FFWP-042Z	TFC	020	ZS33KAE-TF5	27.2	21.6	21.1	1 1/8 S	1/2 S
FFWP-042Z	TFD	020	ZS33KAE-TFD	27.2	21.6	21.1	1 1/8 S	1/2 S
FFWP-050Z	CFV	020	ZS38K4E-PFV	27.5	21.7	21.1	1 1/8 S	1/2 S
FFWP-050Z	TFC	020	ZS38K4E-TF5	27.5	21.7	21.1	1 1/8 S	1/2 S
FFWP-050Z	TFD	020	ZS38K4E-TFD	27.5	21.7	21.1	1 1/8 S	1/2 S
FFWP-050Z	TFE	020	ZS38K4E-TFE	27.5	21.7	21.1	1 1/8 S	1/2 S
FJWM-C50Z	TFC	020	ZS45K4E-TF5	25.0	21.42	21.59	1/2 S	7/8 S
FJWM-C50Z	TFD	020	ZS45K4E-TFD	25.0	21.42	21.59	1/2 S	7/8 S

Physical and Electrical Data

Copeland welded water-cooled condensing units

Model	Electricals	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
							Liquid	Suction
FJWF-C106	CAV	020	RST64C1E-CAV	24.23	17.32	11.87	3/8 S	7/8 S
F3WH-B105	CFV	020	RST70C1-PFV	24.33	19.07	12.76	3/8 S	5/8 S
F3WH-B105	TAC	020	RST70C1-TA5	24.33	19.07	12.76	3/8 S	5/8 S
FJWF-C125	CFV	020	RST70C1E-PFV	24.33	17.81	12.75	3/8 S	5/8 S
FJWF-C125	TAC	020	RST70C1E-TA5	24.33	17.81	12.75	3/8 S	5/8 S
FJWF-C126	CFV	020	RST80C1E-PFV	24.33	17.81	12.75	3/8 S	5/8 S
FJWF-C126	TAC	020	RST80C1E-TA5	24.33	17.81	12.75	3/8 S	5/8 S
FJWL-C105	CFV	020	RST80C1E-PFV	24.00	16.43	12.05	3/8 S	5/8 S
FJWL-C105	TAC	020	RST80C1E-TA5	24.00	16.55	12.00	3/8 S	5/8 S

Physical and Electrical Data

Copeland Scroll water-cooled condensing units

Model	Water Connections		Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight (Lbs)
	In (FPT)	Out (OD)	R-134a	R-22	R-404A	R-407A	R-407C			
FFWP-015Z	3/8	5/8	13.1		11.2	12.2	11.4	12.5	20	107
FFWP-015Z	3/8	5/8	13.1		11.2	12.2	11.4	10.0	15	107
FFWP-015Z	3/8	5/8	13.1		11.2	12.2	11.4	4.8	15	107
FFWP-017Z	3/8	5/8	13.1		11.2	12.2	11.4	15.8	25	105
FFWP-017Z	3/8	5/8	13.1		11.2	12.2	11.4	13.0	20	105
FFWP-017Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	5.4	15	105
FFWP-020Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	15.0	25	107
FFWP-020Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	12.1	20	107
FFWP-020Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	6.0	15	107
FFWP-022Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	19.6	35	106
FFWP-022Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	13.3	20	106
FFWP-022Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	6.8	15	106
FFWP-030Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	22.5	40	105
FFWP-030Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	17.1	30	105
FFWP-030Z	3/8	5/8	13.1	12.9	11.2	12.4	12.3	8.1	15	105
FFWP-032Z	1/2	7/8	13.1	12.9	11.2	12.4	12.3	29.0	50	171
FFWP-032Z	1/2	7/8	13.1	12.9	11.2	12.4	12.3	19.0	30	171
FFWP-032Z	1/2	7/8	13.1	12.9	11.2	12.4	12.3	8.6	15	171
FFWP-040Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	29.5	50	191
FFWP-040Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	19.4	30	191
FFWP-040Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	8.6	15	191
FFWP-042Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	35.3	60	197
FFWP-042Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	27.9	50	197
FFWP-042Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	12.5	20	197
FFWP-050Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	39.8	70	220
FFWP-050Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	26.8	45	220
FFWP-050Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	12.0	20	220
FFWP-050Z	3/4	7/8	21.5	21.1	18.4	20.2	20.1	9.9	15	220
FJWM-C50Z	3/4	7/8			18.4			29.9	50	198
FJWM-C50Z	3/4	7/8			18.4			11.6	20	201

Physical and Electrical Data

Copeland welded water-cooled condensing units

Model	Water Connections		Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight (Lbs)
	In (FPT)	Out (OD)	R-134a	R-22	R-404A	R-407A	R-407C			
FJWF-C106	3/8	1/2			6.4			11.3	20	83
F3WH-B105	3/8	1/2		12.9				9.6	15	91
F3WH-B105	3/8	1/2		12.9				6.1	15	75
FJWF-C125	3/8	1/2			11.2			9.6	15	85
FJWF-C125	3/8	1/2			11.2			6.9	15	90
FJWF-C126	3/8	1/2			11.2			11.6	20	85
FJWF-C126	3/8	1/2			11.2			7.1	15	89
FJWL-C105	3/8	1/2			6.4			12.2	20	115
FJWL-C105	3/8	1/2			6.4			7.7	15	88

Emerson™ Electronic Unit Controller (EUC)

Part #	Description
943-0152-00	115V Electronic Unit Controller
943-0153-00	230V Electronic Unit Controller
943-0154-00	115V Electronic Unit Controller with Fan Cycling
943-0155-00	230V Electronic Unit Controller with Fan Cycling
929-0114-00	Electronic Unit Controller Suction Pressure Transducer (150 PSIA)
929-0113-00	DLT Sensor Kit



Hold 3 Seconds to Enter Menu (PSI Light Will Flash) + SET

Cycle Through Menu Options ▲ ▼

Select Function SET

Adjust Value ▲ ▼

Store Function SET

Exit Menu ▲ + SET

Functions

Low Pressure Cut-In

Low Pressure Cut-Out

More information inside panel

Alarm	Description	Alarm	Description
PoF	Keypad locked	HP	High pressure trip alarm
Pon	Keypad unlocked	HA	High condenser temperature alarm
P1	Suction probe failure	HPL	High pressure trip lock-out alarm
P2	Condenser probe failure		
P3	DLT probe failure		
dLt	DLT temperature alarm		
dLL	DLT lock alarm		
EE	Module Failure		

Scan for Electronic Unit Controller Alarm Code and Service Information
052-7269-00

Note: After 15 seconds of inactivity the controller will revert to the default display

BUTTON	DESCRIPTION
SET	Displays set point In programming mode it confirms an operation.
RESTART	Allows a manual restart and a dead band reset
SERVICE	To enter the service menu.
Alarm menu	To enter the Alarm menu.

Note: Fan Cycling (If Present) is controlled by the Saturated Condenser Temperature for equal runtime

Default Factory Settings For Replacement Controller

Cin = 25	AC = 6	P1E = 135	dly = 0	bEn = 4
CoU = 15	ono = 0	P1d = 15	bMP = no	Di1 = YES
LS = 5	Con = 5	Unt = PSI	On = 2	i1P = CL
US = 135	CoF = 5	CF = F	oFF = 5	Di1 = no
odS = 2	P1i = -15	rES = in	Nub = 3	i2P = CL

Call 1-888-367-9950 or see www.EmersonClimate.com/EUC for more details

Hood Selection

Copeland™ Model	Flex-Line Hood
FFAP-015Z	505-7066-01
FFAP-017Z	505-7066-01
FFAP-020Z	505-7066-02
FFAP-022Z	505-7066-02
FFAP-030Z	505-7066-02
FFAP-032Z	505-7066-02
FFAP-040Z	505-7066-03
FFAP-042Z	505-7066-03
FFAP-050Z	505-7066-03
FPAK-010Z	505-7066-01
FPAK-012Z	505-7066-01
FPAK-013Z	505-7066-01
FPAK-015Z	505-7066-01
FPAK-020Z	505-7066-02
FPAK-039Z	505-7066-02



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Copeland X-Ref™



Emerson PTPro™



More Soon
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Application Engineering Bulletins

- 4-1273 Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
- 4-1292 Medium Temperature R-22 Copelaweld Compressors
- 4-1295 HFC-134A Refrigerant Guidelines
- 4-1298 Extended Medium Temperature R-404A/507 Hermetic Compressors and Condensing Units
- 4-1299 Application Guidelines for Copeland Scroll Compressors 2 - 6 Horsepower
- 4-1302 Application Guidelines for Copeland Scroll Compressors 7.5 - 15 Horsepower
- 4-1305 "SystemPro" AF, AR, & AS Refrigeration Hermetic 1/8-1 Horsepower Compressors
- 4-1306 Application Guidelines for RF Low Temperature Refrigeration Compressors
- 4-1307 Application Guidelines for CF Refrigeration Compressors and Condensing Units
- 4-1317 Application Guidelines for ZBKC / ZBKCE Refrigeration Scroll Compressors 1.3 to 6 HP
- 4-1318 Application Guidelines for ZBKC / ZBKCE Refrigeration Scroll Compressors 7 to 15 HP
- 4-1344 Application Guidelines for RFT, RRT, RST Compressors
- 4-1387 Application Guidelines for ZS**KAE Copeland Scroll™ Refrigeration Compressors 1.3-4.5 HP
- 8-1376 Electronic Unit Controller
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter-Driers
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

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Copeland™ M-Line

Air-cooled and water-cooled condensing units

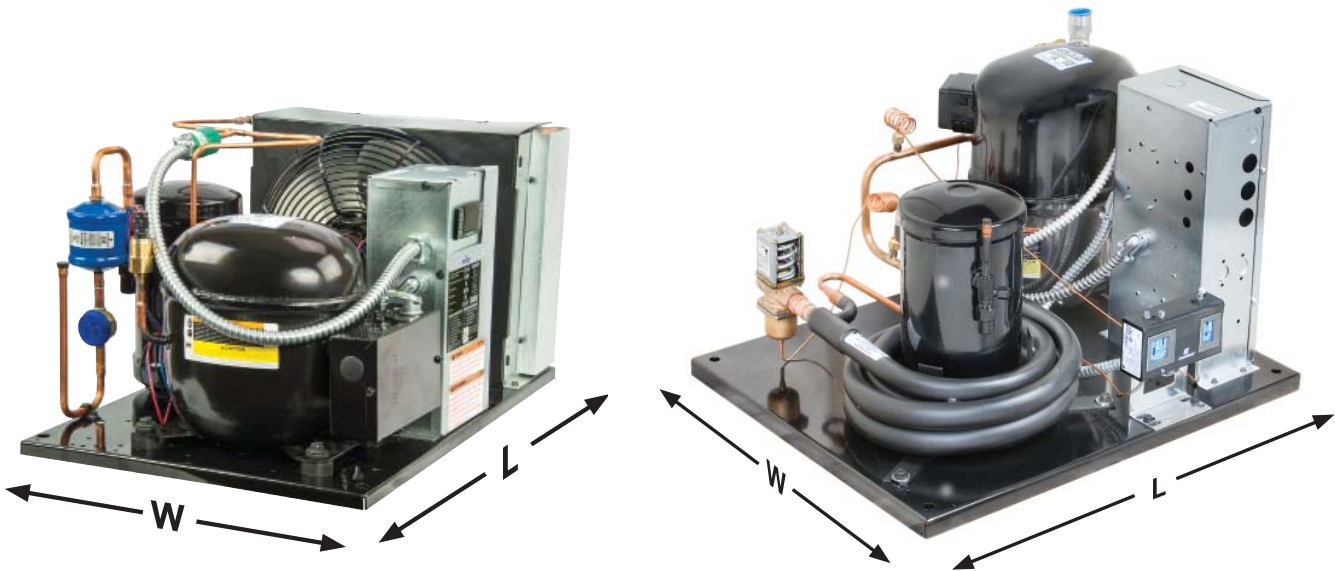
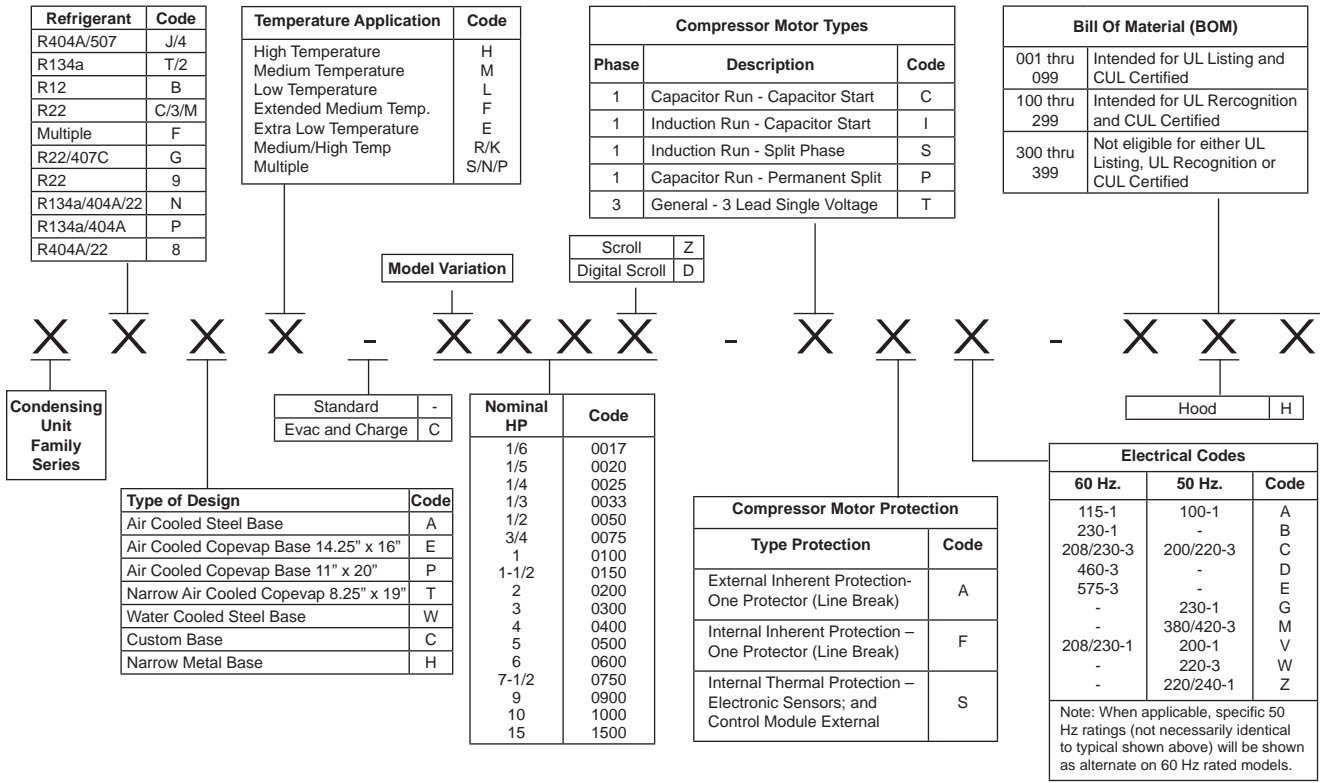


Product Information

Horsepower: 1/6 – 3/4

Refrigerants: R-12, R-134a, R-22, R-404A, R-407C

Nomenclature • Welded Condensing Units



Bill of Materials Matrix

BOM		Options																UL		
Flare (Obsolete)	Sweat	Receiver W/ Valve	Suction Valve	Liquid Base Valve	Fan Guard	End Covers	Conduit	Power Cord	Accumulator†	Fan Cycling	Pressure Controls	Filter Drier	Moisture Indicator	Solenoid Valve	Crankcase Heater	Head Pressure Control Valve	Water Valve	CoreSense	Listed	Recognized
Air Cooled																				
106			X					X												X
	007	X			X	X	X				X								X	
010	015	X	X		X	X	X		X	X	X				X				X	
	017		X	X	X	X	X				X								X	
	018				X	X	X				X								X	
001**	020	X	X		X	X	X				X								X	
	070	X			X	X	X		X		X	X	X						X	
	071	X			X	X	X		X	X	X	X	X		X				X	
	072	X			X	X	X				X	X	X						X	
	073	X			X	X	X			X	X	X	X	X					X	
	074	X			X	X	X				X	X	X	X					X	
	075	X			X	X	X				X	X	X		X	X			X	
	081	X			X	X	X		X	X	X	X	X		X			X	X	
	102							X												X
109	103	X	X					X												X
	108/908				X	X		X												X
105	111		X	X				X												X
	118/918	X‡			X	X		X												X
	119	X						X												X
203/204	208		X	X	X	X	X													X*
201	212	X	X		X	X	X													X*
	214				X	X	X													X*
	216	X			X	X	X													X*
	272	X			X	X	X				X	X	X							X*
Water Cooled																				
001**	020	X	X				X				X						X		X	
	072	X	X				X				X	X	X				X		X	

* These recognized models are identical to the UL Listed models except without pressure control.

Need for the control is to be evaluated in the end use application.

**C-Line, W-Line, and FNAR products with a -001 BOM have sweat connections.

† Some units with Scroll compressors may have accumulators regardless of BOM.

‡ Receiver without valve.

BOMs with 4 or 6 as the middle digit are OEM special units.

Copeland™ air-cooled and water-cooled condensing units

Features

Benefits

Copeland™ Hermetic Compressor and Heavy Duty Unit Bearing Fan Motor

Reliability

High Energy Efficiency

Low Sound & Vibration

Modular Components

Replacement Serviceability

Compact Design

Application Flexibility

All Models Rated Up To 110°F Ambient

Register for more product information

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

R-404A Low Temp/EMT

Copeland air-cooled condensing units

Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25
90° Ambient												
M4FL-H025	AFE08C4E	624	702	786	876	971	1060					
M4FL-0033	AFE11C3E	860	1040	1210	1390	1570	1750					
M4CL-0035	AFE13C3E	1290	1510	1730	1960	2210	2440					
M4FL-0040	AFE13C3E	1320	1550	1790	2040	2300	2560					
M4FL-H051	AFE17C4E	1480	1690	1910	2150	2410	2670					
M4CF-0050	RST45C1E	1490	1730	1980	2260	2550	2830	3170	3490	3820	4160	4500
M4FF-E050	RST45C1E	1330	1670	2010	2340	2670	2980	3330	3660	3990	4320	4660
M4FF-0050	RST45C1E	1330	1680	2010	2350	2680	2980	3330	3660	3980	4320	4660
M4FF-0056	RST45C1E	1430	1800	2150	2460	2800	3140	3530	3920	4330	4750	5180
M4FF-0059	RST45C1E	1450	1830	2210	2600	2990	3380	3790	4220	4660	5110	5590
M4FF-E075	RST55C1E	1860	2240	2640	3070	3510	3970	4470	4980	5510	6050	6610
M4FF-0075	RST55C1E	1880	2260	2660	3090	3540	4000	4500	5010	5550	6090	6660
M4FL-A067	RFT26C1E	2120	2450	2800	3170	3560	3960					
M4CL-0075	RST64C1E	2520	2930	3360	3790	4230	4650					
M4FF-0077	RST64C1E	2480	2910	3360	3840	4340	4830	5370	5890	6420	6950	7480
M4FF-0080	RST64C1E	2490	2930	3390	3880	4380	4880	5440	5980	6530	7080	7640
M4FL-0074	RST80C1E	3140	3600	4070	4570	5090	5600					
100° Ambient												
M4FL-H025	AFE08C4E	549	621	699	783	870	955					
M4FL-0033	AFE11C3E	690	850	1010	1180	1360	1530					
M4CL-0035	AFE13C3E	1070	1270	1480	1710	1940	2160					
M4FL-0040	AFE13C3E	1100	1310	1530	1770	2010	2240					
M4FL-H051	AFE17C4E	1330	1520	1720	1940	2170	2410					
M4CF-0050	RST45C1E	1270	1490	1720	1970	2240	2490	2810	3100	3400	3710	4020
M4FF-E050	RST45C1E	1110	1440	1760	2070	2370	2650	2960	3260	3550	3840	4140
M4FF-0050	RST45C1E	1120	1450	1770	2080	2380	2660	2970	3260	3550	3850	4140
M4FF-0056	RST45C1E	1210	1560	1870	2160	2470	2780	3140	3490	3860	4240	4630
M4FF-0059	RST45C1E	1230	1590	1950	2310	2670	3030	3410	3790	4190	4600	5020
M4FF-E075	RST55C1E	1550	1910	2280	2680	3090	3510	3970	4430	4910	5410	5920
M4FF-0075	RST55C1E	1570	1920	2300	2700	3120	3540	4010	4470	4960	5460	5980
M4FL-A067	RFT26C1E	1860	2160	2480	2820	3180	3530					
M4CL-0075	RST64C1E	2210	2600	2980	3380	3770	4150					
M4FF-0077	RST64C1E	2170	2580	3000	3440	3890	4340	4830	5300	5780	6260	6730
M4FF-0080	RST64C1E	2180	2590	3020	3470	3930	4380	4900	5380	5880	6380	6880
M4FL-0074	RST80C1E	2740	3160	3590	4050	4520	4970					
110° Ambient												
M4FL-H025	AFE08C4E		520	596	676	762	841					
M4FL-0033	AFE11C3E	520	670	830	990	1160	1320					
M4CL-0035	AFE13C3E		1040	1250	1470	1710	1940					
M4FL-0040	AFE13C3E	850	1060	1280	1500	1740	1970					
M4CF-0050	RST45C1E		1260	1470	1700	1940	2170	2460	2730	3010	3300	
M4FL-H051	AFE17C4E		1350	1530	1730	1940	2150					
M4FF-E050	RST45C1E		1220	1510	1790	2060	2300	2580	2840	3090	3350	
M4FF-0050	RST45C1E		1230	1520	1810	2080	2320	2600	2860	3110	3370	
M4FF-0056	RST45C1E	990	1330	1600	1860	2140	2430	2750	3070	3400	3750	4100
M4FF-0059	RST45C1E	1010	1350	1690	2020	2350	2670	3010	3350	3700	4060	4430
M4FF-E075	RST55C1E	1310	1630	1970	2330	2700	3080	3500	3910	4340	4780	5240
M4FF-0075	RST55C1E	1320	1650	1990	2360	2730	3120	3540	3960	4400	4850	5310
M4FL-A067	RFT26C1E	1610	1880	2160	2470	2790	3110					
M4CL-0075	RST64C1E		2240	2590	2940	3300	3620					
M4FF-0077	RST64C1E		2280	2660	3060	3470	3860	4310	4730	5160	5580	
M4FF-0080	RST64C1E		2290	2680	3080	3500	3910	4370	4800	5250	5690	6140
M4FL-0074	RST80C1E		2720	3110	3520	3940	4350					

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-404A Medium/High Temp

Copeland air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
M4FM-E022	ASE12C4E	990	1110	1230	1360	1500	1640				
M4FM-H022	ASE12C4E	990	1110	1230	1360	1500	1640				
MFFP-H022	ASE12C4E	1000	1120	1250	1380	1520	1670				
M4FH-0025	ASE19C3E	1600	1730	1890	2060	2240	2430	2620	2820	3030	3240
M4FH-A036	ASE24C3E	2060	2300	2550	2810	3090	3370	3670	3990	4310	4650
M4FH-E050	ASE32C3E	2680	2980	3280	3590	3930	4300	4710	5170	5670	6310
M4FH-0050	ASE32C3E	2680	2990	3320	3660	4010	4380	4770	5180	5600	6040
100° Ambient											
M4FM-E022	ASE12C4E	880	990	1100	1210	1340	1460				
M4FM-H022	ASE12C4E	880	990	1100	1210	1340	1460				
MFFP-H022	ASE12C4E	890	1000	1110	1230	1350	1480				
M4FH-0025	ASE19C3E	1460	1560	1700	1870	2030	2220	2400	2620	2840	3030
M4FH-A036	ASE24C3E	1880	2100	2330	2580	2840	3100	3370	3660	3960	4290
M4FH-0050	ASE32C3E	2310	2600	2900	3220	3560	3910	4280	4680	5080	5520
M4FH-E050	ASE32C3E	2380	2670	2960	3250	3570	3930	4320	4760	5260	5910
110° Ambient											
M4FM-E022	ASE12C4E		860	960	1060	1160	1270				
M4FM-H022	ASE12C4E		860	960	1060	1160	1270				
MFFP-H022	ASE12C4E		870	970	1070	1180	1290				
M4FH-0025	ASE19C3E	1250	1390	1530	1690	1840	2020	2190			
M4FH-A036	ASE24C3E	1680	1890	2110	2340	2590	2840	3100	3390		
M4FH-0050	ASE32C3E	2150	2400	2660	2940	3240	3530	3850	4190		
M4FH-E050	ASE32C3E		2400	2690	3000	3320	3670	4070			

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-134a LT/EMT

Copeland air-cooled condensing units

Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25
90° Ambient												
M2FL-H023	AFE05C4E	450	540	640	740	850	970					
M2CL-A025	AFE10C3E	720	820	940	1070	1210	1370					
M2FL-A025	AFE10C3E	720	820	940	1070	1210	1370					
M2CL-B033	AFE12C3E	850	960	1090	1240	1410	1590					
M2FL-B033	AFE12C3E	850	960	1090	1240	1410	1590					
M2FL-0050	RFT18C1E	1390	1720	2050	2390	2740	3080					
M2FF-0056	RFT18C1E	1470	1840	2200	2580	2970	3370	3780	4200	4630	5070	5520
M2FF-E056	RFT18C1E	1470	1840	2200	2580	2970	3370	3780	4200	4630	5070	5520
100° Ambient												
M2FL-H023	AFE05C4E	400	480	570	660	770	890					
M2CL-A025	AFE10C3E	670	760	870	1000	1130	1280					
M2FL-A025	AFE10C3E	670	760	870	1000	1130	1280					
M2CL-B033	AFE12C3E	770	880	1000	1150	1300	1480					
M2FL-B033	AFE12C3E	770	880	1000	1150	1300	1480					
M2FL-0050	RFT18C1E		1470	1800	2130	2460	2800					
M2FF-0056	RFT18C1E	1260	1610	1960	2330	2700	3080	3470	3860	4270	4690	5120
M2FF-E056	RFT18C1E	1260	1610	1960	2330	2700	3080	3470	3860	4270	4690	5120
110° Ambient												
M2FL-H023	AFE05C4E	340	420	500	590	690	790					
M2CL-A025	AFE10C3E		700	800	920	1050	1190					
M2FL-A025	AFE10C3E		700	800	920	1050	1190					
M2CL-B033	AFE12C3E		800	920	1050	1200	1360					
M2FL-B033	AFE12C3E		800	920	1050	1200	1360					
M2FL-0050	RFT18C1E					2190	2530					
M2FF-0056	RFT18C1E			1690	2040	2410	2780	3160	3540	3940	4340	4750
M2FF-E056	RFT18C1E			1690	2040	2410	2780	3160	3540	3940	4340	4750

Capacities rated at 40°F return gas, 5°F subcooling

R-134a Med/High Temp

Copeland air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
M2FH-H017	ARE13C4E	620	710	810	920	1040	1170	1310	1460	1620	1790
M2FH-H020	ARE17C4E	780	890	1010	1150	1290	1440	1610	1780	1970	2180
M2FH-0024	ARE25C3E		1110	1310	1470	1640	1810	2000	2190	2390	2600
M2FH-0025	ARE27C3E	860	1080	1300	1510	1730	1950	2160	2390	2620	2850
M2FH-0026	ARE27C3E		1270	1530	1700	1890	2080	2280	2490	2710	2940
M2FH-A033	ARE37C3E		1500	1870	2110	2360	2620	2900	3190	3500	3820
M2FH-H040	ARE40C4E	1650	1860	2090	2330	2590	2860	3140	3420	3710	4000
M2FH-0040	ARE41C3E		1670	1970	2270	2570	2870	3170	3490	3810	4150
M2FH-H049	ARE51C4E	2150	2410	2690	3000	3340	3690	4070	4450	4850	5260
M2FH-H052	ARE51C4E	2190	2460	2760	3080	3440	3810	4200	4610	5030	5470
M2FH-A050	RRT62C1E	2320	2640	2970	3320	3680	4060	4470	4890	5340	5810
M2FM-0050	RRT64C1E	2540	2860	3200	3560	3940	4350				
M2FM-0059	RRT64C1E	2730	3090	3480	3900	4350	4830				
M2FH-A056	RRT64C1E	2870	3250	3660	4120	4600	5100	5630	6170	6720	7280
M2FH-0074	RRT81C1E	3510	4020	4560	5130	5730	6370	7030	7720	8420	9150
M2FH-E074	RRT81C1E	3510	4020	4560	5130	5740	6370	7030	7720	8420	9150
M2FH-0075	RRT81C1E	3520	4040	4580	5160	5780	6420	7100	7800	8520	9270
M2FM-0074	RRT10K1E	4150	4720	5280	5860	6450	7050				
M2FM-0075	RRT10K1E	4170	4750	5330	5910	6520	7140				
100° Ambient											
M2FH-H017	ARE13C4E	560	650	750	850	960	1080	1210	1350	1500	1660
M2FH-H020	ARE17C4E	720	820	940	1060	1200	1340	1500	1670	1850	2040
M2FH-0024	ARE25C3E		1080	1230	1390	1530	1710	1870	2050	2230	2420
M2FH-0025	ARE27C3E	730	950	1170	1380	1600	1810	2010	2230	2440	2650
M2FH-0026	ARE27C3E		1170	1400	1570	1710	1890	2080	2300	2520	2710
M2FH-A033	ARE37C3E		1350	1690	1920	2150	2420	2670	2970	3230	3490
M2FH-0040	ARE41C3E		1520	1790	2070	2350	2630	2910	3210	3510	
M2FH-H040	ARE40C4E	1530	1720	1930	2150	2390	2640	2890	3150	3410	
M2FH-H049	ARE51C4E	1980	2220	2490	2780	3090	3420	3760	4120	4490	
M2FH-H052	ARE51C4E	2020	2270	2550	2860	3190	3530	3900	4280	4680	5080
M2FH-A050	RRT62C1E	2120	2410	2710	3040	3370	3730	4110	4510	4940	5390
M2FM-0050	RRT64C1E		2610	2930	3270	3630	4000				
M2FM-0059	RRT64C1E	2500	2830	3190	3580	4000	4450				
M2FH-A056	RRT64C1E	2650	3010	3400	3820	4260	4730	5210	5700	6200	6690
M2FH-0074	RRT81C1E		3660	4170	4710	5270	5870	6490	7130	7800	8480
M2FH-E074	RRT81C1E		3660	4170	4710	5280	5870	6490	7130	7800	8480
M2FH-0075	RRT81C1E		3680	4190	4730	5310	5920	6550	7210	7890	8590
M2FM-0074	RRT10K1E		4290	4830	5360	5900	6460				
M2FM-0075	RRT10K1E		4320	4860	5400	5960	6530				
110° Ambient											
M2FH-H017	ARE13C4E	510	590	680	780	880	990	1110	1240	1370	1520
M2FH-H020	ARE17C4E	660	750	860	980	1100	1240	1390	1540	1710	1890
M2FH-0024	ARE25C3E			1140	1290	1420	1590	1740	1920		
M2FH-0025	ARE27C3E			1040	1260	1460	1660	1860			
M2FH-0026	ARE27C3E			1330	1470	1570	1740	1910	2100		
M2FH-A033	ARE37C3E			1520	1740	1970	2220	2440	2720		
M2FH-0040	ARE41C3E		1370	1630	1890	2140	2400				
M2FH-H040	ARE40C4E					2180	2400				
M2FH-H049	ARE51C4E					2800	3110				
M2FH-H052	ARE51C4E				2600	2910	3230	3570	3920		
M2FH-A050	RRT62C1E			2490	2790	3100	3440	3800			
M2FM-0050	RRT64C1E				2980						
M2FM-0059	RRT64C1E			2910	3270	3660	4070				
M2FH-A056	RRT64C1E			3100	3490	3900	4320	4750	5190		
M2FH-0074	RRT81C1E			3790	4290	4830	5380				
M2FH-E074	RRT81C1E			3790	4300	4830	5380				
M2FH-0075	RRT81C1E			3810	4320	4860	5420	6010			
M2FM-0074	RRT10K1E				4870	5370					
M2FM-0075	RRT10K1E				4910	5420					

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-407C Med/High Temp

Copeland air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
MFFP-H022	ASE12C4E	910	1030	1170	1310	1470	1630	1810	2000	2190	2390
M4FH-0025	ASE19C3E	1130	1340	1560	1790	2030	2280	2540	2810	3100	3400
M4FH-A036	ASE24C3E	1360	1610	1880	2160	2450	2760	3080	3420	3780	4160
M4FH-0050	ASE32C3E		2320	2650	3010	3400	3800	4230	4670	5130	5610
M4FF-0059	RST45C1E	2700	3090	3520	4000	4530	5090	5690	6330	6990	7680
M4FF-0075	RST55C1E	3340	3840	4370	4940	5540	6190	6880	7620	8390	9210
100° Ambient											
MFFP-H022	ASE12C4E		950	1080	1210	1360	1520	1680	1850	2030	2220
M4FH-0025	ASE19C3E		1190	1400	1610	1840	2070	2310	2560	2830	3100
M4FH-A036	ASE24C3E		1420	1670	1940	2210	2490	2790	3100	3430	3770
M4FH-0050	ASE32C3E			2390	2720	3070	3450	3840	4240	4670	5110
M4FF-0059	RST45C1E		2820	3220	3670	4160	4680	5230	5820	6430	7070
M4FF-0075	RST55C1E		3520	4010	4530	5090	5680	6310	6980	7690	8440
110° Ambient											
MFFP-H022	ASE12C4E			980	1110	1240	1390	1540	1700	1860	2030
M4FH-0025	ASE19C3E			1220	1420	1630	1850	2070	2300		
M4FH-A036	ASE24C3E			1470	1720	1970	2240	2510	2790		
M4FH-0050	ASE32C3E				2430	2750	3090	3440			
M4FF-0059	RST45C1E			2930	3340	3790	4270	4780	5320	5880	6460
M4FF-0075	RST55C1E			3640	4110	4620	5160	5730	6340	6980	

Capacities rated at 65°F return gas, 5°F subcooling

R-22 Med/High Temp

Copeland air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
MCFH-A022	ASE12C4	960	1080	1210	1350	1500	1650	1810	1980	2150	2330
MCFH-B027	ASE20C4	1550	1750	1960	2180	2430	2680	2940	3220	3500	3790
MCFH-A036	ASE20C4	1610	1820	2050	2290	2560	2830	3130	3440	3760	4100
MCFH-B036	ASE26C4	1930	2180	2450	2740	3060	3400	3750	4130	4520	4930
MCFH-A049	ASE35C4	2370	2680	3010	3360	3730	4120	4530	4960	5390	5840
MCFH-A056	RST40C1	2490	2810	3170	3560	3990	4460	4950	5470	6010	6570
MCFH-0078	RST55C1	3650	4120	4640	5220	5840	6520	7240	7990	8770	9580
100° Ambient											
MCFH-A022	ASE12C4		990	1110	1240	1380	1530	1670	1830	1980	2140
MCFH-B027	ASE20C4		1600	1800	2010	2240	2470	2710	2970	3220	3480
MCFH-A036	ASE20C4		1670	1880	2110	2350	2610	2880	3170	3460	3770
MCFH-B036	ASE26C4		1990	2250	2520	2820	3130	3450	3800	4160	4530
MCFH-A049	ASE35C4		2440	2750	3080	3420	3780	4150	4540	4940	5350
MCFH-A056	RST40C1		2590	2920	3290	3690	4120	4580	5060	5570	6090
MCFH-0078	RST55C1		3790	4280	4810	5400	6030	6700	7410	8140	8900
110° Ambient											
MCFH-A022	ASE12C4			1010	1130	1260	1390	1520			
MCFH-B027	ASE20C4			1630	1830	2040	2250	2480			
MCFH-A036	ASE20C4			1710	1920	2150	2380	2630	2890	3160	3440
MCFH-B036	ASE26C4			2050	2300	2570	2860	3160	3470	3800	4140
MCFH-A049	ASE35C4				2800	3110	3440	3780			
MCFH-A056	RST40C1			2670	3010	3390	3790	4220	4670	5140	5630
MCFH-0078	RST55C1			3920	4420	4970	5550	6180	6840	7530	

Capacities rated at 65°F return gas, 5°F subcooling

R-12 Low Temp

Copeland air-cooled condensing units

Unit Model	Compressor	-30	-25	-20	-15	-10	-5	0
90° Ambient								
MBFL-A034	AFE12C4	840	960	1110	1270	1460	1650	1860
100° Ambient								
MBFL-A034	AFE12C4		890	1020	1170	1340	1520	1710
110° Ambient								
MBFL-A034	AFE12C4				1070	1220	1370	1540

