

## **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.



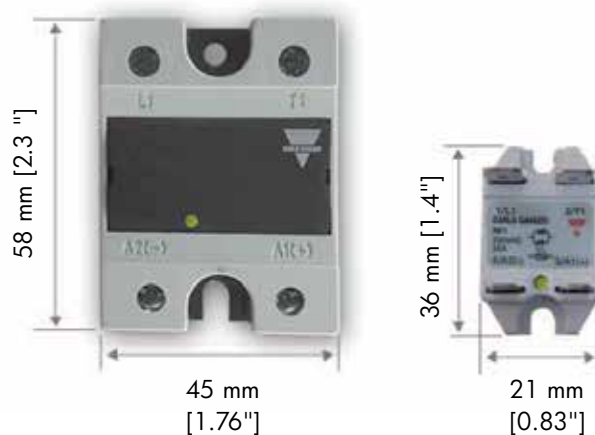
## Compact solid state relay for quick mounting

### 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



\* Approvals pending

**Switches**

CARLO GAVAZZI Automation Components. Specifications are subject to change without notice. Illustrations are for example only.

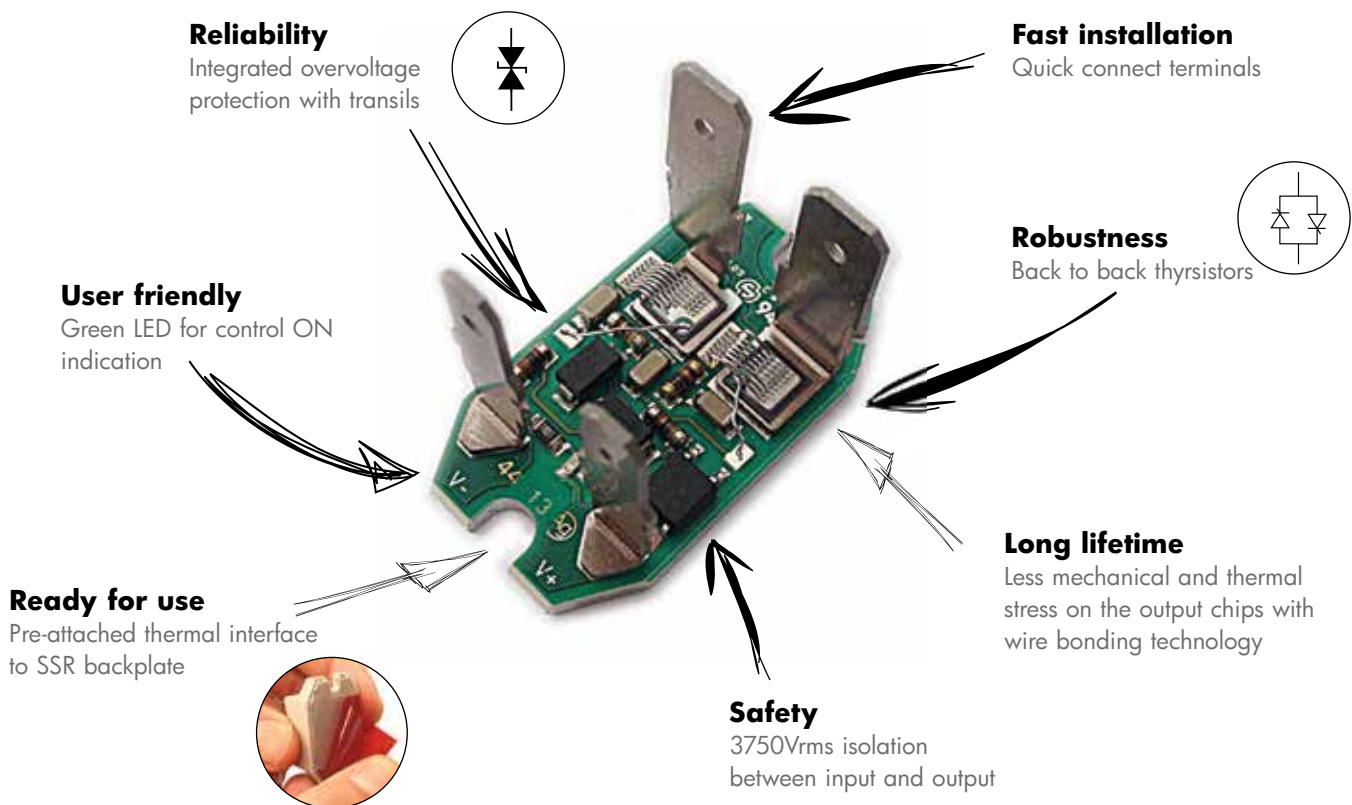
## Applications

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

The **RF1** is particularly suited when trouble free operation is required for a large number of cycles and space is a big constraint. In particular to the Food & Beverage industry the **RF1** conforms to the glow wire test requirements of EN 60335-1 and is certified by UL for 100,000 cycles acc. to UL508. Integrated protection ensures reliable operation and reduces downtime.



## A space and cost saving solution without compromises



## Selection Guide

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

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

## OUR SALES NETWORK IN EUROPE

**AUSTRIA** - Carlo Gavazzi GmbH  
Ketzergrasse 374,  
A-1230 Wien  
Tel: +43 1 888 4112  
Fax: +43 1 889 10 53  
office@carlogavazzi.at

**BELGIUM** - Carlo Gavazzi NV/SA  
Mechelsesteenweg 311,  
B-1800 Vilvoorde  
Tel: +32 2 257 4120  
Fax: +32 2 257 41 25  
sales@carlogavazzi.be

**DENMARK** - Carlo Gavazzi Handel A/S  
Over Hadstenvej 40,  
DK-8370 Hadsten  
