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**THREE-POLE CONTACTORS**

- Ith ratings in AC1 duty at ≤40°C: 16 to 1600A
- Ie ratings in AC3 440V duty: 6 to 630A
- Power ratings in AC3 400V duty: 2.2 to 335kW
- AC, DC and DC low-consumption control coil.



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**FOUR-POLE CONTACTORS**

- Ith ratings in AC1 duty at ≤40°C: 20 to 1600A
- Power ratings in AC1 400V duty: 14 to 950kW
- AC, DC and DC low-consumption control coil.



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**CONTACTORS FOR POWER FACTOR CORRECTION**

- With limiting resistors included
- Power ratings at 400V: 7.5 to 60kvar
- AC control coil.



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**FOUR-POLE CONTACTORS WITH 2NO+2NC MAIN POWER POLES**

- Ith ratings in AC1 duty at ≤40°C: 20 to 60A
- AC, DC and DC low-consumption control coil.



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**FOUR-POLE CONTACTORS WITH 4NC MAIN POWER POLES**

- Ith ratings in AC1 duty at ≤40°C: 25 to 40A
- AC, DC and DC low-consumption control coil.



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**CONTROL RELAYS**

- AC, DC and DC low-consumption control coil
- Screw or Faston termination
- 4, 8 or 11 auxiliary contact composition.

- ◆ Three-pole versions up to 630A in AC3 duty
- ◆ Four-pole versions up to 1600A in AC1 duty
- ◆ Versions for power factor correction up to 60kvar at 400VAC
- ◆ Four-pole versions with 2NO+2NC or 4NC main poles
- ◆ Low-consumption versions with DC control circuit for control relays and 9-38A contactors in AC3 duty
- ◆ Versions with AC or DC control
- ◆ Extensive choice of add-on blocks and accessories
- ◆ Certified by primary international authorities.



PLANET - SWITCH

**Contactors**

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**BG series mini-contactors**



- Three-pole mini-contactors, 6 to 12A in AC3 duty
- Four-pole mini-contactors, 20A in 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		
	I <sub>e</sub> (AC3)	AC	DC	I <sub>th</sub> (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 in AC3 duty
- Four-pole contactors, 25 to 125A in AC1 duty
- Power factor correction contactors, 7.5 to 60kvar at 400V
- Versions with 2NO+2NC or 4NC main power poles
- Highly conductive auxiliary contacts
- AC or DC auxiliary supply
- Low-consumption versions for control relays and 9-38A contactors in AC3 duty.

	3 poles				4 poles			
	I <sub>e</sub> (AC3)	AC	DC	DC <sup>①</sup>	I <sub>th</sub> (AC1)	AC	DC	DC <sup>①</sup>
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**



- Three-pole contactors, 110 to 630A in AC3 duty
- Four-pole contactors, 160 to 1600A in AC1 duty
- Irrelevant AC and DC auxiliary supply
- Screw termination.

	3 poles			4 poles		
	I <sub>e</sub> (AC3)	AC	DC	I <sub>th</sub> (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 duty only.

### Simplicity

#### 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 BF09 to BF38 contactors with standard voltage DC coils include a built-in surge suppressor.

#### 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.

#### LOW-CONSUMPTION FOR 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 and 56A AC1 ratings, a side-mount fourth power pole can be snapped on the three-pole contactor. This solution consents to optimise Inventory.



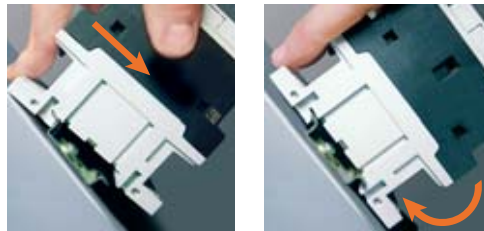
#### MECHANICAL INTERLOCK

Size 1 contactors, 9 to 25A in AC3, can be mechanically and electrically interlocked with size 2 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.



#### 45mm WIDE CONTACTORS

Ratings up to 38A - 18.5kW in AC3, merely 45mm wide: exceptional benefit for electric panel dimensions.

#### STARTER ASSEMBLY

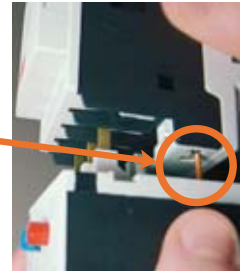
The assembly and wiring of electromechanical starters is extremely fast and reliable. Versatile electrical and mechanical connecting systems provide easy and foolproof assembly of compact starters.



#### 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.



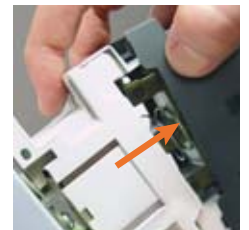
#### TERMINAL ADAPTABILITY

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.



### Safety

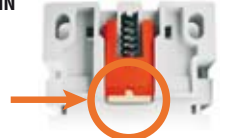
#### FRONT PROTECTION COVER FOR BREAKER - CONTACTOR CONNECTIONS

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



#### 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.



#### CONNECTION SECURITY - IP20

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



# Contactors

## Three-pole contactors with AC control circuit



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

Order code	Operating current I <sub>th</sub> (AC1)			I <sub>e</sub> (AC3) ≤440V at ≤55°C	Maximum power at ≤55°C (AC3)						
	≤40°C	≤55°C	≤70°C		230V	400V	415V	440V	500V	690V	1000V
AC coil	[A]	[A]	[A]	[A]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
11 BG06 01 Aⓐ	16	14	12 (≤60°C)	6	1.5	2.2	2.4	2.5	3	3	—
11 BG06 10 Aⓐ											
11 BG09 01 Aⓐ	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BG09 10 Aⓐ											
11 BGF09 01 Aⓐ	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BGF09 10 Aⓐ											
11 BGP09 01 Aⓐ	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	—	—
11 BGP09 10 Aⓐ											
11 BG12 01 Aⓐ	20	18	15 (≤60°C)	12	3.2	5.7	6.2	5.5	5	5	—
11 BG12 10 Aⓐ											
BF09 01 Aⓐ	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—
BF09 10 Aⓐ											
BF12 01 Aⓐ	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—
BF12 10 Aⓐ											
BF18 01 Aⓐ	32	26	23	18	4	7.5	9	9	10	10	—
BF18 10 Aⓐ											
BF25 01 Aⓐ	32	26	23	25	7	12.5	13.4	13.4	15	11	—
BF25 10 Aⓐ											
BF26 00 Aⓐ	45	36	32	26	7.3	13	14	14	15.6	18.5	—
BF32 00 Aⓐ	56	45	40	32	8.8	16	17	17	20	22	—
BF38 00 Aⓐ	56 (60ⓐ)	45 (48ⓐ)	40 (42ⓐ)	38	11	18.5	18.5	18.5	20	22	—
11 BF50 00ⓐ	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25
11 BF65 00ⓐ	110	90	70	65	18.5	33	36	36	45.3	59.7	30
11 BF80 00ⓐ	125	100	80	80	23	41	46	46	56	74	37
11 BF95 00ⓐ	125	100	80	95	27.6	50	55	55	56	74	45
11 BF110 00ⓐ	125	100	80	110	33	61	66	70	59	80	45
11 B115 00ⓐⓐ	160	150	110	110	33	61	66	70	80	100	63
11 B145 00ⓐⓐ	250	235	190	150	46	80	88	93	100	120	75
11 B180 00ⓐⓐ	275	250	200	185	57	100	108	115	123	144	103
11 B250 00ⓐⓐ	350	300	250	265	83	140	155	164	176	212	156
11 B310 00ⓐⓐ	450	370	300	320	100	170	188	200	213	256	180
11 B400 00ⓐⓐ	550	430	360	420	130	225	247	263	271	352	208
11 B500 00ⓐⓐ	700	550	500	520	156	290	306	328	367	416	312
11 B630 00ⓐⓐ	800	640	540	630	198	335	368	368	368	440	368
11 B630 1000 00ⓐⓐ	100	850	700	—	For AC1 duty only, see page 3-8.						
11 B1250 24ⓐⓐ	1250	1050	880	—	For AC1 duty only, see page 3-8.						
11 B1600 24ⓐⓐ	1600	1360	1120	—	For AC1 duty only, see page 3-8.						

- 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 300V for UL. For certified type up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- 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 16mm<sup>2</sup> cable, headed with a fork terminal, must be used.



B500-B630



B630 1000



B1250-B1600

Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight [kg]
	NO	NC		
Clamp-screw	—	1Ⓢ	10	0.170
	1Ⓢ	—	10	0.170
Clamp-screw	—	1Ⓢ	10	0.170
	1Ⓢ	—	10	0.170
Faston	—	1Ⓢ	10	0.160
	1Ⓢ	—	10	0.160
Rear PCB solder pin	—	1Ⓢ	10	0.170
	1Ⓢ	—	10	0.170
Clamp-screw	—	1Ⓢ	10	0.170
	1Ⓢ	—	10	0.170
Clamp-screw	—	1Ⓢ	1	0.340
	1Ⓢ	—	Ⓢ	0.340
Clamp-screw	—	1Ⓢ	1	0.340
	1Ⓢ	—	Ⓢ	0.340
Clamp-screw	—	1Ⓢ	1	0.340
	1Ⓢ	—	Ⓢ	0.340
Clamp-screw	—	—	1	0.400
Clamp-screw	—	—	1	0.400
Clamp-screw	—	—	1	0.400
Lug-clamp	—	—	1	1.230
Lug-clamp	—	—	1	1.230
Lug-clamp	—	—	1	1.280
Lug-clamp	—	—	1	1.280
Lug-clamp	—	—	1	1.280
Screw-nut	—	—	1	5.100
Screw-nut	—	—	1	5.220
Screw-nut	—	—	1	5.220
Screw-nut	—	—	1	9.100
Screw-nut	—	—	1	9.250
Screw-nut	—	—	1	9.250
Screw-nut	—	—	1	17.600
Screw-nut	—	—	1	17.900
Screw-nut	—	—	1	21.000
Screw-nut	2	4	1	48.000
Screw-nut	2	4	1	50.000

### Certifications and compliance

Certifications obtained:

Type	CULus	UL	CSA	GOST	CCC	Register of shipping RINA	LRORS
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.

Ⓢ "Recognized". 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, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

Ⓢ This contactor is CSA certified as elevator equipment.

