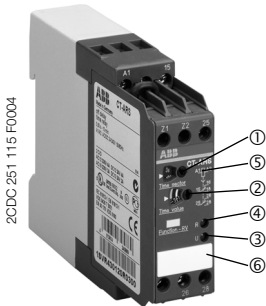


Electronic timer CT-ARS

OFF-delayed without auxiliary voltage, 2 c/o contacts

Data sheet



CT-ARS

- ① 7 selectable time ranges, from 0.05 s to 10 min
- ② Potentiometer with direct reading scale for the fine adjustment of the time delay
- ③ U: green LED - Supply voltage
- ④ R: red LED - Output relay energized
- ⑤ Circuit diagram
- ⑥ Marker label

Characteristics

- Single-function OFF-delay timer without auxiliary voltage
- One device includes 7 time ranges, from 0.05 s to 10 min, for the adjustment of the time delay
- Remote potentiometer connection
- 2 c/o contacts
- 2 LEDs for status indication
- Width 22.5 mm

Approvals

- cULus
- GL
- GOST
- CCC

Marks

- CE CE
- C-Tick C-Tick

Order data

Type	Supply voltage	Order code
CT-ARS	24-240 V AC/DC	1SVR 430 120 R0300

Order data (Accessories)

Description	Order code
Remote potentiometer 30.5 mm	1SVR 700 800 R1000
Remote potentiometer 22.5 mm	1SVR 701 800 R1000
Remote potentiometer 10.5 mm	1SVR 214 017 R0900
Adapter for screw mounting on panel	1SVR 430 029 R0100
Sealable cover	1SVR 430 005 R0100
Marker label	1SVR 366 017 R0100

Application

The CT-S range timers are designed for use in industrial applications. They operate over a universal range of supply voltages and a large time delay range, within compact dimensions. The easy-to-set front-face potentiometers, with direct reading scales, provide accurate time delay adjustment.

Operating mode

The CT-ARS with 2 c/o contact offers 7 time ranges, from 0.05 s to 100 min. The time delay range is rotary switch selectable on the front of the unit. The fine adjustment of the time delay is made via an internal potentiometer, with a direct reading scale, on the front of the unit.

When an external potentiometer is connected to terminals Z1- Z2, the internal adjustment is disabled and external adjustment is enabled.

Electronic timer CT-ARS

OFF-delayed without auxiliary voltage, 2 c/o contacts

Data sheet

Function diagram

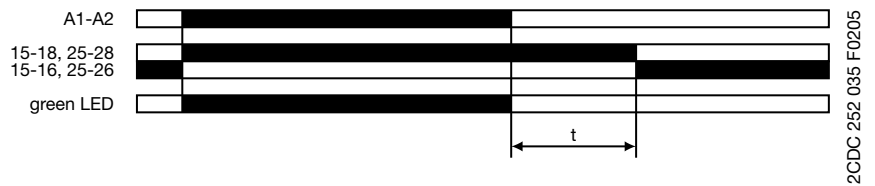
OFF-delay without auxiliary voltage (True delay on break)

The OFF-delay function without auxiliary voltage does not require supply voltage at terminals A1-A2 for timing. After a storage time of several months without any voltage, a charging time of about 5 minutes is necessary.

Applying supply voltage to terminals A1-A2, energizes the output relays. If the supply voltage is interrupted, the OFF-delay starts. When timing is complete, the output relays de-energize.

When an external potentiometer is connected to terminals Z1-Z2, the factory-mounted jumper on terminals Z1-Z2 has to be removed and the internal, front-face potentiometer has to be set to the lowest possible value.

