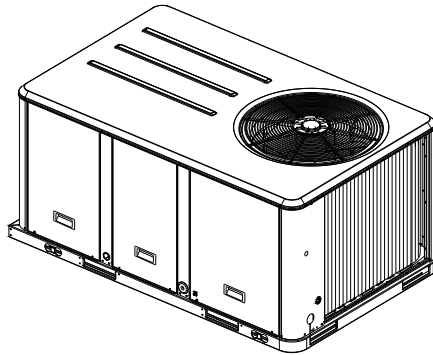


Service Facts

Packaged Rooftop Air Conditioners Precedent™ - Cooling, Gas/Electric, Heat Pumps 3 to 5 Ton Standard and High Efficiency 3 Phase Rooftop Units



Model Numbers

T/YSC033-036G3,4,W
WSC036H3,4,W
T/YHC036E1, 3,4,W

T/YSC043-048G3,4,W
WSC048H3,4,W
T/YHC048E/F1, 3,4,W

T/YSC060-063G3,4,W
WSC060H3,4,W
T/YHC060E/F1, 3,4,W

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

NOTICE: Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified. The Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury. All field wiring **MUST** be performed by qualified personnel. Improperly installed and grounded field wiring poses **FIRE** and **ELECTROCUTION** hazards. To avoid these hazards, you **MUST** follow requirements for field wiring installation and grounding as described in **NEC** and your local/state electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, **MUST** follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians **MUST** put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). **ALWAYS** refer to appropriate Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate MSDS/SDS and OSHA/GHS (Global Harmonized System of Classification and Labelling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians **MUST** put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, **PRIOR** to servicing the unit. **NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

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Revision History

- For 13 SEER information, please reference the previous version of this service fact
- Updated to include 14 SEER WSC036/048/060H

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General Data

Table 1. General data - 3 to 5 tons - standard efficiency

	3 Tons	4 Tons	5 Tons
	T/YSC033G3,4,W	T/YSC043G3,4,W	T/YSC063G3,4,W
Cooling Performance^(a)			
Gross Cooling Capacity	37,000	49,000	60,000
EER/SEER ^(b)	11.2/13.0	10.9/13.0	11.0/13.0
Nominal cfm/AHRI Rated cfm	1,200/1,200	1,600/1,600	2,000/2,000
AHRI Net Cooling Capacity	36,000	48,000	58,500
System Power (kW)	3.21	4.40	5.32
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ^(c)	79	80	80
Outdoor Coil - Type			
	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.63	0.63	0.63
Face Area (sq. ft.)	10.50	10.50	10.50
Rows/FPI	1/16	1/16	1/16
Indoor Coil - Type			
	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.63	0.63	0.63
Face Area (sq. ft.)	6.98	6.98	6.98
Rows/FPI	2/16	2/16	2/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
cfm	3600	4050	5130
Motor hp	0.25	0.33	0.33
Motor rpm	1100	1100	1100
Indoor Fan - Type (Standard)			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1 11x11	1 11x11	1 11x11
Drive Type/No. Speeds/RPM	Direct/5 ^(d)	Direct/5 ^(d)	Direct/5 ^(d)
Number Motors	Direct/5 ^(d)	Direct/5 ^(d)	Direct/5 ^(d)
Motor hp	0.75	1.0	1.0
Motor Frame Size	48/—	48/—	48/—
Filters^(e)			
	Throwaway	Throwaway	Throwaway
Type Furnished	(2) 20x35x2	(2) 20x35x2	(2) 20x35x2
Number Size Recommended			
Refrigerant Charge^(f)			
Pounds of R-410A	3.2	3.5	3.4

continued on next page

General Data

Table 1. General data - 3 to 5 tons - standard efficiency (continued)

	3 Tons	4 Tons	5 Tons
	T/YSC033G3,4,W	T/YSC043G3,4,W	T/YSC063G3,4,W
Heating Performance^(g)			
(Gas/Electric Only)			
Heating Input			
Low Heat Input (Btu)	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	130,000
Heating Output			
Low Heat Output (Btu)	49,200	49,200	49,200
Mid Heat Output (Btu)	65,600	65,600	65,600
High Heat Output (Btu)	98,400	98,400	106,600
AFUE%^(h)			
Low Heat Input (Btu)	—	—	—
Mid Heat Input (Btu)	—	—	—
High Heat Input (Btu)	—	—	—
Steady State Efficiency%			
Low Heat Input (Btu)	82%	82%	82%
Mid Heat Input (Btu)	82%	82%	82%
High Heat Input (Btu)	82%	82%	82%
No. Burners			
Low Heat Input (Btu)	2	2	2
Mid Heat Input (Btu)	2	2	2
High Heat Input (Btu)	3	3	3
No. Stages			
Low Heat Input (Btu)	1	1	1
Mid Heat Input (Btu)	1	1	1
High Heat Input (Btu)	1	1	1
Gas Supply Line Pressure			
Natural (minimum/maximum)	4.5/14.0	4.5/14.0	4.5/14.0
LP (minimum/maximum)	11.0/14.0	11.0/14.0	11.0/14.0
Gas Connection Pipe Size (in)			
Low Heat	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2
High Heat	1/2	1/2	1/2

(a) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

(b) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.

(c) Outdoor sound rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.

(d) For multispeed direct drive rpm T/YSC values, reference the direct drive, evaporator fan performance data.

(e) Optional 2" MERV 8 and MERV 13 filters also available.

(f) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(g) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(h) AFUE is rated in accordance with DOE test procedures.

Table 2. General data - 3 to 5 tons - standard efficiency

	3 Tons	4 Tons	5 Tons
	T/YSC036G3,4,W	T/YSC048G3,4,W	T/YSC060G3,4,W
Cooling Performance^(a)			
Gross Cooling Capacity	37,000	49,000	60,000
EER/SEER ^(b)	12.0/14.0	12.0/14.0	12.0/14.0
Nominal cfm/AHRI Rated cfm	1,200/1,200	1,600/1,600	2,000/2,000
AHRI Net Cooling Capacity	36,000	48,000	58,500
System Power (kW)	3.00	4.00	4.88
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ^(c)	79	80	81
Outdoor Coil - Type			
	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.63	0.63	1
Face Area (sq. ft.)	10.50	10.50	11.90
Rows/FPI	1/23	1/23	1/23
Indoor Coil - Type			
	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.63	0.63	0.81
Face Area (sq. ft.)	6.98	6.98	8.15
Rows/FPI	2/16	2/16	2/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
cfm	3600	4050	3950
Motor hp	0.25	0.33	0.4
Motor rpm	1100	1100	1100
Indoor Fan - Type (Standard)			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1 11x11	1 11x11	1 11x11
Drive Type/No. Speeds/RPM	Direct/5 ^(d)	Direct/5 ^(d)	Direct/5 ^(d)
Number Motors	Direct/5 ^(d)	Direct/5 ^(d)	Direct/5 ^(d)
Motor hp	0.75/—	1.0/—	1.0/—
Motor Frame Size	48/—	48/—	48/—
Filters^(e)			
Type Furnished	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x35x2	(2) 20x35x2	(2) 20x35x2
Refrigerant Charge^(f)			
Pounds of R-410A	3.2	3.5	4.8

continued on next page

General Data

Table 2. General data - 3 to 5 tons - standard efficiency (continued)

	3 Tons	4 Tons	5 Tons
	T/YSC036G3,4,W	T/YSC048G3,4,W	T/YSC060G3,4,W
Heating Performance^(g)			
(Gas/Electric Only)			
Heating Input			
Low Heat Input (Btu)	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	130,000
Heating Output			
Low Heat Output (Btu)	49,200	49,200	49,200
Mid Heat Output (Btu)	65,600	65,600	65,600
High Heat Output (Btu)	98,400	98,400	106,600
AFUE%^(h)			
Low Heat Input (Btu)	—	—	—
Mid Heat Input (Btu)	—	—	—
High Heat Input (Btu)	—	—	—
Steady State Efficiency%			
Low Heat Input (Btu)	82%	82%	82%
Mid Heat Input (Btu)	82%	82%	82%
High Heat Input (Btu)	82%	82%	82%
No. Burners			
Low Heat Input (Btu)	2	2	2
Mid Heat Input (Btu)	2	2	2
High Heat Input (Btu)	3	3	3
No. Stages			
Low Heat Input (Btu)	1	1	1
Mid Heat Input (Btu)	1	1	1
High Heat Input (Btu)	1	1	1
Gas Supply Line Pressure			
Natural (minimum/maximum)	4.5/14.0	4.5/14.0	4.5/14.0
LP (minimum/maximum)	11.0/14.0	11.0/14.0	11.0/14.0
Gas Connection Pipe Size (in)			
Low Heat	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2
High Heat	1/2	1/2	1/2

(a) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

(b) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.

(c) Outdoor sound rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.

(d) For multispeed direct drive rpm T/YSC values, reference the direct drive, evaporator fan performance data.

(e) Optional 2" MERV 8 and MERV 13 filters also available.

(f) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(g) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(h) AFUE is rated in accordance with DOE test procedures.

Table 3. General data - 3 to 4 tons - standard efficiency

	3 Tons	4 Tons	4 Tons
	WSC036H3,4,W	WSC048H3,4,W	WSC060H3,4,W
Cooling Performance^(a)			
Gross Cooling Capacity	39,500	50,000	61,000
EER/SEER ^(b)	12.0/14.0	12.0/14.0	12.0/14.0
Nominal cfm/AHRI Rated cfm	1,200/1,200	1,600/1,600	2,000/2,000
AHRI Net Cooling Capacity	39,000	49,000	60,000
System Power (kW)	3.25	4.08	5.00
Heating Performance^(c)			
High Temp. Btuh Rating	36,000	47,500	59,000
System Power kW/COP	3.01/3.50	3.98/3.50	4.94/3.50
Low Temp. Btuh Rating	20,600	26,000	35,000
System Power kW/COP	2.74/2.20	3.31/2.30	4.46/2.30
HSPF (Btu/Watts-hr)	8.00	8.20	8.20
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ^(d)	79	80	87
Outdoor Coil - Type			
	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	12.33	12.33	17.00
Rows/FPI	2/16	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Indoor Coil - Type			
	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	8.74	8.74	9.27
Rows/FPI	3/16	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/26
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
cfm	3,600	4,050	3,950
Motor hp	0.25	0.33	0.40
Motor rpm	1,100	1,100	1,100
Indoor Fan - Type (Standard)			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1/11x11	1/11x11	1/11x11
Drive Type/No. Speeds/rpm	Direct/5 ^(e)	Direct/5 ^(e)	Direct/5 ^(e)
Motor hp (standard/oversized)	0.75/1.5	1.0/1.5	1.0/1.5
Motor Frame Size (standard/oversized)	48/48	48/48	48/48
Filters^(f) - Type Furnished			
	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x35x2	(2) 20x35x2	(4) 16x25x2
Refrigerant Charge^(g)			
Pounds of R-410A	7.7	9.3	11.5

(a) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

(b) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.

(c) Heating performance is rated at 47°F ambient with 43°F wet bulb, 70°F entering dry bulb, 60°F entering wet bulb. High Temp. Btuh Rating includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

(d) Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.

(e) For multispeed direct drive rpm values, reference the direct drive, evaporator fan performance table.

(f) Optional 2" MERV 8 and MERV 13 filters also available.

(g) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

General Data

Table 4. General data - 3 tons - high efficiency

	3 Tons	
	T/YHC036E1	T/YHC036E3,4W ^{(a),(b)}
Cooling Performance^(c)		
Gross Cooling Capacity	38,490	37,600
EER/SEER ^(d)	13.0/15.2	12.7/15.0 ^(a)
Nominal cfm/AHRI Rated cfm	1,200/1,200	1,200/1,200
AHRI Net Cooling Capacity	37,000	37,000
System Power (kW)	2.93	2.99
Compressor		
Number/Type	1/Scroll	1/Scroll
Sound		
Outdoor Sound Rating (dB) ^(e)	81	81
Outdoor Coil - Type		
	Lanced	Lanced
Configuration	Full Face	Full Face
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	10.96	10.96
Rows/FPI	2/16	2/16
Indoor Coil - Type		
	Lanced	Lanced
Configuration	Full Face	Full Face
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	7.71	7.71
Rows/FPI	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT
Outdoor Fan - Type		
	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1
cfm	3,064	3,064
Motor hp	0.2	0.2
Motor rpm	1,075	1,075
Indoor Fan - Type (Standard)^(f)		
	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1/11x11	1/11x11
Drive Type/No. Speeds/rpm	Direct/5 ^(g)	Direct/5 ^(g)
Number Motors	1	1
Motor hp (Standard/Oversized)	0.75	.75
Motor Frame Size (Standard/Oversized)	48	48
Indoor Fan - Type (Optional)		
	—	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	—	1/11x11
Drive Type/No. Speeds	—	Belt/Variable
Number Motors	—	1
Motor hp (Standard/Oversized)	—	1.0
Motor Frame Size (Standard/Oversized)	—	56
Filters^(h)		
Type Furnished	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x2	(2) 20x30x2
Optional Hot Gas Reheat Coil (Type)		
Tube Size (in.) OD	—	0.3125
Face Area (sq. ft.)	—	5.23
Rows/FPI	—	1/16
Refrigerant Charge (Lbs. of R-410A)⁽ⁱ⁾		
Standard	6.2	6.2
Optional Hot Gas Reheat Coil	—	10.5

continued on next page

Table 4. General data - 3 tons - high efficiency (continued)

	3 Tons	
	T/YHC036E1	T/YHC036E3,4W ^{(a),(b)}
Heating Performance^(j)	(Gas/Electric Only)	
Heating Input		
Low Heat Input (Btu)	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000
High Heat Input (Btu)	100,000	120,000
Heating Output		
Low Heat Output (Btu)	49,200	48,000
Mid Heat Output (Btu)	65,600	64,000
High Heat Output (Btu)	82,000	96,000
AFUE%^(k)		
Low Heat Input (Btu)	81	78
Mid Heat Input (Btu)	81	78
High Heat Input (Btu)	81	78
Steady State Efficiency%		
Low Heat Input (Btu)	82	80
Mid Heat Input (Btu)	82	80
High Heat Input (Btu)	82	80
No. Burners		
Low Heat Input (Btu)	2	2
Mid Heat Input (Btu)	2	2
High Heat Input (Btu)	3	3
No. Stages		
Low Heat Input (Btu)	1	1
Mid Heat Input (Btu)	1	1
High Heat Input (Btu)	1	1
Gas Supply Line Pressure		
Natural (minimum/maximum)	4.5/14.0	4.5/14.0
LP (minimum/maximum)	11.0/14.0	11.0/14.0
Gas Connection Pipe Size (in)		
Low Heat	1/2	1/2
Mid Heat	1/2	1/2
High Heat	1/2	1/2

- (a) YHC036EW: EER = 12.4; SEER = 14.4
- (b) 575V (W voltage) is only available as YHC. No THC models available with 575V (W voltage).
- (c) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.
- (d) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- (e) Outdoor sound rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.
- (f) Belt drive fan is standard on units with reheat option.
- (g) For multispeed direct drive rpm T/YHC values, reference the direct drive, evaporator fan performance data.
- (h) Optional 2" MERV 8 and MERV 13 filters also available.
- (i) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
- (j) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.
- (k) AFUE is rated in accordance with DOE test procedures.

General Data

Table 5. General data - 4 tons - high efficiency

	4 Tons		
	T/YHC048F1	T/YHC048E3,4W ^(b)	T/YHC048F3,4W ^(b)
Cooling Performance^(a)			
Gross Cooling Capacity	48,930	49,930	49,930
EER/SEER ^(b)	12.55/15.0	14.2	13.35/15.0
Nominal cfm/AHRI Rated cfm	1,600/1,600	1,600/1,600	1,600/1,600
AHRI Net Cooling Capacity	48,000	49,000	49,000
System Power (kW)	3.83	3.67	3.67
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ^(c)	87	87	87
Outdoor Coil - Type			
	Microchannel	Lanced	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.71	0.3125	0.71
Face Area (sq. ft.)	16.91	17.00	16.91
Rows/FPI	1/23	3/16	1/23
Indoor Coil - Type			
	Lanced	Lanced	Lanced
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	9.27	9.27	9.27
Rows/FPI	3/16	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/26	1/26	1/26
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
cfm	3,986	3,982	3,982
Motor hp	0.4	0.4	0.4
Motor rpm	1,075	1,075	1,075
Indoor Fan - Type (Standard)^(d)			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1/11x11	1/11x11	1/11x11
Drive Type/No. Speeds/rpm	Direct/5 ^(g)	Direct/5 ^(g)	Direct/5 ^(g)
Number Motors	1	1	1
Motor hp (Standard/Oversized)	1.0	1.0	1.0
Motor Frame Size (Standard/Oversized)	48	48	48
Indoor Fan - Type (Optional)			
		FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	—	1/11x11	1/11x11
Drive Type/No. Speeds	—	Belt/Variable	Belt/Variable
Number Motors	—	1	1
Motor hp (Standard/Oversized)	—	1.0	1.0
Motor Frame Size (Standard/Oversized)	—	56	56
Filters^(e)			
Type Furnished	Throwaway	Throwaway	Throwaway
Number Size Recommended	(4) 16x25x2	(4) 16x25x2	(4) 16x25x2
Optional Hot Gas Reheat Coil (Type)			
Tube Size (in.) OD	—	0.3125	—
Face Area (sq. ft.)	—	6.28	—
Rows/FPI	—	1/16	—
Refrigerant Charge (Lbs. of R-410A)^(f)			
Standard	5.2	—	5.2
Optional Hot Gas Reheat Coil	—	15.2	—

continued on next page

Table 5. General data - 4 tons - high efficiency (continued)

	4 Tons		
	T/YHC048F1	T/YHC048E3,4W ^(b)	T/YHC048F3,4W ^(b)
Heating Performance^(g)			
Heating Input			
Low Heat Input (Btu)	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	120,000
Heating Output			
Low Heat Output (Btu)	49,200	49,000	49,000
Mid Heat Output (Btu)	66,400	64,000	64,000
High Heat Output (Btu)	98,400	96,000	96,000
AFUE^(h)			
Low Heat Input (Btu)	81	80	80
Mid Heat Input (Btu)	81	79	79
High Heat Input (Btu)	81	79	79
Steady State Efficiency%			
Low Heat Input (Btu)	82	81	81
Mid Heat Input (Btu)	83	80	80
High Heat Input (Btu)	82	81	81
No. Burners			
Low Heat Input (Btu)	2	2	2
Mid Heat Input (Btu)	2	2	2
High Heat Input (Btu)	3	3	3
No. Stages			
Low Heat Input (Btu)	1	1	1
Mid Heat Input (Btu)	1	1	1
High Heat Input (Btu)	1	1	1
Gas Supply Line Pressure			
Natural (minimum/maximum)	4.5/14.0	4.5/14.0	4.5/14.0
LP (minimum/maximum)	11.0/14.0	11.0/14.0	11.0/14.0
Gas Connection Pipe Size (in)			
Low Heat	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2
High Heat	1/2	1/2	1/2

(a) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.

(b) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.

(c) Outdoor sound rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.

(d) Belt drive fan is standard on units with reheat option.

(e) Optional 2" MERV 8 and MERV 13 filters also available.

(f) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(g) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(h) AFUE is rated in accordance with DOE test procedures.

General Data

Table 6. General data - 5 tons - high efficiency

	5 Tons		
	T/YH060F1	T/YHC060E3,4W ^(a)	T/YHC060F3,4W ^(a)
Cooling Performance^(b)			
Gross Cooling Capacity	61,000	61,000	61,000
EER/SEER ^(c)	12.85/15.0	14.2	12.85/15.0
Nominal cfm/AHRI Rated cfm	2,000/2,000	2,000/2,000	2,000/2,000
AHRI Net Cooling Capacity	59,500	60,000	60,000
System Power (kW)	4.63	4.67	4.67
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ^(d)	87	87	87
Outdoor Coil - Type			
	Microchannel	Lanced	Microchannel
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.71	0.3125	0.71
Face Area (sq. ft.)	16.91	17	16.91
Rows/FPI	1/23	3/16	1/23
Indoor Coil - Type			
	Lanced	Lanced	Lanced
Configuration	Full Face	Full Face	Full Face
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	9.89	9.89	9.89
Rows/FPI	4/16	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/26	1/26	1/26
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
cfm	3,953	3,953	3,953
Number Motors/hp	0.40	0.40	0.40
Motor rpm	1,075	1,075	1,075
Indoor Fan - Type (Standard)^(e)			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)/Width (in.)	1/11x11	1/11x11	1/11x11
Drive Type/No. Speeds/rpm	Direct/5 ^(f)	Direct/5 ^(f)	Direct/5 ^(f)
Motor hp	1.0	1.0	1.0
Motor Frame Size	48	48	48
Indoor Fan - Type (Optional)			
Number Used/Diameter (in.)/Width (in.)	—	1/11x11	1/11x11
Drive Type/No. Speeds	—	Belt/Variable	Belt/Variable
Motor hp	—	1.0	1.0
Motor Frame Size	—	56	56
Filters^(g)			
Type Furnished	Throwaway	Throwaway	Throwaway
Number Size Recommended	(4) 16x25x2	(4) 16x25x2	(4) 16x25x2
Optional Hot Gas Reheat Coil - Type			
Tube Size (in.) OD	—	0.3125	—
Face Area (sq. ft.)	—	6.28	—
Rows/FPI	—	1/16	—
Refrigerant Charge (Lbs. of R-410A) ^(h)			
Standard	6.1	—	6.1
Optional Hot Gas Reheat Coil	—	15.7	—

continued on next page

Table 6. General data - 5 tons - high efficiency (continued)

	5 Tons		
	T/YH060F1	T/YHC060E3,4W ^(a)	T/YHC060F3,4W ^(a)
Heating Performance⁽ⁱ⁾			
(Gas/Electric Only)			
Heating Input			
Low Heat Input (Btu)	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000
High Heat Input (Btu)	130,000	130,000	130,000
Heating Output			
Low Heat Output (Btu)	49,800	49,000	49,000
Mid Heat Output (Btu)	65,600	64,000	64,000
High Heat Output (Btu)	106,600	104,000	104,000
AFUE%^(j)			
Low Heat Input (Btu)	81	80	80
Mid Heat Input (Btu)	81	79	79
High Heat Input (Btu)	81	80	80
Steady State Efficiency%			
Low Heat Input (Btu)	83	81	81
Mid Heat Input (Btu)	82	80	80
High Heat Input (Btu)	82	80	80
No. Burners			
Low Heat Input (Btu)	2	2	2
Mid Heat Input (Btu)	2	2	2
High Heat Input (Btu)	3	3	3
No. Stages			
Low Heat Input (Btu)	1	1	1
Mid Heat Input (Btu)	1	1	1
High Heat Input (Btu)	1	1	1
Gas Supply Line Pressure			
Natural (minimum/maximum)	4.5/14.0	4.5/14.0	4.5/14.0
LP (minimum/maximum)	11.0/14.0	11.0/14.0	11.0/14.0
Gas Connection Pipe Size (in)			
Low Heat	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2
High Heat	1/2	1/2	1/2

- (a) 575V (W voltage) is only available as YHC. No THC models available with 575V (W voltage).
- (b) Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.
- (c) EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- (d) Outdoor sound rating shown is tested in accordance with AHRI Standard 270. For additional information reference the outdoor sound power level data in the performance section.
- (e) Belt drive is standard on units with reheat option.
- (f) For multispeed direct drive rpm T/YHC values, reference the direct drive, evaporator fan performance data.
- (g) Optional 2" MERV 8 and MERV 13 filters also available.
- (h) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
- (i) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.
- (j) AFUE is rated in accordance with DOE test procedures.

Direct Drive - Evaporator Fan Performance

Table 7. Multispeed direct drive evaporator fan performance 3 to 5 tons - standard efficiency - no electric heat TSC033/036G3,4,W, TSC043/048G3,4,W, TSC060/063G3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^{(a),(b)}														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	TSC(033, 036)G3,4,W Downflow Airflow	960	0.36	699	0.17	0.75	859	0.29	1.12	1017	0.44	1.57	1157	0.61	—	—	—
		1020	0.30	674	0.17	0.68	841	0.29	1.05	997	0.43	1.48	1139	0.60	—	—	—
		1080	0.24	649	0.16	0.61	822	0.28	0.96	978	0.42	1.38	1121	0.59	—	—	—
		1140	0.18	624	0.15	0.54	804	0.27	0.88	958	0.42	1.29	1102	0.58	—	—	—
		1200	0.11	599	0.15	0.47	785	0.27	0.79	939	0.41	1.20	1084	0.57	1.45	1148	0.71
		1260	0.05	574	0.14	0.40	767	0.26	0.71	919	0.40	1.10	1066	0.56	1.34	1127	0.70
		1320	—	—	—	0.34	749	0.25	0.62	899	0.39	1.01	1047	0.55	1.24	1106	0.68
		1380	—	—	—	0.27	730	0.25	0.54	880	0.38	0.92	1029	0.54	1.13	1085	0.67
3	TSC(033, 036)G3,4,W Horizontal Airflow	1440	—	—	—	0.20	712	0.24	0.45	860	0.37	0.82	1011	0.53	1.02	1064	0.66
		960	0.39	676	0.17	0.70	828	0.28	1.05	982	0.43	1.46	1106	0.58	—	—	—
		1020	0.33	650	0.16	0.63	805	0.27	0.97	961	0.42	1.37	1085	0.57	—	—	—
		1080	0.27	625	0.15	0.56	783	0.27	0.90	940	0.41	1.29	1064	0.56	—	—	—
		1140	0.22	599	0.15	0.49	761	0.26	0.82	919	0.40	1.20	1043	0.55	—	—	—
		1200	0.16	574	0.14	0.43	739	0.25	0.75	898	0.39	1.11	1023	0.54	1.59	1171	0.72
		1260	0.10	548	0.14	0.36	716	0.24	0.68	877	0.38	1.02	1002	0.53	1.48	1150	0.71
		1320	0.04	522	0.13	0.29	694	0.24	0.60	856	0.37	0.93	981	0.52	1.38	1128	0.70
4	TSC(043, 048)G3,4,W Downflow Airflow	1380	—	—	—	0.22	672	0.23	0.53	835	0.36	0.84	960	0.51	1.28	1107	0.68
		1440	—	—	—	0.16	650	0.22	0.45	814	0.35	0.76	940	0.49	1.17	1085	0.67
		1280	0.60	842	0.33	0.98	1023	0.50	—	—	—	—	—	—	—	—	—
		1360	0.50	811	0.32	0.84	990	0.48	0.94	1112	0.65	1.17	1133	0.77	—	—	—
		1440	0.39	781	0.30	0.70	956	0.46	0.80	1080	0.63	1.02	1098	0.74	—	—	—
		1520	0.29	750	0.29	0.56	922	0.45	0.65	1048	0.61	0.87	1063	0.72	1.30	1210	0.87
		1600	0.18	719	0.28	0.43	889	0.43	0.51	1016	0.59	0.72	1028	0.70	1.19	1181	0.84
		1680	0.08	689	0.27	0.29	855	0.42	0.37	984	0.57	0.57	993	0.67	1.07	1151	0.82
4	TSC(043, 048)G3,4,W Horizontal Airflow	1760	—	—	—	0.15	821	0.40	0.23	952	0.55	0.42	958	0.65	0.96	1121	0.80
		1840	—	—	—	0.01	787	0.38	0.08	919	0.54	0.28	923	0.63	0.85	1092	0.78
		1920	—	—	—	—	—	—	—	—	—	0.13	888	0.60	0.73	1062	0.76
		1280	0.69	872	0.34	0.92	983	0.48	—	—	—	—	—	—	—	—	—
		1360	0.58	839	0.33	0.81	950	0.46	1.14	1078	0.63	1.14	1190	0.81	—	—	—
		1440	0.47	806	0.31	0.70	916	0.44	1.02	1046	0.61	1.01	1159	0.79	—	—	—
		1520	0.35	773	0.30	0.59	883	0.43	0.90	1014	0.59	0.89	1128	0.77	1.42	1200	0.86
		1600	0.24	739	0.29	0.48	850	0.41	0.79	982	0.57	0.77	1097	0.74	1.31	1175	0.84
5	TSC(063, 060)G3,4,W Downflow Airflow	1680	0.13	706	0.28	0.37	817	0.40	0.67	950	0.55	0.64	1066	0.72	1.20	1150	0.82
		1760	0.02	673	0.26	0.26	784	0.38	0.55	918	0.54	0.52	1035	0.70	1.09	1125	0.80
		1840	—	—	—	0.15	751	0.36	0.44	886	0.52	0.40	1004	0.68	0.98	1100	0.79
		1920	—	—	—	—	—	—	0.32	854	0.50	0.27	973	0.66	0.87	1075	0.77
		1600	0.79	998	0.57	1.07	1083	0.68	1.31	1183	0.85	—	—	—	—	—	—
		1700	0.62	956	0.55	0.92	1043	0.66	1.12	1144	0.82	1.34	1208	0.97	—	—	—
		1800	0.45	913	0.52	0.77	1004	0.63	0.93	1105	0.79	1.15	1176	0.94	—	—	—
		1900	0.28	870	0.50	0.62	964	0.61	0.74	1066	0.76	0.97	1143	0.92	1.24	1188	1.04
5	TSC(063, 060)G3,4,W Horizontal Airflow	2000	0.11	828	0.47	0.47	924	0.58	0.54	1027	0.73	0.78	1111	0.89	1.06	1150	1.01
		2100	—	—	—	0.32	885	0.56	0.35	987	0.71	0.60	1078	0.86	0.87	1111	0.97
		2200	—	—	—	0.17	845	0.53	0.16	948	0.68	0.41	1046	0.84	0.69	1073	0.94
		2300	—	—	—	0.02	805	0.51	—	—	—	0.22	1013	0.81	0.50	1035	0.91
		2400	—	—	—	—	—	—	—	—	—	0.04	980	0.79	0.32	997	0.87
		1600	0.89	1002	0.57	1.04	1049	0.66	1.32	1144	0.82	1.55	1159	0.93	—	—	—
		1700	0.73	959	0.55	0.88	1008	0.63	1.16	1104	0.79	1.39	1119	0.90	—	—	—
		1800	0.57	916	0.52	0.72	966	0.61	0.99	1064	0.76	1.22	1079	0.86	—	—	—
1900	0.42	872	0.50	0.56	924	0.58	0.83	1024	0.73	1.06	1039	0.83	1.37	1213	1.06		
5	Horizontal Airflow	2000	0.26	829	0.47	0.40	882	0.56	0.67	984	0.70	0.89	999	0.80	1.21	1148	1.00
		2100	0.11	769	0.44	0.24	840	0.53	0.51	944	0.68	0.72	959	0.77	1.04	1106	0.97
		2200	—	—	—	0.08	799	0.50	0.34	904	0.65	0.56	918	0.74	0.87	1065	0.93
		2300	—	—	—	—	—	—	0.18	864	0.62	0.39	878	0.70	0.70	1023	0.90
		2400	—	—	—	—	—	—	—	—	—	—	—	—	0.53	982	0.86

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 (b) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 8. Multispeed direct drive evaporator fan performance 3 to 5 tons - standard efficiency - low & medium gas heat YSC033/036G3,4,W, YSC043/048G3,4,W, YSC060/063G3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^(a)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	YSC(033, 036)G3,4,W Downflow Airflow	960	0.39	689	0.175	0.72	853	0.29	1.10	998	0.43	1.53	1136	0.61	—	—	—
		1020	0.32	663	0.169	0.64	832	0.28	1.02	978	0.42	1.43	1117	0.60	—	—	—
		1080	0.25	637	0.162	0.56	811	0.28	0.93	958	0.42	1.34	1099	0.59	—	—	—
		1140	0.18	612	0.156	0.48	790	0.27	0.84	938	0.41	1.24	1080	0.58	—	—	—
		1200	0.11	586	0.149	0.40	769	0.26	0.75	918	0.40	1.15	1061	0.57	1.47	1162	0.71
		1260	0.04	561	0.143	0.32	748	0.25	0.67	898	0.39	1.05	1043	0.56	1.39	1143	0.69
		1320	—	—	—	0.25	726	0.25	0.58	878	0.38	0.96	1024	0.55	1.30	1123	0.68
		1380	—	—	—	0.17	705	0.24	0.49	858	0.37	0.86	1005	0.54	1.22	1104	0.67
1440	—	—	—	0.09	684	0.23	0.41	838	0.36	0.77	987	0.53	1.13	1084	0.66		
3	YSC(033, 036)G3,4,W Horizontal Airflow	960	0.42	681	0.174	0.70	839	0.29	1.05	982	0.43	1.42	1099	0.59	—	—	—
		1020	0.35	656	0.167	0.63	816	0.28	0.97	961	0.42	1.34	1080	0.58	—	—	—
		1080	0.28	630	0.161	0.56	793	0.27	0.90	940	0.41	1.25	1061	0.57	—	—	—
		1140	0.22	605	0.154	0.49	770	0.26	0.82	919	0.40	1.17	1042	0.56	1.46	1152	0.70
		1200	0.15	579	0.148	0.43	747	0.25	0.75	898	0.39	1.09	1023	0.55	1.39	1135	0.69
		1260	0.08	554	0.141	0.36	724	0.25	0.68	877	0.38	1.01	1005	0.54	1.33	1117	0.68
		1320	0.01	528	0.135	0.29	701	0.24	0.60	856	0.37	0.93	986	0.53	1.26	1100	0.67
		1380	—	—	—	0.22	678	0.23	0.53	835	0.36	0.85	967	0.52	1.19	1083	0.66
1440	—	—	—	0.16	655	0.22	0.45	814	0.35	0.77	948	0.51	1.12	1066	0.65		
4	YSC(043, 048)G3,4,W Downflow Airflow	1280	0.67	887	0.36	0.84	994	0.46	—	—	—	—	—	—	—	—	—
		1360	0.55	854	0.34	0.70	959	0.45	0.94	1049	0.56	1.17	1133	0.68	—	—	—
		1440	0.44	821	0.33	0.57	924	0.43	0.80	1015	0.54	1.02	1098	0.66	—	—	—
		1520	0.32	788	0.32	0.44	889	0.41	0.65	980	0.52	0.87	1063	0.64	1.47	1210	0.87
		1600	0.20	755	0.30	0.30	854	0.40	0.51	945	0.50	0.72	1028	0.61	1.32	1181	0.84
		1680	0.08	722	0.29	0.17	819	0.38	0.37	910	0.48	0.57	993	0.59	1.17	1151	0.82
		1760	—	—	—	0.03	783	0.37	0.23	876	0.47	0.42	958	0.57	1.03	1121	0.80
		1840	—	—	—	—	—	—	0.08	841	0.45	0.28	923	0.55	0.88	1092	0.78
1920	—	—	—	—	—	—	—	—	—	0.13	888	0.53	0.73	1062	0.76		
4	YSC(043, 048)G3,4,W Horizontal Airflow	1280	0.69	872	0.35	0.83	934	0.44	—	—	—	—	—	—	—	—	—
		1360	0.58	839	0.34	0.72	902	0.42	0.91	980	0.52	1.09	1057	0.63	—	—	—
		1440	0.47	806	0.32	0.62	869	0.41	0.80	948	0.50	0.97	1026	0.61	—	—	—
		1520	0.35	773	0.31	0.51	837	0.39	0.69	915	0.49	0.86	994	0.59	1.47	1204	0.86
		1600	0.24	739	0.30	0.40	804	0.38	0.58	883	0.47	0.74	962	0.57	1.33	1173	0.84
		1680	0.13	706	0.28	0.30	772	0.36	0.47	851	0.45	0.62	931	0.56	1.20	1142	0.82
		1760	0.02	673	0.27	0.19	739	0.34	0.36	819	0.44	0.51	899	0.54	1.06	1112	0.80
		1840	—	—	—	0.09	707	0.33	0.25	787	0.42	0.39	868	0.52	0.93	1081	0.77
1920	—	—	—	—	—	—	0.13	755	0.40	0.28	836	0.50	0.79	1051	0.75		
5	YSC(063, 060)G3,4,W Downflow Airflow	1600	0.79	998	0.58	1.07	1083	0.69	1.31	1183	0.83	—	—	—	—	—	—
		1700	0.62	956	0.55	0.92	1043	0.67	1.12	1144	0.80	1.21	1179	0.89	—	—	—
		1800	0.45	913	0.53	0.77	1004	0.64	0.93	1105	0.77	1.01	1136	0.86	—	—	—
		1900	0.28	870	0.50	0.62	964	0.62	0.74	1066	0.75	0.82	1094	0.83	1.23	1188	1.02
		2000	0.11	828	0.48	0.47	924	0.59	0.54	1027	0.72	0.62	1052	0.80	1.03	1150	0.99
		2100	—	—	—	0.32	885	0.57	0.35	987	0.69	0.43	1009	0.76	0.82	1111	0.96
		2200	—	—	—	0.17	845	0.54	0.16	948	0.66	0.23	967	0.73	0.61	1073	0.93
		2300	—	—	—	0.02	805	0.52	—	—	—	0.04	924	0.70	0.40	1035	0.89
2400	—	—	—	—	—	—	—	—	—	—	—	—	0.20	997	0.86		
5	YSC(063, 060)G3,4,W Horizontal Airflow	1600	0.84	989	0.57	0.97	1049	0.67	1.16	1144	0.80	1.32	1159	0.88	—	—	—
		1700	0.68	945	0.55	0.82	1008	0.65	1.00	1104	0.77	1.16	1119	0.85	—	—	—
		1800	0.52	901	0.52	0.66	966	0.62	0.84	1064	0.74	1.00	1079	0.82	—	—	—
		1900	0.36	857	0.49	0.51	924	0.59	0.68	1024	0.72	0.84	1039	0.79	1.26	1189	1.03
		2000	0.20	813	0.47	0.36	882	0.57	0.52	984	0.69	0.67	999	0.76	1.07	1148	0.99
		2100	0.04	769	0.44	0.21	840	0.54	0.36	944	0.66	0.51	959	0.73	0.89	1106	0.95
		2200	—	—	—	0.05	799	0.51	0.20	904	0.63	0.35	918	0.70	0.70	1065	0.92
		2300	—	—	—	—	—	—	0.04	864	0.60	0.19	878	0.67	0.52	1023	0.88
2400	—	—	—	—	—	—	—	—	—	0.03	838	0.64	0.33	982	0.85		

