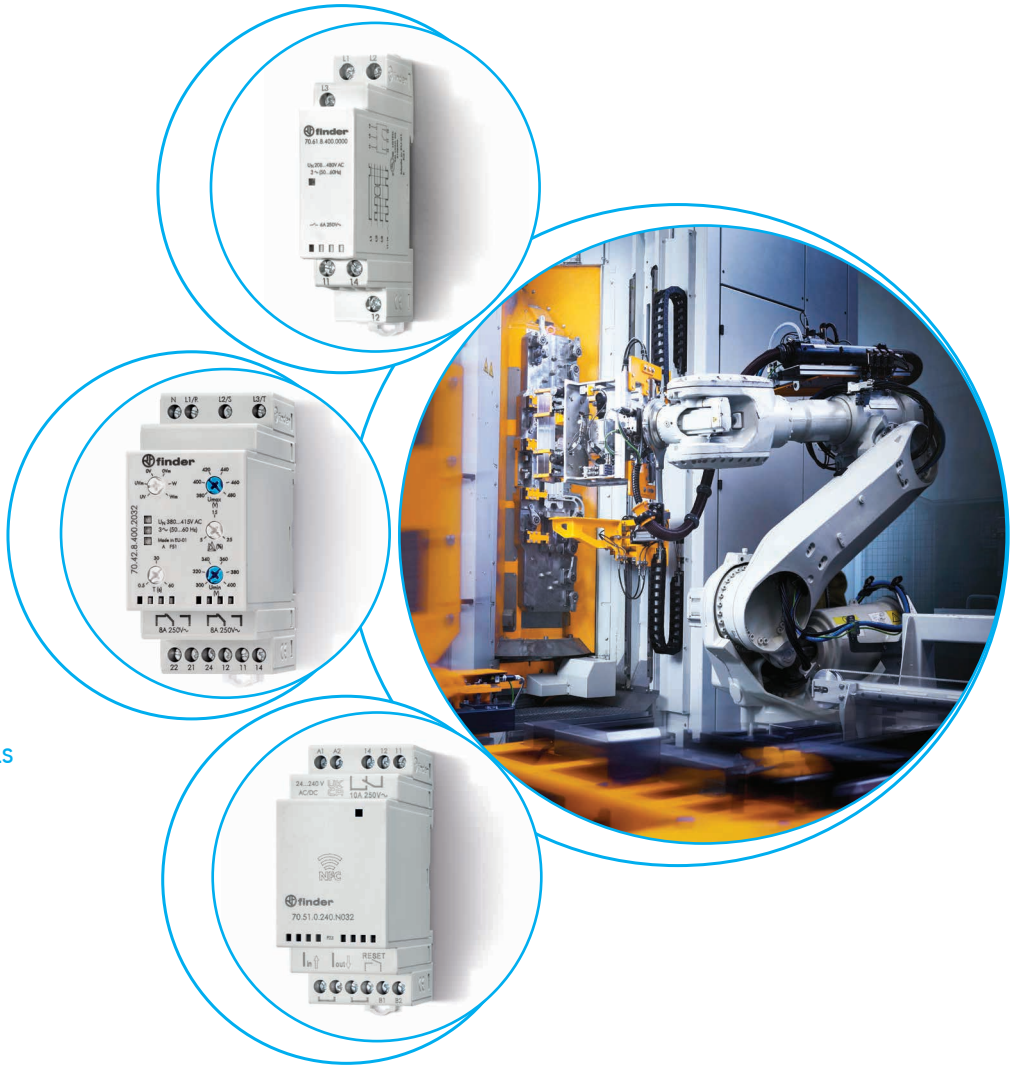
finder
SWITCH TO THE FUTURE

Monitoring relays

70
SERIES

- Air conditioners
- Wood-processing machines
- Hoists and cranes
- Escalators
- Control panels for pumps
- Forced-air ventilators



Electronic voltage monitoring relays for single and three-phase applications

- Multifunctional types, providing the flexibility of monitoring Undervoltage, Overvoltage, Window Mode, Phase rotation, Phase loss
- Positive safety logic - Make output contact opens if the relay detects an error
- All functions and values can be easily adjusted by the selector and trimmer on front face
- "Blade + cross" – both flat blade and cross head screw drivers can be used to adjust the regulators and the function selector
- Colored LEDs for clear & immediate visual indication
- 1 CO relay output, 6 or 10 A
- Modular housing, 17.5 or 35 mm wide
- 35 mm rail (EN 60715) mount
- Cd-free contact material

Screw terminal

For outline drawing see page 16

70.11

Single-phase (220…240)V voltage monitoring:

- Undervoltage
- Overvoltage
- Window mode (overvoltage + undervoltage)
- Voltage fault memory selectable

70.31

Three-phase (380…415)V voltage monitoring:

- Undervoltage
- Overvoltage
- Window mode (overvoltage + undervoltage)
- Voltage fault memory selectable
- Phase loss, even under phase regeneration
- Phase rotation

Contact specification			
Contact configuration		1 CO (SPDT)	1 CO (SPDT)
Rated current/Maximum peak current	A	10/30	6/10
Rated voltage/ Max. switching voltage	V AC	250/400	250/400
Rated load AC1	VA	2500	1500
Rated load AC15	VA	750	500
Single phase motor rating (230 V AC)	kW	0.5	0.185
Breaking capacity DC1: 24/110/220 V	A	10/0.3/0.12	6/0.2/0.12
Minimum switching load	mW (V/mA)	300 (5/5)	500 (12/10)
Standard contact material		AgNi	AgNi
Supply specification			
Nominal system voltage (U_N)	V AC (50/60 Hz)	220…240	380…415
Rated power	VA (50 Hz)/W	2.6/0.8	11/0.9
Operating range	V AC (50/60 Hz)	130…280	220…510
Technical data			
Electrical life at rated load AC1	cycles	$80 \cdot 10^3$	$60 \cdot 10^3$
Voltage detection level range	V	170…270	300…480
Asymmetry detection level range	%	—	—
Switch-off delay time (T on function diagrams)	s	0.5…60	0.5…60
Switch-on lock-out time	s	0.5	1
Switch-on hysteresis (H on function diagrams)	V	5 (L-N)	10 (L-L)
Power-on activation time	s	≈ 1	≈ 1
Insulation between supply and contacts (1.2/50 µs)	kV	4	4
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature	°C	–20…+60	–20…+60
Protection category		IP 20	IP 20
Approvals (according to type)		CE UK CA EAC	

Electronic voltage monitoring relays for three-phase applications

- Multifunctional types, providing the flexibility of monitoring Undervoltage, Overvoltage, Window Mode, Phase rotation, Phase loss, Asymmetry and Neutral loss
- Phase loss monitoring, even under phase regeneration
- Positive safety logic - Make output contact opens if the relay detects an error
- All functions and values can be easily adjusted by the selector and trimmer on front face
- "Blade + cross" – both flat blade and cross head screw drivers can be used to adjust the regulators and the function selector
- Colored LEDs for clear & immediate visual indication
- 1 or 2 CO relay output, 6 or 8 A
- Modular housing, 35 mm wide
- 35 mm rail (EN 60715) mount
- Cd-free contact material

