

BG series mini-contactors

2



Unique features

- Highly conductive auxiliary contacts with four contact points
- AC and DC versions of same size
- Quick connect - snap on accessory mounting
- Distinct contact status indication
- Up to four auxiliary contacts can be mounted
- Mechanical interlock only 5mm deep
- Positive (force) guided contacts (mechanically-linked per IEC)
- Three-pole mini-contactors, 6 to 12A IEC AC3 duty / 3 to 7.5HP 480V - 3 to 10HP 600V UL/CSA
- Four-pole mini-contactors, 20A IEC AC1 duty
- Versions with 2NO+2NC main power poles
- Highly conductive auxiliary contacts
- AC or DC auxiliary supply
- Low-consumption DC versions
- Screw, faston and rear PCB solder pin termination.

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

BF series contactors



Unique features

- Highly conductive auxiliary contacts with four contact points
- Quick connect - snap on accessory mounting
- Distinct contact status indication
- Up to four auxiliary contacts can be mounted
- Mechanical interlock only 5mm deep
- Positive (force) guided contacts (mechanically-linked per IEC)
- Three-pole contactors, 9 to 110A IEC AC3 duty / 5 to 75HP 480V - 7.5 to 100HP 600V UL/CSA
- Four-pole contactors, 25 to 125A in AC1 duty
- Power factor correction contactors, 7.5 to 60kvar at 400V IEC / 9 to 65kvar at 480V UL/CSA
- Types with 2NO+2NC or 4NC main power poles
- Types for photovoltaic applications
- Highly conductive auxiliary contacts
- AC or DC auxiliary supply
- Low-consumption versions for control relays and 9-38A contactors in IEC AC3 duty.

	3 poles			4 poles		
	IEC le (AC3)	Coil in AC	DC	IEC lth (AC1)	Coil in AC	DC
BF09	9A	●	●	25A	●	●
BF12	12A	●	●	28A	●	—
BF18	18A	●	●	32A	●	●
BF25	25A	●	●	—	—	—
BF26	26A	●	●	45A	●	●
BF32	32A	●	●	—	—	—
BF38	38A	●	●	56A	●	●
BF50	50A	●	—	90A	●	—
BF65	65A	●	—	110A	●	—
BF80	80A	●	—	125A	●	—
BF95	95A	●	—	—	—	—
BF110	110A	●	—	—	—	—

① Low-consumption version.

B series contactors



Unique features

- 3 frame sizes offering 11 different contactors
- Coil operates indifferently on AC or DC supply voltage
- Coil with low in-rush and holding
- Coil removable without disconnecting power wiring
- Red indicator when contactor is energised
- Unique right-angle magnet design - limits contact bounce
- Safety feature prevents contactor to be energised without arc chute in place and locked
- Convertible auxiliary contact block (2NO + 1NC or 1NO + 2NC), maximum of 4 blocks per contactor for a total of 12 contacts
- Contact terminals with bolt, washer and nut
- Simple horizontal or vertical interlock
- Positive (force) guided contacts (mechanically-linked per IEC)
- Three-pole contactors, 110 to 630A IEC AC3 duty
- Four-pole contactors, 160 to 1600A IEC AC1 duty
- 100 to 500HP 600V UL/CSA
- Screw termination.

	3 poles			4 poles		
	IEC le (AC3)	Coil both AC	DC	IEC lth (AC1)	Coil both 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.

General information - IEC contactors

Lovato Electric comprehensive line of contactors can be divided in to three basic configurations as illustrated above. Each of these have unique features but all are designed for long life and have finger-safe protection. Lovato Electric facilities, where these contactors are manufactured, work under ISO 9001 quality conditions, per IQNet certification since 1992 and constantly maintained by passing yearly quality assurance audits. The design and manufacture of the contactors and accessories have taken into consideration the most demanding requirements of international standards.

Non-reversing and reversing IEC starters

Contactors can be combined with either manual motor starters of the SM series, providing thermal and magnetic protection up to 100A, or single or three-pole thermal bimetallic overload relays, with or without single-phase protection up to 420A, to obtain non-reversing or reversing starters. Equipment can be assembled together or independently mounted through the use of specifically designed accessories.



Non-reversing starter



Reversing starter

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.

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.



BUILT-IN SURGE SUPPRESSOR

The BF00 to BF38 contactors with standard voltage DC coils include 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.

2

SIDE ADD-ON FOURTH POLE

For the 45A and 56A AC1 ratings, a side-mount fourth power pole can be snapped on the three-pole contactor. This solution permits to optimise inventory.



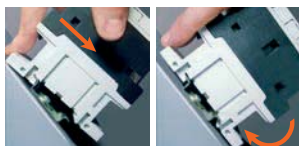
MECHANICAL INTERLOCK

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 mechanical interlock comprises two built-in NC auxiliary contacts to make the electrical interlock as well.



35mm DIN RAIL MOUNTING AND FIXING



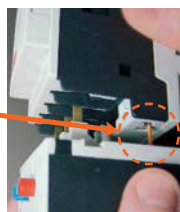
Contactor mounting on and removal from a 35mm DIN rail are tool-less operations and are done by simply applying pressure on the contactor.

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

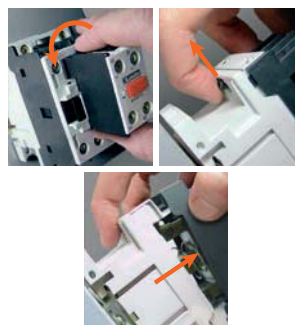


During the connection of the thermal overload relay to the contactor, its auxiliary contact is simultaneously linked to the contactor coil terminal rigid connector. The complete overload relay fixing is obtained with one single operation and without other connections.

