

DEFINITE PURPOSE CONTACTORS

- ◆ *Ideal contactors for air conditioning, heating, refrigeration, ventilation*
- ◆ *Wide range coils +10% to -20%*
- ◆ *Finger safe terminals*
- ◆ *Four-pole versions available*
- ◆ *Extensive assortment of add-on blocks and accessories*
- ◆ *Compact design*



PLANET - SWITCH

Definite purpose contactors

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Add-on blocks and accessories

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MINI-CONTACTORS



DPBG12



DPBF09 T4
DPBF12 T4

CONTACTORS



DPBF09A
DPBF12A
DPBF18A



DPBF26A



DPBF26 T4



DPBF32A

Motor Full Load 600V	Locked Rotor			Resistive 600V	Maximum Horsepower						Incorporated auxiliary contacts		Type of termination	Catalog Number	Price		
	240V	480V	600V		1 Phase		3 Phase				NO	NC					
[A]	[A]	[A]	[A]	[A]	120V	240V	200V	240V	480V	600V	[HP]	[HP]	[HP]	[HP]	[HP]	[HP]	\$ each

THREE POWER POLES

14	84	84	84	20	3/4	2	3	3	10	10	0	1	Clamp-screw	DPBG12 01 Aⓐ	76.00
											1	0		DPBG12 10 Aⓐ	76.00
20	120	120	100	30	1 1/2	3	5	5	10	10	0	1	Clamp-screw	DPBF09 01 Aⓐ	81.00
											1	0		DPBF09 10 Aⓐ	81.00
25	150	150	125	30	2	3	5	5	10	15	0	1	Clamp-screw	DPBF12 01 Aⓐ	102.00
											1	0		DPBF12 10 Aⓐ	102.00
30	180	180	150	32	2	5	7 1/2	7 1/2	15	20	0	1	Clamp-screw	DPBF18 01 Aⓐ	117.00
											1	0		DPBF18 10 Aⓐ	117.00
40	240	240	200	50	3	7 1/2	10	10	30	30	0	0	Clamp-screw	DPBF26 00 Aⓐ	150.00
50	300	300	250	55	3	10	15	15	30	40	0	0	Clamp-screw	DPBF32 00 Aⓐ	154.00

FOUR POWER POLES ⓐ

14	84	84	84	20	3/4	2	3	3	10	10	0	0	Clamp-screw	DPBG12 T4 Aⓐ	79.00
20	120	120	100	30	1 1/2	3	5	5	10	10	0	0	Clamp-screw	DPBF09 T4 Aⓐ	90.00
25	150	150	125	30	2	3	5	5	10	15	0	0	Clamp-screw	DPBF12 T4 Aⓐ	111.00
30	180	180	150	32	2	5	7 1/2	7 1/2	15	20	0	0	Clamp-screw	DPBF18 T4 Aⓐ	142.00
40	240	240	200	50	3	7 1/2	10	10	30	30	0	0	Clamp-screw	DPBF26 T4 Aⓐ	162.00

ⓐ Complete catalog number with coil code as follow:

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

Complete starter can be assembled using overload relays indicated in Section 5.

ⓐ The DPBF32A 3-pole type can be retrofitted with fourth pole, catalog number BFX42. Refer to page 4-5.

Positively guided contacts

See page TC-26 for details.

Certifications and compliance

UL listed for USA and Canada, file E93602.
Compliant with standards: UL508.



