

- ▶ Voltage monitoring in 3-phase mains
- ▶ Quick net error recognition
- ▶ Recognition of isolated operation in accordance with VDE 0126-1-1, 4.5
- ▶ Optional connection of neutral wire
- ▶ Supply voltage selectable via power modules or switching power supply
- ▶ 2 change over contacts
- ▶ Width 22.5mm
- ▶ Industrial design



Technical data

1. Functions

Voltage monitoring in 3-phase mains with fixed ON-Delay, fixed thresholds and recognition of isolated operation in accordance with VDE 0126-1-1 (see 4.5).

WIN Monitoring the fixed range

2. Time ranges

ON-Delay:	Adjustment range
OFF-Delay:	fixed, 30s
U ≤ 80% of U _N	< 200ms
U ≥ 115% of U _N	< 200ms

3. Indicators

Red LED Loss of mains ON/OFF:	indication of failure
Yellow LED ON/OFF:	indication of relay output
Yellow LED flashes:	indication of ON-Delay

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
 Terminals 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 type TR2 according to specification of power module
Tolerance:	according to specification of power module
Rated frequency:	according to specification of power module

Supply voltage: 24V DC	terminals A1-A2 (galvanically separated) selectable via switching power supply type SNT2
Tolerance:	according to specification of switching power supply
Rated frequency:	according to specification of switching power supply

Rated consumption:	2VA (1.5W)
Duty cycle:	100%
Reset time:	500ms
Residual ripple for DC:	-
Drop-out voltage:	>30% of supply voltage
Overvoltage category:	III (in accordance with IEC 60664-1)
Rated surge voltage:	4kV

6. Output circuit

2 potential free change over contacts	
Rated voltage:	250V AC
Switching capacity:	750VA (3A / 250V AC)
If the <u>distance</u> between the devices is <u>less than 5mm!</u>	

Switching capacity:	1250VA (5A / 250V AC)
If the <u>distance</u> between the devices is <u>greater than 5mm!</u>	

Fusing:	5A fast acting
Mechanical life:	20 x 10 ⁶ operations
Electrical life:	2 x 10 ⁵ operations at 1000VA resistive load
Switching frequency:	max. 60/min at 100VA resistive load max. 6/min at 1000VA resistive load (in accordance with IEC 60947-5-1)
Overvoltage category:	III (in accordance with IEC 60664-1)
Rated surge voltage:	4kV

7. Measuring circuit

Fusing:	max. 20A (in accordance with UL 508)
Measured variable:	AC Sinus (48 to 63Hz)
Measurement input:	3(N)~ 400/230V
Overload capacity:	terminals (N)-L1-L2-L3
3(N)~ 400/230V	3(N)~ 600/346V
Input resistance:	1MΩ
3(N)~ 400/230V	
Switching threshold	
Max:	fixed, +15% of U _N
Min:	fixed, -20% of U _N
Overvoltage category:	III (in accordance with IEC 60664-1)
Rated surge voltage:	4kV

8. Accuracy

Base accuracy:	<2%
Frequency response:	-
Adjustment accuracy:	-
Repetition accuracy:	≤1%
Temperature influence:	≤0.05% / °C

9. Ambient conditions

Ambient temperature:	-25 to +55°C (in accordance with IEC 60068-1) -25 to +40°C (in accordance with UL 508)
Storage temperature:	-25 to +70°C
Transport temperature:	-25 to +70°C
Relative humidity:	15% to 85% (in accordance with IEC 60721-3-3 class 3K3)
Pollution degree:	3 (in accordance with IEC 60664-1)
Vibration resistance:	10 to 55Hz 0.35mm (in accordance with IEC 60068-2-6)
Shock resistance:	15g 11ms (in accordance with IEC 60068-2-27)

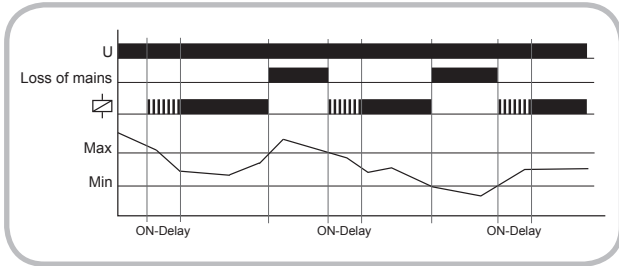
Functions

If a failure already exists when the device is activated, the output relay remains in off-position and the red LED Loss of mains illuminates.

