Electronic timers
CT range

Power and productivity
for a better world™

ABB

ABB electronic timers
CT range

For many years, ABB's CT range electronic timers has been used in applications worldwide and has proven its excellent functionality in daily use even under the toughest conditions. Three ranges of electronic timers provide timing functions for all applications.

CT-D
The CT-D range with MDRC design (modular DIN rail components) in an enclosure with a width of only 17.5 mm fits into all domestic installation and distribution panels.

CT-E
The CT-E range offers an excellent price/performance ratio and is an ideal solution for serial applications.

CT-S
The highly sophisticated CT-S range in ABB's new S-range enclosure offers two different types of connection terminals and is ideally suited for universal use.

Accessories
The CT-S range offers the possibility of using accessories such as a remote potentiometer to adjust the time delay or a sealable transparent cover to protect against unauthorized changes in time and threshold values.

General news and benefits

LEDs for status indication

All actual operational states are displayed by front-face LEDs, thus simplifying commissioning and troubleshooting.

Direct reading scales

Direct setting of the time delay without any additional calculation allows accurate time delay adjustment.

Connection screws in M3 (pozidrive)

Easy tightening and release of the connection screws using a pozidrive, panhead or crosshead screwdriver.

Double-chamber cage connection terminals

Double-chamber cage connection terminals make it possible to connect wires up to 2 x 2.5 mm^2 (2 x 14 AWG), rigid or fine-strand, with or without ferrules. Potential distribution does not require additional terminals.

Time range preselection and fine adjustment

Direct assignment of the preselected time range to the fine adjustment potentiometer scale by multicolor scales.

Easy connect technology

Innovative Push-in connection terminals for tool-free installation. The connection is gas-proof and has the same direction as the double-chamber cage connection terminals.

The CT range includes 103 electronic timers and switching relays with 16 different functions. The electronic timers are divided into three ranges with their individual benefits. A lot of different connection terminals such as screw, chamber, double-chamber cage and push-in connection terminals are available. Furthermore, relay outputs and solid-state outputs are also available.

The modular CT-D range of electronic timers

The CT-D range represents a link between industry and the installation types. For maximum flexibility in operation, 10 single-function as well as 2 multifunction devices with 7 timing functions are available. The devices offer 4 or 7 time ranges from 0.05 seconds up to 100 hours. Their wide input range allows use in applications worldwide.

Characteristics of the CT-D range:
– Diversity:
  – 2 multifunction timers
  – 10 single-function timers
– Control supply voltages:
  – Wide range: 12 - 240 V AC/DC
  – Multi range: 24 - 48 V DC, 24 - 240 V AC
– 4 time ranges, from 0.05 s - 10 min, or
– 7 time ranges, from 0.05 s - 100 h
– Width of only 17.5 mm
– Light-grey enclosure in RAL 7035
– Devices with:
  – 1 c/o (SPDT) contact (250 V / 6 A) or
    2 c/o (SPDT) contacts (250 V / 5 A)
  – Control input: voltage-related triggering, polarized, capable of switching a parallel load

Width and structural form:

With a width of only 17,5 mm, the CT-D range of electronic timers is ideally suited for installation in distribution panels. The light-grey enclosure (RAL 7035) perfectly fits in with ABB's MDRC products such as RCBs and MCBs.

Approvals / marks:

UL	UL 508, CAN/CSA C22.2 No.14
P	GOST
CB	CB scheme
CCC	CCC
CE	
C	C-Tick

Width 17.5 mm

The CT-D range timers are ideally suited for installation in distribution panels with a width of 17.5 mm.

Connection terminals

Wide terminal spacing allows connection of wires from 2 x 1.5 mm^2 (2 x 16AWG) with ferrules or 2 x 2.5 mm^2 (2 x 14AWG) without ferrules.

LEDs for status indication

All actual operational states are displayed by front-face LEDs, thus simplifying commissioning and troubleshooting.

Direct reading scales

Direct setting of the time delay without any additional calculation allows accurate time delay adjustment.

Switching currents

The CT-D range timers allow an output load of up to 6 A on devices with 1 c/o contact and up to 5 A on devices with 2 c/o contacts.

Control input

Voltage-related triggering, polarized, capable of switching parallel loads.

1 or 2 c/o contacts

Depending on the device.

The economic CT-E range of electronic timers

The CT-E range with its excellent price/performance ratio offers an ideal solution for serial applications. 56 single-function devices with 5 different time ranges as well as 2 multifunction timers with 6 functions and 8 time ranges offer the highest possible flexibility for almost every application. For high operating cycles, contact-free CT-E timers with solid-state output are available.

