



Catalog

Extra small for cost effective solutions Mini contactors and mini contactor relays

B mini contactors

K mini contactor relays

With screw terminals

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Mini contactors



3

				Screw terminals			
AC Control supply							
3-pole contactors	Coil consumption 3.5 W	Type	B6	B7	-	-	
3-pole reversing contactors	Coil consumption 3.5 W	Type	-	-	VB6 VB6A ²⁾	VB7 VB7A ²⁾	
4-pole contactors	Coil consumption 3.5 W	Type	B6	B7	-	-	
DC Control supply							
3-pole contactors	Coil consumption 3.5 W	Type	BC6	BC7 B7D ¹⁾	-	-	
3-pole interface contactors	Coil consumption 1.4 ... 2.4 W	Type	BC6	BC7	-	-	
3-pole reversing contactors	Coil consumption 3.5 W	Type	-	-	VBC6 VBC6A ²⁾	VBC7 VBC7A ²⁾	
4-pole contactors	Coil consumption 3.5 W	Type	BC6	B7D			
Wide range types	Extended coil voltage and temperature	Type	-	TBC7			
PLC types	Coil consumption 1.7 W	Type	B6S ¹⁾	B7S ¹⁾			
IEC Rated operational power AC-3	220-230-240 V	kW	2.2	3	2.2	3	
	380-400 V	kW	4	5.5	4	5.5	
Rated operational current AC-1	400 V, $\theta \leq 40^\circ\text{C}$	A	20	20	20	20	
UL/CSA 3-phase motor rating	220-240 V AC	hp	2	3	2	3	
	440-480 V AC	hp	3	5	3	5	
General use rating		A	12 (300 V)	16 (600 V)	12 (300 V)	16 (600 V)	

¹⁾ With integrated surge suppressor

²⁾ With safety blocking function

Main accessories

Auxiliary contact blocks	Front mounting	CAF6
	Side mounting	CA6
Connection sets	For reversing contactors	BSM6-30
Surge suppressors	Varistor (AC/DC)	RV-BC6

Overload relays

Thermal overload relays	Class 10	T16
Thermal and phase failure protection, with single setup possible		
Electronic overload relays	Class 10E, 20E, 30E	E16DU
With single setup possible		

Manual motor starters

Thermal / magnetic protection	Class 10	MS116, MS132
Magnetic only types		MO132
Connecting link to manual motor starters		BEA7/132

Contactor relays



				Screw terminals			
AC Control supply							
4-pole contactor relays	Coil consumption 3.5 W	Type	K6				
DC Control supply							
4-pole contactor relays	Coil consumption 3.5 W	Type	KC6				
4-pole interface contactor relays	Coil consumption 1.4 ... 2.4 W	Type	KC6				
Wide range types	Extended coil voltage and temperature	Type	TKC6				
IEC Rated operational current AC-15	220-230-240 V	A	4				
	380-400 V	A	3				
Rated operational current DC-13	24 V	A	2.5				
Main accessories							
Auxiliary contact blocks	Front mounting	CAF6					
	Side mounting	CA6-11K					

2CDC102040C0201



Soldering pins				Flat pins			
B6...P	B7...P	-	-	B6...F	B7...F	-	-
-	-	VB6...P	VB7...P	-	-	VB6...F	VB7...F
-	-	VB6A...P ²⁾	VB7A...P ²⁾	-	-	VB6A...F ²⁾	VB7A...F ²⁾
-	-	-	-	-	-	-	-
BC6...P	BC7...P	-	-	BC6...F	BC7...F	-	-
-	B7D...P ¹⁾	-	-	-	B7D...F ¹⁾	-	-
BC6...P	BC7...P	-	-	BC6...F	BC7...F	-	-
-	-	VBC6...P	VBC7...P	-	-	VBC6...F	VBC7...F
-	-	VBC6A...P ²⁾	VBC7A...P ²⁾	-	-	VBC6A...F ²⁾	VBC7A...F ²⁾
-	-	-	-	-	-	-	-
2,2	3	2,2	3	2,2	3	2,2	3
4	5,5	4	5,5	4	5,5	4	5,5
12	12	12	12	20	20	20	20
2	3	2	3	2	3	2	3
3	5	3	5	3	5	3	5
12 (300 V)	16 (600 V)	12 (300 V)	16 (600 V)	12 (300 V)	16 (600 V)	12 (300 V)	16 (600 V)

-	-
CA6-11K-P	CA6-11K-F
-	-
-	-

-	-
-	-

MS116, MS132	MS116, MS132
MO132	MO132
-	-



Soldering pins		Flat pins	
K6...P	-	K6...F	-
KC6...P	-	KC6...F	-
KC6...P	-	KC6...F	-
4	-	4	-
3	-	3	-
2,5	-	2,5	-
-	-	-	-
CA6-11K-P	-	CA6-11K-F	-

VB6, VB7 3-pole mini reversing contactors – with screw terminals

4 to 5.5 kW

AC operated

3



2CDC21005F0011

VB7-30-10

Description

VB6, VB7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

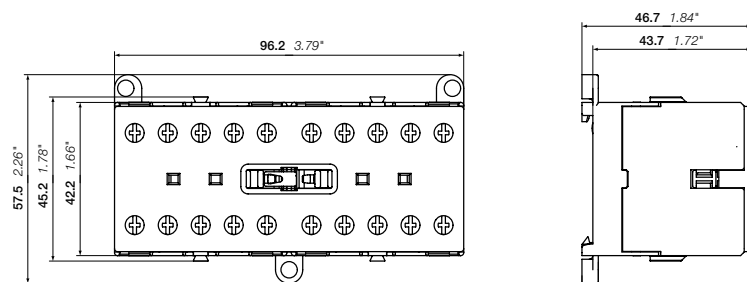
- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc.
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
 - hum-free coil
- add-on auxiliary contact blocks for front mounting
- designed for rail or wall mounting

Ordering details

IEC		UL/CSA		Rated control circuit voltage U_c		Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)				
Rated power	operational current $\theta \leq 40^\circ\text{C}$	3-phase motor rating	General use rating	50 Hz	60 Hz									
400 V	AC-3	480 V		V AC	V AC					kg				
kW	A	hp												
VB6 mini reversing contactors														
4	20	3	300 V / 12 A	24	24	1 0	VB6-30-10-01	GJL1211901R0101	5	0.355				
					24	0 1	VB6-30-01-01	GJL1211901R0011	5	0.355				
				42	42	1 0	VB6-30-10-02	GJL1211901R0102	5	0.355				
					42	0 1	VB6-30-01-02	GJL1211901R0012	5	0.355				
				48	48	1 0	VB6-30-10-03	GJL1211901R0103	5	0.355				
					48	0 1	VB6-30-01-03	GJL1211901R0013	5	0.355				
				110 ... 127	110 ... 127	1 0	VB6-30-10-84	GJL1211901R8104	5	0.355				
					110 ... 127	0 1	VB6-30-01-84	GJL1211901R8014	5	0.355				
				220 ... 240	220 ... 240	1 0	VB6-30-10-80	GJL1211901R8100	5	0.355				
					220 ... 240	0 1	VB6-30-01-80	GJL1211901R8010	5	0.355				
				380 ... 415	380 ... 415	1 0	VB6-30-10-85	GJL1211901R8105	5	0.355				
					380 ... 415	0 1	VB6-30-01-85	GJL1211901R8015	5	0.355				
				VB7 mini reversing contactors										
				5.5	20	5	600 V / 16 A	24	24	1 0	VB7-30-10-01	GJL1311901R0101	5	0.355
24	0 1	VB7-30-01-01	GJL1311901R0011						5	0.355				
42	42	1 0	VB7-30-10-02					GJL1311901R0102	5	0.355				
	42	0 1	VB7-30-01-02					GJL1311901R0012	5	0.355				
48	48	1 0	VB7-30-10-03					GJL1311901R0103	5	0.355				
	48	0 1	VB7-30-01-03					GJL1311901R0013	5	0.355				
110 ... 127	110 ... 127	1 0	VB7-30-10-84					GJL1311901R8104	5	0.355				
	110 ... 127	0 1	VB7-30-01-84					GJL1311901R8014	5	0.355				
220 ... 240	220 ... 240	1 0	VB7-30-10-80					GJL1311901R8100	5	0.355				
	220 ... 240	0 1	VB7-30-01-80					GJL1311901R8010	5	0.355				
380 ... 415	380 ... 415	1 0	VB7-30-10-85					GJL1311901R8105	5	0.355				
	380 ... 415	0 1	VB7-30-01-85					GJL1311901R8015	5	0.355				

