

# SP1MXN-TZX0240-25

1 phase | normally open solid state AC 240V | synchr zero | Screw IP 00



## Main circuit

Output type	TRIAC		
Type	Synchronised zero		
Rated voltage AC	240 V		
Output voltage range AC	24 ... 280 V		
Operating frequency	47 ... 63 Hz		
Recommended minimum contact load	100 mA		
Maximum leakage current @ rated voltage A	5 mA		
Maximum voltage drop @ rated current	≤ 1.5 V rms		
Repetitive peak voltage in off-state	600 Vpk		
Maximum off state dv / dt	200 V / μs		
Maximum non repetitive di / dt	50 A / μs		
Contact type	Screw		
Contact	1 NO		
Load current	<b>10 A</b>	<b>16 A</b>	<b>25 A</b>
Thermal derating, refer to:	Fig. 2	fig. 3	fig. 4
Inrush current @ 10 ms	120 A	160 A	250 A
I <sup>2</sup> t @ 10 ms	50 A <sup>2</sup> s	128 A <sup>2</sup> s	312 A <sup>2</sup> s

## Control circuit

Operating voltage range	4 ... 32 V DC
Max. input current @ max. operating voltage	25 mA
Pick-up voltage	4 V DC
Release voltage	1 V DC
Power consumption DC	0.8 W

## Insulation

Rated test voltage input/output	4000 Vrms / 1 min
Rated test voltage input output/base	2500 Vrms / 1 min
Overtoltage category	III

## General data

Ambient temperature storage (no ice)	-30 ... 100 °C
Ambient temperature operation	-30 ... 80 °C
Pick-up time	10 ms
Release time	10 ms
Power Factor	> 0.5
Protection degree	IP 00
Dimension	fig. 5.
Weight	35 g
Housing material	PBT

## Product references

Description	Type	010	016	025
1 NO, LED, RC Protection	SP1MXN-TZX0240N...X/DC4-32V	✓	o.r.	o.r.
1 NO, LED, TVS (*2) and RC protection	SP1MXN-TZX0240T...X/DC4-32V	✓	o.r.	✓
1 NO, LED, MOV (*1) and RC protection	SP1MXN-TZX0240V...X/DC4-32V	o.r.	o.r.	o.r.

Select load current to complete product reference  
 (\*1) Maximum operating voltage allowed by MOV: 300 V AC  
 (\*2) TVS protection voltage: 480 V

## Heatsinks (to be used either with SP1M/pad or thermal grease)

Heatsinks	Thermal resistance [°C/W]	Dimensions H x W x D (mm)	Mounting type
HS_003	1.9	81x50x82.5	DIN rail (with clip)
HS_010	2.8	80x32x50	Panel (with screws)
HS_012	2.1	80x50x50	Panel (with screws)
HS_015	0.6	106x80x96	Panel (with screws)
HS_020	1.6	106x50x96	Panel (with screws)

## Accessories

Thermal conducting pad	SP1M/pad
Transparent cover   can be removed after assembly	SP1MXN/cover



fig. 1. Wiring diagram

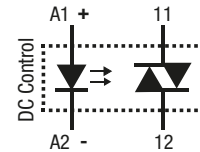


fig. 2. Thermal derating curve 10 A

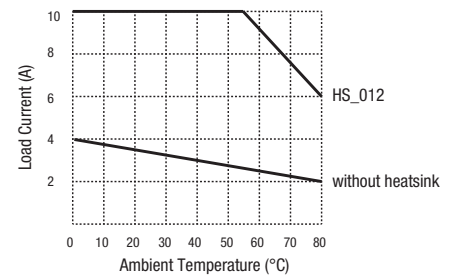


fig. 3. Thermal derating curve 16 A

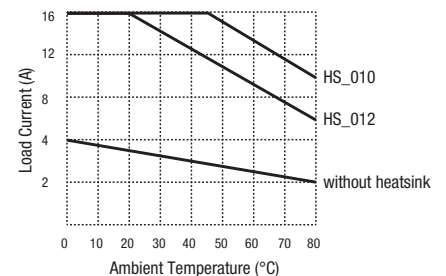


fig. 4. Thermal derating curve 25 A

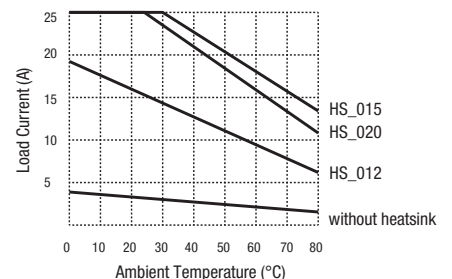


fig. 5. Dimension (mm)

