



# Definite purpose contactors

 **Lovato**  
**electric**

ENERGY AND AUTOMATION

# Definite purpose contactors

## Three-pole and four-pole non-reversing DP contactors 600VAC



Motor Full Load Amps (FLA) 600V [A]	Locked Rotor			Resistive Load 600V [A]	Maximum Horsepower						Incorporated Auxiliary Contacts (SPST)		Type of termination	Catalog Number
	240V [A]	480V [A]	600V [A]		1 Phase 120V [HP]	240V [HP]	3 Phase 200V [HP]	240V [HP]	480V [HP]	600V [HP]	NO	NC		

THREE POWER POLES.														
14	84	84	84	20	3/4	2	3	3	10	10	0	1	Clamp-screw	DPBG12 01 A●
											1	0		
20	120	120	100	30	1 1/2	3	5	5	10	10	0	1	Clamp-screw	DPBF09 01 A●
											1	0		
25	150	150	125	30	2	3	5	5	10	15	0	1	Clamp-screw	DPBF12 01 A●
											1	0		
30	180	180	150	32	2	5	7 1/2	7 1/2	15	20	0	1	Clamp-screw	DPBF18 01 A●
											1	0		
40	240	240	200	50	3	7 1/2	10	10	30	30	0	0	Clamp-screw	DPBF26 00 A●
50	300	300	250	55	3	10	15	15	30	40	0	0	Clamp-screw	DPBF32 00 A●
70	420	420	350	100	5	15	20	25	50	50	0	0	Lug-clamp	DPBF50 00●
80	480	480	400	125	7 1/2	15	25	30	60	60	0	0	Lug-clamp	DPBF65 00●

FOUR POWER POLES ●														
14	84	84	84	20	3/4	2	3	3	10	10	0	0	Clamp-screw	DPBG12 T4 A●
20	120	120	100	30	1 1/2	3	5	5	10	10	0	0	Clamp-screw	DPBF09 T4 A●
25	150	150	125	30	2	3	5	5	10	15	0	0	Clamp-screw	DPBF12 T4 A●
30	180	180	150	32	2	5	7 1/2	7 1/2	15	20	0	0	Clamp-screw	DPBF18 T4 A●
40	240	240	200	50	3	7 1/2	10	10	30	30	0	0	Clamp-screw	DPBF26 T4 A●
70	420	420	350	100	5	15	20	25	50	50	0	0	Lug-clamp	DPBF50 40●
80	480	480	400	125	7 1/2	15	25	30	60	60	0	0	Lug-clamp	DPBF65 40●

**NOTE: All types have undergone UL endurance tests of 250,000 cycles.**

- Complete catalog number with coil code in the side table.
- The DPBF32A 3-pole type can be retrofitted with fourth pole, catalog number BFX42. See page 2.

Code	Voltage range
024 60	24VAC 60Hz
120 60	120VAC 60Hz
230 60	230VAC 60Hz
460 60	460VAC 60Hz
575 60	575VAC 60Hz

### General characteristics

Ideal for air conditioning, heating, ventilation, refrigeration of HVACR industry, compressors, food and beverage industry. Main features:

- Motor FLA ratings at 600VAC: 14 to 80A
- Finger safe terminals
- Positive (force) guided contacts
- Up to four front or side mount auxiliary contacts
- Highly conductive auxiliary contacts
- Quick and simple installation for accessories
- Easy coil replacement
- Wide coil operating range.

### Operating characteristics

- Average coil consumption at 20°C/70°F:

	In rush	Holding
• DPBG12	25VA	4VA
• DPBF09-32	75VA	9VA
• DPBF50-65	220VA	18VA

- Built-in auxiliary contact ratings: A600 for all SPST, if any

Screw termination:	Torque	Wire size
• DPBG12	9lbin	AWG8-12
• DPBF09-18	13-16lbin	AWG8-16
• DPBF26-32	22-27lbin	AWG6-14
• DPBF50-65	44lbin	AWG14-2/0

- Operating temperature:

- DPBG12: -40...+60°C/-40...+140°F
- DPBF: -50...+70°C/-60...+160°F

### Certifications and compliance

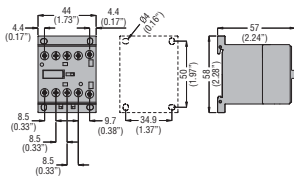
Certifications: UL Listed for USA and Canada (File E93602) under Motor Controllers - Definite purpose contactors.