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

# Contactors

## Three-pole contactors with DC control circuit



**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 in AC3 duty

Order code DC coil	DC coil Low consumption	Operating current I <sub>th</sub> (AC1)			I <sub>e</sub> (AC3) ≤440V at ≤55°C	Maximum power at ≤55°C (AC3)						
		≤40°C [A]	≤55°C [A]	≤70°C [A]		230V [kW]	400V [kW]	415V [kW]	440V [kW]	500V [kW]	690V [kW]	1000V [kW]
11 BG06 01 D <sup>①</sup>	—	16	14	12 (≤60°C)	6	1.5	2.2	2.4	2.5	3	3	—
11 BG06 10 D <sup>①</sup>	—											
11 BG09 01 D <sup>①</sup>	11 BG09 01 L <sup>②</sup>	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BG09 10 D <sup>①</sup>	11 BG09 10 L <sup>②</sup>											
11 BGF09 01 D <sup>①</sup>	11 BGF09 01 L <sup>②</sup>	20	18	15 (≤60°C)	9	2.2	4	4.3	4.5	5	5	—
11 BGF09 10 D <sup>①</sup>	11 BGF09 10 L <sup>②</sup>											
11 BGP09 01 D <sup>①</sup>	—	20	18	15 (≤60°C)	9	2.2	4 <sup>③</sup>	4.3 <sup>③</sup>	4.5 <sup>③</sup>	5 <sup>③</sup>	—	—
11 BGP09 10 D <sup>①</sup>	—											
11 BG12 01 D <sup>①</sup>	—	20	18	15 (≤60°C)	12	3.2	5.7	6.2	5.5	5	5	—
11 BG12 10 D <sup>①</sup>	—											
BF09 01 D <sup>①④</sup>	BF09 01 L <sup>②④</sup>	25	20	18	9	2.2	4.2	4.5	4.8	5.5	7.5	—
BF09 10 D <sup>①④</sup>	BF09 10 L <sup>②④</sup>											
BF12 01 D <sup>①④</sup>	BF12 01 L <sup>②④</sup>	28	23	20	12	3.2	5.7	6.2	6.2	7.5	10	—
BF12 10 D <sup>①④</sup>	BF12 10 L <sup>②④</sup>											
BF18 01 D <sup>①④</sup>	BF18 01 L <sup>②④</sup>	32	26	23	18	4	7.5	9	9	10	10	—
BF18 10 D <sup>①④</sup>	BF18 10 L <sup>②④</sup>											
BF25 01 D <sup>①④</sup>	BF25 01 L <sup>②④</sup>	32	26	23	25	7	12.5	13.4	13.4	15	11	—
BF25 10 D <sup>①④</sup>	BF25 10 L <sup>②④</sup>											
BF26 00 D <sup>①④</sup>	BF26 00 L <sup>②④</sup>	45	36	32	26	7.3	13	14	14	15.6	18.5	—
BF32 00 D <sup>①④</sup>	BF32 00 L <sup>②④</sup>	56	45	40	32	8.8	16	17	17	20	22	—
BF38 00 D <sup>①④</sup>	BF38 00 L <sup>②④</sup>	56 (60 <sup>⑤</sup> )	45 (48 <sup>⑥</sup> )	40 (42 <sup>⑥</sup> )	38	11	18.5	18.5	18.5	20	22	—
11 BF50 C 00 <sup>①④</sup>	—	90	80	65	50	14.3	25	27.2	27.2	33.2	43.5	25
11 BF65 C 00 <sup>①④</sup>	—	110	90	70	65	18.5	33	36	36	45.3	59.7	30
11 BF80 C 00 <sup>①④</sup>	—	125	100	80	80	23	41	46	46	56	74	37
11 BF95 C 00 <sup>①④</sup>	—	125	100	80	95	27.6	50	55	55	56	74	45
11 BF110 C 00 <sup>①④</sup>	—	125	100	80	110	33	61	66	70	59	80	45
11 B115 00 <sup>④⑤</sup>	—	160	150	110	110	33	61	66	70	80	100	63
11 B145 00 <sup>④⑤</sup>	—	250	235	190	150	46	80	88	93	100	120	75
11 B180 00 <sup>④⑤</sup>	—	275	250	200	185	57	100	108	115	123	144	103
11 B250 00 <sup>④⑤</sup>	—	350	300	250	265	83	140	155	164	176	212	156
11 B310 00 <sup>④⑤</sup>	—	450	370	300	320	100	170	188	200	213	256	180
11 B400 00 <sup>④⑤</sup>	—	550	430	360	420	130	225	247	263	271	352	208
11 B500 00 <sup>④⑤</sup>	—	700	550	500	520	156	290	306	328	367	416	312
11 B630 00 <sup>④⑤</sup>	—	800	640	540	630	198	335	368	368	368	440	368
11 B630 1000 00 <sup>④⑤⑦</sup>	—	1000	850	700	—	For AC1 duty only, see page 3-8.						

- ① Complete order code with coil voltage digit. 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.
- 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 mini-contactor BG09, three poles, with one NC contact and 24VDC low-consumption coil.
- ③ Maximum combinations of add-on blocks are given on page 3-19.
- 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, 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.

- ⑤ If predisposed for mechanical latch (G495), the order code becomes 11 B...SL.00<sup>④</sup>. If already fitted with mechanical latch (G495), the order code becomes 11 B...L.00<sup>④</sup> ⑥.
- 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.
- ⑦ G495 mechanical latch cannot be mounted.
- ⑧ Maximum voltage is limited 300V for UL. For certified type up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- ⑨ Highly conductive auxiliary contact.
- ⑩ For use at this other current value, a 16mm<sup>2</sup> cable, headed with a fork terminal, must be used.



B500-B630



B630 1000

	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight [kg]
		NO	NC		
		—	1Ⓢ	10	0.175
Clamp-screw		1Ⓢ	—	10	0.175
Clamp-screw		—	1Ⓢ	10	0.175
Clamp-screw		1Ⓢ	—	10	0.175
Faston		—	1Ⓢ	10	0.165
Faston		1Ⓢ	—	10	0.165
Rear PCB solder pin		—	1Ⓢ	10	0.175
Rear PCB solder pin		1Ⓢ	—	10	0.175
Clamp-screw		—	1Ⓢ	10	0.175
Clamp-screw		1Ⓢ	—	10	0.175
Clamp-screw		—	1Ⓢ	10	0.470
Clamp-screw		1	—	10	0.470
Clamp-screw		—	1Ⓢ	10	0.470
Clamp-screw		1	—	10	0.470
Clamp-screw		—	1Ⓢ	5	0.470
Clamp-screw		1	—	5	0.470
Clamp-screw		—	1Ⓢ	5	0.470
Clamp-screw		1	—	5	0.470
Clamp-screw		—	—	1	0.540
Clamp-screw		—	—	1	0.540
Clamp-screw		—	—	1	0.540
Lug-clamp		—	—	1	1.690
Lug-clamp		—	—	1	1.690
Lug-clamp		—	—	1	1.730
Lug-clamp		—	—	1	1.730
Lug-clamp		—	—	1	1.730
Screw-nut		—	—	1	5.100
Screw-nut		—	—	1	5.220
Screw-nut		—	—	1	5.220
Screw-nut		—	—	1	9.100
Screw-nut		—	—	1	9.250
Screw-nut		—	—	1	9.250
Screw-nut		—	—	1	17.600
Screw-nut		—	—	1	17.900
Screw-nut		—	—	1	21.000

### Certifications and compliance

Certifications obtained:

Type	CULus	UL	CSA	GOST	CCC	Register of shipping RINA	Register of shipping LRS
BG06 D	●			●	●		
BG09 D	●			●	●		
BG12 D	●			●	●		
BGF09 D	●			●	●		
BGP09 D <sup>Ⓢ</sup>	● <sup>Ⓢ</sup>			●	●		
BF09 D - BF09 L	●		●	●	●		
BF12 D - BF12 L	●		● <sup>Ⓢ</sup>	●	●		
BF18 D - BF18 L	●		●	●	●		
BF25 D - BF25 L	●		● <sup>Ⓢ</sup>	●	●		
BF26 D - BF26 L	●		●	●	●		
BF32 D - BF32 L	●		●	●	●		
BF38 D - BF38 L	●		● <sup>Ⓢ</sup>	●	●		
BF50 C	●		●	●	●		
BF65 C	●		● <sup>Ⓢ</sup>	●	●		
BF80 C	●		●	●	●		
BF95 C	●		●	●	●		
BF110 C	●			●	●		
B115		●	●	●	●	●	●
B145		●	●	●	●	●	●
B180		●	●	●	●	●	●
B250		●	●	●	●	●	●
B310		●	●	●	●	●	●
B400		●	●	●	●	●	●
B500				●			
B630				●			
B630 1000				●			

● Certified products.

<sup>Ⓢ</sup> "Recognized". 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 up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

<sup>Ⓢ</sup> This contactor is CSA certified as elevator equipment.

Conformi a: IEC/EN 60947-1, IEC/EN 60947-4-1.

# Contactors

## Four-pole contactors with AC control circuit



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 in AC1 duty

Order code	Operating current I <sub>th</sub> (AC1)			Maximum 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 T4A①	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGF09 T4A①	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGP09 T4A①	20	18	15 (≤60°C)	8	14⑦	14⑦	15⑦	16⑦	—	—
BF09 T4A①	25	20	18	9.5	16	17	18	21	27	—
BF12 T4A①	28	23	20	10	18	19	20	23	32	—
BF18 T4A①	32	26	23	12	21	22	23	26	36	—
BF26 T4A①②	45	36	32	17	30	31	33	37	51	—
BF38 T4A①②	56 (60②)	45 (48②)	40 (42②)	21	36	38	40	45	62	—
11 BF50 40①	90	80	65	34	59	64	65	74	98	—
11 BF65 40①	110	90	70	41	72	78	80	95	112	—
11 BF80 40①	125	100	80	47	82	90	90	108	128	—
11 B115 4 00②③	160	150	110	57	98	107	115	129	173	250
11 B145 4 00②③	250	235	190	91	150	162	180	196	270	390
11 B180 4 00②③	275	250	200	95	160	177	200	213	298	430
11 B250 4 00②③	350	300	250	124	214	234	255	282	380	560
11 B310 4 00②③	450	370	300	158	270	293	325	350	488	700
11 B400 4 00②③	550	430	360	200	345	377	400	452	598	870
11 B500 4 00②③	700	550	500	252	438	478	500	575	755	1100
11 B630 4 00②③	800	640	540	288	500	545	580	655	860	1250
11 B630 1000 4 00②③	1000	850	700	350	600	630	725	750	1000	1600
11 B1250 4 24②③	1250	1050	880	480	830	900	905	1100	1450	2000
11 B1600 4 24②③	1600	1360	1120	550	950	1000	1160	1200	1650	2500

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 2N0+4NC auxiliary contacts and 110-125VAC/DC 50/60Hz coil.

⑦ Maximum voltage is limited 300V for UL. For certified type up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

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 16mm<sup>2</sup> cable, headed with a fork terminal, must be used.





B500 4-B630 4



B630 1000 4



B1250-B1600 4

	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight [kg]
		NO	NC		
	Clamp-screw	none	none	10	0.170
	Faston	none	none	10	0.160
	Rear PCB solder pin	none	none	10	0.170
	Clamp-screw	none	none	1	0.340
	Clamp-screw	none	none	1	0.340
	Clamp-screw	none	none	1	0.340
	Clamp-screw	none	none	1	0.510
	Clamp-screw	none	none	1	0.510
	Lug-clamp	none	none	1	1.430
	Lug-clamp	none	none	1	1.430
	Lug-clamp	none	none	1	1.470
	Screw-nut	none	none	1	5.960
	Screw-nut	none	none	1	6.100
	Screw-nut	none	none	1	6.100
	Screw-nut	none	none	1	10.600
	Screw-nut	none	none	1	10.800
	Screw-nut	none	none	1	10.800
	Screw-nut	none	none	1	20.800
	Screw-nut	none	none	1	21.500
	Screw-nut	none	none	1	25.620
	Screw-nut	2	4	1	57.000
	Screw-nut	2	4	1	59.000

### 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 3-16, 3-21 and 3-26).

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	CULUS	UL	CSA	GOST	CCC
BG09 T4 A	●			●	●
BGF09 T4 A	●			●	●
BGP09 T4 A	●			●	●
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.

"Recognized". 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 up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

This contactor is CSA certified as elevator equipment.

