

Timers

Multifunction

Type DAA51



Preliminary data sheet

- Time range 0.1 s to 100 h
- Knob selection of time range
- Knob adjustable time setting
- Automatic start
- Repeatability: $\leq 0.2\%$
- Output: 8 A SPDT relay
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 17.5 mm DIN-rail housing (DIN 43880)
- Combined AC and DC power supply
- LED indication for relay status and power supply ON

Product Description

Multi-voltage delay on operate timer with 7 selectable time ranges within 0.1 s and 100 h. For mounting on DIN-rail

Housing 17.5 mm wide suitable both for back and front panel mounting.

Ordering Key

DAA 51 C M24

Housing _____

Function _____

Type _____

Item number _____

Output _____

Power supply _____

Type Selection

Mounting	Output	Housing	Supply: 24 VDC and 24 to 240 VAC
DIN-rail	SPDT	Mini-D	DAA51CM24

Time Specifications

Time ranges	
Knob selectable	<div>0.1 to 1 s</div> <div>1 to 10 s</div> <div>6 to 60 s</div> <div>60 to 600 s</div> <div>0.1 to 1 h</div> <div>1 to 10 h</div> <div>10 to 100 h</div>
Setting accuracy	$\leq 5\%$
Repeatability	$\leq 0.2\%$
Time variation	
Within rated power supply	$\leq 0.05\%/V$
Within ambient temperature	$\leq 0.2\%/^{\circ}C$
Reset	
Manual reset of time and/or relay	Close the trigger contact between pins A1 and Y1
Pulse duration	$\geq 100\text{ ms}$

Output Specifications

Output	SPDT relay
Rated insulation voltage	250 VAC (rms)
Contact Ratings (AgSnO2)	μ
Resistive loads	<div>AC 1 8 A @ 250 VAC</div> <div>DC 12 5 A @ 24 VDC</div>
Small inductive loads	<div>AC 15 2.5 A @ 250 VAC</div> <div>DC 13 2.5 A @ 24 VDC</div>
Mechanical life	$\geq 30 \times 10^6$ operations
Electrical life	$\geq 10^5$ operations (at 8 A, 250 V, $\cos \varphi = 1$)
Operating frequency	< 7200 operations/h
Dielectric strength	
Dielectric voltage	2 kVAC (rms)
Rated impulse withstand voltage	4 kV (1.2/50 μ s)

Supply Specifications

Power supply Rated operational voltage through terminals: A1, A2	Overvoltage cat. III (IEC 60664, IEC 60038) 24 VDC \pm 15% and 24 to 240 VAC + 10% -15%, 45 to 65 Hz
Voltage interruption	\leq 40 ms
Rated operational power	2.5 VA @ 240 VAC 1.5 W @ 24 VDC

Time Setting

Centre knob:
Time setting on relative
scale: 10 to 110% on full
scale

Lower knob:
Setting of time range

General Specifications

Power ON delay	\leq 100 ms
Power OFF delay	\leq 100 ms
Indication for Power supply status Output status	LED, green LED, yellow (flashing when timing)
Environment Degree of protection Pollution degree Operating temperature Storage temperature	(EN 60529) IP 20 3 (IEC 60664) -20° to +60°C, R.H. < 95% -30° to +80°C, R.H. < 95%
Weight	100 g
Screw terminals Tightening torque	Max. 0.5 Nm according to IEC 60947
CE-marking	Yes
EMC Immunity Emission	Electromagnetic Compatibility According to EN 50082-2 According to EN 50082-1
Timer Specifications	According to EN 61812-1

Operating Diagram



Mode of Operation

The yellow LED, flashing when timing, is ON as soon as the relay turns ON.

The set delay period begins as soon as the power supply is connected. At the end of the set delay the relay operates and does not release

until the power supply is interrupted for at least 200 ms. If the power supply is interrupted for at least 200 ms before the relay operates the time is set to zero and the circuit is ready for a new time period.

Wiring Diagram