TERMINAL ADAPTABILITY

Terminals are suitable for every type of cable: flexible, rigid, according to AWG standards and interlocked with any type of cable terminal. Power pole, auxiliary and coil screws can be tightened using one single type of screwdriver.

SNAP-ON INSTALLATION



Mounting and removal of the add-on auxiliary contacts and accessories, along with BF09 to BF38 AC contactor coil replacement are quick and easy operations and are done with no tools.

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.

FRONT PROTECTION COVER FOR BREAKER - CONTACTOR CONNECTIONS



The front cover, fixed between breaker and contactor, provide protection to the connections.

IP20 CONNECTION SECURITY



The ease of terminal access and space is combined with IP20 finger safety, to prevent touching of live parts.



BG06 A-BG12 A



BF09 A-BF25 A



BF26 A-BF38 A



BF50-BF110



B115-B180



B250-B400

Three-phase motor control in AC3 duty												UL/CSA details						
Order code	IEC operating current Ith (AC1)				Maximum IEC power at ≤55°C (AC3)								Maximum UL/CSA horsepower ratings					
AC coil	≤40°C	≤55°C	≤70°C	Ie (AC3) ≤440V at ≤55°C	230V	400V	415V	440V	500V	690V	1000V	Single phase 120V	240V	Three phase 200V	240V	480V	600V	
[A]	[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]	
11 BG06 01 Aⓘ	16	14	12	6	1.5	2.2	2.4	2.5	3	3	—	1/3	1	1½	2	3	3	
11 BG06 10 Aⓘ			(≤60°C)															
11 BG09 01 Aⓘ	20	18	15	9	2.2	4	4.3	4.5	5	5	—	½	1½	2	3	5	5	
11 BG09 10 Aⓘ			(≤60°C)															
11 BGF09 01 Aⓘ	20	18	15	9	2.2	4	4.3	4.5	5	5	—	½	1½	2	3	5	5	
11 BGF09 10 Aⓘ			(≤60°C)															
11 BGP09 01 Aⓘ	20	18	15	9	2.2	4Ⓣ	4.3Ⓣ	4.5Ⓣ	5Ⓣ	—	—	½	1½	2	3	5Ⓣ	—	
11 BGP09 10 Aⓘ			(≤60°C)															
11 BG12 01 AⓘⓉ	20	18	15	12	3.2	5.7	6.2	5.5	5	5	—	½	1½	3	3	7½	10	
11 BG12 10 AⓘⓉ			(≤60°C)															
BF09 01 AⓘⓉ	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—	¾	2	3	3	5	7½	
BF09 10 AⓘⓉ																		
BF12 01 AⓘⓉ	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—	1	2	5	5	7½	10	
BF12 10 AⓘⓉ																		
BF18 01 AⓘⓉ	32	26	23	18	4	7.5	9	9	10	10	—	1	3	5	5	10	15	
BF18 10 AⓘⓉ																		
BF25 01 Aⓘ	32	26	23	25	7	12.5	13.4	13.4	15	11	—	2	3	7½	7½	15	15	
BF25 10 Aⓘ																		
BF26 00 AⓘⓉ	45	36	32	26	7.3	13	14	14	15.6	18.5	—	2	5	7½	7½	15	20	
BF32 00 AⓘⓉ	56	45	40	32	8.8	16	17	17	20	22	—	3	7½	10	10	20	25	
BF38 00 Aⓘ	56 (60Ⓣ)	45 (48Ⓣ)	40 (42Ⓣ)	38	11	18.5	18.5	18.5	20	22	—	3	7½	10	15	30	30	
11 BF50 00ⓘⓉ	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25	5	10	10	15	30	40	
11 BF65 00ⓘⓉ	110	90	70	65	18.5	33	36	36	45.3	59.7	30	—	—	20	25	50	60	
11 BF80 00ⓘ	125	100	80	80	23	41	46	46	56	74	37	—	—	25	30	60	75	
11 BF95 00ⓘ	125	100	80	95	27.6	50	55	55	56	74	45	—	—	30	30	60	75	
11 BF110 00ⓘ	125	100	80	110	33	61	66	70	59	80	45	—	—	30	40	75	100	
11 B115 00ⓉⓉ	160	150	110	110	33	61	66	70	80	100	63	—	—	30	40	75	100	
11 B145 00ⓉⓉ	250	235	190	150	46	80	88	93	100	120	75	—	—	50	50	100	125	
11 B180 00ⓉⓉ	275	250	200	185	57	100	108	115	123	144	103	—	—	60	75	150	150	
11 B250 00ⓉⓉ	350	300	250	265	83	140	155	164	176	212	156	—	—	75	100	200	250	
11 B310 00ⓉⓉ	450	370	300	320	100	170	188	200	213	256	180	—	—	100	125	250	300	
11 B400 00ⓉⓉ	550	430	360	420	130	225	247	263	271	352	208	—	—	125	150	350	400	
11 B500 00ⓉⓉ	700	550	500	520	156	290	306	328	367	416	312	—	—	150Ⓣ	200Ⓣ	400Ⓣ	450Ⓣ	
11 B630 00ⓉⓉ	800	640	540	630	198	335	368	368	368	440	368	—	—	200Ⓣ	250Ⓣ	500Ⓣ	500Ⓣ	
11 B630 1000 00ⓉⓉ	1000	850	700	—	For AC1/Resistive duty only, see page 2-8.								—	—	—	—	—	
11 B1250 24ⓉⓉ	1250	1050	880	—	For AC1/Resistive duty only, see page 2-8.								No UL	—	—	—	—	
11 B1600 24ⓉⓉ	1600	1360	1120	—	For AC1/Resistive duty only, see page 2-8.								No UL	—	—	—	—	

- ① Complete order code with coil voltage digit or with voltage digit followed by 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 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, three poles, without auxiliary contacts and 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 ②
If already fitted with mechanical latch (G495), the order code becomes 11 B...L.00 ② ④.