Capacities rated at 40°F return gas, 5°F subcooling

R-12 Med/High Temp

Copeland air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
MBFH-B026	ARE29C4	1100	1240	1380	1520	1680	1840	2000	2170	2350	2530
MBFS-A033	ARE40C4	1490	1670	1860	2050	2260	2470	2690	2920	3160	
MBFH-A049	ARE51C4	1980	2230	2490	2760	3050	3350	3660	3990	4330	4690
MBFH-A050	RRT62C1	2360	2680	3010	3350	3700	4070	4440	4820	5210	5620
MBAM-0050	RRT64C1	2570	2920	3260	3610	3980	4350				
MBAH-0075	RRT81C1	3860	4390	4930	5480	6050	6640	7250	7870	8520	9180
MBAM-0075	RRT10K1	4320	4900	5490	6100	6720	7360				
100° Ambient											
MBFH-B026	ARE29C4		1150	1290	1430	1570	1720	1880	2040		
MBFS-A033	ARE40C4			1730	1920	2110	2310				
MBFH-A049	ARE51C4	1830	2060	2310	2560	2830	3120	3420	3730	4050	4400
MBFH-A050	RRT62C1		2480	2790	3110	3430	3770	4110	4470	4840	5210
MBAM-0050	RRT64C1			3020	3350	3690	4030				
MBAH-0075	RRT81C1		4060	4560	5080	5610	6160	6730	7310	7920	8540
MBAM-0075	RRT10K1			5090	5660	6240	6830				
110° Ambient											
MBFH-B026	ARE29C4					1460					
MBFH-A049	ARE51C4				2380	2630	2900				
MBFH-A050	RRT62C1			2580	2880	3180	3490	3800			
MBAH-0075	RRT81C1				4720	5210	5720				
MBAM-0075	RRT10K1				5260	5800					

Capacities rated at 65°F return gas, 5°F subcooling

Physical and Electrical Data

Copeland air-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M2CL-A025-IAA	111	AFE10C3E-IAA	17.38	12.09	9.73	1/4 S	3/8 S
M2FF-0056-CFA	212	RFT18C1E-PFA	17.38	14.38	12.56	1/4 S	5/8 S
M2FF-E056-CFA	212	RFT18C1E-PFA	17.50	14.38	12.56	1/4 S	5/8 S
M2FH-0024-SAA	102, 111	ARE25C3E-SAA	13.82	11.05	9.67	1/4 S	5/16 S
M2FH-0025-IAA	018	ARE27C3E-IAA	13.72	11.49	9.62	1/4 S	5/16 S
M2FH-0026-IAA	020	ARE27C3E-IAA	13.96	11.81	9.67	1/4 S	3/8 S
M2FH-0026-IAA	103, 111	ARE27C3E-IAA	13.82	11.53	9.67	1/4 S	3/8 S
M2FH-0026-IAA	072	ARE27C3E-IAA	14.46	11.98	11.36	1/4 S	3/8 S
M2FH-0026-IAA	102	ARE27C3E-IAA	13.64	11.05	9.67	1/4 S	5/16 S
M2FH-0040-IAA	212	ARE41C3E-IAA	16.35	12.32	8.13	1/4 S	3/8 S
M2FH-0074-CFA	272	RRT81C1E-PFA	17.50	14.39	12.50	1/4 S	5/8 S
M2FH-0074-CFA	212	RRT81C1E-PFA	17.50	14.38	11.82	1/4 S	5/8 S
M2FH-0074-CFV	212	RRT81C1E-PFV	17.50	14.39	11.92	1/4 S	5/8 S
M2FH-0074-CFV	272	RRT81C1E-PFV	17.50	14.39	12.50	1/4 S	5/8 S
M2FH-0075-CFA	212	RRT81C1E-PFA	24.00	17.33	13.07	3/8 S	5/8 S
M2FH-0075-CFV	020, 212	RRT81C1E-PFV	24.00	17.50	13.07	3/8 S	5/8 S
M2FH-A033-IAA	103, 111, 208, 212	ARE37C3E-IAA	13.82	11.47	9.67	1/4 S	3/8 S
M2FH-A033-IAA	102	ARE37C3E-IAA	13.82	11.05	9.67	1/4 S	5/16 S
M2FH-A033-IAA	272	ARE37C3E-IAA	14.42	12.80	11.36	1/4 S	3/8 S
M2FH-A033-IAV	103, 111, 208, 212	ARE37C3E-IAV	13.82	11.47	9.67	1/4 S	3/8 S
M2FH-A033-IAV	272	ARE37C3E-IAV	14.42	12.80	11.36	1/4 S	3/8 S
M2FH-A050-IAA	103	RRT62C1E-IAA	17.45	14.07	11.70	1/4 S	3/8 S
M2FH-A050-IAA	111	RRT62C1E-IAA	17.45	13.67	11.70	1/4 S	3/8 S
M2FH-A050-IAA	212	RRT62C1E-IAA	16.58	14.18	11.74	1/4 S	3/8 S
M2FH-A050-IAA	272	RRT62C1E-IAA	16.60	13.80	11.74	1/4 S	3/8 S
M2FH-A050-IAV	103	RRT62C1E-IAV	17.07	13.68	11.75	1/4 S	3/8 S
M2FH-A050-IAV	212	RRT62C1E-IAV	16.60	13.70	11.74	1/4 S	3/8 S
M2FH-A056-IAA	103	RRT64C1E-IAA	17.76	14.18	11.82	1/4 S	3/8 S
M2FH-A056-IAA	212, 272	RRT64C1E-IAA	17.76	14.46	11.82	1/4 S	3/8 S
M2FH-A056-IAA	111	RRT64C1E-IAA	17.76	14.18	11.82	1/4 S	3/8 S
M2FH-A056-IAV	212, 272	RRT64C1E-IAV	17.76	14.46	11.82	1/4 S	3/8 S
M2FH-A056-IAV	103	RRT64C1E-IAV	18.20	14.05	11.82	1/4 S	3/8 S
M2FH-E033-IAA	212	ARE37C3E-IAA	13.96	11.81	9.67	1/4 S	3/8 S
M2FH-E049-CAA	212	ARE51C4E-CAA	16.14	13.13	11.73	1/4 S	3/8 S
M2FH-E056-IAA	212	RRT64C1E-IAA	17.76	14.46	11.82	1/4 S	3/8 S
M2FH-E074-CFA	212	RRT81C1E-PFA	17.50	14.38	11.82	1/4 S	5/8 S
M2FH-H017-IAA	103	ARE13C4E-IAA	13.94	11.47	9.67	1/4 S	3/8 S
M2FH-H017-IAA	111	ARE13C4E-IAA	13.64	11.26	9.67	1/4 S	3/8 S
M2FH-H020-IAA	102, 111	ARE17C4E-IAA	13.94	11.05	9.67	1/4 S	5/16 S
M2FH-H040-IAA	272	ARE40C4E-IAA	16.64	12.42	9.71	1/4 S	3/8 S
M2FH-H049-CAA	111	ARE51C4E-CAA	16.18	12.69	11.74	1/4 S	3/8 S
M2FH-H049-CAA	103	ARE51C4E-CAA	16.20	12.90	11.70	1/4 S	3/8 S
M2FH-H049-CAA	212	ARE51C4E-CAA	16.14	13.13	11.73	1/4 S	3/8 S
M2FH-H049-CAA	272	ARE51C4E-CAA	16.58	13.15	11.69	1/4 S	3/8 S
M2FH-H049-IAV	212	ARE51C4E-IAV	16.18	13.08	11.74	1/4 S	3/8 S
M2FH-H049-IAV	214	ARE51C4E-IAV	16.18	13.08	11.74	1/4 S	5/16 S
M2FH-H052-CAA	212	ARE51C4E-CAA	16.18	13.08	11.74	1/4 S	3/8 S
M2FL-0050-CFA	111	RFT18C1E-PFA	16.13	12.68	12.50	1/4 S	1/2 S
M2FL-0050-CFA	119	RFT18C1E-PFA	16.13	13.08	12.50	1/4 S	1/2 S
M2FL-0050-CFA	212	RFT18C1E-PFA	16.00	13.08	12.50	1/4 S	1/2 S
M2FL-A025-IAA	103	AFE10C3E-IAA	13.81	11.66	9.67	1/4 S	3/8 S
M2FL-A025-IAA	111	AFE10C3E-IAA	13.82	11.25	9.67	1/4 S	3/8 S
M2FL-A025-IAA	020	AFE10C3E-IAA	13.82	11.65	9.62	1/4 S	3/8 S
M2FL-B033-IAA	103	AFE12C3E-IAA	13.81	11.66	9.67	1/4 S	3/8 S
M2FL-B033-IAA	111	AFE12C3E-IAA	13.82	11.25	9.67	1/4 S	3/8 S
M2FL-B033-IAA	020	AFE12C3E-IAA	14.01	11.83	9.62	1/4 S	3/8 S
M2FL-H023-IAA	111	AFE05C4E-IAA	13.64	11.26	9.67	1/4 S	3/8 S
M2FL-H040-IAA	212	AFE12C4E-IAA	16.57	12.41	9.61	1/4 S	3/8 S
M2FL-H040-IAA	111	AFE12C4E-IAA	16.53	12.16	9.71	1/4 S	3/8 S
M2FL-H040-IAA	103	AFE12C4E-IAA	16.53	12.43	9.71	1/4 S	3/8 S
M2FM-0050-IAA	212	RRT64C1E-IAA	16.16	13.68	11.73	1/4 S	1/2 S
M2FM-0050-IAV	212	RRT64C1E-IAV	16.16	13.68	11.73	1/4 S	1/2 S
M2FM-0059-IAA	102	RRT64C1E-IAA	17.38	13.99	11.82	1/4 S	3/8 S
M2FM-0074-CFA	212	RRT10K1E-PFA	17.50	14.38	11.82	3/8 S	5/8 S

Physical and Electrical Data

Copeland air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
M2CL-A025-IAA						6.9	15	40
M2FF-0056-CFA		3.7				13.8	20	60
M2FF-E056-CFA		3.7				13.5	20	
M2FH-0024-SAA						6.3	15	37
M2FH-0025-IAA						6.9	15	42
M2FH-0026-IAA		2.2				6.9	15	39
M2FH-0026-IAA		2.2				6.9	15	38
M2FH-0026-IAA		2.2				6.9	15	42
M2FH-0026-IAA						6.9	15	36
M2FH-0040-IAA		2.2				10.2	15	45
M2FH-0074-CFA		3.7				18.0	25	75
M2FH-0074-CFA		3.7				18.0	25	72
M2FH-0074-CFV		3.7				9.1	15	68
M2FH-0074-CFV		3.7				9.1	15	55
M2FH-0075-CFA		7.4				18.3	25	90
M2FH-0075-CFV		7.4				9.3	15	85
M2FH-A033-IAA		2.2				9.9	15	36
M2FH-A033-IAA						9.9	15	37
M2FH-A033-IAA		2.2				9.9	15	42
M2FH-A033-IAV		2.2				4.9	15	37
M2FH-A033-IAV		2.2				4.9	15	46
M2FH-A050-IAA		2.8				12.8	20	55
M2FH-A050-IAA						12.8	20	50
M2FH-A050-IAA		2.8				12.8	20	62
M2FH-A050-IAA		2.8				12.8	20	55
M2FH-A050-IAV		2.8				6.0	15	48
M2FH-A050-IAV		2.8				6.0	15	60
M2FH-A056-IAA		2.8				15.5	20	50
M2FH-A056-IAA		2.8				15.5	20	66
M2FH-A056-IAA						15.5	20	40
M2FH-A056-IAV		2.8				9.0	15	66
M2FH-A056-IAV		2.8				9.0	15	
M2FH-E033-IAA		2.2				9.6	15	
M2FH-E049-CAA		2.8				9.6	15	
M2FH-E056-IAA		2.8				15.2	20	
M2FH-E074-CFA		3.7				17.7	25	70
M2FH-H017-IAA		2.2				6.0	15	120
M2FH-H017-IAA						6.0	15	26
M2FH-H020-IAA						6.0	15	39
M2FH-H040-IAA		2.2				9.6	15	
M2FH-H049-CAA						14.0	20	50
M2FH-H049-CAA		2.8				14.0	20	48
M2FH-H049-CAA		2.8				14.0	20	49
M2FH-H049-CAA		2.8				14.0	20	125
M2FH-H049-IAV		2.8				6.7	15	43
M2FH-H049-IAV						6.7	15	
M2FH-H052-CAA		2.8				14.0	20	
M2FL-0050-CFA						13.0	20	63
M2FL-0050-CFA		2.8				13.0	20	
M2FL-0050-CFA		2.8				13.0	20	67
M2FL-A025-IAA		2.2				6.9	15	36
M2FL-A025-IAA						6.9	15	37
M2FL-A025-IAA		2.2				6.9	15	40
M2FL-B033-IAA		2.2				6.7	15	47
M2FL-B033-IAA						6.7	15	38
M2FL-B033-IAA		2.2				6.7	15	40
M2FL-H023-IAA						5.4	15	34
M2FL-H040-IAA		2.2				9.0	15	31
M2FL-H040-IAA						9.0	15	87
M2FL-H040-IAA		2.2				9.0	15	100
M2FM-0050-IAA		2.8				14.6	20	45
M2FM-0050-IAV		2.8				8.6	15	45
M2FM-0059-IAA						15.5	20	58
M2FM-0074-CFA		3.7				18.7	30	76

*Receiver capacity applies only to units with receivers. See BOM Matrix for included components.

Physical and Electrical Data

Copeland air-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M2FM-0075-CFA	020	RRT10K1E-PFA	24.00	17.50	13.07	3/8 S	5/8 S
M2FM-0075-CFV	020, 212	RRT10K1E-PFV	24.00	17.50	13.07	3/8 S	5/8 S
M4CF-0050-IAA	212	RST45C1E-IAA	21.25	13.40	11.73	1/4 S	1/2 S
M4CL-0035-IAA	212	AFE13C3E-IAA	13.81	11.82	9.63	1/4 S	5/16 S
M4CL-0075-CAV	212	RST64C1E-CAV	21.25	13.33	11.66	1/4 S	5/8 S
M4CL-0075-CFA	212	RST64C1E-CFA	21.25	13.33	11.66	1/4 S	5/8 S
M4FF-0050-IAA	208, 212	RST45C1E-IAA	16.13	13.68	11.73	1/4 S	1/2 S
M4FF-0050-IAV	212	RST45C1E-IAV	16.13	13.74	11.73	1/4 S	1/2 S
M4FF-0056-CAA	212	RST45C1E-CAA	17.50	14.38	11.82	1/4 S	5/8 S
M4FF-0056-IAA	103	RST45C1E-IAA	17.38	13.99	11.82	1/4 S	5/8 S
M4FF-0056-IAA	212	RST45C1E-IAA	17.50	14.38	11.82	1/4 S	5/8 S
M4FF-0056-IAA	214	RST45C1E-IAA	17.50	14.38	11.82	1/4 S	3/8 S
M4FF-0056-IAA	272	RST45C1E-IAA	17.38	14.38	11.82	1/4 S	5/8 S
M4FF-0056-IAV	020	RST45C1E-IAV	17.50	14.90	12.11	1/4 S	5/8 S
M4FF-0056-IAV	103	RST45C1E-IAV	17.38	13.99	11.82	1/4 S	5/8 S
M4FF-0056-IAV	212	RST45C1E-IAV	17.50	14.38	11.82	1/4 S	5/8 S
M4FF-0056-IAV	272	RST45C1E-IAV	17.38	14.38	11.82	1/4 S	5/8 S
M4FF-0059-IAA	272	RST45C1E-IAA	24.00	17.11	13.06	3/8 S	5/8 S
M4FF-0059-IAV	272	RST45C1E-IAV	24.00	17.13	13.01	3/8 S	5/8 S
M4FF-0075-CAA	020, 212, 272	RST55C1E-CAA	24.00	17.06	13.07	3/8 S	5/8 S
M4FF-0075-CAV	020, 212, 272	RST55C1E-CAV	24.00	17.06	13.07	3/8 S	5/8 S
M4FF-0077-CFA	208, 212	RST64C1E-CFA	17.51	14.39	11.82	1/4 S	5/8 S
M4FF-0077-IAV	208, 212	RST64C1E-IAV	17.49	14.39	11.82	1/4 S	5/8 S
M4FF-0080-CAV	020, 212	RST64C1E-CAV	24.00	16.89	13.07	3/8 S	5/8 S
M4FF-0080-CAV	072	RST64C1E-CAV	24.00	16.97	13.08	3/8 S	5/8 S
M4FF-0080-CFA	020, 212	RST64C1E-CFA	24.00	16.89	13.07	3/8 S	5/8 S
M4FF-0080-CFA	017	RST64C1E-CFA	24.00	16.34	13.08	3/8 S	5/8 S
M4FF-0080-IAV	020, 212	RST64C1E-IAV	24.00	16.86	13.07	3/8 S	5/8 S
M4FF-0080-IAV	072, 075	RST64C1E-IAV	24.00	16.97	13.08	3/8 S	5/8 S
M4FF-E050-IAA	212	RST45C1E-IAA	16.13	13.68	11.73	1/4 S	1/2 S
M4FF-E075-CAA	212	RST55C1E-CAA	24.00	17.06	13.02	3/8 S	5/8 S
M4FF-E075-CAV	212	RST55C1E-CAV	24.00	16.34	13.02	3/8 S	5/8 S
M4FF-E080-CAV	212	RST64C1E-CAV	24.00	16.89	13.07	3/8 S	5/8 S
M4FH-0025-IAA	212	ASE19C3E-IAA	13.96	11.81	9.67	1/4 S	3/8 S
M4FH-0025-IAA	103	ASE19C3E-IAA	13.82	11.47	9.67	1/4 S	3/8 S
M4FH-0025-IAA	111	ASE19C3E-IAA	13.94	11.28	9.67	1/4 S	3/8 S
M4FH-0025-IAA	272	ASE19C3E-IAA	14.46	11.99	11.36	1/4 S	3/8 S
M4FH-0050-CAA	111	ASE32C3E-CAA	16.18	12.72	11.81	1/4 S	3/8 S
M4FH-0050-CAA	103	ASE32C3E-CAA	16.20	12.97	11.75	1/4 S	3/8 S
M4FH-0050-CAA	272	ASE32C3E-CAA	16.30	13.08	11.73	1/4 S	3/8 S
M4FH-0050-CAV	103	ASE32C3E-CAV	16.20	12.97	11.75	1/4 S	3/8 S
M4FH-0050-CAV	272	ASE32C3E-CAV	16.30	13.08	11.73	1/4 S	3/8 S
M4FH-A036-IAA	103	ASE24C3E-IAA	16.00	12.82	11.74	1/4 S	3/8 S
M4FH-A036-IAA	111, 208	ASE24C3E-IAA	16.06	12.69	11.78	1/4 S	3/8 S
M4FH-A036-IAA	212	ASE24C3E-IAA	16.18	13.11	11.73	1/4 S	3/8 S
M4FH-A036-IAA	272	ASE24C3E-IAA	16.64	13.08	11.73	1/4 S	3/8 S
M4FH-A036-IAV	103	ASE24C3E-IAV	16.00	12.82	11.74	1/4 S	3/8 S
M4FH-A036-IAV	208, 212	ASE24C3E-IAV	16.06	13.08	11.73	1/4 S	3/8 S
M4FH-A036-IAV	272	ASE24C3E-IAV	16.30	13.08	11.73	1/4 S	3/8 S
M4FH-E025-IAA	212	ASE19C3E-IAA	13.96	11.81	9.67	1/4 S	3/8 S
M4FH-E050-CAA	212	ASE32C3E-CAA	16.18	13.08	11.73	1/4 S	3/8 S
M4FL-0033-IAA	017, 111	AFE11C3E-IAA	13.98	11.54	9.62	1/4 S	3/8 S
M4FL-0033-IAA	020	AFE11C3E-IAA	13.96	11.81	9.67	1/4 S	3/8 S
M4FL-0033-IAA	103	AFE11C3E-IAA	13.82	11.47	9.67	1/4 S	3/8 S
M4FL-0033-IAA	072	AFE11C3E-IAA	14.42	12.80	11.36	1/4 S	3/8 S
M4FL-0040-IAA	272	AFE13C3E-IAA	16.64	13.08	11.73	1/4 S	3/8 S
M4FL-0040-IAA	103	AFE13C3E-IAA	16.06	13.03	11.74	1/4 S	3/8 S
M4FL-0040-IAA	111, 208	AFE13C3E-IAA	16.06	12.69	11.74	1/4 S	3/8 S
M4FL-0040-IAV	272	AFE13C3E-IAV	16.64	13.08	11.73	1/4 S	3/8 S
M4FL-0074-CFA	214	RST80C1E-PFA	17.50	14.39	12.09	1/4 S	1/2 S
M4FL-A067-CAA	103, 111	RFT26C1E-CAA	17.76	14.13	11.82	1/4 S	1/2 S
M4FL-A067-CAA	212, 272	RFT26C1E-CAA	17.76	14.46	11.82	1/4 S	1/2 S
M4FL-A067-CAV	212, 272	RFT26C1E-CAV	17.76	14.46	11.82	1/4 S	1/2 S
M4FL-H025-IAA	020	AFE08C4E-IAA	13.98	11.83	9.63	1/4 S	3/8 S

Physical and Electrical Data

Copeland air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
M2FM-0075-CFA		7.4				19.0	30	88
M2FM-0075-CFV		7.4				11.2	15	100
M4CF-0050-IAA				2.4		14.0	20	68
M4CL-0035-IAA				1.9		8.9	15	39
M4CL-0075-CAV				4.1		12.3	20	78
M4CL-0075-CFA				4.1		20.0	30	77
M4FF-0050-IAA				2.4		14.0	20	61
M4FF-0050-IAV				2.4		7.2	15	60
M4FF-0056-CAA				3.2		14.8	20	71
M4FF-0056-IAA				3.2		14.8	20	64
M4FF-0056-IAA				3.2		14.8	20	65
M4FF-0056-IAA						14.8	20	59
M4FF-0056-IAA				3.2		14.8	20	67
M4FF-0056-IAV				3.2		7.6	15	65
M4FF-0056-IAV				3.2		7.6	15	65
M4FF-0056-IAV				3.2		7.6	15	65
M4FF-0056-IAV				3.2		7.6	15	69
M4FF-0059-IAA				6.3	6.9	15.1	20	
M4FF-0059-IAV				6.3	6.9	7.8	15	64
M4FF-0075-CAA				6.3	6.9	20.8	30	86
M4FF-0075-CAV				6.3	6.9	9.7	15	87
M4FF-0077-CFA				3.2		20.0	30	71
M4FF-0077-IAV				3.2		12.3	20	65
M4FF-0080-CAV				4.1		12.4	20	81
M4FF-0080-CAV				4.1		12.4	20	87
M4FF-0080-CFA				4.1		20.3	30	86
M4FF-0080-CFA						20.3	30	
M4FF-0080-IAV				4.1		12.4	20	82
M4FF-0080-IAV				4.1		12.4	20	81
M4FF-E050-IAA				2.4		13.7	20	
M4FF-E075-CAA				6.3		19.9	30	83
M4FF-E075-CAV				6.3	6.9	9.6	15	
M4FF-E080-CAV				4.1		12.3	20	
M4FH-0025-IAA				1.9	2	10.7	15	39
M4FH-0025-IAA				1.9	2	10.7	15	40
M4FH-0025-IAA						10.7	15	40
M4FH-0025-IAA				1.9	2	10.7	15	44
M4FH-0050-CAA						12.3	20	46
M4FH-0050-CAA				2.4	2.6	12.3	20	50
M4FH-0050-CAA				2.4	2.6	12.3	20	52
M4FH-0050-CAV				2.4	2.6	6.7	15	51
M4FH-0050-CAV				2.4	2.6	6.7	15	53
M4FH-A036-IAA				2.4	2.6	8.4	15	45
M4FH-A036-IAA						8.4	15	41
M4FH-A036-IAA				2.4	2.6	8.4	15	45
M4FH-A036-IAA				2.4	2.6	8.4	15	47
M4FH-A036-IAV				2.4	2.6	5.9	15	45
M4FH-A036-IAV				2.4	2.6	5.9	15	45
M4FH-A036-IAV				2.4	2.6	5.9	15	
M4FH-E025-IAA				1.9		10.6	15	
M4FH-E050-CAA				2.4		12.1	20	46
M4FL-0033-IAA						7.7	15	41
M4FL-0033-IAA				1.9		7.7	15	38
M4FL-0033-IAA				1.9		7.7	15	38
M4FL-0033-IAA				1.9		7.7	15	41
M4FL-0040-IAA				2.4		8.9	15	48
M4FL-0040-IAA				2.4		8.9	15	46
M4FL-0040-IAA						8.9	15	41
M4FL-0040-IAV				2.4		4.6	15	50
M4FL-0074-CFA						24.5	40	69
M4FL-A067-CAA				2.4		15.1	20	45
M4FL-A067-CAA				2.4		15.1	20	66
M4FL-A067-CAV				2.4		9.0	15	55
M4FL-H025-IAA				1.9		5.6	15	37

*Receiver capacity applies only to units with receivers. See BOM Matrix for included components.

Physical and Electrical Data

Copeland air-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M4FL-H025-IAA	072	AFE08C4E-IAA	14.46	13.17	11.40	1/4 S	3/8 S
M4FL-H051-IAA	103	AFE17C4E-IAA	17.38	12.94	11.76	1/4 S	3/8 S
M4FL-H051-IAA	272	AFE17C4E-IAA	17.78	13.11	11.81	1/4 S	3/8 S
M4FM-E022-IAA	212	ASE12C4E-IAA	13.98	11.83	9.62	1/4 S	3/8 S
M4FM-H022-IAA	111	ASE12C4E-IAA	13.97	11.26	9.67	1/4 S	3/8 S
M4FM-H022-IAA	212	ASE12C4E-IAA	13.98	11.83	9.62	1/4 S	3/8 S
M4FM-H022-IAA	272	ASE12C4E-IAA	14.49	12.88	11.39	1/4 S	3/8 S
MBAH-0075-CFA	020	RRT81C1-PFA	24.00	17.48	13.07	3/8 S	5/8 S
MBAH-0075-CFV	020	RRT81C1-PFV	24.00	17.48	13.07	3/8 S	5/8 S
MBAM-0050-IAA	212	RRT64C1-IAA	16.15	13.68	11.74	1/4 S	1/2 S
MBAM-0050-IAV	212	RRT64C1-IAV	16.15	13.68	11.74	1/4 S	1/2 S
MBAM-0075-CFA	020	RRT10K1-PFA	24.00	17.51	13.07	3/8 S	5/8 S
MBAM-0075-CFV	020	RRT10K1-PFV	24.00	17.51	13.07	3/8 S	5/8 S
MBFH-A049-CAA	272	ARE51C4-CAA	16.14	13.08	11.73	1/4 S	3/8 S
MBFH-A050-IAA	272	RRT62C1-IAA	16.60	13.70	11.70	1/4 S	3/8 S
MBFH-B026-IAA	111	ARE29C4-IAA	13.94	11.25	9.67	1/4 S	3/8 S
MBFH-B026-IAA	103	ARE29C4-IAA	13.91	11.47	9.67	1/4 S	3/8 S
MBFH-B026-IAA	072	ARE29C4-IAA	14.46	13.13	11.39	1/4 S	3/8 S
MBFL-A034-IAA	020, 103	AFE12C4-IAA	16.20	12.42	9.67	1/4 S	3/8 S
MBFL-A034-IAA	111	AFE12C4-IAA	16.20	12.16	9.67	1/4 S	3/8 S
MBFS-A033-IAA	103	ARE40C4-IAA	13.96	11.47	9.67	1/4 S	3/8 S
MBFS-A033-IAA	111	ARE40C4-IAA	13.96	11.23	9.67	1/4 S	3/8 S
MBFS-A033-IAA	272	ARE40C4-IAA	14.46	13.13	11.39	1/4 S	3/8 S
MCFH-0078-CAA	072	RST55C1-CAA	24.00	17.14	13.07	3/8 S	5/8 S
MCFH-0078-CAV	072	RST55C1-CAV	24.00	17.14	13.07	3/8 S	5/8 S
MCFH-A022-IAA	111	ASE12C4-IAA	13.94	11.25	9.67	1/4 S	3/8 S
MCFH-A022-IAA	103	ASE12C4-IAA	13.94	11.70	9.67	1/4 S	3/8 S
MCFH-A036-IAA	103	ASE20C4-IAA	16.15	12.87	11.74	1/4 S	3/8 S
MCFH-A036-IAA	272	ASE20C4-IAA	16.33	13.08	11.73	1/4 S	3/8 S
MCFH-A049-CAA	272	ASE35C4-CAA	16.56	13.08	11.74	1/4 S	3/8 S
MCFH-A049-CAA	111	ASE35C4-CAA	16.20	12.71	11.75	1/4 S	3/8 S
MCFH-A049-IAV	272	ASE35C4-IAV	16.57	13.08	11.74	1/4 S	3/8 S
MCFH-A056-IAA	272	RST40C1-IAA	17.38	14.38	11.82	1/4 S	5/8 S
MCFH-A056-IAV	272	RST40C1-IAV	17.38	14.38	11.82	1/4 S	5/8 S
MCFH-B027-IAA	103	ASE20C4-IAA	13.91	11.47	9.67	1/4 S	3/8 S
MCFH-B027-IAA	111	ASE20C4-IAA	13.91	11.32	9.67	1/4 S	3/8 S
MCFH-B027-IAA	272	ASE20C4-IAA	14.46	13.13	11.39	1/4 S	3/8 S
MCFH-B036-IAA	272	ASE26C4-IAA	16.54	13.08	11.73	1/4 S	3/8 S
MCFH-B036-IAA	111	ASE26C4-IAA	16.16	12.69	11.74	1/4 S	4/8 S
MFFP-H022-IAA	272	ASE12C4E-IAA	14.49	12.88	11.39	1/4 S	3/8 S

Physical and Electrical Data

Copeland air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
M4FL-H025-IAA				1.9		5.6	15	42
M4FL-H051-IAA				2.4		11.5	15	51
M4FL-H051-IAA				2.4		11.5	15	53
M4FM-E022-IAA				1.9		5.4	15	
M4FM-H022-IAA						5.5	15	36
M4FM-H022-IAA				1.9		5.5	15	38
M4FM-H022-IAA				1.9		5.5	15	38
MBAH-0075-CFA	8.1					18.3	25	100
MBAH-0075-CFV	8.1					9.3	15	35
MBAM-0050-IAA	3					14.6	20	59
MBAM-0050-IAV	3					8.6	15	45
MBAM-0075-CFA	8.1					19.0	30	55
MBAM-0075-CFV	8.1					11.2	15	75
MBFH-A049-CAA	3					14.0	20	50
MBFH-A050-IAA	3					12.8	20	45
MBFH-B026-IAA						7.4	15	40
MBFH-B026-IAA	2.4					7.4	15	39
MBFH-B026-IAA	2.4					7.4	15	55
MBFL-A034-IAA	2.4					8.7	15	28
MBFL-A034-IAA						8.7	15	100
MBFS-A033-IAA	2.4					9.5	15	40
MBFS-A033-IAA						9.5	15	40
MBFS-A033-IAA	2.4					9.5	15	53
MCFH-0078-CAA			7.3			20.8	30	40
MCFH-0078-CAV			7.3			9.7	15	87
MCFH-A022-IAA						5.9	15	40
MCFH-A022-IAA			2.1			5.9	15	55
MCFH-A036-IAA			2.8			8.4	15	55
MCFH-A036-IAA			2.8			8.4	15	50
MCFH-A049-CAA			2.8			15.9	25	125
MCFH-A049-CAA						15.9	25	75
MCFH-A049-IAV			2.8			8.3	15	75
MCFH-A056-IAA			3.7			15.5	20	40
MCFH-A056-IAV			3.7			7.3	15	66
MCFH-B027-IAA			2.1			8.2	15	40
MCFH-B027-IAA						8.2	15	40
MCFH-B027-IAA			2.1			8.2	15	45
MCFH-B036-IAA			2.8			10.3	15	48
MCFH-B036-IAA						10.3	15	50
MFFP-H022-IAA				1.9	2	5.5	15	

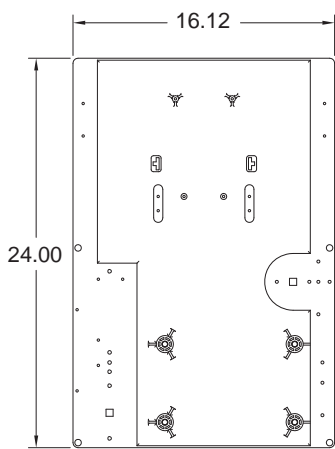
*Receiver capacity applies only to units with receivers. See BOM Matrix for included components.