Other types on request

Main dimensions mm, inches



VB6, VB7

2CDC21005F0011

2CDC102016C0201

VBC6, VBC7 3-pole mini reversing contactors – with screw terminals

4 to 5.5 kW

DC operated



VBC6-30-10

2CDC211049F0011



VBC7-30-10

2CDC211001F0011

Description

VBC6, VBC7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc.
- control circuit: DC operated
 - low coil consumption (3.5 W at pull-in and at holding)
- hum-free coil
- add-on auxiliary contact blocks for front mounting
- designed for rail or wall mounting

Ordering details

IEC	UL/CSA	Rated control circuit voltage: U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
Rated operational power	3-phase motor rating	General use rating					kg
400 V AC-3 kW	AC-1 A hp	300 V / 12 A	V DC				

VBC6 mini reversing contactors

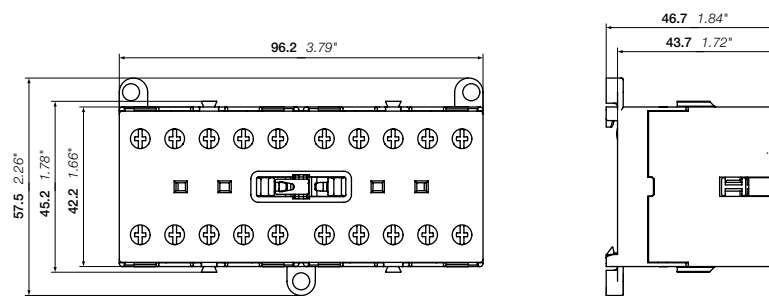
Rated power	3-phase motor rating	General use rating	Rated control circuit voltage: U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)				
4	20	3	300 V / 12 A	1 0	VBC6-30-10-07	GJL1213901R0107	5	0.355				
						0 1	VBC6-30-01-07	GJL1213901R0017	5	0.355		
				24	1 0	VBC6-30-10-01	GJL1213901R0101	5	0.355			
							0 1	VBC6-30-01-01	GJL1213901R0011	5	0.355	
				48	1 0	VBC6-30-10-16	GJL1213901R1106	5	0.355			
							0 1	VBC6-30-01-16	GJL1213901R1016	5	0.355	
				60	1 0	VBC6-30-10-03	GJL1213901R0103	5	0.355			
							0 1	VBC6-30-01-03	GJL1213901R0013	5	0.355	
				110 ... 125	1 0	VBC6-30-10-04	GJL1213901R0104	5	0.355			
							0 1	VBC6-30-01-04	GJL1213901R0014	5	0.355	
							220 ... 240	1 0	VBC6-30-10-05	GJL1213901R0105	5	0.355
										0 1	VBC6-30-01-05	GJL1213901R0015

VBC7 mini reversing contactors

Rated power	3-phase motor rating	General use rating	Rated control circuit voltage: U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)	
5.5	20	5	600 V / 16 A	1 0	VBC7-30-10-07	GJL1313901R0107	5	0.355	
						0 1	VBC7-30-01-07	GJL1313901R0017	5
				24	1 0	VBC7-30-10-01	GJL1313901R0101	5	0.355
							0 1	VBC7-30-01-01	GJL1313901R0011
				48	1 0	VBC7-30-10-16	GJL1313901R1106	5	0.355
							0 1	VBC7-30-01-16	GJL1313901R1016
				60	1 0	VBC7-30-10-03	GJL1313901R0103	5	0.355
							0 1	VBC7-30-01-03	GJL1313901R0013
				110 ... 125	1 0	VBC7-30-10-04	GJL1313901R0104	5	0.355
							0 1	VBC7-30-01-04	GJL1313901R0014
				220 ... 240	1 0	VBC7-30-10-05	GJL1313901R0105	5	0.355
							0 1	VBC7-30-01-05	GJL1313901R0015

Other types on request

Main dimensions mm, inches



VBC6, VBC7

2CDC212005F0011

2CDC102017C0201

VB6A, VB7A 3-pole mini reversing contactors – with screw terminals

4 to 5.5 kW

AC operated – with safety blocking function

3



2CDC211039F0011

VB6A-30-10



2CDC211039F0011

VB7A-30-10

Description

VB6A, VB7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
 - hum-free coil
- add-on auxiliary contact blocks for front mounting
- designed for rail or wall mounting

Ordering details

IEC Rated operational power	Rated operational current $\theta \leq 40^\circ\text{C}$	UL/CSA 3-phase motor rating	General use rating	Rated control circuit voltage U_c		Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
				50 Hz	60 Hz					
400 V AC-3 kW	A	hp		V AC	V AC					kg

VB6A mini reversing contactors with safety blocking function

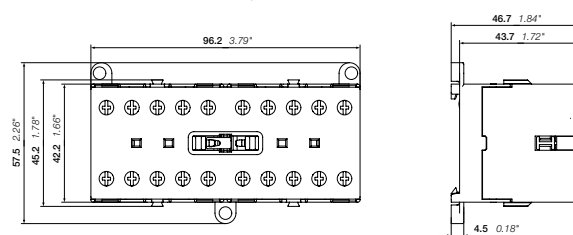
4	20	3	300 V / 12 A	24	24	1 0 0 1	VB6A-30-10-01 VB6A-30-01-01	GJL1211911R0101 GJL1211911R0011	5	0.355
				42	42	1 0 0 1	VB6A-30-10-02 VB6A-30-01-02	GJL1211911R0102 GJL1211911R0012	5	0.355
				48	48	1 0 0 1	VB6A-30-10-03 VB6A-30-01-03	GJL1211911R0103 GJL1211911R0013	5	0.355
				110 ... 127	110 ... 127	1 0 0 1	VB6A-30-10-84 VB6A-30-01-84	GJL1211911R8104 GJL1211911R8014	5	0.355
				220 ... 240	220 ... 240	1 0 0 1	VB6A-30-10-80 VB6A-30-01-80	GJL1211911R8100 GJL1211911R8010	5	0.355
				380 ... 415	380 ... 415	1 0 0 1	VB6A-30-10-85 VB6A-30-01-85	GJL1211911R8105 GJL1211911R8015	5	0.355

VB7A mini reversing contactors with safety blocking function

5.5	20	5	600 V / 16 A	24	24	1 0 0 1	VB7A-30-10-01 VB7A-30-01-01	GJL1311911R0101 GJL1311911R0011	5	0.355
				42	42	1 0 0 1	VB7A-30-10-02 VB7A-30-01-02	GJL1311911R0102 GJL1311911R0012	5	0.355
				48	48	1 0 0 1	VB7A-30-10-03 VB7A-30-01-03	GJL1311911R0103 GJL1311911R0013	5	0.355
				110 ... 127	110 ... 127	1 0 0 1	VB7A-30-10-84 VB7A-30-01-84	GJL1311911R8104 GJL1311911R8014	5	0.355
				220 ... 240	220 ... 240	1 0 0 1	VB7A-30-10-80 VB7A-30-01-80	GJL1311911R8100 GJL1311911R8010	5	0.355
				380 ... 415	380 ... 415	1 0 0 1	VB7A-30-10-85 VB7A-30-01-85	GJL1311911R8105 GJL1311911R8015	5	0.355

Other types on request

Main dimensions mm, inches



VB6A, VB7A

VBC6A, VBC7A 3-pole mini reversing contactors – with screw terminals

4 to 5.5 kW

DC operated – with safety blocking function



VBC6A-30-10

2CDC21104F0011



VBC7A-30-10

2CDC211007F0011

Description

VBC6A, VBC7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- control circuit: DC operated
 - low coil consumption (3.5 W at pull-in and at holding)
- hum-free coil
- add-on auxiliary contact blocks for front mounting
- designed for rail or wall mounting

Ordering details

IEC Rated operational power	UL/CSA 3-phase motor rating	General use rating	Rated control circuit voltage: U _c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
400 V AC-3 kW	AC-1 hp		V DC					kg

VBC6A mini reversing contactors with safety blocking function

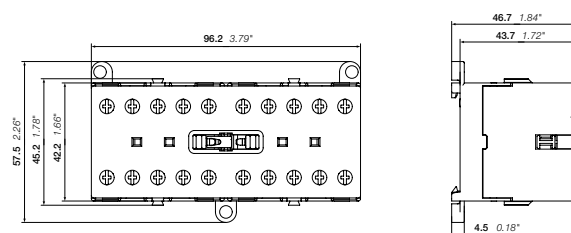
4	20	3	300 V / 12 A	12	1 0	VBC6A-30-10-07	GJL1213911R0107	5	0.355
					0 1	VBC6A-30-01-07	GJL1213911R0017	5	0.355
				24	1 0	VBC6A-30-10-01	GJL1213911R0101	5	0.355
					0 1	VBC6A-30-01-01	GJL1213911R0011	5	0.355
				48	1 0	VBC6A-30-10-16	GJL1213911R1106	5	0.355
					0 1	VBC6A-30-01-16	GJL1213911R1016	5	0.355
				60	1 0	VBC6A-30-10-03	GJL1213911R0103	5	0.355
					0 1	VBC6A-30-01-03	GJL1213911R0013	5	0.355
				110 ... 125	1 0	VBC6A-30-10-04	GJL1213911R0104	5	0.355
					0 1	VBC6A-30-01-04	GJL1213911R0014	5	0.355
				220 ... 240	1 0	VBC6A-30-10-05	GJL1213911R0105	5	0.355
					0 1	VBC6A-30-01-05	GJL1213911R0015	5	0.355

