Phase control

→ Multi-function phase control relay - 17.5 mm

- Control of 3-phase networks: phase sequence, phase failure, imbalance (asymmetry), over and undervoltage
- Range includes mono-function product and multifunction product
- lacksquare Multi-voltage from 3 x 208 to 3 x 480 V \sim

Galvanic isolation of power supply/measurement

Power consumption at Un

Immunity from micro power cuts

- Controls its own supply voltage
- True RMS measurement
- LED status indication









MWG

IWU

VA

MWUA

Part numbers				
Туре	Functions	Nominal voltage (V)	Code	
MWG	Phase sequence and failure	3 x 208 \rightarrow 3 x 480 V \sim	84873022	
MWU	Phase sequence, failure, undervoltage	3 x 208 \rightarrow 3 x 480 V \sim	84873023	
MWA	Phase sequence, failure and imbalance	3 x 208 \rightarrow 3 x 480 V \sim	84873024	
MWUA	Phase sequence, failure, imbalance, under and overvoltage in window mode	3 x 208 \rightarrow 3 x 480 V \sim	84873025	
Droduo	t adaptations			

Product adaptations



- Customisable colours and labels
- Single voltage in the generic range
- Adjustable fixed hysteresis
- Fixed or adjustable time delay except for MWG

Dedicated adaptation on MWG:

■ Adjustable regeneration rate

Dedicated adaptation on MWU:

Fixed undervoltage threshold in the generic range

Dedicated adaptation on MWA:

Fixed asymmetry threshold in the generic range

Dedicated adaptations to MWUA:

- Fixed undervoltage threshold in the generic range
- Fixed overvoltage threshold in the generic range
- \blacksquare Fixed asymmetry threshold in the generic range or adjustable 5 25 %

Accessories	
Description	Code
Removable sealable cover for 17.5 mm casing	8480000
General characteristics	MWG/MWU/MWA/MWUA
Supply	
	3 x 208 → 3 x 480 V \sim *
Supply Supply voltage Un Voltage supply tolerance	3 x 208 → 3 x 480 V \sim * -12% / +10%
,	

