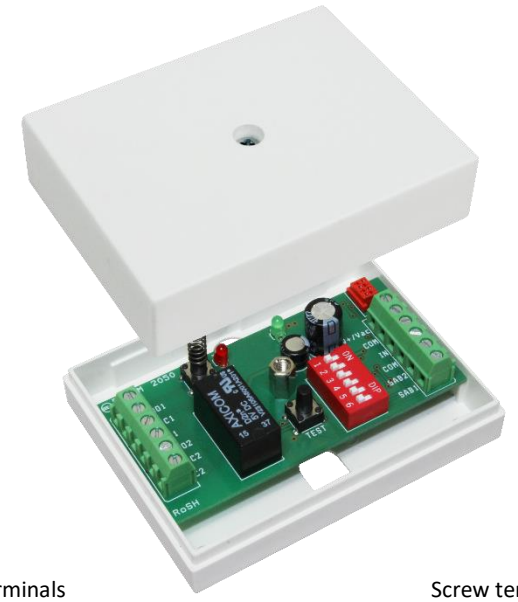
Datasheet and mounting instruction — 28050.01, 28050.03



LSA terminals



Screw terminals



DESCRIPTION

Unit 28050 enables control of load up to 2 A / 30 V with a relay having 2 change over contacts. State of relay can be controlled by magnetic contact or low voltage detector. It has a build in programmable timer function for ON or OFF control. The timer is programmed with a DIP-switch. Control unit can be supplied by DC or AC voltage.

DIP SWITCH SETTINGS

Timer function activating relay is programmed with the help of DIP switch:

- DIP1 – DIP5: time of relay activation
  - Timer OFF – relay follows input state, DIP1=DIP2=DIP3=DIP4=DIP5 = OFF
  - Timer ON from 10 s to 8 h
  - Timer OFF – flip-flop function, relay changes state after every change of input state, DIP1=DIP2=DIP3=DIP4=DIP5 = ON
- DIP6: state of input triggering timer and relay

DIP1 – DIP5: Timer settings

#	DIP1	DIP2	DIP3	DIP4	DIP5	
					OFF	ON
0	OFF	OFF	OFF	OFF	Follow function	3 min
1	ON	OFF	OFF	OFF	10 s	4 min
2	OFF	ON	OFF	OFF	20 s	5 min
3	ON	ON	OFF	OFF	30 s	6 min
4	OFF	OFF	ON	OFF	40 s	7 min
5	ON	OFF	ON	OFF	50 s	8 min
6	OFF	ON	ON	OFF	60 s	9 min
7	ON	ON	ON	OFF	70 s	10 min
8	OFF	OFF	OFF	ON	80 s	15 min
9	ON	OFF	OFF	ON	90 s	20 min
10	OFF	ON	OFF	ON	100 s	30 min
11	ON	ON	OFF	ON	110 s	60 min (1 h)
12	OFF	OFF	ON	ON	120 s	120 min (2 h)
13	ON	OFF	ON	ON	130 s	240 min (4 h)
14	OFF	ON	ON	ON	140 s	480 min (8 h)
15	ON	ON	ON	ON	150 s	Flip-flop function