VBC7A mini reversing contactors with safety blocking function

5.5	20	5	600 V / 16 A	12	1 0	VBC7A-30-10-07	GJL1313911R0107	5	0.355
					0 1	VBC7A-30-01-07	GJL1313911R0017	5	0.355
				24	1 0	VBC7A-30-10-01	GJL1313911R0101	5	0.355
					0 1	VBC7A-30-01-01	GJL1313911R0011	5	0.355
				48	1 0	VBC7A-30-10-16	GJL1313911R1106	5	0.355
					0 1	VBC7A-30-01-16	GJL1313911R0016	5	0.355
				60	1 0	VBC7A-30-10-03	GJL1313911R0103	5	0.355
					0 1	VBC7A-30-01-03	GJL1313911R0013	5	0.355
				110 ... 125	1 0	VBC7A-30-10-04	GJL1313911R0104	5	0.355
					0 1	VBC7A-30-01-04	GJL1313911R0014	5	0.355
				220 ... 240	1 0	VBC7A-30-10-05	GJL1313911R0105	5	0.355
					0 1	VBC7A-30-01-05	GJL1313911R0015	5	0.355

Other types on request

Main dimensions mm, inches



VBC6A, VBC7A

2CDC212008F0011

VB6, VB7 3-pole mini reversing contactors – with soldering pins 4 to 5.5 kW AC operated



VB7-30-10-P

2CDC21109S0011


Description

VB6, VB7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
- hum-free coil
- no auxiliary contact block permitted for mounting
- designed for soldering on PCB boards

Ordering details

IEC Rated power 400 V AC-3 kW	operational current $\theta \leq 40^\circ\text{C}$ AC-1 A	UL/CSA 3-phase motor rating 480 V hp	General use rating	Rated control circuit voltage U_c		Auxiliary contacts fitted 	Type	Order code	Pkg qty	Weight (1 pce) kg
				50 Hz V AC	60 Hz V AC					

VB6 mini reversing contactors

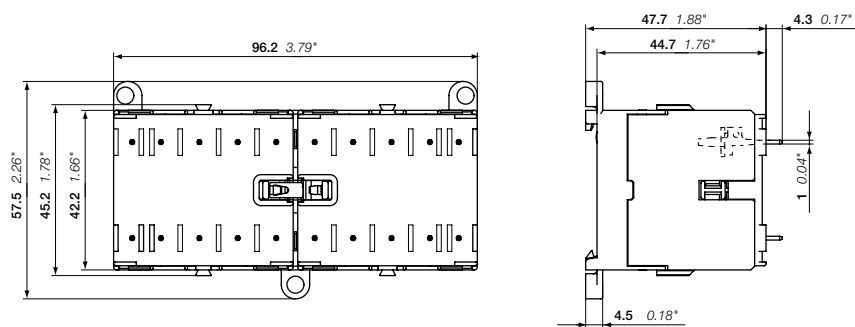
4	12	3	300 V / 12 A	24	24	1 0	VB6-30-10-P-01	GJL1211909R0101	5	0.345
						0 1	VB6-30-01-P-01	GJL1211909R0011	5	0.345
				42	42	1 0	VB6-30-10-P-02	GJL1211909R0102	5	0.345
						0 1	VB6-30-01-P-02	GJL1211909R0012	5	0.345
				48	48	1 0	VB6-30-10-P-03	GJL1211909R0103	5	0.345
						0 1	VB6-30-01-P-03	GJL1211909R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB6-30-10-P-84	GJL1211909R8104	5	0.345
						0 1	VB6-30-01-P-84	GJL1211909R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB6-30-10-P-80	GJL1211909R8100	5	0.345
						0 1	VB6-30-01-P-80	GJL1211909R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB6-30-10-P-85	GJL1211909R8105	5	0.345
						0 1	VB6-30-01-P-85	GJL1211909R8015	5	0.345

VB7 mini reversing contactors

5.5	12	5	600 V / 16 A	24	24	1 0	VB7-30-10-P-01	GJL1311909R0101	5	0.345
						0 1	VB7-30-01-P-01	GJL1311909R0011	5	0.345
				42	42	1 0	VB7-30-10-P-02	GJL1311909R0102	5	0.345
						0 1	VB7-30-01-P-02	GJL1311909R0012	5	0.345
				48	48	1 0	VB7-30-10-P-03	GJL1311909R0103	5	0.345
						0 1	VB7-30-01-P-03	GJL1311909R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB7-30-10-P-84	GJL1311909R8104	5	0.345
						0 1	VB7-30-01-P-84	GJL1311909R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB7-30-10-P-80	GJL1311909R8100	5	0.345
						0 1	VB7-30-01-P-80	GJL1311909R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB7-30-10-P-85	GJL1311909R8105	5	0.345
						0 1	VB7-30-01-P-85	GJL1311909R8015	5	0.345

Other types on request

Main dimensions mm, inches



VB6, VB7

2CDC212007F0011

2CDC102025C0201

VBC6, VBC7 3-pole mini reversing contactors – with soldering pins

4 to 5.5 kW

DC operated

3



2CDC211009R0011

VBC7-30-10-P

Description

VBC6, VBC7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

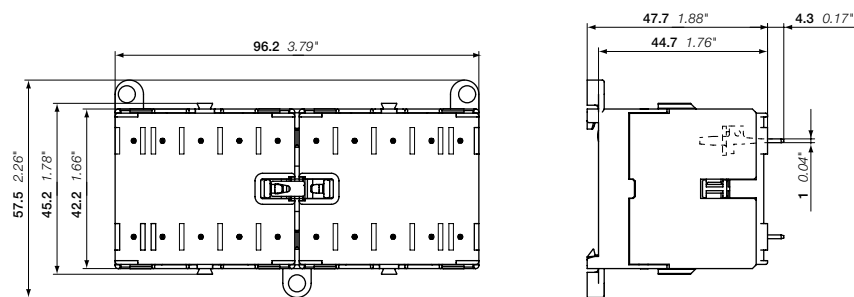
- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc
- control circuit: DC operated
 - low coil consumption (3.5 W at pull-in and at holding)
- hum-free coil
- no auxiliary contact block permitted for mounting
- designed for soldering on PCB boards

Ordering details

IEC		UL/CSA		Rated control circuit voltage U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)					
Rated operational power	current $\theta \leq 40^\circ\text{C}$	3-phase motor rating	General use rating											
400 V AC-3	AC-1	480 V		V DC					kg					
VBC6 mini reversing contactors														
4	12	3	300 V / 12 A	12	1 0	VBC6-30-10-P-07	GJL1213909R0107	5	0.345					
					0 1	VBC6-30-01-P-07	GJL1213909R0017	5	0.345					
				24	1 0	VBC6-30-10-P-01	GJL1213909R0101	5	0.345					
					0 1	VBC6-30-01-P-01	GJL1213909R0011	5	0.345					
				48	1 0	VBC6-30-10-P-06	GJL1213909R0106	5	0.345					
					0 1	VBC6-30-06-P-06	GJL1213909R0016	5	0.345					
				60	1 0	VBC6-30-10-P-03	GJL1213909R0103	5	0.345					
					0 1	VBC6-30-01-P-03	GJL1213909R0013	5	0.345					
				110 ... 125	1 0	VBC6-30-10-P-04	GJL1213909R0104	5	0.345					
					0 1	VBC6-30-01-P-04	GJL1213909R0014	5	0.345					
				220 ... 240	1 0	VBC6-30-10-P-05	GJL1213909R0105	5	0.345					
					0 1	VBC6-30-01-P-05	GJL1213909R0015	5	0.345					
				VBC7 mini reversing contactors										
				5.5	12	5	600 V / 16 A	12	1 0	VBC7-30-10-P-07	GJL1313909R0107	5	0.345	
0 1	VBC7-30-01-P-07	GJL1313909R0017	5						0.345					
24	1 0	VBC7-30-10-P-01	GJL1313909R0101					5	0.345					
	0 1	VBC7-30-01-P-01	GJL1313909R0011					5	0.345					
48	1 0	VBC7-30-10-P-16	GJL1313909R1106					5	0.345					
	0 1	VBC7-30-01-P-16	GJL1313909R1016					5	0.345					
60	1 0	VBC7-30-10-P-03	GJL1313909R0103					5	0.345					
	0 1	VBC7-30-01-P-03	GJL1313909R0013					5	0.345					
110 ... 125	1 0	VBC7-30-10-P-04	GJL1313909R0104					5	0.345					
	0 1	VBC7-30-01-P-04	GJL1313909R0014					5	0.345					
220 ... 240	1 0	VBC7-30-10-P-05	GJL1313909R0105					5	0.345					
	0 1	VBC7-30-01-P-05	GJL1313909R0015					5	0.345					

