

- Three-pole contactors p1-3
- Four-pole contactors p1-7
- Contactors for power factor correction p1-13
- Control relays p1-14
- Add on blocks and accessories p1-15
- Spare parts p1-28
- Modular Contactors p1-31
- Plug in relays p1-33
- Solid State Relays p1-36



The ideal solution

- 45mm WIDE CONTACTORS**
 Ratings up to 38A - 18.5kW IEC AC3 / 30HP UL - merely 45mm wide: exceptional benefit for electric panel dimensions.
- CONTACTORS 55mm WIDE**
 Up to 80A in AC3 (45kW) with a width of just 55mm.
- COILS WITH WIDE OPERATING RANGE**
 BF...D contactors are equipped with a wide operating range coil and are particularly useful in applications subject to considerable voltage variations, such as in electric traction railway equipment.



- 4-TERMINAL COIL**
 Connecting cables can be coupled to the coil both on the line and load ends of the contactor.
- ELECTRONIC COIL**
 Contactors from 50 to 80A AC3 can be equipped with AC/DC electronic coil with wide operating range. Example: single 100 to 250V AC/DC coil.
- BUILT-IN SURGE SUPPRESSOR**
 BF series contactors up to 80A AC3 with standard voltages in DC or AC/DC already have a built-in surge suppressor.
- LOW-CONSUMPTION COILS**
 The BF...L contactors feature a 2.4W low consumption. This characteristic widely allows their direct control by PLC outputs.



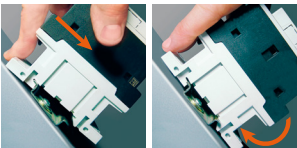
- SIDE ADD-ON FOURTH POLE**
 For the 45A to 115A AC1 ratings, a side-mount fourth power pole can be snapped on the three-pole contactor. This solution permits to optimise inventory.



- MECHANICAL INTERLOCK**
 Smaller-size contactors, 9 to 25A in AC3, can be mechanically and electrically interlocked with larger-size contactors, 26 to 38A AC3. The BFX50 01 and BFX53 01 mechanical interlock comprises two built-in NC auxiliary contacts to make the electrical interlock as well.



- DIN RAIL MOUNTING AND FIXING**

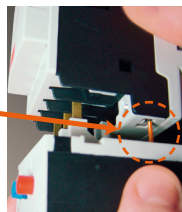


Contactors mounting on and removal from a 35mm DIN rail are tool-less operations and are done by simply applying pressure on the contactor.

- STARTER ASSEMBLY**
 The assembly and wiring of electromechanical starters is extremely fast and reliable. Versatile electrical and mechanical connecting systems provide easy and foolproof assembly of compact starters.



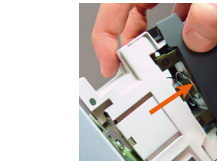
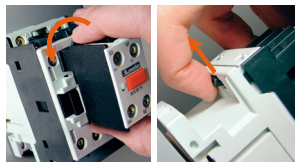
- EFFORTLESS THERMAL OVERLOAD RELAY LINK RF38 AND RF82 TYPES**



During the connection of the thermal overload relay to the contactor, its auxiliary contact is simultaneously linked to the contactor coil terminal rigid connector. The complete overload relay fixing is obtained with one single operation and without other connections.

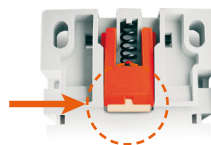
- TERMINAL ADAPTABILITY**
 Terminals are suitable for every type of cable: flexible, rigid, according to AWG standards and interlocked with any type of cable terminal. For BF09...BF38 contactors, a single type of screwdriver tightens the screws for the power contacts, auxiliary contacts and coil.

- SNAP-ON INSTALLATION**



On the contactors, it's quick and easy to fit and remove auxiliary contacts and accessories, without using tools; the same applies to replacing the coil in the AC BF09...BF38 contactors.

- RUBBER PAD INSERT FOR NO DIN RAIL SLIDING**



A rubber insert prevents the contactors from sliding on the 35mm DIN rail even when out of tolerance or mounted vertically.

- CONTACTOR PROTECTION CONNECTION**

The rigid connections between breaker and contactor allow complete compact starters to be created easily, quickly and with less space used in the panel. It is fitted on a single DIN rail.



- IP20 CONNECTION SECURITY**



For BF09...BF38 contactors, the easy access and space for the terminals is combined with IP20 protection, preventing accidental contact with live parts.

- DOUBLE MANTLE TERMINALS**
 40 to 80A AC3 contactors are equipped with double mantle terminals for easy, functional access for power cables. It is extremely simple to create star-delta starters, reversing switches, changeovers and arrange parallel supply for several contactors.



BG series mini-contactors



- Three-pole mini-contactors, 6 to 12A IEC AC3
- Four-pole mini-contactors, 20A IEC AC1 duty
- Versions with 2NO+2NC main power poles
- Highly conductive auxiliary contacts
- Coils with AC or DC supply
- Low-consumption DC versions
- Screw, Faston and rear PCB solder pin termination.

	3 poles			4 poles		
	le (AC3)	AC	DC	lth (AC1)	AC	DC
BG06	6A	●	●	—	—	—
BG09	9A	●	●	20A	●	●
BGF09	9A	●	●	20A	●	●
BGP09	9A	●	●	20A	●	●
BG12	12A	●	●	—	—	—

BF series contactors



- Three-pole contactors, 9 to 110A IEC AC3 duty
- Four-pole contactors, 25 to 125A in AC1 duty
- Power factor correction contactors, 7.5 to 75kvar at 400V IEC
- Types with 2NO+2NC or 4NC main power poles
- Types for photovoltaic applications
- Highly conductive auxiliary contacts
- Coils with AC or DC supply
- Wide-range coils with electronic control for contactors from 40 to 80A AC3
- Low-consumption versions for control relays and 9-38A contactors in IEC AC3 duty.

	le AC3	3 poles			
		AC	DC	DC ^①	AC/DC ^②
BF09	9A	●	●	●	—
BF12	12A	●	●	●	—
BF18	18A	●	●	●	—
BF25	25A	●	●	●	—
BF26	26A	●	●	●	—
BF32	32A	●	●	●	—
BF38	38A	●	●	●	—
BF40	40A	●	—	—	●
BF50	50A	●	—	—	●
BF65	65A	●	—	—	●
BF80	80A	●	—	—	●
BF95	95A	●	●	—	—
BF110	110A	●	●	—	—

	lth AC1	4 poles			
		AC	DC	DC ^①	AC/DC ^②
BF09	25A	●	●	●	—
BF12	28A	●	—	—	—
BF18	32A	●	●	●	—
BF26	45A	●	●	●	—
BF38	56A	●	●	●	—
BF40	70A	●	—	—	—
BF50	90A	●	—	—	—
BF65	100A ^③	●	—	—	●
BF80	115A ^④	●	—	—	●

① Low-consumption version.
 ② Wide-range coil with electronic control.
 ③ 80A for BF65 with AC/DC coil.
 ④ 90A for BF80 with AC/DC coil.

B series contactors



- Three-pole contactors, 110 to 630A IEC AC3 duty
- Four-pole contactors, 160 to 1600A IEC AC1 duty
- Coils with AC/DC supply.
- Screw termination.

	3 poles			4 poles		
	le (AC3)	AC	DC	lth (AC1)	AC	DC
B115	110A	●	●	160A	●	●
B145	150A	●	●	250A	●	●
B180	185A	●	●	275A	●	●
B250	265A	●	●	350A	●	●
B310	320A	●	●	450A	●	●
B400	420A	●	●	550A	●	●
B500	520A	●	●	700A	●	●
B630	630A	●	●	800A	●	●
B630 1000	①	●	●	1000A	●	●
B1250	①	●	—	1250A	●	—
B1600	①	●	—	1600A	●	—

① For AC1 / general use duty only.



BG06 A...BG12 A

BF09 A...BF25 A

BF26 A...BF38 A

BF40 A...BF80 A

BF95...BF110

B115...B180

B250...B400

Three-phase motor control in AC3 duty

Order code	IEC operating current I _{th} (AC1)				Maximum IEC power at ≤55°C (AC3)						
	≤40°C		≤55°C	≤70°C	I _e (AC3) ≤440V		≤55°C				
AC coil	[A]	[A]	[A]	[A]	230V	400V	415V	440V	500V	690V	1000V
	[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
11 BG06 01 A 0	16	14	12 (≤60°C)	6	1.5	2.2	2.4	2.5	3	3	—
11 BG06 10 A 0											
11 BG09 01 A 0	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BG09 10 A 0											
11 BGF09 01 A 0	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BGF09 10 A 0											
11 BGP09 01 A 0	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	—	—
11 BGP09 10 A 0											
11 BG12 01 A 0	20	18	15 (≤60°C)	12	3.2	5.7	6.2	5.5	5	5	—
11 BG12 10 A 0											
BF09 01 A 0	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—
BF09 10 A 0											
BF12 01 A 0	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—
BF12 10 A 0											
BF18 01 A 0	32	26	23	18	4	7.5	9	9	10	10	—
BF18 10 A 0											
BF25 01 A 0	32	26	23	25	7	12.5	13.4	13.4	15	11	—
BF25 10 A 0											
BF26 00 A 0	45	36	32	26	7.3	13	14	14	15.6	18.5	—
BF32 00 A 0	56	45	40	32	8.8	16	17	17	20	22	—
BF38 00 A 0	56 (60)	45 (48)	40 (42)	38	11	18.5	18.5	18.5	20	22	—
BF40 00A 0	70	60	50	40	11	18.5	22	22	22	30	18
BF50 00A 0	90	75	60	50	15	22	30	30	30	37	22
BF65 00A 0	100	80	65	65	18.5	30	37	37	37	45	30
BF80 00A 0	115	95	75	80	22	45	45	45	55	75	37
11 BF95 00 0	125	100	80	95	27.6	50	55	55	56	74	45
11 BF110 00 0	125	100	80	110	33	61	66	70	59	80	45
11 B115 00 0 0	160	150	110	110	33	61	66	70	80	100	63
11 B145 00 0 0	250	235	190	150	46	80	88	93	100	120	75
11 B180 00 0 0	275	250	200	185	57	100	108	115	123	144	103
11 B250 00 0 0	350	300	250	265	83	140	155	164	176	212	156
11 B310 00 0 0	450	370	300	320	100	170	188	200	213	256	180
11 B400 00 0 0	550	430	360	420	130	225	247	263	271	352	208
11 B500 00 0 0	700	550	500	520	156	290	306	328	367	416	312
11 B630 00 0 0	800	640	540	630	198	335	368	368	368	440	368
11 B630 1000 00 0 0	1000	850	700	—	For AC1/Resistive duty only, see page 1-7.						
11 B1250 24 0 0	1250	1050	880	—	For AC1/Resistive duty only, see page 1-7.						
11 B1600 24 0 0	1600	1360	1120	—	For AC1/Resistive duty only, see page 1-7.						

1 The order code must be completed with the coil voltage digit if 50/60Hz or with the coil voltage digit followed by the number 60 if 60Hz.
Standard voltages are:
- AC 50/60Hz 024 / 048 / 110 / 230 / 400V
- AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).
Example: 11 BG06 10 A230 for mini-contactor BG06, three poles, with one NO contact and 230VAC 50/60Hz coil.
11 BG06 10 A460 60 for mini-contactor BG06 with one NO contact and 460VAC 60Hz coil.

2 The coil of the contactor can be powered indifferently in AC or DC. Complete the order code only with the digit of the coil voltage.
Standard voltages are:
- AC/DC 24 / 48 / 60 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415 (indicate 380) / 440-480V (indicate 440).
Example: 11 B145 00 110 for contactor B145, with 110-125VAC/DC coil.
The 24VAC/DC voltage is not possible for B500-B630 1000 contactors.
Other voltages available on request.

3 If predisposed for mechanical latch (G495), the order code becomes 11 B...SL.00 0
If already fitted with mechanical latch (G495), the order code becomes 11 B...L.00 0 0 0

4 Indicate rated voltage of the mechanical latch, preceded by the letter C if in DC. Standard voltages are:
- AC 50/60Hz 48 / 110-125 indicate 110 / 220-240 indicate 220 / 380-415V indicate 380
- DC 48 / 110-125 indicate 110 / 220-240V indicate 220.
Example: 11 B145L 00 110 220 for contactor B145 without auxiliary contacts, with 110-125VAC/DC coil and mechanical latch powered at 220-240VAC.

5 G495 mechanical latch cannot be mounted.

6 Complete the order code with the digit of the coil voltage. For 110-125VAC (50/60Hz) indicate 110 or 220-240VAC (50/60Hz) indicate 220.
Example: 11 B1250 24 110 for contactor B1250, with 110-125VAC 50/60Hz coil.

7 Maximum voltage is limited at 300V for UL.

CONTACTORS & RELAYS

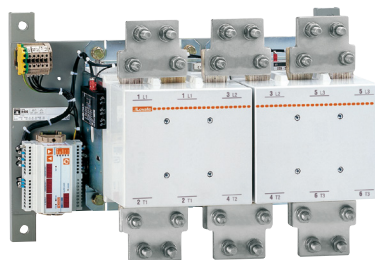
Three pole contactors with AC control circuit



B500-B630



B630 1000



B1250-B1600

	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight [kg]
		NO	NC		
Clamp-screw	—	1Ⓢ	—	10	0.180
	1Ⓢ	—	—	10	0.180
Clamp-screw	—	1Ⓢ	—	10	0.180
	1Ⓢ	—	—	10	0.180
Faston	—	1Ⓢ	—	10	0.180
	1Ⓢ	—	—	10	0.180
Rear PCB solder pin	—	1Ⓢ	—	10	0.197
	1Ⓢ	—	—	10	0.197
Clamp-screw	—	1Ⓢ	—	10	0.180
	1Ⓢ	—	—	10	0.180
Clamp-screw	—	1Ⓢ	—	1	0.367
	1Ⓢ	—	—	Ⓣ	0.367
Clamp-screw	—	1Ⓢ	—	1	0.367
	1Ⓢ	—	—	Ⓣ	0.367
Clamp-screw	—	1Ⓢ	—	1	0.367
	1Ⓢ	—	—	Ⓣ	0.367
Clamp-screw	—	—	—	1	0.437
	—	—	—	1	0.437
Clamp-screw	—	—	—	1	0.437
	—	—	—	1	0.437
Lug-clamp ⑩	—	—	—	1	1.000
	—	—	—	1	1.000
Lug-clamp ⑩	—	—	—	1	1.000
	—	—	—	1	1.000
Lug-clamp ⑩	—	—	—	1	1.000
	—	—	—	1	1.000
Lug-clamp	—	—	—	1	1.360
	—	—	—	1	1.360
Screw-nut	—	—	—	1	5.290
	—	—	—	1	5.400
Screw-nut	—	—	—	1	5.400
	—	—	—	1	9.575
Screw-nut	—	—	—	1	9.575
	—	—	—	1	9.575
Screw-nut	—	—	—	1	18.000
	—	—	—	1	18.620
Screw-nut	—	—	—	1	21.400
	—	—	—	1	21.400
Screw-nut	2	4	—	1	48.000
	2	4	—	1	50.000

- Ⓢ Highly conductive auxiliary contact.
- Ⓣ For voltages 024 / 230 / 400VAC 50-60Hz: 10 pieces/package.
For all other voltages: 1 piece/package.
- ⑩ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.
- ⑪ IEC/EN 60947-1 designation: Pillar terminal.

Certifications and compliance

Certifications obtained:

Type	C U L S	U L	C S A	E A C	C C C	Register of shipping		
						R I N A	L R O S	
BG06 A	●			●	●			
BG09 A	●			●	●			
BG12 A	●			●	●			
BGF09 A	●			●	●			
BGP... A ⑦	●			●	●			
BF09 A	●		●	●	●	●		
BF12 A	●		●	●	●	●		
BF18 A	●		●	●	●	●		
BF25 A	●		●	●	●	●		
BF26 A	●		●	●	●	●		
BF32 A	●		●	●	●	●		
BF38 A	●		●	●	●	●		
BF40 A	●			●	●			
BF50 A	●			●	●			
BF65 A	●			●	●			
BF80 A	●			●	●			
BF95	●		●	●	●	●	●	●
BF110	●			●	●			
B115		●	●	●	●	●	●	●
B145		●	●	●	●	●	●	●
B180		●	●	●	●	●	●	●
B250		●	●	●	●	●	●	●
B310		●	●	●	●	●	●	●
B400		●	●	●	●	●	●	●
B500	●			●				
B630	●			●				
B630 1000	●			●				
B1250				●				
B1600				●				

● Certified products.

UL US "UL Recognized" for Canada and USA as component

⑦ This contactor has also achieved CSA elevator equipment certification.

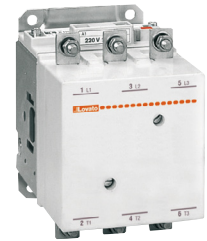
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; UL 60947-1, UL 60947-4-1, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1.

Plastic materials are compliant with standards IEC/EN 60335; for all BF09...BF38 versions only, add suffix V260 to the standard product order code.

Example: BF09 10 A230V260 for BF09, three poles, with one NO contact and 230V 50/60Hz coil with compliant plastic materials.

For dimensions and full technical data visit www.mechtronic.com.au

new



**BG06 D...BG12 D
BG09 L**

**BF09 D...BF25 D
BF09 L...BF25 L**

**BF26 D-BF38 D
BF26 L-BF38 L**

BF40 E...BF80 E

BF95 C...BF110 C

B115...B180

B250...B400

Three-phase motor control in AC3 duty

Order code DC coil	DC coil Low consumption	IEC operating current				Maximum IEC power at ≤55°C (AC3)						
		I _{th} (AC1)			I _e (AC3)	230V	400V	415V	440V	500V	690V	1000V
		≤40°C	≤55°C	≤70°C	≤440V ≤55°C	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
11 BG06 01 D①	—	16	14	12 (≤60°C)	6	1.5	2.2	2.4	2.5	3	3	—
11 BG06 10 D①	—											
11 BG09 01 D①	11 BG09 01 L②	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BG09 10 D①	11 BG09 10 L②											
11 BGF09 01 D①	11 BGF09 01 L②	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BGF09 10 D①	11 BGF09 10 L②											
11 BGP09 01 D①	—	20	18	15 (≤60°C)	9	2.2	4③	4.3③	4.5③	5③	—	—
11 BGP09 10 D①	—											
11 BG12 01 D①	—	20	18	15 (≤60°C)	12	3.2	5.7	6.2	5.5	5	5	—
11 BG12 10 D①	—											
BF09 01 D①④	BF09 01 L②④	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—
BF09 10 D①④	BF09 10 L②④											
BF12 01 D①④	BF12 01 L②④	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—
BF12 10 D①④	BF12 10 L②④											
BF18 01 D①④	BF18 01 L②④	32	26	23	18	4	7.5	9	9	10	10	—
BF18 10 D①④	BF18 10 L②④											
BF25 01 D①④	BF25 01 L②④	32	26	23	25	7	12.5	13.4	13.4	15	11	—
BF25 10 D①④	BF25 10 L②④											
BF26 00 D①④	BF26 00 L②④	45	36	32	26	7.3	13	14	14	15.6	18.5	—
BF32 00 D①④	BF32 00 L②④	56	45	40	32	8.8	16	17	17	20	22	—
BF38 00 D①④	BF38 00 L②④	56 (60⑩)	45 (48⑩)	40 (42⑩)	38	11	18.5	18.5	18.5	20	22	—
BF40 00 E⑤	—	70	60	50	40	11	16.5	22	22	22	30	18
BF50 00 E⑤	—	80	70	60	50	15	22	30	30	30	37	22
BF65 00 E⑤	—	80	70	60	65	18.5	30	37	37	37	45	30
BF80 00 E⑤	—	90	80	65	80	22	45	45	45	55	75	37
11 BF95 C 00①⑥	—	125	100	80	95	27.6	50	55	55	56	74	45
11 BF110 C 00①⑥	—	125	100	80	110	33	61	66	70	59	80	45
11 B115 00④⑥	—	160	150	110	110	33	61	66	70	80	100	63
11 B145 00④⑥	—	250	235	190	150	46	80	88	93	100	120	75
11 B180 00④⑥	—	275	250	200	185	57	100	108	115	123	144	103
11 B250 00④⑥	—	350	300	250	265	83	140	155	164	176	212	156
11 B310 00④⑦	—	450	370	300	320	100	170	188	200	213	256	180
11 B400 00④⑥	—	550	430	360	420	130	225	247	263	271	352	208
11 B500 00④⑥	—	700	550	500	520	156	290	306	328	367	416	312
11 B630 00④⑥	—	800	640	540	630	198	335	368	368	368	440	368
11 B630 1000 00④⑦	—	1000	850	700	—	For AC1/Resistive duty only, see page 1-7.						