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



BG09 T4 D

BF09 T4 D-BF18 T4 D  
BF09 T4 L-BF18 T4 LBF26 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 in AC1 duty

Order code DC coil	DC coil Low consumption	Operating current I <sub>th</sub> (AC1)			Maximum 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 ①	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGF09 T4 D ①	—	20	18	15 (≤60°C)	8	14	14	15	16	22	—
11 BGP09 T4 D ①	—	20	18	15 (≤60°C)	8	14⑤	14⑤	15⑤	16⑤	—	—
BF09 T4 D ①②	BF09 T4 L ②③	25	20	18	9.5	16	17	18	21	27	—
BF18 T4 D ①②	BF18 T4 L ②③	32	26	23	12	21	22	23	26	36	—
BF26 T4 D ①②	BF26 T4 L ②③	45	36	32	17	30	31	33	37	51	—
BF38 T4 D ①②	BF38 T4 L ②③	56 (60④)	45 (48④)	40 (42④)	21	26	38	40	45	62	—
11 BF65C 40 ①	—	110	90	70	41	72	78	80	95	112	—
11 BF80C 40 ①	—	125	100	80	47	82	90	90	108	128	—
11 B115 4 00 ④⑤	—	160	150	110	57	98	107	115	129	173	250
11 B145 4 00 ④⑤	—	250	235	190	91	150	162	180	196	270	390
11 B180 4 00 ④⑤	—	275	250	200	95	160	177	200	213	298	430
11 B250 4 00 ④⑤	—	350	300	250	124	214	234	255	282	380	560
11 B310 4 00 ④⑦	—	450	370	300	158	270	293	325	350	488	700
11 B400 4 00 ④⑤	—	550	430	360	200	345	377	400	452	598	870
11 B500 4 00 ④⑤	—	700	550	500	252	438	478	500	575	755	1100
11 B630 4 00 ④⑤	—	800	640	540	288	500	545	580	655	860	1250
11 B630 1000 4 00 ④⑦	—	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 / 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.

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 3-19.

## 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 300V for UL. For certified type up to 600V contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

⑨ For use at this other current value, a 16mm<sup>2</sup> cable, headed with a fork terminal, must be used.



B500 4-B630 4



B630 1000 4

	Type of terminal	Incorporated auxiliary contacts		Quantity per pkg	Weight
		NO	NC		
	Clamp-screw	—	—	10	0.175
	Faston	—	—	10	0.165
	Rear PCB solder pin	—	—	10	0.175
	Clamp-screw	—	—	1	0.470
	Clamp-screw	—	—	1	0.470
	Clamp-screw	—	—	1	0.625
	Clamp-screw	—	—	1	0.625
	Lug-clamp	—	—	1	1.940
	Lug-clamp	—	—	1	1.950
	Screw-nut	—	—	1	5.960
	Screw-nut	—	—	1	6.100
	Screw-nut	—	—	1	6.100
	Screw-nut	—	—	1	10.600
	Screw-nut	—	—	1	10.800
	Screw-nut	—	—	1	10.800
	Screw-nut	—	—	1	20.800
	Screw-nut	—	—	1	21.500
	Screw-nut	—	—	1	25.620

### 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 3-16, 3-21 and 3-26).

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	C U L U S	U L	C S A	G O S T	C C C
BG09 T4 D	●			●	●
BGF09 T4 D	●			●	●
BGP09 T4 D				●	●
BF09 T4 D - BF09 T4 L	●		●	●	●
BF18 T4 D - BF18 T4 L	●		● <sup>Ⓜ</sup>	●	●
BF26 T4 D - BF26 T4 L	●		● <sup>Ⓜ</sup>	●	●
BF38 T4 D - BF38 T4 L	●		● <sup>Ⓜ</sup>	●	●
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.



"Recognized". 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 up to 600V, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

<sup>Ⓜ</sup> This contactor is CSA certified as elevator equipment.

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

## Contactors for power factor correction with AC control circuit

### BFK contactors (including limiting resistors)



BFK...

Order code	Maximum power at ≤50°C (AC-6b) ❶				NO	Qty per pkg	Wt [kg]
	240V	400V	480V	690V			
	[kvar]	[kvar]	[kvar]	[kvar]		n°	
AC COIL.							
<b>BFK09 10A</b> ❷	4.5	7.5	9	10	1	10	0.413
<b>BFK12 10A</b> ❷	7	12.5	14	16	1	10	0.413
<b>BFK18 10A</b> ❷	9	15	17	20	1	10	0.413
<b>BFK26 00A</b> ❷	11	20	22	22	–	10	0.472
<b>BFK32 00A</b> ❷	14	25	27.5	30	–	10	0.472
<b>BFK38 00 A</b> ❷	17	30	33	36	–	10	0.472
<b>11 BF50K 00</b> ❸	22	38	41	46	–	5	1.440
<b>11 BF65K 00</b> ❸	26	45	50	56	–	5	1.470
<b>11 BF70K 00</b> ❸	30	50	56	65	–	5	1.470
<b>11 BF80K 00</b> ❸	34	60	65	70	–	5	1.470

❶ Consult our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com) for the use of contactors to switch with delta connection.

❷ One NO auxiliary contact incorporated.

❸ 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 / 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.

#### Operational characteristics

Type	Rated operational current [A]	Protection fuse gG [A]
BFK09	12	16
BFK12	18	25
BFK18	23	40
BFK26	30	40
BFK32	36	63
BF38K	43	63
BF50K	58	80
BF65K	70	100
BF70K	75	125
BF80K	90	125

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: ≥200,000 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, GOST and CCC.

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

### Kits to assemble BFK contactors



11 G46...

Order code	For contactor	Qty per pkg	Wt	
			n°	[kg]
<b>11 G460</b>	BF09 10A - BF12 10A - BF18 10A - BF26 00A - BF32 00A - BF38 00A	10		0.072
<b>11 G464</b>	BF50 00 - BF65 00 - BF80 00	10		0.080

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.

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



11 BG09 T2...

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

AC COIL.

Terminals: clamp screw.

<b>11 BG09 T2 A</b> ⓐ	20	18	15	1	0.170
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DC COIL.

Terminals: clamp screw.

<b>11 BG09 T2 D</b> ⓐ	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 change or replacement is possible.

#### Certifications and compliance

Certifications obtained: cULus, GOST and CCC.  
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1.

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



BF09 T2...



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

AC COIL.

Terminals: clamp screw.

<b>BF09 T2 A</b> ⓐ	25	20	18	1	0.340
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<b>BF18 T2 A</b> ⓐ	32	26	23	1	0.340
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<b>BF26 T2 A</b> ⓐ	45	36	32	1	0.420
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<b>BF38 T2 A</b> ⓐ	56 (60 <sup>ⓑ</sup> )	45 (48 <sup>ⓑ</sup> )	40 (42 <sup>ⓑ</sup> )	1	0.420
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DC COIL.

Terminals: clamp screw.

<b>BF18 T2 D</b> ⓐⓐ	32	26	23	1	0.470
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<b>BF26 T2 D</b> ⓐⓐ	45	36	32	1	0.540
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<b>BF38 T2 D</b> ⓐⓐ	56 (60 <sup>ⓑ</sup> )	45 (48 <sup>ⓑ</sup> )	40 (42 <sup>ⓑ</sup> )	1	0.540
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DC COIL. Low consumption (2.4W).

Terminals: clamp screw.



<b>BF18 T2 L</b> ⓐⓐ	32	26	23	1	0.470
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<b>BF26 T2 L</b> ⓐⓐ	45	36	32	1	0.540
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<b>BF38 T2 L</b> ⓐⓐ	56 (60 <sup>ⓑ</sup> )	45 (48 <sup>ⓑ</sup> )	40 (42 <sup>ⓑ</sup> )	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	215-16

#### Certifications and compliance

Certifications obtained: cULus, GOST, CCC and CSA.  
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1.

### Contactors four power poles, 4 NC BF series



BF18 T0...



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

AC COIL.

Terminals: clamp screw.

<b>BF18 T0 A</b> ⓐ	32	26	23	1	0.340
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<b>BF26 T0 A</b> ⓐ	45	36	32	1	0.420
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DC COIL.

Terminals: clamp screw.

<b>BF18 T0 D</b> ⓐⓐ	32	26	23	1	0.470
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<b>BF26 T0 D</b> ⓐⓐ	45	36	32	1	0.540
---------------------	----	----	----	---	-------

DC COIL. Low consumption (2.4W).

Terminals: clamp screw.

<b>BF18 T0 L</b> ⓐⓐ	32	26	23	1	0.470
---------------------	----	----	----	---	-------

#### Operational characteristics

Type	Protection fuse gG	Conductor section
	[A]	[mm²]

BF18 T0	40	1-6
BF26 T0	50	1.5-10

#### Certifications and compliance

Certifications obtained: cULus, GOST, CCC and CSA.  
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1.

ⓐ 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.

ⓑ Complete with coil voltage digit.

- 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.

ⓒ Low-consumption version.

- Complete the order code with coil voltage digit.
- 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.

ⓓ Maximum combinations of add-on blocks are given on page 3-19.

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

### Control relays BG00 type



11 BG00...



11 BGF00...

Order code	Configuration and number of contacts		Quantity per package	Wt [kg]
	NO	NC		
			n°	

#### AC COIL.

Terminals: clamp screw.

11 BG00 40 A①	4	0	1	0.170
11 BG00 31 A①	3	1	1	0.170
11 BG00 22 A①	2	2	1	0.170

Terminals: Faston.

11 BGF00 40 A①	4	0	1	0.160
11 BGF00 31 A①	3	1	1	0.160
11 BGF00 22 A①	2	2	1	0.160

#### DC COIL.

Terminals: clamp screw.

11 BG00 40 D②	4	0	1	0.175
11 BG00 31 D②	3	1	1	0.175
11 BG00 22 D②	2	2	1	0.175

Terminals: Faston.

11 BGF00 40 D②	4	0	1	0.165
11 BGF00 31 D②	3	1	1	0.165
11 BGF00 22 D②	2	2	1	0.165

#### DC COIL. Low-consumption (2.3W).

Terminals: clamp screw.

11 BG00 40 L③	4	0	1	0.175
11 BG00 31 L③	3	1	1	0.175
11 BG00 22 L③	2	2	1	0.175

Terminals: Faston.

11 BGF00 40 L③	4	0	1	0.165
11 BGF00 31 L③	3	1	1	0.165
11 BGF00 22 L③	2	2	1	0.165

① 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.

11 BG00 40 A460 60 for control relay BG00 with four NO auxiliary contacts and 460VAC 60Hz coil.

② Complete the order code with coil voltage digit.

Standard voltages are:

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

Example: 11 BG00 40 D012 for control relay BG00 with four NO auxiliary contacts and 12VDC coil.

③ Low-consumption version. No additional auxiliary contacts or the mechanical interlock can be mounted.

Complete the order code with coil voltage digit.

Standard voltages are:

– DC 024 / 048V.

Example: 11 BG00 40 L024 for control relay BG00 with four NO auxiliary contacts and 24VDC low-consumption coil.

④ All contacts are highly conductive.

#### Operational characteristics

- Rated insulation voltage  $U_i$ : 690V
- Rated conventional free air thermal current  $I_{th}$ : 10A
- Designation according to IEC/EN 60947-5-1: A600-Q600
- Low-consumption version cannot accept additional contacts.

NOTE: No coil change or replacement is possible.

#### Certifications and compliance

Certification obtained: cULus, GOST and CCC.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

### Control relays BF00 type



BF00... A...



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



Order code	Configuration and number of contacts		Quantity per package	Wt [kg]
	NO	NC		
			n°	

AC COIL.  
Terminals: clamp screw.

