lors Smitt Wabtec Company



XT-17M-C3 relay - Multifunctional time, Datasheet 8 A, 3 C/O



Description

The XT-17M-C3 is a multifunctional time relay and fullfills all requirements for any function. To be controlled by a supply voltage or control input.

Choice of 10 time ranges:

| 0.1 - 1 s | 1 - 10 s | 0.1 - 1 min | 1 - 10 min |
|-----------|----------|-------------|------------|
| 0.1 - 1 h | 1 - 10 h | 0.1 - 1 d | 1 - 10 d |
| Only on | Only off | | |

The relay has an universal supply voltage 12...240 V AC/DC and 3 change-over contacts 8 A /AC1. It has a multifunctional red LED output indicator that flashes or shines depending of the status.

Application

Multifunctional time relay, suitable for general purpose applications. For example to be used for electrical appliances, control of lights, heating, motors, pumps and fans.

Features

10 functions

- Delay-on after energisation
- Delay-off after energisation
- Recycler starting off
- Recycler starting on
- Delay-off after break of S contact
- Delay-off after make of S contact
- Delay-off after make and break of S contact
- Delay-on / off
- Latching
- Pulse generator -
- 3 C/O contacts 8 A / AC1
- 35 mm rail mounting
- LED indicator red and green Universal supply voltage 12...240
- VAC/DC
- Time range 0.1 s 10 d
- Modular housing, 1 module •

Benefits

- Rated current 8 A / AC1
- Long term availability •
- 17.6 mm wide
- No maintenance

Industry compliancy

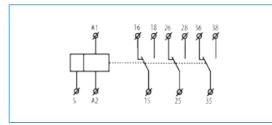
All our relays and accessories are designed according to regulations:

- EN 60255-6
- EN 61010-1
- CE





Connection diagram



Time range

| Time range | 0.1 s - 10 d / only-on / only-off |
|-------------------|-----------------------------------|
| Time setting | Rotary switch & potentiometer |
| Time deviation | 5% mechanical setting |
| Repeat accuracy | 0.2% set value stability |
| Temp. coefficient | 0.01% / °C, at 20 °C |

Control

| Load between S-A2 | Yes |
|---|--|
| Control terminals | A1-S |
| Max. capacity of cable control without connected glow-lamps | 0.1 μF |
| without connected glow-lamps | Glow-lamps cannot connected / N/O |
| | 9 nF (AC 230 V), max. 20 pcs (1 pc - 1 mA) |
| Impulse length | Min. 25 ms / Max. unlimited |
| Reset time | Max. 150 ms |

Output

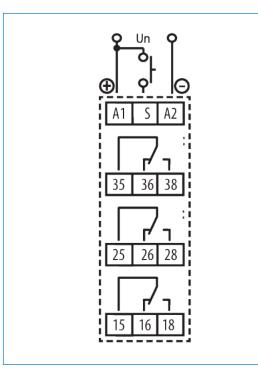
| Number of contacts | 3 change-over / SPDT (AgNi/silver alloy) |
|---------------------------|--|
| Rated current | 8 A / AC1 |
| Breaking capacity | 2000 VA / AC1, 192 W / DC |
| Inrush current | 10 A / < 3 s |
| Switching voltage | 250 V AC1 / 24 VDC |
| Min. breaking capacity DC | 500 mW |
| Output indication | red LED |
| Mechanical life | 3×10^7 operations |
| Electrical life (AC1) | 7×10^4 operations |



Supply

| Supply terminals | A1 - A2 | | |
|--------------------------|--------------------------------|--|--|
| Supply voltage (µn) | 12 - 240 VAC/DC 50/60 Hz | | |
| Supply indication | Green LED | | |
| Power consumption | AC 0.7 - 3 VA / DC 0.5 - 1.7 W | | |
| Supply voltage tolerance | 0.851.1 Un | | |

Connection





Environmental conditions

| Operating temperature | -20 °C+55 °C |
|------------------------------|---|
| Storage temperature | -30 °C+70 °C |
| Electrical strength | 4 kV (supply output) |
| Operating position | Any |
| Mounting 35 mm rail EN 60715 | |
| Protection degree | IP40 front panel / IP20 terminals |
| Overvoltage category | III |
| Pollution degree | 2 |
| Max. cable size | Solid wire max.1 x 2.5 or 2 x1.5 mm ² / with sleeve max. |
| | $1 \text{ x } 2.5 \text{ mm}^2$ |

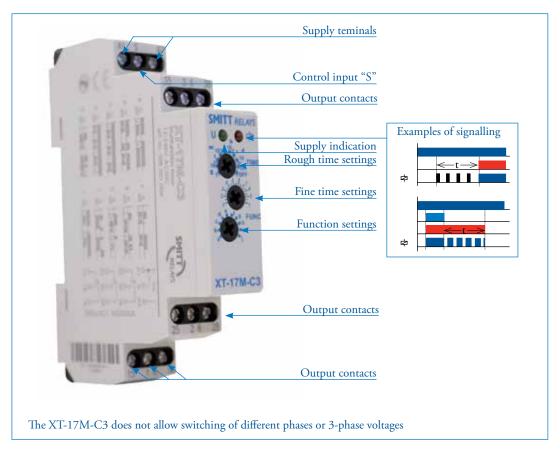
Mechanical data

| Dimensions (d x w x h) | 90 x 17.6 x 64 mm |
|------------------------|------------------------|
| Weight | 89 g |
| Standards | EN 61812-1, EN 61010-1 |

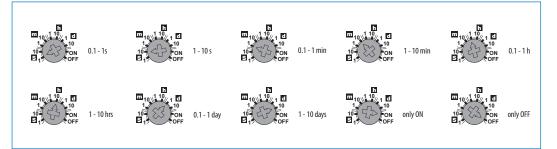




Description



Time ranges





Functions

Delay-on after energisation

When input voltage U is applied, timing delay t begins. Relay contacts R change state after time delay is complete. Contacts R return to their shelf state when input voltage U is removed. Trigger switch is not used in this function.