- ① Complete order code with coil voltage digit.
Standard voltages are as follows:
— DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.
For BG09...D 24VDC version complete with built-in surge suppressor, add suffix **V120** to the standard order code.
The BF09-BF38D types already have a standard supplied built-in TVS (Transient Voltage Suppressor).
Example: 11 BG06 10 D012 for mini-contactor BG06, with one NO contact and 12VDC coil.
11 BG09 10 D024 V120 for mini-contactor BG09, with one NO contact and 24VDC coil, complete with built-in TVS (diode) suppressor.
- ② Low-consumption version. No add-on auxiliary contacts or mechanical interlock can be mounted on BG... type contactors. Complete order code with coil voltage digit.
Standard voltages are as follows:
— DC 024 / 048V.
Example: 11 BG09 01 L024 for contactor BG09, with one NC contact and 24VDC low-consumption coil.
- ③ The contactor coil is controlled electronically; it can have either an AC or a DC supply and has a wide operating range.
The order code must be completed with the coil voltage digit.
The standard voltages are as follows:
— AC/DC 024 = 20...48V; 110 = 60...110V; 230 = 100...250V.
- ④ The coil of the contactor can be powered indifferently in AC or DC. Complete the order code only with the digit of the coil voltage.

- Standard voltages are:
— AC/DC 24 / 48 / 60 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415 (indicate 380) / 440-480V (indicate 440).
Example: 11 B145 00 110 for contactor B110, with 110-125VAC/DC coil.
The 24VAC/DC voltage is not possible for B500-B630 1000 contactors.
Other voltages available on request.
- ⑤ If predisposed for mechanical latch (G495), the order code becomes B...SL.00 ④.
 - ⑥ If already fitted with mechanical latch (G495), the order code becomes B...L.00 ④ ⑥.
 - ⑦ Indicate rated voltage of the latch, preceded by the letter C if in DC.
Standard voltages are:
— AC 50/60Hz 48 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415V (indicate 380)
— DC 48 / 110-125 (indicate 110) / 220-240V (indicate 220).
Example: 11 B145L 00 110 C48 for contactor B145, with 110-125VAC/DC coil and mechanical latch powered at 48VDC.
 - ⑧ G495 mechanical latch cannot be mounted.
 - ⑨ Maximum voltage is limited at 300V for UL.
 - ⑩ Highly conductive auxiliary contact.
 - ⑪ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.
 - ⑫ IEC/EN 60947-1 designation: Pillar terminal.
 - ⑬ Maximum combinations of add-on blocks see page 1-18.



B500-B630



B630 1000

Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight [kg]
	NO	NC		
Clamp-screw	—	1Ⓢ	10	0.214
	1Ⓢ	—	10	0.214
Clamp-screw	—	1Ⓢ	10	0.214
	1Ⓢ	—	10	0.214
Faston	—	1Ⓢ	10	0.210
	1Ⓢ	—	10	0.210
Rear PCB solder pin	—	1Ⓢ	10	0.240
	1Ⓢ	—	10	0.240
Clamp-screw	—	1Ⓢ	10	0.214
	1Ⓢ	—	10	0.214
Clamp-screw	—	1Ⓢ	1	0.494
	1	—	1	0.494
Clamp-screw	—	1Ⓢ	1	0.494
	1	—	1	0.494
Clamp-screw	—	1Ⓢ	1	0.494
	1	—	1	0.494
Clamp-screw	—	—	1	0.559
Clamp-screw	—	—	1	0.559
Clamp-screw	—	—	1	0.559
Lug-clamp Ⓢ	—	—	1	1.050
Lug-clamp Ⓢ	—	—	1	1.050
Lug-clamp Ⓢ	—	—	1	1.050
Lug-clamp Ⓢ	—	—	1	1.050
Lug-clamp Ⓢ	—	—	1	1.895
Lug-clamp Ⓢ	—	—	1	1.895
Screw-nut	—	—	1	5.290
Screw-nut	—	—	1	5.400
Screw-nut	—	—	1	5.400
Screw-nut	—	—	1	9.635
Screw-nut	—	—	1	9.635
Screw-nut	—	—	1	9.635
Screw-nut	—	—	1	18.060
Screw-nut	—	—	1	18.620
Screw-nut	—	—	1	21.400

Certifications and compliance

Certifications obtained:

Type	CULUS	UL	CSA	EAC	CCC	RINA
BG06 D	●			●	●	
BG09 D	●			●	●	
BG12 D	●			●	●	
BGF09 D	●			●	●	
BGP09 D Ⓢ	● ^{us}	●	●			
BF09 D - BF09 L	●		●	●	●	●
BF12 D - BF12 L	●		● ¹²	●	●	●
BF18 D - BF18 L	●		●	●	●	●
BF25 D - BF25 L	●		● ¹²	●	●	●
BF26 D - BF26 L	●		●	●	●	●
BF32 D - BF32 L	●		●	●	●	●
BF38 D - BF38 L	●		● ¹²	●	●	●
BF40 E	●			●	●	
BF50 E	●			●	●	
BF65 E	●			●	●	
BF80 E	●			●	●	
BF95 C	●		●	●	●	●
BF110 C	●			●	●	
B115		●	●	●	●	●
B145		●	●	●	●	●
B180		●	●	●	●	●
B250		●	●	●	●	●
B310		●	●	●	●	●
B400		●	●	●	●	●
B500	●			●		
B630	●			●	●	
B630 1000	●			●		

● Certified products.

●^{us} "UL Recognized" for Canada and USA as component

●¹² This contactor has also achieved CSA elevator equipment certification.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; UL 60947-1, UL 60947-4-1, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1.

Plastic materials are compliant with standards IEC/EN 60335; for all BF09...BF38 versions only, add suffix V260 to the standard product order code.

Example: BF09 10 D024 V260 for BF09, three poles, with one NO contact and 24VDC coil with compliant plastic materials.

For dimensions and full technical data visit www.mechtronic.com.au



BG09 T4 A

BF09A T4 A...BF18 T4 A

BF26 T4 A...BF38 T4 A

BF50 T4 A...BF80 T4 A

B115 4...B180 4

B250 4...B400 4

Resistive load control in AC1

Order code	IEC operating current Ith (AC1)			Maximum IEC power at ≤40°C (AC1)						
	≤40°C	≤55°C	≤70°C	230V	400V	415V	440V	500V	690V	1000V
AC coil	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
11 BG09 T4 A 0	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGF09 T4 A 0	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGP09 T4 A 0	20	18	15 (≤60°C)	8	14 ^⑦	14 ^⑦	15 ^⑦	16 ^⑦	—	—
BF09 T4 A 0	25	20	18	9.5	16	17	18	21	27	—
BF12 T4 A 0	28	23	20	10	18	19	20	23	32	—
BF18 T4 A 0	32	26	23	12	21	22	23	26	36	—
BF26 T4 A 0	45	36	32	17	30	31	33	37	51	—
BF38 T4 A 0	56 (60 ^⑧)	45 (48 ^⑧)	40 (42 ^⑧)	21	36	38	40	45	62	—
BF40 T4 A 0	70	60	50	26	46	48	51	58	79	115
BF50 T4 A 0	90	75	60	34	59	61	65	74	102	148
BF65 T4 A 0	100	80	65	38	65	68	72	82	114	165
BF80 T4 A 0	115	95	75	43	76	79	83	95	120	185
11 B115 4 0000	160	150	110	57	98	107	115	129	173	250
11 B145 4 0000	250	235	190	91	150	162	180	196	270	390
11 B180 4 0000	275	250	200	95	160	177	200	213	298	430
11 B250 4 0000	350	300	250	124	214	234	255	282	380	560
11 B310 4 0000	450	370	300	158	270	293	325	350	488	700
11 B400 4 0000	550	430	360	200	345	377	400	452	598	870
11 B500 4 0000	700	550	500	252	438	478	500	575	755	1100
11 B630 4 0000	800	640	540	288	500	545	580	655	860	1250
11 B630 1000 4 0000	1000	850	700	350	600	630	725	750	1000	1600
11 B1250 4 2400	1250	1050	880	480	830	900	905	1100	1450	2000
11 B1600 4 2400	1600	1360	1120	550	950	1000	1160	1200	1650	2500

① The order code must be completed with the coil voltage digit if 50/60Hz and with the coil voltage digit followed by the number 60 if 60Hz.

Standard voltages are as follows:

- AC 50/60Hz 024 / 048 / 110 / 230 / 400V

- AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).

Example: 11 BG09 T4 A230 for mini-contactor BG09, four poles, with 230VAC 50/60Hz coil.

11 BG09 T4 A460 60 for mini-contactor BG09, four poles, with 460VAC 60Hz coil.

② The coil of the contactor can be powered indifferently in AC or DC. Complete the order code only with the digit of the coil voltage. Standard voltages are:

- AC/DC 24 / 48 / 60 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415 (indicate 380) / 440-480V (indicate 440).

Example: 11 B145 4 00 110 for contactor B145, four poles, with 110-125VAC/DC coil.

The 24VAC/DC voltage is not possible for B500-B630 1000 contactors.

Other voltages available on request.

③ If predisposed for mechanical latch (G495), the order code becomes B...4SL 00 ②.

If already fitted with mechanical latch (G495), the order code becomes B...4L.00 ② ④.

④ Indicate rated voltage of the mechanical latch, preceded by the letter C if in DC.

Standard voltages are:

- AC 50/60Hz 48 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415V (indicate 380)

- DC 48 / 110-125 (indicate 110) / 220-240V (indicate 220).

Example: 11 B145 4L 00 110 C220 for contactor B145, four poles, with 110-125VAC/DC coil and mechanical latch powered at 220-240VDC.

⑤ G495 mechanical latch cannot be mounted.

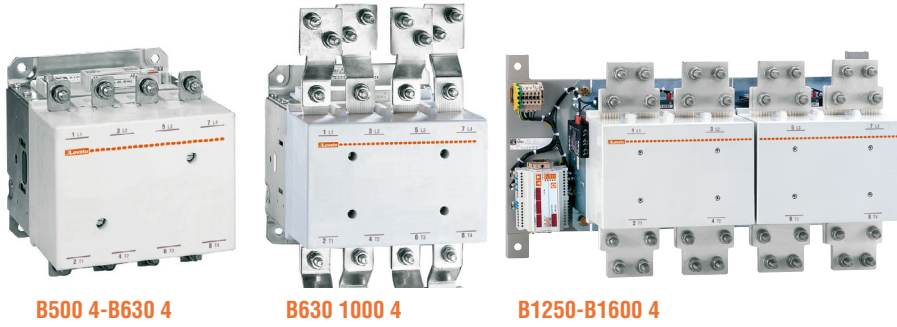
⑥ Complete the order code with the digit of the coil voltage. For 110-125VAC 50/60 Hz indicate 110 or 220-240VDC 50/60 Hz indicate 220.

Example: 11 B1250 4 24 110 for contactor B1250, four poles, with 110-125VAC/DC 50/60Hz coil.

⑦ Maximum voltage is limited at 300V for UL.

⑧ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.

⑨ IEC/EN 60947-1 designation: Pillar terminal.



B500 4-B630 4

B630 1000 4

B1250-B1600 4

Type of terminal	Incorporated auxiliary contacts		Quantity per pkg n°	Weight [kg]
	NO	NC		
Clamp-screw	—	—	10	0.180
Faston	—	—	10	0.180
Rear PCB solder pin	—	—	10	0.197
Clamp-screw	—	—	1	0.367
Clamp-screw	—	—	1	0.367
Clamp-screw	—	—	1	0.367
Clamp-screw	—	—	1	0.508
Clamp-screw	—	—	1	0.508
Lug-clamp	—	—	1	1.100
Lug-clamp	—	—	1	1.100
Lug-clamp	—	—	1	1.100
Screw-nut	—	—	1	6.220
Screw-nut	—	—	1	6.340
Screw-nut	—	—	1	6.340
Screw-nut	—	—	1	11.195
Screw-nut	—	—	1	11.195
Screw-nut	—	—	1	11.195
Screw-nut	—	—	1	20.910
Screw-nut	—	—	1	21.880
Screw-nut	—	—	1	25.620
Screw-nut	2	4	1	57.500
Screw-nut	2	4	1	58.400

IEC utilisation current with poles in parallel

If the poles of the contactors are arranged in parallel, the operating current is the one indicated in the table multiplied by the **K** factor given below, which account for the unequal distribution of the current in the various poles.

To limit distribution inequality, it is advisable to use paralleling links (see pages 1-15, 1-20 and 1-25).

2 POLES in parallel: **K = 1.6**

3 POLES in parallel: **K = 2.2**

4 POLES in parallel: **K = 2.8**

Certifications and compliance

Certifications obtained:

Type	C U L U S	U L	C S A	E A C	C C C	R I N A
BG09 T4 A	●			●	●	
BGF09 T4 A	●			●	●	
BGP09 T4 A	● ^{UL US}			●	●	
BF09 T4 A	●		●	●	●	●
BF12 T4 A	●		● ¹⁰	●	●	●
BF18 T4 A	●		●	●	●	●
BF26 T4 A	●		● ¹⁰	●	●	●
BF38 T4 A	●		● ¹⁰	●	●	●
BF40 T4 A	●			●	●	
BF50 T4 A	●			●	●	
BF65 T4 A	●			●	●	
BF80 T4 A	●			●	●	
B115 4		●	●	●	●	
B145 4		●	●	●	●	
B180 4		●	●	●	●	
B250 4		●	●	●	●	
B310 4		●	●	●	●	
B400 4		●	●	●	●	
B500 4	●			●		
B630 4	●			●	●	
B630 1000 4	●			●		
B1250 4				●		
B1600 4				●		

● Certified products.

^{UL US} "UL Recognized" for Canada and USA as component.

¹⁰ This contactor has also achieved CSA elevator equipment certification.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; UL 60947-1, UL 60947-4-1, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1.

Plastic materials are compliant with standards IEC/EN 60335; for all BF09...BF38 versions only, add suffix V260 to the standard product order code.

Example: BF09 T4 A230 V260 for BF09, four poles, 230V 50/60Hz coil with compliant plastic materials.

For dimensions and full technical data visit www.mechtronic.com.au



new



BG09 T4 D

**BF09 T4 D-BF18 T4 D
BF09 T4 L-BF18 T4 L**

**BF26 T4 D-BF38 T4 D
BF26 T4 L-BF38 T4 L**

**BF65 T4 E
BF80 T4 E**

B115 4...B180 4

B250 4...B400 4

Resistive load control in AC1

Order code DC coil	DC coil Low consumption	IEC operating current I _{th} (AC1)			Maximum IEC power at ≤40°C (AC1)						
		≤40°C	≤55°C	≤70°C	230V	400V	415V	440V	500V	690V	1000V
		[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
11 BG09 T4 D 0	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGF09 T4 D 0	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGP09 T4 D 0	—	20	18	15 (≤60°C)	8	14 ^⑥	14 ^⑥	15 ^⑥	16 ^⑥	—	—
BF09 T4 D 0	BF09 T4 L 0	25	20	18	9.5	16	17	18	21	27	—
BF18 T4 D 0	BF18 T4 L 0	32	26	23	12	21	22	23	26	36	—
BF26 T4 D 0	BF26 T4 L 0	45	36	32	17	30	31	33	37	51	—
BF38 T4 D 0	BF38 T4 L 0	56 (60 ^⑩)	45 (48 ^⑩)	40 (42 ^⑩)	21	26	38	40	45	62	—
BF65 T4 E 0	—	80	70	60	41	72	78	80	95	112	—
BF80 T4 E 0	—	90	80	65	43	76	79	83	95	120	—
11 B115 4 00006	—	160	150	110	57	98	107	115	129	173	250
11 B145 4 00006	—	250	235	190	91	150	162	180	196	270	390
11 B180 4 00006	—	275	250	200	95	160	177	200	213	298	430
11 B250 4 00006	—	350	300	250	124	214	234	255	282	380	560
11 B310 4 00006	—	450	370	300	158	270	293	325	350	488	700
11 B400 4 00006	—	550	430	360	200	345	377	400	452	598	870
11 B500 4 00006	—	700	550	500	252	438	478	500	575	755	1100
11 B630 4 00006	—	800	640	540	288	500	545	580	655	860	1250
11 B630 1000 4 00007	—	1000	850	700	350	600	630	725	750	1000	1600

① Complete order code with coil voltage digit.

Standard voltages are as follows:

– DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.

The BF09...BF38D and BF09...BF38L types already have a standard supplied built-in TVS (Transient Voltage Suppressor).

Example: 11 BG09 T4 D012 for mini-contactor BG09, four poles, with 12VDC coil.

② Low consumption version with TVS. Complete the order code with coil voltage digit.

Standard voltages are as follows:

– DC 024 / 048V.

Example: BF09 T4 L024 for contactor BF09, four poles, with 24VDC low-consumption coil with TVS.

③ The contactor coil is controlled electronically; it can have either an AC or a DC supply and has a wide operating range.

Complete the order code only with the digit of the coil voltage.

Standard voltages are:

– AC/DC 024 = 20...48V; 110 = 60...110V; 230 = 100...250V.

④ The coil of the contactor can be powered indifferently in AC or DC. Complete the order code only with the digit of the coil voltage.

Standard voltages are:

– AC/DC 24 / 48 / 60 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415 (indicate 380) / 440-480V (indicate 440).

Example: 11 B145 4 00 110 for contactor B145, four poles, with 110-125VAC/DC coil.

The 24V voltage is not possible for B500-B630 1000 contactors.

Other voltages available on request.

⑤ If predisposed for mechanical latch (G495), the order code becomes B...4SL.00.④

If already fitted with mechanical latch (G495), the order code becomes B...4L.00.④⑥.

⑥ Indicate rated voltage of the mechanical latch, preceded by the letter C if in DC.

Standard voltages are:

– AC 50/60Hz 48 / 110-125 (indicate 110) / 220-240 (indicate 220) / 380-415V (indicate 380)

– DC 48 / 110-125 (indicate 110) / 220-240V (indicate 220).

Example: 11 B145L 00 110 C48 for contactor B145, four poles, with 110-125VAC/DC coil and mechanical latch powered at 48VDC.

⑦ G495 mechanical latch cannot be mounted

⑧ Maximum voltage is limited at 300V for UL.

⑨ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.

⑩ IEC/EN 60947-1 designation: Pillar terminal.



B500 4-B630 4



B630 1000 4

	Type of terminal	Incorporated auxiliary contacts		Quantity per pack	Weight [kg]
		NO	NC		
	Clamp-screw	—	—	10	0.220
	Faston	—	—	10	0.220
	Rear PCB solder pin	—	—	10	0.242
	Clamp-screw	—	—	1	0.498
	Clamp-screw	—	—	1	0.498
	Clamp-screw	—	—	1	0.665
	Clamp-screw	—	—	1	0.665
	Lug-clamp®	—	—	1	1.150
	Lug-clamp®	—	—	1	1.150
	Screw-nut	—	—	1	6.220
	Screw-nut	—	—	1	6.340
	Screw-nut	—	—	1	6.340
	Screw-nut	—	—	1	11.195
	Screw-nut	—	—	1	11.195
	Screw-nut	—	—	1	11.195
	Screw-nut	—	—	1	11.195
	Screw-nut	—	—	1	20.910
	Screw-nut	—	—	1	21.880
	Screw-nut	—	—	1	25.600

IEC utilisation current with poles in parallel

If the poles of the contactors are arranged in parallel, the operating current is the one indicated in the table multiplied by the **K** factor given below, which account for the unequal distribution of the current in the various poles.

To limit distribution inequality, it is advisable to use paralleling links (see pages 1-15, 1-20 and 1-25).

