

## RF1 mini puck solid state relays

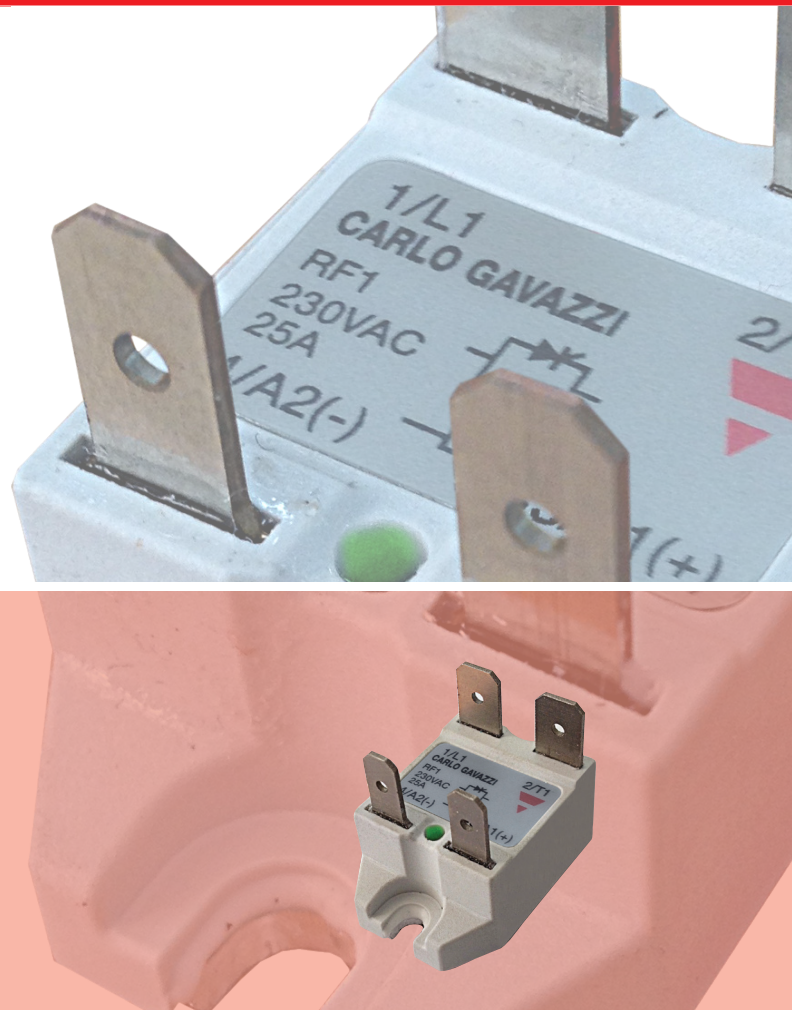
# Switches

# 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.



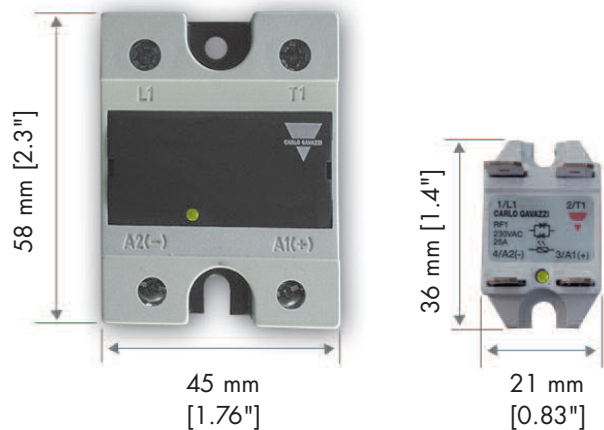
## Compact solid state relay for quick mounting

### 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

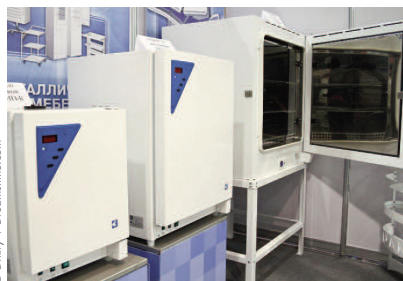
### Space Economy

- 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 bonding technology

**Safety**  
3750Vrms 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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