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 9. Multispeed direct drive evaporator fan performance 3 to 5 tons - standard efficiency - high gas heat
YSC033/036G3,4,W, YSC043/048G3,4,W, YSC060/063G3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^(a)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	YSC(033, 036)G3,4,W Downflow Airflow	960	0.40	699	0.178	0.74	865	0.295	1.14	1017	0.441	1.57	1157	0.62	—	—	—
		1020	0.33	674	0.172	0.66	844	0.287	1.05	997	0.432	1.48	1139	0.61	—	—	—
		1080	0.26	649	0.165	0.58	823	0.280	0.96	978	0.424	1.38	1121	0.60	—	—	—
		1140	0.19	624	0.159	0.50	801	0.273	0.88	958	0.415	1.29	1102	0.59	—	—	—
		1200	0.12	599	0.152	0.43	780	0.266	0.79	939	0.407	1.20	1084	0.58	1.44	1154	0.70
		1260	0.05	574	0.146	0.35	759	0.258	0.71	919	0.398	1.10	1066	0.57	1.35	1135	0.69
		1320	—	—	—	0.27	737	0.251	0.62	899	0.390	1.01	1047	0.56	1.27	1117	0.68
		1380	—	—	—	0.19	716	0.244	0.54	880	0.381	0.92	1029	0.55	1.18	1098	0.67
1440	—	—	—	0.11	695	0.236	0.45	860	0.373	0.82	1011	0.54	1.09	1079	0.66		
3	YSC(033, 036)G3,4,W Horizontal Airflow	960	0.42	695	0.177	0.70	839	0.29	1.05	982	0.43	1.43	1112	0.60	—	—	—
		1020	0.35	671	0.171	0.63	816	0.28	0.97	961	0.42	1.35	1093	0.59	—	—	—
		1080	0.29	646	0.165	0.56	793	0.27	0.90	940	0.41	1.27	1075	0.58	—	—	—
		1140	0.22	622	0.158	0.49	770	0.26	0.82	919	0.40	1.19	1057	0.57	1.49	1165	0.71
		1200	0.15	597	0.152	0.43	747	0.25	0.75	898	0.39	1.11	1038	0.56	1.41	1147	0.70
		1260	0.09	573	0.146	0.36	724	0.25	0.68	877	0.38	1.03	1020	0.55	1.34	1129	0.69
		1320	0.02	549	0.140	0.29	701	0.24	0.60	856	0.37	0.95	1002	0.54	1.26	1111	0.67
		1380	—	—	—	0.22	678	0.23	0.53	835	0.36	0.87	983	0.53	1.18	1093	0.66
1440	—	—	—	0.16	655	0.22	0.45	814	0.35	0.79	965	0.52	1.10	1075	0.65		
4	YSC(043, 048)G3,4,W Downflow Airflow	1280	0.60	842	0.34	0.88	1023	0.47	—	—	—	—	—	—	—	—	—
		1360	0.50	811	0.33	0.74	990	0.45	1.18	1112	0.58	1.24	1141	0.66	—	—	—
		1440	0.39	781	0.31	0.60	956	0.44	1.04	1080	0.56	1.09	1107	0.64	—	—	—
		1520	0.29	750	0.30	0.47	922	0.42	0.90	1048	0.54	0.94	1074	0.62	—	—	—
		1600	0.18	719	0.29	0.33	889	0.41	0.76	1016	0.53	0.79	1040	0.60	1.28	1183	0.85
		1680	0.08	689	0.28	0.19	855	0.39	0.62	984	0.51	0.64	1007	0.58	1.13	1154	0.83
		1760	—	—	—	0.06	821	0.38	0.48	952	0.49	0.49	974	0.56	0.99	1126	0.81
		1840	—	—	—	—	—	—	0.34	919	0.48	0.34	940	0.54	0.84	1097	0.78
1920	—	—	—	—	—	—	0.20	887	0.46	0.18	907	0.52	0.69	1068	0.76		
4	YSC(043, 048)G3,4,W Horizontal Airflow	1280	0.69	883	0.35	0.83	948	0.44	—	—	—	—	—	—	—	—	—
		1360	0.58	850	0.34	0.72	916	0.42	0.94	1007	0.52	1.16	1091	0.63	—	—	—
		1440	0.46	817	0.33	0.61	885	0.41	0.82	975	0.50	1.04	1060	0.61	—	—	—
		1520	0.35	784	0.31	0.51	853	0.39	0.71	944	0.49	0.92	1029	0.59	—	—	—
		1600	0.23	751	0.30	0.40	822	0.38	0.59	912	0.47	0.80	998	0.57	1.33	1181	0.84
		1680	0.12	718	0.29	0.29	790	0.36	0.48	880	0.46	0.68	967	0.56	1.19	1150	0.82
		1760	0.01	685	0.27	0.18	759	0.35	0.37	849	0.44	0.56	936	0.54	1.04	1119	0.80
		1840	—	—	—	0.08	727	0.33	0.25	817	0.42	0.44	905	0.52	0.90	1088	0.78
1920	—	—	—	—	—	—	0.14	785	0.41	0.32	874	0.50	0.76	1057	0.76		
5	YSC(063, 060)G3,4,W Downflow Airflow	1600	0.79	998	0.58	1.08	1115	0.72	1.31	1193	0.85	—	—	—	—	—	—
		1700	0.62	956	0.56	0.89	1074	0.70	1.11	1151	0.82	1.25	1165	0.91	—	—	—
		1800	0.45	913	0.53	0.71	1032	0.67	0.92	1109	0.79	1.07	1123	0.87	—	—	—
		1900	0.28	870	0.51	0.52	991	0.64	0.73	1067	0.76	0.90	1081	0.84	1.17	1200	1.04
		2000	0.11	828	0.48	0.33	949	0.61	0.53	1025	0.73	0.73	1039	0.81	0.97	1158	1.00
		2100	—	—	—	0.14	908	0.59	0.34	983	0.70	0.56	997	0.77	0.77	1116	0.96
		2200	—	—	—	—	—	—	0.15	941	0.67	0.39	955	0.74	0.57	1074	0.93
		2300	—	—	—	—	—	—	—	—	—	0.21	913	0.71	0.37	1032	0.89
2400	—	—	—	—	—	—	—	—	—	0.04	871	0.68	0.17	990	0.85		
5	YSC(063, 060)G3,4,W Horizontal Airflow	1600	0.84	1006	0.59	1.00	1061	0.69	1.20	1132	0.81	1.42	1207	0.94	—	—	—
		1700	0.67	962	0.56	0.84	1017	0.66	1.03	1090	0.78	1.25	1165	0.91	—	—	—
		1800	0.51	918	0.54	0.69	974	0.63	0.87	1047	0.75	1.07	1123	0.87	—	—	—
		1900	0.34	874	0.51	0.53	931	0.60	0.71	1005	0.72	0.90	1081	0.84	1.26	1205	1.04
		2000	0.18	831	0.48	0.37	888	0.57	0.54	963	0.69	0.73	1039	0.81	1.06	1163	1.00
		2100	0.01	787	0.46	0.21	845	0.55	0.38	920	0.65	0.56	997	0.77	0.86	1120	0.97
		2200	—	—	—	0.05	802	0.52	0.21	878	0.62	0.39	955	0.74	0.66	1077	0.93
		2300	—	—	—	—	—	—	0.05	836	0.59	0.21	913	0.71	0.46	1034	0.89
2400	—	—	—	—	—	—	—	—	—	0.04	871	0.68	0.26	991	0.86		

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

**Table 10. Multispeed direct drive evaporator fan performance 3 to 5 tons - high efficiency - no electric heat
THC036E1,3,4,W/THC048 and THC060E3,4,W/THC048F and THC060F1,3,4,W**

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^{(a),(b)}														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	THC036E1,3,4,W Downflow Airflow	960	0.45	715	0.21	0.74	851	0.31	0.92	929	0.38	1.07	993	0.44	1.25	1053	0.52
		1020	0.39	695	0.20	0.66	826	0.30	0.84	905	0.37	0.99	969	0.43	1.17	1030	0.50
		1080	0.33	675	0.20	0.59	800	0.29	0.77	880	0.36	0.91	945	0.42	1.08	1007	0.49
		1140	0.27	654	0.19	0.51	774	0.28	0.69	855	0.35	0.83	921	0.41	1.00	985	0.48
		1200	0.21	634	0.18	0.43	749	0.27	0.61	831	0.34	0.75	898	0.40	0.91	962	0.47
		1260	0.15	614	0.18	0.35	723	0.26	0.53	806	0.33	0.67	874	0.39	0.83	939	0.46
		1320	0.09	593	0.17	0.28	697	0.25	0.45	782	0.32	0.59	850	0.38	0.74	916	0.45
		1380	0.03	573	0.17	0.20	671	0.24	0.37	757	0.31	0.51	826	0.37	0.66	893	0.44
		1440	—	—	—	0.12	646	0.23	0.29	732	0.30	0.43	802	0.36	0.57	871	0.43
3	THC036E1,3,4,W Horizontal Airflow	960	0.45	711	0.21	0.70	835	0.30	0.89	913	0.37	1.04	978	0.44	1.21	1037	0.51
		1020	0.39	689	0.20	0.63	811	0.29	0.81	890	0.36	0.96	957	0.43	1.13	1016	0.50
		1080	0.32	667	0.19	0.56	787	0.28	0.73	868	0.35	0.88	935	0.42	1.04	996	0.49
		1140	0.26	644	0.19	0.48	763	0.28	0.65	845	0.34	0.80	913	0.41	0.95	975	0.48
		1200	0.20	622	0.18	0.41	739	0.27	0.57	823	0.33	0.72	892	0.40	0.87	955	0.47
		1260	0.13	599	0.17	0.33	715	0.26	0.50	800	0.32	0.64	870	0.39	0.78	934	0.46
		1320	0.07	577	0.17	0.26	691	0.25	0.42	777	0.32	0.56	848	0.38	0.69	913	0.45
		1380	0.01	555	0.16	0.18	667	0.24	0.34	755	0.31	0.48	826	0.37	0.61	893	0.44
		1440	—	—	—	0.11	642	0.23	0.26	732	0.30	0.40	805	0.36	0.52	872	0.43
4	THC048E3,4,W/ THC048F1,3,4,W Downflow Airflow	1280	0.65	805	0.31	0.86	902	0.40	1.04	966	0.48	1.27	1042	0.58	—	—	—
		1360	0.55	769	0.30	0.76	866	0.38	0.94	934	0.46	1.17	1010	0.56	1.43	1113	0.68
		1440	0.46	733	0.28	0.66	830	0.37	0.84	902	0.44	1.06	977	0.54	1.31	1078	0.66
		1520	0.36	696	0.27	0.56	794	0.35	0.74	869	0.43	0.95	944	0.52	1.20	1043	0.64
		1600	0.27	660	0.25	0.46	758	0.33	0.63	837	0.41	0.85	912	0.50	1.08	1009	0.62
		1680	0.17	624	0.24	0.36	722	0.32	0.53	805	0.40	0.74	879	0.49	0.97	974	0.60
		1760	—	—	—	0.26	686	0.30	0.43	772	0.38	0.63	847	0.47	0.85	939	0.58
		1840	—	—	—	0.16	650	0.29	0.33	740	0.36	0.53	814	0.45	0.74	905	0.55
		1920	—	—	—	0.06	614	0.27	0.23	707	0.35	0.42	782	0.43	0.62	870	0.53
4	THC048E3,4,W/ THC048F1,3,4,W Horizontal Airflow	1280	0.56	795	0.31	0.77	880	0.39	0.95	967	0.48	1.16	1040	0.57	—	—	—
		1360	0.48	760	0.29	0.67	847	0.37	0.86	935	0.46	1.06	1010	0.56	1.26	1105	0.68
		1440	0.39	725	0.28	0.58	814	0.36	0.76	903	0.44	0.96	980	0.54	1.16	1075	0.66
		1520	0.30	690	0.27	0.48	780	0.34	0.66	871	0.43	0.86	951	0.53	1.06	1045	0.64
		1600	0.22	655	0.25	0.39	747	0.33	0.57	838	0.41	0.76	921	0.51	0.96	1016	0.62
		1680	0.13	619	0.24	0.30	714	0.31	0.47	806	0.40	0.66	891	0.49	0.86	986	0.60
		1760	—	—	—	0.20	681	0.30	0.37	774	0.38	0.56	861	0.48	0.76	956	0.59
		1840	—	—	—	0.11	647	0.29	0.28	742	0.37	0.46	831	0.46	0.66	926	0.57
		1920	—	—	—	0.01	614	0.27	0.18	710	0.35	0.36	802	0.44	0.56	896	0.55
5	THC060E3,4,W/ THC060F1,3,4,W Downflow Airflow	1600	0.82	918	0.50	1.04	1002	0.60	1.26	1087	0.72	—	—	—	—	—	—
		1700	0.67	873	0.47	0.89	957	0.58	1.11	1043	0.69	—	—	—	—	—	—
		1800	0.53	828	0.45	0.74	913	0.55	0.96	1000	0.66	1.16	1083	0.78	—	—	—
		1900	0.39	782	0.42	0.59	869	0.52	0.82	957	0.63	1.02	1041	0.75	1.17	1099	0.85
		2000	0.25	737	0.40	0.45	824	0.50	0.67	914	0.60	0.87	999	0.72	1.02	1056	0.82
		2100	0.11	692	0.37	0.30	780	0.47	0.52	870	0.58	0.72	957	0.69	0.87	1014	0.78
		2200	—	—	—	0.15	735	0.44	0.37	827	0.55	0.57	914	0.66	0.71	971	0.75
		2300	—	—	—	0.00	691	0.42	0.22	784	0.52	0.42	872	0.63	0.56	929	0.72
		2400	—	—	—	—	—	0.07	741	0.49	0.27	830	0.60	0.41	886	0.68	
5	THC060E3,4,W/ THC060F1,3,4,W Horizontal Airflow	1600	0.71	918	0.50	0.91	1001	0.60	1.09	1070	0.71	—	—	—	—	—	—
		1700	0.59	875	0.47	0.78	959	0.58	0.96	1029	0.68	1.11	1102	0.79	—	—	—
		1800	0.46	832	0.45	0.65	916	0.55	0.82	987	0.65	0.97	1063	0.77	—	—	—
		1900	0.33	788	0.43	0.51	874	0.53	0.68	945	0.62	0.84	1023	0.74	1.01	1093	0.85
		2000	0.21	745	0.40	0.38	831	0.50	0.54	903	0.60	0.71	984	0.71	0.87	1052	0.81
		2100	0.08	701	0.38	0.25	788	0.47	0.41	861	0.57	0.57	944	0.68	0.73	1010	0.78
		2200	—	—	—	0.12	746	0.45	0.27	819	0.54	0.44	904	0.65	0.59	968	0.75
		2300	—	—	—	—	—	—	0.13	778	0.51	0.31	865	0.62	0.45	926	0.72
		2400	—	—	—	—	—	—	—	0.17	825	0.59	0.31	884	0.68		

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

- (a) For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
(b) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 11. Multispeed direct drive evaporator fan performance 3 to 5 tons - high efficiency - low & medium gas heat YHC036E1,3,4,W/YHC048 and 060E3,4,W/YHC048F and YHC060F1,3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^(a)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	YHC036E1,3,4,W*L,M Downflow Airflow	960	0.43	718	0.19	0.64	825	0.27	0.88	923	0.35	1.12	1017	0.46	1.28	1074	0.52
		1020	0.37	696	0.18	0.57	800	0.26	0.80	900	0.35	1.04	997	0.45	1.20	1053	0.51
		1080	0.30	675	0.18	0.49	775	0.26	0.72	877	0.34	0.96	977	0.44	1.11	1033	0.50
		1140	0.24	654	0.17	0.42	749	0.25	0.64	854	0.33	0.87	957	0.43	1.03	1013	0.49
		1200	0.18	633	0.17	0.34	724	0.24	0.56	832	0.32	0.79	938	0.42	0.94	992	0.48
		1260	0.11	612	0.16	0.26	698	0.23	0.48	809	0.31	0.71	918	0.41	0.86	972	0.47
		1320	0.05	590	0.16	0.19	673	0.22	0.39	786	0.30	0.63	898	0.40	0.77	951	0.46
		1380	—	—	—	0.11	647	0.21	0.31	763	0.29	0.55	878	0.39	0.68	931	0.45
1440	—	—	—	0.03	622	0.21	0.23	740	0.28	0.47	859	0.38	0.60	910	0.44		
3	YHC036E1,3,4,W*L,M Horizontal Airflow	960	0.42	715	0.19	0.67	842	0.28	0.90	937	0.36	1.15	1037	0.46	1.25	1062	0.51
		1020	0.37	695	0.18	0.61	819	0.27	0.83	916	0.35	1.07	1014	0.45	1.18	1047	0.50
		1080	0.31	675	0.18	0.54	796	0.26	0.75	895	0.34	0.99	992	0.44	1.11	1032	0.50
		1140	0.26	654	0.17	0.47	772	0.26	0.68	874	0.34	0.91	970	0.43	1.04	1017	0.49
		1200	0.20	634	0.17	0.41	749	0.25	0.61	853	0.33	0.83	948	0.42	0.97	1002	0.48
		1260	0.14	614	0.16	0.34	725	0.24	0.54	832	0.32	0.75	926	0.41	0.90	987	0.48
		1320	0.09	594	0.16	0.27	702	0.23	0.47	811	0.31	0.67	903	0.40	0.83	972	0.47
		1380	0.03	574	0.15	0.20	678	0.22	0.40	789	0.30	0.59	881	0.39	0.76	957	0.46
1440	—	—	—	0.14	654	0.22	0.33	768	0.29	0.51	859	0.38	0.69	942	0.45		
4	YHC048***L,M Downflow Airflow	1280	0.69	820	0.33	0.88	903	0.41	1.07	969	0.49	1.07	969	0.49	1.27	1039	0.58
		1360	0.59	785	0.32	0.78	869	0.40	0.96	936	0.48	0.96	936	0.48	1.16	1007	0.56
		1440	0.49	750	0.30	0.68	835	0.38	0.86	903	0.46	0.86	903	0.46	1.05	976	0.55
		1520	0.40	714	0.29	0.58	801	0.37	0.75	870	0.44	0.75	870	0.44	0.94	944	0.53
		1600	0.30	679	0.27	0.48	767	0.35	0.65	837	0.42	0.65	837	0.42	0.84	912	0.51
		1680	0.20	643	0.26	0.38	733	0.34	0.54	804	0.41	0.54	804	0.41	0.73	881	0.49
		1760	0.10	608	0.25	0.28	699	0.32	0.44	771	0.39	0.44	771	0.39	0.62	849	0.48
		1840	0.01	572	0.23	0.18	666	0.31	0.33	738	0.37	0.33	738	0.37	0.51	817	0.46
1920	—	—	—	0.08	632	0.29	0.23	705	0.36	0.23	705	0.36	0.41	786	0.44		
4	YHC048***L,M Horizontal Airflow	1280	0.61	813	0.33	0.81	896	0.41	1.00	977	0.50	1.00	977	0.50	1.17	1044	0.58
		1360	0.51	777	0.31	0.70	862	0.40	0.89	944	0.48	0.89	944	0.48	1.06	1011	0.57
		1440	0.42	742	0.30	0.60	828	0.38	0.79	911	0.46	0.79	911	0.46	0.95	979	0.55
		1520	0.32	707	0.28	0.50	794	0.36	0.68	878	0.45	0.68	878	0.45	0.84	946	0.53
		1600	0.22	671	0.27	0.40	760	0.35	0.57	845	0.43	0.57	845	0.43	0.73	913	0.51
		1680	0.13	636	0.26	0.29	725	0.33	0.46	812	0.41	0.46	812	0.41	0.62	881	0.49
		1760	0.03	600	0.24	0.19	691	0.32	0.36	779	0.40	0.36	779	0.40	0.51	848	0.47
		1840	—	—	—	0.09	657	0.30	0.25	746	0.38	0.25	746	0.38	0.40	815	0.46
1920	—	—	—	—	—	—	0.14	713	0.36	0.14	713	0.36	0.29	783	0.44		
5	YHC060***L,M Downflow Airflow	1600	0.90	962	0.55	1.07	1027	0.64	1.28	1099	0.75	—	—	—	—	—	—
		1700	0.76	919	0.53	0.93	985	0.61	1.14	1060	0.72	—	—	—	—	—	—
		1800	0.62	875	0.50	0.78	943	0.59	0.99	1022	0.70	1.15	1092	0.81	—	—	—
		1900	0.48	832	0.48	0.64	900	0.56	0.84	984	0.67	1.00	1051	0.78	1.18	1116	0.89
		2000	0.34	788	0.45	0.49	858	0.53	0.70	945	0.65	0.86	1010	0.75	1.03	1076	0.86
		2100	0.20	745	0.43	0.35	815	0.51	0.55	907	0.62	0.71	969	0.72	0.88	1037	0.83
		2200	0.06	701	0.40	0.20	773	0.48	0.41	868	0.59	0.56	928	0.69	0.73	997	0.80
		2300	—	—	—	0.06	730	0.46	0.26	830	0.57	0.41	887	0.66	0.58	958	0.77
2400	—	—	—	—	—	—	0.12	792	0.54	0.26	846	0.63	0.43	918	0.73		
5	YHC060***L,M Horizontal Airflow	1600	0.75	944	0.54	0.91	1010	0.63	1.10	1094	0.75	—	—	—	—	—	—
		1700	0.61	899	0.52	0.77	969	0.60	0.96	1052	0.72	1.12	1114	0.82	—	—	—
		1800	0.48	855	0.49	0.63	927	0.58	0.82	1011	0.69	0.97	1074	0.79	—	—	—
		1900	0.34	811	0.47	0.49	885	0.55	0.67	969	0.66	0.83	1035	0.76	1.01	1111	0.89
		2000	0.20	766	0.44	0.35	843	0.53	0.53	928	0.63	0.68	995	0.74	0.87	1070	0.85
		2100	0.07	722	0.42	0.21	801	0.50	0.39	887	0.61	0.54	956	0.71	0.72	1028	0.82
		2200	—	—	—	0.07	759	0.47	0.25	845	0.58	0.39	916	0.68	0.57	987	0.79
		2300	—	—	—	—	—	—	0.10	804	0.55	0.25	877	0.65	0.42	945	0.76
2400	—	—	—	—	—	—	—	—	—	0.10	837	0.62	0.27	904	0.72		

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 12. Multispeed direct drive evaporator fan performance 3 to 5 tons - high efficiency - high heat YHC036E1,3,4,W/ YHC048 and 060E3,4,W/YHC048F and YHC060F1,3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (Inches of Water) & Motor Power (bhp) ^(a)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp	ESP	rpm	bhp
3	YHC036E1,3,4,W*H Downflow Airflow	960	0.43	718	0.19	0.64	825	0.26	0.88	923	0.34	1.12	1017	0.44	1.28	1074	0.51
		1020	0.37	696	0.19	0.57	800	0.26	0.80	900	0.34	1.04	997	0.43	1.20	1053	0.50
		1080	0.30	675	0.18	0.49	775	0.25	0.72	877	0.33	0.96	977	0.42	1.11	1033	0.49
		1140	0.24	654	0.18	0.42	749	0.24	0.64	854	0.32	0.87	957	0.42	1.03	1013	0.48
		1200	0.18	633	0.17	0.34	724	0.23	0.56	832	0.31	0.79	938	0.41	0.94	992	0.47
		1260	0.11	612	0.16	0.26	698	0.22	0.48	809	0.30	0.71	918	0.40	0.86	972	0.46
		1320	0.05	590	0.16	0.19	673	0.21	0.39	786	0.29	0.63	898	0.39	0.77	951	0.45
		1380	—	—	—	0.11	647	0.21	0.31	763	0.28	0.55	878	0.38	0.68	931	0.44
1440	—	—	—	0.03	622	0.20	0.23	740	0.28	0.47	859	0.37	0.60	910	0.43		
3	YHC036E1,3,4,W*H Horizontal Airflow	960	0.44	732	0.20	0.65	836	0.27	0.87	935	0.35	1.12	1033	0.45	1.25	1078	0.51
		1020	0.37	708	0.19	0.58	811	0.26	0.80	911	0.34	1.03	1010	0.44	1.17	1059	0.50
		1080	0.31	684	0.18	0.51	787	0.25	0.72	886	0.33	0.95	987	0.43	1.09	1040	0.49
		1140	0.24	660	0.18	0.43	762	0.24	0.64	862	0.32	0.87	964	0.42	1.01	1021	0.48
		1200	0.18	636	0.17	0.36	737	0.24	0.56	838	0.31	0.79	941	0.41	0.93	1002	0.47
		1260	0.11	612	0.16	0.29	712	0.23	0.48	814	0.30	0.70	918	0.40	0.85	983	0.47
		1320	0.05	588	0.16	0.21	688	0.22	0.40	789	0.29	0.62	895	0.39	0.77	964	0.46
		1380	—	—	—	0.14	663	0.21	0.32	765	0.28	0.54	872	0.38	0.69	945	0.45
1440	—	—	—	0.07	638	0.20	0.24	741	0.28	0.45	849	0.37	0.61	926	0.44		
4	YHC048***H Downflow Airflow	1280	0.69	833	0.35	0.90	924	0.43	1.07	989	0.51	1.07	989	0.51	1.27	1066	0.61
		1360	0.60	796	0.33	0.80	889	0.42	0.97	956	0.50	0.97	956	0.50	1.17	1033	0.59
		1440	0.50	759	0.32	0.71	855	0.40	0.87	922	0.48	0.87	922	0.48	1.06	1000	0.57
		1520	0.40	722	0.30	0.61	820	0.39	0.77	889	0.46	0.77	889	0.46	0.96	966	0.56
		1600	0.31	684	0.29	0.51	785	0.37	0.67	855	0.44	0.67	855	0.44	0.85	933	0.54
		1680	0.21	647	0.27	0.41	751	0.35	0.57	822	0.43	0.57	822	0.43	0.75	900	0.52
		1760	0.12	610	0.26	0.31	716	0.34	0.47	788	0.41	0.47	788	0.41	0.64	867	0.50
		1840	—	—	—	0.22	681	0.32	0.37	755	0.39	0.37	755	0.39	0.54	834	0.48
1920	—	—	—	0.12	647	0.30	0.27	721	0.37	0.27	721	0.37	0.43	801	0.46		
4	YHC048***H Horizontal Airflow	1280	0.60	822	0.34	0.81	912	0.43	0.97	986	0.51	0.97	986	0.51	1.18	1063	0.61
		1360	0.51	787	0.33	0.70	876	0.41	0.87	952	0.49	0.87	952	0.49	1.07	1031	0.59
		1440	0.41	752	0.31	0.60	840	0.40	0.76	918	0.48	0.76	918	0.48	0.96	998	0.57
		1520	0.31	718	0.30	0.49	805	0.38	0.66	885	0.46	0.66	885	0.46	0.84	966	0.56
		1600	0.22	683	0.29	0.38	769	0.36	0.55	851	0.44	0.55	851	0.44	0.73	933	0.54
		1680	0.12	648	0.27	0.28	733	0.34	0.45	818	0.42	0.45	818	0.42	0.62	901	0.52
		1760	0.03	613	0.26	0.17	697	0.33	0.34	784	0.41	0.34	784	0.41	0.51	868	0.50
		1840	—	—	—	0.07	661	0.31	0.23	750	0.39	0.23	750	0.39	0.40	836	0.48
1920	—	—	—	—	—	—	0.13	717	0.37	0.13	717	0.37	0.29	803	0.46		
5	YHC060***H Downflow Airflow	1600	0.90	955	0.57	1.06	1022	0.66	1.25	1095	0.77	—	—	—	—	—	
		1700	0.76	910	0.54	0.92	977	0.63	1.11	1052	0.74	1.28	1113	0.85	—	—	—
		1800	0.62	865	0.52	0.77	932	0.60	0.96	1009	0.71	1.13	1072	0.82	—	—	—
		1900	0.47	819	0.49	0.63	888	0.57	0.82	966	0.68	0.98	1031	0.79	1.18	1105	0.91
		2000	0.33	774	0.46	0.49	843	0.54	0.67	922	0.65	0.83	990	0.75	1.02	1062	0.87
		2100	0.19	729	0.44	0.34	798	0.52	0.52	879	0.62	0.68	949	0.72	0.87	1019	0.84
		2200	0.04	683	0.41	0.20	754	0.49	0.38	836	0.59	0.54	908	0.69	0.71	976	0.80
		2300	—	—	—	0.05	709	0.46	0.23	793	0.56	0.39	867	0.66	0.55	933	0.77
2400	—	—	—	—	—	—	0.09	750	0.53	0.24	826	0.63	0.40	890	0.73		
5	YHC060***H Horizontal Airflow	1600	0.77	948	0.57	0.95	1016	0.66	1.10	1093	0.77	—	—	—	—	—	
		1700	0.63	903	0.54	0.80	973	0.63	0.96	1052	0.74	—	—	—	—	—	
		1800	0.48	859	0.51	0.66	930	0.60	0.81	1012	0.71	1.00	1084	0.83	—	—	—
		1900	0.34	814	0.49	0.51	888	0.57	0.67	971	0.68	0.85	1042	0.79	1.01	1106	0.91
		2000	0.20	770	0.46	0.36	845	0.55	0.52	931	0.65	0.70	1000	0.76	0.86	1063	0.87
		2100	0.06	725	0.43	0.22	803	0.52	0.38	890	0.62	0.55	959	0.73	0.70	1021	0.84
		2200	—	—	—	0.07	760	0.49	0.23	850	0.60	0.39	917	0.70	0.54	979	0.80
		2300	—	—	—	—	—	—	0.09	809	0.57	0.24	875	0.67	0.39	937	0.77
2400	—	—	—	—	—	—	—	—	0.00	0.09	833	0.63	0.23	894	0.73		

For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 13. Multispeed direct drive evaporator fan performance (standard motor) 3 to 5 tons - no electric heat - WSC036H3,4,W, WSC048H3,4,W, WSC060H3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (in./water) & Motor Power (Bhp)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp
3	WSC036H3,4,W Downflow Airflow	960	0.502	738	0.20	0.767	850	0.29	0.987	943	0.38	1.190	1029	0.47	—	—	—
		1020	0.419	717	0.19	0.683	829	0.28	0.904	923	0.37	1.107	1009	0.46	—	—	—
		1080	0.335	696	0.19	0.600	808	0.28	0.820	902	0.36	1.023	988	0.45	—	—	—
		1140	0.252	675	0.18	0.516	787	0.27	0.737	881	0.35	0.940	967	0.44	—	—	—
		1200	0.168	654	0.18	0.433	766	0.26	0.653	860	0.34	0.856	946	0.43	1.174	1080	0.58
		1260	0.084	633	0.17	0.349	746	0.25	0.570	839	0.34	0.773	925	0.42	1.090	1060	0.57
		1320	0.001	612.5	0.16	0.266	725	0.25	0.486	818	0.33	0.689	904	0.41	1.006	1039	0.56
		1440	-	-	-	0.182	704	0.24	0.403	797	0.32	0.605	883	0.40	0.923	1018	0.55
3	WSC036H3,4,W Horizontal Airflow	960	0.457	703	0.19	0.718	815	0.28	0.936	908	0.36	1.136	994	0.45	—	—	—
		1020	0.379	682	0.18	0.640	794	0.27	0.858	886	0.35	1.058	973	0.44	—	—	—
		1080	0.301	661	0.18	0.562	772	0.26	0.780	864	0.35	0.980	951	0.43	—	—	—
		1140	0.224	639	0.17	0.485	751	0.26	0.702	842	0.34	0.902	930	0.42	—	—	—
		1200	0.146	618	0.17	0.407	729	0.25	0.624	820	0.33	0.824	908	0.41	1.138	1042	0.56
		1260	0.068	596	0.16	0.329	708	0.24	0.546	798	0.32	0.746	887	0.40	1.060	1021	0.55
		1320	—	—	—	0.251	687	0.23	0.468	776	0.31	0.668	865	0.39	0.982	1000	0.54
		1440	—	—	—	0.173	665	0.23	0.390	754	0.30	0.591	844	0.38	0.904	978	0.53
4	WSC048H3,4,W Downflow Airflow	1280	0.72	918	0.38	0.96	1010	0.49	1.14	1077	0.58	—	—	—	—	—	—
		1360	0.57	885	0.37	0.82	977	0.47	1.00	1045	0.56	—	—	—	—	—	—
		1440	0.42	852	0.35	0.67	945	0.46	0.85	1012	0.54	—	—	—	—	—	—
		1520	0.27	819	0.34	0.52	912	0.44	0.70	979	0.52	1.13	1139	0.75	—	—	—
		1600	0.12	787	0.33	0.37	879	0.43	0.55	946	0.51	0.98	1106	0.72	1.19	1186	0.85
		1680	—	—	—	0.22	847	0.41	0.40	914	0.49	0.83	1073	0.70	1.05	1153	0.82
		1760	—	—	—	0.07	814	0.40	0.25	881	0.47	0.68	1040	0.68	0.90	1120	0.80
		1920	—	—	—	—	—	—	0.11	848	0.45	0.53	1008	0.66	0.75	1088	0.78
4	WSC048H3,4,W Horizontal Airflow	1280	0.68	881	0.37	0.90	972	0.47	1.06	1038	0.56	—	—	—	—	—	—
		1360	0.56	849	0.35	0.78	940	0.46	0.94	1006	0.54	—	—	—	—	—	—
		1440	0.44	817	0.34	0.66	908	0.44	0.82	974	0.52	—	—	—	—	—	—
		1520	0.33	785	0.33	0.55	876	0.43	0.71	942	0.50	1.09	1099	0.72	—	—	—
		1600	0.21	754	0.31	0.43	845	0.41	0.59	911	0.49	0.97	1067	0.70	1.16	1146	0.82
		1680	0.09	722	0.30	0.31	813	0.39	0.47	879	0.47	0.85	1036	0.68	1.04	1114	0.80
		1760	—	—	—	0.19	781	0.38	0.35	847	0.45	0.73	1004	0.66	0.92	1082	0.77
		1920	—	—	—	0.07	749	0.36	0.23	815	0.44	0.61	972	0.64	0.80	1051	0.75
5	WSC060H3,4,W Downflow Airflow	1600	0.87	830	0.46	1.00	909	0.53	1.20	996	0.64	—	—	—	—	—	—
		1700	0.73	795	0.44	0.86	873	0.51	1.05	960	0.62	—	—	—	—	—	—
		1800	0.59	759	0.42	0.72	837	0.49	0.91	924	0.59	1.12	1011	0.71	—	—	—
		1900	0.44	723	0.40	0.57	802	0.47	0.77	889	0.57	0.97	975	0.68	—	—	—
		2000	0.30	687	0.38	0.43	766	0.45	0.62	853	0.55	0.83	940	0.66	1.20	1086	0.88
		2100	0.16	651	0.36	0.29	730	0.43	0.48	817	0.52	0.69	904	0.63	1.05	1050	0.85
		2200	0.01	616	0.34	0.14	694	0.41	0.34	781	0.50	0.54	868	0.61	0.91	1014	0.82
		2400	—	—	—	0.00	658	0.39	0.19	745	0.48	0.40	832	0.58	0.77	979	0.79
5	WSC060H3,4,W Horizontal Airflow	1600	0.74	778	0.32	0.84	846	0.41	0.97	919	0.49	1.12	992	0.65	—	—	—
		1700	0.62	742	0.31	0.71	809	0.39	0.85	883	0.47	0.99	956	0.63	—	—	—
		1800	0.49	706	0.29	0.58	773	0.38	0.72	846	0.45	0.86	920	0.60	1.12	1042	0.84
		1900	0.36	669	0.28	0.45	737	0.36	0.59	810	0.43	0.74	883	0.58	0.99	1006	0.81
		2000	0.23	633	0.26	0.32	700	0.34	0.46	774	0.41	0.61	847	0.55	0.87	970	0.78
		2100	0.10	596	0.25	0.20	664	0.32	0.33	737	0.39	0.48	810	0.53	0.74	933	0.75
		2200	—	—	—	0.07	628	0.30	0.21	701	0.38	0.35	774	0.51	0.61	897	0.72
		2400	—	—	—	—	—	—	0.08	665	0.36	0.22	738	0.48	0.48	861	0.69
		2400	—	—	—	—	—	—	—	—	0.10	701	0.46	0.35	824	0.66	

- For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15.
- Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- For electric heat applications minimum airflow is set to 320 cfm/ton, unless specified otherwise, values found in electric heat temp rise table.
- Data includes pressure drop due to wet coil and filters.

Direct Drive - Evaporator Fan Performance

Table 14. Multispeed direct drive evaporator fan performance (oversized motor) 3 to 5 tons - no electric heat - WSC036H3,4,W, WSC048H3,4,W, WSC060H3,4,W

Tons	Unit Model Number	cfm	External Static Pressure (in./water) & Motor Power (Bhp)														
			Speed Set 1			Speed Set 2			Speed Set 3			Speed Set 4			Speed Set 5		
			ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp	ESP	rpm	Bhp
3	WSC036H3,4,W Downflow Airflow	960	1.15	963	0.44	—	—	—	—	—	—	—	—	—	—	—	—
		1020	1.06	942	0.43	—	—	—	—	—	—	—	—	—	—	—	—
		1080	0.97	921	0.42	1.51	1157	0.69	—	—	—	—	—	—	—	—	—
		1140	0.88	900	0.41	1.42	1133	0.67	—	—	—	—	—	—	—	—	—
		1200	0.79	879	0.40	1.33	1109	0.66	1.45	1155	0.73	—	—	—	—	—	—
		1260	0.70	859	0.39	1.24	1086	0.65	1.36	1131	0.71	—	—	—	—	—	—
		1320	0.61	838	0.38	1.15	1062	0.63	1.28	1107	0.70	1.49	1184	0.81	—	—	—
		1380	0.52	817	0.37	1.06	1038	0.62	1.19	1084	0.68	1.40	1160	0.79	1.51	1201	0.86
1440	0.43	796	0.36	0.97	1015	0.60	1.10	1060	0.67	1.31	1136	0.78	1.42	1177	0.84		
3	WSC036H3,4,W Horizontal Airflow	960	1.14	1111	0.50	1.50	1164	0.69	—	—	—	—	—	—	—	—	
		1020	1.06	1088	0.49	1.43	1141	0.68	—	—	—	—	—	—	—	—	
		1080	0.99	1065	0.48	1.35	1118	0.67	1.44	1131	0.71	—	—	—	—	—	
		1140	0.91	1042	0.47	1.28	1095	0.65	1.36	1108	0.70	1.50	1128	0.77	—	—	—
		1200	0.84	1019	0.46	1.20	1072	0.64	1.29	1085	0.68	1.43	1105	0.76	1.50	1117	0.80
		1260	0.76	996	0.45	1.13	1049	0.62	1.21	1062	0.67	1.35	1082	0.74	1.43	1093	0.78
		1320	0.69	973	0.44	1.05	1026	0.61	1.14	1038	0.65	1.28	1059	0.72	1.35	1070	0.76
		1380	0.61	950	0.43	0.98	1003	0.60	1.06	1015	0.64	1.20	1036	0.71	1.28	1047	0.75
1440	0.54	927	0.42	0.90	980	0.58	0.99	992	0.62	1.13	1013	0.69	1.20	1024	0.73		
4	WSC048H3,4,W Downflow Airflow	1280	1.12	1016	0.58	1.50	1159	0.78	—	—	—	—	—	—	—	—	
		1360	1.00	988	0.56	1.39	1131	0.76	—	—	—	—	—	—	—	—	
		1440	0.88	961	0.55	1.27	1104	0.74	—	—	—	—	—	—	—	—	
		1520	0.77	933	0.53	1.15	1076	0.73	—	—	—	—	—	—	—	—	
		1600	0.65	905	0.52	1.04	1048	0.71	1.50	1218	0.97	—	—	—	—	—	
		1680	0.54	877	0.50	0.92	1020	0.69	1.38	1190	0.95	—	—	—	—	—	
		1760	0.42	850	0.49	0.81	993	0.67	1.26	1162	0.93	—	—	—	—	—	
		1840	0.30	822	0.47	0.69	965	0.65	1.15	1134	0.90	1.50	1266	1.13	—	—	—
1920	0.19	794	0.45	0.57	937	0.63	1.03	1107	0.88	1.39	1238	1.10	1.50	1279	1.18		
4	WSC048H3,4,W Horizontal Airflow	1280	1.04	1077	0.62	1.30	1121	0.76	—	—	—	—	—	—	—	—	
		1360	0.94	1047	0.60	1.20	1091	0.74	—	—	—	—	—	—	—	—	
		1440	0.84	1016	0.58	1.10	1061	0.72	1.41	1287	1.03	—	—	—	—	—	
		1520	0.74	986	0.56	1.00	1030	0.70	1.31	1257	1.00	—	—	—	—	—	
		1600	0.64	956	0.55	0.90	1000	0.67	1.21	1226	0.98	1.45	1340	1.20	—	—	—
		1680	0.54	925	0.53	0.80	970	0.65	1.11	1196	0.95	1.35	1310	1.17	1.43	1346	1.24
		1760	0.44	895	0.51	0.70	939	0.63	1.01	1166	0.93	1.25	1280	1.14	1.33	1315	1.21
		1840	0.34	865	0.49	0.60	909	0.61	0.91	1135	0.91	1.15	1249	1.11	1.23	1285	1.18
1920	0.24	834	0.48	0.50	879	0.59	0.81	1105	0.88	1.05	1219	1.09	1.13	1255	1.16		
5	WSC060H3,4,W Downflow Airflow	1600	1.23	905	0.52	1.50	1048	0.71	—	—	—	—	—	—	—	—	
		1700	1.08	870	0.50	1.35	1014	0.68	—	—	—	—	—	—	—	—	
		1800	0.94	836	0.48	1.21	979	0.66	—	—	—	—	—	—	—	—	
		1900	0.79	801	0.46	1.06	944	0.64	1.50	1113	0.89	—	—	—	—	—	
		2000	0.65	766	0.44	0.92	909	0.61	1.35	1079	0.86	1.50	1210	1.08	—	—	—
		2100	0.50	732	0.42	0.77	875	0.59	1.21	1044	0.83	1.36	1176	1.05	—	—	—
		2200	0.36	697	0.40	0.63	840	0.57	1.06	1009	0.80	1.21	1141	1.02	1.50	1182	0.84
		2300	0.21	662	0.38	0.48	805	0.54	0.92	975	0.78	1.07	1106	0.99	1.36	1147	1.06
2400	0.07	628	0.36	0.34	771	0.52	0.77	940	0.75	0.92	1072	0.96	1.21	1113	1.03		
5	WSC060H3,4,W Horizontal Airflow	1600	1.03	1075	0.61	1.21	1119	0.75	1.51	1316	1.05	—	—	—	—	—	
		1700	0.91	1037	0.59	1.09	1081	0.73	1.38	1278	1.02	1.49	1350	1.20	—	—	—
		1800	0.78	999	0.57	0.96	1043	0.70	1.26	1240	0.99	1.36	1312	1.17	—	—	—
		1900	0.66	961	0.55	0.84	1005	0.68	1.13	1202	0.96	1.24	1274	1.14	1.43	1347	1.24
		2000	0.53	923	0.53	0.71	967	0.65	1.01	1164	0.93	1.11	1236	1.10	1.31	1309	1.21
		2100	0.41	885	0.51	0.59	929	0.63	0.88	1126	0.90	0.99	1198	1.07	1.18	1271	1.17
		2200	0.28	847	0.48	0.46	891	0.60	0.76	1088	0.87	0.86	1160	1.04	1.06	1233	1.14
		2300	0.16	809	0.46	0.34	853	0.58	0.63	1050	0.84	0.74	1122	1.00	0.93	1195	1.10
2400	0.03	771	0.44	0.21	816	0.55	0.51	1013	0.81	0.61	1084	0.97	0.81	1157	1.07		

1. For 036 models, fan motor heat (MBh) = 2.72 x Fan Bhp + 0.16. For 048 & 060 models, fan motor heat (MBh) = 2.87 x Fan Bhp + 0.15.
 2. Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
 3. For electric heat applications minimum airflow is set to 320 cfm/ton, unless specified otherwise, values found in electric heat temp rise table.
 4. Data includes pressure drop due to wet coil and filters.