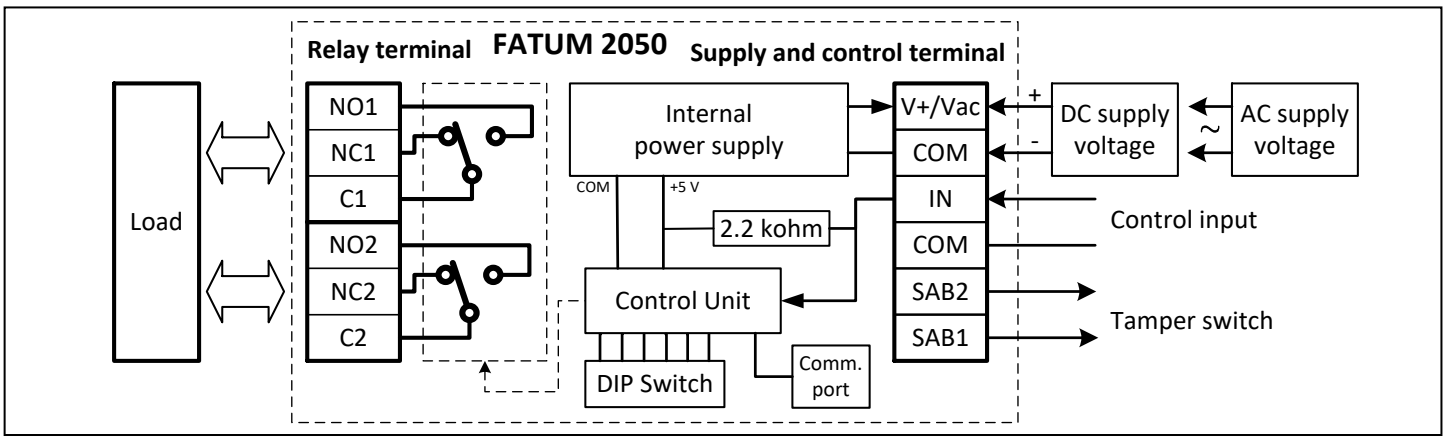
DIP6: Trigger settings

#	DIP6	Activation of relay, timer and flip-flop trigger
0	OFF	Change of control input: OPEN → CLOSED
1	ON	Change of control input: CLOSED → OPEN

TECHNICAL SPECIFICATION

Unit	28050.01	28050.03
Casing	Plastic case	Plastic case
Terminals	LSA	Screw
Relay	DPDT relay	
Relay contact rating	30 Vdc, 2 A	
Supply voltage DC	7 ÷ 30 V	
Supply voltage AC	8 ÷ 20 Vrms, 47 ÷ 63 Hz	
Supply current (relay energized)	18 mA @ 12 Vdc, 11 mA @ 24 Vdc	
Detector input	NC/NO, polarized to +5 V by 2.2 kohm	
Time control	Time is set with a 6 pin DIP-switch for ON/OFF or from 10 s to 8 hours	
Environmental class	EN 50130-5, Class II	
Dimensions	77 x 59 x 27 mm	
Weight	60 g	
Operating temperature	-20 °C to +55 °C	
Compliance	CE, RoHS 2002/95/EC	

