Timers
Delay on Operate
Types DAA51, DAA71

DAA51

DAA71

- **Time range 0.1 s to 100 h**
- **Knob selection of time range**
- **Knob adjustable time setting**
- **Automatic start**
- **Repeatability: ² 0.2%**
- **Output: 5 A SPDT or 5 A DPDT relays**
- **For mounting on DIN-rail in accordance with DIN/EN/EC 60715**
- **17.5 mm (DAA51C) or 35.5 mm (DAA71D) 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 for SPDT version and 35.5 mm for DPDT version, 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: 12 to 240 VAC/DC	Supply: 24 VDC and 24 to 240 VAC
DIN-rail	SPDT	Mini-D		**DAA 51 C M24**
DIN-rail	DPDT	Mini-D	**DAA 71 D W24**	**DAA 71 D M24**

Time Specifications

Time ranges		
Knob selectable		0.1 to 1 s 1 to 10 s 6 to 60 s 60 to 600 s 0.1 to 1 h 1 to 10 h 10 to 100 h
Setting accuracy		≤ 5%
Repeatability		≤ 0.2%
Time variation		
Within rated power supply		≤ 0.05%/V
Within ambient temperature		≤ 0.2%/°C
Reset		
Power supply interruption		≥ 200 ms

Supply Specifications

Power supply			Overvoltage cat. II (IEC 60664, IEC 60038)
Rated operational voltage through terminals:			
(DAA51C)	A1, A2	M24	24 VDC ± 15% and 24 to 240 VAC + 10% -15%, 45 to 65 Hz
(DAA71D)	A1, A2	M24	24 to 240 VAC +10% -15%, 45 to 65 Hz
		W24	12 to 240 VDC +10% -15% and 12 to 240 VAC +10% -15%, 45 to 65 Hz
Voltage interruption			≤ 10 ms
Rated operational power			
(DAA51C)	AC supply		4 VA
	DC supply		1.5 W
(DAA71D)	AC supply		5.5 VA
	DC supply		2 W

Output Specifications

Output		SPDT or DPDT relays
Rated insulation voltage		250 VAC (rms)
Contact Ratings		µ
DAA51 (SPDT):		
Resistive loads	AC 1	5 A @ 250 VAC
	DC 12	5 A @ 24 VDC
Small inductive loads	AC 15	2.5 A @ 250 VAC
	DC 13	2.5 A @ 24 VDC
DAA71 (DPDT)		
Resistive loads	AC 1	5 A @ 250 VAC
Small inductive loads	AC 15	3 A @ 250 VAC
	DC 13	3 A @ 24 VDC
Mechanical life		≥ 30 x 10^6 operations
Electrical life		≥ 50 x 10^3 operations (at 5 A, 250 V, cos φ = 1)
Dielectric strength		
Dielectric voltage		2 kVAC (rms)
Rated impulse withstand voltage		2.5 kV (1.2/50 µs)

General Specifications

Power ON delay		≤ 100 ms
Indication for		
Power supply ON		LED, green
Output relays ON		LED, yellow (flashing when timing)
Environment		(EN 60529)
Degree of protection		IP 20
Pollution degree		2 (IEC 60664)
Operating temperature		
	(DAA51C)	-25° to +60°C, R.H. < 95%
	(DAA71D)	-20° to +60°C, R.H. < 95%
Storage temperature		-30° to +80°C, R.H. < 95%
Housing		
Dimesions	(DAA51C)	17.5 x 81 x 67.2 mm
	(DAA71D)	35.5 x 81 x 67.2 mm
Material		PA66
Weight		75 g
Screw terminals		
Tightening torque		Max. 0.5 Nm according to IEC EN 60947
Approvals		cULus, RCM CCC (DAA51 only)
CE Marking		Yes
EMC		Electromagnetic Compatibillity
Immunity		According to EN 61000-6-2
Emission		According to EN 61000-6-3

Mode of Operation

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

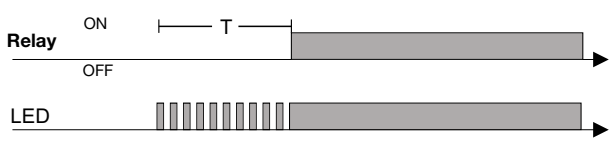
The set delay period begins as soon as the power supply is connected. At the end of the set delay the relay operates and does not release until the power supply is interrupted for at least 200 ms. If the power supply is interrupted for at least 200 ms before the relay operates the time is set to zero and the circuit is ready for a new time period.

Time Setting

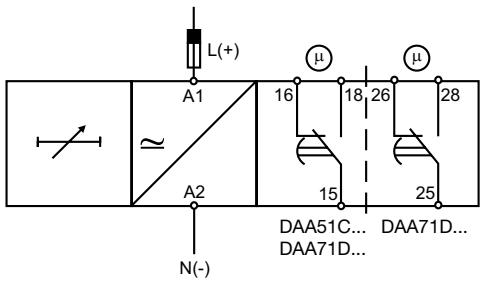
Centre knob:
Time setting on relative scale: From 1 to 10 with respect to the chosen range.

Lower knob:
Setting of time range

Operating Diagram

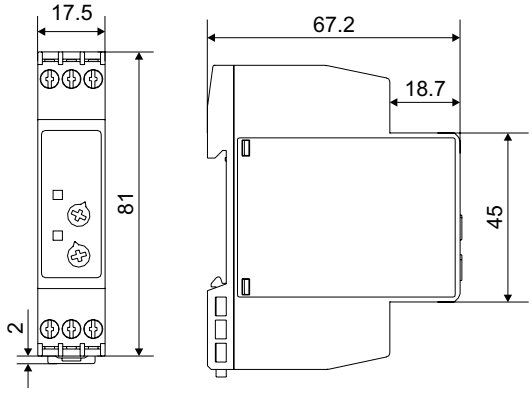


Wiring Diagram



Dimensions

DAA51



DAA71