



Product Overview

The AX-SSR1 Series of single phase DIN Rail mounting Solid State Relays are designed for ease of use as they require no additional Heatsinks . Applications include electric heating coils, duct heaters, lighting circuits and electric furnaces. The AX-SSR Series use solid-state switching with “zero crossing technology” for minimum RFI and provides accurate switching control. and are designed to mount on TS35 section DIN Rail. Various control input options are available, both ac and dc.

Features

- 4-38Vdc , 24vac and 230Vac input options
- 4.8kW and 6kW Models
- Zero Volt Switching
- Neutral Pass Through Terminals
- Integral Heatsink
- DIN Rail (TS35) Mounting

Product Specifications

Control Input:	24	24Vac
	DC	4-38Vdc
	230	230Vac
Rated Load:	SSR1-20-xx	20A (resistive) 4.8kW
	SSR1-25-xx	25A (resistive) 6.0kW
LED Indication:		ON when output is on.
Load Supply:		230Vac
Terminals:	Input	Rising Clamp for 0.5-2.5mm ² Cable
	Load	Rising Clamp for 6mm solid or 4mm stranded
Ambient Temp. Range:		0 to 55°C
		Note; The units are rated at 40°C. If using at higher ambient temperature de-rate the units by 10% for every 5°C above 40°C upto 50°C.
Dimensions:	SSR1-20-xx	90(w) x 95(h) x 80(d) mm
	SSR1-25-xx	130(w) x 95(h) x 85(d) mm
Country of Origin:		United Kingdom

Order Codes - Specify Control Input

xx= 24= 24vac or DC=4-38Vdc or 230=230Vac

AX-SSR1-20-xx	Solid State Relay Single Phase 4.8kW
AX-SSR1-25-xx	Solid State Relay Single Phase 6kW

Installation and Configuration

The AX-SSR1 Series solid State Relays are designed for mounting on a TS35 Section DIN Rail and must be installed with their heatsink cooling fins in a vertical plane. Allow a minimum of 100mm between units mounted in a vertical plane.

Load Supply and Back-up Protection:

It is recommended that a load disconnect switch and a contactor are installed in the load supply. Fuses or MCB's (miniature circuit breakers) are required to provide back-up protection. High Speed Fuses will protect the solid-state switching devices against short circuit currents. Solid state relays do not provide safety isolation .

Maximum Heating Load

The power rating of the units are given as a guide. The maximum current (which is dependant on the actual supply voltage and heating load) must not be exceeded.

Principle of Operation

The solid-state relay module comprises an opto-isolated input device, coupled to a power semi-conductor. This output device acts as a switch, operating when the applied load voltage crosses or is very close to zero volts. This type of control, referred to as "zero volt switching" ensures minimal RFI is generated and therefore compliance with EMC regulation is achieved

CAUTION!

In normal operation the heatsink surface can exceed 90°C. Dangerous voltages exist on the PCB and particular care should be taken. The AX-SSR1 Series Solid State Relays must be installed in accordance with the relevant statutory regulations and installation must be carried out by an experienced and fully qualified engineer.

Ventilation:

The AX-SSR1 Series are designed for a maximum ambient temperature of 40°C which should not be exceeded. If necessary, enclosures or control panels should be ventilated with a cooling fan.

See note in product specification for de-rating to be applied above ambient of 40°C.

Connection Details