Other types on request

Main dimensions mm, inches



VBC6, VBC7

2CDC212007R0011

2CDC102026C0201

VB6A, VB7A 3-pole mini reversing contactors – with soldering pins 4 to 5.5 kW AC operated – with safety blocking function



VB7-30-01-P

2CDC211019F0010

Description

VB6A, VB7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
- hum-free coil
- no auxiliary contact block permitted for mounting
- designed for soldering on PCB boards

Ordering details

IEC		UL/CSA		Rated control circuit voltage U_c		Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
Rated operational power	current $\theta \leq 40^\circ\text{C}$	3-phase motor rating	General use rating	50 Hz	60 Hz					
kW	A	hp		V AC	V AC					kg

VB6A mini reversing contactors with safety blocking function

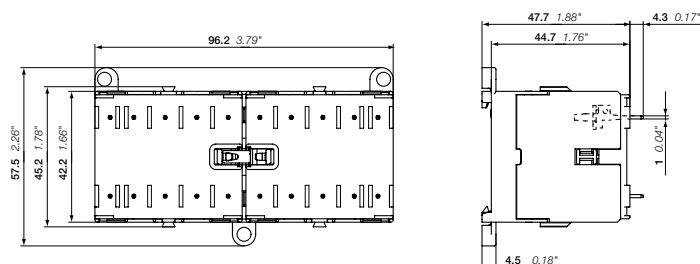
Rated operational power (kW)	Current (A)	3-phase motor rating (hp)	General use rating	50 Hz (V AC)	60 Hz (V AC)	Auxiliary contacts	Type	Order code	Pkg qty	Weight (kg)
4	12	3	300 V // 12 A	24	24	1 0	VB6A-30-10-P-01	GJL1211919R0101	5	0.345
						0 1	VB6A-30-01-P-01	GJL1211919R0011	5	0.345
				42	42	1 0	VB6A-30-10-P-02	GJL1211919R0102	5	0.345
						0 1	VB6A-30-01-P-02	GJL1211919R0012	5	0.345
				48	48	1 0	VB6A-30-10-P-03	GJL1211919R0103	5	0.345
						0 1	VB6A-30-01-P-03	GJL1211919R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB6A-30-10-P-84	GJL1211919R8104	5	0.345
						0 1	VB6A-30-01-P-84	GJL1211919R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB6A-30-10-P-80	GJL1211919R8100	5	0.345
						0 1	VB6A-30-01-P-80	GJL1211919R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB6A-30-10-P-85	GJL1211919R8105	5	0.345
						0 1	VB6A-30-01-P-85	GJL1211919R8015	5	0.345

VB7A mini reversing contactors with safety blocking function

Rated operational power (kW)	Current (A)	3-phase motor rating (hp)	General use rating	50 Hz (V AC)	60 Hz (V AC)	Auxiliary contacts	Type	Order code	Pkg qty	Weight (kg)
5.5	12	5	600 V // 16 A	24	24	1 0	VB7A-30-10-P-01	GJL1311919R0101	5	0.345
						0 1	VB7A-30-01-P-01	GJL1311919R0011	5	0.345
				42	42	1 0	VB7A-30-10-P-02	GJL1311919R0102	5	0.345
						0 1	VB7A-30-01-P-02	GJL1311919R0012	5	0.345
				48	48	1 0	VB7A-30-10-P-03	GJL1311919R0103	5	0.345
						0 1	VB7A-30-01-P-03	GJL1311919R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB7A-30-10-P-84	GJL1311919R8104	5	0.345
						0 1	VB7A-30-01-P-84	GJL1311919R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB7A-30-10-P-80	GJL1311919R8100	5	0.345
						0 1	VB7A-30-01-P-80	GJL1311919R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB7A-30-10-P-85	GJL1311919R8105	5	0.345
						0 1	VB7A-30-01-P-85	GJL1311919R8015	5	0.345

Other types on request

Main dimensions mm, inches



VB6A, VB7A

2CDC21007F0011

2CDC102027C0201

VBC7A 3-pole mini reversing contactors – with soldering pins

4 to 5.5 kW

DC operated – with safety blocking function

3



2CDC211009F0011

VBC7A-30-10-P

Description

VBC7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- control circuit: AC operated
 - low coil consumption (3.5 W at pull-in and at holding)
 - hum-free coil
- no auxiliary contact block permitted for mounting
- designed for soldering on PCB boards

Ordering details

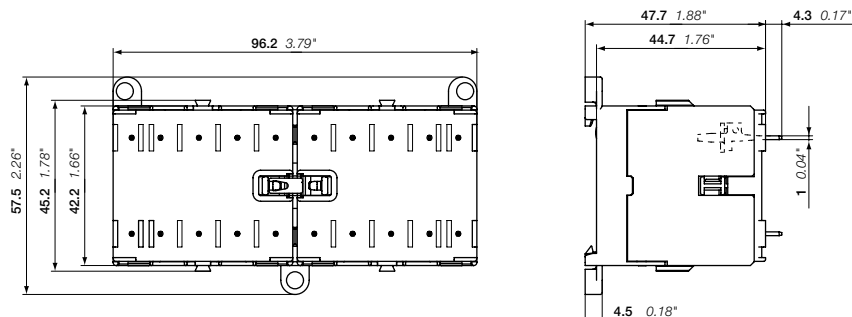
IEC		UL/CSA		Rated control circuit voltage U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
Rated operational power	current $\theta \leq 40^\circ\text{C}$	3-phase motor rating	General use rating						
400 V	AC-3	480 V		V DC					kg
kW	A	hp							

VBC7A mini reversing contactors with safety blocking function

Rated power (kW)	Rated current (A)	Motor rating (hp)	Rated voltage (V)	Rated current (A)	Control voltage (V DC)	Control current (A)	Type	Order code	Pkg qty	Weight (kg)	
5.5	12	5	600 V / 16 A	12	12	1	0	VBC7A-30-10-P-07	GJL1313919R0107	5	0.345
						0	1	VBC7A-30-01-P-07	GJL1313919R0017	5	0.345
				24	1	0	VBC7A-30-10-P-01	GJL1313919R0101	5	0.345	
					0	1	VBC7A-30-01-P-01	GJL1313919R0011	5	0.345	
				48	1	0	VBC7A-30-10-P-16	GJL1313919R1106	5	0.345	
					0	1	VBC7A-30-01-P-16	GJL1313919R1016	5	0.345	
				60	1	0	VBC7A-30-10-P-03	GJL1313919R0103	5	0.345	
					0	1	VBC7A-30-01-P-03	GJL1313919R0013	5	0.345	
				110 ... 125	1	0	VBC7A-30-10-P-04	GJL1313919R0104	5	0.345	
					0	1	VBC7A-30-01-P-04	GJL1313919R0014	5	0.345	
				220 ... 240	1	0	VBC7A-30-10-P-05	GJL1313919R0105	5	0.345	
					0	1	VBC7A-30-01-P-05	GJL1313919R0015	5	0.345	

Other types on request

Main dimensions mm, inches



VBC7A

2CDC212007F0011

2CDC102028C0201

VB7 3-pole mini reversing contactors – with flat pin connection

4 to 5.5 kW

AC operated



VB7-30-10-F

2CDC211006F0011

Description

VB7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc.
- flat pin connection for plug-in wiring and shake proven connection
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
- hum-free coil
- no auxiliary contact block permitted for mounting
- for rail and wall mounting

Ordering details

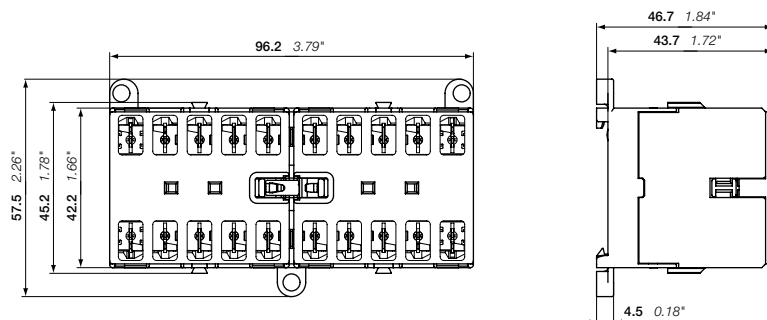
IEC Rated power 400 V AC-3 kW	operational current $\theta \leq 40^\circ\text{C}$ AC-1 A	UL/CSA 3-phase motor rating 480 V hp	General use rating	Rated control circuit voltage U_c		Auxiliary contacts fitted 	Type	Order code	Pkg qty	Weight (1 pce) kg
				50 Hz V AC	60 Hz V AC					

