



## Overview

# Monitoring relays

# Overview

## Monitoring relays

### How they work

Monitoring relays are like all other relays, they open and close a contact output. The main difference is that these relays are activated by some measurements made by the unit itself so that, if the value is not in the desired range, the relay output reacts.

Measurements can be the correct phase sequence or loss of a 3-phase main system, a voltage or a current level, a frequency, temperature or even a power, without forgetting earth leakage current. Basically the relay trips when the measured value is not where it should be.



### The right monitoring relay for each application

The principle is simple, and the applications are countless: from HVAC equipment to pumping systems, from building automation systems to renewable energy sources, just to provide a few examples. The beauty being that the monitoring function is performed by a device usually independent from the control chain itself, increasing the reliability of the whole system. Monitoring and relaying are not the only variables: depending on the application, some others come into play.

The housing can be different, depending on the electrical panel, there may be more than one relay output to drive different and independent loads, or a delay on alarm to reduce the number of undesired trips, or even an adjustable hysteresis to avoid output flickering. The relay latch function allows restarting the equipment only when all conditions have been correctly reset. The comprehensive line of monitoring relays from Carlo Gavazzi offers these and many other functions to exactly fit the application needs in the simplest way.

### The main advantages of using monitoring relays:

- **Service cost reduction:** maintenance costs are reduced, because a failure is promptly pointed out and correctly signalled for a quicker and simpler maintenance task;
- **Down time reduction:** monitoring relays can either stop the equipment before a major failure, granting a quicker and less expensive intervention to restart it faster, or even provide a signalling alarm, completely avoiding the down time and giving the information to plan some scheduled maintenance when consequences are less impactful;
- **Total cost of ownership reduction:** monitoring relays allow the equipment to reduce repair cost, which is one of the major parts of the operating expenses

### Find the best product for your needs via the specific Product Solution Search App

- Get the item number, description, picture and technical information of the best fit for your needs in a few clicks
- This App works on PC, Android and iOS devices
- 8 languages available



<https://carlogavazzi-pss.com/>

## How to select the right monitoring relay

Have a quick and easy summary of the Carlo Gavazzi monitoring relays shown in the below tables.

According to the required measured variables, the housings and different function levels, you can find the ideal relay among our range and more detailed specifications are available on the inner pages of this document.

- Basic function:** relays perform a single function, like correct phase sequence and loss, or overtemperature
- Extended functions:** relays usually add a time delay and a number of side functions, like latch or hysteresis
- Full functions:** relays offer the highest flexibility in terms of relay outputs, settings and adjustments

## DIN-rail mounting/ plug-in monitoring relays

Measured value	Basic function (setpoint)		Extended functions (time delay)		Full functions (2 relays output)	
	DIN-rail	Plug-in	DIN-rail	Plug-in	DIN-rail	Plug-in
Current	DIA01 DIA02 DIA53 EISH	PIA01	DIB01 DIB71 DIB02	PIB01 PIB02	DIC01	PIC01
Voltage	DUA01 DUA52 DUA55	PUA01	DUB01 DUB71 DUB02 DUB03	PUB01 PUB02 PUB03	DUC01	PUC01
3-phase voltage	DPA01 DPA51 DPA71 DPA52 DPA03 DPA53 DPA55	PPA01 PPA03	DPB01 DPB51 DPB52 DPB02	PPB01 PPB02	DPC01 DPC71 DPC02 DPD02	PPC01
Frequency			DFB01	PFB01	DFC01	
Power	DWA01	PWA01	DWB01 DWB02 DWB03	PWB01 PWB02 PWB03		
PTC	DTA01 DTA71 DTA02 DTA72 DTA04	PTA01 PTA02				
Earth leakage	DEA71		DEB71			
Pump alternating	DLA71 DLA73					

## Accessories

Measured value	Current transformer	Current transducer
1-phase	M1	A82 E83
3-phase	MP	A74

# Overview

## Monitoring relays

### Current relays



Type	DIA 01 / PIA 01	DIA 02	EIS H	DIA53
Function	1-phase AC/DC over current relay. Direct input or on CT 5 A. Setpoint adjustable. Hysteresis adjustable.	1-phase AC/DC load ON/OFF relay. Direct input or on CT 5 A. Setpoint adjustable.	Load ON/OFF sensor. 1-phase AC Direct input and solid state output.	1-phase AC over current relay. Setpoint adjustable. 2-wire connection. Reaction time < 50 ms for F ver. 12 mm hole for insulated wire.
Measuring range	0.5 - 5 AAC/DC	2 mA - 5 AAC/DC	200 mA - 60 AAC	2 - 100 AAC
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	80 x 22.5 x 99.5	56 x 22.5 x 49	81 x 17.5 x 67.2
Plug-in housing Size (mm)	80 x 36 x 94			
Output type	1 x SPDT relay	1 x SPDT relay	Static output	Static output
Certifications	CE - UL - CSA	CE - cULus	CE - cURus - CSA	CE - UL - CSA