Evaporator Fan Performance - High Efficiency

Table 15. Belt drive evaporator fan performance - 3 tons high efficiency - THC036E3,E4 downflow airflow

cfm	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Low Static Drive Accessory Kit^(a)											1-hp Standard Motor & Drive									
600*	—	—	468	0.07	547	0.1	616	0.13	677	0.17	729	0.21	776	0.24	819	0.28	860	0.32	898	0.36
720*	386	0.05	490	0.08	570	0.12	638	0.16	697	0.12	752	0.24	802	0.28	848	0.33	889	0.37	928	0.42
840*	416	0.06	511	0.10	593	0.14	661	0.19	719	0.23	773	0.28	823	0.32	870	0.37	914	0.42	954	0.47
960	449	0.08	534	0.12	614	0.17	683	0.22	742	0.27	795	0.32	845	0.37	891	0.42	935	0.47	977	0.53
1080	483	0.11	561	0.15	635	0.20	704	0.25	765	0.30	818	0.36	868	0.42	913	0.47	957	0.53	998	0.59
1200	518	0.14	592	0.18	658	0.23	725	0.29	786	0.35	842	0.41	891	0.47	936	0.53	979	0.59	1019	0.66
1320	555	0.17	625	0.22	686	0.27	747	0.33	807	0.39	862	0.46	914	0.53	959	0.59	1002	0.66	1043	0.73
1440	592	0.21	658	0.27	717	0.32	772	0.38	828	0.44	882	0.51	933	0.58	980	0.66	1025	0.73	1065	0.80

Continued

cfm	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive										
600*	934	0.41	968	0.45	1001	0.49	1034	0.54	1066	0.59
720*	965	0.46	999	0.51	1032	0.56	1065	0.61	1095	0.66
840*	992	0.53	1029	0.58	1063	0.63	1096	0.68	1125	0.74
960	1016	0.59	1054	0.65	1089	0.70	1124	0.76	1155	0.82
1080	1036	0.65	1075	0.72	1111	0.78	1146	0.84	1180	0.91
1200	1058	0.72	1095	0.78	1131	0.85	1167	0.92	1201	0.99
1320	1082	0.80	1119	0.87	1153	0.94	1188	1.01	1221	1.08
1440	1104	0.88	1141	0.95	1176	1.03	1211	1.10	1243	1.18
1-hp Standard Motor & Field Supplied High Static Drive^(b)										

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 600, 720, and 840 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 16. Belt drive evaporator fan performance - 3 tons high efficiency - THC036E3,E4 horizontal airflow

External Static Pressure (Inches of Water)																						
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Low Static Drive Accessory Kit^(a)											1-hp Standard Motor & Drive											
600*	372	0.04	472	0.06	552	0.09	619	0.12	678	0.15	730	0.18	778	0.22	823	0.25	865	0.29	904	0.32		
720*	398	0.05	496	0.08	575	0.11	643	0.15	702	0.18	756	0.22	805	0.26	849	0.29	892	0.33	931	0.37		
840*	422	0.06	524	0.10	598	0.13	665	0.17	726	0.22	780	0.26	829	0.30	875	0.34	918	0.39	957	0.43		
960	449	0.08	552	0.12	626	0.16	689	0.20	748	0.25	802	0.30	852	0.35	898	0.39	942	0.44	982	0.49		
1080	482	0.10	576	0.14	654	0.19	716	0.24	772	0.29	825	0.34	874	0.39	921	0.45	964	0.50	1005	0.55		
1200	517	0.13	600	0.17	681	0.23	744	0.28	799	0.33	850	0.39	898	0.44	943	0.50	987	0.56	1028	0.62		
1320	554	0.16	627	0.20	705	0.27	773	0.33	828	0.38	877	0.44	923	0.50	967	0.56	1010	0.62	1052	0.69		
1440	590	0.20	657	0.24	728	0.30	797	0.37	855	0.44	904	0.50	950	0.56	993	0.63	1034	0.69	1074	0.76		

Continued

External Static Pressure (Inches of Water)												
		1.10		1.20		1.30		1.40		1.50		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive												
600*	941	0.36	977	0.4	1010	0.44	1042	0.48	1074	0.53		
720*	969	0.41	1005	0.45	1040	0.5	1073	0.54	1105	0.5		
840*	995	0.47	1031	0.52	1066	0.56	1100	0.61	1131	0.66		
960	1020	0.54	1057	0.59	1092	0.64	1126	0.69	1158	0.74		
1080	1045	0.61	1082	0.67	1116	0.72	1151	0.77	1183	0.83		
1200	1067	0.68	1104	0.74	1141	0.80	1174	0.86	1207	0.92		
1320	1091	0.75	1127	0.82	1163	0.88	1198	0.95	1230	1.02		
1440	1112	0.83	1150	0.90	1186	0.97	1221	1.04	1254	1.11		
1-hp Standard Motor & Field Supplied High Static Drive^(b)												

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 600, 720, and 840 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 17. Belt drive evaporator fan performance - 3 tons high efficiency - YHC036E3,E4*L,M low & medium gas heat downflow airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
960	—	—	—	—	605	0.15	671	0.19	730	0.23	784	0.27	835	0.31	881	0.36	924	0.41	965	0.45	
1080	—	—	563	0.14	630	0.17	693	0.22	751	0.26	804	0.31	854	0.35	901	0.40	946	0.46	986	0.50	
1200	—	—	596	0.17	659	0.21	718	0.25	773	0.30	825	0.35	875	0.40	921	0.45	964	0.51	1005	0.56	
1320	555	0.16	629	0.20	689	0.25	745	0.29	797	0.34	848	0.40	897	0.45	941	0.51	984	0.56	1026	0.62	
1440	593	0.20	663	0.25	721	0.29	775	0.34	824	0.39	873	0.45	919	0.51	963	0.57	1006	0.63	1046	0.69	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive ^(b)											
960	1004	0.50	1039	0.55	1073	0.59	1105	0.64	1137	0.69	
1080	1025	0.56	1063	0.61	1098	0.66	1132	0.72	1163	0.77	
1200	1046	0.62	1082	0.67	1119	0.73	1153	0.79	1187	0.85	
1320	1064	0.68	1103	0.74	1139	0.80	1174	0.86	1207	0.93	
1440	1085	0.75	1123	0.81	1159	0.88	1193	0.94	—	—	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 18. Belt drive evaporator fan performance - 3 tons high efficiency - YHC036E3,E4*L,M low & medium gas heat horizontal airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive^(a)											1-hp Standard Motor & Drive										
960	—	—	—	—	613	0.15	679	0.20	736	0.24	788	0.28	837	0.32	886	0.37	930	0.42	973	0.47	
1080	—	—	561	0.14	636	0.18	702	0.23	761	0.28	812	0.32	860	0.37	904	0.42	947	0.47	991	0.52	
1200	—	—	589	0.16	661	0.21	726	0.26	784	0.31	836	0.37	884	0.42	929	0.47	970	0.52	1011	0.58	
1320	—	—	619	0.20	687	0.25	750	0.30	807	0.36	859	0.41	909	0.47	953	0.53	995	0.59	1034	0.65	
1440	585	0.19	651	0.24	715	0.29	775	0.35	831	0.40	883	0.47	931	0.53	976	0.59	1019	0.66	1058	0.72	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
960	1014	0.53	1051	0.58	1087	0.63	1121	0.68	1155	0.74	
1080	1031	0.58	1071	0.64	1108	0.69	1142	0.75	1177	0.81	
1200	1049	0.63	1087	0.69	1124	0.75	1161	0.82	1195	0.88	
1320	1071	0.70	1107	0.76	1143	0.82	1178	0.89	1213	0.96	
1440	1095	0.78	1130	0.84	1166	0.91	1199	0.97	—	—	
1-hp Standard Motor & Field Supplied High Static Drive^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 19. Belt drive evaporator fan performance - 3 tons high efficiency - YHC036E3,E4*H high gas heat downflow airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive^(a)											1-hp Standard Motor & Drive										
960	—	—	—	—	609	0.15	671	0.19	730	0.24	785	0.28	835	0.33	881	0.37	924	0.42	966	0.47	
1080	—	—	572	0.14	638	0.18	697	0.23	752	0.27	805	0.32	855	0.37	900	0.42	945	0.47	986	0.53	
1200	—	—	606	0.18	668	0.22	725	0.26	778	0.31	827	0.36	876	0.42	922	0.47	964	0.52	1007	0.58	
1320	573	0.17	641	0.22	700	0.26	754	0.31	805	0.36	853	0.41	898	0.47	942	0.53	985	0.59	1026	0.65	
1440	613	0.21	677	0.27	733	0.31	786	0.36	835	0.42	881	0.47	925	0.53	966	0.59	1007	0.65	1047	0.71	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
960	1004	0.52	1041	0.58	1076	0.63	1109	0.68	1142	0.73	
1080	1026	0.58	1063	0.64	1098	0.69	1133	0.75	1165	0.81	
1200	1046	0.64	1083	0.70	1120	0.76	1154	0.82	1187	0.88	
1320	1065	0.71	1103	0.77	1139	0.83	1175	0.90	1207	0.96	
1440	1086	0.78	1123	0.84	1160	0.91	1194	0.98	1227	1.05	
1-hp Standard Motor & Field Supplied High Static Drive^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 20. Belt drive evaporator fan performance - 3 tons high efficiency - YHC036E3,E4*H high gas heat horizontal airflow

External Static Pressure (Inches of Water)																						
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Field Supplied Low Static Drive^(a)											1-hp Standard Motor & Drive											
960	—	—	—	—	621	0.15	685	0.20	745	0.24	799	0.29	849	0.33	894	0.38	936	0.42	975	0.47		
1080	—	—	580	0.14	649	0.19	711	0.23	768	0.28	821	0.32	871	0.38	917	0.43	960	0.48	1000	0.53		
1200	—	—	613	0.18	679	0.22	738	0.27	793	0.32	845	0.37	892	0.42	939	0.48	982	0.53	1024	0.59		
1320	574	0.17	647	0.22	710	0.26	767	0.31	820	0.37	870	0.42	917	0.48	962	0.53	1004	0.59	1046	0.66		
1440	612	0.21	682	0.26	742	0.31	797	0.37	849	0.42	897	0.48	943	0.54	986	0.60	1028	0.66	1068	0.72		

Continued

External Static Pressure (Inches of Water)												
		1.10		1.20		1.30		1.40		1.50		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive												
960	1012	0.52	1048	0.57	1082	0.62	1116	0.67	1148	0.72		
1080	1039	0.59	1075	0.64	1109	0.69	1142	0.74	1173	0.80		
1200	1063	0.65	1100	0.71	1134	0.77	1168	0.83	1199	0.88		
1320	1085	0.72	1122	0.78	1159	0.85	1193	0.91	1226	0.98		
1440	1107	0.79	1145	0.86	1181	0.93	1216	1.00	1248	1.07		
1-hp Standard Motor & Field Supplied High Static Drive^(b)												

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 21. Belt drive evaporator fan performance - 4 tons high efficiency - THC048E3,4/THC048F3,4 downflow airflow

cfm	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Low Static Drive Accessory Kit^(a)												1-hp Standard Motor & Drive								
800*	—	—	444	0.06	526	0.09	598	0.13	663	0.16	720	0.20	772	0.24	820	0.28	863	0.32	905	0.36
960*	—	—	462	0.08	542	0.12	610	0.15	672	0.19	731	0.23	785	0.27	835	0.32	881	0.36	923	0.41
1120*	399	0.07	485	0.11	559	0.14	626	0.18	687	0.22	743	0.26	795	0.31	846	0.36	893	0.41	937	0.46
1280	429	0.10	510	0.14	581	0.17	644	0.21	703	0.26	757	0.30	809	0.35	857	0.40	903	0.45	947	0.51
1440	459	0.12	537	0.17	604	0.21	665	0.26	722	0.30	774	0.35	823	0.40	871	0.45	916	0.51	959	0.56
1600	492	0.16	567	0.21	630	0.26	689	0.31	742	0.36	793	0.41	842	0.46	887	0.51	932	0.57	974	0.63
1760	526	0.20	597	0.26	658	0.31	713	0.36	765	0.42	814	0.47	860	0.53	905	0.58	947	0.64	989	0.70
1920	561	0.25	627	0.31	687	0.37	739	0.43	790	0.49	838	0.55	882	0.60	924	0.66	966	0.72	1006	0.79

Continued

cfm	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive										
800*	942	0.40	980	0.44	1015	0.48	1047	0.53	1079	0.569
960*	964	0.46	1002	0.50	1038	0.55	1072	0.60	1105	0.65
1120*	979	0.51	1019	0.56	1055	0.62	1091	0.67	1125	0.725
1280	990	0.56	1031	0.62	1069	0.68	1105	0.74	1140	0.80
1440	999	0.62	1040	0.68	1079	0.75	1115	0.81	1152	0.87
1600	1014	0.69	1051	0.75	1089	0.82	1125	0.88	1162	0.95
1760	1028	0.77	1066	0.83	1104	0.90	1139	0.96	1175	1.04
1920	1044	0.85	1083	0.92	1118	0.99	1155	1.06	1188	1.13
1-hp Standard Motor & Field Supplied High Static Drive^(b)										

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 800, 960, and 1120 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 22. Belt drive evaporator fan performance - 4 tons high efficiency - THC048E3,4/THC048F3,4 horizontal airflow

cfm	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
	1-hp Standard Motor & Low Static Drive Accessory Kit^(a)										1-hp Standard Motor & Drive									
800*	368	0.05	481	0.08	562	0.12	623	0.16	677	0.20	730	0.24	780	0.28	825	0.32	870	0.37	911	0.41
960*	392	0.06	501	0.10	587	0.15	655	0.20	711	0.24	759	0.29	804	0.33	848	0.38	891.1	0.43	932	0.48
1120*	420	0.08	519	0.13	607	0.18	679	0.23	740	0.29	792	0.34	837	0.39	879	0.45	918	0.50	955	0.55
1280	449	0.11	541	0.16	625	0.21	700	0.27	764	0.33	819	0.40	868	0.46	912	0.52	951	0.58	989	0.64
1440	482	0.14	567	0.19	644	0.25	718	0.32	783	0.38	841	0.45	892	0.52	939	0.59	982	0.66	1022	0.73
1600	518	0.18	596	0.24	668	0.30	736	0.36	801	0.44	861	0.51	915	0.59	963	0.67	1007	0.74	1048	0.82
1760	555	0.23	625	0.29	694	0.35	757	0.42	820	0.50	879	0.58	933	0.66	984	0.74	1030	0.83	1072	0.91
1920	593	0.28	657	0.35	723	0.42	783	0.49	840	0.57	897	0.65	951	0.74	1001	0.83	1049	0.92	1093	1.01
											1-hp Standard Motor & Field Supplied High Static Drive^(b)									

Continued

cfm	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
	1-hp Standard Motor & Drive									
800*	950	0.46	986	0.51	1024	0.56	1057	0.602	1090	0.65
960*	972	0.53	1009	0.58	1045	0.64	1080	0.692	1111	0.74
1120*	994	0.61	1031	0.67	1067	0.73	1101	0.786	1134	0.85
1280	1023	0.70	1057	0.76	1090	0.82	1123	0.89	1157	0.95
1440	1057	0.80	1091	0.86	1123	0.93	1155	1.00	1184	1.07
1600	1087	0.90	1123	0.97	1156	1.05	1187	1.12	1217	1.20
1760	1113	1.00	1150	1.08	1184	1.17	1219	1.25	1250	1.34
1920	1135	1.10	1174	1.19	1210	1.29	1244	1.38	1278	1.47
	1-hp Standard Motor & Field Supplied High Static Drive									

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 800, 960, and 1120 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 23. Belt drive evaporator fan performance - 4 tons high efficiency - YHC048E3,4/F3,4*L,M low & medium gas heat downflow airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
1280	—	—	—	—	589	0.18	652	0.23	710	0.27	763	0.32	812	0.37	858	0.42	905	0.47	949	0.53	
1440	—	—	546	0.18	614	0.22	675	0.27	731	0.32	782	0.37	830	0.42	876	0.48	919	0.53	961	0.59	
1600	—	—	575	0.22	641	0.27	699	0.32	752	0.37	803	0.43	851	0.49	895	0.54	938	0.60	978	0.66	
1760	538	0.21	606	0.27	668	0.32	725	0.38	776	0.44	826	0.50	872	0.56	916	0.62	958	0.68	997	0.75	
1920	574	0.27	638	0.32	696	0.38	752	0.45	802	0.51	850	0.57	895	0.63	938	0.70	978	0.77	1018	0.84	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
1280	993	0.58	1032	0.64	1070	0.70	1107	0.76	1143	0.82	
1440	1003	0.65	1043	0.71	1082	0.77	1118	0.84	1154	0.90	
1600	1017	0.72	1054	0.78	1092	0.85	1129	0.92	1165	0.98	
1760	1036	0.81	1073	0.88	1108	0.94	1142	1.01	1177	1.08	
1920	1056	0.91	1092	0.98	1127	1.04	1160	1.11	1193	1.19	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 24. Belt drive evaporator fan performance - 4 tons high efficiency - YHC048E3,4/F3,4*L,M low & medium gas heat horizontal airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
1280	—	—	554	0.16	622	0.21	685	0.26	741	0.31	794	0.36	842	0.42	888	0.47	931	0.53	973	0.59	
1440	—	—	590	0.21	652	0.26	712	0.31	767	0.36	818	0.42	866	0.48	911	0.54	953	0.60	995	0.67	
1600	561	0.21	628	0.26	686	0.32	741	0.37	794	0.43	844	0.49	890	0.55	935	0.62	976	0.68	1017	0.75	
1760	602	0.27	667	0.33	722	0.38	773	0.44	822	0.50	871	0.57	917	0.63	960	0.70	1001	0.77	1040	0.84	
1920	644	0.33	706	0.40	760	0.46	809	0.52	855	0.59	900	0.66	944	0.73	987	0.80	1027	0.87	1066	0.95 ^(b)	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
1280	1012	0.65	1052	0.72	1090	0.78	1127	0.84	1162	0.91	
1440	1032	0.73	1070	0.80	1107	0.87	1142	0.94	1175	1.01	
1600	1055	0.82	1093	0.89	1128	0.96	1162	1.03	1195	1.11	
1760	1078	0.91	1114	0.99	1150	1.06	1183	1.14	1217	1.22	
1920	1103	1.02	1139	1.10	1174	1.18	1207	1.26	1239	1.34	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 25. Belt drive evaporator fan performance - 4 tons high efficiency - YHC048E3,4/F3,4*H high gas heat downflow airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
1280	—	—	528	0.15	600	0.19	661	0.23	717	0.28	771	0.33	821	0.38	870	0.43	915	0.48	959	0.54	
1440	—	—	556	0.18	626	0.23	687	0.28	740	0.33	790	0.38	839	0.43	886	0.49	930	0.54	974	0.61	
1600	—	—	586	0.22	651	0.28	712	0.34	766	0.39	814	0.44	860	0.50	904	0.55	947	0.61	990	0.68	
1760	554	0.22	619	0.28	680	0.33	738	0.39	792	0.46	841	0.52	884	0.58	926	0.63	967	0.69	1007	0.76	
1920	592	0.28	653	0.34	710	0.39	765	0.46	817	0.53	866	0.60	912	0.67	953	0.73	992	0.79	1028	0.85	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
1280	1003	0.60	1045	0.66	1083	0.71	1121	0.77	1156	0.83	
1440	1013	0.66	1054	0.73	1094	0.79	1132	0.86	1168	0.92	
1600	1029	0.74	1069	0.81	1106	0.87	1142	0.94	1177	1.01	
1760	1046	0.82	1084	0.89	1121	0.96	1156	1.03	1191	1.11	
1920	1066	0.92	1103	0.99	1139	1.06	1174	1.14	1206	1.21	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 26. Belt drive evaporator fan performance - 4 tons high efficiency - YHC048E3,4/F3,4*H high gas heat horizontal airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
1280	—	—	561	0.16	626	0.20	684	0.25	739	0.29	792	0.34	842	0.39	890	0.45	935	0.50	977	0.56	
1440	—	—	595	0.20	659	0.25	715	0.30	766	0.35	816	0.40	864	0.45	909	0.51	953	0.57	995	0.63	
1600	561	0.20	628	0.25	694	0.31	748	0.36	798	0.41	843	0.47	888	0.52	932	0.58	974	0.64	1015	0.71	
1760	603	0.26	665	0.31	727	0.37	782	0.43	830	0.49	875	0.54	917	0.60	958	0.67	998	0.73	1038	0.80	
1920	646	0.32	705	0.38	761	0.44	816	0.52	864	0.58	908	0.63	949	0.70	988	0.76	1026	0.83	1063	0.90 ^(b)	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
1280	1018	0.62	1058	0.68	1095	0.74	1131	0.81	1166	0.87	
1440	1036	0.69	1075	0.76	1113	0.82	1148	0.89	1183	0.96	
1600	1055	0.77	1093	0.84	1130	0.91	1166	0.98	1201	1.05	
1760	1075	0.86	1113	0.93	1149	1.00	1184	1.08	1219	1.15	
1920	1100	0.97	1135	1.04	1171	1.11	1204	1.19	1237	1.26	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 27. Belt drive evaporator fan performance - 5 tons high efficiency - THC060E3,4/F3,4 downflow airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Low Static Drive Accessory Kit ^(a)															1-hp Standard Motor & Drive						
1000*	379	0.06	469	0.09	546	0.12	614	0.16	676	0.20	732	0.24	784	0.28	833	0.33	879	0.37	922	0.42	
1200*	416	0.09	498	0.12	571	0.158	635	0.20	694	0.24	749	0.28	800	0.33	849	0.38	894	0.43	938	0.48	
1400*	456	0.12	531	0.16	599	0.20	662	0.25	717	0.29	769	0.34	820	0.39	867	0.44	911	0.50	955	0.56	
1600	499	0.16	570	0.21	631	0.25	691	0.31	745	0.36	794	0.41	842	0.46	887	0.52	930	0.57	972	0.63	
1800	544	0.22	609	0.27	667	0.32	721	0.37	773	0.43	823	0.49	868	0.55	911	0.61	953	0.67	992	0.73	
2000	589	0.29	650	0.35	706	0.40	755	0.46	804	0.52	851	0.58	897	0.65	938	0.71	978	0.77	1017	0.84	
2200	636	0.37	692	0.43	745	0.50	793	0.56	838	0.62	882	0.68	925	0.75	967	0.83	1007	0.90	1044	0.97	
2400	683	0.47	736	0.54	785	0.61	833	0.68	875	0.74	916	0.81	956	0.88	996	0.95	1036	1.03	1073	1.11	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm
1-hp Standard Motor & Drive											
1000*	962	0.46	1002	0.51	1040	0.56	1076	0.61	1111	0.66	
1200*	979	0.54	1018	0.50	1055	0.64	1091	0.70	1126	0.75	
1400*	996	0.61	1035	0.67	1072	0.73	1107	0.79	1143	0.85	
1600	1013	0.70	1051	0.76	1088	0.82	1124	0.89	1160	0.96	
1800	1031	0.79	1070	0.86	1106	0.93	1142	1.00	1176	1.07	
2000	1054	0.91	1091	0.98	1126	1.04	1161	1.12	1195	1.19	
2200	1080	1.04	1115	1.11	1148	1.18	1183	1.26	1215	1.33	
2400	1108	1.19	1142	1.27	1176	1.34	1207	1.42	1238	1.49	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 1000, 1200, and 1400 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 28. Belt drive evaporator fan performance - 5 tons high efficiency - THC060E3,4/F3,4 horizontal airflow

cfm	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Low Static Drive Accessory Kit^(a)												1-hp Standard Motor & Drive									
1000*	412	0.07	517	0.10	601	0.15	664	0.19	716	0.23	764	0.27	810	0.31	853	0.35	897	0.40	939	0.44	
1200*	456	0.10	542	0.14	631	0.19	702	0.24	758	0.29	808	0.33	851	0.38	892	0.43	932	0.48	970	0.53	
1400*	502	0.14	580	0.18	654	0.23	730	0.29	795	0.35	848	0.41	893	0.46	936	0.52	974	0.58	1010	0.63	
1600	550	0.19	622	0.24	688	0.29	753	0.35	820	0.41	881	0.49	930	0.55	975	0.62	1015	0.68	1052	0.75	
1800	598	0.25	668	0.31	728	0.37	785	0.42	843	0.49	903	0.56	960	0.64	1010	0.72	1053	0.80	1092	0.87	
2000	648	0.33	714	0.39	771	0.46	824	0.52	875	0.58	927	0.66	982	0.74	1034	0.83	1082	0.91	1126	1.00	
2200	699	0.42	762	0.50	816	0.57	866	0.63	914	0.70	960	0.77	1006	0.85	1056	0.94	1106	1.03	1152	1.13	
2400	750	0.54	810	0.61	863	0.69	911	0.77	956	0.84	999	0.92	1042	1.00	1084	1.08	1130	1.17	1176	1.27	
1-hp Standard Motor & Field Supplied High Static Drive^(b)																					

Continued

cfm	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive										
1000*	977	0.49	1014	0.53	1049	0.58	1084	0.63	1118	0.68
1200*	1006	0.58	1042	0.63	1078	0.69	1112	0.74	1145	0.80
1400*	1045	0.69	1078	0.74	1111	0.8	1144	0.86	1174	0.92
1600	1087	0.81	1121	0.88	1152	0.94	1182	1.00	1213	1.07
1800	1129	0.95	1163	1.02	1195	1.09	1226	1.16	1255	1.23
2000	1165	1.08	1201	1.17	1236	1.25	1268	1.33	1298	1.41
2200	1196	1.23	1237	1.33	1271	1.42	1305	1.51	1338	1.60
2400	1219	1.37	1261	1.48	1301	1.58	1339	1.69	1373	1.79
1-hp Standard Motor & Field Supplied High Static Drive^(b)										

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
 2. Data includes pressure drop due to standard filters and wet coils. Data does not include pressure drop due to reheat coil.
 3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
 4. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
 5. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
- * For 1000, 1200, and 1400 CFM, unit application below 320 CFM/Ton are only applicable on T_C models only (No Gas Heat). See below for restrictions.
 * For electric heat applications, minimum airflow is set to 320/ton, unless specified otherwise, values found in electric heat temperature rise table.
 * Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crankcase Heaters are required on applications below 320 CFM/Ton.

(a) BAYLSDR006AB
 (b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 29. Belt drive evaporator fan performance - 5 tons high efficiency - YHC060E3,4/F3,4*L,M low & medium gas heat downflow airflow

External Static Pressure (Inches of Water)																						
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Field Supplied Low Static Drive^(a)											1-hp Standard Motor & Drive											
1600	—	—	583	0.22	648	0.27	705	0.32	755	0.37	804	0.42	852	0.47	897	0.53	941	0.59	982	0.65		
1800	—	—	623	0.28	683	0.34	740	0.40	790	0.45	835	0.50	879	0.56	922	0.62	964	0.68	1004	0.74		
2000	605	0.30	665	0.36	721	0.42	774	0.48	824	0.55	870	0.61	911	0.66	951	0.73	991	0.79	1028	0.86		
2200	653	0.39	709	0.45	762	0.51	812	0.58	859	0.65	905	0.72	948	0.79	986	0.86	1022	0.92	1057	0.99		
2400	701	0.49	756	0.56	803	0.63	851	0.70	896	0.77	939	0.85	982	0.93	1022	1.00	1057	1.07	1092	1.14		

Continued

External Static Pressure (Inches of Water)												
		1.10		1.20		1.30		1.40		1.50		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive												
1600	1024	0.71	1061	0.77	1099	0.83	1136	0.90	1170	0.96		
1800	1044	0.81	1081	0.87	1118	0.94	1155	1.01	1188	1.08		
2000	1067	0.93	1103	1.00	1139	1.07	1175	1.14	1209	1.22		
2200	1094	1.06	1129	1.13	1163	1.21	1197	1.29	1229	1.36		
2400	1124	1.21	1157	1.29	1189	1.37	1222	1.45	—	—		
1-hp Standard Motor & Field Supplied High Static Drive^(b)												

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 30. Belt drive evaporator fan performance - 5 tons high efficiency - YHC060E3,4/F3,4*L,M low & medium gas heat horizontal airflow

External Static Pressure (Inches of Water)																						
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive											
1600	566	0.21	633	0.26	694	0.31	747	0.36	798	0.41	848	0.47	895	0.52	939	0.58	981	0.65	1021	0.71		
1800	621	0.28	681	0.33	739	0.39	790	0.45	837	0.51	884	0.57	929	0.63	971	0.69	1013	0.76	1052	0.82		
2000	676	0.37	731	0.43	785	0.49	836	0.56	880	0.62	923	0.69	966	0.75	1006	0.82	1046	0.89	1084	0.96		
2200	732	0.48	784	0.54	832	0.61	881	0.68	927	0.75	967	0.83	1005	0.90	1044	0.97	1082	1.04	1118	1.12		
2400	789	0.61	838	0.68	882	0.75	927	0.82	972	0.90	1012	0.98	1049	1.06	1085	1.14	1121	1.22	1155	1.30 ^(b)		

Continued

External Static Pressure (Inches of Water)												
		1.10		1.20		1.30		1.40		1.50		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive												
1600	1060	0.78	1097	0.84	1135	0.91	1169	0.98	1203	1.04		
1800	1090	0.89	1126	0.96	1161	1.04	1195	1.11	1229	1.19		
2000	1121	1.03	1156	1.10	1192	1.18	1224	1.26	1257	1.34		
2200	1155	1.19	1189	1.27	1223	1.34	1256	1.42	—	—		
2400	1190	1.38	1223	1.46	—	—	—	—	—	—		
1-hp Standard Motor & Field Supplied High Static Drive ^(b)												

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 31. Belt drive evaporator fan performance - 5 tons high efficiency - YHC060E3,4/F3,4*H high gas heat downflow airflow

External Static Pressure (Inches of Water)																						
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive											
1600	—	—	595	0.22	658	0.27	716	0.32	768	0.37	817	0.42	864	0.47	910	0.53	954	0.59	996	0.65		
1800	—	—	637	0.29	697	0.34	752	0.40	802	0.45	849	0.51	893	0.56	936	0.62	979	0.68	1019	0.75		
2000	621	0.31	680	0.36	737	0.42	790	0.49	838	0.55	884	0.61	927	0.67	967	0.73	1007	0.80	1046	0.86		
2200	671	0.40	726	0.46	779	0.52	829	0.59	876	0.66	919	0.72	962	0.79	1002	0.86	1039	0.93	1076	1.00		
2400	721	0.50	773	0.57	822	0.64	870	0.71	916	0.78	957	0.86	998	0.93	1036	1.00	1074	1.08	1109	1.15		

Continued

External Static Pressure (Inches of Water)												
		1.10		1.20		1.30		1.40		1.50		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1-hp Standard Motor & Drive												
1600	1037	0.72	1076	0.78	1114	0.85	1151	0.91	1184	0.98		
1800	1058	0.82	1096	0.88	1133	0.95	1169	1.02	1204	1.10		
2000	1083	0.93	1120	1.00	1155	1.07	1189	1.15	1224	1.23		
2200	1111	1.07	1146	1.14	1181	1.22	1214	1.29	1248	1.37		
2400	1144	1.23	1177	1.30	1210	1.38	1241	1.46	1274	1.54		
1-hp Standard Motor & Field Supplied High Static Drive ^(b)												

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Evaporator Fan Performance - High Efficiency

Table 32. Belt drive evaporator fan performance - 5 tons high efficiency - YHC060E3,4/F3,4*H high gas heat horizontal airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Field Supplied Low Static Drive ^(a)											1-hp Standard Motor & Drive										
1600	570	0.21	639	0.26	703	0.32	760	0.37	809	0.41	854	0.46	894	0.52	936	0.58	977	0.64	1019	0.70	
1800	620	0.28	689	0.34	746	0.40	801	0.46	851	0.52	896	0.57	937	0.62	974	0.68	1011	0.75	1048	0.81	
2000	671	0.36	741	0.44	792	0.50	844	0.57	893	0.64	939	0.71	980	0.76	1019	0.82	1054	0.88	1087	0.95	
2200	723	0.46	791	0.55	843	0.62	889	0.69	936	0.77	981	0.85	1022	0.92	1061	0.99	1097	1.05	1131	1.11	
2400	776	0.58	841	0.68	895	0.76	937	0.84	981	0.91	1023	1.00	1064	1.09	1103	1.17	1140	1.25	1173	1.31 ^(b)	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
1-hp Standard Motor & Drive											
1600	1057	0.76	1096	0.83	1133	0.90	1167	0.96	1201	1.03	
1800	1086	0.88	1123	0.95	1159	1.02	1192	1.09	1226	1.17	
2000	1119	1.02	1153	1.09	1188	1.17	1221	1.24	1253	1.32	
2200	1162	1.18	1193	1.25	1223	1.33	1253	1.41	1284	1.49	
2400	1206	1.38	1236	1.44	1266	1.52	1294	1.61	1320	1.69	
1-hp Standard Motor & Field Supplied High Static Drive ^(b)											

Notes:

1. For standard evaporator fan speed (rpm), reference the standard motor and sheave/fan speed applicable table in the fan performance section.
2. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
3. Data does not include pressure drop due to reheat coil.
4. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
5. 1-hp Fan Motor Heat (MBh) = 2.7672 x Fan bhp + 0.4705.
6. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(a) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

(b) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Fan Performance

Table 33. Standard motor & sheave/fan speed (rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
3	T/YHC036E	AK51x3/4"	N/A	765	835	905	975	1045	1115
4	T/YHC048E	AK54x3/4"	N/A	729	794	860	926	911	1057
4	T/YHC048F	AK54x3/4"	N/A	729	794	860	926	911	1057
5	T/YHC060E	AK49x3/4"	N/A	801	871	942	1012	1083	1154
5	T/YHC060F	AK49x3/4"	N/A	801	871	942	1012	1083	1154

Note: Factory set at 3 turns open.

Table 34. Standard motor & low static drive accessory sheave/fan speed (rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
3	YHC036E	AK71x3/4"	N/A	556	607	657	707	758	808
3	THC036E	AK99x3/4"	N/A	385	424	462	501	539	578
4	YHC048E,F	AK71x3/4"	N/A	556	607	657	707	758	808
4	THC048E,F	AK99x3/4"	N/A	385	424	462	501	539	578
5	YHC060E,F	AK71x3/4"	N/A	556	607	657	707	758	808
5	THC060E,F	AK99x3/4"	N/A	385	424	462	501	539	578

Note: Factory set at 3 turns open.

Table 35. Standard motor & high static drive accessory sheave/fan speed (rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
3	T/YHC036E	AK41x3/4"	N/A	N/A	967	1040	1113	1187	N/A
4	T/YHC048E,F	AK41x3/4"	N/A	N/A	966	1048	1132	1215	N/A
5	T/YHC060E,F	AK41x3/4"	N/A	N/A	961	1041	1122	1203	N/A

Note: Factory set at 3 turns open.

Table 36. Outdoor sound power level - dB (ref. 10 - 12 W)

Tons	Unit Model Number	Octave Center Frequency								Overall dBA
		63	125	250	500	1000	2000	4000	8000	
3	T/YSC0(33,036)G	85	86	79	76	73	69	65	63	79
4	T/YSC0(43,48)G ^(a)	90	82	79	76	75	70	66	64	80
5	T/YSC060G	84	80	80	79	77	72	67	65	81
3	T/YHC036E	79	85	79	79	77	71	67	58	81
4	T/YHC048E	80	86	84	85	83	79	73	67	87
4	T/YHC048F	80	86	84	85	83	79	73	67	87
5	T/YHC060E	80	86	84	85	83	79	73	67	87
5	T/YHC060F	80	86	84	85	83	79	73	67	87

Note: Tests follow ARI270-95.