R-404A Condensate Base LT/EMT

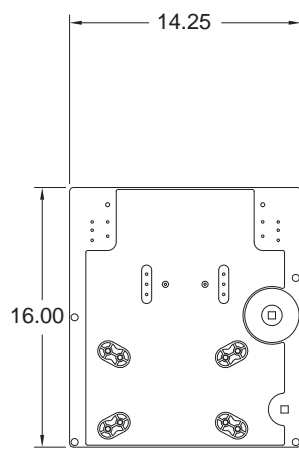
Copevap welded air-cooled condensing units

Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25
90° Ambient												
M4TL-H025	AFE08C4E	620	700	780	860	960	1050					
M4TL-H033	AFE11C4E	780	890	1000	1120	1240	1370					
M4EL-0033	AFE11C3E	860	1040	1210	1390	1570	1750					
M4PL-0033	AFE11C3E	860	1040	1210	1390	1570	1750					
M4TL-H034	AFE13C4E	1010	1140	1270	1420	1570	1720					
M4EL-0039	AFE13C3E	1290	1510	1740	1980	2240	2500					
M4PL-0039	AFE13C3E	1290	1510	1740	1980	2240	2500					
M4EL-H050	AFE17C4E	1480	1680	1890	2130	2380	2630					
M4PL-H050	AFE17C4E	1510	1710	1920	2140	2380	2620					
M4EF-0050	RST45C1E	1480	1710	1960	2220	2500	2780	3110	3410	3730	4050	4380
M4EF-0058	RST45C1E	1600	1860	2150	2470	2810	3160	3560	3960	4370	4800	5250
M4EF-0075	RST55C1E	1870	2250	2650	3080	3530	3980	4490	4990	5520	6060	6620
M4EF-0080	RST64C1E	2490	2930	3390	3880	4380	4880	5440	5980	6530	7080	7640
100° Ambient												
M4TL-H025	AFE08C4E	540	610	690	770	860	940					
M4TL-H033	AFE11C4E	700	800	900	1010	1130	1240					
M4EL-0033	AFE11C3E	690	850	1010	1180	1360	1530					
M4PL-0033	AFE11C3E	690	850	1010	1180	1360	1530					
M4TL-H034	AFE13C4E		1030	1160	1290	1430	1560					
M4EL-0039	AFE13C3E	1080	1280	1500	1720	1950	2180					
M4PL-0039	AFE13C3E	1080	1280	1500	1720	1950	2180					
M4EL-H050	AFE17C4E	1320	1510	1700	1920	2140	2370					
M4PL-H050	AFE17C4E	1360	1530	1730	1930	2140	2360					
M4EF-0050	RST45C1E	1260	1470	1700	1940	2200	2450	2750	3030	3330	3620	3920
M4EF-0058	RST45C1E	1370	1610	1880	2170	2480	2800	3160	3520	3900	4290	4690
M4EF-0075	RST55C1E	1560	1920	2300	2690	3110	3530	3990	4450	4930	5430	5940
M4EF-0080	RST64C1E	2180	2590	3020	3470	3930	4380	4900	5380	5880	6380	6880
110° Ambient												
M4TL-H025	AFE08C4E		510	590	670	750	830					
M4TL-H033	AFE11C4E			810	910	1010	1100					
M4EL-0033	AFE11C3E	520	670	830	990	1160	1320					
M4PL-0033	AFE11C3E	520	670	830	990	1160	1320					
M4TL-H034	AFE13C4E				1160	1290						
M4EL-0039	AFE13C3E	850	1050	1250	1470	1670	1900					
M4PL-0039	AFE13C3E	850	1050	1250	1470	1670	1900					
M4EF-0050	RST45C1E		1240	1450	1670	1910	2140	2420	2680	2950		
M4EL-H050	AFE17C4E		1340	1510	1700	1910	2110					
M4PL-H050	AFE17C4E		1360	1530	1720	1910	2100					
M4EF-0058	RST45C1E	1140	1360	1610	1870	2150	2440	2770	3100	3440	3790	4150
M4EF-0075	RST55C1E	1320	1650	1990	2350	2730	3110	3520	3940	4370	4820	5280
M4EF-0080	RST64C1E		2290	2680	3080	3500	3910	4370	4800	5250	5690	6140

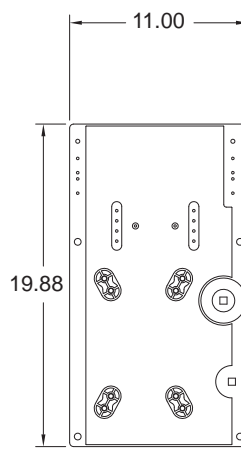
Capacities rated at 65°F return gas, 5°F subcooling



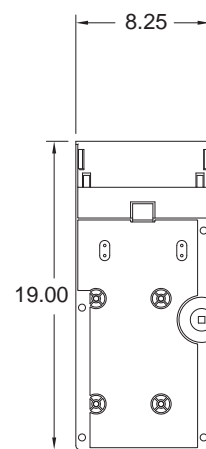
E base (3/4 HP and larger)



E base (3/4 HP and smaller)



P base



T base

R-404A Condensate Base MT/HT

Copevap welded air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
M4TM-H020	ASE12C4E	960	1080	1200	1320	1450	1580				
M4TM-H025	ASE20C4E	1560	1720	1860	2010	2150	2300				
M4EH-0025	ASE19C3E	1600	1730	1890	2060	2240	2430	2620	2820	3030	3240
M4PH-0025	ASE19C3E	1600	1730	1890	2060	2230	2430	2620	2820	3030	3270
M4TM-0033	ASE24C3E	1560	1750	1920	2110	2310	2520				
M4EH-A035	ASE24C3E	1800	2040	2280	2530	2800	3100	3430	3810	4230	4710
M4PH-A035	ASE24C3E	1800	2040	2280	2530	2800	3100	3430	3810	4230	4710
M4EH-0049	ASE32C3E	2470	2750	3020	3310	3620	3970	4350	4800	5320	5940
M4PH-0049	ASE32C3E	2630	2920	3210	3520	3850	4210	4610	5060	5570	6140
100° Ambient											
M4TM-H020	ASE12C4E	850	960	1060	1170	1290	1400				
M4TM-H025	ASE20C4E	1470	1590	1700	1800	1920	2030				
M4EH-0025	ASE19C3E	1460	1560	1700	1870	2030	2220	2400	2620	2840	3030
M4PH-0025	ASE19C3E	1460	1560	1700	1870	2030	2220	2400	2620	2840	3030
M4TM-0033	ASE24C3E	1360	1540	1710	1890	2090	2320				
M4EH-A035	ASE24C3E	1570	1800	2020	2250	2510	2800	3130	3500	3930	4430
M4PH-A035	ASE24C3E	1570	1800	2020	2250	2510	2800	3130	3500	3930	4430
M4EH-0049	ASE32C3E	2190	2480	2760	3050	3370	3730	4140			
M4PH-0049	ASE32C3E	2340	2620	2900	3200	3510	3870	4270	4720	5260	
110° Ambient											
M4TM-H020	ASE12C4E		840	930	1030	1120	1220				
M4TM-H025	ASE20C4E			1540	1610	1680	1770				
M4EH-0025	ASE19C3E	1250	1390	1530	1690	1840	2020	2190			
M4PH-0025	ASE19C3E	1250	1390	1530	1690	1840	2020	2190			
M4TM-0033	ASE24C3E		1360	1540	1730	1940					
M4EH-A035	ASE24C3E	1360	1570	1790	2020	2270	2570	2900	3290	3750	
M4PH-A035	ASE24C3E	1360	1570	1790	2020	2270	2570	2900	3290	3750	
M4EH-0049	ASE32C3E			2580	2920						
M4PH-0049	ASE32C3E		2370	2660	2970	3310	3690				

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-134a Condensate Base LT

Copevap welded air-cooled condensing units

Model	Compressor	-25	-20	-15	-10	-5	0
90° Ambient							
M2PL-A025	AFE10C3E	720	820	940	1070	1210	1370
M2EL-B033	AFE12C3E	850	960	1090	1240	1410	1590
M2PL-B033	AFE12C3E	850	960	1090	1240	1410	1590
M2PL-H040	AFE12C4E	985	1140	1320	1530	1750	1980
M2EL-0050	RFT18C1E	1380	1700	2030	2360	2710	3050
100° Ambient							
M2PL-A025	AFE10C3E	670	760	870	1000	1130	1280
M2EL-B033	AFE12C3E	770	880	1000	1150	1300	1480
M2PL-B033	AFE12C3E	770	880	1000	1150	1300	1480
M2PL-H040	AFE12C4E	907	1050	1220	1410	1610	1830
M2EL-0050	RFT18C1E		1460	1780	2100	2440	2770
110° Ambient							
M2PL-A025	AFE10C3E		700	800	920	1050	1190
M2EL-B033	AFE12C3E		800	920	1050	1200	1360
M2PL-B033	AFE12C3E		800	920	1050	1200	1360
M2PL-H040	AFE12C4E		964	1110	1280	1470	1660
M2EL-0050	RFT18C1E					2170	2510

Capacities rated at 40°F return gas and 5°F subcooling

R-134a Condensate Base MT/HT

Copevap welded air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
M2TH-H017	ARE13C4E	620	710	810	920	1030	1160	1300	1440	1600	1770
M2TH-0020	ARB17C3E	790	880	980	1090	1220	1350	1500	1650	1810	1970
M2TH-H020	ARE17C4E	760	870	980	1110	1240	1390	1540	1710	1890	2070
M2TH-0024	ARE25C3E	830	1000	1180	1360	1540	1730	1920	2130	2340	2550
M2EH-0024	ARE25C3E		1110	1310	1470	1640	1810	2000	2190	2390	2600
M2TH-0026	ARE27C3E	870	1100	1320	1530	1750	1970	2200	2430	2660	2910
M2EH-0026	ARE27C3E		1270	1530	1700	1890	2080	2280	2490	2710	2940
M2PH-0026	ARE27C3E		1270	1530	1700	1890	2080	2280	2490	2710	2940
M2TH-H033	ARE34C4E	1390	1540	1710	1900	2100	2320	2560	2800	3040	3290
M2PH-M033	ARE37C3E	940	1280	1580	1850	2120	2370	2620	2870	3130	3400
M2EH-A033	ARE37C3E		1500	1870	2110	2360	2620	2900	3190	3500	3820
M2PH-A033	ARE37C3E		1500	1870	2110	2360	2620	2900	3190	3500	3820
M2PH-0040	ARE41C3E		1670	1970	2270	2570	2870	3170	3490	3810	4150
M2EM-A048	RRT62C1E	2170	2460	2760	3070	3390	3740				
M2EM-0052	RRT64C1E	2670	3000	3360	3740	4140	4540				
M2EM-0059	RRT64C1E	2880	3260	3680	4130	4620	5130				
M2EH-0075	RRT81C1E	3530	4040	4590	5170	5790	6430	7110	7810	8530	9280
M2EM-0075	RRT10K1E	4080	4640	5230	5850	6490	7160				
M2EM-0078	RRT10K1E	4320	4920	5530	6150	6800	7460				
M2EH-0090	RRT10K1E	4400	5010	5630	6270	6930	7610	8320	9060	9830	10600
100° Ambient											
M2TH-H017	ARE13C4E	560	650	740	840	950	1070	1200	1340	1490	1640
M2TH-0020	ARB17C3E	730	810	900	1010	1120	1240	1380	1520	1680	1840
M2TH-H020	ARE17C4E	700	800	910	1030	1160	1290	1440	1600	1760	1940
M2TH-0024	ARE25C3E	760	920	1080	1250	1420	1600	1780	1970	2160	2360
M2EH-0024	ARE25C3E		1080	1230	1390	1530	1710	1870	2050	2230	2420
M2TH-0026	ARE27C3E	730	960	1190	1400	1620	1830	2050	2260	2480	2710
M2EH-0026	ARE27C3E		1170	1400	1570	1710	1890	2080	2300	2520	2710
M2PH-0026	ARE27C3E		1170	1400	1570	1710	1890	2080	2300	2520	2710
M2TH-H033	ARE34C4E	1290	1430	1580	1750	1940	2140	2350	2570		
M2PH-M033	ARE37C3E	840	1150	1430	1690	1940	2180	2410	2650		
M2EH-A033	ARE37C3E		1350	1690	1920	2150	2420	2670	2970	3230	3490
M2PH-A033	ARE37C3E		1350	1690	1920	2150	2420	2670	2970	3230	3490
M2PH-0040	ARE41C3E		1520	1790	2070	2350	2630	2910	3210	3510	
M2EM-A048	RRT62C1E		2250	2520	2810	3110	3430				
M2EM-0052	RRT64C1E			3080	3430	3790	4150				
M2EM-0059	RRT64C1E	2660	3020	3410	3830	4280	4750				
M2EH-0075	RRT81C1E		3680	4190	4740	5320	5930	6560	7220	7900	8590
M2EM-0075	RRT10K1E		4230	4770	5350	5950	6570				
M2EM-0078	RRT10K1E		4490	5060	5640	6230	6850				
M2EH-0090	RRT10K1E		4590	5180	5770	6380	7010	7660	8340	9040	9780
110° Ambient											
M2TH-H017	ARE13C4E	510	590	680	770	870	980	1100	1220	1360	1500
M2TH-0020	ARB17C3E	680	740	820	910	1020	1130	1260	1400	1540	1700
M2TH-H020	ARE17C4E		730	840	950	1070	1190	1330	1470	1630	1790
M2TH-0024	ARE25C3E	690	840	990	1150	1300	1470	1630	1810	1990	
M2EH-0024	ARE25C3E			1140	1290	1420	1590	1740	1920		
M2TH-0026	ARE27C3E		830	1060	1270	1480	1680	1880	2090		
M2EH-0026	ARE27C3E			1330	1470	1570	1740	1910	2100		
M2PH-0026	ARE27C3E			1330	1470	1570	1740	1910	2100		
M2TH-H033	ARE34C4E						1960				
M2EH-A033	ARE37C3E			1520	1740	1970	2220	2440	2720		
M2PH-A033	ARE37C3E			1520	1740	1970	2220	2440	2720		
M2PH-0040	ARE41C3E		1370	1630	1890	2140	2400				
M2EM-A048	RRT62C1E				2580	2860	3160				
M2EM-0052	RRT64C1E				3090						
M2EM-0059	RRT64C1E			3110	3510	3920	4350				
M2EH-0075	RRT81C1E			3820	4330	4870	5430	6020			
M2EM-0075	RRT10K1E				4850	5410					
M2EM-0078	RRT10K1E			4600	5130	5680	6240				
M2EH-0090	RRT10K1E			4720	5280	5840	6410	7010			

Capacities rated at 40°F return gas (65°F return gas for capacities in bold), 5°F subcooling

R-22 Condensate Base

Copevap welded air-cooled condensing units

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
MCPH-B027	ASE20C4	1560	1750	1970	2200	2440	2690	2960	3240	3530	3820
MCPH-A035	ASE26C4	1870	2110	2370	2650	2950	3260	3590	3940	4290	4660
MCEH-A048	ASE35C4	2360	2660	2990	3330	3700	4080	4480	4900	5330	5770
MCPH-A048	ASE35C4	2360	2660	2990	3330	3700	4080	4480	4890	5310	5740
100° Ambient											
MCPH-B027	ASE20C4		1600	1810	2020	2250	2490	2730	2990	3250	3520
MCPH-A035	ASE26C4		1930	2180	2440	2710	3010	3310	3620	3950	4280
MCPH-A048	ASE35C4	2140	2430	2730	3050	3390	3740	4110	4480	4860	
MCEH-A048	ASE35C4	2150	2430	2730	3050	3390	3750	4110	4500	4890	5290
110° Ambient											
MCPH-B027	ASE20C4			1640	1840	2050	2270	2500			
MCPH-A035	ASE26C4			1980	2220	2480	2740	3020	3310		
MCEH-A048	ASE35C4		2200	2480	2780	3090	3410				
MCPH-A048	ASE35C4		2200	2480	2780	3090	3410				

Capacities rated at 65°F return gas and 5°F subcooling



Physical and Electrical Data

Copevap air-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M2EH-0024-SAA	102	ARE25C3E-SAA	16	14.25	10.52	1/4 S	5/16 S
M2EH-0026-IAA	020, 103, 111	ARE27C3E-IAA	16	14.25	10.47	1/4 S	3/8 S
M2EH-0075-CFA	212	RRT81C1E-PFA	24	17.12	13.58	3/8 S	5/8 S
M2EH-0090-CFV	208	RRT10K1E-PFV	24	16.8	13.58	3/8 S	5/8 S
M2EH-A033-IAA	208, 212	ARE37C3E-IAA	16	14.25	10.47	1/4 S	3/8 S
M2EH-H047-CAA	212	ARE51C4E-CAA	16.04	15.13	11.77	1/4 S	3/8 S
M2EL-0050-CFA	212	RFT18C1E-PFA	17.36	15.54	13.31	1/4 S	1/2 S
M2EL-B033-IAA	020	AFE12C3E-IAA	16	14.25	10.46	1/4 S	3/8 S
M2EM-0052-IAA	212	RRT64C1E-IAA	16.91	15.57	11.77	1/4 S	1/2 S
M2EM-0052-IAA	208	RRT64C1E-IAA	16.9	15.57	11.77	3/8 S	1/2 S
M2EM-0052-IAA	103	RRT64C1E-IAA	17.03	15.57	11.75	1/4 S	1/2 S
M2EM-0059-IAV	102	RRT64C1E-IAV	24	16.86	13.59	1/4 S	3/8 S
M2EM-0075-CFA	212	RRT10K1E-PFA	24	16.8	13.58	3/8 S	5/8 S
M2EM-0075-CFV	212	RRT10K1E-PFV	24	16.75	13.58	3/8 S	5/8 S
M2EM-0078-CFV	212	RRT10K1E-PFV	24	17.11	13.59	3/8 S	5/8 S
M2EM-A048-IAA	111	RRT62C1E-IAA	16.52	15.12	11.83	1/4 S	3/8 S
M2EM-A048-IAA	212	RRT62C1E-IAA	16.26	15.12	11.83	1/4 S	3/8 S
M2EM-A048-IAV	212	RRT62C1E-IAV	16.23	15.52	11.77	1/4 S	3/8 S
M2EM-A048-IAV	103	RRT62C1E-IAV	16.67	15.43	11.77	1/4 S	3/8 S
M2PH-0026-IAA	020	ARE27C3E-IAA	19.88	11.25	10.46	1/4 S	3/8 S
M2PH-0026-IAA	103	ARE27C3E-IAA	19.88	11.2	10.52	1/4 S	3/8 S
M2PH-0040-IAA	208	ARE41C3E-IAA	19.88	11.08	10.45	1/4 S	3/8 S
M2PH-0040-IAA	214	ARE41C3E-IAA	19.88	11.08	10.45	1/4 S	5/16 S
M2PH-A033-IAA	212	ARE37C3E-IAA	19.88	11.25	10.46	1/4 S	3/8 S
M2PH-A033-IAA	103	ARE37C3E-IAA	19.88	11.08	10.52	1/4 S	3/8 S
M2PH-A033-IAA	208	ARE37C3E-IAA	19.88	11.07	10.46	1/4 S	3/8 S
M2PH-A033-IAA	111	ARE37C3E-IAA	19.88	11	10.52	1/4 S	3/8 S
M2PH-A033-IAV	212	ARE37C3E-IAV	19.88	11.17	10.46	1/4 S	3/8 S
M2PH-A033-IAV	103	ARE37C3E-IAV	19.88	11.08	10.52	1/4 S	3/8 S
M2PH-A033-IAV	208	ARE37C3E-IAV	19.88	11.07	10.46	1/4 S	3/8 S
M2PH-H047-CAA	208, 212	ARE51C4E-CAA	19.88	11.08	10.44	1/4 S	3/8 S
M2PH-H047-IAV	212	ARE51C4E-IAV	19.88	11.15	10.47	1/4 S	3/8 S
M2PH-M033-IAA	103	ARE37C3E-IAA	19.88	11.08	10.52	1/4 S	3/8 S
M2PL-A025-IAA	212	AFE10C3E-IAA	19.88	11.25	10.46	1/4 S	3/8 S
M2PL-B033-IAA	020	AFE12C3E-IAA	19.88	11.29	10.47	1/4 S	3/8 S
M2PL-H040-IAA	212	AFE12C4E-IAA	19.88	11.15	10.46	1/4 S	3/8 S
M2PL-H040-IAA	103	AFE12C4E-IAA	19.88	11.08	10.46	1/4 S	3/8 S
M2TH-0024-IAA	908	ARE25C3E-IAA	19	8.47	10.53	1/4 S	5/16 S
M2TH-0024-IAA	918	ARE25C3E-IAA	19	9.35	10.53	1/4 S	5/16 S
M2TH-0026-IAA	908	ARE27C3E-IAA	19	8.47	10.53	1/4 S	5/16 S
M2TH-0026-IAA	918	ARE27C3E-IAA	19	9.35	10.53	1/4 S	5/16 S
M2TH-H017-IAA	908	ARE13C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M2TH-H017-IAA	918	ARE13C4E-IAA	19	9.46	10.53	1/4 S	5/16 S
M2TH-H020-IAA	908	ARE17C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M2TH-H020-IAA	918	ARE17C4E-IAA	19	9.46	10.53	1/4 S	5/16 S
M2TH-H033-IAA	908	ARE34C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M2TH-H033-IAA	918	ARE34C4E-IAA	19	9.35	10.53	1/4 S	5/16 S
M4EF-0050-IAA	212	RST45C1E-IAA	17.03	15.56	11.75	1/4 S	1/2 S
M4EF-0058-IAA	072, 272	RST45C1E-IAA	24	17.15	13.58	3/8 S	1/2 S
M4EF-0075-CAA	212	RST55C1E-CAA	24	16.82	13.58	3/8 S	5/8 S
M4EF-0080-CFA	212	RST64C1E-CFA	24	16.82	13.59	3/8 S	5/8 S
M4EH-0025-IAA	212	ASE19C3E-IAA	16	14.25	10.47	1/4 S	3/8 S
M4EH-0049-CAA	020, 103, 208, 212	ASE32C3E-CAA	16.17	15.41	11.75	1/4 S	3/8 S
M4EH-0049-CAV	212	ASE32C3E-CAV	16.08	15.12	11.75	1/4 S	3/8 S
M4EH-A035-IAA	212	ASE24C3E-IAA	16.03	15.12	11.83	1/4 S	3/8 S
M4EH-A035-IAA	208	ASE24C3E-IAA	16.03	15.12	11.81	1/4 S	3/8 S
M4EH-A035-IAA	103, 111	ASE24C3E-IAA	16.06	15.12	11.78	1/4 S	3/8 S
M4EH-A035-IAV	212	ASE24C3E-IAV	16.03	15.12	11.83	1/4 S	3/8 S
M4EL-0033-IAA	212	AFE11C3E-IAA	16	14.25	10.47	1/4 S	3/8 S
M4EL-0033-IAA	103	AFE11C3E-IAA	16	14.25	10.52	1/4 S	3/8 S
M4EL-0039-IAA	111	AFE13C3E-IAA	16.06	15.12	11.78	1/4 S	3/8 S
M4EL-H050-IAA	103, 212	AFE17C4E-IAA	16.03	15.12	11.77	1/4 S	3/8 S
M4PH-0025-IAA	212	ASE19C3E-IAA	19.88	11.25	10.46	1/4 S	3/8 S
M4PH-0025-IAA	208	ASE19C3E-IAA	19.88	11.07	10.46	1/4 S	3/8 S

Physical and Electrical Data

Copevap air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
M2EH-0024-SAA						6.3	15	37
M2EH-0026-IAA		2.2				6.9	15	44
M2EH-0075-CFA		7.4				18.3	25	55
M2EH-0090-CFV						11.2	15	
M2EH-A033-IAA		2.2				9.9	15	41
M2EH-H047-CAA		2.8				14.0	20	55
M2EL-0050-CFA		2.8				13.0	20	72
M2EL-B033-IAA		2.2				6.7	15	47
M2EM-0052-IAA		2.8				14.6	20	45
M2EM-0052-IAA						14.6	20	61
M2EM-0052-IAA		2.8				14.6	20	61
M2EM-0059-IAV						9.2	15	70
M2EM-0075-CFA		4.8				19.0	30	68
M2EM-0075-CFV		4.8				11.2	15	78
M2EM-0078-CFV		7.4				11.2	15	50
M2EM-A048-IAA						12.8	20	40
M2EM-A048-IAA		2.8				12.8	20	57
M2EM-A048-IAV		2.8				6.0	15	51
M2EM-A048-IAV		2.8				6.0	15	65
M2PH-0026-IAA		2.2				6.9	15	42
M2PH-0026-IAA		2.2				6.9	15	41
M2PH-0040-IAA						10.2	15	
M2PH-0040-IAA						10.2	15	
M2PH-A033-IAA		2.2				9.9	15	40
M2PH-A033-IAA		2.2				9.9	15	46
M2PH-A033-IAA						9.9	15	46
M2PH-A033-IAA						9.9	15	46
M2PH-A033-IAV		2.2				4.9	15	46
M2PH-A033-IAV		2.2				4.9	15	46
M2PH-A033-IAV						4.9	15	46
M2PH-H047-CAA						14.0	20	50
M2PH-H047-IAV		2.2				6.7	15	
M2PH-M033-IAA		2.2				9.7	15	46
M2PL-A025-IAA		2.2				6.9	15	42
M2PL-B033-IAA		2.2				6.7	15	47
M2PL-H040-IAA		2.2				9.0	15	45
M2PL-H040-IAA		2.2				9.0	15	50
M2TH-0024-IAA						6.7	15	34
M2TH-0024-IAA		1.3				6.7	15	36
M2TH-0026-IAA						7.1	15	34
M2TH-0026-IAA		1.3				7.1	15	40
M2TH-H017-IAA						6.1	15	40
M2TH-H017-IAA		1.3				6.1	15	37
M2TH-H020-IAA						6.1	15	40
M2TH-H020-IAA		1.3				6.1	15	
M2TH-H033-IAA						6.6	15	36
M2TH-H033-IAA		1.3				6.6	15	38
M4EF-0050-IAA				2.4		14.0	20	66
M4EF-0058-IAA				2.9		15.1	20	73
M4EF-0075-CAA				4.1		20.8	30	77
M4EF-0080-CFA				4.1		20.3	30	78
M4EH-0025-IAA				1.9		10.7	15	36
M4EH-0049-CAA				2.4		12.3	20	51
M4EH-0049-CAV				2.4		6.7	15	50
M4EH-A035-IAA				2.4		8.4	15	49
M4EH-A035-IAA						8.4	15	45
M4EH-A035-IAA				2.4		8.4	15	45
M4EH-A035-IAV				2.4		5.9	15	50
M4EL-0033-IAA				1.9		7.7	15	41
M4EL-0033-IAA				1.9		7.7	15	41
M4EL-0039-IAA						8.9	15	47
M4EL-H050-IAA				2.4		10.6	15	
M4PH-0025-IAA				1.9		10.7	15	44
M4PH-0025-IAA						10.7	15	41

*Receiver capacity applies only to units with receivers. See BOM Matrix for included components.

Physical and Electrical Data

Copevap air-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M4PH-0025-IAA	111	ASE19C3E-IAA	19.88	11	10.52	1/4 S	3/8 S
M4PH-0049-CAA	208	ASE32C3E-CAA	19.88	11.08	10.46	1/4 S	3/8 S
M4PH-A035-IAA	111, 212	ASE24C3E-IAA	19.88	11.15	10.46	1/4 S	3/8 S
M4PH-A035-IAV	208, 212	ASE24C3E-IAV	19.88	11.15	10.46	1/4 S	3/8 S
M4PL-0033-IAA	020	AFE11C3E-IAA	19.88	11.25	10.46	1/4 S	3/8 S
M4PL-0039-IAA	103, 111, 208, 212	AFE13C3E-IAA	19.88	11.08	10.44	1/4 S	3/8 S
M4PL-H050-IAA	103, 212	AFE17C4E-IAA	19.88	11.15	10.46	1/4 S	3/8 S
M4TL-H025-IAA	908	AFE08C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TL-H025-IAA	918	AFE08C4E-IAA	19	9.35	10.53	1/4 S	5/16 S
M4TL-H033-IAA	908	AFE11C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TL-H033-IAA	918	AFE11C4E-IAA	19	9.35	10.53	1/4 S	5/16 S
M4TL-H034-IAA	908	AFE13C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TL-H034-IAA	918	AFE13C4E-IAA	19	9.35	10.53	1/4 S	5/16 S
M4TM-0033-IAA	908	ASE24C3E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TM-0033-IAA	918	ASE24C3E-IAA	19	9.35	10.53	1/4 S	5/16 S
M4TM-0033-IAV	908	ASE24C3E-IAV	19	8.47	10.53	1/4 S	5/16 S
M4TM-0033-IAV	918	ASE24C3E-IAV	19	9.35	10.53	1/4 S	5/16 S
M4TM-H020-IAA	908	ASE12C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TM-H020-IAA	918	ASE12C4E-IAA	19	9.46	10.53	1/4 S	5/16 S
M4TM-H025-IAA	908	ASE20C4E-IAA	19	8.47	10.53	1/4 S	5/16 S
M4TM-H025-IAA	918	ASE20C4E-IAA	19	9.35	10.53	1/4 S	5/16 S
MCEH-A048-CAA	212	ASE35C4-CAA	16.06	15.13	11.77	1/4 S	3/8 S
MCPH-A035-IAA	212	ASE26C4-IAA	19.88	11.08	10.46	1/4 S	3/8 S
MCPH-A048-CAA	212	ASE35C4-CAA	19.88	11.15	10.47	1/4 S	3/8 S
MCPH-A048-IAV	212	ASE35C4-IAV	19.88	11.15	10.46	1/4 S	3/8 S
MCPH-B027-IAA	212	ASE20C4-IAA	19.88	11.25	10.46	1/4 S	3/8 S

Physical and Electrical Data

Copevap air-cooled condensing units

Model	Receiver Capacity (Lbs @ 90% Volume)					MCA	Max Fuse	Ship Weight
	R-12	R-134a	R-22	R-404A	R-407C			
M4PH-0025-IAA						10.7	15	41
M4PH-0049-CAA						12.3	20	51
M4PH-A035-IAA				1.9		8.4	15	44
M4PH-A035-IAV				1.9		5.9	15	45
M4PL-0033-IAA				1.9		7.7	15	43
M4PL-0039-IAA				1.9		8.9	15	47
M4PL-H050-IAA				1.9		10.6	15	44
M4TL-H025-IAA						5.8	15	31
M4TL-H025-IAA				1.1		5.8	15	31
M4TL-H033-IAA						6.1	15	35
M4TL-H033-IAA				1.1		6.1	15	36
M4TL-H034-IAA						7.9	15	37
M4TL-H034-IAA				1.1		7.9	15	38
M4TM-0033-IAA						8.4	15	35
M4TM-0033-IAA				1.1		8.4	15	36
M4TM-0033-IAV						5.9	15	33
M4TM-0033-IAV				1.1		5.9	15	37
M4TM-H020-IAA						5.6	15	37
M4TM-H020-IAA				1.1		5.6	15	40
M4TM-H025-IAA						8.4	15	35
M4TM-H025-IAA				1.1		8.4	15	35
MCEH-A048-CAA			2.8			15.9	25	40
MCPH-A035-IAA			2.2			10.3	15	44
MCPH-A048-CAA			2.2			15.9	25	55
MCPH-A048-IAV			2.2			8	15	
MCPH-B027-IAA			2.2			8.2	15	75

*Receiver capacity applies only to units with receivers. See BOM Matrix for included components.

Copeland™ water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F)	Water flow (GPM) at evaporator temp (°F)
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Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-404A

Model	Compressor	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	-25	0	25
M4WL-C075	RST64C1E	2600	3050	3550	4100	4700												0.41	0.72 (-5°)	
M4WL-H025	AFE08C4E	610	700	800	900	1020	1140											0.1	0.21	
M4WH-C025	ASE19C3E							1610	1820	2030	2260	2520	2790	3090	3420	3790	4190		0.3	0.39
M4WL-C033	AFE11C3E	770	960	1160	1370	1590	1830											0.17	0.25	
M4WH-C036	ASE24C3E							1880	2160	2460	2780	3130	3520	3960	4450	5000	5630		0.29	0.49
M4WL-C040	AFE13C3E	1180	1430	1690	1970	2270	2590											0.18	0.36	
M4WL-H051	AFE17C4E	1430	1640	1880	2140	2430	2740											0.21	0.41	
M4WH-C050	ASE32C3E							2800	3170	3570	4020	4530	5130	5830	6640	7590	8680		0.4	0.71
M4WF-C056	RST45C1E	1500	1780	2090	2440	2830	3250	3710	4200	4730	5290	5890						0.21	0.53	0.84
M4WF-C075	RST55C1E	2160	2460	2820	3230	3700	4220	4790	5410	6080	6790	7560						0.33	0.61	1.03
M4WL-D067	RFT26C1E	1860	2170	2510	2880	3290	3730	4230										0.31	0.63	

Physical and Electrical Data

Copeland™ welded water-cooled condensing units

Model	BOM	Compressor Electrical	Length	Width	Height	Refrigerant Connections	
						Liquid	Suction
M2WH-C026-IAA	020	ARE27C3E-IAA	17.9	12.98	8.65	1/4 S	3/8 S
M2WH-C033-IAA	020	ARE37C3E-IAA	17.9	12.98	8.65	1/4 S	3/8 S
M2WH-C033-IAV	020	ARE37C3E-IAV	17.9	12.98	8.65	1/4 S	3/8 S
M2WH-C040-IAA	020	ARE41C3E-IAA	17.9	12.98	8.65	1/4 S	3/8 S
M2WH-D050-IAA	020	RRT62C1E-IAA	13.8	18.6	9.3	1/4 S	3/8 S
M2WH-D050-IAV	020	RRT62C1E-IAV	13.8	18.6	9.3	1/4 S	3/8 S
M2WH-D056-IAA	020	RRT64C1E-IAA	18.5	13.8	9.8	1/4 S	3/8 S
M2WH-D056-IAV	020	RRT64C1E-IAV	12.8	17.9	9.2	1/4 S	3/8 S
M2WH-H049-IAV	020	ARE51C4E-IAV	18.2	12.9	9.3	1/4 S	3/8 S
M2WM-C075-CFA	020	RRT10K1E-PFA	24	17.58	12.1	3/8 S	5/8 S
M2WM-C075-CFV	020	RRT10K1E-PFV	24	16.5	12.1	3/8 S	5/8 S
M4WF-C056-IAA	020	RST45C1E-IAA	17.4	12.7	10.5	1/4 S	5/8 S
M4WF-C056-IAV	020	RST45C1E-IAV	17.4	12.7	10.5	1/4 S	5/8 S
M4WF-C075-CAA	020	RST55C1E-CAA	24	16.1	10.7	3/8 S	5/8 S
M4WF-C075-CAV	020	RST55C1E-CAV	24	16.1	10.7	3/8 S	5/8 S
M4WH-C025-IAA	020	ASE19C3E-IAA	17.9	12.77	8.97	1/4 S	3/8 S
M4WH-C036-IAA	020	ASE24C3E-IAA	17.9	12.77	8.76	1/4 S	3/8 S
M4WH-C036-IAV	020	ASE24C3E-IAV	17.9	12.77	8.76	1/4 S	3/8 S
M4WH-C050-CAA	020	ASE32C3E-CAA	17.9	12.77	9.26	1/4 S	3/8 S
M4WH-C050-CAV	020	ASE32C3E-CAV	17.9	12.77	9.26	1/4 S	3/8 S
M4WL-C033-IAA	020	AFE11C3E-IAA	24	16.41	9.51	1/4 S	3/8 S
M4WL-C040-IAA	020	AFE13C3E-IAA	24	16.41	9.51	1/4 S	3/8 S
M4WL-C075-CFA	020	RST64C1E-CFA	24	16.4	10.7	3/8 S	5/8 S
M4WL-C075-IAV	020	RST64C1E-IAV	24	16.4	10.7	3/8 S	5/8 S
M4WL-D067-CAA	020	RFT26C1E-CAA	24	16.4	9.9	1/4 S	1/2 S
M4WL-H025-IAA	020	AFE08C4E-IAA	24	16.41	9.51	1/4 S	3/8 S
M4WL-H051-IAA	020	AFE17C4E-IAA	24	16.41	9.51	1/4 F	3/8 S
MCWH-0078-CAA	020	RST55C1-CAA	24.23	17.79	10.71	3/8 S	5/8 S
MCWH-0078-CAV	072	RST55C1-CAV	24.3	17.8	12.4	3/8 S	5/8 S
MCWH-A056-IAA	020	RST40C1-IAA	17.9	12.7	10.5	1/4 S	5/8 S
MCWH-A056-IAV	020	RST40C1-IAV	17.9	12.7	10.5	1/4 S	5/8 S
MCWH-D036-IAA	020	ASE26C4-IAA	17.2	12.8	9	1/4 S	3/8 S
MCWH-D049-CAA	020	ASE35C4-CAA	17.92	12.93	8.96	1/4 S	3/8 S

Copeland™ water-cooled condensing units

BTU/H at 105° condensing, 75° water inlet - evaporator temp (°F)	Water flow (GPM) at evaporator temp (°F)
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Capacities rated at 65°F return gas (40°F return gas for capacities in **bold**), 5°F subcooling

R-134a

Model	Compressor	0	5	10	15	20	25	30	35	40	45	-25	0	25
M2WH-C026	ARE27C3E	850	1110	1360	1620	1890	2160	2450	2760	3100	3470	0.18	0.27	0.46
M2WH-C033	ARE37C3E	980	1390	1790	2190	2590	3000	3420	3870	4350	4860	0.19	0.39	0.68
M2WH-C040	ARE41C3E	1380	1750	2130	2530	2950	3390	3870	4380	4920	5520	0.27	0.45	0.72
M2WH-H049	ARE51C4E	2210	2510	2860	3250	3680	4150	4660	5220	5810	6450	0.3	0.6	0.9
M2WH-D050	RRT62C1E	2350	2730	3150	3590	4080	4610	5180	5800	6480	7220	0.31	0.62	0.93
M2WH-D056	RRT64C1E		3300	3770	4300	4880	5510	6190	6930	7730	8580		0.71	1.11
M2WM-C075	RRT10K1E	4470	5180	5920	6710	7570	8490					0.6	1.11	

R-22

Model	Compressor	0	5	10	15	20	25	30	35	40	45	-25	0	25
MCWH-D036	ASE26C4	1880	2160	2470	2810	3190	3600	4050	4530	5060	5630	0.3	0.5	0.7
MCWH-D049	ASE35C4	2440	2800	3210	3650	4140	4670	5250	5880	6560	7300	0.4	0.69	0.99
MCWH-A056	RST40C1	2460	2810	3210	3660	4170	4730	5330	5990	6690	7440	0.4	0.59	0.99
MCWH-0078	RST55C1	3650	4160	4760	5430	6180	7000	7900	8870	9910	11000	0.51	0.92	1.43

Physical and Electrical Data

Copeland™ welded water-cooled condensing units

Model	Water Connections					MCA	Max Fuse	Ship Weight (Lbs)
	In (FPT)	Out (OD)	R-134a	R-22	R-404A			
M2WH-C026-IAA	3/8	1/2	2.2			6.2	15	47
M2WH-C033-IAA	3/8	1/2	2.2			9.0	15	46
M2WH-C033-IAV	3/8	1/2	2.2			4.3	15	48
M2WH-C040-IAA	3/8	1/2	2.2			9.3	15	50
M2WH-D050-IAA	3/8	1/2	2.8			11.9	20	57
M2WH-D050-IAV	3/8	1/2	2.8			5.4	15	75
M2WH-D056-IAA	3/8	1/2	2.8			13.8	20	50
M2WH-D056-IAV	3/8	1/2	2.8			8.0	15	75
M2WH-H049-IAV	3/8	1/2	2.8			6.1	15	54
M2WM-C075-CFA	3/8	1/2	7.4			17.0	30	125
M2WM-C075-CFV	3/8	1/2	7.4			10.0	15	86
M4WF-C056-IAA	3/8	1/2			2.9	13.1	20	65
M4WF-C056-IAV	3/8	1/2			2.9	6.6	15	65
M4WF-C075-CAA	3/8	1/2			6.4	18.8	30	75
M4WF-C075-CAV	3/8	1/2			6.4	8.5	15	78
M4WH-C025-IAA	3/8	1/2			2.4	10.0	15	48
M4WH-C036-IAA	3/8	1/2			2.4	7.5	15	47
M4WH-C036-IAV	3/8	1/2			2.4	5.3	15	45
M4WH-C050-CAA	3/8	1/2			2.4	11.5	20	52
M4WH-C050-CAV	3/8	1/2			2.4	6.1	15	53
M4WL-C033-IAA	3/8	1/2			1.9	7.7	15	60
M4WL-C040-IAA	3/8	1/2			2.4	8.7	15	50
M4WL-C075-CFA	3/8	1/2			6.4	19.0	30	85
M4WL-C075-IAV	3/8	1/2			6.4	11.8	20	30
M4WL-D067-CAA	3/8	1/2			2.4	14.1	20	55
M4WL-H025-IAA	3/8	1/2			1.9	5.6	15	
M4WL-H051-IAA	3/8	1/2			2.4	10.4	15	69
MCWH-0078-CAA	3/8	1/2		7.3		18.8	30	55
MCWH-0078-CAV	3/8	1/2		7.3		8.5	15	62
MCWH-A056-IAA	3/8	1/2		3.3		13.8	20	92
MCWH-A056-IAV	3/8	1/2		3.3		6.3	15	66
MCWH-D036-IAA	3/8	1/2		2.7		9.4	15	65
MCWH-D049-CAA	3/8	1/2		2.7		15.0	25	45

Emerson™ Electronic Unit Controller (EUC)

Part #	Description
943-0152-00	115V Electronic Unit Controller
943-0153-00	230V Electronic Unit Controller
943-0154-00	115V Electronic Unit Controller with Fan Cycling
943-0155-00	230V Electronic Unit Controller with Fan Cycling
929-0114-00	Electronic Unit Controller Suction Pressure Transducer (150 PSIA)
929-0113-00	DLT Sensor Kit



Hold 3 Seconds to Enter Menu (PSI Light Will Flash) ▾ + SET

Cycle Through Menu Options ▲ ▾

Select Function SET

Adjust Value ▲ ▾

Store Function SET

Exit Menu ▲ + SET

Functions

[in]
Low Pressure Cut-In

[CoU]
Low Pressure Cut-Out

More information inside panel

Alarm	Description	Alarm	Description
PoF	Keypad locked	HP	High pressure trip alarm
Pon	Keypad unlocked	HA	High condenser temperature alarm
P1	Suction probe failure	HPL	High pressure trip lock-out alarm
P2	Condenser probe failure		
P3	DLT probe failure		
dLt	DLT temperature alarm		
dLL	DLT lock alarm		
EE	Module Failure		

Scan for Electronic Unit Controller Alarm Code and Service Information

052-7269-00

Note: After 15 seconds of inactivity the controller will revert to the default display

BUTTON	DESCRIPTION
SET	Displays set point In programming mode it confirms an operation.
RESTART	Allows a manual restart and a dead band reset
SERVICE	To enter the service menu.
Alarm menu	To enter the Alarm menu.