11 BGX10 11
11 BGX11 11



11 BGX10 31



11 BGX77
11 BGX78 225
11 BGX79



11 BGX50 00

Characteristics	Maximum qty per contactor	Catalog number	Price
			\$ each
Auxiliary contacts with screw terminals.			
2NC	1	11 BGX10 02	13.80
1NO + 1NC	1	11 BGX10 11	13.80
2NO	1	11 BGX10 20	13.80
4NC ❶	1	11 BGX10 04❶	24.00
1NO + 3NC ❶	1	11 BGX10 13❶	24.00
2NO + 2NC	1	11 BGX10 22	24.00
3NO + 1NC	1	11 BGX10 31	24.00
4NO	1	11 BGX10 40	24.00
Mechanical interlock.			
For both DPBG types	1	11 BGX50 00	12.00
Quick connect surge suppressors (Faston terminals).			
≤48VAC/DC (Varistor)		11 BGX77 048	15.00
48-125VAC/DC (Varistor)		11 BGX77 125	15.00
125-240VAC/DC (Varistor)		11 BGX77 240	15.00
≤225VDC (Diode)		11 BGX78 225	15.00
≤48VAC (Resistor-Capacitor)		11 BGX79 048	15.00
48-125VAC (Resistor-Capacitor)		11 BGX79 125	15.00
125-240VAC (Resistor-Capacitor)		11 BGX79 240	15.00
240-415VAC (Resistor-Capacitor)		11 BGX79 415	15.00
Modular cover ❷.			
For both DPBG types	1	11 BGX80 00	3.50

❶ Cannot be used with DPBG with DC coil.
❷ Cannot be fitted if other accessories are mounted.

Operational characteristics for add-on auxiliary contacts

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

❸ See page TC-25 for details.

Positively guided contacts

See page TC-27 with both NO and NC auxiliary contacts.

Certifications and compliance

UL listed for USA and Canada file E93602 for auxiliary contacts.

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

Add-on blocks



BFX10 (02-11-20)

11 G484
(03-12-21-30)BFX10
(04-13-22-31-40)

11 G418

11 G218

11 G481
11 G482

11 G428... (01-01D-10-10A)

11 G485 - 11 G486
11 G487

Characteristics	Maximum number per contactor	Catalog number	Price
			\$ each

Instantaneous auxiliary contacts with front center mounting. Screw terminals.

2NC	1	BFX10 02 ①	14.00
1NO + 1NC	1	BFX10 11 ①	14.00
2NO	1	BFX10 20 ①	14.00
4NC	1	BFX10 04 ①②	28.20
1NO + 3NC	1	BFX10 13 ①②	28.20
2NO + 2NC	1	BFX10 22 ①②	28.20
3NO + 1NC	1	BFX10 31 ①②	28.20
4NO	1	BFX10 40 ①②	28.20
3NC	1	11 G484 03 ①	22.00
1NO + 2NC	1	11 G484 12 ①	22.00
2NO + 1 NC	1	11 G484 21 ①	22.00
3NO	1	11 G484 30 ①	22.00

Instantaneous auxiliary contacts with front lateral mounting. Screw terminals.

1NO	2	11 G418 10	12.00
1EM early make	2	11 G418 10A	12.00
1NC	2	11 G418 01	12.00
1LB late break	2	11 G418 01D	12.00

Faston terminals.

1NO or 1NC reversible	2	11 G218	11.00
2NO	2	11 G481 20	15.00
1NO + 1NC	2	11 G481 11	15.00
2NC	2	11 G481 02	15.00
Double-throw③	2	11 G482③	28.00

Side mount adapters.

For G218	2	11 G280	3.20
For G481 and G482	2	11 G483	4.20

Auxiliary contacts for side mounting, duly fitted on side-mount adapter. Screw terminals.

1NC	2	11 G428 01	17.40
1LB late break	2	11 G428 01D	17.40
1NO	2	11 G428 10	17.40
1EM early make	2	11 G428 10E	17.40

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on energization ④. Screw terminals.

3 seconds	1	11 G485 3	102.00
6 seconds	1	11 G485 6	102.00
15 seconds	1	11 G485 15	102.00
30 seconds	1	11 G485 30	102.00
60 seconds	1	11 G485 60	102.00
120 seconds	1	11 G485 120	102.00

Delayed auxiliary contacts 1NO + 1NC (pneumatic operation) on de-energization ⑤. Screw terminals.

3 seconds	1	11 G486 3	102.00
6 seconds	1	11 G486 6	102.00
15 seconds	1	11 G486 15	102.00
30 seconds	1	11 G486 30	102.00
60 seconds	1	11 G486 60	102.00
120 seconds	1	11 G486 120	102.00
70 milliseconds	1	11 G487	102.00

- ① Highly conductive contacts.
- ② Available during 2007; contact Sales & Technical Support for availability.
- ③ Highly conductive contact.