(a) T/YSC063G models have same sound ratings as T/YSC0(43,48)G.

Table 37. Outdoor sound power level - dB (ref. 10 - 12 W)

Tons	Unit Model Number	Octave Center Frequency								Overall dBA
		63	125	250	500	1000	2000	4000	8000	
3	WSC036H	85	86	79	76	73	69	65	63	79
4	WSC048H	90	82	79	76	75	70	66	66	80
5	WSC060H	81	87	84	85	83	78	73	67	87

Note: Tests follow ARI270-95.

Table 38. Static pressure drop through accessories (inches water column) - 3 to 5 tons

Tons	Unit Model Number	cfm	Standard Filters ^(d)	2" MERV 8 Filter	2" MERV 13 Filter	Economizer with OA/RA Dampers ^(a)						Electric Heater Accessory (kW) ^{(b),(c)}			
						100% OA	100% RA	100% OA	100% RA	100% OA	100% RA	5-6	9-18	23-36	54
						Downflow		Low Leak ^(e)		Horizontal					
3	T/YSC033/036G	960	0.01	0.03	0.04	0.04	0.01	0.11	0.04	0.04	0.01	0.01	0.01	0.01	—
3	T/YSC033/036G	1200	0.02	0.04	0.05	0.06	0.01	0.17	0.07	0.06	0.01	0.02	0.02	0.02	—
3	T/YSC033/036G	1440	0.03	0.05	0.06	0.08	0.02	0.23	0.09	0.08	0.01	0.02	0.03	0.03	—
4	T/YSC043/048G	1280	0.03	0.05	0.06	0.09	0.02	0.08	0.04	0.09	0.01	0.02	0.03	0.03	—
4	T/YSC043/048G	1600	0.04	0.07	0.07	0.13	0.04	0.13	0.08	0.13	0.02	0.04	0.05	0.05	—
4	T/YSC043/048G	1920	0.06	0.10	0.08	0.17	0.06	0.20	0.09	0.17	0.02	0.05	0.06	0.08	—
5	T/YSC060/063G	1600	0.04	0.07	0.07	0.13	0.04	0.14	0.08	0.13	0.02	0.04	0.05	0.05	—
5	T/YSC060/063G	2000	0.06	0.10	0.09	0.18	0.07	0.22	0.10	0.18	0.02	0.06	0.07	0.08	—
5	T/YSC060/063G	2400	0.08	0.13	0.10	0.25	0.11	0.31	0.11	0.25	0.03	0.08	0.10	0.12	—

- (a) OA = Outside Air and RA = Return Air.
- (b) Nominal kW ratings at 240, 480, 600 volts. Heaters only available on T units.
- (c) Electric heaters restricted on applications below 320 cfm/Ton.
- (d) Tested with standard filters. Difference in pressure drop should be considered when utilizing optional 2" MERV 8 and MERV 13 filters.
- (e) Low Leak - Downflow only.

Table 39. Static pressure drop through accessories (inches water column) - 3 to 5 tons

Tons	Unit Model Number	cfm	Std. Filters ^(d)	2" MERV 8 Filter	2" MERV 13 Filter	Reheat Coil	Economizer with OA/RA Dampers ^(a)						Electric Heater Accessory (kW) ^{(b),(c)}			
							100% OA	100% RA	100% OA	100% RA	100% OA	100% RA	5-6	9-18	23-36	54
							Downflow		Low Leak ^(e)		Horizontal					
3	T/YHC036E3,4,W	600	0.01	0.02	0.03	0.04	0.03	0.01	0.04	0.01	0.03	0.01	—	—	—	—
3	T/YHC036E3,4,W	960	0.01	0.03	0.04	0.08	0.04	0.01	0.11	0.04	0.04	0.01	0.01	0.01	0.01	—
3	T/YHC036E3,4,W	1200	0.02	0.04	0.05	0.10	0.06	0.01	0.17	0.07	0.06	0.01	0.02	0.02	0.02	—
3	T/YHC036E3,4,W	1440	0.03	0.05	0.06	0.14	0.08	0.02	0.23	0.09	0.08	0.01	0.02	0.03	0.03	—
4	T/YHC048E/F3,4,W	800	0.01	0.03	0.04	0.03	0.06	0.00	0.02	0.03	0.03	0.01	—	—	—	—
4	T/YHC048E/F3,4,W	1280	0.02	0.04	0.03	0.07	0.08	0.00	0.08	0.04	0.04	0.01	0.01	0.00	0.01	—
4	T/YHC048E/F3,4,W	1600	0.03	0.06	0.05	0.09	0.09	0.01	0.13	0.08	0.05	0.02	0.02	0.01	0.02	—
4	T/YHC048E/F3,4,W	1920	0.05	0.08	0.07	0.12	0.10	0.01	0.20	0.09	0.07	0.02	0.02	0.01	0.03	—
5	T/YHC060E/F3,4,W	1000	0.01	0.04	0.03	0.05	0.06	0.01	0.04	0.03	0.06	0.01	—	—	—	—
5	T/YHC060E/F3,4,W	1600	0.03	0.06	0.08	0.09	0.09	0.01	0.14	0.08	0.05	0.01	0.02	0.01	0.02	—

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Table 39. Static pressure drop through accessories (inches water column) - 3 to 5 tons (continued)

							Economizer with OA/RA Dampers ^(a)						Electric Heater Accessory (kW) ^{(b),(c)}			
Tons	Unit Model Number	cfm	Std. Filters ^(d)	2" MERV 8 Filter	2" MERV 13 Filter	Reheat Coil	100% OA	100% RA	100% OA	100% RA	100% OA	100% RA	5-6	9-18	23-36	54
							Downflow		Low Leak ^(e)		Horizontal					
5	T/YHC060E/F3,4,W	2000	0.05	0.08	0.11	0.13	0.11	0.01	0.22	0.10	0.07	0.02	0.02	0.02	0.03	—
5	T/YHC060E/F3,4,W	2400	0.07	0.10	0.13	0.17	0.12	0.03	0.31	0.11	0.09	0.04	0.03	0.02	0.04	—

(a) OA = Outside Air and RA = Return Air.

(b) Nominal kW ratings at 240, 480, 600 volts. Heaters only available on T units.

(c) Electric heaters restricted on applications below 320 cfm/Ton.

(d) Tested with standard filters. Difference in pressure drop should be considered when utilizing optional 2" MERV 8 and MERV 13 filters.

(e) Low Leak - Downflow only.

Table 40. Static pressure drop through accessories (inches water column) - 3 to 5 tons

						Economizer with OA/RA Dampers ^(a)						Electric Heater Accessory (kW) ^{(b),(c)}			
Tons	Unit Model Number	cfm	Standard Filters ^(d)	2" MERV 7 Filter	2" MERV 13 Filter	100% OA	100% RA	100% OA	100% RA	100% OA	100% RA	5-6	9-18	23-36	54
						Downflow		Low Leak ^(e)		Horizontal					
3	WSC036H	960	0.01	0.03	0.04	0.04	0.01	0.11	0.04	0.04	0.01	0.01	0.01	0.01	—
3	WSC036H	1200	0.02	0.04	0.05	0.06	0.01	0.17	0.07	0.06	0.01	0.02	0.02	0.02	—
3	WSC036H	1440	0.03	0.05	0.06	0.08	0.02	0.23	0.09	0.08	0.01	0.02	0.03	0.03	—
4	WSC048H	1280	0.03	0.05	0.06	0.09	0.02	0.08	0.04	0.09	0.01	0.02	0.03	0.03	—
4	WSC048H	1600	0.04	0.07	0.07	0.13	0.04	0.13	0.08	0.13	0.02	0.04	0.05	0.05	—
4	WSC048H	1920	0.06	0.10	0.08	0.17	0.06	0.20	0.09	0.17	0.02	0.05	0.06	0.08	—
5	WSC060H	1600	0.03	0.06	0.05	0.09	0.01	0.14	0.08	0.05	0.01	0.01	0.01	0.02	—
5	WSC060H	2000	0.05	0.08	0.07	0.11	0.01	0.22	0.10	0.07	0.02	0.02	0.01	0.03	—
5	WSC060H	2400	0.07	0.10	0.10	0.12	0.03	0.31	0.11	0.09	0.03	0.03	0.02	0.04	—

(a) OA = Outside Air and RA = Return Air.

(b) Nominal kW ratings at 240, 480, 600 volts.

(c) Electric heaters restricted on applications below 320 cfm/ton.

(d) Tested with standard filters. Difference in pressure drop should be considered when utilizing optional 2" MERV 8 and MERV 13 filters.

(e) Low Leak - Downflow only.

Heating Performance

Table 41. Electric heater voltage correction factors (applicable to auxiliary heat capacity)

Nominal Voltage	Distribution Voltage	Capacity Multiplier
240	208	0.751
240	230	0.918
240	240	1.000
480	440	0.840
480	460	0.918
480	480	1.000
600	540	0.810
600	575	0.918
600	600	1.000

Table 42. 3 to 5 tons air temperature rise across electric heaters (°F)

		3 Tons ^(a) 1200 cfm		4 Tons 1600 cfm		5 Tons ^(b) 2000 cfm	
kW	Stages	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase
		THC036E1	T*C036E3,E4,EW	THC048E/F1	T*C048E/F3, E/F4, EW	THC060E/F1	T*C060E/F3, E/F4, EW
5.00	1	13.8	—	10.5	—	8.5	—
6.00	1	—	18.5	—	10.5	—	11.4
10.00	2	26.8	—	20.3	—	16.3	—
12.00	2	—	36.2	—	22.3	—	21.5
13.80	2	36.9	—	27.8	—	22.3	—
17.40	2	—	48.2	—	33.0	—	30.0
17.60	2	—	—	35.5	—	28.3	—
23.0	2	—	—	—	—	—	38.8

Notes:

- For minimum design airflow, see airflow performance table for each unit.
 - To calculate temp rise at different airflow, use the following formula: Temp. rise across Electric Heater = kWx3414/1.08xCFM.
- (a) The minimum allowable airflow for a 3 ton with a 17.4 kW heater is 1080 cfm.
 (b) The minimum allowable airflow for a 5 ton unit with a 23.0 kW heater is 1900 cfm.

Table 43. Air temperature rise across electric heaters (°F)

		3 Tons ^(a) 1200 cfm	4 Tons 1600 cfm	5 Tons ^(b) 2000 cfm
kW	Stages	Three Phase	Three Phase	Three Phase
		WSC036E3,E4,EW	WSC048E3, E4, EW	WSC060E3, E4, EW
5.00	1	—	—	—
6.00	1	18.5	10.5	11.4
10.00	2	—	—	—
12.00	2	36.2	22.3	21.5
13.80	2	—	—	—
17.40	2	48.2	33.0	30.0
17.60	2	—	—	—
23.0	2	—	—	38.8

Notes:

- For minimum design airflow, see airflow performance table for each unit.
 - To calculate temp rise at different airflow, use the following formula: Temp. rise across Electric Heater = kWx3414/1.08xCFM.
- (a) The minimum allowable airflow for a 3 ton with a 17.4 kW heater is 1080 cfm.
 (b) The minimum allowable airflow for a 5 ton unit with a 23.0 kW heater is 1900 cfm.

Heating Performance

Table 44. Reheat temperature rise table

Leaving Evaporator Dry Bulb									
Tons	Unit Model No.	CFM	35	40	45	50	55	60	65
3	THC	600	26.3	24.6	22.8	21.0	19.2	17.5	15.8
3	THC	720	24.4	22.8	21.1	19.4	17.7	16.1	14.6
3	THC	840	22.8	21.3	19.8	18.3	16.7	15.2	13.7
3	T/YHC	960	21.3	20.0	18.6	17.2	15.7	14.3	13.0
3	T/YHC	1080	20.0	18.8	17.5	16.2	14.9	13.6	12.3
3	T/YHC	1200	18.9	17.7	16.5	15.3	14.1	12.9	11.7
3	T/YHC	1320	17.9	16.8	15.7	14.6	13.4	12.2	11.1
3	T/YHC	1440	17.0	16.0	14.9	13.9	12.8	11.7	10.6
4	THC	800	18.1	16.7	15.4	14.1	12.8	11.6	10.6
4	THC	960	16.5	15.3	14.1	12.9	11.7	10.6	9.6
4	THC	1120	15.1	14.0	12.9	11.9	10.8	9.8	8.8
4	T/YHC	1280	14.0	13.0	12.0	11.0	10.0	9.1	8.2
4	T/YHC	1440	13.1	12.2	11.3	10.3	9.4	8.5	7.7
4	T/YHC	1600	12.3	11.4	10.6	9.7	8.8	8.0	7.2
4	T/YHC	1760	11.6	10.8	10.0	9.2	8.4	7.6	6.8
4	T/YHC	1920	10.9	10.2	9.4	8.7	7.9	7.2	6.4
5	THC	1000	24.4	22.9	21.5	20.1	18.8	17.4	16.1
5	THC	1200	22.4	21.1	19.8	18.5	17.3	16.1	14.9
5	THC	1400	20.8	19.6	18.4	17.2	16.1	15.0	13.9
5	T/YHC	1600	19.4	18.3	17.2	16.1	15.0	14.0	13.0
5	T/YHC	1800	18.1	17.1	16.1	15.1	14.2	13.2	12.2
5	T/YHC	2000	17.0	16.1	15.2	14.3	13.4	12.4	11.5
5	T/YHC	2200	16.1	15.3	14.4	13.5	12.6	11.8	10.9
5	T/YHC	2400	15.2	14.4	13.7	12.8	12.0	11.2	10.4

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Table 45. Unit wiring - standard efficiency

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor ^(a)		Oversized Indoor Fan Motor	
			MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
3	T/YSC033G3	187-253	19.9	30.0	—	—
3	T/YSC033G4	414-506	9.5	15.0	—	—
3	T/YSC033GW	517-633	7.6	15.0	—	—
4	T/YSC043G3	187-253	25.4	35.0	—	—
4	T/YSC043G4	414-506	11.0	15.0	—	—
4	T/YSC043GW	517-633	9.4	15.0	—	—
5	T/YSC063G3	187-253	28.3	40.0	—	—
5	T/YSC063G4	414-506	12.9	20.0	—	—
5	T/YSC063GW	517-633	10.6	15.0	—	—
3	T/YSC036G3	187-253	19.9	30	—	—
3	T/YSC036G4	414-506	9.5	15	—	—
3	T/YSC036GW	517-633	7.6	15	—	—
4	T/YSC048G3	187-253	25.4	35	—	—
4	T/YSC048G4	414-506	11.0	15	—	—
4	T/YSC048GW	517-633	9.4	15	—	—
5	T/YSC060G3	187-253	28.2	40	—	—
5	T/YSC060G4	414-506	12.0	15	—	—
5	T/YSC060GW	517-633	9.9	15	—	—

(a) No optional motors available for 3 to 5 tons. The standard motor is a multispeed, direct drive motor. The standard motor for 3-phase (6 to 8½ ton models) is a belt drive motor.

Table 46. Unit wiring - standard efficiency heat pump

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor ^(a)		Oversized Indoor Fan Motor	
			MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
3	WSC036H3	187-253	26	40	30	40
3	WSC036H4	414-506	11	15	14	20
3	WSC036HW	517-633	12	15	12	15
4	WSC048H3	187-253	27	40	30	40
4	WSC048H4	414-506	12	15	14	15
4	WSC048HW	517-633	13	15	13	15
5	WSC060H3	187-253	32	45	34	50
5	WSC060H4	414-506	15	20	16	20
5	WSC060HW	517-633	13	15	13	15

(a) The standard motor for WSC036/048/060H is a multi-speed direct drive motor. An optional high static motor is available.

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Table 47. Unit wiring with electric heat (single point connection) - standard efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase								
3	TSC033G3	BAYHTRE306*	4.5/6.0	1	22.8/25.1	30/30	—	—
3	TSC033G3	BAYHTRE312*	9.0/12.0	2	38.4/43.3	40/45	—	—
3	TSC033G3	BAYHTRE318*	13.1/17.4	2	52.5/59.5	60/60	—	—
4	TSC043G3	BAYHTRE306*	4.5/6.0	1	25.4/26.6	35/35	—	—
4	TSC043G3	BAYHTRE312*	9.0/12.0	2	39.9/44.8	40/45	—	—
4	TSC043G3	BAYHTRE318*	13.1/17.4	2	54.0/61.0	60/70	—	—
5	TSC063G3	BAYHTRE306*	4.5/6.0	1	28.3/28.3	40/40	—	—
5	TSC063G3	BAYHTRE312*	9.0/12.0	2	39.9/44.8	40/45	—	—
5	TSC063G3	BAYHTRE318*	13.1/17.4	2	54.0/61.0	60/70	—	—
5	TSC063G3	BAYHTRE323*	17.3/23.0	2	68.6/77.8	70/80	—	—
3	TSC036G3	BAYHTRE306*	4.5/6.0	1	22.8/25.1	30/30	—	—
3	TSC036G3	BAYHTRE312*	9.0/12.0	2	38.4/43.3	40/45	—	—
3	TSC036G3	BAYHTRE318*	13.1/17.4	2	52.5/59.5	60/60	—	—
4	TSC048G3	BAYHTRE306*	4.5/6.0	1	25.4/26.6	35/35	—	—
4	TSC048G3	BAYHTRE312*	9.0/12.0	2	39.9/44.8	40/45	—	—
4	TSC048G3	BAYHTRE318*	13.1/17.4	2	54.0/61.0	60/70	—	—
5	TSC060G3	BAYHTRE306*	4.5/6.0	1	28.2/28.2	40/40	—	—
5	TSC060G3	BAYHTRE312*	9.0/12.0	2	39.9/44.8	40/45	—	—
5	TSC060G3	BAYHTRE318*	13.1/17.4	2	54.0/61.0	60/70	—	—
5	TSC060G3	BAYHTRE323*	17.3/23.0	2	68.6/77.8	70/80	—	—
460 Volts Three Phase								
3	TSC033G4	BAYHTRE406*	6.0	1	11.1	15.0	—	—
3	TSC033G4	BAYHTRE412*	12.0	2	20.1	25.0	—	—
3	TSC033G4	BAYHTRE418*	17.4	2	28.3	30.0	—	—
4	TSC043G4	BAYHTRE406*	6.0	1	12.1	15.0	—	—
4	TSC043G4	BAYHTRE412*	12.0	2	21.1	25.0	—	—
4	TSC043G4	BAYHTRE418*	17.4	2	29.3	30.0	—	—
5	TSC063G4	BAYHTRE406*	6.0	1	12.9	20.0	—	—
5	TSC063G4	BAYHTRE412*	12.0	2	21.1	25.0	—	—
5	TSC063G4	BAYHTRE418*	17.4	2	29.3	30.0	—	—
5	TSC063G4	BAYHTRE423*	23.0	2	37.8	40.0	—	—
3	TSC036G4	BAYHTRE406*	6.0	1	11.1	15.0	—	—
3	TSC036G4	BAYHTRE412*	12.0	2	20.1	25.0	—	—
3	TSC036G4	BAYHTRE418*	17.4	2	28.3	30.0	—	—
4	TSC048G4	BAYHTRE406*	6.0	1	12.1	15.0	—	—
4	TSC048G4	BAYHTRE412*	12.0	2	21.1	25.0	—	—
4	TSC048G4	BAYHTRE418*	17.4	2	29.3	30.0	—	—
5	TSC060G4	BAYHTRE406*	6.0	1	12.1	15.0	—	—
5	TSC060G4	BAYHTRE412*	12.0	2	21.1	25.0	—	—
5	TSC060G4	BAYHTRE418*	17.4	2	29.3	30.0	—	—
5	TSC060G4	BAYHTRE423*	23.0	2	37.8	40.0	—	—

Table 47. Unit wiring with electric heat (single point connection) - standard efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
575 Volts Three Phase								
3	TSC033GW	BAYHTREW06*	6.0	1	10.2	15.0	—	—
3	TSC033GW	BAYHTREW12*	12.0	2	17.3	20.0	—	—
3	TSC033GW	BAYHTREW18*	17.4	2	23.8	25.0	—	—
4	TSC043GW	BAYHTREW06*	6.0	1	10.9	15.0	—	—
4	TSC043GW	BAYHTREW12*	12.0	2	18.0	20.0	—	—
4	TSC043GW	BAYHTREW18*	17.4	2	24.5	25.0	—	—
5	TSC063GW	BAYHTREW06*	6.0	1	10.9	15.0	—	—
5	TSC063GW	BAYHTREW12*	12.0	2	18.0	20.0	—	—
5	TSC063GW	BAYHTREW18*	17.4	2	24.5	25.0	—	—
5	TSC063GW	BAYHTREW23*	23.0	2	31.2	35.0	—	—
3	TSC036GW	BAYHTREW06*	6.0	1	10.2	15.0	—	—
3	TSC036GW	BAYHTREW12*	12.0	2	17.3	20.0	—	—
3	TSC036GW	BAYHTREW18*	17.4	2	23.8	25.0	—	—
4	TSC048GW	BAYHTREW06*	6.0	1	10.9	15.0	—	—
4	TSC048GW	BAYHTREW12*	12.0	2	18.0	20.0	—	—
4	TSC048GW	BAYHTREW18*	17.4	2	24.5	25.0	—	—
5	TSC060GW	BAYHTREW06*	6.0	1	10.9	15.0	—	—
5	TSC060GW	BAYHTREW12*	12.0	2	18.0	20.0	—	—
5	TSC060GW	BAYHTREW18*	17.4	2	24.5	25.0	—	—
5	TSC060GW	BAYHTREW23*	23.0	2	31.2	35.0	—	—

(a) No optional motors available for 3 to 5 tons. The standard motor is a multispeed, direct drive motor. The standard motor for the 3-phase (6-8½ ton models) is a belt drive motor.

Table 48. Unit wiring with electric heat (single point connection) - standard efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase								
3	WSC036H3	BAYHTRE306*	4.5/6.0	1	42/44	50/50	46/48	50/50
3	WSC036H3	BAYHTRE312*	9.0/12.0	2	58/62	60/70	62/66	70/70
3	WSC036H3	BAYHTRY318*	13.1/17.4	2	72/79	80/80	76/83	80/90
4	WSC048H3	BAYHTRE306*	4.5/6.0	1	43/45	50/50	46/48	50/50
4	WSC048H3	BAYHTRE312*	9.0/12.0	2	58/63	60/70	61/66	70/70
4	WSC048H3	BAYHTRY318*	13.1/17.4	2	72/79	80/80	75/82	80/90
5	WSC060H3	BAYHTRX306*	4.5/6.0	1	48/50	60/60	50/52	60/60
5	WSC060H3	BAYHTRX312*	9.0/12.0	2	63/68	70/70	65/70	70/70
5	WSC060H3	BAYHTRY318*	13.1/17.4	2	77/84	80/90	79/86	80/90
5	WSC060H3	BAYHTRY318*	17.3/23.0	2	92/101	100/110	94/103	100/110
460 Volts Three Phase								
3	WSC036H4	BAYHTRE406*	6.0	1	20	20.0	23	25
3	WSC036H4	BAYHTRE412*	12.0	2	29	30.0	32	35
3	WSC036H4	BAYHTRY418*	17.4	2	37	40.0	40	40
4	WSC048H4	BAYHTRE406*	6.0	1	21	25.0	23	25
4	WSC048H4	BAYHTRE412*	12.0	2	30	30.0	32	35

Electrical Data

Table 48. Unit wiring with electric heat (single point connection) - standard efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
460 Volts Three Phase								
4	WSC048H4	BAYHTRY418*	17.4	2	38	40.0	40	40
5	WSC060H4	BAYHTRX406*	6.0	1	24	30.0	25	30
5	WSC060H4	BAYHTRX412*	12.0	2	34	35.0	35	35
5	WSC060H4	BAYHTRY418*	17.4	2	42	45.0	43	45
5	WSC060H4	BAYHTRY418*	23.0	2	50	50.0	51	60
575 Volts Three Phase								
3	WSC036HW	BAYHTREW06*	6.0	1	19	20	19	20
3	WSC036HW	BAYHTREW12*	12.0	2	26	30	26	30
3	WSC036HW	BAYHTRYW18*	17.4	2	33	35	33	35
4	WSC048HW	BAYHTREW06*	6.0	1	20	20	20	20
4	WSC048HW	BAYHTREW12*	12.0	2	27	30	27	30
4	WSC048HW	BAYHTRYW18*	17.4	2	34	35	34	35
5	WSC060HW	BAYHTRXW06*	6.0	1	20	20	20	20
5	WSC060HW	BAYHTRXW12*	12.0	2	28	30	28	30
5	WSC060HW	BAYHTRYW18*	17.4	2	34	35	34	35
5	WSC060HW	BAYHTRYW23*	23.0	2	41	45	41	45

(a) The standard motor for WSC036/048/060H is a multi-speed, direct drive motor. An optional high static motor is available.

Table 49. Electrical characteristics - compressor motor and condenser motor - 60 cycle - standard efficiency

Tons	Unit Model Number	No.	Compressor Motors						Condenser Fan Motors					
			Volts	Phase	hp ^(b)	rpm	Amps ^(a)		Volts	Phase	hp	Amps ^(a)		
							RLA	LRA				FLA	LRA	
3	T/YSC0(33,36)G3	1	208-230	3	2.8	3500	12.8	95.0	1	208-230	3	.25	1.1	3.6
3	T/YSC0(33,36)G4	1	460	3	2.8	3500	6.4	45.0	1	460	3	.25	.55	1.8
3	T/YSC0(33,36)GW	1	575	3	2.8	3500	5.4	38.0	1	575	3	.25	.45	1.4
4	T/YSC0(43,48)G3	1	208-230	3	3.6	3500	13.7	83.1	1	208-230	3	.33	1.4	4.6
4	T/YSC0(43,48)G4	1	460	3	3.6	3500	6.2	41.0	1	460	3	.33	0.7	2.3
4	T/YSC0(43,48)GW	1	575	3	3.5	3500	4.8	33.0	1	575	3	.33	0.55	1.8
5	T/YSC060G3	1	208-230	3	4.3	3500	15.9	110.0	1	208-230	3	.40	1.4	5.2
5	T/YSC060G4	1	460	3	4.3	3500	7.1	52.0	1	460	3	.40	0.7	2.6
5	T/YSC060GW	1	575	3	4.3	3500	5.1	39.5	1	575	3	.40	0.6	2.1
5	T/YSC063G3	1	208-230	3	4.3	3500	16.0	110.0	1	208-230	3	.33	1.4	5.2
5	T/YSC063G4	1	460	3	4.3	3500	7.8	52.0	1	460	3	.33	0.7	2.6
5	T/YSC063GW	1	575	3	4.3	3500	5.7	39.5	1	575	3	.33	0.6	2.1

(a) Amp draw for each motor; multiply value by number of motors to determine total amps.

(b) hp for each compressor.

Table 50. Electrical characteristics - compressor motor and condenser motor - 60 cycle - standard efficiency

Tons	Unit Model Number	No.	Compressor Motors						Condenser Fan Motors					
			Volts	Phase	hp ^(a)	rpm	Amps ^(b)		No.	Volts	Phase	hp	Amps ^(a)	
							RLA	LRA					FLA	LRA
3	WSC036H3	1	208-230	3	3.2	3500	15	88	1	208-230	3	0.25	1.1	3.6
3	WSC036H4	1	460	3	3.2	3500	6.6	44	1	460	3	0.25	0.55	1.8
3	WSC036HW	1	575	3	3.2	3500	5.5	34	1	575	3	0.25	0.45	1.4
4	WSC048H3	1	208-230	3	3.8	3500	14.5	98	1	208-230	3	0.40	1.4	4.6
4	WSC048H4	1	460	3	3.8	3500	6.3	55	1	460	3	0.40	0.7	2.3
4	WSC048HW	1	575	3	3.8	3500	6	41	1	575	3	0.40	0.55	1.8
5	WSC060H3	1	208-230	3	4.7	3500	17.5	110	1	208-230	3	0.40	1.5	5.6
5	WSC060H4	1	460	3	4.7	3500	7.9	52	1	460	3	0.40	0.8	2.8
5	WSC060HW	1	575	3	4.7	3500	6.3	39	1	575	3	0.40	0.65	2.3

(a) hp for each compressor.

(b) Amp draw for each motor; multiply value by number of motors to determine total amps.

Table 51. Electrical characteristics - standard evaporator fan motor - 60 cycle - direct or belt drive standard efficiency^{(a),(b)}

Tons	Unit Model Number	Direct or Belt Drive	No.	Volts	Phase	hp	Amps	
							FLA	LRA
3	T/YSC0(33,36)G3	Direct Drive	1	208-230	1	.75	5.7	—
3	T/YSC0(33,36)G4	Direct Drive	1	460	1	.75	1.7	—
3	T/YSC0(33,36)GW	Direct Drive	1	575	1	.75	2.4	—
4	T/YSC0(43,48)G3	Direct Drive	1	208-230	1	1.00	6.9	—
4	T/YSC0(43,48)G4	Direct Drive	1	460	1	1.00	2.5	—
4	T/YSC0(43,48)GW	Direct Drive	1	575	1	1.00	2.9	—
5	T/YSC060G3	Direct Drive	1	208-230	1	1.00	6.9	—
5	T/YSC060G4	Direct Drive	1	460	1	1.00	2.5	—
5	T/YSC060GW	Direct Drive	1	575	1	1.00	2.9	—
5	T/YSC063G3	Direct Drive	1	208-230	1	1.00	6.9	32.2
5	T/YSC063G4	Direct Drive	1	460	1	1.00	2.5	16.1
5	T/YSC063GW	Direct Drive	1	575	1	1.00	2.9	13.2

(a) Precedent 575V rated units utilize a 208-230V evaporator fan motor powered through a 575/230V transformer assembly. Motor voltage/FLA rated at transformer input.

(b) Precedent 575V rated units utilize a 380-480V evaporator fan motor powered through a 575/480V transformer assembly. Motor voltage/FLA rated at transformer input.

Table 52. Electrical characteristics - standard evaporator fan motor - 60 cycle - standard efficiency

Tons	Unit Model Number	Direct or Belt Drive	No.	Volts	Phase	hp	Amps	
							FLA	LRA
3	WSC036H3	Direct Drive	1	208-230	1	0.75	5.7	—
3	WSC036H4	Direct Drive	1	460	1	0.75	1.7	—
3	WSC036HW	Direct Drive	1	575	1	0.75	5.7	—
4	WSC048H3	Direct Drive	1	208-230	1	1.0	6.9	—
4	WSC048H4	Direct Drive	1	460	1	1.0	2.5	—
4	WSC048HW	Direct Drive	1	575	1	1.0	6.9	—
5	WSC060H3	Direct Drive	1	208-230	1	1.0	7.6	—
5	WSC060H4	Direct Drive	1	460	1	1.0	4.0	—
5	WSC060HW	Direct Drive	1	575	1	1.0	7.6	—

Note: WSC(036,048,060)HW utilize 230V evaporator motors.

Electrical Data

Table 53. Electrical characteristics - oversized evaporator fan motor - 60 cycle - standard efficiency

Tons	Unit Model Number	Direct or Belt Drive	No.	Volts	Phase	hp	Amps	
							FLA	LRA
3	WSC036H3	Direct Drive	1	208-230	1	1.5	9.4	—
3	WSC036H4	Direct Drive	1	460	1	1.5	4.8	—
3	WSC036HW	Direct Drive	1	575	1	1.5	9.4	—
4	WSC048H3	Direct Drive	1	208-230	1	1.5	9.4	—
4	WSC048H4	Direct Drive	1	460	1	1.5	4.8	—
4	WSC048HW	Direct Drive	1	575	1	1.5	9.4	—
5	WSC060H3	Direct Drive	1	208-230	1	1.5	9.4	—
5	WSC060H4	Direct Drive	1	460	1	1.5	4.8	—
5	WSC060HW	Direct Drive	1	575	1	1.5	9.4	—

Note: WSC(036,048,060)HW utilize 230V evaporator motors.

Table 54. Electrical characteristics — power exhaust (cooling and gas/electric)

Tons	Volts	Phase	hp	rpm	FLA	LRA
3-5	208-230	1	0.33	1075	2.2	3.9
3-5	460	1	0.33	1075	1.1	2.0
3-5	575	1	0.33	1075	1.0	1.8

Table 55. Electrical characteristics - inducer motor - standard efficiency

Unit Model Number	Stages	hp	rpm	Volts	Phase	LRA
YSC(036-060)G**(L,M,X,Y)	1	1/35	3000	208-230	1	0.6
YSC(036-060)G**(H,Z)	1	1/15	3300	208-230	1	0.4

Table 56. Unit wiring - high efficiency

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor		Optional Belt Drive Indoor Fan Motor ^(a)	
			MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
3	T/YHC036E1	187-253	28.3	45	(^a)	(^a)
3	T/YHC036E3	187-253	20.6	30	19.6	25
3	T/YHC036E4	414-506	11.0	15	10.3	15
3	YHC036EW	517-633	7.9	15	7.2	15
4	T/YHC048F1	187-253	37.3	50	(^a)	(^a)
4	T/YHC048E_F3	187-253	27.2	40	24.6	35
4	T/YHC048E_F4	414-506	12.8	15	11.3	15
4	YHC048FW	517-633	9.8	15	8.5	15
5	T/YHC060F1	187-253	41.4	60	(^a)	(^a)
5	T/YHC060E_F3	187-253	30.0	45	27.4	40
5	T/YHC060E_F4	414-506	13.8	20	12.3	15
5	YHC060E_FW	517-633	10.2	15	8.9	15

(a) No optional motors available for 3-5 tons. The standard motor for the 1-phase models is a Multispeed Direct Drive Motor.

Table 57. Unit wiring with electric heat (single point connection) - high efficiency - 3 to 5 tons

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Optional Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Single Phase								
3	THC036E1	BAYHTRE105*	3.8/5.0	1	30.1/33.5	45/45	—	—
3	THC036E1	BAYHTRE110*	7.5/10.0	2	52.6/59.6	60/60	—	—
3	THC036E1	BAYHTRE114*	10.4/13.8	2	69.8/79.4	70/80	—	—
4	THC048F1	BAYHTRX105*	3.8/5.0	1	37.3/37.3	50/50	—	—
4	THC048F1	BAYHTRX110*	7.5/10.0	2	54.6/61.6	60/70	—	—
4	THC048F1	BAYHTRX114*	10.4/13.8	2	71.8/81.4	80/90	—	—
4	THC048F1	BAYHTRX118*	13.2/17.6	2	89.0/101.1	90/110	—	—
5	THC060F1	BAYHTRX105*	3.8/5.0	1	41.1/41.4	60/60	—	—
5	THC060F1	BAYHTRX110*	7.5/10.0	2	54.6/61.6	60/70	—	—
5	THC060F1	BAYHTRX114*	10.4/13.8	2	71.8/81.4	80/90	—	—
5	THC060F1	BAYHTRX118*	13.2/17.6	2	89.0/101.1	90/110	—	—
208/230 Volts Three Phase								
3	THC036E3	BAYHTRE306*	4.5/6.0	1	23.1/25.5	30/30	21.9/24.3	30/30
3	THC036E3	BAYHTRE312*	9.0/12.0	2	38.8/43.6	40/45	37.5/42.4	40/45
3	THC036E3	BAYHTRE318*	13.1/17.4	2	52.9/59.9	60/60	51.6/58.6	60/60
4	THC048E_F3	BAYHTRX306*	4.5/6.0	1	27.2/27.5	40/40	24.6/24.6	35/35
4	THC048E_F3	BAYHTRX312*	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
4	THC048E_F3	BAYHTRX318*	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
5	THC060E_F3	BAYHTRX306*	4.5/6.0	1	30.0/30.0	45/45	27.4/27.4	40/40
5	THC060E_F3	BAYHTRX312*	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
5	THC060E_F3	BAYHTRX318*	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
5	THC060E_F3	BAYHTRX323*	17.3/23.0	2	69.5/78.6	70/80	66.3/75.4	70/80
460 Volts Three Phase								
3	THC036E4	BAYHTRE406*	6.0	1	13.0	15	12.1	15
3	THC036E4	BAYHTRE412*	12.0	2	22.0	25	21.1	25
3	THC036E4	BAYHTRE418*	17.4	2	30.1	35	29.3	30
4	THC048E_F4	BAYHTRX406*	6.0	1	14.0	15	12.1	15
4	THC048E_F4	BAYHTRX412*	12.0	2	23.0	25	21.1	25
4	THC048E_F4	BAYHTRX418*	17.4	2	31.1	35	29.3	30
5	THC060E_F4	BAYHTRX406*	6.0	1	14.0	20	12.3	15
5	THC060E_F4	BAYHTRX412*	12.0	2	23.0	25	21.1	25
5	THC060E_F4	BAYHTRX418*	17.4	2	31.1	35	29.3	30
5	THC060E_F4	BAYHTRX423*	23.0	2	39.6	40	37.8	40

(a) Heater kW ratings are at 208/240V for 208/230V units, 480V for 460V units.

Electrical Data

Table 58. Electrical characteristics - compressor motor and condenser fan motor - 60 cycle - high efficiency

Tons	Unit Model Number	No.	Compressor Motors						No.	Condenser Fan Motors				
			Volts	Phase	hp	rpm	RLA	LRA		Volts	Phase	hp	FLA	LRA
3	T/YHC036E1	1	208-230	1	2.7	3500	16.7	79.0	1	208-230	1	0.20	1.5	2.4
3	T/YHC036E3	1	208-230	3	2.7	3500	10.4	73.0	1	208-230	1	0.20	1.5	2.4
3	T/YHC036E4	1	460	3	2.7	3500	5.8	38.0	1	460	1	0.20	0.6	1.3
3	T/YHC036EW	1	575	3	2.7	3500	3.8	36.5	1	575	1	0.40	0.8	2.0
4	T/YHC048F1	1	208-230	1	3.6	3500	21.8	117.0	1	208-230	1	0.40	2.5	6.6
4	T/YHC048E_F3	1	208-230	3	3.5	3500	13.7	83.1	1	208-230	1	0.40	2.5	6.6
4	T/YHC048E_F4	1	460	3	3.5	3500	6.2	41.0	1	460	1	0.40	1.0	2.8
4	YHC048FW	1	575	3	3.5	3500	4.8	33	1	575	1	0.40	0.8	2.0
5	T/YHC060F1	1	208-230	1	4.4	3500	25.0	134.0	1	208-230	1	0.40	2.5	6.6
5	T/YHC060E_F3	1	208-230	3	4.3	3500	15.9	110.0	1	208-230	1	0.40	2.5	6.6
5	T/YHC060E_F4	1	460	3	4.3	3500	7.1	52.0	1	460	1	0.40	1.0	2.8
5	YHC060FW	1	575	3	4.1	3500	5.1	39.5	1	575	1	0.40	0.8	2.0

Table 59. Electrical characteristics - evaporator fan motor - 60 cycle - direct drive - high efficiency^(a)

Tons	Unit Model Number	Volts	Hz	Motor Phase	No.	FLA	LRA	bhp
3	T/YHC036E1	208-230	60	1	1	6.0	—	0.75
3	T/YHC036E3	208-230	60	1	1	6.0	—	0.75
3	T/YHC036E4	460	60	1	1	3.2	—	0.75
3	YHC036EW	575 ^(b)	60	1	1	2.4	—	0.75
4	T/YHC048F1	208-230	60	1	1	7.6	—	1.00
4	T/YHC048E_F3	208-230	60	1	1	7.6	—	1.00
4	T/YHC048E_F4	460	60	1	1	4.0	—	1.00
4	YHC048FW	575 ^(b)	60	1	1	3.0	—	1.00
5	T/YHC060F1	208-230	60	1	1	7.6	—	1.00
5	T/YHC060E_F3	208-230	60	1	1	7.6	—	1.00
5	T/YHC060E_F4	460	60	1	1	4.0	—	1.00
5	YHC060FW	575 ^(b)	60	1	1	3.0	—	1.00

(a) Belt drive indoor motor is standard equipment on T/YHC036E-T/YHC060E with optional dehumidification.

