finder®
SWITCH TO THE FUTURE

Monitoring relays 6 - 8 A

70
SERIES



Air conditioning

Couplers

Ancillary equipment

FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

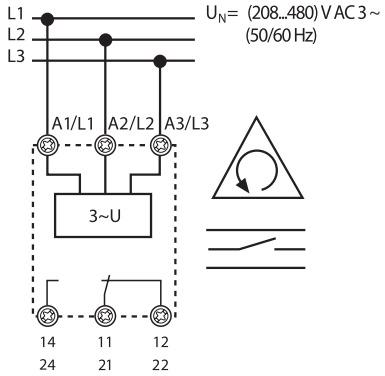
3 Phase - Rotation and phase loss monitoring relay

- Complies with EN 45545-2 +A1:2016 (protection against fire of materials), EN 61373 (resistance against random vibrations and shock, Category 1, Class B), EN 50155 (resistance to temperature and humidity, T1 class)
- Universal voltage monitoring (U_N from 208 V to 480 V, 50/60 Hz)
- Phase loss monitoring, under phase regeneration
- Positive safety logic - make contact opens if the relay detects an error
- 2 versions:
  - 1 CO, 6 A (width 17.5 mm)
  - 2 CO, 8 A (width 22.5 mm)
- 35 mm rail (EN 60715) mount
- European patent pending for the innovative principle at the root of the 3 phase monitoring and error survey system

Screw terminal



	70.61T	70.62T
		
	Three-phase (208…480)V voltage monitoring: • Phase loss • Phase rotation	Three-phase (208…480)V voltage monitoring: • Phase loss • Phase rotation



* Short term (10 min) +70°C

For outline drawing see page 5

		70.61T	70.62T
Contact specification			
Contact configuration		1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current	A	6/15	8/15
Rated voltage/ Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	1500	2000
Rated load AC15 (230 V AC)	VA	250	400
Single phase motor rating (230 V AC)	kW	0.185	0.3
Breaking capacity DC1: 30/110/220 V	A	3/0.35/0.2	8/0.3/0.12
Minimum switching load	mW (V/mA)	500 (10/5)	300 (5/5)
Standard contact material		AgCdO	AgNi
Supply specification			
Nominal system voltage (U_N)	V AC 3 ~	208…480	208…480
Frequency	Hz	50/60	50/60
Rated power	VA (50 Hz)/W	8/1	11/0.8
Operating range	V AC 3 ~	170…500	170…520
Technical data			
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$	$60 \cdot 10^3$
Switch-off/reaction time	s	<0.5/<0.5	<0.5/<0.5
Ambient temperature	°C	–25…+55*	–25…+55*
Protection category		IP 20	IP 20
Approvals (according to type)		CE EAC cULus	CE EAC

Ordering information

Example: 70 series, three-phase voltage monitoring relay, 1 output, supply voltage 208…480 V AC.

7 0	.	6	1	.	8	.	4 0 0	.	A: 0	.	B: 0	.	C: 0	.	D: 0	T

Series

Type
6 = 3 phase loss and rotation monitoring

No. of poles
1 = 1 pole
2 = 2 pole

Supply version
8 = AC (50/60 Hz)

Supply voltage
400 = 208…480 V AC 3~

A: Detection values
0 = Non-adjustable detection values

B: Contact circuit
0 = CO

C: Time delay setting
0 = Fixed switch-off delay

D: Fault memory option
0 = No fault memory

Technical data

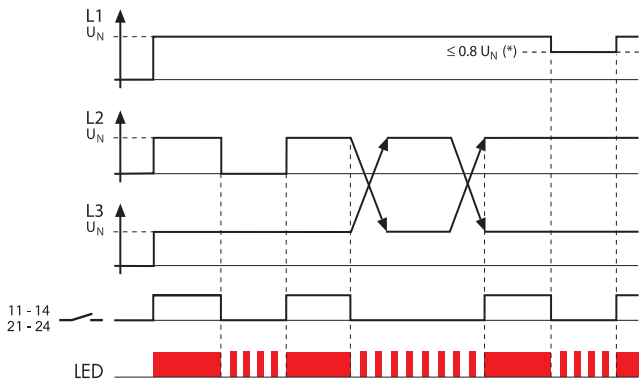
Insulation				
Insulation			Dielectric strength	Impulse (1.2/50 µs)
	between supply and contacts		3000 V	5 kV
	between open contacts		1000 V	1.5 kV
EMC specifications				
Type of test			**Reference standard**	
Electrostatic discharge	contact discharge		EN 61000-4-2	4 kV
	air discharge		EN 61000-4-2	8 kV
Fast transients (burst) (5-50 ns, 5 kHz)	on A1, A2, A3		EN 61000-4-4	2 kV
Surge (1.2/50 µs)	differential mode		EN 61000-4-5	4 kV
Other data				
Start up time (NO contact closure after energising)		s	< 2	
Regeneration level (Maximum)			≤ 80% of average of other 2 phase	
Power lost to the environment	without contact current	W	1	
	with rated current	W	1.4	
Screw torque		Nm	0.8	
Max. wire size			solid cable	stranded cable
		mm²	1 x 6 / 2 x 4	1 x 4 / 2 x 2.5
		AWG	1 x 10 / 2 x 12	1 x 12 / 2 x 14

Functions

Output relay On (NO closed) when all OK: positive logic.