VB7 mini reversing contactors

5.5	20	5	600 V / 16 A	24	24	1 0	VB7-30-10-F-01	GJL1311903R0101	5	0.345
						0 1	VB7-30-01-F-01	GJL1311903R0011	5	0.345
				42	42	1 0	VB7-30-10-F-02	GJL1311903R0102	5	0.345
						0 1	VB7-30-01-F-02	GJL1311903R0012	5	0.345
				48	48	1 0	VB7-30-10-F-03	GJL1311903R0103	5	0.345
						0 1	VB7-30-01-F-03	GJL1311903R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB7-30-10-F-84	GJL1311903R8104	5	0.345
						0 1	VB7-30-01-F-84	GJL1311903R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB7-30-10-F-80	GJL1311903R8100	5	0.345
						0 1	VB7-30-01-F-80	GJL1311903R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB7-30-10-F-85	GJL1311903R8105	5	0.345
						0 1	VB7-30-01-F-85	GJL1311903R8015	5	0.345

Other types on request

Main dimensions mm, inches



VB7

2CDC211006F0011

2CDC102035C0201

VBC7 3-pole mini reversing contactors – with flat pin connection

4 to 5.5 kW

DC operated

3



2CDC211009F0011

VBC7-30-10-F

Description

VBC7 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock. The coils must be mutually interlocked electrically and coils must be de-energised for 50 ms at least to prevent phase to phase short circuit on the arc
- flat pin connection for plug-in wiring and shake proven connection
- control circuit: DC operated
 - low coil consumption (3.5 W at pull-in and at holding)
 - hum-free coil
- no auxiliary contact block permitted for mounting
- for rail and wall mounting

Ordering details

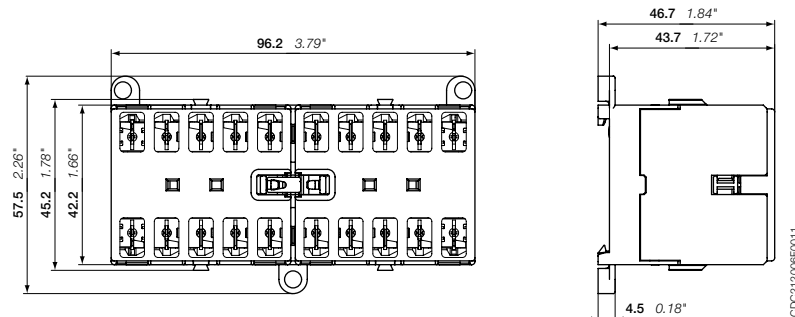
IEC		UL/CSA		Rated control circuit voltage U_c	Auxiliary contacts fitted	Type	Order code	Pkg qty	Weight (1 pce)
Rated operational power	current $\theta \leq 40^\circ\text{C}$	3-phase motor rating	General use rating						
400 V	AC-3	480 V		V DC					kg
kW	AC-1	hp							

VBC7 mini reversing contactors

Rated power (kW)	Rated current (A)	3-phase motor rating (hp)	Rated control circuit voltage (V DC)	Rated control circuit voltage (V AC)	Rated control circuit voltage (V AC)	Rated control circuit voltage (V AC)	Order code	Pkg qty	Weight (1 pce)
5.5	20	5	12	600 V / 16 A	1 0	VBC7-30-10-F-07	GJL1313903R0107	5	0.345
					0 1	VBC7-30-01-F-07	GJL1313903R0017	5	0.345
					1 0	VBC7-30-10-F-01	GJL1313903R0101	5	0.345
					0 1	VBC7-30-01-F-01	GJL1313903R0011	5	0.345
					1 0	VBC7-30-10-F-16	GJL1313903R1106	5	0.345
					0 1	VBC7-30-01-F-16	GJL1313903R1016	5	0.345
					1 0	VBC7-30-10-F-03	GJL1313903R0103	5	0.345
					0 1	VBC7-30-01-F-03	GJL1313903R0013	5	0.345
					1 0	VBC7-30-10-F-04	GJL1313903R0104	5	0.345
					0 1	VBC7-30-01-F-04	GJL1313903R0014	5	0.345
					1 0	VBC7-30-10-F-05	GJL1313903R0105	5	0.345
					0 1	VBC7-30-01-F-05	GJL1313903R0015	5	0.345

Other types on request

Main dimensions mm, inches



VBC7

2CDC212009F0011

2CDC102036C0201

VB7A 3-pole mini reversing contactors – with flat pin connection

4 to 5.5 kW

AC operated – with safety blocking function



VB7A-30-10-F

2CDC211003F0011


Description

VB7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- flat pin connection for plug-in wiring and shake proven connection
- control circuit: AC operated
 - low coil consumption (3.5 VA at pull-in and at holding)
- hum-free coil
- no auxiliary contact block permitted for mounting
- for rail and wall mounting

Ordering details

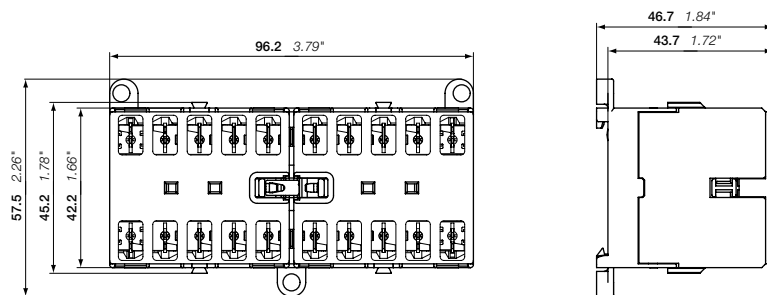
IEC Rated operational power 400 V AC-3 kW	UL/CSA 3-phase motor rating 480 V hp	General use rating	Rated control circuit voltage U_c		Auxiliary contacts fitted 	Type	Order code	Pkg qty	Weight (1 pce) pce kg
			50 Hz V AC	60 Hz V AC					

VB7A mini reversing contactors with safety blocking function

5.5	20	5	600 V / 16 A	24	24	1 0	VB7A-30-10-F-01	GJL1311913R0101	5	0.345
				42	42	0 1	VB7A-30-01-F-01	GJL1311913R0011	5	0.345
						1 0	VB7A-30-10-F-02	GJL1311913R0102	5	0.345
						0 1	VB7A-30-01-F-02	GJL1311913R0012	5	0.345
				48	48	1 0	VB7A-30-10-F-03	GJL1311913R0103	5	0.345
						0 1	VB7A-30-01-F-03	GJL1311913R0013	5	0.345
				110 ... 127	110 ... 127	1 0	VB7A-30-10-F-84	GJL1311913R8104	5	0.345
						0 1	VB7A-30-01-F-84	GJL1311913R8014	5	0.345
				220 ... 240	220 ... 240	1 0	VB7A-30-10-F-80	GJL1311913R8100	5	0.345
						0 1	VB7A-30-01-F-80	GJL1311913R8010	5	0.345
				380 ... 415	380 ... 415	1 0	VB7A-30-10-F-85	GJL1311913R8105	5	0.345
						0 1	VB7A-30-01-F-85	GJL1311913R8015	5	0.345

Other types on request

Main dimensions mm, inches



VB7A

2CDC212006F0011

2CDC102037C0201

VBC7A 3-pole mini reversing contactors – with flat pin connection 4 to 5.5 kW DC operated – with safety blocking function

3



VBC7A-30-10-F

2CDC21002F0011

Description

VBC7A 3-pole compact design reversing contactors are space optimized control products mainly used for switching resistive or motor loads up to 690 V AC.

