GL

Integral Motor Protection Relays

INTEGRAL MOTOR PROTECTION

- For 3-phase motors from 1 to 630 A and over. Cable feed through relay.
- Precise motor heating and cooling memory, reproduces its thermal image.
- Immediate detection of phase loss (3 s), even at reduced load.
- Visual indication of tripping cause.

For motors (1 to 630 A and over), in applications such as surface mounted pumps, compressors, mixers, ventilators, elevators, cranes, industrial refrigeration and in general for those motors requiring complete protection where over temperature (by means of PTC sensor) and incorrect phase sequence protection is required.

Its 7 trip classes cover all types of starting or working cycles.

EXTERNAL DISPLAY MODULE

By means of this plug-in optional accessory, the relay status can be seen and reset from the exterior of the electrical panel board.

Easy to install. Size of a Ø22 mm push button.

Suitable for motor control centres (MCC) and panel boards.

GL



PROTECTION FUNCTIONS

- $I>$ Overload
- Phase imbalance or phase loss
- Overtemperature
- Phase sequence

ODGL

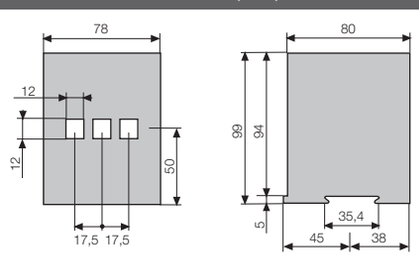


Models	Code	Relay type
ODGL	**12535**	GL

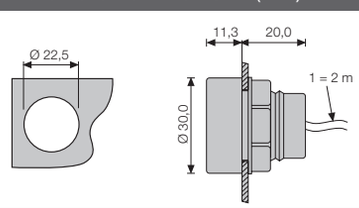
MODELS			GL 16	GL 40	GL 90
Adjustment range	I_B (A)		4 - 16,7	15 - 40,5	40 - 91
Motor 400 V 50/60 Hz	CV		3 - 10	10 - 25	30 - 60
	kW		2,2 - 7,5	7,5 - 18,5	22 - 45
Code: according to the relay voltage supply (+15% -10%) ac: 50/60 Hz	230 Vac	single phase	**11303**	**11323**	**11343**
	115 Vac	single phase	**11302**	**11322**	**11342**
	24 Vac, dc	single phase	**11300**	**11320**	**11340**
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 .../5 and the relay GL16 and pass the secondary through the holes		
External display module (optional)			ODGL		

CHARACTERISTICS	
Thermal memory / Overload trip	Yes / From 1,1 x I_B
Maximum motor nominal voltage	1000 Vac
Trip classes (IEC 947-4-1)	5 - 10 - 15 - 20 - 25 - 30 - 35
Phase sequence protection	ON OFF Actuates during the motor start
Phase imbalance protection	Over 40%. Tripping time < 3s
PTC Min/max cold resist.-Average trip / reset resist.	25Ω / 1500Ω - 3600Ω / 1800Ω
Reset mode	Manual and remote
Signalling LED's	4 LED's: ON + $I>$ + + +
Output contacts	1 relay with 1 NA + 1 NC
Switching power	I_{th}: 5A; AC15 - 250V - 2A; DC13 - 30V - 2A
Terminals: Max. section / screw torque	2,5 mm², No. 22 - 12AWG / 20Ncm, 1.8 LB - IN
Power consumption	2,5 VA (115-230 Vac) - 1,5 W (24 Vdc)
Protection degree / weight / mounting	IP20 / 0,5 kg / DIN rail
Storage temperature	-30°C +70°C
Operating temperature / max. altitude	-15°C +60°C / 1000m ; -15°C +50°C / 3000m
Standards	IEC 255, IEC 947, IEC 801, EN 50081-2
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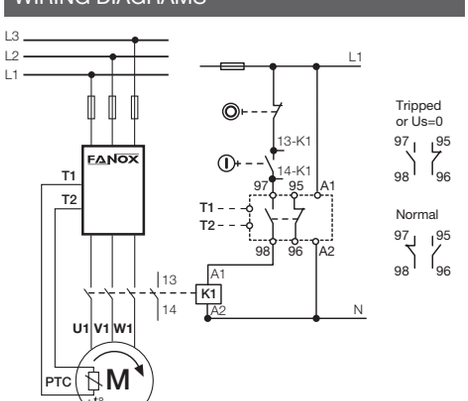
DIMENSIONS GL RELAY (mm)



