

1 - Phase 230 V
Over & Under voltage monitoring relays

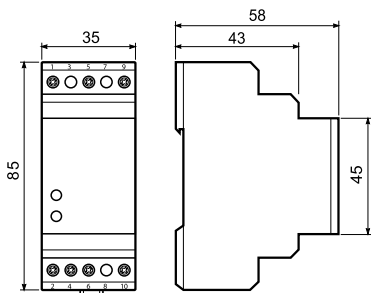
71.11.8.230.0010

- Fixed Over & Under voltage detection
- Link selectable 5 or 10 minute lock-out delay

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- Adjustable Over & Under voltage detection
- Switch selectable 5 or 10 minute lock-out delay

- 35 mm rail (EN 60715) mounting
- LED indication
- Positive safety logic (healthy conditions - output relay energised)



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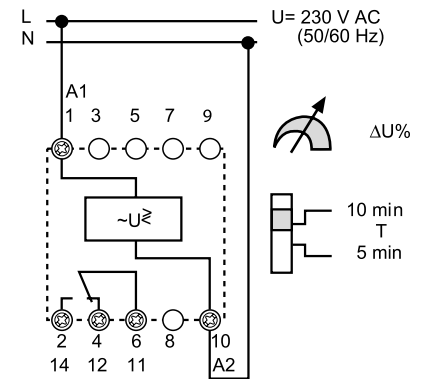
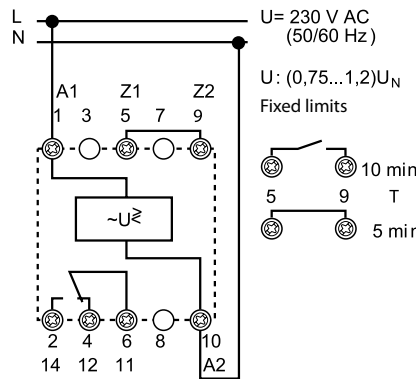
- Fixed - Over/Under voltage limits, (0.75...1.2)U_N respectively
- Link selectable - 5 min or 10 min delay

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- Adjustable - symmetrical Over/Under voltage limits adjustable between ± 5% to ± 20% U_N
- Switch selectable - 5 min or 10 min delay

- Detects and trips on out-of-limits L-N voltage, and protects against excessive "starts/hour" through "power-on" and "lock-out" time delays.
- Typical applications - protection of compressor motors and high pressure discharge lamp circuitry.



Contact specification

Contact configuration		1 CO (SPDT)	1 CO (SPDT)
Rated current/Maximum peak current	A	10/15	10/15
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	2500	2500
Rated load AC15 (230 V AC)	VA	500	500
Single phase motor rating (230 V AC)	kW	0.5	0.5
Breaking capacity DC1: 30/110/220 V	A	10/0.3/0.12	10/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgCdO	AgCdO

Supply specification

Nominal voltage (U _N)	V AC (50/60 Hz)	230	230
	V DC	—	—
Rated power AC/DC	VA (50 Hz)/W	4/—	4/—
Operating range	AC	(0.75...1.2)U _N	(0.8...1.2)U _N
	DC	—	—

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³
Detection levels		Fixed (0.75...1.2)U _N	Adjustable (± 5...± 20)% U _N
Switch-on lock-out time/reaction time		(5 or 10)min/< 0.5 s	(5 or 10)min/< 0.5 s
Fault memory		—	—
Electrical isolation: Supply to Measuring circuits		None - circuits are electrically common	None - circuits are electrically common
Ambient temperature range	°C	-20...+55	-20...+55
Protection category		IP 20	IP 20

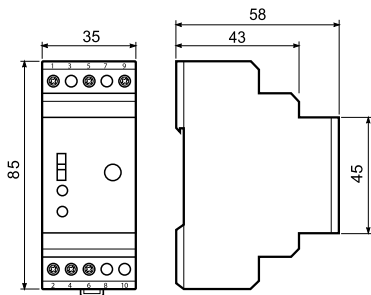
Approvals (according to type)



3 - Phase 400 V**Over & Under voltage monitoring relay****71.31.8.400.1010**

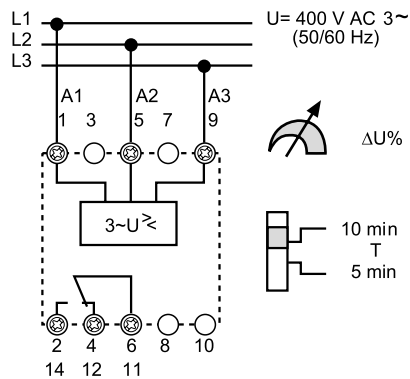
- Adjustable Over & Under voltage detection
- Switch selectable 5 or 10 minute lock-out delay

- 35 mm rail (EN 60715) mounting
- LED indication
- Positive safety logic (healthy conditions - output relay energised)

**71.31.8.400.1010**

- Adjustable - symmetrical Over/Under voltage limits adjustable between $\pm 5\%$ to $\pm 20\%$ U_N
- Switch selectable - 5 min or 10 min delay

- Detects and trips on out-of-limits L-L voltage, and protects against excessive "starts/hour" through "power-on" and "lock-out" time delays.
- Typical applications - protection of compressor motors and high pressure discharge lamp circuitry.

**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: 30/110/220 V	A	10/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)
Standard contact material		AgCdO

Supply specification

Nominal voltage (U_N)	V AC (50/60 Hz)	400
	V DC	—
Rated power AC/DC	VA (50 Hz)/W	4/—
Operating range	AC	$(0.8 \dots 1.2)U_N$
	DC	—

Technical data

Electrical life at rated load AC1	cycles	$100 \cdot 10^3$
Detection levels	V (50/60 Hz)	Adjustable $(\pm 5 \dots \pm 20)\% U_N$
Switch-on lock-out time/reaction time		(5 or 10)min / < 0.5 s
Fault memory		—
Electrical isolation: Supply to Measuring circuits		None – circuits are electrically common
Ambient temperature range	$^{\circ}\text{C}$	$-20 \dots +55$
Protection category		IP 20

Approvals (according to type)