These reversing contactors are designed with:

- built-in mechanical interlock and safety blocking function. The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out. The contactor coils are designed for continuous operation when the contactor is de-energised i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.
- flat pin connection for plug-in wiring and shake proven connection
- control circuit: DC operated
 - low coil consumption (3.5 W at pull-in and at holding)
 - hum-free coil
- no auxiliary contact block permitted for mounting
- for rail and wall mounting

Ordering details

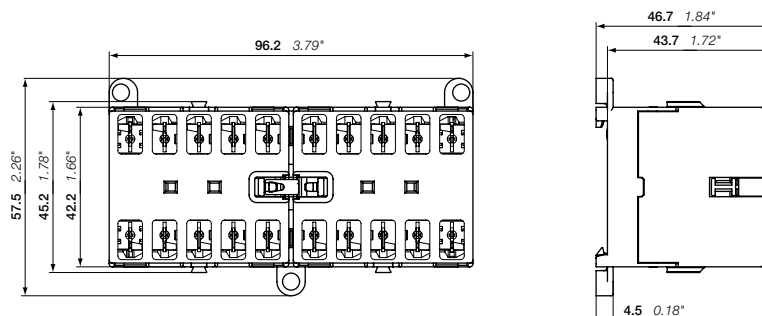
IEC Rated operational power 400 V AC-3 kW	Rated operational current $\theta \leq 40^\circ\text{C}$ AC-1 A	UL/CSA 3-phase motor rating 480 V hp	General use rating	Rated control circuit voltage U_c V DC	Auxiliary contacts fitted 	Type	Order code	Pkg qty	Weight (1 pce) kg
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VBC7A mini reversing contactors with safety blocking function

5.5	20	5	600 V / 16 A	12	1 0	VBC7A-30-10-F-07	GJL1313913R0107	5	0.345
					0 1	VBC7A-30-01-F-07	GJL1313913R0017	5	0.345
				24	1 0	VBC7A-30-10-F-01	GJL1313913R0101	5	0.345
					0 1	VBC7A-30-01-F-01	GJL1313913R0011	5	0.345
				48	1 0	VBC7A-30-10-F-16	GJL1313913R1106	5	0.345
					0 1	VBC7A-30-01-F-16	GJL1313913R1016	5	0.345
				60	1 0	VBC7A-30-10-F-03	GJL1313913R0103	5	0.345
					0 1	VBC7A-30-01-F-03	GJL1313913R0013	5	0.345
				110 ... 125	1 0	VBC7A-30-10-F-04	GJL1313913R0104	5	0.345
					0 1	VBC7A-30-01-F-04	GJL1313913R0014	5	0.345
				220 ... 240	1 0	VBC7A-30-10-F-05	GJL1313913R0105	5	0.345
					0 1	VBC7A-30-01-F-05	GJL1313913R0015	5	0.345

Other types on request

Main dimensions mm, inches



VBC7A

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B6, B7, BC6, BC7 3- and 4-pole mini contactors

VB6, VB7, VBC6, VBC7 3-pole mini reversing contactors

Accessories



2CDC11012F0010

CAF6-11N



2CDC211007F0010

RV-BC6/250



2CDC211008F0010

CA6-11E



2CDC211018F0011

CA6-11E-P



2CDC211028F0011

CA6-11E-F



SS27792R

BSM6-30



2CDC231012F0011

T16-16

Ordering details

Suitable for	Auxiliary contacts	Type	Order code	Pkg qty	Weight (1 pce)
					kg

Front mounted instantaneous auxiliary contact blocks (not allowed for mounting on TBC, B6S, B7S, interface contactors) ¹⁾

B6-, B7-40-00, BC6-, BC7-40-00	1 1	CAF6-11E	GJL1201330R0002	10	0.020
VB6, VB7, VBC6, VBC7, VB6A, VB7A	2 0	CAF6-20E	GJL1201330R0006	10	0.020
VBC6A, VBC7A	0 2	CAF6-02E	GJL1201330R0010	10	0.020
B6-, B7-30-10, BC6-, BC7-30-10	1 1	CAF6-11M	GJL1201330R0003	10	0.020
VB6, VB7, VBC6, VBC7, VB6A, VB7A	2 0	CAF6-20M	GJL1201330R0007	10	0.020
VBC6A, VBC7A	0 2	CAF6-02M	GJL1201330R0011	10	0.020
B6-, B7-30-01, BC6-, BC7-30-01	1 1	CAF6-11N	GJL1201330R0004	10	0.020
VB6, VB7, VBC6, VBC7, VB6A, VB7A	2 0	CAF6-20N	GJL1201330R0008	10	0.020
VBC6A, VBC7A	0 2	CAF6-02N	GJL1201330R0012	10	0.020

Side mounted instantaneous auxiliary contact block ¹⁾

B6-, B7-40-00, BC6-, BC7-40-00	1 1	CA6-11E	GJL1201317R0002	10	0.030
B6-, B7-30-10, BC6-, BC7-30-10	1 1	CA6-11M	GJL1201317R0003	10	0.030
B6-, B7-30-01, BC6-, BC7-30-01	1 1	CA6-11N	GJL1201317R0004	10	0.030

Side mounted instantaneous auxiliary contact block with soldering pins ²⁾

B6-, B7-40-00-P, BC6-, BC7-40-00-P	1 1	CA6-11E-P	GJL1201319R0002	10	0.025
B6-, B7-30-10-P, BC6-, BC7-30-10-P	1 1	CA6-11M-P	GJL1201319R0003	10	0.025
B6-, B7-30-01-P, BC6-, BC7-30-01-P	1 1	CA6-11N-P	GJL1201319R0004	10	0.025

Side mounted instantaneous auxiliary contact block with flat pin connection ²⁾

B6-, B7-40-00-F, BC6-, BC7-40-00-F	1 1	CA6-11E-F	GJL1201318R0002	10	0.025
B6-, B7-30-10-F, BC6-, BC7-30-10-F	1 1	CA6-11M-F	GJL1201318R0003	10	0.025
B6-, B7-30-01-F, BC6-, BC7-30-01-F	1 1	CA6-11N-F	GJL1201318R0004	10	0.025

Soldering receptacle (I_{in} = 10 A, AC-3: 500 V / 8 A, 690 V / 3.5 A, UL: 300 V / 8 A)

B6, B7, BC6, BC7	LB6	GJL1201902R0001	10	0.020
2-pole aux.contact blocks CA	LB6-CA	GJL1201903R0001	10	0.010

¹⁾ CA6 and CAF6 must not be fitted simultaneously.

Suitable for	Rated control circuit voltage U _c V DC	Connection type	Type	Order code	Pkg qty	Weight (1 pce)
						kg

Surge suppressors for contactor coils

BC6, BC7	24 ... 60	Cable lug	RV-BC6/60	GHV2501902R0002	10	0.005
		Flat pin, 2.8 mm	RV-BC6-F/60	GHV2501902R0003	10	0.005
	50 ... 250	Cable lug	RV-BC6/250	GHV2501903R0002	10	0.005
		Flat pin, 2.8 mm	RV-BC6-F/250	GHV2501903R0003	10	0.010
	380	Cable lug	RV-BC6/380	GHV2501904R0002	10	0.005
		Flat pin, 2.8 mm	RV-BC6-F/380	GHV2501904R0003	10	0.010

Note: Mini contactors for AC operation have an integrated protective circuit

Connecting links with manual motor starters

To connect B..VB.. mini contactor to MS116, MS132	BEA7/132	1SBN080906R1002	10	0.013
To connect B..VB.. mini contactors to MS325	BEA7/325	1SBN080906R1001	10	0.021

Connection sets for reversing contactors

VB6, VB7, VBC6, VBC7, VB6A, VB7A, VBC6A, VBC7A, cross-section 1.8 mm ²	BSM6-30	GJL1201908R0001	10	0.010
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Parallel connecting link

B6, B7, BC6, BC7	LP6	GJL1201907R0001	100	0.009
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Cover cap, transparent fitting to DIN rail design, sealable

B6, B7, BC6, BC7	LT6-B	GJL1201906R0001	10	0.015
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Plastic label for markings

B6, B7, BC6, BC7	BA5-50	1SBN110000R1000	50	0.020
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Thermal overload relays

	T16 (see page 2CDC106036C0201)		1	0.100
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B6, B7, BC6, BC7, TBC7 3- and 4-pole mini contactors VB6, VB7, VBC6, VBC7 3- and 4-pole mini reversing contactors

