

ON & OFF DELAY TIMER RELAYS

STR-6DN / STR-6DF

Multi-range timing for industrial, residential and plant applications.



STR-6DN

ON DELAY TIMER



STR-6DF

OFF DELAY TIMER

24-240 V AC/DC

MULTI-RANGE / DIN-RAIL MOUNTING

50/60 Hz

ON & OFF DELAY TIMER RELAYS

STR-6DN / STR-6DF

Adjustable time control for industrial, residential and plant applications.

6 ranges

10 seconds to 100 hours

5 A / 250 V AC

Resistive contact rating

DIN rail

Terminal connection

TECHNICAL SPECIFICATIONS

Operating voltage: STR-6DN	24-240 V AC/DC
Operating voltage: STR-6DF	24-240 V AC/DC
Operating frequency / power	50/60 Hz / <4 VA
Operating temperature	-20°C to +55°C
Selectable time ranges	10 s, 100 s, 10 min, 100 min, 10 h, 100 h
Display	ON LED and output (RLY) LED
Connection / mounting	Terminal connection / DIN rail
Weight / operating altitude	Maximum 120 g / <2,000 m
Contact rating	5 A / 250 V AC, resistive load
Conductor cross-section	2.5 mm ² ; 1.5 mm ² for STR-6DF

TIME SETTINGS

Time Steps: selects the time range.
t: sets the time value within that range.

75-minute example: select 100 min and set t between 7 and 8.

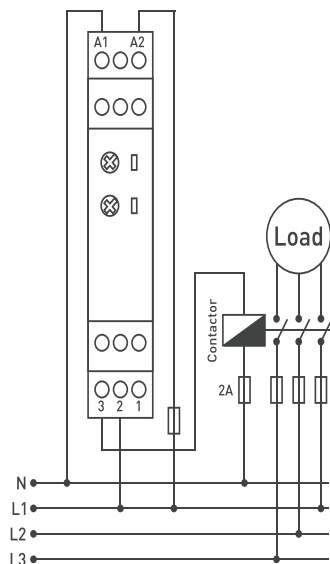
STAGE VALUES

A / B	10 s / 100 s
C / D	10 min / 100 min
E / F	10 h / 100 h

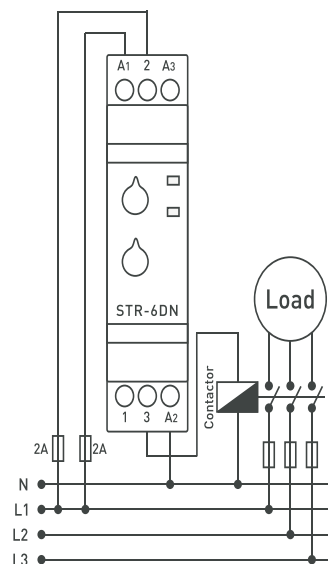
Fine adjustment for 25 hours: first select 10 s and set t between 2 and 3. Energise and measure 2.5 seconds; readjust and recheck as needed. Then select the 100 h range.

Wiring, dimensions & operation

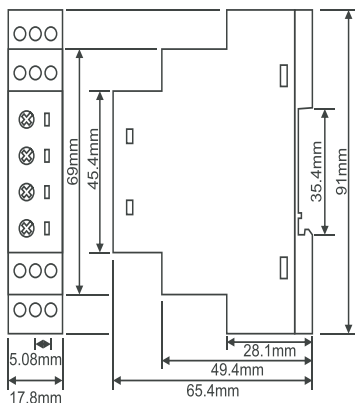
STR-6DF / CONNECTION



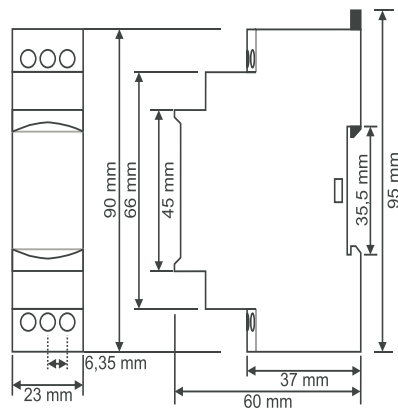
STR-6DN / CONNECTION



STR-6DF / DIMENSIONS (mm)



STR-6DN / DIMENSIONS (mm)



ON-DELAY OPERATING SEQUENCE

After setting the time, apply power. The LED flashes during timing and contact 1 (NC) is active. When the set time ends, the relay LED turns on and contact 3 (NO) becomes active. The device holds this state until power is removed.