Characteristics of the CT-E range:
– Diversity:
    – 2 multifunction timers
    – 56 single-function timers
    – 4 switching relays
– Control supply voltages:
    – Dual range: 24 V AC/DC
    – Single range: 110 - 130 V AC, 220-240 V AC
    – Wide range: 24 - 240 V AC/DC (CT-MFE)
– Time ranges:
    – 5 single ranges: 0.05 - 1 s, 0.1 - 10 s, 0.3 - 30 s, 3 - 300 s, 0.3 - 30 min
    – 8 time ranges: 0.05 s - 100 h (CT-MFE)
– Devices with:
    – 1 c/o (SPDT) contact (250 V / 4 A) or solid-state output for high switching frequencies (thyristor 0.8 A)
– Switching relay CT-IRE for added switching contacts with either side-by-side or diagonally positioned connection terminals

The economic range:

The CT-E range offers a wide range of single-function timers with a very good price/performance ratio in the well-known ABB quality. With a total of 56 electronic timers and switching relays, the devices in this range are the ideal solution for most standard applications, for example in machinery.

Approvals / marks:

(UL)	UL 508, CAN/CSA C22.2 No.14
(GL)	GL
(PG)	GOST
CB	CB scheme[1]
(CCC)	CCC[1]
(RMRS)	RMRS
CE	
C	C-Tick

[1] Except CT-MKE, CT-EKE and CT-AKE

Connection screws in M3 (pozidrive 1)
Easy tightening and release of the connection screws using a pozidrive, panhead or crosshead screwdriver.

LEDs for status indication
All actual operational states are displayed by front-face LEDs, thus simplifying commissioning and troubleshooting.

Direct reading scales
Direct setting of the time delay without any additional calculation allows accurate time delay adjustment.

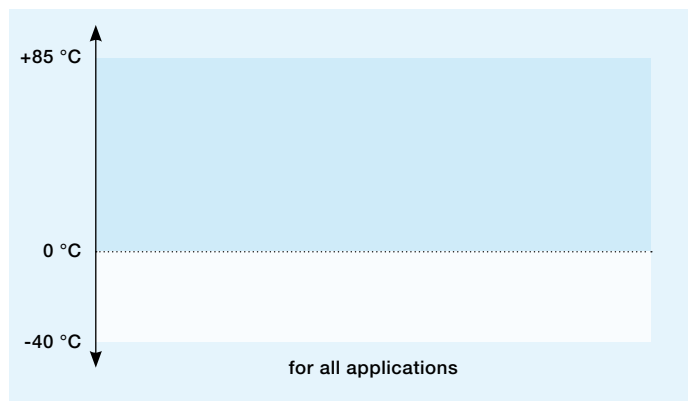# The high-end CT-S range of electronic timers in a new housing

NEW

The highly sophisticated CT-S range is ABB's most modern and universal time relay range. This program includes 24 single-function devices and 16 multifunction timers with up to 11 functions offering the highest flexibility in operation. The devices feature 7 or 10 time ranges that are adjustable from 0.05 seconds to 300 hours.

!NEW!
Extended temperature range from -40 °C to 85 °C

for all applications

Characteristics of the CT-S range:
– Diversity:
  – 8 multifunction timers
  – 13 single-function timers
– Control supply voltages:
  – Multi range: 24 - 48 V DC, 24 - 240 V AC
  – Wide range: 24 - 240 V AC/DC
  – Single range: 380 - 440 V AC
– Devices with:
  – 1 or 2 c/o (SPDT) contacts
  – 2nd c/o (SPDT) contact can be selected as instantaneous contact
  – Remote potentiometer connection
  – Control input with volt-free (dry/floating) or voltage-related (wet/non-floating) triggering e.g. to start timing, pause timing

Approvals / marks:
UL	UL 508, CAN/CSA C22.2 No.14
GL	GL [1]
PCT	GOST
CB	CB scheme [2]
CCC	CCC
CE	
C-Tick	C-Tick

[1] Except CT-VBS.xx
[2] Pending for CT-ARS.xx

The CT-S range in a new housing:
The universal CT-S range offers all devices in a new housing, which provides two different connection possibilities: Double-chamber cage connection terminals or Push-in terminals. The functionality can be extended with different accessories such as a remote potentiometer.

