

E1PF400VSY01

Monitoring relays - ENYA series Monitoring of phase sequence and phase failure Monitoring of asymmetry Connection of neutral wire optional Supply voltage = measuring voltage 1 change over contact Width 17.5mm Installation design



Technical data

1. Functions

Monitoring of phase sequence, phase failure and asymmetry with adjustable asymmetrie, connection of neutral wire optional.

2. Time ranges

Tripping delay:

Adjustment range fixed, approx. 100ms

indication of supply voltage

indication of relay output

3. Indicators

Green LED ON: Yellow LED ON/OFF:

4. Mechanical design Self-extinguishing plastic housing, IP rating IP40 Mounted on DIN-rail TS 35 according to EN 60715 Mounting position: any Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20 Tightening torque: max. 1Nm Terminal capacity: 1 x 0.5 to 2.5mm² with/without multicore cable end 1 x 4mm² without multicore cable end 2×0.5 to 1.5mm^2 with/without multicore cable end

2 x 2.5mm² flexible without multicore cable end

5. Input circuit

Supply voltage: Terminals: Rated voltage UN:

Tolerance: Rated consumption: Rated frequency: Duty cycle: Reset time: Hold-up time: Drop out voltage: Overvoltage category: Rated surge voltage:

6. Output circuit

1 potential free change over contact 250V AC Rated voltage: Switching capacity: 1250VA (5A / 250V AC) Fusing: 5A fast acting Mechanical life: 20 x 10⁶ operations Electrical life: 2 x 10⁵ operations at 1000VA resistive load Switching frequency: max. 6/min at 1000VA resistive load

4kV

Overvoltage category: Rated surge voltage:

(= measured voltage) (N)-L1-L2-L3 see table ordering information or printing on the unit . -30% to +30% of U 8VA (0.8W) AC 48 to 63Hz 100% 500ms >20% of the supply voltage III (in accordance with IEC 60664-1) 4kV

(in accordance with IEC 60947-5-1)

III (in accordance with IEC 60664-1)

7. Measuring circuit Measuring variable:

Measuring input: Terminals: Overload capacity: Input resistance: Asymmetry:

Overvoltage category: Rated surge voltage:

8. Accuracy Base accuracy:

Voltage influence:

Adjustment accuracy: ≤5% Repetition accuracy: ±2% Temperature influence:

9. Ambient conditions

Ambient temperature: Storage temperature: Transport temperature: Relative humidity:

Pollution degree:

10. Weight

Single packing: Packing of 10pcs:

670g per Package

3(N)~, sinus, 48 to 63Hz (= supply voltage) (N)-L1-L2-L3 determined by tolerance specified for supply voltage 5% ... 25%

III (in accordance with IEC 60664-1) 4kV

≤5% (of nominal value) ≤0.05% / °C

-25 to +55°C -25 to +70°C -25 to +70°C 15% to 85% (in accordance with IEC 60721-3-3 class 3K3) 2 (in accordance with IEC 60664-1)

72g

E1PF400VSY01

Functions

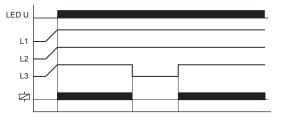
Phase sequence monitoring

When all the phases are connected in the correct sequence and the measured asymmetry is less than the fixed value, the output relay switches into on-position (yellow LED illuminated). When the phase sequence changes, the output relay switches into off-position (yellow LED not illuminated).



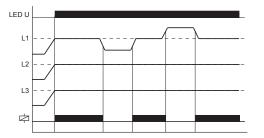
Überwachung Phasenausfall

Das Ausgangsrelais R fällt ab (gelbe LED leuchtet nicht), wenn eine der Phasen ausfällt.

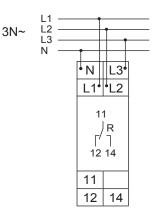


Asymmetry monitoring

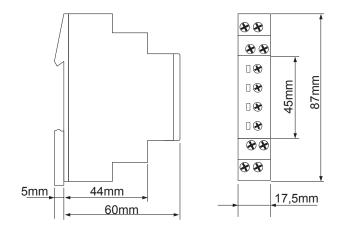
The output relay R switches into off-position (yellow LED not illuminated) when the asymmetrie exceeds the value set at the ASYM-regulator. Reverse voltages of a consumer (e.g. a motor which continues to run on two phases only) do not effect the disconnection.



Connections



Dimensions



Ordering information

Types	Rated voltage U _N	Switching thresholds	Part. No. (PQ 1)	Part. No. (PQ 10)
E1PF400VSY01	3(N)~ 400/230V	Asymmetrie 5%25%	1340300	1340300A



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Subject to alterations and errors