Note: Fan Cycling (If Present) is controlled by the Saturated Condenser Temperature for equal runtime

Default Factory Settings For Replacement Controller

Cin = 25 AC = 6 P1E = 135 dly = 0 bEn = 4
 CoU = 15 ono = 0 P1d = 15 bMP = no Di1 = YES
 LS = 5 Con = 5 Unt = PSI On = 2 i1P = CL
 US = 135 CoF = 5 CF = F oFF = 5 Di1 = no
 odS = 2 P1i = -15 rES = in Nub = 3 i2P = CL

Call 1-888-367-9950 or
 see www.EmersonClimate.com/EUC for more details

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HVACR Fault Finder



Vilter™ Docs



ComfortGuard™



HVAC Check & Charge



Emerson e-Saver™



Sensi



WRMobile



Emerson X-Check™



Copeland™ Mobile



Copeland X-Ref™



Emerson PTPro™



Vilter Select

More Soon – We're listening to you!

Application Engineering Bulletins

4-1255	U.L. and C.S.A. Agency File Numbers
4-1273	Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
4-1292	Medium Temperature R-22 Copelaweld Compressors
4-1295	HFC-134A Refrigerant Guidelines
4-1298	Extended Medium Temperature R-404A/507 Hermetic Compressors and Condensing Units
4-1305	"Copeland" AF, AR, & AS Refrigeration Hermetic 1/8-1 Horsepower Compressors
4-1306	Application Guidelines for RF Low Temperature Refrigeration Compressors
4-1307	Application Guidelines for CF Refrigeration Compressors and Condensing Units
5-1340	Care and Cleaning of Air-Cooled Condensing Units
5-1174	Water Flow Requirements and Water Pressure Drop for Copeland Water-Cooled Condensing Units
4-1344	Application Guidelines for RFT, RRT, RST Compressors
8-1376	Electronic Unit Controller
11-1147	Suction Accumulators
17-1260	Compressor Overheating
17-1268	Compression Ratio as it Affects Compressor Reliability
22-1182	Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

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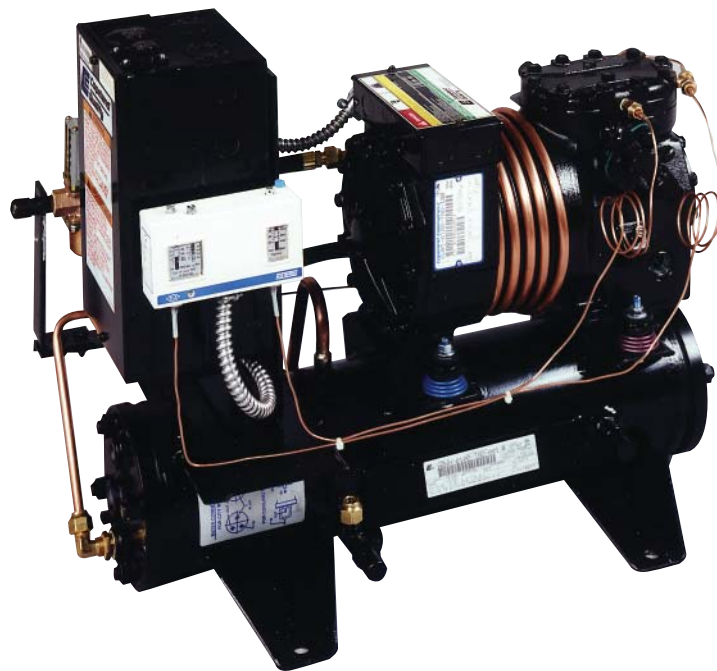


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EMERSON. CONSIDER IT SOLVED.™

W-Line

Semi-hermetic water-cooled condensing units



Product Information

Horsepower: 3/4 – 30
Temperature Applications: Ultra-Low/Low/Medium/High
Refrigerants: R-12, R-22, R-134a, R-404A, R-407A & R-407C
Installation Applications: A variety of applications including walk-in boxes and industrial air dryers



EMERSON
Climate Technologies

Nomenclature • Semi-Hermetic Condensing Units

Temperature Application		Compressor Motor Types		
Description	Code	Phase	Description	Code
High Temperature	H	1	Capacitor Run – Capacitor Start	C
Medium Temperature	M	1	Induction Run – Capacitor Start	I
Low Temperature	L	1	Induction Run – Split Phase	S
Extended Medium Temp.	F	1	Capacitor Run – Permanent Split Capacitor	P
Extra Low Temp.	E	3	Three Phase	T
High Temperature	B	3	Wye (star) Delta	E
R22/404A LT & R134a HT	G	3	6 Lead Part Winding or Across the Line – except 575V	F
R22 HT & R404A MT	J			
R404A LT & R134a HT	K			
Two Stage	U			
Two Stage	T			

Product Variations
Numbers will be assigned as follows:

- Number –100 is standard compressor used in Copeland® condensing units.
- Number –200 indicates a STANDARD compressor parts B/M and model no.
- Number –201 and larger will be assigned for all other variations of a given model.
- Number –800 indicates a standard replacement compressor and Component Parts B/M and model no. –240 volt control.
- Number –801 indicates a standard replacement compressor and component parts B/M and model no. –120 volt control.

Receiver Base	C
Flat Metal Base	E, D
Water Condenser Base	W
Transport Unit	T



Refrigerant	
R404A/507	J/4
R134a	T/2
R12	B/7
R22	3/M/L/C
Multiple	F
R22/407C	G
R22	9
R134a/404A/22	N
R134a/404A	P
R404A/22	8

Air Cooled Steel Base	A
Air Cooled Copevap Base	E
Water Cooled Steel Base	W
Custom Base	C
Discus	D

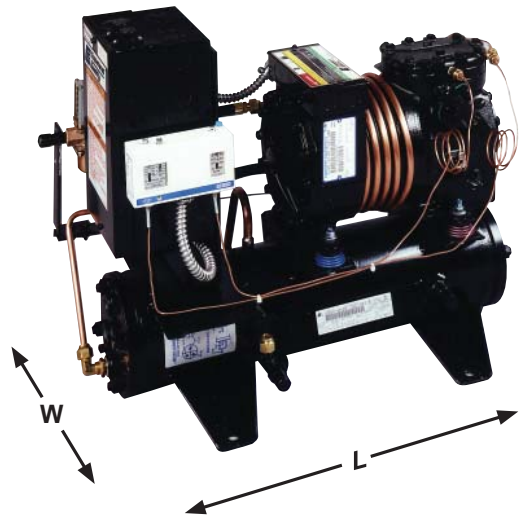
Comp. Motor Rating	
Nominal (HP)	Code
1/2	0050
3/4	0075
1	0100
1-1/2	0150
2	0200
3	0300
4	0400
5	0500
6	0600
7-1/2	0750
9	0900
10	1000
15	1500
20	2000
22	2200
25	2500
27	2700
30	3000
40	4000
50	5000
60	6000
70	7000
80	8000

Note: Left position may be a letter indicating a revision change

Compressor Motor Protection	
Type Protection	Code
External Inherent Protection-One Protector, (Line Break) Use with Contactor	A
Internal Inherent Protection-One Protector (Line Break) Use with Contactor	F
Internal Thermal Protectors-Electronic Sensors; and Control Module External Use with Contactor	S

Electrical Codes		
60 Hz.	50 Hz.	Code
115-1	100-1	A
230-1	-	B
208/230-3	200/220-3	C
460-3	-	D
575-3	-	E
-	230-1	G
-	380/420-3	M
208/230-1	200-1	V
-	220-3	W
-	220/240-1	Z

Note: When applicable, specific 50 Hz ratings (not necessarily identical to typical shown above) will be shown as alternate on 60 Hz rated models.



Bill of Materials Matrix

BOM	Options					UL	
	Suction Valve	Liquid Valve	Conduit	Pressure Controls	Head Cooling Fan	Listed	Recognized
001	X	X	X	X		X	
007/050	X	X	X	X	X	X	

Semi-hermetic water-cooled condensing units

Features	Benefits
Copeland™ Semi-hermetic Compressor Copeland Discus™ Compressor with Unique 'Discus' Valve Design	Reliability High Energy Efficiency
Modular Components	Replacement Serviceability
Positive Displacement Oil Pump	Oil Lubrication Under All Operating Conditions Lower Service & Maintenance Cost
Low Re-expansion Volumes	Decreases Energy Costs Greater Capacity
Lower Operating Speeds	Reduces Operating Component Stress Low Sound Lower Maintenance Costs
Wide Range of Available Models from 0.75 HP to 30 HP For HCFC and HFC Refrigerants	Application Flexibility

Register for more product information

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

Semi-hermetic water-cooled condensing units

BTU/H at 105° condensing, 85° water inlet - evaporator temp (°F)

Water flow (GPM) at evaporator temp (°F)

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Ultra Low Temp

Unit Model	Compressor	-60	-55	-50	-45	-40	-35	-30	-25	-60	-40	-25
WJWU-0500	9TK2-050E	7110	8700	10400	12300	14200	16100	18100	20000	2.5	4.83	6.61

R-404A Low Temp

Unit Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0	-40	-20	0
WJWL-0100	KWJ*-011E	2300	2800	3360	3980	4660	5420	6250	7170	8180	0.91	1.46	2.28
WJWL-0151	KWL*-016E	3450	4200	5020	5920	6900	7960	9130	10410	11800	1.28	2.19	3.28
WJWL-A201	EAV*-021E	4440	5460	6580	7810	9170	10700	12300	14100	16100	1.44	2.68	4.43
WJWL-0303	LAHA-032E	5890	7570	9500	11700	14100	16700	19600	22700	26100	1.76	3.93	7.02
WJDL-0302	2DF3-030E / 2DF3F16KE	9950	12100	14440	17000	19810	22910	26310	30050	34150	3.35	5.86	9.02
WFDP-0300	2DF3F16KE	10300	12600	15000	17700	20600	23800	27300	31200	35500	3.1	5.7	9.4
WFDP-0350	2DL3F20KE	12300	14800	17600	20600	23900	27500	31500	35800	40600	3.06	5.73	9.37
WJDL-0401	2DL3-040E	12360	14900	17660	20700	24020	27660	31640	36000	40760	4.09	6.96	10.68
WFDP-0400	2DA3F23KE	14600	17500	20600	23900	27600	31600	35900	40700	45900	3.57	6.55	10.65
WJDL-0604	2DA3-060E	14650	17570	20680	24050	27710	31710	36090	40890	46160	4.75	8.02	12.12
WFDP-0500	3DA3F28KE	18000	21300	24800	28800	33100	37900	43100	48800	55000	4.2	7.55	12.06
WJDL-0603	3DA3A060E	18090	21350	24950	28920	33280	38060	43300	49020	55260	5.85	9.66	14.49
WFDP-0550	3DB3F33KE	21400	25300	29600	34200	39300	44800	50800	57500	64900	5.19	9.05	14.44
WJDL-0751	3DB3A075E / 3DB3F33KE	21400	25300	29600	34200	39200	44800	51000	57500	65000	6.15	10.78	17.11
WFDP-0600	3DF3F40KE	26100	30800	35900	41600	47900	55000	62500	70500	79500	7.3	12.8	20.5
WJDL-0901	3DF3F40KE	26180	30920	36130	41850	48130	55040	62620	70920	80010	8.46	13.86	21.02
WFDP-0700	3DS3F46KE	30400	35700	41400	47600	54500	61500	69500	78500	88000	8.4	14.6	22.8
WJDL-1001	3DS3A100E / 3DS3F46KE	29850	35220	41090	47500	54480	62050	70250	79120	88680	9.55	15.67	23.37
WJDL-1501	4DL3F63KE / 4DL3A150E	41400	49300	57400	65800	74800	84400	94800	106600	119600	11.6	20.31	31.49
WFDP-1500	4DHN63KE	39300	47500	56000	64500	74000	84000	95000	107000	120000	11.2	19.9	30.9
WJDL-2701	6DL3F93KE	59500	70700	83200	96900	111700	127800	145000	163400	183000	19.08	32.1	48.11

R-404A Med Temp

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	-5	25	45
WJWM-0075	KWN*-007E	3140	3670	4270	4940	5660	6450	7280					0.95	1.9	
WJWM-0100	K*R*-010E	4890	5650	6410	7210	8090	9090	10260					1.42	2.74	
WJWM-0152	K*G*-010E	5860	6740	7650	8640	9740	11000	12400					1.74	3.19	
WJWM-0202	K*KA-020E	8440	9750	11000	12300	13800	15400	17400					2.71	4.65	
WJWM-0203	ERCA-02*E	10000	11600	13300	15100	17100	19200	21600					3.11	5.64	
WJWM-0300	ERFA-031E	14800	17000	19400	22000	24800	27800	31200					4.48	8.07	
WFDP-0451	2DC3R53KE	22400	25700	29400	33500	38000	42900	48300	54100	60400	67300	74600	6.03	12.02	17.66
WFDP-0501	2DD3R63KE	27400	31200	35600	40400	45800	51700	58000	64900	72200	80100	88500	7.31	14.38	20.91
WFDP-0751	2DA3R89KE	41100	46400	52500	58500	65500	73500	81500					10.6	19.9	
WFDP-1001	3DB3R12ME	57800	65300	73400	82200	91800	102300	113700	126100	139600	154300	170300	15.07	27.81	39.82
WFDP-2511	4DK3R22ME	106000	119000	134000	151000	170000	191000	212000					27.2	52	
WFDP-3011	4DRNR28ME	125000	142000	161000	182000	204000	229000	255000					32.8	62.8	

Semi-hermetic water-cooled condensing units

BTU/H at 105° condensing, 85° water inlet - evaporator temp (°F)

Water flow (GPM) at evaporator temp (°F)

Capacities rated at 65°F return gas, 5°F subcooling

R-407A

Unit Model	Compressor	-10	-5	0	5	10	15	20	25	30	35	40	45	-10	25	45
WFDP-1001	3DB3R12ME	43900	51100	59000	67500	76800	86900	97900	109900	123000	137100	152400	168900	11.8	26.82	39.2

R-407C High Temp

Unit Model	Compressor	-10	-5	0	5	10	15	20	25	30	35	40	45	-10	25	45
WFDP-0451	2DC3R53KE	16900	19200	21900	25200	28900	33200	38100	43600	49600	56300	63700	71700	4.66	10.8	17.1
WFDP-0501	2DD3R63KE	20500	23000	26100	29700	34000	38900	44400	50700	57600	65300	73700	82800	5.61	12.5	19.7
WFDP-0751	2DA3R89KE		32600	37400	42900	49000	56000	63500	72000						17.7	
WFDP-1001	3DB3R12ME	43000	49800	57100	65000	73600	83000	93200	104300	116500	129700	144200	159900	11.38	25.4	37.1
WFDP-2511	4DK3R22ME		89500	103000	118000	134000	153000	174000	198000						48.6	
WFDP-3011	4DRNR28ME		106000	123000	140000	159000	180000	204000	231000						57.1	

R-134a HighTemp

Unit Model	Compressor	0	5	10	15	20	25	30	35	40	45	0	25	45
WTWH-0100	KWJ*-011E	4140	4890	5700	6580	7540	8580	9730	11000	12400	13900	1.14	2.18	3.43
WTWH-A201	EAV*-021E	8360	9880	11500	13300	15200	17300	19700	22200	25000	28000	2.25	4.4	6.86
WTWM-0300	LAHA-031E	13200	15500	18100	20900	24000	27300					3.58	6.95	
WFDP-0300	2DF3F16KE	19600	22700	26100	29700	33700	38100	42900	48100	53800	60100	5.2	9.4	14.2
WFDP-0400	2DA3F23KE	24500	28300	32500	37100	42200	47700	53800	60400	67600	75400	6.4	11.8	17.8
WFDP-0500	3DA3F28KE	29600	34300	39300	44800	50800	57400	64500	72300	80800	90100	7.79	14.26	21.34
WFDP-0550	3DB3F33KE	34600	40100	46100	52600	59600	67300	75800	85100	95200	106300	9	16.5	24.9
WFDP-0600	3DF3F40KE	41000	47800	55000	62500	70500	79500	89500	100000	112000	124000	10.7	19.6	29.4
WFDP-0700	3DS3F46KE	45200	52500	60500	68500	78000	88000	98500	111000	124000	138000	11.8	21.7	32.6

Semi-hermetic water-cooled condensing units

BTU/H at 105° condensing, 85° water inlet - evaporator temp (°F) Water flow (GPM) at evaporator temp (°F)

Capacities rated at 65°F return gas, 5°F subcooling

R-22 High Temp

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	0	25	45
W2WH-0075	KWN1-0075		3450	3980	4570	5230	5960	6750	7610	8550	9570	10700	1.06	1.74	2.52
W2WM-0075	KWE*-0075	3680	4260	4880	5550	6290	7110	8040					1.36	2.14	
W2WH-0100	KWR*-0100		5050	5800	6640	7570	8590	9700	10900	12200	13600	15000	1.53	2.58	3.73
W3WM-0100	KWM*-0100		5730	6700	7750	8890	10100	11400					1.63	2.87	
W2WH-0201	ERA*-0200		2960	5420	7890	10400	13000	15700	18600	21600	24800	28200	1.04	4.17	6.64
W3WM-0201	KWK*-0200	7260	8690	10200	11700	13400	15100	17000					2.56	4.37	
W2WM-0202	ERC1-0200	8180	9530	11100	12800	14800	17000	19400					2.76	4.95	
W2WH-0300	ERF*-0310		14800	17100	19700	22400	25500	28800	32400	36200	40400	44900	4.3	7.45	10.7
WFDP-0451	2DC3R53KE	19400	23100	27000	31300	35800	40800	46100	51900	58100	64900	72200	6.07	11.34	16.9
WFDP-0501	2DD3R63KE	23200	27400	31900	36700	41900	47600	53600	60200	67300	75000	83300	7.18	13.17	19.52
WFDP-0751	2DA3R89KE				53000	60500	68000	76500						18.7	
WFDP-1001	3DB3R12ME	54700	62100	70200	78900	88400	98700	109900	122000	135100	149200	164500	16.03	26.81	38.35
W3DD-1502	3DS3A1500				102930	116170	130360	145600	161970	179560	198450	218750		36.17	52.5
W3DD-1502	3DS3R17M0				102930	116170	130360	145600	161970	179560	198450	218750		36.17	52.5
W3DH-1512	3DT3A1500		81700	92500	104300	116900	130700	145600	161700	179200	198200	218600	22.5	36.11	50.6
W3DD-2002	4DA3R18M0		84800	96500	109400	123700	139400	156600	175600	196400	219200	244000	23.16	38.7	55.97
W3DH-2512	4DK3R22M0		108200	123500	141000	160500	181800	204700	228900	254400	280700	307900	29.85	50.52	71.1
W3DH-3012	4DR3R28M0				166400	188200	211900	237600	265200	294400	325400	357900		59.69	84.86

R-12 High Temp

Unit Model	Compressor	-5	0	5	10	15	20	25	30	35	40	45	0	25	45
W7WB-0075	KWM1-0075		3260	3800	4400	5060	5780	6560	7390	8270	9220	10200	1.1	1.8	2.5
WSWM-0075	KWG1-0075	3130	3740	4340	4950	5600	6320	7130					1.1	1.9	
W7WB-0100	KWJ1-0100		4530	5120	5820	6610	7500	8460	9510	10600	11800	13000	1.3	2.2	3.2
WSWM-0100	KWK1-0100	4740	5430	6160	6940	7790	8740	9820					1.4	2.5	
WFDP-0300	2DF3F16KE	16500	19200	22200	25400	28900	32600	36700	41200	45900	51100	56600	5.2	9.3	13.6

Physical and Electrical Data

Semi-hermetic water-cooled condensing units

MODEL	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection	Discharge Connection	Water Inlet	Water Outlet
W2WH-0075-TAC	001	KWN1-0075-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WH-0100-CAV	001	KWR2-0100-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WH-0100-TAC	001	KWR1-0100-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WH-0100-TAD	001	KWR1-0100-TAD	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WH-0201-CAB	001	ERA2-0200-CAB	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
W2WH-0201-TAC	001	ERA1-0200-TAC	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
W2WH-0201-TAD	001	ERA1-0200-TAD	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
W2WH-0300-TAC	001	ERF1-0310-TAC	30	17	24	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
W2WH-0300-TAD	001	ERF1-0310-TAD	30	17	17	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
W2WM-0075-CAV	001	KWE2-0075-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WM-0075-TAC	001	KWE1-0075-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W2WM-0202-TAC	001	ERC1-0200-TAC	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
W3DD-2002-TSD	001	4DA3R18M0-TSK	64	20.2	34.3	1-1/8 S	1-5/8 S	-	2" FPT	2" FPT
W3DH-1512-TFD	001	3DT3A1500-TFD	52	18	36.4	1-1/8 S	1-5/8 S	-	1 1/2 FPT	1 1/2 FPT
W3DH-2512-TSE	001	4DK3R22M0-TSE	64	20.5	33	1/8 S	1-5/8 S	-	2" FPT	2" FPT
W3WM-0100-CAV	001	KWM2-0100-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W3WM-0100-TAC	001	KWM1-0100-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W3WM-0100-TAD	001	KWM1-0100-TAD	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W3WM-0201-TAD	001	KWKA-0200-TAD	34.8	14.5	17.67	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
W7WB-0075-TAC	001	KWM1-0075-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W7WB-0100-TAC	001	KWJ1-0100-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
W7WB-0100-TAD	001	KWJ1-0100-TAD	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WFDP-0300-CFB	050	2DF3F16KE-CFB	39.87	17	36.5	1/2 S	1 1/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0300-TFC	050	2DF3F16KE-TFC	39.87	17	36.5	1/2 S	1 1/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0300-TFD	050	2DF3F16KE-TFD	39.87	17	36.5	1/2 S	1 1/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0300-TFE	050	2DF3F16KE-TFE	39.87	17	36.5	1/2 S	1 1/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0350-TFC	050	2DL3F20KE-TFC	39.87	17	36.5	1/2 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0350-TFD	050	2DL3F20KE-TFD	39.87	17	36.5	1/2 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0400-TFC	050	2DA3F23KE-TFC	39.87	17	36.5	1/2 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0400-TFD	050	2DA3F23KE-TFD	39.87	17	36.5	1/2 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0451-TFC	001	2DC3R53KE-TFC	39.87	17	28	1/2 S	1 3/8 S	-	1 1/4 FPT	2 1/4 FPT
WFDP-0451-TFD	001	2DC3R53KE-TFD	39.87	17	28	1/2 S	1 3/8 S	-	1 1/4 FPT	2 1/4 FPT
WFDP-0500-TFC	050	3DA3F28KE-TFC	46	17	38.62	5/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0500-TFD	050	3DA3F28KE-TFD	46	17	38.62	5/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0501-TFC	001	2DD3R63KE-TFC	39.87	17	28	1/2 S	1 3/8 S	-	1 1/4 FPT	2 1/4 FPT
WFDP-0550-TFC	050	3DB3F33KE-TFC	46	17	38.62	5/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0550-TFD	050	3DB3F33KE-TFD	46	17	38.62	5/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0550-TFE	050	3DB3F33KE-TFE	46	17	38.62	5/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0600-TFC	050	3DF3F40KE-TFC	52	17	39.47	7/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0600-TFD	050	3DF3F40KE-TFD	52	17	38.65	7/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0700-TFC	050	3DS3F46KE-TFC	52	17	39.47	7/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0700-TFD	050	3DS3F46KE-TFD	52	17	38.65	7/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0700-TFE	050	3DS3F46KE-TFE	52	17	38.65	7/8 S	1 3/8 S	-	1 1/4 FPT	1 1/4 FPT
WFDP-0751-TFC	001	2DA3R89KE-TFC	46	17	31.41	5/8 S	1 3/8 S	-	1-1/4 FPT	1-1/4 FPT

Physical and Electrical Data

Semi-hermetic water-cooled condensing units

MODEL	BOM	Compressor Electrical	Length	Width	Height	Liquid Connection	Suction Connection	Discharge Connection	Water Inlet	Water Outlet
WFDP-0751-TFD	001	2DA3R89KE-TFD	46	17	31.41	5/8 S	1 3/8 S	-	1-1/4 FPT	1-1/4 FPT
WFDP-0751-TFE	001	2DA3R89KE-TFE	46	17	31.41	5/8 S	1 3/8 S	-	1-1/4 FPT	1-1/4 FPT
WFDP-1001-TFC	001	3DB3R12ME-TFC	52	17	31.15	7/8 S	1 3/8 S	-	1-1/4 FPT	1-1/4 FPT
WFDP-1001-TFD	001	3DB3R12ME-TFD	52	17	31.15	7/8 S	1-3/8 S	-	1-1/4 FPT	1-1/4 FPT
WFDP-1500-TSD	050	4DHN63KE-TSK	52.02	21.07	37.15	1 1/8 S	1 5/8 S	-	1 1/2 FPT	1 1/2 FPT
WFDP-2511-TSE	001	4DK3R22ME-TSE	64	21.68	32.77	1 1/8 S	1 5/8 S	1 1/8 S	2" FPT	2" FPT
WFDP-3011-TSE	001	4DRNR28ME-TSE	64	21.68	32.77	1 1/8 S	2 1/8 S	1 3/8 S	2" FPT	2" FPT
WJDL-1501-TSC	050	4DL3F63KE-TSK	52.02	19.04	37.61	1 1/8 S	1 5/8 S	-	1 1/2 FPT	1 1/2 FPT
WJDL-1501-TSD	050	4DL3F63KE-TSK	52.02	19.04	37.61	1 1/8 S	1 5/8 S	-	1 1/2 FPT	1 1/2 FPT
WJDL-2701-TSD	050	6DL3F93KE-TSK	64	22.44	42.97	1 1/8 S	2 1/8 S	1 3/8 S	2" FPT	2" FPT
WJWL-0100-CAV	001	KWJB-010E-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWL-0100-TAC	001	KWJA-011E-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWL-0100-TAD	001	KWJA-011E-TAD	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWL-0151-TAC	001	KWLA-016E-TAC	34.8	14.5	16.99	3/8 F	7/8 S	-	3/8 MPT	1/2 FPT
WJWL-0151-TAD	001	KWLA-016E-TAD	34.8	14.5	16.99	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
WJWL-0303-TAC	050	LAHA-032E-TAC	33.87	17	32.2	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
WJWL-A201-CAV	001	EAVB-021E-CAV	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WJWL-A201-TAC	001	EAVA-021E-TAC	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WJWL-A201-TAD	001	EAVA-021E-TAD	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WJWL-A201-TAE	001	EAVA-021E-TAE	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WJWM-0075-CAV	001	KWNB-007E-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWM-0075-TAC	001	KWNA-007E-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWM-0100-CAV	007	KARB-010E-CAV	28.6	14.5	17	3/8 S	5/8 S	-	3/8 MPT	1/2 FPT
WJWM-0100-TAC	001	KWRA-010E-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WJWM-0100-TAC	007	KARA-010E-TAC	29.07	17.75	17.53	3/8 S	5/8 S	-	3/8 MPT	1/2 FPT
WJWM-0152-CAV	007	KAGB-010E-CAV	35	19	17.63	1/4 S	5/8 S	-	1/2 MPT	1/2 FPT
WJWM-0152-TAC	001	KWGA-010E-TAC	34.8	14.5	16.99	3/8 F	7/8 S	-	3/8 MPT	1/2 FPT
WJWM-0152-TAC	007	KAGA-010E-TAC	34.8	14.5	16.99	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WJWM-0202-TAC	001	KWKA-020E-TAC	34.8	14.5	17.67	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
WJWM-0203-TAC	001	ERCA-021E-TAC	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
WJWM-0203-TAD	001	ERCA-020E-TAD	34	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
WJWM-0300-TAC	001	ERFA-031E-TAC	30	17	24	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
WJWM-0300-TAD	001	ERFA-031E-TAD	30	17	24	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
WJWM-0300-TAE	001	ERFA-031E-TAE	30	17	24	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT
WJWU-0500-TFC	001	9TK2-050E-TFC	41.11	20.26	31.21	5/8 S	1-3/8 S	-	1-1/4 FPT	1-1/4 FPT
WSWM-0075-TAC	001	KWG1-0075-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WSWM-0100-TAC	001	KWK1-0100-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WTWH-0075-CAV	001	KWMB-007E-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WTWH-0100-CAV	001	KWJB-010E-CAV	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WTWH-0100-TAC	001	KWJA-011E-TAC	27.3	14.5	17.5	3/8 S	5/8 S	-	3/4 FPT	3/4 FPT
WTWH-A201-CAV	001	EAVB-021E-CAV	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WTWH-A201-TAC	001	EAVA-021E-TAC	35.64	18.75	21.11	3/8 S	7/8 S	-	1/2 MPT	1/2 FPT
WTWH-A201-TAD	001	EAVA-021E-TAD	35.33	14.5	20.4	3/8 S	7/8 S	-	1/2 FPT	1/2 FPT
WTWM-0300-TAC	050	LAHA-031E-TAC	33.87	17	32.2	1/2 S	1-1/8 S	-	1 1/4 FPT	1 1/4 FPT

Physical and Electrical Data

Semi-hermetic water-cooled condensing units

MODEL	Receiver Capacity (Lbs @ 90% Volume)						MCA	Max Fuse	Ship Weight
	R-12	R-22	134a	404A	407A	407C			
W2WH-0075-TAC			26.5				4.4	15	166
W2WH-0100-CAV			26.5				9.3	15	170
W2WH-0100-TAC			26.5				5.4	15	205
W2WH-0100-TAD			26.5				2.8	15	170
W2WH-0201-CAB			35.9				13.0	20	296
W2WH-0201-TAC			35.9				8.3	15	294
W2WH-0201-TAD			35.9				4.4	15	305
W2WH-0300-TAC			61				14.6	25	330
W2WH-0300-TAD			61				8.0	15	330
W2WM-0075-CAV			26.5				6.8	15	166
W2WM-0075-TAC			26.5				4.3	15	166
W2WM-0202-TAC			35.9				8.5	15	308
W3DD-2002-TSD		260					41.3	70	1160
W3DH-1512-TFD		204					36.3	60	946
W3DH-2512-TSE		248					43.0	70	950
W3WM-0100-CAV		26.2					9.4	15	170
W3WM-0100-TAC		26.2					5.6	15	170
W3WM-0100-TAD		26.2					2.8	15	170
W3WM-0201-TAD		32					3.8	15	233
W7WB-0075-TAC	28.9						3.4	15	166
W7WB-0100-TAC	28.9						4.3	15	172
W7WB-0100-TAD	28.9						2.6	15	172
WFDP-0300-CFB	76			60			33.4	50	491
WFDP-0300-TFC	76			60			22.2	35	491
WFDP-0300-TFD	76			60			10.9	15	490
WFDP-0300-TFE	76			60			9.5	15	491
WFDP-0350-TFC				60			34.0	50	320
WFDP-0350-TFD				60			13.5	20	320
WFDP-0400-TFC			70	60			37.2	60	250
WFDP-0400-TFD			70	60			13.5	20	250
WFDP-0451-TFC		69		60	66	65	27.9	50	489
WFDP-0451-TFD		69		60	66	65	41.3	70	489
WFDP-0500-TFC	143		132	113			39.0	60	636
WFDP-0500-TFD	143		132	113			17.9	30	643
WFDP-0501-TFC		69		60	66	65	27.9	50	480
WFDP-0550-TFC	143		132	113			40.5	70	640
WFDP-0550-TFD	143		132	113			20.9	35	640
WFDP-0550-TFE	143		132	113			14.9	20	640
WFDP-0600-TFC	160		147	127			49.9	80	719
WFDP-0600-TFD	160		147	127			21.9	35	719
WFDP-0700-TFC	160		147	127			53.7	90	728
WFDP-0700-TFD	160		147	127			24	40	728
WFDP-0700-TFE	160		147	127			22.2	35	728
WFDP-0751-TFC		129		113	122	122	40	70	574

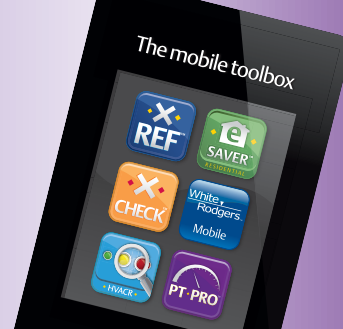
Physical and Electrical Data

Semi-hermetic water-cooled condensing units

MODEL	Receiver Capacity (Lbs @ 90% Volume)						MCA	Max Fuse	Ship Weight
	R-12	R-22	134a	404A	407A	407C			
WFDP-0751-TFD		129		113	122	122	17.6	30	574
WFDP-0751-TFE		129		113	122	122	16.6	25	574
WFDP-1001-TFC		145		127	137	136	54.5	90	730
WFDP-1001-TFD		145		127	137	136	25	45	730
WFDP-1500-TSD				136			33.6	50	900
WFDP-2511-TSE		248		216	234	233	48.5	80	1100
WFDP-3011-TSE		248		216	234	233	61.6	110	1100
WJDL-1501-TSC				136			66.9	110	865
WJDL-1501-TSD				136			33.6	50	865
WJDL-2701-TSD				136			51.2	90	1195
WJWL-0100-CAV				22.8			8.6	15	177
WJWL-0100-TAC				22.8			5.8	15	200
WJWL-0100-TAD				22.8			2.6	15	189
WJWL-0151-TAC				28.4			8.3	15	214
WJWL-0151-TAD				28.4			4.3	15	224
WJWL-0303-TAC				52			17.2	25	405
WJWL-A201-CAV				30.7			19.0	30	314
WJWL-A201-TAC				30.7			9.9	15	308
WJWL-A201-TAD				30.7			5.4	15	325
WJWL-A201-TAE				30.7			4.5	15	325
WJWM-0075-CAV				22.8			6.8	15	174
WJWM-0075-TAC				22.8			3.8	15	177
WJWM-0100-CAV				22.8			9.9	15	198
WJWM-0100-TAC				22.8			5.4	15	201
WJWM-0100-TAD				22.8			6.0	15	210
WJWM-0152-CAV				28.4			10.0	15	225
WJWM-0152-TAC				28.4			5.4	15	178
WJWM-0152-TAD				28.4			6.0	15	232
WJWM-0202-TAC				30.7			8.5	15	225
WJWM-0203-TAC				30.7			11.0	15	270
WJWM-0203-TAD				30.7			4.4	15	306
WJWM-0300-TAC				52			15.5	25	326
WJWM-0300-TAD				52			7.3	15	326
WJWM-0300-TAE				52			6.5	15	326
WJWU-0500-TFC				60			25.4	45	566
WSWM-0075-TAC	28.9						3.3	15	166
WSWM-0100-TAC	28.9						4.1	15	202
WTWH-0075-CAV			26.5				7.0	15	178
WTWH-0100-CAV			26.5				8.6	15	176
WTWH-0100-TAC			26.5				5.8	15	176
WTWH-A201-CAV			35.9				19.0	30	311
WTWH-A201-TAC			35.9				9.9	15	311
WTWH-A201-TAD			35.9				5.4	15	320
WTWM-0300-TAC			61				11.8	15	376

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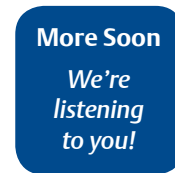
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Application Engineering Bulletins

4-1094	Identification of port locations in heads of Copelometric Compressors
4-1135	Cooling Requirements for Copelometric and Discus Compressors
4-1166	Copeland oil pumps
4-1273	Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
4-1295	HFC-134A Refrigerant Guidelines
5-1174	Water flow requirement and water pressure drop for Copeland water cooled condensing units
8-1376	Electronic Unit Controller
11-1147	Suction Accumulators
11-1297	Liquid Line Filter-Driers
17-1260	Compressors Overheating
17-1268	Compression Ratio as it Affects Compressor Reliability
22-1182	Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

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Copeland Scroll™ X-Line

Outdoor Refrigeration Units



Product Information

Horsepower:	1-1/2 – 6
Temperature Applications:	Low/Medium/High
Refrigerants:	R-134a, R-22, R-404A, R-407C/A, R-507
Installation Applications:	A variety of applications including walk-in boxes, display cases, island cases, soft serve



Copeland Scroll™ outdoor condensing units

Features	Benefits
Copeland Scroll Compressor Variable Speed Fan Motor	Reliability
	High Energy Efficiency
	Low Sound & Vibration
Advanced Diagnostics and Protection Features	Faster Troubleshooting Warranty Reduction
Factory Installed EK Filter Drier and HMI Moisture Indicator	Fewer Leaks, Reduced Callbacks, Lower Installation Costs, Increased Equipment Reliability, Lower Warranty
Slim Profile Design and Light Weight	Application Flexibility

Resources and Support

EmersonClimate.com/CopelandOutdoorUnit

- Online Product Information and Technical Data
 - Application Engineering Bulletins
 - Instruction Sheets
 - Marketing Brochures
 - Videos
- Product Selection Tools
 - Walk-In Box Load Calculator
 - Energy Savings Calculator
- Where to Buy

Application Engineering Bulletins

- 4-1273 Factors to Consider in Converting Compressor Rated Capacity to Actual Capacity
- 4-1295 HFC-134A Refrigerant Guidelines
- 4-1298 Extended Medium Temperature R-404A/507 Hermetic Compressors and Condensing Units
- 4-1299 Application Guidelines for Copeland Scroll Compressors 2 - 6 Horsepower
- 4-1327 Economized Vapor Injection (EVI) Compressors
- 4-1387 Application Guidelines for ZS**KAE Copeland Scroll™ Refrigeration Compressors 1.3-4.5 HP
- 5-1377 Copeland Scroll Outdoor Condensing Unit
- 5-1412 Copeland Scroll Outdoor Refrigeration Unit Installation and Reference Manual
- 11-1147 Suction Accumulators
- 11-1297 Liquid Line Filter-Driers
- 17-1260 Compressor Overheating
- 17-1268 Compression Ratio as it Affects Compressor Reliability
- 22-1182 Liquid Refrigerant Control in Refrigeration and Air Conditioning Systems

For more information, visit EmersonClimate.com and login to the Customer Portal to view Online Product Information

Correction Factor	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50

Bill of Materials Matrix

BOM		Features															UL			
First Generation *	New Generation	Receiver W/ Valve	Receiver Heater / Insulation	Suction Valve	Liquid Valve	Accumulator	Oil Separator (Low Temp Only)	Pressure Controls (Adjustable low, Fixed High)	Defrost Control	Filter Drier	Moisture Indicator / Sight Glass	Crankcase Heater	Variable Speed Condenser Fan	Demand Cooling Low Temp - Enhanced Vapor Injection (EVI)	Med/Ext Med Temp - Suction Line Liquid Injecton	One-Way Communication	Two-Way Communication	CoreSense™ Diagnostics / Protection	Listed	Recognized
002		X		X	X	Low Temp Only	X	X	X	X	X	X	X	X				X	X	
012		X		X	X	Low Temp Only	X	X	X	X	X	X	X	X	X	X		X	X	
022		X	X	X	X	Low Temp Only	X	X	X	X	X	X	X	X	X	X		X	X	
	081	X	X	X	X	XFAL, XFAP Only	X	X	X	X	X	X	X	X		X	X	X	X	

* First Generation (XJAM/XJAL) models continue to be available while supplies last. Orders will automatically roll to the new generation model (XFAM/XFAL) once the XJAM/XJAL model is no longer available. See page 7 for model cross reference.