DIMENSIONS ODGL MODULE (mm)



WIRING DIAGRAMS



INTEGRAL MOTOR PROTECTION

- For 3-phase motors from 60 to 200 A and over. Cable feed through relay.
- Precise motor heating and cooling memory, reproduces its thermal image.
- Immediate detection of phase loss (3 s), even at reduced load.
- Visual indication of tripping cause.

For 3 phase motors up to 200A, in applications such as surface mounted pumps, compressors, mixers, ventilators, elevators, cranes, industrial refrigeration and in general for those motors requiring complete protection where over temperature (by means of PTC sensor) and incorrect phase sequence protection is required.

Its 7 trip classes cover all types of starting or working cycles.

EXTERNAL DISPLAY MODULE

By means of this plug-in optional accessory, the relay status can be seen and reset from the exterior of the electrical panel board.

Easy to install. Size of a Ø22 mm push button.

Suitable for motor control centres (MCC) and panel boards.

GL 200



PROTECTION FUNCTIONS

- $I>$ Overload
- Phase imbalance or phase loss
- Overtemperature
- Phase sequence

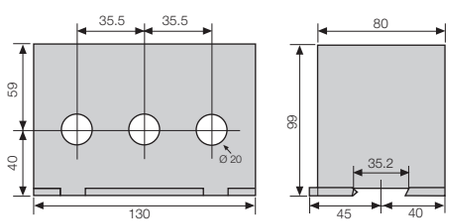
ODGL



Models	Code	Relay type
ODGL	**12535**	GL

MODELS				GL 200
Adjustment range	I_B (A)			60 - 200
Motor 400 V 50/60 Hz	CV			50 - 150
	kW			37 - 110
Code — according to the relay voltage supply — ac: 50/60 Hz	15%	230 Vac	single phase	**11363**
	15%	115 Vac	single phase	**11362**
	20%	24 Vac, dc	single phase	**11360**
External display module (optional)				ODGL

DIMENSIONS GL RELAY (mm)



CHARACTERISTICS	
Thermal memory / Overload trip	Yes / From 1,1 x I_B
Maximum motor nominal voltage	1000 Vac
Trip classes (IEC 947-4-1)	5 - 10 - 15 - 20 - 25 - 30 - 35
Phase sequence protection	ON ■□ OFF Actuates during the motor start
Phase imbalance protection	Over 40%. Tripping time < 3s
PTC Min/max cold resist.-Average trip / reset resist.	25Ω / 1500Ω - 3600Ω / 1800Ω
Reset mode	Manual and remote
Signalling LED's	4 LED's: ON + $I>$ + + +
Output contacts	1 relay with 1 NA + 1 NC
Switching power	I_{th}: 5A; AC15 - 250V - 2A; DC13 - 30V - 2A
Terminals: Max. section / screw torque	4.0 mm², No. 30 - 12AWG / 50Ncm, 4.4 LB - IN
Power consumption	2,5 VA (115-230 Vac) - 1,5 W (24 Vdc)
Protection degree / weight / mounting	IP20 / 1 kg / DIN rail
Storage temperature	-30°C +70°C
Operating temperature / max. altitude	-15°C +60°C / 1000m ; -15°C +50°C / 3000m
Standards	IEC 255, IEC 947, IEC 801, EN 50081-2
	CE c UL us LISTED

WIRING DIAGRAMS

