2

BG series mini-contactors

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 Ie (AC3)	Coil in AC	Coil in DC	IEC Ith (AC1)	Coil in AC	Coil in 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
- 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			
	IEC Ie (AC3)	Coil in AC	Coil in DC	Coil in DC❶	IEC Ith (AC1)	Coil in AC	Coil in DC	Coil in DC❶
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	●	●	—	—	—	—	—

❶ Low-consumption version.

B series contactors

Unique features
- 3 frame sizes offering 11 different contactors
- Coil operate 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
- Contactor 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 Ie (AC3)	Coil both AC	Coil both DC	IEC Ith (AC1)	Coil both AC	Coil both 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	❶	●	●	1000A	●	●
B1250	❶	●	—	1250A	●	—
B1600	❶	●	—	1600A	●	—

❶ 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.

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.

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.

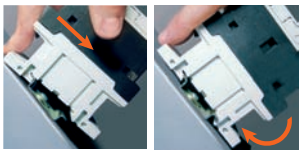
LOW-CONSUMPTION COILS
The BF...L contactors feature a 2.4W low consumption.
This characteristic widely allows their direct control by PLC outputs.

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 permits to optimise inventory.

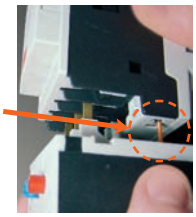
MECHANICAL INTERLOCK

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.

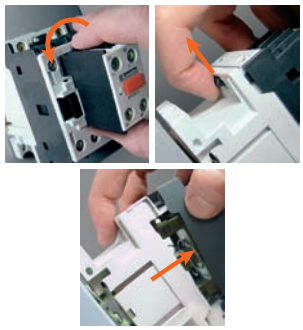
35mm DIN RAIL MOUNTING AND FIXING

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

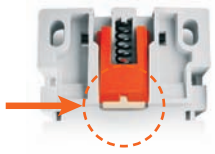
STARTER ASSEMBLY

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 theconnections.

IP20 CONNECTION SECURITY

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