Sound Data

	Model	dBa*
MED TEMP	XJAM-015Z	55
	XJAM-020Z	55
	XJAM-030Z	55
	XJAM-040Z	58
	XJAM-050Z	58
	XJAM-060Z	58
LOW TEMP	XJAL-020Z	53
	XJAL-030Z	53
	XJAL-035Z	53
	XJAL-040Z	59
	XJAL-050Z	59
	XJAL-060Z	59

Sound pressure values are 10 feet from the unit at 25°F evap for MT and -10°F evap for LT at 90°F ambient. A sound reduction of up to 3 dBA will occur in ambient temperatures below 70°F. This data is typical of “free field” conditions for horizontal air cooled condensing units and may vary depending on the condensing unit installation. There are many factors that affect the sound reading of a condensing unit such as unit mounting, reflecting walls, background noise and operating condition.

R-404A Low Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
XJAL-020Z	ZXI06KCE	5700	6960	8210	9450	10690	11920	13140	14360	15570
XJAL-030Z	ZXI09KCE	7840	9390	10950	12500	14060	15620	17170	18730	20280
XJAL-035Z	ZXI11KCE	9700	11100	12600	14200	15900	17700	19700	21700	23900
XJAL-040Z	ZXI14KCE	12690	14430	16280	18240	20300	22470	24740	27120	29610
XJAL-050Z	ZXI15KCE	14030	16040	18140	20350	22660	25060	27570	30170	32880
XJAL-050Z	ZXI16KCE	14030	16040	18140	20350	22660	25060	27570	30170	32880
XJAL-060Z	ZXI18KCE	18000	20500	23000	25700	28600	31600	34700	38100	41500
100° Ambient										
XJAL-020Z	ZXI06KCE	5640	6840	8020	9200	10370	11530	12680	13830	14970
XJAL-030Z	ZXI09KCE	6940	8520	10100	11680	13260	14840	16420	18000	19580
XJAL-035Z	ZXI11KCE	9090	10300	11700	13100	14700	16300	18100	20000	21900
XJAL-040Z	ZXI14KCE	12370	13980	15710	17540	19480	21530	23680	25940	28300
XJAL-050Z	ZXI15KCE	13110	14960	16900	18940	21080	23320	25660	28100	30640
XJAL-050Z	ZXI16KCE	13110	14960	16900	18940	21080	23320	25660	28100	30640
XJAL-060Z	ZXI18KCE	17240	19480	21930	24380	27030	29780	32740	35800	38200
110° Ambient										
XJAL-020Z	ZXI06KCE	5500	6610	7710	8810	9890	10970	12040	13100	14160
XJAL-030Z	ZXI09KCE	5830	7420	9010	10590	12180	13770	15350	16940	18530
XJAL-035Z	ZXI11KCE	9020	10140	11340	12720	14200	15690	17380	19190	21090
XJAL-040Z	ZXI14KCE	11850	13350	14950	16660	18480	20400	22420	24560	26800
XJAL-050Z	ZXI15KCE	11920	13590	15370	17250	19220	21300	23470	25740	28110
XJAL-050Z	ZXI16KCE	11920	13590	15370	17250	19220	21300	23470	25740	28110
XJAL-060Z	ZXI18KCE	16170	18330	20500	22760	25130	27600	30200	32960	34700

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	-5	0	5	10	15	20	25	30	35	40
90° Ambient											
XJAM-015Z	ZS11KAE	7800	8500	9700	10800	12000	13100	14600	16100	17500	19000
XJAM-020Z	ZX15KCE	10570	11780	13140	14610	16160	17770	19560	20800	22300	23790
XJAM-030Z	ZX21KCE	15540	17900	19320	21570	23790	26070	28490	30340	32470	34600
XJAM-040Z	ZX30KCE	21280	23920	26450	28030	32400	35500	38640	41060	43960	46860
XJAM-050Z	ZX38KCE	26690	29600	32740	35910	39400	43180	47070	49930	53330	56720
XJAM-060Z	ZX45KCE	30360	33830	37780	41780	45890	50320	54610	58340	62410	66470
100° Ambient											
XJAM-015Z	ZS11KAE	7100	7800	8900	10000	11200	12300	13600	14900	16200	17500
XJAM-020Z	ZX15KCE		10730	11970	13360	15070	16640	17930	19460	20930	22410
XJAM-030Z	ZX21KCE		15780	17700	19670	21700	23990	25880	27920	29960	32000
XJAM-040Z	ZX30KCE	19440	21770	24210	26920	29620	32430	35330	37730	40380	43040
XJAM-050Z	ZX38KCE	24580	27480	30340	33360	36630	40040	43760	46450	49630	52800
XJAM-060Z	ZX45KCE	27730	31000	34500	38110	42040	45970	50180	53480	57230	60970
110° Ambient											
XJAM-015Z	ZS11KAE	6330	7220	7900	8100	9600	11000	12100	13300	14400	15600
XJAM-020Z	ZX15KCE			10940	12170	13600	14940	16380	17700	19060	20430
XJAM-030Z	ZX21KCE				17540	19850	21800	23340	25470	27410	29340
XJAM-040Z	ZX30KCE			21910	24400	26830	29490	32180	34650	37210	39780
XJAM-050Z	ZX38KCE		24980	27860	30650	33540	36370	39820	42470	45400	48330
XJAM-060Z	ZX45KCE	23370	27280	31410	34800	38390	42200	45860	49660	53380	57110

Capacities rated at 65°F return gas, 5°F subcooling

R-407A Low Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
XJAL-020Z	ZXI06KCE	3742	4361	5147	6076	7120	8254	9453	10689	11937
XJAL-030Z	ZXI09KCE	5735	6537	7698	8998	10422	11953	13575	15269	17022
XJAL-035Z	ZXI11KCE	7173	8417	9816	11356	13024	14805	16685	18652	20691
XJAL-040Z	ZXI14KCE	10387	11920	13592	15403	17352	19439	21664	24026	26526
XJAL-050Z-TFC	ZXI15KCE	10486	12164	13982	15941	18045	20296	22698	25251	27960
XJAL-050Z-CFV	ZXI16KCE	10791	12486	14353	16392	18604	20988	23545	26275	29176
XJAL-060Z	ZXI18KCE	13901	16078	18450	21019	23784	26745	29902	33255	36804
100° Ambient										
XJAL-020Z	ZXI06KCE	3517	4088	4831	5722	6733	7840	9016	10235	11471
XJAL-030Z	ZXI09KCE	5598	6551	7661	8911	10285	11765	13335	14979	16679
XJAL-035Z	ZXI11KCE	6722	7868	9174	10625	12209	13910	15716	17613	19587
XJAL-040Z	ZXI14KCE	9989	11407	12959	14644	16461	18411	20493	22707	25052
XJAL-050Z-TFC	ZXI15KCE	9876	11507	13265	15155	17177	19336	21633	24072	26654
XJAL-050Z-CFV	ZXI16KCE	10385	11933	13664	15578	17675	19956	22419	25066	27895
XJAL-060Z	ZXI18KCE	13301	15272	17477	19916	22590	25497	28640	32016	35627
110° Ambient										
XJAL-020Z	ZXI06KCE	3118	3651	4362	5225	6215	7305	8469	9682	10916
XJAL-030Z	ZXI09KCE	5354	6239	7281	8462	9767	11178	12679	14253	15884
XJAL-035Z	ZXI11KCE	6235	7272	8473	9825	11313	12925	14646	16462	18361
XJAL-040Z	ZXI14KCE	9594	10950	12433	14044	15781	17646	19637	21754	23997
XJAL-050Z-TFC	ZXI15KCE	9071	10643	12331	14140	16070	18125	20307	22619	25064
XJAL-050Z-CFV	ZXI16KCE	9586	11076	12737	14570	16576	18753	21102	23624	26317
XJAL-060Z	ZXI18KCE	12626	14472	16538	18826	21334	24063	27013	30184	33576

Capacities rated at 65°F return gas, 5°F subcooling

R-407A Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XJAM-015Z	ZS11KAE	8250	9180	10200	11300	12500	14000	15400	17000	18700	20600
XJAM-020Z	ZX15KCE			13000	14600	16200	18200	20100	22200	24500	27100
XJAM-030Z	ZX21KCE			19000	21200	23600	26600	29400	32300	35300	38600
XJAM-040Z	ZX30KCE			26200	29400	32700	37100	41000	45000	49200	53500
XJAM-050Z	ZX38KCE			32700	36600	40800	45900	50500	55500	61000	66500
XJAM-060Z	ZX45KCE			37100	41500	46200	52000	57500	63000	69000	75000
100° Ambient											
XJAM-015Z	ZS11KAE	7690	8560	9500	10500	11600	13100	14400	15900	17500	19300
XJAM-020Z	ZX15KCE			13400	14900	16900	18700	20700	22900	25200	28200
XJAM-030Z	ZX21KCE				21800	24600	27200	30000	32800	35900	
XJAM-040Z	ZX30KCE				30200	34500	38100	41800	45800	50000	
XJAM-050Z	ZX38KCE				37600	42600	47000	51500	56500	61500	
XJAM-060Z	ZX45KCE				42600	48300	53000	58500	64000	69500	
110° Ambient											
XJAM-015Z	ZS11KAE	7120	7930	8790	9730	10800	12200	13400	14800	16300	18000
XJAM-020Z	ZX15KCE						15600	17300	19100	21100	23400
XJAM-030Z	ZX21KCE						22600	25000	27600	30200	33100
XJAM-040Z	ZX30KCE							34900	38500	42100	46000
XJAM-050Z	ZX38KCE						39200	43300	47600	52000	57000
XJAM-060Z	ZX45KCE							48900	54000	59000	64000

Capacities rated at 65°F return gas (40°F return gas for capacities in **bold**), 5°F subcooling

R-407C Low Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
XJAL-020Z	ZXI06KCE	5046	5061	5769	6433	7408	8405	9407	10393	11342
XJAL-030Z	ZXI09KCE	4831	5801	6882	8072	9368	10766	12265	13861	15551
XJAL-035Z	ZXI11KCE	6663	7698	8887	10224	11705	13324	15076	16957	18961
XJAL-040Z	ZXI14KCE	9664	10971	12469	14151	16007	18029	20208	22534	24999
XJAL-050Z-TFC	ZXI15KCE	9603	11024	12689	14570	16640	18870	21233	23702	26247
XJAL-050Z-CFV	ZXI16KCE	7688	10396	13105	15813	18522	21230	23939	26647	29355
XJAL-060Z	ZXI18KCE	11842	13667	15707	17963	20434	23121	26023	29141	32475
100° Ambient										
XJAL-020Z	ZXI06KCE	4838	4946	5555	6266	7060	7916	8815	9736	10661
XJAL-030Z	ZXI09KCE	4430	5367	6413	7566	8822	10179	11633	13182	14823
XJAL-035Z	ZXI11KCE	6060	7022	8137	9401	10808	12355	14034	15842	17773
XJAL-040Z	ZXI14KCE	9362	10612	12037	13628	15377	17275	19313	21481	23771
XJAL-050Z-TFC	ZXI15KCE	9432	10647	12105	13780	15644	17669	19828	22091	24433
XJAL-050Z-CFV	ZXI16KCE	9336	11268	13335	15536	17871	20339	22942	25679	28549
XJAL-060Z	ZXI18KCE	11146	12936	14916	17085	19444	21993	24731	27658	30776
110° Ambient										
XJAL-020Z	ZXI06KCE	4468	4741	5174	5749	6445	7242	8121	9061	10043
XJAL-030Z	ZXI09KCE	4015	4911	5915	7023	8232	9540	10942	12437	14022
XJAL-035Z	ZXI11KCE	5503	6380	7411	8591	9914	11376	12972	14696	16544
XJAL-040Z	ZXI14KCE	8468	9718	11126	12684	14383	16213	18166	20233	22405
XJAL-050Z-TFC	ZXI15KCE	8709	9793	11121	12666	14400	16295	18325	20460	22673
XJAL-050Z-CFV	ZXI16KCE	9623	11858	13870	15660	17228	18574	19698	20600	21280
XJAL-060Z	ZXI18KCE	10391	12079	13922	15920	18073	20381	22844	25462	28235

Capacities rated at 65°F return gas, 5°F subcooling

Shaded area = 20°F max superheat

R-407C Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XJAM-015Z	ZS11KAE	7010	8070	9180	10300	11500	12800	14100	15500	16900	18400
XJAM-020Z	ZX15KCE	8,640	9,900	11,300	12,800	14,300	16,000	17,800	19,700	21,800	23,900
XJAM-030Z	ZX21KCE			16,300	18,300	20,300	22,500	24,800	27,300	29,900	32,600
XJAM-040Z	ZX30KCE				22,800	25,200	27,800	30,600	33,600	36,700	39,900
XJAM-050Z	ZX38KCE										
XJAM-060Z	ZX45KCE										
100° Ambient											
XJAM-015Z	ZS11KAE	6600	7630	8720	9840	11000	12200	13400	14700	16100	17500
XJAM-020Z	ZX15KCE			10,500	11,900	13,400	15,000	16,800	18,600	20,500	22,600
XJAM-030Z	ZX21KCE						21,200	23,400	25,700	28,200	30,700
XJAM-040Z	ZX30KCE							28,600	31,400	34,400	37,400
XJAM-050Z	ZX38KCE										
XJAM-060Z	ZX45KCE										
110° Ambient											
XJAM-015Z	ZS11KAE	6110	7130	8190	9280	10400	11500	12700	13900	15200	16500
XJAM-020Z	ZX15KCE						14,000	15,600	17,400	19,200	21,200
XJAM-030Z	ZX21KCE									26,400	28,800
XJAM-040Z	ZX30KCE										
XJAM-050Z	ZX38KCE										
XJAM-060Z	ZX45KCE										

Capacities rated at 65°F return gas, 5°F subcooling

Shaded area = 20°F max superheat

Physical and Electrical Data

Copeland Scroll Outdoor Refrigeration Units – XJ Series

Model	Compressor	# of Fans	Overall Dimensions (in)			Refrigerant Connections		Receiver Capacity (Lbs @ 90% Volume)			MCA	Max Fuse*	Defrost Relay Rating** (Amps)	Ship Weight (lbs)
			L	W	H	Liquid	Suction	404A	407A	407C				
XJAL-020Z-CFV-022	ZXI06KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	19.4	30	40	188
XJAL-020Z-TFC-022	ZXI06KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	14.7	25	40	188
XJAL-030Z-TFC-022	ZXI09KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	15.4	25	40	192
XJAL-035Z-CFV-022	ZXI11KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	30.7	50	40	213
XJAL-040Z-CFV-022	ZXI14KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	36.1	60	40	251
XJAL-040Z-TFC-022	ZXI14KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	24.5	40	40	251
XJAL-050Z-CFV-022	ZXI16KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	40.4	70	40	287
XJAL-050Z-TFC-022	ZXI15KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	26.1	45	40	267
XJAL-060Z-TFC-022	ZXI18KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	30.7	50	40	291
XJAM-015Z-CFV-022	ZS11KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	12.3	20	40	180
XJAM-020Z-CFV-022	ZX15KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	18.7	30	40	182
XJAM-020Z-TFC-022	ZX15KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	11.1	15	40	182
XJAM-030Z-CFV-022	ZX21KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	24.3	40	40	194
XJAM-030Z-TFC-022	ZX21KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S	8.9	10	10	14.7	25	40	194
XJAM-040Z-CFV-022	ZX30KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	32.1	50	40	250
XJAM-040Z-TFC-022	ZX30KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	19.7	30	40	250
XJAM-050Z-CFV-022	ZX38KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	36.6	60	40	258
XJAM-050Z-TFC-022	ZX38KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	29.0	50	40	258
XJAM-060Z-TFC-022	ZX45KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S	13.1	14.8	14.7	28.1	45	40	270

* Max Fuse rating applies to the condensing unit only. Additional evaporator fan or defrost heater loads must be considered. See evaporator manufacturer literature for additional load requirements.

** Defrost relay for single phase heaters only. For three-phase heaters, additional contactors are required.

Cross Reference

XJ Series		XF Series	
Model	Compressor	Model	Compressor
XJAL-020Z-CFV-022	ZXI06KCE-PFV	XFAL-020Z-CFV-081	ZXI06KCE-PFV
XJAL-020Z-TFC-022	ZXI06KCE-TF5	XFAL-020Z-TFC-081	ZXI06KCE-TF5
XJAL-030Z-TFC-022	ZXI09KCE-TF5	XFAL-030Z-TFC-081	ZXI09KCE-TF5
XJAL-035Z-CFV-022	ZXI11KCE-PFV	XFAL-035Z-CFV-081	ZXI11KCE-PFV
XJAL-040Z-CFV-022	ZXI14KCE-PFV	XFAL-040Z-CFV-081	ZXI14KCE-PFV
XJAL-040Z-TFC-022	ZXI14KCE-TF5	XFAL-040Z-TFC-081	ZXI14KCE-TF5
XJAL-050Z-CFV-022	ZXI16KCE-PFV	XFAL-051Z-CFV-081	ZXI16KCE-PFV
XJAL-050Z-TFC-022	ZXI15KCE-TF5	XFAL-050Z-TFC-081	ZXI15KCE-TF5
XJAL-060Z-TFC-022	ZXI18KCE-TF5	XFAL-060Z-TFC-081	ZXI18KCE-TF5
None		XFAM-015Z-CFV-081	ZS09KAE-PFV
None		XFAM-015Z-TFC-081	ZS09KAE-TF5
XJAM-015Z-CFV-022	ZS11KAE-PFV	XFAM-017Z-CFV-081	ZS11KAE-PFV
None		XFAM-017Z-TFC-081	ZS11KAE-TF5
XJAM-020Z-CFV-022	ZX15KCE-PFV	XFAM-022Z-CFV-081	ZS15KAE-PFV
XJAM-020Z-TFC-022	ZX15KCE-TF5	XFAM-022Z-TFC-081	ZS15KAE-TF5
XJAM-030Z-CFV-022	ZX21KCE-PFV	XFAM-030Z-CFV-081	ZS21KAE-PFV
XJAM-030Z-TFC-022	ZX21KCE-TF5	XFAM-030Z-TFC-081	ZS21KAE-TF5
XJAM-040Z-CFV-022	ZX30KCE-PFV	XFAM-045Z-CFV-081	ZS33KAE-PFV
XJAM-040Z-TFC-022	ZX30KCE-TF5	XFAM-045Z-TFC-081	ZS33KAE-TF5
XJAM-050Z-CFV-022	ZX38KCE-PFV	XFAM-050Z-CFV-081	ZS38K4E-PFV
XJAM-050Z-TFC-022	ZX38KCE-TF5	XFAM-050Z-TFC-081	ZS38K4E-TF5
XJAM-060Z-TFC-022	ZX45KCE-TF5	XFAM-060Z-TFC-081	ZS45K4E-TF5

XJAM models will automatically transition to XFAM models.

XFAP models may be selected instead of XFAM models for an additional charge.

Physical and Electrical Data

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	# of Fans	Overall Dimensions (in)			Refrigerant Connections	
			L	W	H	Liquid	Suction
XFAL-020Z-CFV	ZXI06KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAL-020Z-TFC	ZXI06KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAL-030Z-TFC	ZXI09KCE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAL-035Z-CFV	ZXI11KCE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAL-040Z-CFV	ZXI14KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAL-040Z-TFC	ZXI14KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAL-050Z-TFC	ZXI15KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAL-051Z-CFV	ZXI16KCE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAL-060Z-TFC	ZXI18KCE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAM-015Z-CFV	ZS09KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-015Z-TFC	ZS09KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-017Z-CFV	ZS11KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-017Z-TFC	ZS11KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-022Z-CFV	ZS15KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-022Z-TFC	ZS15KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-030Z-CFV	ZS21KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-030Z-TFC	ZS21KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAM-045Z-CFV	ZS33KAE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAM-045Z-TFC	ZS33KAE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAM-050Z-CFV	ZS38K4E-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAM-050Z-TFC	ZS38K4E-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAM-060Z-TFC	ZS45K4E-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAP-015Z-CFV	ZS09KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-015Z-TFC	ZS09KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-017Z-CFV	ZS11KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-017Z-TFC	ZS11KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-022Z-CFV	ZS15KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-022Z-TFC	ZS15KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-030Z-CFV	ZS21KAE-PFV	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-030Z-TFC	ZS21KAE-TF5	1	16.7	40.5	33.1	1/2 S	7/8 S
XFAP-045Z-CFV	ZS33KAE-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAP-045Z-TFC	ZS33KAE-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAP-050Z-CFV	ZS38K4E-PFV	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAP-050Z-TFC	ZS38K4E-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S
XFAP-060Z-TFC	ZS45K4E-TF5	2	16.7	40.5	48.9	1/2 S	7/8 S

* R-448A and R-449A volumes shown for reference only. Refrigerant approval is expected mid-2016. Visit EmersonClimate.com/opi or contact your Emerson sales representative for the latest updates on refrigerant approvals and availability.

** Max Fuse rating applies to the condensing unit only. Additional evaporator fan or defrost heater loads must be considered. See evaporator manufacturer literature for additional load requirements.

† Defrost relay for single phase heaters only. For three-phase heaters, additional contactors are required.

Physical and Electrical Data

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Receiver Capacity (Lbs @ 90% Volume)								MCA	Max Fuse*	Defrost Relay Rating† (Amps)	Ship Weight (lbs)
	R-134a	R-22	R-404A	R-407A	R-407C	R-507A	R-448A*	R-449A*				
XFAL-020Z-CFV	N/A	N/A	9.1	10	10	9.1	9.7	9.7	21.55	35	40	246
XFAL-020Z-TFC	N/A	N/A	9.1	10	10	9.1	9.7	9.7	16.18	25	40	246
XFAL-030Z-TFC	N/A	N/A	9.1	10	10	9.1	9.7	9.7	17.18	25	40	246
XFAL-035Z-CFV	N/A	N/A	9.1	10	10	9.1	9.7	9.7	34.05	50	40	272
XFAL-040Z-CFV	N/A	N/A	13.4	14.8	14.7	13.4	14.2	14.3	40.1	60	40	274
XFAL-040Z-TFC	N/A	N/A	13.4	14.8	14.7	13.4	14.2	14.3	27.1	45	40	312
XFAL-050Z-TFC	N/A	N/A	13.4	14.8	14.7	13.4	14.2	14.3	28.85	45	40	323
XFAL-051Z-CFV	N/A	N/A	13.4	14.8	14.7	13.4	14.2	14.3	44.73	70	40	343
XFAL-060Z-TFC	N/A	N/A	13.4	14.8	14.7	13.4	14.2	14.3	33.98	50	40	341
XFAM-015Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	13.55	20	40	218
XFAM-015Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	11.05	15	40	219
XFAM-017Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	16.8	25	40	219
XFAM-017Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	14.05	20	40	219
XFAM-022Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	20.68	35	40	220
XFAM-022Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	14.3	20	40	219
XFAM-030Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	30.05	50	40	236
XFAM-030Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	20.05	30	40	236
XFAM-045Z-CFV	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	37.35	60	40	285
XFAM-045Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	29.98	50	40	280
XFAM-050Z-CFV	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	41.85	70	40	292
XFAM-050Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	28.85	45	40	292
XFAM-060Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	31.98	50	40	299
XFAP-015Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	13.55	20	40	233
XFAP-015Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	11.05	15	40	234
XFAP-017Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	16.8	25	40	234
XFAP-017Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	14.05	20	40	234
XFAP-022Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	20.68	35	40	235
XFAP-022Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	14.3	20	40	234
XFAP-030Z-CFV	10.7	10.5	9.1	10	10	9.1	9.7	9.7	30.05	50	40	251
XFAP-030Z-TFC	10.7	10.5	9.1	10	10	9.1	9.7	9.7	20.05	30	40	251
XFAP-045Z-CFV	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	37.35	60	40	300
XFAP-045Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	29.98	50	40	295
XFAP-050Z-CFV	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	41.85	70	40	307
XFAP-050Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	28.85	45	40	307
XFAP-060Z-TFC	15.7	15.5	13.4	14.8	14.7	13.4	14.2	14.3	31.98	50	40	314

* R-448A and R-449A volumes shown for reference only. Refrigerant approval is expected mid-2016. Visit EmersonClimate.com/opi or contact your Emerson sales representative for the latest updates on refrigerant approvals and availability.

** Max Fuse rating applies to the condensing unit only. Additional evaporator fan or defrost heater loads must be considered. See evaporator manufacturer literature for additional load requirements.

† Defrost relay for single phase heaters only. For three-phase heaters, additional contactors are required.

R-134a Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XFAM-015Z	ZS09KAE	4,380	4,970	5,600	6,300	7,050	7,870	8,860	9,820	10,900	12,000
XFAM-017Z	ZS11KAE	5,210	5,900	6,650	7,470	8,360	9,320	10,500	11,600	12,800	14,200
XFAM-022Z	ZS15KAE	7,100	8,030	9,040	10,100	11,300	12,600	14,200	15,700	17,300	19,000
XFAM-030Z	ZS21KAE	10,600	11,900	13,400	14,900	16,600	18,400	20,700	22,800	25,100	27,500
XFAM-045Z	ZS33KAE	14,200	16,000	17,900	20,000	22,100	24,500	27,500	30,100	33,000	36,000
XFAM-050Z	ZS38K4E	16,200	18,100	20,300	22,500	24,900	27,500	30,900	33,800	36,900	40,200
XFAM-060Z	ZS45K4E	19,500	21,900	24,400	27,000	29,900	32,900	36,100	39,500	43,100	46,800
100° Ambient											
XFAM-015Z	ZS09KAE	4,150	4,700	5,300	5,950	6,660	7,430	8,400	9,310	10,300	11,400
XFAM-017Z	ZS11KAE	4,940	5,590	6,300	7,060	7,900	8,800	9,950	11,000	12,200	13,400
XFAM-022Z	ZS15KAE	6,730	7,610	8,560	9,590	10,700	11,900	13,400	14,900	16,400	18,000
XFAM-030Z	ZS21KAE	10,000	11,300	12,700	14,100	15,700	17,400	19,700	21,700	23,800	26,100
XFAM-045Z	ZS33KAE	13,500	15,200	17,000	18,900	20,900	23,100	26,000	28,500	31,200	34,100
XFAM-050Z	ZS38K4E	15,300	17,100	19,100	21,300	23,500	26,000	29,300	32,100	35,000	38,100
XFAM-060Z	ZS45K4E	18,500	20,700	23,100	25,600	28,300	31,200	34,200	37,400	40,800	44,300
110° Ambient											
XFAM-015Z	ZS09KAE	3,920	4,440	5,000	5,610	6,270	6,990	7,930	8,800	9,730	10,700
XFAM-017Z	ZS11KAE	4,660	5,270	5,930	6,650	7,430	8,280	9,400	10,400	11,500	12,700
XFAM-022Z	ZS15KAE	6,340	7,160	8,050	9,020	10,100	11,200	12,700	14,000	15,500	17,000
XFAM-030Z	ZS21KAE		10,600	11,900	13,300	14,800	16,400	18,500	20,400	22,400	24,600
XFAM-045Z	ZS33KAE		14,200	15,900	17,700	19,600	21,600	24,400	26,800	29,300	32,000
XFAM-050Z	ZS38K4E	14,400	16,100	18,000	20,000	22,100	24,400	27,600	30,200	33,000	
XFAM-060Z	ZS45K4E	17,500	19,600	21,800	24,200	26,700	29,400	32,200			

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

All capacities shown for XFAM models also apply to XFAP models

Shaded area = 20°F max superheat

R-22 Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XFAM-015Z	ZS09KAE	7,160	8,130	9,120	10,200	11,200	12,400	13,500	14,800	16,200	18,000
XFAM-017Z	ZS11KAE	8,370	9,500	10,700	11,900	13,100	14,500	15,800	17,300	18,900	20,900
XFAM-022Z	ZS15KAE	11,100	12,600	14,100	15,700	17,400	19,100	20,800	22,800	24,900	27,500
XFAM-030Z	ZS21KAE	16,400	18,600	20,800	23,100	25,400	27,900	30,400	33,100	36,000	39,500
XFAM-045Z	ZS33KAE	21,800	24,700	27,500	30,500	33,500	36,600	39,800	43,200	46,700	50,500
XFAM-050Z	ZS38K4E			30,900	33,800	36,900	40,100	43,600	47,200	51,000	54,500
XFAM-060Z	ZS45K4E			36,500	40,000	43,700	47,500	51,500	56,000	60,000	
100° Ambient											
XFAM-015Z	ZS09KAE	6,710	7,650	8,620	9,610	10,700	11,800	12,900	14,100	15,400	17,100
XFAM-017Z	ZS11KAE	7,840	8,940	10,100	11,200	12,400	13,700	15,000	16,400	18,000	19,900
XFAM-022Z	ZS15KAE	10,400	11,900	13,300	14,900	16,500	18,100	19,800	21,700	23,700	26,100
XFAM-030Z	ZS21KAE		17,400	19,600	21,800	24,100	26,400	28,800	31,400	34,200	37,600
XFAM-045Z	ZS33KAE			25,900	28,700	31,600	34,600	37,700	40,900	44,300	47,800
XFAM-050Z	ZS38K4E						38,000	41,400	44,700		
XFAM-060Z	ZS45K4E										
110° Ambient											
XFAM-015Z	ZS09KAE		7,150	8,090	9,050	10,100	11,100	12,200	13,400	14,600	16,200
XFAM-017Z	ZS11KAE		8,340	9,440	10,600	11,700	12,900	14,200	15,600	17,000	18,900
XFAM-022Z	ZS15KAE			12,500	14,000	15,500	17,100	18,700	20,500	22,400	24,700
XFAM-030Z	ZS21KAE				20,500	22,600	24,900	27,300	29,700	32,400	35,600
XFAM-045Z	ZS33KAE					29,700	32,600	35,500	38,500	41,700	45,100
XFAM-050Z	ZS38K4E										
XFAM-060Z	ZS45K4E										48,900

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

All capacities shown for XFAM models also apply to XFAP models

R-404A Low Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
XFAL-020Z	ZXI06KCE	5,700	6,960	8,210	9,450	10,690	11,920	13,140	14,360	15,570
XFAL-030Z	ZXI09KCE-TF5	7,840	9,390	10,950	12,500	14,060	15,620	17,170	18,730	20,280
XFAL-035Z	ZXI11KCE-PFV	9,700	11,100	12,600	14,200	15,900	17,700	19,700	21,700	23,900
XFAL-040Z	ZXI14KCE	12,690	14,430	16,280	18,240	20,300	22,470	24,740	27,120	29,610
XFAL-050Z	ZXI15KCE-TF5	14,030	16,040	18,140	20,350	22,660	25,060	27,570	30,170	32,880
XFAL-051Z	ZXI16KCE-PFV	14,030	16,040	18,140	20,350	22,660	25,060	27,570	30,170	32,880
XFAL-060Z	ZXI18KCE	18,000	20,500	23,000	25,700	28,600	31,600	34,700	38,100	41,500
100° Ambient										
XFAL-020Z	ZXI06KCE	5,640	6,840	8,020	9,200	10,370	11,530	12,680	13,830	14,970
XFAL-030Z	ZXI09KCE-TF5	6,940	8,520	10,100	11,680	13,260	14,840	16,420	18,000	19,580
XFAL-035Z	ZXI11KCE-PFV	9,090	10,300	11,700	13,100	14,700	16,300	18,100	20,000	21,900
XFAL-040Z	ZXI14KCE	12,370	13,980	15,710	17,540	19,480	21,530	23,680	25,940	28,300
XFAL-050Z	ZXI15KCE-TF5	13,110	14,960	16,900	18,940	21,080	23,320	25,660	28,100	30,640
XFAL-051Z	ZXI16KCE-PFV	13,110	14,960	16,900	18,940	21,080	23,320	25,660	28,100	30,640
XFAL-060Z	ZXI18KCE	17,240	19,480	21,930	24,380	27,030	29,780	32,740	35,800	38,200
110° Ambient										
XFAL-020Z	ZXI06KCE	5,500	6,610	7,710	8,810	9,890	10,970	12,040	13,100	14,160
XFAL-030Z	ZXI09KCE-TF5	5,830	7,420	9,010	10,590	12,180	13,770	15,350	16,940	18,530
XFAL-035Z	ZXI11KCE-PFV	9,020	10,140	11,340	12,720	14,200	15,690	17,380	19,190	21,090
XFAL-040Z	ZXI14KCE	11,850	13,350	14,950	16,660	18,480	20,400	22,420	24,560	26,800
XFAL-050Z	ZXI15KCE-TF5	11,920	13,590	15,370	17,250	19,220	21,300	23,470	25,740	28,110
XFAL-051Z	ZXI16KCE-PFV	11,920	13,590	15,370	17,250	19,220	21,300	23,470	25,740	28,110
XFAL-060Z	ZXI18KCE	16,170	18,330	20,500	22,760	25,130	27,600	30,200	32,960	34,700