- ④ Indicate rated voltage of the mechanical latch, preceded by the letter C if in DC. Available 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, three poles, with 2NO+4NC auxiliary contacts and 110-125VAC 50/60Hz coil.
- ⑦ Maximum voltage is limited at 300V for UL. For certified type up to 600V, consult Customer Service for information; see contact details on inside front cover.
- ⑧ For voltages 024 / 230 / 400VAC 50-60Hz: 10 pieces/package.
For all other voltages: 1 piece/package.
- ⑨ Highly conductive auxiliary contact.
- ⑩ For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.
- ⑪ No UL/CSA ratings; data given for indication and reference purposes only.
- ⑫ Definite-purpose (DP) contactors are available. Consult Customer Service for information; see contact details on inside front cover.

Contactors

Three-pole contactors with AC control circuit



B500-B630



B630 1000



B1250-B1600

	UL/CSA General (purpose) use	UL/CSA Fuse class	Short circuit current RMS sym. 600VAC	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight
	[A]	Type/[A]	[kA] UL/CSA		NO	NC	n°	[kg]
	16	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.180
					1Ⓢ	—	10	0.180
	20	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.180
					1Ⓢ	—	10	0.180
	20	K5/30	5	Faston	—	1Ⓢ	10	0.180
					1Ⓢ	—	10	0.180
	20	K5/30	5	Rear PCB solder pin	—	1Ⓢ	10	0.197
					1Ⓢ	—	10	0.197
	20	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.180
					1Ⓢ	—	10	0.180
	25	RK5/60	5	Clamp-screw	—	1Ⓢ	1	0.367
					1Ⓢ	—	Ⓢ	0.367
	28	RK5/70	5	Clamp-screw	—	1Ⓢ	1	0.367
					1Ⓢ	—	Ⓢ	0.367
	32	RK5/80	5	Clamp-screw	—	1Ⓢ	1	0.367
					1Ⓢ	—	Ⓢ	0.367
	32	RK5/100	5	Clamp-screw	—	1Ⓢ	1	0.367
					1Ⓢ	—	Ⓢ	0.367
	45	RK5/100	5	Clamp-screw	—	—	1	0.432
	55	RK5/125	5	Clamp-screw	—	—	1	0.432
	55	RK5/150	5	Clamp-screw	—	—	1	0.432
	90	RK5/200	5	Lug-clampⓈ	—	—	1	1.350
	110	RK5/225	10	Lug-clampⓈ	—	—	1	1.350
	125	RK5/250	10	Lug-clampⓈ	—	—	1	1.360
	125	RK5/250	10	Lug-clampⓈ	—	—	1	1.360
	125	RK5/250	10	Lug-clampⓈ	—	—	1	1.360
	160	RK5/500	5	Screw-nut	—	—	1	5.290
	250	RK5/500	5	Screw-nut	—	—	1	5.400
	275	RK5/500	10	Screw-nut	—	—	1	5.400
	350	L/800	18	Screw-nut	—	—	1	9.575
	450	L/800	18	Screw-nut	—	—	1	9.575
	550	L/800	18	Screw-nut	—	—	1	9.575
	700	L/1200 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	18.000
	800	L/1500 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	18.620
	1000	L/1500 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	21.400
	No UL	—	—	Screw-nut	2	4	1	48.000
	No UL	—	—	Screw-nut	2	4	1	50.000

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

Certifications and compliance

Certifications obtained:

Type	UL Canada USA	UL USA	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 Ⓢ	●			●	●		
BF09 AⓈ	●		●	●	●	●	
BF12 AⓈ	●		●	●	●	●	
BF18 AⓈ	●		●	●	●	●	
BF25 A	●		●	●	●	●	
BF26 AⓈ	●		●	●	●	●	
BF32 AⓈ	●		●	●	●	●	
BF38 A	●		●	●	●	●	
BF50 Ⓢ	●		●	●	●	●	●
BF65 Ⓢ	●		●	●	●	●	●
BF80	●		●	●	●	●	●
BF95	●		●	●	●	●	●
BF110	●			●	●		
B115		●	●	●	●	●	●
B145		●	●	●	●	●	●
B180		●	●	●	●	●	●
B250		●	●	●	●	●	●
B310		●	●	●	●	●	●
B400		●	●	●	●	●	●
B500	●			●			
B630	●			●	●		
B630 1000	●			●			
B1250				●			
B1600				●			

● Certified products.

- UL - UL Listed, for USA and Canada (cULus - File E93602) for BG... BF110 types indicated, as Motor Controllers – Contactors, except for BGP09... types which are UL Recognized, for USA and Canada (UL File E93602 – Component - Products having this type of marking are intended for use as components of complete workshop-assembled equipment). BGP is UL rated up to 300V; for type with rating up to 600V, consult Customer Service for information – see contact details on inside front cover.
- UL Listed for USA only (File E93602) for B115...B400 types indicated, as Motor Controllers – Contactors.
- UL Listed for USA and Canada (cULus - File E172189) for B500... B630 1000 and B500 SL... B630 SL types as Industrial Control Switches.
- CSA - BF09...BF95 and B115...B400 contactors are also CSA certified, for Canada only (File 54332). In addition, BF12..., BF25..., BF38... and BF65... types are CSA certified as "Elevator Equipment" (File 54332, class 2411). See technical characteristics on page 2-63 for BF12-BF38 and page 2-65 for BF65.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14 for all types; UL 60947-1, UL 60947-4-1A, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1 for B115... B630 1000 types.