Window function WIN:

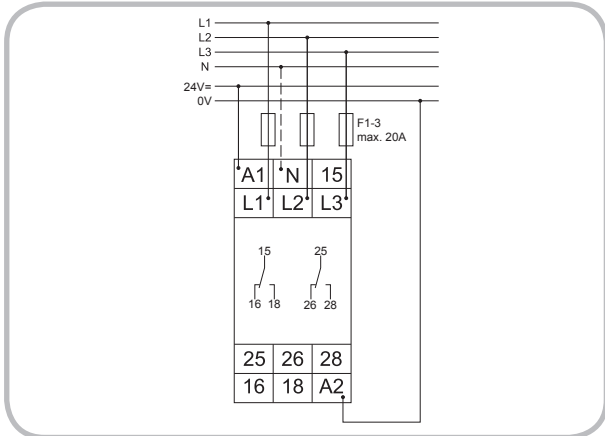
When the supply voltage U is applied, the output relay R switches into on-position after the set interval of the tripping delay (ON-Delay) has expired and if the measured voltage is within the fixed adjusted window. When the measured voltage leaves the window between the fixed adjusted range, the output relay R switches into off-position (red LED Loss of mains illuminated).

As soon as the voltage reenters the adjusted window, the set interval of the tripping delay (ON-Delay) begins (yellow LED flashes). After the interval has expired, the output relay R switches into on-position (yellow LED illuminated).

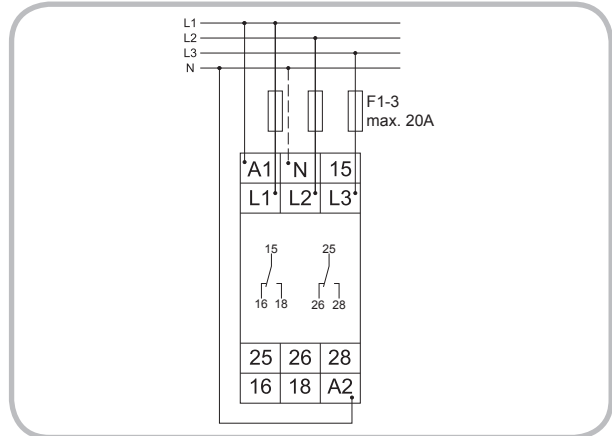


Connections

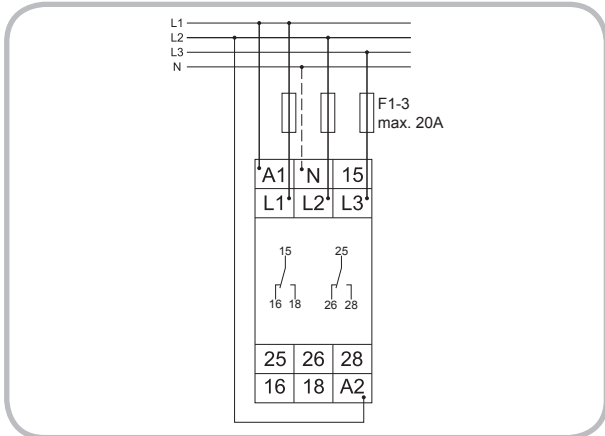
G2PW400VF02 with switching power supply SNT2 24V DC



G2PW400VF02 with power module TR2 230V AC



G2PW400VF02 with power module TR2 400V AC



Dimensions