2 POLES in parallel: **K** = 1.6

3 POLES in parallel: **K** = 2.2

4 POLES in parallel: **K** = 2.8

Certifications and compliance

Certifications obtained:

Type	C U L S	U L	C S A	E A C	C C C	R I N A
BG09 T4 D	●			●	●	
BGF09 T4 D	●			●	●	
BGP09 T4 D				●	●	
BF09 T4 D - BF09 T4 L	●		●	●	●	●
BF18 T4 D - BF18 T4 L	●		●	●	●	●
BF26 T4 D - BF26 T4 L	●		●	●	●	●
BF38 T4 D - BF38 T4 L	●		●	●	●	●
BF65 T4 E	●			●	●	
BF80 T4 E	●			●	●	
B115 4		●	●	●	●	
B145 4		●	●	●	●	
B180 4		●	●	●	●	
B250 4		●	●	●	●	
B310 4		●	●	●	●	
B400 4		●	●	●	●	
B500 4	●			●		
B630 4	●			●	●	
B630 1000 4	●			●		

● Certified products.

"UL Recognized" for Canada and USA as component

This contactor has also achieved CSA elevator equipment certification.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; UL 60947-1, UL 60947-4-1, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1.

Plastic materials are compliant with standards IEC/EN 60335; for all BF09...BF38 versions only, add suffix V260 to the standard product order code.

Example: BF09 T4 D024 V260 for BF09, four poles, 24VDC coil with compliant plastic materials.

For dimensions and full technical data visit www.mechtronic.com.au

Mini-contactor four power poles, 2 NO and 2 NC BG series



11 BG09 T2...

Order code	IEC rated conventional free air thermal current Ith			Qty per pkg	Wt [kg]
	≤40°C	≤55°C	≤60°C		
	[A]	[A]	[A]	n°	[kg]

AC COIL.

Terminals: clamp screw.

11 BG09 T2 Aⓐ	20	18	15	1	0.170
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DC COIL.

Terminals: clamp screw.

11 BG09 T2 Dⓐ	20	18	15	1	0.175
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Operational characteristics

Type	Protection fuse gG	Conductor section
	[A]	[mm²]
BG09...T2	20	0.75-2.5

NOTE: No coil replacement is possible.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14.

Contactors four power poles, 2 NO and 2 NC BF series



BF09 T2...

Order code	IEC rated conventional free air thermal current Ith			Qty per pkg	Wt [kg]
	≤40°C	≤55°C	≤60°C		
	[A]	[A]	[A]	n°	[kg]

AC COIL.

Terminals: clamp screw.

BF09 T2 Aⓐ	25	20	18	1	0.340
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BF18 T2 Aⓐ	32	26	23	1	0.340
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BF26 T2 Aⓐ	45	36	32	1	0.420
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BF38 T2 Aⓐ	56 (60 ^⑤)	45 (48 ^⑥)	40 (42 ^⑥)	1	0.420
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BF80 T2 Aⓐ	115	95	75	1	1.075
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new

DC COIL.

Terminals: clamp screw.

BF18 T2 Dⓐⓐ	32	26	23	1	0.470
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BF26 T2 Dⓐⓐ	45	36	32	1	0.540
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BF38 T2 Dⓐⓐ	56 (60 ^⑤)	45 (48 ^⑥)	40 (42 ^⑥)	1	0.540
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BF80 T2 Eⓐ	90	80	65	1	1.125
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new

DC COIL. Low consumption (2.4W).

Terminals: clamp screw.

BF18 T2 Lⓐⓐ	32	26	23	1	0.470
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BF26 T2 Lⓐⓐ	45	36	32	1	0.540
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BF38 T2 Lⓐⓐ	56 (60 ^⑤)	45 (48 ^⑥)	40 (42 ^⑥)	1	0.540
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Operational characteristics

Type	Protection fuse gG	Conductor section
	[A]	[mm²]
BF09 T2	32	1-6
BF18 T2	40	1-6
BF26 T2	50	1.5-10
BF38 T2	80	2.5-16
BF80 T2	125	1.5-35

Certifications and compliance

Certifications obtained: cULus, CSA, EAC, CCC and RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; UL 60947-1, UL 60947-4-1, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1.
Plastic materials are compliant with standards IEC/EN 60335; for all BF09...BF38 versions only, add suffix V260 to the standard product order code.
Example: BF09 T4 A230 V260 (BF09 230VAC 50/60Hz four-pole contactor with compliant plastic materials).

For dimensions and full technical data visit www.mechtronic.com.au

- ① Complete with coil voltage digit if 50/60Hz or with voltage digit followed by 60 if 60Hz. Standard voltages are:
- AC 50/60Hz 024 / 048 / 110 / 230 / 400V
- AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).

Example:

- 11 BG09 T2 A230 for mini-contactor BG09 T2, 2 poles NO and 2 poles NC, with 230VAC 50/60Hz coil.
- 11 BG09 T2 A460 60 for mini-contactor BG09 T2, 2 poles NO and 2 poles NC, with 460VAC 60Hz coil.

- ② Complete the order code with coil voltage digit.

Standard voltages are:

- DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.

The BF18-BF26-BF38 T2D types already have a standard supplied built-in TVS (Transient Voltage Suppressor).

Example:

- 11 BG09 T2 D012 for mini-contactor BG09 T2, 2 poles NO and 2 poles NC, with 12VDC coil.

- ③ Low consumption version with built-in TVS. Complete the order code with coil voltage digit.

Standard voltages are:

- DC 024 / 048V.

Example:

- BF18 T2 L024 for contactor BF18 T2, 2 poles NO and 2 poles NC, with 24VDC low-consumption coil, supplied with TVS.

- ④ The contactor coil is controlled electronically; it can have either an AC or a DC supply and has a wide operating range.

Complete the order code with coil voltage digit.

Standard voltages are:

- AC/DC 024 = 20...48V; 110 = 60...110V; 230 = 100...250V.

- ⑤ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.

- ⑥ Maximum combinations of add-on blocks are given on page 1-18.

Contactors four power poles, 4 NC BF series



BF18 TO...

Order code	IEC rated conventional free air thermal current I _{th}			Qty per pkg	Wt [kg]
	≤40°C	≤55°C	≤60°C		
	[A]	[A]	[A]	n°	[kg]

AC COIL.
Terminals: clamp screw.

BF18 TO A	32	26	23	1	0.340
BF26 TO A	45	36	32	1	0.420

DC COIL.
Terminals: clamp screw.

BF18 TO D	32	26	23	1	0.470
BF26 TO D	45	36	32	1	0.540

DC COIL. Low consumption (2.4W).
Terminals: clamp screw.

BF18 TO L	32	26	23	1	0.470
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Operational characteristics

Type	Protection fuse	Conductor section
	gG	[mm ²]
BF18 T0	40	1-6
BF26 T0	50	1.5-10

Certifications and compliance

Certifications obtained: cULus, CSA, EAC, CCC and RINA. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14. Plastic materials are compliant with standards IEC/EN 60335; for BF18 and BF26 versions only, add suffix V260 to the standard product order code. Esempio: BF18 TO A230 V260, four NC main poles, 230VAC 50/60Hz coil with compliant plastic materials.

NOTE: The BF18-BF26 TOD and BF18 T0L types have a standard supplied built-in TVS (Transient Voltage Suppressor).

Contactors four NO power poles to connect in series for photovoltaic applications BF series



BFD80 T4



BFD80 40...

Order code	Operational current at 600V in DC1 ≤55°C with 4 poles in series	Qty per pkg	Wt [kg]

AC COIL.
Terminals: lug clamp.



BFD80 T4 A	100	1	1.100
11BFD80 40	125	1	1.440

AC/DC COIL.
Terminals: lug clamp.



BFD80 T4 E	90	1	1.100
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DC COIL.
Terminals: lug clamp.

11BFD80 C 40	125	1	1.910
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1 Complete with coil voltage digit if 50/60Hz or with voltage digit followed by 60 if 60Hz. Standard voltages are:
- AC 50/60Hz 024 / 048 / 110 / 230 / 400V
- AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).

Example:
- BF18 TO A230 for contactor BF18 T0, 4 NC power poles, with 230VAC 50/60Hz.
- 11 BFD80 40 024 for contactor BFD80 40, 4 NO power poles, with 24V 50/60Hz for photovoltaic application.

2 Complete the order code with coil voltage digit.

Standard voltages are:
- DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.

Example:
- BF18 T0 D012 for micro-contactor BF18 T0, 4 NC power poles, with 12VDC coil.

3 Low-consumption version. Complete the order code with coil voltage digit.

Standard voltages are:
- DC 024 / 048V.

Example:
- BF18 T2 L024 (low-consumption BF18 T2 contactor with 2 NO poles and 2 NC poles supplied at 24VDC).

4 The contactor coil is controlled electronically; it can have either an AC or a DC supply and has a wide operating range.

Complete the order code with coil voltage digit.

Standard voltages are:

- AC/DC 024 = 20...48V; 110 = 60...110V; 230 = 100...250V.

5 IEC/EN 60947-1 designation: Pillar terminal.

6 Maximum combinations of add-on blocks are given on page 1-18.

General characteristics

The contactors are specifically made with magnetic elements in the arc extinction chambers to obtain high DC load operational capabilities. They are used to disconnect and isolate the load between the photovoltaic panel and the AC/DC inverter.

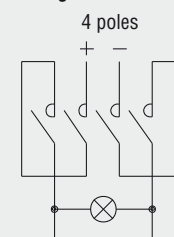
For add-on contact blocks, accessories and spare parts, consider indications of the corresponding standard (11 BFD80 40..., 11 BFD80C 40..., BF50 T4 A... and BF50 T4 E...).

Operational characteristics

Use in IEC DC1 duty

Type	IEC operational voltage U _e			
	400V	600V	800V	1000V
	IEC max current I _e in DC1 with L/R ≤1ms with 4 poles in series			
	[A]	[A]	[A]	[A]
BFD80 T4A...	100	100	76	60
BFD80 T4E...	90	90	76	60
BFD80...	125	125	95	75

Wiring scheme



Compliance

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1.

For dimensions and full technical data visit www.mechtronic.com.au

BFK contactors (including limiting resistors)



BFK...

Order code	Maximum IEC operational power at ≤50°C (AC-6b) ①				NO	n°	Qty per pkg	Wt [kg]
	240V	400V	440V	690V				
	[kvar]	[kvar]	[kvar]	[kvar]				
AC COIL.								
BFK09 10A ②	4,5	7,5	9	10	1	10	0.413	
BFK12 10A ②	7	12,5	14	16	1	10	0.413	
BFK18 10A ②	9	15	17	20	1	10	0.413	
BFK26 00A ②	11	20	22	25	–	10	0.472	
BFK32 00A ②	14	25	27,5	30	–	10	0.472	
BFK38 00A ②	17	30	33	36	–	10	0.472	
BFK50 00A ②	22	40	41	46	–	5	1.080	
BFK65 00A ②	26	45	50	56	–	5	1.080	
BFK80 00A ②	30	50	56	65	–	5	1.080	
11 BFK80 00 ②	34	60	65	70	–	5	1.470	
11 BFK110K 00 ② ③	45	75	80	100	–	5	1.470	

new

new

- ① To use the contactor in the delta, contact our Customer Service office. Tel. 1800 252 995 or sales@mechtric.com.au
- ② NO auxiliary contacts available.
- ③ The order code must be completed either with the coil voltage digit if 50/60Hz or with the coil voltage digit followed by the number 60 if 60Hz. Standard voltages are:
 – AC 50-60Hz 024 / 048 / 110 / 230 / 400VAC
 – AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).
 Example: BFK09 10 A230 for contactor BFK09 with one NO contact and 230VAC 50/60Hz coil.
 BFK09 10 A460 60 for contactor BFK09 with one NO contact and 460VAC 60Hz coil.
- ④ Note: the maximum thermal current Ith of the BF110K contactor is 125A.

Operational characteristics

Type	IEC rated operat. current ≤440V [A]	Protection fuse gG [A]
BFK09	12	16
BFK12	18	25
BFK18	23	40
BFK26	30	40
BFK32	36	63
BFK38	43	63
BFK50	58	80
BFK65	65	100
BFK80	75	125
BF80K	90	125
BF110K	110	160

Ambient operating temperature: ≤50°C. For ambient temperatures higher than 50°C and up to 70°C, the maximum operating power values indicated in the table must be reduced by a percentage equal to the difference between the operating ambient temperature and 50°C. E.g.: Using a BFK26 00 contactor at the ambient temperature of 60°C, the maximum operating power (at 400V) of the contactor will be equal to 20kvar – 10% = 18kvar.
 Operating cycle: ≤120 cycles/h
 Electrical life: ≥400,000 cycles.

Add-on auxiliary contacts

The following contact blocks, can be fitted on the BFK contactors: BFX12..., G418..., G481..., G482... and G218.

Certifications and compliance

Certification obtained: cULus, EAC, CCC.
 Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14.

Kits to assemble BFK contactors

Order code	For contactor	Qty per pkg	Wt [kg]
11 G460	BF09 10A - BF12 10A - BF18 10A - BF26 00A - BF32 00A - BF38 00A	10	0.072
11 G464	BF50 00A - BF65 00A - BF80 00A	10	0.078
11 G464	BF80 00 - BF110 00	10	0.080

new



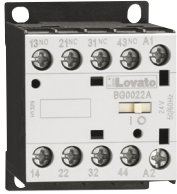
11 G46...

General characteristics

To optimise contactor stock management, a kit is available to transform normal three-pole contactors into BFK types for power factor correction. The table to the left indicates which kits to purchase depending on the standard contactor in stock.

For dimensions and full technical data visit www.mechtric.com.au

Control relays BG00 type



11 BG00...



11 BGF00...

Order code	Configuration and number of contacts ⓐ (SPST ea)		Quantity per package n°	Wt [kg]
	NO	NC		
AC COIL. Terminals: clamp screw.				
11 BG00 40 Aⓐ	4	0	1	0.170
11 BG00 31 Aⓐ	3	1	1	0.170
11 BG00 22 Aⓐ	2	2	1	0.170
Terminals: Faston.				
11 BGF00 40 Aⓐ	4	0	1	0.160
11 BGF00 31 Aⓐ	3	1	1	0.160
11 BGF00 22 Aⓐ	2	2	1	0.160
DC COIL. Terminals: clamp screw.				
11 BG00 40 Dⓐ	4	0	1	0.175
11 BG00 31 Dⓐ	3	1	1	0.175
11 BG00 22 Dⓐ	2	2	1	0.175
Terminals: Faston.				
11 BGF00 40 Dⓐ	4	0	1	0.165
11 BGF00 31 Dⓐ	3	1	1	0.165
11 BGF00 22 Dⓐ	2	2	1	0.165
DC COIL. Low-consumption (2.3W). Terminals: clamp screw.				
11 BG00 40 Lⓐ	4	0	1	0.175
11 BG00 31 Lⓐ	3	1	1	0.175
11 BG00 22 Lⓐ	2	2	1	0.175
Terminals: Faston.				
11 BGF00 40 Lⓐ	4	0	1	0.165
11 BGF00 31 Lⓐ	3	1	1	0.165
11 BGF00 22 Lⓐ	2	2	1	0.165

Operational characteristics

- IEC rated insulation voltage U_i : 690V
- IEC rated conventional free air thermal current I_{th} : 10A
- UL/CSA and IEC/EN 60947-5-1 designation:
 - BG types: A600-Q600
 - BF types: A600-P600
- Low-consumption version of BG types cannot accept additional contacts.

NOTE: No coil change or replacement is possible.

Certifications and compliance

Certification obtained: CCC, EAC, UL Listed for USA and Canada (cULus - File E93602), as Motor Controllers - Auxiliary contactors for all; RINA for BF00 types. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14. Plastic materials are compliant with standards IEC/EN 60335; for BF00 version only, add suffix V260 to the standard product order code. Example: BF00 40 A230 V260 for BF00 control relay having 4 NO auxiliary contacts and 230VAC 50/60Hz coil with compliant plastic materials.

NOTE: The BF00...D and BF00...L types have a standard supplied built-in TVS (Transient Voltage Suppressor).

Control relays BF00 type



BF00... A...



BF00... D...
BF00... L...

Order code	Configuration and number of contacts ⓐ (SPST ea)		Quantity per package n°	Wt [kg]
	NO	NC		
AC COIL. Terminals: clamp screw.				
BF00 40 Aⓐ	4	0	1	0.340
BF00 31 Aⓐ	3	1	1	0.340
BF00 22 Aⓐ	2	2	1	0.340
BF00 04 Aⓐ	0	4	1	0.340
DC COIL. Terminals: clamp screw.				
BF00 40 Dⓐⓐ	4	0	1	0.470
BF00 31 Dⓐⓐ	3	1	1	0.470
BF00 22 Dⓐⓐ	2	2	1	0.470
BF00 04 Dⓐⓐ	0	4	1	0.470
DC COIL. Low consumption (2.4W). Terminals: clamp screw.				
BF00 40 Lⓐⓐ	4	0	1	0.470
BF00 31 Lⓐⓐ	3	1	1	0.470
BF00 22 Lⓐⓐ	2	2	1	0.470
BF00 04 Lⓐⓐ	0	4	1	0.470

- Complete order code with coil voltage digit or with voltage digit followed by 60 if 60Hz.
Standard voltages are:
 - AC 50/60Hz 024 / 048 / 110 / 230 / 400V
 - AC 60Hz 024 60 / 048 60 / 120 60 / 220 60 / 230 60 / 460 60 / 575 60 (V).
 Example: 11 BG00 40 A230 for control relay BG00 with four NO auxiliary contacts and 230VAC 50/60Hz coil.
BF00 40 A460 60 for control relay BF00 with four NO auxiliary contacts and 460VAC 60Hz coil.

- Complete the order code with coil voltage digit.
Standard voltages are:
 - DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.
 Example: BF00 40 D012 for control relay BF00 with four NO contacts and 12VDC coil.
- Low-consumption version.
Complete the order code with coil voltage digit.
Standard voltages are as follows:
 - DC 024 / 048V.
 Example: 11 BG00 40 L024 for control relay BG00 with four NO auxiliary contacts and 24VDC low-consumption coil.
- Maximum combinations of add-on blocks are given on page 1-18.
- All contacts are highly conductive.

Add-on blocks and accessories



11 BGX10... (20-11-02)
11 BGX11 11



11 BGX10... (40-31-22-13-04)
11 BGX11 22



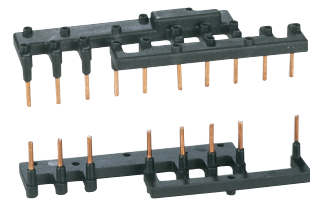
11 BGXF...



11 BGX77... -
11 BGX78 225 -
11 BGX79...



11 BGX50 00...



11 SMX90 21
11 SMX90 22

- ① Cannot be used with BG...L types.
- ② Cannot be used with BG...D and BG...L types.
- ③ Suitable for left-hand mini-contactor only of BGT and BGT-P reversing and BGC changeover assemblies.
- ④ The shroud can be used with BG... types with screw termination only and with no auxiliary contacts, surge suppressor or mechanical interlock mounted.
It raises the front degree of protection of the mini-contactor when these are used in consumer switchboards.
- ⑤ Cannot be used with BGX80 00 shroud.
- ⑥ Contactors with one NC auxiliary contact, 01 type, are usually used for reversing assemblies.
The relay cannot be directly mounted on the contactor. Use the RF38 type and the RFX38 04 independent mounting base.
- ⑦ All contacts are each SPST.