Technical data

Main pole – Utilization characteristics according to IEC

Contactor types	AC operated	B6, VB6, VB6A	B7, VB7, VB7A
	DC operated	BC6, VBC6, VBC6A	BC7, TBC7, VBC7, VBC7A
Standards		IEC/EN 60947-1, IEC/EN 60947-4-1	
Rated operational voltage U_e		690 V AC	
Rated frequency (without derating)		DC or 50 / 60 Hz	
Conventional free-air thermal current I_{th} acc. to IEC 60947-4-1, open contactors, $\theta \leq 40^\circ\text{C}$, with conductor cross-sectional area		Screw terminal types: 20 A Flat pin types: 20 A Soldering pin types: 12 A	
AC-1 Utilization category for air temperature close to contactor $\theta \leq 40^\circ\text{C}$			
I_e / Rated operational current AC-1 $U_{e\max} \leq 690\text{ V}, 50/60\text{ Hz}$	220-230-240 V	Screw terminal types: 20 A Flat pin types: 20 A Soldering pin types: 12 A	
	380-400 V	Screw terminal types: 20 A Flat pin types: 20 A Soldering pin types: 12 A	
	440 V	Screw terminal types: 20 A Flat pin types: 20 A Soldering pin types: 12 A	
	500 V	12 A	
	690 V	6 A	
AC-1 Utilization category for air temperature close to contactor $\theta \leq 55^\circ\text{C}$			
I_e / Rated operational current AC-1 $U_{e\max} \leq 690\text{ V}, 50/60\text{ Hz}$	220-230-240 V	Screw terminal types: 16 A Flat pin types: 16 A Soldering pin types: 12 A	
	380-400 V	Screw terminal types: 16 A Flat pin types: 16 A Soldering pin types: 12 A	
	440 V	Screw terminal types: 16 A Flat pin types: 16 A Soldering pin types: 12 A	
	500 V	12 A	
	690 V	6 A	
AC-3 Utilization category for air temperature close to contactor $\theta \leq 55^\circ\text{C}$			
I_e / Rated operational current AC-3 	220 / 230 / 240 V	8.9 / 8.5 / 8.1 A	11.8 / 11.3 / 10.8 A
	380 / 400 V	8.9 / 8.5 A	12.1 / 11.5 A
	440 V	7.4 A	10.1 A
	500 V	6.8 A	9.2 A
	690 V	3.8 A	3.8 A
Rated operational power AC-3  1500 r.p.m. 50 Hz 1800 r.p.m. 60 Hz 3-phase motors	220-230-240 V	2.2 kW	3 kW
	380-400 V	4 kW	5.5 kW
	440 V	4 kW	5.5 kW
	500 V	4 kW	5.5 kW
	690 V	3 kW	3 kW
DC-1 Utilization category for air temperature close to contactor $\theta \leq 55^\circ\text{C}$			
I_e / Rated operational current DC-1	110 V	-	4 A
	220 V	-	0.6 A
DC-3 Utilization category for air temperature close to contactor $\theta \leq 55^\circ\text{C}$			
I_e / Rated operational current DC-3	110 V	-	1.5 A
	220 V	-	0.25 A
DC-5 Utilization category for air temperature close to contactor $\theta \leq 55^\circ\text{C}$			
I_e / Rated operational current DC-5	110 V	-	0.4 A
	220 V	-	0.2 A
Rated making capacity AC-3		10 x I_e AC-3 acc. to IEC 60947-4-1	
Rated breaking capacity AC-3		8 x I_e AC-3 acc. to IEC 60947-4-1	
Short-circuit protection device for contactors without thermal O/L relay - motor protection excluded $U_e \leq 500\text{ V AC}$ - fuse type gG		Type 1: 25 A / Type 2: 25 A	
Rated short-time withstand current I_{cw} at 40°C ambient temperature, in free air from a cold state	10 s	64 A	96 A
Maximum breaking capacity $\cos \phi = 0.45$	at 400 V	64 A	96 A
Maximum electrical switching frequency	AC-1	300 cycles/h	
	AC-3	600 cycles/h	
	DC-1, DC-3, DC-5	600 cycles/h	

B6, B7, BC6, BC7, TBC7 3- and 4-pole mini contactors VB6, VB7, VBC6, VBC7 3- and 4-pole mini reversing contactors

Technical data

Main pole – Utilization characteristics according to UL/NEMA/CSA

Contactor types	AC operated	B6, VB6, VB6A	B7, VB7, VB7A
	DC operated	BC6, VBC6, VBC6A	BC7, TBC7, VBC7, VBC7A
Standards	UL 508, CSA C22.2 N°14		
Maximum operational voltage	600 V		
UL/CSA general use rating	12 A / 300 V		16 A / 600 V
UL/CSA maximum 1-phase motor rating			
Full load current	120 V AC	5.8 A	13.8 A
	240 V AC	4.9 A	10.0 A
Horse power rating	120 V AC	0.25 hp	0.75 hp
	240 V AC	0.5 hp	1.5 hp
UL/CSA maximum 3-phase motor rating			
Full load current ¹⁾	200 / 208 V AC	4.8 / 4.6 A	7.8 / 10.6 A
	220-240 V AC	6.8 A	9.6 A
	440-480 V AC	4.8 A	7.6 A
	550-600 V AC	1.7 A	6.1 A
Horse power rating ¹⁾	200 / 208 V AC	1 hp	2 / 3 hp
	220-240 V AC	2 hp	3 hp
	440-480 V AC	3 hp	5 hp
	550-600 V AC	1 hp	5 hp
Resistive Heating	300 V per pole	8 A	8 A
Incandescent Lamps	300 V per pole	6 A	6 A
Fluorescent Lamps	300 V per pole	8.4 A	8.4 A
Short-circuit protection device for contactors without thermal overload relay - motor protection excluded			
Fuse rating	600 V	40 A	
Fuse type, 600 V	600 V	Class J	
Maximum electrical switching frequency			
For resistive loads AC-1	300 cycles/h		
For motor loads AC-3	600 cycles/h		

¹⁾ For the corresponding kW/A or hp/A values of 1500 r.p.m, 50 Hz or 1800 r.p.m, 60 Hz, 3-phase motors, see "Motor rated operational powers and currents".

General technical data

Contactor types	AC operated	B6, VB6, VB6A	B7, VB7, VB7A
	DC operated	BC6, VBC6, VBC6A	BC7, TBC7, VBC7, VBC7A
Rated insulation voltage U _i	690 V		
acc. to IEC 60947-4-1	690 V		
acc. to UL/CSA	600 V		
Rated impulse withstand voltage U _{imp}	6 kV		
Ambient air temperature, close to contactor			
Operation	Fitted with thermal overload relay	-25 ... +50 °C	
	Without thermal overload relay	-25 ... +55 °C	
Storage	-40 ... +80 °C		
Climatic withstand	Acc. to IEC 60947-1 Annex Q		
Maximum operating altitude (without derating)	2000 m		
Mechanical durability	10 ⁷ operating cycles		
Resistance to shock	Half-sine		
acc. IEC 60068-2-27 and EN 60068-2-27	15 g / 11 ms		
acc. to IEC/EN 60947-1 Annex. Q	Category E		
Resistance to vibrations	Sinusoidal		
acc. IEC 60068-2-27 and EN 60068-2-27	5 g / 3 ... 150 Hz		
acc. to IEC/EN 60947-1 Annex. Q	Category E		

B6, B7, BC6, BC7, TBC7 3- and 4-pole mini contactors VB6, VB7, VBC6, VBC7 3- and 4-pole mini reversing contactors

Technical data

Magnet system characteristics for B6, B7 contactors

Contactor types	AC operated	B6, VB6	B7, VB7
Coil operating limits acc. to IEC 60947-4-1	AC supply	0.85 ... 1.1 x U _c	
AC control voltage			
Rated control circuit voltage U _c		See ordering tables	
Coil consumption	Average pull-in value	3.5 VA / 3.5 W	
	Average holding value	3.5 VA / 3.5 W	
Drop-out voltage		0.20 ... 0.75 % of U _c	

Magnet system characteristics for BC6, BC7 contactors

Contactor types	DC operated	BC6, VBC6	BC7, VBC7
Coil operating limits acc. to IEC 60947-4-1	DC supply	0.85 ... 1.1 x U _c	
AC control voltage			
Rated control circuit voltage U _c		See ordering tables	
Coil consumption ¹⁾	Average pull-in value	3.5 VA / 3.5 W	
	Average holding value	3.5 VA / 3.5 W	
Drop-out voltage in % of U _{c min}		0.10 ... 0.75 x U _c	

¹⁾ Interface mini-contactors: see coil consumption on ordering details pages

Magnet system characteristics for TBC7 contactors

Contactor types	DC operated	TBC7
Coil operating limits acc. to IEC 60947-4-1	DC supply	Wide range voltage supply see ordering tables, U _{c min} ... U _{c max}
AC control voltage		
Rated control circuit voltage U _c		See ordering tables
Coil consumption	Average pull-in value	5 VA / 5 W
	Average holding value	5 VA / 5 W
Drop-out voltage in % of U _{c min}		≤ 0.20 % of U _{c min}

Mounting characteristics and conditions for use

Contactor types	AC operated	B6, VB6, VB6A	B7, VB7, VB7A
	DC operated	BC6, VBC6, VBC6A	BC7, TBC7, VBC7, VBC7A
Mounting positions			
Mounting distances	The contactors can be assembled side by side		
Fixing	<p>On rail acc. to IEC 60715, EN 60715</p> <p>By screws (not supplied)</p>		
	<p>35 x 7.5 mm or 35 x 15 mm</p> <p>2 x M4 screws placed diagonally</p>		

B6, B7, BC6, BC7, TBC7 3- and 4-pole mini contactors VB6, VB7, VBC6, VBC7 3- and 4-pole mini reversing contactors

