

Timers

Delay on operate

Types

DAA 51
DAA 71

FAA 01
FAA 08

HAA 08
HAA 14



Dimensions HxWxD (mm)
DIN RAIL housing

81 x 17.5 x 67.2 [Mini-D]

Plug-in housing

81 x 35.5 x 67.2 [Mini-D]

48 x 48 x 83.4

28 x 21.5 x 64

Function

Delay on operate (automatic start)

Delay on operate.
Symmetrical recycler.
Interval.
One shot

Delay on operate.
Symmetrical recycler with
ON or OFF first.
Interval

Input specifications

Time range

0.1 s - 1 s
1 s - 10 s
6 s - 60 s
60 s - 600 s
0.1 h - 1 h
1 h - 10 h
10 h - 100 h

Full scale 12
0.02 - 1.2 s
0.2 - 12 s
2 - 120 s
0.2 - 12 m
2 - 120 m
0.2 - 12 h
2 - 120 h

Full scale 30
0.05 - 3 s
0.5 - 30 s
5 - 300 s
0.5 - 30 m
5 - 300 m
0.5 - 30 h
5 - 300 h

0.1 s - 1 s
1 s - 10 s
6 s - 60 s
60 s - 600 s
0.1 h - 1 h
1 h - 10 h
10 h - 100 h

Output specifications

1 x SPDT relay [C]
1 x DPDT relay [D]

1 x DPDT relay
11-pin [01]
8-pin [08]

1 x 4PDT relay [Q]
1 x DPDT relay [D]
14-pin [14]
8-pin [08]

Max. load AC1

5 A / 250 VAC

5 A / 250 VAC

5 A / 250 VAC

Max. load DC12

5 A / 24 VDC

5 A / 24 VDC

5 A / 24 VDC

Electrical life

>1 x 10⁵ operations

>1 x 10⁵ operations

>1 x 10⁵ operations

General specifications

Power supply

24 VDC / 24-240 VAC [CM24]
24-240 VAC / DC [DM24]
12-240 VAC / DC [DW24]

12-240 VAC / DC

24-240 VAC / DC

Approvals / Marks

CE - UL - CSA - RINA - CCC [DAA51_B001]

CE - UL - CSA

CE - UL - CSA

References

DAA51C M24
DAA71D M24
DAA71D W24

FAA01D W24
FAA08D W24

HAA14Q M24
HAA08D M24

Timers			
	Delay on release		True delay on release
Types	DBA 02 PBA 02	DBA 52	D/PBB 01 D/PBB 02
			
Dimensions HxWxD (mm)	80 x 22.5 x 99.5 [D] 80 x 36 x 94 [P]	81 x 17.5 x 67.2 [Mini-D]	80 x 22.5 x 99.5 [D] 80 x 36 x 94 [P]
DIN RAIL housing			
Plug-in housing			
Function	Delay on release	Delay on release	True delay on release
Input specifications			
Time range	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s 0.1 h - 1 h / 1 h - 10 h 10 h - 100 h	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s 0.1 h - 1 h / 1 h - 10 h 10 h - 100 h	D/PBB01: 0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s D/PBB02: 60 s - 600 s / 0.1 h - 1 h 1 h - 10 h
Output specifications			
	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay [C] 1 x DPDT relay [D]
Max. load AC1	8 A / 250 VAC	5 A / 250 VAC	8 A / 250 VAC
Max. load DC12	5 A / 24 VDC	5 A / 24 VDC	5 A / 24 VDC
Electrical life	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations
General specifications			
Power supply	24 VDC / 24-240 VAC	24 VDC / 24-240 VAC	24-240 VAC / DC [M24] 12-24 VDC [724]
Approvals / Marks	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA
References			
	DBA02C M24	DBA52C M24	DBB01C M24
	PBA02C M24		PBB01C M24
			DBB01D M24
			PBB01D M24
			DBB01C 724
			PBB01C 724
			DBB01D 724
			PBB01D 724
			DBB02C M24
			PBB02C M24
			DBB02D M24
			PBB02D M24

Timers

	True delay on release	Recycler	
Types	DBB 51	DCB 01 PCB 01	DCB 51
			
Dimensions HxWxD (mm) DIN RAIL housing Plug-in housing	81 x 17.5 x 67.2 [Mini-D]	80 x 22.5 x 99.5 [D] 80 x 36 x 94 [P]	81 x 17.5 x 67.2 [Mini-D]
Function	True delay on release	Asymmetrical recycler with ON and OFF time first. One shot. Two state delay on operate	Asymmetrical recycler with ON or OFF first
Input specifications			
Time range	1 s - 10 s [10S] 6 s - 60 s [1M] 60 s - 600 s [10M]	0.1 - 1 s / 1 - 10 s 6 - 60 s / 60 s - 600 s 0.1 h 1 h / 1 h - 10 h 10 h - 100 h	0.1 - 1 s / 1 - 10 s 6 - 60 s / 60 s - 600 s 0.1 h 1 h / 1 h - 10 h 10 h - 100 h
Output specifications			
	1 x SPDT relay	1 x SPDT relay [C] 2 x SPDT relays [D]	1 x SPDT relay
Max. load AC1	5 A / 250 VAC	8 A / 250 VAC	5 A / 250 VAC
Max. load DC12	5 A / 24 VDC	5 A / 24 VDC	5 A / 24 VDC
Electrical life	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations
General specifications			
Power supply	24 VDC / 24-240 VAC	24 VDC / 24-240 VAC [C] 24-240 VAC / DC [D]	24 VDC / 24-240 VAC
Approvals / Marks	CE - UL - CSA - RINA	CE - UL - CSA	CE - UL - CSA
References			
	DBB51C M24 10S	DCB01C M24	DCB51C M24
	DBB51C M24 1M	PCB01C M24	
	DBB51C M24 10M	DCB01D M24	
		PCB01D M24	