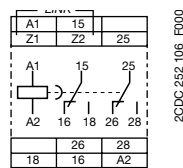
For correct operation of the unit, it is necessary to complete the minimum energizing time of 80 ms. As soon as timing starts, both LEDs turn off.



t = adjustable delay time

Connection diagram

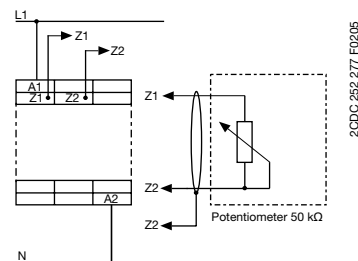
CT-ARS



Version: 1SVR 430 120 R0300
A1-A2 Supply: 24-240 V AC
15-16/18 c/o contact

Wiring note

Connection diagram for remote potentiometer



Electronic timer CT-ARS

OFF-delayed without auxiliary voltage, 2 c/o contacts

Data sheet

Technical Data

Input circuits		
Supply voltage	A1-A2	24-240 V AC/DC
Power consumption	24-240 V AC/DC	approx. 2-2.5 VA/W
Supply voltage tolerance		-15...+10 %
Supply voltage frequency	AC/DC Version	DC or 50/60 Hz
	AC Version	50/60 Hz
Remote potentiometer connection	Z1/Z3-Z2	50 kΩ
Max. cable length to remote potentiometer		2 x 25 m, shield connected to Z2 potential
Duty time		100 %
Timing circuit		
Time ranges 0.05 s - 30 min	1)	0.05-1 s
	2)	0.15-3 s
	3)	0.5-10 s
	4)	1.5-30 s
	5)	5-100 s
	6)	15-300 s
	7)	1.5-30 min
Recovery time		< 50 ms
Repeat accuracy (constant parameters)		< 0.2 %
Timing error within the supply voltage tolerance range		< 0.008 % / % Δ U
Timing error within operating temperature range		< 0.07 % / °C
Indication of operational states		
Supply voltage / timer		green LED steady / flashing while timing
1st / 2nd output relay energized		red LED / red LED
Output circuits		
	15-16/18	
Number of contacts		Relays, 2 c/o contacts
Contact material		AgCdO
Related voltage	acc. to VDE 0110, IEC 60947-1	250 V
Maximum switching voltage		250 V AC, 250 V DC
Rated switching current acc. to IEC 60947-5-1	AC-12 (resistive) 230 V	4 A
	AC-15 (inductive) 230 V	3 A
	DC-12 (resistive) 24 V	4 A
	DC-13 (inductive) 24 V	2 A
Maximum lifetime	mechanical	30 x 10 ⁶ switching cycles
	electrical (AC-12, 230 V, 4 A)	0.1 x 10 ⁶ switching cycles
Short circuit proof, max. fuse rating	n/c	10 A fast, operating class gL
	n/o	10 A fast, operating class gL
General data		
Enclosure	width	22.5 mm
	length	78.0 mm
	depth	100.0 mm
Wire size	fine-strand with wire end ferrule	2 x 0.75 - 2.5 mm ² (18-14 AWG)
	fine-strand without wire end ferrule	
	rigid	2 x 0.5 - 4 mm ² (20-12 AWG)
Weight		approx. 150 g (5.3 oz)
Mounting position		any
Degree of protection	enclosure / terminals	IP50 / IP20
Temperature	operating	-20...+60 °C
	storage	-40...+85 °C
Mounting		DIN rail (EN 50022)
Standards		
Product standard		IEC 61812-1, EN 61812-1
EMC Directive		89/336/EEC
Electromagnetic compatibility		IEC 61000-6-2, EN 61000-6-4
ESD	acc. to IEC 61000-4-2, EN 61000-4-2	level 3 6 kV / 8 kV
HF radiation resistance	acc. to IEC 61000-4-3, EN 61000-4-3	level 3 10 V/m
Burst	acc. to IEC 61000-4-4, EN 61000-4-4	level 3 2 kV / 5 kHz
Surge	acc. to IEC 1000-4-5, EN 61000-4-5	level 4 2 kV L-L
HF line emission	acc. to IEC 1000-4-6, EN 61000-4-6	level 3 10 V

