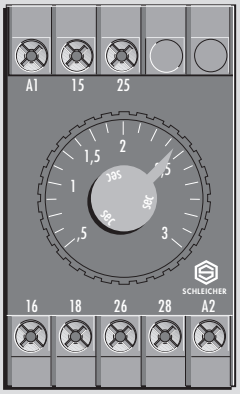
## Capacitor Short Time Relay

**SZC 120 for single voltage**

**Function: OFF-delay (RV)** without auxiliary supply
**1 time range**
**Contact equipment: 2 timed changeover**



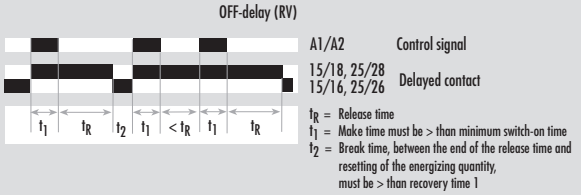
## SZC 120




## Function Diagram

FD 0001

**SZC 120**

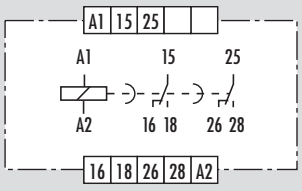



$t_R$ = Release time
$t_1$ = Make time must be > than minimum switch-on time
$t_2$ = Break time, between the end of the release time and resetting of the energizing quantity, must be > than recovery time 1

## Connection Diagram

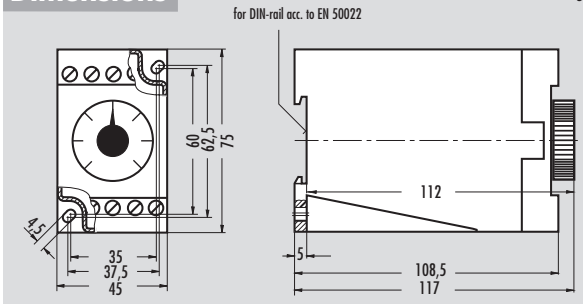
KS 082/1

**SZC 120**




## Dimensions

S 3-9




## 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 capacitor short-time relay SZC 120 has a single setting range and is available with the following time range:

| Time Range |
|---|
| 0,15 to 3 s |

| Type | Standard voltage | Special voltage | **Price Code** |
|---|---|---|---|
| SZC 120 3 s | 110 to 127 V AC/DC<br>230 V AC/DC<br>50 to 60 Hz | | **S 1/33.1** |

## Accessories

Cover Z 29 (sealable transparent cover)

Price code for accessories (see page S 1/72).

1

## TECHNICAL DATA

## SZC 120

| | | |
|---|---|---|
| **FUNCTION** according to DIN VDE 0435 Part 110:04.89 | | Capacitor short-time relay for single voltage |
| | Point 3.15 | OFF-delay time relay without auxiliary supply |
| Function display | | – |
| Function diagram | | FD 0001 |
| **POWER SUPPLY** | | |
| Rated voltage $U_N$ | V AC/DC | **110 - 127** \| **230** |
| Rated consumption at 50 Hz and $U_N$ (AC) | VA | 1,3 \| 3,3 |
| Rated consumption at 50 Hz and $U_N$ (AC) | W | 1,3 \| 3,3 |
| Rated consumption at $U_N$ (DC) | W | 1,0 \| 2,2 |
| Starting current inrush | A/ms | ,1/750 \| ,1/300 |
| Rated frequency | Hz | 50 to 60 |
| Operating voltage range | | 0,8 to 1,1 x $U_N$ |
| **TIME CIRCUIT** | | |
| Time setting/Number of time ranges | | analog/1 |
| Available time range | s | 0,15 to 3 |
| Recovery time 1/2 | ms | 0/– |
| Minimum switch-ON time | ms | 3000 after longer shutdown, |
| | ms | 250 on standard duty |
| Release value | % $U_N$ | – |
| Repeat cycle starting with | | – |
| Permissible parallel load | | yes |
| Internal rectifier | | no |
| Average of the error | | – |
| Dispersion | % + ± 10 ms | ≤ ± 1 |
| Influence of the energizing quantity or supply voltage | %/% Δ $U_N$ | ≤ 0,15 |
| Influence of the ambient temperature | %/K | ≤ 0,15 |
| **OUTPUT CIRCUIT** | | |
| Contact equipment | | 2 timed changeover |
| Contact material | | Ag–alloy; gold-plated |
| Switching voltage $U_n$ | V AC/DC | 230/230 |
| Maximum continuous current $I_n$ | A | 5 |
| Application category according to EN 60947–5–1:1991 | | AC–15 $U_e$ 230 V AC, $I_e$ 2 A |
| | | DC–13 $U_e$ 24 V DC, $I_e$ 2 A |
| Permissible switching frequency | switching cycles/h | 6000 |
| Mechanical service life | switching cycles | 30 x $10^6$ |
| Response time | ms | ca. 15 |
| Release time | ms | – |
| **GENERAL DATA** | | |
| Creepage and clearance distances between circuits according to DIN VDE 0110-1:04.97: rated surge voltage | kV | 4 |
| 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 0082/1 |
| Weight | kg | 0,18 |
| Accessories | | cover Z 29 |
| Approvals | | page i.4 |
| **GENERAL TECHNICAL SPECIFICATIONS** | | page i.5 |