**All contactors are CE marked per European Union requirements.**

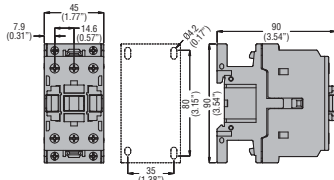
Compliant with standards: UL 508, CSA C22.2 n°14.

### DIMENSIONS [mm (in)]

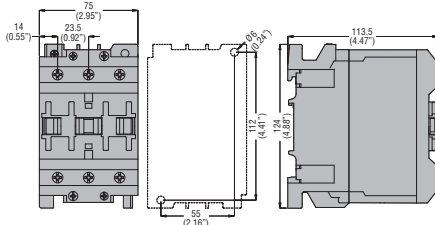
#### DPBG12, 3 and 4 poles



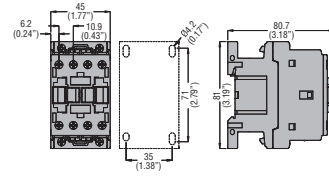
#### DPBF26-DPBF32, 3 poles



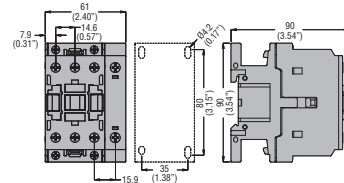
#### DPBF50-DPBF65, 3 poles



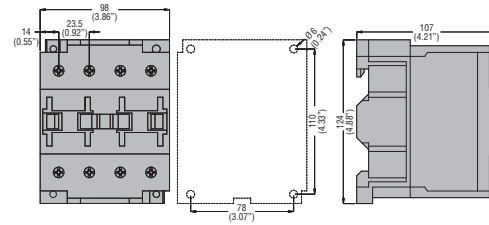
#### DPBF09-DPBF12-DPBF18, 3 and 4 poles



#### DPBF26, 4 poles



#### DPBF50-DPBF65, 4 poles



### Add-on blocks - Accessories for DPBG12 type

Characteristics	Max qty per contactor	Catalog number
	n°	
Auxiliary contacts with front center mounting. Screw terminals.		
2NC	1	<b>BGX10 02</b>
1NO + 1NC	1	<b>BGX10 11</b>
2NO	1	<b>BGX10 20</b>
4NC	1	<b>BGX10 04</b>
1NO + 3NC	1	<b>BGX10 13</b>
2NO + 2NC	1	<b>BGX10 22</b>
3NO + 1NC	1	<b>BGX10 31</b>
4NO	1	<b>BGX10 40</b>
Mechanical interlock.		
For DPBG12 side by side	1	<b>BGX50 00</b>
Quick connect surge suppressors.		
≤48VAC/DC (Varistor)		<b>BGX77 048</b>
48-125VAC/DC (Varistor)		<b>BGX77 125</b>
125-240VAC/DC (Varistor)		<b>BGX77 240</b>
≤225VDC (Diode)		<b>BGX78 225</b>
≤48VAC (Resistor-Capacitor)		<b>BGX79 048</b>
48-125VAC (Resistor-Capacitor)		<b>BGX79 125</b>
125-240VAC (Resistor-Capacitor)		<b>BGX79 240</b>
240-415VAC (Resistor-Capacitor)		<b>BGX79 415</b>
Modular protection cover.		
Raises protection to IP40		<b>BGX80 00</b>
Rigid connecting kits for reversing contactor assembly.		
For DPBG12 side by side with BGX50 00 interlock		<b>SMX90 22</b>

### Spare parts

NO COIL REPLACEMENT FOR DPBG CONTACTORS IS POSSIBLE.