<b>BF00 40 A①</b>	4	0	1	0.340
<b>BF00 31 A①</b>	3	1	1	0.340
<b>BF00 22 A①</b>	2	2	1	0.340
<b>BF00 04 A①</b>	0	4	1	0.340

DC COIL.  
Terminals: clamp screw.

<b>BF00 40 D②③</b>	4	0	1	0.470
<b>BF00 31 D②③</b>	3	1	1	0.470
<b>BF00 22 D②③</b>	2	2	1	0.470
<b>BF00 04 D②③</b>	0	4	1	0.470

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

<b>BF00 40 L④⑤</b>	4	0	1	0.470
<b>BF00 31 L④⑤</b>	3	1	1	0.470
<b>BF00 22 L④⑤</b>	2	2	1	0.470
<b>BF00 04 L④⑤</b>	0	4	1	0.470

- ① 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: BF00 40 A230 for control relay BF00 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.
- ② 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.
- ③ Low-consumption version.  
Complete the order code with coil voltage digit.  
Standard voltages are as follows:  
- DC 024 / 048V.  
Example: BF00 40 L24 for control relay BF00 with four NO contacts and 24VDC low-consumption coil.
- ④ Maximum combinations of add-on blocks are given on page 3-19.
- ⑤ All contacts are highly conductive.

#### Operational characteristics

- Rated insulation voltage  $U_i$ : 690V
- Rated conventional free air thermal current  $I_{th}$ : 10A
- Designation according to IEC/EN 60947-5-1: A600-P600.

#### Certifications and compliance

Certifications obtained: cULus, GOST and CCC.  
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

# Contactors

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

### Add-on blocks and accessories



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



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



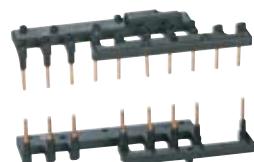
11 BGXF...



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



11 BGX50 00



11 SMX90 21  
11 SMX90 22

- ① Cannot be used with BG...D and BG...L types.
- ② Suitable for left-hand mini-contactor only of BGT and BGTP reversing and BGC changeover assemblies.
- ③ 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.
- ④ Cannot be used with BGX80 00 shroud.
- ⑤ 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.

Order code	Characteristics	Max qty per contactor	Qty per pkg	Wt
		n°	n°	[kg]
Auxiliary contacts. Screw terminals.				
11 BGX10 02	2NC	1	10	0.021
11 BGX10 11	1NO + 1NC	1	10	0.021
11 BGX10 20	2NO	1	10	0.021
11 BGX10 04①	4NC	1	10	0.028
11 BGX10 13①	1NO + 3NC	1	10	0.028
11 BGX10 22	2NO + 2NC	1	10	0.028
11 BGX10 31	3NO + 1NC	1	10	0.028
11 BGX10 40	4NO	1	10	0.028
Auxiliary contacts for reversing and changeover assemblies. Screw terminals.				
11 BGX11 11②	1NO + 1NC	1	10	0.021
11 BGX11 22②	2NO + 2NC	1	10	0.028
Auxiliary contacts. Faston terminals.				
11 BGXF10 02	2NC	1	10	0.021
11 BGXF10 11	1NO + 1NC	1	10	0.021
11 BGXF10 20	2NO	1	10	0.021
11 BGXF10 04③	4NC	1	10	0.028
11 BGXF10 13③	1NO + 3NC	1	10	0.028
11 BGXF10 22	2NO + 2NC	1	10	0.028
11 BGXF10 31	3NO + 1NC	1	10	0.028
11 BGXF10 40	4NO	1	10	0.028
Mechanical interlock.				
11 BGX50 00	For all BG types	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 00④	Raises protection to IP40 w/consumer boards		20	0.006
Paralleling links. Clamp-screw terminals.				
11 G323⑤	For 2 poles		10	0.009
11 G324			10	0.009
11 G325⑤	For 4 poles		10	0.014
11 G326			10	0.014
Rigid connecting kits.				
11 SMX90 21⑤	For star-delta starter composed by 3-contactor combination of BG types (line-star-delta)		10	0.040
11 SMX90 22⑤	For reversing contactor assembly composed by mini-contactors BG ⑤		1	0.026

### Operational characteristics for add-on auxiliary contacts

Type		BGX10... BGX11...	BGXF10...
Rated conventional free air thermal current I <sub>th</sub>	A	10	10
Rated insulation voltage U <sub>i</sub> voltage U <sub>i</sub>	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 <sup>2</sup>	2.5
	flexible with lug	mm <sup>2</sup>	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 page 1-5.

### Certifications and compliance

Certifications obtained: GOST; cULus and CCC for BGX10... auxiliary contacts.

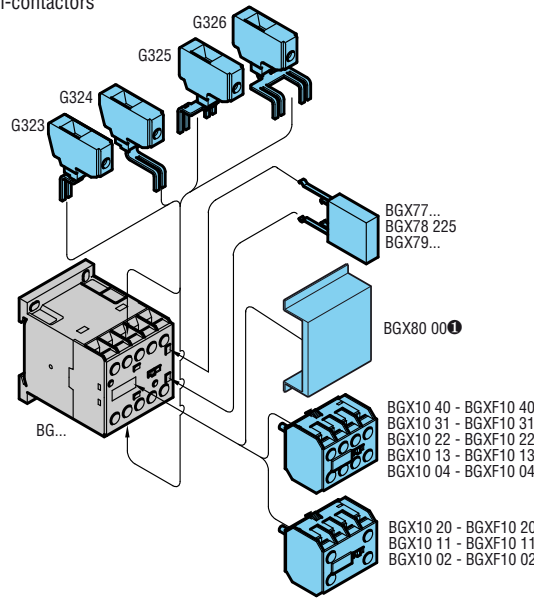
⑤ "Recognized": SMX90 21 and SMX90 22 only.

Compliant with standards: IEC/EN 60947-1;  
IEC/EN 60947-5-1 for auxiliary contacts.

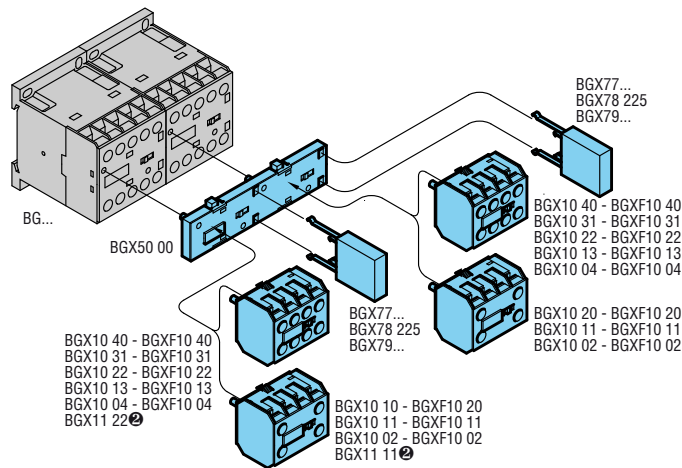


## Add-on blocks and accessories for BG series mini-contactors

Combinations: Mounting position on BG mini-contactors

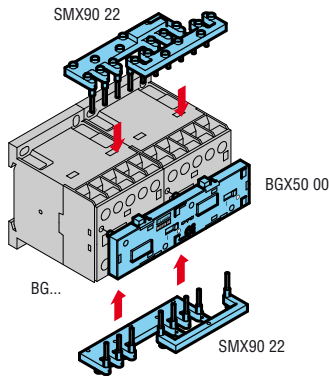


① Suitable for screw-termination contactors without BGX10... auxiliaries, BGX50 00 interlock or BGX7... surge suppressor.

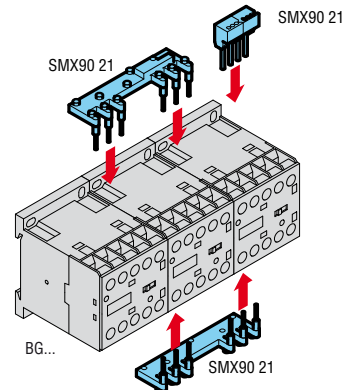


② For left-hand mini-contactor of BGT, BGTP and BGC contactor assemblies only. See page 5-9.

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

Auxiliary contacts with front centre mounting<sup>①</sup>.  
Screw terminals.

<b>BFX10 02</b>	2NC	1	5	0.030
<b>BFX10 11</b>	1NO + 1NC	1	5	0.030
<b>BFX10 20</b>	2NO	1	5	0.030
<b>11 G484 03</b>	3NC	1	5	0.039
<b>11 G484 12</b>	1NO + 2NC	1	5	0.039
<b>11 G484 21</b>	2NO + 1NC	1	5	0.039
<b>11 G484 30</b>	3NO	1	5	0.039
<b>BFX10 04</b>	4NC	1	5	0.048
<b>BFX10 13</b>	1NO + 3NC	1	5	0.048
<b>BFX10 22</b>	2NO + 2NC	1	5	0.048
<b>BFX10 31</b>	3NO + 1NC	1	5	0.048
<b>BFX10 40</b>	4NO	1	5	0.048

Auxiliary contacts for front lateral mounting. Screw terminals.

<b>11 G418 01</b>	1NC	2	10	0.014
<b>11 G418 01D</b>	1LB	2	10	0.014
<b>11 G418 10</b>	1NO	2	10	0.014
<b>11 G418 10A</b>	1EM	2	10	0.014

Auxiliary contacts for front lateral mounting. Faston terminals.

<b>11 G218</b>	1NO or 1NC reversible	2	10	0.011
<b>11 G481 02</b>	2NC	2	10	0.013
<b>11 G481 11</b>	1NO + 1NC	2	10	0.013
<b>11 G481 20</b>	2NO	2	10	0.013
<b>11 G482</b>	Changeover contact	2	10	0.013

Adapter for auxiliary contact side mounting.

<b>11 G280</b>	for G218	2	10	0.008
<b>11 G419</b>	for G418	2	10	0.010
<b>11 G483</b>	for G481 and G482	2	10	0.010

Auxiliary contacts for side mounting.  
Screw terminals.

<b>11 G428 01</b>	1NC	2	10	0.024
<b>11 G428 01D</b>	1LB	2	10	0.024
<b>11 G428 10</b>	1NO	2	10	0.024
<b>11 G428 10A</b>	1EM	2	10	0.024
<b>BFX12 02</b>	2NC for BF00, BF09-BF38	2	5	0.040
<b>BFX12 11</b>	1NO+1NC for BF00, BF09-BF38	2	5	0.040
<b>BFX12 20</b>	2NO for BF00, BF09-BF38	2	5	0.040

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on energisation for front centre mounting<sup>①</sup>.  
Screw terminals.

<b>11 G485 3</b>	3 s	1	1	0.040
<b>11 G485 6</b>	6 s	1	1	0.040
<b>11 G485 15</b>	15 s	1	5	0.040
<b>11 G485 30</b>	30 s	1	5	0.040
<b>11 G485 60</b>	60 s	1	5	0.040
<b>11 G485 120</b>	120 s	1	1	0.040

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on de-energisation for front centre mounting<sup>①</sup>.  
Screw terminals.

