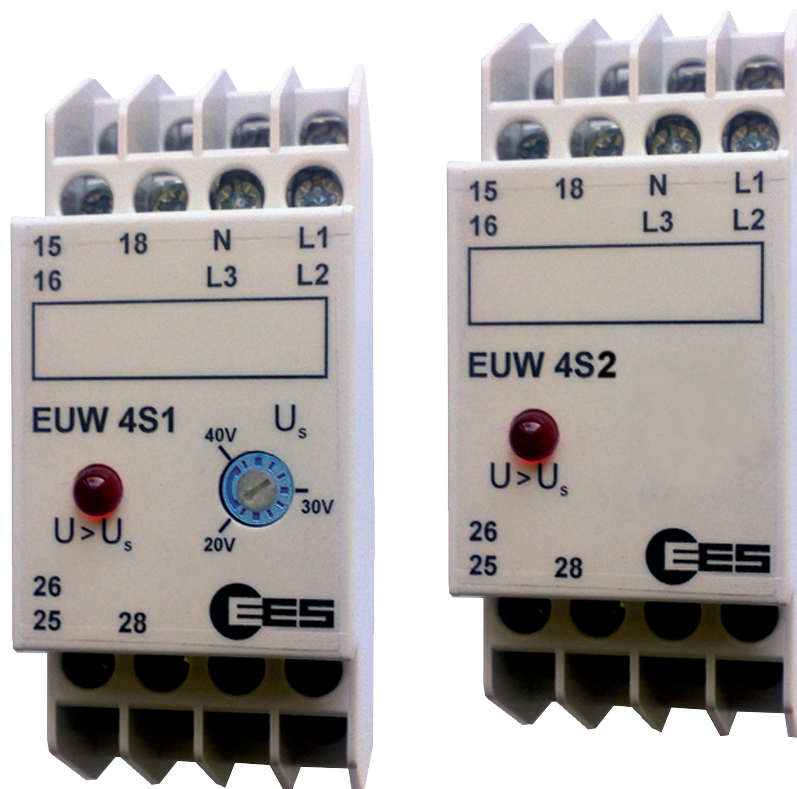




3 phase voltage monitoring relays



→ EUW4S - voltage monitoring relays

- › Monitoring on absence of voltage
- › Switching threshold adjustable
- › LED-Operation indication
- › Signalling contacts designed as potential-free change-over contact

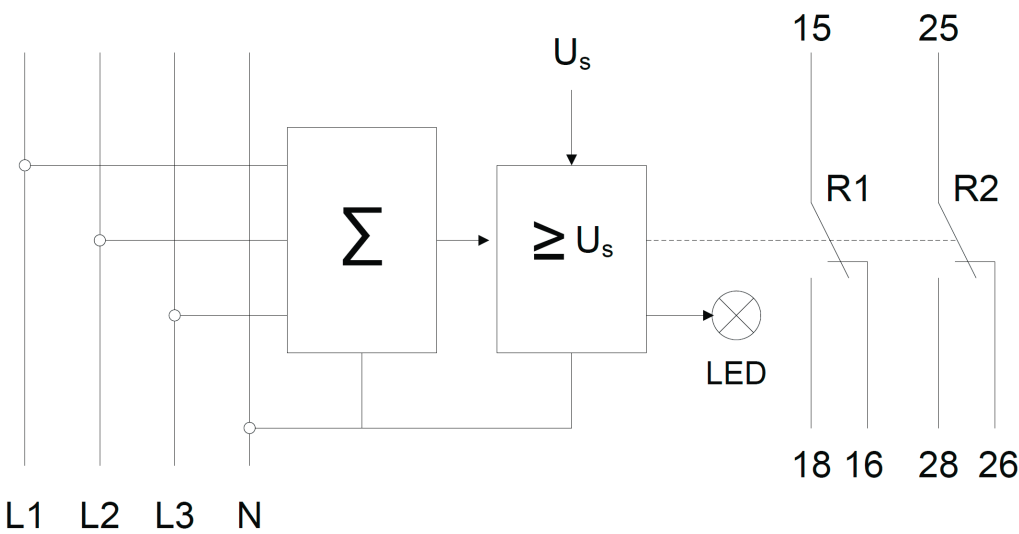
→ Datasheet

➔ Functional description

With the devices „EUW4S“ 110V 3 phase current nets are monitored on absence of voltage. Only if voltages of all phases drop below the treshhold U_s , absence of voltage is signalized - the red operation light is turned/switched off and the relay is released. The breakdown of N-conductor does not have an effect on the signalization of the absence of voltage. Depending on the variant treshhold U_s is adjustable by a potentiometer between 20V...40V (EUW4 S1) or fixed 30V (EUW4 S2) and is referring to the triangular voltage U_{LxLy} .



The function of the voltage monitoring is assured, as long as at least 2 phases or one phase and the N-conductor are applied.