ⓘ The protection cover can be used with no auxiliary contacts, surge suppressor or mechanical interlock mounted.

### Certifications and compliance

Certifications for DPBG12 accessories:

Type	cULus	CSA
BGX10...	●	—
BGX50 00	●	—
BGX7...	●	—
BGX80 00	●	—
SMX90 02	Ⓢ	—

For DPBF accessories:

Type	cULus	CSA
BFX42	●	—
BFX10-BFX12...	●	—
G418-G428...	Ⓢ	●
BFX50...	●	—
BFX7...	●	—
G269 2	Ⓢ	●
BFX31...	●	—

Ⓢ UL Recognized for USA only (File E197069) as Panel and Switchboard Accessories - Component.

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

cULus - UL Listed for USA and Canada (File E93601) as Auxiliary devices. CSA - CSA certified for Canada only (File 54332) as Auxiliary devices for motor controllers.

All products are also CE marked per European Union requirements.

Comply with standards: UL 508, CSA C22.2 n°14.

### Add-on blocks - Accessories - Spare parts for DPBF types

Characteristics	Max qty per contactor	Catalog number
	n°	
Fourth pole.		
For DPBF32 contactor	1	<b>BFX42</b>
Auxiliary contacts with front center mounting. Screw terminals.		
2NC	1	<b>BFX10 02</b>
1NO + 1NC	1	<b>BFX10 11</b>
2NO	1	<b>BFX10 20</b>
4NC	1	<b>BFX10 04</b>
1NO + 3NC	1	<b>BFX10 13</b>
2NO + 2NC	1	<b>BFX10 22</b>
3NO + 1NC	1	<b>BFX10 31</b>
4NO	1	<b>BFX10 40</b>
Auxiliary contacts for front lateral mounting. Screw terminals.		
1NO	2	<b>G418 10</b>
1EM (Early Make)	2	<b>G418 10A</b>
1NC	2	<b>G418 01</b>
1LB (Late Break)	2	<b>G418 01D</b>
Auxiliary contacts for side mounting. Screw terminals.		
1NO	2	<b>G428 10</b>
1EM (Early Make)	2	<b>G428 10A</b>
1NC	2	<b>G428 01</b>
1LB (Late Break)	2	<b>G428 01D</b>
2 NC for DPBF09-DPBF32 contactors	2	<b>BFX12 02</b>
1NO+1NC for DPBF09-DPBF32 contactors	2	<b>BFX12 11</b>
2NO for DPBF09-DPBF32 contactors	2	<b>BFX12 20</b>
Mechanical interlocks.		
Side mount for DPBF09-32 contactors	1	<b>BFX50 00</b>
Side mount with 2NC contacts for DPBF09-32 contactors	1	<b>BFX50 01</b>
Front mount low profile for DPBF09-32 contactors	1	<b>BFX50 02</b>
Front mount for DPBF09-32 contactors	1	<b>BFX50 03</b>
Front mount for DPBF50-65 contactors	1	<b>G269 2</b>
Surge suppressors, quick connect to DPBF09-DPBF32 base.		
≤48VAC (Varistor)		<b>BFX77 048</b>
48-125VAC (Varistor)		<b>BFX77 125</b>
125-240VAC (Varistor)		<b>BFX77 240</b>
≤48VAC (Resistor-Capacitor)		<b>BFX79 048</b>
48-125VAC (Resistor-Capacitor)		<b>BFX79 125</b>
125-240VAC (Resistor-Capacitor)		<b>BFX79 240</b>
240-415VAC (Resistor-Capacitor)		<b>BFX79 415</b>
Surge suppressor for DPBF50-65 contactors, front lateral mounting. Faston terminals.		
≤48VAC/DC (Varistor)		<b>G318 48</b>
48-125VAC/DC (Varistor)		<b>G318 125</b>
125-240VAC (Varistor)		<b>G318 240</b>
240-415VAC/DC (Varistor)		<b>G318 415</b>
≤225VDC (Diode)		<b>G319 225</b>
≤48VAC (Resistor-Capacitor)		<b>G322 48</b>
48-240VAC (Resistor-Capacitor)		<b>G322 220</b>
240-415VAC (Resistor-Capacitor)		<b>G322 380</b>