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.



BG06 D-BG12 D
BG09 L



BF09 D-BF25 D
BF09 L-BF25 L



BF26 D-BF38 D
BF26 L-BF38 L



BF50 C-BF110 C



B115-B180



B250-B400

Three-phase motor control													UL/CSA details						
Order code DC coil	DC coil	IEC operating current I _{th} (AC1)				I _e (AC3) ≤440V at ≤55°C	Maximum IEC power at ≤55°C (AC3)							Maximum UL/CSA horsepower ratings					
	Low consumption	≤40°C	≤55°C	≤70°C	230V		400V	415V	440V	500V	690V	1000V	Single phase	Three phase					
		[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]	
11 BG06 01 D❶	—	16	14	12 (≤60°C)	6	1.5	2.2	2.4	2.5	3	3	—	⅓	1	1½	2	3	3	
11 BG06 10 D❶	—																		
11 BG09 01 D❶	11 BG09 01 L❷	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—	½	1½	2	3	5	5	
11 BG09 10 D❶	11 BG09 10 L❷																		
11 BGF09 01 D❶	11 BGF09 01 L❷	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—	½	1½	2	3	5	5	
11 BGF09 10 D❶	11 BGF09 10 L❷																		
11 BGP09 01 D❶	—	20	18	15 (≤60°C)	9	2.2	4❸	4.3❸	4.5❸	5❸	—	—	½	1½	2	3	5❸	—	
11 BGP09 10 D❶	—																		
11 BG12 01 D❶❷	—	20	18	15 (≤60°C)	12	3.2	5.7	6.2	5.5	5	5	—	½	1½	3	3	7½	10	
11 BG12 10 D❶❷	—																		
BF09 01 D❶❸❷	BF09 01 L❷❸❷	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—	¾	2	3	3	5	7½	
BF09 10 D❶❸❷	BF09 10 L❷❸❷																		
BF12 01 D❶❸❷	BF12 01 L❷❸❷	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—	1	2	5	5	7½	10	
BF12 10 D❶❸❷	BF12 10 L❷❸❷																		
BF18 01 D❶❸❷	BF18 01 L❷❸❷	32	26	23	18	4	7.5	9	9	10	10	—	1	3	5	5	10	15	
BF18 10 D❶❸❷	BF18 10 L❷❸❷																		
BF25 01 D❶❹	BF25 01 L❷❹	32	26	23	25	7	12.5	13.4	13.4	15	11	—	2	3	7½	7½	15	15	
BF25 10 D❶❹	BF25 10 L❷❹																		
BF26 00 D❶❸❷	BF26 00 L❷❸❷	45	36	32	26	7.3	13	14	14	15.6	18.5	—	2	5	7½	7½	15	20	
BF32 00 D❶❸❷	BF32 00 L❷❸❷	56	45	40	32	8.8	16	17	17	20	22	—	3	7½	10	10	20	25	
BF38 00 D❶❹	BF38 00 L❷❹	56 (60❸)	45 (48❸)	40 (42❸)	38	11	18.5	18.5	18.5	20	22	—	3	7½	10	15	30	30	
11 BF50 C 00❶❸❷	—	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25	5	10	10	15	30	40	
11 BF65 C 00❶❸❷	—	110	90	70	65	18.5	33	36	36	45.3	59.7	30	—	—	20	25	50	60	
11 BF80 C 00❶❹	—	125	100	80	80	23	41	46	46	56	74	37	—	—	25	30	60	75	
11 BF95 C 00❶❹	—	125	100	80	95	27.6	50	55	55	56	74	45	—	—	30	30	60	75	
11 BF110 C 00❶❹	—	125	100	80	110	33	61	66	70	59	80	45	—	—	30	40	75	100	
11 B115 00❶❹	—	160	150	110	110	33	61	66	70	80	100	63	—	—	30	40	75	100	
11 B145 00❶❹	—	250	235	190	150	46	80	88	93	100	120	75	—	—	50	50	100	125	
11 B180 00❶❹	—	275	250	200	185	57	100	108	115	123	144	103	—	—	60	75	150	150	
11 B250 00❶❹	—	350	300	250	265	83	140	155	164	176	212	156	—	—	75	100	200	250	
11 B310 00❶❹	—	450	370	300	320	100	170	188	200	213	256	180	—	—	100	125	250	300	
11 B400 00❶❹	—	550	430	360	420	130	225	247	263	271	352	208	—	—	125	150	350	400	
11 B500 00❶❹	—	700	550	500	520	156	290	306	328	367	416	312	—	—	150❶	200❶	400❶	450❶	
11 B630 00❶❹	—	800	640	540	630	198	335	368	368	368	440	368	—	—	200❶	250❶	500❶	500❶	
11 B630 1000 00❶❹	—	1000	850	700	—	For AC1/Resistive duty only, see page 2-8.							—	—	—	—	—	—	