Operational characteristics for add-on auxiliary contacts

Type	G418 G428 G485⑤ G486⑤ G487⑤	BFX10 G484	G218 G481	G482⑥
Rated current Ith	A 10	10	10	0.1⑦
Rated insulation voltage Ui	V 690	690	690	690
Terminals: Screw	M 3.5	M 3	—	—
Width	mm 7 (0.2in)	6.9 (0.2in)	—	—
Faston	mm —	—	1-6.35 2-2.8	1-6.35 2-2.8
Conductor section maximum with 1 or 2 wires				
flexible w/o lug	mm² 2.5	2.5	—	—
flexible c/w lug	mm² 2.5	2.5	2.5	2.5
AWG	n° 14	14	14	14
Terminal protection according to IEC/EN 60529	IP20⑧	IP20	IP20⑩	IP20⑩
UL designation⑨	AC A600 DC P600⑥	A600 Q600	A600 P600	—
Mechanical life (in millions)	cycles 10⑪	10	10	10

④ See TC-25 for details.

⑤ For particularly severe ambient conditions, contact Sales & Technical Support.

⑥ Gold-plated contacts inside tight enclosure for use in pollutant environments.

⑦ Referred to 125VAC and 30VDC.

⑧ Finger safe IP20 protection is warranted to equipment wired with 0.75mm²/18 AWG minimum conductor section for G418 or G428 and 1mm²/18 AWG minimum for G480, G485, G486 and G487 types.

⑨ Q600 for G418.

⑩ Finger safe IP20 protection is warranted to equipment wired with insulated Faston terminals.

⑪ 3 million cycles for G485, G486, G487.

Positively guided contacts

See page TC-27 for blocks with both NO and NC auxiliary contacts.

Certifications and compliance

BFX contacts: UL Listed for USA and Canada, file E93601; pending for BFX10 04, BFX10 13, BFX10 22, BFX10 31, BFX10 40.

All others: UL Recognized for USA, file E93601 and CSA certified, file LR 54332-15.

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

Maximum assembly combination of add-on blocks

See page TC-28.

Add-on blocks and accessories



BFX42



BFX50 00 BFX50 01



BFX50 02 BFX50 03



BFX77
BFX79



BFX 80



BFX89 01



BFX89 02

Characteristics	Maximum number per contactor	Catalog number	Price
			\$ each
Fourth pole			
For DPBF26A and DPBF32A	1	BFX42	72.00
Mechanical interlock for all DPBF types.			
Side mount	1	BFX50 00 Ⓢ	25.00
Side mount with 2NC contacts	1	BFX50 01 Ⓢ	36.00
Front mount low profile	1	BFX50 02	10.00
Front mount	1	BFX50 03	30.00
Quick-connect surge suppressors top mount for all DPBF types.			
Varistor	≤48VAC	BFX77 048	17.00
	48-125VAC	BFX77 125	17.00
	125-240VAC	BFX77 240	17.00
Resistor-Condenser	≤48VAC	BFX79 048	21.00
	48-125VAC	BFX79 125	21.00
	125-240VAC	BFX79 240	21.00
	240-415VAC	BFX79 415	21.00
Sealing cover.			
For DPBF contactors		BFX80	5.00
Screw fixing adapters.			
Universal base to screw fix DPBF contactors		BFX89 01	4.00
Screw fixing brackets for DPBF contactors		BFX89 02	3.00
Marking element for all DPBF contactors.			
Blank label for writing		BFX30	2.00

Ⓢ Different sized contactors can be interlocked.
Example: DPBF09A-DPBF18A with DPBF26A-BF38A.