Characteristics	Catalog number
Suppressor mounting adapter.	
For 35mm DIN rail (IEC/EN 60715)	<b>RE244</b>
Rigid connecting kits for three-pole reversing contactor assembly.	
For DPBF09-18 side by side with BFX50 02 or BFX50 03 interlock	<b>BFX31 01</b>
For DPBF09-18 side by side with BFX50 00 or BFX50 01 interlock	<b>BFX31 02</b>
For DPBF26-32 w/ BFX50... interlock	<b>BFX32 01</b>
Protection cover.	
For DPBF09-32 contactors	<b>BFX80</b>
Screw fixing adapters.	
Universal base to screw fix DPBF09-32 contactors	<b>BFX89 01</b>
Screw fixing brackets for DPBF09-32 contactors	<b>BFX89 02</b>
Power terminal cover.	
IP20 protection for 3-pole DPBF50-65 contactors	<b>G265</b>

### Spare parts

For DPBF contactors, standard coil voltages and frequency. Four-terminal coil for DPBF09-18 types.

60Hz	24VAC	Catalog number
	24VAC	<b>BFX91A 024 60</b>
	48VAC	<b>BFX91A 048 60</b>
	120VAC	<b>BFX91A 120 60</b>
	220VAC	<b>BFX91A 220 60</b>
	230VAC	<b>BFX91A 230 60</b>
	460VAC	<b>BFX91A 460 60</b>
	575VAC	<b>BFX91A 575 60</b>

Four-terminal coil for DPBF26-32 types.

60Hz	24VAC	Catalog number
	24VAC	<b>BFX92A 024 60</b>
	48VAC	<b>BFX92A 048 60</b>
	120VAC	<b>BFX92A 120 60</b>
	220VAC	<b>BFX92A 220 60</b>
	230VAC	<b>BFX92A 230 60</b>
	460VAC	<b>BFX92A 460 60</b>
	575VAC	<b>BFX92A 575 60</b>

Two-terminal coil for DPBF50-65 types.

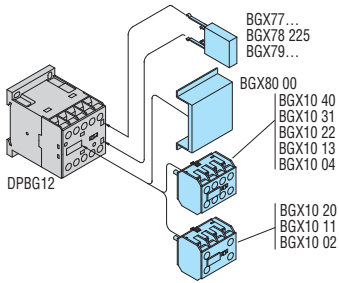
60Hz	24VAC	Catalog number
	24VAC	<b>BA705 024 60</b>
	48VAC	<b>BA705 048 60</b>
	120VAC	<b>BA705 120 60</b>
	220VAC	<b>BA705 220 60</b>
	230VAC	<b>BA705 230 60</b>
	460VAC	<b>BA705 460 60</b>
	575VAC	<b>BA705 575 60</b>

Ⓢ For 3-pole contactors, DPBF50-65 types only. N.B. Two pieces are required per contactor.

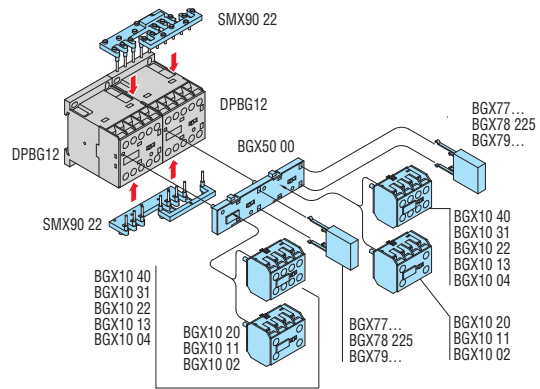
### NOTE:

Other coil voltages and frequencies, add-on accessories, contact blocks are available. Contact Customer Service for part numbers, detailed information and technical data; see contact details on back cover.