- Complete order code with coil voltage digit.
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).
Standard voltages are as follows:
— DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.
Example: 11 BG06 10 D012 for mini-contactor BG06, three poles, with one NO contact and 12VDC coil.
11 BG09 10 D024 V120 for mini-contactor BG09, three poles, with one NO contact and 24VDC coil, complete with built-in TVS (diode) suppressor.
- 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.
The BF09-BF38L types already have a standard supplied built-in TVS (Transient Voltage Suppressor).
Standard voltages are as follows:
— DC 024 / 048V.
Example: 11 BG09 01 L024 for mini-contactor BG09, three poles, with one NC contact and 24VDC low-consumption coil.
- Maximum combinations of add-on blocks are given on page 3-19.
- 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, three poles, without auxiliary contacts and with 110-125VAC/DC coil.
The 24VAC/DC voltage is not possible for B500-B630 1000 contactors.
Other voltages available on request.
- If predisposed for mechanical latch (G495), the order code becomes 11 B...L.00 ④ ⑤.
If already fitted with mechanical latch (G495), the order code becomes 11 B...L.00 ④ ⑤ 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, three poles, without auxiliary contacts, with 110-125VAC/DC coil and mechanical latch powered at 48VDC.
 - G495 mechanical latch cannot be mounted.
 - Maximum voltage is limited at 300V for UL. For certified type up to 600V, consult Customer Service for information; see contact details on inside front cover.
 - Highly conductive auxiliary contact.
 - For use at this other current value, a 16mm² cable, headed with a fork terminal, must be used.
 - No UL/CSA ratings; data given for indication and reference purposes only.
 - Definite-purpose (DP) contactors are available. Consult Customer Service for information; see contact details on inside front cover.

Contactors

Three-pole contactors with DC control circuit



B500-B630



B630 1000

	UL/CSA General (purpose) use	UL/CSA Fuse class	Short circuit current RMS sym. 600VAC	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight
	[A]	Type/[A]	[kA] UL/CSA		NO	NC	n°	[kg]
	16	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.214
					1Ⓢ	—	10	0.214
	20	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.214
					1Ⓢ	—	10	0.214
	20	K5/30	5	Faston	—	1Ⓢ	10	0.210
					1Ⓢ	—	10	0.210
	20	K5/30	5	Rear PCB solder pin	—	1Ⓢ	10	0.240
					1Ⓢ	—	10	0.240
	20	K5/30	5	Clamp-screw	—	1Ⓢ	10	0.214
					1Ⓢ	—	10	0.214
	25	RK5/60	5	Clamp-screw	—	1Ⓢ	1	0.494
					1	—	1	0.494
	28	RK5/70	5	Clamp-screw	—	1Ⓢ	1	0.494
					1	—	1	0.494
	32	RK5/80	5	Clamp-screw	—	1Ⓢ	1	0.494
					1	—	1	0.494
	32	RK5/100	5	Clamp-screw	—	1Ⓢ	1	0.494
					1	—	1	0.494
	45	RK5/100	5	Clamp-screw	—	—	1	0.559
	55	RK5/125	5	Clamp-screw	—	—	1	0.559
	55	RK5/150	5	Clamp-screw	—	—	1	0.559
	90	RK5/200	5	Lug-clamp Ⓢ	—	—	1	1.885
	110	RK5/225	5	Lug-clamp Ⓢ	—	—	1	1.885
	125	RK5/250	10	Lug-clamp Ⓢ	—	—	1	1.895
	125	RK5/250	10	Lug-clamp Ⓢ	—	—	1	1.895
	125	RK5/250	10	Lug-clamp Ⓢ	—	—	1	1.895
	160	RK5/500	10	Screw-nut	—	—	1	5.290
	250	RK5/500	10	Screw-nut	—	—	1	5.400
	275	RK5/500	10	Screw-nut	—	—	1	5.400
	350	L/800	18	Screw-nut	—	—	1	9.635
	450	L/800	18	Screw-nut	—	—	1	9.635
	500	L/800	18	Screw-nut	—	—	1	9.635
	700 Ⓢ	L/1200 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	18.060
	800 Ⓢ	L/1500 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	18.620
	1000 Ⓢ	L/1500 Ⓢ	18 Ⓢ	Screw-nut	—	—	1	21.400

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

Certifications and compliance

Certifications obtained:

Type	UL Canada USA	UL USA	CSA	EAC	CCC	Register of shipping RINA	LR CCS
BG06 D	●			●	●		
BG09 D	●			●	●		
BG12 D	●			●	●		
BGF09 D	●			●	●		
BGP09 DⓈ	●			●	●		
BF09 D - BF09 L	●		●	●	●	●	
BF12 D - BF12 L	●		●	●	●	●	
BF18 D - BF18 L	●		●	●	●	●	
BF25 D - BF25 L	●		●	●	●	●	
BF26 D - BF26 L	●		●	●	●	●	
BF32 D - BF32 L	●		●	●	●	●	
BF38 D - BF38 L	●		●	●	●	●	
BF50 C	●		●	●	●		
BF65 C	●		●	●	●		
BF80 C	●		●	●	●		
BF95 C	●		●	●	●		
BF110 C	●			●	●		
B115		●	●	●	●	●	●
B145		●	●	●	●	●	●
B180		●	●	●	●	●	●
B250		●	●	●	●	●	●
B310		●	●	●	●	●	●
B400		●	●	●	●	●	●
B500	●			●			
B630	●			●	●		
B630 1000	●			●			

● Certified products.

- UL - UL Listed, for USA and Canada (cULus File E93602) for BG...BF110 types indicated, as Motor Controllers – Contactors, except for BGP09... types which are UL Recognized, for USA and Canada (cULus File E93602 – Component). Products having this type of marking are intended for use as components of complete workshop-assembled equipment.
BGP is UL rated up to 300V; for type with rating up to 600V, consult Customer Service for information – see contact details on inside front cover.
UL Listed for USA only (File E93602) for B115...B400 types indicated, as Motor Controllers – Contactors.
UL Listed for USA and Canada (cULus - File E172189) for B500...B630 1000 and B500 SL... B630 SL types as Industrial Control Switches.
- CSA - BF09...BF95 and B115...B400 contactors are also CSA certified, for Canada only (File 54332).
In addition, BF12..., BF25..., BF38... and BF65... types are CSA certified as "Elevator Equipment" (File 54332, class 2411).
See technical characteristics on page 2-63 for BF12-BF38 and page 2-65 for BF65.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14 for all types; UL 60947-1, UL 60947-4-1A, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1 for B115... B630 1000 types.