Order code	Characteristics ⑦	Max qty per contactor	Qty per pkg n°	Wt [kg]
Auxiliary contacts. Screw terminals.				
11 BGX10 02①	2NC	1	10	0.021
11 BGX10 11①	1NO + 1NC	1	10	0.021
11 BGX10 20①	2NO	1	10	0.021
11 BGX10 04①②	4NC	1	10	0.028
11 BGX10 13①②	1NO + 3NC	1	10	0.028
11 BGX10 22①	2NO + 2NC	1	10	0.028
11 BGX10 31①	3NO + 1NC	1	10	0.028
11 BGX10 40①	4NO	1	10	0.028
Auxiliary contacts for reversing and changeover assemblies. Screw terminals.				
11 BGX11 11③	1NO + 1NC	1	10	0.021
11 BGX11 22③	2NO + 2NC	1	10	0.028
Auxiliary contacts. Faston terminals.				
11 BGXF10 02①	2NC	1	10	0.021
11 BGXF10 11①	1NO + 1NC	1	10	0.021
11 BGXF10 20①	2NO	1	10	0.021
11 BGXF10 04①②	4NC	1	10	0.028
11 BGXF10 13①②	1NO + 3NC	1	10	0.028
11 BGXF10 22①	2NO + 2NC	1	10	0.028
11 BGXF10 31①	3NO + 1NC	1	10	0.028
11 BGXF10 40①	4NO	1	10	0.028
Mechanical interlock.				
11 BGX50 00④	For all BG...A and BG...D	1	10	0.008
Quick connect surge suppressors.				
11 BGX77 048	≤48VAC/DC (Varistor)		10	0.007
11 BGX77 125	48-125VAC/DC (Varistor)		10	0.007
11 BGX77 240	125-240VAC/DC (Varistor)		10	0.007
11 BGX78 225	≤225VDC (Diode)		10	0.007
11 BGX79 048	≤48VAC (Resistor-Capacitor)		10	0.007
11 BGX79 125	48-125VAC (Resistor-Capacitor)		10	0.007
11 BGX79 240	125-240VAC (Resistor-Capacitor)		10	0.007
11 BGX79 415	240-415VAC (Resistor-Capacitor)		10	0.007
Modular shroud.				
11 BGX80 00⑤	Raises protection to IP40 w/consumer boards		20	0.006
Paralleling links. Clamp-screw terminals.				
11 G323⑥	For 2 poles		10	0.009
11 G324			10	0.009
11 G325⑥	For 4 poles		10	0.014
11 G326			10	0.014
Rigid connecting kits.				
11 SMX90 21⑥	For star-delta starter composed by 3-contactor combination of BG types (line-star-delta)		10	0.040
11 SMX90 22⑥	For reversing contactor assembly composed by mini-contactors BG ⑥		10	0.026

Operational characteristics for add-on auxiliary contacts

Type		BGX10... BGX11...	BGXF10...
Rated conventional free air thermal current I _{th}	A	10	10
Rated insulation voltage U _i voltage U _i	V	690	690
Terminals	Screw	M3	Faston 1-6.3mm 2-2.8mm
	Width	mm	6.9
Conductor section maximum with 1 or 2 cables	flexible without lug	mm ²	2.5
	flexible with lug	mm ²	2.5
	AWG	n°	14
IEC/EN 60947-5-1 designation	AC	A600	A600
	DC	Q600	Q600
Mechanical life (in millions)	cycles	20	20

SM1 breaker - mini-contactor connecting kits
See section 2.

Positive (force) guided contacts
See information on our web site www.mechtric.com.au

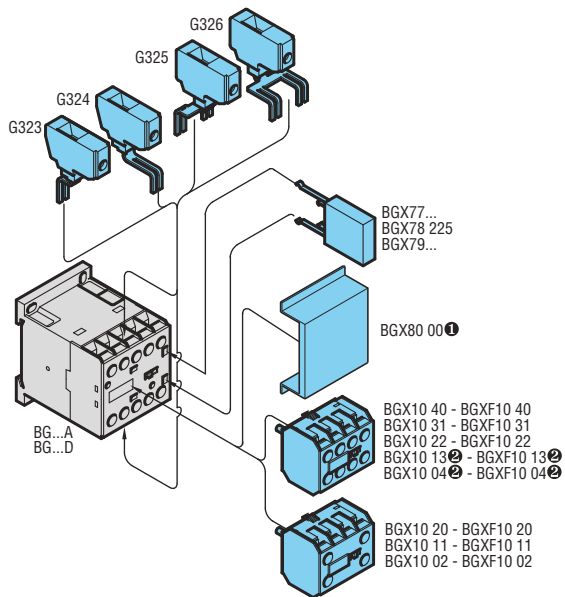
Certifications and compliance
Certifications obtained: GOST; cULus and CCC for BGX10... auxiliary contacts.
 "Recognized": SMX90 21 and SMX90 22 only.
Compliant with standards: UL508, CSA C22.2 n° 14, IEC/EN 60947-1; IEC/EN 60947-5-1 for auxiliary contacts.

CONTACTORS & RELAYS

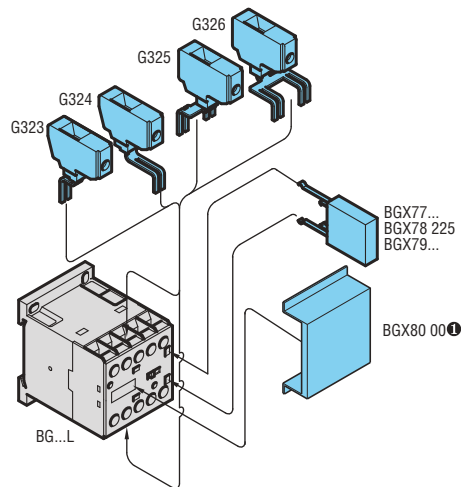
Add-on blocks and accessories for BG series mini-contactors



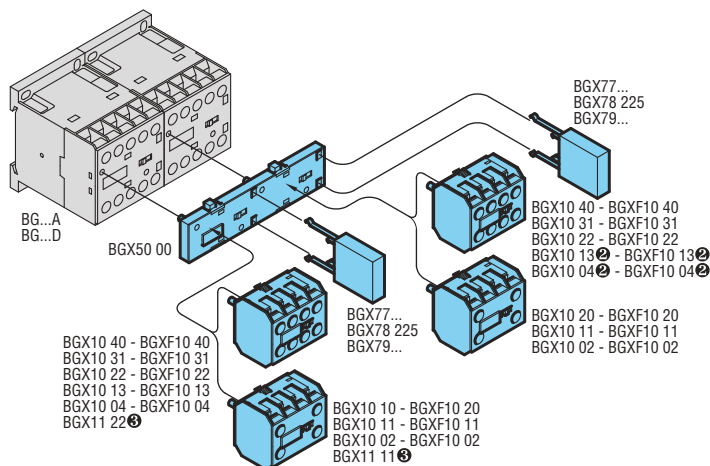
Combinations: Mounting position on BG...A and BG...D mini-contactors



Combinations: Mounting position on BG...L mini-contactors

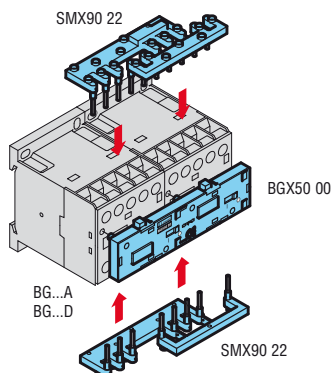


- ① Suitable for screw-termination contactors without BGX10... auxiliaries, BGX50 00 interlock or BGX7... surge suppressor.
- ② Not suitable for BG...D types.

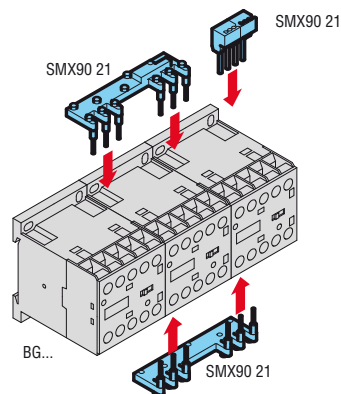


- ② Not suitable for BG...D types.
- ③ For left-hand mini-contactor of BGT, BGTP and BGC contactor assemblies only.

Connections for reversing contactor assembly



Connections for star-delta assembly



Add-on blocks



BFX10...



11 G484...



BFX10...



11 G418...

11 G218



11 G481...

11 G482



11 G428...

BFX12...



11 G485...

11 G486...

11 G487

Order code	Characteristics ⁷	Max qty per contactor	Qty per pkg	Wt
		n°	n°	[kg]

Auxiliary contacts with front centre mounting⁸.
Screw terminals.

BFX10 02 ⁸	2NC	1	5	0.030
BFX10 11 ⁸	1NO + 1NC	1	5	0.030
BFX10 20 ⁸	2NO	1	5	0.030
11 G484 03 ⁸	3NC	1	5	0.039
11 G484 12 ⁸	1NO + 2NC	1	5	0.039
11 G484 21 ⁸	2NO + 1NC	1	5	0.039
11 G484 30 ⁸	3NO	1	5	0.039
BFX10 04	4NC	1	5	0.048
BFX10 13	1NO + 3NC	1	5	0.048
BFX10 22	2NO + 2NC	1	5	0.048
BFX10 31	3NO + 1NC	1	5	0.048
BFX10 40	4NO	1	5	0.048
BFX10 11 11	1NO+1NC and 1EM+1LB (1 early make+1 late break)	1	5	0.048

new

Auxiliary contacts for front lateral mounting. Screw terminals⁸.

11 G418 01	1NC	2	10	0.014
11 G418 01D	1LB (late break)	2	10	0.014
11 G418 10	1NO	2	10	0.014
11 G418 10A	1EM (early make)	2	10	0.014

Auxiliary contacts for front lateral mounting. Faston terminals⁸.

11 G218	1NO or 1NC reversible	2	10	0.011
11 G481 02	2NC	2	10	0.013
11 G481 11	1NO + 1NC	2	10	0.013
11 G481 20	2NO	2	10	0.013
11 G482 ⁸	Changeover contact	2	10	0.013

Adapter for auxiliary contact side mounting.

11 G280	for G218	2	10	0.008
11 G419	for G418	2	10	0.010
11 G483	for G481 and G482	2	10	0.010

Auxiliary contacts for side mounting.

Screw terminals.

BFX12 02 ⁸	2NC for BF00, BF09-BF38	2	5	0.044
BFX12 11 ⁸	1NO+1NC for BF00, BF09-BF38	2	5	0.044
BFX12 20 ⁸	2NO for BF00, BF09-BF38	2	5	0.044
11 G428 01	1NC	2	10	0.024
11 G428 01D	1LB (late break)	2	10	0.024
11 G428 10	1NO	2	10	0.024
11 G428 10A	1EM (early make)	2	10	0.024

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on energisation for front centre mounting¹⁰.

Screw terminals.

11 G485 3	3 s	1	1	0.040
11 G485 6	6 s	1	1	0.040
11 G485 15	15 s	1	5	0.040
11 G485 30	30 s	1	5	0.040
11 G485 60	60 s	1	5	0.040
11 G485 120	120 s	1	1	0.040

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on de-energisation for front centre mounting¹⁰.

Screw terminals.

11 G486 3	3 s	1	1	0.040
11 G486 6	6 s	1	1	0.040
11 G486 15	15 s	1	5	0.040
11 G486 30	30 s	1	5	0.040
11 G486 60	60 s	1	5	0.040
11 G486 120	120 s	1	1	0.040
11 G487	70 ms	1	1	0.040

Operational characteristics for add-on auxiliary contacts

Type		G418 ⁸ G428 ⁸ G485 ⁸ G486 ⁸ G487 ⁸	G484 BFX10 BFX12	G218 ⁸ G481 ⁸	G482 ⁸
IEC conventional free air thermal current I _{th}	A	10	10	10	0.1 ⁸
IEC rated insulation voltage U _i	V	690	690	690	690
Terminals: Screw		M3.5	M3	—	—
Width	mm	7	7	—	—
Faston	mm	—	—	1x6.35 2x2.8	1x6.35 2x2.8
Tightening torque	Nm	0.8-1	0.8-1	—	—
	lbin	7-9	7-9	—	—
Conductor section maximum with 1 or 2 cables					
flexible w/o lug	mm ²	2.5	2.5	—	—
flexible c/w lug	mm ²	2.5	2.5	2.5	2.5
AWG	n°	14	14	14	14
Terminal protection per IEC/EN 60529		IP20 ⁸ ⁹	IP20	IP20 ⁸	IP20 ⁸
UL/CSA and IEC/EN 60947-5-1 designation	AC	A600	A600	A600	A600
	DC	P600 ⁸	Q600	P600	P600
Mechanical life (million)	cycles	10 ⁶	10	10	10

SM1 breaker - contactor connecting kits

See Section 2.

Maximum assembly combination of add-on blocks

See pages 1-21 and 1-22.

Positive (force) guided contacts

See information on our web site www.mechtric.com.au

Certifications and compliance

Certifications obtained:

Type	UL	cULus	CSA	EAC	CCC
BFX10...	—	●	—	●	●
BFX12...	—	●	—	●	—
G218	●	—	●	●	●
G418..., G428...	●	—	●	●	●
G481...	●	—	●	●	●
G482	●	—	●	●	●
G484...	●	—	●	●	●
G485...	●	—	●	●	●
G486...	●	—	●	●	●
G487...	●	—	●	●	●

● Certified products; pending for BFX10 1111

UL - UL Recognized for USA only (File E93601) as Auxiliary Devices - Component.

Products having this type of marking are intended for use as components of complete workshop-assembled equipment.

cULus - UL Listed for USA and Canada (cULus - File E93601) as Auxiliary Devices.

CSA - CSA certified for Canada only (File 54332) as Auxiliary Devices for motor controllers.

Add-on auxiliary contacts are compliant with the following standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

¹ The contacts can also be fitted on B type contactors using the adapter G358. See pages 1-25 and 1-26.

² Highly conductive contacts.

³ Gold-plated contacts inside tight casing for use in pollutant environments. The I_{th} value refers to 125VAC and 30VDC.

IEC IP20 protection is warranted to equipment wired with insulated Faston terminals.

⁴ IEC IP20 protection is warranted to equipment wired with minimum 0.75mm² conductor section.

Designation in DC is Q600 for these types.

⁵ IEC IP20 protection is warranted to equipment wired with insulated Faston terminals.

⁶ For particularly severe ambient conditions, consult Customer Service 1800 252 995 or sales@mechtric.com.au

IEC IP20 protection is warranted to equipment wired with minimum 1mm² conductor section. Mechanical life is 3 million cycles.

⁷ All contacts are each SPST except G482 which is SPDT.

CONTACTORS & RELAYS

Add-on blocks and accessories for
BF series contactors



BF00 A, BF09 A...BF80 A, BF40 E...BF80 E BF95 C...BF110 C

Maximum assembly combination for alternating-current contactors BF00 A, BF09 A...BF110.
Maximum assembly combination for alternating/direct-current contactors BF40 E...BF80 E.
Maximum assembly combination for direct-current contactors BF80 C...BF110 C.

		Front centre mount				Front lateral mount			Side mount		
Contactors	Control relay	BF00 A	1	1	1	1	—	1 or 2	1 or 2	1	
		Three poles	BF09 A...BF25 A	1	1	1	1	—	1 or 2	1 or 2	1
			BF26 A...BF38 A	1	1	1	1	—	1 or 2	1 or 2	1
			BF40 A...BF110	1	1	1	1	1	1 or 2	2	1
			BF40 E...BF80 E	1	1	1	1	—	1 or 2	2	1
			BF95 C...BF110 C	1	1	1	1	—	1 or 2	2	—
	Four poles	BF09 A...BF25 A	1	1	1	1	1	1 or 2	1 or 2	1	
		BF26 A...BF38 A	1	1	1	1	1	1	1 or 2	1	
		BF40 A...BF80 A	1	1	1	1	—	1 or 2	2	1	
		BF40 E...BF80 E	1	1	1	1	—	1 or 2	2	2	
		n° of blocks 1 type only			n° of blocks	n° of blocks 1 type only		n° of blocks	n° of blocks	n° of blocks	

- ❶ Cannot be fitted with BFX10... with 4 contacts and G222.
- ❷ To fit the mechanical interlock, the add-on fourth pole needs to be mounted on the left side of the one of the contactors.
- ❸ One only side-mount block can be fitted on each contactor whenever the BFX50 0... interlock is mounted.
- ❹ One BFX10... or delayed G48... contact block can be mounted on the G222 or G272 mechanical latch.
- ❺ G222 mechanical latch.
- ❻ G272 mechanical latch.
- ❼ For BF40 80 code BFX53 00 or BFX53 01.

BF00 D, BF09 D...BF38 D, BF00 L, BF09 L...BF38 L

Maximum assembly combination for direct-current contactors BF00 D, BF09 D...BF38 D
Maximum assembly combination for direct-current contactors BF00 L, BF09 L...BF38 L with low absorption

		Front centre mount				Front lateral mount		Side mount		
Contactors	Control relay	BF00 D	1	1	1	1	—	1	1	
		Three poles	BF00 L	1	—	1	—	—	—	—
			BF09 D-BF25 D	1	1	1	1	1	1	1
			BF26 D-BF38 D	1	1	1	1	1	1	1
			BF09 L-BF25 L	1	—	1	—	—	—	—
			BF26 L-BF38 L	1	—	1	—	—	—	—
	Four poles	BF09 D-BF25 D	1	1	1	1	1	1	1	
		BF26 D-BF38 D	—	1	—	—	1	1	1	
		BF09 L-BF25 L	—	1	—	1	—	—	—	
		BF26 L-BF38 L	—	1	—	—	—	—	—	
		n° of blocks 1 type only				n° of blocks	n° of blocks 1 type only			

- ❶ Mounting of BFX50 03 interlock is not possible when BFX10... block with 4 contacts and G222 latch are mounted.
 - ❷ One only side-mount block can be fitted on each contactor whenever the BFX50 0... interlock is mounted.
 - ❸ One BFX10... or delayed G48... contact block can be mounted on the G222 or G272 mechanical latch.
 - ❹ To fit the mechanical interlock, the add-on fourth pole needs to be mounted on the left side of the one of the contactors.
- For other assembly combination, consult Customer Service 1800 252 995 or sales@mechtronic.com.au

Add-on blocks



BFX42
BFXD42



BFX50 00
BFX53 00

BFX50 01
BFX53 01



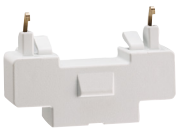
BFX50 02

BFX50 03
BFX53 03
11 G269 2

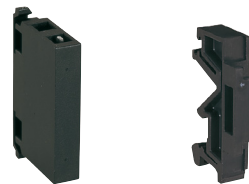


11 G222...
11 G272...

11 G454
11 G455



BFX77...
BFX79...



11 G318...
11 G319 225
11 G322...

11 RE244

Order code	Characteristics	Max qty per cont.	Qty per pkg	Wt
		n°	n°	[kg]
Fourth pole.				
BFX42	For BF26 A, BF32 A, BF38 A	1	1	0.100
BFXD42	For BF26 D, BF32 D, BF38 D, BF26 L, BF32 L, BF38 L	1	1	0.108
BFX43	For BF40 A...BF80 A and BF40 E...BF80 E	1	1	0.150
Mechanical interlock.				
BFX50 00	Side mount for BF00, BF09...BF38	1	5	0.039
BFX50 01	Side mount with 2NC contacts for BF00, BF09...BF38	1	5	0.052
BFX50 02	Front mount, low profile for BF00, BF09...BF38	1	5	0.006
BFX50 03	Front mount for BF00, BF09...BF38	1	5	0.023
BFX89 10	Spacer for interlocking BF09...BF38 AC/DC with types in DC	1	10	0.017
BFX53 00	Side mount for BF40...BF80 A/E	1	5	0.039
BFX53 01	Side mount with 2NC contacts for BF40...BF80 A/E	1	5	0.052
BFX53 03	Front mount for BF40...BF80 A/E	1	5	0.034
11 G269 2	Front mount for BF95...BF110	1	5	0.034
Mechanical latch. Screw terminals				
11 G222	For BF00, BF09...BF38	1	1	0.070
11 G272	For BF40...BF110	1	1	0.070
Manual closing mechanism.				
11 G454	For BF00, BF09...BF38	1	1	0.021
11 G455	For BF40...BF110	1	1	0.021
Quick connect surge suppressors for BF00A, BF09A...BF80A contactors.				
BFX77 048	≤48VAC/DC (Varistor)	5	0.012	
BFX77 125	48...125VAC/DC (Varistor)	5	0.012	
BFX77 240	125...240VAC/DC (Varistor)	5	0.012	
BFX79 048	≤48VAC (Resistor-Capacitor)	5	0.012	
BFX79 125	48...125VAC (Resistor-Capacitor)	5	0.012	
BFX79 240	125...240VAC (Resistor-Capacitor)	5	0.012	
BFX79 415	240...415VAC (Resistor-Capacitor)	5	0.012	
Surge suppressor for BF95...BF110 contactors, front mount. Faston terminals.				
11 G318 48	≤48VAC/DC (Varistor)	10	0.010	
11 G318 125	48...125VAC/DC (Varistor)	10	0.010	
11 G318 240	125...240VAC/DC (Varistor)	10	0.010	
11 G318 415	240...415VAC/DC (Varistor)	10	0.010	
11 G319 225	≤225VDC (Diode)	10	0.010	
11 G322 48	≤48VAC (Resistor-Capacitor)	10	0.010	
11 G322 220	48...240VAC (Resistor-Capacitor)	10	0.010	
11 G322 380	240...415VAC (Resistor-Capacitor)	10	0.010	
Suppressor mounting adapter for G318-G319-G322.				
11 RE244	For 35mm DIN rail	10	0.004	

Operational characteristics

Type		BFX42 BFXD42	BFX43	BFX50 01
IEC conventional free air thermal current I _{th}	A	56	115	10
IEC rated insulation voltage U _i	V	690	1000	690
Terminals: Screw		M4	M6	M3
Width	mm	12.5	9.6	7
Tightening torque	Nm	2.5...3	4...5	0.8...1
	lbin	21.6...26.4	35.4...44.2	7...9
Conductor section maximum with 1 or 2 cables	flexible w/o lug	mm ²	16	35
	flexible c/w lug	mm ²	16	35
	AWG	n°	6	2
			14	14
Terminal protection per IEC/EN60529		IP20	IP20	IP20
IEC/EN 60947-5-1 designation	—	—	A600	—
	DC	—	—	Q600
Mechanical life (million)	cycles	10	15	10
Type		G222...	G272...	
Rated control circuit voltage	AC (50/60Hz)	V	24...415	24...415
	DC	V	12...240	12...240
Power consumption with control:	AC	VA	40	40
	DC	W	70	70
Minimum energising: drop-out		ms	10	10
	pick-up	ms	100	200
Tightening torque	Nm	0.8...1	0.8...1	
	lbin	7...9	7...9	
Conductor section Maximum with 1 or 2 cables	flexible w/o lug	mm ²	4	4
	flexible c/w lug	mm ²	2.5	2.5
	AWG	n°	14...12	14...12

⊗ The condition is front IP20 protection.

