

RF1 mini puck solid state relays

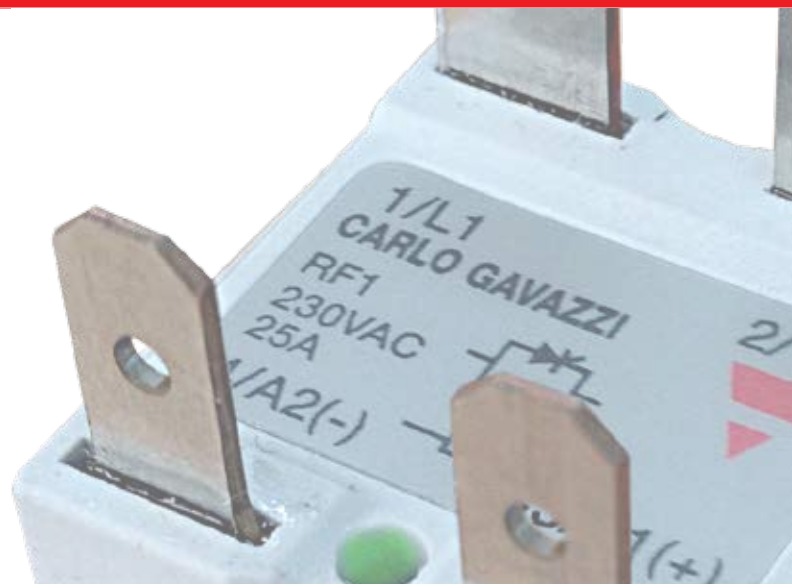
Switches

RF1 series

Mini puck solid state relay

The **RF1** mini puck solid state relay complements the extensive range of Carlo Gavazzi solid state switching solutions with the addition of a new compact platform that occupies only 30% the space normally required with standard hockey puck solid state relays.

Despite the compact dimensions, reliability is not compromised. Switching is done through back to back thyristors that are more robust compared to triacs. The use of wire bonding assembly technology adapted in the design of the **RF1** ensures less mechanical and thermal stresses on the output chips leading to a longer product lifetime. The **RF1** is the solution when space is a constraint and when trouble free frequent switching of resistive loads is required.



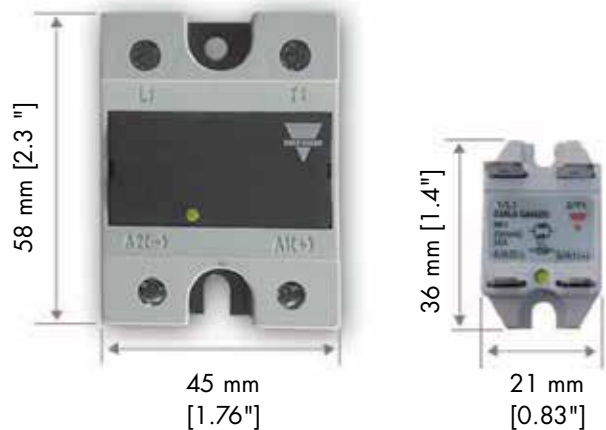
Compact solid state relay for quick mounting

Main Features

- 1-phase AC solid state relay
- Zero cross switching or Instant on switching
- Back to back thyristors for output switching
- Long lifetime through reduced stresses on output chips
- Ratings up to 280 VAC, 25 AAC @ 80 °C (176 °F)
- 5 VDC, 12 VDC or 24 VDC control voltage
- LED indication for control ON
- Integrated output overvoltage protection
- 100,000 cycle (endurance) tests according to UL508
- Conformance to EN 60335-1 requirements
- Pre-attached thermal interface to SSR backplate

Space Economy

- A solution that occupies only 30% the space of standard hockey puck SSRs



Applications

- Coffee machines
- Vending machines
- Kitchen appliances
- Temperature control units
- Climatic chambers
- Packaging machines



A space and cost saving solution without compromises

Reliability
integrated overvoltage protection with transils

Fast installation
Quick connect terminals

Robustness
Back to back thyristors

Long lifetime
Less mechanical and thermal stress on the output chips with wire bond technology

Safety
3750 Vrms isolation between input and output

User friendly
Green LED for control ON indication

Ready for use
Pre-attached thermal interface to SSR backplate

Selection Guide

Solid state relays

Switching mode	Operational voltage	Max. current	Control voltage		
			4.25 - 9 VDC	9 - 18 VDC	18 - 28.8 VDC
Zero Cross	24 - 280 VAC	25 AAC	RF1A23L25	RF1A23M25	RF1A23D25
Instant On			RF1B23L25*	RF1B23M25**	RF1B23D25

Heatsink accessories

Reference	Mounting	Dimensions (mm) Width x Height x Depth	Max. rating with mounted RF1 @ 40 °C (104 °F)
RHS5050RFD	Panel	80 x 50 x 51	15 AAC
RHS38ARFD	Panel, Thru wall	46 x 76 x 33	16 AAC

* 4.5 - 9 VDC for RF1B ** 11 - 18 VDC for RF1B

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