Screw terminal

	70.41	70.42
		
	Three-phase (380…415 V, with or without neutral) voltage monitoring: • Window mode (overvoltage + undervoltage) • Phase loss • Phase rotation • Asymmetry • Neutral loss selectable	Three-phase (380…415 V, with neutral) voltage monitoring: • Undervoltage • Overvoltage • Window mode (overvoltage + undervoltage) • Voltage fault memory selectable • Phase loss • Phase rotation • Asymmetry • Neutral loss
For outline drawing see page 16		
Contact specification		
Contact configuration	1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current A	6/10	8/15
Rated voltage/ Max. switching voltage V AC	250/400	250/400
Rated load AC1 VA	1500	2000
Rated load AC15 VA	500	400
Single phase motor rating (230 V AC) kW	0.185	0.3
Breaking capacity DC1: 24/110/220 V A	6/0.2/0.12	8/0.3/0.12
Minimum switching load mW (V/mA)	500 (12/10)	300 (5/5)
Standard contact material	AgNi	AgNi
Supply specification		
Nominal system voltage (U_N) V AC (50/60 Hz)	380…415	380…415
Rated power VA (50 Hz)/W	11/0.9	12.5/1
Operating range V AC (50/60 Hz)	220…510	220…510
Technical data		
Electrical life at rated load AC1 cycles	$60 \cdot 10^3$	$60 \cdot 10^3$
Voltage detection level range V	300…480	300…480
Asymmetry detection level range %	4…25	5…25
Switch-off delay time (T on function diagrams) s	0.5…60	0.5…60
Switch-on lock-out time s	1	1
Switch-on hysteresis (H on function diagrams) V	10 (L-L)	10 (L-L)
Power-on activation time s	≈ 1	≈ 1
Insulation between supply and contacts (1.2/50 µs) kV	4	4
Dielectric strength between open contacts V AC	1000	1000
Ambient temperature °C	–20…+60	–20…+60
Protection category	IP 20	IP 20
Approvals (according to type)	CE UK CA EAC	

Universal current detecting and monitoring relays

Type 70.51.0.240.2032
- Current Control standard version

Type 70.51.0.240.N032
- Current Control Programmable via NFC version

Multifunctional type, providing the flexibility of monitoring Undercurrent, Overcurrent and Window Mode

- Positive safety logic - Make output contact opens if the relay detects an error
- All functions and values can be easily adjusted by the selector and trimmer on front face (70.51.0.240.2032) OR via NFC toolbox APP (70.51.0.240.N032)
- "Blade + cross" –both flat blade and cross head screw drivers can be used to adjust the regulators and the function selector
- Colored LED for clear & immediate visual indication
- 1 CO 10 A relay output
- Modular housing, 35 mm wide

Screw Terminal

For outline drawing see page 16

NEW **70.51.0.240.2032**

- 6 Functions universal current monitoring relay
- AC/DC current detection 50 mA…16 A
- Fault memory selectable
- Switch-on hysteresis (5…50)% (1…99% in Window Mode)

NEW **70.51.0.240.N032**

- 6 Functions universal current monitoring relay
- AC/DC current detection 50 mA…16 A
- Programmable via Toolbox NFC APP

Contact specification		
Contact configuration		1 CO (SPDT)
Rated current/Maximum peak current	A	10/15
Rated voltage/ Maximum switching voltage	V AC	250/400
Rated load AC1	VA	2500
Rated load AC15 (230 V AC)	VA	500
Single phase motor rating (230 V AC)	kW	0.5
Breaking capacity DC1: 24/110/220 V	A	10/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)
Standard contact material		$AgSnO_2$
Supply specification		
Nominal voltage (U_N)	V AC (50/60 Hz)	24…240
	V DC	24…240
Rated power AC/DC	VA (50 Hz)/W	2.5/0.53
Operating range	AC	$(0.8…1.1)U_N$
	DC	$(0.8…1.1)U_N$
Technical data		
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$
Detection levels	AC(50/60 Hz)/DC	50 mA…16 A
Switch-on lock-out time (T1 on function diagrams)	s	0.1…40
Switch-on hysteresis (H on function diagrams)	%	5…50 (1…99 in Window Mode)
Switch-off delay time (T2 on function diagrams)	s	0.1…30
Electrical isolation: Supply to Measuring circuits		Yes
Ambient temperature range	°C	–20…+55
Protection category		IP 20
Approvals (according to type)		CE UK CA EAC

Electronic phase loss and rotation monitoring relays for three-phase applications

- Universal voltage monitoring (U_N from 208 V to 480 V, 50/60 Hz)
- Phase loss monitoring, even under phase regeneration
- Positive safety logic - Make contact opens if the relay detects an error
- 2 versions:
  1 CO relay output, 6 A (17.5 mm wide), and
  2 CO relay output, 8 A (22.5 mm wide)
- 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 (70.61)

70.61
Screw terminal

70.61-P000
Push-in terminal

E

NEW **70.61/70.61-P000**

Three-phase (208…480)V voltage monitoring:

- Phase loss
- Phase rotation

70.62

Three-phase (208…480)V voltage monitoring:

- Phase loss
- Phase rotation

For outline drawing see page 17

Contact specification			
Contact configuration		1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current	A	6/15	8/15
Rated voltage/ Max. switching voltage	V AC	250/400	250/400
Rated load AC1	VA	1500	2000
Rated load AC15	VA	250	400
Single phase motor rating (230 V AC)	kW	0.185	0.3
Breaking capacity DC1: 24/110/220 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		$AgSnO_2$	AgNi
Supply specification			
Nominal system voltage (U_N)	V AC (50/60 Hz)	208…480	208…480
Rated power	VA (50 Hz)/W	8/1	11/0.8
Operating range	V AC (50/60 Hz)	170…500	170…520
Technical data			
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$	$60 \cdot 10^3$
Switch-off delay time	s	0.5	0.5
Switch-on lock-out time	s	0.5	0.5
Power-on activation time	s	< 2	< 2
Insulation between supply and contacts (1.2/50 µs)	kV	5	5
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature	°C	–20…+60	–20…+60
Protection category		IP 20	IP 20
Approvals (according to type)		CE UKCA EAC cULus	CE UKCA EAC

Thermistor temprature sensing relays for industrial apllication

- Temperature detection with PTC
- PTC short circuit detection
- PTC wire breakage detection
- Positive safety logic - Make contact opens if the relay detects an error
- Fault memory selectable
- LED status indication
- 35 mm rail (EN 60715) mounting

