

# SP1MXF-TIX0380-25

1 phase | normally open solid state AC 380V | synchr zero | Faston IP 00

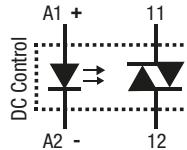


## Main circuit

Output type	TRIAC
Type	Instantaneous
Rated voltage AC	380 V
Output voltage range AC	24 ... 440 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	Faston
Contact	1 NO
Load current	<b>10 A</b>
Thermal derating, refer to:	fig. 2
Inrush current @ 10 ms	120 A
I <sub>2t</sub> @ 10 ms	50 A <sup>2</sup> s
	<b>16 A</b>
	fig. 3
	160 A
	128 A <sup>2</sup> s
	<b>25 A</b>
	fig. 4
	250 A
	312 A <sup>2</sup> s



fig. 1. Wiring diagram



## 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
Overshoot category	III

## General data

Ambient temperature storage (no ice)	-30 ... 100 °C
Ambient temperature operation	-30 ... 80 °C
Pick-up time	1 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	SP1MXF-TIX0380N...X/DC4-32V	✓	✓	✓
1 NO, LED, TVS (*2) and RC protection	SP1MXF-TIX0380T...X/DC4-32V	O.r.	✓	✓
1 NO, LED, MOV (*1) and RC protection	SP1MXF-TIX0380V...X/DC4-32V	O.r.	O.r.	O.r.

Select load current to complete product reference

(\*1) Maximum operating voltage allowed by MOV: 420 V AC

(\*2) TVS protection voltage: 750 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)

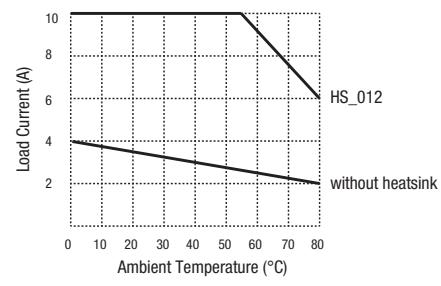


fig. 2. Thermal derating curve 10 A

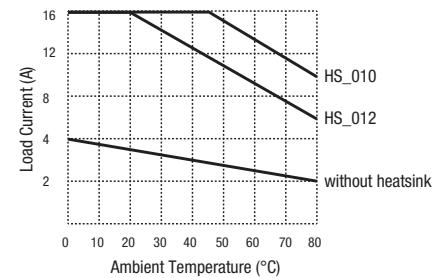


fig. 3. Thermal derating curve 16 A

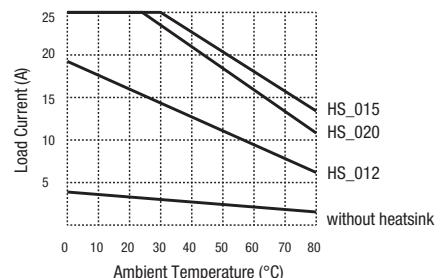


fig. 4. Thermal derating curve 25 A

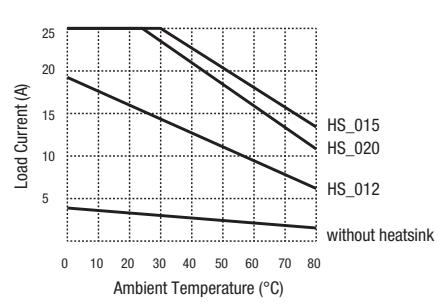


fig. 5. Dimension (mm)

## Accessories

Thermal conducting pad	SP1M/pad
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