

EEx e Motor Protection Relays

MOTOR PROTECTION IN EXPLOSIVE OR HAZARDOUS AREAS

- Certificates for use as category 3 - Directive ATEX 94/9/EC.
- For 3-phase motors up to 1000 Vac.
- Currents from 1,5 to 630 A and over.
- With thermal memory.
- Visual indication of tripping cause.

These relays are applicable for EEx e motors with ratings up to 630A and above, operating in potentially explosive or hazardous areas such as petrochemical industries, plastic factories, etc. The relay is installed outside the explosive area.

G



PROTECTION FUNCTIONS

- Overload
- ⚡ Phase imbalance or phase loss
- 🔥 Overtemperature



The models G and BG are ATEX marked with certification for Category 3 use.

PTB approval:

G and BG relays have been approved by the **Physikalisch-Technische Bundesanstalt-PTB** for the protection of EEx e explosion proof motors (DIN EN 50019 / DIN VDE 0170 / DIN VDE 0171 part 6) according to the stipulations and requirements of PTB. PTB report no. PTB Ex 3.43-30004/00.

CE II (3) G EEx e

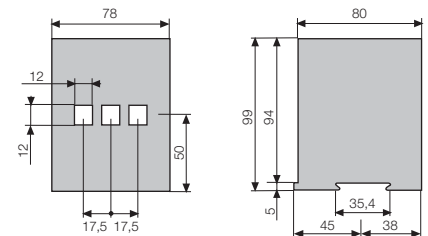
PTB Ex 3.43 - 30004/00

MODELS		G 17
Adjustment range Motor 400 V 50/60 Hz	I_B (A)	5 - 17,7
	CV	3 - 10
	kW	2,2 - 7,5
Code according to the relay voltage supply (+15% -10%) ac: 50/60 Hz	230 Vac single phase	10723
	115 Vac single phase	10722
	24 Vdc, ac	10720
For I_N of the motor below the minimum setting I_B		Pass the cables several times (n) through the holes in the relay $I_B = n \times I_N$
For I_N of the motor above the maximum setting I_B		Use 3 CT's .../5 and pass their secondary twice (n=2) through the relay holes
External display module / Code no.		No

CHARACTERISTICS	
Thermal memory / Overload trip	Yes / From 1,1 x I_B
Maximum motor nominal voltage	1000 V
15 adjustable tripping curves	Cold tripping times at 6 x I_B from 2 to 30s
Phase imbalance protection	Over 40%. Tripping time < 3s
PTC min/max cold resist. / Average trip resistance	100 Ω / 1500 Ω - 2750 Ω
Reset mode	Manual and remote
Signalling LED's	4 LED's: ON + one for each protection
Alimentación auxiliar monofásica	115 - 230 Vac (+15% -6%) / 24 Vdc ($\pm 10\%$) 50/60 Hz (from 49 to 61,2 Hz) 2,5 VA (115 - 230 Vac) / 1,5 W (24 Vdc) GL 6 A
Output contacts	1 relay with 1 NO + 1 NC I_B : 5A; AC15 - 250V - 2A; DC13 - 30V - 2A 1000 A
Short circuit withstand rating	5000 A at 0,5 s (SCR 5000@0,5 s)
Terminals max. section / Screw torque	2,5 mm ² , No. 22 - 12AWG / 20Ncm, 1,8 LB - IN
Protection degree / weight / mounting	IP20 / 0,5 kg / DIN rail
Storage temperature	-30°C +70°C
Operating temperature	-15°C +60°C
Standards	EN 50081-2, 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



DIMENSIONS G RELAY (mm)



WIRING DIAGRAM