Screw Terminal

NEW **70.92.x.xxx.0002**

- 6 functions
- RESET delay time (0.5s or 3s) selectable
- RESET terminals

For outline drawing see page 17

Contact specification		
Contact configuration		2 CO (DPDT)
Rated current/Maximum peak current	A	8 /15
Rated voltage/ Maximum switching voltage	V AC	250/400
Rated load AC1	VA	2000
Rated load AC15 (230 V AC)	VA	400
Single phase motor rating (230 V AC)	kW	0.3
Breaking capacity DC1: 24/110/220 V	A	8/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)
Standard contact material		AgNi
Supply specification		
Nominal voltage (U_N)	V AC (50/60 Hz)	230
	V AC/DC	24
Rated power AC/DC	VA (50 Hz)/W	1/0.5
Operating range	AC	184…253
	AC/DC	19.2…26.4
Technical data		
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$
PTC detecting: Short circuit/Temperture OK		<20 Ω/>20 Ω .... <3 Ω
RESET/PTC break		< 1.3 Ω / > 3 Ω
RESET delay time	s	0.5 or 3
Ambient temperature range	°C	–20…+55
Protection category		IP 20
Approvals (according to type)		CE UK CA EAC

Ordering information

Example: 70 series, three-phase voltage monitoring relays, 1 output, supply voltage 380…415 V AC.

7 0	.	3	1	.	8	.	4 0 0	.	2	.	0	.	2	.	2
									A		B		C		D

Series

Type
1 = 1 phase AC line monitoring
3 = 3 phase AC line monitoring
4 = 3 phase + neutral AC line monitoring
5 = AC/DC universal- Current detection
6 = 3 phase loss and rotation monitoring
9 = Thermistor relays (temperature monitoring with PTC thermistor)

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

Supply version
0 = AC (50/60 Hz)/DC
8 = AC (50/60 Hz)

Supply voltage
024 = 24 V AC/DC (70.92)
230 = 230 V (70.92)
230 = 220…240 V (70.11)
240 = 240 V AC/DC (70.51)
400 = 380…415 V (70.31/41/42)
400 = 208…480 V (70.61/62)

D: Fault memory option
0 = No fault memory
2 = Fault memory function selectable

C: Time delay setting
0 = Fixed switch-off delay
2 = Adjustable switch-off delay
3 = Adjustable switch-off delay and asymmetry (for 70.41 and 70.42 only)
Adjustable switch-off and switch-on delay (for 70.51 only)

B: Contact circuit
0 = CO (nPDT)

A: Detection Values / Terminals options
0 = Non-adjustable detection values
2 = 2 adjustable detection values
P = Push-in terminals (70.61 only)
N = Programmable via NFC (70.51 only)

Codes

70.11.8.230.2022	70.61.8.400.0000
70.31.8.400.2022	70.61.8.400.P000
70.41.8.400.2030	70.62.8.400.0000
70.42.8.400.2032	70.92.0.024.0002
70.51.0.240.2032	70.92.8.230.0002
70.51.0.240.N032	

Selection guide

Type	70.11.8.230.2022	70.31.8.400.2022	70.41.8.400.2030	70.42.8.400.2032	70.51.0.240.x032	70.61.8.400.P000	70.62.8.400.0000	70.92.x.xxx.0002
Supply system type	Single phase	3-phase	3-phase / 3-phase + neutral	3-phase + neutral	Single phase	3-phase	3-phase	Single phase
Functions								
Undervoltage/Overvoltage	AC	AC	—	AC	—	—	—	—
Window mode (Undervoltage and Overvoltage)	AC	AC	AC	AC	—	—	—	—
Phase loss	—	•	•	•	—	•	•	—
Phase rotation	—	•	•	•	—	•	•	—
Asimmetry	—	—	•	•	—	—	—	—
Neutral loss	—	—	•	•	—	—	—	—
Overcurrent/Undercurrent	—	—	—	—	•	—	—	—
Window mode (Undercurrent and Overcurrent)	—	—	—	—	•	—	—	—
Thermistor relay (PTC)	—	—	—	—	—	—	—	•
Delay Times								
Fixed	—	—	—	—	—	•	•	•
Adjustable	•	•	•	•	•	—	—	—
Supply voltage								
24 V AC/DC	—	—	—	—	—	—	—	•
24…240 V AC/DC	—	—	—	—	•	—	—	—
230 V AC	•	—	—	—	—	—	—	•
400 V AC	—	•	•	•	—	•	•	—
Module width								
35 mm wide	—	•	•	•	•	—	—	—
22.5 mm wide	—	—	—	—	—	—	•	•
17.5 mm wide	•	—	—	—	—	•	—	—
Other data								
Fault memory	•	•	—	•	•	—	—	•
Contact configuration	1 CO	1 CO	1 CO	2 CO	1 CO	1 CO	2 CO	2 CO

Technical data

Insulation			70.11/31/41/42	70.51	70.61	70.62/92
Between supply and contacts	dielectric strength	V AC	2500	2500	2500	3000
	impulse (1.2/50 µs)	kV	4	4	5	5
Between open contacts	dielectric strength	V AC	1000	1000	1000	1000
	impulse (1.2/50 µs)	kV	1.5	1.5	1.5	1.5

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
Radiated electromagnetic field	80…1000 MHz		EN 61000-4-3	10 V/m
	1…2.8 GHz		EN 61000-4-3	5 V/m
Fast transients (burst 5/50 ns, 5 and 100 kHz)	on supply terminals		EN 61000-4-4	4 kV
Voltage pulses on supply terminals (surge 1.2/50 µs)	common mode		EN 61000-4-5	4 kV
	differential mode		EN 61000-4-5	4 kV
Radiofrequency common mode voltage (0.15…230 MHz)	on supply terminals		EN 61000-4-6	10 V
Voltage dips	70% U_N		EN 61000-4-11	25 cycles
Short interruptions			EN 61000-4-11	1 cycle
Radiofrequency conducted emissions	0.15…30 MHz		CISPR 11	class B
Radiated emissions	30…1000 MHz		CISPR 11	class B

Terminals			Screw terminals	Push-in terminals
Wire strip length		mm	10	10
Screw torque		Nm	0.8	—
Min. wire size			Solid cable	Solid cable
		mm^2	0.5	0.75
		AWG	20	18
Max. wire size			Solid cable	Solid cable
		mm^2	1 x 6 / 2 x 4	1 x 1.5 / 2 x 1.5
		AWG	1 x 10 / 2 x 12	1 x 16 / 2 x 16
Min. wire size			Stranded cable	Stranded cable
		mm^2	0.5	0.75
		AWG	20	18
Max. wire size			Stranded cable	Stranded cable
		mm^2	1 x 4 / 2 x 2.5	1 x 2.5 / 2 x 2.5
		AWG	1 x 12 / 2 x 14	1 x 14 / 2 x 14