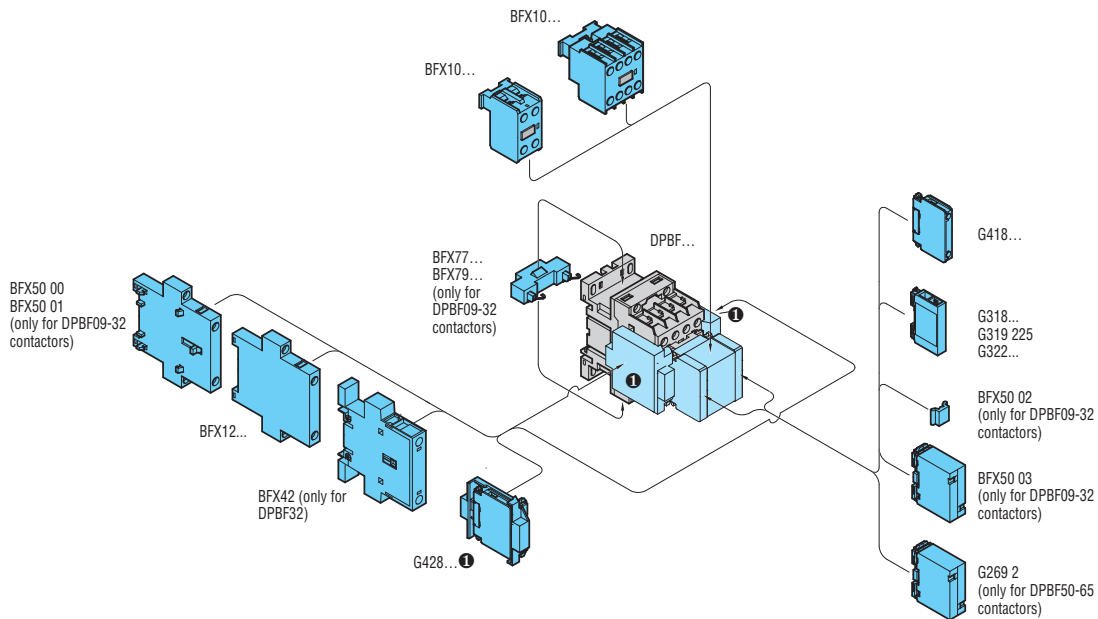
### DPBG12 TYPE



### Assembled as reversing contactors

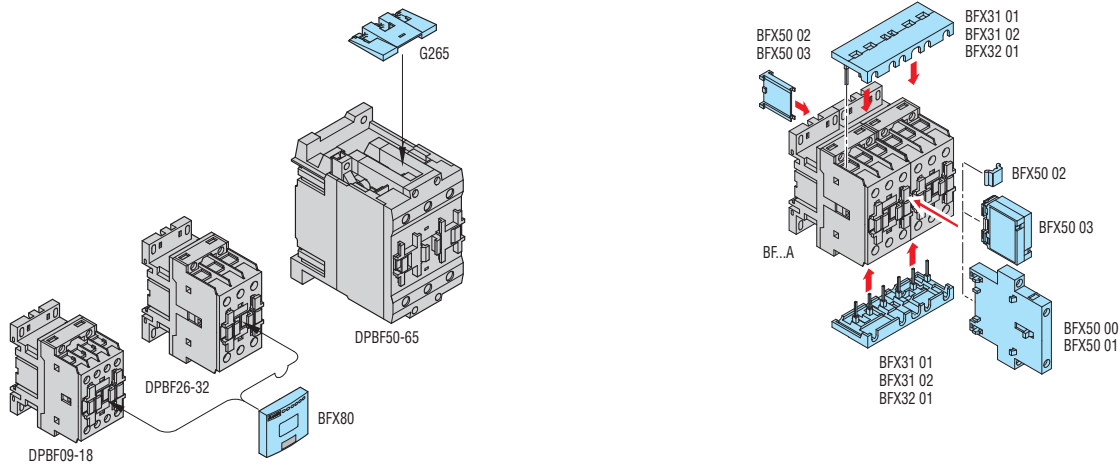


### DPBF TYPES



① Mounting not possible if front lateral contacts or mechanical interlocks BFX50.../G269 2 are mounted.  
 ② Only for DPBF09-32 types.