Functional diagram

L1	L2	L3	N	LED	Contacts 15 /18 25 / 28
> U_s	> U_s	> U_s	ok	on	closed
> U_s	> U_s	< U_s	ok	on	closed
> U_s	< U_s	< U_s	ok	on	closed
< U_s	< U_s	< U_s	ok	off	open
> U_s	< U_s	x	ok	on	closed
> U_s	x	x	ok	on	closed
> U_s	< U_s	x	x	on	closed
> U_s	x	x	x	off	open
> U_s	> U_s	> U_s	x	on	closed

Legend:
 U_s : Threshold
x: Breakdown

Table of condition

→ Technical Data

Electrical data:

Supply/Signal voltage 3 x 110 V AC @ 50 / 60 Hz ± 10%

(Linked voltage U_{LxLy} RMS)

maximum 150 V AC

minimum 18 V AC

Switching threshold U_s

EUW4 S1 20 ... 40 V adjustable

EUW4 S2 30 V fixed

Hysteresis ≤ 5%

Response delay < 100 ms

Drop-out delay > 500 ms (typ. 700 ms)

Load on relay contacts 3 A @ 0...250 V AC

3 A @ 30 V DC

0,3 A @ 110 V DC

0,1 A @ 250 V DC

Max. switching voltage: 250 V AC/DC

Power consumption < 1 W

Ambient conditions

Protection class IP 20

Operation ambient temperature: - 20°C ... + 50°C non condensing

Storage temperature: - 20°C ... + 70°C

Relative humidity ≤ 75 % non condensing

Power-frequency electric strength

between all measuring inputs and
relay contacts, as well between adjacent

relay contacts 2,5 kV_{eff} / 50 Hz 1 min

of open relay contacts 1 kV_{eff} / 50 Hz 1 min

Electromagnetic compatibility

Noise immunity acc. to EN 61000-4-2,3,4,5,6,11

Noise irradiation acc. to EN 61000-3-3, EN 55011

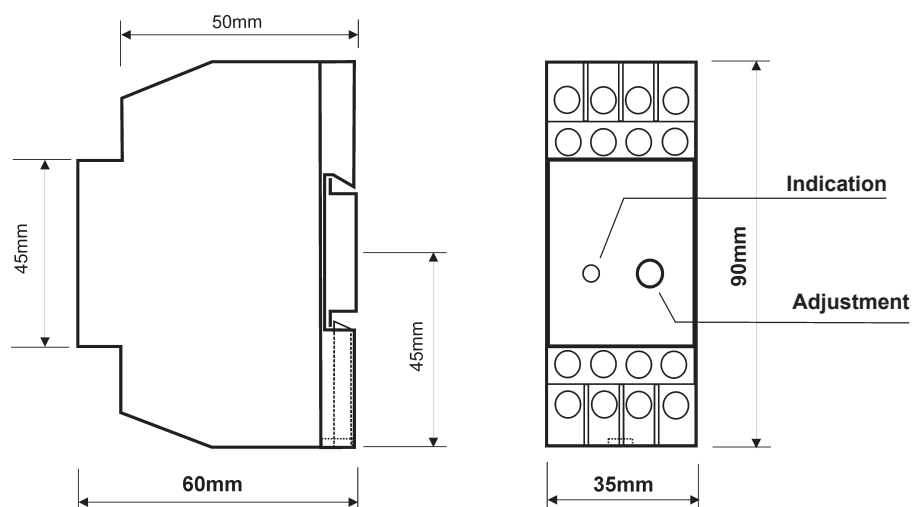
Mechanical data

Dimensions (H x W x D) [mm] 75 x 45 x 110

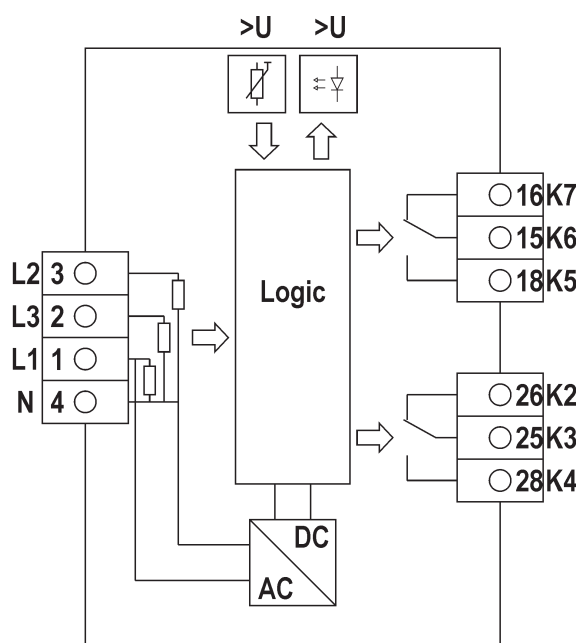
Assembly C-DIN rail acc. to EN 50022-35

Weight < 150 g

→ Dimensional drawing



→ Terminal assignment



Subject to technical changes
without prior notice

→ Ordering number

Article no.	Type	Switching threshold
11EUW4SA1S	EUW4 S1	30 ... 40 V adjustable
11EUW4SA2S	EUW4 S2	30 V fixed

→ Contact

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