Maximum assembly combination of add-on blocks

See pages 1-18, 1-21 to 1-24.

Certifications and compliance

Certifications obtained:

Type	UL	cULus	CSA	EAC
BFX42 - BFXD42 - BFXD43	—	●	—	●
BFX50...	—	●	—	●
BFX77...	—	●	—	●
BFX79...	—	●	—	●
G269 2	●	—	●	●
G222...	●	—	●	●
G272...	●	—	●	●

● Certified products..

● UL "Recognized". For USA as component.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

① Different sized contactors can be interlocked.

Example: BF09...BF25 with BF26...BF38.

② Replace with the digit of the voltage if 50 or 60Hz and with the letter C followed by the digit of the voltage if DC.

Standard voltages are:

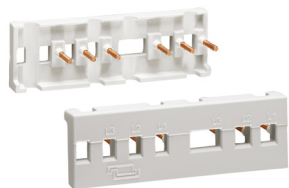
— AC 50/60Hz 24 (indicate 24) - 48 (indicate 48) - 110...125 (indicate 110)

220...240 (indicate 220) - 380...415V (indicate 380).

12 (indicate 12) - 24 (indicate 24) - 48 (indicate 48)

110...125 (indicate 110) - 220...240V (indicate 220).

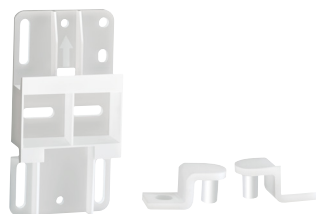
Accessories



BFX31...
BFX32...



BFX 80



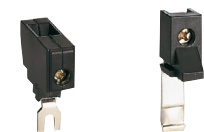
BFX89 01 **BFX89 02**



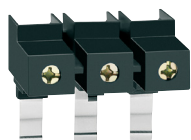
11 G265



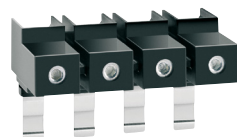
11 BA135 **11 BA435**
11 BA235



11 G231... **11 G285**
11 G232



11 G271



11 G288

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

Rigid connecting kits for three-pole reversing contactor assembly.

BFX31 01	For contactors BF09 - BF25 side by side with BFX50 02 or BFX50 03 interlock	1	0.052
BFX31 02	For contactors BF09 - BF25 side by side with BFX50 00 or BFX50 01 interlock	1	0.054
BFX32 01	For contactors BF26 - BF38 side by side with BFX50... interlock	1	0.060

Rigid connecting kits for star-delta starters.

BFX31 31	For contactors BF09-BF25 (line-star-delta)	1	0.058
BFX32 31	For contactors BF26-BF38 (line-star-delta)	1	0.064
BFX32 32	For contactors BF26-BF38 (line-delta) and BF09-BF25 (star)	1	0.064

Sealing cover.

BFX80	For contactors BF00, BF09-BF38	10	0.001
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Screw fixing adapters for contactors.

BFX89 01	Universal base to screw fix BF09-BF38 contactors	5	0.016
BFX89 02	Screw fixing brackets for BF09-BF38 contactors	10	0.002

Power terminal shroud.

11 G265	IP20 protection for 3-pole BF50 to BF110 types	10	0.015
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Paralleling links.

11 BA135	2 poles for BF09-BF25 types	10	0.001
11 BA235	2 poles for BF26-BF38 types	10	0.003
11 BA435	3 poles for BF50-BF110 types	10	0.030

One-pole enlarged terminals.

11 G231	1-6 mm ² for BF09-BF25 types	12	0.009
11 G232	1-16 mm ² for BF26-BF38 types	12	0.014

Three-pole enlarged terminals.

11 G271	1-50 mm ² for BF50-BF110 types ^①	10	0.142
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Four-pole enlarged terminals.

11 G288	1x50mm ² for contactors BF50-BF110 types ^②	10	0.194
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Auxiliary terminal.

11 G285	For BF50-BF110 types	8	0.009
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Marking element for BF00, BF09-BF110 contactors.

BFX30	Blank label for writing	50	0.001
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^① For 3-pole contactors, BF50-BF110 types only.
N.B. Two pieces are required per contactor.

^② An additional 1-50mm² conductor can be fitted in the contactor terminal.

Operational characteristics of enlarged and auxiliary terminals

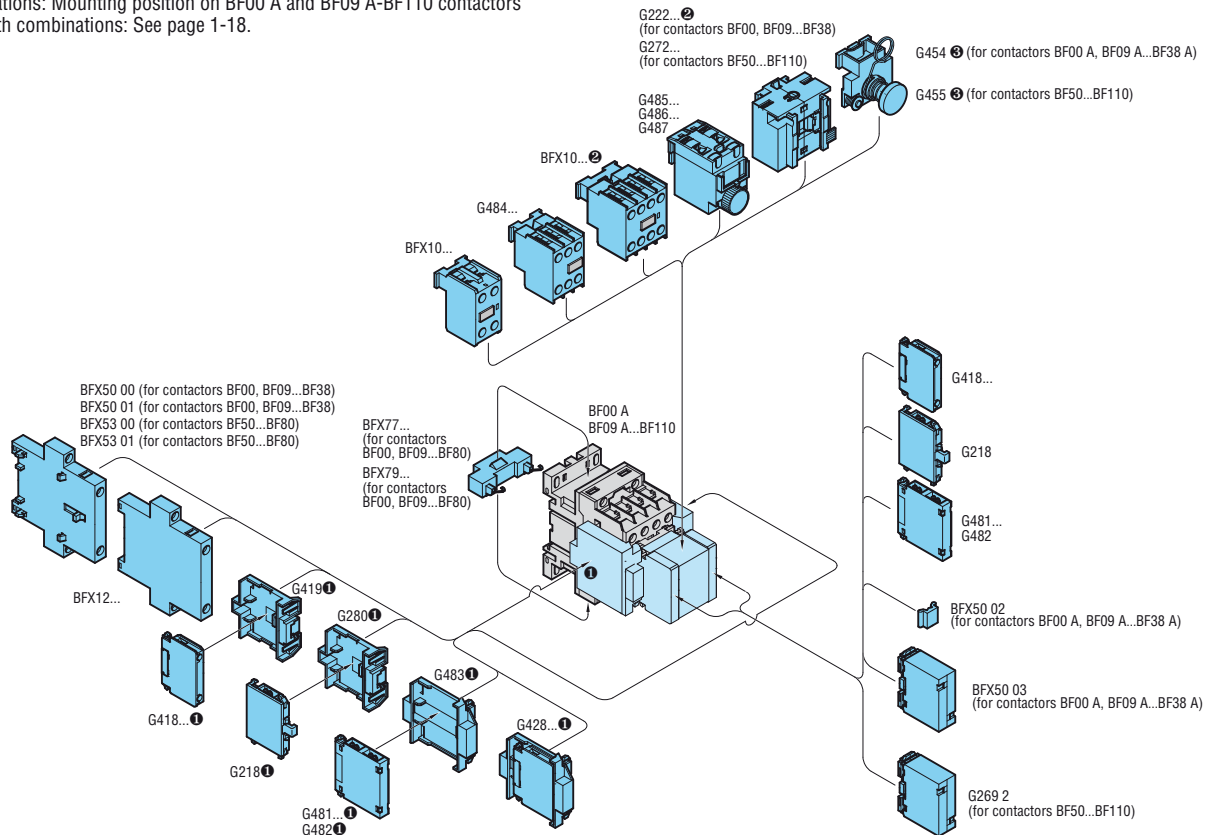
Type		G231	G232	G285	G271 G288
Tightening torque	Nm	1.5-1.8	2.5-3	0.8-1	5
	lbin	13.2-18	7-9	7.9	44.3
Tool	Type	PH1	PH2	PH1	Metric Allen 4

Certifications and compliance

Certifications obtained: GOST for all; UL Listed, for USA and Canada (cULus - File E93602), under Magnetic Motor Controllers for BFX31 01, BFX31 02, BFX32 01, BFX31 31, BFX32 31 and BFX32 32 as rigid kits, G271 and G288 as enlarged terminal kits.
Compliant with standards: IEC/EN 60947-1, UL508, CSA C22.2 n° 14.

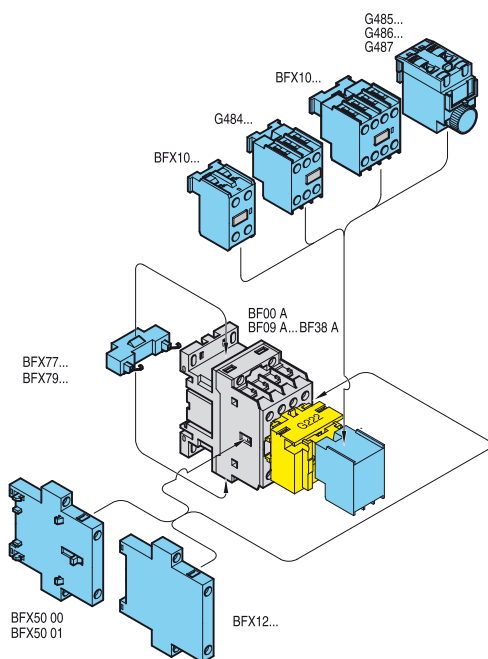
Add-on blocks for AC and AC/DC contactors

Combinations: Mounting position on BF00 A and BF09 A-BF110 contactors
Table with combinations: See page 1-18.

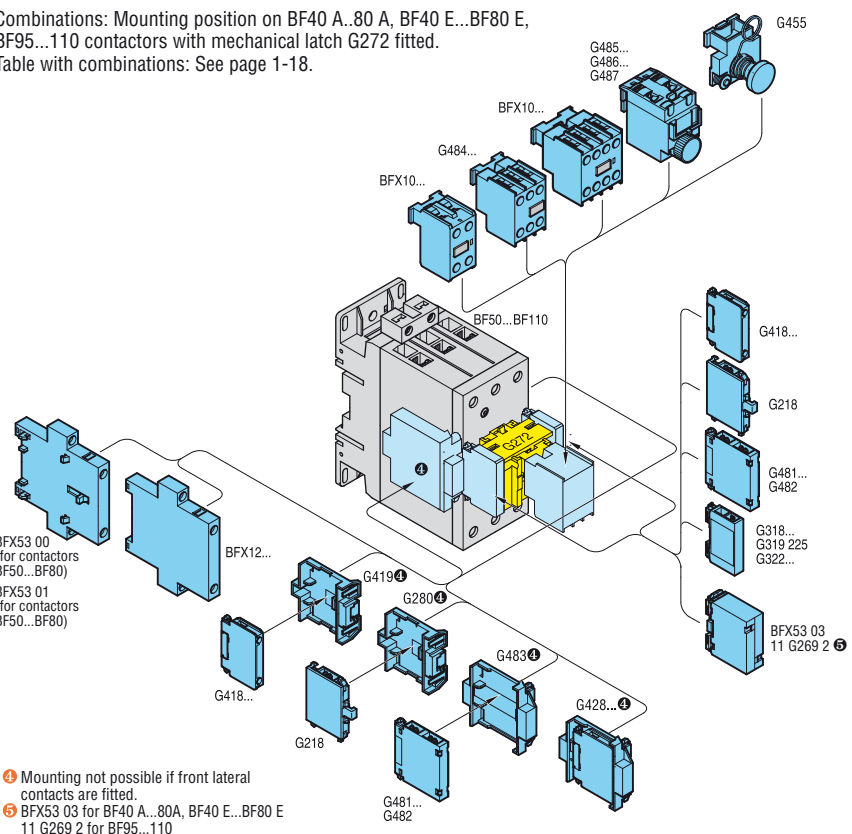


- ❶ Mounting is not possible if front lateral contacts or mechanical interlock BFX50 00 or BFX50 01 are mounted. BF00, BF09...38 cannot be fitted with BFX10 with 4 contacts or G222...
- ❷ Refer to the diagram below for use with G222... on contactors BF00 A and BF09 A...BF38 A and to the table of combinations on page 1-18.
- ❸ No add-on block can be mounted on front when the manual closing mechanism G454 or G455 is fitted.

Combinations: Mounting position on BF00 A and BF09 A-BF38 A contactors with mechanical latch G222 fitted.
Table with combinations: See page 1-18.



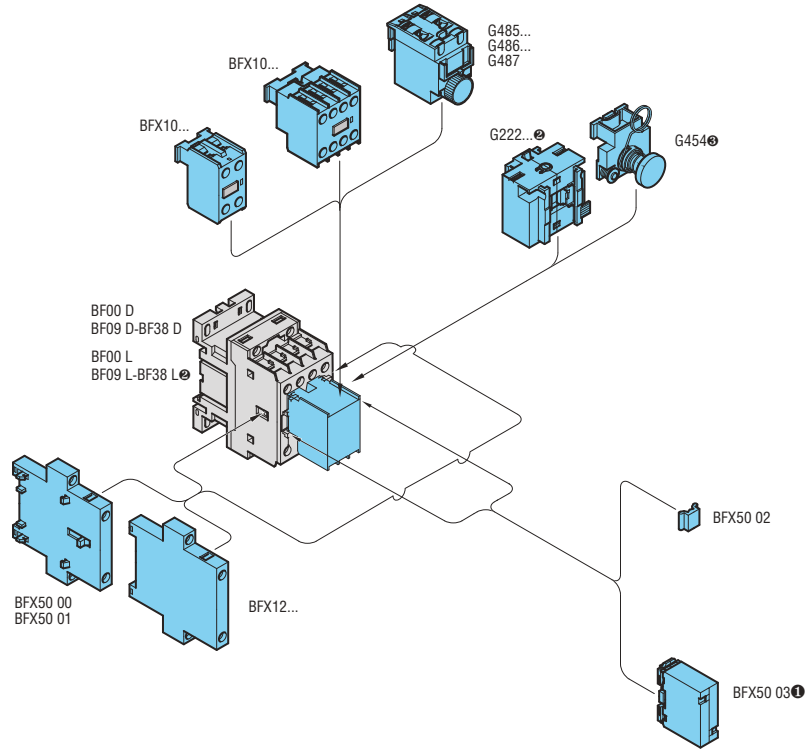
Combinations: Mounting position on BF40 A..80 A, BF40 E...BF80 E, BF95...110 contactors with mechanical latch G272 fitted.
Table with combinations: See page 1-18.



- ❹ Mounting not possible if front lateral contacts are fitted.
- ❺ BFX53 03 for BF40 A...80A, BF40 E...BF80 E 11 G269 2 for BF95...110

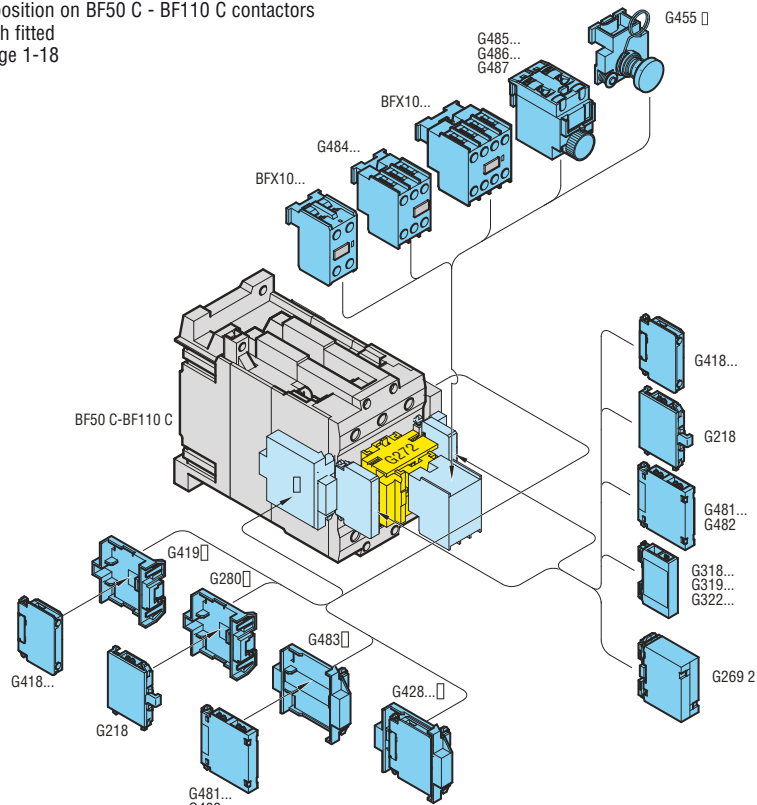
DC and DC low consumption contactors

Combinations: Mounting position on BF00 and BF09-BF38, D and L versions
Combination table: See page 1-18



- ① Mounting not possible when the G222 mechanical latch is fitted.
- ② The G222 mechanical latch cannot be fitted on BF26 L - BF38 L.
- ③ No add-on block can be mounted on front when the G454 manual closing mechanism is fitted.

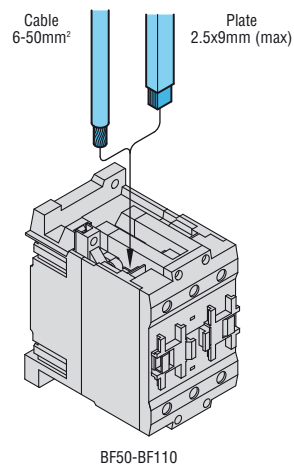
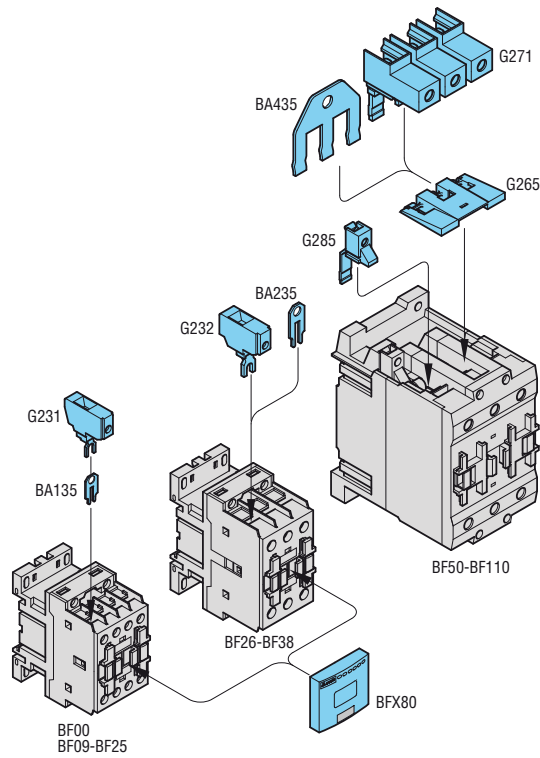
Combinations: Mounting position on BF50 C - BF110 C contactors
with G272 mechanical latch fitted
Combination table: See page 1-18



- ④ No add-on block can be mounted on front when the G455 manual closing mechanism is fitted.
- ⑤ Mounting not possible if front lateral contacts are fitted.