### Current relays



Type	DIB 01 / PIB 01	DIB 71	DIB 02 / PIB 02	DIC 01 / PIC 01
Function	1-phase AC/DC TRMS over or under current relay. Direct input or on CT 5 A. Setpoint adjustable. Hysteresis and delay time adjustable. 12 mm hole for insulated current carrying wire.	1-phase AC/DC TRMS over or under current relay. Direct input or on CT 5 A. Setpoint adjustable. Hysteresis and delay time adjustable.	1-phase AC/DC TRMS over or under current relay. Input on shunt or CT MI / MP. Setpoint adjustable. Hysteresis and delay time adjustable.	1-phase AC/DC TRMS process signal relay. Direct input, CT A82 or CT MI / MP. 2 setpoints separately adjustable. Hysteresis and 2 delay times separately adjustable.
Measuring ranges	0.1 mA - 100 AAC 0.1 mA - 10 ADC	0.1 mA - 5 AAC/DC	6 - 150 mVAC/DC 0.4 - 4 V <sub>P</sub>	0.5 - 20 mAAC/DC 0.1 - 10 VAC/DC 0.4 - 4 V <sub>P</sub>
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	81 x 35.5 x 67.2	80 x 22.5 x 99.5	80 x 45 x 99.5
Plug-in housing Size (mm)	80 x 36 x 94		80 x 36 x 94	80 x 36 x 94
Output type	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay	1 or 2 x SPDT relay
Certifications	CE - cULus - CCC	CE - UL - CSA	CE - cULus	CE - UL - CSA

### Voltage relays



Type	DUA 01 / PUA 01	DUA 52	DUA 55	DUB 01 / PUB 01
Function	Over current and voltage relay. 1-phase AC/DC or CT MI / MP. Setpoint and hysteresis adjustable.	Under voltage relay for DC battery. Setpoint and hysteresis adjustable. Measures its own power supply.	1-phase AC TRMS over and under voltage relay. Measures its own power supply.	1-phase AC/DC TRMS over or under voltage relay. Setpoint adjustable. Hysteresis and delay time adjustable.
Measuring ranges	2 - 500 VAC/DC 0.4 - 4 V <sub>P</sub>	8 - 58 VDC	208 / 220 / 230 / 240 VAC	0.1 - 500 VAC/DC
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	81 x 17.5 x 67.2	81 x 17.5 x 67.2	80 x 22.5 x 99.5
Plug-in housing Size (mm)	80 x 36 x 94			80 x 36 x 94
Output type	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay
Certifications	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA - CCC	CE - cULus - CCC

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

# Monitoring relays

## Voltage relays



Type	DUB 71	DUB 72	DUB 02 / PUB 02	DUB 03 / PUB 03
Function	1-phase AC/DC TRMS over or under voltage relay. Setpoint adjustable. Hysteresis and delay time adjustable.	Double under voltage relay. 24 VDC. 2 adjustable setpoints + hysteresis. 2 independent relay outputs.	1-phase AC TRMS over and under voltage relay (measures its own power supply). Over and under voltage setpoints separately adjustable. Hysteresis and delay time adjustable (ON/OFF).	1-phase AC/DC TRMS over or under voltage relay (measures its own power supply). Setpoint adjustable. Hysteresis and delay time adjustable.
Measuring ranges	0.1 - 500 VAC/DC	16 - 30 VDC	24/115/230 VAC	24/48/115/240 VAC/DC
DIN-rail housing Size (mm)	81 x 35.5 x 67.2	90 x 35.5 x 63.5	80 x 22.5 x 99.5	80 x 22.5 x 99.5
Plug-in housing Size (mm)			80 x 36 x 94	80 x 36 x 94
Output type	1 x SPDT relay	1 x SPST 3 A / 1 x SPST 20 A	1 x SPDT relay	1 x SPDT relay
Certifications	CE - UL - CSA	CE- cULus - ISA Class I Div 2	CE - cULus	CE - cULus