Electronic timer CT-ARS

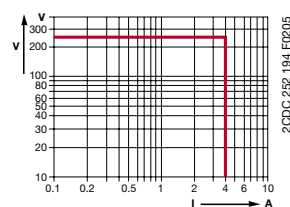
OFF-delayed without auxiliary voltage, 2 c/o contacts

Data sheet

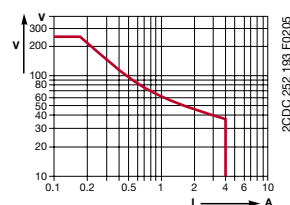
Low Voltage Directive		73/23/EEC
Operational reliability	acc. to IEC 68-2-6	4 g
Mechanical resistance	acc. to IEC 68-2-6	6 g
Approvals / marks		
Approvals		cULus, GL, GOST and CCC
Marks		CE and C-Tick
Isolation data		
Rated insulation voltage between supply circuit, control circuit and output circuit	acc. to VDE 0110, IEC 60947-1	supply up to 240 V: 300 V supply up to 440 V: 500 V
Rated impulse withstand voltage between all isolated circuits	acc. to VDE 0110, IEC 664	4 kV / 1.2-50 μ s
Test voltage between all isolated circuits		2 kV, 50 Hz, 1 min.
Pollution category	acc. to VDE 0110, IEC 664, IEC 255-5	III/C
Overvoltage category	acc. to VDE 0110, IEC 664, IEC 255-5	III/C
Environmental testing	acc. to IEC 68-2-30	24 h cycle time, 55 °C, 93 % rel., 96 h

Load limit curves

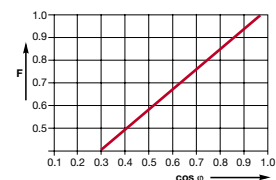
AC load (resistive)



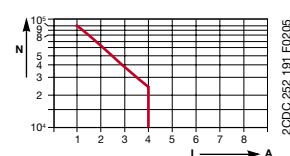
DC load (resistive)



Derating factor F for inductive AC load



Contact lifetime /switching cycles N



220 V 50 Hz 1 AC 360 cycles/h

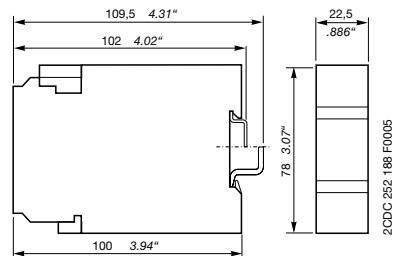
Electronic timer CT-ARS

OFF-delayed without auxiliary voltage, 2 c/o contacts

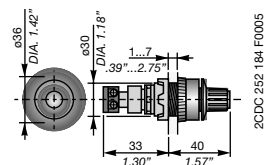
Data sheet

Dimensional drawings

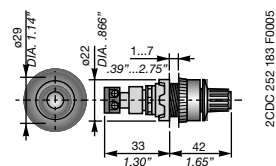
Dimensions in mm



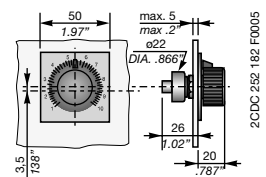
Dimensional drawings (Accessories)



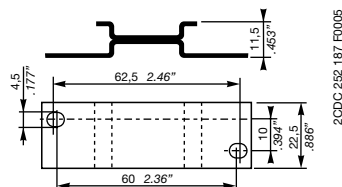
Remote potentiometer 30.5 mm



Remote potentiometer 22.5 mm



Remote potentiometer 10.5 mm

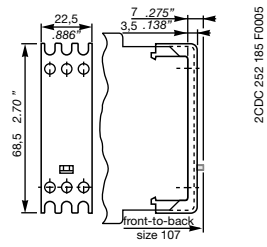


Adapter for screw mounting on panel

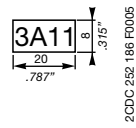
Electronic timer CT-ARS

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Sealable cover



Marker label



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