(b) 575V rated units utilize a high efficiency 230 evaporator fan motor powered through a 575/230V transformer. Motor voltage/FLA rated at transformer input.

Table 60. Electrical characteristics - evaporator fan motor - 60 cycle - optional belt drive - high efficiency^(a)

Tons	Unit Model Number	Volts	Hz	Phase	No.	FLA	LRA	bhp
3	T/YHC036E3	208-230	60	3	1	5.0	32.2	1.00
3	T/YHC036E4	460	60	3	1	2.5	16.1	1.00
3	YHC036EW	575	60	3	1	1.7	13.2	1.00
4	T/YHC048E3	208-230	60	3	1	5.0	32.2	1.00
4	T/YHC048E4	460	60	3	1	2.5	16.1	1.00
4	T/YHC048F3	208-230	60	3	1	5.0	32.2	1.00
4	T/YHC048E4	460	60	3	1	2.5	16.1	1.00
4	YHC048FW	575	60	3	1	1.7	13.2	1.00
5	T/YHC060E3	208-230	60	3	1	5.0	32.2	1.00
5	T/YHC060E4	460	60	3	1	2.5	16.1	1.00
5	T/YHC060F3	208-230	60	3	1	5.0	32.2	1.00
5	T/YHC060F4	460	60	3	1	2.5	16.1	1.00
5	YHC060FW	575	60	3	1	1.7	13.2	1.00

(a) Belt drive indoor motor is standard equipment on T/YHC036E-T/YHC060E with optional dehumidification.

Table 61. Electrical characteristics - inducer motor - high efficiency

Unit Model Number	Stages	hp	rpm	Volts	Phase	LRA
YHC(048-060)E/F*(L,M,H,X,Y,Z)	1	1/35	3000	208-230	1	0.6
YHC(036)E*(L,M,X,Y)	1	1/35	3000	208-230	1	0.6
YHC(036)E*(H,Z)	1	1/35	3300	208-230	1	0.4

Sequence of Operation - ReliaTel™

These units are offered with two control options, electromechanical and ReliaTel™.

Note: Refer to the unit nameplate: If the 9th digit of the model number = R, proceed with the following Sequence of Operation. If the 9th digit of the model number = E, proceed with Sequence of Operation - Electromechanical Controls.

Note: The Condensate Overflow Switch (optional) will shut the unit down if the float is raised and the switch is closed.

ReliaTel™ Controls

ReliaTel Control is a microelectronic control feature, which provides operating functions that are significantly different than conventional electromechanical units. The master module is the ReliaTel Refrigeration Module (RTRM).

The RTRM provides compressor anti-short cycle timing functions through minimum “Off” and “On” timing to increase reliability, performance and to maximize unit efficiency.

Upon power initialization, the RTRM performs self-diagnostic checks to insure that all internal controls are functioning. It checks the configuration parameters against the components connected to the system.

The LED located on the RTRM module is turned “On” within one second after power-up if all internal operations are okay.

ReliaTel Control Cooling without an Economizer

When the system switch is set to the “Cool” position and the zone temperature rises above the cooling setpoint control band, the RTRM energizes the (K9) relay coil located on the RTRM. When the K9 relay contacts close, the compressor contactor (CC1) coil is energized provided the low pressure control (LPC1), high pressure control (HPC1) and discharge line thermostat (TDL 1) are closed. When the CC1 contacts close, compressor (CPR1) and the outdoor fan motor (ODM) start to maintain the zone temperature to within $\pm 2^\circ\text{F}$ of the sensor setpoint at the sensed location.

If the first stage of cooling can not satisfy the cooling requirement, the RTRM energizes the (K10) relay coil located on the RTRM. When the (K10) relay contacts close, the compressor contactor (CC2) coil is energized provided the low pressure control (LPC2), high pressure control (HPC2) and discharge line thermostat (TDL 2) are closed. When the CC2 contacts close, compressor (CPR2) starts to maintain the zone temperature to within $\pm 2^\circ\text{F}$ of the sensor setpoint at the sensed location.

Three-Stages of Cooling¹

When the unit is configured for three-stage cooling, and the system switch is set to the cool position and the zone temperature rises above the cooling setpoint control band, the RTRM energizes the (K10) relay coil located on the RTRM. When the (K10) relay contacts close, compressor contactor (CC2) is energized. This is the smaller of the two compressors (CPR2). This staging order is opposite standard staging order.

If the first stage of cooling can not satisfy the cooling requirement, the RTRM energizes the (K9) relay coil and de-energizes the (K10) relay coil on the RTRM. Compressor contactor (CC1) is energized, bringing on the larger of the two compressors (CPR1). Compressor contactor (CC2) is de-energized, turning off the smaller compressor.

If the second stage of cooling can not satisfy the cooling requirement, the RTRM keeps the (K9) relay coil energized and energizes the (K10) relay coil. Compressor contactors (CC1) and (CC2) are energized, and both compressors (CPR1 and CPR2).

Lead/Lag is disabled with three-stage cooling. A unit configured for three-stage cooling and controlled with a thermostat will operate as a two-stage unit.

ReliaTel Control Evaporator Fan Operation (for Gas Units)

When the fan selection switch is set to the “Auto” position, the RTRM energizes the (K6) relay coil approximately 1 second after energizing the compressor contactor coil (CC1) in the cooling mode. In the heating mode, the RTRM energizes the (K6) relay coil approximately 45 second after gas ignition. Closing the (K6) contacts on the RTRM energizes the indoor fan relay (F) coil to start the indoor fan motor (IDM).

The RTRM de-energizes the fan relay (F) approximately 60 seconds after the cooling requirement has been satisfied to enhance unit efficiency. When the heating cycle is terminated, the indoor fan relay (F) coil is de-energized approximately 90 seconds after the heating requirement.

When the fan selection switch is set to the “On” position, the RTRM keeps the indoor fan relay coil (F) energized for continuous fan motor operation.

When the unit is equipped with the optional clogged filter switch, wired between terminals J7-3 and J7-4 on the ReliaTel Options Module (RTOM), the RTRM produces an analog output if the clogged filter switch (CFS) closes for two minutes after a request for fan operation. When the system is connected to a remote panel, the “SERVICE” LED will be turned on when this failure occurs.

¹ High efficiency units only.

ReliaTel Control Evaporator Fan Operation (for Cooling Only Units)

When the fan selection switch is set to the "Auto" position, the RTRM energizes the (K6) relay coil approximately 1 second after energizing the compressor contactor coil (CC1) in the cooling mode. In the heating mode, the RTRM energizes the (K6) relay coil approximately 1 second before energizing the electric heat contactors. Closing the (K6) contacts on the RTRM energizes the indoor fan relay (F) coil to start the indoor fan motor (IDM). The RTRM de-energizes the fan relay (F) approximately 60 seconds after the cooling requirement has been satisfied to enhance unit efficiency.

When the heating cycle is terminated, the indoor fan relay (F) coil is de-energized at the same time as the heater contactors.

When the fan selection switch is set to the "On" position, the RTRM keeps the indoor fan relay coil (F) energized for continuous fan motor operation.

When the unit is equipped with the optional clogged filter switch, wired between terminals J7-3 and J7-4 on the ReliaTel Options Module (RTOM), the RTRM produces an analog output if the clogged filter switch (CFS) closes for two minutes after a request for fan operation.

When the system is connected to a remote panel, the "SERVICE" LED will be turned on when this failure occurs.

Low Ambient Operation

During low ambient operation, outside air temperature below 55°F, the RTRM will cycle the compressor and outdoor fan motor "Off" for approximately 3 minutes after every 10 minutes of accumulated compressor run time. The indoor fan motor (IDM) will continue to operate during this evaporator defrost cycle (EDC) and the compressor and outdoor fan will return to normal operation once the defrost cycle has terminated and the compressor "Off" time delay has been satisfied.

Note: (For units with the dehumidification option) When in dehumidification mode, the unit will not cycle as described above. The unit will run continuously in dehumidification mode at all ambient conditions above 40°F. Dehumidification is disabled at ambient conditions below 40°F.

ReliaTel Control Dehumidification

Single Compressor Units

On a call for dehumidification, the reheat valve is energized and the compressor is turned on. When the humidity control setpoint is satisfied, the valve is de-energized and the compressor is turned off. If there is a call for cooling or heating from the space temperature controller, i.e. zone sensor or thermostat, while in reheat, the reheat valve is de-energized and the compressor continues to run, or the heat is turned on. The 3 minute

compressor on and off times are still active during compressor operation.

Dual Compressor Units

The dehumidification cycle is only permitted above 40°F as indicated above and is not permitted during a heating cycle or during a demand for 2nd stage cooling. Otherwise, when an installed zone humidity sensor indicates a relative humidity equal to or greater than the RH set point as adjusted on the ReliaTel Options Module (RTOM), a dehumidification cycle is initiated. The Sequence of Operation for the dehumidification cycle is identical to that of the second stage ReliaTel cooling cycle, except that the hot gas reheat valve (RHV) is energized, allowing air from the evaporator to be reheated. Also, any installed fresh air damper is driven to minimum position. The dehumidification cycle is terminated by initiation of a heating cycle or a 2nd stage cooling cycle or when zone humidity is reduced to 5% below the R.H. set point. In the absence of a zone humidity sensor input, an on/off input from a zone humidistat is used to initiate/terminate the dehumidification cycle.

Dehumidification takes priority over a call for one-stage cooling.

Heating or two-stage cooling takes priority over dehumidification, and a relative humidity sensor takes priority over a humidistat.

Dehumidification Coil Purge Cycle

On multiple circuit units with dehumidification/reheat configured, a purge cycle will be active for compressor reliability. The purpose of this function is to properly distribute refrigerant and lubricant throughout the system by temporarily switching to the unused section of the coil for 3 minutes (purge cycle). The function operates as follows:

1. A purge cycle will be initiated after 90 minutes of accumulated compressor run time in only one mode: cooling or dehumidification, without transitioning to the other mode.
2. A purge cycle will consist of transitioning to the mode that hasn't run in 90 minutes of total compressor operation. The cycle will last for a period of 3 minutes.
3. The 90-minute cycle count will be reset anytime there is a normal transition between cooling and dehumidification. Transitioning from one of these modes to any other mode (off or heat) will not reset the counter.
4. If the purge cycle is a cooling cycle, only the first circuit will be activated. If it is a dehumidification cycle then the normal 2-compressor dehumidification mode cycle will be used.
5. The purge cycle will ignore the low ambient dehumidification lockout feature.

- A purge cycle takes priority over normal cooling or dehumidification requests, but will discontinue for all high priority lockouts and alarms.

ReliaTel Control Cooling with an Economizer

The economizer is utilized to control the zone temperature providing the outside air conditions are suitable. Outside air is drawn into the unit through modulating dampers. When cooling is required and economizing is possible, the RTRM sends the cooling request to the unit economizer actuator (ECA) to open the economizer damper. The RTRM tries to cool the zone utilizing the economizer to slightly below the zone temperature setpoint. If the mixed air sensor (MAS) senses that the mixed air temperature is below 53°F, the damper modulates toward the closed position. If the zone temperature continues to rise above the zone temperature setpoint control band and the economizer damper is full open for 5 minutes, the RTRM energizes the compressor contactor (CC1). If the zone temperature continues to rise above the zone temperature setpoint control band and the economizer damper is fully open, the RTRM energizes the compressor contactor (CC2).

The ECA continues to modulate the economizer damper open/closed to keep the mixed air temperature that is calculated by the RTRM.

If economizing is not possible, the ECA drives the damper to the minimum position setpoint when the indoor fan relay (F) is energized and allows mechanical cooling operation.

When the unit is equipped with the optional fan failure switch, wired between terminals J7-5 and J7-6 on the RTOM, the RTRM will stop all cooling functions and produce an analog output if the fan failure switch (FFS) does not open within 40 seconds after a request for fan operation. When the system is connected to a remote panel, the "SERVICE" LED will flash when this failure occurs.

Note: For units equipped with the dehumidification option, if the unit is economizing, the damper resets to minimum position while in dehumidification mode.

Economizer Set-Up

Adjusting the minimum position potentiometer located on the unit economizer actuator (ECA) sets the required amount of ventilation air.

Two of the three methods for determining the suitability of the outside air can be selected utilizing the enthalpy potentiometer on the ECA, as described below:

- Ambient Temperature - controlling the economizing cycle by sensing the outside air dry bulb temperature. [Table 62, p. 58](#) lists the selectable dry bulb values by potentiometer setting.
- Reference Enthalpy - controlling the economizer cycle by sensing the outdoor air humidity. [Table 62, p. 58](#) lists the selectable enthalpy values by potentiometer setting. If the outside air enthalpy value is less than the selected value, the economizer is allowed to operate.
- Comparative Enthalpy - utilizing a humidity sensor and a temperature sensor in both the return air stream and the outdoor air stream, the unit control processor (RTRM) will be able to establish which conditions are best suited for maintaining the zone temperature, i.e. indoor conditions or outdoor conditions. The potentiometer located on the ECA is non-functional when both the temperature and humidity sensors are installed.

Table 62. Potentiometer settings

Potentiometer Setting	Dry Bulb	Reference Enthalpy
A	73°F (22.8°C)	27 Btu/lb (63 kJ/kg)
B	70°F (21.1°C)	25 Btu/lb (58 kJ/kg)
C	67°F ^(a) (19.4°C)	23 Btu/lb (53 kJ/kg)
D	63°F (17.2°C)	22 Btu/lb (51 kJ/kg)
E	55°F (12.8°C)	19 Btu/lb (44 kJ/kg)

(a) Factory settings

ReliaTel Control Heating Operation (for Cooling Only Units)

When the system switch is set to the "Heat" position and the zone temperature falls below the heating setpoint control band, the RTRM energizes (K1) relay coil. When the (K1) relay contacts close, located on the RTRM, the first stage electric heat contactor (AH or AH & CH) is energized.

If the first stage of electric heat can not satisfy the heating requirement, the RTRM energizes (K2) relay coil. When the (K2) relay contacts close, located on the RTRM, the second stage electric heat contactor (BH) is energized, if applicable. The RTRM cycles both the first and second stages of heat "On" and "Off" as required to maintain the zone temperature setpoint.

ReliaTel Control Heating Operation (for Gas Units)

When the system switch is set to the "Heat" position and the zone temperature falls below the heating setpoint control band, a heat cycle is initiated when the RTRM communicates ignition information to the Ignition module (IGN).

Ignition Module

Two-stage (IGN) runs self-check (including verification that the gas valve is de-energized). (IGN) checks the high-limit switches (TC01 & TC02) for normally closed contacts, the pressure switch (PS) for normally open contacts, and the flame rollout (FR) switch for continuity. (IGN) energizes inducer blower on high speed to check pressure switch closure. If the pressure switch is closed, the inducer blower

starts a 20-second pre-purge (15 seconds on high speed followed by 5 seconds on low speed). If the pressure switch (PS) is still open, the inducer blower will continue to be energized on high speed until pressure switch closure. After pre-purge completes, the (IGN) energizes the first stage of the gas valve, initiates spark for 2 seconds minimum, 7 seconds maximum (ignition trial) and detects flame and de-energizes spark. From this point, a fixed 45 second indoor blower delay on timing starts. After the indoor blower delay on is completed, the (IGN) energizes the indoor blower. The (IGN) enters a normal operating loop where all inputs are continuously monitored. If the first stage of gas heat can not satisfy the heating requirement, the thermostat closes W2. The (IGN) energizes the second stage of the gas valve and the second stage of inducer blower. When the zone thermostat is satisfied, the (IGN) de-energizes the gas valve. The (IGN) senses loss of flame. The (IGN) initiates a 5 second inducer blower post purge. The (RTRM) initiates a second indoor blower delay off.

If the burner fails to ignite, the ignition module will attempt two retries before locking out. The green LED will indicate a lock out by two fast flashes. An ignition lockout can be reset by;

1. Opening for 3 seconds and closing the main power disconnect switch.
2. Switching the "Mode" switch on the zone sensor to "OFF" and then to the desired position.
3. Allowing the ignition control module to reset automatically after one hour. Refer to the "Ignition Control Module Diagnostics" section for the LED diagnostic definitions.

When the fan selection switch is set to the "Auto" position, the RTRM energizes the indoor fan relay (F) coil approximately 30 second after initiating the heating cycle to start the indoor fan motor (IDM).

Table 63. Ignition module diagnostics

Steady light	Module is powered up, but no active call for heat.
Blinking at continuous steady rate	Active call for heat.
One blink	Loss of communication.
Two blinks	System lockout (failure to ignite, no spark, low/no gas pressure, etc.)
Three blinks	Pressure switch (no vent air flow, bad CBM, closed at initial call for heat). Auto reset.
Four blinks	High limit (excessive heat in combustion chamber, low airflow). Auto reset.
Five blinks	Flame sensed and gas valve not energized or flame sensed and no call for heat.
Six blinks	Flame rollout (CBM failure, incorrect gas pressure, incorrect primary air). Requires manual reset of the switch.
Seven blinks	ReliaTel module will communicate a heat fail diagnostic back to the RTRM.

Drain Pan Condensate Overflow Switch (Optional)

This input incorporates the Condensate Overflow Switch (COF) mounted on the drain pan and the ReliaTel Options Module (RTOM). When the condensate level reaches the trip point for 6 continuous seconds, the RTOM will shut down all unit function until the overflow condition has cleared. The unit will return to normal operation after 6 continuous seconds with the COF in a non-tripped condition. If the condensate level causes the unit to shutdown more than 2 times in a 3 day period, the unit will be locked-out of operation. A manual reset of the diagnostic system through the Zone Sensor or Building Automation System (BAS) will be required. Cycling unit power will also clear the fault.

Sequence of Operation - Electromechanical

Electromechanical Controls

These units are offered with two control options, electromechanical and ReliaTel controls. The ReliaTel controls is a microelectronic control feature, which provides operating functions that are significantly different than conventional electromechanical units.

Electromechanical Control Cooling without an Economizer

When the thermostat switch is set to the “Cool” position and the zone temperature rises above the cooling setpoint, the thermostat Y contacts close. The compressor contactor (CC1) coil is energized provided the low pressure control (LPC1), high pressure control (HPC1) and discharge line thermostat (TDL 1) are closed. When the (CC1) contacts close, compressor (CPR1) and the outdoor fan motor (ODM) start. If the first stage of cooling can not satisfy the cooling requirement, the thermostat closes Y2. The compressor contactor (CC2) coil is energized provided the low pressure control (LPC2), high pressure control (HPC2) and discharge line thermostat (TDL 2) are closed.

When the (CC2) contacts close, compressor (CPR2) starts.

Electromechanical Control Evaporator Fan Operation (for Gas Units)

When the thermostat fan selection switch is set to the “Auto” position, the Ignition Module (IGN) energizes the indoor fan relay (F) approximately 1 second after energizing the compressor contactor coil (CC1) in the cooling mode. In the heating mode, the Ignition Module (IGN) energizes the indoor fan relay (F) coil approximately 45 second after gas ignition. Closing indoor fan relay (F) coil starts the indoor fan motor (IDM). The (IGN) de-energizes the fan relay (F) approximately 80 seconds after the cooling requirement has been satisfied to enhance unit efficiency.

When the heating cycle is terminated, the indoor fan relay (F) coil is de-energized approximately 90 seconds after the heating requirement.

When the thermostat fan selection switch is set to the “On” position, the (IGN) keeps the indoor fan relay coil (F) energized for continuous fan motor operation.

Electromechanical Evaporator Fan Operation (for Cooling Only Units)

When the thermostat fan selection switch is set to the “Auto” position, the thermostat energizes the indoor fan relay coil (F) to start the indoor fan motor (IDM). The fan relay (F) de-energizes after the cooling requirement has been satisfied. When the heating cycle is terminated, the indoor fan relay (F) coil is de-energized with heater contactors.

When the thermostat fan selection switch is set to the “On” position, the thermostat keeps the indoor fan relay coil (F) energized for continuous fan motor operation.

Economizer Set-Up

Adjusting the minimum position potentiometer located on the unit economizer actuator (ECA) sets the required amount of ventilation air.

Ambient temperature is controlling the economizing cycle by sensing the outside air dry bulb temperature. [Table 62, p. 58](#) lists the selectable dry bulb values by potentiometer setting.

Electromechanical Control Cooling with an Economizer

The economizer is utilized to control the zone temperature providing the outside air conditions are suitable. Outside air is drawn into the unit through modulating dampers.

When cooling is required and economizing is possible, the unit economizer actuator (ECA) opens the economizer damper. The ECA continues to modulate the economizer damper open/closed to keep the mixed air temperature in the 50°F to 55°F range.

The thermostat will close the Y2 contacts to turn on contactor (CC1) if mechanical cooling is required.

If economizing is not possible, the ECA drives the damper to the minimum position setpoint when the indoor fan relay (F) is energized and allows mechanical cooling operation.

Electromechanical Control Heating Operation (for Cooling Only Units)

When the system switch is set to the “Heat” position and the zone temperature falls below the heating setpoint, the thermostat closes W1 contacts the first stage electric heat contactor (AH or AH & CH) is energized. If the first stage of electric heat can not satisfy the heating requirement, the thermostat closes W2.

When the W2 contacts close, the second stage electric heat contactor (BH) is energized, if applicable. The thermostat cycles both the first and second stages of heat “On” and “Off” as required to maintain the zone temperature setpoint.

Electromechanical Control Heating Operation (for Gas Units)

When the system switch is set to the “Heat” position and the zone temperature falls below the heating setpoint, the Ignition module (IGN) initiates a heat cycle.

Ignition Module Low, Medium and High Heat

Two-stage (IGN) runs self-check (including verification that the gas valve is de-energized). (IGN) checks the high-limit switches (TC01 & TC02) for normally closed contacts, the pressure switch (PS) for normally open contacts, and the flame rollout (FR) switch for continuity. (IGN) energizes inducer blower on high speed to check pressure switch closure.

If the pressure switch is closed, the inducer blower starts a 20 second pre-purge (15 seconds on high speed followed by 5 seconds on low speed).

If the pressure switch (PS) is still open, the inducer blower will continue to be energized on high speed until pressure switch closure.

After pre-purge completes, the (IGN) energizes the first stage of the gas valve, initiates spark for 2 seconds minimum, 7 seconds maximum (ignition trial) and detects flame and de-energizes spark. From this point, a fixed 45 second indoor blower delay on timing starts.

After the indoor blower delay on is completed, the (IGN) energizes the indoor blower. The (IGN) enters a normal operating loop where all inputs are continuously monitored. If the first stage of gas heat can not satisfy the heating requirement, the thermostat closes W2. The (IGN) energizes the second stage of the gas valve and the second stage of inducer blower.

When the zone thermostat is satisfied, the (IGN) de-energizes the gas valve. The (IGN) senses loss of flame. The (IGN) initiates a 5 second inducer blower post purge and 90 second indoor blower delay off at current speed. The (IGN) de-energizes the inducer blower at the end of the post purge. The (IGN) de-energizes the indoor blower at the end of the selected indoor blower delay off.

Table 64. Ignition module diagnostics

Steady light	Module is powered up, but no active call for heat.
Blinking at continuous steady rate	Active call for heat.
One blink	Loss of communication.
Two blinks	System lockout (failure to ignite, no spark, low/no gas pressure, etc.)
Three blinks	Pressure switch (no vent air flow, bad CBM, closed at initial call for heat). Auto reset.
Four blinks	High limit (excessive heat in combustion chamber, low airflow). Auto reset.
Five blinks	Flame sensed and gas valve not energized or flame sensed and no call for heat.
Six blinks	Flame rollout (CBM failure, incorrect gas pressure, incorrect primary air). Requires manual reset of the switch.
Seven blinks	W1& W2 swapped (electromechanical 3-10 tons units).

Drain Pan Condensate Overflow Switch (Optional)

The Condensate Overflow Switch (COF) is utilized to prevent water overflow from the drain pan. The float switch is installed on the corner lip of the drain pan. When the condensate level reaches the trip point, the COF relay energizes and opens the 24VAC control circuit which disables the unit. Once the 24VAC control circuit is opened, a delay timer will prevent unit start-up for three minutes.

Sequence of Operation - Heat Pumps

ReliaTel™ Controls

These units are equipped with a microelectronic control feature, which provides operating functions that are significantly different than conventional units. It is referred to as the "ReliaTel Control System". The master module is the ReliaTel Refrigeration Module (RTRM).

The RTRM provides compressor anti-short cycle timing functions through minimum "Off" and "On" timing to increase reliability, performance and to maximize unit efficiency.

Upon power initialization, the RTRM performs self-diagnostic checks to insure that all internal controls are functioning. It checks the configuration parameters against the components connected to the system.

The LED located on the RTRM module is turned "On" within one second after power-up if all internal operations are okay.

Cooling without an Economizer

When the system is in the "Cool" MODE, the RTRM energizes relay (K3). When the normally open (K3) contacts close, the switch over valves (SOV1 & 2) are energized. When the zone temperature rises above the cooling setpoint controlband, the RTRM energizes the (K9) relay coil on the RTRM. When the (K9) relay contacts close, the compressor contactor (CC1) coil is energized provided the low pressure control (LPC1), high pressure control (HPC1) and discharge line thermostat (TDL 1) are closed. When the CC1 contacts close, compressor (CPR1) and the outdoor fan motor (ODM) starts provided the normally open (ODF) relay contacts are closed, to maintain the zone temperature to within $\pm 2^{\circ}\text{F}$ of the sensor setpoint at the sensed location.

Evaporator Fan Operation

When the fan selection switch is set to the "Auto" position, the RTRM energizes the (K6) relay coil approximately 1 second after energizing the compressor contactor coil (CC1) in the cooling mode. In the heating mode, the RTRM energizes the (K6) relay coil approximately 1 second before energizing the electric heat contactors. Closing the (K6) contacts on the RTRM energizes the indoor fan relay (F) coil to start the indoor fan motor (IDM).

The RTRM de-energizes the fan relay (F) approximately 60 seconds after the cooling requirement has been satisfied to enhance unit efficiency. When the heating cycle is terminated, the indoor fan relay (F) coil is de-energized at the same time as the heater contactors.

When the fan selection switch is set to the "On" position, the RTRM keeps the indoor fan relay coil (F) energized for continuous fan motor operation.

When the unit is equipped with the optional clogged filter switch, wired between terminals J7-3 and J7-4 on the

ReliaTel Options Module (RTOM), the RTRM produces an analog output if the clogged filter switch (CFS) closes for two minutes after a request for fan operation. When the system is connected to a remote panel, the "SERVICE" LED will be turned on when this failure occurs.

Low Ambient Operation

During low ambient operation, outside air temperature below 55°F , the RTRM will cycle the compressor and outdoor fan motor "Off" for approximately 3 minutes after every 10 minutes of accumulated compressor run time. The indoor fan motor (IDM) will continue to operate during this evaporator defrost cycle (EDC) and the compressor and outdoor fan will return to normal operation once the defrost cycle has terminated and the compressor "Off" time delay has been satisfied.

Cooling with an Economizer

When the system is in the "Cool" MODE, the RTRM energizes relay (K3). When the normally open (K3) contacts close, the switch over valves (SOV1 & 2) are energized. The economizer is utilized to control the zone temperature providing the outside air conditions are suitable. Outside air is drawn into the unit through modulating dampers. When cooling is required and economizing is possible, the RTRM sends the cooling request to the unit economizer actuator (ECA) to open the economizer damper. The RTRM tries to cool the zone utilizing the economizer to slightly below the zone temperature setpoint. If the mixed air sensor (MAS) senses that the mixed air temperature is below 53°F , the damper modulates toward the closed position. If the zone temperature continues to rise above the zone temperature setpoint controlband and the economizer damper is fully open, the RTRM energizes the compressor contactor (CC1).

The ECA continues to modulate the economizer damper open/closed to keep the mixed air temperature that is calculated by the RTRM.

If economizing is not possible, the ECA drives the damper to the minimum position setpoint when the indoor fan relay (F) is energized and allows mechanical cooling operation.

When the unit is equipped with the optional fan failure switch, wired between terminals J7-5 and J7-6 on the RTOM, the RTRM will stop all cooling functions and produce an analog output if the fan failure switch (FFS) does not open within 40 seconds after a request for fan operation. When the system is connected to a remote panel, the "SERVICE" LED will flash when this failure occurs.

Economizer Set-Up

Adjusting the minimum position potentiometer located on the unit economizer actuator (ECA) sets the required amount of ventilation air.

Two of the three methods for determining the suitability of the outside air can be selected utilizing the enthalpy potentiometer on the ECA, as described below:

4. Ambient Temperature - controlling the economizing cycle by sensing the outside air-dry bulb temperature. The table below lists the selectable dry bulb values by potentiometer setting.
5. Reference Enthalpy - controlling the economizer cycle by sensing the outdoor air humidity. The table below lists the selectable enthalpy values by potentiometer setting. If the outside air enthalpy value is less than the selected value, the economizer is allowed to operate.
6. Comparative Enthalpy - By utilizing a humidity sensor and a temperature sensor in both the return air stream and the outdoor air stream, the unit control processor (RTRM) will be able to establish which conditions are best suited for maintaining the zone temperature, i.e. indoor conditions or outdoor conditions. The potentiometer located on the ECA is nonfunctional when both the temperature and humidity sensors are installed.

Table 65. Potentiometer settings

Potentiometer Setting	Dry Bulb	Enthalpy
A	73°F (22.8°C)	27 Btu/lb (63 kJ/kg)
B	70°F (21.1°C)	25 Btu/lb (58 kJ/kg)
C	67°F ^(a) (19.4°C)	23 Btu/lb (53 kJ/kg)
D	63°F (17.2°C)	22 Btu/lb (51 kJ/kg)
E	55°F (12.8°C)	19 Btu/lb (44 kJ/kg)

(a) Factory Setting

Heating Operation

When the system switch is set to the “Heat” MODE, the RTRM energizes relay (K3). When the normally open (K3) contacts open, the switch over valves (SOV1 & 2) are de-energized. When the zone temperature falls below the heating setpoint controlband, the RTRM energizes the (K9) & (K10) relay coils on the RTRM. When the (K9) relay contacts close, the compressor contactor (CC1) coil is energized provided the low pressure control (LPC1), high pressure control (HPC1) and discharge line thermostat (TDL 1) are closed. When the CC1 contacts close, compressor (CPR1) and the outdoor fan motor (ODM) starts provided the normally open (ODF) relay contacts are closed.

The RTRM “Smart Recovery” function monitors the rate at which the zone temperature is changing every 9 minutes during the operating heating cycle. If the zone temperature is rising at a rate greater than 6°F per hour, no additional heat is requested (auxiliary electric heat). If not, the RTRM energizes the first stage auxiliary electric heat contactor

(AH or AH and CH) (electric heat optional). A minimum of 10 seconds “Off” time must have elapsed between heater cycles. If mechanical heat and first stage auxiliary heat cannot provide the 6 F recovery rate, the RTRM energizes second stage auxiliary heat contactor (BH), if applicable. The RTRM continues to monitor the rate of change and stages the electric heat “Off” as it determines that the mechanical heat (compressor operation) is sufficient.

Demand Defrost

Demand defrost is a standard feature which permits defrost whenever coil icing conditions begin to significantly reduce unit capacity. To permit defrost, the outdoor temperature must be below 52°F, coil temperature must be below 33°F, and the delta temperature F must exceed a RTRM calculated value. After 30 minutes of run time under defrost permit conditions, the RTRM initiates a defrost cycle. Upon termination of this cycle, the RTRM monitors the outdoor temperature (ODT) and the coil temperature (CT) and calculates the delta temperature F (ODT - CT). This value is stored in memory and the RTRM calculates a defrost initiate value. The RTRM continually compares the delta temperature F to the defrost initiate value. Once the delta tee reaches the initiate value, a defrost cycle is initiated.

During the defrost cycle, the RTRM energizes the relay (K3), which energizes the switch over valves (SOV1 & 2) through the normally open K3 relay contacts. Then turns the outdoor fan motor (ODM) “Off” by de-energizing the (K8) relay, which de-energizes the (ODF) relay. The RTRM energizes the auxiliary electric heat contactor (AH) and (BH) (if applicable) if they are not operating, while maintaining compressor (CPR1) operation.

The defrost cycle is terminated based on the RTRM termination temperature calculation using the outdoor temperature (ODT) + 27°F. The defrost termination temperature (DTT) will typically be between 37°F and 52°F.

Emergency Heat Operation

When the system selection switch is in the “EM HEAT” MODE, and the zone temperature falls below the heating setpoint controlband, the RTRM bypasses compressor and outdoor fan operation and energizes the K1 relay located on the RTRM. When K1 relay contacts close, the first stage auxiliary electric heat contactor (AH or AH and CH) is energized. If the first stage of auxiliary electric heat can not satisfy the heating requirement, the RTRM energizes the K2 relay coil located on the RTRM. When the K2 relay contacts close, the second stage auxiliary electric heat contactor (BH) is energized. The RTRM cycles both the first and second stages of heat “On” and “Off” as required to maintain the zone temperature setpoint.

Sequence of Operation - Heat Pumps

Drain Pan Condensate Overflow Switch (Optional)

This input incorporates the Condensate Overflow Switch (COF) mounted on the drain pan and the ReliaTel Options Module (RTOM). When the condensate level reaches the trip point for 6 continuous seconds, the RTOM will shut down all unit function until the overflow condition has cleared. The unit will return to normal operation after 6 continuous seconds with the COF in a non-tripped condition. If the condensate level causes the unit to shutdown more than 2 times in a 3 day period, the unit will be locked-out of operation. A manual reset of the diagnostic system through the Zone Sensor or Building Automation System (BAS) will be required. Cycling unit power will also clear the fault.