MAINTENANCE & USE

Isolate and disconnect before cleaning with a swab. Avoid conductive or chemical cleaning agents and ensure the device is dry afterward. Do not use in wet conditions. Provide an accessible switch and circuit breaker, labelled as the device isolation means. Connect and operate according to the supplied diagrams.

STAR DELTA TIMER RELAY

STR-SD

Timed star-to-delta starting control for three-phase motors.



CONTROLLED CHANGEOVER

Star starting period

The star relay energises when power is applied and stays on for the selected starting time.

Transition interval

Both outputs remain off during the adjustable waiting interval.

Delta operation

The delta relay then energises and remains on until power is removed.

TECHNICAL SPECIFICATIONS

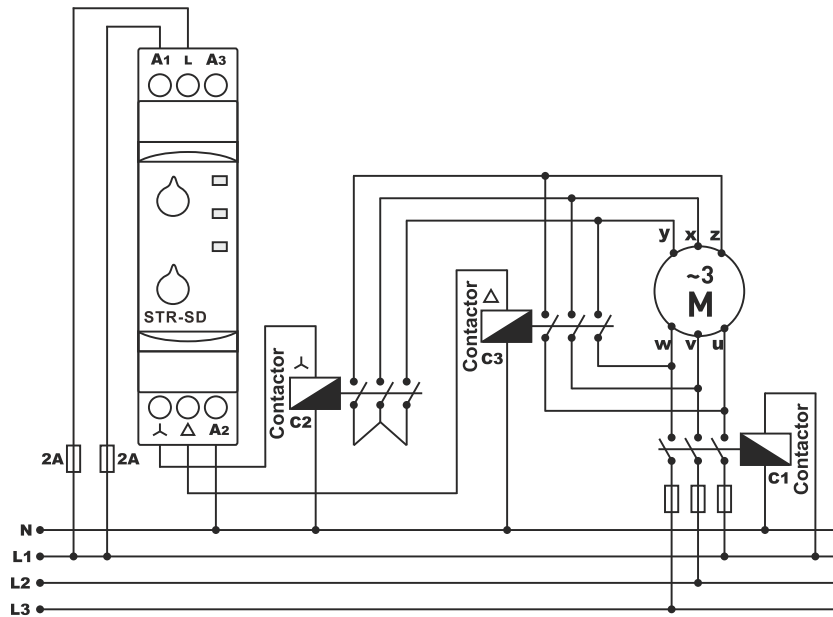
Operating voltage / frequency	150–260 V AC / 50–60 Hz
Operating power / temperature	<6 VA / -20°C to +55°C
Star working time / waiting time	0.1–30 s / 1–500 ms
Contact rating	5 A / 250 V AC, resistive load
Indicators	Power ON, star and delta LEDs
Connection / mounting	Terminal connection / DIN rail
Weight / operating altitude	Maximum 110 g / <2,000 m
Conductor cross-section	2.5 mm ²

Timing note: the technical table specifies 0.1–30 s for star operation; the source operating text states 1–30 s. Confirm the minimum setting for the supplied unit.

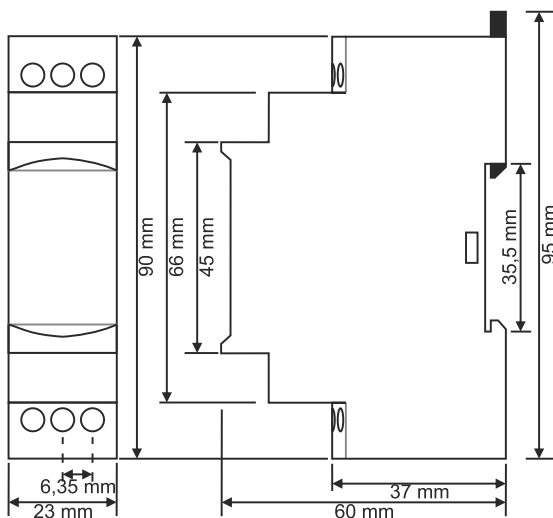
Connection & operating sequence

CONNECTION DIAGRAM

C1 Main contactor C2 Star contactor C3 Delta contactor



DIMENSIONS / mm



TIMING SEQUENCE



1. Star: star contact closes for ton.
2. Waiting: both outputs are off for toff.
3. Delta: delta contact closes and holds until supply power is removed.

INSTALLATION & CARE

Connect according to the diagram. Provide an accessible switch and circuit breaker labelled as the isolation means. Do not use in wet conditions. Isolate and disconnect before cleaning with a swab; avoid conductive or chemical cleaning agents and ensure the device is dry afterward.



MULTIFUNCTION TIMER RELAY

STR-X10

Flexible time control for industrial, residential and factory applications.



