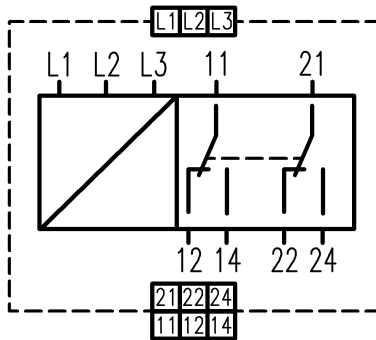


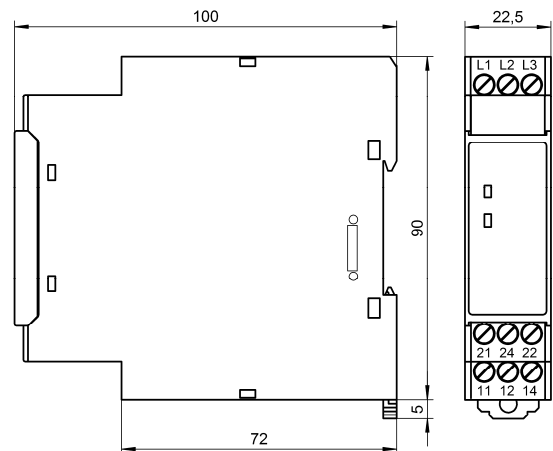


flare CONTROL P3-L
Three-phase monitoring relays
81.030.0020.1

- 3-phase monitoring relays
- Phase loss detection
- Monitoring of phase sequence
- Monitoring voltage used as power supply
- Output: relay switching contact 5 A
- Mounting width 22.5 mm



Block diagram



Dimensional diagram

Technical Data

flare CONTROL P3-L		Order no. 81.030.0020.1
Function (see Fig. 2 Functional diagram for phase loss and phase sequence)		- phase loss detection - phase sequence monitoring (rotating filed)
Input / Measuring Circuit		
Operating voltage, 3-phase		200 ... 480 V AC
Voltage range, 3-phase		85 ... 110 % of operating voltage
Module supply voltage		from L1 and L2
Input load		ca. 4.1 VA
Response time max.		0.1 s
Input frequency AC		50/60 Hz
Reset type		automatic reset
Output / Switching Contact		
Contacts		2 changeover contacts (DPTP)
Max. current	Ohmic load	5 A, 250 V AC / 30 V DC
	Inductive load	1 A, 250 V AC (cos phi = 0.4) / 30 V DC(L/R = 7 ms)
Minimum load		4 mA at 24 V DC; 10 mA at 5 V
Contact voltage max.		250 V AC
Contact current max.		5 A
Switching capacity		1,500 VA max.
Contact material		AgNi
Mechanical life cycle		10 x 10 ⁶ cycles
Electrical life cycle		50.000 cycles

Technical Data

flare CONTROL P3-L	Order no. 81.030.0020.1
Functional Display	(see Fig. 1 Display elements)
LED 'PWR' (green) (Fig. 1 - 1)	lit when power is supplied (module supplied from L1 and L2)
LED 'RY' (yellow) (Fig. 1 - 2)	lit when relay is on
Insolation Properties	
Insolation resistance input/output	20 MOhm (at 500 V)
Safety Standard	
Application standard	EN 60947-5-1 (Overvoltage category III, Pollution degree 2)
EMC	EN 60947-5-1
Approvals	
UL	cURus (UL508)
Operation / Dimensions / Connection	
Operating temperature range	-20 ... +60 °C (no condensing or icing)
Storage temperature range	-25 ... +65 °C (no condensing or icing)
Humidity	25 – 85 %
Operating altitude	2,000 m AMSL max.
Dimensions (W x H x D)	22.5 x 95 x 100 mm
Weight	ca. 130 g
Housing material	PC and ABS plastic; UL94-V0
Installation	35 mm rail acc. EN 60715
Cooling	free convection
IP rating	Terminals: IP20
Terminal type	screw clamp
Connector cross section (max.)	solid 0.2 ... 4 mm ² (AWG10-24)
	stranded with ferrule 0.2 ... 2.5 mm ²
Strip length	7 ... 8 mm max.
Recommended torque	0.49 ... 0.59 Nm max.
Terminal Assignments	(see also block diagram above)
L1, L2, L3	monitoring / supply voltage
11, 12, 14 (21, 22, 24)	switching output (relays changeover contacts)

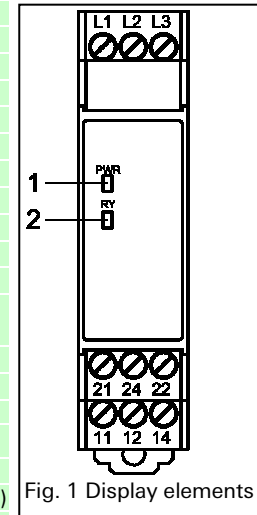


Fig. 1 Display elements

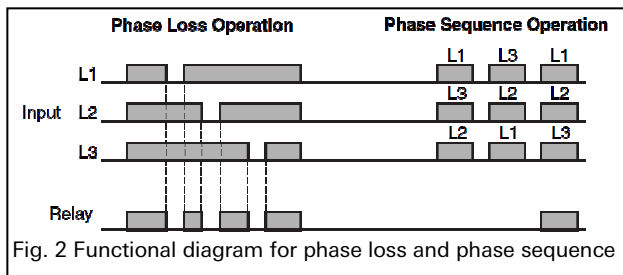


Fig. 2 Functional diagram for phase loss and phase sequence