

- ▶ Voltage monitoring in 3-phase mains
- ▶ Window function
- ▶ Supply voltage selectable via power modules
- ▶ 1 change-over contact
- ▶ Width 22.5mm
- ▶ Industrial design



Figure similar

Technical data

1. Functions

Voltage monitoring in 3-phase mains with adjustable thresholds and adjustable tripping delay
WIN Monitoring the window between Min and Max

2. Time ranges

| | |
|----------------------------|------------------|
| | Adjustment range |
| Start-up suppression time: | - |
| Tripping delay: | 0.2s 10s |

3. Indicators

Red LED ON/OFF: indication of failure of the corresponding threshold
Red LED flashing: indication of tripping delay of the corresponding threshold
Yellow LED ON/OFF: indication of relay output

4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-Rail TS 35 according to EN 50022
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 x 0.5 to 1.5mm² with/without multicore cable end
2 x 2.5mm² flexible without multicore cable end

5. Input circuit

Supply voltage: 12 to 400V AC terminals A1-A2 (galvanically separated) selectable via power modules TR2
Tolerance: according to specification of power module
Rated frequency: according to specification of power module
Rated consumption: 2VA (1.5W)
Duration of operation: 100%
Reset time: 500ms
Residual ripple for DC: -
Drop-out voltage: >30% of the supply voltage
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

6. Output circuit

1 potential free change-over contact
Rated voltage: 250V AC
Switching capacity (distance <5mm): 750VA (3A / 250V AC)
Switching capacity (distance >5mm): 1250VA (5A / 250V AC)
Fusing: 5A fast acting
Mechanical life: 20 x 10⁵ operations
Electrical life: 2 x 10⁵ operations at 1000VA resistive load

Switching frequency: max. 60/min at 100VA resistive load
max. 6/min at 1000VA resistive load (according to IEC 947-5-1)
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

7. Measuring circuit

Measured variable: DC or AC sinus (48 to 63Hz)
Input:
3~ 115/66V terminals L1-L2-L3 (G2PW115V10)
3~ 230/132V terminals L1-L2-L3 (G2PW230V10)
3~ 400/230V terminals L1-L2-L3 (G2PW400V10)
Overload capacity:
3~ 115/66V 3~ 173/100V (G2PW115V10)
3~ 230/132V 3~ 345/199V (G2PW230V10)
3~ 400/230V 3~ 600/346V (G2PW400V10)
Input resistance:
3~ 115/66V 220kΩ (G2PW115V10)
3~ 230/132V 470kΩ (G2PW230V10)
3~ 400/230V 1MΩ (G2PW400V10)
Switching threshold
Max: -20% to +30% of U_N
Min: -30% to +20% of U_N
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

8. Accuracy

Base accuracy: ±5% (of maximum scale value)
Frequency response: -10% to +5% (48 to 63Hz)
Adjustment accuracy: ≤5% (of maximum scale value)
Repetition accuracy: ≤2%
Voltage influence: ≤0.5%
Temperature influence: ≤0.1% / °C

9. Ambient conditions

Ambient temperature: -25 to +55°C (according to IEC 68-1)
-25 to +40°C (according to UL 508)
Storage temperature: -25 to +70°C
Transport temperature: -25 to +70°C
Relative humidity: 15% to 85% (according to IEC 721-3-3 class 3K3)
Pollution degree: 3 (according to IEC 664-1)

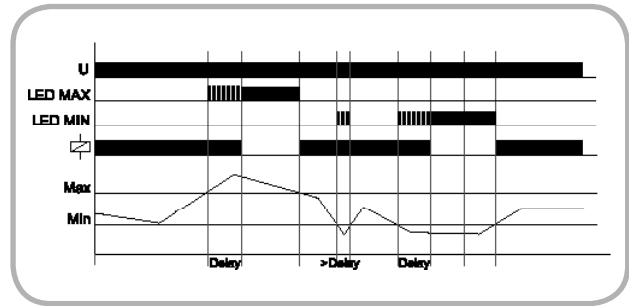
Functions

If a failure already exists when the device is activated, the output relay remains in the off position and the LED for the corresponding threshold is illuminated.

