

	MFZ12DDX^{b)} MFZ12DX^{b)} RVZ/AVZ/TGI/ EAW12DX^{b)}	MFZ12NP PTN12	MFZ12-230V A2Z12-UC^{b)}	MFZ61DX^{b)}	S2U12DDX^{b)}	MFZ12PMD
Contacts						
Contact material/contact gap	AgSnO ₂ / 0.5 mm	AgSnO ₂ / 0.5 mm	AgSnO ₂ / 0.5 mm	AgSnO ₂ / 0.5 mm	AgSnO ₂ / 0.5 mm	Power MOSFET
Spacing of control connections/contact	6 mm	3 mm	6 mm	6 mm	6 mm	6 mm
Spacing of control connections C1-C2/contact	–	6 mm	–	–	–	–
Test voltage control connections/contact	4000V	2000V	4000V	4000V	4000V	4000V
Test voltage C1-C2/contact	–	4000V	–	–	–	–
Rated switching capacity	10 A/250 V AC	16 A/250 V AC	10 A/250 V AC	10 A/250 V AC	16 A/250 V AC	400 W
Incandescent lamp and halogen lamp load ¹⁾ 230 V, I _{on} ≤ 70 A/10 ms	2000 W ³⁾	2300 W ³⁾	1000 W ³⁾	2000 W ³⁾	2000 W ³⁾	400 W
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	1000 VA ³⁾	1000 VA ³⁾	500 VA ³⁾	1000 VA ³⁾	1000 VA ³⁾	–
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	500 VA ³⁾	500 VA ³⁾	250 VA ³⁾	500 VA ³⁾	500 VA ³⁾	–
Compact fluorescent lamps with EVG* and energy saving lamps ESL	15x7 W 10x20 W ^{3) 4) 5)}	15x7 W 10x20 W ^{3) 5)}	I _{on} ≤ 35 A/10 ms ^{2) 3) 5)}	15x7 W 10x20 W ^{3) 4) 5)}	15x7 W 10x20 W ^{3) 4) 5)}	100 W ⁵⁾
230 V LED lamps	up to 200 W ⁵⁾ I _{on} ≤ 120 A/5 ms	up to 200 W ⁵⁾ I _{on} ≤ 30 A/20 ms	up to 200 W ⁵⁾ I _{on} ≤ 120 A/5 ms	up to 200 W ⁵⁾ I _{on} ≤ 120 A/5 ms	up to 200 W ⁵⁾ I _{on} ≤ 120 A/5 ms	–
Max. switching current DCI: 12 V/24 V DC	8 A	–	8 A	8 A	8 A	–
Life at rated load, cos φ = 1 for incandescent lamps 1000 W at 100/h	> 10 ⁵	> 10 ⁵	> 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	> 4 x 10 ⁴	> 4 x 10 ⁴	∞
Maximum conductor cross-section (3-fold terminal)	6 mm ² (4 mm ²)	6 mm ² (4 mm ²)	6 mm ² (4 mm ²)	4 mm ²	6 mm ² (4 mm ²)	6 mm ² (4 mm ²)
Two conductors of same cross-section (3-fold terminal)	2.5 mm ² (1.5 mm ²)	2.5 mm ² (1.5 mm ²)	2.5 mm ² (1.5 mm ²)	1.5 mm ²	2.5 mm ² (1.5 mm ²)	2.5 mm ² (1.5 mm ²)
Screw head	slotted / cross-head, pozidriv	slotted / cross-head, pozidriv	slotted / cross-head, pozidriv	slotted / cross-head	slotted / cross-head, pozidriv	slotted / cross-head, pozidriv
Type of enclosure/terminals	IP50/IP20	IP50/IP20	IP50/IP20	IP30/IP20	IP50/IP20	IP50/IP20
Electronics						
Time on	100 %	100 %	100 %	100 %	100 %	100 %
Max./min. temperature at mounting location	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Temperature dependence	< 0.2 % per °C	< 0.2 % per °C	< 0.2 % per °C	< 0.2 % per °C	< 0.2 % per °C	< 0.2 % per °C
Repeat accuracy at 25°C	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%
Control voltage dependence from 0.9 to 1.1x rated voltage	none	none	none	none	none	none
Stored energy time in the event of power failure (then total reset)	≥ 0.2 seconds	≥ 0.2 seconds	≥ 0.2 seconds	≥ 0.2 seconds	7 days	≥ 0.2 seconds
Standby loss (active power) 230V	MFZ12DDX: 0.5W; MFZ12DX: 0.4-0.6 W; RVZ/AVZ/TGI/ EAW12: 0.4 W	0.5 W	0.4 W	0.4 W	0.4 W	0.3 W
Standby loss (active power) 12V/24V	0.02 W/0.04 W; MFZ12DDX: 0.05 W/0.1 W	–	–	0.02 W/0.04 W	0.03 W/0.06 W	–
Control current 230 V-control input local ±20%	–	2 mA	2 mA; A2Z12: –	–	–	–
Control current universal control voltage 8/12/24/230V (<10s) ± 20%	0.05/0.1/ 0.2/1 mA	2/4/9/5 (100) mA	A2Z12: 0.05/ 0.1/0.2/1 mA	0.05/0.1/ 0.2/1 mA	0.04/0.05/ 0.1/1.2 mA	10 (100) mA
Max. parallel capacitance (approx. length) of the control leads at 230V AC	0.2 μF (600 m)	0.01 μF (30 m) C1-C2: 0.03 μF (100 m)	0.01 μF (30 m); A2Z12: 0.2 μF (600 m)	0.2 μF (600 m)	0.2 μF (600 m)	0.9 μF (3000 m)

* EVG = electronic ballast units; KVG = conventional ballast units³⁾ Bistable relay as relay contact. The switched consumer may not be connected to the mains before the short automatic synchronisation after installation has terminated.¹⁾ For lamps with a load of 150W max.²⁾ A 40-fold inrush current must be calculated for electronic ballast devices. For steady loads of 1200W or 600W use the current-limiting relay SBR12 or SBR61. See chapter 14, page 14-8.³⁾ The maximum load can be used from a delay time or clock cycle of 5 minutes. The maximum load is reduced for shorter times as follows: up to 2 seconds 15%, up to 2 minutes 30%, up to 5 minutes 60%.⁴⁾ When using DX types close attention must be paid that zero passage switching is activated!⁵⁾ Usually applies for dimmable energy saving lamps and dimmable 230V LED lamps. Due to differences in the lamps electronics, there may be a restriction on the maximum number of lamps; especially if the connected load is very low (for 5W-LEDs).

To comply with DIN VDE 0100-443 and DIN VDE 0100-534, a Type 2 or Type 3 surge protection device (SPD) must be installed.