SP1MXF-TIX0240-25

1 phase | normally open solid state AC up to 280 V, 25 A | synchr zero | Faston IP 00

Main circuit

Output type	TRIAC		
Type	Instantaneous		
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	Faston		
Contact	1 NO		
Load current	**10 A**	**16 A**	**25 A**
Thermal derating, refer to:	fig. 2.	fig. 3.	fig. 4.
Inrush current @ 10 ms	120 A	160 A	250 A
I2t @ 10 ms	50 A^2s	128 A^2s	312 A^2s

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
Overvoltage 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-TIX0240N…X/DC4-32V	✓	o.r.	✓
1 NO, LED, TVS (*2) and RC protection	SP1MXF-TIX0240T…X/DC4-32V	✓	o.r.	✓
1 NO, LED, MOV (*1) and RC protection	SP1MXF-TIX0240V…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 (witd 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

fig. 1. Wiring diagram

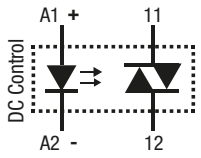


fig. 2. Thermal derating curve 10 A

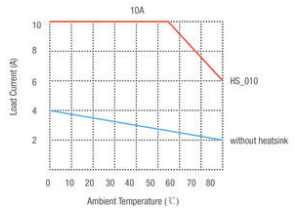


fig. 3. Thermal derating curve 16 A

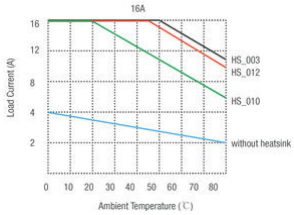


fig. 4. Thermal derating curve 25 A

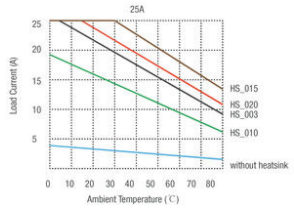
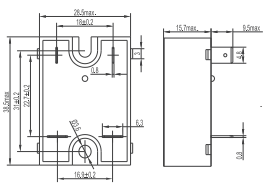


fig. 5. Dimension (mm)



Technical approvals, conformities

Standards EN 60950-1, EN 62314

Approvals