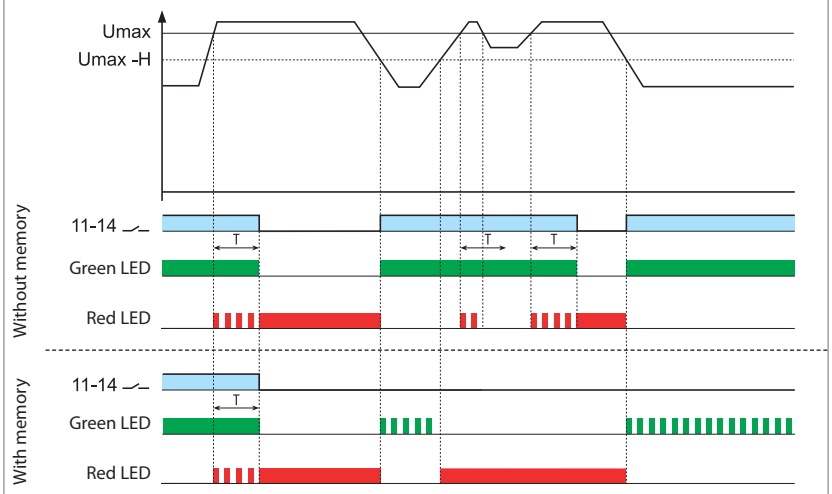
Other data			70.11	70.31/41	70.42/61/62/92	70.51
Power lost to the environment	without output current	W	0.8	0.9	1	2 (230 V AC) / 0.2 (24 V DC)
	with rated output current	W	2	1.2	1.4	2.5 (230 V AC) / 0.5 (24 V DC)

Functions

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

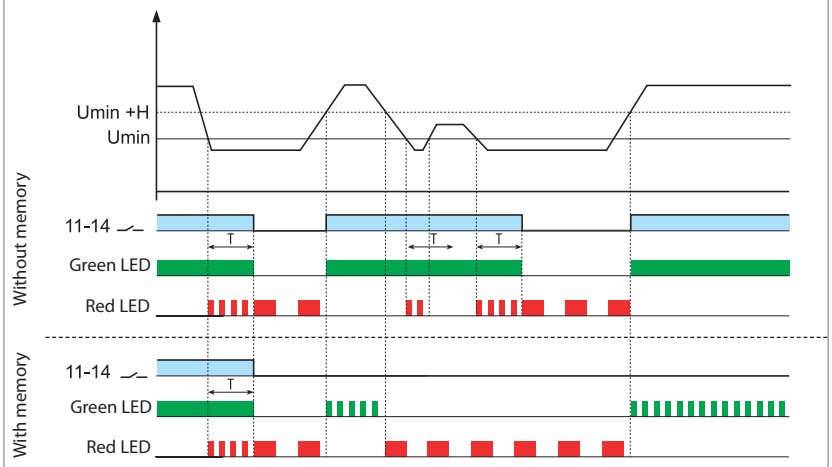
Type
70.11
70.31
70.42

Overvoltage (OV and OVm functions)



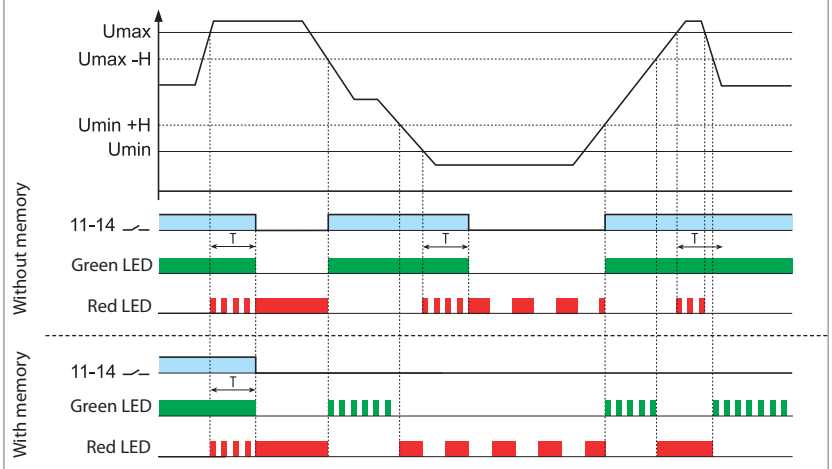
Type
70.11
70.31
70.42

Undervoltage (UV and UVm functions)



Type
70.11
70.31
70.41
(70.41 without memory)
70.42

Window mode (overvoltage + undervoltage, W and Wm functions)



Functions

⎯◡⎯ = Output contact (11-14, 21-24 for 70.42 only)
OV = Overvoltage
OVm = Overvoltage with memory
UV = Undervoltage
UVm = Undervoltage with memory
W = Window mode (OV + UV)
Wm = Window mode (OV + UV) with memory
H = Hysteresis

If the voltage moves out of limits, following delay **T** the output relay turns Off.

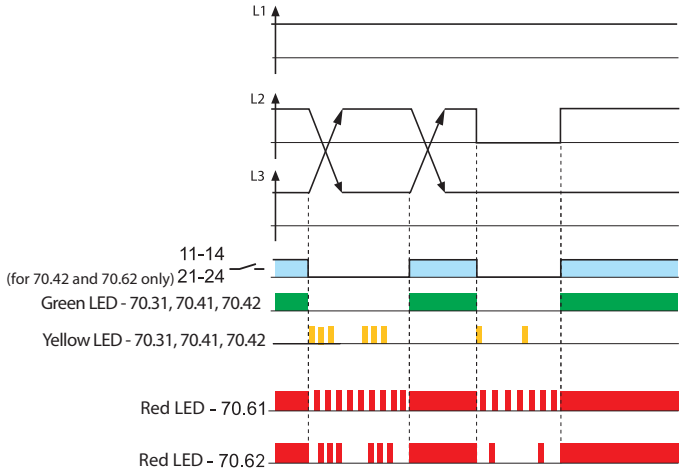
When the voltage is again within limits (± the Switch-on hysteresis **H**):
- if set in the "without memory" position, the output relay "recovers", i.e. it turns On (after the Switch-on lock-out time) without any memory of the previous event.
- if set in the "with memory" position (70.11, 70.42 and 70.31 only), the output relay remains open. To reset, it is necessary to switch the supply Off and then On again, or to rotate the selector first to an adjacent position and then to the original position.

Functions

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

Type
70.31
70.41
70.42
70.61
70.62

Phase loss and phase rotation



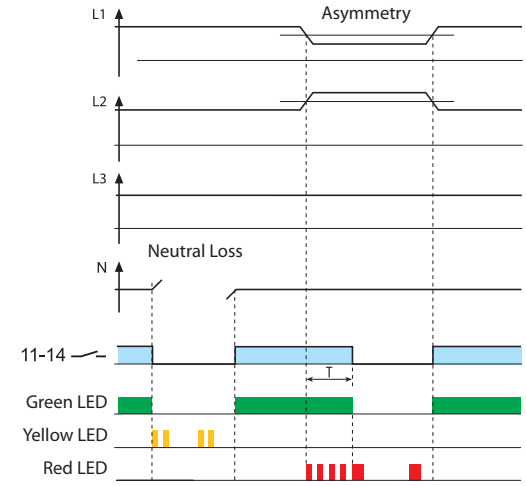
If the sequence (L1, L2, L3) is incorrect at power-on, the output relay will not turn-on.

