Type	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 Spacing of control connections C1-C2/contact	6 mm –	3 mm 6 mm	6 mm –	6 mm –	6 mm –	6 mm –
Test voltage control connections/contact Test voltage C1-C2/contact	4000 V –	2000 V 4000 V	4000 V –	4000 V –	4000 V –	4000 V –
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 10x20W [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 DC1: 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	$>4x10^4$	$>4x10^4$	$>4x10^4$	$>4x10^4$	$>4x10^4$	∞
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 ºC	< 0.2% per ºC	< 0.2% per ºC	< 0.2% per ºC	< 0.2% per ºC	< 0.2% per ºC
Repeat accuracy at 25ºC	±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) 230 V	MFZ12DDX: 0.5 W; 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) 12 V/24 V	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%	–	2mA	2mA; A2Z12: –	–	–	–
Control current universal control voltage 8/12/24/230 V (<10 s) ± 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 230 V 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 units [b] 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 150 W max. [2] A 40-fold inrush current must be calculated for electronic ballast devices. For steady loads of 1200 W or 600 W 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 230 V 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 5 W-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.

Compliance with: EN 61000-6-3, EN 61000-6-1, EN 60 669 (S2U12DDX: EN 60730-1)