### DPBF09-32 assembled as reversing contactors

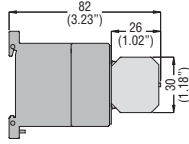
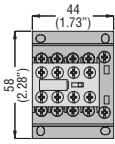


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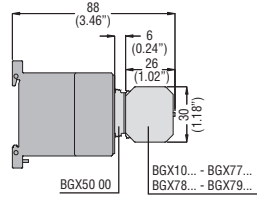
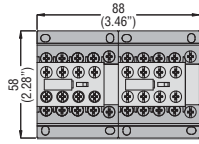
## Dimensions [mm (in)]

### ADD-ON BLOCKS ON DPBG12 CONTACTORS

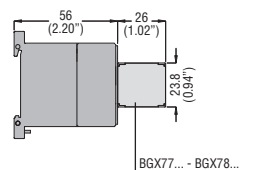
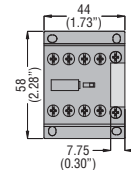
#### BGX10... auxiliary contacts



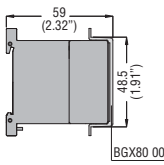
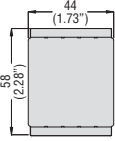
#### BGX50 00 interlock with BGX10... and BGX77 or BGX78 or BGX79 suppressor



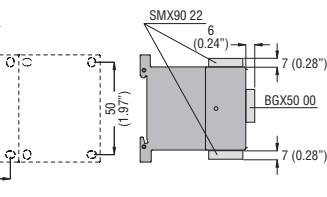
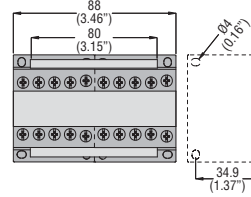
#### BGX77 or BGX78 or BGX79... suppressor only



#### BGX80 00 cover

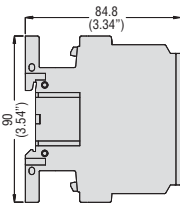
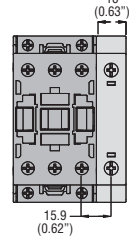


#### SMX90 22 rigid connectors with BGX50 00 interlock for reversing contactors

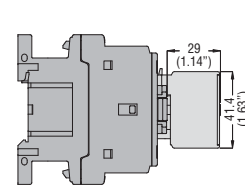
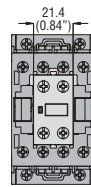


### ADD-ON BLOCKS ON DPBF09-32 CONTACTORS

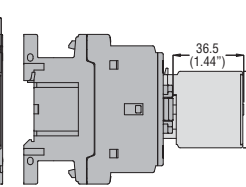
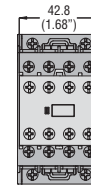
#### Fourth pole BFX42



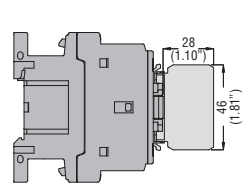
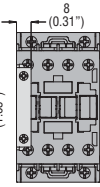
#### Auxiliary contacts BFX10... w/2 contacts



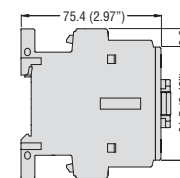
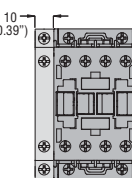
#### BFX10... w/4 contacts



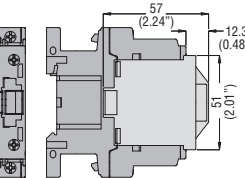
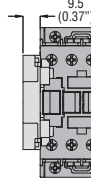
#### G418... w/1 contact