<b>11 G486 3</b>	3 s	1	1	0.040
<b>11 G486 6</b>	6 s	1	1	0.040
<b>11 G486 15</b>	15 s	1	5	0.040
<b>11 G486 30</b>	30 s	1	5	0.040
<b>11 G486 60</b>	60 s	1	5	0.040
<b>11 G486 120</b>	120 s	1	1	0.040
<b>11 G487</b>	70 ms	1	1	0.040

### Operational characteristics for add-on auxiliary contacts

Type		G418 G428 G485 <sup>②</sup> G486 <sup>②</sup> G487 <sup>②</sup>	G484 BFX10 BFX12	G218 G481	G482 <sup>③</sup>
Conventional free air thermal current I <sub>th</sub>	A	10	10	10	0.1 <sup>⑤</sup>
Rated insulation voltage U <sub>i</sub>	V	690	690	690	690
Terminals: Screw		M3.5	M3	—	—
Width	mm	7	7	—	—
Faston		—	—	1-6.35 2-2.8	1-6.35 2-2.8
Conductor section maximum with 1 or 2 cables flexible w/o lug	mm <sup>2</sup>	2.5	2.5	—	—
flexible c/w lug	mm <sup>2</sup>	2.5	2.5	2.5	2.5
AWG	n°	14	14	14	14
Terminal protection per IEC/EN 60529		IP20 <sup>⑥</sup>	IP20	IP20 <sup>⑦</sup>	IP20 <sup>⑦</sup>
IEC/EN 60947-5-1 designation	AC	A600	A600	A600	—
	DC	P600 <sup>⑧</sup>	Q600	P600	—
Mechanical life (in millions)	cycles	10 <sup>⑨</sup>	10	10	10

<sup>③</sup> For particularly severe ambient conditions, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

<sup>④</sup> Gold-plated contacts inside tight enclosure for use in pollutant environments.

<sup>⑤</sup> Referred to 125VAC and 30VDC.

<sup>⑥</sup> IP20 protection is warranted to equipment wired with 0.75mm<sup>2</sup> minimum cable section for G418 or G428 and 1mm<sup>2</sup> minimum for G485, G486 and G487 types.

<sup>⑦</sup> IP20 protection is warranted to equipment wired with insulated Faston terminals.

<sup>⑧</sup> Q600 for G418... and G428.

<sup>⑨</sup> 3 million cycles for G485, G486, G487.

### SM1 breaker - contactor connecting kits

See page 1-5.

### Maximum assembly combination of add-on blocks

See pages 3-22 to 3-25.

### Certifications and compliance

Certifications obtained:

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

● Certified products.

▲ Pending completion.

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

Add-on auxiliary contacts are compliant with the following standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

<sup>①</sup> The contacts can also be fitted on B type contactors using the adapter G358. See pages 3-26 and 3-27.

<sup>②</sup> Highly conductive contacts.

### BF00 A, BF09 A-BF110, BF50C-BF110C

Maximum assembly combination for alternating current contactors BF00 A, BF09 A-BF110 A  
Maximum assembly combination for direct current contactors BF50 C-BF110 C.

		Front centre mounting				Front lateral mounting			Side mounting		
		BFX10 02 BFX10 11 BFX10 20	BFX10 04 BGX10 13 BFX10 22 BFX10 31 BFX10 40	G485... G486... G487	G222... G272...	BFX50 02 BFX50 03	G269 2	G418... G218 G481... G482 G318... G319 225 G322...	G428... G419+ G418... G280+ G218 G483+ G481... G483+ G482	BFX12 02 BFX12 11 BFX12 20 BFX50 00 BFX50 01	
		n° of blocks	n° of blocks	n° of blocks	n° of blocks	n° of blocks	n° of blocks	n° of blocks	n° of blocks	n° of blocks	
Contactors	Control relays	BF00 A	1	1	1	1	—	1 o 2	1 o 2	1	
	Three poles	BF09 A-BF25 A	1	1	1	1	1	—	1 o 2	1 o 2	1
		BF26 A-BF38 A	1	1	1	1	1	—	1 o 2	1 o 2	1
		BF50-BF110	1	1	1	1	—	1	1 o 2	2	—
		BF50 C-BF110 C	1	1	1	1	—	1	1 o 2	2	—
	Four poles	BF09 A-BF25 A	1	1	1	1	1	—	1 o 2	1 o 2	1
		BF26 A-BF38 A	1	1	1	1	1	—	1	1 o 2	1
		BF50-BF80	1	1	1	1	—	1	1 o 2	2	—
BF65 C-BF80 C		1	1	1	1	—	1	1 o 2	2	—	

- ① Mounting is not possible when BFX10... block with 4 contacts and/or G222 latch are mounted.
- ② To fit the mechanical interlock, the add-on fourth pole needs to be mounted on the left side of the one of the contactors.
- ③ One only side-mount block can be fitted whenever the BFX50 0... interlock is mounted.
- ④ Another BFX10... or delayed G48... contact block can be mounted on the G222 or G272 mechanical latch.
- ⑤ G222 mechanical latch.
- ⑥ G272 mechanical latch.

### 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

		Centre mounting					Side mounting				
		BFX10... ...02 ...11 ...20	BFX10... ...04 ...13 ...22 ...31 ...40				G485... G486... G487	G222...	BFX50... ...02 ...03	BFX50 00 BFX50 01	BFX12...
		n° of blocks	n° of blocks				n° of blocks	n° of blocks	n° of blocks		
Contactors	Control relays	BF00 D	1	1	1	1	1	1	1	1	1
	Three poles	BF00 L	1	1	1	—	—	1	1	—	—
		BF09 D-BF25 D	1	1	1	1	1	1	1	1	1
		BF26 D-BF38 D	1	1	1	1	1	1	1	1	1
		BF09 L-BF25 L	1	1	1	—	—	1	1	—	—
	BF26 L-BF38 L	1	1	1	—	—	1	1	—	—	
	Four poles	BF09 D-BF25 D	1	1	1	1	1	1	1	1	1
		BF26 D-BF38 D	—	1	1	—	—	1	1	1	1
BF09 L-BF25 L		1	1	1	—	—	1	1	—	—	
BF26 L-BF38 L		—	1	—	—	—	—	—	1	—	

- ⑦ 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, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

# Contactors

## Add-on blocks and accessories for BF series contactors

### Add-on blocks

3



BFX42  
BFXD42



BFX50 00 BFX50 01



BFX50 02 BFX50 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 contactor	Qty per pkg	Wt
		n°	n°	[kg]
Fourth pole.				
<b>BFX42</b>	For BF26 A-BF32 A and BF38 A	1	1	0.070
<b>BFXD42</b>	For BF26 D-BF32 D BF38 D-BF26 L-BF32 L - BF38L	1	1	0.070
Mechanical interlocks.				
<b>BFX50 00</b>	Side mount for BF00, BF09-BF38	1	5	0.032
<b>BFX50 01</b>	Side mount with 2NC contacts for BF00, BF09-BF38	1	5	0.040
<b>BFX50 02</b>	Front mount, low profile for BF00, BF09-BF38	1	5	0.005
<b>BFX50 03</b>	Front mount for BF00, BF09-BF38	1	5	0.023
<b>11 G269 2</b>	Front mount for BF50-BF110	1	5	0.028
Mechanical latch. Screw terminals.				
<b>11 G222</b>	For BF00, BF09-BF38	1	1	0.059
<b>11 G272</b>	For BF50-BF110	1	1	0.059
Manual closing mechanism.				
<b>11 G454</b>	For BF00, BF09-BF38	1	1	0.021
<b>11 G455</b>	For BF50-BF110	1	1	0.028
Quick connect surge suppressors for BF00A, BF09A-BF38A contactors.				
<b>BFX77 048</b>	≤48VAC (Varistor)	10	10	0.010
<b>BFX77 125</b>	48-125VAC (Varistor)	10	10	0.010
<b>BFX77 240</b>	125-240VAC (Varistor)	10	10	0.010
<b>BFX79 048</b>	≤48VAC (Resistor-Capacitor)	10	10	0.010
<b>BFX79 125</b>	48-125VAC (Resistor-Capacitor)	10	10	0.010
<b>BFX79 240</b>	125-240VAC (Resistor-Capacitor)	10	10	0.010
<b>BFX79 415</b>	240-415VAC (Resistor-Capacitor)	10	10	0.010
Surge suppressor for BF50-BF110 contactors, front mount. Faston terminals.				
<b>11 G318 48</b>	≤48VAC/DC (Varistor)	10	10	0.008
<b>11 G318 125</b>	48-125VAC/DC (Varistor)	10	10	0.008
<b>11 G318 240</b>	125-240VAC/DC (Varistor)	10	10	0.008
<b>11 G318 415</b>	240-415VAC/DC (Varistor)	10	10	0.008
<b>11 G319 225</b>	≤225VDC (Diode)	10	10	0.008
<b>11 G322 48</b>	≤48VAC (Resistor-Capacitor)	10	10	0.008
<b>11 G322 220</b>	48-240VAC (Resistor-Capacitor)	10	10	0.008
<b>11 G322 380</b>	240-415VAC (Resistor-Capacitor)	10	10	0.008
Suppressor mounting adapter for G318-G319-G322.				
<b>11 RE244</b>	For 35mm DIN rail (IEC/EN 60715)	10	10	0.004

- 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:
  - 50/60Hz 24 / 48 / 110-125 indicate 110 / 220-240 indicate 220 / 380-415V indicate 380.
  - DC 12 / 24 / 48 / 110-125 indicate 110 / 220-240V indicate 220.

### Operational characteristics

Type		BFX42 BFXD42	BFX50 01
Conventional free air thermal current Ith	A	56	10
Rated insulation voltage Ui	V	690	690
Terminals: Screw		M4	M3
Width	mm	12.5	7
Conductor section Maximum with 1 or 2 cables			
flexible w/o lug	mm <sup>2</sup>	16	2.5
flexible c/w lug	mm <sup>2</sup>	16	2.5
AWG	n°	6	14
Terminal protection per IEC/EN60529		IP20	IP20
IEC/EN 60947-5-1 designation	AC	—	A600
	DC	—	Q600
Mechanical life (in millions)	cycles	10	10
Type		G222	G272
Rated control circuit voltage	AC (50/60 Hz)	V	24-415
	DC	V	12-240
Power consumption with control AC	VA	40	40
	W	70	70
Minimum energising drop-out	ms	10	10
pick-up	ms	50	100

② See page TC-22 to warrant IP20 protection.

### Maximum assembly combination of add-on blocks

See page 3-22 to 3-25.

### Certifications and compliance

Certifications obtained:

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

● Certified products.  
 RU "Recognized". Products having this type of marking are intended for use as components of complete workshop-assembled equipment.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

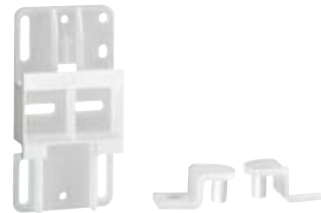
### Accessories



BFX31...  
BFX32...



BFX 80



BFX89 01

BFX89 02



11 G265



11 BA135  
11 BA235

11 BA435



11 G231  
11 G232

11 G285



11 G271



11 G288

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

Rigid connecting kits for three-pole reversing contactor assembly.

<b>BFX31 01</b>	For contactors BF09 - BF25 side by side with mechanical interlock	1	0.060
<b>BFX31 02</b>	For contactors BF09 - BF25 side by side with BFX50 00 or BFX50 01 mechanical interlock	1	0.063
<b>BFX32 01</b>	For contactors BF26 - BF38 side by side with mechanical interlock	1	0.080

Rigid connecting kits for star-delta starters.

<b>BFX31 31</b>	For contactors BF09-BF25 (line-star-delta)	1	0.065
<b>BFX32 31</b>	For contactors BF26-BF38 (line-star-delta)	1	0.085
<b>BFX32 32</b>	For contactors BF26-BF38 (line-delta) and BF09-BF25 (star)	1	0.080

Sealing cover.