Capacities rated at 65°F return gas, 5°F subcooling

R-404A Med/Ext Med Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient																
XFAM-015Z	ZS09KAE						7400	8260	9200	10200	11300	12500	14100	15400	16900	18400
XFAP-015Z	ZS09KAE	4130	4670	5260	5910	6620	7400	8260	9200	10200	11300	12500	14100	15400	16900	18400
XFAM-017Z	ZS11KAE						8880	9900	11000	12200	13500	14900	16800	18400	20000	21800
XFAP-017Z	ZS11KAE	4970	5610	6320	7100	7950	8880	9900	11000	12200	13500	14900	16800	18400	20000	21800
XFAM-022Z	ZS15KAE						12000	13400	14800	16400	18100	20000	22300	24300	26400	28600
XFAP-022Z	ZS15KAE	6770	7640	8600	9640	10800	12000	13400	14800	16400	18100	20000	22300	24300	26400	28600
XFAM-030Z	ZS21KAE						17600	19600	21600	23900	26200	28800	31800	34500	37200	40100
XFAP-030Z	ZS21KAE	10100	11300	12700	14200	15900	17600	19600	21600	23900	26200	28800	31800	34500	37200	40100
XFAM-045Z	ZS33KAE						24400	27100	30000	33100	36400	40000	44500	48200	52000	56000
XFAP-045Z	ZS33KAE	13900	15700	17600	19700	22000	24400	27100	30000	33100	36400	40000	44500	48200	52000	56000
XFAM-050Z	ZS38K4E						29100	32000	35200	38500	42100	45800	51500	56000	60500	65000
XFAP-050Z	ZS38K4E	17100	19200	21400	23800	26300	29100	32000	35200	38500	42100	45800	51500	56000	60500	65000
XFAM-060Z	ZS45K4E						34500	37900	41500	45400	49500	54000	60500	65500	70500	76000
XFAP-060Z	ZS45K4E	20600	23000	25600	28300	31300	34500	37900	41500	45400	49500	54000	60500	65500	70500	76000
100° Ambient																
XFAM-015Z	ZS09KAE						6850	7630	8490	9420	10400	11500	12900	14100	15400	16800
XFAP-015Z	ZS09KAE	3860	4350	4890	5490	6140	6850	7630	8490	9420	10400	11500	12900	14100	15400	16800
XFAM-017Z	ZS11KAE						8220	9140	10200	11300	12500	13700	15400	16800	18300	19900
XFAP-017Z	ZS11KAE	4650	5240	5880	6590	7370	8220	9140	10200	11300	12500	13700	15400	16800	18300	19900
XFAM-022Z	ZS15KAE						11100	12300	13700	15100	16700	18400	20500	22300	24100	26100
XFAP-022Z	ZS15KAE	6330	7130	7990	8940	9980	11100	12300	13700	15100	16700	18400	20500	22300	24100	26100
XFAM-030Z	ZS21KAE						16300	18000	19900	21900	24000	26400	29300	31600	34100	36700
XFAP-030Z	ZS21KAE	9410	10600	11800	13200	14700	16300	18000	19900	21900	24000	26400	29300	31600	34100	36700
XFAM-045Z	ZS33KAE						22500	25000	27600	30400	33400	36700	41000	44300	47800	51500
XFAP-045Z	ZS33KAE	13000	14600	16400	18300	20300	22500	25000	27600	30400	33400	36700	41000	44300	47800	51500
XFAM-050Z	ZS38K4E						26600	29300	32200	35200	38400	41800	47400	51500	55500	60000
XFAP-050Z	ZS38K4E	15800	17700	19700	21800	24100	26600	29300	32200	35200	38400	41800	47400	51500	55500	60000
XFAM-060Z	ZS45K4E						31700	34700	38000	41500	45200	49100	55500	60500	65000	70000
XFAP-060Z	ZS45K4E	19100	21300	23600	26100	28800	31700	34700	38000	41500	45200	49100	55500	60500	65000	70000
110° Ambient																
XFAM-015Z	ZS09KAE						6260	6960	7730	8570	9480	10500	11800	12900	14000	15200
XFAP-015Z	ZS09KAE	3570	4010	4500	5030	5620	6260	6960	7730	8570	9480	10500	11800	12900	14000	15200
XFAM-017Z	ZS11KAE						7500	8330	9240	10200	11300	12500	14100	15400	16700	18100
XFAP-017Z	ZS11KAE	4290	4830	5410	6040	6740	7500	8330	9240	10200	11300	12500	14100	15400	16700	18100
XFAM-022Z	ZS15KAE						10100	11200	12400	13700	15100	16700	18800	20400	22100	23800
XFAP-022Z	ZS15KAE	5850	6560	7340	8190	9110	10100	11200	12400	13700	15100	16700	18800	20400	22100	23800
XFAM-030Z	ZS21KAE						14800	16300	18000	19800	21700	23800	27100	29200	31400	33700
XFAP-030Z	ZS21KAE	8670	9710	10800	12000	13400	14800	16300	18000	19800	21700	23800	27100	29200	31400	33700
XFAM-045Z	ZS33KAE						20500	22600	25000	27500	30200	33200	38000	41000	44100	47400
XFAP-045Z	ZS33KAE	12000	13400	15000	16700	18500	20500	22600	25000	27500	30200	33200	38000	41000	44100	47400
XFAM-050Z	ZS38K4E						24100	26500	29000	31700	34600	37700	43200	46900	50500	55000
XFAP-050Z	ZS38K4E	14400	16000	17800	19800	21800	24100	26500	29000	31700	34600	37700	43200	46900	50500	55000
XFAM-060Z	ZS45K4E						28700	31500	34400	37500	40800	44400	51000	55000	59500	64000
XFAP-060Z	ZS45K4E	17500	19500	21600	23800	26200	28700	31500	34400	37500	40800	44400	51000	55000	59500	64000

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

R-407A Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XFAM-015Z	ZS09KAE	6,940	7,730	8,590	9,520	10,500	11,800	13,000	14,400	15,900	17,500
XFAM-017Z	ZS11KAE	8,240	9,180	10,200	11,300	12,500	14,000	15,400	17,000	18,700	20,600
XFAM-022Z	ZS15KAE	11,200	12,500	13,800	15,300	16,900	18,800	20,800	22,800	25,100	27,500
XFAM-030Z	ZS21KAE	16,400	18,100	20,100	22,100	24,400	27,200	29,900	32,800	35,900	39,200
XFAM-045Z	ZS33KAE	23,000	25,500	28,200	31,100	34,200	38,200	41,900	45,900	50,500	55,000
XFAM-050Z	ZS38K4E	26,100	29,400	32,800	36,500	40,300	45,000	49,200	53,500	58,000	62,500
XFAM-060Z	ZS45K4E	31,200	35,000	39,000	43,300	47,800	53,500	58,000	63,500	68,500	74,000
100° Ambient											
XFAM-015Z	ZS09KAE	6,480	7,210	8,010	8,880	9,820	11,100	12,200	13,500	14,900	16,400
XFAM-017Z	ZS11KAE	7,690	8,560	9,490	10,500	11,600	13,100	14,400	15,900	17,500	19,300
XFAM-022Z	ZS15KAE	10,400	11,600	12,900	14,200	15,700	17,600	19,400	21,300	23,500	25,800
XFAM-030Z	ZS21KAE	15,200	16,900	18,600	20,600	22,600	25,400	27,800	30,500	33,400	36,600
XFAM-045Z	ZS33KAE	21,400	23,700	26,200	28,800	31,700	35,600	39,000	42,800	46,900	51,500
XFAM-050Z	ZS38K4E	24,300	27,300	30,600	34,000	37,600	42,200	46,200	50,500	54,500	59,000
XFAM-060Z	ZS45K4E	29,100	32,600	36,400	40,400	44,600	50,000	54,500	59,500	64,500	69,500
110° Ambient											
XFAM-015Z	ZS09KAE	6,000	6,680	7,420	8,210	9,090	10,300	11,400	12,500	13,800	15,300
XFAM-017Z	ZS11KAE	7,120	7,920	8,790	9,720	10,700	12,100	13,400	14,800	16,300	18,000
XFAM-022Z	ZS15KAE	9,660	10,700	11,900	13,100	14,500	16,300	18,000	19,800	21,800	23,900
XFAM-030Z	ZS21KAE	14,100	15,600	17,200	19,000	20,800	23,500	25,800	28,300	31,000	33,900
XFAM-045Z	ZS33KAE	19,700	21,900	24,100	26,600	29,200	32,900	36,100	39,600	43,400	47,600
XFAM-050Z	ZS38K4E	22,400	25,300	28,300	31,500	34,900	39,400	43,100	47,000	51,000	55,000
XFAM-060Z	ZS45K4E	26,900	30,200	33,700	37,500	41,400	46,700	51,000	55,500	60,500	65,000

Capacities rated at 65°F return gas (40°F return gas for capacities in **bold**), 5°F subcooling
 Superheat restrictions apply. See AE bulletin 4-1387 for full compressor operating envelope.
 All capacities shown for XFAM models also apply to XFAP models

R-407C Medium Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	0	5	10	15	20	25	30	35	40	45
90° Ambient											
XFAM-015Z	ZS09KAE	5,960	6,890	7,860	8,870	9,940	11,200	12,400	13,600	15,000	16,400
XFAM-017Z	ZS11KAE	7,090	8,190	9,340	10,500	11,800	13,300	14,700	16,100	17,700	19,300
XFAM-022Z	ZS15KAE	9,660	11,100	12,700	14,300	16,000	17,900	19,800	21,800	23,800	26,000
XFAM-030Z	ZS21KAE	14,400	16,600	18,900	21,200	23,700	26,500	29,200	32,000	34,900	37,900
XFAM-045Z	ZS33KAE	19,700	22,700	25,900	29,100	32,500	36,400	40,100	44,000	47,900	52,000
XFAM-050Z	ZS38K4E	25,900	29,100	32,500	36,100	39,900	43,100	47,800	52,500	57,500	62,500
XFAM-060Z	ZS45K4E	30,900	34,700	38,700	42,900	47,300	52,500	57,500	62,500	67,500	73,000
100° Ambient											
XFAM-015Z	ZS09KAE	5,580	6,480	7,420	8,390	9,400	10,600	11,700	12,900	14,100	15,400
XFAM-017Z	ZS11KAE	6,630	7,700	8,810	9,960	11,200	12,600	13,900	15,300	16,700	18,300
XFAM-022Z	ZS15KAE	9,020	10,500	12,000	13,500	15,100	17,000	18,800	20,600	22,500	24,500
XFAM-030Z	ZS21KAE	13,400	15,600	17,800	20,000	22,400	25,100	27,600	30,200	32,900	35,700
XFAM-045Z	ZS33KAE	18,300	21,300	24,300	27,400	30,700	34,500	38,000	41,600	45,300	49,200
XFAM-050Z	ZS38K4E	24,100	27,100	30,300	33,700	37,300	40,100	44,600	49,300	54,000	58,500
XFAM-060Z	ZS45K4E	28,900	32,400	36,100	40,100	44,200	49,400	54,000	58,500	63,500	68,500
110° Ambient											
XFAM-015Z	ZS09KAE	5,160	6,050	6,960	7,900	8,860	10,000	11,100	12,200	13,400	14,600
XFAM-017Z	ZS11KAE	6,130	7,180	8,260	9,370	10,500	11,900	13,100	14,400	15,800	17,200
XFAM-022Z	ZS15KAE	8,310	9,740	11,200	12,700	14,200	16,100	17,700	19,400	21,200	23,100
XFAM-030Z	ZS21KAE	12,300	14,400	16,600	18,700	21,000	23,700	26,000	28,500	31,000	33,600
XFAM-045Z	ZS33KAE	16,800	19,700	22,700	25,700	28,800	32,600	35,800	39,200	42,700	46,300
XFAM-050Z	ZS38K4E	22,300	25,100	28,100	31,300	34,600	37,000	41,300	45,700	50,000	54,500
XFAM-060Z	ZS45K4E	26,800	30,000	33,500	37,200	41,100	46,100	50,500	55,000	59,500	64,000

Capacities rated at 65°F return gas (40°F return gas for capacities in **bold**), 5°F subcooling
 Superheat restrictions apply. See AE bulletin 4-1387 for full compressor operating envelope.
 All capacities shown for XFAM models also apply to XFAP models

R-507A Low Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	-40	-35	-30	-25	-20	-15	-10	-5	0
90° Ambient										
XFAL-020Z	ZXI06KCE	5,700	6,960	8,210	9,450	10,690	11,920	13,140	14,360	15,570
XFAL-030Z	ZXI09KCE-TF5	7,840	9,390	10,950	12,500	14,060	15,620	17,170	18,730	20,280
XFAL-035Z	ZXI11KCE-PFV	9,700	11,100	12,600	14,200	15,900	17,700	19,700	21,700	23,900
XFAL-040Z	ZXI14KCE	12,690	14,430	16,280	18,240	20,300	22,470	24,740	27,120	29,610
XFAL-050Z	ZXI15KCE-TF5	14,030	16,040	18,140	20,350	22,660	25,060	27,570	30,170	32,880
XFAL-051Z	ZXI16KCE-PFV	14,030	16,040	18,140	20,350	22,660	25,060	27,570	30,170	32,880
XFAL-060Z	ZXI18KCE	18,000	20,500	23,000	25,700	28,600	31,600	34,700	38,100	41,500
100° Ambient										
XFAL-020Z	ZXI06KCE	5,640	6,840	8,020	9,200	10,370	11,530	12,680	13,830	14,970
XFAL-030Z	ZXI09KCE-TF5	6,940	8,520	10,100	11,680	13,260	14,840	16,420	18,000	19,580
XFAL-035Z	ZXI11KCE-PFV	9,090	10,300	11,700	13,100	14,700	16,300	18,100	20,000	21,900
XFAL-040Z	ZXI14KCE	12,370	13,980	15,710	17,540	19,480	21,530	23,680	25,940	28,300
XFAL-050Z	ZXI15KCE-TF5	13,110	14,960	16,900	18,940	21,080	23,320	25,660	28,100	30,640
XFAL-051Z	ZXI16KCE-PFV	13,110	14,960	16,900	18,940	21,080	23,320	25,660	28,100	30,640
XFAL-060Z	ZXI18KCE	17,240	19,480	21,930	24,380	27,030	29,780	32,740	35,800	38,200
110° Ambient										
XFAL-020Z	ZXI06KCE	5,500	6,610	7,710	8,810	9,890	10,970	12,040	13,100	14,160
XFAL-030Z	ZXI09KCE-TF5	5,830	7,420	9,010	10,590	12,180	13,770	15,350	16,940	18,530
XFAL-035Z	ZXI11KCE-PFV	9,020	10,140	11,340	12,720	14,200	15,690	17,380	19,190	21,090
XFAL-040Z	ZXI14KCE	11,850	13,350	14,950	16,660	18,480	20,400	22,420	24,560	26,800
XFAL-050Z	ZXI15KCE-TF5	11,920	13,590	15,370	17,250	19,220	21,300	23,470	25,740	28,110
XFAL-051Z	ZXI16KCE-PFV	11,920	13,590	15,370	17,250	19,220	21,300	23,470	25,740	28,110
XFAL-060Z	ZXI18KCE	16,170	18,330	20,500	22,760	25,130	27,600	30,200	32,960	34,700

Capacities rated at 65°F return gas, 5°F subcooling

R-507A Med/Ext Med Temp

Copeland Scroll Outdoor Refrigeration Units – XF Series

Model	Compressor	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
90° Ambient																
XFAM-015Z	ZS09KAE						7400	8260	9200	10200	11300	12500	14100	15400	16900	18400
XFAP-015Z	ZS09KAE	4130	4670	5260	5910	6620	7400	8260	9200	10200	11300	12500	14100	15400	16900	18400
XFAM-017Z	ZS11KAE						8880	9900	11000	12200	13500	14900	16800	18400	20000	21800
XFAP-017Z	ZS11KAE	4970	5610	6320	7100	7950	8880	9900	11000	12200	13500	14900	16800	18400	20000	21800
XFAM-022Z	ZS15KAE						12000	13400	14800	16400	18100	20000	22300	24300	26400	28600
XFAP-022Z	ZS15KAE	6770	7640	8600	9640	10800	12000	13400	14800	16400	18100	20000	22300	24300	26400	28600
XFAM-030Z	ZS21KAE						17600	19600	21600	23900	26200	28800	31800	34500	37200	40100
XFAP-030Z	ZS21KAE	10100	11300	12700	14200	15900	17600	19600	21600	23900	26200	28800	31800	34500	37200	40100
XFAM-045Z	ZS33KAE						24400	27100	30000	33100	36400	40000	44500	48200	52000	56000
XFAP-045Z	ZS33KAE	13900	15700	17600	19700	22000	24400	27100	30000	33100	36400	40000	44500	48200	52000	56000
XFAM-050Z	ZS38K4E						29100	32000	35200	38500	42100	45800	51500	56000	60500	65000
XFAP-050Z	ZS38K4E	17100	19200	21400	23800	26300	29100	32000	35200	38500	42100	45800	51500	56000	60500	65000
XFAM-060Z	ZS45K4E						34500	37900	41500	45400	49500	54000	60500	65500	70500	76000
XFAP-060Z	ZS45K4E	20600	23000	25600	28300	31300	34500	37900	41500	45400	49500	54000	60500	65500	70500	76000
100° Ambient																
XFAM-015Z	ZS09KAE						6850	7630	8490	9420	10400	11500	12900	14100	15400	16800
XFAP-015Z	ZS09KAE	3860	4350	4890	5490	6140	6850	7630	8490	9420	10400	11500	12900	14100	15400	16800
XFAM-017Z	ZS11KAE						8220	9140	10200	11300	12500	13700	15400	16800	18300	19900
XFAP-017Z	ZS11KAE	4650	5240	5880	6590	7370	8220	9140	10200	11300	12500	13700	15400	16800	18300	19900
XFAM-022Z	ZS15KAE						11100	12300	13700	15100	16700	18400	20500	22300	24100	26100
XFAP-022Z	ZS15KAE	6330	7130	7990	8940	9980	11100	12300	13700	15100	16700	18400	20500	22300	24100	26100
XFAM-030Z	ZS21KAE						16300	18000	19900	21900	24000	26400	29300	31600	34100	36700
XFAP-030Z	ZS21KAE	9410	10600	11800	13200	14700	16300	18000	19900	21900	24000	26400	29300	31600	34100	36700
XFAM-045Z	ZS33KAE						22500	25000	27600	30400	33400	36700	41000	44300	47800	51500
XFAP-045Z	ZS33KAE	13000	14600	16400	18300	20300	22500	25000	27600	30400	33400	36700	41000	44300	47800	51500
XFAM-050Z	ZS38K4E						26600	29300	32200	35200	38400	41800	47400	51500	55500	60000
XFAP-050Z	ZS38K4E	15800	17700	19700	21800	24100	26600	29300	32200	35200	38400	41800	47400	51500	55500	60000
XFAM-060Z	ZS45K4E						31700	34700	38000	41500	45200	49100	55500	60500	65000	70000
XFAP-060Z	ZS45K4E	19100	21300	23600	26100	28800	31700	34700	38000	41500	45200	49100	55500	60500	65000	70000
110° Ambient																
XFAM-015Z	ZS09KAE						6260	6960	7730	8570	9480	10500	11800	12900	14000	15200
XFAP-015Z	ZS09KAE	3570	4010	4500	5030	5620	6260	6960	7730	8570	9480	10500	11800	12900	14000	15200
XFAM-017Z	ZS11KAE						7500	8330	9240	10200	11300	12500	14100	15400	16700	18100
XFAP-017Z	ZS11KAE	4290	4830	5410	6040	6740	7500	8330	9240	10200	11300	12500	14100	15400	16700	18100
XFAM-022Z	ZS15KAE						10100	11200	12400	13700	15100	16700	18800	20400	22100	23800
XFAP-022Z	ZS15KAE	5850	6560	7340	8190	9110	10100	11200	12400	13700	15100	16700	18800	20400	22100	23800
XFAM-030Z	ZS21KAE						14800	16300	18000	19800	21700	23800	27100	29200	31400	33700
XFAP-030Z	ZS21KAE	8670	9710	10800	12000	13400	14800	16300	18000	19800	21700	23800	27100	29200	31400	33700
XFAM-045Z	ZS33KAE						20500	22600	25000	27500	30200	33200	38000	41000	44100	47400
XFAP-045Z	ZS33KAE	12000	13400	15000	16700	18500	20500	22600	25000	27500	30200	33200	38000	41000	44100	47400
XFAM-050Z	ZS38K4E						24100	26500	29000	31700	34600	37700	43200	46900	50500	55000
XFAP-050Z	ZS38K4E	14400	16000	17800	19800	21800	24100	26500	29000	31700	34600	37700	43200	46900	50500	55000
XFAM-060Z	ZS45K4E						28700	31500	34400	37500	40800	44400	51000	55000	59500	64000
XFAP-060Z	ZS45K4E	17500	19500	21600	23800	26200	28700	31500	34400	37500	40800	44400	51000	55000	59500	64000

Capacities rated at 40°F return gas (65°F return gas for capacities in **bold**), 5°F subcooling

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Appendix

Additional Information

- Copeland to Copeland Condensing Unit Cross Reference
- Tecumseh to Copeland Condensing Unit Cross Reference
- EK Filter Drier
- HMI Moisture Indicator
- HF/HFK Series Thermal Expansion Valve
- TXV Superheat Adjustment Chart
- Outdoor Hood Accessory Information
- Refrigerants and Lubricants Approved for Use in Copeland™ Compressors

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	MBFS-0017-SAA	13.8	11.1	9.7	12	HT	1,090	4.2 - 15
Active	M2FH-H017-IAA	13.6	11.5	9.7	134a	HT	1,170	6.0 - 15
Obsolete	MBFS-0020-SAA	13.8	11.1	9.7	12	HT	1,260	5.5 - 15
Active	M2FH-H020-IAA	14	11.2	9.7	134a	HT	1,440	6.0 - 15
Obsolete	MBFS-0024-SAA	13.8	11.8	9.7	12	HT	1,730	6.3 - 15
Active	M2FH-0024-SAA	13.9	11.3	9.7	134a	HT	1,810	6.3 - 15
Obsolete	MBFH-A026-IAA	13.8	11.8	9.7	12	HT	2,770	6.9 - 15
Active	M2FH-0026-IAA	13.8	11.5	9.7	134a	HT	2,080	6.9 - 15
Active	MBFH-B026-IAA	13.9	11.5	9.7	12	HT	1,840	7.4 - 15
Obsolete	MBFS-0033-IAA	13.8	11.8	9.7	12	HT	4,080	9.7 - 15
Active	MBFS-A033-IAA	13.9	11.5	9.7	12	HT	2,470	9.5 - 15
Active	M2FH-A033-IAA	13.8	11.3	9.7	134a	HT	2,620	9.9 - 15
Obsolete	MBFH-0049-IAA	16.2	13.1	11.8	12	HT	4,890	12.5 - 20
Active	MBFH-A049-CAA	16.3	13.1	11.7	12	HT	3,350	14.0 - 20
Obsolete	MBFH-0050-IAA	17.9	13.1	11.8	12	HT	4,030	13.8 - 20
Active	MBFH-A050-IAA	16.6	13.7	11.7	12	HT	4,070	12.8 - 20
Obsolete	M2FH-0049-IAA	16.2	13.1	11.8	134a	HT	3,500	12.5 - 20
Active	M2FH-H049-CAA	16	12.7	11.7	134a	HT	3,690	14.0 - 20
Obsolete	M2FH-0050-IAA	16.2	12.7	11.8	134a	HT	4,230	13.6 - 20
Active	M2FH-A050-IAA	17.5	13.7	11.7	134a	HT	4,060	12.8 - 20
Obsolete	FJAF-A050-IAA	16.2	13.2	11.9	404A	MT	4,340	13.7 - 20
Active	M4FF-0050-IAA	16.1	13.7	11.7	404A	MT	4,660	14.0 - 20
Obsolete	FJAF-A050-IAV	16.2	13.2	11.9	404A	MT	4,340	7.8 - 15
Active	M4FF-0050-IAV	16.1	13.7	11.7	404A	MT	4,660	7.2 - 15
Obsolete	FJAF-A056-IAA	17.5	14.3	12.1	404A	MT	5,630	14.3 - 20
Active	M4FF-0056-IAA	17.4	14.4	11.8	404A	MT	5,180	14.8 - 20
Obsolete	FJAF-A056-IAV	17.5	14.3	12.1	404A	MT	5,630	8.1 - 15
Active	M4FF-0056-IAV	17.4	14.4	11.8	404A	MT	5,350	7.6 - 15
Obsolete	FJAF-B078-CAA	24	16.9	13.1	404A	MT	6,740	18.5 - 25
Active	M4FF-0075-CAA	24	17.1	13.1	404A	MT	6,660	20.8 - 30
Obsolete	FJAF-B078-CAV	24	16.9	13.1	404A	MT	6,740	8.8 - 15
Active	M4FF-0075-CAV	24	17.1	13.1	404A	MT	6,660	9.7 - 15
Obsolete	FJAM-A106-CAV	24	18.3	16.2	404A	MT	8,530	12.5 - 15
Active	FJAF-0106-CAV	24	18.3	16.1	404A	MT	8,500	12.7 - 20
Obsolete	F3AD-B151-CFV	24	18.3	16.9	22	HT	11,500	14.2 - 20
Active	FFAP-015Z-CFV	24.1	18.3	16.6	22	HT	11,400	13.9 - 20
Obsolete	FGAH-A151-CFV	24	18.3	16.1	22	HT	11,300	14.2 - 20
Active	FFAP-015Z-CFV	24.1	18.3	16.6	22	HT	11,400	13.9 - 20
Obsolete	F3AD-B151-TFC	24	18.3	16.9	22	HT	11,300	10.4 - 15
Active	FFAP-015Z-TFC	24.1	18.3	16.6	22	HT	11,400	11.4 - 15
Obsolete	FGAH-A151-TFC	24	18.3	16.1	22	HT	11,300	10.4 - 15
Active	FFAP-015Z-TFC	24.1	18.3	16.6	22	HT	11,400	11.4 - 15
Obsolete	F3AD-B151-TFD	24	18.3	16.9	22	HT	11,100	5.4 - 15
Active	FFAP-015Z-TFD	24.1	18.3	16.6	22	HT	11,400	6.4 - 15
Obsolete	FGAH-A151-TFD	24	18.3	16.1	22	HT	11,300	5.4 - 15
Active	FFAP-015Z-TFD	24.1	18.3	16.6	22	HT	11,400	6.4 - 15
Obsolete	F3AD-B201-CFV	25	34	19	22	HT	15,400	19.2 - 30
Active	FFAP-020Z-CFV	25.2	34.1	19	22	HT	15,200	16.8 - 25
Obsolete	FGAH-A201-CFV	25.2	34	19	22	HT	15,400	19.2 - 30
Active	FFAP-020Z-CFV	25.2	34.1	19	22	HT	15,200	16.8 - 25
Obsolete	F3AD-B201-TFC	25	34	19	22	HT	15,800	11.7 - 15
Active	FFAP-020Z-TFC	25.2	34.1	19	22	HT	15,200	13.9 - 20
Obsolete	FGAH-A201-TFC	25.2	34	19	22	HT	15,400	11.7 - 15
Active	FFAP-020Z-TFC	25.2	34.1	19	22	HT	15,200	13.9 - 20
Obsolete	F3AD-B201-TFD	25	34	19	22	HT	15,000	6.1 - 15
Active	FFAP-020Z-TFD	25.2	34.1	19	22	HT	15,200	7.1 - 15
Obsolete	FGAH-A201-TFD	25.2	34	19	22	HT	15,400	6.1 - 15
Active	FFAP-020Z-TFD	25.2	34.1	19	22	HT	15,200	7.1 - 15
Obsolete	F3AD-B225-CFV	25.1	34.1	19	22	HT	17,100	21.1 - 30
Active	FFAP-022Z-CFV	25.2	34.1	19	22	HT	18,300	22.4 - 35
Obsolete	FGAH-A225-CFV	25.2	34	19	22	HT	18,100	21.1 - 30
Active	FFAP-022Z-CFV	25.2	34.1	19	22	HT	18,300	22.4 - 35
Obsolete	F3AD-B225-TFC	25.1	34.1	19	22	HT	17,100	13.3 - 15
Active	FFAP-022Z-TFC	25.2	34.1	19	22	HT	18,300	16.1 - 20

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications

Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	FGAH-A225-TFC	25.2	34	19	22	HT	18,100	13.3 - 15
Active	FFAP-022Z-TFC	25.2	34.1	19	22	HT	18,300	16.1 - 20
Obsolete	F3AD-B225-TFD	25.1	34.1	19	22	HT	17,100	7.0 - 15
Active	FFAP-022Z-TFD	25.2	34.1	19	22	HT	18,300	10.0 - 15
Obsolete	FGAH-A225-TFD	25.2	34	19	22	HT	18,100	7.0 - 15
Active	FFAP-022Z-TFD	25.2	34.1	19	22	HT	18,300	10.0 - 15
Obsolete	F3AD-B301-CFV	25.2	34.1	19.1	22	HT	24,600	28.9 - 40
Active	FFAP-032Z-CFV	25.2	34.1	19	22	HT	27,400	31.8 - 50
Obsolete	FGAH-A301-CFV	25.5	34	19	22	HT	24,600	28.9 - 40
Active	FFAP-032Z-CFV	25.2	34.1	19	22	HT	27,400	31.8 - 50
Obsolete	F3AD-B301-TFC	25.2	34.1	19.1	22	HT	24,600	19.7 - 20
Active	FFAP-032Z-TFC	25.2	34.1	19	22	HT	27,400	21.8 - 30
Obsolete	FGAH-A301-TFC	25.5	34	19	22	HT	24,600	19.7 - 20
Active	FFAP-032Z-TFC	25.2	34.1	19	22	HT	27,400	21.8 - 30
Obsolete	F3AD-B301-TFD	25.2	34.1	19.1	22	HT	24,600	10.2 - 15
Active	FFAP-032Z-TFD	25.2	34.1	19	22	HT	27,400	11.8 - 15
Obsolete	FGAH-A301-TFD	25.5	34	19	22	HT	24,600	10.2 - 15
Active	FFAP-032Z-TFD	25.2	34.1	19	22	HT	27,400	11.8 - 15
Obsolete	F3AD-B325-CFV	25.2	34.1	18.9	22	HT	26,500	30.1 - 40
Active	FFAP-032Z-CFV	25.2	34.1	19	22	HT	27,400	31.8 - 50
Obsolete	FGAH-A325-CFV	25.5	34	19	22	HT	26,400	30.1 - 40
Active	FFAP-032Z-CFV	25.2	34.1	19	22	HT	27,400	31.8 - 50
Obsolete	F3AD-B325-TFC	25.2	34.1	18.9	22	HT	26,500	22.2 - 25
Active	FFAP-032Z-TFC	25.2	34.1	19	22	HT	27,400	21.8 - 30
Obsolete	FGAH-A325-TFC	25.5	34	19	22	HT	26,400	22.2 - 25
Active	FFAP-032Z-TFC	25.2	34.1	19	22	HT	27,400	21.8 - 30
Obsolete	F3AD-B325-TFD	25.2	34.1	18.9	22	HT	26,500	10.6 - 15
Active	FFAP-032Z-TFD	25.2	34.1	19	22	HT	27,400	11.8 - 15
Obsolete	FGAH-A325-TFD	25.5	34	19	22	HT	26,400	10.6 - 15
Active	FFAP-032Z-TFD	25.2	34.1	19	22	HT	27,400	11.8 - 15
Obsolete	F3AD-B401-TFC	28.2	44.1	26.8	22	HT	37,600	26.1 - 40
Active	FFAP-042Z-TFC	28.2	44.1	26.8	22	HT	38,700	31.5 - 50
Obsolete	FGAH-A401-TFC	28.6	44.1	26.8	22	HT	37,500	26.1 - 40
Active	FFAP-042Z-TFC	28.2	44.1	26.8	22	HT	38,700	31.5 - 50
Obsolete	F3AD-B401-TFD	28.2	44.1	26.8	22	HT	37,600	13.8 - 20
Active	FGAH-A401-TFD	28.6	44.1	26.8	22	HT	37,500	13.8 - 20
Obsolete	F3AD-A501-CFV	28.6	44.1	26.9	22	HT	42,700	46.4 - 70
Active	FFAP-050Z-CFV	28.2	44.1	26.8	22	HT	43,100	43.4 - 70
Obsolete	FGAH-A501-CFV	28.6	44.1	26.8	22	HT	43,200	46.5 - 70
Active	FFAP-050Z-CFV	28.2	44.1	26.8	22	HT	43,100	43.4 - 70
Obsolete	F3AD-A501-TFC	28.6	44.1	26.9	22	HT	42,700	30.3 - 45
Active	FFAP-050Z-TFC	28.2	44.1	26.8	22	HT	43,100	30.4 - 45
Obsolete	FGAH-A501-TFC	28.6	44.1	26.8	22	HT	43,200	30.4 - 45
Active	FFAP-050Z-TFC	28.2	44.1	26.8	22	HT	43,100	30.4 - 45
Obsolete	F3AD-A501-TFD	28.6	44.1	26.9	22	HT	42,700	14.4 - 20
Active	FFAP-050Z-TFD	28.2	44.1	26.8	22	HT	43,100	14.4 - 20
Obsolete	FGAH-A501-TFD	28.6	44.1	26.8	22	HT	43,200	14.4 - 20
Active	FFAP-050Z-TFD	28.2	44.1	26.8	22	HT	43,100	14.4 - 20
Obsolete	MBFL-0034-IAA	16	12.2	9.7	12	LT	1,660	7.0 - 15
Active	MBFL-A034-IAA	16	12.4	9.6	12	LT	1,460	8.7 - 15
Obsolete	FJWM-C056-IAA	17.9	13.2	11.2	404A	MT	6,000	12.6 - 20
Active	M4WF-C056-IAA	17.4	12.7	10.5	404A	MT	5,890	13.1 - 20
Obsolete	FJWM-C056-IAV	17.9	13.2	11.2	404A	MT	6,000	7.1 - 15
Active	M4WF-C056-IAV	17.4	12.7	10.5	404A	MT	5,890	6.6 - 15
Obsolete	FJWM-C078-CAA	24	17.1	12.1	404A	MT	7,930	16.5 - 25
Active	M4WF-C075-CAA	24	16.1	10.7	404A	MT	7,560	18.8 - 30
Obsolete	FJWM-C078-CAV	24	17.1	12.1	404A	MT	7,930	7.6 - 15
Active	M4WF-C075-CAV	24	16.1	10.7	404A	MT	7,560	8.5 - 15
Obsolete	FJWM-C106-CAV	24	16.1	11.8	404A	MT	9,100	9.6 - 15
Active	FJWF-C106-CAV	24.2	17.2	10.7	404A	MT	9,470	11.3 - 20
Obsolete	FJWL-C075-IAV	24	16.1	11.6	404A	LT	3,750	12.1 - 20
Active	M4WL-C075-IAV	24	16.4	10.7	404A	LT	4,100	11.8 - 20
Obsolete	FTAH-A15Z-CFV	24	18.3	16.3	134a	HT	13,100	23.8 - 40
Active	FFAS-A20Z-CFV	25.2	34	19	134a	HT	12,200	21.8 - 35