Pressure Curves

Figure 1. T/YSC036G3,4,W cooling cycle pressure curve

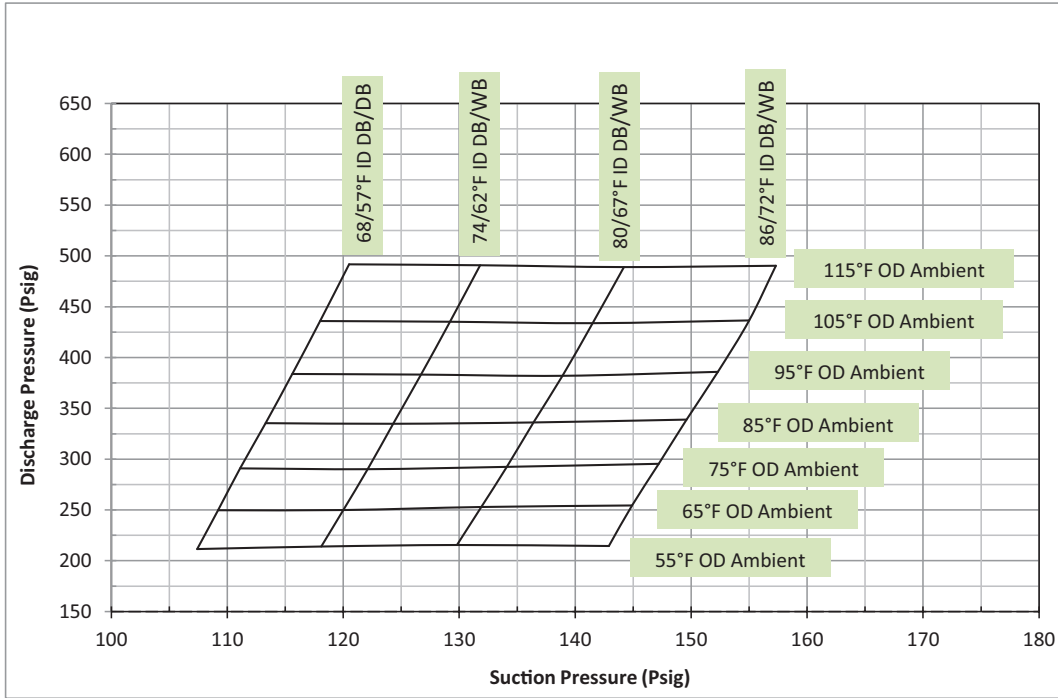
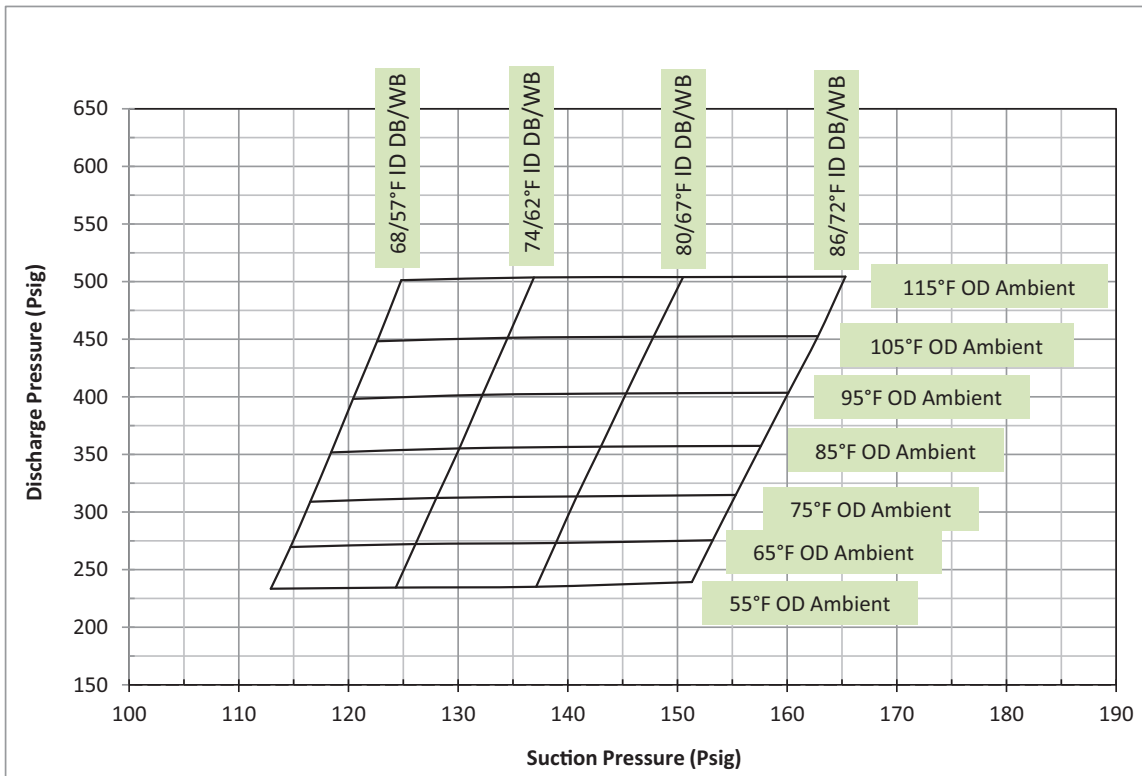


Figure 2. T/YSC048G3,4,W cooling cycle pressure curve



Pressure Curves

Figure 3. T/YSC060G3,4,W cooling cycle pressure curve

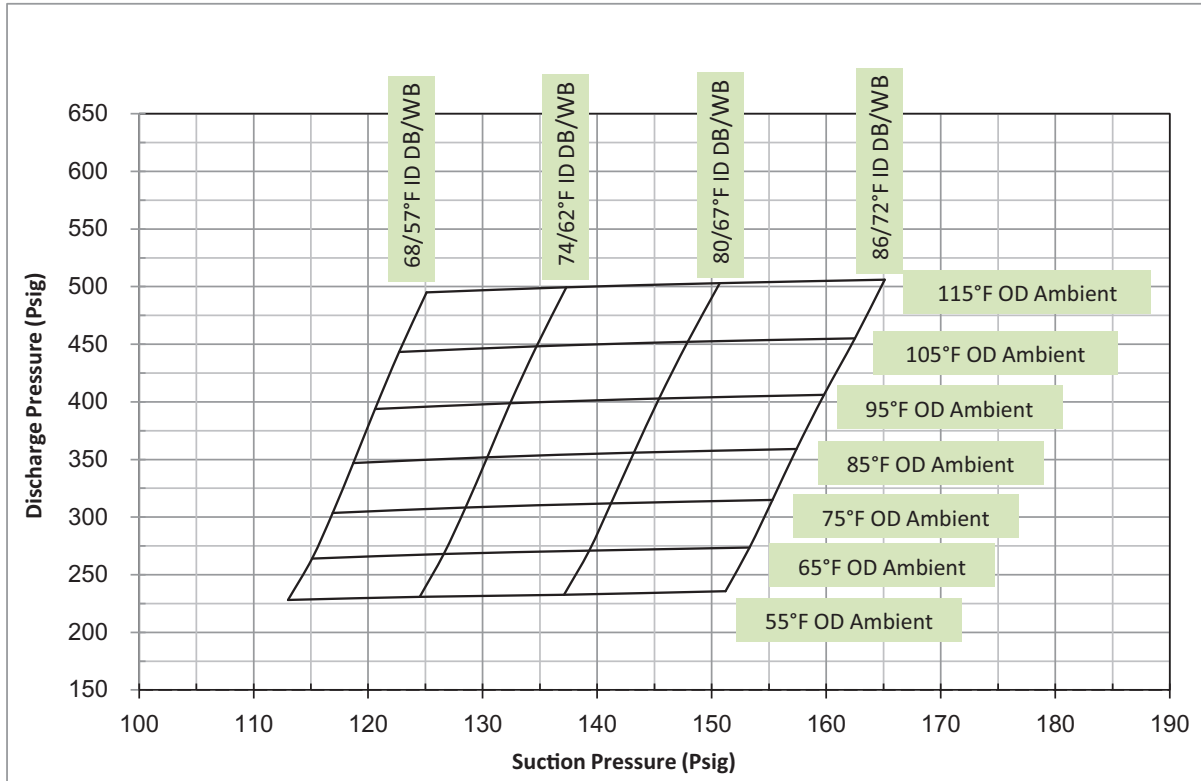


Figure 4. T/YSC033G3,4,W cooling cycle pressure curve

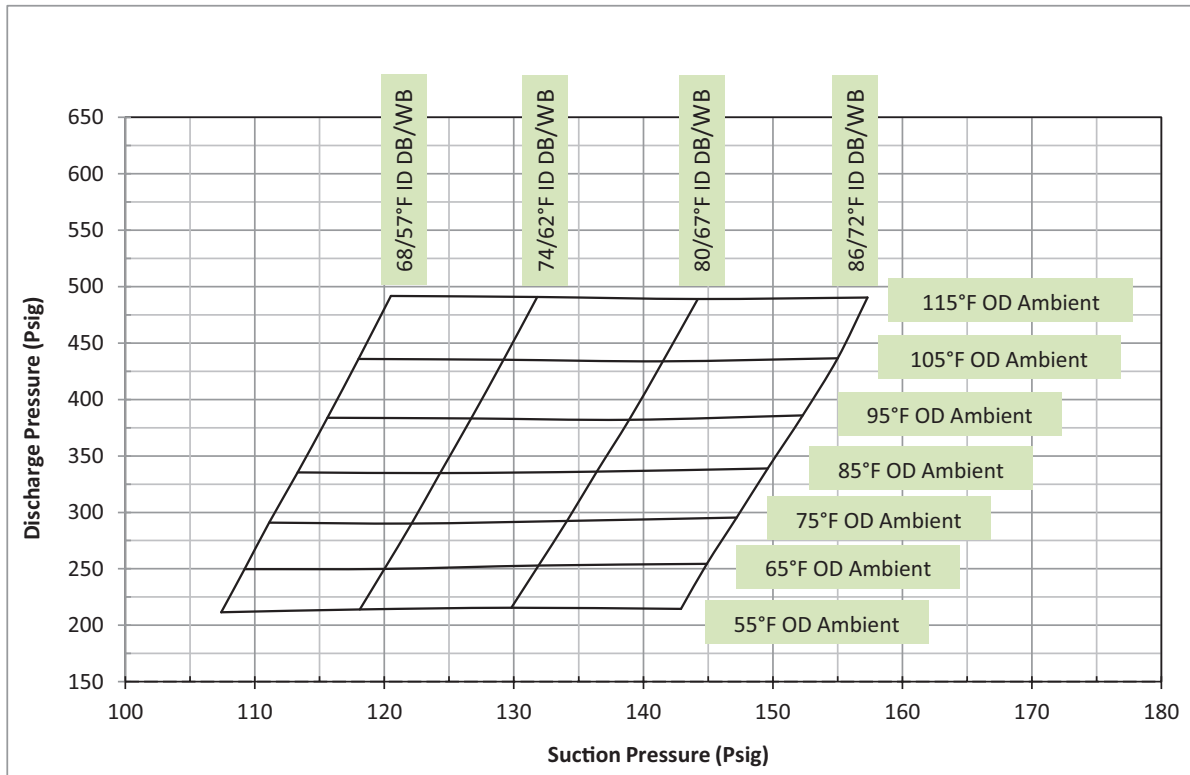


Figure 5. T/YSC043G3,4,W cooling cycle pressure curve

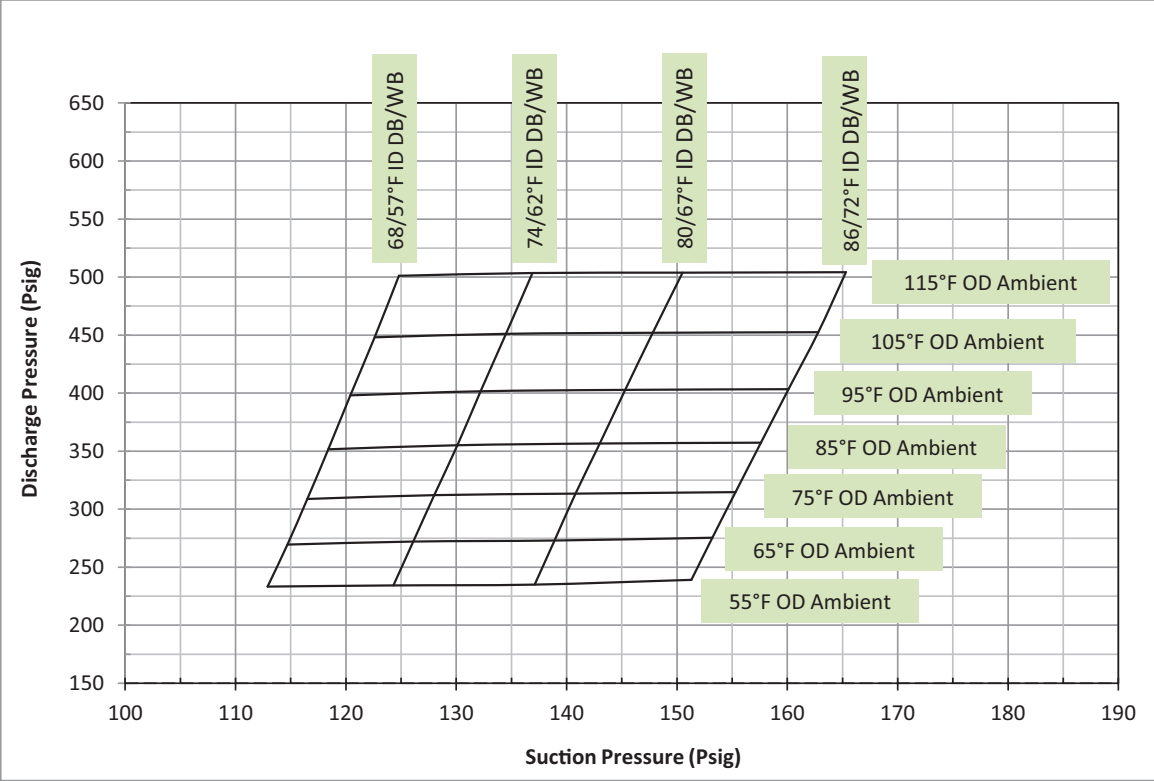
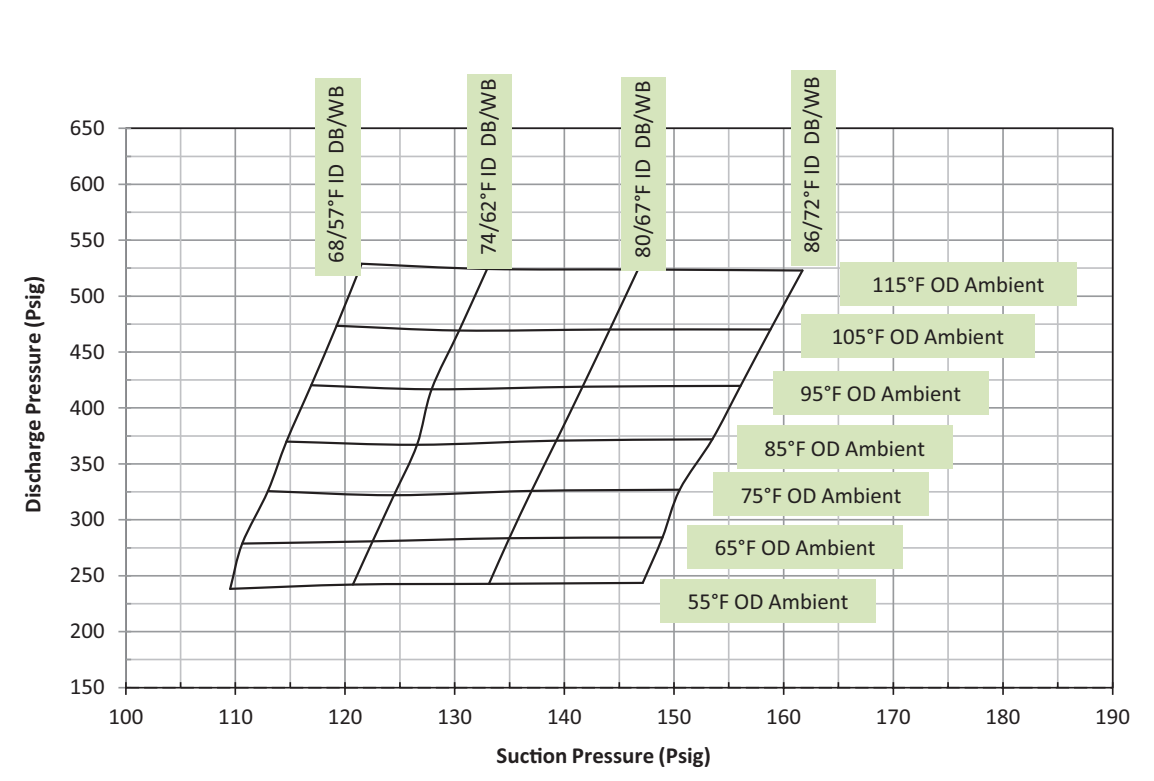


Figure 6. T/YSC063G3,4,W cooling cycle pressure curve



Pressure Curves

Figure 7. T/YHC036E3,E4 cooling cycle pressure curve

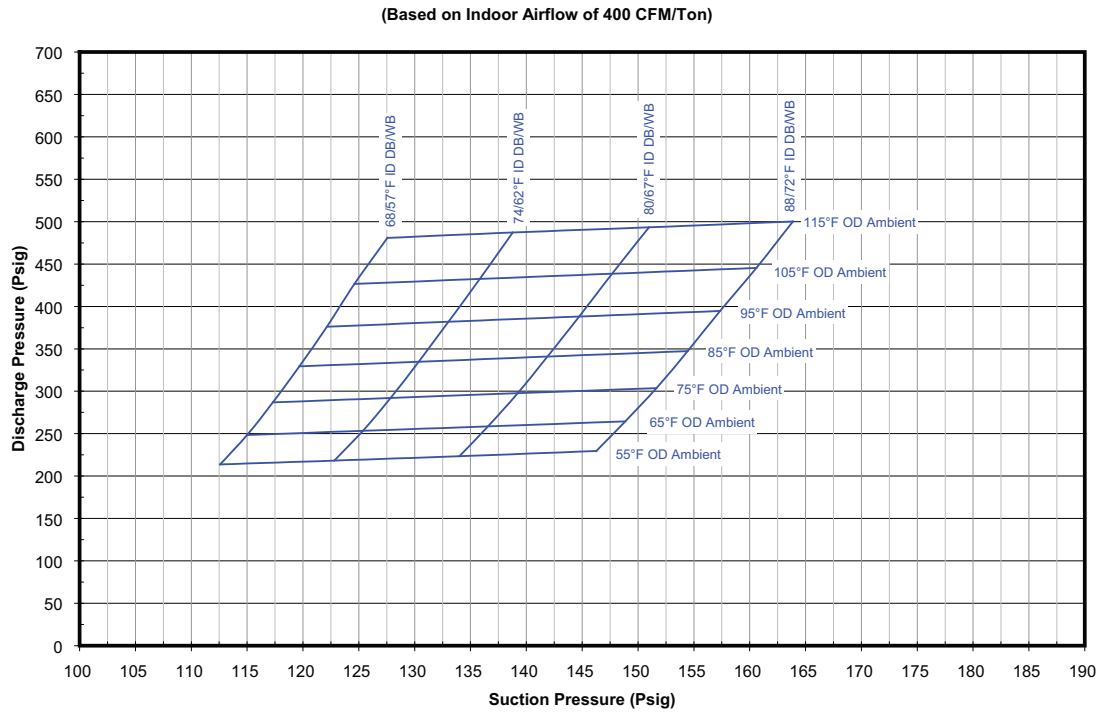


Figure 8. T/YHC048E3,E4 cooling cycle pressure curve

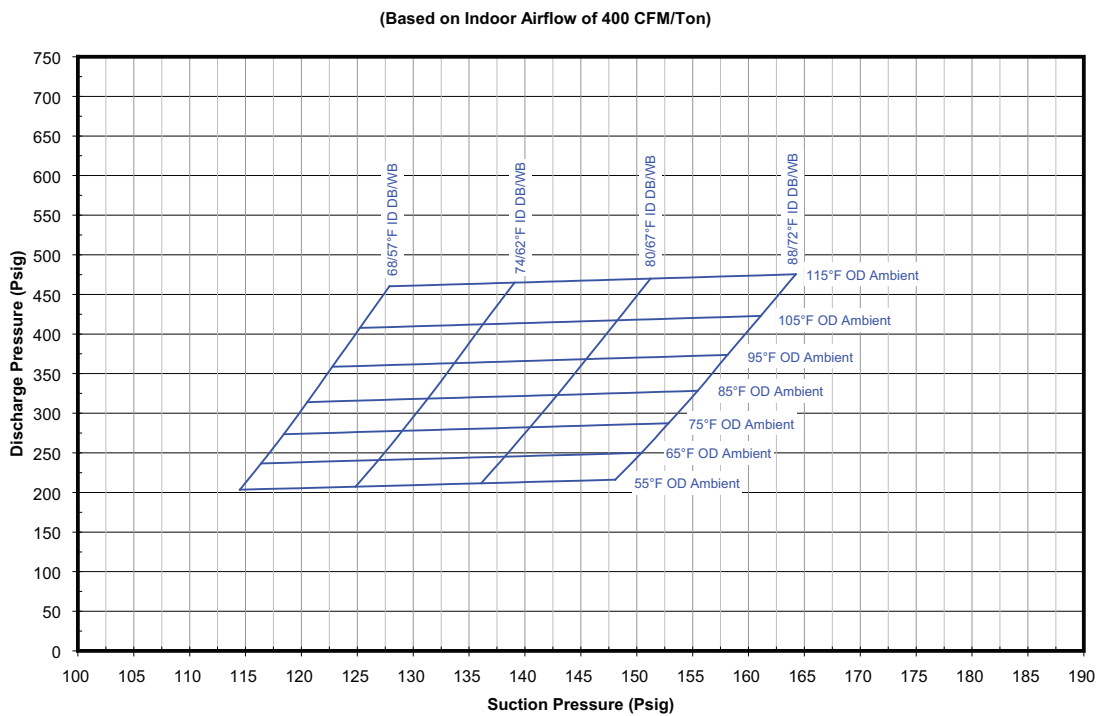


Figure 9. T/YHC048F3,F4 cooling cycle pressure curve

(Based on Indoor Airflow of 400 CFM / Ton)

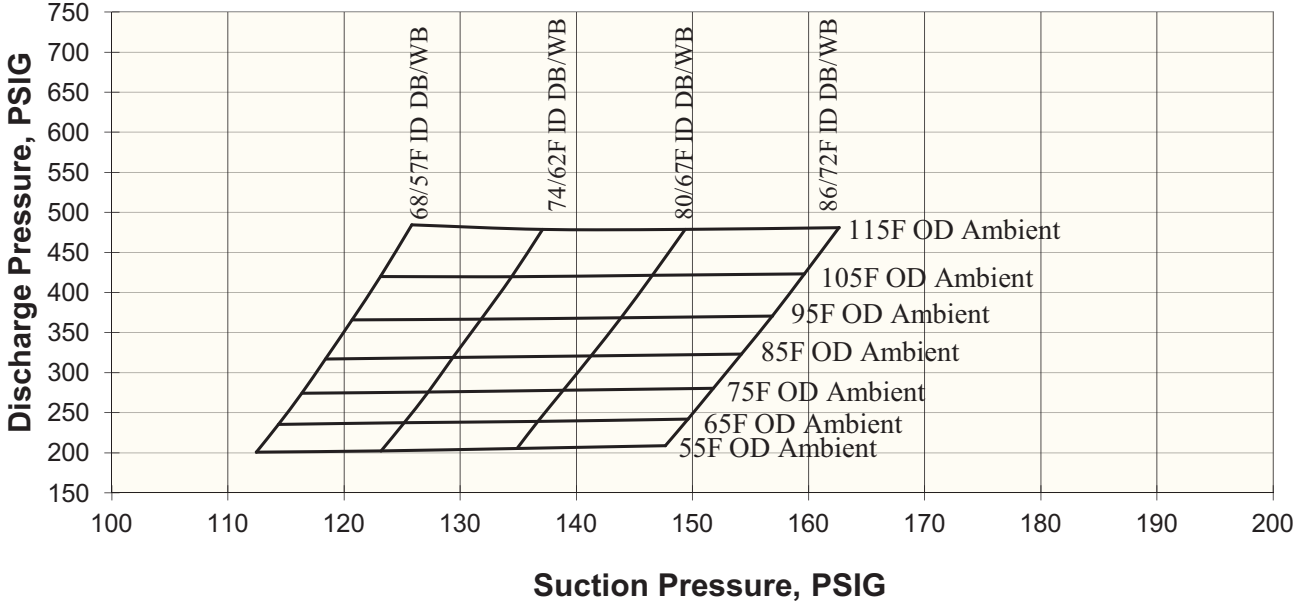
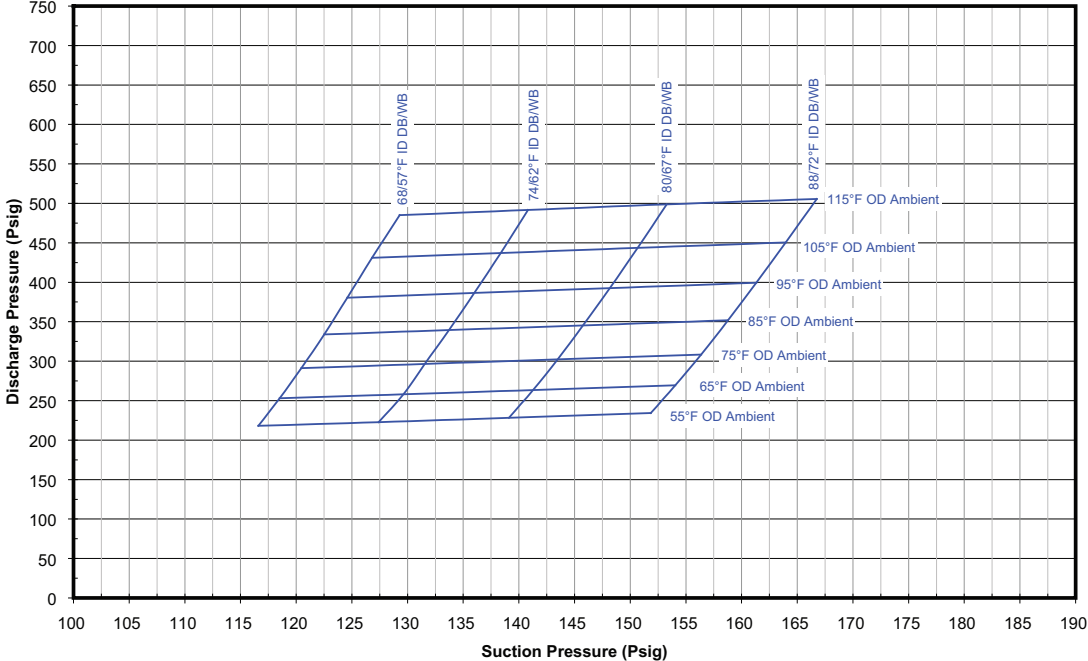


Figure 10. T/YHC060E3,E4 cooling cycle pressure curve

(Based on Indoor Airflow of 400 CFM/Ton)



Pressure Curves

Figure 11. T/YHC060F3,F4 cooling cycle pressure curve

(Based on Indoor Airflow of 400 CFM / Ton)

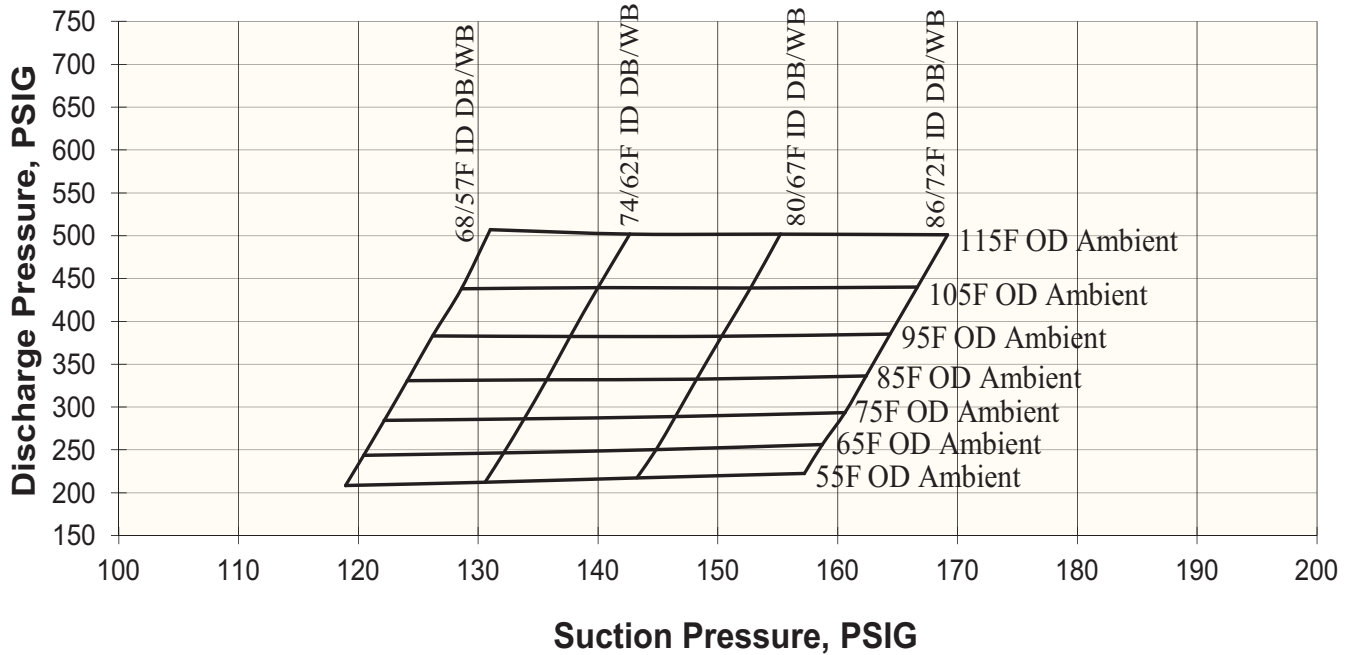


Figure 12. WSC036H3,4,W cooling cycle pressure curve

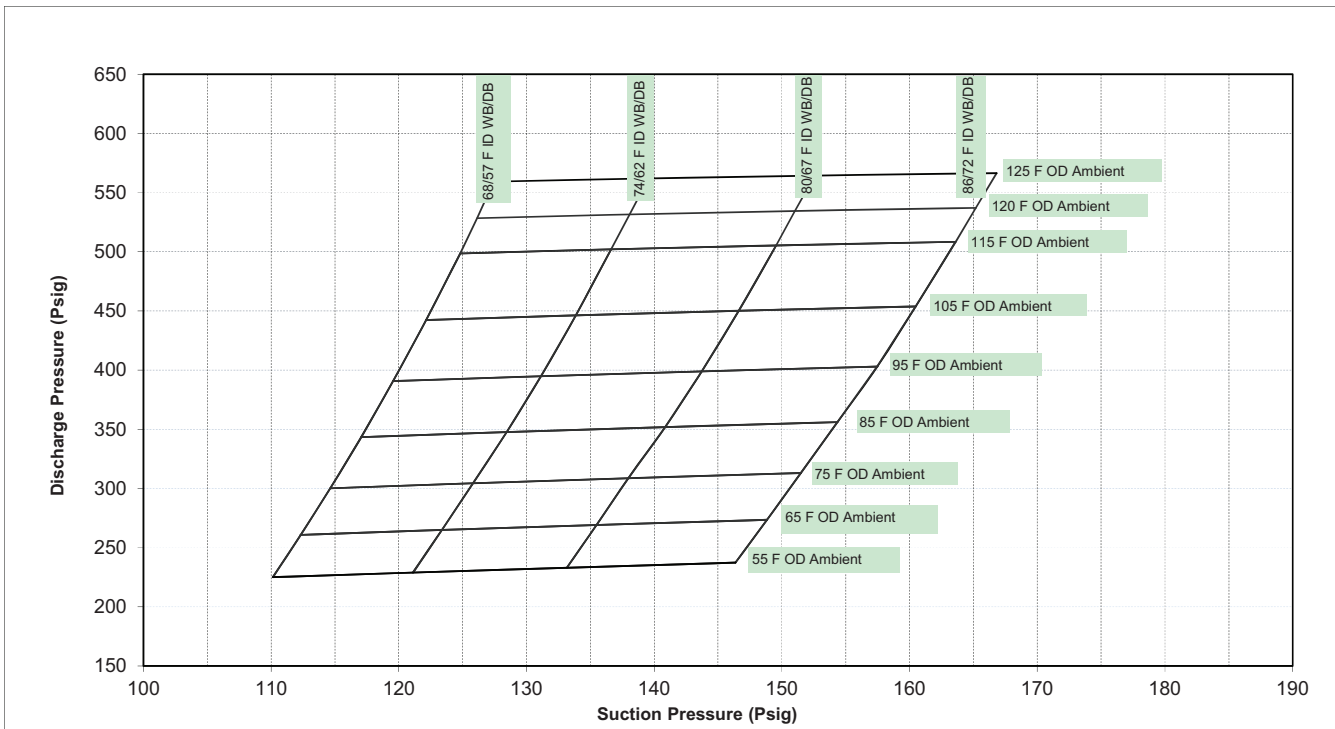


Figure 13. WSC036H3,4,W heating pressure curve

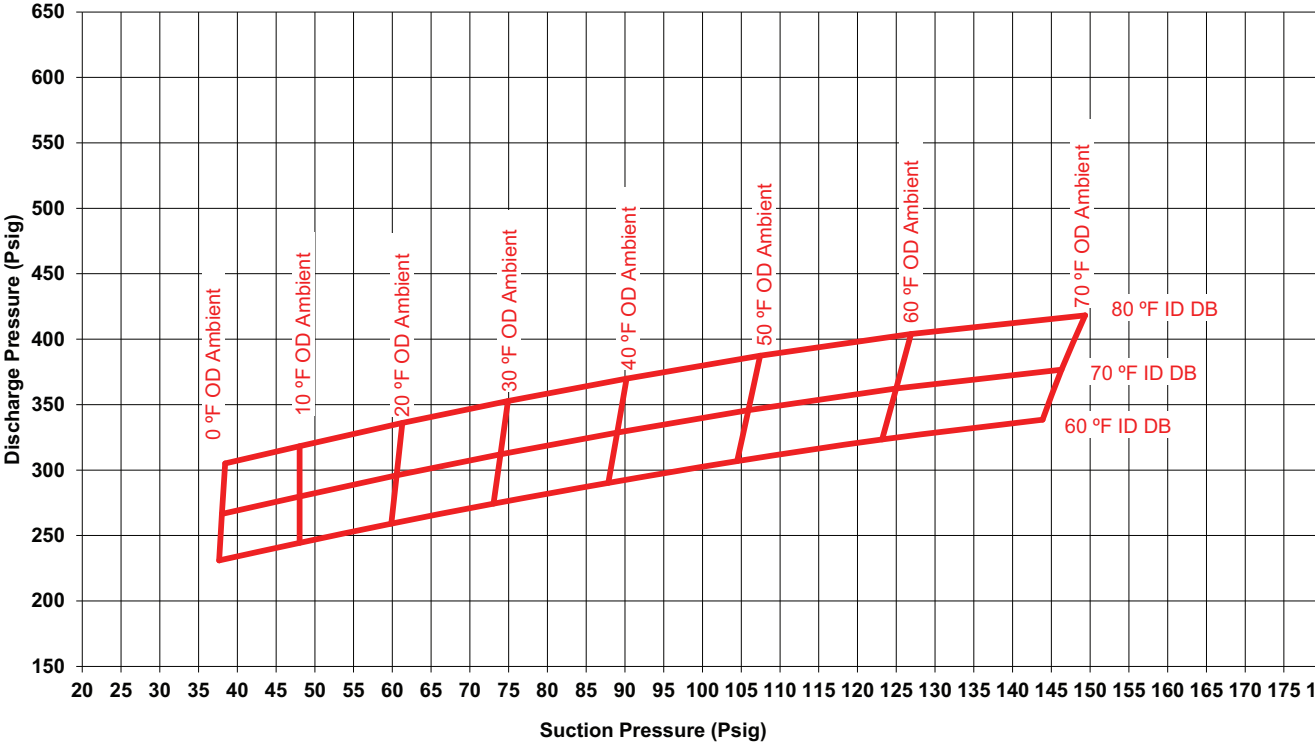
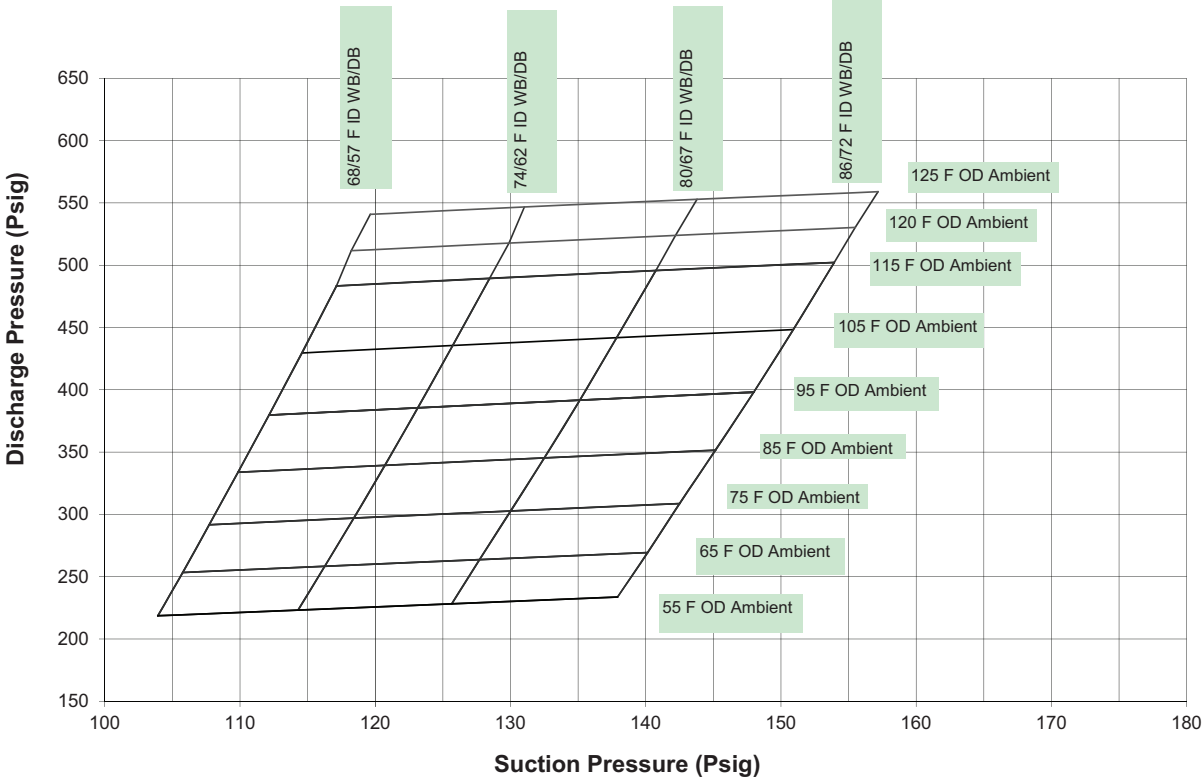


Figure 14. WSC048H3,4,W cooling cycle pressure curve



Pressure Curves

Figure 15. WSC048H3,4,W heating pressure curve

(Based on Indoor Airflow of 400 CFM/Ton)

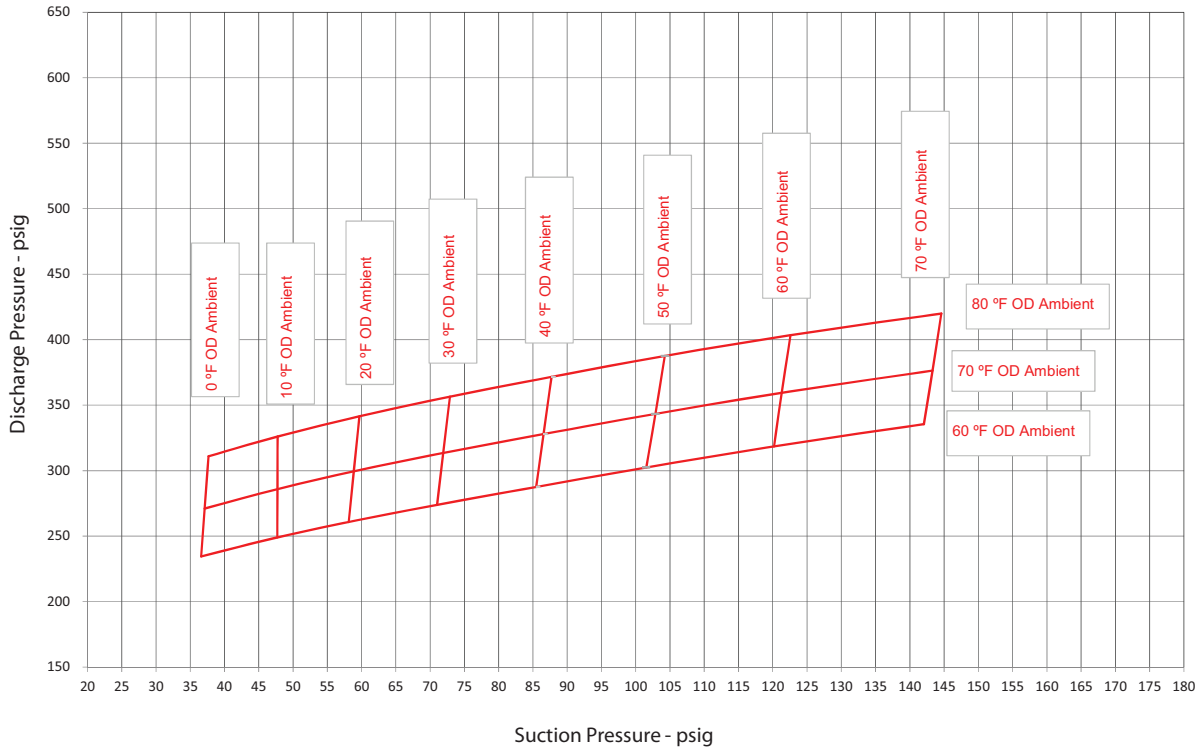


Figure 16. WSC060H3,4,W cooling cycle pressure curve

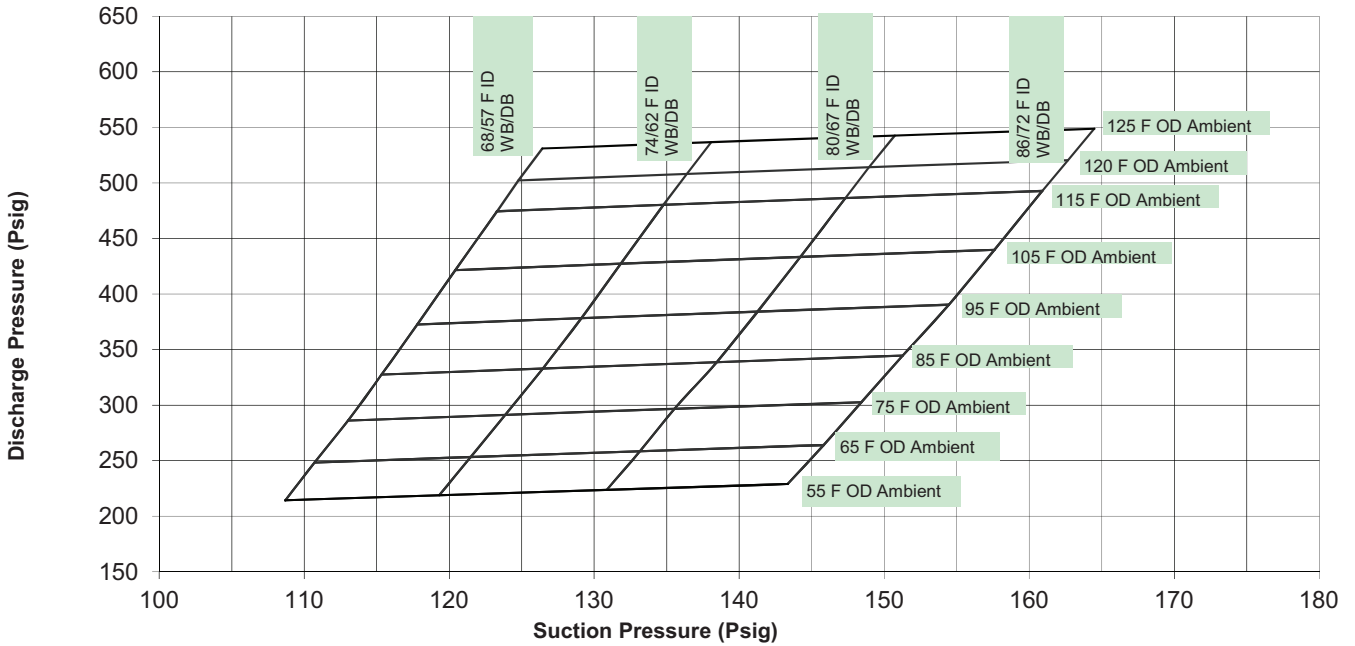
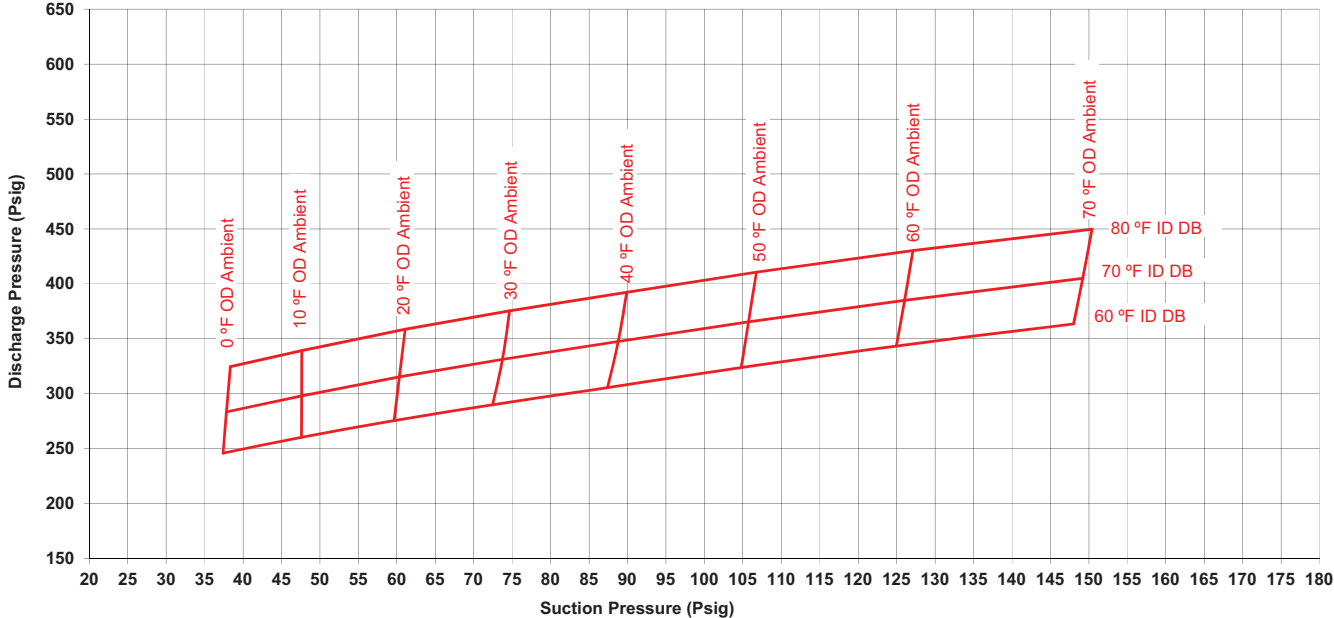