BLOCK DIAGRAM



I/O TERMINALS

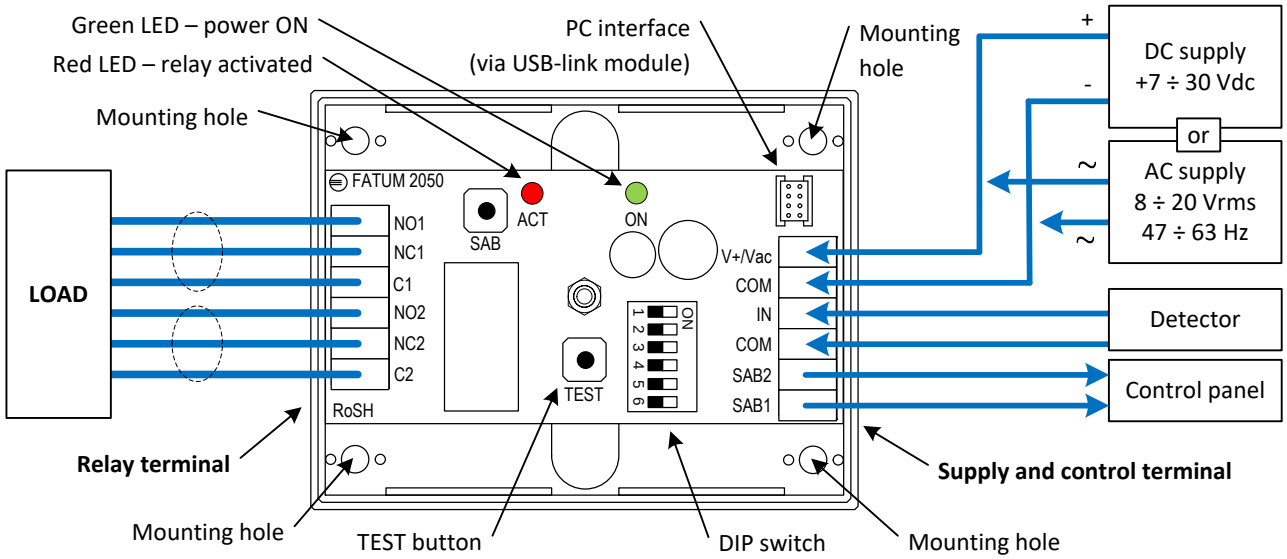
Relay terminal

Marking	Function	
NO1	Normally open contact	Relay switch #1
C1	Common contact	
NC1	Normally connected contact	
NO2	Normally open contact	Relay switch #2
C2	Common contact	
NC2	Normally connected contact	

Supply and control terminal

Marking	Function	
SAB1	Sabotage output	Signalization of open case
SAB2	Sabotage output	
COM	Common ground	Relay control and timer trigger
IN	Control input	
COM	Common ground	DC or AC supplying voltage
V+/Vac	Supply voltage	

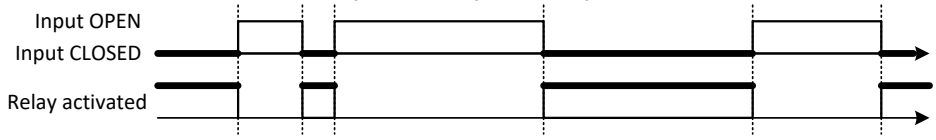
MOUNTING AND CONNECTION DIAGRAM



Press of TEST button is changing relay state for min. 3 s

WAVEFORMS

Follow function, relay activated by CLOSED input



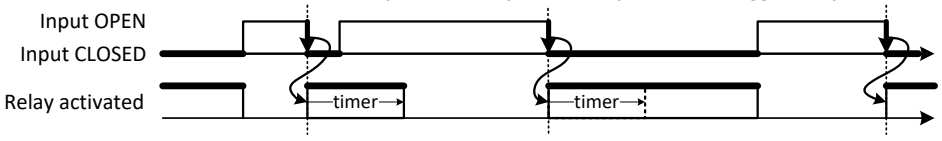
DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
OFF	OFF	OFF	OFF	OFF	OFF

Follow function, relay activated by OPEN input



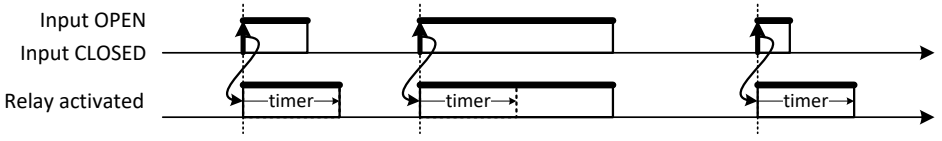
DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
OFF	OFF	OFF	OFF	OFF	ON

Timer function ON, relay activated by CLOSED input + timer triggered by OPEN → CLOSED input



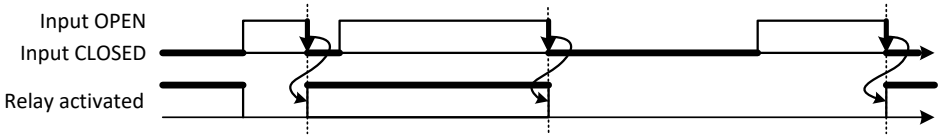
DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
Time settings					OFF

Timer function ON, relay activated by OPEN input + timer triggered by CLOSED → OPEN input
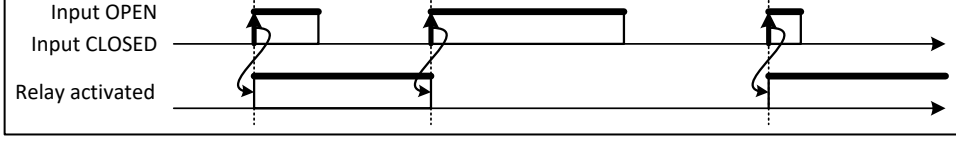


DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
Time settings					ON

Flip-flop function, relay state changed by CLOSED input



DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
ON	ON	ON	ON	ON	OFF

Flip-flop function, relay state changed by OPEN input



DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
Time settings					ON