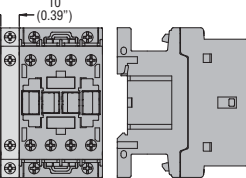
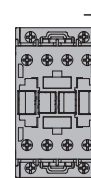
#### BFX12... w/2 contacts



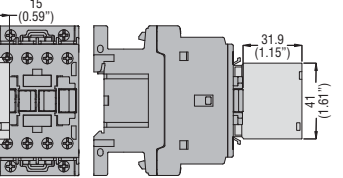
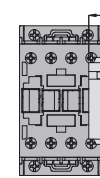
#### G428... w/1 contact



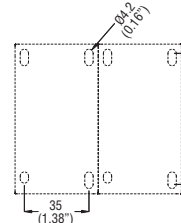
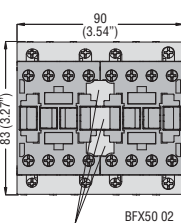
#### BFX50 00, BFX50 01 interlock



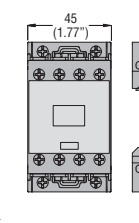
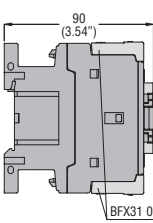
#### BFX50 03 interlock



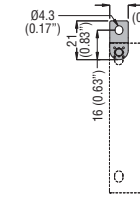
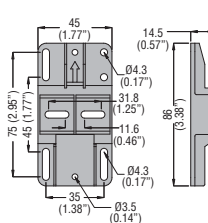
#### BFX31 01 rigid connectors with BFX50 02 interlock for reversing contactors



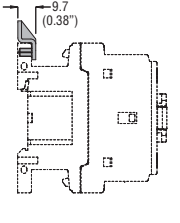
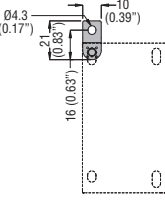
#### BFX80 cover



#### BFX89 01 fixing base

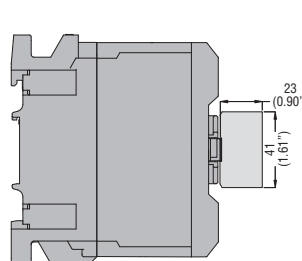
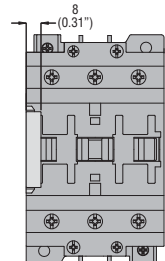


#### BFX89 02 fixing bracket

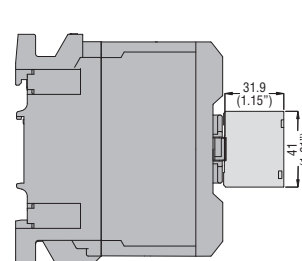
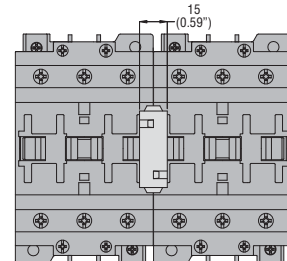


### ADD-ON BLOCKS ON DPBF50-65 CONTACTORS

#### G318, G319 225, G322 suppressor



#### G269 2 interlock for reversing contactors



### Thermal overloads for DPBF types

Single phase sensitive, three pole types

For DPBF09-32 types

Adjustment range	Catalog number
[A]	

MANUAL OR AUTOMATIC RESETTING.  
Direct mount on DPBF09-32 types.  
Independent mounting with RFX38 04 base.

4-6.5	<b>RF38 0650</b>
6.3-10	<b>RF38 1000</b>
9-14	<b>RF38 1400</b>
13-18	<b>RF38 1800</b>
17-23	<b>RF38 2300</b>
20-25	<b>RF38 2500</b>
24-32	<b>RF38 3200</b>
32-38	<b>RF38 3800</b>

❗ If a range higher than 32-38A is required, the RF95 type needs to be considered; the links must be changed. Contact Customer Service for assistance and details; contact details are given at the bottom of the page.

For DPBF50-65 types

Adjustment range	Catalog number
[A]	

MANUAL RESETTING.  
Direct mount on DPBF50-65 types.  
Complete with G261 links.  
Independent mounting with G270 base.