Figure 17. WSC060H3,4,W heating pressure curve

(Based on Indoor Airflow of 400 CFM/Ton)



Subcooling Charging Charts

Figure 18. T/YSC036G3,4,W subcooling charging chart

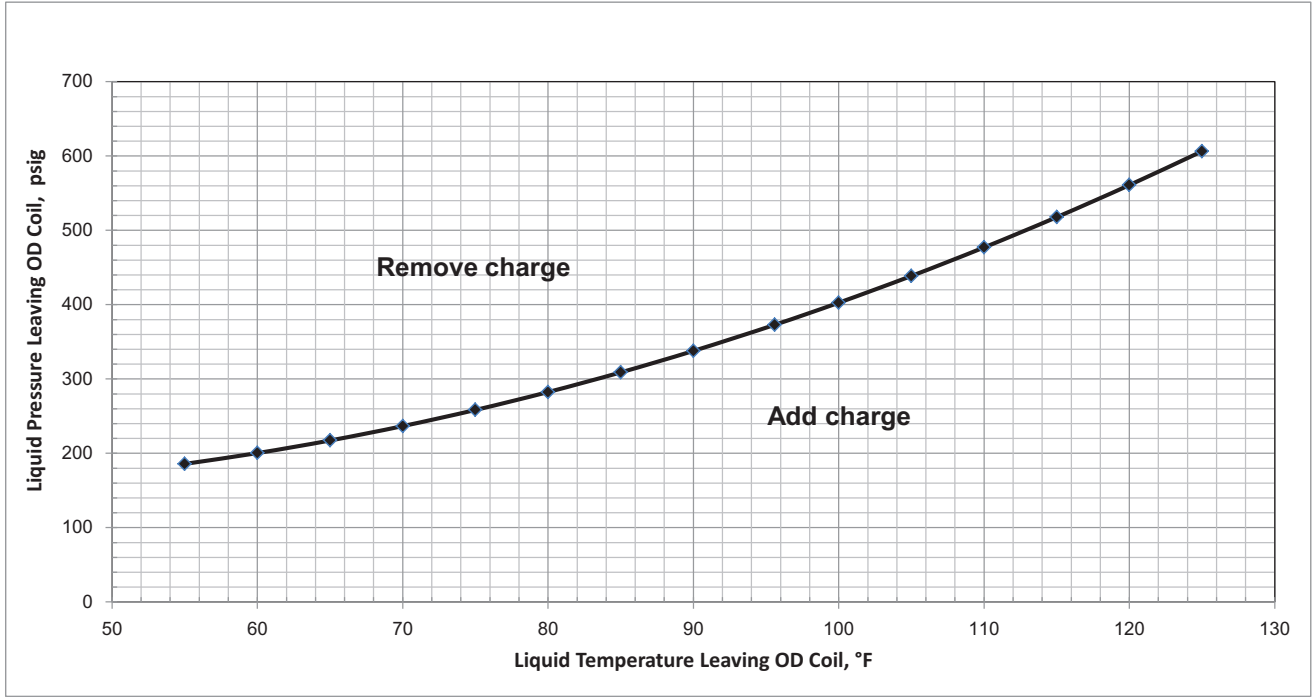


Figure 19. T/YSC048G3,4,W subcooling charging chart

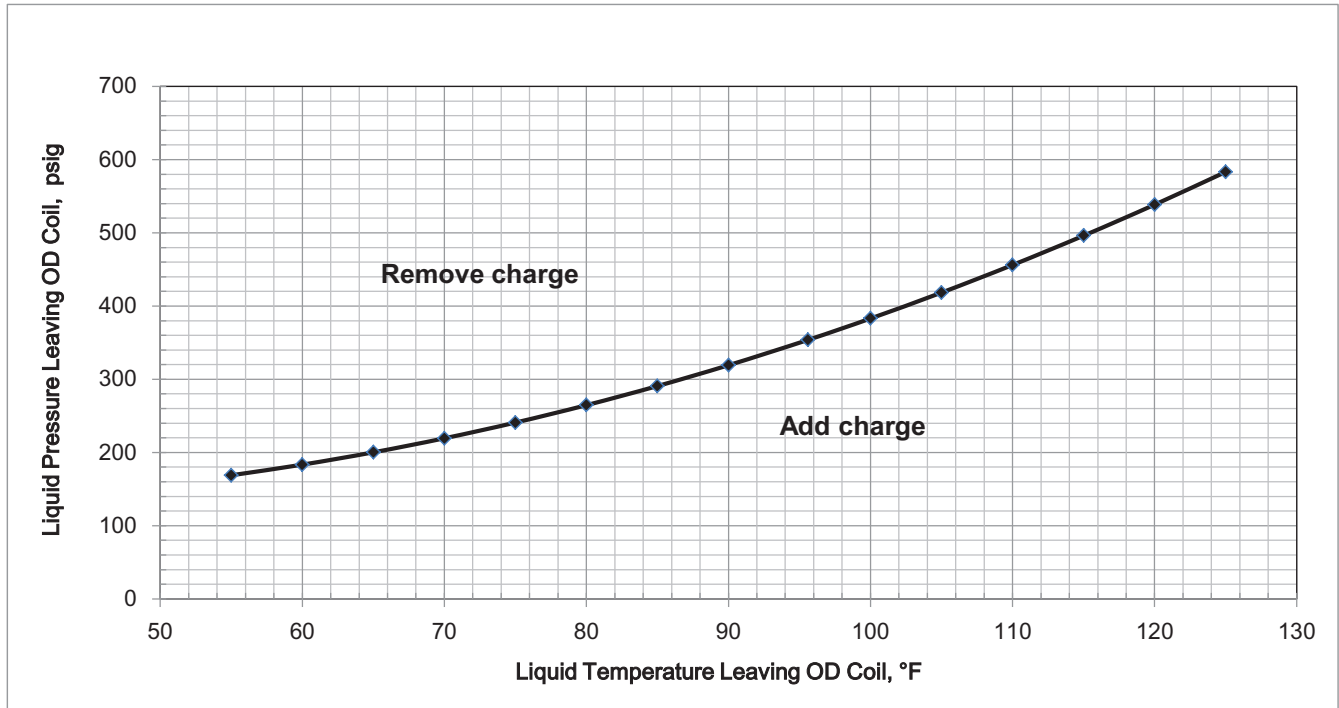


Figure 20. T/YSC060G3,4,W subcooling charging chart

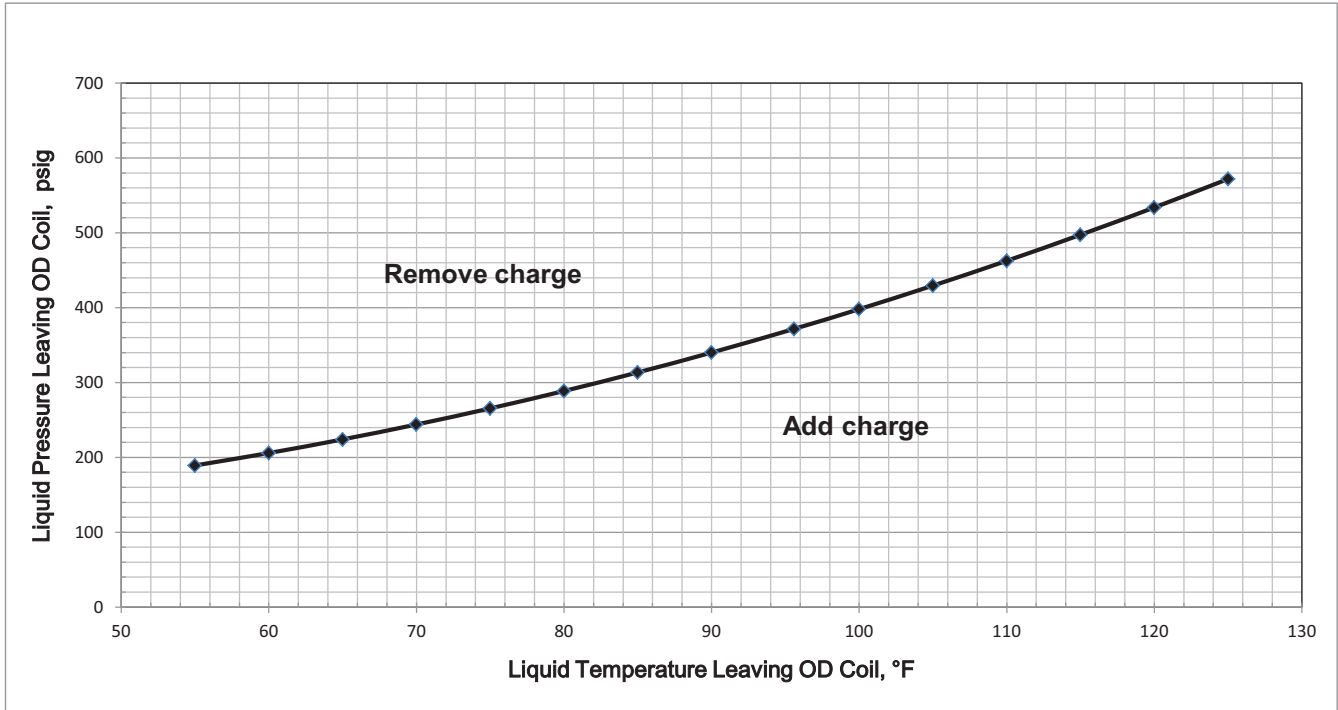
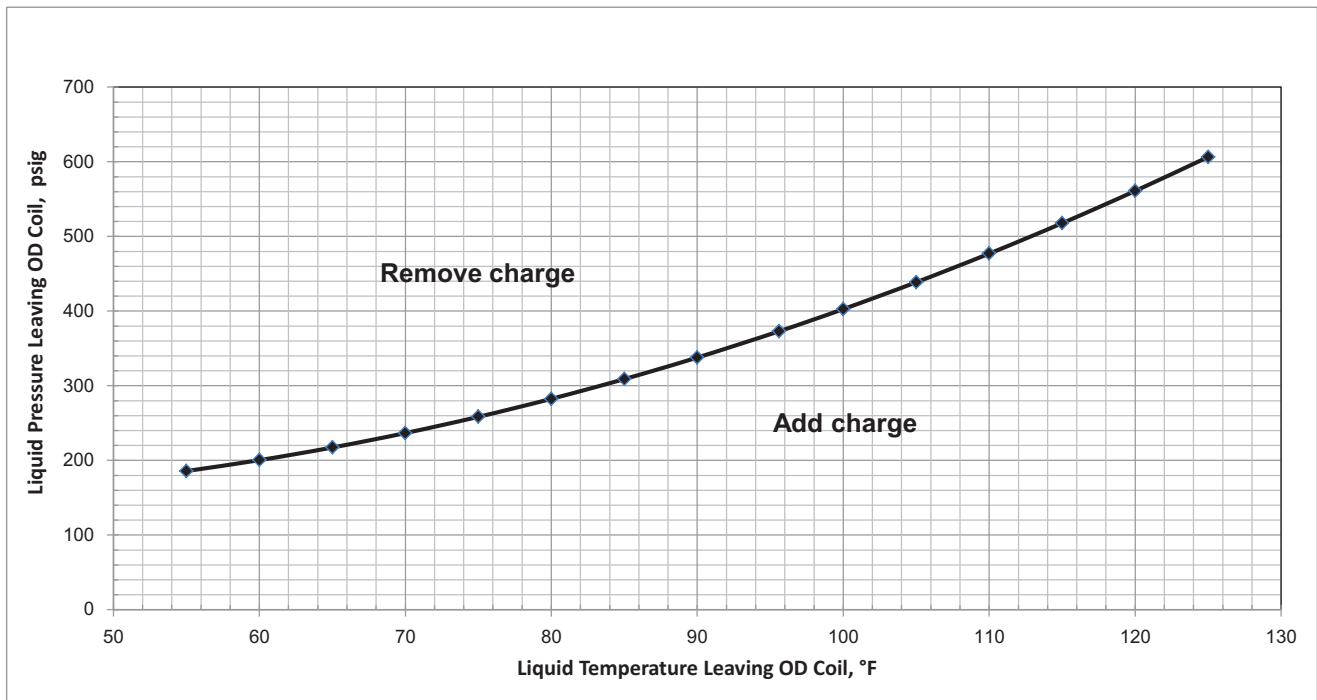


Figure 21. T/YSC033G subcooling charging chart



Subcooling Charging Charts

Figure 22. T/YSC043G subcooling charging chart

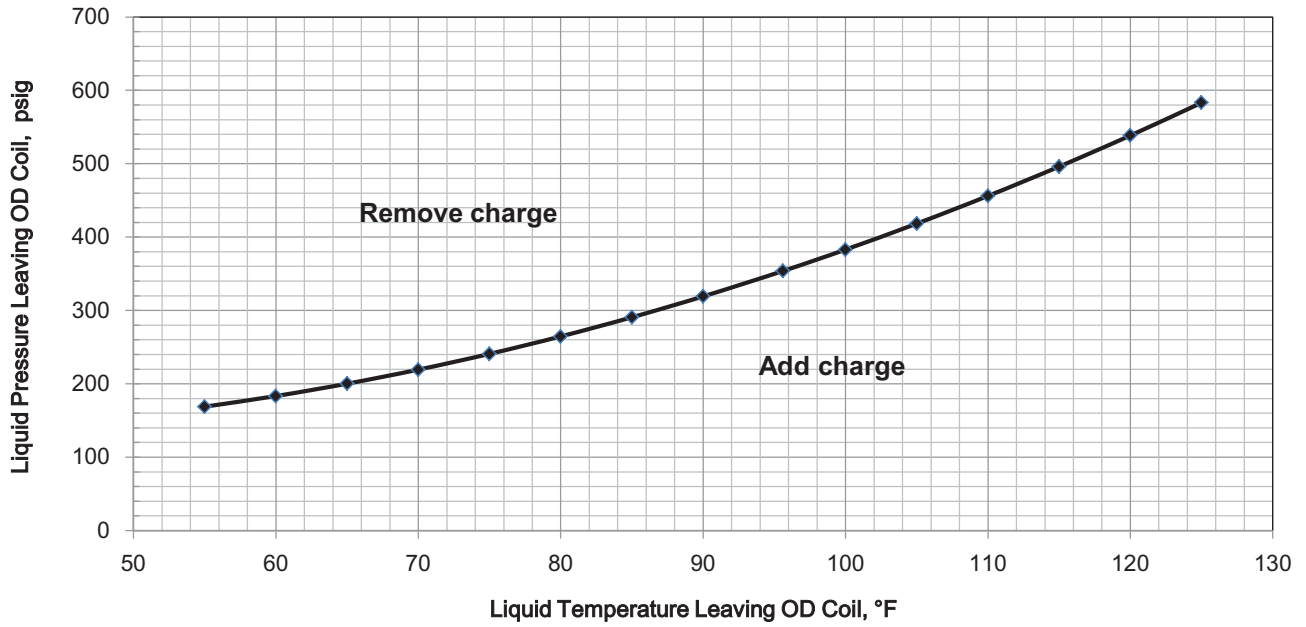


Figure 23. T/YSC063G subcooling charging chart

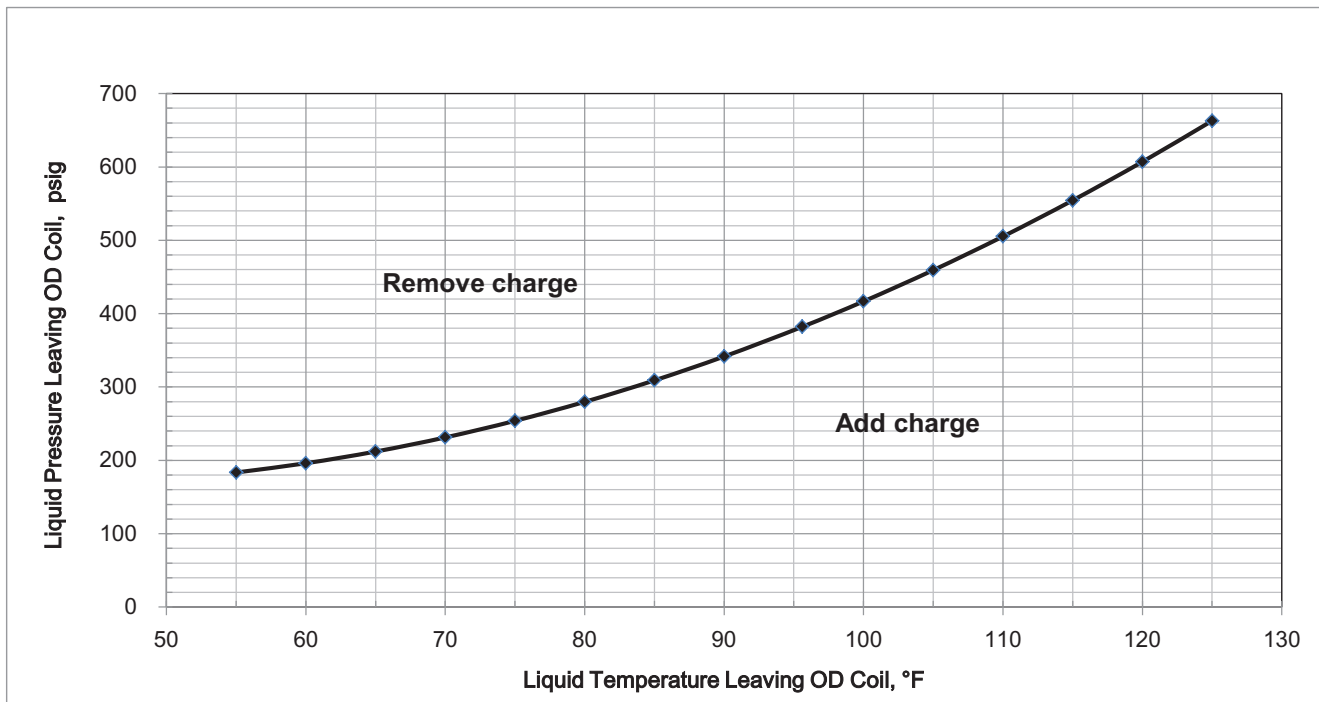


Figure 24. T/YHC036E3,E4 subcooling charging chart

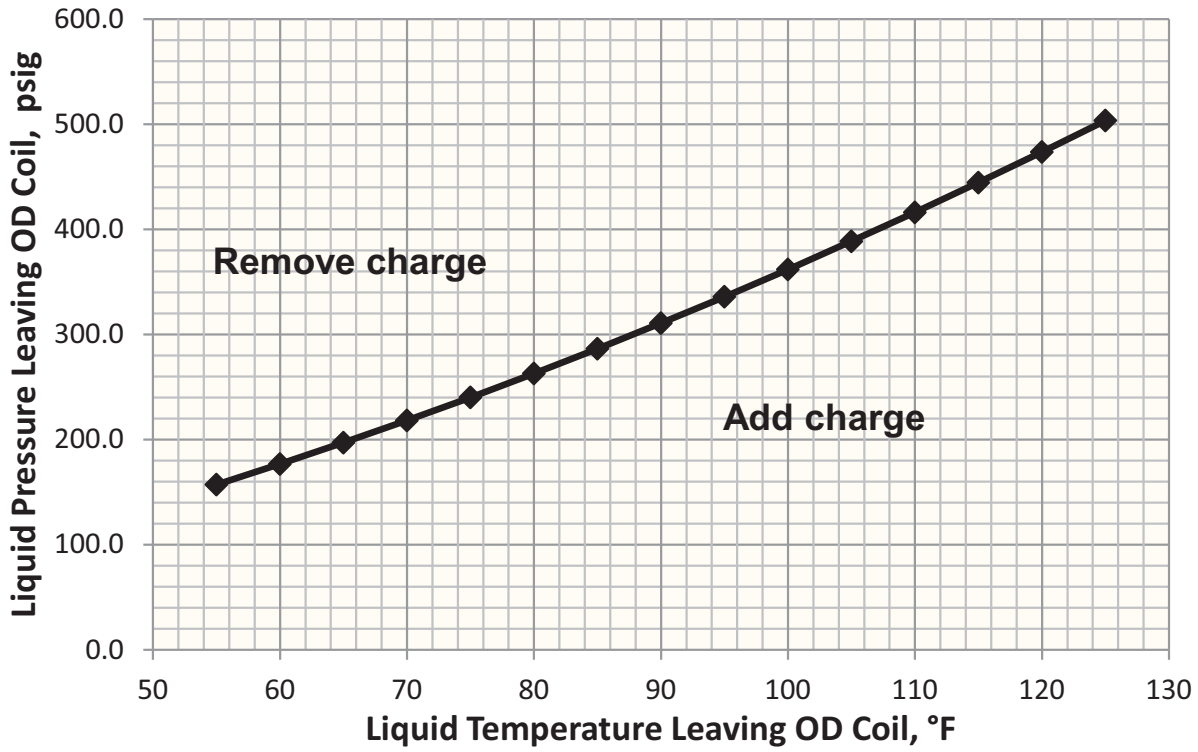
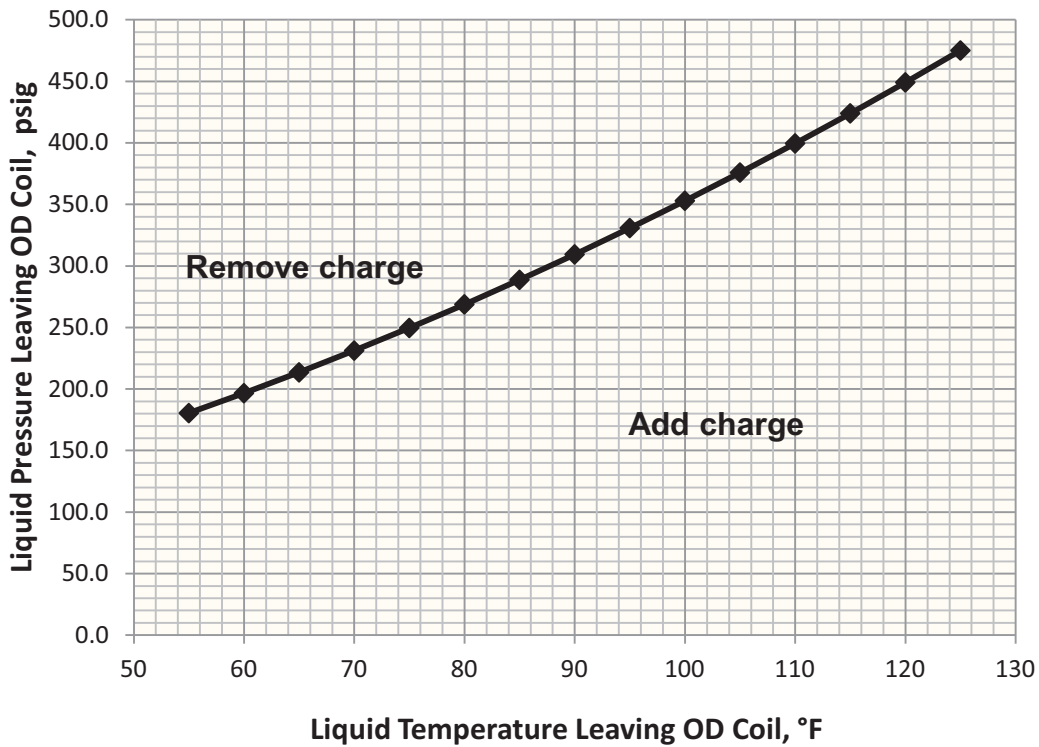


Figure 25. T/YHC048E3,E4 subcooling charging chart (dehumidification)



Subcooling Charging Charts

Figure 26. T/YHC048F3,F4 Subcooling charging chart

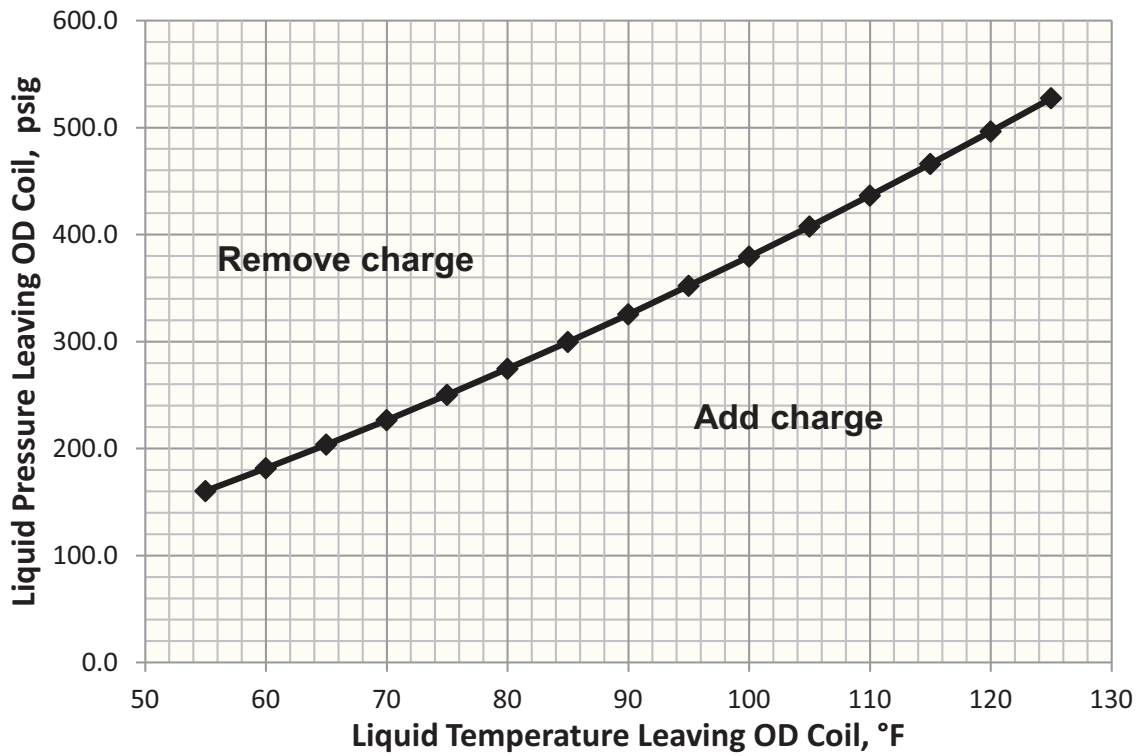


Figure 27. T/YHC060E3,E4 subcooling charging chart (dehumidification)

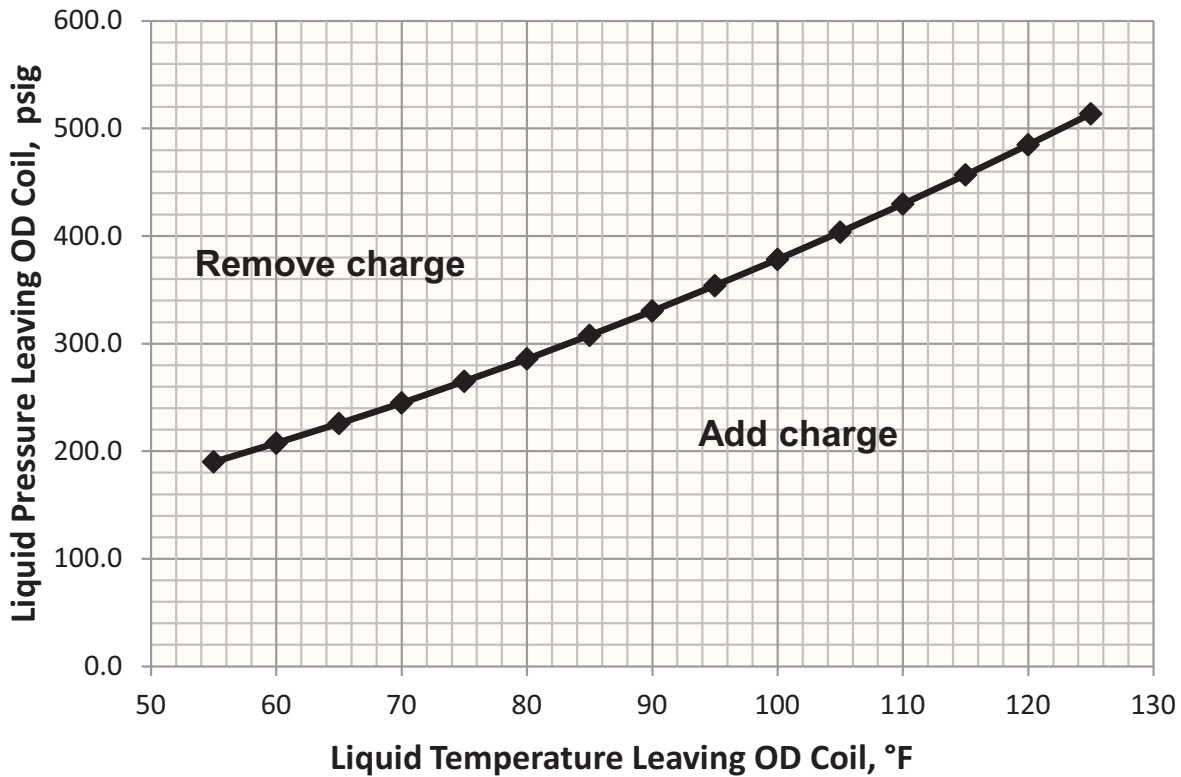


Figure 28. T/YHC060F3,F4 subcooling charging chart

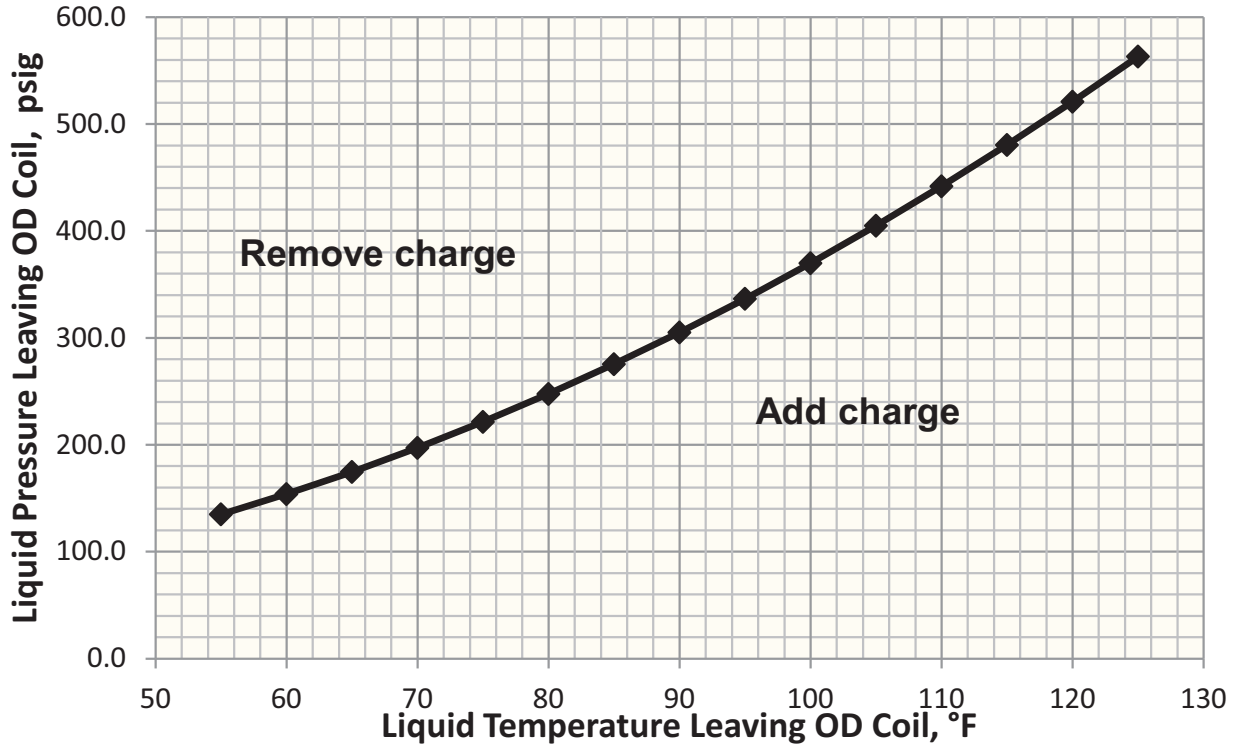
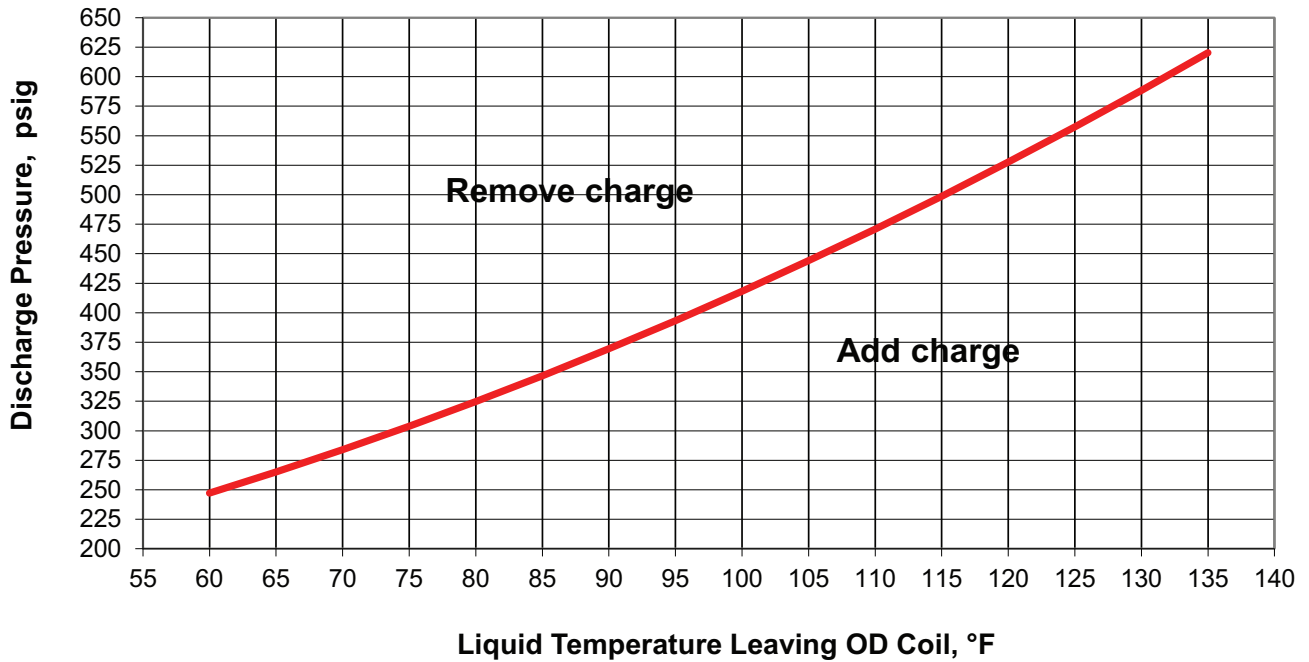