## Voltage relays



## Pump alternating relay



## Earth leakage relays



Type	DUC 01 / PUC 01	DLA 71 / DLA 73	DEA 71	DEB 71
Function	Over and under voltage relay. 1-phase AC/DC TRMS. 2 setpoints separately adjustable. Hysteresis and 2 delay functions separately adjustable.	Pump alternating relay. For 2 or 3 pumps. Differential or sequential mode. Automatic rotation of the pumps.	Modular residual current relay, fixed $\Delta I_n$ setting, warning output @60% $\Delta I_n$ , Alarm @80% $\Delta I_n$ , no delay. Operates with CTG series core balance transformers.	Modular residual current relay, adjustable $\Delta I_n$ setting, warning output @60% $\Delta I_n$ , Alarm @80% $\Delta I_n$ , leakage level LED bar, adjustable delay. Operates with CTG series core balance transformers
Measuring ranges	2 - 500 VAC/DC		30 mA / 300 mA	30 mA to 5 A 300 mA to 30 A
DIN-rail housing Size (mm)	80 x 45 x 99.5	81 x 35.5 x 67.2	81 x 35.5 x 67.2	81 x 35.5 x 67.2
Plug-in housing Size (mm)	80 x 36 x 94			
Output type	1 or 2 x SPDT relay	2 or 3 x SPST relays	2 x SPDT relays	2 x SPDT relays
Certifications	CE - UL - CSA	CE - UL - CSA	CE - cULus	CE - cULus

## 3-phase voltage relays



Type	DPA 01 / PPA 01	DPA 51 / DPA 71	DPA 52	DPA 03 / PPA 03
Function	Phase sequence, phase loss relay. 3-phase AC (measures its own power supply).	Phase sequence, phase loss relay. 3-phase AC (measures its own power supply).	Phase sequence, phase loss relay. 3-phase AC TRMS (measures its own power supply), switching power supply.	Under voltage, phase sequence, phase loss relay. 3-phase AC TRMS (measures its own power supply).
Measuring ranges	208 - 690 VAC	208 - 480 VAC	208 - 480 VAC	208 - 690 VAC
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	81 x 17.5 x 67.2 81 x 35.5 x 67.2	81 x 17.5 x 67.2	80 x 22.5 x 99.5
Plug-in housing Size (mm)	80 x 36 x 94			80 x 36 x 94
Output type	1 x SPDT relay / 1 x DPDT relay	1 x SPDT relay / 1 x DPDT relay	1 x SPDT relay	1 x SPDT relay
Certifications	CE - UL - CSA	CE - UL - CSA	CE - cULus - CCC	CE - UL - CSA

# Monitoring relays

## 3-phase voltage relays



Type	DPA 53	DPA 55	DPB 51	DPB 52
Function	Under voltage, phase sequence, phase loss relay. 3-phase AC TRMS (measures its own power supply).	Over and under voltage, phase sequence, phase loss relay. 3-phase (measures its own power supply) AC TRMS. Two tolerance voltage windows.	Over and under voltage, phase sequence, phase loss, neutral loss relay. 3-phase+N AC TRMS (measures its own power supply). 2 setpoints separately adjustable. Delay time adjustable.	Over and under voltage, phase sequence, phase loss 3-phase (measures its own power supply), switching power supply. 2 setpoints separately adjustable. Delay time adjustable.
Measuring range	208 - 480 VAC	208 - 480 VAC	208 - 480 VAC	208 - 480 VAC
DIN-rail housing Size (mm)	81 x 17.5 x 67.2	81 x 17.5 x 67.2	90 x 17.5 x 67.2	81 x 17.5 x 67.2
Output type	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay
Certifications	CE - UL - CSA	CE - UL - CSA - CCC	CE - UL - CSA	CE - cULus - CCC

## 3-phase voltage relays



Type	DPB 01 / PPB 01	DPB 02 / PPB 02	DPC 01 / PPC 01	DPC 71
Function	Over and under voltage, phase sequence, phase loss. 3-phase+N AC TRMS (measures its own power supply). N versions without phase sequence detection. 2 setpoints and delay time separately adjustable.	Asymmetry, phase sequence, phase loss relay. 3-phase+N AC TRMS (measures its own power supply). Adjustable asymmetry and delay time.	Over and under voltage, asymmetry and tolerance, phase sequence, phase loss relay. 3-phase+N AC TRMS (measures its own power supply), 50 - 400 Hz mains. Setpoint separately adjustable.	Over and under voltage, asymmetry and tolerance, phase sequence, phase loss relay. 3-phase+N AC TRMS (measures its own power supply). Setpoints separately adjustable.
Measuring range	208 - 480 VAC	208 - 480 VAC	100 - 690 VAC / 50 - 400 Hz	208 - 480 VAC
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	80 x 22.5 x 99.5	80 x 45 x 99.5	81 x 35.5 x 67.2
Plug-in housing Size (mm)	80 x 36 x 94	80 x 36 x 94	80 x 36 x 94	
Output type	1 x SPDT relay	1 x SPDT relay	2 x SPDT relays	2 x SPDT relays
Certifications	CE - cULus - CCC	CE - cULus - CCC	CE - cULus - CCC - RINA	CE - UL - CSA