SELECT. SET. TIME.

10 selectable functions

On/off delays, single-shot modes, pulse output and equal-time flashing.

Adjustable timing

Select the maximum time (tm), then apply a multiplier (Xn) from 0.1 to 1.0.

DIN-rail installation

Terminal connections with relay, trigger, status and power indication.

$$\text{Time} = t_m \times X_n$$

TECHNICAL SPECIFICATIONS

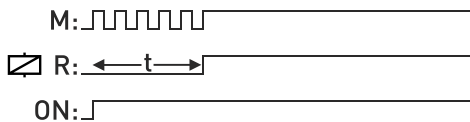
Operating voltage / frequency	12-260 V AC/DC / 50-60 Hz
Operating power / contact rating	<4 VA / 5 A, 250 V AC (resistive load)
Time range / temperature	0.1 second-30 hours / -20°C to +55°C
Connection / mounting	Terminal connection / DIN rail
Protection / operating altitude	IP20 / <2,000 m
Weight / conductor cross-section	<100 g / 0.22-1.5 mm ²
Indicators	Relay, T switch (S), status (M), power (ON)

Rating note: values above follow the supplied manual. The supplied product photo is marked 24-240 V AC/DC and 8 A / 250 V AC1; verify the applicable unit variant before selection.

Timing functions

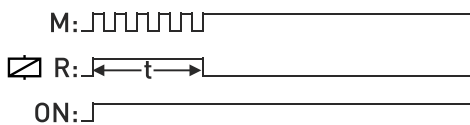
01-05 / FUNCTION REFERENCE

01 ON delay



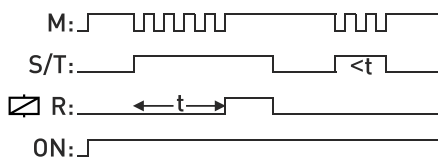
Power-on starts timing; M flashes. At the end of the delay, the relay energises and the relay and M LEDs remain on. Power-off reset is required before repeating.

02 OFF delay



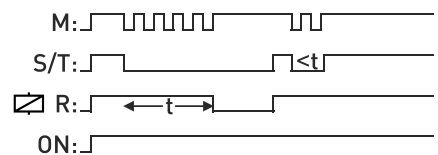
At power-on, the relay energises immediately and timing starts; M flashes. At the end of the delay, the relay switches off, its LED goes out and M remains on. Power-off reset is required.

03 Control ON delay



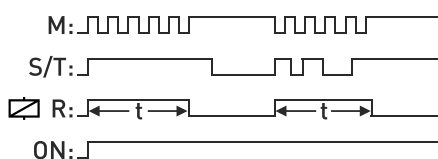
With power applied, turning on the T signal starts timing; M flashes. The relay energises after the delay. If T turns off during timing, timing stops and the elapsed delay is cleared.

04 Control OFF delay



With power applied, turning on T energises the relay immediately and starts timing; M flashes. The relay switches off after the delay. If T turns off during timing, timing stops and the delay is cleared.

05 Single shot: leading edge with control input

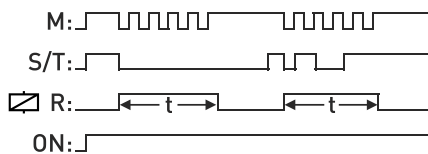


Turning on T energises the relay immediately and starts timing; M flashes. The relay switches off after the delay. Turning T off during the delay does not interrupt timing.

Timing functions

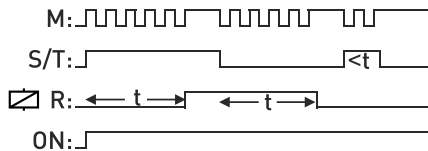
06-10 / FUNCTION REFERENCE

06 Single shot: trailing edge with control input



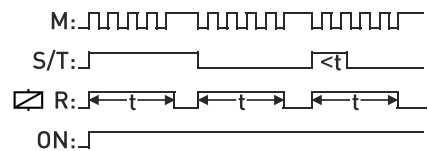
With power applied, the device waits while T is on. Turning T off energises the relay and starts timing; M flashes. The relay switches off at the end of the delay. Subsequent T-off changes do not interrupt timing.

07 ON and OFF delay with control



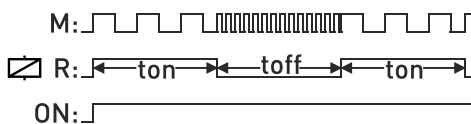
T-on starts timing; the relay energises after the delay. T-off starts a further delay, after which the relay switches off. M flashes while timing. Turning T on during the off-delay stops and clears that delay.