Operational characteristics for mechanical latch

Type		BFX42	BFX50 01
Conventional free air thermal Current Ith	A	55	10
Rated insulation voltage Ui	V	690	690
Terminals:	Screw	M4	M3
	Width	mm	12.5
Conductor section Maximum with 1 or 2 cables	flexible w/o lug	mm ²	16
	flexible c/w lug	mm ²	16
	AWG	n°	6
			14
Terminal protection per IEC/EN60529		IP20Ⓢ	IP20
UL designation Ⓢ	AC	A600	—
	DC	—	Q600
Mechanical life (in millions) cycles		10	10

Type		G222	G272
Control circuit voltage	AC (50/60 Hz)	V	12-380
	DC	V	12-220
Power consumption with control	AC	VA	40
	DC	W	70
Minimum energising drop-out		ms	10
	pick-up	ms	50

Ⓢ See pages TC-18 and 19 to warrant finger-safe IP20 protection.
Ⓢ See page TC-25 for details.

Maximum assembly combination of add-on blocks

See page TC-28.

Certifications and compliance

UL listing for USA and Canada, pending completion.
Compliant with standards: IEC 60947-1, IEC/EN 60947-5-1.



Dimensions
page D-12

Wiring diagrams
pages W-3 and 4

Technical characteristics
pages TC-25 to 28



PAGE 5-2

FOR BG SERIES MINI-CONTACTORS

- Type RF9, single phase sensitive, three poles, manual reset
- Type RFA9, single phase sensitive, three poles, automatic reset
- Type RFS9, single phase sensitive, two poles, manual reset
- Type RFSA9, single phase sensitive, two poles, automatic reset.



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FOR BF SERIES CONTACTORS

- Type RF38, single phase sensitive, three poles, manual or automatic reset
- Types RF25 and RF95, single phase sensitive, three poles, manual reset
- Types RFA25 and RFA95, single phase sensitive, three poles, automatic reset
- Types RFS25 and RFS95, single phase sensitive, two poles, manual reset
- Types RFSA25 and RFSA95, single phase sensitive, two poles, automatic reset.



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FOR B SERIES CONTACTORS

- Type RF200 and RF420, single phase sensitive, three poles, manual or automatic reset.

RF38 features

FRONT PROTECTION COVER OF THERMAL OVERLOAD RELAYS
 A sealable protection cover is available. When fitted on to the relay front, it precludes all possible adjuster tampering and involuntary activation of the "Reset" and "Stop" buttons of the thermal overload relay.



CLEAR IDENTIFICATION OF THERMAL OVERLOAD RELAY MANUAL OR AUTOMATIC RESET
 The RF38 thermal overload relay is supplied configured for manual resetting. By breaking the two tabs, the "Reset" button can be rotated to automatic resetting. The broken tabs and the index indicator provides for immediate and distinct identification of the selected configuration.



FIXING EASE OF THE THERMAL OVERLOAD RELAY
 While the thermal overload relay is being linked to the contactor, its auxiliary contact fits on and connects to the coil terminal by rigid terminal. Complete relay fixing is done in a single operation, without the need of other connections.



SEALABLE RELAY COVER
 A handy closing flap feature excludes any tampering with the thermal overload relay adjuster.



IEC STYLE OVERLOAD RELAYS

- ◆ IEC style adjustable bimetallic overload relays
- ◆ Class 10A thermal overload relays for motor currents 0.14 to 630A
- ◆ Ambient compensated
- ◆ Three phase (3-pole) and single phase (2-pole) types
- ◆ Three phase units are single phase sensitive for better motor protection
- ◆ Automatic and/or manual reset
- ◆ Direct mount to contactor or separate mount



IEC style overload relays

SEC. PAGE

With BG series mini-contactors

For three-phase starters, RF9 and RFA9 types **5- 2**

For single-phase starters, RFS9 and RFS9A types **5- 3**

With BF series contactors

For three-phase starters, RF38 - RF25 - RF95 - RFA25 - RFA95 types **5- 4**

For single-phase starters, RFS38 - RFS25 - RFS95 - RFA25 - RFA95 types **5- 6**

With B series contactors

For three-phase starters, RF200 and RF420 types **5- 8**

Accessories for all versions **5- 9**