<b>BFX80</b>	For contactors BF00, BF09-BF38	10	0.006
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Screw fixing adapters for contactors.

<b>BFX89 01</b>	Universal base to screw fix BF09-BF38 contactors	5	②
<b>BFX89 02</b>	Screw fixing brackets for BF09-BF38 contactors	10	②

Power terminal shroud.

<b>11 G265</b>	IP20 protection for 3-pole BF50 to BF110 types	10	0.011
----------------	--	----	-------

Paralleling links.

<b>11 BA135</b>	2 poles for BF09-BF25 types	10	0.001
<b>11 BA235</b>	2 poles for BF26-BF38 types	10	0.003
<b>11 BA435</b>	3 poles for BF50-BF110 types	10	0.029

One-pole enlarged terminals.

<b>11 G231</b>	1-6 mm <sup>2</sup> for BF09-BF25 types	12	0.008
<b>11 G232</b>	1-16 mm <sup>2</sup> for BF26-BF38 types	12	0.017

Three-pole enlarged terminals.

<b>11 G271</b>	1-50 mm <sup>2</sup> for BF50-BF110 types	10	0.130
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Four-pole enlarged terminals.

<b>11 G288</b>	1x50mm <sup>2</sup> for contactors BF50-BF110 types	10	0.174
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Auxiliary terminal.

<b>11 G285</b>	For BF50-BF110 types	8	0.008
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Marking element for BF00, BF09-BF110 contactors.

<b>BFX30</b>	Blank label for writing	50	0.001
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- ① Mechanical interlock BFX50 02 or BFX50 03 can be used only.
- ② Any type of mechanical interlock BFX50 00, BFX50 01, BFX50 02 can be used.
- ③ Contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- ④ For 3-pole contactors, BF50-BF110 types only.  
N.B. Two pieces are required per contactor.

### Certifications and compliance

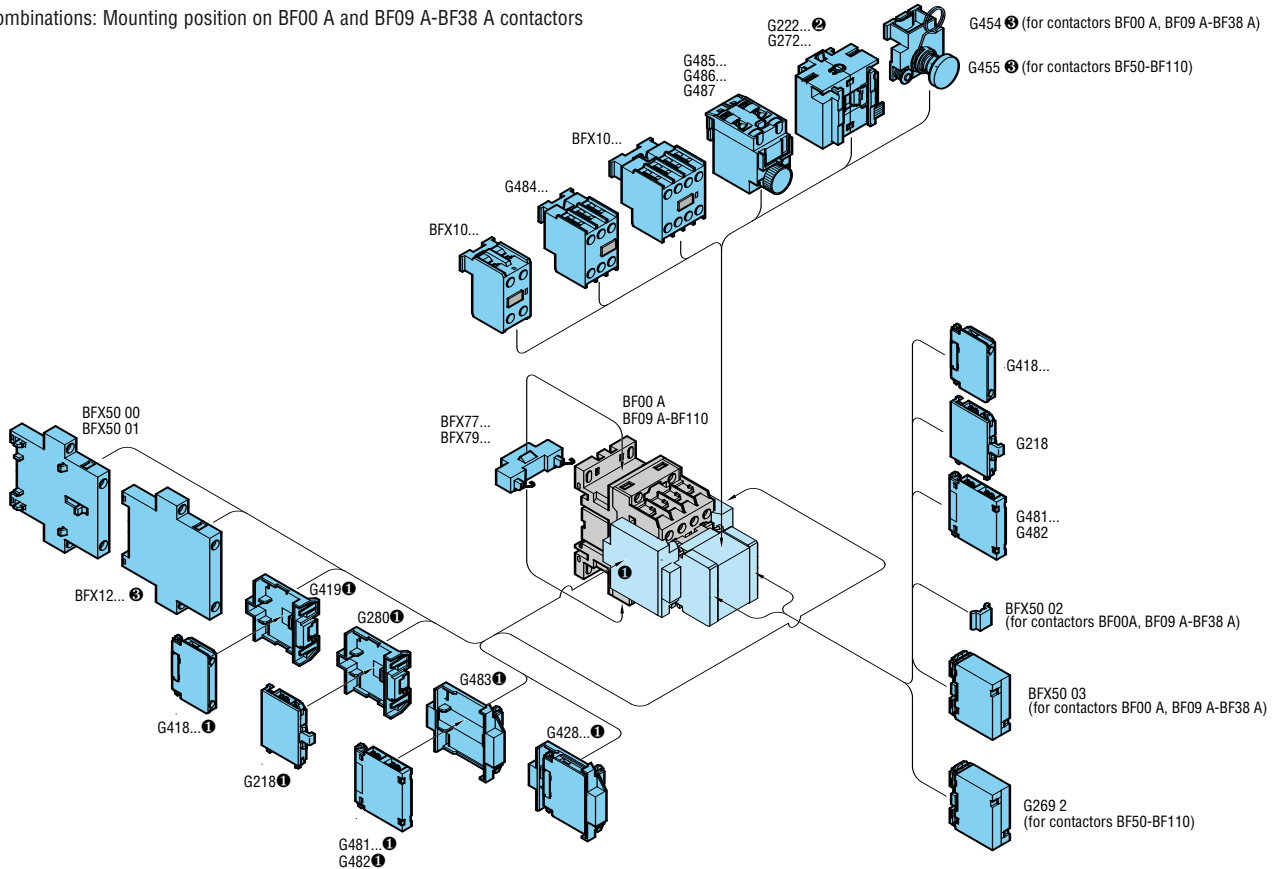
Certifications obtained: cULus for BFX31 01, BFX31 02, BFX32 01, BFX31 31, BFX32 31 and BFX32 32 and GOST.

Compliant with standards: IEC/EN 60947-1.

### Add-on blocks for AC contactors

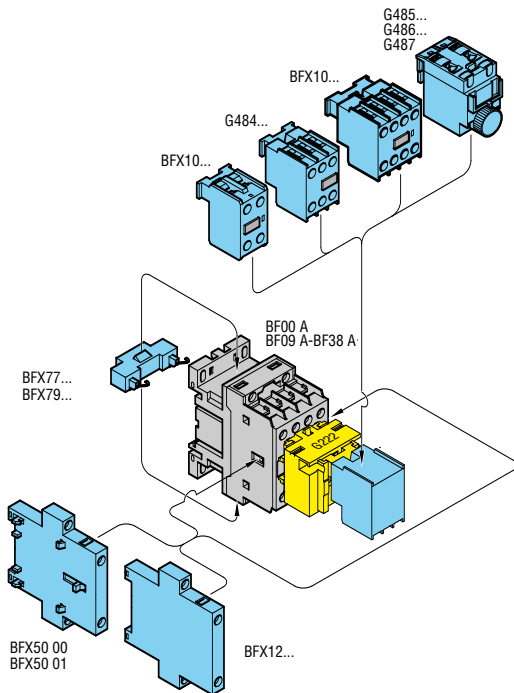
3

Combinations: Mounting position on BF00 A and BF09 A-BF38 A contactors

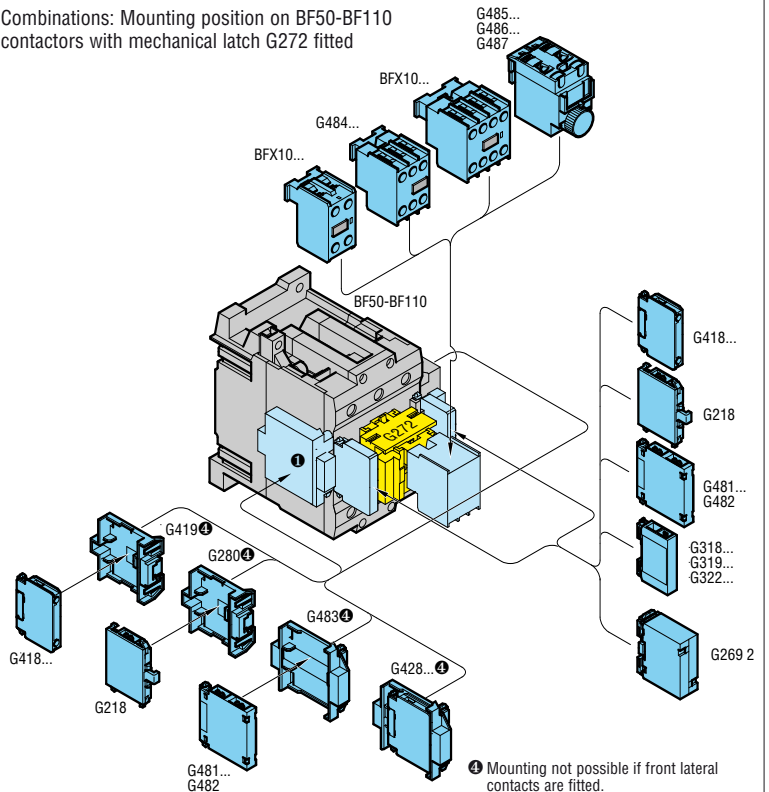


- ❶ Mounting not possible if front lateral contacts or mechanical interlock BFX50 00 or BFX50 01 are mounted.
- ❷ If the G222 latch is mounted, no front lateral contacts can be fitted.
- ❸ No add-on block can be mounted on front when the manual closing mechanism G454 or G455 is fitted.

Combinations: Mounting position on BF00 A and BF09 A-BF38 A contactors with mechanical latch G222 fitted



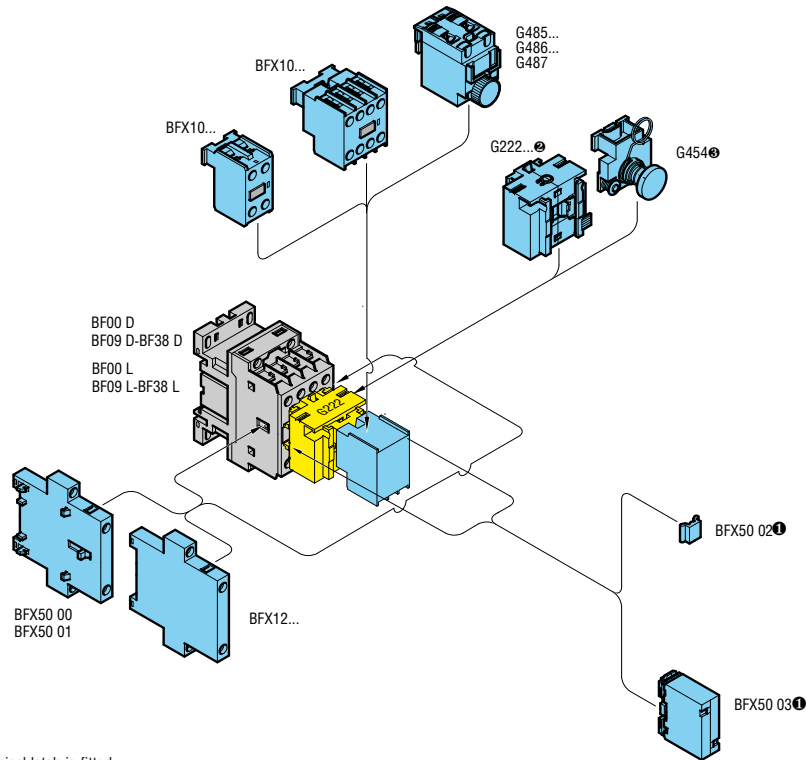
Combinations: Mounting position on BF50-BF110 contactors with mechanical latch G272 fitted



- ❶ Mounting not possible if front lateral contacts are fitted.

