

Timers

Delay on Operate

Types DAA51, DAA71

CARLO GAVAZZI



DAA51



DAA71

- Time range 0.1 s to 100 h
- Knob selection of time range
- Knob adjustable time setting
- Automatic start
- Repeatability: $\leq 0.2\%$
- Output: 5 A SPDT or 5 A DPDT relays
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 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	Repeatability	$\leq 0.2\%$
	1 to 10 s		
	6 to 60 s	Time variation Within rated power supply Within ambient temperature	$\leq 0.05\%/V$ $\leq 0.2\%/^{\circ}C$
	60 to 600 s		
	0.1 to 1 h	Reset Power supply interruption	≥ 200 ms
	1 to 10 h		
	10 to 100 h		
Setting accuracy	$\leq 5\%$		

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 24 to 240 VAC +10% -15%, 45 to 65 Hz 12 to 240 VDC +10% -15% and 12 to 240 VAC +10% -15%, 45 to 65 Hz
(DAA71D)	A1, A2	M24 W24	
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

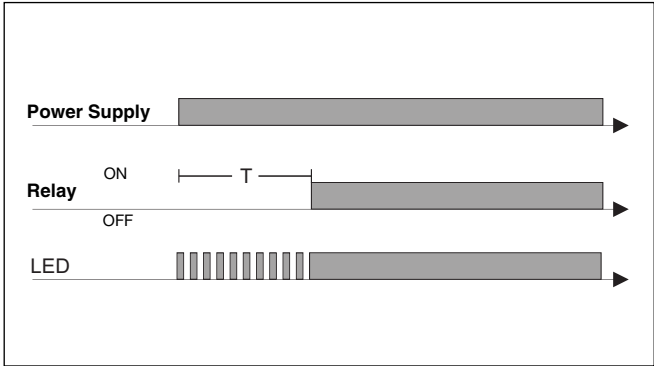
Output	SPDT or DPDT relays
Rated insulation voltage	250 VAC (rms)
Contact Ratings (AgSnO ₂) DAA51 (SPDT): Resistive loads AC 1 DC 12 Small inductive loads AC 15 DC 13	μ
	5 A @ 250 VAC 5 A @ 24 VDC 2.5 A @ 250 VAC 2.5 A @ 24 VDC
DAA71 (DPDT) Resistive loads AC 1 Small inductive loads AC 15 DC 13	5 A @ 250 VAC 3 A @ 250 VAC 3 A @ 24 VDC
Mechanical life	$\geq 30 \times 10^6$ operations
Electrical life	$\geq 10^5$ operations (at 5 A, 250 V, $\cos \varphi = 1$)
Operating frequency	< 7200 operations/h
Dielectric strength Dielectric voltage Rated impulse withstand voltage	2 kVAC (rms)
	2.5 kV (1.2/50 μ s)



General Specifications

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

Operating Diagram



Mode of Operation

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

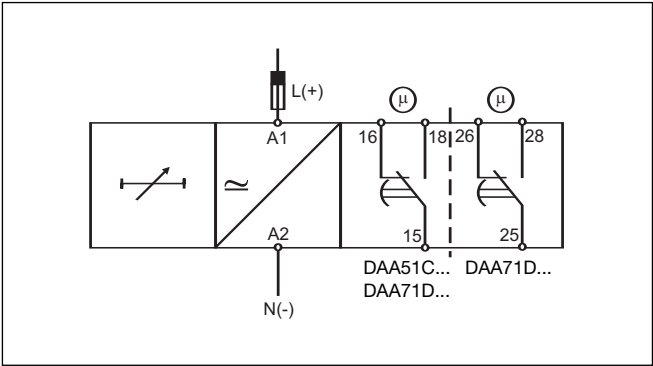
The set delay period begins as soon as the power supply is connected. At the end of the set delay the relay operates and does not release until the power supply is interrupted for at least 200 ms. If the power supply is interrupted for at least 200 ms before the relay operates the time is set to zero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

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

Wiring Diagram



Dimensions

