



Rottweil, 27.10.2021

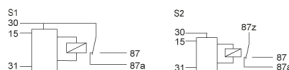
## Time Relay Switch On and Off Delay M1 compact 12 V (1.003.18z.xxE)

Time relays with switch on and off delay can be used if loads are to be switched on and off time-delayed. Please indicate the desired tightening and waste delay time when ordering.

All schematics: Operating voltage is applied to terminal 30/87z. If the voltage is set at Terminal 15, the relay will pull on at the end of the specified time. If the voltage is removed at Terminal 15, the relay falls off after the specified time has elapsed. Circuit diagram S2: The contacts are separate from the control and can therefore be used in links. In this variant, the relay contact is completely potential-free and thus capable of switching alternating voltage. Circuit diagram S3: The relay does not consume a quiescent current by the diode circuitry after the drop. Housing forms can be found in the section housing and basic body.

## Product images

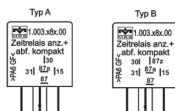
### 1. Connection Diagram



### 4. Time Relay Switch on and off Delay M1 compact 12V



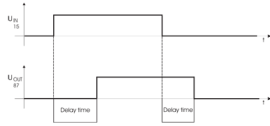
### 2. Design



### 3. Function Diagram



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## General Data

| Name                 | Value           |
|----------------------|-----------------|
| Dimensions           | 30 × 30 × 30 mm |
| Housing material     | Plastic         |
| Type-approval number | 04 7282         |
| Type-approval        | E1 - ECE R10    |
| Number of pins       | 5               |
| In-/Outputs (total)  | 2               |
| Operating voltage    | 12 V            |

## Technical Data

| Name                    | Value                     |
|-------------------------|---------------------------|
| Number of pins          | 5                         |
| In-/Outputs (total)     | 2                         |
| Inputs (total)          | 1                         |
| Inputs (digital)        | 1                         |
| Outputs (total)         | 1                         |
| Relay outputs           | 1                         |
| Processor family        | Texas Instruments MSP 430 |
| Processor               | 16 bit                    |
| Temperature range       | -40 to 85 °C              |
| Protection class        | IP53                      |
| Operating voltage       | 12 V                      |
| Quiescent current (12V) | 1 mA                      |
| Time delay              | By customer request       |
| Programming system      | MRS Realizer              |

## Order options

| Name   | Type | Model                             | Connection diagram | Order no.     |
|--|------|-----------------------------------|--------------------|---------------|
| Time Relay Switch On and Off Delay M1 Compact 12 V | A    | Individual delay time (see below) | S1                 | 1.003.186.xxE |
| Time Relay Switch On and Off Delay M1              | B    |                                   | S2                 | 1.003.187.xxE |



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| Name         | Type | Model | Connection diagram | Order no. |
|--------------|------|-------|--------------------|-----------|
| Compact 12 V |      |       |                    |           |

## Accessories

| Required accessories  | Article number |
|---|----------------|
| Software programming tool MRS Realizer                        | 1.100.000.01   |
| Socket ST FL 9-pin 5 x 6.3 / 4 x 2.8                          | 1.017.002.00   |
| Socket package watertight 30 mm                               | 1.017.010.30   |
| FASTON terminal for latching 2.8 mm 0.5 – 1.0 mm <sup>2</sup> | 105292         |
| FASTON terminal for latching 6.3 mm 1 mm <sup>2</sup>         | 102355         |
| FASTON terminal for latching 6.3 mm 1.5 – 2.5 mm <sup>2</sup> | 103064         |