No

10 ms

1.8 VA in \sim



Measurement ranges 183 - 528 V \ 208 - 220 - 380 - 400 - 415 - 440 - 480 V	Inputs and measuring cicuit	
208 ± 220 − 380 + 400 + 415 − 440 − 480 V		400 500 1/ 0
Frequency of measured signal Max. measuring cycle time 150 ms True RMS measurement Voltage threshold adjustment 2 = 20% of selected Un 2 to 12% across the 3 ± 206 V ~ range / -2 to -17% across Cycle to 12% across the 3 ± 206 V ~ range / -2 to -17% across Cycle threshold signal to 15 to 15% of fixed Un Asymmetry threshold hysteresis 2% of fixed Un Asymmetry threshold signal threshold signal threshold adjustment 5 to 15% of fixed Un Asymmetry threshold adjustment 5 to 15% of fixed Un Asymmetry threshold adjustment 5 to 15% of fixed Un Repetition accuracy with constant parameters 2 to 5% of the displayed value Repetition accuracy with constant parameters 2 to 5% of the displayed value Repetition accuracy with constant parameters 2 to 5% of the displayed value Repetition accuracy with constant parameters 3 to 5% of the displayed value Repetition accuracy with constant parameters 4 to 5% of the displayed value Repetition accuracy with constant parameters 5 to 5% of the displayed value Repetition accuracy with constant parameters 5 to 5% of the displayed value Repetition accuracy with constant parameters 5 to 500 ms Collety on threshold crossing 5 to 100 ms Collety on threshold crossing 5 to 100 ms Collety on pick-up 5 to 00 ms Collety on pick-up 5 to 00 ms Collety on pick-up 1500 ms Collety on pick-up		
Max. measuring cycle time 150 ms/True RMS measurement 2 = 2-20% of selected bin (2 to 1-2% across the 3 x 269 t √ range) / 2 to -17% across the 3 x 269 t √ range / 2 to -17% across the 3 x 269 t √ range / 2 to 17% across the 3 x 269 t √ range / 2 to 17% across the 3 x 269 t √ range / 2 to 17% across the 3 x 460 t √ range) 2		
Voltage threshold adjustment		
(2 to 12% across the 3 x 280 ¥ \ range / 2 to 17% across the 3 x 480 ¥ \ range / 2 to 17% across the 3 x 480 ¥ \ range) Voltage threshold hysteresis 2% of fixed Un Asymmetry threshold squastnern 5 2% of fixed Un Asymmetry threshold squastnern 5 5 to 15% of fixed Un Asymmetry threshold adjustment 5 5 to 15% of fixed Un Asymmetry threshold adjustment 5 5 to 15% of fixed Un Asymmetry threshold adjustment 6 2 5 5 the 4 to 15% of fixed Un Asymmetry threshold adjustment 6 2 5 5 the 4 to 15% of fixed Un Measuring error with voltage drift Maximum regeneration (phase failure) Triling Delay on threshold crossing O.1 to 10 s (0, +10%) Repetition according with censaring parameters Each time 1500 ms Delay on threshold crossing O.1 to 10 s (0, +10%) Repetition according with censaring parameters 1500 ms Delay on threshold crossing O.1 to 10 s (0, +10%) Repetition according with censaring parameters 1500 ms Delay on threshold crossing O.1 to 10 s (0, +10%) Repetition according with censaring parameters 1500 ms Delay on pick-up S00 ms 1 injele pole changeover relay Type of corticats No cadmium Type of corticats No cadmium Maximum breaking outrent 1 injele pole changeover relay Type of corticats No cadmium Maximum breaking outrent 1 x 10° 1 x 1		
The content of th	Totago anostrola aajaoanona	
Voltage threshold hysteresis 2% of fixed Un		
Asymment's threshold adjustment 5 to 15% of fixed Un	Voltage threshold hysteresis	
Display precision ± 3% of the displayed value	Asymmetry threshold hysteresis	2% of fixed Un
Repetition accuracy with constant parameters	Asymmetry threshold adjustment	5 to 15% of fixed Un
Measuring error with veloped drift < 1% across the whole range		± 3% of the displayed value
Measuring error with temperature drift < 0.05%/*C		± 0.5%
Maximum regeneration (phase failure) 70%		
Delay on threshold crossing		
Delay on threshold crossing		70%
Repetition accuracy with constant parameters ± 3%	Timing	
Reset time		· · · · · · · · · · · · · · · · · · ·
Delay on pick-up 500 ms		
Alarm on delay time max. < 200 ms		
Output 1 single pole changeover relay Type of contacts No cadmium Max. breaking current 250 V ≈ Max. breaking current 5 A ≈ Min. breaking current 10 mA / 5 V :::: Electrical life (number of operations) 1 x 10° Breaking capacity (resistive) 1250 VA ~ Maximum rate 360 operations/hour at full load Operating categories acc. to IEC 60947-5-1 AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mochanical life (loperations) 30 x 10° Insulation Nominal insulation voltage IEC 60664-1 Nominal insulation (IEC 60664-1 /60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1/60255-5 4 KY (1,2 / 50 µs) Dielectric strength IEC 60664-1/60255-5 2 kY AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kY AC 50 Hz 1 min Display power supply Green LED Display power supply Green LED Display relay Yelkow LED - This LED flashes during the threshold delay Casing 7.5 mm Mounting position An incadescent wire test according to IEC 60695-2-11 & NF EN 60695-2-1 <td></td> <td></td>		
1 single pole changeover relay	· · · · · · · · · · · · · · · · · · ·	< 200 ms
Type of contacts		
Maximum breaking voltage 250 V ≈ Min. breaking current 5 A ≈ Min. breaking current 10 mA / 5 V ::: Electrical life (number of operations) 1 x 10° Breaking capacity (resistive) 1250 VA ~ Maximum rate 360 operations/hour at full load Operating categories acc. to IEC 60947-5-1 AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mechanical life (operations) 30 x 10° Nominal insulation voltage IEC 60664-1 400 V Insulation conditation (IEC 60664-1/60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/60255-6 1 la		