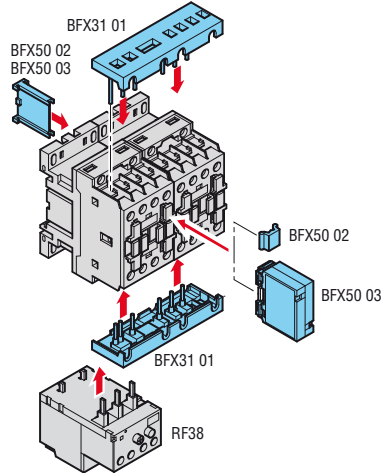
Accessories for
AC, DC and DC
low consumption
contactors

Combinations



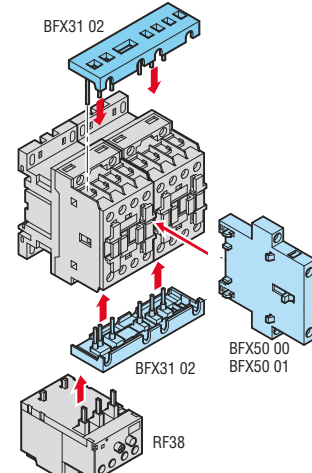
Accessories for AC, DC and DC low consumption contactors

Rigid reversing contactor assembly connecting kits for BF09-BF25 contactors with BFX50 02 or BFX50 03 mechanical interlock



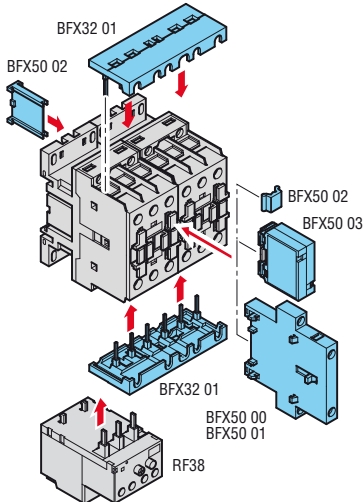
RF38 thermal overload relay can be mounted only on left side contactor.

Rigid reversing contactor assembly connecting kits for BF09-BF25 contactors with BFX50 00 or BFX50 01 mechanical interlock



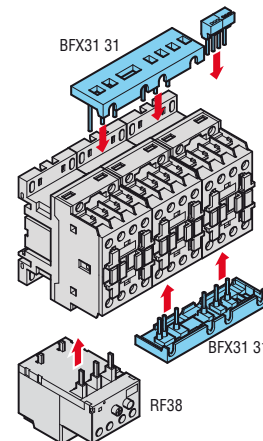
RF38 thermal overload relay can be mounted only on left side contactor.

Rigid reversing contactor assembly connecting kits for BF26-BF38 contactors with BFX50 02 or BFX50 03 mechanical interlock

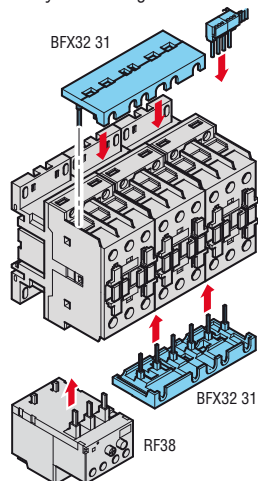


RF38 thermal overload relay can be mounted only on left side contactor.

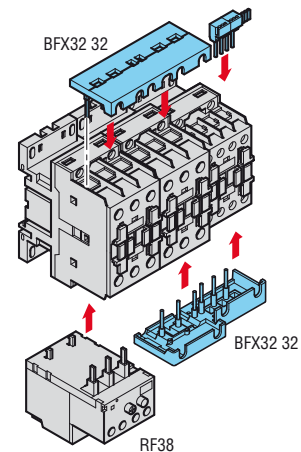
Rigid star-delta starter assembly connecting kits for BF09-BF25 contactors



Rigid star-delta starter assembly connecting kits for BF26-BF38 contactors



Rigid star-delta starter assembly connecting kits for BF26-BF38 (line-delta) and BF09-BF25 (star) contactors



Add-on blocks



11 G350 - 11 G354



11 G358

Order code	Characteristics	Max qty per contactor	Qty per pkg	Wt
		n°	n°	[kg]

Faston terminals.

Auxiliary contacts for side mounting.

11 G350	2NO+1NC or 1NO+2NC reversible (SPST ea)	4	1	0.082
11 G354	1NO+1NC (SPST ea)	4	1	0.078

Contact block adapter.

11 G358	To fit auxiliary contacts BFX10, G484, G485, G486 and G487 types, on B115-B630 1000 contactors; see page 1-27.	4	5	0.050
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Mechanical interlock.

11 G355	Side by side	1	1	0.026
11 G356 1	One on top of other	1	1	0.120
11 G356 2	One on top of other	1	1	0.126
11 G356 3	One on top of other	1	1	0.132
11 G356 4	One on top of other	1	1	0.140
11 G356 5	One on top of other	1	1	0.146
11 G356 6	One on top of other	1	1	0.150

Mechanical latch.

11 G495	For B115-B630	1	1	0.795
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Accessories



11 G360 - 11 G361 - 11 G363



11 G527 - 11 G528 - 11 G529
11 G530



11 G370



11 G371



11 BA126 1 11 BA126 2



3958...

Order code	Characteristics	Qty per pkg	Wt
		n°	[kg]

Power terminal protection.

11 G360	For contactor B115	6	0.026
11 G361	For contactors B145-B180	6	0.026
11 G363	For contactors B250-B310-B400	6	0.046
11 G527	For contactor B500	1	0.238
11 G528	For contactor B500 4	1	0.265
11 G529	For contactor B630	1	0.238
11 G530	For contactor B630 4	1	0.266

3 pole star connecting bars.

11 BA1595	For B115-B145-B180	1	0.065
11 BA1721	For B250-B310-B400	1	0.140
11 BA1846	For B500-B630	1	0.341

2 pole bars for parallel arrangement.

11 BA1594	For B115-B145-B180	1	0.095
11 BA1720	For B250-B310-B400	1	0.149
11 BA1845	For B500-B630	1	0.322

Terminal adapter.

11 G370	To transform Faston terminals of auxiliary contacts and coils into screw terminals	10	0.003
11 G371	To transform both coil Faston terminals into screw terminals	5	0.022

Marking elements.

11 BA126 1	Label for alphanumeric symbols	50	0.001
11 BA126 2	Label for writing	50	0.001
3958	Set of 100 alphanumeric symbols	1	0.010

Operational characteristics of auxiliary contacts

Type	G350-G354	
IEC conventional free-air thermal current Ith	A	16
IEC rated insulation voltage Ui	V	690
Terminals	Faston	mm 1-6.35 2-2.8
Conductor section maximum with 1 or 2 cables	flexible c/w lug	mm ² 2.5
	AWG	n° 14
UL/CSA and IEC/EN 60947-5-1 designation	AC	A600
	DC	P600
Mechanical life (million)	cycles	5

Operational characteristics of mechanical latch

Type	G495	
Rated control circuit voltage	AC (50/60Hz)	V 48-480
	DC	V 48-480
Power consumption	AC	VA 1500
	DC	W 1100
Minimum energising drop-out		ms 40
	pick-up	ms 300
Terminals	Faston	mm 1-6.3x0.8 2-2.8x0.8

Operational characteristics of terminal adapters

Type	G370-G371	
Tightening torque	Nm	1
	lbin	8.9
Tool	Type	Phillips 2
Conductor section 1 or 2 cables	mm ²	4
	AWG	10

Certifications and compliance

Certifications obtained:

Type	UL	CSA	GOST	CCC
G350	●	●	●	●
G354	●	●	●	—
G355	—	●	●	—
G356 ...	—	●	●	—
G360	—	●	●	—
G361	—	●	●	—
G362	—	●	●	—
G363	—	●	●	—
G370	—	●	●	—

● Certified products.

UL - UL Recognized for USA only (File E93601) as Auxiliary Devices - Component.

Products having this type of marking are intended for use as components of complete workshop-assembled equipment.

CSA - CSA certified for Canada only (File 54332) as Auxiliary Devices for motor controllers.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14; add-on auxiliary contacts also comply with IEC/EN 60947-5-1.

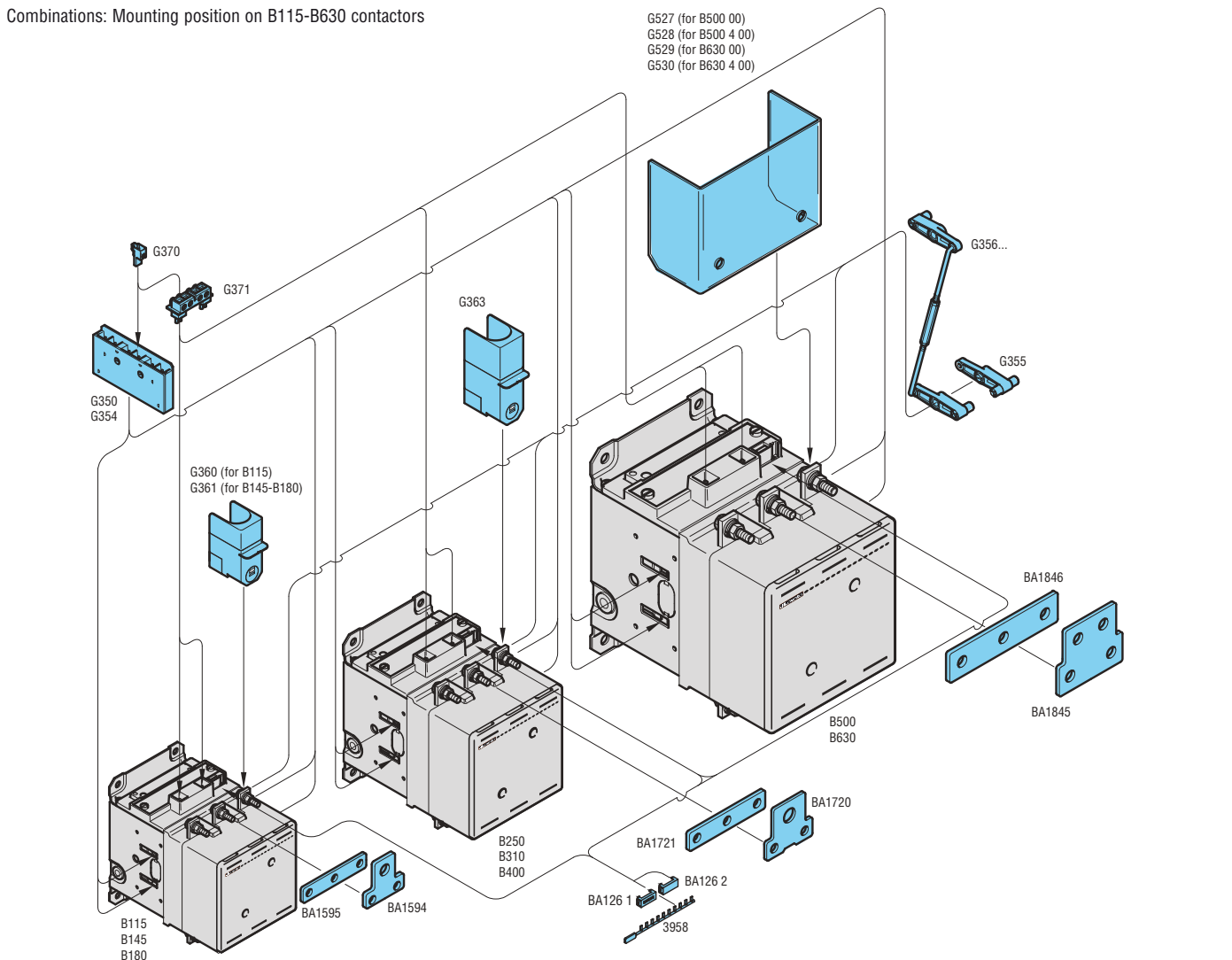
- ① Only one piece can be mounted on B1250 or B1600 type.
- ② Not suitable for B630 1000, B1250, B1600.
- ③ For use with three-pole B630 1000, consult Customer Service; see contact details on inside front cover.
- ④ Allowed distances see information on our web site www.mechtric.com.au
- ⑤ To interlock two contactors B1250 or B1600, it is imperative to use two pieces of type G356 6, one fixed on the left side and the other on the right.
- ⑥ Replace with the digit of the voltages if 50 or 60 Hz or with the letter C followed by voltage if DC. The standard voltages are:
 - AC 50/60Hz 48 - 110/125 indicate 110 - 220/240 indicate 220 - 380/415 indicate 380
 - DC 48 - 110/125 indicate 110 - 220/240 indicate 220
- ⑦ It can be mounted only in contactors if predisposed for it.
- ⑧ Except for B310 and B310 4.
- ⑨ Provided for one pole terminal only. Example: For three-pole contactors, purchase 3 pieces for the upper terminals only or 6 pieces for all upper and lower terminals.
- ⑩ Replace with the required alphanumeric symbol; each package contains 100 pieces of the same symbol.

CONTACTORS & RELAYS

Add-on blocks and accessories
for B series contactors

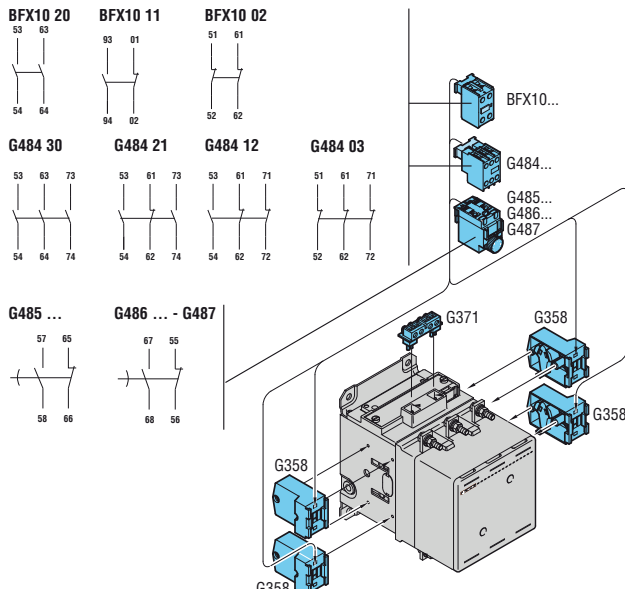
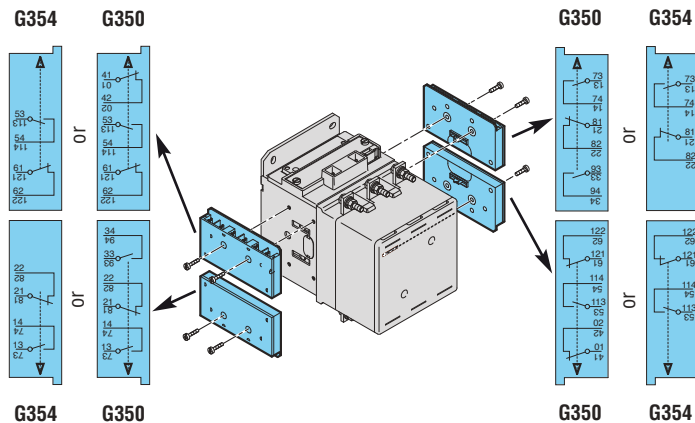


Combinations: Mounting position on B115-B630 contactors



The add-on auxiliary contact blocks G350 and G354 can be applied to contactors B115-B630 1000 only up to a maximum of four pieces for each contactor, for a total of 12 contacts.
The contact block G350 provides a 2NO+1NC or 1NO+2NC combination depending on its mounting position; see the drawing below. The G354 block consists of 1NO+1NC.

Contact blocks, BFX10 with 2 contacts, G484, G485, G486 and G487 types, can be mounted using the G358 adapter, refer to page 1-17 for exact types and order codes of the blocks.
A maximum of four adapters can be possibly used per contactor and each adapter can hold one BFX10, G484, G485, G486 and G487.



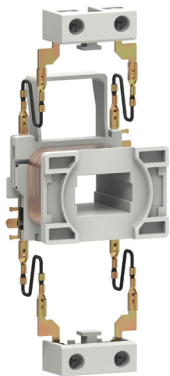
AC coils



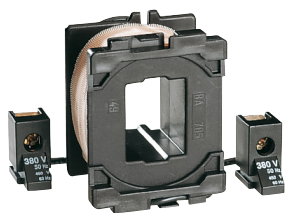
BFX91A...



BFX92A...



BFX93A



11 BA705...

Order code	Rated frequency and voltage		Qty per pkg	Wt [kg]
	[Hz]	[V]		

For contactors BF00 A-BF09 A-BF12 A-BF18 A-BF25 A.

BFX91 A024	50/60	24VAC	1	0.085
BFX91 A048		48VAC	1	0.085
BFX91 A110		110VAC	1	0.085
BFX91 A230		230VAC	1	0.085
BFX91 A400		400VAC	1	0.085
BFX91 A024 60	60	24VAC	1	0.085
BFX91 A048 60		48VAC	1	0.085
BFX91 A120 60		120VAC	1	0.085
BFX91 A220 60		220VAC	1	0.085
BFX91 A230 60		230VAC	1	0.085
BFX91 A460 60		460VAC	1	0.085
BFX91 A575 60		575VAC	1	0.085

For contactors BF26 A-BF32 A-BF38 A.

BFX92A 024	50/60	24VAC	1	0.088
BFX92A 048		48VAC	1	0.088
BFX92A 110		110VAC	1	0.088
BFX92A 230		230VAC	1	0.088
BFX92A 400		400VAC	1	0.088
BFX92A 024 60	60	24VAC	1	0.088
BFX92A 048 60		48VAC	1	0.088
BFX92A 120 60		120VAC	1	0.088
BFX92A 220 60		220VAC	1	0.088
BFX92A 230 60		230VAC	1	0.088
BFX92A 460 60		460VAC	1	0.088
BFX92A 575 60		575VAC	1	0.088

For contactors BF40 A-BF50 A-BF65 A-BF80 A.

BFX93 A024	50/60	24VAC	1	0.150
BFX93 A048		48VAC	1	0.150
BFX93 A110		110VAC	1	0.150
BFX93 A230		230VAC	1	0.150
BFX93 A400		400VAC	1	0.150
BFX93 A024 60	60	24VAC	1	0.150
BFX93 A048 60		48VAC	1	0.150
BFX93 A120 60		120VAC	1	0.150
BFX93 A220 60		220VAC	1	0.150
BFX93 A230 60		230VAC	1	0.150
BFX93 A460 60		460VAC	1	0.150
BFX93 A575 60		575VAC	1	0.150

new

For contactors BF95-BF110.

11 BA705 024	50/60	24VAC	1	0.145
11 BA705 048		48VAC	1	0.145
11 BA705 110		110VAC	1	0.145
11 BA705 230		230VAC	1	0.145
11 BA705 400		400VAC	1	0.145
11 BA705 024 60	60	24VAC	1	0.145
11 BA705 048 60		48VAC	1	0.145
11 BA705 120 60		120VAC	1	0.145
11 BA705 220 60		220VAC	1	0.145
11 BA705 230 60		230VAC	1	0.145
11 BA705 460 60		460VAC	1	0.145
11 BA705 575 60		575VAC	1	0.145

① Four-terminal coil.

