

FTS 175 Built-in controls

# **FTS 175**

- DELAY ON AND INTERVAL ON.
- START AND RESET BY NPN SENSOR, OPEN CO-LLECTOR OR PUSH BUTTON.
- Time ranges up to 180 s.
- Repeating precision ± 5%
- Scale precision ± 5%
- Reset 700 ms.
- Built-in adjustable controls.

OPERATING PRINCIPLE

- Led indicating power on.
- Led indicating relay on.
- A.C. or D.C. supply.

### CHARACTERISTICS

#### Technical data in common See page 10 and 11

#### Form of adjustment By means of buttons built in the box, on a direct scale.

#### Time ranges

0.03 s. - 3 s.

0.15 s. - 15 s.

0.3 s. - 30 s. 0.6 s. - 60 s.

1.2 s. - 120 s.

1.8 s. - 180 s.

# Repeating precision ± 5%

# Precision Scale ± 5%.

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#### Maximum time deviation

It admits a  $\pm$  10%, supply voltage variation, keeping the time within the mentioned precision and repeating precision margins.

#### Timing start

Pulse greater than 20 ms.

#### Time reset

Pulse greater than 10 ms. Terminals 6-7 or 5-6-7 or 8-9.

#### Type of contacts

For three wire D.C. sensor: 24 V D.C. 8 mA
Terminal 7 (-)

For Namur sensor

Detecting: 8.2 V D.C. - 3.8 mA Without detecting: 8.2 V D.C. - 0.4 mA Terminal 9 (+)

#### Reset of the time and/or the relay By disconnecting the supply for longer

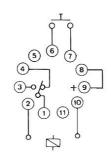
than 700 ms.

#### Accessories

Sockets. IDM system coding ring. Attachment spring. Front mounting frame.

Protecting covers.

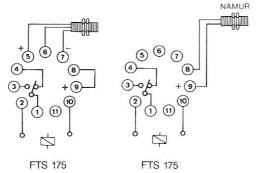
### Example 1



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When the supply voltage is connected, this has no effect on the system. When contacts 6-7 (N.O.) are closed, the time pre-set on the OFF control starts up. After this time, the relay operates. When contacts 6-7 are opened, the time preset on the ON control starts up. After this time, the relay releases.

The succession of pulses in contacts 6-7 with a cadence less than the pre-set time brings about the reset of the time circuit.



Contacts 5-6-7 are prepared for connecting a mechanically operated limit switch, a push-button, and inductive sensor (NPN) or an NPN photocell (light barrier or direct detection type). The power for this type of sensor is supplied by the actual timer (24 V, D.C. terminal 5+).

## Sensor maximum consumption 20 mA.

The Namur type sensors (two wires) must be connected to terminals 8 and 9. In the above cases, these terminals must have a jumper.

The time range for OFF and ON is the same, and combinations of the various ranges cannot be made.

### FUNCTION DIAGRAM