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.



BG09 T4 A



BF09 A T4A-BF18 T4 A



BF26 T4 A-BF38 T4 A



BF65 40 - BF80 40



B115 4-B180 4



B250 4-B400 4

Resistive load control

Order code	IEC operating current Ith (AC1)			Maximum IEC power at ≤40°C (AC1)								UL/CSA details
	AC coil	≤40°C	≤55°C	≤70°C	230V	400V	415V	440V	500V	690V	1000V	UL/CSA General (purpose) use
		[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[A]
11 BG09 T4 A①⑩		20	18	15 (≤60°C)	8	14	14	15	16	22	—	20
11 BGF09 T4 A①		20	18	15 (≤60°C)	8	14	14	15	16	22	—	20
11 BGP09 T4 A①		20	18	15 (≤60°C)	8	14⑦	14⑦	15⑦	16⑦	—	—	20
BF09 T4 A①⑩		25	20	18	9.5	16	17	18	21	27	—	25
BF12 T4 A①⑩		28	23	20	10	18	19	20	23	32	—	28
BF18 T4 A①⑩		32	26	23	12	21	22	23	26	36	—	32
BF26 T4 A①③⑩		45	36	32	17	30	31	33	37	51	—	45
BF38 T4 A①③		56 (60③)	45 (48③)	40 (42③)	21	36	38	40	45	62	—	55
11 BF50 40①⑩		90	80	65	34	59	64	65	74	98	—	90
11 BF65 40①⑩		110	90	70	41	72	78	80	95	112	—	110
11 BF80 40①		125	100	80	47	82	90	90	108	128	—	125
11 B115 4 00②③		160	150	110	57	98	107	115	129	173	250	160
11 B145 4 00②③		250	235	190	91	150	162	180	196	270	390	250
11 B180 4 00②③		275	250	200	95	160	177	200	213	298	430	275
11 B250 4 00②③		350	300	250	124	214	234	255	282	380	560	350
11 B310 4 00②③		450	370	300	158	270	293	325	350	488	700	450
11 B400 4 00②③		550	430	360	200	345	377	400	452	598	870	550
11 B500 4 00②③		700	550	500	252	438	478	500	575	755	1100	700
11 B630 4 00②③		800	640	540	288	500	545	580	655	860	1250	800
11 B630 1000 4 00②③		1000	850	700	350	600	630	725	750	1000	1600	1000
11 B1250 4 24⑥⑥		1250	1050	880	480	830	900	905	1100	1450	2000	No UL/CSA
11 B1600 4 24⑥⑥		1600	1360	1120	550	950	1000	1160	1200	1650	2500	No UL/CSA

① Complete order code with coil voltage digit or voltage digit followed by 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, without auxiliary contacts and 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...4SL 00 ②.

If already fitted with mechanical latch (G495), the order code becomes 11 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, without auxiliary contacts, 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 2NO+4NC auxiliary contacts and 110-125VAC/DC 50/60Hz coil.

⑦ Maximum voltage is limited at 300V for UL. For certified type up to 600V. Consult Customer Service for information; see contact details on inside front cover.

⑧ Whenever the BF26 T4 or BF38 T4 types need to be mechanically interlocked with either the BFX50 00 or BFX50 01, the add-on fourth pole of one of the contactors needs to be removed from the right side and fitted on the left side.

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

⑩ Definite-purpose (DP) contactors are available. Consult Customer Service for information; see contact details on inside front cover.



B500 4-B630 4



B630 1000 4



B1250-B1600 4

UL/CSA Fuse class	Short circuit current RMS sym. 600VAC	Type of terminal	Incorporated auxiliary contacts	Quantity per pkg	Weight
Type / [A]	[kA] UL/CSA		NO NC	n°	[kg]
K5 / 30	5	Clamp-screw	none none	10	0.180
K5 / 30	5	Faston	none none	10	0.180
K5 / 30	5	Rear PCB solder pin	none none	10	0.197
RK5 / 60	5	Clamp-screw	none none	1	0.367
RK5 / 70	5	Clamp-screw	none none	1	0.367
RK5 / 80	5	Clamp-screw	none none	1	0.367
RK5 / 100	5	Clamp-screw	none none	1	0.508
RK5 / 150	5	Clamp-screw	none none	1	0.508
RK5 / 200	5	Lug-clamp ⑪	none none	1	1.554
RK5 / 225	10	Lug-clamp ⑪	none none	1	1.554
RK5 / 250	10	Lug-clamp ⑪	none none	1	1.570
RK5 / 500	10	Screw-nut	none none	1	6.220
RK5 / 500	10	Screw-nut	none none	1	6.340
RK5 / 500	10	Screw-nut	none none	1	6.340
L/800	18	Screw-nut	none none	1	11.195
L/800	18	Screw-nut	none none	1	11.195
L/800	18	Screw-nut	none none	1	11.195
L/1200 ⑫	18 ⑫	Screw-nut	none none	1	20.910
L/1500 ⑫	18 ⑫	Screw-nut	none none	1	21.880
—	—	Screw-nut	2 4	1	57.500
—	—	Screw-nut	2 4	1	58.400

⑪ IEC/EN 60947-1 designation: Pillar terminal.

⑫ No UL/CSA ratings; data given for indication and reference purposes only.

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 2-16, 2-21 and 2-26).