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications

Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	FTAH-A15Z-TFC	24	18.3	16.3	134a	HT	13,100	13.9 - 20
Active	FFAS-A20Z-TFC	25.2	34	19	134a	HT	12,200	13.3 - 20
Obsolete	FTAH-A20Z-CFV	25.2	34	19	134a	HT	17,000	28.1 - 45
Active	FFAS-A30Z-CFV	25	34	19	134a	HT	17,700	28.7 - 45
Obsolete	FJAM-A20Z-CFV	25.2	34	19	404A	MT	18,100	21.9 - 35
Active	FFAS-A20Z-CFV	25.2	34	19	404A	MT	17,500	21.8 - 35
Obsolete	FJAM-A20Z-TFC	25.2	34	19	404A	MT	18,100	13.4 - 20
Active	FFAS-A20Z-TFC	25.2	34	19	404A	MT	17,500	13.3 - 20
Obsolete	FTAH-A25Z-CFV	25.2	34	19	134a	HT	19,200	31.8 - 50
Active	FFAS-A30Z-CFV	25	34	19	134a	HT	17,700	28.7 - 45
Obsolete	FTAH-A25Z-TFC	25.2	34	19	134a	HT	19,200	19.7 - 30
Active	FFAS-A30Z-TFC	25	34	19	134a	HT	17,700	17.9 - 25
Obsolete	FJAM-A25Z-CFV	25.2	34	19	404A	MT	23,000	25.2 - 40
Active	FFAS-A25Z-CFV	25.2	34.1	19	404A	MT	23,200	25.2 - 40
Obsolete	FJAM-A25Z-TFC	25.2	34	19	404A	MT	23,000	15.3 - 20
Active	FFAS-A25Z-TFC	25.2	34.1	19	404A	MT	23,200	15.3 - 20
Obsolete	FTAH-A30Z-CFV	25.2	34	19	134a	HT	23,200	36.3 - 60
Active	FFAS-A40Z-CFV	28.1	44.1	26.8	134a	HT	24,700	37.1 - 60
Obsolete	FTAH-A30Z-TFC	25.2	34	19	134a	HT	23,200	22.4 - 35
Active	FFAS-A40Z-TFC	28.1	44.1	26.8	134a	HT	24,700	23.2 - 35
Obsolete	FJAM-A30Z-CFV	25.2	34	19	404A	MT	26,900	28.7 - 45
Active	FFAS-A30Z-CFV	25	34	19	404A	MT	26,900	28.7 - 45
Obsolete	FJAM-A30Z-TFC	25.2	34	19	404A	MT	26,900	17.9 - 25
Active	FFAS-A30Z-TFC	25	34	19	404A	MT	26,900	17.9 - 25
Obsolete	FTAH-A35Z-CFV	25.2	34	19	134a	HT	27,000	41.7 - 60
Active	FFAS-A50Z-CFV	28.1	44.1	26.8	134a	HT	29,900	42.5 - 60
Obsolete	FTAH-A35Z-TFC	25.2	34	19	134a	HT	27,000	30.4 - 45
Active	FFAS-A50Z-TFC	28.1	44.1	26.8	134a	HT	29,900	31.2 - 45
Obsolete	FTAH-A35Z-TFD	25.2	34	19	134a	HT	27,000	15.2 - 20
Active	FFAS-A50Z-TFD	28.1	44.1	26.8	134a	HT	29,900	14.4 - 20
Obsolete	FJAM-A35Z-CFV	25.2	34	19	404A	MT	30,500	32.3 - 50
Active	FFAS-A35Z-CFV	25.2	34	19	404A	MT	30,400	32.3 - 50
Obsolete	FJAM-A35Z-TFC	25.2	34	19	404A	MT	30,500	20.2 - 30
Active	FFAS-A35Z-TFC	25.2	34	19	404A	MT	30,400	20.2 - 30
Obsolete	FTAH-A45Z-TFC	28.2	44.1	26.8	134a	HT	35,000	31.7 - 50
Active	FFAS-A60Z-TFC	28.2	44.1	26.8	134a	MT	35,000	31.7 - 50
Obsolete	FTAH-A45Z-TFD	28.2	44.1	26.8	134a	HT	35,000	16.8 - 25
Active	FFAS-A60Z-TFD	28.2	44.1	26.8	134a	HT	35,000	16.8 - 25
Obsolete	FJAM-A40Z-CFV	28.2	44.1	26.8	404A	MT	37,800	37.1 - 60
Active	FFAS-A40Z-CFV	28.2	44.1	26.8	404A	MT	38,100	37.1 - 60
Obsolete	FJAM-A40Z-TFC	28.2	44.1	26.8	404A	MT	37,800	23.2 - 60
Active	FFAS-A40Z-TFC	28.2	44.1	26.8	404A	MT	38,100	23.2 - 35
Obsolete	FTAH-A50Z-TFC	28.2	44.1	26.8	134a	HT	39,200	39.4 - 60
Active	FFAS-A60Z-TFC	28.2	44.1	26.8	134a	MT	35,000	31.7 - 50
Obsolete	FTAH-A50Z-TFD	28.2	44.1	26.8	134a	HT	39,200	20.3 - 30
Active	FFAS-A60Z-TFD	28.2	44.1	26.8	134a	MT	35,000	16.8 - 25
Obsolete	FJAM-A50Z-CFV	28.2	44.1	26.8	404A	MT	45,600	42.5 - 60
Active	FFAS-A50Z-CFV	28.1	44.1	26.8	404A	MT	46,100	42.5 - 60
Obsolete	FJAM-A50Z-TFC	28.2	44.1	26.8	404A	MT	45,600	31.2 - 45
Active	FFAS-A50Z-TFC	28.1	44.1	26.8	404A	MT	46,100	31.2 - 45
Obsolete	FJAM-A50Z-TFD	28.2	44.1	26.8	404A	MT	45,600	14.4 - 20
Active	FFAS-A50Z-TFD	28.1	44.1	26.8	404A	MT	46,100	14.4 - 20
Obsolete	FJAM-A60Z-TFC	28.2	44.1	26.8	404A	MT	52,400	31.7 - 50
Active	FFAS-A60Z-TFC	28.2	44.1	26.8	404A	MT	53,100	31.7 - 50
Obsolete	FJAM-A60Z-TFD	28.2	44.1	26.8	404A	MT	52,400	16.8 - 25
Active	FFAS-A60Z-TFD	28.2	44.1	26.8	404A	MT	53,100	16.8 - 25
Obsolete	FJEF-B078-CAA	24	16.8	13.7	404A	MT	6,740	18.5 - 25
Active	M4EF-0075-CAA	24	16.8	13.6	404A	MT	6,620	20.8 - 30
Obsolete	FJEF-A075-IAV	24	16.1	13.7	404A	MT	7,120	12.7 - 20
Active	M4EF-0080-IAV	24	16.8	13.6	404A	MT	7,640	12.4 - 20
Obsolete	M2FL-0040-IAA	16.5	12.4	9.7	134a	LT	1,540	7.3 - 15
Active	M2FL-H040-IAA	16.6	12.4	9.6	134a	LT	1,530	9.0 - 15
Obsolete	M2EM-0048-IAA	16	15.1	11.8	134a	MT	3,760	13.6 - 20
Active	M2EM-A048-IAA	16.5	15.1	11.8	134a	MT	3,740	12.8 - 20

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	MBFL-0050-IAA	16.2	13.1	11.8	12	LT	2,350	9.9 - 15
Active	M2FL-0050-CFA	16.1	12.7	12.5	134a	LT	2,390	13.0 - 20
Obsolete	FTAL-A050-IAA	16	13.1	11.9	134a	LT	2,260	17.2 - 25
Active	M2FL-0050-CFA	16.1	12.7	12.5	134a	LT	2,390	13.0 - 20
Obsolete	F3WD-C151-CFV	24	16.1	15	22	HT	13,500	11.3 - 20
Active	FFWP-015Z-CFV	16.9	24	16.6	22	HT	12,100	12.5 - 20
Obsolete	FGWH-A151-CFV	24	16.7	14.3	22	HT	13,500	11.3 - 20
Active	FFWP-015Z-CFV	16.9	24	16.6	22	HT	12,100	12.5 - 20
Obsolete	F3WD-C151-TFC	24	16.1	14.2	22	HT	13,500	7.5 - 15
Active	FFWP-015Z-TFC	16.9	24	16.6	22	HT	12,100	10.0 - 15
Obsolete	FGWH-A151-TFC	24	16.7	14.3	22	HT	13,500	7.5 - 15
Active	FFWP-015Z-TFC	16.9	24	16.6	22	HT	12,100	10.0 - 15
Obsolete	F3WD-C151-TFD	24	16.1	15.4	22	HT	13,500	3.8 - 15
Active	FFWP-015Z-TFD	16.9	24	16.6	22	HT	12,100	4.8 - 15
Obsolete	FGWH-A151-TFD	24	16.7	15.4	22	HT	13,500	3.8 - 15
Active	FFWP-015Z-TFD	16.9	24	16.6	22	HT	12,100	4.8 - 15
Obsolete	F3WD-C201-CFV	24	16.1	15	22	HT	16,900	16.9 - 30
Active	FFWP-020Z-CFV	16.9	24	16.6	22	HT	16,400	15.0 - 25
Obsolete	FGWH-A201-CFV	24	16.7	15	22	HT	16,900	16.9 - 30
Active	FFWP-020Z-CFV	16.9	24	16.6	22	HT	16,400	15.0 - 25
Obsolete	F3WD-C201-TFC	24	16.1	14.2	22	HT	16,900	9.4 - 15
Active	FFWP-020Z-TFC	16.9	24	16.6	22	HT	16,400	12.1 - 20
Obsolete	FGWH-A201-TFC	24	16.7	14.3	22	HT	16,900	9.4 - 15
Active	FFWP-020Z-TFC	16.9	24	16.6	22	HT	16,400	12.1 - 20
Obsolete	F3WD-C201-TFD	24	16.1	15.4	22	HT	16,900	4.6 - 15
Active	FFWP-020Z-TFD	16.9	24	16.6	22	HT	16,400	6.0 - 15
Obsolete	FGWH-A201-TFD	24	16.7	15.4	22	HT	16,900	4.6 - 15
Active	FFWP-020Z-TFD	16.9	24	16.6	22	HT	16,400	6.0 - 15
Obsolete	F3WD-C225-CFV	24	16.1	15	22	HT	19,300	18.8 - 30
Active	FFWP-022Z-CFV	16.9	24	16.6	22	HT	19,200	19.6 - 35
Obsolete	FGWH-A225-CFV	24	16.7	15	22	HT	19,300	18.8 - 30
Active	FFWP-022Z-CFV	16.9	24	16.6	22	HT	19,200	19.6 - 35
Obsolete	F3WD-C225-TFC	24	16.1	14.6	22	HT	19,300	11.0 - 15
Active	FFWP-022Z-TFC	16.9	24	16.6	22	HT	19,200	13.3 - 20
Obsolete	FGWH-A225-TFC	24	16.7	14.6	22	HT	19,300	11.0 - 15
Active	FFWP-022Z-TFC	16.9	24	16.6	22	HT	19,200	13.3 - 20
Obsolete	F3WD-C225-TFD	24	16.1	15.4	22	HT	19,300	5.5 - 15
Active	FFWP-022Z-TFD	16.9	24	16.6	22	HT	19,300	5.5 - 15
Obsolete	F3WD-C301-CFV	26.2	21	15.4	22	HT	27,300	23.1 - 40
Active	FFWP-032Z-CFV	27.2	21.5	18.2	22	HT	29,400	29.0 - 50
Obsolete	FGWH-A301-CFV	25	21	15.5	22	HT	27,300	23.1 - 40
Active	FFWP-032Z-CFV	27.2	21.5	18.2	22	HT	29,400	29.0 - 50
Obsolete	F3WD-C301-TFC	25	21	15.8	22	HT	27,300	13.9 - 20
Active	FFWP-032Z-TFC	27.2	21.5	18.2	22	HT	29,400	19.0 - 30
Obsolete	FGWH-A301-TFC	25	21	15.8	22	HT	27,300	13.9 - 20
Active	FFWP-032Z-TFC	27.2	21.5	18.2	22	HT	29,400	19.0 - 30
Obsolete	F3WD-C301-TFD	25	21	15.8	22	HT	27,300	7.0 - 15
Active	FFWP-032Z-TFD	27.2	21.5	18.2	22	HT	29,400	8.6 - 15
Obsolete	FGWH-A301-TFD	25	21	15.8	22	HT	27,300	7.0 - 15
Active	FFWP-032Z-TFD	27.2	21.5	18.2	22	HT	29,400	8.6 - 15
Obsolete	F3WD-C325-CFV	26.2	21	15.4	22	HT	29,700	24.3 - 40
Active	FFWP-032Z-CFV	27.2	21.5	18.2	22	HT	29,400	29.0 - 50
Obsolete	FGWH-A325-CFV	25	21	15.5	22	HT	30,200	24.3 - 40
Active	FFWP-032Z-CFV	27.2	21.5	18.2	22	HT	29,400	29.0 - 50
Obsolete	F3WD-C325-TFC	25	21	16.1	22	HT	29,700	16.4 - 25
Active	FFWP-032Z-TFC	27.2	21.5	18.2	22	HT	29,400	19.0 - 30
Obsolete	FGWH-A325-TFC	25	21	15.5	22	HT	30,200	16.4 - 25
Active	FFWP-032Z-TFC	27.2	21.5	18.2	22	HT	29,400	19.0 - 30
Obsolete	F3WD-C325-TFD	25	21	16.1	22	HT	29,700	7.4 - 15
Active	FFWP-032Z-TFD	27.2	21.5	18.2	22	HT	29,400	8.6 - 15
Obsolete	FGWH-A325-TFD	25	21	15.5	22	HT	30,200	7.4 - 15
Active	FFWP-032Z-TFD	27.2	21.5	18.2	22	HT	29,400	8.6 - 15
Obsolete	F3WD-C401-CFV	26.8	21	21.1	22	HT	39,400	36.3 - 60
Active	FFWP-042Z-CFV	27.2	21.6	21.1	22	HT	40,500	35.3 - 60

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications Capacity at -10° F Evap, 90° F Ambient for LT Applications Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	FGWH-A401-CFV	26.8	21	21.1	22	HT	39,400	36.3 - 60
Active	FFWP-042Z-CFV	27.2	21.6	21.1	22	HT	40,500	35.3 - 60
Obsolete	F3WD-C401-TFC	26.8	21	21.1	22	HT	39,400	22.5 - 40
Active	FFWP-042Z-TFC	27.2	21.6	21.1	22	HT	40,500	27.9 - 50
Obsolete	FGWH-A401-TFC	26.8	21	21.1	22	HT	39,400	22.5 - 40
Active	FFWP-042Z-TFC	27.2	21.6	21.1	22	HT	40,500	27.9 - 50
Obsolete	F3WD-C401-TFD	26.8	21	21.1	22	HT	39,400	11.4 - 20
Active	FGWH-A401-TFD	26.8	21	21.1	22	HT	39,400	11.4 - 20
Obsolete	F3WD-C501-CFV	25.8	21.8	21.1	22	HT	45,100	42.9 - 70
Active	FFWP-050Z-CFV	27.5	21.7	21.1	22	HT	44,800	39.8 - 70
Obsolete	FGWH-A501-CFV	25.8	21.8	21.1	22	HT	45,100	42.9 - 70
Active	FFWP-050Z-CFV	27.5	21.7	21.1	22	HT	44,800	39.8 - 70
Obsolete	F3WD-C501-TFC	25.8	21.8	21.1	22	HT	45,100	26.8 - 45
Active	FFWP-050Z-TFC	27.5	21.7	21.1	22	HT	44,800	26.8 - 45
Obsolete	FGWH-A501-TFC	25.8	21.8	21.1	22	HT	45,100	26.8 - 45
Active	FFWP-050Z-TFC	27.5	21.7	21.1	22	HT	44,800	26.8 - 45
Obsolete	F3WD-C501-TFD	25.8	21.8	21.1	22	HT	45,100	12.0 - 20
Active	FFWP-050Z-TFD	27.5	21.7	21.1	22	HT	44,800	12.0 - 20
Obsolete	FGWH-A501-TFD	25.8	21.8	21.1	22	HT	45,100	12.0 - 20
Active	FFWP-050Z-TFD	27.5	21.7	21.1	22	HT	44,800	12.0 - 20
Obsolete	FJAM-A300-CFV	25.1	34	18.9	404A	MT	23,800	25.8 - 35
Active	FFAP-030Z-CFV	25.2	34.1	19	404A	HT	20,800	25.3 - 40
Obsolete	FGAH-A401-CFV	28.6	44.1	26.8	22	HT	37,500	39.9 - 60
Active	FFAP-042Z-CFV	28.2	44.1	26.8	22	HT	38,700	38.9 - 60
Obsolete	FGAH-A401-CFV	28.6	44.1	26.8	22	HT	37,500	39.9 - 60
Active	FFAP-042Z-CFV	28.2	44.1	26.8	22	HT	38,700	38.9 - 60
Obsolete	FJAM-B400-CFV	28.2	44.1	26.8	404A	MT	37,800	33.5 - 50
Active	FFAP-040Z-CFV	28.2	44.1	26.8	404A	HT	31,700	33.1 - 50
Obsolete	FJAM-A125-CFV	24	18.3	16.2	404A	MT	9,340	11.7 - 15
Active	FJAF-0125-CFV	24	18.3	16.1	404A	MT	9,330	11.0 - 15
Obsolete	FJAM-A126-CAV	24	18.4	16.2	404A	MT	10,500	14.9 - 20
Active	FJAF-0126-CFV	24	18.3	16.5	404A	MT	10,500	13.0 - 20
Obsolete	FJAL-A101-CAV	24	16.1	13.1	404A	LT	4,850	13.2 - 20
Active	FJAF-0108-CFV	24	17.3	13	404A	MT	9,230	12.8 - 20
Obsolete	FTEH-B075-IAA	24	16.8	15.9	134a	HT	5,510	21.0 - 30
Active	M2EH-0075-CFA	24	17.1	13.6	134a	HT	6,430	18.3 - 25
Obsolete	FJWM-C125-CFV	24	18.5	12.8	404A	MT	10,300	8.8 - 15
Active	FJWF-C125-CFV	24.2	19.1	12.8	404A	MT	9,870	9.6 - 15
Obsolete	FJWM-C126-CAV	24	17.3	12.8	404A	MT	11,600	12.0 - 20
Active	FJWF-C126-CFV	24.2	17.8	12.8	404A	MT	11,400	11.6 - 20
Obsolete	FTWH-C074-IAA	18	12.7	11.6	134a	HT	6,530	19.0 - 30
Active	M2WH-C074-CFA	19.5	12.7	11.9	134a	HT	7,270	16.3 - 25
Obsolete	FTWM-C075-IAA	24	16.1	11.8	134a	MT	7,850	14.8 - 25
Active	M2WM-C075-CFA	24	17.6	12.1	134a	MT	8,490	17.0 - 30
Obsolete	MMFH-0022-IAA	13.8	11.3	9.7	22	HT	1,540	6.5 - 15
Active	MCFH-A022-IAA	13.9	11.3	9.7	22	HT	1,650	5.9 - 15
Obsolete	MCFH-0027-IAA	13.8	11.2	9.7	22	HT	2,600	9.1 - 15
Active	MCFH-B027-IAA	13.9	11.5	9.7	22	HT	2,680	8.2 - 15
Obsolete	MCFH-0036-IAA	16.1	12.7	11.8	22	HT	3,140	9.7 - 15
Active	MCFH-B036-IAA	16.2	12.7	11.7	22	HT	3,400	10.3 - 15
Obsolete	MCFH-0049-CAA	16.1	12.7	11.8	22	HT	4,150	10.9 - 15
Active	MCFH-A049-CAA	16	12.9	11.7	22	HT	4,120	15.9 - 25
Obsolete	MCFH-0056-IAA	17.4	14	11.8	22	HT	4,950	18.0 - 25
Active	MCFH-A056-IAA	17.4	14.4	11.8	22	HT	4,460	15.5 - 20
Obsolete	F3AH-A078-IAA	24	16.9	13.1	22	HT	6,450	19.9 - 30
Active	MCFH-0078-CAA	24	17.1	13.1	22	HT	6,520	20.8 - 30
Obsolete	F3AH-A100-CAV	24	17	13.1	22	HT	7,480	9.5 - 15
Active	F3AH-B100-CAV	24.3	17.2	13.1	22	HT	7,870	12.4 - 20
Obsolete	F3AM-A105-CFV	24	18.3	16.2	22	MT	9,590	11.7 - 15
Active	F3AH-B105-CFV	24	18.3	16.2	22	HT	9,060	11.0 - 15
Obsolete	MCPH-0027-IAA	19.9	11	10.5	22	HT	2,600	9.1 - 15
Active	MCPH-B027-IAA	19.9	11.3	10.5	22	HT	2,690	8.2 - 15
Obsolete	MCEH-0048-CAA	16	15.2	11.8	22	HT	4,110	10.9 - 15
Active	MCEH-A048-CAA	16.1	15.1	11.8	22	HT	4,080	15.9 - 25

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications Capacity at -10° F Evap, 90° F Ambient for LT Applications

Refrigerant change

Copeland to Copeland condensing unit cross reference

Status	Product Number	Length (in)	Width (in)	Height (in)	Refrigerant	Application	Capacity	MCA / Fuse
Obsolete	MCWH-C036-IAA	17.9	12.8	8.8	22	HT	3,330	8.8 - 15
Active	MCWH-D036-IAA	17.2	12.8	9	22	HT	3,600	9.4 - 15
Obsolete	MCWH-C049-CAA	17.9	12.8	9.3	22	HT	4,640	10.0 - 15
Active	MCWH-D049-CAA	17.9	12.9	9.3	22	HT	4,670	15.0 - 25
Obsolete	MCWH-C056-IAA	17.9	13.3	9.8	22	HT	5,390	16.3 - 25
Active	MCWH-A056-IAA	17.9	12.7	10.5	22	HT	4,730	13.8 - 20
Obsolete	F3WH-C078-IAA	24	17.2	12.1	22	HT	6,980	17.9 - 30
Active	MCWH-0078-CAA	24.2	17.8	10.7	22	HT	7,000	18.8 - 30
Obsolete	F3WM-C105-CFV	24	17.3	12.8	22	MT	10,300	8.8 - 15
Active	F3WH-B105-CFV	19.1	24.2	12.8	22	HT	9,340	9.6 - 15
Obsolete	M4FH-0022-IAA	13.9	11.3	9.7	404A	HT	1,550	7.4 - 15
Active	M4FM-H022-IAA	14	11.3	9.7	404A	MT	1,670	5.5 - 15
Obsolete	M2FL-0023-IAA	13.8	11.8	9.7	134a	LT	740	4.2 - 15
Active	M2FL-H023-IAA	14	11.3	9.7	134a	LT	730	5.4 - 15
Obsolete	M4FL-0025-IAA	13.8	12	9.7	404A	LT	920	6.7 - 15
Active	M4FL-H025-IAA	14	11.8	9.6	404A	LT	930	5.6 - 15
Obsolete	M2TH-0020-IAA	19	8.5	10.5	134a	HT	1,350	5.3 - 15
Active	M2TH-H020-IAA	19	8.5	10.5	134a	HT	1,390	6.1 - 15
Obsolete	M4TM-0020-IAA	19	8.5	10.5	404A	MT	1,520	7.5 - 15
Active	M4TM-H020-IAA	19	8.5	10	404A	MT	1,580	5.6 - 15
Obsolete	M4WL-C025-IAA	24	16.4	9.5	404A	LT	900	6.7 - 15
Active	M4WL-H025-IAA	24	16.4	9.5	404A	LT	900	5.6 - 15
Obsolete	M2FH-0056-IAA	17.4	14	11.8	134a	HT	4,630	15.5 - 20
Active	M2FH-A056-IAA	17.8	14.2	11.8	134a	HT	5,100	15.5 - 20
Obsolete	M4FL-0067-CFA	18.1	14	11.8	404A	LT	3,290	12.7 - 15
Active	M4FL-A067-CAA	17.8	14	11.8	404A	LT	3,170	15.1 - 20
Obsolete	M2EH-0047-IAA	16	15.2	11.8	134a	HT	3,460	12.5 - 20
Active	M2EH-H047-CAA	16	15.1	11.8	134a	HT	3,650	14.0 - 20
Obsolete	M2PH-0047-IAA	19.9	11	10.5	134a	HT	3,460	12.5 - 20
Active	M2PH-H047-CAA	19.9	11.1	10.4	134a	HT	3,640	14.0 - 20
Obsolete	M2PL-0040-IAA	19.9	11.1	10.5	134a	LT	1,540	7.3 - 15
Active	M2PL-H040-IAA	19.9	11.1	10.5	134a	LT	1,530	9.0 - 15
Obsolete	M2WH-C049-IAA	17.9	12.8	9	134a	HT	4,050	11.6 - 20
Active	M2WH-H049-CAA	12.8	17.9	9.2	134a	HT	4,150	13.1 - 20
Obsolete	M2WH-C050-IAA	17.9	12.8	9.8	134a	HT	4,720	12.8 - 20
Active	M2WH-D050-IAA	13.8	18.6	9.3	134a	HT	4,610	11.9 - 20
Obsolete	M2WH-C056-IAA	17.9	12.8	9.8	134a	HT	5,140	13.8 - 20
Active	M2WH-D056-IAA	18.5	13.8	9.8	134a	HT	5,510	13.8 - 20
Obsolete	M4WL-C067-CFA	24	16.4	9.9	404A	LT	3,420	11.7 - 15
Active	M4WL-D067-CAA	24	16.4	9.9	404A	LT	3,290	14.1 - 20
Obsolete	FTAH-B074-IAA	17.4	14.4	11.8	134a	HT	5,450	20.7 - 30
Active	M2FH-0074-CFA	17.5	14.4	11.9	134a	HT	6,370	18.0 - 25
Obsolete	FTAM-A075-IAA	24	16.9	13.1	134a	MT	6,450	16.8 - 25
Active	M2FM-0075-CFA	24	17.5	13.1	134a	MT	7,300	19.0 - 30

Capacity at +25° F Evap, 90° F Ambient for MT / HT Applications Capacity at -10° F Evap, 90° F Ambient for LT Applications Refrigerant change

Tecumseh to Copeland condensing unit cross reference

Brand	Model Number	Length (in)	Width (in)	Height (in)	Refrig.	Application Evap Temp °F	Capacity Btu/Hr	MCA	Max Fuse
Tecumseh	AEA1360YXASS	16	11.5	9.9	134A	-10	610		15
Copeland	M2FL-H023-IAA-111	14.0	11.3	9.7	134A	-10	730	5.4	15
Tecumseh	AEA1360YXASS	16	11.5	9.9	134A	-10	610		15
Copeland	M2FL-H023-IAA-111	14.0	11.3	9.7	134A	-10	730	5.4	15
Tecumseh	AEA2380ZXASB	16	11.5	9.9	404A	-10	1030		15
Copeland	M4FL-H025-IAA-072	14.4	12.8	11.4	404A	-10	930	5.6	15
Tecumseh	AEA2380ZXASB	16	11.5	9.9	404A	-10	1030		15
Copeland	M4FL-H025-IAA-072	14.4	12.8	11.4	404A	-10	930	5.6	15
Tecumseh	AEA2410YXASB	16	11.5	9.9	134A	-10	1180		15
Copeland	M2FL-A025-IAA-103	13.8	11.8	9.7	134A	-10	1070	6.9	15
Tecumseh	AEA2410YXASB	16	11.5	9.9	134A	-10	1180		15
Copeland	M2FL-A025-IAA-103	13.8	11.8	9.7	134A	-10	1070	6.9	15
Tecumseh	AEA2411ZXASB	16	11.5	9.9	404A	-10	1340		15
Copeland	M4FL-0033-IAA-103	13.8	11.5	9.7	404A	-10	1390	7.7	15
Copeland	M4FL-0033-IAA-072	14.5	12	11.4	404A	-10	1390	7.7	15
Tecumseh	AEA2411ZXASS	16	11.5	9.9	404A	-10	1340		15
Copeland	M4FL-0033-IAA-111	13.9	11.2	9.7	404A	-10	1390	7.7	15
Copeland	M4FL-0033-IAA-072	14.5	12	11.4	404A	-10	1390	7.7	15
Tecumseh	AEA2413YXASB	16	11.5	9.9	134A	-10	1480		15
Copeland	M2FL-H040-IAA-103	16.5	12.4	9.7	134A	-10	1530	9.0	15
Tecumseh	AEA2413YXASB	16	11.5	9.9	134A	-10	1480		15
Copeland	M2FL-H040-IAA-103	16.5	12.4	9.7	134A	-10	1530	9.0	15
Tecumseh	AEA3414YXASB	16	11.5	9.9	134A	25	980		15
Copeland	M2HH-H017-IAA-102	16.4	6.6	10.7	134A	25	880	6.0	15
Copeland	M2FH-H017-IAA-103	13.6	11.5	9.7	134A	25	1170	6.0	15
Tecumseh	AEA3414YXASK	16	11.5	9.9	134A	25	980		15
Copeland	M2HH-H017-IAA-102	16.4	6.6	10.7	134A	25	880	6.0	15
Tecumseh	AEA3417YXASK	16	11.5	9.9	134A	25	1280		15
Copeland	M2FH-H020-IAA-111	14.0	11.2	9.7	134A	25	1440	6.0	15
Tecumseh	AEA3417YXASK	16	11.5	9.9	134A	25	1280		15
Copeland	M2FH-H020-IAA-111	14.0	11.2	9.7	134A	25	1440	6.0	15
Tecumseh	AEA3425YXASS	16	11.5	9.9	134A	25	1640		15
Copeland	M2FH-0024-SAA-111	13.9	11.3	9.7	134A	25	1810	6.3	15
Copeland	M4FM-H022-IAA-111	14.0	11.3	9.7	404A	25	1670	5.5	15
Copeland	MCFH-A022-IAA-111	13.9	11.3	9.7	22	25	1650	5.9	15
Tecumseh	AEA3425YXASS	16	11.5	9.9	134A	25	1640		15
Copeland	M2FH-0026-IAA-111	13.8	11.3	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Tecumseh	AEA4430YXASS	16	11.5	9.9	134A	25	2030		15
Copeland	M2FH-0026-IAA-111	13.8	11.3	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-111	13.8	11.8	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Tecumseh	AEA4430YXASB	16	11.5	9.9	134A	25	2030		15
Copeland	M2FH-0026-IAA-103	13.8	11.5	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15

Capacity at 90° F Ambient for LT / MT / HT Applications

Refrigerant change

Bold Models= Value Add Models With EK Filter Drier and HMI Moisture Indicator Sightglass

Tecumseh to Copeland condensing unit cross reference

Brand	Model Number	Length (in)	Width (in)	Height (in)	Refrig.	Application Evap Temp °F	Capacity Btu/Hr	MCA	Max Fuse
Tecumseh	AEA4430YXASB	16	11.5	9.9	134A	25	2030		15
Copeland	M2FH-0026-IAA-103	13.8	11.5	9.7	134A	25	2080	6.9	15
Copeland	M2FH-0026-IAA-072	14.5	12	11.4	134A	25	2080	6.9	15
Tecumseh	AEA4440YXASK	16	11.5	9.9	134A	25	2610		15
Copeland	M2FH-A033-IAA-111	13.8	11.3	9.7	134A	25	2620	9.9	15
Tecumseh	AEA4440YXASB	16	11.5	9.9	134A	25	2610		15
Copeland	M2FH-A033-IAA-103	13.8	11.5	9.7	134A	25	2620	9.9	15
Copeland	M2FH-A033-IAA-272	14.5	12	11.4	134A	25	2620	9.9	15
Tecumseh	AEA4448YXASB	16	11.5	9.9	134A	25	3060		20
Copeland	M2FH-0040-IAA-212	16.3	12.5	9.7	134A	25	2870	10.2	15
Tecumseh	AEA4448YXASB	16	11.5	9.9	134A	25	3060		20
Copeland	M2FH-0040-IAA-212	16.3	12.5	9.7	134A	25	2870	10.2	15
Tecumseh	AEA9415EXASB	16	11.5	9.9	22	25	1880		15
Copeland	M2FH-0024-SAA-111	13.9	11.3	9.7	134A	25	1810	6.3	15
Copeland	MCFH-A022-IAA-111	13.9	11.3	9.7	22	25	1650	5.9	15
Copeland	MCFH-B027-IAA-103	13.9	11.5	9.7	22	25	2680	8.2	15
Tecumseh	AEA9415ZXASS	16	11.5	9.9	404A	25	1640		15
Copeland	M4FM-H022-IAA-111	14.0	11.3	9.7	404A	25	1670	5.5	15
Copeland	M4FM-H022-IAA-272	14.4	12.7	11.4	404A	25	1670	5.5	15
Tecumseh	AEA9415EXASB	16	11.5	9.9	22	25	1880		15
Copeland	M2FH-0024-SAA-102	13.9	11	9.7	134A	25	1810	6.3	15
Copeland	MCFH-A022-IAA-111	13.9	11.3	9.7	22	25	1650	5.9	15
Tecumseh	AEA9415ZXASS	16	11.5	9.9	404A	25	1640		15
Copeland	M4FM-H022-IAA-111	14.0	11.3	9.7	404A	25	1670	5.5	15
Copeland	M4FM-H022-IAA-272	14.4	12.7	11.4	404A	25	1670	5.5	15
Tecumseh	AEA9422EXASB	16	11.5	9.9	22	25	2680		15
Copeland	M2FH-A033-IAA-103	13.8	11.5	9.7	134A	25	2620	9.9	15
Copeland	MCFH-B027-IAA-103	13.9	11.5	9.7	22	25	2680	8.2	15
Copeland	MCFH-B027-IAA-272	14.5	12	11.4	22	25	2680	8.2	15
Tecumseh	AEA9422ZXASB	16	11.5	9.9	404A	25	2530		15
Copeland	M4FH-0025-IAA-103	13.8	11.5	9.7	404A	25	2430	10.7	15
Copeland	M4FH-0025-IAA-272	14.5	12	11.4	404A	25	2430	10.7	15
Tecumseh	AEA9422EXASS	16	11.5	9.9	22	25	2680		15
Copeland	MCFH-B027-IAA-111	13.9	11.3	9.7	22	25	2680	8.2	15
Copeland	MCFH-B027-IAA-272	14.5	12	11.4	22	25	2680	8.2	15
Tecumseh	AEA9422ZXASB	16	11.5	9.9	404A	25	2530		15
Copeland	M4FH-0025-IAA-103	13.8	11.5	9.7	404A	25	2430	10.7	15
Copeland	M4FH-0025-IAA-272	14.5	12	11.4	404A	25	2430	10.7	15

Capacity at 90° F Ambient for LT / MT / HT Applications

Bold Models= Value Add Models With EK Filter Drier and HMI Moisture Indicator Sightglass

Refrigerant change

Emerson™ EK filter drier

The EK filter drier is a best-in-class Emerson® product, recommended by Emerson Climate Technologies, Inc. for use with HFC refrigerants.