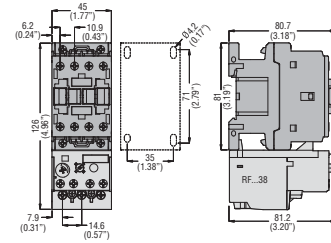
28 - 42	<b>11 RF95 3 42</b>
35 - 50	<b>11 RF95 3 50</b>
46 - 65	<b>11 RF95 3 65</b>
60 - 82	<b>11 RF95 3 82</b>

AUTOMATIC RESETTING.  
Direct mount on DPBF50-65 types.  
Complete with G261 links.  
Independent mounting with G270 base.

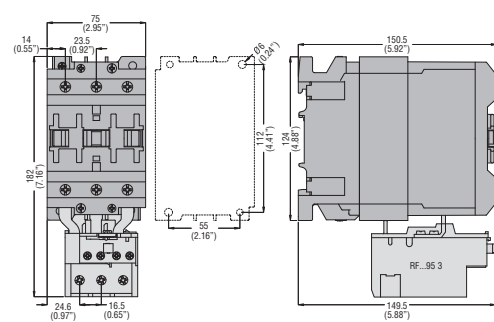
28 - 42	<b>11 RFA95 3 42</b>
35 - 50	<b>11 RFA95 3 50</b>
46 - 65	<b>11 RFA95 3 65</b>
60 - 82	<b>11 RFA95 3 82</b>

NOTE: Other adjustment ranges, non-single phase sensitive or 2-pole types and accessories are available, Contact Customer Service for part numbers and technical information; see contact details below.

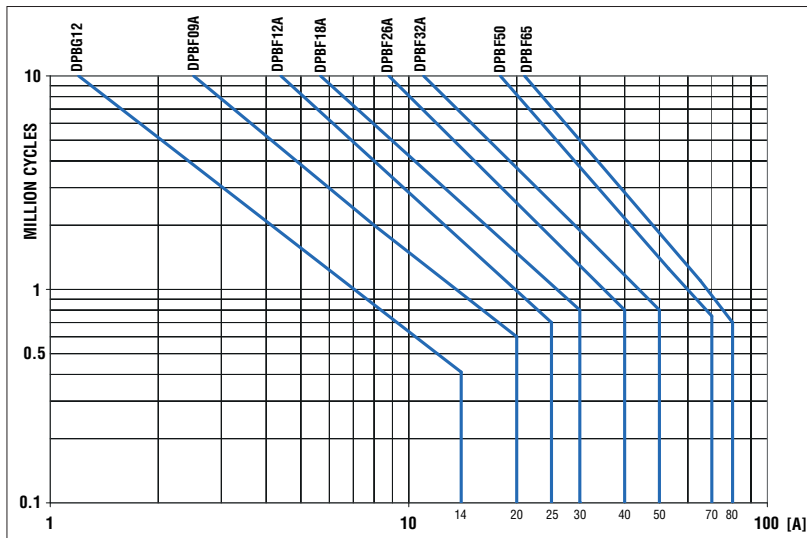
### DIMENSIONS [mm (in)] DPBF09-32 contactors with RF38 overload



### DPBF50-65 contactors with RF95 overload



### Electrical life



### Mechanical life

DPBG12 and DPBF09-32: 20 million cycles  
DPBF50-65: 15 million cycles.

### Notes for installation

For single or two-wire supply configurations with DP contactors, directly connect respectively to one or two contactor poles, leaving the others unwired. If a three-pole overload is installed with single-phase motors, the overload terminal L2 needs to be jumpered with terminal T3; the line is connected to L1-L3 terminals while the load (motor) to terminals T1 and T2.

The products described in this publication are subject to be revised or improved at any moment. Catalog descriptions and details, such as technical and operational data, drawings, diagrams and instructions, etc., do not have any contractual value. In addition, products should be installed and used by qualified personnel and in compliance with the regulations in force for electrical systems in order to avoid damages and safety hazards.



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