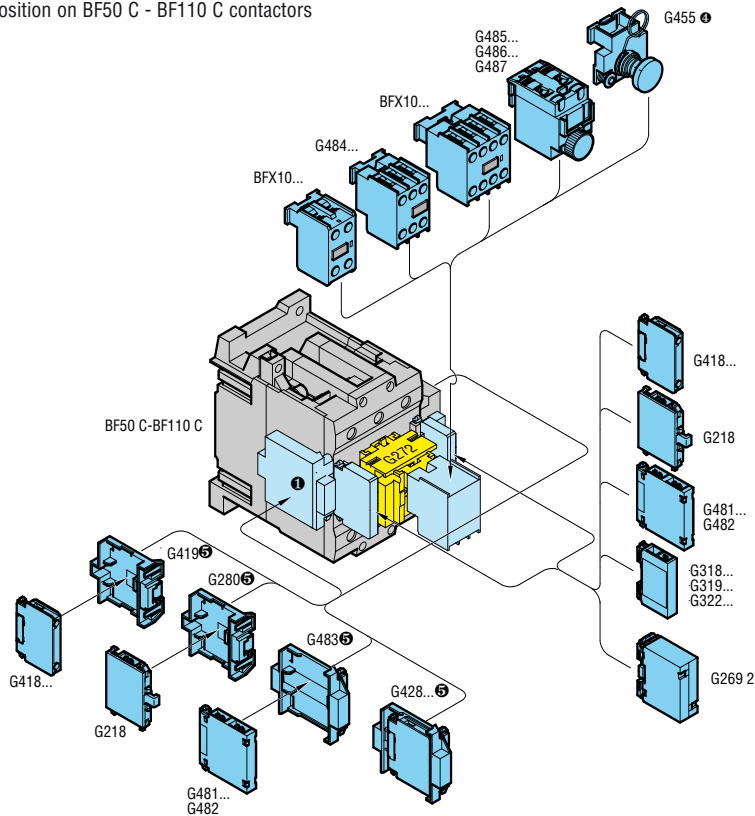
### Add-on blocks for DC contactors

Combinations: Mounting position on BF00 and BF09-BF38, D and L versions  
 Combination table: See page 3-19



- ❶ Mounting not possible when the G222 mechanical latch is fitted.
- ❷ If the G222 mechanical latch is fitted, the mechanical interlock BFX50 02 or BFX50 03 cannot be used.
- ❸ 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

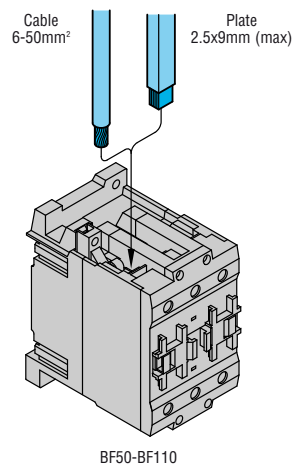
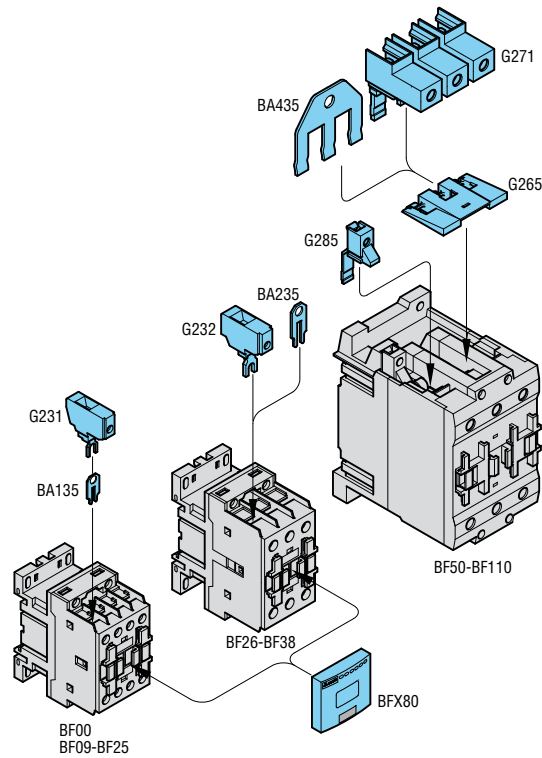


- ❹ No add-on block can be mounted on front when the G455 manual closing mechanism is fitted.
- ❺ Mounting not possible if front lateral contacts are fitted.

### Accessories for AC, DC and DC low consumption contactors

Combinations

3

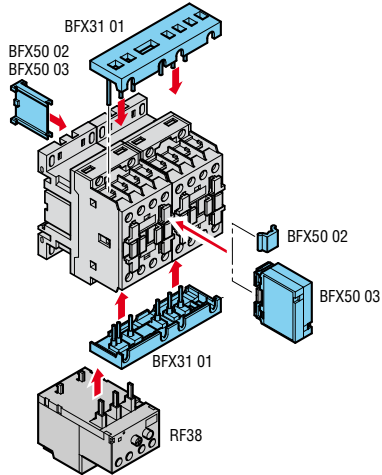




### Accessories for AC, DC and DC low consumption contactors

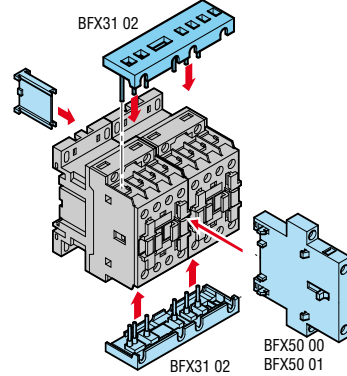
3

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



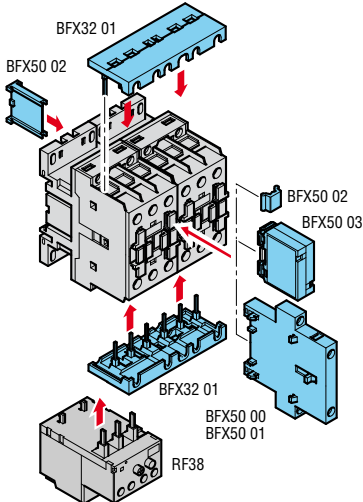
RF38 thermal overload relay can be mounted only on left side contactor.

Rigid reversing contactor assembly connecting kits for BF09-BF25 contactors with BFX50 01 or BFX50 02 mechanical interlock



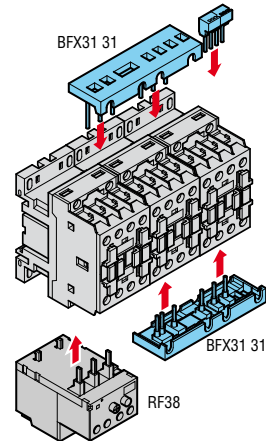
RF38 thermal overload relay can be mounted only on left side contactor.

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

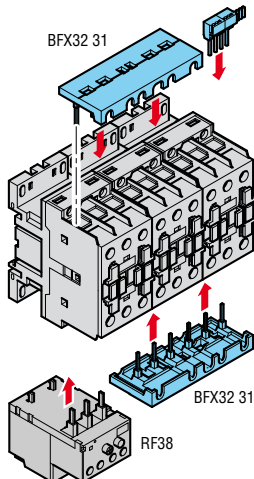


RF38 thermal overload relay can be mounted only on left side contactor.

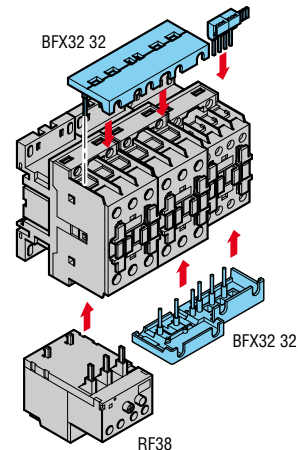
Rigid star-delta starter assembly connecting kits for BF09-BF25 contactors



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 G350①	2NO+1NC or 1NO+2NC reversible	4①	4	0.067
11 G354①	1NO+1NC	4①	4	0.065
Contact block adapter.				
11 G358	To fit auxiliary contacts BFX10, G484, G485, G486 and G487 types, on B115-B630 1000 contactors; see page 3-18.	4	5	0.035
Mechanical interlock.				
11 G355②③	Side by side	1	1	0.025
11 G356 1②④	One on top of other	1	1	0.104
11 G356 2②④	One on top of other	1	1	0.110
11 G356 3②④	One on top of other	1	1	0.116
11 G356 4②④	One on top of other	1	1	0.122
11 G356 5②④	One on top of other	1	1	0.124
11 G356 6④⑤	One on top of other	1	1	0.134
Mechanical latch.				
11 G495⑥⑦⑧	For B115-B630	1	1	0.716

### Operational characteristics of auxiliary contacts

Type		G350 G354
Conventional free-air thermal current I <sub>th</sub>	A	16
Rated insulation voltage U <sub>i</sub>	V	690
Terminals	Faston	1-6.35 2-2.8
Conductor section maximum with 1 or 2 cables	flexible c/w lug	mm <sup>2</sup> 2.5
	AWG	n° 14
IEC/EN 60947-5-1 designation	AC	A600
	DC	P600
Mechanical life (in millions)	cycles	5

### Operational characteristics of mechanical latch

Type		G495⑨
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

### Certifications and compliance

Certifications obtained:

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

Certified products.

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

Add-on auxiliary contacts comply with the following standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

### 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 G360⑩	For contactor B115	6	0.026
11 G361⑩	For contactors B145-B180	6	0.026
11 G363⑩	For contactors B250-B310-B400	6	0.047
11 G527	For contactor B500	1	0.238
11 G528	For contactor B500 4	1	0.265
11 G529	For contactor B630	1	0.250
11 G530	For contactor B630 4	1	0.290
3 pole star connecting bars.			
11 BA1595	For B115-B145-B180	1	0.082
11 BA1721	For B250-B310-B400	1	0.140
11 BA1846	For B500-B630	1	0.340
2 pole bars for parallel arrangement.			
11 BA1594	For B115-B145-B180	1	0.089
11 BA1720	For B250-B310-B400	1	0.140
11 BA1845	For B500-B630	1	0.320
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	0.012
Marking elements.			
11 BA126 1	Label for alphanumeric symbols	50	0.001
11 BA126 2	Label for writing	50	0.001
3958⑩	Alphanumeric symbols	100	0.002

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, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

④ Allowed distances see page TC-28.