Max. breaking current S A		
Min. breaking current 10 mA / 5 V = Electrical life (number of operations) 1 x 10° 1250 VA ∼ Maximum rate 360 operations/hour at full load Operating categories acc. to IEC 60947-5-1 Mechanical life (operations) Nominal insulation voltage IEC 60964-1 Nominal insulation voltage	0 0	
Electrical life (number of operations) 1 x 10 ⁵ Breaking capacity (resistive) 1250 VA ~ Maximum rate 360 operations/hour at full load Operating categories acc. to IEC 60947-5-1 AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mechanical life (operations) 100 V Insulation Nominal insulation voltage IEC 60664-1 Insulation Nominal insulation voltage IEC 60664-1 (60255-5) Rated impulse withstand voltage IEC 60664-1/60255-5 2 k VA C 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 k VA C 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 k VA C 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 k VA C 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 2 k VA C 50 Hz 1 min Insulation resistance IEC 60664-1/60255-5 3 k V V (1.2 / 50 μs) Polipaday relay 3 k V (1.2 / 50 μs) Polipaday relay 3 k V (1.2 / 50 μs) Polipaday relay 4 k V (1.2 / 50 μs) Polipaday relay 3 k V (1.2 / 50 μs) Polipaday relay 4 k V (1.2 / 50 μs) Polipaday relay 4 k V (1.2 / 50 μs) Polipaday relay 5 k V (1.2 / 50 μs) Polipaday relay 4 k V (1.2 / 50 μs) Polipaday relay 5 k V (1.2 / 50 μs) Polipaday relay 5 k V (1.2 / 50 μs) Polipaday relay 7 k V (1.2 / 50 μs) Polipaday relay 8 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay 1 k V (1.2 / 50 μs) Polipaday relay Polipaday re	· · · · · · · · · · · · · · · · · · ·	5 A ≂
Breaking capacity (resistive) 1250 VA	Min. breaking current	10 mA / 5 V ===
Maximum rate 360 operations/hour at full load Operating categories acc. to IEC 60947-5-1 AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mechanical life (operations) 30 x 10° Insulation 400 V Insulation coordination (IEC 60664-1/ 60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1/ 60255-5 4 KV 1(2 z 50 µs) Dielectric strength IEC 60664-1/ 60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1/ 60255-5 2 kV AC 50 Hz 1 min Display power supply Green LED Display power supply Green LED Display related the foliation of the foliation	Electrical life (number of operations)	1 x 10 ⁵
Operating categories acc. to IEC 60947-5-1 AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mechanical life (operations) 30 x 10° Insulation AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14 Mominal insulation voltage IEC 60664-1 (60255-5) 400 V Insulation coordination (IEC 60664-1 (60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1 (60255-5 4 KV (1.2 / 50 µs) Dielectric strength IEC 60664-1 (60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 (60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 (60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 (60255-5 2 500 MΩ / 500 V ::: General characteristics Cereal LED Display power supply Green LED Display power supply Green LED Mounting position All positions Multing position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-17 ferminal block: IP20 Veight 80 g Rigid: 1 x 4² - 2 x 2.5² mm² Carring: IP30 Rigid: 1 x 4² - 2 x 2.5² mm² 1	Breaking capacity (resistive)	1250 VA \sim
Mechanical life (operations) 30 x 10° Insulation 400 V Insulation (IEC 60664-1 / 60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1/60255-5 4 K V (1.2 / 50 μs) Dielectric strength IEC 60664-1/60255-5 2 k V AC 50 Hz 1 min Insulation resistance IEC 60664-1 / 60255-5 2 k V AC 50 Hz 1 min Insulation resistance IEC 60664-1 / 60255-5 > 500 MΩ / 500 V General characteristics 30 mm y feet with the standard of the properties of the	Maximum rate	360 operations/hour at full load
Insulation A00 V Insulation coordination (IEC 60664-1 / 60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1 /60255-5 4 KV (1.2 / 50 µs) Dielectric strength IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 So0 MΩ / 500 V ::: General characteristics Verification of the property of the pro		AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14
Insulation A00 V Insulation coordination (IEC 60664-1 / 60255-5) Overvoltage category III: degree of pollution 3 Rated impulse withstand voltage IEC 60664-1 /60255-5 4 KV (1.2 / 50 µs) Dielectric strength IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 /60255-5 So0 MΩ / 500 V ::: General characteristics Verification of the property of the pro	Mechanical life (operations)	30 x 10 ⁶
Insulation coordination (IEC 60684-1 / 60255-5) Overvoltage category III: degree of pollution 3	Insulation	
Rated impulse withstand voltage IEC 60664-1/60255-5 4 KV (1.2 / 50 μs) Dielectric strength IEC 60664-1/60255-5 2 kV AC 50 Hz 1 min Insulation resistance IEC 60664-1 / 60255-5 > 500 MΩ / 500 V ⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅⋅	Nominal insulation voltage IEC 60664-1	400 V
Dielectric strength IEC 60684-1/60255-5 2 kV ÅC 50 Hz 1 min		
Insulation resistance IEC 60664-1 / 60255-5 S 500 MΩ / 500 V == Ceneral characteristics		4 KV (1.2 / 50 μs)