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.

Type
70.41
70.42

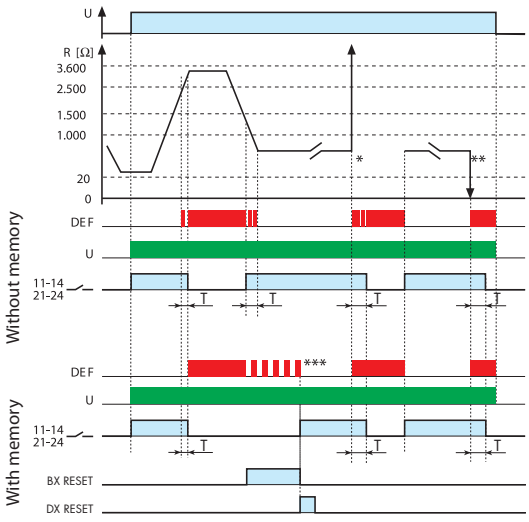
Neutral loss and asymmetry



If the neutral is lost (and the Neutral control function is set), the output relay turns off immediately.
When the neutral is again present, the output relay turns on immediately

If the asymmetry $(U_{max} - U_{min})/U_N$ is above the % set value, the output relay turns off after the set delay **T**. When the asymmetry is again below the % set value (with a fixed hysteresis of approximately 2%), the output relay turns on after the Switch-on lock-out time.

Type
70.92



* PTC-Break ** PTC-Short circuit
*** RESET MEMORY = Operate the RESET key, or interrupt the supply.

The contact open if:
- thermistor line break
- over temperature R_{PTC} > (2.5…3.6)kΩ
- thermistor line short circuit ($R_{PTC\approx}$< 20 Ω)
- loss of supply

The contact close if:
- temperature within limits
- R_{PTC} > (1.0…1.5)kΩ on power-up
- (1…1.5)kΩ on cooling

In BX mode (BF 0.5s or BL 3s) RESET work on falling front of the signal.

In DX mode (DF 0.5s or DL 3s) RESET work on rising front of the signal.

RESET signal must be >1s.

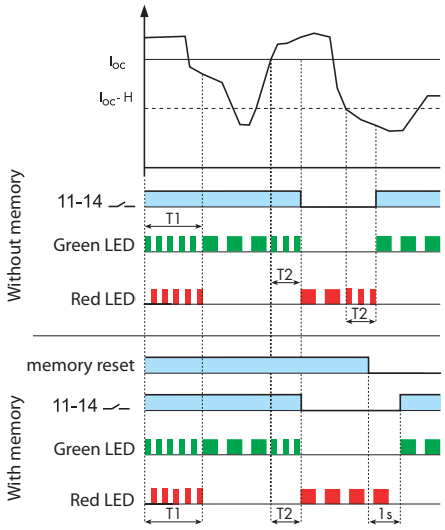
E

Functions

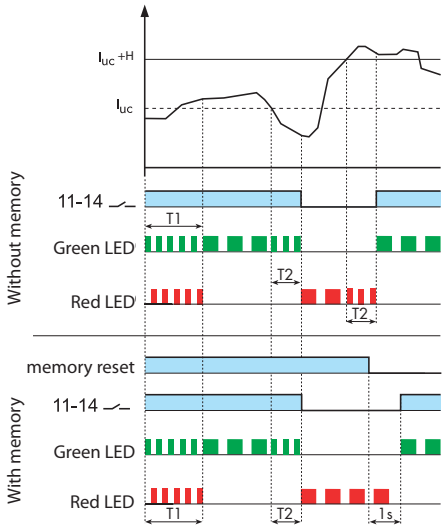
Output relay On (NO closed) when all OK: positive logic.

Type 70.51

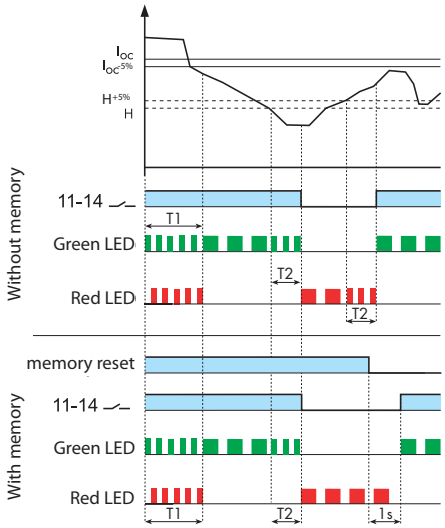
Overcurrent (OC and OCm functions)



Undercurrent (UC and UCm functions)



Window Mode (Overcurrent + Undercurrent, W and Wm functions)



Functions

⎯◡⎯ = Output contact 11-14
OC = Overcurrent
OCm = Overcurrent with memory
UC = Undercurrent
UCm = Undercurrent with memory
W = Window mode (OC + UC)
Wm = Window mode (OC + UC) with memory
H = Hysteresis

If the current moves out of limits, following delay **T2** the output relay turns Off.

When the current is again within limits the Switch-on hysteresis **H**):

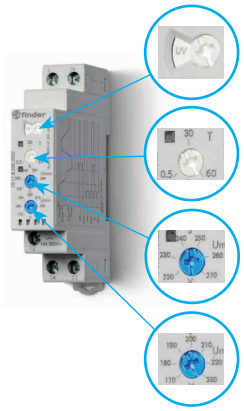
- if set in the "without memory" position, the output relay "recovers", i.e. it turns On (after the Switch-on lock-out time) without any memory of the previous event;
- if set in the "with memory" position the output relay remains open.

To reset, it is necessary to switch the supply Off and then On again, or to push button connected on RESET terminals.

During **T1** delay the relay don't monitoring.