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	UL Canada USA	UL USA	C S A	E A C	C C C	R I N A
BG09 T4 A	●			●	●	
BGF09 T4 A	●			●	●	
BGP09 T4 A ⑦	●			●	●	
BF09 T4 A	●		●	●	●	●
BF12 T4 A	●		●	●	●	●
BF18 T4 A	●		●	●	●	●
BF26 T4 A	●		●	●	●	●
BF38 T4 A	●		●	●	●	●
BF50 40	●		●	●	●	
BF65 40	●		●	●	●	
BF80 40	●		●	●	●	
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** - UL Listed, for USA and Canada (cULus File E93602) for BG...BF110 types indicated, as Motor Controllers – Contactors, except for BGP09... types which are UL Recognized, for USA and Canada (cULus File E93602 – Component). Products having this type of marking are intended for use as components of complete workshop-assembled equipment.
BGP is UL rated up to 300V; for type with rating up to 600V, consult Customer Service for information – see contact details on inside front cover.
UL Listed for USA only (File E93602) for B115...B400 types indicated, as Motor Controllers – Contactors.
UL Listed for USA and Canada (cULus - File E172189) for B500 4... B630 1000 4 and B500 4SL... B630 4SL types as Industrial Control Switches.
- CSA** - BF09...BF80 and B115...B400 contactors are also CSA certified, for Canada only (File 54332).
In addition, BF12..., BF25..., BF38... and BF65... types are CSA certified as "Elevator Equipment" (File 54332, class 2411).
See technical characteristics on page 2-63 for BF12-BF38 and page 2-65 for BF65.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14 for all types; UL 60947-1, UL 60947-4-1A, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1 for B115 4... B630 1000 4.
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).



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


BF50C 40-BF80C 40



B115 4-B180 4



B250 4-B400 4

Resistive load control

Order code DC coil	DC coil Low consumption	IEC operating current I _{th} (AC1)			Maximum IEC power at ≤40°C (AC1)							UL/CSA details UL/CSA General (purpose) use
		≤40°C	≤55°C	≤70°C	230V	400V	415V	440V	500V	690V	1000V	
		[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[A]
11 BG09 T4 D 0	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—	20
11 BGF09 T4 D 0	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—	20
11 BGP09 T4 D 0	—	20	18	15 (≤60°C)	8	14 ⑤	14 ⑤	15 ⑤	16 ⑤	—	—	20
BF09 T4 D 0 ⑥	BF09 T4 L 0 ⑥	25	20	18	9.5	16	17	18	21	27	—	25
BF18 T4 D 0 ⑥	BF18 T4 L 0 ⑥	32	26	23	12	21	22	23	26	36	—	32
BF26 T4 D 0 ⑥	BF26 T4 L 0 ⑥	45	36	32	17	30	31	33	37	51	—	45
BF38 T4 D 0 ⑥	BF38 T4 L 0 ⑥	56 (60 ⑨)	45 (48 ⑨)	40 (42 ⑨)	21	26	38	40	45	62	—	55
11 BF65C 40 0	—	110	90	70	41	72	78	80	95	112	—	110
11 BF80C 40 0	—	125	100	80	47	82	90	90	108	128	—	125
11 B115 4 000 ⑤	—	160	150	110	57	98	107	115	129	173	250	160
11 B145 4 000 ⑤	—	250	235	190	91	150	162	180	196	270	390	250
11 B180 4 000 ⑤	—	275	250	200	95	160	177	200	213	298	430	275
11 B250 4 000 ⑤	—	350	300	250	124	214	234	255	282	380	560	350
11 B310 4 000 ⑦	—	450	370	300	158	270	293	325	350	488	700	450
11 B400 4 000 ⑤	—	550	430	360	200	345	377	400	452	598	870	550
11 B500 4 000 ⑤	—	700	550	500	252	438	478	500	575	755	1100	700
11 B630 4 000 ⑤	—	800	640	540	288	500	545	580	655	860	1250	800
11 B630 1000 4 000 ⑦	—	1000	850	700	350	600	630	725	750	1000	1600	1000

1 Complete order code with coil voltage digit.

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

Standard voltages are as follows:

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

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

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

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

Standard voltages are as follows:

– DC 024 / 048V

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

3 Maximum combinations add-on blocks are page 2-19.

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 B145, four poles, without auxiliary contacts and 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 11 B...4SL 00 ④.

If already fitted with mechanical latch (G495), the order code becomes 11 B...4L 00 ④ ⑤.

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, without auxiliary contacts, 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. For certified type up to 600V consult Customer Service for information; see contact details on inside front cover.

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



B500 4-B630 4



B630 1000 4

	UL/CSA Fuse class	Short circuit RMS sym. 600VAC	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight
	Type / [A]	[kA] UL/CSA		NO	NC	n°	[kg]
	K5 / 30	5	Clamp-screw	—	—	10	0.220
	K5 / 30	5	Faston	—	—	10	0.220
	K5 / 30	5	Rear PCB solder pin	—	—	10	0.242
	RK5 / 60	5	Clamp-screw	—	—	1	0.498
	RK5 / 80	5	Clamp-screw	—	—	1	0.498
	RK5 / 100	5	Clamp-screw	—	—	1	0.665
	RK5 / 150	5	Clamp-screw	—	—	1	0.665
	RK5 / 225	5	Lug-clamp ⑩	—	—	1	2.035
	RK5 / 250	5	Lug-clamp ⑩	—	—	1	2.100
	RK5 / 500	10	Screw-nut	—	—	1	6.220
	RK5 / 500	10	Screw-nut	—	—	1	6.340
	RK5 / 500	10	Screw-nut	—	—	1	6.340
	L/800	18	Screw-nut	—	—	1	11.195
	L/800	18	Screw-nut	—	—	1	11.195
	L/800	18	Screw-nut	—	—	1	11.195
	L/1200 ⑩	18 ⑩	Screw-nut	—	—	1	20.910
	L/1200 ⑩	18 ⑩	Screw-nut	—	—	1	21.880
	L/1500 ⑩	18 ⑩	Screw-nut	—	—	1	25.600

⑩ No UL/CSA ratings; data given for indication and reference purposes only.

