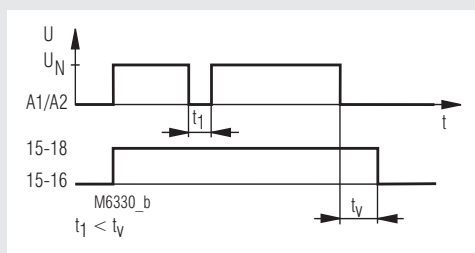




- According to IEC/EN 61 812-1
- Delay up to 300 s
- Repeat accuracy $< \pm 1 \%$
- Without auxiliary voltage
- For 2-wire proximity sensors
- With 1 or 2 changeover contacts
- Width 45 mm

Function diagram



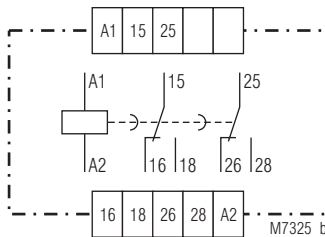
Approvals and marking



Indication

LED: on when operating voltage applied

Circuit diagram



BA 7954.82, AI 954 N.0082

Technical Data

Time circuit

Time ranges: 0,05 ... 1 s 0,15 ... 3 s
 0,5 ... 10 s 1,5 ... 30 s
 5 ... 100 s 15 ... 300 s

Time setting: stepless, on absolute scale
Repeat accuracy: $\leq \pm 1 \%$
Min. setting time: 25 ms

Attention!
 Time faults when min. setting time $< 10 \%$. When setting time longer, the fault will be less.

Voltage influence: $< \pm 1 \%$
Temperature influence $< 0,3 \%$ / K

Input

Nominal voltage U_N : AC 24, 42, 110, 127, 230, 240 V
 DC 24 V

DC 48 V*: ZWS 20 SL 390 Ω 20 W
 DC 60 V*: ZWS 20 SL 640 Ω 20 W
 DC 110 V*: ZWS 20 SL 1,5 k Ω 20 W
 DC 220 V*: ZWS 35 SL 3,3 k Ω 35 W

*) with external series resistor
 The series resistors have to be used together with DC 24 V-devices. The series resistor has to be connected to (+).

Voltage range: 0,8 ... 1,1 U_N
Permissible residual current: $\leq 2,5$ mA
Nominal consumption: AC 3 VA
 DC 48 60 110/127 220 V
 3,0 3,5 6,5 13,0 W

Nominal frequency: 50 / 60 Hz
Recovery time: ≥ 25 ms

Output

Contacts:
 BA 7954.81, AI 954 N.0081: 1 changeover contact, delayed
 BA 7954.82, AI 954 N.0082: 2 changeover contacts, delayed
Operate time of the contacts: ≤ 25 ms

Technical Data

Thermal current I_{th}:	5 A	
Switching capacity to AC 15:		
NO contact:	3 A / AC 230 V	IEC/EN 60 947-5-1
NC contact:	1 A / AC 230 V	IEC/EN 60 947-5-1
Electrical life to AC 15 at 1 A, AC 230 V:	2,5 x 10 ⁵ switching cycles	
Permissible switching frequency:	6000 switching cycles / h	
Short-circuit strength max. fuse rating:	4 A gL	IEC/EN 60 947-5-1
Mechanical life:	> 10 x 10 ⁶ switching cycles	

General Data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60 °C	
Clearance and creepage distances rated impuls voltage / pollution degree:	4 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V/m	IEC/EN 61 000-4-3
Fast transients:	2 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply: between wire and ground:	1 kV 2 kV	IEC/EN 61 000-4-5 IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
Degree of protection		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Housing:	Thermoplast with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0,35 mm frequency 10...55Hz IEC/EN 60 068-2-6	
Climate resistance:	20 / 060 / 04 IEC/EN 60 068-1	
Terminal arrangement:	DIN 46 199-5	
Terminal designation:	EN 50 005	
Wire connection:	2 x 2,5 mm ² solid or 2 x 1,5 mm ² stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1	
Mounting:	DIN rail IEC/EN 60 715	
Weight:	260 g	

Dimensions

Width x height x depth

BA 7954:	45 x 73 x 133 mm
AI 954N:	45 x 77 x 127 mm

Standard types

BA 7954.82	AC 230 V	50 / 60 Hz	0,5 ... 10 s	
Article number:	0024075			stock item
• Nominal voltage U_N :	AC 230 V			
• Time range:	0,5 ... 10 s			
• Width:	45 mm			

Variant

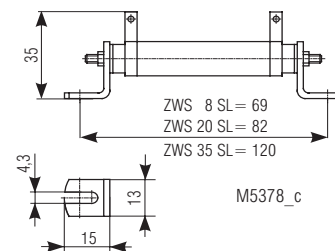
Ordering example for variant

AI 954 N	.0082	/	_	AC 230 V	50 / 60 Hz	100 s	
							Time range max. value
							Nominal frequency
							Nominal voltage
							Variant, if required
							Contacts
							Type

Accessories

ZWS 20 SL, ZWS 35 SL:

Series resistors



for BA 7954:
ET 4762-5

Adaptor

for AI 954 N:
K 70-34

Transparent cover