Front view: function selector and regulators

70.11



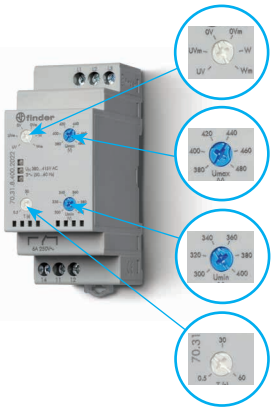
Functions:
OV, OVm, UV,
UVm, W, Wm

$T_{off\ delay}$:
(0.5…60)sec

U_{Max}:
(220…270)V

U_{Min}:
(170…230)V

70.31



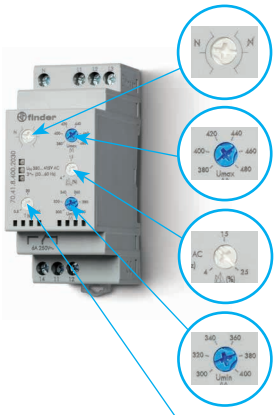
Functions:
OV, OVm, UV,
UVm, W, Wm

U_{Max}:
(380…480)V

U_{Min}:
(300…400)V

$T_{off\ delay}$:
(0.5…60) sec

70.41



N= With N-line monitoring
~~N~~= Without N-line monitoring

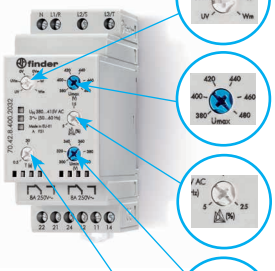
U_{Max}:
(380…480)V

(4…25)% U_N

U_{Min}:
(300…400)V

$T_{off\ delay}$:
(0.5…60)sec

70.42



Functions:
OV, OVm, UV,
UVm, W, Wm

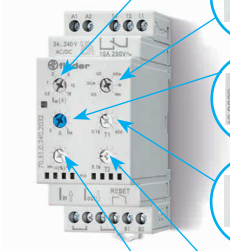
U_{Max}:
(380…480)V

(5…25)% U_N

U_{Min}:
(300…400)V

$T_{off\ delay}$:
(0.5…60)sec

70.51



Detection levels I_M:
(0.5, 1, 2, 5, 10, 16) A

Functions:
OC, OCm, UC,
UCm, W, Wm

Current value
(0…I_M)

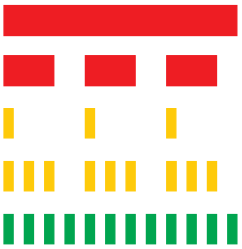
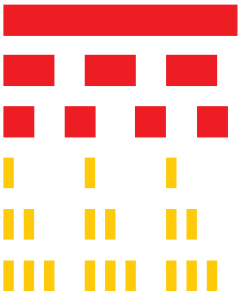
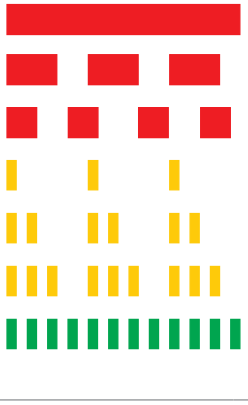
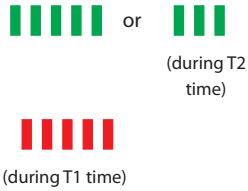
Switch on lock out time
(0.1…40 sec)

Switch OFF Delay
(0.1…30 sec)

Hysteresys
5…50%
1…99% in Window Mode

E

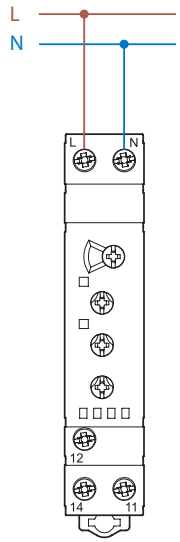
LED indication

Monitoring relays Type	LED	Supply system normal	Supply system abnormal (Voltage out of limits, switch-off delay time T running)	Supply system abnormal (Reason for switch-off, RESET necessary when "with Memory"* is selected)
		Contact 11 - 14 closed	Contact 11 - 14 closed	Contact 11-14 open
70.11.8.230.2022	• / •			 Overvoltage OV and OVm Undervoltage UV and UVm With Memory, following a failure a manual "RESET" ** is necessary
70.31.8.400.2022	• / • / •			 Overvoltage OV and OVm Undervoltage UV and UVm Phase loss Phase rotation With Memory, following a failure a manual "RESET" ** is necessary
70.41.8.400.2030	• / • / •			 Overvoltage OV Undervoltage UV Asymmetry Phase loss Neutral loss Phase rotation
70.42.8.400.2032	• / • / •			 Overvoltage OV and OVm Undervoltage UV and UVm Asymmetry Phase loss Neutral loss Phase rotation With Memory, following a failure a manual "RESET" ** is necessary
70.51.0.240.x032	• / •		 or (during T2 time) (during T1 time)	 or (during T2 time)
70.61.8.400.x000	•			 Phase rotation or Phase loss
70.62.8.400.0000	•			 Phase loss Phase rotation

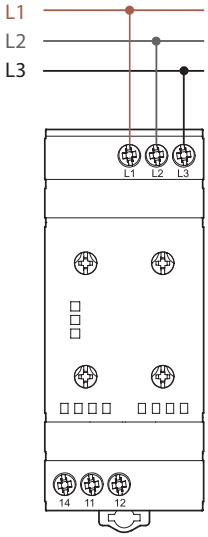
* The function "with Memory" is only available for type 70.11, 70.31, 70.42 and 70.51.

** It is necessary to switch the supply OFF and then On again (U off U on) or to rotate the function selector first to an adjacent position and then to the original position.