## 3-phase multifunction voltage relays

## Frequency relays



Type	DPC 02	DPD 02	DFB 01 / PFB 01	DFC 01
Function	Voltage, frequency, phase sequence and phase loss relay. 3-phase+N AC TRMS (measures its own power supply). Setpoints and delay times separately adjustable. Adjustable frequency range.	Voltage, frequency, asymmetry detection, phase loss and phase sequence relay. NFC communication 3-phase+N AC TRMS (measures its own power supply). Digital settings, setpoints and delay time separately adjustable.	Frequency relay. 1-phase AC (measures its own power supply). 2 setpoints separately adjustable. Delay time adjustable.	Frequency relay. 1-phase AC (measures its own power supply). 2 setpoints separately adjustable. 2 separately adjustable delay times. 2 separate relay outputs.
Measuring range	208 - 690 VAC	208 VAC - 480 VAC	50 / 60 Hz	50 / 60 Hz
DIN-rail housing Size (mm)	80 x 45 x 99.5	80 x 22.5 x 99.5	80 x 22.5 x 99.5	80 x 45 x 99.5
Plug-in housing Size (mm)			80 x 36 x 94	
Output type	2 x SPDT relays	2 x SPDT relays	1 x SPDT relay	2 x SPDT relays
Certifications	CE - cULus - CCC - RINA	CE - cULus - CCC - RINA	CE - UL - CSA	CE - UL - CSA

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

# Monitoring relays

## Cosφ relays



## Power and power factor relays



Type	DWA 01 / PWA 01	DWB 01 / PWB 01	DWB 02 / PWB 02	DWB 03 / PWB 03
Function	Cosφ relay. 1- or 3-phase AC (measures its own power supply). Direct input or through external CT. Power ON delay adjustable.	Power factor relay. 1- or 3-phase (measures its own power supply) AC TRMS. Direct input or through external CT. 2 separately adjustable setpoints. Delay time and Power ON delay adjustable.	Active power relay. 1- or 3-phase (measures its own power supply) AC TRMS. Direct input or through external CT. 2 separately adjustable setpoints. Delay time and Power ON delay adjustable.	Active power, with power direction, relay. 1- or 3-phase AC TRMS (measures its own power supply). Direct input or through external CT. 2 separately adjustable setpoints. Delay time and Power ON delay adjustable.
Measuring ranges	cosφ: 0.1-0.99	Power factor: 0.1 - 0.99	208 - 690 VAC / 0.5 - 10 AAC 0.4 - 4 Vp	208 - 690 VAC / 0.5 - 10 AAC 0.4 - 4 Vp
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	80 x 45 x 99.5	80 x 45 x 99.5	80 x 45 x 99.5
Plug-in housing Size (mm)	80 x 36 x 94	80 x 36 x 94	80 x 36 x 94	80 x 36 x 94
Output type	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay	1 x SPDT relay
Certifications	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA

## Motor thermistor relays

## Interface protection relays



Type	DTA 01 / PTA 01 DTA 02 / PTA 02	DTA 71 / DTA 72	DTA 04	PI-DIN
Function	Motor thermistor relays. PTC insulated input. Automatic set-point. Short circuit detection. Latch, test and reset function [DTA02, PTA02].	Motor Thermistor relays. PTC insulated input. Automatic set-point. Short circuit and Open Circuit detection. Automatic Reset [DTA71] Auto or Manual reset, local or remote, test and ready for reset functions [DTA72].	Motor Thermistor relays. PTC insulated input. Automatic set-point. Short circuit and Open Circuit detection. Automatic or manual Reset, test, ready for reset functions.	1- or 3-phase systems monitoring relay interface protection.
Measuring range				230 V <sub>LN</sub> , 400 V <sub>LL</sub>
DIN-rail housing Size (mm)	80 x 22.5 x 99.5	81 x 35.5 x 67.2	80 x 22.5 x 99.5	90 x 71.6 x 66.3
Plug-in housing Size (mm)	80 x 36 x 94			
Output type	1 x SPDT relay	1 x SPDT relay [DTA71] 2 x SPDT relays [DTA72]	2 x SPST relays	2 x SPDT relays
Certifications	CE - UL - CSA	CE - cULus	CE - cULus	CE - VDE-AR-N4105:2018 - CEI- 0-21 - ER-G98-Issue-1-Am-1 - ER- G99-Issue-1-Am-3 - Dansk Energi

## Current transformers for monitoring relays

## Core balance transformers



Type	MI	MP	A82	E83	CTG
Input type	1-phase AC. Output voltage. Cable hole	3-phase AC. Output voltage. Cable hole.	1-phase AC. Output 0 / 4-20 mA DC, 0-10 VDC (A82-30). Cable hole. