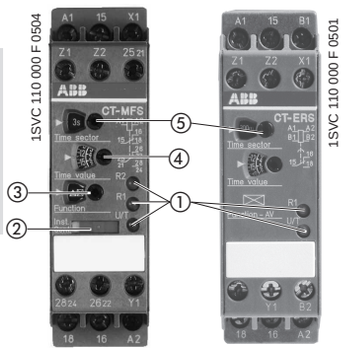
Electronic timers
CT-ranges

Content

Electronic timers CT-S, CT-E range

Benefits and advantages

Electronic timers CT-S range



① Display of operational status by 2 or 3 LEDs
R2 - output relay 2 energized = red LED
R1- output relay 1energized = red LED
U- supply voltage = green LED
U/T-supply voltage = green LED flashing while timing

② Slide switch to set the 2nd c/o contact as an instantaneous contact.

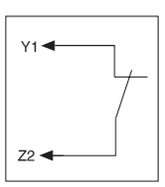
③ Rotary switch to preselect the desired function.

④ Potentiometer with direct reading scale to set the desired time delay.

⑤ 10 selectable time ranges from 1s-300h

Characteristics of CT-S range

- 3 multifunction and 21 multi-range timers
- Continuous supply voltage range (24-240VAC/DC) or multisupply voltage ranges (12-40VAC/12-60V/DC; 24V, 42-48VAC/DC; 110-240VAC; 380-440VAC)
- 1 or 2c/o contacts (250V/4A)
- 2nd c/o contact can be selected as instantaneous contact (front-face selection switch)
- Timing function is initiated via external, voltage free control contacts or via supply voltage
- Remote potentiometer connection feature
- Time stop function is possible via external control contact
- In compliance with international standards and approvals



Volt free (dry) control contacts

The controlling of the CT-S range timers is done by volt free (dry) control contacts via cable length up to 50m without interferences.

Time range preselection and fine adjustment

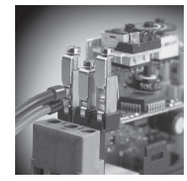
Multicolor scales allow the direct selection of the time range, scaled for the adjustment potentiometer.

Display of operational states

All actual operational states are displayed by front-face LEDs, thus simplifying installation.

Double-chamber cage connecting terminals

Double-chamber cage connecting terminals provide connection of up to two wires to 2x2.5mm² (2x14AWG), solid or stranded, with or without wire end ferrules.
Potential distribution does not require additional terminations, thus saving time and money.
Wiring is considerably simplified through integrated cable guides.

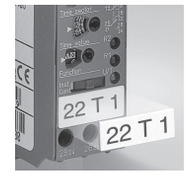


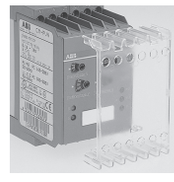
Connection of remote potentiometers

The CT-S range allows fine adjustment of the time ranges via an external potentiometer. The internal potentiometer switches off automatically when an external one is connected.

Integrated markers

Integrated markers allow the product to be marked quickly and simply. No additional marking labels are required.

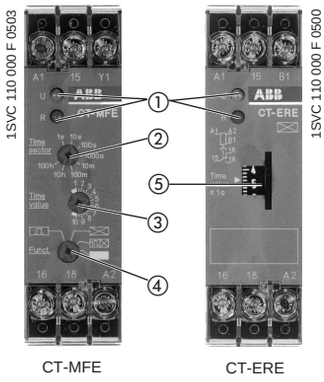




Sealable transparent covers

Protection against unauthorized change of time values (available as an accessory).

Electronic timers CT-E range



① Display of operational status by 2 LEDs
U - supply voltage = LED green
R - output relay energized = LED red

② 8 selectable time ranges from 0.05s-100h

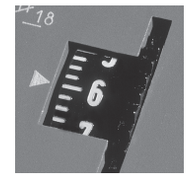
③ Potentiometer with direct reading scale to set the desired time value.

④ Rotary switch to preselect the desired function.

⑤ Potentiometer to adjust the desired time value.

Direct reading scales

Direct setting of the delay time without any additional calculation provides fast positive adjustment.



Combination screws

To actuate the connecting combination screws, only one tool is needed.

Remark: 1c/o = SPDT; 2c/o = DPDT

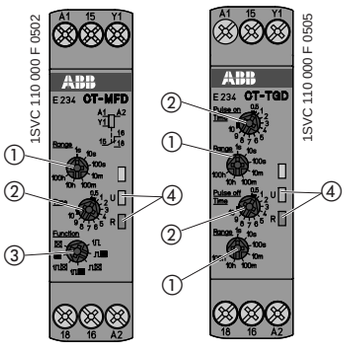
Characteristics of CT-E range

- 12 single function timers and 2 multifunction timers (24-240VAC/DC)
- Single or dual supply voltage ranges 24VAC/DC, 110-130VAC, 220-240VAC
- Output contacts – 1c/o contact (250V/4A) or solid-state output for high switching frequencies (thyristor 0.8A)
- Time ranges 0.1…10s, 0.3…30s, 3…300s, 0.3...30min
- In compliance with international standards and approvals

Electronic timers CT-D range

Benefits and advantages

Electronic timers CT-D range (17.5 mm)



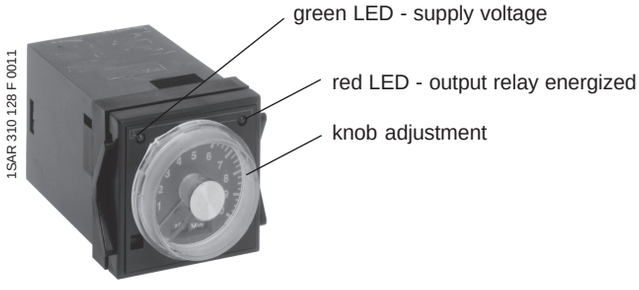
① 7 selectable time ranges from 0.05s-100h
② Potentiometer with direct reading scale to set the desired time delay.
③ Rotary switch to preselect the desired function.
④ Display of operational status by 2 LEDs
U - supply voltage = green LED flashing while timing
R - output relay energized = red LED

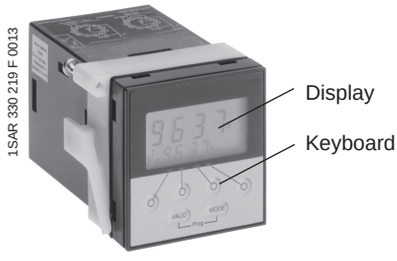
- **Multi-voltage supply**
  All standard control voltages 24-240VAC / 24-48VDC are connected to the terminals A1-A2.
- **Connection terminals**
  Wide terminal spacing allows connection of 2x1.5mm² (2x16AWG) with or 2x2.5mm² (2x14AWG) sized wires without ferrules.
- **Shaping**
  The width of only 17.5mm saves space in the control panel.
- **Direct reading scales**
  Direct adjustment of the delay time speeds up installation.
- **Display of operational states**
  The front face LEDs display supply voltage and relay status. The green supply voltage LED flashes while timing.
- **Manual setting tool**
  As an accessory, a manual setting tool is available.

Characteristics of CT-D range

- 1 multifunction and 5 single function timers
- Multisupply voltage range A1-A2, 24-240VAC/24-48VDC
- 1c/o contact (250V/8A)
- 7 time ranges 0.05-100h
- Parallel load to the control contact possible
- c UL us LISTED - Approval (under preparation)

Electronic timers CT-56xx range (panel mounted)





Characteristics of C56xx range

- 2 multifunction and 1 single function timer
- 6 analog (0.1s-10h) or 11 (0.1s-9999h) digital time ranges
- Front panel mounted 46x48mm (hole 45x45mm)
- Supply voltages 110VAC/24VDC or 220-240VAC/24VDC
- 1c/o or 2c/o with selectable instantaneous contact
- Display of operational states with 2 LEDs
- Dual supply ranges 24VDC and 110VAC/220-240VAC
- Stocked as accessory
- C5600 and C5610 analog adjustable via potentiometer
- C5620 digital via display and keyboard adjustable

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-S range

Selection and ordering details

CT-MFS

CT-MBS (1We)

CT-ERS

CT-AHS

CT-ARS

Characteristics CT-S range

- 3 multifunction and 21 multi-range timers
- Continuous supply voltage range (24-240VAC/DC) or multisupply voltage ranges (12-40VAC/12-60V/DC; 24V, 42-48VAC/DC; 110-240VAC; 380-440VAC)
- 1 or 2c/o contacts (250V/4A)
- 2nd c/o contact can be set as instantaneous contact (front-face selection switch)
- Timing function is initiated via external, voltage free (dry) control contacts or via supply voltage
- Remote potentiometer connection feature
- Time stop function is possible via external control contact
- In compliance with international standards and approvals

c UL us LISTED , GL , PCT

Supply voltage	Control contacts, timing start	Control contacts, timing stop	Remote potentio-meter connection	Order code	Price 1 piece
CT-MFS, multifunction timer, 8 functions[1], 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24-240VAC/DC	•	•	•	**1SVR 430 010 R 0200**	
CT-MBS,multifunction timer, 8 functions[1], 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
12-40VAC, 12-60VDC	•		•	**1SVR 430 010 R 1200**	
24VAC/DC, 110-240VAC				**1SVR 430 012 R 0200**	
380-440VAC				**1SVR 430 011 R 2200**	
CT-MBS, multifunction timer, 6 functions[1], 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
12-40AC/12-60VDC	•	•	•	**1SVR 430 010 R 1100**	
24V/42-48VAC/DC, 110-240VAC				**1SVR 430 013 R 0100**	
380-440VAC				**1SVR 430 011 R 2100**	
⊠ **CT-ERS**, ON-delay timer, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
12-40VAC/12-60VDC				**1SVR 430 100 R 1100**	
24V/42-48VAC/DC, 110-240VAC				**1SVR 430 102 R 0100**	
380-440VAC				**1SVR 430 101 R 2100**	
⊠ **CT-ERS**, ON-delay timer, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V/42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 103 R 0100**	
⊠ **CT-ERS**, ON-delay timer, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
12-40VAC/12-60VDC			•	**1SVR 430 100 R 1200**	
24V/42-48VAC/DC, 110-240VAC				**1SVR 430 103 R 0200**	
380-440VAC				**1SVR 430 101 R 2200**	
■ **CT-AHS**, OFF-delay timer, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V/42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 113 R 0100**	
■ **CT-AHS**, OFF-delay timer, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V/42-48VAC/DC, 110-240VAC	•			**1SVR 430 113 R 0200**	
■ **CT-APS**, OFF-delay timer with voltage controlled input, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V/42-48VAC/DC, 110-240VAC	•			**1SVR 430 183 R 0300**	
■ **CT-ARS**, OFF-delay timer without auxiliary voltage[4], 7 time ranges (0.05s-10min), 1c/o, 2 LEDs					
24-240VAC/DC				**1SVR 430 120 R 0100**	
■ **CT-ARS**, OFF-delay timer without auxiliary voltage[4], 7 time ranges (0.05s-10min), 2c/o, 3 LEDs					
24-240VAC/DC			•	**1SVR 430 120 R 0300**	

1) Functions: ON-delay, OFF-delay, impulse-on, impulse-off, flasher starting with ON, flasher starting with OFF, 2x star-delta

2) 2nd c/o can be selected as instantaneous contact (via front-face selection switch)

3) Functions: ON-delay, OFF-delay, impulse-on, impulse-off, flasher starting with ON, flasher starting with OFF

4) True OFF-delay

Packing unit 1 piece

Remark: 1c/o = SPDT; 2c/o = DPDT

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Electronic timers CT-S range

Selection and ordering details

CT-EBS

CT-TGS

CT-YDAV

CT-YDEW

CT-IRS

Supply voltage	Control contacts, timing start	Control contacts, timing stop	Remote potentio-meter-connection	Order code	Price 1 piece
CT-EAS, ON- and OFF-delay timer, symmetrical times, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 173 R 0100**	
CT-EAS, ON- and OFF-delay timer, symmetrical times, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•			**1SVR 430 173 R 0200**	
CT-EVS, ON- and OFF-delay timer, asymmetrical times[1], 2x10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 193 R 0100**	
CT-VWS, impulse-on, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24VAC/DC, 110-240VAC				**1SVR 430 132 R 0100**	
CT-VWS, impulse-on, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC			•	**1SVR 430 133 R 0200**	
CT-AWS, impulse-off, 10 time ranges (0.05s-300h), 1c/o, 2 LED.s					
24V, 42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 143 R 0100**	
CT-AWS, impulse-on, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•			**1SVR 430 143 R 0200**	
CT-EBS, flasher, starting with "OFF", symmetrical ON/OFF intervals, 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24VAC/DC, 110-240VAC				**1SVR 430 152 R 0100**	
CT-EBS, flasher, starting with "OFF", symmetrical ON/OFF intervals, 10 time ranges (0.05s-300h), 2c/o[2], 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC			•	**1SVR 430 153 R 0200**	
CT-TGS, pulse generator[3], 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 163 R 0100**	
CT-PGS, single pulse generator[3], 10 time ranges (0.05s-300h), 1c/o, 2 LEDs					
24V, 42-48VAC/DC, 110-240VAC	•	•	•	**1SVR 430 253 R 0100**	
CT-YDAV, Star delta timer, twice ON-delayed , 10 time ranges (0.05s-300h), c/o time 50ms, 2c/o, 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC				**1SVR 430 203 R 0200**	
380-440VAC				**1SVR 430 201 R 2300**	
CT-YDEW, Star delta timer 10 time ranges (0.05s-300h), c/o time 50ms, 1n/o delayed, 1n/o non-delayed, 3 LEDs					
24V, 42-48VAC/DC, 110-240VAC				**1SVR 430 213 R 0200**	
C566, OFF-delay for DC coils, delay time depending on coil					
200-240VDC				**1SAR 380 000 R 0008**	
100-127VDC				**1SAR 380 000 R 0007**	
CT-IRS, switching relay, 1c/o, 2 LEDs					
24VAC/DC				**1SVR 430 220 R 9100**	
42-48VAC/DC				**1SVR 430 220 R 8100**	
110-240VAC				**1SVR 430 221 R 7100**	
CT-IRS, switching relay, 2c/o, 2 LEDs					
24VAC/DC				**1SVR 430 220 R 9300**	
42-48VAC/DC				**1SVR 430 220 R 8300**	
110-240VAC				**1SVR 430 221 R 7300**	
CT-IRS, switching relay, 2c/o, with gold plated contacts, 2 LEDs					
24VAC/DC				**1SVR 430 230 R 9300**	
110-240VAC/DC				**1SVR 430 231 R 7300**	
CT-IRS, switching relay, 3c/o, 2 LEDs					
24VAC/DC				**1SVR 430 220 R 9400**	
42-48VAC/DC				**1SVR 430 220 R 8400**	
220-240VAC				**1SVR 430 221 R 1400**	

1) Times for ON- and OFF-delay adjustable independently
2) 2nd c/o selectable as instantaneous contact
3) ON- and OFF-time adjustable independently
4) 2 remote potentiometers connectable

Remark: 1c/o = SPDT; 2c/o = DPDT

Packing unit 1 piece

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Electronic timers CT-E range

Selection and ordering details

1SVR 550 029 F 8100

CT-MFE

1SVR 550 107 F 4100

CT-ERE

1SVR 550 111 F 1100

CT-AHE

1SVR 550 127 F 4100

CT-ARE

1SVR 550 137 F 1100

CT-VWE

Characteristics CT-E range

- 12 single function timers and 2 multifunction timers (24-240VAC/DC)
- Single or dual supply voltage ranges 24VAC/DC, 110-130VAC, 220-240VAC
- Output contacts – 1c/o contact (250V / 4A) or solid-state for high switching frequencies (thyristor 0.8 A)
- Time ranges 0.1…10s, 0.3…30s, 3…300s, 0.3...30min
- In compliance with international standards and approvals

c UL us LISTED , GL , PG

Supply voltage	Time range	**Order code**	**Price** 1 piece
CT-MFE, multifunction timer, 6 functions[1], 8 time ranges (0.05s-100h), 1c/o, 2 LEDs			
24-240VAC/DC	0.05s-100h	**1SVR 550 029 R 8100**	
CT-ERE, ON-delay timer, 1 time range, 1c/o, 2 LEDs			
24VAC/DC, 220-240VAC	0.1-10s	**1SVR 550 107 R 1100**	
	0.3-30s	**1SVR 550 107 R 4100**	
	3-300s	**1SVR 550 107 R 2100**	
	0.3-30min	**1SVR 550 107 R 5100**	
110-130VAC	0.1-10s	**1SVR 550 100 R 1100**	
	0.3-30s	**1SVR 550 100 R 4100**	
	3-300s	**1SVR 550 100 R 2100**	
	0.3-30min	**1SVR 550 100 R 5100**	
CT-AHE, OFF-delay timer, 1c/o, 2 LEDs			
24VAC/DC	0.1-10s	**1SVR 550 118 R 1100**	
	0.3-30s	**1SVR 550 118 R 4100**	
	3-300s	**1SVR 550 118 R 2100**	
110-130VAC	0.1-10s	**1SVR 550 110 R 1100**	
	0.3-30s	**1SVR 550 110 R 4100**	
	3-300s	**1SVR 550 110 R 2100**	
220-240VAC	0.1-10s	**1SVR 550 111 R 1100**	
	0.3-30s	**1SVR 550 111 R 4100**	
	3-300s	**1SVR 550 111 R 2100**	
CT-ARE, OFF-delay timer without auxiliary voltage, 1c/o, 1 LED			
24VAC/DC, 220-240VAC	0.1-10s	**1SVR 550 127 R 1100**	
	0.3-30s	**1SVR 550 127 R 4100**	
110-130VAC	0.1-10s	**1SVR 550 120 R 1100**	
	0.3-30s	**1SVR 550 120 R 4100**	
1 **CT-VWE**, impulse-on, 1c/o, 2 LEDs			
24VAC/DC, 220-240VAC	0.1-10s	**1SVR 550 137 R 1100**	
	0.3-30s	**1SVR 550 137 R 4100**	
	3-300s	**1SVR 550 137 R 2100**	
110-130VAC	0.1-10s	**1SVR 550 130 R 1100**	
	0.3-30s	**1SVR 550 130 R 4100**	
	3-300s	**1SVR 550 130 R 2100**	
1 **CT-AWE**, impulse-off without auxiliary voltage, 1c/o, 2 LEDs			
24VAC/DC	0.05-1s	**1SVR 550 158 R 3100**	
110-130VAC		**1SVR 550 150 R 3100**	
220-240VAC		**1SVR 550 151 R 3100**	
1 **CT-AWE**, impulse-OFF with auxiliary voltage, 1c/o, 2 LEDs			
24VAC/DC	0.1-10s	**1SVR 550 148 R 1100**	
	0.3-30s	**1SVR 550 148 R 4100**	
	3-300s	**1SVR 550 148 R 2100**	
110-130VAC	0.1-10s	**1SVR 550 140 R 1100**	
	0.3-30s	**1SVR 550 140 R 4100**	
	3-300s	**1SVR 550 140 R 2100**	
220-240VAC	0.1-10s	**1SVR 550 141 R 1100**	
	0.3-30s	**1SVR 550 141 R 4100**	
	3-300s	**1SVR 550 141 R 2100**	

1) Functions: ON-delay, OFF-delay, impulse-on, impulse-off, flasher starting with ON, flasher starting with OFF, pulse former

Remark: 1c/o = SPDT
Packing unit 1 piece

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Electronic timers CT-E range

Selection and ordering details

1SVR 550 167 F 1100

CT-EBE

1SVR 550 207 F 4100

CT-YDE

1SVR 550 019 F 0000

CT-MKE

1SVR 550 509 F 2000

CT-EKE

1SVR 550 519 F 1000

CT-AKE

Supply voltage	Time range	Order code	Price 1 piece
⎍ ■ **CT-EBE**, flasher with symmetrical ON-OFF times, starting with OFF, 1c/o, 2 LEDs			
24VAC/DC, 220-240VAC	0.1-10s	**1SVR 550 167 R 1100**	
110-130VAC		**1SVR 550 160 R 1100**	
◬ ⊠ **CT-YDE**, star-delta timer, 1c/o, 2 LEDs			
24VAC/DC, 220-240VAC	0.1-10s	**1SVR 550 207 R 1100**	
	0.3-30s	**1SVR 550 207 R 4100**	
	3-300s	**1SVR 550 207 R 2100**	
110-130VAC	0.1-10s	**1SVR 550 200 R 1100**	
	0.3-30s	**1SVR 550 200 R 4100**	
	3-300s	**1SVR 550 200 R 2100**	
◬1⎍ **CT-SDE**, star-delta timer, 1n/c, 1n/o, 2 LEDs			
24VAC/DC, 220-240VAC	0.3-30s	**1SVR 550 217 R 4100**	
110-130VAC		**1SVR 550 210 R 4100**	
▭ **CT-IRE**, switching relay, A1/A2 diagonal, 1c/o, 2 LEDs			
24VAC/DC		**1SVR 550 228 R 9100**	
220-240VAC/DC		**1SVR 550 221 R 9100**	
▭ **CT-IRE**, switching relay, A1/A2 on top, 1c/o, 2 LEDs			
24VAC/DC		**1SVR 550 238 R 9100**	
220-240VAC/DC		**1SVR 550 231 R 9100**	

Solid-state output

CT-MKE, multifunction timer, 4 functions[1)], solid-state, functions and time range selection via external jumpers			
24-240VAC/DC	0.1-10s, 3-300s	**1SVR 550 019 R 0000**	
⊠ **CT-EKE**, ON-delay timer, solid-state output, 1 LED			
24-240VAC/DC	0.1-10s	**1SVR 550 509 R 1000**	
	0.3-30s	**1SVR 550 509 R 4000**	
	3-300s	**1SVR 550 509 R 2000**	
■ **CT-AKE**, OFF-delay timer, solid-state output, 1 LED			
24-240VAC/DC	0.1-10s	**1SVR 550 519 R 1000**	
	0,3-30s	**1SVR 550 519 R 4000**	
	3-300s	**1SVR 550 519 R 2000**	

1) Functions: ON-delay AC/DC, impulse-ON (AC only), flasher starting with ON (AC only), flasher starting with OFF (AC only)

CT-MKE is a solid-state timer for 2-wire applications with thyristor output.
It is connected in series with the control contactors or relays. The voltage should not be connected without a load, because there is no current limiting in the unit.
Functions and time ranges are programmed simply by plugging in external wire jumpers.
Times can be set exactly by a knurled thumb wheel with relative time scale.

Function "ON-delay"

Without external wire jumpers connected. If voltage is applied by an external control contact, the timer will start. After the set delay time the thyristor will energize the contactor.

Function "OFF-delay"

With the addition of an auxiliary relay, an “OFF-delay” function may be obtained. See schematic herein marked “OFF-delay”.

Function "impulse-ON"

External jumper connection X_1-X_4. If voltage is applied by an external control contact, the thyristor will switch without delay and energizes the contactor. After the time delay has elapsed, the thyristor de-energizes the contactor.

Function "Flasher, starting with ON"

External jumber connection X_1-X_4 and X_1-X_2. If voltage is applied by an external control contact, the thyristor will control the contactor cyclically. The ON and OFF times are symmetrical. Starting with an ON time.

Function "Flasher, starting with OFF"

External jumber connection X_2-X_4. If voltage is applied by an external control contact, the thyristor will control the contactor cyclically. The ON and OFF times are symmetrical. Starting with an ON time.

Programming the time ranges

Time ranges 0.1...10 s - wire jumper: X_3-X_4
3...300 s - no wire jumpers

Remark: 1c/o = SPDT

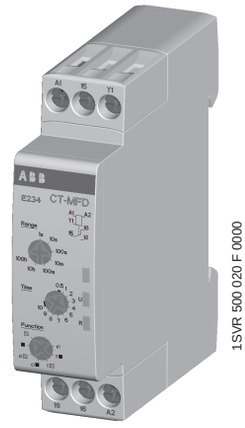
Packing unit 1 piece

- **Function diagrams** 12
- **Technical data** 18
- **Connection diagrams** 25
- **Dimensional drawings** 25

NEW

Electronic timers CT-D range

Selection and ordering details



1SVR 500 020 F 0000

CT-MFD

Characteristics CT-D range

- 1 multifunction and 5 single function timers
- Multi supply voltage range A1-A2 = 24-240VAC/24-48VDC
- 1c/o output contact (250V/8A)
- 7 time ranges 0.05s-100h
- Parallel load to the control input possible
- c UL us LISTED - Approval (under preparation)

Supply voltage	Order code	Price 1 piece
CT-MFD, multifunction timer, 7 functions[1], 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 020 R 0000**	
CT-ERD, ON-delay timer, 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 100 R 0000**	
CT-AHD, OFF-delay timer, 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 110 R 0000**	
1 **CT-VWD**, impulse-on timer , 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 130 R 0000**	
CT-EBD, flasher, starting with ON, 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 150 R 0000**	
CT-TGD, pulse generator[2], 7 time ranges (0.05s-100h), 1c/o, 2 LEDs		
24-240VAC, 24-48VDC	**1SVR 500 160 R 0000**	

1) Functions: ON-delay, OFF-delay with auxiliary voltage, impulse-ON, pulse former with auxiliary voltage, impulse-OFF with auxiliary voltage, flasher starting with ON, flasher starting with OFF.
2) ON - and OFF time adjustable independently from each other 2x0.05s-100h

Remark: 1c/o = SPDT

Packing unit 1 piece

- **Function diagrams** 14
- **Technical data** 20
- **Connection diagrams** 25
- **Dimensional drawings** 25

Electronic timers C56xx range front panel mounted

Selection and ordering details, accessories

1SAR 310 128 F 0011

C5600

1SAR 310 128 F 0011

C5610

1SAR 330 219 F 0013

C5620

1SAR 390 000 F 5000

C5600.10

1SAR 390 000 F 6000

C5600.20

Selection and ordering details

- Electronic timers, front panel mounted 48x48mm;
- Panel hole 45x45 mm
- 11 pin socket

Version	Time range t	Supply voltage AC (50-60Hz) DC	**Order code**	Packing unit piece	**Price** 1 piece	Weight 1 piece kg/oz
Timer C5600, ON-delay, 6 analog time ranges						
with LED 2c/o delayed or 1c/o delayed and one as an instantaneous contact	0.1 s-10 h	110V 24V 220-240V 24V 50/60Hz	**1SAR 310 128 R0011** **1SAR 310 128 R0012**	1		0.110/4.0
Timer C5610, multifunction, 6 analog time ranges						
with LED 1c/o ON-delay, OFF-delay with auxiliary voltage, pulse former, impulse-ON	0.1 s-10 h	110V 24V 220-240V 24V 50/60Hz	**1SAR 330 128 R0011** **1SAR 330 128 R0012**	1		0.110/4.0
Timer C5620, multifunction, digital adjustable, 11 time ranges						
with LED indication 1c/o ON-delay, OFF-delay with aux. voltage, pulse generator starting with ON, pulse generator starting with OFF, imp.-ON, pulse former	0.1s-9999h	110-240V 24V 50/60Hz	**1SAR 330 219 R0013**	1		0.110/4.0

Accessories

Type	Function	**Order code**	Packing unit piece	**Price** 1 piece	Weight 1 piece kg /oz
Socket C5600.10	11 pin socket with connection on backside	**1SAR 390 000 R5000**	6		0.080/2.8
Socket C5600.20	11 pin socket with DIN-rail mounting	**1SAR 390 000 R6000**	6		0.080/2.8

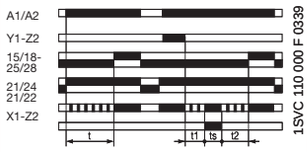
Remark: 1c/o = SPDT; 2c/o = DPDT

- **Function diagrams** 15
- **Technical data** 22
- **Connection diagrams** 26
- **Dimensional drawings** 26

Electronic timers CT-S range

Function diagrams

= ON- delay
CT-ERS, CT-MBS, CT-MFS



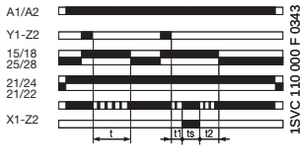
t = set delay time / ts = storing time;
t = t1 + t2

ON-delay / Delay on make

Timer is started when the supply voltage is applied, control contact **Y1/Z2** is being open. The green LED flashes while timing. The output relay is energized and the flashing light turns steady after the set delay time has elapsed. If the supply is disconnected, the output relay resets and the elapsed time is reset. Timing can also be started by opening control contact **Y1/Z2** with the supply voltage applied.
If the control contact **Y1/Z2** closes after the supply voltage has been applied, all the internal functions are reset. By closing the control contact **X1/Z2** the timer can be stopped. The elapsed time is stored.

Timing continues by opening the contact. This can be repeated as often as required.
By setting the slide switch to position Inst., the 2nd c/o contact operates instanteously when the supply voltage is applied.
Both c/o contacts reset if the supply is disconnected.
By connecting a remote potentiometer at the **Z1/Z2** terminals the time can be set externally. When connecting an external potentiometer the internal potentiometer is automatically switched off.

= OFF-delay
CT-AHS, CT-MBS, CT-MFS



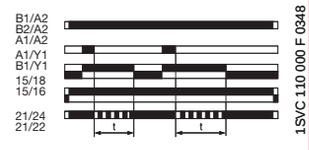
t = set delay time / ts = storing time;
t = t1 + t2

OFF-delay / Delay on break volt free (dry contact) control input

This function needs a permanent supply at the **A1/A2** terminals for timing. Timing is controlled by a potential-free contact at the **Y1/Z2** terminals. If the contact is closed, the output relay is energized.
If the contact is opened, the set time starts to elapse (control pulse length 20 ms min.). The green LED flashes while timing. The LED turns steady and the output relay is opened if the timer has elapsed.
By closing the control contact **X1/Z2** the timer can be stopped.

The elapsed time is stored. Timing continues by opening the contact. This can be repeated as often as required.
By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally. When connecting an external potentiometer the internal potentiometer is automatically switched off.
Both c/o contacts reset if the supply is disconnected.

= OFF-delay
CT-APS



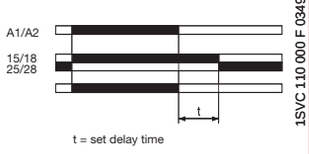
t = set delay time

OFF-delay / Delay on break volt controlled input contact

The OFF-delay time relay CT-APS needs a permanent supply at the terminals **A1/A2, B2/A2 or B1/A2**. Timing is controlled by supply voltage related control contact at the **Y1** terminal.
If the control contact is closed the output relay energizes.
If the control contact is opened, the set time starts to elapse (control pulse length 20ms min.). The green LED flashes while timing.

The LED turns steady and the output relay is de-energized if the timer has elapsed. By setting the slide switch to position Inst., the 2nd c/o contact operates as an instantaneous contact.
If supply is disconnected while timing both outputs are de-energized.

= OFF-delay, without aux. voltage
CT-ARS



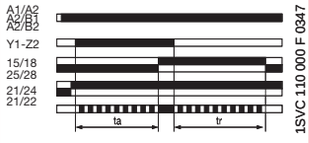
t = set delay time

OFF-delay, without auxiliary voltage / True OFF-delay

CT-ARS is an OFF-delay timer which does not require supply power at the **A1/A2** terminals while timing.
After a storage time of several months, a charging time of about 5 minutes is necessary. For this, voltage must be applied to the unit.
When applying the voltage the output relay is energized and after disconnecting the supply, the preset time starts to elapse.
By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally.

When connecting a remote potentiometer the factory-mounted jumper on the **Z1/Z2** terminals must be removed and the internal potentiometer must be set on the smallest possible value.
For correct functioning of the unit, it is necessary to observe the minimum energizing time.
As soon as the timer starts to elapse, both LEDs will turn off.

= ON- and OFF-delay
CT-EAS, CT-EVS



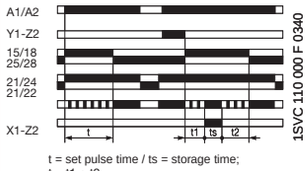
ta = timer delay on "ON"/ tr = timer delay on "OFF"
CT-EAS - ta = tr
CT-EVS - ta and tr independently adjustable

ON and OFF-delay, symmetrical times (CT-EAS), asymmetrical times (CT-EVS)

The time relay needs a continuous supply voltage at the **B1** and **A2**, **B2** and **A2** or **A1** and **A2** respectively.
The ON-delay function starts by closing the control contact **Y1-Z2**.
After the timer has elapsed and is opened the control contact **Y1-Z2**, the OFF-delay is started.

The green LED flashes during timing of both functions.
If the slide switch is set to the Inst. position, the 2nd c/o contact is energized immediately, and the 1st c/o contact, after the delay time has elapsed.
Both c/o contacts reset if the supply is disconnected.

1 = Impulse-ON
CT-VWS, CT-MBS, CT-MFS



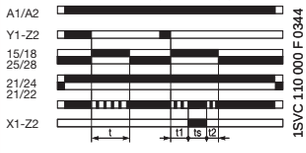
t = set pulse time / ts = storage time;
t = t1 + t2

Impulse-ON / Interval

The output relay is energized without delay when the supply voltage is applied to the **A1** and **A2** terminals and is de-energized after the set time has elapsed.
The green LED flashes while timing. The flashing LED turns steady as soon as the set time has elapsed. Timing can also be started by opening control contact **Y1/Z2** with the supply voltage applied.
By closing the control contact **X1/Z2,** the timer can be stopped.
The elapsed time is stored.

Timing continues by opening the contact. This can be repeated as often as required.
By setting the slide switch to position Inst., the 2nd c/o contact is.
The 2nd c/o contact resets if the supply is disconnected.
By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally. When connecting an external potentiometer the internal potentiometer is automatically switched off.
Both c/o contacts reset if the supply is disconnected.

1 = Impulse-OFF
CT-AWS, CT-MBS, CT-MFS



t = set pulse time / ts = storage time;
t = t1 + t2

Impulse-OFF / Trailing edge interval

The supply voltage must be applied continuously.
By opening control contact **Y1/Z2,** the output relay is energized immediately and timing starts.
The green LED flashes while timing. The flashing LED turns steady and the output relay resets after the set time has elapsed.
Timing can be stopped by closing control contact **X1/Z2**.
The elapsed time is stored. Timing continues by opening the contact.

This function can be repeated as often as required.
If the slide switch is set to Inst. position, the 2nd c/o contact is energized immediately as supply voltage is connected.
If de-energized when supply voltage is disconnected.
By connecting a remote potentiometer at the **Z1/Z2** terminals the time can be set externally. When connecting an external potentiometer the built-in one is automatically switched off.
Both c/o contacts reset if the supply is disconnected.

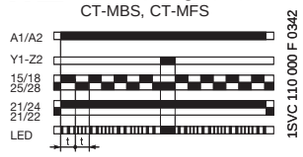
Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-S range

Function diagrams

Flasher, starting with "ON" / Recycling equal times-ON first

=Flasher, starting with "ON"
CT-MBS, CT-MFS



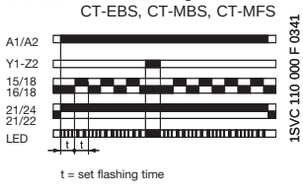
t = set flashing time

After connecting the supply power to the **A1** and **A2,** the timer will start to pulse in a symmetrical ON/ OFF cycle. This cycle will be displayed by the flashing green LED, which flashes twice as fast in the OFF cycle. When closing the control contact **Y1/Z2** at applied supply voltage, the output relay will open.

Opening the control contact again, restarts the pulse again in the preset cycle.
If the slide switch is set to the Inst. position, the 2nd c/o contact is energized immediately when supply voltage is applied.
Both c/o contacts reset if supply voltage is disconnected.

Flasher, starting with "OFF" / Recycling equal times-OFF first

=Flasher, starting with "OFF"
CT-EBS, CT-MBS, CT-MFS

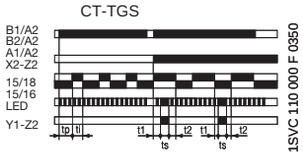


t = set flashing time

After applying the supply power to the **A1** and **A2** terminals, the timer will start to pulse in a symmetrical OFF/ON cycle. This cycle will be displayed by the flashing green LED which flashes twice as fast in the OFF cycle.
When closing the control contact **Y1/Z2** at applied supply voltage, the output relay will be de-energized. By opening the control contact again, the relay will start to flash in the preset cycle.
If the slide switch is set to the Inst. position, the 2nd c/o contact will be energized immediately as an instantaneous contact after applying the supply. When disconnecting the supply, it will be de-energized.
By connecting a remote potentiometer at the **Z1/Z2** terminals the timer can be set externally, the built-in potentiometer is automatically switched off.
Both c/o contacts reset if supply voltage is disconnected.

Pulse generator / Recycling unequal times

= Pulse generator
CT-TGS



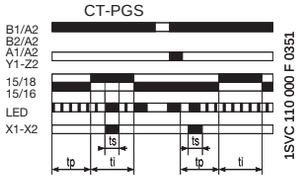
tp =OFF time/ ti = ON time
ts = Storage time / tp/ti = t1 + t2

ON and OFF times ranging from 0.05s ... 300 h can be set independently of each other.
Time ranges are set using two turn-switches. The desired time values are set using built-in potentiometers with direct reading scales.
Time ranges can also be set by remote potentiometers. The built-in potentiometers are switched off automatically when remote potentiometers are connected.
The function can be changed from “OFF” cycle to “ON” cycle using X2/Z2 terminals as an external link. The relationship of the internal and external potentiometers remain unchanged.

By closing the control contact **X1/Z2**, the timer for ON/OFF cycle can be stopped.
The actual time value is stored. By opening the contact again, the timer continues timing from this point.
This function can be repeated as often as required.
After applying the supply to the **B2/A2** or respectively to the **A1/A2** terminals, the CT-TGS starts - as selected - to work with an "ON" or an "OFF" cycle. The "ON"/ "OFF" cycle is displayed with the flashing green LED.

Single pulse generator (impulse) / Delay on make interval

= Single pulse generator
CT-PGS



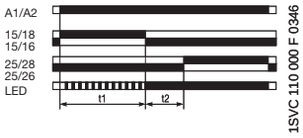
tp=OFF time / ti = ON time
ts = Storage time / tp/ti = t1 + t2

When applying the supply voltage at the terminals **B1/A2**, **B2/A2**, **A1/A2**, the output relay will be energized after the preset delay on operate time and will then be de-energized after the delay on release time has elapsed.
Timing can be stopped by closing the control contact **X1/Z2**.
When opening the contact again, the timer will continue at the stored time value.

Timing can also be started by opening the control contact **Y1/Z2** and applied supply.
If the control contact **Y1/Z2** is closed after applying the supply voltage, the internal function is reset.
With the PGS, a single pulse can be produced with a delay.

Star-delta changeover with impulse

= Star-delta changeover with wiper function
CT-YDEW, CT-MFS, CT-MBS

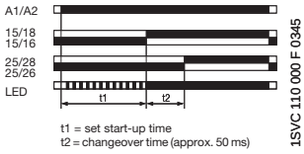


CT-YDEW is designed especially for starting-up squirrel cage motors by a star-delta starter.
It uses two separate timing circuits: a variable timing circuit for the start-up time in star-mode, and a fixed timing circuit with 50ms for the transit time from star contactor to delta contactor.
If the supply is applied to the **A1/A2** terminals,
the first output relay will close.

After the first output relay has opened, the second timer with 50 ms will start to elapse.
After this timer has elapsed, the second output relay will close and stay closed until the supply is disconnected.
Timing is displayed by the flashing green LED.

Star-delta changeover twice ON-delayed

= Star-delta changeover twice delayed on "ON"
CT-YDAV, CT-MFS, CT-MBS



t1 = set start-up time
t2 = changeover time (approx. 50 ms)

CT-YDAV is designed especially for starting-up squirrel cage motors by a star-delta starter.
It uses two separate timing circuits: a variable timing circuit for the start-up time star-mode and a fixed timing circuit with 50 ms for the transit time from star contactor to delta contactor.

If the supply is applied to the **A1/A2** terminals,
the first output relay will close after the preset time.
The second output relay will close after another 50 ms and stay closed until the supply is disconnected.
Timing is displayed by the flashing green LED.

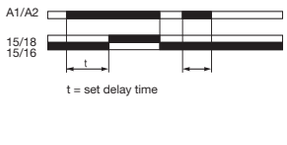
Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-E range

Function diagrams

= ON-delay

CT-MFE, CT-MKE, CT-EKE, CT-ERE



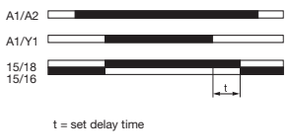
ON-delay / Delay on make

Timing starts when the supply voltage is applied at the **A1** and **A2** terminals. After the set time has elapsed, the output relay is energized.
If the supply voltage is disconnected, the output relay resets and the elapsed time is cancelled.

If the supply is disconnected before the set time has elapsed, the output relay is not energized.

= OFF-delay

CT-MFE, CT-AKE, CT-AHE

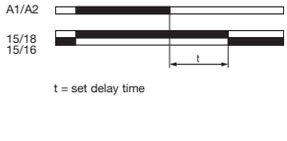


OFF-delay, with auxiliary voltage / Delay on break

Continuous presence of a supply voltage at the **A1/B1-A2** terminals is required while timing.
Timing is controlled by a control input **Y1** (supply power potential). If this input contact is closed, the output relay is energized.
By opening the control contact, the timer is started, and the set time begins to elapse.

After the delay time has elapsed,the output relay is de-energized. If the control contact is closed once more while the timer is energized, the time delay is reset. If the control contact is opened again, the timer restarts.

= OFF-delay
without auxiliary voltage
CT-ARE



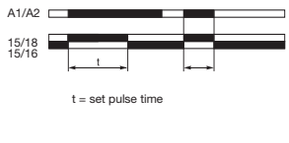
OFF-delay, without auxiliary voltage / True OFF-delay

The OFF-delay function does not need an auxiliary voltage; it is controlled by the supply voltage.
After applying the supply at the **A1-A2** terminals the output relay is energized. If the supply is disconnected, the set time value starts to elapse.

After the set time has elapsed, the output relay is de-energized.
If the supply is connected again before the set time has elapsed, the time is reset and the output relay stays energized until the time has elapsed anew.

1 = Impulse-on

CT-MFE, CT-MKE, CT-VWE

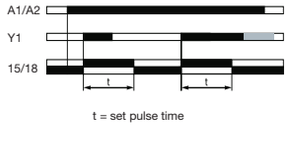


Impulse-ON / Interval

When applying the supply voltage at the **A1** and **A2** terminals, the output relay is energized without delay and is de-energized after the set pulse time has elapsed.

If the supply voltage is disconnected before the set pulse time has elapsed, the output relay is de-energized without delay.

= Pulse former
CT-MFE

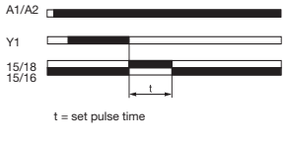


Pulse former / Single shot

If the control contact **Y1** is closed when supply voltage is applied, the output relay is energized for the set pulse time. If the control contact **Y1** is then opened, the output relay remains energized for the set pulse time.

When the power supply is disconnected, the output relay is de-energized without delay.
After the pulse has elapsed, the next pulse defined by the set time, can be activated by closing the control contact **Y1.**

1 = Impulse-off
CT-AWE



Impulse-off, with auxiliary voltage / Trailing edge interval

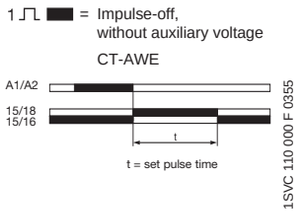
The single pulse on release function requires a continuous presence of a supply voltage at the **A1/B1-A2** terminals. If the control contact **Y1** (supply power potential) is opened, the output relay is energized without delay and the timer is started.

The output relay stays energized for the set pulse time and is de-energized after this time has elapsed.
By disconnecting the supply or by closing the controller contact the time delay is reset and the output relay is de-energized.

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-E range

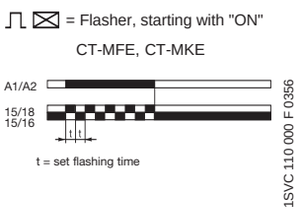
Function diagrams



Impulse-OFF, without auxiliary voltage / True trailing edge interval

The impulse-off function does not need an auxiliary supply at the **A1** and **A2** terminals for timing.
This is controlled by the supply voltage.
By disconnecting the supply voltage, the output relay is energized and the set impulse time starts to elapse.

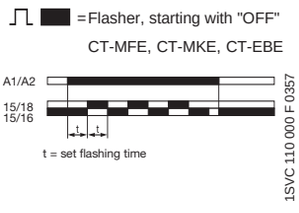
After the impulse time has elapsed, the output relay is de-energized.
If the supply power is applied again while the timer is active, the output relay is de- energized at once and the time delay is reset.



Flasher, starting with "ON" / Recycling equal times-ON first

When the supply power is applied at the **A1/B1-A2** terminals, the output relay starts to cycle in symmetrical ON/ OFF intervals.
The time delay can be modified by a potentiometer at the front of the timer.

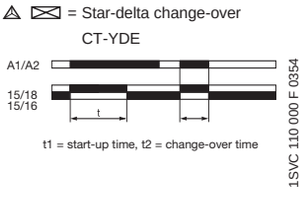
If the supply power is disconnected, the output relay will be de-energized.



Flasher, starting with "OFF" / Recycling equal times-OFF first

When applying the supply power at the **A1/B1-A2** terminals, the output relay starts to cycle in symmetrical OFF/ON intervals.
The cycle starts with an OFF cycle.

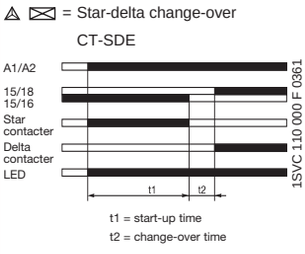
The OFF/ON cycle can be adjusted by a potentiometer at the front of the timer.
If the supply is disconnected, the output relay will be de-energized.



Star-delta change-over (CT-YDE)

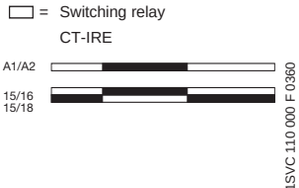
The CT-YDE is designed for starting-up squirrel cage motors with a star-delta starter.
It uses two separate timing circuits: an adjustable timing circuit, settable at the front of the timer, for the start-up time of the star contactor and a fixed timing circuit of 50 ms for star-delta change-over.

After the delay time has elapsed, the relay interrupts the voltage to the star contactor, and, after another 50ms, activates the delta contactor.
Application examples see page 23.



Star-delta change-over

The CT-SDE is designed especially for starting-up squirrel cage motors with a star-delta starter.
It uses two separate timing circuits: an adjustable timing circuit, settable at the front of the timer, for the start-up time of the star contactor and a fixed timing circuit of 30 ms for star-delta change-over.
If the supply is applied to the **A1-A2** terminals, and after the set time has elapsed, the contact **15-16** will open.
After another 30 ms the contact **15-18** closes.
The internal wiring combination of two relays greatly reduces the amount of external wiring required.
Application examples see page 23.



Switching relay / Interface relay

The switching relay may be used to increase the number of available contacts or as a coupling/ decoupling interface.
If the supply is applied to the **A1-A2** terminals, the output relay will be energized immediately.

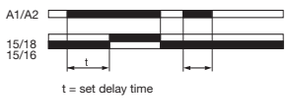
If the supply is interrupted, the output relay will be de-energized.

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-D range

Function diagrams

= ON-delay
CT-ERD, CT-MFD

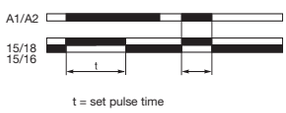


1SVC 110 000 F 0352

= OFF-delay
CT-AHD, CT-MFD

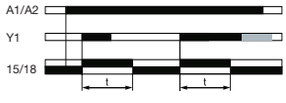
1SVC 110 000 F 0353

1 = Impulse-on
CT-VWD, CT-MFD



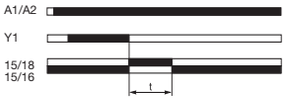
1SVC 110 000 F 0354

= Pulse former
CT-MFD



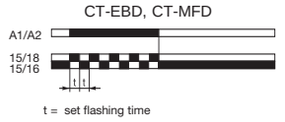
1SVC 110 000 F 0362

1 = Impulse-off
CT-MFD



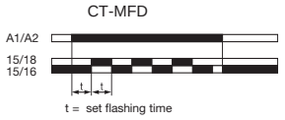
1SVC 110 000 F 0359

= Flasher, starting with "ON"
CT-EBD, CT-MFD



1SVC 110 000 F 0356

= Flasher, starting with "OFF"
CT-MFD



1SVC 110 000 F 0357

= Pulse generator starting with "ON" or starting with "OFF"
CT-TGD

tp = break time / ti = impulse time
A1/Y1 ■ (closed) = starting with OFF
A1/Y1 □ (open) = starting with ON

1SVC 110 000 F 0379

ON-delay / Delay on make

Timing starts when the supply voltage is applied at the **A1** and **A2** terminals. After the set time has elapsed, the output relay is energized. If the supply voltage is disconnected, the output relay resets and the elapsed time is cancelled. If the supply is disconnected before the set time has elapsed, the output relay is not energized.

OFF-delay, with auxiliary voltage / Delay on break

Continuous presence of a supply voltage at the **A1-A2** terminals is required while timing.
Timing is controlled by an input contact **Y1** (supply power potential). If this input contact is closed, the output relay is energized.
By opening the control contact, the timer is started, and the set time begins to elapse.
After the delay time has elapsed, the output relay is de-energized. If the control contact is closed once more during timing, the time delay is reset. If the control contact is opened again, the timer restarts.

Impulse-ON / Interval

When applying the supply power at the **A1** and **A2** terminals, the output relay is energized without delay and is de-energized after the set pulse time has elapsed.
If the supply voltage is disconnected before the set pulse time has elapsed, the output relay is de-energized without delay.

Pulse former / Single shot

If the control contact **Y1** is closed when supply voltage is applied, the output relay is energized for the set pulse time. If the control contact **Y1** is then opened, the output relay remains energized for the set pulse time.
When the power supply is disconnected, the output relay is de-energized without delay.
After the pulse has elapsed, the next pulse defined by a set time, can be activated by closing the control contact **Y1.**

Impulse-OFF, with auxiliary voltage / Trailing edge interval

The impulse-OFF function requires a continuous presence of a supply voltage at the **A1/B1-A2** terminals. If the control contact **Y1** (supply power potential) is opened, the output relay is energized without delay and the timer is started. The output relay stays energized for the set pulse time and is de-energized after this time has elapsed.
By disconnecting the supply or by closing the control contact, the timer is reset and the output relay is de-energized.

Flasher, starting with "ON" / Recyling equal times - ON first

When the supply voltage is applied at the **A1-A2** terminals, the output relay starts to cycle in symmetrical ON/OFF intervals.
The time delay can be adjusted by a potentiometer at the front of the timer.
If the supply power is disconnected, the output relay will be de-energized.

Flasher, starting with "OFF" / Recyling equal times - OFF first

When applying the supply voltage at the **A1-A2** terminals, the output relay starts to cycle in symmetrical OFF/ON intervals.
The cycle starts with an OFF cycle.
The OFF/ON cycle can be adjusted by a potentiometer at the front of the timer.
If the supply is disconnected, the output relay will be de-energized.

Pulse generator starting with "ON" or starting with "OFF" / Recycling unequal times

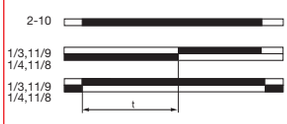
When applying the supply voltage at the **A1** and **A2** terminals, the timer relay starts either with an"ON" or an "OFF" cycle. Starting with ON or OFF is selectable.
The ON-time and the OFF-time can be adjusted independenty.
If the supply voltage is disconnected, the output relay will be de-energized.

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers C56xx range

Function diagrams

= ON-delay
C5600, C5610, C5620



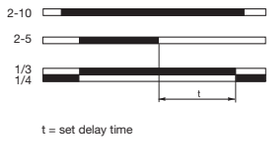
1SVC 110 000 F 0442

ON- delay / Delay on make

Timing starts when the supply voltage is applied at the **2-10** terminals. After the set time has elapsed, the output relay is energized. If the supply voltage is disconnected, the output relay resets and the elapsed time is cancelled.

If the supply is disconnected before the set time has elapsed, the output relay is not energized.

= OFF- delay
C5610, C5620



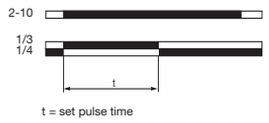
1SVC 110 000 F 0443

OFF-delay, with auxiliary voltage / Delay on break

Continuous presence of a supply voltage at the **2-10** terminals is required while timing.
Timing is controlled by an input contact **2-5** (supply power potential). If this input contact is closed, the output relay is energized.
By opening the control contact, the timer is started, and the set time begins to elapse.

After the delay time has elapsed,the output relay is de-energized. If the control contact is closed once more while the timer is energized, the time delay is reset. If the control contact is opened again, the timer restarts.

1 = Impulse-ON
C5610, C5620



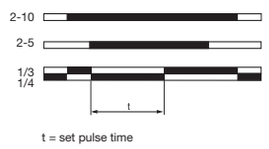
1SVC 110 000 F 0444

Impulse-ON / Interval

When applying the supply voltage at the **2-10** terminals, the output relay is energized without delay and is de-energized after the set pulse time has elapsed.

If the supply voltage is disconnected before the set pulse time has elapsed, the output relay is de-energized without delay.

1 = Pulse former
C5610, C5620



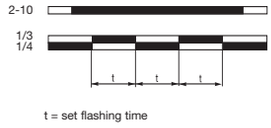
1SVC 110 000 F 0445

Pulse former / Single shot

If the control contact **2-10** is closed when supply voltage is applied, the output relay is energized for the set pulse time. If the control contact **2-5** is then opened, the output relay remains energized for the set pulse time.

When the power supply is disconnected, the output relay is de-energized without delay.
After the pulse has elapsed, the next pulse defined by the set time can be activated by closing the control contact **2-5.**

= Flasher, starting with "ON"
C5620



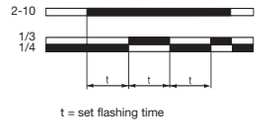
1SVC 110 000 F 0446

Flasher, starting with "ON" / Recyling equal times-ON first

When the supply power is applied at the **2-10** terminals, the output relay starts to switch in symmetrical ON/ OFF intervals.

The time delay can be adjusted by a potentiometer at the front of the timer.
If the supply power is disconnected, the output relay will be de-energized.

= Flasher, starting with "OFF"
C5620



1SVC 110 000 F 0447

Flasher, starting with "OFF" Recyling equal times-OFF first

When applying the supply power at the **2-10** terminals, the output relay starts to flash in symmetrical OFF/ON intervals.
The cycle starts with an OFF.

The OFF/ON cycle can be adjusted by a potentiometer at the front of the timer.
If the supply is disconnected, the output relay will be de-energized.

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-S range

Technical data

	Terminals used	CT-S range
Input circuits		
Supply voltage - power consumption	**A1-A2**	24-240VAC/DC - approx. 2-2.5VA/W [5]
	A1-A2	12-40VAC - approx. 0.6-1.8VA
	A1-A2	12-60VDC - approx. 0.6-2.5VA
	B1-A2	24VAC/DC - approx. 0.5VA/W
	B2-A2	42-48VAC/DC - approx. 1.8VA/W
	A1-A2	110-240VAC - approx. 2-3VA[1] / approx. 2.5-12VA
	A1-A2	380-440VAC - approx. 3VA
Tolerance of the supply voltage		-15%...+10%
Supply voltage frequency	AC/DC versions	DC (0Hz), 50/60Hz
	AC versions	50/60Hz
Control contact connections, volt-free[2]	**Y1-Z2**	external timer start
	X1-Z2	timer stop, time storage
Minimum control pulse length		20ms
Floating voltage at the control contacts[3]		10-40VDC
Max. current in the control circuit		1mA
Max. cable length to the control inputs		50m
Remote potentiometer connection	**Z1-Z2**	50kΩ
Max. cable length to remote potentiometer		2x25m, shield to Z2 potential
Duty time		100%
Timing circuit		
Time ranges		10 time ranges 0.05s-300h 1.) 0.05-1s 2.) 0.15-3s 3.) 0.5-10s 4.) 1.5-30s 5.) 5-100s 6.) 15-300s 7.) 1.5-30min 8.) 15-300min 9.) 1.5-30h 10.) 15-300h
Recovery time		<50ms
Repeat accuracy (constant parameters)		<0.2%
Timing error within the tolerance of supply voltage		<0.008% / % Δ U
Timing error within temperature range		<0.07% / °C
Display of operational states		
Supply voltage / timer		green LED steady / flashing while timing
1. Output relay energized		red LED
2. Output relay energized		red LED
Output circuits		**15-16/18, 25(21)-26(22)/28(24)**
No. of contacts		Relays, 1 or 2c/o (2nd c/o with selectable instant. function)
Contact material		AgCdo
Rated voltage acc. to VDE0110, IEC947-1		250V
Max. switching voltage		250VAC, 250VDC
Rated switching current acc. to IEC941-x AC12 (resistive)	230V	4A
Rated switching current acc. to IEC941-x AC15 (inductive)	230V	3A
Rated switching current acc. to IEC941-x DC12 (resistive)	24V	4A
Rated switching current acc. to IEC941-x DC13 (inductive)	24V	2A
Maximum mechanical life		$30x10^6$
Maximum electrical life (acc. to AC12, 230V, 4A)		$0.1x10^6$
Short circuit proof, max. fuse rating	n/c	10A fast, operating class gL
	n/o	10A fast, operating class gL

Remark: 1c/o = SPDT; 2c/o = DPDT

Electronic timers CT-S range

Technical data, standards, load limit curves

	CT-S range
General data	
Width of the enclosure	22.5mm
Wire size	2x2.5mm² (2x14AWG) stranded with wire end ferrule
Weight	approx. 150g/5.3oz
Mounting position	any
Degree of protection enclosure / terminals	IP50/IP20
Operating temperature	-20°C...+60°C
Storage temperature	-40°C...+85°C
Mounting	DIN rail (EN50022)
Mechanical shock resistance acc. to IEC68-2-6	6G
Standards / directives	
Product standard	parts of IEC 255 , IEC 1812-1
Electromagnetic compatibility	93/68/EWG
EMC-tests acc. to EN50082-2	
ESD acc. to IEC1000-4-2, EN61000-4-2	level 3-6kV/8kV
HF radiation resistance acc. to IEC1000-4-3, EN61000-4-3	level 3-10V/m
Burst acc. to IEC1000-4-4, EN61000-4-4	level 3-2 kV/5 kHz
Surge acc. to IEC1000-4-5, EN61000-4-5	level 4-2kV L-L
HF line emission acc. to IEC1000-4-6, EN61000-4-6	level 3-10V
Low voltage directive	93/68/EWG
Resistance to vibration	10G, f = 55Hz, a = 0.95mm, t = 2h per level
Approvals	**cULus, GL, GOST**
Isolation data	
Rated Isolation voltage to VDE0110, IEC947-1 between supply-, control- and output circuit	Supply 240V-300V Supply 440V-500V
Rated impulse withstand voltage to VDE0110, IEC664 -between all isolated circuits	4kV/1.2-50µs
Test voltage between all isolated circuits	2.5kV, 50Hz, 1min. [4]
Pollution category acc. to VDE0110, IEC664/IEC255-5	III/C
Overvoltage category acc. to VDE0110, IEC664/IEC255-5	III/C
Environmental tests acc. to IEC68-2-30	24h cycle, 55°C, 93% rel., 96h

[1] CT-MBS 1c/o, CT-MBS 2c/o, CT-ERS 1c/o, CT-EVS, CT-APS, CT-EBS 1c/o

[2] see connection example page 23, 24

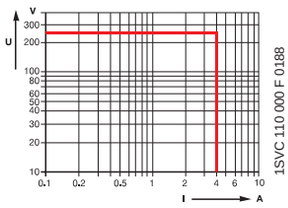
[3] no galvanic isolation to supply circuit

[4] 2kV, 50Hz, 1min. for CT-ARS

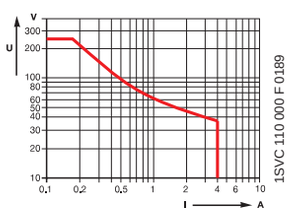
[5] CT-ARS: 24VAC/DC - approx. 1A for 30ms
18VAC/DC - approx. 1A for 20ms
110-130VAC - approx. 1A for 15ms
220-240VAC - approx. 1A for 10ms

Load limit curves

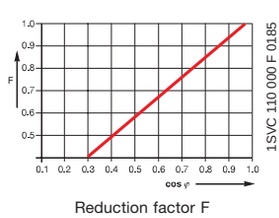
AC load (resistive)



DC load (resistive)

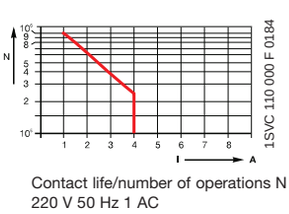


Reduction factor for inductive AC load



Reduction factor F
for inductive load

Contact life



Contact life/number of operations N
220 V 50 Hz 1 AC
360 operations/h

Electronic timers CT-E range

Technical data

	Terminals used	CT-E range
Input circuits		
Supply voltage - power consumption	**A1-A2**	24-240VAC/DC - approx. 1.0-2.0VA/W
	A1-A2	110-130VAC - approx. 2.0VA
	A1-A2	220-240VAC - approx. 2.0VA
	B1-A2	24VAC/DC - approx. 1.0VA/W
Tolerance of the supply voltage		-15%...+10%
Supply voltage frequency	AC/DC version	DC (0Hz), 50/60Hz
	AC version	50/60Hz
Control contact connections, non-volt free[1)]	**Y1**	external timer start-up
Control contact potential		Supply voltage
Minimum controller pulse length		20ms
Duty time		100%
Minimum energizing time (CT-ARE)		200ms
Solid-state devices CT-MKE, CT-EKE, CT-AKE		
Voltage drop in closed state		≤ 3V
Power consumption while timing		≤ 2mA (24-60VAC/DC) ≤ 8mA (60-240VAC/DC)
Cable length CT-MKE, CT-EKE, CT-AKE		
Between solid-state timer and connected load at 50Hz and a cable capacity of 100pF/m:		at 24VAC-220m/22nF at 42VAC-100m/10nF at 60VAC-65m/6.5nF at 110VAC-50m/5 nF at 240VAC-22m/2.2nF
Timing circuit		
Time ranges		
Single function timers		1 time range per unit 0.05-1s, 0.1-10s, 0.3-30s, 3-300s, 0.3-30min
Multifunction timers	**CT-MFE** **CT-MKE**	8 time ranges 0.05s-100h 2 time ranges 0.1-10s and 3-300s
Stardelta changeover time		CT-YDE-50ms, CT-SDE-30ms
Recovery time		<50ms (<100ms CT-MKE, <300ms CT-AKE, <200ms CT-ARE, <400ms CT-AWE, CT-SDE, <500ms CT-YDE)
Repeat accuracy (constant parameters)		<1%
Timing error within the tolerance of the supply voltage		<0.5% / % Δ U
Timing error within temperature range		<0.1% (<0.06% / °C CT-MFE)
Display of operational states		
Supply voltage		green LED
Output relay energized		red LED
Output circuit, relay devices		**15-16/18**
No. of contacts		Relay, 1c/o
Contact material		AgCdo
Rated voltage acc. to VDE0110, IEC947-1		250V
Switching voltage max.		250VAC, 250VDC
Rated switching current acc. to IEC941-x AC12 (resistive)	230V	4A
Rated switching current acc. to IEC941-x AC15 (inductive)	230V	3A
Rated switching current acc. to IEC941-x DC12 (resistive)	24V	4A
Rated switching current acc. to IEC941-x DC13 (inductive)	24V	2A
Maximum mechanical life		$30x10^6$
Maximum electrical life (acc. to AC12, 230V, 4A)		$0.1x10^6$
Short circuit proof, max. fuse rating	n/c	10A fast, operating class gL (5A CT-ARE)
	n/o	10A fast, operating class gL (5A CT-ARE)

Remark: 1c/o = SPDT

Electronic timers CT-E range

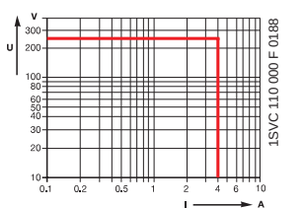
Technical data, standards, load limit curves

	CT-E range
Output circuits solid-state devices CT-MKE, CT-EKE, CT-AKE	**A1-A2, A1-AL**
	Thyristor (CT-MKE, CT-EKE, CT-AKE)
Rated voltage acc. to VDE0110, IEC947-1	250V
Switching voltage max.	240V
Load current min.	20mA (10mA CT-EKE, CT-AKE)
Load current max.	0.8A at TA=20°C (0.7A CT-EKE, CT-AKE)
Load current reduced / derating	10mA/°C
Surge current max.	≤ 20A for t ≤ 20ms (≤ 15A CT-EKE, CT-AKE)
General data	
Width of the enclosure	22.5mm
Wire size	2x1.5mm²(2x16AWG) stranded with wire end ferrule
Weight	approx. 80g / approx. 2.8oz
Mounting position	any
Degree of protection enclosure / terminals	IP50/IP20
Operating temperature	-20°C...+60°C
Storage temperature	-40°C...+85°C
Mounting of	DIN rail (EN50022)
Mechanical shock resistance acc. to IEC68-2-6	10G
Standards / directives	
Product standard	parts of IEC255, IEC 1812-1
Electromagnetic compatibility	93/68/EWG
EMC-tests acc. to EN50082-2	
ESD acc. to IEC1000-4-2, EN61000-4-2	level 3-6kV/8 kV
HF radiation resistance acc. to IEC1000-4-3, EN61000-4-3	level 3-10V/m
Burst acc. to IEC1000-4-4, EN61000-4-4	level 3-2kV/5kHz
Surge acc. to IEC1000-4-5, EN61000-4-5	level 4-2kV L-L
HF line emission acc. to IEC1000-4-6, EN61000-4-6	level 3-10V
Low voltage directive	93/68/EWG
Resistance to vibration	10G, f = 55Hz, a = 0.95mm, t = 2h per level
Approvals	**cULus, GL, GOST**
Isolation data	
Rated isolation voltage to VDE0110, IEC947-1 between supply-, control- and output circuits	supply up to 240V-300V supply up to 440V-500V
Rated impulse withstand voltage to VDE0110, IEC664 -between all isolated circuits	4kV/1.2-50µs
Test voltage between all isolated circuits	2.5kV, 50Hz, 1min.
Pollution category acc. to VDE0110, IEC664/IEC255-5	III/C
Overvoltage category acc. to VDE0110, IEC664/IEC255-5	III/C
Environmental tests acc. to IEC68-2-30	24h cycle, 55°C, 93% rel., 96h

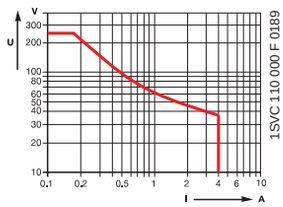
[1] see connection example page 25

Load limit curves

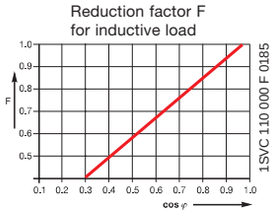
AC load (resistive)



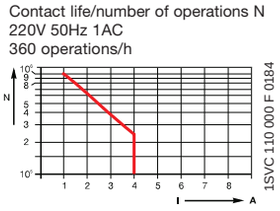
DC load (resistive)



Reduction factor for inductive AC load



Contact life



Electronic timers CT-D range

Technical data

	Terminals used	CT-D range
Input circuits		
Supply voltage - power consumption	**A1-A2**	24-240VAC / 24-48VDC - approx. VA/W
Tolerance of the supply voltage		-15%...+10%
Supply voltage frequency	DC supply AC supply	DC / 0Hz 50/60Hz
Control contact connections, non-volt free[1)]	**Y1-A2**	external timer start-up
Minimum control input pulse length		20ms
Max. cable length to the control inputs		
Duty time		100%
Timing circuit		
Time ranges		7 time ranges 0.05s-100h 1.) 0.05-1s 2.) 0.5-10s 3.) 5-100s 4.) 0.5-10min 5.) 5-100min 6.) 0.5-10h 7.) 5-100h
Recovery time		<50ms
Repeat accuracy (constant parameters)		< +/- 0.5%
Timing error within the tolerance of the supply voltage		<0.5%
Timing error within temperature range		<0.06% / °C
Display of operating status		
Supply voltage / timer		green LED steady / flashing while timing
Output relay energized		red LED
Output circuits		**15-16/18**
No. of contacts		relay, 1c/o
Contact material		$AgSnO_2$
Rated voltage acc. to VDE0110, IEC947-1		250V
Switching voltage min.		12V
Switching voltage max.		250VAC
Switching current min.		100mA
Switching current max.		8A
Rated switching current acc. to IEC941-x AC12 (resistive)	230V	4A
Rated switching current acc. to IEC941-x AC15 (inductive)	230V	3A
Rated switching current acc. to IEC941-x DC12 (resistive)	24V	4A
Rated switching current acc. to IEC941-x DC13 (inductive)	24V	2A
Maximum mechanical life		$30x10^6$
Maximum electrical life (acc. to AC12, 230V, 4A)		$0.1x10^6$
Short circuit proof, max. fuse rating	n/c	6A fast, operating class gL
	n/o	10A fast, operating class gL
General data		
Width of the enclosure		17.5mm
Wire size		$2x1.5mm^2$ (2x16AWG) stranded with wire end ferrule $2x2.5mm^2$ (2x14AWG) without wire end ferrule
Weight		approx. 60g / approx. 2.1oz
Mounting position		any
Degree of protection enclosure / terminals		IP50 / IP20
Operating temperature		-20°C...+60°C
Storage temperature		-40°C...+85°C
Mounting		DIN rail (EN50022), snap-on mounting
Mechanical shock resistance acc. to IEC68-2-6		6G

Remark: 1c/o = SPDT

Electronic timers CT-D range

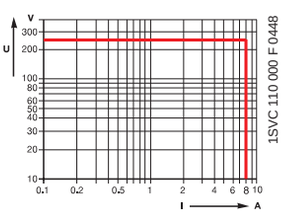
Technical data, standards, load limit curves

	CT-D range
Standards / directives	
Product standard	IEC 61812-1 10.1996, EN 611812-1 + A11/8.1999, DIN VDE 0435 part 2021
Electromagnetic compatibility	93/68/EWG
EMC-tests acc. to EN50082-2	
ESD acc. to IEC1000-4-2, EN61000-4-2	level 3-6kV/8kV
HF radiation resistance acc. to IEC1000-4-3, EN61000-4-3	level 3-10V/m
Burst acc. to IEC1000-4-4, EN61000-4-4	level 3-2kV/5kHz
Surge ac. to IEC1000-4-5, EN61000-4-5	level 4-2kV L-L
HF line emission acc. to IEC1000-4-6, EN61000-4-6	level 3-10V
Low voltage directive	93/68/EWG
Resistance to vibration	10G, f = 55Hz, a = 0.95mm, t = 2h per level
Approvals	**cULus**
Isolation data	
Rated isolation voltage acc. to IEC 50175 / VDE 0160 between supply-, control- and output circuit	300V
Rated impulse withstand voltage to VDE0110, IEC664 -between all isolated circuits	4kV / 1.2-50µs
Test voltage between all isolated circuits	2.5kV, 50Hz, 1min.
Pollution category acc. to IEC 50175 / VDE 0160 / UL508	3
Overvoltage category acc. to IEC 50175 / VDE 0160 / UL508	III
Environmental tests acc. to IEC68-2-30	24h cycle, 55°C, 93% rel., 96h

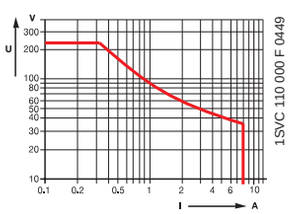
[1] see connection example page 25

Load limit curves

AC load (resistive)

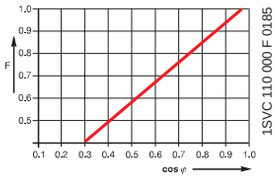


DC load (resistive)



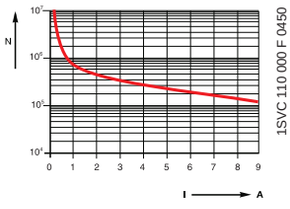
Reduction factor for inductive AC load

Reduction factor F for inductive load



Contact life

Contact life/number of operations N
220V 50Hz 1AC
360 operations/h



Electronic timers C56xx range

Technical data

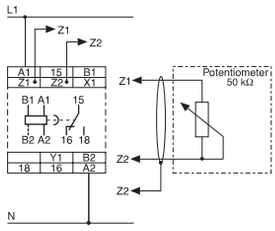
	C5620	C5600 C5610
Rated isolation voltage Overvoltage category C acc. to DIN VDE 0110	250VAC	250VAC
Tolerance of supply voltage	+ 10 ... - 15%	24V: - 15 ... + 30% 115/230V: - 15 ... + 10%
Power consumption at AC 230V/50 Hz	1W 11VA	1W 11VA
Rated switching current I_e AC-1 at AC 230V/50 Hz	8A	8A
No. of operations at load I_e , AC 230 V at load with contactor 3RT10 16, AC230V	600/h	600/h
Recovery time	50ms	100ms
Minimum energizing time	50ms	100ms
Tolerance of adjustment related to fullscale value	± 0.03% ± 10ms	± 10%
Repetitive accuracy	± 0.03% ± 10ms	± 2%
Mechanical life	$5x10^6$	$2x10^7$
Environment temperatures operating storage	-10°C to +60°C -30°C to +70°C	-20°C to +60°C -25°C to +70°C
Degree of protection acc. to DIN EN 60 529	IP65	IP50
Mounting position	any	any

Electronic timers CT-S range

Wiring diagrams, connection examples star-delta applications

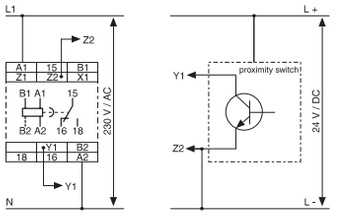
CT-S range wiring diagrams

Connection diagram using a remote potentiometer



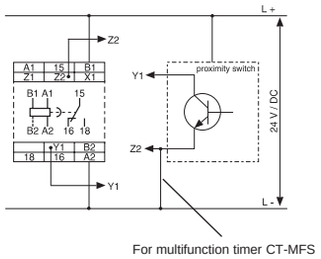
1SVC 110 000 F 0387

Connection diagram of a proximity switch (3 wire) with 230VAC supply



1SVC 110 000 F 0697

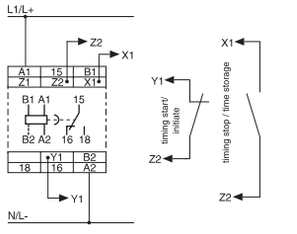
Connection diagram of a proximity switch (3 wire) with 24VDC supply



1SVC 110 000 F 0698

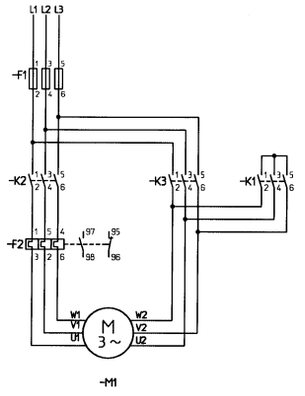
For multifunction timer CT-MFS this jumper is not required

Connection diagram of the control contacts



1SVC 110 000 F 0699

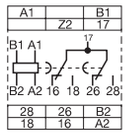
Diagram of main circuit



1SVC 110 000 F 0389

CT-YDEW

Star-delta timer with relay output impulse function



1SVC 110 000 F 0381

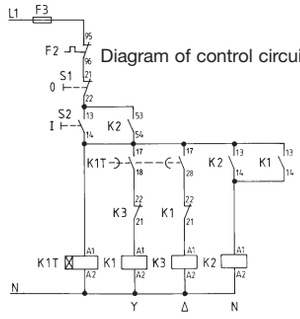
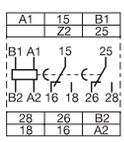


Diagram of control circuit

1SVC 110 000 F 0391

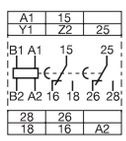
CT-YDAV

Star-delta timer with relay output



1SVC 110 000 F 0393

Version 380-440VAC



1SVC 110 000 F 0380

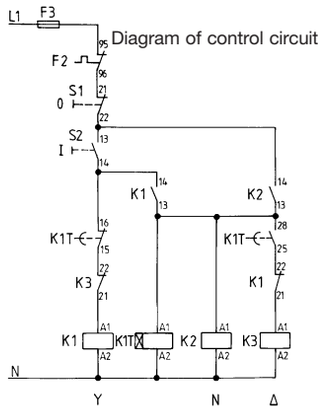
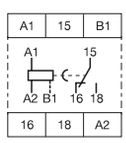


Diagram of control circuit

1SVC 110 000 F 0388

CT-YDE

Star-delta timer with relay output



1SVC 110 000 F 0382

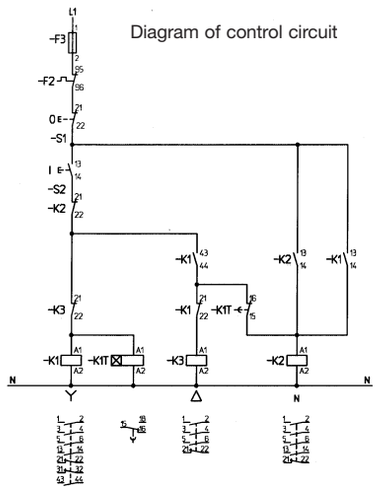
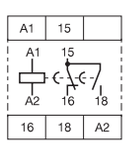


Diagram of control circuit

1SVC 110 000 F 0390

CT-SDE

Star-delta timer with relay output



1SVC 110 000 F 0383

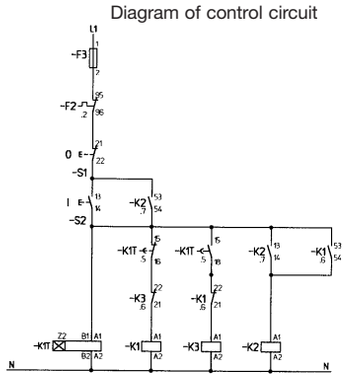


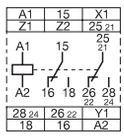
Diagram of control circuit

1SVC 110 000 F 0392

Electronic timers CT-S range

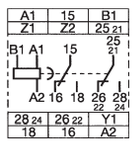
Connection diagrams and position of connection terminals
Dimensional drawing

CT-MFS

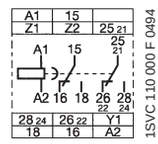


1SVC 110 000 F 0394

CT-MBS



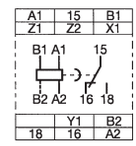
1SVC 110 000 F 0493



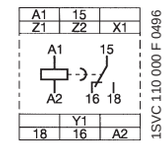
1SVC 110 000 F 0494

Supply voltage versions 12-40VAC/12-60VDC and 380-440VAC

CT-MBS



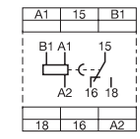
1SVC 110 000 F 0495



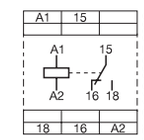
1SVC 110 000 F 0496

Supply voltage versions 12-40VAC/12-60VDC and 380-440VAC

CT-ERS



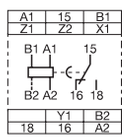
1SVC 110 000 F 0395



1SVC 110 000 F 0396

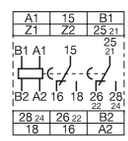
Supply voltage versions 12-40VAC/12-60V DC and 380-440VAC

CT-ERS

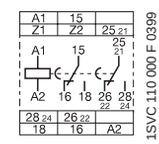


1SVC 110 000 F 0397

CT-ERS



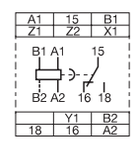
1SVC 110 000 F 0398



1SVC 110 000 F 0399

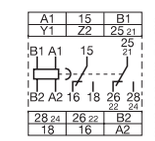
Supply voltage versions 12-40VAC/12-60VDC and 380-440VAC

CT-AHS



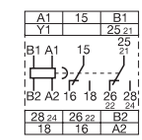
1SVC 110 000 F 0402

CT-AHS



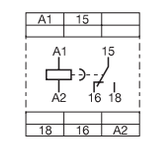
1SVC 110 000 F 0403

CT-APS



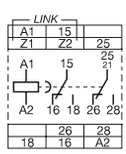
1SVC 110 000 F 0404

CT-ARS



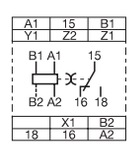
1SVC 110 000 F 0405

CT-ARS



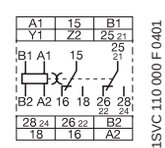
1SVC 110 000 F 0406

CT-EAS



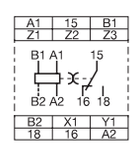
1SVC 110 000 F 0400

CT-EAS



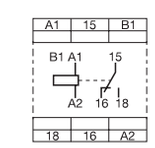
1SVC 110 000 F 0401

CT-EVS



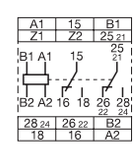
1SVC 110 000 F 0420

CT-VWS



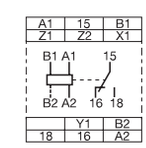
1SVC 110 000 F 0407

CT-VWS



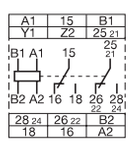
1SVC 110 000 F 0408

CT-AWS



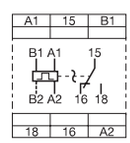
1SVC 110 000 F 0409

CT-AWS



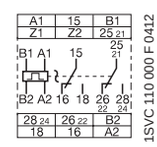
1SVC 110 000 F 0410

CT-EBS



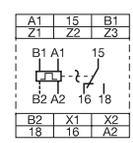
1SVC 110 000 F 0411

CT-EBS



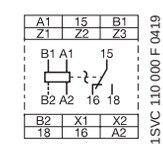
1SVC 110 000 F 0412

CT-TGS



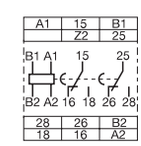
1SVC 110 000 F 0413

CT-PGS



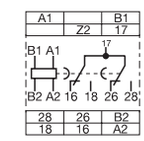
1SVC 110 000 F 0419

CT-YDAV



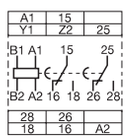
1SVC 110 000 F 0414

CT-YDEW



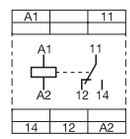
1SVC 110 000 F 0381

CT-IRS



1SVC 110 000 F 0415

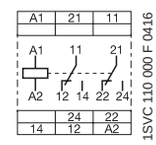
CT-IRS



1SVC 110 000 F 0421

Version 380-440VAC

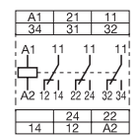
CT-IRS



1SVC 110 000 F 0416

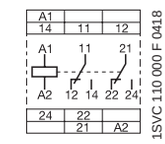
Version with gold plated contacts

CT-IRS



1SVC 110 000 F 0417

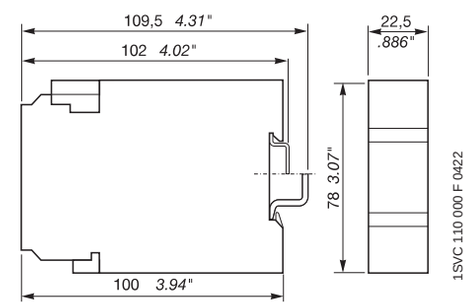
CT-IRS



1SVC 110 000 F 0418

Dimensional drawing

CT-S range

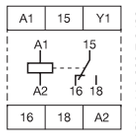


Electronic timers CT-E/CT-D range

Connection diagrams and position of connection terminals
Dimensional drawings

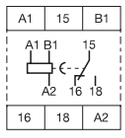
Electronic timers CT-E range

CT-MFE



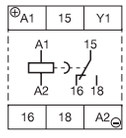
1SVC 110 000 F 0436

CT-ERE



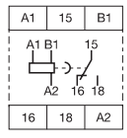
1SVC 110 000 F 0427

CT-AHS [1)]



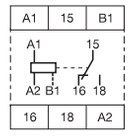
1SVC 110 000 F 0428

CT-ARE



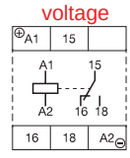
1SVC 110 000 F 0430

CT-VWE



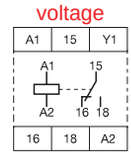
1SVC 110 000 F 0431

CT-AWE [1)] without auxiliary voltage



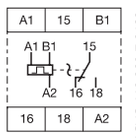
1SVC 110 000 F 0433

CT-AWE [1)] with auxiliary voltage



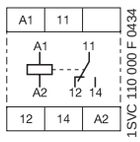
1SVC 110 000 F 0432

CT-EBE

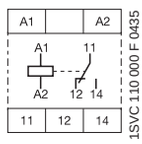


1SVC 110 000 F 0429

CT-IRE

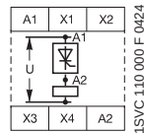


1SVC 110 000 F 0434



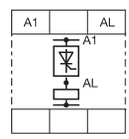
1SVC 110 000 F 0435

CT-MKE



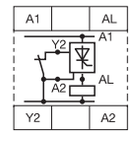
1SVC 110 000 F 0424

CT-EKE



1SVC 110 000 F 0425

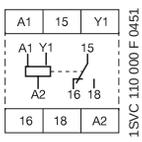
CT-AKE



1SVC 110 000 F 0426

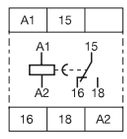
Electronic timers CT-D range

CT-MFD



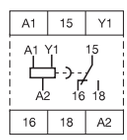
1SVC 110 000 F 0451

CT-ERD



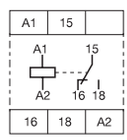
1SVC 110 000 F 0452

CT-AHD



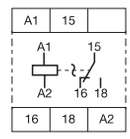
1SVC 110 000 F 0453

CT-VWD



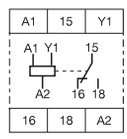
1SVC 110 000 F 0454

CT-EBD



1SVC 110 000 F 0455

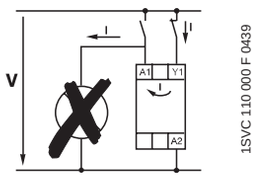
CT-TGD



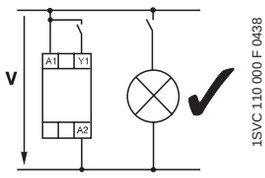
1SVC 110 000 F 0456

Connection examples CT-E range

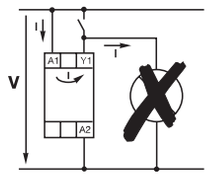
Single function devices with control contact



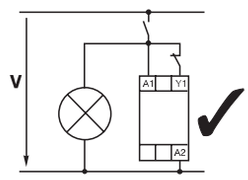
1SVC 110 000 F 0439



1SVC 110 000 F 0438



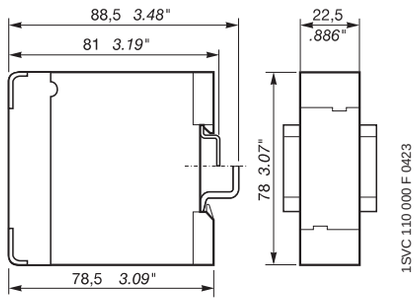
1SVC 110 000 F 0437



1SVC 110 000 F 0440

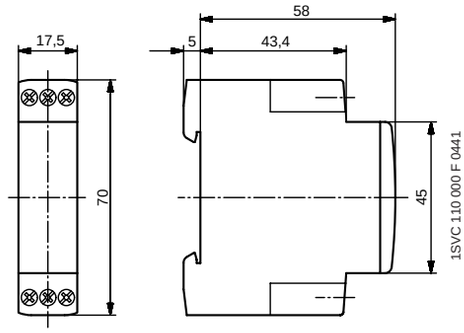
Dimensional drawings

CT-E range



1SVC 110 000 F 0423

CT-D range

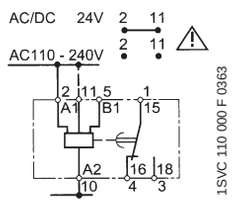


1SVC 110 000 F 0441

Electronic timers C56xx range

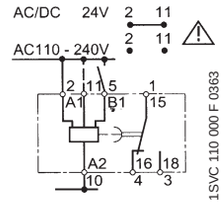
Connection diagrams and position of connection terminals
Dimensional drawings

C 5620



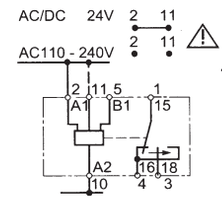
ON-delay **(A)**

C 5620



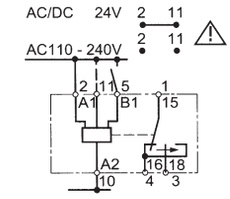
OFF-delay with auxiliary voltage **(C)**

C 5620



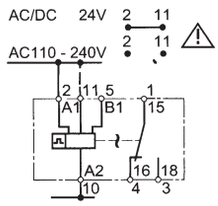
Impulse-on **(H)**

C 5620



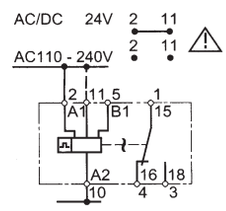
Pulse former with auxiliary voltage **(B)**

C 5620



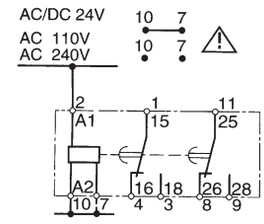
Flasher, starting with "OFF" **(D)**

C 5620



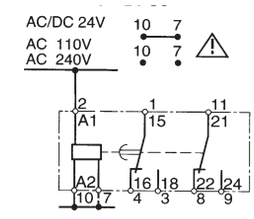
Flasher, starting with "ON" **(Di)**

C 5600



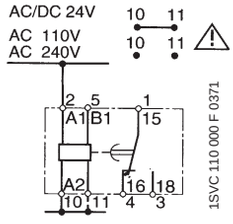
ON-delay **(0)**

C 5600



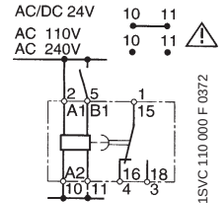
ON-delay and instantaneous contact **(1)**

C 5610



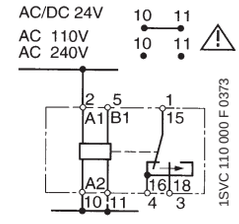
ON-delay **(A)**

C 5610



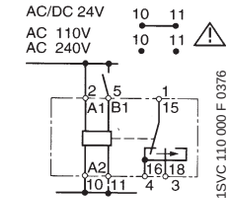
OFF-delay with auxiliary voltage **(C)**

C 5610



Impulse-on **(H)**

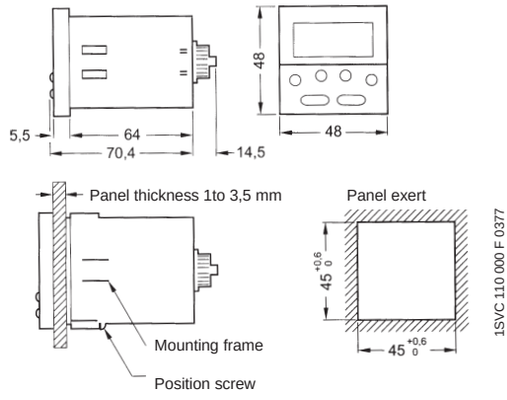
C 5610



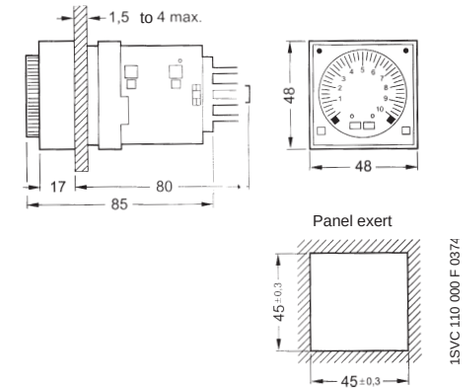
Pulse former with auxiliary voltage **(B)**

Dimensional drawings

C5620

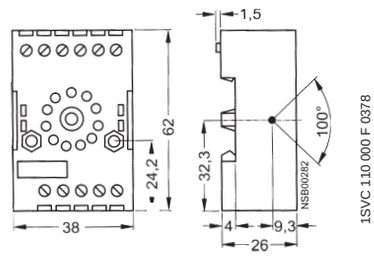


C5600/C5610

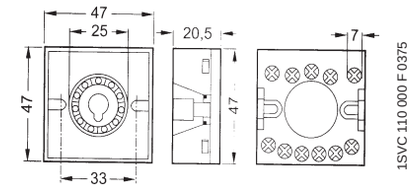


Accessories

Socket for C56xx

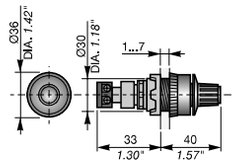


Socket with backward connection forr C56xx

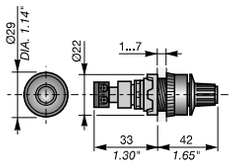


Electronic timers CT-S range

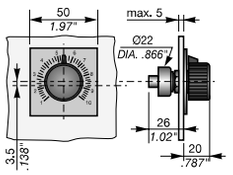
Accessories



1SVC 110 000 F 0336



1SVC 110 000 F 0337

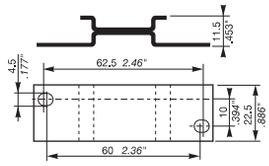


1SVC 110 000 F 0338

Remote potentiometer

50kΩ ±20%-0.2Ω with direct reading scale (graduated dial supplied)

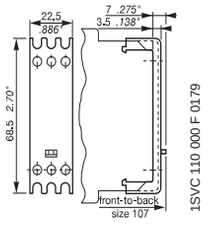
Diameter mm	Degree of protection	**Order code**	Pack. unit piece	**Price** 1 piece	Weight 1 piece kg/oz
30.5	IP65	**1SVR 700 800 R 1000**	1		0.040/1.4
22.5	IP65	**1SVR 701 800 R 1000**	1		0.040/1.4
10.5	IP40	**1SVR 214 017 R 0900**	1		0.040/1.4



1SVC 110 000 F 0182

Adapter for panel mounting

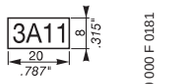
Enclosure width in mm	**Order code**	Pack. unit piece	**Price** 1 piece	Weight 1 piece kg/oz
22.5	**1SVR 430 029 R 0100**	1		0.020/0.7



1SVC 110 000 F 0179

Sealable cover

Enclosure width in mm	**Order code**	Pack. unit piece	**Price** 1 piece	Weight 1 piece kg/oz
22.5	**1SVR 430 005 R 0100**	1		0.020/0.7



1SVC 110 000 F 0181

Marker

	Order code	Pack. unit piece	**Price** 1 piece	Weight 1 piece kg/oz
	1SVR 366 017 R 0100	1		0.020/0.7

Electronic timers

Conversion table C56xx → CT-S/CT-E ranges

Conversion table C56xx range (discontinued) to new CT-S and CT-E range

Old order code C56xx	Type	Description	Supply voltage		New order code	Type CT-	Description	Supply voltage
1SAR 330 020 R 0000	**C 565**	multifunction timer, 2c/o, 15 ranges (0.05s-100h)	24-240VAC/DC	->	**1SVR 430 010 R 0200**	**CT-MFS**	multifunction timer 2c/o, 10 ranges (0.05s-300h)	24-240VAC/DC
1SAR 330 020 R 0001	**C 565**	multifunction timer, 2c/o, 15 ranges (0.05s-100h)	24VAC/DC, 100-127VAC10	->	**1SVR 430 012 R 0200**	**CT-MBS**	multifunction timer 2c/o, 10 ranges (0.05s-300h)	24VAC/DC, 110-240VAC
1SAR 330 020 R 0002	**C 565**	multifunction timer, 2c/o, 15 ranges (0.05s-100h)	24VAC/DC, 200-240VAC					
1SAR 330 020 R 0009	**C 565**	multifunction timer, 2c/o, 15 ranges (0.05s-100h)	24VAC/DC, 400-440VAC	->	**1SVR 430 011 R 2200**	**CT-MBS**	multifunction timer 2c/o, 10 ranges (0.05s-300h)	380-440VAC
1SAR 330 010 R 0010	**C 564**	multifunction timer, 1c/o, 15 ranges (0.05s-100h)	12VDC	->	**1SVR 430 010 R 1100**	**CT-MBS**	multifunction timer 1c/o, 10 ranges (0.05s-300h)	12-40VAC/ 12-60VDC
1SAR 330 010 R 0001	**C 564**	multifunction timer, 1c/o, 15 ranges (0.05s-100h)	24VAC/DC, 100-127VAC	->	**1SVR 430 013 R 0100**	**CT-MBS**	multifunction timer 1c/o, 10 ranges (0.05s-300h)	24VAC/DC, 110-240VAC
1SAR 330 010 R 0002	**C 564**	multifunction timer, 1c/o, 15 ranges (0.05s-100h)	24VAC/DC, 200-240VAC					
1SAR 330 010 R 0000	**C 564**	multifunction timer, 1c/o, 15 ranges (0.05s-100h)	24-240VAC/DC	->	**1SVR 550 029 R 8100**	**CT-MFE**	multifunction timer, 1c/o 8 ranges (0.05s-100h)	24-240VAC/DC
1SAR 310 010 R 0001	**C 561.00**	ON-delay timer, 15 ranges (0.05s-100h), 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 430 102 R 0100**	**CT-ERS**	ON-delay timer 1c/o, 10 ranges (0.05s-300h)	24VAC/DC, 110-240VAC
1SAR 310 010 R 0002	**C 561.00**	ON-delay timer, 15 ranges (0.05s-100h), 1c/o	24VAC/DC, 200-240VAC					
1SAR 310 020 R 0003	**C 561.01**	ON-delay timer, 15 ranges (0.05s-100h), 2c/o	42-48VAC/DC, 60VAC/DC	->	**1SVR 430 100 R 1200**	**CT-ERS**	ON-delay timer 2c/o, 10 ranges (0.05s-300h)	12-40VAC/ 12-60VDC
1SAR 310 020 R 0001	**C 561.01**	ON-delay timer, 15 ranges (0.05s-100h), 2c/o	24VAC/DC, 100-127V AC	->	**1SVR 430 103 R 0200**	**CT-ERS**	ON-delay timer 2c/o, 10 ranges (0.05s-300h)	24VAC/DC, 42-48VAC/DC, 110-240VAC
1SAR 310 020 R 0002	**C 561.01**	ON-delay timer, 15 ranges (0.05s-100h), 2c/o	24VAC/DC, 200-240VAC					
1SAR 310 020 R 0000	**C 561.01**	ON-delay timer, 15 ranges (0.05s-100h), 2c/o	24-240VAC/DC					
1SAR 340 017 R 0006	**C 562.20**	true OFF-delay timer, 7 ranges (0.05s-100s),	24VAC/DC	->	**1SVR 430 120 R 0100**	**CT-ARS**	true OFF-delay timer 1c/o, 7 ranges (0.05s-10min)	24-240VAC/DC without auxiliary voltage
1SAR 340 017 R 0007	**C 562.20**	true OFF-delay timer, 7 ranges (0.05s-100s), 1c/o	100-127VAC/DC					
1SAR 340 017 R 0008	**C 562.20**	true OFF-delay timer, 7 ranges (0.05s-100s), 1c/o	200-240VAC/DC					
1SAR 340 027 R 0006	**C 562.22**	true OFF-delay timer, 7 ranges (0.05s-100s), 2c/o	24VAC/DC	->	**1SVR 430 120 R 0300**	**CT-ARS**	true OFF-delay timer 2c/o, 7 ranges (0.05s-10min)	24-240VAC/DC without auxiliary voltage
1SAR 340 027 R 0007	**C 562.22**	true OFF-delay timer, 7 ranges (0.05s-100s), 2c/o	100-127VAC/DC					
1SAR 340 027 R 0008	**C 562.22**	true OFF-delay timer, 7 ranges (0.05s-100s), 2c/o	200-240VAC/DC					
1SAR 350 010 R 0001	**C 563**	pulse generator, 7 ranges (0.05s-100h), 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 430 163 R 0100**	**CT-TGS**	pulse generator 1c/o., 2x10 ranges (0.05s-300h)	24VAC/DC, 42-48VAC/DC, 110-240VAC
1SAR 350 010 R 0002	**C 563**	pulse generator, 7 ranges (0.05s-100h), 1c/o	24VAC/DC, 200-240VAC					
1SAR 310 011 R 0002	**C 561.10**	ON-delay timer, 0.5-10s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 107 R 1100**	**CT-ERE**	ON-delay timer 0.1-10s, 1c/o	24VAC/DC, 220-240VAC
1SAR 310 011 R 0001	**C 561.10**	ON-delay timer, 0.5-10s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 100 R 1100**	**CT-ERE**	ON-delay timer 0.1-10s, 1c/o	110-130VAC
1SAR 310 012 R 0002	**C 561.10**	ON-delay timer, 1.5-30s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 107 R 4100**	**CT-ERE**	ON-delay timer, 0.3-30s 1c/o	24VAC/DC, 220-240VAC
1SAR 310 012 R 0001	**C 561.10**	ON-delay timer,1.5-30s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 100 R 4100**	**CT-ERE**	ON-delay timer,0.3-30s 1c/o	110-130VAC
1SAR 310 013 R 0002	**C 561.10**	ON-delay timer, 5-100s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 107 R 2100**	**CT-ERE**	ON-delay timer, 3-300s, 1c/o	24VAC/DC, 220-240VAC
1SAR 310 013 R 0001	**C 561.10**	ON-delay timer, 5-100s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 100 R 2100**	**CT-ERE**	ON-delay timer, 3-300s, 1c/o	110-130VAC
1SAR 320 011 R 0002	**C 562.10**	OFF-delay timer, 0.5-10s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 118 R 1100** **1SVR 550 111 R 1100**	**CT-AHE** **CT-AHE**	OFF-delay timer, 0.1-10s, 1c/o OFF-delay timer, 0.1-10s, 1c/o	24VAC/DC 220-240VAC
1SAR 320 011 R 0001	**C 562.10**	OFF-delay timer, 0.5-10s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 110 R 1100**	**CT-AHE**	OFF-delay timer, 0.1-10s, 1c/o	110-130VAC
1SAR 320 012 R 0002	**C 562.10**	OFF-delay timer, 1.5-30s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 118 R 4100** **1SVR 550 111 R 4100**	**CT-AHE** **CT-AHE**	OFF-delay timer, 0.3-30s, 1c/o OFF-delay timer, 0.3-30s, 1c/o	24VAC/DC 220-240VAC
1SAR 320 012 R 0001	**C 562.10**	OFF-delay timer, 1.5-30s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 110 R 4100**	**CT-AHE**	OFF-delay timer, 0.3-30s, 1c/o	110-130VAC
1SAR 320 013 R 0002	**C 562.10**	OFF-delay timer, 5-100s, 1c/o	24VAC/DC, 200-240VAC	->	**1SVR 550 118 R 2100** **1SVR 550 111 R 2100**	**CT-AHE** **CT-AHE**	OFF-delay timer, 3-300s, 1c/o OFF-delay timer, 3-300s, 1c/o	24VAC/DC 220-240VAC
1SAR 320 013 R 0001	**C 562.10**	OFF-delay timer, 5-100s, 1c/o	24VAC/DC, 100-127VAC	->	**1SVR 550 110 R 2100**	**CT-AHE**	OFF-delay timer, 3-300s, 1c/o	110-130VAC
1SAR 360 014 R 0002	**C 561.13**	star-delta timer, 1-20s, 2 delayed n/o, 50 ms	24VAC/DC, 100-127VAC	->	**1SVR 430 213 R 0200**	**CT-YDEW**	star-delta timer 2c/o, 10 ranges (0.05s-300h)	24VAC/DC, 42-48VAC/DC, 110-240VAC
1SAR 360 014 R 0001	**C 561.13**	star-delta timer, 1-20s, 2 delayed n/o, 50 ms	24VAC/DC, 200-240VAC			**CT-SDE**	see page 7	
1SAR 360 015 R 0002	**C 561.13**	star-delta timer, 3-60s, 2 delayed n/o, 50 ms	24VAC/DC, 100-127VAC					
1SAR 360 015 R 0001	**C 561.13**	star-delta timer, 3-60s, 2 delayed n/o, 50 ms	24VAC/DC, 200-240VAC					
1SBN 020 010 R 1001	**TE5S-24**	star-delta timer, 0.8-60s, 2 delayed n/o, 50 ms	24VAC/DC	->	**1SVR 430 213 R 0200**	**CT-YDEW**	star-delta timer 2c/o, 10 ranges (0.05s-300h)	24VAC/DC, 42-48VAC/DC, 110-240VAC
1SBN 020 010 R 1002	**TE5S-120**	star-delta timer, 0.8-60s, 2 delayed n/o, 50 ms	110-120VAC			**CT-SDE**	see page 7	
1SBN 020 010 R 1003	**TE5S-240**	star-delta timer, 0.8-60s, 2 delayed n/o, 50 ms	220-240VAC					
1SBN 020 010 R 1004	**TE5S-440**	star-delta timer, 0.8-60s, 2 delayed n/o, 50 ms	380-440VAC					
1SAR 370 006 R 0005	**C 561.02**	ON-delay timer, 0.05-240s, solid-state output	24-66VAC/DC	->	**1SVR 550 509 R 1000**	**CT-EKE**	ON-delay timer 0.1-10s, solid-state output	24-240VAC/DC
1SAR 370 006 R 0004	**C 561.02**	ON-delay timer, 0.05-240s, solid-state output	90-240VAC/DC		**1SVR 550 509 R 4000**	**CT-EKE**	ON-delay timer 0.3-30s, solid-state output	24-240VAC/DC
					1SVR 550 509 R 2000	**CT-EKE**	ON-delay timer 3-300s, solid-state output	24-240VAC/DC

Remark: 1c/o = SPDT; 2c/o = DPDT