General characteristics Orean LED Display power supply Yellow LED - This LED flashes during the threshold delay Casing 17.5 mm Mounting On 35 mm symmetrical DIN rail, IEC/EN 60715 Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Protection (IEC 60529) Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG MMG Max. tightening torques IEC 60947-1 0.6 Nm - 1 / 5.3 → 8.8 Lbf. In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -20 → +50°C Humidity IEC 80068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 5 g Standards Immunity EN 61000-6-2/IEC 61000-6-2 Encision En Ribono-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 Emission En Ribono-6-4/IEC 61000-6-3 Emission EN 55022 class B	Dielectric strength IEC 60664-1/60255-5	2 kV AC 50 Hz 1 min
Display power supply Green LED Display relay Yellow LED - This LED flashes during the threshold delay Casing 17.5 mm Mounting On 35 mm symmetrical DIN rail, IEC/EN 60715 Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-17 Protection (IEC 60529) Terminal block: IP20 Casing: IP30 S0 g Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 1 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² Max. tightening torques IEC 60947-1 0.6 Nm → 1/5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 5 g Standards Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / U. 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC	Insulation resistance IFC 60664-1 / 60255-5	> 500 MQ / 500 V
Display relay Yellow LED - This LED flashes during the threshold delay Casing 17.5 mm Mounting On 35 mm symmetrical DIN rail, IEC/EN 60715 Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Protection (IEC 60529) Terminal block: IP20 Casing: IP30 Casing: IP30 Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 1 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf. In Operating temperature IEC 60068-2 -20 → +50°C 2.20 → +50°C Storage temperature IEC 60068-2 -20 → +50°C 4.0 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 5 g Shocks IEC 60068-2-6 5 g Standards We Fen 60255-6 / CEI 60255-6 / U. 508 / CSA C22.2 N°14 Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard IP En 60255-6 /		7 000 1112 7 000 1
Casing 17.5 mm Mounting On 35 mm symmetrical DIN rail, IEC/EN 60715 Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60068-2 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-3 Emission EN 65022 class B UL, CSA, GL Certifications UL, CSA, GL Conformity with environmental directives	General characteristics	7 333 1112 7 333 1
Mounting On 35 mm symmetrical DIN rail, IEC/EN 60715 Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-11	General characteristics Display power supply	
Mounting position All positions Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay	Green LED Yellow LED - This LED flashes during the threshold delay
Material: enclosure plastic type VO to UL94 standard Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf. In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 EC 610000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm
Protection (IEC 60529) Terminal block: IP20 Casing: IP30 Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards The No0255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL, pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715
Weight Casing: IP30 Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG In x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 610000-6-3 EIC 61000-6-4/IEC 61000-6-3 EIC 61000-6-4/IEC 610000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions
Weight 80 g Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-4/EN 61000-6-2 Emission EN 61000-6-3 IEC 61000-6-3 IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-
Connecting capacity IEC 60947-1 Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf. In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20
1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEN 61000-6-3 Emission EN 61000-6-4/IEN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529)	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30
Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g
1 x 14 AWG - 2 x 16 AWG Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529)	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm²
Max. tightening torques IEC 60947-1 0.6 Nm → 1 / 5.3 → 8.8 Lbf. In Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG
Operating temperature IEC 60068-2 -20 → +50°C Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Marking NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm²
Storage temperature IEC 60068-2 -40 → +70°C Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG
Humidity IEC 60068-2-30 2 x 24 hr cycle 95% RH max. without condensation 55°C Vibrations according to IEC/EN60068-2-6 5 g Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1/5.3 → 8.8 Lbf.ln
Vibrations according to IEC/EN60068-2-6 10 → 150 Hz, A = 0.035 mm Shocks IEC 60068-2-6 5 g Standards	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C
Shocks IEC 60068-2-6 5 g Standards	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C
Standards Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B UL, CSA, GL Certifications UL, CSA, GL Pending RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C
