



Electronic Time Relay

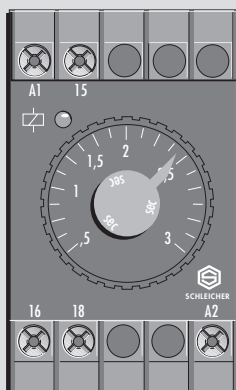
SZT 110 for single voltage

Function: OFF-delay (RV) without auxiliary supply

1 time range

Contact equipment: 1 timed changeover

SZT 110



Function

RV (see page S 1/3).

Infinitely variable time setting within a range is carried out with the aid of a transparent rotary knob.

Product Description

The electronic time relay SZT 110 has a single setting range and is available in the following time ranges:

Time range

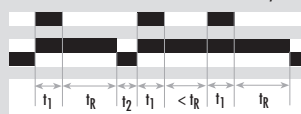
0,05 to	1 s
0,15 to	3 s
0,5 to	10 s
1,5 to	30 s
5 to	100 s
15 to	300 s

Function Diagram

FD 0056

SZT 110

OFF-delay (RV)



A1/A2 Control signal, red LED

15/18 Delayed contact

15/16 Delayed contact

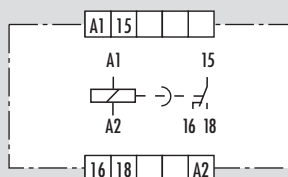
t_R = Release time
t₁ = Make time must be > than minimum switch-on time
t₂ = Break time, between the end of the release time and resetting of the energizing quantity, must be > than recovery time 1

Type	Standard voltage	Special voltage	Price Code
SZT 110 1 s	24 V AC/DC	42 V AC/DC	S 1/29.1
SZT 110 3 s	110 to 120 V AC	48 V AC/DC	
SZT 110 10 s	230 to 240 V AC	60 V AC/DC	
SZT 110 30 s	50 to 60 Hz	50 to 60 Hz	
SZT 110 100 s			
SZT 110 300 s	24 V AC/DC	42 V AC/DC	S 1/29.2
	110 to 120 V AC	48 V AC/DC	
	230 to 240 V AC	60 V AC/DC	
	50 to 60 Hz	50 to 60 Hz	

Connection Diagram

KS 0165/4

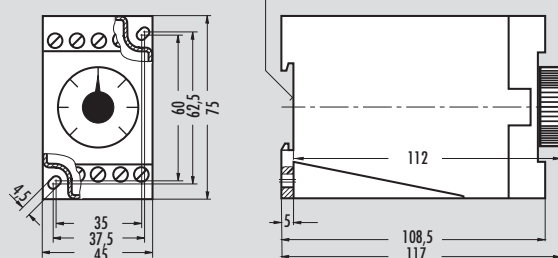
SZT 110



Dimensions

S 3-9

for DIN-rails acc. to EN 50022





TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 1 110:04.89

Point 3.15

Function display
Function Diagram

POWER SUPPLY

Rated voltage U_N V AC/DC
Rated voltage U_N V AC

Rated consumption at 50 Hz and U_N (AC) VA
Rated consumption at 50 Hz and U_N (AC) W
Rated consumption at U_N (DC) W
Starting current inrush A/ms
Rated frequency Hz
Operating voltage range

TIME CIRCUIT

Time setting/Number of time ranges s
Available setting ranges s
Recovery time 1/2 ms
Minimum switch-ON time ms
Release value % U_N
Permissible parallel load
Internal rectifier
Average of the error
Dispersion % ± 10 ms
Influence of the energizing quantity or supply voltage %/% ΔU_N
Influence of the ambient temperature %/K

OUTPUT CIRCUIT

Contact equipment
Contact material
Switching voltage U_n V AC/DC
Maximum continuous current I_n A
Application category according to EN 60947-5-1:1991
Permissible switching frequency switching cycles/h
Mechanical service life switching cycles
Response time ms
Release time ms

GENERAL DATA

Creepage and clearance distances between circuits according to DIN VDE 0110-1:04.97: rated surge voltage kV
Over voltage category III
Contamination level 3 outside, 2 inside
Design voltage V AC 250
Test voltage U_{eff} 50 Hz acc. to DIN VDE 0110-1, Table A.1 kV 2,21
Protection class housing/terminals acc. to DIN VDE 0470 Sec. 1:11.92 IP 30/IP 20
Radiated noise EN 50081-1:03.93, -2:03.94
Noise immunity EN 50082-2:1995
Ambient temperature, working range °C -20 to + 60
Dimensions S 3-9
Connection diagram KS 0165/4
Weight kg 0,17
Accessories cover Z 29
Approvals page i.4

GENERAL TECHNICAL SPECIFICATIONS

SZT 110

Electronic, single voltage
time relay
OFF-delay time relay without
auxiliary supply
1 LED red
FD 0056

	24	42	48	60	110-120	230-240
Rated consumption at 50 Hz and U_N (AC) VA	0,1	0,2	0,3	0,3	0,8	1,3
Rated consumption at 50 Hz and U_N (AC) W	0,06	0,2	0,2	0,2	0,5	0,9
Rated consumption at U_N (DC) W	0,06	0,4	0,4	0,5		
Starting current inrush A/ms	,4/40	,2/40	,2/50	,2/60	,1/40	,05/175
Rated frequency Hz	50 to 60					
Operating voltage range	0,8 to 1,1 x U_N					

analog/1
0,05 to 1; 0,15 to 3;
0,5 to 10; 1,5 to 30;
5 to 100; 15 to 300;
ca. 250/-
200, 500 at time range 300 s
-
yes
yes
diagram 1, page i.5
 $\leq \pm 1$
 $\leq 0,04$
 $\leq 0,05$

2 timed changeover
Ag-alloy; gold-plated
230/230
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
3600
 10×10^6
ca. 15
-

4
III
3 outside, 2 inside
250
2,21
IP 30/IP 20
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
S 3-9
KS 0165/4
0,17
cover Z 29
page i.4

page i.5