Window function (WIN)

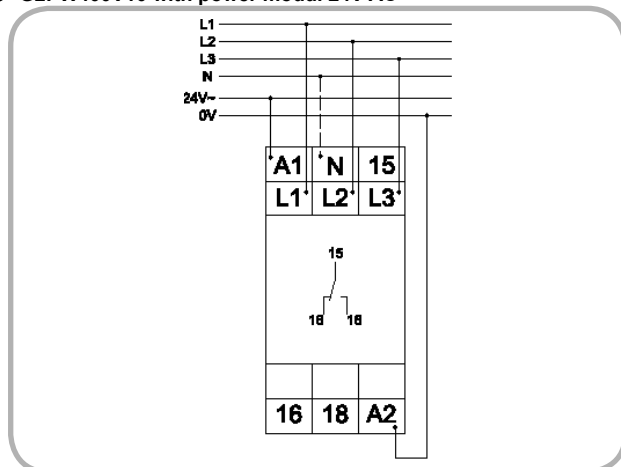
The output relay R switches into on-position (yellow LED illuminated) when the measured voltage (mean value of linked voltages) exceeds the value adjusted at the MIN-regulator. When the measured voltage exceeds the value adjusted at the MAX-regulator, the set interval of the tripping delay (DELAY) begins (red LED MAX flashes). After the interval has expired (red LED MAX illuminated), the output relay switches into off-position (yellow LED not illuminated). The output relay again switches into on-position (yellow LED illuminated) when the measured voltage falls below the value adjusted at the MAX-regulator (red LED MAX not illuminated). When the measured voltage falls below the value adjusted at the MIN-regulator, the set interval of the tripping delay (DELAY) begins again (red LED MIN flashes). After the interval has expired (red LED MIN illuminated), the output relay switches into off-position (yellow LED not illuminated).

The LEDs MIN and MAX are flashing alternating, when the minimum value for the measured voltage was chosen to be greater than the maximum value.

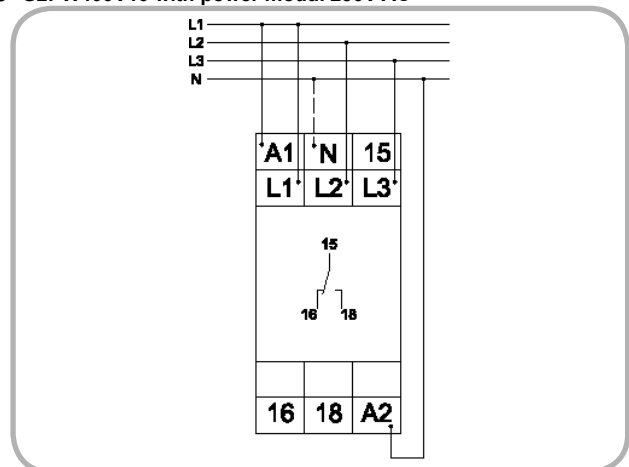


Connections

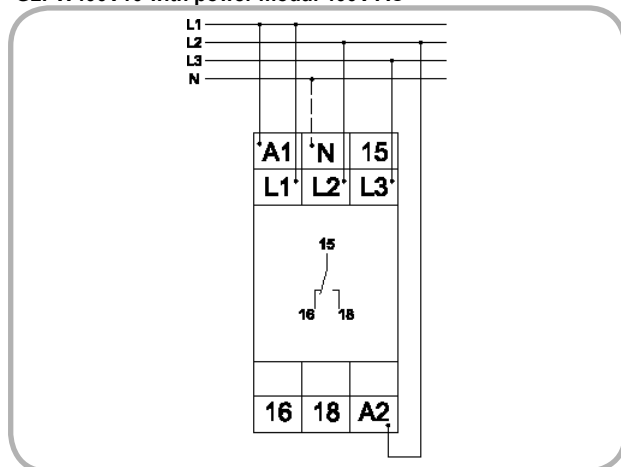
► G2PW400V10 with power modul 24V AC



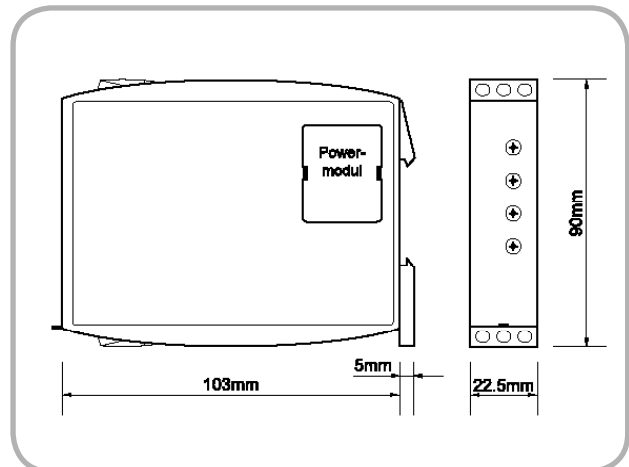
► G2PW400V10 with power modul 230V AC



► G2PW400V10 with power modul 400V AC



Dimensions



Subject to alterations and errors