FSS15

Solid State Relay

- 4000V dielectric strength
- Photo isolation
- Nuilt-in snubber
- Zero-cross or random turn-on
- Panel mount

Technical data

Applications

Incubator, air conditioners, fuel dispensers, programmable controllers.

Description

The FSS-15 offers 3-32VDC input control, with outputs rated at 10, 15, 20, 25 or 40Amps. All models include an internal snubber. The relays provide 4000Vrms opto-isolation, between input and output. Encapsulation, thermally conductive epoxy.

Ordering information

FSS15 B - 10 - Z

- Zero cross Function:
  P : Non-Zero Cross Turn-On
  Z : Zero Cross Turn-On
- Load Current:
  10=10A 15=15A 20=20A 25=25A 40=40A
- Load Supply Voltage:
  NIL: 48-240VAC
  B : 48-440VAC
- Relay model

Specifications

Input

Models	FSS15(B)-Z10	FSS15(B)-Z15	FSS15(B)-Z20	FSS15(B)-Z25	FSS15(B)-Z40
Control voltage range	3 - 32VDC	3 - 32VDC	3 - 32VDC	3 - 32VDC	3 - 32VDC
Must operate voltage	3VDC Max.	3VDC Max.	3VDC Max.	3VDC Max.	3VDC Max.
Must release voltage	1.0VDC Min.	1.0VDC Min.	1.0VDC Min.	1.0VDC Min.	1.0VDC Min.
Maximum input current	15mA at 32VDC	15mA at 32VDC	15mA at 32VDC	15mA at 32VDC	15mA at 32VDC
Max Reverse Protection Voltage	-32VDC	-32VDC	-32VDC	-32VDC	-32VDC
All parameters at 25°C					

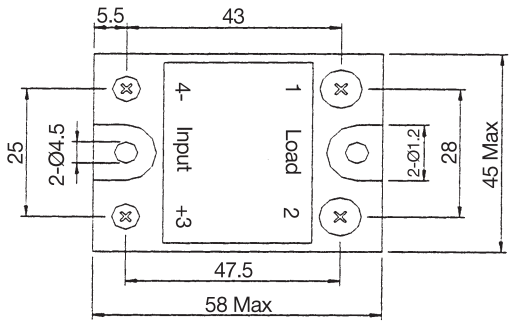
Output

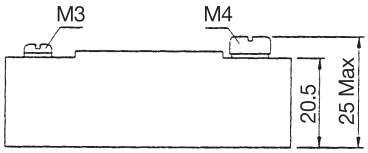
Load Voltage Range	FSS15	48 - 240Vrms	48 - 240Vrms	48 - 240Vrms	48 - 240Vrms	48 - 240Vrms
(47-63Hz)	FSS15B	48 - 440Vrms	48 - 440Vrms	48 - 440Vrms	48 - 440Vrms	48 - 440Vrms
Translent	FSS15	600Vpk	600Vpk	600Vpk	600Vpk	600Vpk
Overvoltage	FSS15B	800Vpk	800Vpk	800Vpk	800Vpk	800Vpk
Load Current Range		0.1 - 10Arms	0.1 - 15Arms	0.1 - 20Arms	0.1 - 25Arms	0.1 - 40Arms
Max Surge Current		100Apk	150Apk	200Apk	250Apk	400Apk
Max Leakage Current		3mA	5mA	5mA	10mA	10mA
Max On-State Voltage Drop		1.5Vrms	1.5Vrms	1.5Vrms	1.5Vrms	1.5Vrms
Max Turn-On Time		10ms	10ms	10ms	10ms	10ms
Max Turn-Off Time		10ms	10ms	10ms	10ms	10ms
Min Off-State dv/dt		200V/µs	200V/µs	200V/µs	200V/µs	200V/µs
Min Power Factory		0,5	0,5	0,5	0,5	0,5
All parameters at 25°C						

General

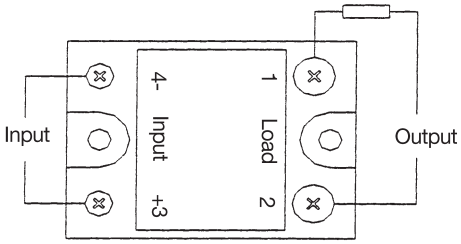
Dielectric Strenght (50/60 Hz for 1 minute)		4000 Vrms min.	4000 Vrms min.	4000 Vrms min.	4000 Vrms min.	4000 Vrms min.
Transulation Resistance (500 VDC)		1000MΩ Min.	1000MΩ Min.	1000MΩ Min.	1000MΩ Min.	1000MΩ Min.
Max Capacitance Input/Output		8pF	8pF	8pF	8pF	8pF
Ambient Temp	Operating	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
	Storage	-30°C to +100°C	-30°C to +100°C	-30°C to +100°C	-30°C to +100°C	-30°C to +100°C
Ambient Humidity		45 - 85%	45 - 85%	45 - 85%	45 - 85%	45 - 85%
Weight		Approx. 135g max.	Approx. 135g max.	Approx. 135g max.	Approx. 135g max.	Approx. 135g max.
Dielectric Strength is measured between input and output.						

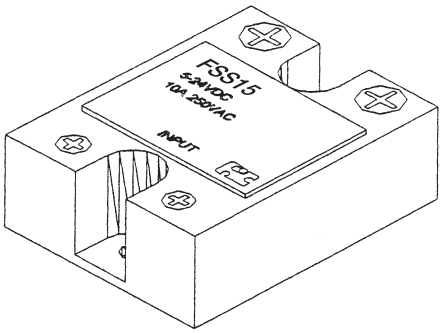
DIMENSIONS (mm)

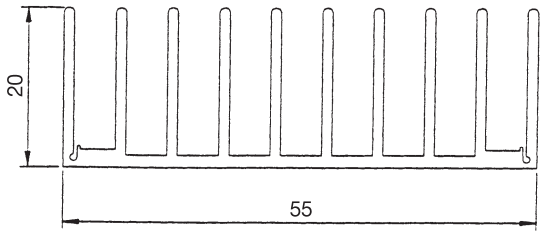




WIRING







Installation

Close Mounting

When mounting Solid-state relays (SSRs) side by side, provide a space equivalent to the width of a single SSR between two adjacent SSRs. Other, reduce the current flow to 1/2 to 1/3 of the rated current.

Heat Sink Mounting

To mount an SSR in a heat sink, apply a heat conductive grease to the metal back surface of the SSR. Press the SSR firmly on to the heat sink to ensure a good seal. Screw the SSR down to the heat sink.