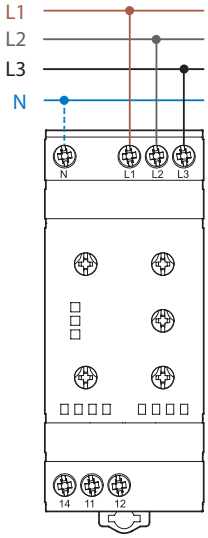
Wiring diagrams



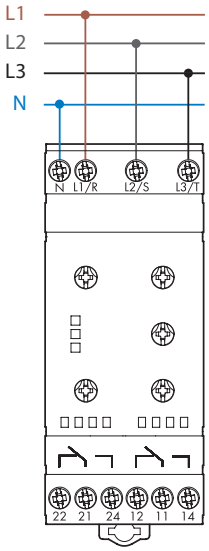
Type 70.11



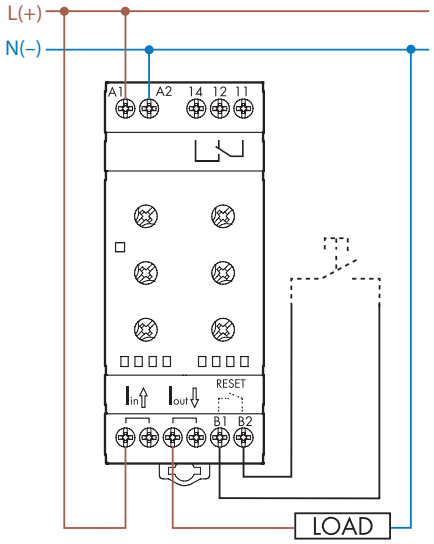
Type 70.31



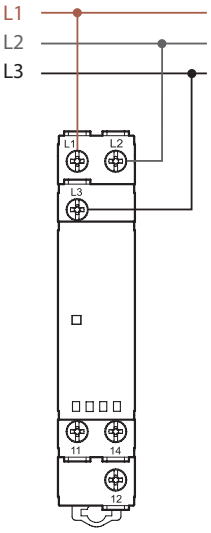
Type 70.41



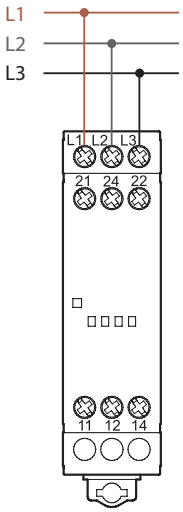
Type 70.42



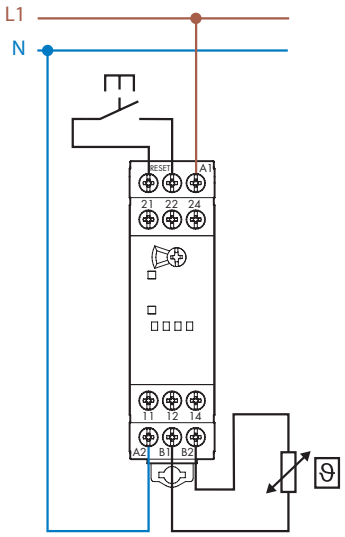
Type 70.51 and 70.51 NFC



Type 70.61



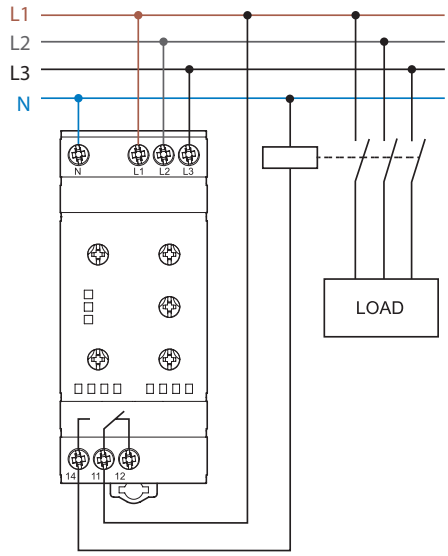
Type 70.62



Type 70.92

Application example

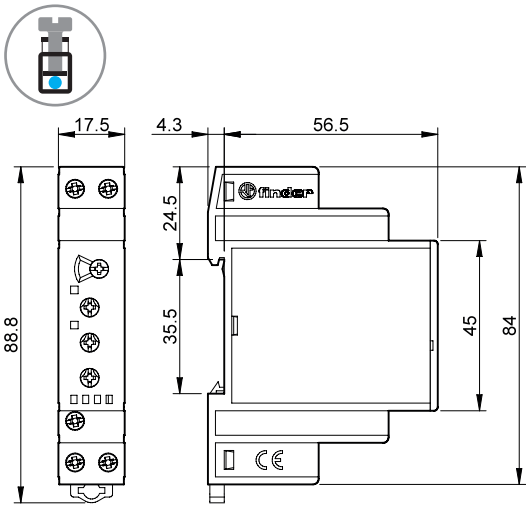
The output contact switches the coil of the line contactor.



