Relays for the protection of EEx e motors

Protections

- I> Overload
- Phase imbalance or phase loss

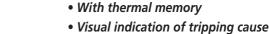


Protection of motors in explosive or hazardous areas

As of the 30th of June, 2003, in the European Union, the products marketed or placed in service in potentially explosive areas must conform to Directive ATEX 94/9/EC

These relays are applicable for EEx motors with intensities of up to 630A and above, which run in potentially explosive areas such as petrochemical industries, plastics factories, etc.

The relay is installed outside the explosive area.



Relay to be used with the external display module

• Certificates for use as category 3 -

• For 3-phase motors up to 1000 Vac

• Currents from 1,5 to 630 A and higher

Directive ATEX 94/9/EC

With the same features and applications as the G17 relay, the BG17 relay incorporates an external display module which shows the status of the relay and allows it to be reset from outside of the panel or the motor control center (MCC).

As the BG17 is designed for use with the ODG display module, it does not include the LED signals on the front of the relay itself.







Protections Models			<i>I</i> >	<i>I</i> >	
Adjustment range	$I_{B}\left(A\right)$		5 - 17,7	5 - 17,7	
Motor 400 V	HP		3 - 10	3 - 10	
50/60 Hz	kW		2,2 - 7,5	2,2 - 7,5	
Code no. according	230 Vac	single phase	10723	10733	
to the relay	115 Vac	single phase	10722	10732	
voltage supply	24 Vdc		10720	10730	
For $I_{ m N}$ of the motor below the minimum setting $I_{ m B}$			Pass the motor cables several times (n) through the corresponding holes in the relay $I_B = n \times I_N$		
For I_N of the motor above the maximum setting I_R			Use 3 CT's/5 and pass their secondary twice (n=2) through the relay holes		

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Cha	racti	Pric	tics
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Thermal memory / Overload trip Maximum motor nominal voltage 15 adjustable tripping curves Phase imbalance protection PTC min/max cold resist. / Average trip resistance Reset mode Signalling LED's

Single phase auxiliary power supply

External display module / Code no.

- Voltage Us
- Frequency
- Consumption
- Protection fuse

• Switching capacity in abnormal conditions

Short-circuit resistance

Terminals max. section / Screw torque Protection degree / weight / mounting Storage temperature

Operation temperature

Standards



G 17 and BG 17

No

Yes / From 1,1 x I_B

1000 V

Cold tripping times at $6 \times I_B$ from 2 to 30s

Over 40%. Tripping time < 3s

100 Ω / 1500 Ω - 2750 Ω

Manual and remote

4 LED's: ON + one for each protection

115 - 230 Vac (+15% -6%) / 24 Vdc (±10%)

50/60 Hz (from 49 to 61,2 Hz)

2,5 VA (115 - 230 Vac) / 1,5 W (24 Vdc)

GL 6 A

1 relay with 1 NO + 1 NC

I_{th}: 5A; AC15 - 250V - 2A; DC13 - 30V - 2A

2,5 mm², No. 22 - 12AWG / 20Ncm, 1.8 LB - IN

IP20 / 0,5 Kg / DIN rail

-30°C +70°C

-15°C +60°C

EN 5081-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 60529, EN 60947-5-1, UL 508

EN 60947-1, EN 60947-4-1, EN 60255-8, EN 954-1,

EN 60079-14, EN 60034-1, EN 50019

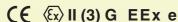
ODG display module

This module, which is the size of a pushbutton of Ø22 mm, is mounted outside on the panel door or on the front of the motor control center (MCC), and is connected to the relay by means of a 2 meters long flat cable. Weight: 0,05 Kg

ODG / 12505

ATEX Certificaction

Relays G and BG are certificate for use as category 3, with ATEX marked:



PTB approval:

G and BG relays have been approved by the **Physikalisch-Technische Bundesanstalt-PTB** for the protection of EEx e protected explosion motors (DIN EN 50019 / DIN VDE 0170 /DIN VDE 0171 part 6) according to the stipulations and requirements of

PTB report no. PTB Ex 3.43-30004/00