Timers

Multifunction				
Types	DMB 01 PMB 01	DMB 51 PMB 71	FMB 01	DMC 01 PMC 01
				
Dimensions HxWxD (mm)	80 x 22.5 x 99.5 [D]	81 x 17.5 x 67.2 [Mini-D] 81 x 35.5 x 67.2 [Mini-D]	48 x 48 x 83.4	80 x 22.5 x 99.5 [D] 80 x 45 x 99.5 [D] 80 x 36 x 94 [P]
DIN RAIL housing				
Plug-in housing	80 x 36 x 94 [P]			
Function	Multifunction: • Delay on operate - manual start • Delay on release • Interval - manual start • Symmetrical recycler • Double interval • Interval on trigger open	Multifunction: • Delay on operate - manual start • Delay on release • Interval - manual start • Symmetrical recycler • Double interval • Interval on trigger open	Multifunction: (Trigger, Gate and Reset inputs) • Delay on operate - manual start • Delay on release • Interval - manual start • Symmetrical recycler • Double interval • Interval on trigger open	Multifunction: • Delay on operate - manual start • Delay on operate - automatic and manual start • Delay on release • Interval - manual start • Interval - automatic and manual start • Interval - manual start with no time reset • Interval - automatic and manual start with no time reset
Input specifications				
Time range	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s 0.1 h - 1 h / 1 h - 10 h 10 h - 100 h	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s 0.1 h - 1 h / 1 h - 10 h 10 h - 100 h	Full scale: 12 0.02 - 1.2 s / 0.2 - 12 s 2 - 120 s / 0.2 - 12 m 2 - 120 m / 0.2 - 12 h 2 - 120 h Full scale: 30 0.05 - 3 s / 0.5 - 30 s 5 - 300 s / 0.5 - 30 m 5 - 300 m / 0.5 - 30 h 5 - 300 h	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s 0.1 h - 1 h / 1 h - 10 h 10 h - 100 h
Output specifications				
	1 x SPDT relay [C] 1 x DPDT relay [D]	1 x SPDT relay [C] 1 x DPDT relay [D]	1 x DPDT relay	1 x SPDT relay [C] 2 x SPDT relay [D]
Max. load AC1	8 A / 250 VAC	5 A / 250 VAC	5 A / 250 VAC	8 A / 250 VAC
Max. load DC12	5 A / 24 VDC	5 A / 24 VDC	5 A / 24 VDC	5 A / 24 VDC
Electrical life	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations	>1 x 10 ⁵ operations
General specifications				
Power supply	24 VDC & 24-240 VAC [C] 24-240 VAC/DC [D]	24 VDC & 24-240 VAC [M24] 12-240 VAC/DC [W24]	12-240 VAC/DC	24 VDC [724] 24 / 48 VAC [B48] 115 / 230 VAC [B23] 24 VAC [024] 115 VAC [115] 230 VAC [230]
Approvals / Marks	CE - UL - CSA - RINA	CE - UL - CSA - RINA - CCC [DMB51_B006]	CE - UL - CSA	CE - UL - CSA
References				
	DMB01C M24	DMB51C M24	FMB01D W24	DMC01C xxx
	PMB01C M24	DMB51C W24		PMC01C yyy
	DMB01D M24	DMB71D M24		DMC01D xxx
	PMB01D M24	DMB71D W24		PMC01D yyy
				xxx= 724, B23, B48 yyy= 724, 024, 115, 230

Timers

	Mini-E timers	Star delta	
Types	EAS EBS ECS	DAC 01 PAC 01	DAC 51
	  		
Dimensions HxWxD (mm)	56 x 22.5 x 49 [Mini-E]	80 x 22.5 x 99.5 [D]	81 x 17.5 x 67.2 [Mini-D]
DIN RAIL housing	56 x 22.5 x 44 [Mini-E] [F]		
Plug-in housing		80 x 36 x 94 [P]	
Function	EAS - Delay on operate (automatic start). EBS - Interval (automatic start). ECS - Symmetrical recycler (ON/OFF automatic start) thyristor output. Screw or fast-ON connection. DIN-rail or chassis mounting		
		Star delta	Star delta
Input specifications			
Time range	[10S] : 0.5 s - 10 s [1M] : 0.1 m - 1 m [10M] : 1 m - 10 m	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s	0.1 s - 1 s / 1 s - 10 s 6 s - 60 s / 60 s - 600 s
Star to delta relay (neutral centre position)		50 - 130 ms between star to delta position	50 - 130 ms between star to delta position
Output specifications			
	Static output 500 mA, 700 mA [F]	1 x SPDT relay (with neutral centre position)	1 x SPDT relay (with neutral centre position)
Max. load AC1		8 A / 250 VAC	5 A / 250 VAC
Max. load DC12		5 A / 24 VDC	5 A / 24 VDC
Electrical life		>1 x 10 ⁵ operations	>1 x 10 ⁵ operations
General specifications			
Power supply	24-230 VAC / DC [EAS] 24-230 VAC [EBS], [ECS]	24-240 VAC / DC [M24] 380-415 VAC [M40]	24-240 VAC / DC
Approvals / Marks	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA
References			
	EAS S M23 ...	DAC01C M24	DAC51C M24
	EAS S M23 ... F	PAC01C M24	
	EBS S M23 ...	DAC01C M40	
	EBS S M23 ... F	PAC01C M40	
	ECS S M23 A ...		
	ECS S M23 B ...		
	ECS S M23 A ... F		
	ECS S M23 B ... F		
	... = insert code for Time Range		