For more information about the EK filter drier see marketing brochure 2004FC-78 and Application Engineering Bulletin AE-1297



Application

- Premium compacted bead filter-drier with a finer 20 micron final outlet pad for maximum filtration
- Premium Universal replacement liquid line filter drier for CFC, HCFC and HFC refrigerants including R-12, R-134a, R-22, R-404A, R-407C, R-410A, R-500, R-502, R-507

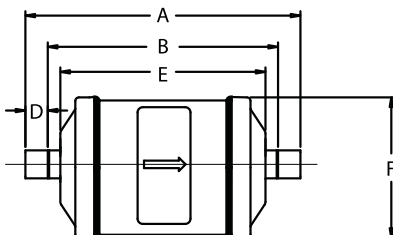
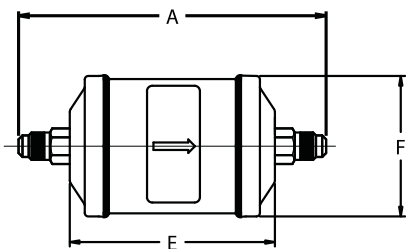
Features

- Filtration first for more effective use of surface area of desiccant
- High moisture and acid removal
- Solid copper fittings
- Corrosion resistant epoxy powder paint finish
- Approved for POE Oils with Copeland® products
- Shock resistant steel shell construction

Specifications

- Desiccant blend - optimized for high water capacity and acid capacity
- Filtration: 20 microns
- Maximum working pressure: 680 psig
- UL/CUL file number: SA 3124

Dimensional Data



For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Ordering Information

PCN	Description	Dimensions (in)					Weight (lbs)
		A	B	D	E	F	
060009	EK 032	4.38	-	-	2.56	1.63	0.50
060012	EK 032S	3.88	3.13	0.38			
060011	EK 032FM	3.50	-	-			
060010	EK 032MF	3.50	-	-			
060013	EK 033	4.69	-	-	3.00	0.88	0.50
060014	EK 033S	4.06	3.19	0.44			
047601	EK 052	4.81	-	-	3.00	0.88	0.50
057013	EK 052MF	4.50	-	-			
063978	EK 0525S	3.57	0.32	2.64	3.00	0.88	0.50
047602	EK 052S	4.44	3.69	0.38			
047603	EK 053	5.13	-	-	3.81	2.63	1.25
047604	EK 053S	4.50	3.63	0.44			
047605	EK 082	5.63	-	-	4.75	3.06	3.75
047606	EK 082S	5.25	4.50	0.38			
049551	EK 0825S	5.38	4.38	0.50	4.75	3.06	3.75
056906	EK 083MF	5.94	-	-			
047607	EK 083	5.31	4.44	0.44	7.50	3.06	3.75
047608	EK 083S	5.31	4.44	0.44			
047609	EK 084	6.19	-	-	7.50	3.06	3.75
047610	EK 084S	5.38	4.38	0.50			
047611	EK162	6.56	-	-	7.50	3.06	3.75
047612	EK 162S	6.19	5.44	0.38			
056045	EK 1625S	5.94	5.31	0.31	7.50	3.06	3.75
047613	EK 163	6.88	-	-			
047614	EK 163S	6.25	5.44	0.44	7.50	3.06	3.75
047615	EK 164	7.06	-	-			
047616	EK 164S	6.31	5.31	0.50	7.50	3.06	3.75
047617	EK 165	7.50	-	-			
047618	EK 165S	6.56	5.31	0.63	7.50	3.06	3.75
047619	EK 167S	7.50	5.63	0.75			
048210	EK 303	9.63	-	-	7.50	3.06	3.75
048211	EK 303S	9.00	8.13	0.44			
048212	EK 304	9.88	-	-	7.50	3.06	3.75
048213	EK 304S	9.13	8.13	0.50			
048214	EK 305	10.31	-	-	7.50	3.06	3.75
048215	EK 305S	9.31	8.06	0.63			
048216	EK 306S	9.69	8.44	-	7.50	3.06	3.75
048217	EK 307S	9.88	8.38	0.75			
048218	EK 309S	10.25	8.44	0.94	7.50	3.06	3.75
048219	EK 413	9.75	-	-			
048220	EK 414	10.00	-	-	7.50	3.06	3.75
048221	EK 414S	9.25	8.25	0.50			
048222	EK 415	10.44	-	-	7.50	3.06	3.75
048223	EK 415S	9.44	8.19	0.63			
048224	EK 417S	10.00	-	-	7.50	3.06	3.75
048225	EK 419S	10.94	8.50	0.75			
048228	EK 757S	15.44	13.94	-	13.06	7.50	7.50
048229	EK 759S	15.75	13.88	0.94			

¹Does not include weld bead

Standard product offering

Nomenclature (example: EK-083S)

EK	08	3	S
Drier Series	Unit Size (in cu. in.)	Connection Size (in 1/8")	S=ODF connections (omit for SAE)

EK Filter Drier

Capacity Data

Description	Connections Inlet/Outlet	Flow Capacity Tons @ 1 psi ΔP ^{1,4} (For kW, multiply tons by 3.5)						Water Capacity ² Drops of Water ³																	
		R-12		R-134a		R-22 R-410A		R-407C		R-404A R-507		R-12		R-134a		R-22		R-407C		R-410A		R-404A/507		R-502	
		75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
EK 03 2 FM	1/4 Fem/1/4 Male SAE	1.6	2.0	2.2	2.1	1.4																			
EK 03 2 MF	1/4 Male/1/4 Fem SAE	1.6	2.0	2.2	2.1	1.4																			
EK 03 2	1/4 SAE	1.6	2.0	2.2	2.1	1.4																			
EK 03 2 S	1/4 ODF	2.2	2.7	2.9	2.9	2.0	47	41	40	37	40	33	33	25	21	19	38	37	42	37					
EK 032 SV	1/4 ODF	2.2	2.7	2.9	2.9	2.0																			
EK 03 3	3/8 SAE	2.5	3.0	3.3	3.2	2.2																			
EK 03 3 S	3/8 ODF	2.5	3.0	3.3	3.2	2.2																			
EK 05 2 FM	1/4 Fem/1/4 Male SAE	1.7	2.1	2.3	2.2	1.5																			
EK 05 2 MF	1/4 Male/1/4 Fem SAE	1.7	2.1	2.3	2.2	1.5																			
EK 05 2	1/4 SAE	1.7	2.1	2.3	2.2	1.5																			
EK 05 2 S	1/4 ODF	2.7	3.3	3.6	3.5	2.4	133	119	116	106	114	97	95	75	64	58	109	106	120	107					
EK 05 3 MF	3/8 Male/3/8 Fem SAE	2.9	3.5	3.8	3.7	2.5																			
EK 05 3	3/8 SAE	2.9	3.5	3.8	3.7	2.5																			
EK 05 3 S	3/8 ODF	3.6	4.4	4.8	4.7	3.2																			
EK 08 2 FM	1/4 Fem/1/4 Male SAE	1.9	2.3	2.5	2.4	1.7																			
EK 08 2 MF	1/4 Male/1/4 Fem SAE	1.9	2.3	2.5	2.4	1.7																			
EK 08 2	1/4 SAE	1.9	2.3	2.5	2.4	1.7																			
EK 08 2 S	1/4 ODF	2.5	3.1	3.4	3.3	2.2																			
EK 08 25 S	5/16 ODF	2.9	3.5	3.8	3.7	2.5																			
EK 08 3 MF	3/8 Male/3/8 Fem SAE	3.3	4.0	4.3	4.3	2.9	274	240	237	218	235	200	195	155	159	118	224	217	245	217					
EK 08 3	3/8 SAE	3.3	4.0	4.3	4.3	2.9																			
EK 08 3 S	3/8 ODF	3.7	4.5	4.9	4.8	3.3																			
EK 08 4	1/2 SAE	5.5	6.7	7.3	7.1	4.9																			
EK 08 4 S	1/2 ODF	5.8	7.1	7.7	7.5	5.1																			
EK 16 2 MF	1/4 Male/1/4 Fem SAE	1.9	2.3	2.5	2.4	1.7																			
EK 16 2	1/4 SAE	1.9	2.3	2.5	2.4	1.7																			
EK 16 2 S	1/4 ODF	2.5	3.1	3.4	3.3	2.2																			
EK 16 25 S	5/16 ODF	2.5	3.1	3.4	3.3	2.2																			
EK 16 3	3/8 SAE	3.2	3.9	4.2	4.1	2.8	347	301	371	341	368	313	305	240	206	186	350	340	306	272					
EK 16 3 S	3/8 ODF	3.6	4.4	4.8	4.7	3.2																			
EK 16 4 S	1/2 ODF	7.0	8.5	9.2	9.0	6.2																			
EK 16 5	5/8 SAE	8.0	9.7	10.5	10.3	7.0																			
EK 16 5 S	5/8 ODF	8.3	10.1	10.9	10.7	7.3																			
EK 16 7 S	7/8 ODF	12.7	15.5	16.8	16.5	11.2																			
EK 30 3	3/8 SAE	3.5	4.3	4.7	4.6	3.1																			
EK 30 3 S	3/8 ODF	5.2	6.3	6.8	6.7	4.6																			
EK 30 4	1/2 SAE	6.6	8.1	8.8	8.6	5.9																			
EK 30 4 S	1/2 ODF	8.2	10.0	10.8	10.6	7.2																			
EK 30 5	5/8 SAE	8.7	10.6	11.5	11.3	7.7	601	526	664	611	657	561	548	434	515	355	627	608	536	477					
EK 30 6 S	3/4 ODF	12.1	14.8	16.0	15.7	10.7																			
EK 30 7 S	7/8 ODF	13.8	16.8	18.2	17.9	12.2																			
EK 30 9 S	1 1/8 ODF	16.1	19.6	21.2	20.8	14.2																			
EK 41 3	3/8 SAE	3.5	4.3	4.7	4.6	3.1																			
EK 41 4	1/2 SAE	8.5	10.4	11.3	11.1	7.5																			
EK 41 4 S	1/2 ODF	8.9	10.8	11.7	11.5	7.8	1104	971	938	854	919	785	765	607	715	465	876	850	991	884					
EK 41 5	5/8 SAE	9.8	12.0	13.0	12.8	8.7																			
EK 41 7 S	7/8 ODF	16.6	20.3	22.0	21.6	14.7																			
EK 41 9 S	1 1/8 ODF	22.7	27.7	30.0	29.4	20.1																			
EK 75 7 S	7/8 ODF	18.2	22.2	24.1	23.6	16.1	2368	2159	2159	2019	2159	1880	1810	1460	1460	1111	2019	2019	2229	2019					
EK 75 9 S	1 1/8 ODF	26.8	32.7	35.4	34.8	23.7																			

¹ All ratings in accordance with ARI Standard 710-04. 86°F liquid refrigerant temperature
5°F saturated vapor temperature
3.1 lbs./min./ton for R-134a
2.9 lbs./min./ton for R-22 and R-407C
4.0 lbs./min./ton for R-404A/507 and R-12
2.7 lbs./min./ton for R-410A

² Water Capacities are based on:
Equilibrium Point Dryness (EPD) of:
50 parts per million for R-134a, R404-A/507,
R-410A and R-407C
60 parts per million for R-22
15 parts per million for R-12

³ 20 drops of water = 1 gram = 1 cc

⁴ For 2 PSI ΔP, Multiply values by 1.4

Refrigerant Volume (oz.)

Unit Size	R-12		R-134a		R-22		R-407C		R-410A		R-404A/R-507		R-502	
	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
03	2.9	2.6	2.6	2.3	2.6	2.3	2.5	2.1	2.3	1.9	2.3	1.9	2.7	2.3
05	6.5	5.9	6.0	5.4	5.9	5.3	5.6	4.9	5.3	4.4	5.2	4.4	6.0	5.3
08	8.3	7.6	7.6	6.9	7.5	6.8	7.2	6.3	6.7	5.7	6.6	5.6	7.7	6.8
16	10.2	9.4	9.4	8.6	9.3	8.4	8.9	7.8	8.3	7.0	8.2	6.9	9.5	8.4
30	28.7	26.3	26.4	23.9	26.1	23.5	24.9	21.9	23.3	19.6	22.9	19.4	26.7	23.4
41	40.0	36.4	36.9	33.1	36.4	32.5	34.7	30.3	32.5	27.2	31.9	26.8	37.2	32.4
75	72.4	66.3	66.7	60.3	65.8	59.2	62.8	55.2	58.7	49.5	57.7	48.9	67.2	59.0

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

HMI-Hermetic Moisture Indicators

Application

- The HMI is designed to provide an accurate method of determining the moisture content of a system's refrigerant.
- The HMI has a unique high accuracy moisture indicator for CFC, HCFC, and HFC refrigerants.

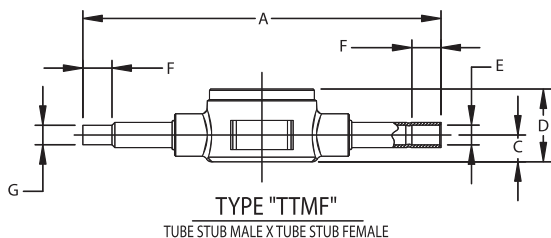
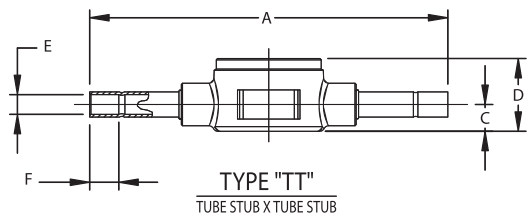
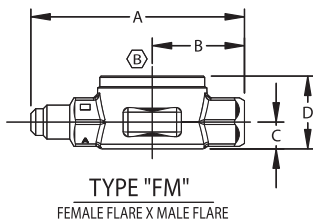
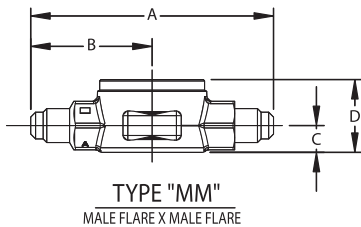
Features

- Highest sensitivity moisture indicator available
- Hermetic, leak-free construction
- Single indicator for all common refrigerants
- Accurate color calibration at low ppm levels and higher temperatures
- Wide angle viewing/high visibility window for ease of monitoring
- All brass corrosion resistant body for fewer leaks
- Solid copper connections

Specifications

- Maximum working pressure: 680 psig
- UL/CUL file number: SA 9566

Dimensional Data (in)



If it's not Blue,
It's not DRY!

Ordering Information

PCN	Description	Series	Connection Size	
065391	HMI-1MM2	Male Flare x Male Flare	1/4	
065392	HMI-1MM3		3/8	
065393	HMI-1MM4		1/2	
065394	HMI-1MM5		5/8	
065395	HMI-1MM6		3/4	
065405	HMI-1TT2		Sweat x Sweat (ODF)	1/4
065406	HMI-1TT3	3/8		
065407	HMI-1TT4	1/2		
065408	HMI-1TT5	5/8		
065409	HMI-1TT6	3/4		
065410	HMI-1TT7	7/8		
065411	HMI-1TT9	1 1/8		
065396	HMI-1FM2	Female Flare x Male Flare		1/4
065397	HMI-1FM3			3/8
065398	HMI-1FM4		1/2	
065622	HMI-1TT2MF	Sweat x Sweat (ODM x ODF)	1/4	
065814	HMI-1TT3MF		3/8	
065979	HMI-1TT4MF		1/2	
065980	HMI-1TT5MF		5/8	

Standard product offering

Nomenclature (example: HMI 1TT4)

HMI	1	TT	4
Hermetic Moisture Indicator	Series	Connection Style TT = Sweat x Sweat	Connection Size (in 1/8")

Moisture Content Color Code (ppm H₂O)

Indication Liquid Temp.	Dry (Dark Blue)			Caution (Purple)			Wet (Salmon)		
	75°F	100°F	125°F	75°F	100°F	125°F	75°F	100°F	125°F
R-12	1.4	2.5	4	5	9	15	25	43	70
R-134A	20	35	60	35	55	85	130	160	190
R-22	25	35	50	40	65	90	145	205	290
R-407C	26	40	64	42	68	109	150	230	370
R-410A	30	55	75	50	85	120	165	290	420
R-404A/507	15	25	45	33	50	80	120	150	180

Dimensional Data (in)

Type Number	Connection Size	A	B	C	D	E	F _{Min}	G
HMI - 1MM2	1/4 SAE	3.13	1.56	0.34	0.94			
HMI - 1MM3	3/8 SAE	3.38	1.69	0.34	0.94			
HMI - 1MM4	1/2 SAE	3.62	1.81	0.47	1.19			
HMI - 1MM5	5/8 SAE	3.88	1.94	0.47	1.19			
HMI - 1MM6	3/4 SAE	5.00	2.50	0.59	1.53			
HMI - 1FM2	1/4 SAE FM	2.75	1.19	0.34	0.94			
HMI - 1FM3	3/8 SAE FM	3.00	1.31	0.47	1.19			
HMI - 1FM4	1/2 SAE FM	3.22	1.41	0.47	1.19			
HMI - 1TT2	1/4 ODF	5.56		0.34	0.94	0.25	0.38	
HMI - 1TT3	3/8 ODF	5.61		0.34	0.94	0.38	0.40	
HMI - 1TT4	1/2 ODF	5.87		0.47	1.19	0.50	0.50	
HMI - 1TT5	5/8 ODF	5.87		0.61	1.19	0.63	0.63	
HMI - 1TT6	3/4 ODF	6.56		0.61	1.50	0.75	0.63	
HMI - 1TT7	7/8 ODF	6.31		0.61	1.50	0.88	0.75	
HMI - 1TT9	1 1/8 ODF	6.59		0.67	1.37	1.13	0.90	
HMI - 1TT2MF	1/4 ODM x 1/4 ODF	5.56		0.34	0.94	0.25	0.38	0.25
HMI - 1TT3MF	3/8 ODM x 3/8 ODF	5.61		0.34	0.94	0.38	0.38	0.38
HMI - 1TT4MF	1/2 ODM x 1/2 ODF	5.87		0.47	1.19	0.50	0.50	0.50
HMI - 1TT5MF	5/8 ODM x 5/8 ODF	5.87		0.61	1.19	0.63	0.50	0.62

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Emerson™ HF/HFK series thermal expansion valve

The HF series is a balanced ported valve designed for refrigeration, air conditioning and heat pump applications.

Features

- Stainless steel replaceable power element eliminates corrosion and prevents valve failure
- Two body sizes provide capacities from 1/4 to 20 ton

Standard Body – HF & HFK

- The HF is offered several ways:
 - *Pre-packaged HFK service kits* – Include a mix of bodies and power elements with a complete set of cages to serve the most applications with a minimum of parts
 - *Individual components* – Bodies, cages, & power elements may be ordered separately
 - *Finished valves* – Assembled valves ready for immediate installation
- Bi-Flow capability up to 5-1/2 tons R-22 allows one valve to control the superheat in both cooling and heating modes

Extended Body – HF

- Capacity range from 8 to 20 tons (R-22)
- Finished valve only



NOTE: If the HF body is stamped HFK, the cage is replaceable.

Options

- ODF or SAE connections
- Straight-through or angle flow configurations
- Removable inlet strainer (ODF only)
- Internal or external equalizer

Specifications

- Maximum working pressure: 450 psig

Nomenclature example: HFESC 2 HC 5 FT 3/8 x 1/2 ODF S/T

HF	N	E	S	C	B	2	H	C	5 FT	3/8 x 1/2	ODF	S/T
Valve Series Balanced Port Design	Superheat Adjustment N = Non-Adjustable Omit for Adjustable	Equalizer E=External (Omit for Internal)	Connection Type S = Solder (Omit for SAE Flare)	Removable Inlet Strainer (optional) C = Inlet Strainer (ODF only)	Bleed Hole (optional) (Omit for no bleed hole)	Capacity Nominal Rating in Tons (See nominal capacity table below)	Refrigerant Code +F = R-12 • H = R-22 +M = R-134a • N = R-407C * P = R-507 * R = R-502 * S = R-404A	Charge Code C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range	Capillary Tube Length 5 FT (std)	Inlet x Outlet Connection Sizes 1/4 x 3/8 3/8 x 1/2	Connection Type SAE = flare ODF = solder	Configuration ANG = 90° angle S/T = straight-thru

+ = R-12 and R-134a are interchangeable refrigerant charges
 * = R-507, R-502 and R-404A are interchangeable refrigerant charges
 • = R-22 and R-407C are interchangeable refrigerant charges

HF Series-Nominal* Capacity Tables in Tons (kW)

Standard Body HF

R-12	R-134a	R-22/R-407C	R-502/R-404A/R-507
1/8 (0.4)	1/4 (0.9)	1/4 (0.9)	1/8 (0.4)
1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/4 (0.9)
1/2 (1.8)	3/4 (2.7)	1 (3.5)	1/2 (1.8)
1 (3.5)	1 (3.5)	1 1/2 (5.3)	1 (3.5)
1 1/4 (4.4)	1 1/2 (5.3)	2 (7.0)	1 1/4 (4.4)
1 1/2 (5.3)	1 3/4 (6.2)	2 1/2 (8.8)	1 1/2 (5.3)
2 (7.0)	2 1/2 (8.8)	3 (11.0)	2 (7.0)
3 1/2 (12.0)	4 (14.0)	5 1/2 (20.0)	3 1/2 (12.0)

Extended Body HF

R-12	R-134a	R-22/R-407C	R-502/R-404A/R-507
5 (17.0)	6 (21.0)	8 (28.0)	5 (17.0)
6 (21.0)	7 1/2 (27.0)	10 (35.0)	7 (27.0)
9 (32.0)	11 (39.0)	15 (53.0)	10 (35.0)
12 (42.0)	14 (50.0)	20 (70.0)	13 (46.0)

All capacities shown are at 100°F condensing, 40°F evaporator temperature.
 *See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Ordering Information

Use the following tables to order individual components.

HFK Body Selection Table

PCN	Description	Type	Connections (Inlet x Outlet)
064881	KT-20298-1	HFKE	1/4 x 1/2 SAE Ang Inlet
064882	KT-20298-2	HFKE	3/8 x 1/2 SAE Ang Inlet
064883	KT-20298-3	HFKE	1/4 x 1/2 SAE Ang Inlet
064884	KT-20298-4	HFKE	3/8 x 1/2 SAE Ang Inlet
064885	KT-20298-5	HFKE	3/8 x 1/2 ODF Ang Inlet w/ Strainer
064886	KT-20298-6	HFKE	3/8 x 1/2 ODF Ang Inlet w/ Strainer
064887	KT-20298-7	HFKE	3/8 x 1/2 ODF S/T
064888	KT-20298-8	HFKE	3/8 x 5/8 ODF S/T
064889	KT-20298-9	HFKE	1/2 x 5/8 ODF S/T
064890	KT-20298-10	HFKE	1/2 x 7/8 ODF S/T
064891	KT-20298-11	HFKE	3/8 x 1/2 ODF S/T
064892	KT-20298-12	HFKE	3/8 x 5/8 ODF S/T
064895	KT-20298-13	HFKE	1/2 x 5/8 ODF S/T
064896	KT-20298-14	HFKE	1/2 x 7/8 ODF S/T

HF & HFKE Power Element Table

PCN	Description	System Refrigerant(s)	Application
053769	X26300-FW15-1	R-134a/R-12	Low Temp MOP
054798	X26300-FW35-1	R-134a/R-12	Low Temp MOP
063869	X26300-FW55-1	R-134a/R-12	Low Temp MOP
053766	X26300-FZ-1	R-134a/R-12	Low Temp
053763	X26300-FC-1	R-134a/R-12	Medium Temp
058074	X26300-MC-1	R-134a	Medium Temp
053767	X26300-HZ-1	R-22/R-407C	Low Temp
057834	X26300-HCA-1	R-22/R-407C	Heat Pump
057764	X26300-HW100-1	R-22/R-407C	AC MOP
053764	X26300-HC-1	R-22/R-407C	A/C Med. Temp
058085	X26300-SW45-1	R-404/ R-507/ R-502	Low Temp MOP
058082	X26300-SZ-1	R-404/ R-507/ R-502	Low Temp
058083	X26300-SC-1	R-404/ R-507/ R-502	Medium Temp

HFKE Cage Nominal* Capacity Table

PCN	Description ¹	Cage Code	R-12	R-22	R-134a	R-404	R-507	R-502	R-407C
064868	KT-20299-0	0	1/8	1/4	1/4	1/8	1/8	1/8	1/4
064869	KT-20299-1	1	1/4	1/2	1/2	1/4	1/4	1/4	1/2
064870	KT-20299-2	2	1/2	1	3/4	1/2	1/2	1/2	1
064871	KT-20299-3	3	1	1 1/2	1	1	1	1	1 1/2
064872	KT-20299-4	4	1 1/4	2	1 1/2	1 1/4	1 1/4	1 1/4	2
064873	KT-20299-5	5	1 1/2	2 1/2	1 3/4	1 1/2	1 1/2	1 1/2	2 1/2
064874	KT-20299-6	6	2	3	2 1/2	2	2	2	3
064875	KT-20299-7	7	3 1/2	5 1/2	4	3 1/2	3 1/2	3 1/2	5 1/2

¹ Cage Kit includes Cage, Insertion Tool and ID Clips.

*All capacities shown are at 100°F condensing, 40°F evaporator temperature.

See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

Cage Kit (PCN 064879)

Item	Qty
Size 0 Cage (1/4 ton R-22)	2
Size 1 Cage (1/2 ton R-22)	2
Size 2 Cage (1 ton R-22)	2
Size 3 Cage (1 1/2 ton R-22)	2
Size 4 Cage (2 ton R-22)	2
Size 5 Cage (2 1/2 ton R-22)	2
Size 6 Cage (3 ton R-22)	2
Size 7 Cage (5 1/2 ton R-22)	2
Insertion Tool	1
Oil Bottle	1
Cage ID Tags	16

Replacement Parts – SAE Inlet

PCN	Part Number	Description
027385	X-11176-1	Filter Screen
058707	27676-1	Seal Cap

Replacement Parts- HFSC & HFESC Only

PCN	Kit Number	Description
057686	KT-20264	Includes seal cap, gasket o-ring, screen, spring

HFKE Accessories

PCN	Description
064880	Service Box
064897	Cage Box (Empty)
064898	Insertion Tool
064899	Oil Bottle
065203	Cage Gasket Kit (12 sets)

TXV SUPERHEAT ADJUSTMENT

Valve Family	Total Turns	Degrees of SH Per Turn					
		R-22		R-134a	R-404A/507		R410A
		+20 F	-20 F	+20 F	+20F	-20F	+40F
A	8	3.0	5.0	4.5	2.0	4.0	2.0
C	12	–	–	–	–	–	4.0
HF	10	2.2	4.2	3.8	1.8	3.2	N/A
TF	10	3.0	5.0	4.5	2.0	4.0	2.0
TRAE	10	2.2	4.2	3.8	1.8	3.2	N/A
TCLE	32	0.8	1.5	1.0	0.5	1.0	N/A

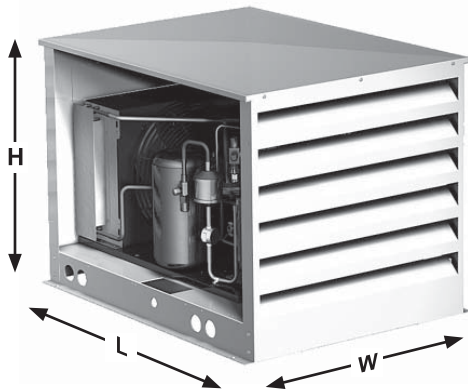
Turn adjustment clockwise to increase superheat, counterclockwise to decrease superheat. To return to approximate original factory setting, turn adjustment stem counterclockwise until the spring is completely unloaded (reaches stop or starts to ratchet). Then, turn it back in one half of the Total Turns shown on the chart.

Standard Product Offering

For more information see 2003FC-91 Wholesaler Catalog for Emerson® Valves, Controls and System Protectors

Flex-Line hoods for SystemPro™ condensing units

- Four outdoor enclosures to cover all ½ to 6 HP SystemPro units
- Assembly time reduced 50%
- UL listed
- Elevated rails
- Sliding panels for ease of service
- Ample space for additional features



Hood Selection

Copeland™ Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
SystemPro® Air-Cooled					
M2FH-H017	13.6	11.5	9.7	005-0882-00 / -09	505-7066-00
M2FH-0026	13.8	11.5	9.7	005-0882-00 / -09	505-7066-00
M2FH-0033	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FH-A056	17.8	14.2	11.8	005-0882-00 / -09	505-7066-00
M4FH-0025	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M4FH-A036	16.1	12.7	11.8	005-0882-00 / -09	505-7066-00
M2FL-0020	13.8	11.1	9.7	005-0882-00 / -09	505-7066-00
M2FL-A025	13.8	11.8	9.7	005-0882-00 / -09	505-7066-00
M2FL-B033	16.2	12.4	9.7	005-0882-00 / -09	505-7066-00
M4FL-0040	16.2	13.1	11.8	005-0882-00 / -09	505-7066-00
M4FL-0051	17.4	13.1	11.9	005-0882-00 / -09	505-7066-00
M4FL-A067	17.8	14.5	11.8	005-0882-00 / -09	505-7066-00
MCFH-B027	13.9	11.5	9.7	005-0882-00 / -09	505-7066-00
MCFH-B036	16	12.8	11.7	005-0882-00 / -09	505-7066-00
MCFH-A056	17.4	14.4	11.8	005-0882-00 / -09	505-7066-00
M4FF-0056	17.4	14.4	11.8	005-0882-00 / -09	505-7066-00
M4FF-0080	24	16.8	13.1	005-0882-00 / -09	505-7066-01
FJAF-0108	24	17.3	13	005-0882-00 / -09	505-7066-01
FJAL-B200	24.1	19.5	16.2	005-0882-02 / -10	505-7066-01
FJAL-B301	25.2	34	19	005-0882-01 / -11	505-7066-02
FJAL-A390	25.2	34	19	005-0882-01 / -11	505-7066-02
FJAF-0106	24	18.3	16.1	005-0882-00 / -09	505-7066-01
FJAM-A200	25.2	34.1	18.9	005-0882-01 / -11	505-7066-02
FJAM-B400	28.2	44.1	26.8	005-0882-04	505-7066-03
M2FH-0074	17.5	14.4	11.9	005-0882-00 / -09	505-7066-00
FTAH-A101	24	16.8	15.9	005-0882-00 / -09	505-7066-01
FTAH-A150	24	18.4	16.3	005-0882-02 / -10	505-7066-01
FTAH-A201	25.2	34	18.9	005-0882-01 / -11	505-7066-02
M2FL-0050	16.1	12.7	12.5	005-0882-00 / -09	505-7066-00
FGAH-A151	24	18.3	16.1	005-0882-02 / -10	505-7066-01
FGAH-A201	25.2	34	19	005-0882-01 / -11	505-7066-02
FGAH-A301	25.2	34	19	005-0882-01 / -11	505-7066-02
FGAH-A401	28.6	44.1	26.8	005-0882-04	505-7066-03
FGAH-A501	28.6	44.1	26.8	005-0882-04	505-7066-03
MCFH-0078	24	17.1	13.1	005-0882-00 / -09	505-7066-01
F3AH-B100	24.3	17.2	13.1	005-0882-00 / -09	505-7066-01

Hood Specification Data

Emerson Part #	Mfg. Part #	External Dimensions (in.)			Internal Dimensions (in.)			Unit Size*
		L	W	H	L	W	H	
505-7066-00	N/A	24.3	20.2	18.7	22.5	18.4	15.0	1/2 Hp to 3/4 Hp
505-7066-01	N/A	30.3	23.5	22.7	28.5	22.2	19	3/4 Hp to 2 Hp
505-7066-02	N/A	32.3	38.3	22.7	30.6	37.1	24.0	2 Hp to 3 Hp
505-7066-03	N/A	35.3	48	34.7	33.6	46.2	30.7	4 Hp to 6 Hp
005-0882-03	CHO-13	35.5	24.0	25.0	34.5	24.0	21.0	
005-0882-05	CHO-16	46.5	38.0	38.0	45.5	38.0	33.0	
005-0882-06	CHO-17	42.5	74.0	48.5	41.5	74.0	40.5	

UL Listed for outdoor use * Specific model to hood cross reference should be used.

Flex-Line hoods for semi-hermetic condensing units

Hood Selection

Copeland™ Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
Copelametic™					
E3AH-A050	19.5	14.8	12.1	005-0882-00 / -09	505-7066-00
E3AM-A075	24	17.9	13.2	005-0882-00 / -09	505-7066-01
E8AJ-A075	24	17.9	13.2	005-0882-00 / -09	505-7066-01
E8AL-A050	19.5	16.3	12.1	005-0882-00 / -09	505-7066-00
E8AL-A075	24	17.9	13.2	005-0882-00 / -09	505-7066-01
E8AM-A050	19.5	14.7	12	005-0882-00 / -09	505-7066-00
ENAG-A050	19.5	16.3	12.1	005-0882-00 / -09	505-7066-00
ENAG-A075	24	17.9	12	005-0882-00 / -09	505-7066-01
CBAM-0103	33.4	20	19.1	005-0882-03	N/A
C3AM-0101	33.4	20	19.1	005-0882-03	N/A
C8AJ-0100	33.4	20	19.1	005-0882-03	N/A
C8AJ-0200	33.4	20	19.1	005-0882-03	N/A
ENAG-A100	24	17.9	13.2	005-0882-00 / -09	505-7066-01
E3AM-A101	26.4	18.4	16.2	005-0882-01 / -11	505-7066-01
CPAK-0150	33.4	20	19.1	005-0882-03	N/A
C3AH-0150	33.4	20	19.1	005-0882-03	N/A
C3AM-0303	39	30	29.5	005-0882-05	N/A
C7AB-0150	33.4	20	19.1	005-0882-03	N/A
C7AB-0200	33.4	20	19.1	005-0882-03	N/A
C7AB-0300	39	30	29.5	005-0882-05	N/A
C8AL-0151	33.4	20	19.1	005-0882-03	N/A
C8AL-0200	33.4	20	19.1	005-0882-03	N/A
CNAG-0200	33.4	20	19.1	005-0882-03	N/A
C8AJ-0300	38.4	30	29.1	005-0882-05	N/A
C8AM-0202	33.4	20	19.1	005-0882-03	N/A
CJAL-0300	39	30	29.5	005-0882-05	N/A
CLAL-0300	39	30	29.5	005-0882-05	N/A
CPDK-0300	38.4	30	29.1	005-0882-05	N/A
CPDK-0600	44.9	36	31	005-0882-05	N/A
CPDK-0750	44.1	36	31.5	005-0882-05	N/A
CJDL-0400	38.4	30	29.1	005-0882-05	N/A
CMDL-0400	38.4	30	29.1	005-0882-05	N/A
C8DJ-0500	38.4	30	29.1	005-0882-05	N/A
C8DJ-0501	38.4	30	29.1	005-0882-05	N/A
C8DJ-0750	44.9	36	31	005-0882-05	N/A
C8DJ-1000	39.8	66	36.2	005-0882-06	N/A

Flex-Line hoods for scroll condensing units

Hood Selection

Copeland™ Model	Dimensions (in.)			Hood	Flex-Line Hood
	L	W	H		
Copeland Scroll™					
FTAH-A13Z	24	18.3	16.3	005-0882-01 / -10	505-7066-01
FJAM-A15Z	24.1	18.6	16.2	005-0882-01 / -10	505-7066-01
FTAH-A15Z	24	18.3	16.3	005-0882-01 / -10	505-7066-01
FFAS-A20Z	25.2	34	19	005-0882-01 / -11	505-7066-02
FFAS-A25Z	25.2	34	19	005-0882-01 / -11	505-7066-02
FFAS-A30Z	25	34	19	005-0882-01 / -11	505-7066-02
FFAS-A35Z	25.2	34	19	005-0882-01 / -11	505-7066-02
FFAS-A40Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAS-A50Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAS-A60Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FPAN-070Z	28.5	44	36.8	005-0882-04	N/A
FPAN-080Z	28.5	44	36.8	005-0882-04	N/A
FPAN-091Z	28.5	44	36.8	005-0882-04	N/A
FPAN-101Z	28.5	44	36.8	005-0882-04	N/A
FFAP-015Z	24.1	18.3	16.6	005-0882-02 / -10	505-7066-01
FFAP-017Z	24.1	18.3	16.6	005-0882-02 / -10	505-7066-01
FFAP-020Z	25.2	34.1	19	005-0882-01 / -11	505-7066-02
FFAP-022Z	25.2	34.1	19	005-0882-01 / -11	505-7066-02
FFAP-030Z	25.2	34.1	19	005-0882-01 / -11	505-7066-02
FFAP-032Z	25.2	34.1	19	005-0882-01 / -11	505-7066-02
FFAP-040Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAP-042Z	28.2	44.1	26.8	005-0882-04	505-7066-03
FFAP-050Z	28.2	44.1	26.8	005-0882-04	505-7066-03
DJAL-015Z	25.2	34.3	19	005-0882-01 / -11	505-7066-02
DJAL-020Z	25.2	34.3	19	005-0882-01 / -11	505-7066-02
DJAL-022Z	25.2	34.3	19	005-0882-01 / -11	505-7066-02
DJAL-026Z	25.2	34.3	19	005-0882-01 / -11	505-7066-02
DJAL-030Z	25.2	34.3	19	005-0882-01 / -11	505-7066-02
DJAL-041Z	28.2	44.1	26.8	005-0882-04	505-7066-03
DJAL-051Z	28.2	44.1	26.8	005-0882-04	505-7066-03
DJAL-060Z	28.2	44.1	26.8	005-0882-04	505-7066-03

Refrigerants and lubricants approved for use in Copeland™ compressors

	Refrigerants	Similar to	Application		Preferred	Lubricant choices		Comments
			Retrofit	New		Alternate #1	Alternate #2	
Ozone depleting	CFC R-12		L,M		MIN	AB & MIN		Phased out in 1996
	CFCL-502		L,M		MIN	AB & MIN	POE-32	Phased out in 1996
	HCFC R-22		L,M,H		MIN	AB & MIN	POE-32	No new equipment 2010
Interims	HCFC R-401A	R-12	M,H		AB & MIN	POE-32 & MIN	POE-32	Service only Suva™ MP39
	HCFC R-401B	R-12	L,M		AB & MIN	POE-32 & MIN	POE-32	Service only Suva MP66
	HCFC R-402A	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service only Suva HP80
	HCFC R-402B	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service only Suva HP81
	HCFC R-408A	R-502	L,M		AB & MIN	POE-32 & MIN	POE-32	Service only FX10
	HCFC R-409A	R-12	L,M		AB & MIN	POE-32 & MIN	POE-32	Service only FX56
	HFC R-134a	R-12	M,H	M,H	POE-32			
	HFC R-404A	R-502	L,M	L,M	POE-32			Suva HP62, Forane™ FX70
	HFC R-507	R-502	L,M	L,M	POE-32			Genetron™ AZ50
Non-ozone depleting	HFC R-407A	R-22	L,M	L,M	POE-32			
	HFC R-407C	R-22	L,M,H	L,M,H	POE-32			Suva 9000/KLEA 66
	HFC R-407F	R-22	L,M	L,M	POE			Discuss™ and select refrigeration scroll models (ZF/ZB)
	HFC R-410A	R-22	L,M	M,H	POE-32			ZP & ZB KCP Copeland Scroll™ models only
	HFC R-422A/D	R-22	L,M		POE-32	MIN	AB	Discuss supermarket racks only
	HFC R-438A	R-22	L,M		POE-32	MIN	AB	Discuss supermarket racks only; ISCEON™ MO99
	R-704 helium			Cryogenic	PAG			ZC Copeland Scroll models only
	R-744 CO ₂			Sub-critical	POE*			ZO Copeland Scroll models only
	R-290 propane			L,M	POE			For use with specific Copeland compressors designed for R-290

Legend:

- MIN: Mineral Oil (Copeland 468WMO, Calumet R015, Chevron/Texaco Capella WF32, Sonneborn Suniso 3GS) Mineral oils are interchangeable for 'top off' purposes
 AB: Alkyl Benzene Oil (Copeland Ultra 200, Shrieve Zerol 200 TD, Sonneborn Suniso AKB200A, Shell 22 12)
 POE 32: Polyolester Oil (Copeland Ultra 32-3MAF, Lubrizol Emkarate RL32-3MAF, Parker EMKARATE RL32-3MAF (Virginia) LE323MAF, Nu Calgon 4314-66 (EMKARATE RL32-3MAF)
 Hatcol 22 CC, Copeland Ultra 22 CC & Mobil Arctic 22 CC (last three for 'top off' only)
 POE*: Contact Application Engineer for oil details
 PAG: Polyalkylene Glycol Oil (Lubrizol RPAG 62, UCON LB300X)
 POE-32 & MIN: Minimum 50% POE
 AB & MIN: Minimum 50% Alkyl Benzene
 L: Low Temperature Application (Refrigeration) For R-407A, R-407C, R-407F, R-422A/D, R-438A, Demand Cooling™ is required for low temperature application - See AE guidelines for details
 M: Medium Temperature Application (Refrigeration)
 H: High Temperature Application (Air-Conditioning, Heat Pump, Refrigeration)

Spectronics AR-GLO 4/E Fluorescent Leak Detection Dye is approved for HFC/POE and HCFC/Mineral Oil usage at the manufacturer's recommended concentrations.

CAUTION: POE must be handled carefully and the proper protective equipment (gloves, eye protection, etc.) must be used when handling POE lubricant. POE must not come into contact with any surface or material that might be harmed by POE, including without limitation, certain polymers (e.g. PVC/CPVC and polycarbonate).

For specific product availability and performance data refer to Emerson Climate Technologies, Inc. sales literature
 Refer To Application Engineering bulletins, change-over guidelines And MSDS sheets for additional information at EmersonClimate.com



EmersonClimate.com