Tel: +45 89 60 6100  
Fax: +45 86 98 15 30  
handel@gavazzi.dk

**FINLAND** - Carlo Gavazzi OY AB  
Petaksentie 2-4,  
FI-00661 Helsinki  
Tel: +358 9 756 2000  
Fax: +358 9 756 20010  
myynti@gavazzi.fi

**FRANCE** - Carlo Gavazzi Sarl  
Zac de Paris Nord II, 69, rue de la Belle Etoile,  
F-95956 Roissy CDG Cedex  
Tel: +33 1 49 38 98 60  
Fax: +33 1 48 63 27 43  
french.team@carlogavazzi.fr

**GERMANY** - Carlo Gavazzi GmbH  
Pfnorstr. 10-14  
D-64293 Darmstadt  
Tel: +49 6151 81000  
Fax: +49 6151 81 00 40  
info@gavazzi.de

**GREAT BRITAIN** - Carlo Gavazzi UK Ltd  
4.4 Frimley Business Park,  
Frimley, Camberley, Surrey GU16 7SG  
Tel: +44 1 276 854 110  
Fax: +44 1 276 682 140  
sales@carlogavazzi.co.uk

**ITALY** - Carlo Gavazzi SpA  
Via Milano 13,  
I-20020 Lainate  
Tel: +39 02 931 761  
Fax: +39 02 931 763 01  
info@gavazziacbu.it

**NETHERLANDS** - Carlo Gavazzi BV  
Wijkermeerweg 23,  
NL-1948 NT Beverwijk  
Tel: +31 251 22 9345  
Fax: +31 251 22 60 55  
info@carlogavazzi.nl

**NORWAY** - Carlo Gavazzi AS  
Melkeveien 13,  
N-3919 Porsgrunn  
Tel: +47 35 93 0800  
Fax: +47 35 93 08 01  
post@gavazzi.no

**PORTUGAL** - Carlo Gavazzi Lda  
Rua dos Jerónimos 38-B,  
P-1400-212 Lisboa  
Tel: +351 21 361 7060  
Fax: +351 21 362 13 73  
carlogavazzi@carlogavazzi.pt

**SPAIN** - Carlo Gavazzi SA  
Avda. Iparraguirre, 80-82,  
E-48940 Leioa (Bizkaia)  
Tel: +34 94 480 4037  
Fax: +34 94 431 6081  
gavazzi@gavazzi.es