Type
70.61T
70.62T

Phase loss and phase rotation



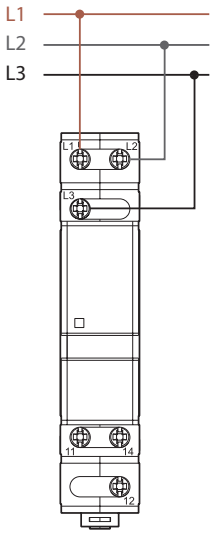
If the sequence (L1, L2, L3) is incorrect at power-on, the output relay will not turn-on.

If a phase is lost, the output relay turns off immediately. When the phase is again active, the output relay turns on immediately.

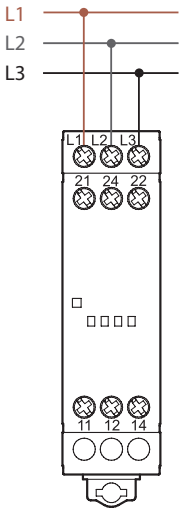
Phase loss monitoring possible even under regeneration up to 80% of the average of the other 2 phases.

V-2018, www.findernet.com

Wiring diagrams



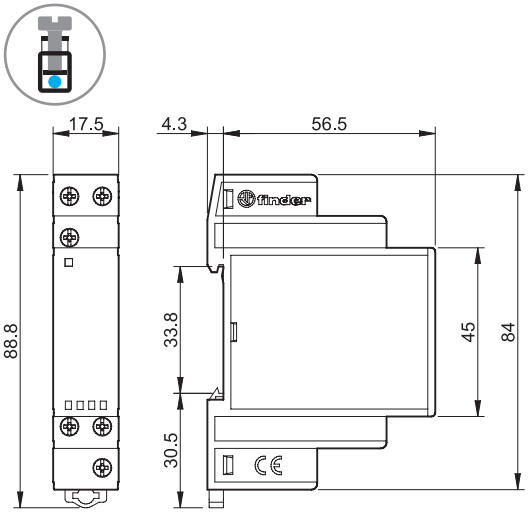
Type 70.61T



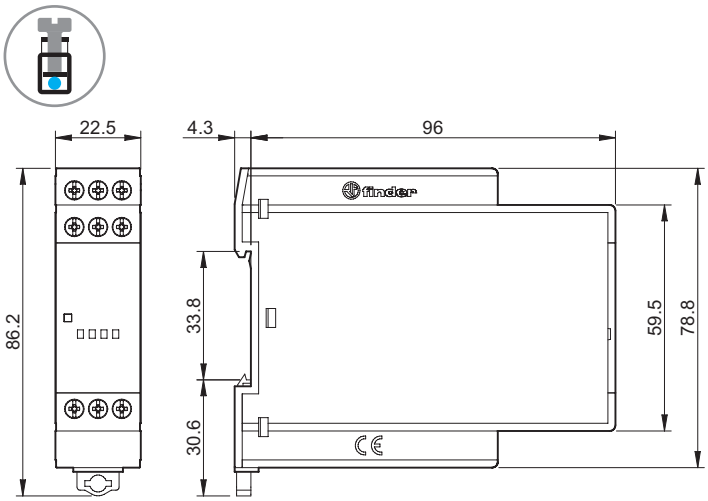
Type 70.62T

Outline drawings

70.61T
Screw terminal



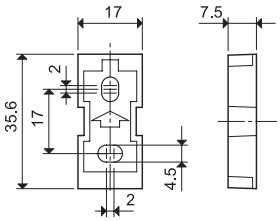
70.62T
Screw terminal



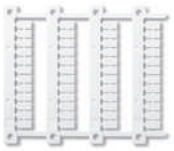
Accessories



020.01



Adaptor for panel mounting, plastic, 17.5 mm wide	020.01



060.48

Sheet of marker tags, plastic, 48 tags, 6 x 12 mm, for CEMBRE's thermal transfer printers for type 70.62	060.48



020.24

Sheet of marker tags, plastic, 24 tags, 9 x 17 mm for type 70.61	020.24

V-2018, www.findernet.com