Marking CE (LVD) 73/23/EEC - EMC 89/336/EEC Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B UL, CSA, GL Certifications UL, CSA, GL Pending RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C 10 → 150 Hz, A = 0.035 mm
Product standard NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C 10 → 150 Hz, A = 0.035 mm
Electromagnetic compatibility Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B UL, CSA, GL Certifications UL, CSA, GL pending RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2 Terminal block: IP20 Casing: IP30 80 g Rigid: $1 \times 4^2 - 2 \times 2.5^2$ mm² $1 \times 11 \text{ AWG} - 2 \times 14 \text{ AWG}$ Flexible with ferrules: $1 \times 2.5^2 - 2 \times 1.5^2$ mm² $1 \times 14 \text{ AWG} - 2 \times 16 \text{ AWG}$ $0.6 \text{ Nm} \rightarrow 1 / 5.3 \rightarrow 8.8 \text{ Lbf.In}$ $-20 \rightarrow +50^{\circ}\text{C}$ $-40 \rightarrow +70^{\circ}\text{C}$ $2 \times 24 \text{ hr cycle } 95\% \text{ RH max. without condensation } 55^{\circ}\text{C}$ $10 \rightarrow 150 \text{ Hz}, A = 0.035 \text{ mm}$ 5 g
Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: $1 \times 4^2 - 2 \times 2.5^2$ mm² $1 \times 11 \text{ AWG} - 2 \times 14 \text{ AWG}$ Flexible with ferrules: $1 \times 2.5^2 - 2 \times 1.5^2$ mm² $1 \times 14 \text{ AWG} - 2 \times 16 \text{ AWG}$ $0.6 \text{ Nm} \rightarrow 1 / 5.3 \rightarrow 8.8 \text{ Lbf.In}$ $-20 \rightarrow +50^{\circ}\text{C}$ $-40 \rightarrow +70^{\circ}\text{C}$ $2 \times 24 \text{ hr cycle } 95\% \text{ RH max. without condensation } 55^{\circ}\text{C}$ $10 \rightarrow 150 \text{ Hz}, A = 0.035 \text{ mm}$ 5 g $CE (LVD) 73/23/EEC - EMC 89/336/EEC$
Emission EN 55022 class B Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking Product standard	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: $1 \times 4^2 - 2 \times 2.5^2$ mm² $1 \times 11 \text{ AWG} - 2 \times 14 \text{ AWG}$ Flexible with ferrules: $1 \times 2.5^2 - 2 \times 1.5^2$ mm² $1 \times 14 \text{ AWG} - 2 \times 16 \text{ AWG}$ 0.6 Nm \rightarrow 1 / 5.3 \rightarrow 8.8 Lbf.In $-20 \rightarrow +50^{\circ}\text{C}$ $-40 \rightarrow +70^{\circ}\text{C}$ 2 $\times 24 \text{ hr cycle } 95\% \text{ RH max. without condensation } 55^{\circ}\text{C}$ 10 \rightarrow 150 Hz, A = 0.035 mm 5 g CE (LVD) 73/23/EEC - EMC 89/336/EEC NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14
Certifications UL, CSA, GL pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-1-11 & NF EN 60695-1-1
pending Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking Product standard	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: $1 \times 4^2 - 2 \times 2.5^2$ mm² $1 \times 11 \text{ AWG} - 2 \times 14 \text{ AWG}$ Flexible with ferrules: $1 \times 2.5^2 - 2 \times 1.5^2$ mm² $1 \times 14 \text{ AWG} - 2 \times 16 \text{ AWG}$ 0.6 Nm \rightarrow 1 / 5.3 \rightarrow 8.8 Lbf.In $-20 \rightarrow +50^{\circ}\text{C}$ $-40 \rightarrow +70^{\circ}\text{C}$ $2 \times 24 \text{ hr cycle } 95\% \text{ RH max. without condensation } 55^{\circ}\text{C}$ 10 \rightarrow 150 Hz, A = 0.035 mm 5 g CE (LVD) 73/23/EEC - EMC 89/336/EEC NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Immunity EN 61000-6-4/EN 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3
Conformity with environmental directives RoHS, WEEE	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking Product standard Electromagnetic compatibility	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C 10 → 150 Hz, A = 0.035 mm 5 g CE (LVD) 73/23/EEC - EMC 89/336/EEC NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B
	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking Product standard Electromagnetic compatibility	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2-Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C 10 → 150 Hz, A = 0.035 mm 5 g CE (LVD) 73/23/EEC - EMC 89/336/EEC NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Immunity EN 61000-6-4/IEC 61000-6-2 Emission EN 61000-6-4/IEC 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B UL, CSA, GL
	General characteristics Display power supply Display relay Casing Mounting Mounting position Material: enclosure plastic type VO to UL94 standard Protection (IEC 60529) Weight Connecting capacity IEC 60947-1 Max. tightening torques IEC 60947-1 Operating temperature IEC 60068-2 Storage temperature IEC 60068-2 Humidity IEC 60068-2-30 Vibrations according to IEC/EN60068-2-6 Shocks IEC 60068-2-6 Standards Marking Product standard Electromagnetic compatibility Certifications	Green LED Yellow LED - This LED flashes during the threshold delay 17.5 mm On 35 mm symmetrical DIN rail, IEC/EN 60715 All positions Incandescent wire test according to IEC 60695-2-11 & NF EN 60695-2- Terminal block: IP20 Casing: IP30 80 g Rigid: 1 x 4² - 2 x 2.5² mm² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules: 1 x 2.5² - 2 x 1.5² mm² 1 x 14 AWG - 2 x 16 AWG 0.6 Nm → 1 / 5.3 → 8.8 Lbf.In -20 → +50°C -40 → +70°C 2 x 24 hr cycle 95% RH max. without condensation 55°C 10 → 150 Hz, A = 0.035 mm 5 g CE (LVD) 73/23/EEC - EMC 89/336/EEC NF EN 60255-6 / CEI 60255-6 / UL 508 / CSA C22.2 N°14 Immunity EN 61000-6-2/IEC 61000-6-2 Emission EN 61000-6-4/EN 61000-6-3 IEC 61000-6-4/IEC 61000-6-3 Emission EN 55022 class B UL, CSA, GL pending