Operational characteristics for BFX91 A, BFX92 A and BFX93 A coils

AC control

Rated voltage at 50/60, 60Hz	V	12...600
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Operating voltage limits

50/60Hz coil powered at	50Hz	pick-up	% Us	80...110
				drop-out
60Hz coil powered at 60Hz	60Hz	pick-up	% Us	85...110
		drop-out	% Us	20...55

Average coil consumption at ≤20°C

50/60Hz coil powered at	50Hz	in-rush	VA	75
			holding	VA
60Hz coil powered at 60Hz	60Hz	in-rush	VA	70
		holding	VA	6.5

Dissipation a 50Hz	W	2.5
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Operational characteristics for BA705 coil

AC control

Rated voltage at 50/60, 60Hz	V	12...600
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Operating voltage limits

50/60Hz coil powered at	50Hz	pick-up	% Us	80...110
				drop-out
60Hz coil powered at 60Hz	60Hz	pick-up	% Us	85...110
		drop-out	% Us	40...55

Average coil consumption at ≤20°C

50/60Hz coil powered at	50Hz	in-rush	VA	220
			holding	VA
60Hz coil powered at 60Hz	60Hz	in-rush	VA	200
		holding	VA	15

Dissipation at 50Hz	W	6
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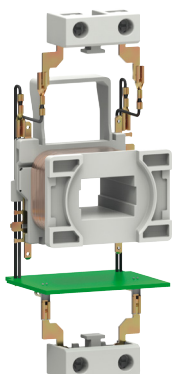
Materials

Class F enamelled copper wire.

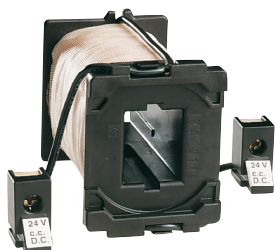
Special versions

For coils with non standard voltages, contact our Customer Service 1800 252 995 or sales@mechtric.com.au

AC/DC and DC coils



BFX93 E



11 BA911...

Order code	Rated voltage	Qty per pkg	Wt
	[V]	n°	[kg]

For contactors BF40 E-BF50 E-BF65 E-BF80 E.

BFX93 E024	20...48V AC/DC	1	0.150
BFX93 E110	60...110V AC/DC	1	0.150
BFX93 E230	100...250V AC/DC	1	0.150

For contactors BF95 C...BF110 C.

11 BA911 12	12VDC	1	0.380
11 BA911 24	24VDC	1	0.380
11 BA911 48	48VDC	1	0.380
11 BA911 60	60VDC	1	0.380
11 BA911 110	110VDC	1	0.380
11 BA911 125	125VDC	1	0.380
11 BA911 220	220VDC	1	0.380

NOTE: No coil replacement for contactors BF00 D, BF09 D-BF38 D, BF00 L, BF09 L-BF38 L, is possible.



Operational characteristics for BFX93 E coil

AC/DC control

Rated voltage	V	20...250
Operating voltage limits: 50/60 Hz coil powered at or in DC	pick-up	% Us 80...110 ^①
	drop-out	% Us 20...25 ^②
Average coil cons. at ≤20°C	in-rush	VA/W 60...125/50
	holding	VA/W 1.7...2.3/1.5

Operational characteristics for BA911 coil

DC control

Rated voltage	V	12...600
Operating voltage limits:	pick-up	% Us 80...110
	drop-out	% Us 10...25
Average dissipation in-rush/holding	W	15

① For electronically controlled AC/DC coils 80% of Us min. and 110% of Us max.

② For electronically controlled AC/DC coils 20% of Us min. and 55% of Us max.

Materials

Class F enamelled copper wire.

Special versions

For coils with non standard voltages, contact our Customer Service 1800 252 995 or sales@mechtronic.com.au

AC/DC coils



Coil



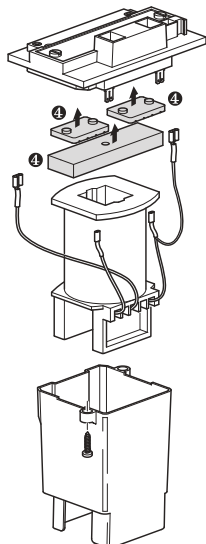
Bridge rectifier



Coil protection



Coil assembly



Order code	Rated voltage AC 50/60 Hz and DC	Qty per pkg	Wt
	[V]	n°	[kg]
Coil for B115-B145-B180 contactors.			
11 BA11574 24	24VAC/DC	1	0.800
11 BA11574 48	48VAC/DC	1	0.800
11 BA11574 60	60VAC/DC	1	0.800
11 BA11574 110	110-125VAC/DC	1	0.800
11 BA11574 220	220-240VAC/DC	1	0.800
11 BA11574 380	380-415VAC/DC	1	0.800
11 BA11574 440	440-480VAC/DC	1	0.800

Coil for B250-B310-B400 contactors.			
11 BA1699 24	24VAC/DC	1	1.800
11 BA1699 48	48VAC/DC	1	1.800
11 BA1699 60	60VAC/DC	1	1.800
11 BA1699 110	110-125VAC/DC	1	1.800
11 BA1699 220	220-240VAC/DC	1	1.800
11 BA1699 380	380-415VAC/DC	1	1.800
11 BA1699 440	440-480VAC/DC	1	1.800

Coil for B500-B630-B630 1000 contactors.			
11 BA1800 48	48VAC/DC	1	3.400
11 BA1800 60	60VAC/DC	1	3.400
11 BA1800 110	110-125VAC/DC	1	3.400
11 BA1800 220	220-240VAC/DC	1	3.400
11 BA1800 380	380-415VAC/DC	1	3.400
11 BA1800 440	440-480VAC/DC	1	3.400

Coil for B1250-B1600 contactors.			
11 BA1800 110Ⓢ	110-125VACⓈ	1	3.400
11 BA1800 220Ⓢ	220-240VACⓈ	1	3.400

Order code	For contactor	Qty per pkg	Wt
		n°	[kg]
Bridge rectifier (Faston terminals).			
11 BA1575 1	B115-B145-B180	1	0.170
11 BA1700 1	B250-B310-B400	1	0.230
11 BA1799	B500-B630-B630 1000 B1250-B1600	1	0.520

Coil protection			
11 BA1553	B115-B145-B180	1	0.042
11 BA1678	B250-B310-B400	1	0.079
11 BA1803	B500-B630-B630 1000 B1250-B1600	1	0.164

Coil assembly (Coil, rectifier and coil protection).			
11 BA1546Ⓢ	B115-B145-B180	1	1.220
11 BA1671Ⓢ	B250-B310-B400	1	2.290
11 BA1796Ⓢ	B500-B630-B630 1000 B1250-B1600	1	4.650

- ① Available for AC supply only.
 - ② Add the coil voltage digit. Standard voltages are:
– AC/DC 24 / 48 / 60 / 110-125 indicate 110 / 220-240 indicate 220 / 380-415 indicate 380 / 440-480V indicate 440.
Example: 11 BA1546 110 for B115-B180 contactor coil assembly suitable for 110-125VAC/DC supply.
 - ③ Add the coil voltage digit. Standard voltages are:
– AC/DC 48 / 60 / 110-125 indicate 110 / 220-240 indicate 220 / 380-415 indicate 380 / 440-480V indicate 440.
Example: 11 BA1796 110 for B500-B1600 contactor coil assembly suitable for 110-125VAC/DC supply.
- For B1250 and B1600, add only 110 for 110-125VAC or 220 for 220-240VAC since these are the only standard voltages available.
- ④ During coil replacement operations, always reinsert dampers (1 pair for B115-B180; 2 pairs for B250-B1600) and fixed magnetic core which one finds in the original coil assembly.

Operational characteristics

AC and DC control			
For contactor type			B115 - B145 - B180
Supply voltage			AC and DC
Rated control voltage		V	24-480
Operating limits	pick-up	% Us	80-110
	drop-out	% Us	20-60
Consumption	in-rush	VA/W	300
	holding	VA/W	10
Dissipation		W	10

For contactor type			B250 - B310 - B400
Supply voltage			AC and DC
Rated control voltage		V	24-480
Operating limits	pick-up	% Us	80-110
	drop-out	% Us	20-60
Consumption	in-rush	VA/W	300
	holding	VA/W	10
Dissipation		W	10

For contactor type			B500 - B630 - B630 1000
Supply voltage			AC and DC
Rated control voltage		V	48-480
Operating limits	pick-up	% Us	80-110
	drop-out	% Us	20-60
Consumption	in-rush	VA/W	400
	holding	VA/W	18
Dissipation		W	18

For contactor type			B1250 - B1600
Supply voltage			in AC
Rated control voltage		V	110-240
Operating limits	pick-up	% Us	80-110
	drop-out	% Us	20-60
Consumption	in-rush	VA/W	800
	holding	VA/W	45
Dissipation		W	40

Operating limits for ambient temperature up to 40°C are 0.8 to 1.1 times rated voltage.
NOTE: For use at ambient temperature exceeding 55°C, contact our Customer Service 1800 252 995 or sales@mechtric.com.au

Materials

Class F enamelled copper wire.

Coil assembly

Comprises the coil, bridge rectifier, fixed core, coil protection, cross piece and fixing screws.

Special versions

For coils with non standard voltages, contact our Customer Service 1800 252 995 or sales@mechtric.com.au

Main contacts for BF contactors



BFX99...



11 G274... - 11 G275... - 11 G276...
11 G475 - 11 G476

new

Order code	For contactor	Qty per pkg	Wt
		n°	[kg]

Main contacts.
3 or 4 pole set complete with screws.

BFX99 026T	BF26	1	0.038
BFX99 026F	BF26 T4	1	0.051
BFX99 032T	BF32	1	0.070
BFX99 038T	BF38	1	0.070
BFX99 038F	BF38 T4	1	0.093
BFX99 040T	BF40	1	0.095
BFX99 040F	BF40T4	1	0.095
BFX99 050T	BF50	1	0.095
BFX99 050F	BF50 T4	1	0.095
BFX99 065T	BF65	1	0.095
BFX99 065F	BF65 T4	1	0.127
BFX99 080T	BF80	1	0.100
BFX99 080F	BF82 T4	1	0.130
11 G475	BF95	1	0.111
11 G476	BF110	1	0.111

Special versions

For non standard spare contact configurations, contact our Customer Service 1800 252 995 or sales@mechtronic.com.au

NOTE: For B1250 and B1600 contactor spares, contact our Customer Service 1800 252 995 or sales@mechtronic.com.au

Main contacts and arc chutes for B contactors



11 G380... - 11 G381... - 11 G382...
11 G383... - 11 G384... - 11 G385...
11 G525... - 11 G526... - 11 G537...

Order code	For contactor	Qty per pkg	Wt
		n°	[kg]

Main contacts.
3 or 4 pole set complete with Allen screws and key for contact replacement.

11 G380	B115	1	0.440
11 G380 4	B115 4	1	0.580
11 G381	B145	1	0.440
11 G381 4	B145 4	1	0.580
11 G382	B180	1	0.440
11 G382 4	B180 4	1	0.580
11 G383	B250	1	0.770
11 G383 4	B250 4	1	1.030
11 G385	B310	1	0.770
11 G385 4	B310 4	1	1.030
11 G384	B400	1	0.770
11 G384 4	B400 4	1	1.030
11 G525	B500	1	2.520
11 G525 4	B500 4	1	3.360
11 G526	B630	1	2.660
11 G526 4	B630 4	1	3.550
11 G537	B630 1000	1	2.660
11 G537 4	B630 1000 4	1	3.550
11 G538	B1250 24	1	5.040
11 G538 4	B1250 4 24	1	6.720
11 G539	B1600 24	1	5.320
11 G539 4	B1600 4 24	1	7.100

Arc chutes.

11 BA1588	B115-B145-B180	1	0.755
11 BA1589	B115 4-B145 4-B180 4	1	1.000
11 BA1713	B250-B310-B400	1	1.210
11 BA1714	B250 4-B310 4-B400 4	1	1.600
11 BA1838	B500-B630-B630 1000	1	1.910
11 BA1839	B500 4-B630 4-B630 1000 4	1	2.490



Arc chute

CN contactors



CN20...



CN25...



CN40...



CN63...

Order code	Rated auxiliary supply voltage [V] ①	Configuration and n° of contacts \NO †NC	Qty per pkg n°	Wt [kg]
One-pole or two-pole.				
CN20 11 024 ② ⑦	24VAC/DC	1 1 ④	10	0.135
CN20 11 220 ② ⑦	220-230VAC ⑥	1 1 ④	10	0.135
CN20 20 024 ② ⑦	24VAC/DC	2 —	10	0.135
CN20 20 220 ② ⑦	220-230VAC ⑥	2 —	10	0.135

Order code	Rated auxiliary supply voltage [V] ①	Configuration and n° of contacts \NO †NC	Qty per pkg n°	Wt [kg]
Three-pole or four-pole.				
CN25 10 024 ⑤	24VAC/DC	4 ④ —	5	0.260
CN25 10 220 ⑤	220-230VAC ⑥	4 ④ —	5	0.260
CN25 01 024 ⑤	24VAC/DC	3 1 ④	5	0.260
CN25 01 220 ⑤	220-230VAC ⑥	3 1 ④	5	0.260

Order code	Rated auxiliary supply voltage [V] ①	Configuration and n° of contacts \NO †NC	Qty per pkg n°	Wt [kg]
Three-pole or four-pole.				
CN40 10 024 ⑤	24VAC/DC	4 ④ —	5	0.425
CN40 10 220 ⑤	220-230VAC ⑥	4 ④ —	5	0.425
CN40 01 024 ⑤	24VAC/DC	3 1 ④	5	0.425
CN40 01 220 ⑤	220-230VAC ⑥	3 1 ④	5	0.425

Order code	Rated auxiliary supply voltage [V] ①	Configuration and n° of contacts \NO †NC	Qty per pkg n°	Wt [kg]
Three-pole or four-pole.				
CN63 10 024	24VAC/DC	4 ④ —	5	0.425
CN63 10 220	220-230VAC ⑥	4 ④ —	5	0.425
CN63 01 024	24VAC/DC	3 1 ④	5	0.425
CN63 01 220	220-230VAC ⑥	3 1 ④	5	0.425

- ① Other voltages on request. Consult Customer Service; see contact details on inside front cover.
- ② 2NC version supplied on request.
- ③ The last (NC) pole has the same characteristics as the power pole. It can therefore be used indifferently as an auxiliary or as a NC power contact.
- ④ The fourth NO or NC pole has the same characteristics as the power poles; therefore it can be used indifferently as auxiliary or as power contact.
- ⑤ On request CN25 and CN40 contactors in the following versions can be supplied: 2NO + 2NC or 4NC power poles. Consult Customer Service; see contact details on inside front cover.
- ⑥ Can also operate at 220VDC.
- ⑦ No auxiliary contacts can be mounted.

General characteristics

- DC powered magnetic core system assuring silent operation and noise damping during the control phase
- Overvoltage protection circuit and voltage peak limitation of the magnetic core
- Equipped with 2 or 4 closing contacts of equal capacity permitting use in power or auxiliary circuits
- Operation flag indicator
- Fast mounting.

Operational characteristics

Type	IEC conventional free-air thermal current Ith	IEC operating power in AC3		Protection fuse gG (IEC)
	in AC1 [A]	230V [kW]	400V [kW]	
CN20...	20	1.3	—	20
CN25...	25	2.2	4	35
CN40...	40	5.5	11	63
CN63...	63	8.5	15	80

- Noise level:
 - Closed contactor ≤ 20 dB
 - Making/breaking operation ≤ 50 dB
- IEC degree of protection: IP20
- Mounting on 35mm DIN rail (IEC/EN 60175).

When contactors are mounted side by side and operate in continuous service (≥ 1 hour), spacing is needed between equipment to consent appropriate cooling. 9mm spacing is required; there is an accessory, called half-module spacer, order code CNX 80, for this specific type of mounting. The following table indicates details of the space needed between each.

Maximum number of contactors to be mounted side-by-side without spacing; the CNX 80 spacer is required when the number of pieces is more than the indicated below:

	CN20	CN25	CN40	CN63
Ambient temperature $\leq 40^\circ\text{C}$	3	3	3	3
Ambient temperature $> 40^\circ \dots 55^\circ\text{C}$	2	2	3	2

Operational characteristics of contactor-incorporated auxiliary contacts

Type	IEC insulation voltage U_i	IEC rating (AC15 category)	
	[V]	230V [A]	400V [A]
CN20...	440	6	6
CN25...	440	6	4
CN40...	500	6	4
CN63...	500	6	4

Certifications and compliance

Certifications obtained: EAC.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1, IEC/EN 61095.

Utilisation

- Lighting systems
- Electric home heating
- Heat pumps
- Conditioning
- Ventilation
- Civil installations.

Lighting circuit switching

See information on our web site www.mechtric.com.au

Add-on blocks and accessories



CNH...



CNP2

Order code	Characteristics	Max qty per contactor	Qty per pkg	Wt
		n°	n°	[kg]
Auxiliary contacts ^① .				
CNH 11 ^②	1NO + 1NC	1	1	0.045
CNH 20 ^②	2NO	1	1	0.045
Set for terminal protection (also sealable).				
CNP 0	For CN20	2	1 ^②	0.001
CNP 1	For CN25	2	1 ^②	0.002
CNP 2	For CN40 and CN63	2	1 ^②	0.003
Spacer.				
CNX 80	1/2 module wide	1	10	0.005

^① Not suitable for CN20 modular contactors.

^② Set of 2 pieces.

Mounting

Fasten the CNH... auxiliary contact by slightly pressing it in place.

Removal

Release the catch using a screwdriver.

Operational characteristics for auxiliary contacts

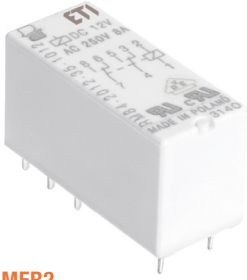
- Rated insulation voltage: 440VAC
- Conventional free air thermal current I_{th}: 6A
- Minimum switching capacity: 5mA 12V
- Maximum tightening torque: 1Nm.

Certifications and compliance

Certifications obtained: GOST.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1, IEC/EN 61095.

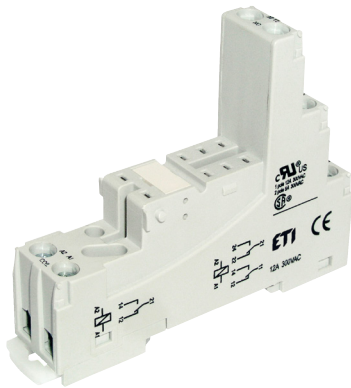
MER2 miniature relays

- 2 change over contacts DPDT, 8A, 8 pins
- MOV protection module available
- Optional retaining clip and labelling plate



MER2

Order Code	Voltage	Contacts	Max. Current AC1 (250VAC)	Max. Current DC1 (24Vdc)	Socket	Weight (kg)
ETI002473031	12Vdc	2CO	8A	8A	ETI002473036	0.013
ETI002473032	24Vdc	2CO	8A	8A	ETI002473036	0.013
ETI002473033	24Vac	2CO	8A	8A	ETI002473036	0.013
ETI002473034	230Vac	2CO	8A	8A	ETI002473036	0.013



MERB-M

Sockets

Order Code	Description	Weight (kg)
ETI002473036	MERB-M socket DIN rail mounting	0.044
ETI002473037	MER-CLIP-SP wire retaining clip	0.001
ETI002473038	MER-CLIP-PL plastic retaining and extractor clip	0.001
ETI002473039	MER-PLATE marker plate	0.001
ETI002473040	ERC-024ACD LEDCL MOV protection module with LED 12-24Vac/dc	0.003
ETI002473042	ERC-230ACD LEDCL MOV protection module with LED 110-230Vac/dc	0.003

Specifications

Electrical life:	≥10 ⁶ operations
Mechanical life:	≥10 ⁷ operations
Rated surge voltage:	4000V
Dielectric strength:	5000V (coil to pole), 2500V (pole to pole)
Pick up time:	7ms
Release time:	3ms
Switching frequency:	600/hour at nominal load
Contact material:	AgNi
Contact resistance:	≤100mΩ
Operation temp:	-40 to +70°C

Coil ratings:

Nominal voltage VAC (Un)	-	24	230
Resistance (Ω± 10%)		400	38.5k
Current mA		60	6
Nominal voltage VDC (Un)	12	24	-
Resistance (Ω± 10%)	360	1.44k	
Current mA	34	17	

Nominal coil power: 0.48W DC, 0.75VA AC
Pick up voltage: <0.7 x Un
Release voltage: >0.1 x Un

Compliance and standards

Certifications obtained: CE, UL, EAC, RoHS
 Compliant with standards: IEC 61810, EN60947

Rated load: 12A 300V/250V
Max wire size: 4 mm², 2 x 2.5mm² 22-14AWG
Max screw torque: 0.7Nm
Dimensions: 78.1(h) x 15.9(w) x 61(66.5)(d) mm*

* The dimension in brackets includes height of socket with retainer / retractor clip.