08 Pulse output with control



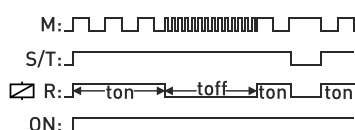
T-on energises the relay immediately and starts timing. The relay switches off after the delay. A new T-on signal repeats the pulse. M flashes while timing. T-off during the delay does not interrupt timing.

09 Equal-time flasher (t = ton = toff)



At power-on, the relay energises immediately. It then switches off after the set delay and repeats equal on/off periods continuously. M flashes during timing. T-off does not interrupt timing.

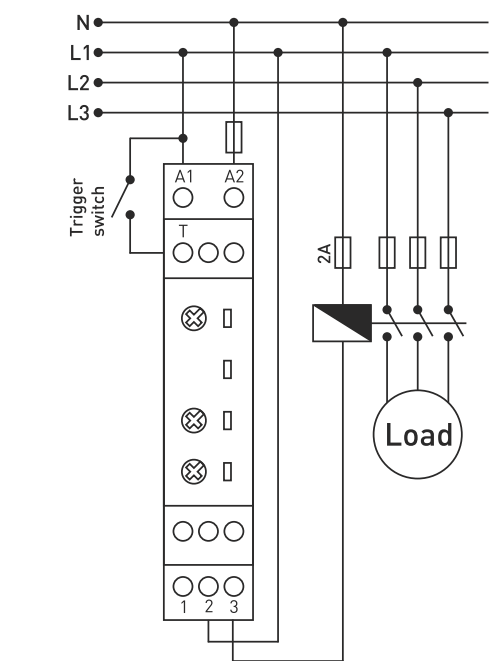
10 Equal-time flasher with control (t = ton = toff)



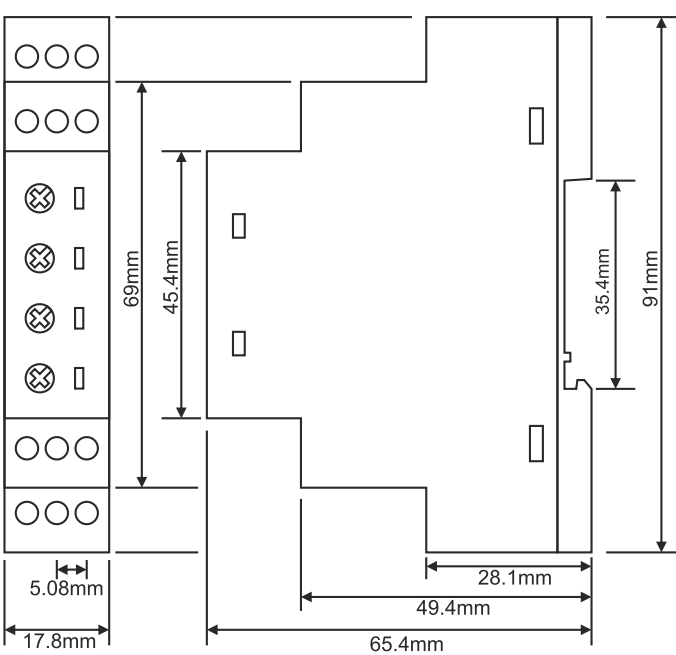
At power-on, the relay energises immediately and repeats equal on/off periods continuously. M flashes during timing. If T turns off during a delay, timing stops, the delay is cleared and the relay output stops.

Installation & settings

CONNECTION DIAGRAM



DIMENSIONS / mm



SETTING THE TIMER

Set the function and time before energising. Fn selects the function; tm selects the maximum time; Xn sets the multiplier from 0.1 to 1.0. Example: 30 min × 0.5 = 15 min.

Change functions with power off. After changing a function while energised, switch the supply off for at least 0.3 seconds, then re-energise so the new function is recognised.

INDICATION & CONTACT STATES

S LED: on when the T switch is on. Relay energised: 1-2 open, 2-3 closed; relay LED on. Relay de-energised: 1-2 closed, 2-3 open; relay LED off. Terminal numbering follows the supplied manual diagram.

CONTACT

support@stefanelectric.com

TIME RANGES

1 s	0.1-1 s
5 s	0.5-5 s
10 s	1-10 s
30 s	3-30 s
60 s	6-60 s
10 min	1-10 min
30 min	3-30 min
60 min	6-60 min
10 h	1-10 h
30 h	3-30 h

MAINTENANCE & USE

Isolate and disconnect before cleaning. Use a swab; avoid conductive or chemical cleaning agents and ensure the device is dry afterward. Do not use in wet conditions. Provide an accessible, labelled switch and circuit breaker for isolation.