Snap On Housing
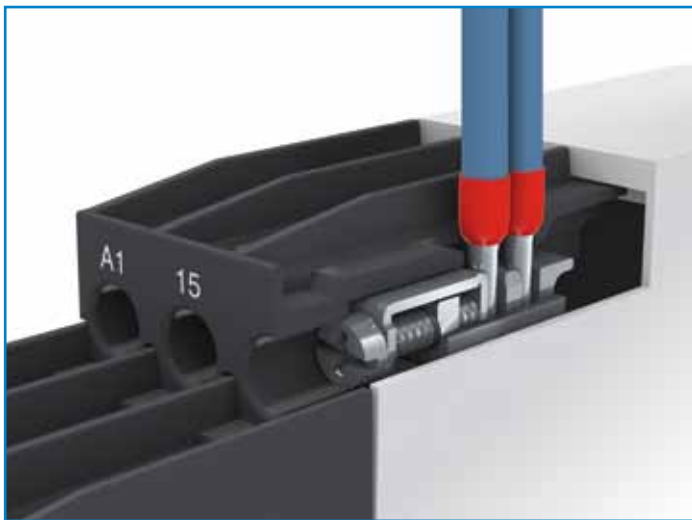Tool free mounting of housing on DIN rail

Time range preselection
Direct assignment of the preselected time range to the fine adjustment potentiometer scale by multicolor scales.

Indication of all operational states
All actual operational states are displayed by front-face LEDs, thus simplifying commissioning and troubleshooting.
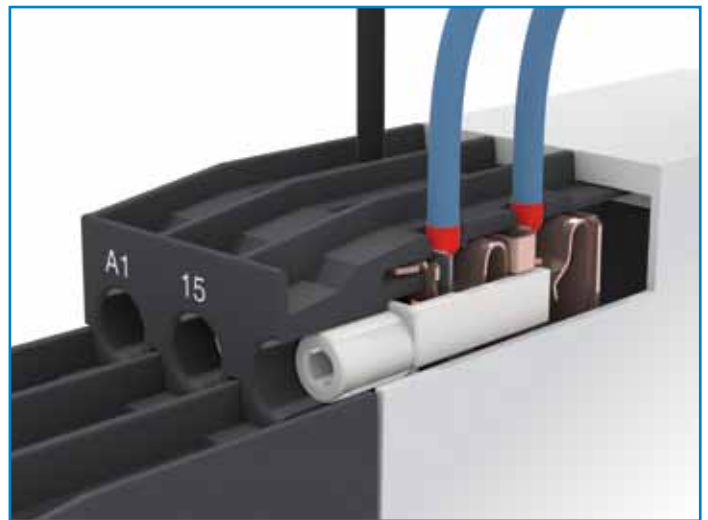
Integrated marker labels
Integrated markers allow the product to be marked quickly and simply. No additional marking labels are required.

Double-chamber cage connection terminals
Double-chamber cage connection terminals provide connection of wires up to 2 x 2.5 mm^2 (2 x 14 AWG), rigid or fine-strand, with or without ferrules. Potential distribution does not require additional terminals.

Easy Connect Technology
Innovative Push-in connection terminals for tool-free installation. The connection is gas-proof and has the same connection direction as the double-chamber cage connection terminals

Accessories for the CT-S range

To extend the functionalities of the CT-S range you can use one of the following accessories:

Remote potentiometer connection
The CT-S range offers the possibility of connecting a remote potentiometer for the fine adjustment of the time delay. When an external potentiometer is connected, the internal front-face potentiometer is disabled.

Sealable transparent cover
Protection against unauthorized changes of time and threshold values. Available as an accessory.

The timing functions in detail

The symbols are printed on all multifunction electronic timers to make adjustment as easy as possible. The following table explains which symbol represents which function.

For further information please have a look at:

Catalogue (2CDC 110 004 C0207)

Panorama (2CDC 110 065 C0201)

Symbol	Function
⊠	ON delay
▬	OFF delay
⊠▬	ON and OFF delay
1⊓⊠	Impulse ON
1⊓▬	Impulse OFF
1⊓⊠	Impulse ON and OFF
⊓⊠	Flasher starting with ON
⊓▬	Flasher starting with OFF
⊓⊠	Flasher starting with ON or OFF
⊠⊓	Pulse generator starting with ON or OFF
⊓⊓	Pulse former
△	Star-delta change-over
△1⊓	Star-delta change-over with impulse
△⊠	Star-delta change-over twice ON-delayed
▭	Switching relay
▭	ON/OFF function
⊠+	Accumulative ON delay
⊠1⊓	Fixed impulse with adjustable time delay
▬1⊓	Adjustable impulse with fixed time delay

Notes

Contact us

ABB STOTZ-KONTAKT GmbH

http://www.abb.com/lowvoltage

-> Control Products   -> Electronic Relays and Controls

                       -> Time Relays

www.abb.com/contacts

Power and productivity
for a better world™

ABB