MER-CLIP-PL



MER-CLIP-SP



ERC....

ERM industrial relays



- 2 change over contacts, 12A
- 4 change over contacts, 6A
- Test button, coloured to indicate coil voltage (DC green or AC orange)
- LED indicator and mechanical indication
- MOV protection module available

ERM-2 DC

ERM-4 AC

Order Code	Voltage	Contacts	Max. Current AC1 (250VAC)	Max. Current DC1 (24Vdc)	Socket	Weight (kg)
ETI002473001	24Vdc	2CO	12A	12A	ETI002473013	0.035
ETI002473003	24Vac	2CO	12A	12A	ETI002473013	0.035
ETI002473005	230Vac	2CO	12A	12A	ETI002473013	0.035
ETI002473007	24Vdc	4CO	6A	6A	ETI002473015	0.035
ETI002473009	24Vac	4CO	6A	6A	ETI002473015	0.035
ETI002473011	230Vac	4CO	6A	6A	ETI002473015	0.035

Specifications

Electrical life:	≥10 ⁵ operations
Mechanical life:	≥10 ⁷ operations
Rated surge voltage:	4000V
Dielectric strength:	2500V (coil to pole), 2500V (pole to pole)
Pick up time:	AC 10ms DC 13ms
Release time:	AC 8ms DC 3ms
Switching frequency:	1200/hour at nominal load
Contact material:	AgNi
Contact resistance:	≤100mΩ
Operation temp:	-40 to +55°C

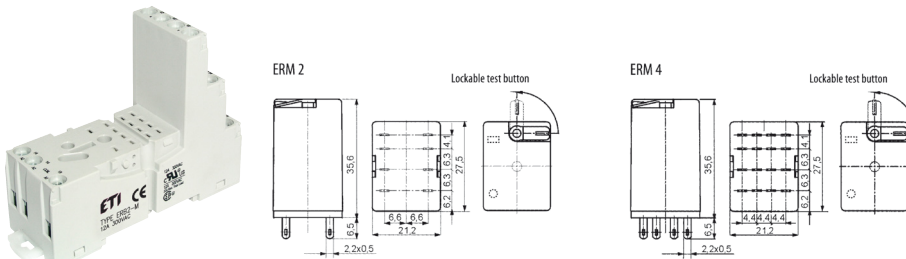
Coil ratings:

Nominal voltage VAC (Un)	-	24	230
Resistance (Ω± 10%)		158	16.1k
Current mA		66	7
Nominal voltage VDC (Un)	12	24	-
Resistance (Ω± 10%)	160	640	
Current mA	75	38	

Nominal coil power: 0.9W DC, 1.6VA AC
 Pick up voltage: <0.8 x Un
 Release voltage: DC > 0.1 x Un, AC > 0.2 x Un

Compliance and standards

Certifications obtained: CE, UL, Lloyds EAC, RoHS
 Compliant with standards: IEC 61810, EN60947



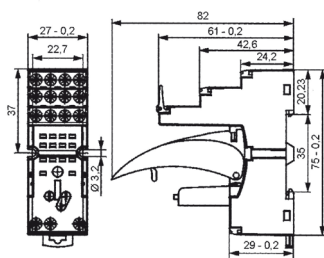
Dimensions (mm)

ERB2-M

Sockets

Order Code	Description	Weight (kg)
ETI002473013	EBR2-M 2 pole socket DIN rail mounting	0.060
ETI002473015	EBR4-M 4 pole socket DIN rail mounting	0.071
ETI002473016	ER-CLIP_PL plastic retaining and extractor clip	0.005
ETI002473017	ER-PLATE marker plate	0.001
ETI002473018	ER-TERMINAL 6 way bridge	0.002
ETI002473040	ERC-024ACD LEDCL MOV protection module with LED 12-24Vac/dc	0.003
ETI002473042	ERC-230ACD LEDCL MOV protection module with LED 110-230Vac/dc	0.003

Rated load: 12A 300V (2 pole),
6A 300V (4 pole)
 Max wire size: 4 mm², 2 x 2.5mm² 22-14AWG
 Max screw torque: 1.2Nm



Connection diagram



Dimensions (mm)



ER-CLIP



ER-PLATE



ER-TERMINAL

41F series slim interface relays

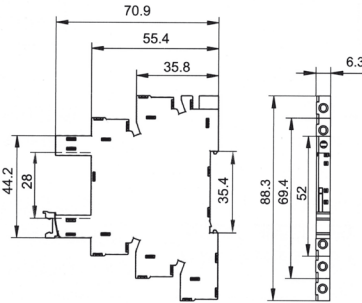
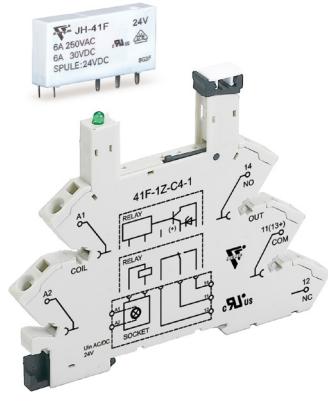
- 6.3mm wide sockets with plug-in relays
- 1 CO contact
- Maximum current 6A
- Operating voltages from 12V to 240V AC/DC

Specifications

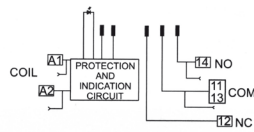
Contact rating:	1500VA/180W
Max. voltage:	400VAC/125VDC
Rated current:	6A (AC1 250V)/30VDC
Coil consumption:	408mW (24VDC), 900mW (230VAC)
Electrical life:	≥10 ⁴ operations
Mechanical life:	≥10 ⁷ operations
Insulation resistance:	≤ 1000MΩ (500VDC)
Pick up time:	≤ 8ms
Release time:	≤ 4ms
Pick up voltage:	0.8 xUn
Contact Resistance:	30mΩ
Contact material:	AgNi
Operation frequency:	1200/hour at nominal load
Max wire size:	1 x 2.5mm ²
Max screw torque:	0.5Nm
Operation temp:	-40 to +70°C

Compliance and standards

Certifications obtained: CE, UL, VDE, TUV, RoHS



Dimensions (mm)



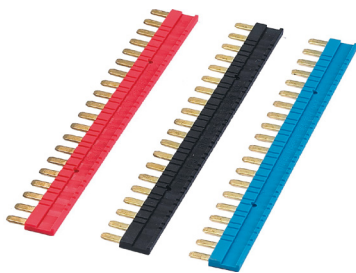
41F

Order Code			Operating Voltage	Coil Voltage	Weight (kg)
Combo	Relay	Socket			
12ZC41F1ZC2UC12	12ZR41F012Z	12ZS41F1ZC2024	12V AC/DC	12V	0.031
12ZC41F1ZC2UC24	12ZR41F024Z	12ZS41F1ZC2024	24V AC/DC	24V	0.031
12ZC41F1ZC2UC110	12ZR41F060Z	12ZS41F1ZC2110	110V AC	60V	0.031
12ZC41F1ZC2UC230	12ZR41F060Z	12ZS41F1ZC2230	230V AC	60V	0.031

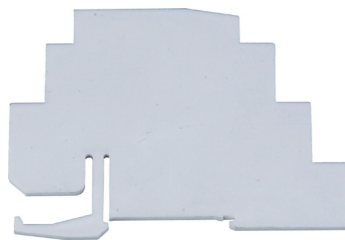
Note: Relay and socket are supplied pre-assembled

Accessories

Order Code	Description
12Z41FJ1	Connection bridges for connection of A2 coil terminal 20 pins
12Z41FS	Relay separator
12Z41FM	Labels for laser marking (set of 64)



41F Bridge



41F Separator

KSI single phase AC SSR

- Zero crossing AC load SSR
- 2 control ranges 4-32VDC and 90-280VAC
- Load currents up to 80A
- LED indicator
- Clip on protective cover IP20 (up to 80A)



KSI480A60-L(068)



KSI(083)

Specifications

Operation temp: -30 to +80°C
 Max. control current: 25mA @ 5-24VDC
 15mA @ 220VAC
 Min. turn on voltage: 4VDC, 90VAC
 Min. turn off voltage: 1VDC, 10VAC
 Max. off state leakage I: 5mA
 Max. on state voltage drop: 1.6V
 Min. load I: 0.1A

Max. response time

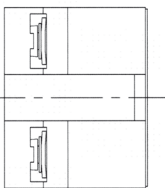
Pick up: DC ½ cycle + 1ms, AC 40ms
 Drop out: DC ½ cycle + 1ms, AC 40ms
 Transient overvoltage: 1200Vpk
 Dielectric strength: Input/Output ≥ 4000Vrms
 Output/Base ≥ 2500Vrms

Compliance and standards

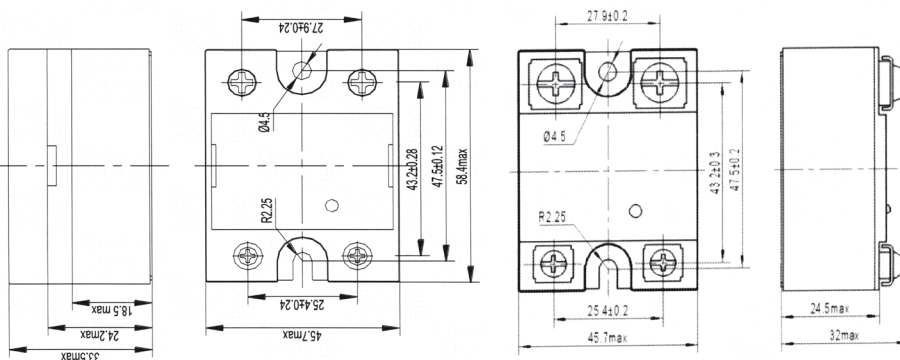
Certifications obtained: CE, UL, TUV, RoHS

Order Code	Control voltage	Rated operational voltage	Rated operational current with heat sink (AC51 @ Ta = 25° C)	Max. Surge Current (10ms)	Weight (kg)
12ZKSI480D25L068	4 - 32 VDC	48-530VAC	25A	260A	0.1
12ZKSI480D40L068			40A	360A	
12ZKSI480D60L068			60A	650A	
12ZKSI480D80L068			80A	1000A	
12ZKSI480D100L083			100A	1400A	
12ZKSI480D125L083			125A	1680A	0.18
12ZKSI480A25L068	90 - 280 VAC	48-530VAC	25A	260A	0.1
12ZKSI480A40L068			40A	360A	
12ZKSI480A60L068			60A	650A	
12ZKSI480A80L068			80A	1000A	
12ZKSI480A100L083			100A	1400A	
12ZKSI480A125L083			125A	1680A	0.18

For load over 5A a suitable heat sink must be used. See page 1-41



Dimensions (mm)



KSI 25-80A

KSI 100-125A

KSJ single phase DC SSR

- DC load SSR
- Input 4-32VDC
- Load currents up to 50A
- LED indicator
- Clip on protective cover IP20



KSJ400D20-L(068)

Specifications

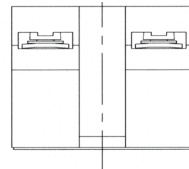
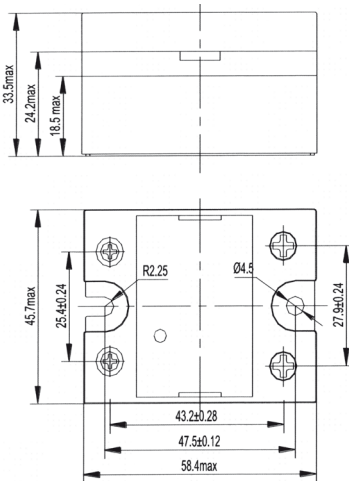
Operation temp:	-30 to +80°C
Max. control current:	28mA @ 32VDC
Min. turn on voltage:	4VDC
Min. turn off voltage:	1VDC
Max. off state leakage I:	≤ 0.5mA (depending on voltage rating)
Max. on state voltage drop:	≤ 2.5VDC (depending on voltage rating)
Min. load I:	100mA
Max. response time	
Pick up:	≤ 5ms
Drop out:	≤ 5ms
Dielectric strength:	Input/Output ≥ 2500Vrms Output/Base ≥ 2500Vrms

Compliance and standards

Certifications obtained: CE, UL, TUV, RoHS

Order Code	Control voltage	Rated operational voltage	Rated operational current with heat sink (DC1 @ Ta = 25° C)	Max. Surge Current (10ms)	Weight (kg)
12ZKSJ500D7L068	4-32VDC	0-500VDC	7A	42A	0.11
12ZKSJ400D20L068		0-400VDC	20A	120A	
12ZKSJ1200D25L068		0-1200VDC	25A	250A	0.09
12ZKSJ1200D50L068			50A	500A	

For load over 5A a suitable heat sink must be used. See page 1-41



Dimensions (mm)

KSJ

KSQF three phase AC SSR

- Zero crossing 3 phase AC load SSR
- 2 input ranges 4-32VDC and 90-280VAC
- Load currents up to 80A
- LED indicator
- Protected terminals



KSQF480D60

Specifications

Operation temp:	-30 to +80°C
Max. control current:	25mA @ 5-24VDC 15mA @ 220VAC
Min. turn on voltage:	4VDC, 90VAC
Min. turn off voltage:	1VDC, 10VAC
Max. off state leakage I:	5mA
Max. on state voltage drop:	1.6V
Min. load I:	0.1A

Max. response time

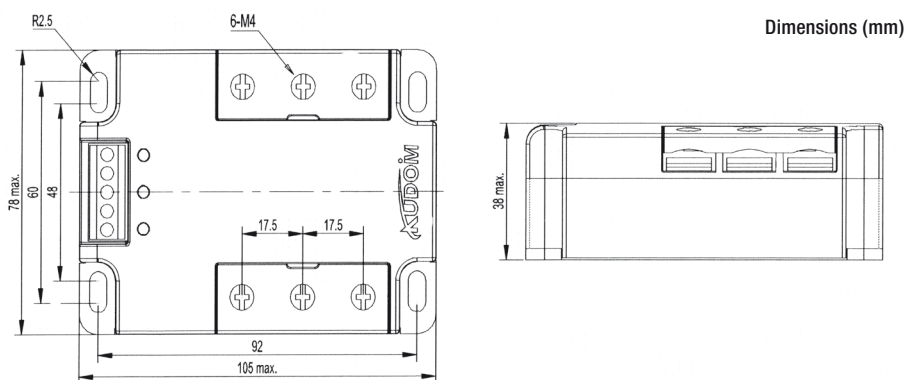
Pick up:	DC ½ cycle + 1ms, AC 40ms
Drop out:	DC ½ cycle + 1ms, AC 40ms
Transient overvoltage:	1200Vpk
Dielectric strength:	Input/Output ≥ 4000Vrms Output/Base ≥ 2500Vrms

Compliance and standards

Certifications obtained: CE, UL, TUV, RoHS

Order Code	Control voltage	Rated operational voltage	Rated operational current with heat sink (AC51 @ Ta = 25° C)	Max. Surge Current (10ms)	Weight (kg)
12ZKSQF480D25L	4 - 32 VDC	48-530VAC	25A	250A	0.350
12ZKSQF480D40L			40A	400A	
12ZKSQF480D60L			60A	600A	
12ZKSQF480D80L			80A	800A	
12ZKSQF480A25L	90 - 280 VAC	48-530VAC	25A	250A	0.350
12ZKSQF480A40L			40A	400A	
12ZKSQF480A60L			60A	600A	
12ZKSQF480A80L			80A	800A	

For load over 5A a suitable heat sink must be used. See page 1-41



KSQF

KPR single phase analogue SSR

- Single phase voltage regulator
- 4-20mA and 0-10VDC control
- Load currents up to 80A
- LED indicators
- Protected terminals



KPR

Order Code	Analogue Control Input	Rated operational voltage	Rated operational current with heat sink (AC51 @ Ta = 25° C)	Max. Surge Current (10ms)	Weight (kg)
12ZKPRV240H25L	0 - 10 VDC 4-20mA	175-265VAC	25A	250A	0.112
112ZKPRV240H40L			40A	400A	
12ZKPRV240H60L			60A	600A	
12ZKPRV240H80L			80A	800A	

For load over 5A a suitable heat sink must be used. See page 1-41

Specifications

Operation temp:	-30 to +80°C
Input impedance:	15kΩ
Min. turn on voltage:	4VDC, 90VAC
Min. turn off voltage:	1VDC, 15VAC
Max. off state leakage I:	5mA
Max. on state voltage drop:	1.7V
Min. load I:	0.1A
Transient overvoltage:	1200Vpk
Dielectric strength:	Control/Load ≥ 4000Vrms
	Control/Load/Base ≥ 4000Vrms
	Control/Gnd ≥ 1000Vrms

Compliance and standards

Certifications obtained: CE, UL, TUV, RoHS

KYRT 3 phase analogue SSR

- 3 phase voltage regulator
- 4-20mA and 0-10VDC control
- Load currents up to 80A
- LED indicators
- Protected terminals



KYRTV480

Specifications

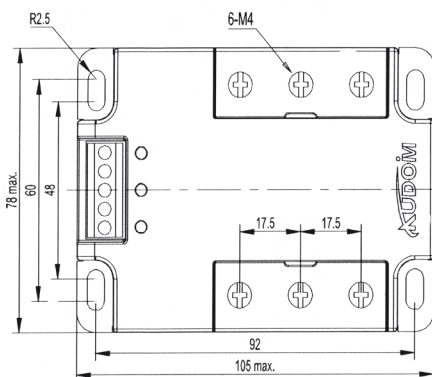
Operation temp:	-30 to +80°C
External power supply:	9-28VDC
Input impedance:	15kΩ
Min. turn on voltage:	4VDC, 90VAC
Min. turn off voltage:	1VDC, 15VAC
Max. off state leakage I:	5mA
Max, on state voltage drop:	1.7V
Min. load I:	0.1A
Transient overvoltage:	1200Vpk
Dielectric strength:	Control/Load ≥ 4000Vrms
	Control/Load/Base ≥ 4000Vrms
	Control/Gnd ≥ 1000Vrms

Compliance and standards

Certifications obtained: CE, UL, TUV, RoHS

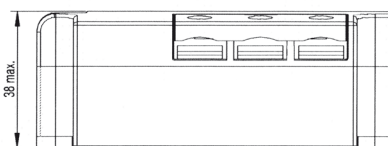
Order Code	Analogue Control Input	Rated operational voltage	Rated operational current with heat sink (AC51 @ Ta = 25° C)	Max. Surge Current (10ms)	Weight (kg)
12ZKYRTV480H25L	0 - 10 VDC 4-20mA	300-530VAC	25A	250A	0.36
12ZKYRTV480H40L			40A	400A	
12ZKYRTV480H60L			60A	600A	
12ZKYRTV480H80L			80A	800A	

For load over 5A a suitable heat sink must be used. See page 1-41



KPR/KYRT

Dimensions (mm)



Heat Sinks



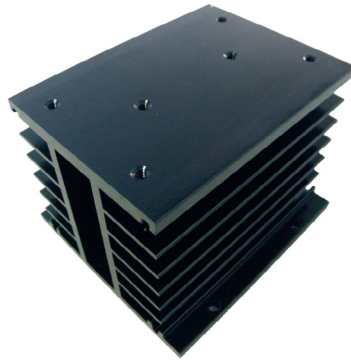
KHS-1D



KHS-1E



KHS-3A



KHS-3G

Order Code	Dimensions (mm)	Thermal Resistance (with fan)	Max. Current of AC SSR (with fan)	Weight (kg)
12ZKHS1A	80x50x50	2.1°C/W	18A 1ph	0.12
12ZKHS1B	70x45x83.5	1.9°C/W	19A 1ph	0.29
12ZKHS1C	100x48.5x80	1.7°C/W(0.8°C/W)	21A 1ph (41A 1ph)	0.25
12ZKHS1D	100x50x97	1.6°C/W (0.6°C/W)	22A 1ph (59A 1ph)	0.38
12ZKHS150A	142x150x55	0.6°C/W	59A 1ph, 26A 3ph	0.54
12ZKHS3A	100x100x97	0.8°C/W (0.35°C/W)	21A 3ph (42A 3ph)	0.83
12ZKHS3G	100x100x80	0.9°C/W (0.4°C/W)	40A 1ph, 19A 3ph (65A 1ph, 39A 3ph)	0.56