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 - 440/480V indicate 440  
 - DC 48 - 110/125 indicate 110 - 220/240 indicate 220 - 380/415 indicate 380 - 440/480V indicate 440

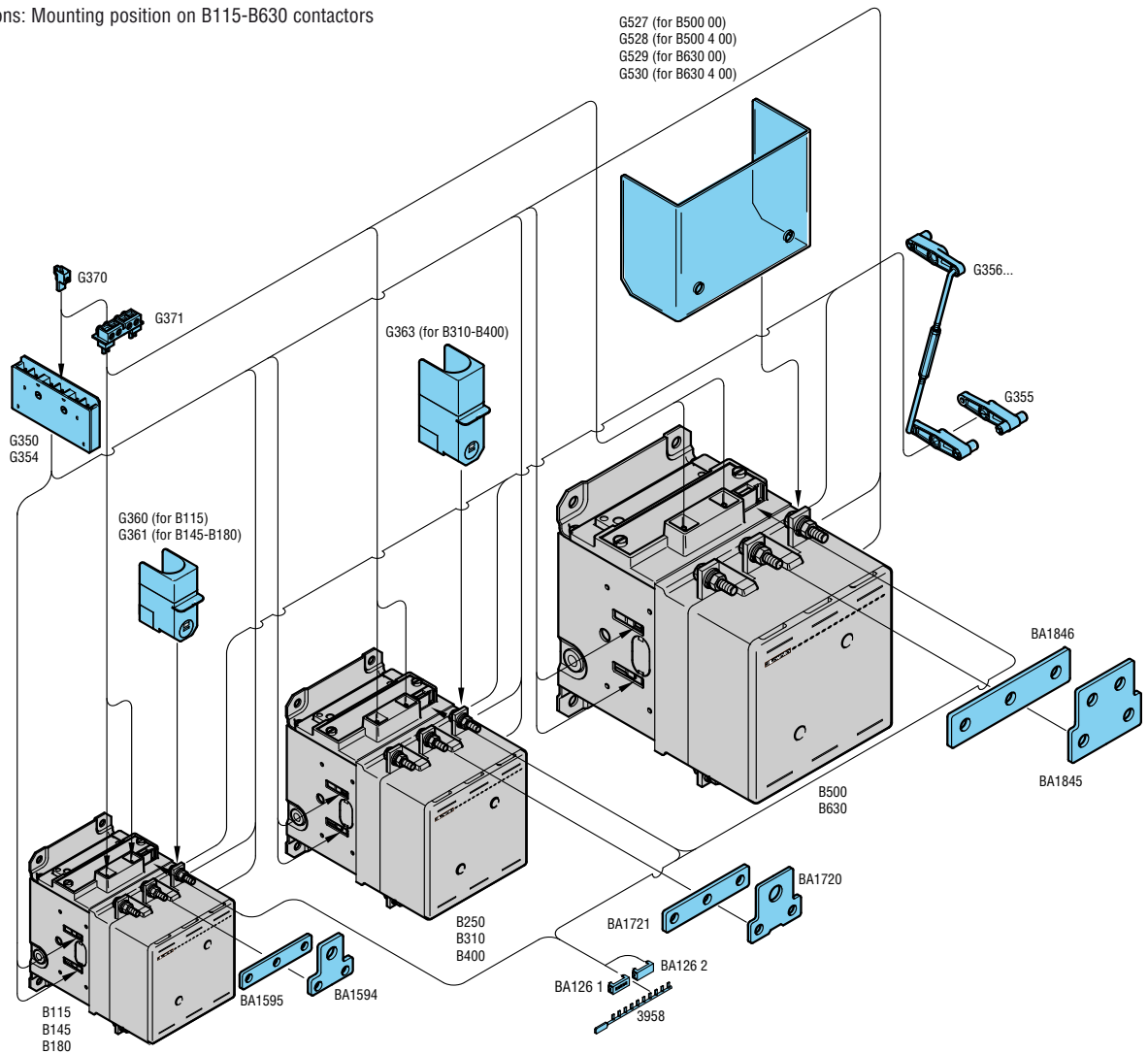
⑦ It can be mounted only in contactors if predisposed for it.

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.

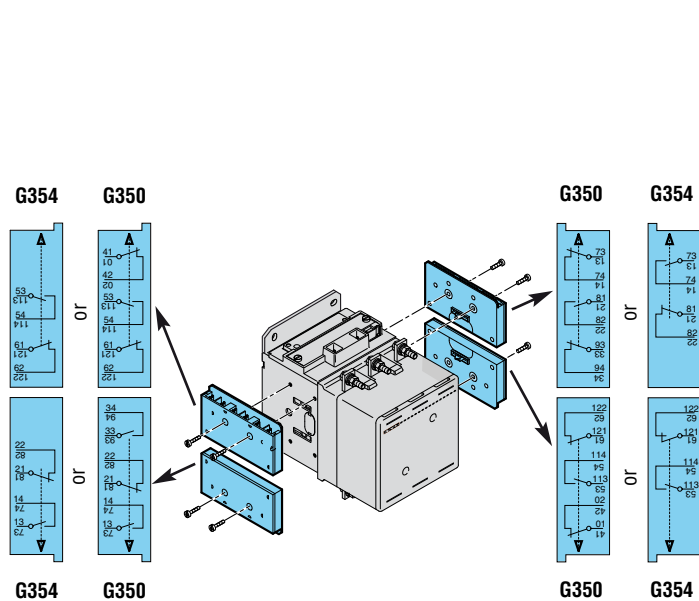
⑩ Replace with the required alphanumeric symbol; each package contains 100 pieces of the same symbol.

Combinations: Mounting position on B115-B630 contactors



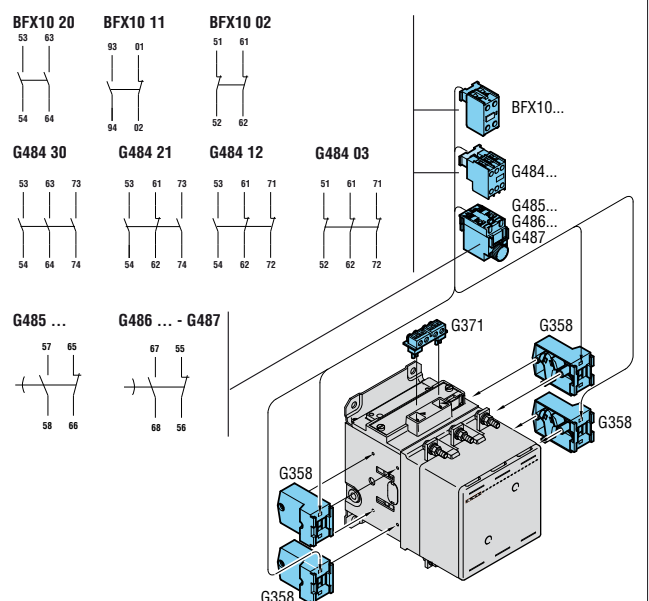
The add-on auxiliary contact blocks G350 and G354 can be applied to contactors B115-B630 1000 only up to a maximum of four pieces for each contactor, for a total of 12 contacts.

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 3-18 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...

3



BFX92A...



11 BA705...

Order code	Rated frequency and voltage		Qty per pkg n°	Wt [kg]
	[Hz]	[V]		
For contactors BF00 A-BF09 A-BF12 A-BF18 A-BF25 A				
BFX91A 024	50/60	24VAC	1	0.085
BFX91A 048		48VAC	1	0.085
BFX91A 110		110VAC	1	0.085
BFX91A 230		230VAC	1	0.085
BFX91A 400		400VAC	1	0.085
BFX91A 024 60	60	24VAC	1	0.085
BFX91A 048 60		48VAC	1	0.085
BFX91A 120 60		120VAC	1	0.085
BFX91A 230 60		220VAC	1	0.085
BFX91A 230 60		230VAC	1	0.085
BFX91A 460 60		460VAC	1	0.085
BFX91A 575 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 BF50-BF65-BF80-BF95-BF110 contactors.

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

④ Four-terminal coil.

#### Operational characteristics for BFX91 A or BFX92 A coils AC control

Rated voltage at 50/60, 60Hz	from	V	12
	to	V	600
Operating limits for 50/60Hz powered at 50Hz or 60Hz type	pick up	from	% Us 80
		to	% Us 110
	drop out	from	% Us 20
		to	% Us 55
Operating limits for 50/60Hz type when powered at 60Hz	pick up	from	% Us 85
		to	% Us 110
	drop out	from	% Us 20
		to	% Us 55
Consumption for 50/60Hz type	50Hz	in-rush	VA 65
		holding	VA 8.5
	60Hz	in-rush	VA 70
		holding	VA 6.5
Dissipation	at 50Hz	W	2.5

#### Operational characteristics for BA705 coil AC control

Rated voltage at 50/60, 60Hz	from	V	12
	to	V	600
Operating limits for 50/60Hz powered at 50Hz or 60Hz type	pick up	from	% Us 80
		to	% Us 110
	drop out	from	% Us 40
		to	% Us 55
Operating limits for 50/60Hz type when powered at 60Hz	pick up	from	% Us 85
		to	% Us 110
	drop out	from	% Us 40
		to	% Us 55
Consumption	50Hz	in-rush	VA 210
		holding	VA 18
	60Hz	in-rush	VA 252
		holding	VA 21.6
Dissipation	at 50Hz	W	6

#### Materials

Class F enamelled copper wire.

#### Special versions

For coils with non standard voltages, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

### DC coils



11 BA911...

Order code	Rated voltage	Qty per pkg	Wt
	[V]	n°	[kg]
For contactors BF00 D, BF09 D-BF38 D BF00 L, BF09 L-BF38 L			
No coil replacement for these contactors is possible.			
For BF50 C-BF110 C contactors.			
<b>11 BA911 12</b>	12VDC	1	0.380
<b>11 BA911 24</b>	24VDC	1	0.380
<b>11 BA911 48</b>	48VDC	1	0.380
<b>11 BA911 60</b>	60VDC	1	0.380
<b>11 BA911 110</b>	110VDC	1	0.380
<b>11 BA911 125</b>	125VDC	1	0.380
<b>11 BA911 220</b>	220VDC	1	0.380

#### Operational characteristics for BA911 coil

DC control			
Rated voltage	from	V	12
	to	V	660
Operating limits	pick-up	from	% Us 80
		to	% Us 110
	drop-out	from	% Us 10
		to	% Us 25
Average dissipation (in-rush/holding) 20°C		W	15

#### Materials

Class F enamelled copper wire.

#### Special versions

For coils with non standard voltages, contact our Customer Service (Tel. +39 035 4282422; email: [service@LovatoElectric.com](mailto:service@LovatoElectric.com)).



### AC/DC coils



Coil



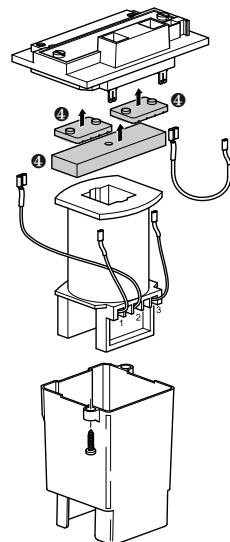
Bridge rectifier



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

- ⓐ Available for AC supply only.
- ⓑ 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.
- ⓒ 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.
- ⓓ 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 (Tel. +39 035 4282422; email: service@LovatoElectric.com).

### 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 (Tel. +39 035 4282422).

### Main contacts for BF contactors


**BFX99...**

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

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

Main contacts  
3 or 4 pole set complete with screws.

<b>BFX99 026T</b>	BF26	1	0.038
<b>BFX99 026F</b>	BF26 T4	1	0.051
<b>BFX99 032T</b>	BF32	1	0.070
<b>BFX99 038T</b>	BF38	1	0.070
<b>BFX99 038F</b>	BF38 T4	1	0.093
<b>11 G274</b>	BF50	1	0.095
<b>11 G274 4</b>	BF50 40	1	0.127
<b>11 G275</b>	BF65	1	0.095
<b>11 G275 4</b>	BF65 40	1	0.127
<b>11 G276</b>	BF80	1	0.111
<b>11 G276 4</b>	BF80 40	1	0.148
<b>11 G475</b>	BF95	1	0.111
<b>11 G476</b>	BF110	1	0.111

#### Special versions

For non standard spare contact configurations, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

NOTE: For B1250 and B1600 contactor spares, contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

### 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...**

**Arc chute**

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.

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

Arc chutes.

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