⑪ IEC/EN 60947-1 designation: Pillar terminal.

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 2-16, 2-21 and 2-26).

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	UL Canada USA	UL USA	CSA	EAC	CCC	RINA
BG09 T4 D	●			●	●	
BGF09 T4 D	●			●	●	
BGP09 T4 D ⑪	●			●	●	
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 C 40	●		●	●	●	
BF80 C 40	●		●	●	●	
B115 4		●	●	●	●	
B145 4		●	●	●	●	
B180 4		●	●	●	●	
B250 4		●	●	●	●	
B310 4		●	●	●	●	
B400 4		●	●	●	●	
B500 4	●			●		
B630 4	●			●	●	●
B630 1000 4	●			●		

● Certified products.

UL - UL Listed, for USA and Canada (cULus File E93602) for BG...BF110 types indicated, as Motor Controllers – Contactors, except for BGP09... types which are UL Recognized, for USA and Canada (cULus File E93602 – Component). Products having this type of marking are intended for use as components of complete workshop-assembled equipment.

BGP is UL rated up to 300V; for type with rating up to 600V, consult Customer Service for information – see contact details on inside front cover.

UL Listed for USA only (File E93602) for B115...B400 types indicated, as Motor Controllers – Contactors.

UL Listed for USA and Canada (cULus - File E172185) for B500 4... B630 1000 4 and B500 4SL... B630 4SL types as Industrial Control Switches.

CSA - BF09...BF95 and B115...B400 contactors are also CSA certified, for Canada only (File 54332).

In addition, BF12..., BF25..., BF38... and BF65... types are CSA certified as "Elevator Equipment" (File 54332, class 2411).

See technical characteristics on page 2-63 for BF12-BF38 and page 2-65 for BF65.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 n° 14 for all types; UL 60947-1, UL 60947-4-1A, CSA C22.2 n° 60947-1, CSA C22.2 n° 60947-4-1 for B115 4... B630 1000 4.

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).

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

2



11 BG09 T2...

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.

11 BG09 T2 A①	20	18	15	1	0.170
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DC COIL.

Terminals: clamp screw.

11 BG09 T2 D②	20	18	15	1	0.175
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NOTE: No coil change or replacement is possible.

Operational characteristics

Type	UL/CSA General use	Protection fuse IEC gG	UL K5	Conductor section	
	[A]	[A]	[A]	[mm²]	[AWG]
BG09...T2	20	20	30	0.75-2.5	18-12

Certifications and compliance

Certifications obtained: CCC, EAC; UL Listed, for USA and Canada (cULus - File E93602), as Motor Controllers - Contactors.

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

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 A①	25	20	18	1	0.340
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BF18 T2 A①	32	26	23	1	0.340
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BF26 T2 A①	45	36	32	1	0.420
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BF38 T2 A①	56 (60③)	45 (48③)	40 (42③)	1	0.420
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DC COIL.

Terminals: clamp screw.

BF18 T2 D②④	32	26	23	1	0.470
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BF26 T2 D②④	45	36	32	1	0.540
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BF38 T2 D②④	56 (60③)	45 (48③)	40 (42③)	1	0.540
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DC COIL. Low consumption (2.4W).

Terminals: clamp screw.

BF18 T2 L③④	32	26	23	1	0.470
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BF26 T2 L③④	45	36	32	1	0.540
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BF38 T2 L③④	56 (60③)	45 (48③)	40 (42③)	1	0.540
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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: 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 with coil voltage digit.
 The BF18-BF26-BF38 T2D types already have a standard supplied built-in TVS (Transient Voltage Suppressor).
 Standard voltages are:
 – DC 012 / 024 / 048 / 060 / 110 / 125 / 220V.
 Example: 11 BG09 T2 D012 for mini-contactor BG09 T2, 2 poles NO and 2 poles NC, with 12VDC coil.

- ③ Low-consumption version.
 Complete the order code with coil voltage digit.
 The BF18-BF26-BF38 T2L types already have a standard supplied built-in TVS (Transient Voltage Suppressor).
 Standard voltages are as follows:
 – DC 024 / 048V.
 Example: BF18 T2 L024 for contactor BF18 T2, 2 poles NO and 2 poles NC, with 24VDC low-consumption coil.

- ④ Maximum combinations of add-on blocks are given on page 2-19.

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

Operational characteristics

Type	UL/CSA General use	Protection fuse IEC gG	UL RK5	Conductor section	
	[A]	[A]	[A]	[mm²]	[AWG]

BF09 T2	25	32	60	1-6	16-10
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BF18 T2	32	40	80	1-6	16-10
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BF26 T2	45	50	100	1.5-10	14-6
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BF38 T2	55	80	150	2.5-16	14-6
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Certifications and compliance

Certifications obtained: EAC, CCC, RINA; UL Listed for USA and Canada (cULus - File E93602) and CSA certified for Canada (File 54332), as Motor Controllers - Contactors.
 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 all BF09...BF38 versions only, add suffix V260 to the standard product order code.

Example: BF09 T2 A230 V260 for BF09, 2NO+2NC main poles, 230V 50/60Hz coil with compliant plastic materials).