**SWEDEN** - Carlo Gavazzi AB  
V:a Kyrkogatan 1,  
S-652 24 Karlstad  
Tel: +46 54 85 1125  
Fax: +46 54 85 11 77  
info@carlogavazzi.se

**SWITZERLAND** - Carlo Gavazzi AG  
Verkauf Schweiz/Vente Suisse  
Sumpfstrasse 3,  
CH-6312 Steinhausen  
Tel: +41 41 747 4535  
Fax: +41 41 740 45 40  
info@carlogavazzi.ch

## OUR SALES NETWORK IN THE AMERICAS

**USA** - Carlo Gavazzi Inc.  
750 Hastings Lane,  
Buffalo Grove, IL 60089, USA  
Tel: +1 847 465 6100  
Fax: +1 847 465 7373  
sales@carlogavazzi.com

**CANADA** - Carlo Gavazzi Inc.  
2660 Meadowvale Boulevard,  
Mississauga, ON L5N 6M6, Canada  
Tel: +1 905 542 0979  
Fax: +1 905 542 22 48  
gavazzi@carlogavazzi.com

**MEXICO** - Carlo Gavazzi Mexico S.A. de C.V.  
Calle La Montaña no. 28, Fracc. Los Pastores  
Naucalpan de Juárez, EDOMEX CP 53340  
Tel & Fax: +52.55.5373.7042  
mexicosales@carlogavazzi.com

**BRAZIL** - Carlo Gavazzi Automação Ltda.  
Av. Francisco Matarazzo, 1752  
Conj 2108 - Barra Funda - São Paulo/SP  
Tel: +55 11 3052 0832  
Fax: +55 11 3057 1753  
info@carlogavazzi.com.br

## OUR SALES NETWORK IN ASIA AND PACIFIC

**SINGAPORE** - Carlo Gavazzi Automation  
Singapore Pte. Ltd.  
61 Tai Seng Avenue  
#05-06 UE Print Media Hub  
Singapore 534167  
Tel: +65 67 466 990  
Fax: +65 67 461 980  
info@carlogavazzi.com.sg

**MALAYSIA** - Carlo Gavazzi Automation  
(M) SDN. BHD.  
D12-06-G, Block D12,  
Pusat Perdagangan Dana 1,  
Jalan PJU 1A/46, 47301 Petaling Jaya,  
Selangor, Malaysia.  
Tel: +60 3 7842 7299  
Fax: +60 3 7842 7399  
sales@gavazzi-asia.com

**CHINA** - Carlo Gavazzi Automation  
(China) Co. Ltd.  
Unit 2308, 23/F.,  
News Building, Block 1, 1002  
Middle Shennan Zhong Road,  
Shenzhen, China  
Tel: +86 755 83699500  
Fax: +86 755 83699300  
sales@carlogavazzi.cn

**HONG KONG** - Carlo Gavazzi  
Automation Hong Kong Ltd.  
Unit 3 12/F Crown Industrial Bldg.,  
106 How Ming St., Kwun Tong,  
Kowloon, Hong Kong  
Tel: +852 23041228  
Fax: +852 23443689

## OUR COMPETENCE CENTRES AND PRODUCTION SITES

**DENMARK** - Carlo Gavazzi Industri A/S  
Hadsten

**MALTA** - Carlo Gavazzi Ltd  
Zejtun

**ITALY** - Carlo Gavazzi Controls SpA  
Belluno

**LITHUANIA** - Uab Carlo Gavazzi Industri Kaunas  
Kaunas

**CHINA** - Carlo Gavazzi Automation  
(Kunshan) Co., Ltd.  
Kunshan

## HEADQUARTERS

Carlo Gavazzi Automation SpA  
Via Milano, 13  
I-20020 - Lainate (MI) - ITALY  
Tel: +39 02 931 761  
info@gavazziautomation.com



**CARLO GAVAZZI**  
Automation Components

*Energy to Components!*

www.gavazziautomation.com