Delay-off after energisation

When input voltage U is applied, relay contacts R change state immediatly and timing cycle begins. When time delay is complete, contacts return to shelf state. When input voltage U is removed, contacts will also return to their shelf state. Trigger switch is not used in this function.

Recycler starting off When input voltage U is applied, time delay t begins. When time delay t is complete, relay contacts R change state for time delay t. Thisw cycle will repeat until input voltage U is removed. Trigger switch is not used in this function.

Recycler starting on

When input voltage U is applied, relay contacts R change state immediatly and time delay T begins. When time delay t is complete, contacts return to their shelf state for time delay t. This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function

Delay-off after break of S contact

Input voltage U must be applied continuously. When trigger switch S is closed, relay contacts R change state. When trigger switch S is opened, delay t begins. When delay t is complete, contacts R return to their shelf state. If trigger switch S is closed befor time delay t is complete, then time is reset.

When trigger switch S is opened, the delay begins again, and relay contacts R remain in their energized state. If input voltage U is removed, relay contacts R return to their shelf state.

Delay-off after make of S contact

Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. During time-out, the trigger signal S is ignored. The relay resets by applying the trigger switch S when relay is not energized.

Delay-off after make and break of S contact

Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. At the end of the preset time t, the relay contacts R return to preset time out t (before preset time elapses). Continuously cycling of the trigger switch S at a rate faster than the preset time will cause the relay contacts R to remain closed. If input voltage U is removed, relay contacts R return to their shelf state.

Delay-on and -off

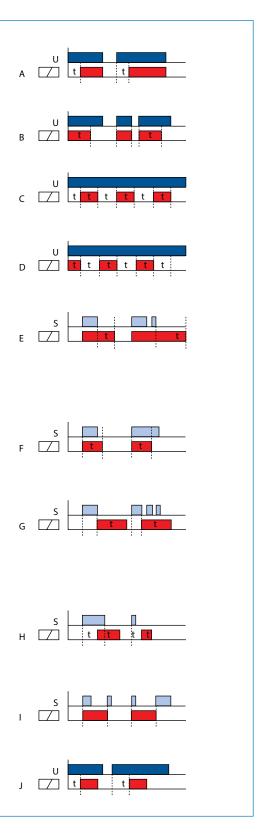
Input voltage U must be applied continuously. When trigger switch S is closed, time delay T begins. When time delay T is complete, relay contacts R change state and remain transferred until trigger switch S is openend. If input voltage U is removed, relay contacts R return to their shelf state

Latching

Input voltage U must be applied continuously. Output changes state with every trigger switch S closure. If input voltage U is removed, relay contacts R return to their shelf state.

Pulse generator

Upon application of input voltage U, a single output pulse of 0.5 seconds is delivered to relay after time delay t. Power must be removed and reaplied to repeat pulse. Trigger switch is not used in this function







XT-17M-C3 relay Ordering codes

| Art. no. | Туре | Time range | Function | Contacts | Voltage range |
|-----------|-------------|----------------|-------------------------|----------|----------------------------------|
| 326001001 | XT-17M-A1 | 0.1 - 1 s | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001009 | XT-17M-A2 | 1 - 10 s | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001010 | XT-17M-A3 | 6 - 60 s | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001011 | XT-17M-A4 | 1 - 10 min | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001012 | XT-17M-A5 | 6 - 60 min | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001013 | XT-17M-A6 | 1 - 10 h | Delay-on | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001002 | XT-17M-B1 | 0.1 - 1 s | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001014 | XT-17M-B2 | 1 - 10 s | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001015 | XT-17M-B3 | 6 - 60 s | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001016 | XT-17M-B4 | 1 - 10 min | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001017 | XT-17M-B5 | 6 - 60 min | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001018 | XT-17M-B6 | 1 - 10 h | Delay-off | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001003 | XT-17M-C1 | 0.1 s - 10 d | Multifunction | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001004 | XT-17M-C3 | 0.1 s - 10 d | Multifunction | 3 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001025 | XT-17M-C1/6 | 0.1 s - 10 h | Multifunction | 1 C/O | 24 - 240 VAC, 50/60 Hz or 24 VDC |
| 326001019 | XT-17M-D | 0.1 s - 10 min | Delay-on / Delay-off* | 2 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001020 | XT-17M-L | - | Latching | 2 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001005 | XT-17M-P | 0.1 s - 100 d | Recycler | 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001006 | XT-17M-S | 0.1 s - 100 d | Star-delta | 2 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001021 | XT-17M-2XA | 0.1 s - 10 d | Delay-on | 2x 1 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001026 | XT-35M-DC2 | Weekly | Digital time | 2 C/O | 12 - 240 VAC/DC, 50/60 Hz |
| 326001028 | XT-35M-DCL1 | Daily - weekly | Digital twilight switch | 1 C/O | 230 VAC, 50/60 Hz |

* without auxiliary supply









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