Technical specifications

Type		3UG46 24
General data		
Rated control supply voltage U_s	V	90 … 690[1]
Rated frequency	Hz	50/60
Rated power, typical		
• At 90 V AC	VA	2.8
• At 230 V AC	VA	2.4
• At 400 V AC	VA	3.1
• At 460 V AC	VA	3.2
• At 690 V AC	VA	4.7
Width	mm	22.5
RESET		Automatic/ manual
Principle of operation		Closed-circuit principle, open-circuit principle
Availability time after application of U_s	ms	1000
Response time once a switching threshold is reached	ms	Max. 300
Adjustable delay time	s	0.1... 20
Mains buffering time, minimum	ms	10
Rated insulation voltage U_i Degree of pollution 3 Overvoltage category III acc. to VDE 0110	V	690
Rated impulse withstand voltage	kV	6
Permissible ambient temperature		
• During operation	°C	-25 … +60
• During storage	°C	-40 … +85
EMC tests[2]		IEC 60947-1/ IEC 61000-6-2 / IEC 61000-6-4
Degree of protection		
• Enclosures		IP40
• Terminals		IP20
Vibration resistance acc. to IEC 60068-2-6		1 ... 6 Hz: 15 mm; 6 ... 500 Hz: 2 *g*
Shock resistance acc. to IEC 60068-2-27		12 shocks (half-sine 15 *g*/11 ms)
Connection type		**Screw terminals**
• Terminal screw		M3 (for standard screw driver size 2 and Pozidriv 2)
• Solid	mm^2	1 x (0.5 ... 4) / 2 x (0.5 ... 2.5)
• Finely stranded with end sleeve	mm^2	1 x (0.5 ... 2.5) / 2 x (0.5 ... 1.5)
• AWG cables, solid or stranded	AWG	2 x (20 ... 14)
• Tightening torque	Nm	0.8 … 1.2
Connection type		**Spring-loaded terminals**
• Solid	mm^2	2 x (0.25 ... 1.5)
• Finely stranded, with end sleeves acc. to DIN 46228	mm^2	2 x (0.25 ... 1.5)
• Finely stranded	mm^2	2 x (0.25 ... 1.5)
• AWG cables, solid or stranded	AWG	2 x (24 ... 16)
Measuring circuit		
Measurable residual current I_{res}	A	10 ... 120 % $I_{\Delta n}$ ($I_{\Delta n}$: rated residual current of the transformer)
Adjustable response value		
• Residual current		10 ... 100 % $I_{\Delta n}$
• Warning		10 ... 100 % $I_{\Delta n}$
Measuring accuracy	%	±5
Repeat accuracy at constant parameters	%	±1
Accuracy of digital display		± 1 digit
Deviations for temperature changes	%/°C	±0.1
Hysteresis for residual current		LSB[3] up to 50 % $I_{\Delta n}$
Hysteresis for warning threshold	A	5 % $I_{\Delta n}$

1) Absolute limit values.

2) Note: This is a Class A product. In the household environment this device may cause radio interference. In this case the user must take suitable precautions.

3) LSB: Smallest adjustable value, transformer-dependent, ≤1 % of $I_{\Delta n}$.

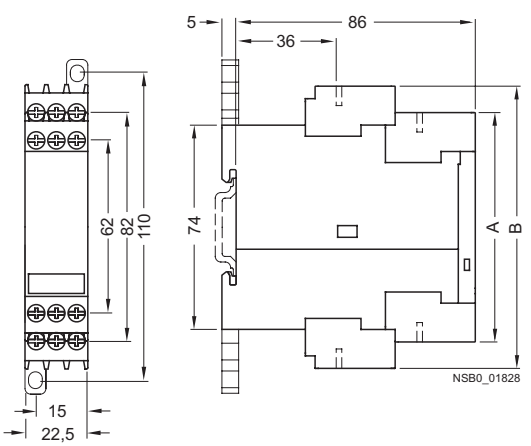
3UG Monitoring Relays for Electrical and Additional Measurements

Residual current monitoring: Residual-current monitoring relays

Type		3UG46 24
Control circuit		
Number of CO contacts for auxiliary contacts		2
Load capacity of the output relay Thermal current I_{th}	A	5
Rated operational current I_e at		
• AC-15/24 ... 400 V	A	3
• DC-13/24 V	A	1
• DC-13/125 V	A	0.2
• DC-13/250 V	A	0.1
Minimum contact load at 17 V DC	mA	5
Output relay with DIAZED fuse gL/gG operational class	A	4
Electrical endurance AC-15	Million operating cycles	0.1
Mechanical endurance	Million operating cycles	10

Dimensional drawings

3UG46 24



Type	3UG46 24	
	A	B
Removable terminal		
Screw-type terminal	83	102
Spring-loaded terminal	84	103

1) For standard mounting rail according to EN 60715.