Timers True delay on release Types DBB01, PBB01





• Time range 0.1 to 600 s - capacitor powered

- 4 time ranges selectable by DIP-switches
- Knob-adjustable time setting
- Automatic start after drop-out of power supply
- Repeatability: < 0.2%
- Output: 8 A SPDT or 8 A DPDT relay
- For mounting on DIN-rail in accordance with DIN/EN 50 022 or Plug-in

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- 22.5 mm Euronorm or 36 mm Plug-in module housing
- Combined AC and DC power supply
- LED indication for power supply ON

Product Description

Multi voltage true delay on release timer with 4 time ranges from 0.1 to 600 s selectable by DIP-switches.

For mounting on DIN-rail (DBB01) or Plug-in (PBB01).

Ordering key	DBB 01 C M24
Housing Function Type Item number Output Power Supply	

Type Selection

Mounting	Output	Housing	Supply: 12 to 24 VDC	Supply: 24 to 240 VAC/DC
For DIN-rail	SPDT DPDT	D - Housing D - Housing	DBB 01 C 724 DBB 01 D 724	DBB 01 C M24 DBB 01 D M24
Plug-in	SPDT DPDT	P - Housing P - Housing P - Housing	PBB 01 C 724 PBB 01 D 724	PBB 01 C M24 PBB 01 D M24

Time Specifications

Time ranges Selectable by DIP-switches	0.1 to 1 s 1 to 10 s 6 to 60 s 60 to 600 s	
Repeatability	≤ 0.2%	
Time variation Within rated power supply Within ambient temperature	≤ 0.05% ≤ 0.2%	
Reset	Power supply applied for min. 200 ms	

Supply Specifications

Power supply Rated operational voltage through terminals:		Overvoltage cat. III (IEC 60664, IEC 60038)
(DBB01M24)	A1, A2	24 to 240 VAC/DC
(PBB01M24)	2, 10	+10% -15%, 45 to 65 Hz
(DBB01724)	A1, A2	12 to 24 VDC
(PBB01724)	2, 10	+15% -10%
Voltage interruption		≤ 40 ms
Rated operational	power	
AC supply:		2.2 VA
DC supply:		0.6 W

Output Specifications

Output		SPDT or DPDT relay	
Rated insulation volta	ige	250 VAC (RMS)	
Contact Ratings (AgN	i)	μ	
Resistive loads	AC 1 DC 12		
Small inductive loads	AC 15 DC 13	2.5 A @ 250 VAC 2.5 A @ 24 VDC	
Mechanical life		\geq 2 x 10 ⁶ operations	
Electrical life	AC1	$\geq 10^{\circ}$ operations (at max load)	
Operating frequency		< 3600 operations / h	
Dielectric strength Dielectric voltage Rated impulse withsta voltage	and	2 kVAC (RMS) 4 kV (1.2/50μs)	



General Specifications

Power ON delay		≤ 200 ms	
Power OFF delay		≤ 100 ms	
Indication for Power supply ON		LED, green	
Environment Degree of protection Pollution degree Operating temperature Storage temperature		(EN 60529) IP 20 3 (DBB01), 2 (PBB01) (IEC 60664) -20 to 60 °C, R.H. < 95% -30 to 80 °C, R.H. < 95%	
Housing Dimensions	DBB01 PBB01	22.5 x 80 x 99.5 mm 36 x 80 x 94 mm	
Weight		Approx 120 g	
Screw terminals Tightening torque		(DBB01) Max 0.5 Nm according to IEC EN 60947	
Approval		UL (except 724) CSA (except 724)	
CE Marking		Yes	
EMC Immunity Emission		Electromagnetic Compatibility According to EN 61000-6-2 According to EN 61000-6-3	
Timer Specification	S	According to EN 61812-1	

Mode of Operation

When the power supply is applied the relay operates. When the power supply is interrupted the time period starts and, at the end of the set time period, the relay releases.

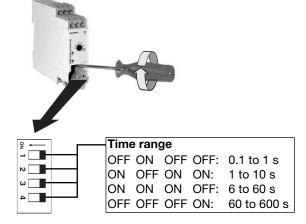
If power supply is reapplied before the realy releases the time is reset and the relay remains ON. **Note:** DBB01, PBB01 should not be operated by pulses shorter than 200 ms. For these purposes the relays DMB01 or PMB01, operated by external contact function, should be used.

Range/Time Setting

Adjust the time range setting the DIP-switches 1 and 2 as shown below. To access the DIP-switches open the plastic cover using a screwdriver as shown below.

Centre knob:

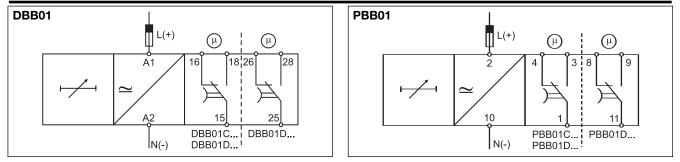
Time setting on relative scale: 1 to 10 with respect to the chosen range.



Operation Diagram

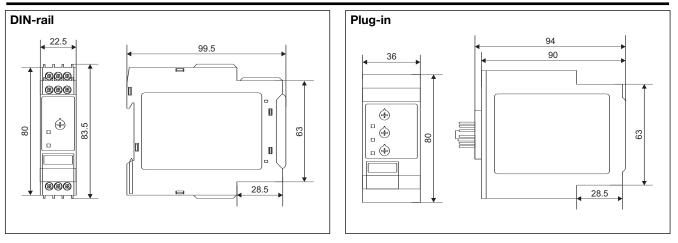


Wiring Diagrams



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Dimensions



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Authorized Distributor

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PBB01DM24 PBB01C724 PBB01CM24 PBB01D724 DBB01DM24 DBB01C724 DBB01CM24 DBB01D724