

Technical data time relays and multifunction time relays

	CE	CE	CE
	MFZ12NP	EZ12^{b)}/MFZ12^{b)}	DZ12/DMZ12.1
Time on	100 %	100 %	100 % ¹⁾
Max./min. temperature at mounting location	+ 50°C / - 20°C	+ 50°C / - 20°C	+ 50°C / - 20°C
Contact material/contact gap	AgSnO ₂ /0,5 mm	AgSnO ₂ /0,5 mm	AgSnO ₂ /0,5 mm
Spacing of control connections/contact	3 mm, MFZ12NP (C1-C2): 8 mm		
Test voltage contact to contact	1000V		
Test voltage control connection to contact	2000V, C1-C2: 4000V		
Rated switching capacity	16A/250V AC	10A/250V AC	10A/250V AC
Incandescent lamp and halogen lamp load 230V ²⁾	3600W ⁵⁾	1000W	1000W
Fluorescent lamp load in lead-lag, inductive or capacitive	3600VA ⁵⁾	1000VA	1000VA
Fluorescent lamp load shunt-compensated	1200VA ⁵⁾	5000VA	5000VA
Electronic ballast gears (EVG)	240-500W ⁵⁾	I _{on} ≤ 70A/10ms ³⁾	I _{on} ≤ 70A/10ms ³⁾
Inductive load cos φ = 0,6/230V AC	1200VA ⁵⁾	650VA	650VA
Max. switching current DC1 (not for NP-Type): 12V/24V DC	8A	8A	8A
Life at rated load, cos φ = 1 resp. for incandescent lamps 1000 W at 100/h	>10 ⁵	>10 ⁵	>10 ⁵
Life at rated load, cos φ = 0,6 at 100/h	> 4 x 10 ⁴	> 4 x 10 ⁴	> 4 x 10 ⁴
Temperature dependence	<0,2 % je °C	<0,2 % je °C	<0,2 % je °C
Repeat accuracy at 25°C	±0,1 %	±0,1 %	±0,1 %
Setting accuracy from 1 minute	–	±0,2 %	±0,2 %
Control voltage dependence from 0,9 to 1,1 x rated voltage	non	non	non
Stored energy time in the event of power failure (then total reset)	≥0,2 seconds	≥0,2 seconds	≥0,2 seconds
Control current 8V(DMZ/DZ: 12V)/230V ± 20 %	2/5 mA	0,03 / 1,0 mA	0,04 / 1,0 mA
Control current 8V DC(DMZ/DZ: 12V DC)/230V DC ± 20 %	–	0,05 / 1,7 mA	0,07 / 1,7 mA
Control current C1- C2 8V/230V (10s)	2mA/100mA(5mA)	–	–
Power consumption in case of continuous power supply, 12V/230V UC, relay off	–/0,6W	0,02 / 0,1W	0,2 / 2,5 W
Power consumption in case of continuous power supply, 12V/230V UC, relay on	–/0,9W	0,07 / 0,15W	0,2 / 2,5 W ⁴⁾
Max. parallel capacitance (length) of the control leads at 230V	0,2 μF (ca. 600 m)	0,2 μF (ca. 600 m)	0,2 μF (ca. 600 m)
Shock-hazard protection (on the device)	VDE 0106 part100	VDE 0106 part100	VDE 0106 part100
Terminal cross-section	12 mm ²	12 mm ²	12 mm ²
Maximum conductor cross-section	6 mm ²	6 mm ²	6 mm ²
Screw head	slotted/Phillips, pozidriv		

Compliance with

VDE 0435, EN 61000-6-3, EN 61000-6-1 and EN 60669

^{b)} Bistable relay as make contact. Before applying voltage to the connected consumer, the automatic synchronization of approx. 2 seconds after installation must be completed.

¹⁾ Only for continuous supply voltage > 110V and 60 min "relay on" a ventilation clearance of ½ module on both sides is necessary. If necessary use spacer DS12 (page Z1). For 230V a capacitor of 0,33 μF series connected to B1 is sufficient.

²⁾ For lamps with a load of 200W max.

³⁾ For electronic ballast gears a 40-fold inrush current has to be calculated.

⁴⁾ The DMZ12.1 and DZ are internally clocked on the supply circuit at "relay on", so currents as high as 1 A can occur in the μs range.

⁵⁾ The maximum load can be used from a delay time or clock cycle of 5 minutes. The maximum load will be reduced for shorter times as follows: up to 2 seconds 500W, up to 2 minutes 1000W, up to 5 minutes 2000W.