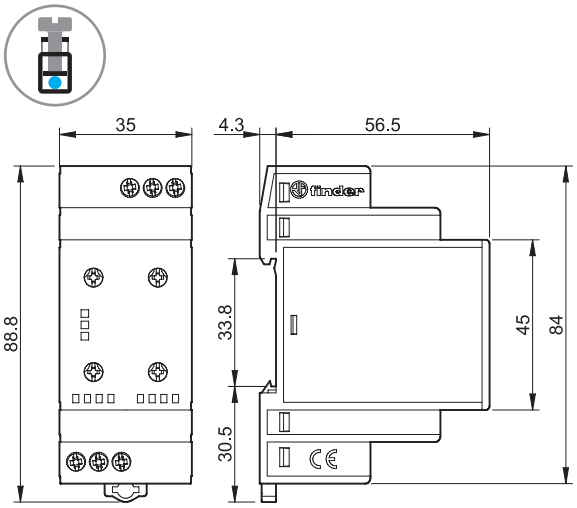
E

Outline drawings

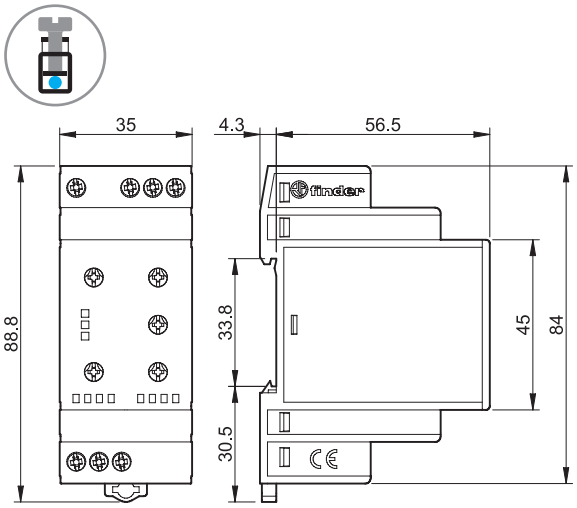
Type 70.11
Screw terminal



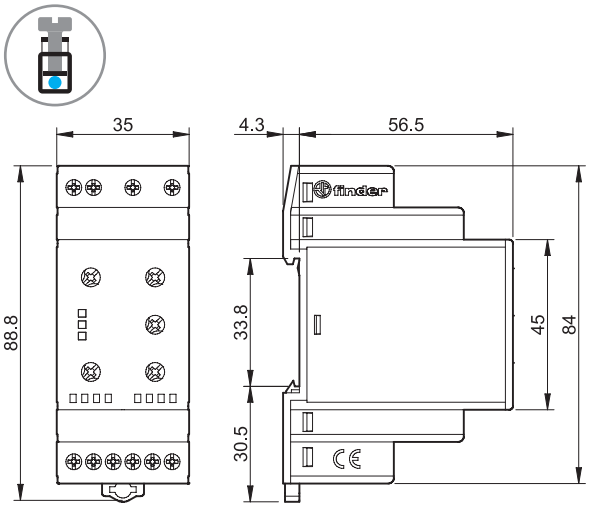
Type 70.31
Screw terminal



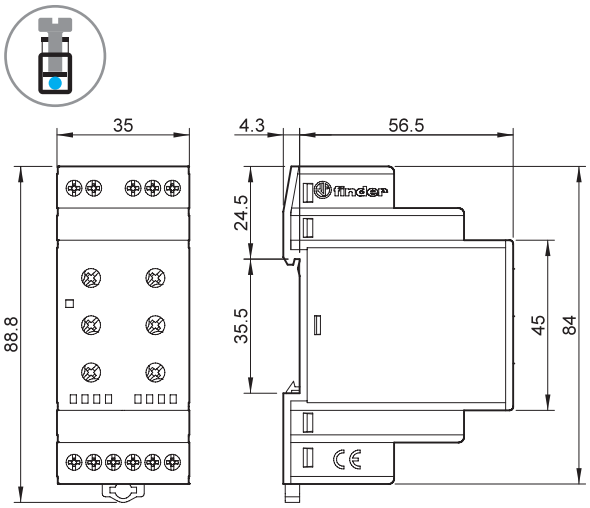
Type 70.41
Screw terminal



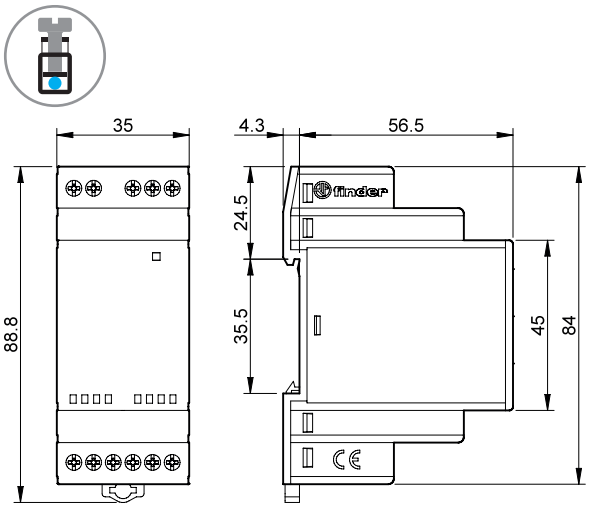
Type 70.42
Screw terminal



Type 70.51.0.240.2032
Screw terminal

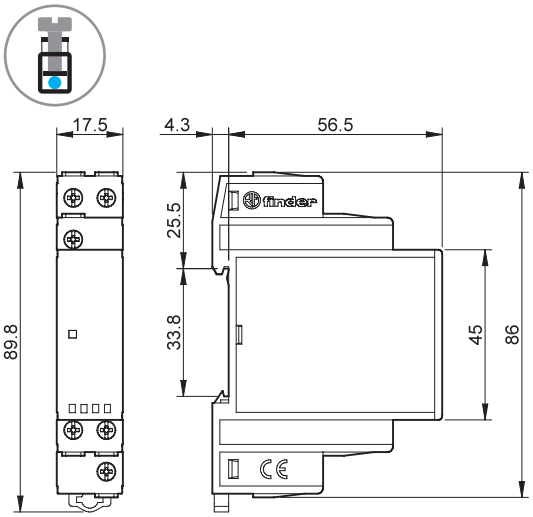


Type 70.51.0.240.N032
Screw terminal

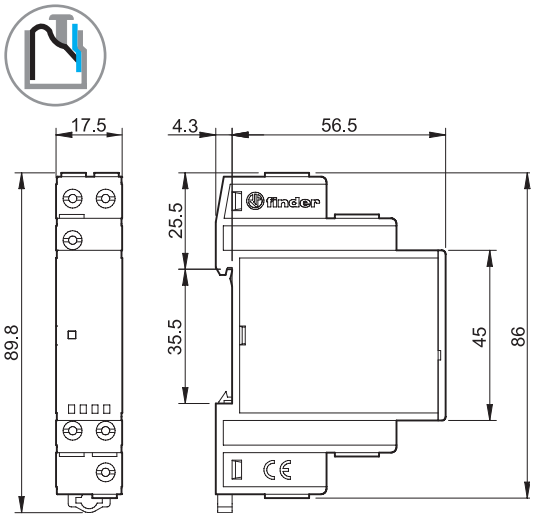


Outline drawings

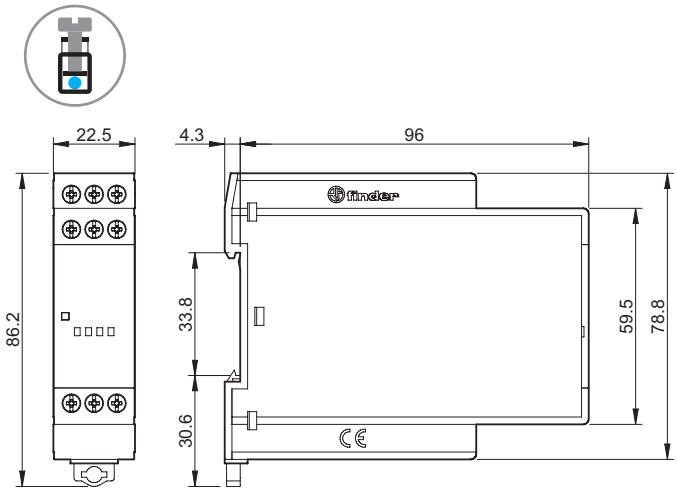
Type 70.61
Screw terminal



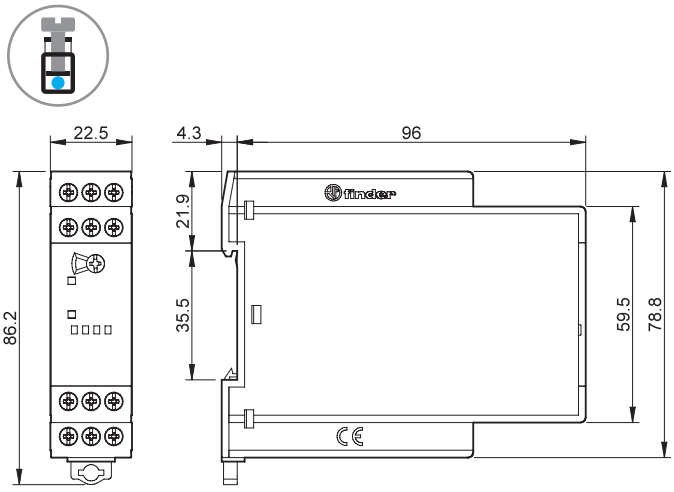
Type 70.61-P000
Push-in terminal



Type 70.62
Screw terminal



Type 70.92
Screw terminal

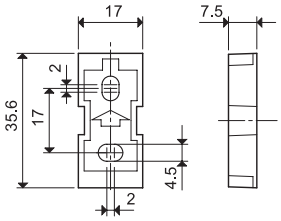


E

Accessories

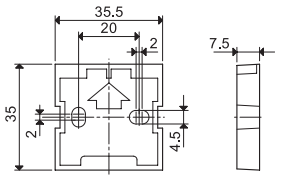
020.01

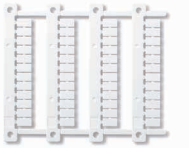
Adaptor for panel mounting, plastic, 17.5 mm wide for 70.11, 70.61 and 70.92	020.01



011.01

Adaptor for panel mounting, plastic, 35 mm wide for 70.31, 70.41, 70.42 and 70.51	011.01



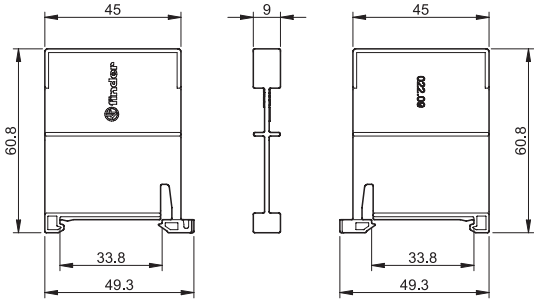


060.48

Sheet of marker tags (CEMBRE Thermal transfer printers) for relays types 70.11, 70.31, 70.41, 70.42, 70.51, 70.62 and 70.92 (48 tags), 6 x 12 mm	060.48

022.09

Separator for rail mounting, plastic, 9 mm wide	022.09



Please see general technical information

I-2023, www.findernet.com