Phase control

Principles

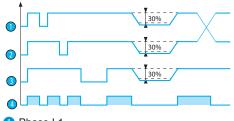
Overview

3-phase network control relays monitor:

- The correct sequence of phases L1, L2, L3
- Total phase failure
- Undervoltage and overvoltage from 2 to 20 % of Un
- Asymmetry rate from 5 to 15% of Un
- LEDs are used for fault signalling.

If a fault persists for longer than the threshold crossing delay configured by the user, the output relay opens and the LED R is extinguished.

MWG - Phase failure and sequence (with regeneration)



- Phase L1
- 2 Phase L2
- 3 Phase L3
- Relay

Operating principle

MWG: Phase controller with voltage regeneration Voltage selector switch:

Set the selector switch to the 3-phase network voltage Un.

The position of this selector switch is only taken into account when the unit is powered up. If the switch position changes while the unit is operating, all the LEDs flash but the product continues to work normally with the voltage selected on energisation prior to the change of

. The LEDs return to their normal state if the switch is reset to its initial position defined before the last energisation.

The relay monitors its own supply voltage.

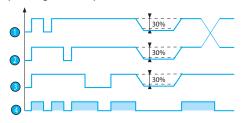
The relay controls:

- correct sequencing of the three phases
- failure of one of the three phases (U measured < 0.7 x Un).

In the event of a phase sequence or failure fault, the relay opens instantaneously.

When the unit is powered up with a measured fault, the relay stays open.

MWU - Phase failure and sequence (with regeneration)



- Phase L1
- Phase L2
- 3 Phase L3
- 4 Relay

Operating principle

MWU: Phase controller with voltage and undervoltage regeneration Voltage selector switch:

Set the selector switch to the 3-phase network voltage Un.

The position of this selector switch is only taken into account when the unit is powered up. If the switch position changes while the unit is operating, all the LEDs flash but the product continues to work normally with the voltage selected on energisation prior to the change of

The LEDs return to their normal state if the switch is reset to its initial position defined before the last energisation.

The relay monitors its own supply voltage.

The relay controls:

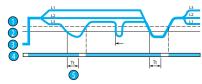
- correct sequencing of the three phases
- failure of one of the three phases (U measured < 0.7 x Un).
- undervoltage, adjustable from -2 to -20% of Un (-2 to -12% across the 3 x 208 V range and -2 to 17% for the 3 x 220 V range due to the minimum voltage 183 V \sim).

In the event of a phase sequence or failure fault, the relay opens instantaneously.