Technical data

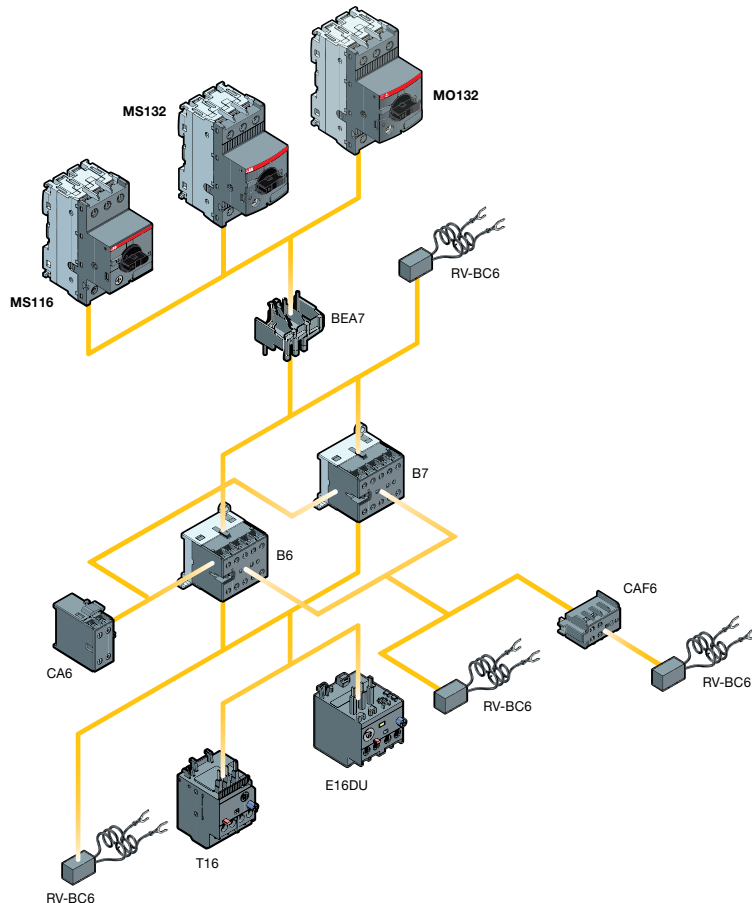
Auxiliary contacts for front mounting, side mounting and built-in according to IEC

Types	CA6, CAF6, built-in auxiliary contacts	
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1	
Rated operational voltage U_e max	690 V	
Rated frequency (without derating)	DC or 50 / 60 Hz	
Conventional free-air thermal current I_m , $\theta \leq 40$ °C	6 A	
I_e / Rated operational current AC-15 acc. to IEC 60947-5-1	24 V 50/60 Hz	4 A
	110-120 V 50/60 Hz	4 A
	220-230-240 V 50/60 Hz	4 A
	380-400 V 50/60 Hz	3 A
	440 V 50/60 Hz	3 A
I_e / Rated operational current DC-13 acc. to IEC 60947-5-1	24 V DC	2.5 A
	110 V DC	0.7 A
	220 - 240 V DC	0.4 A
Short-circuit protection device	6 A, Type gG	
Minimum switching capacity with failure rate acc. to IEC 60947-5-4	17 V / 5 mA	
Maximum electrical switching frequency	AC-15	600 cycles/h
	DC-13	600 cycles/h

Auxiliary contacts for front mounting, side mounting and built-in according to UL/CSA

Types	CA6, CAF6, built-in auxiliary contacts	
Max. operational voltage	600 V AC	
Pilot duty	A600	
AC thermal rated current	5 A	

Accessories for mini contactors








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B6, B7, BC6, BC7, TBC7 3- and 4-pole mini contactors VB6, VB7, VBC6, VBC7 3- and 4-pole mini reversing contactors

Technical data

Connection characteristics

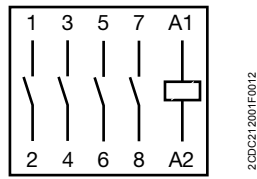
Contactor types	AC operated	B6, VB6, VB6A	B7, VB7, VB7A
	DC operated	BC6, VBC6, VBC6A	BC7, TBC7, VBC7, VBC7A
Main terminals ¹⁾	 Screw terminals with cable clamp		
Connection capacity			
Main conductors (poles)			
 Rigid: solid	1 or 2 x	1 ... 4 mm ²	
 Flexible without ferrule	1 or 2 x	1 ... 2.5 mm ²	
Connection capacity acc. to UL/CSA	1 or 2 x	AWG 22 ... 10	
Stripping length		9 mm	
Tightening torques		0.8 ... 1.1 Nm / 7 lb.in	
Connection capacity – auxiliary conductors (built-in auxiliary terminals + coil terminals)			
 Rigid: solid	1 or 2 x	1 ... 4 mm ²	
 Flexible without ferrule	1 or 2 x	1 ... 2.5 mm ²	
Connection capacity acc. to UL/CSA	1 or 2 x	AWG 22 ... 10	
Stripping length		9 mm	
Tightening torques		0.8 ... 1.1 Nm / 7 lb.in	
Coil terminals		0.8 ... 1.1 Nm / 7 lb.in	
Built-in auxiliary terminals		0.8 ... 1.1 Nm / 7 lb.in	
Degree of protection acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529			
Main terminals		IP20	
Coil terminals		IP20	
Built-in auxiliary terminals		IP20	
Screw terminals (Delivered in open position, screws of unused terminals must be tightened)			
All terminals		M3	
Screwdriver type Flat Ø 5.5 mm / Pozidriv 1			

¹⁾ Soldering pin connection acc. to DIN 40801: 0.8 x 1 mm / 0.8 x 2.54 mm
Flat pin connection acc. to DIN 46248: 1 x 6.3 mm / 1 x 2.8 mm

Mini contactors

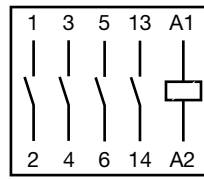
Location of the connection terminals and terminal designation

Mini contactors



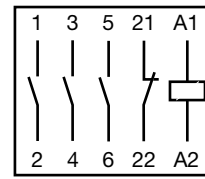
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B6(7)-40-00 ...
BC6(7)-40-00 ...



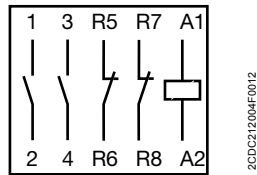
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B6(7)-30-10 ...
BC6(7)-30-10 ...



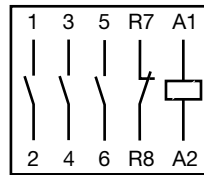
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B6(7)-30-01 ...
BC6(7)-30-01 ...



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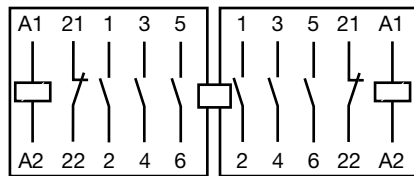
B6(7)-22-00 ...
BC6(7)-22-00 ...



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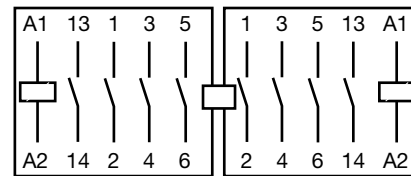
B6(7)-31-00 ...
BC6(7)-31-00 ...

Compact reversing contactors



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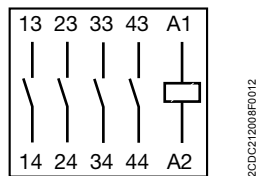
VB6(7)-30-01 ...
VBC6(7)-30-01 ...



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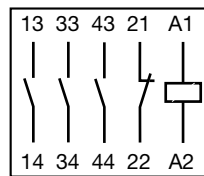
VB6(7)-30-10 ...
VBC6(7)-30-10 ...

Mini contactor relays



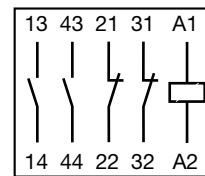
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K6-40E ...
KC6-40E ...



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K6-31Z ...
KC6-31Z ...

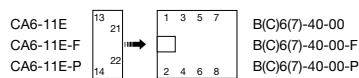


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K6-22Z ...
KC6-22Z ...

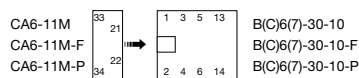
Auxiliary switches

CA6...



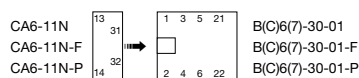
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B(C)6(7)-40-00
B(C)6(7)-40-00-F
B(C)6(7)-40-00-P



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B(C)6(7)-30-10
B(C)6(7)-30-10-F
B(C)6(7)-30-10-P



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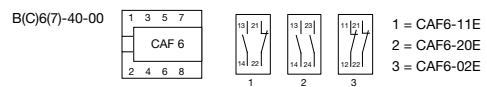
B(C)6(7)-30-01
B(C)6(7)-30-01-F
B(C)6(7)-30-01-P



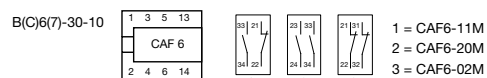
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K(C)6
K(C)6-F
K(C)6-P

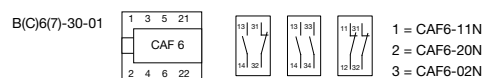
CAF...



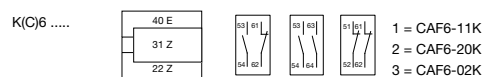
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