Figure 29. WSC036H3,4,W subcooling charging chart - cooling



Subcooling Charging Charts

Figure 30. WSC036H3,4,W subcooling charging chart - heating

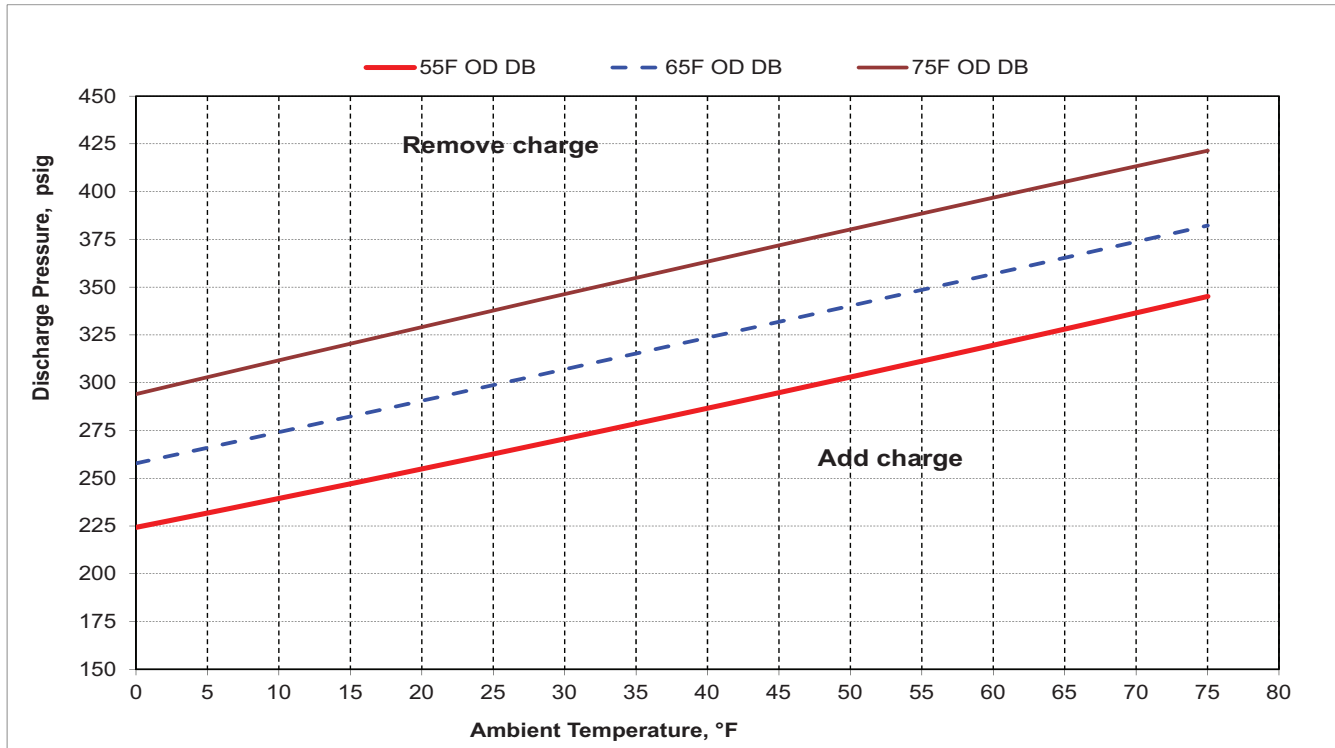


Figure 31. WSC048H3,4,W subcooling charging chart - cooling

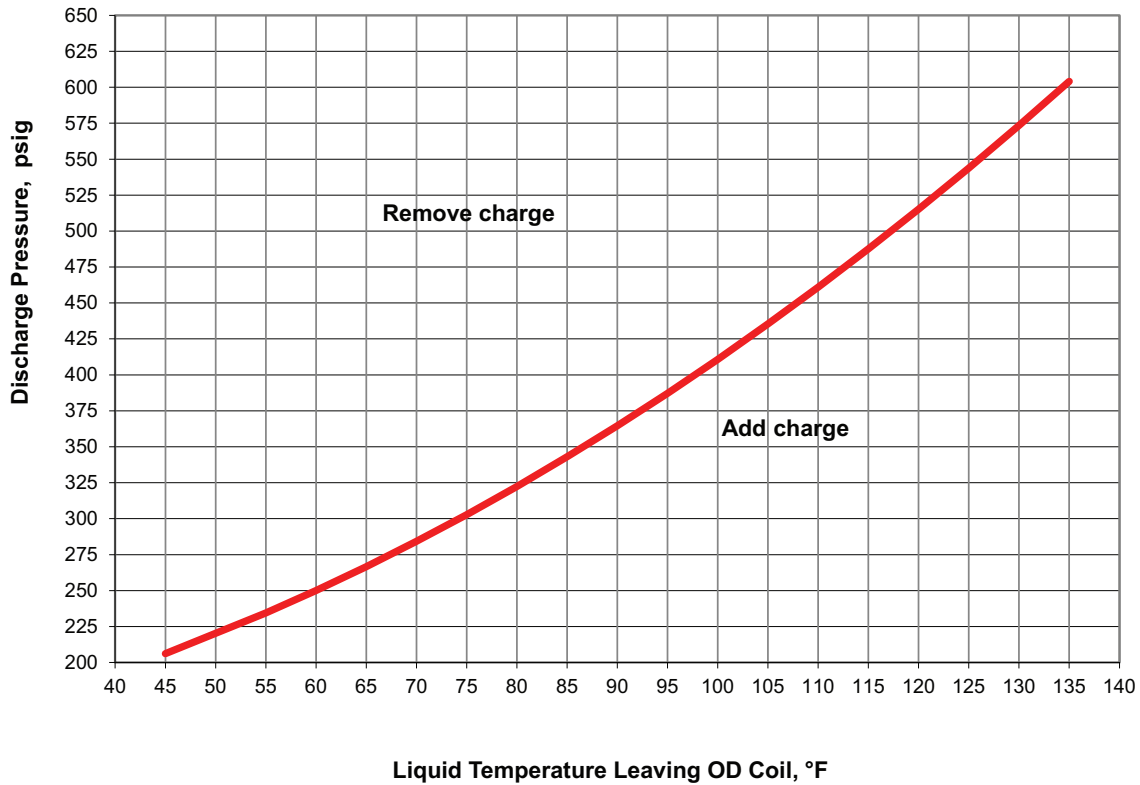


Figure 32. WSC048H3,4,W subcooling charging chart - heating

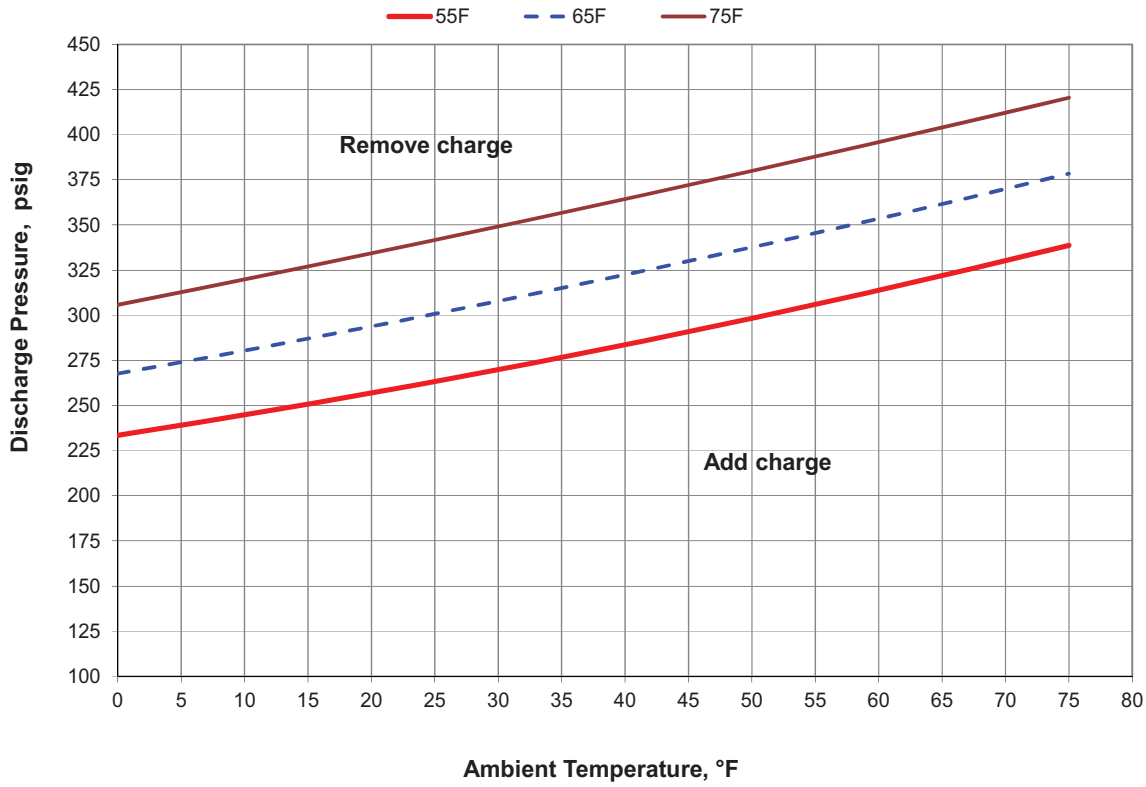
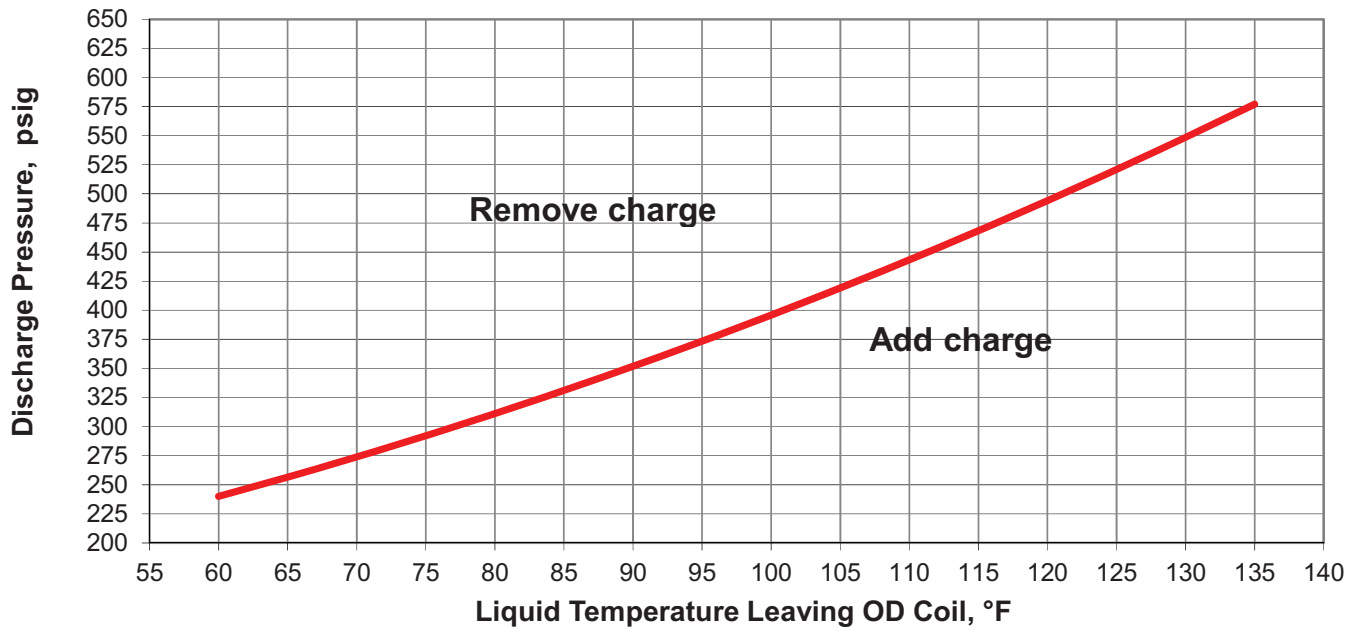
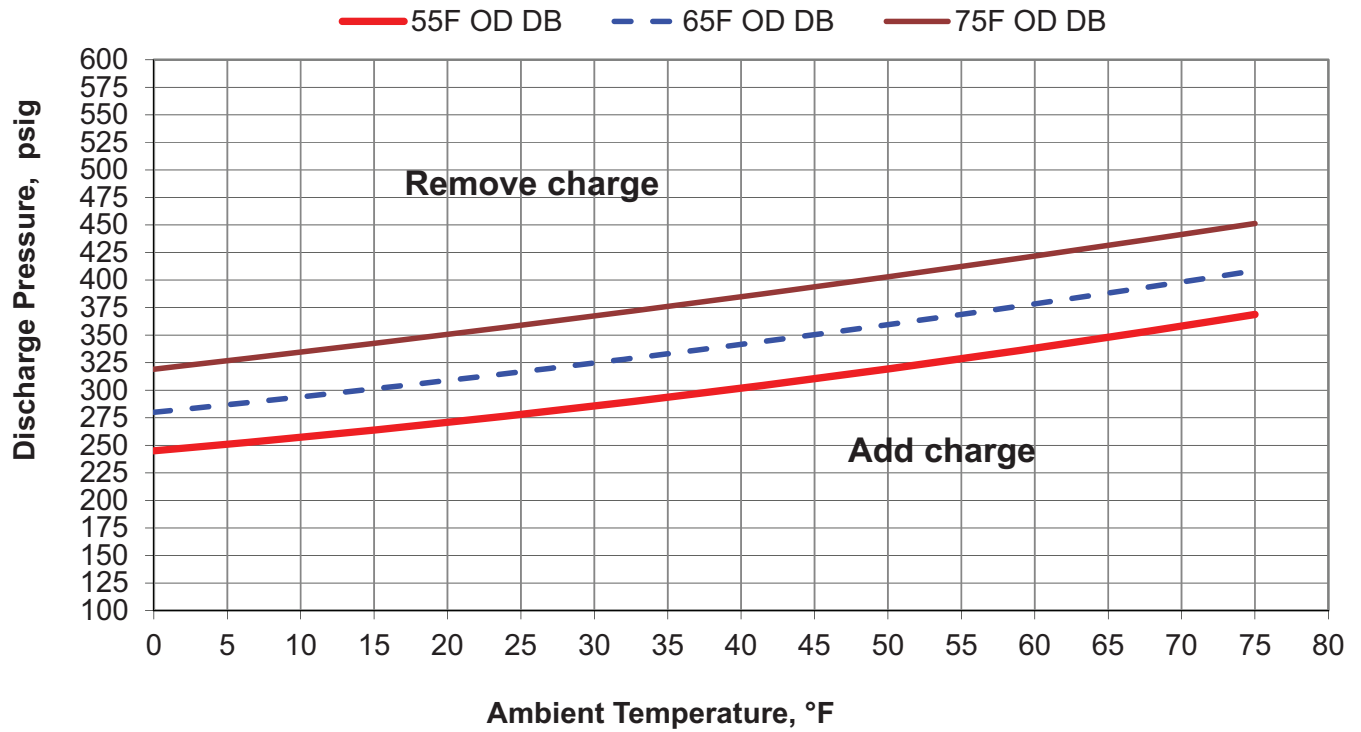


Figure 33. WSC060H3,4,W subcooling charging chart - cooling



Subcooling Charging Charts

Figure 34. WSC060H3,4,W subcooling charging chart - heating



Refrigerant Circuits

Figure 35. T/YSC036/033/048/043/060/063G refrigerant circuit

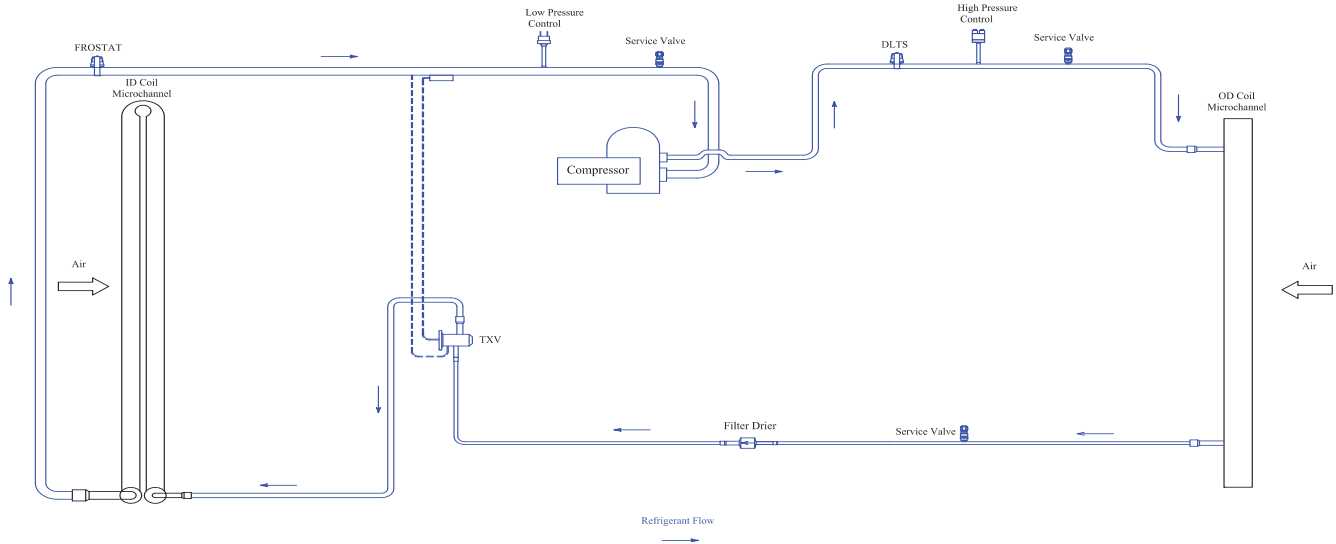
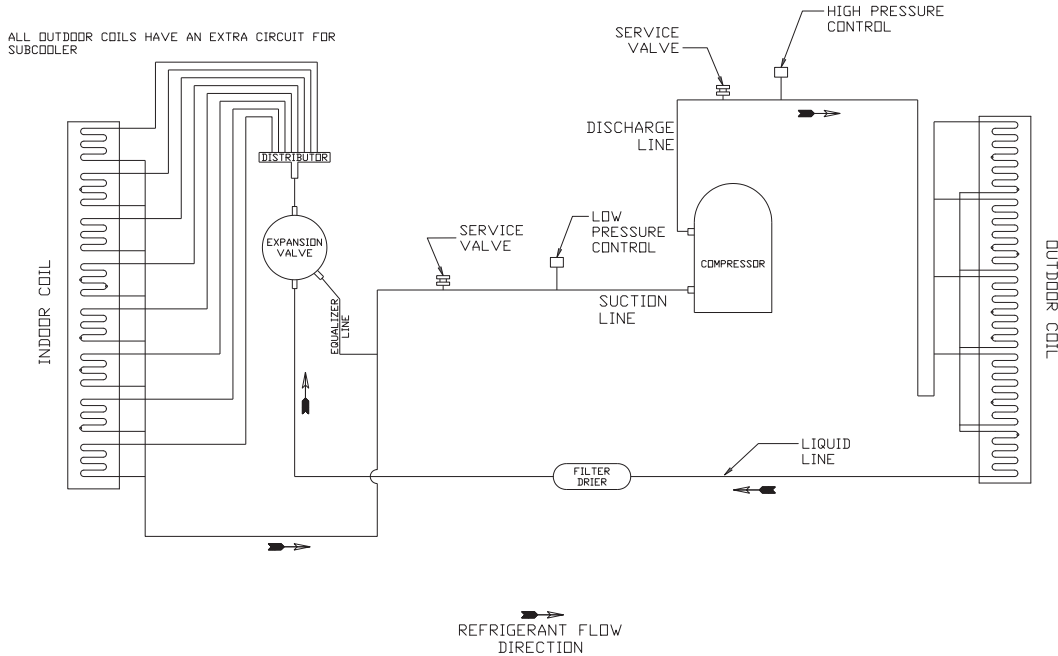


Figure 36. T/YHC036-060E, T/YHC048-060F refrigerant circuit

Unit	No. Circuits Indoor Coil	No. Circuits Outdoor Coil
T/YHC036E1,E3,E4	9	7
T/YHC048E3,E4	9	8
T/YHC060E3,E4	12	8
T/YHC048F1,F3,F4	9	Microchannel
T/YHC060F1,F3,F4	12	Microchannel



Refrigerant Circuits

Figure 37. WSC036H refrigerant circuit

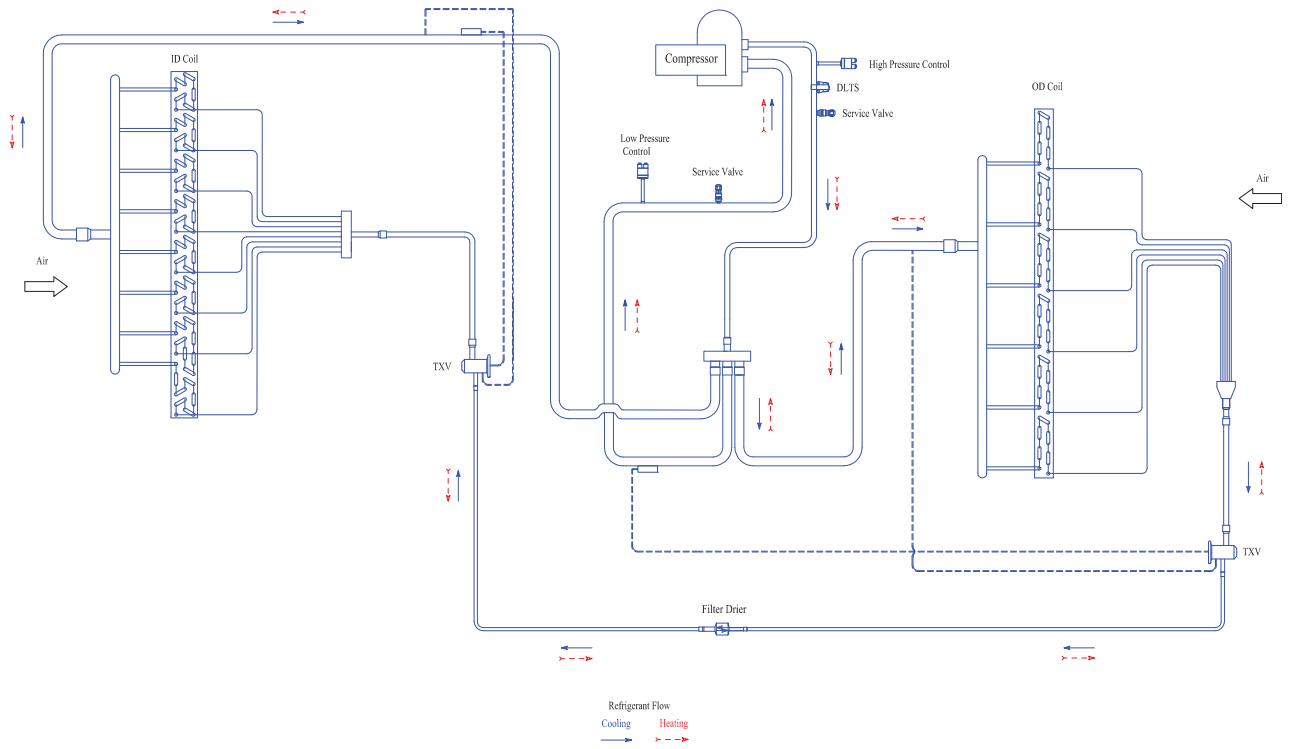


Figure 38. WSC048H refrigerant circuit

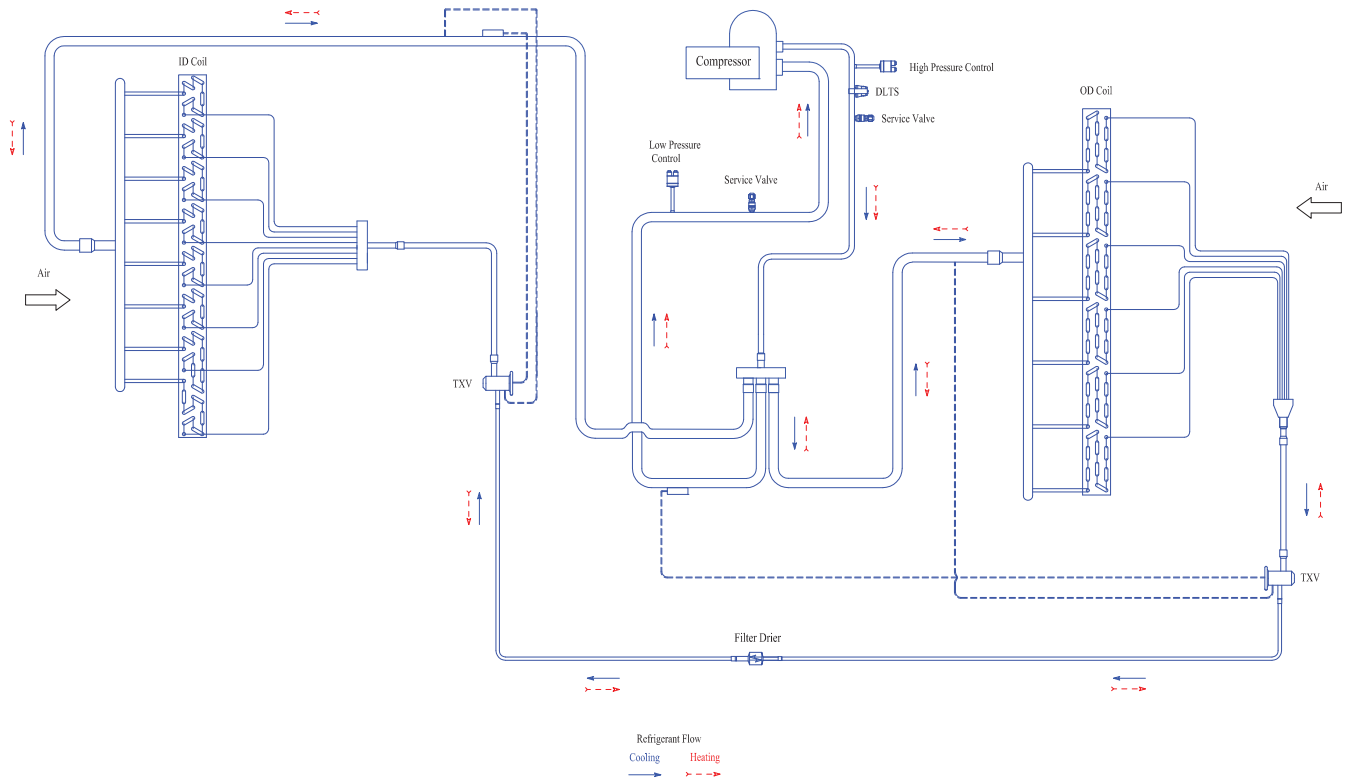


Figure 39. WSC060H refrigerant circuit

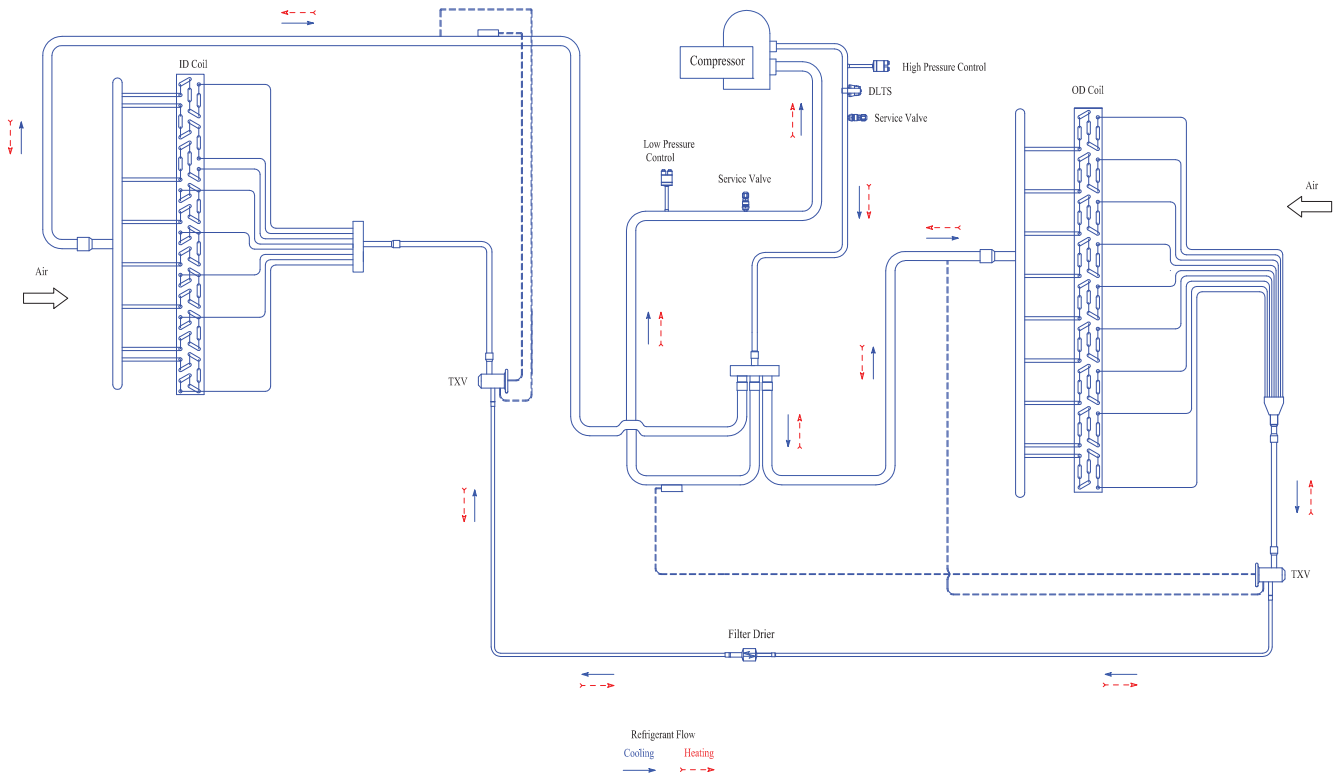
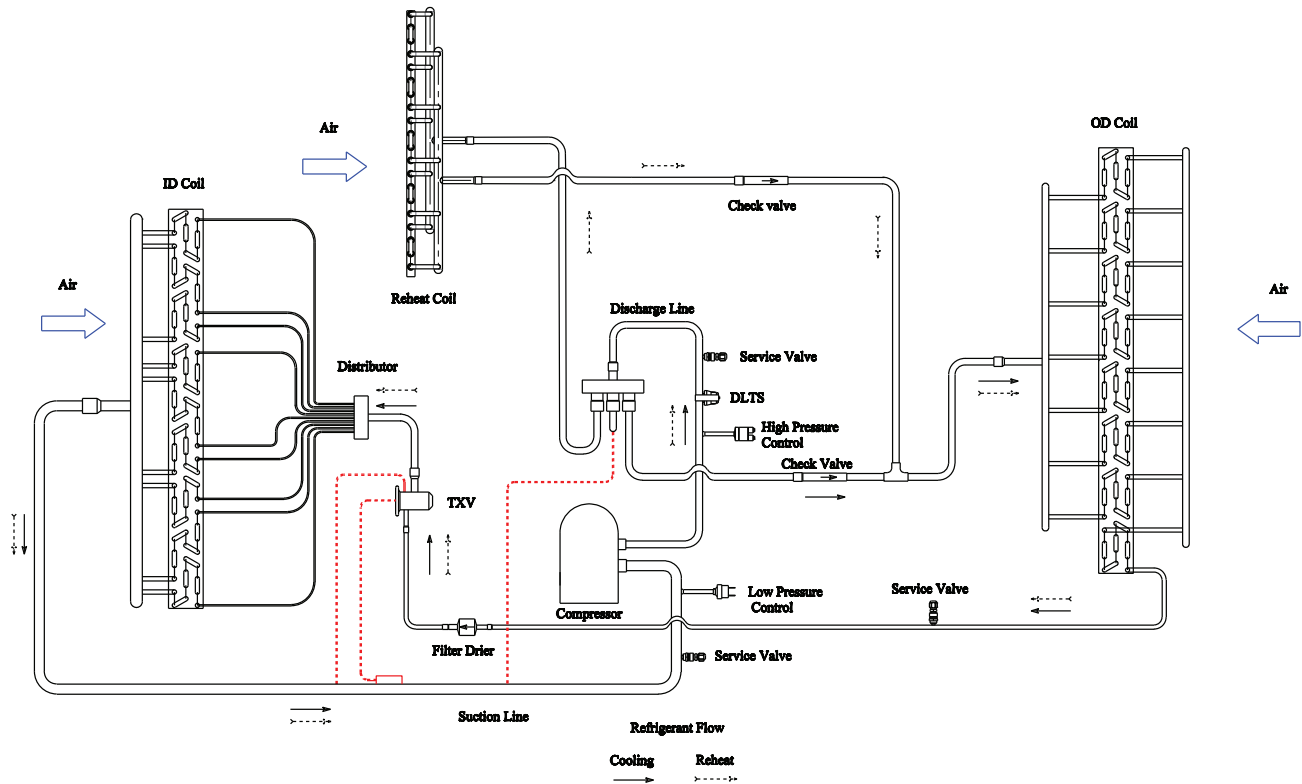


Figure 40. T/YHC036E - reheat refrigerant circuit



Refrigerant Circuits

Figure 41. T/YHC048E - reheat refrigerant circuit

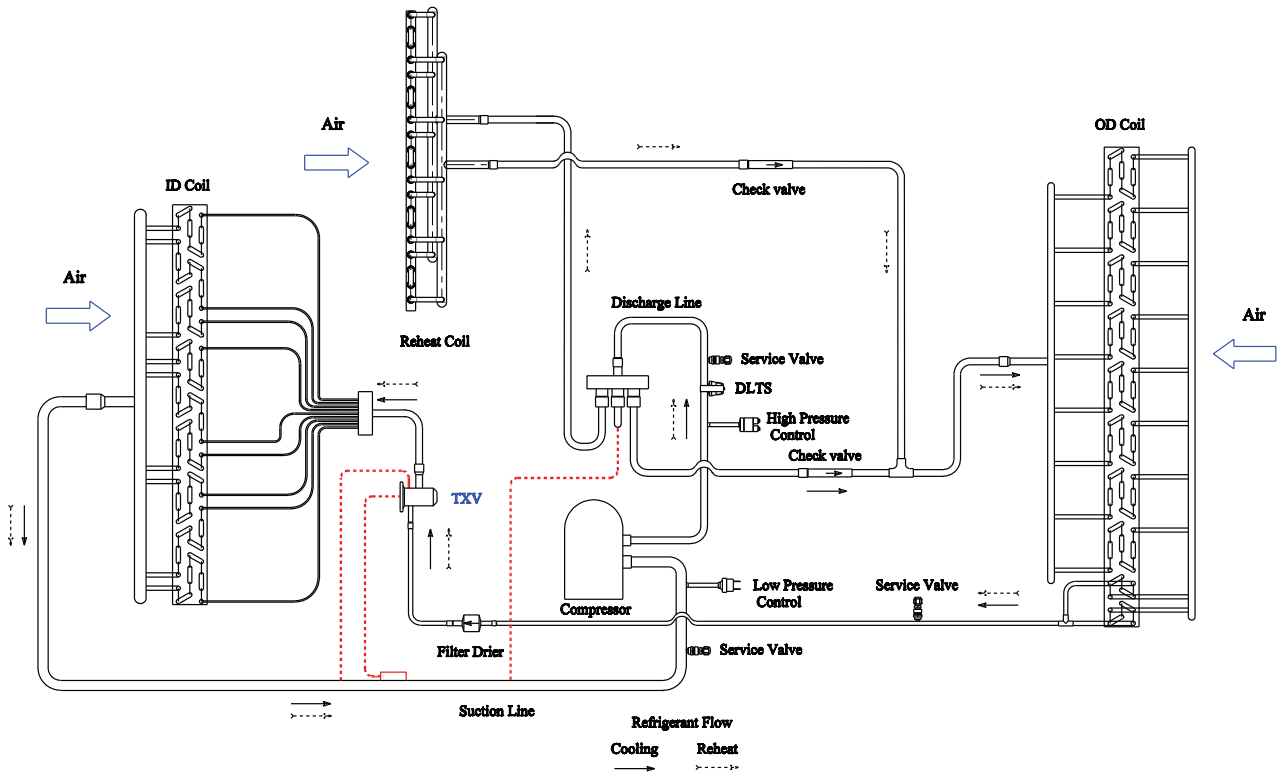
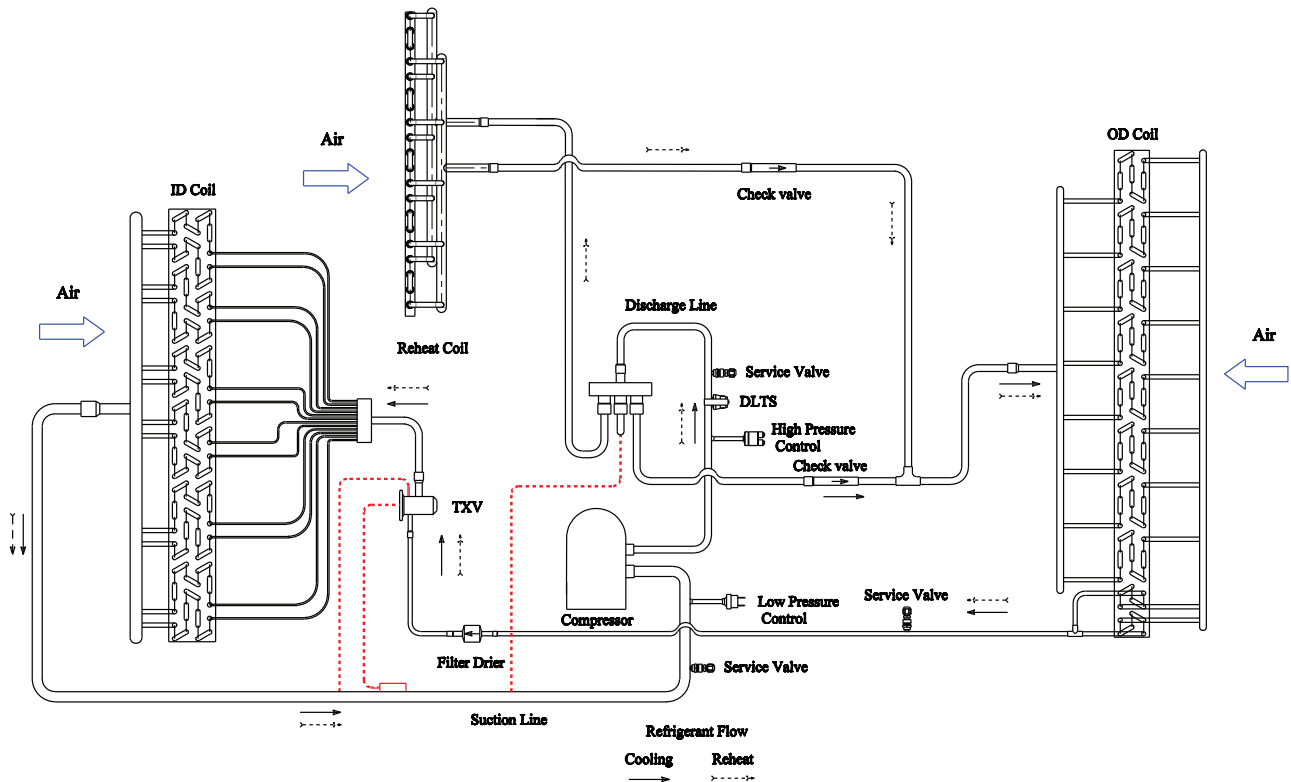


Figure 42. T/YHC060E - reheat refrigerant circuit



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