In the event of a voltage fault, the relay opens at the end of the time delay set by the user.

When the unit is powered up with a measured fault, the relay stays open.

MWU - Undervoltage

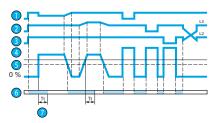


- Hysteresis
- 2 Undervoltage
- Phases L1, L2, L3
- Relay
- Delay on threshold crossing (Tt)



Principles

MWA - Failure, phase sequence and asymmetry



- 1 Phase L1
- 2 Phase L2
- 3 Phase L3
- 4 Asymmetry threshold
- 6 Hysteresis
- 6 Relay
- Delay on threshold crossing (Tt)

Operating principle

MWA: Phase controller with voltage and asymmetry regeneration

Voltage selector switch:

Set the selector switch to the 3-phase network voltage Un.

The position of this selector switch is only taken into account when the unit is powered up. If the switch position changes while the unit is operating, all the LEDs flash but the product continues to work normally with the voltage selected on energisation prior to the change of position.

The LEDs return to their normal state if the switch is reset to its initial position defined before the last energisation.

Definition of asymmetry setting = Nominal voltage between phases (Un) x asymmetry rate (%) displayed on front face.

The relay monitors its own supply voltage.

The relay controls:

- correct sequencing of the three phases
- failure of one of the three phases (U measured < 0.7 x Un).
- asymmetry, adjustable from 5 to 15% of Un.

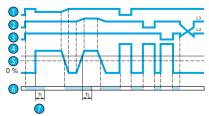
In the event of a phase sequence or failure fault, the relay opens instantaneously.

In the event of an asymmetry fault, the relay opens at the end of the time delay set by the user. When the unit is powered up with a measured fault, the relay stays open.

Asymmetry is defined as follows: (Vrms max. - Vrms min.) /Vrms mains.

Vrms mains corresponds to the voltage selected by the switch on the front face.

MWUA - Failure, phase sequence and asymmetry



- 1 Phase L1
- 2 Phase L2
- 3 Phase L3
- 4 Asymmetry threshold
- 6 Hysteresis
- 6 Relay
- Delay on threshold crossing (Tt)

Operating principle

MWUA: Phase controller with voltage regeneration + Asymmetry + Under/Overvoltage Voltage selector switch:

Set the selector switch to the 3-phase network voltage Un.

The position of this selector switch is only taken into account when the unit is powered up. If the switch position changes while the unit is operating, all the LEDs flash but the product continues to work normally with the voltage selected on energisation prior to the change of position.

The LEDs return to their normal state if the switch is reset to its initial position defined before the last energisation.

The relay monitors its own supply voltage.

The relay controls:

- correct sequencing of the three phases
- failure of one of the three phases (U measured < 0.7 x Un).
- asymmetry, adjustable from 5 to 15% of Un,

and the under and overvoltage drift adjustable from 2 to 20% of Un (-2 to -12% across the 3 x 208 V \sim range, -2 to -17% across the 3 x 220 V \sim range due to the minimum voltage 183 V

 \sim ; +2 to +10 % across the 3 x 480 V \sim range due to the maximum voltage 528 V \sim).

In the event of a phase sequence or failure fault, the relay opens instantaneously.

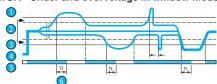
In the event of an asymmetry or voltage fault, the relay opens at the end of the time delay set by the user.

When the unit is powered up with a measured fault, the relay stays open.

Asymmetry is defined as follows: (Vrms max. - Vrms min.) /Vrms mains.

Vrms mains corresponds to the voltage selected by the switch on the front face.

MWUA - Under and overvoltage in window mode

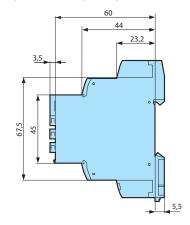


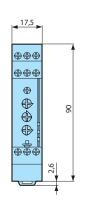
Overvoltage

- 2 Hysteresis
- 3 Undervoltage
- 4 Phases L1, L2, L3
- 6 Relay
- 6 Delay on threshold crossing (Tt)

Dimensions (mm)

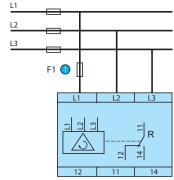
MWG - MWA - MWU - MWUA





Connections

MWG - MWA - MWU - MWUA



100 mA fast-blow fuse

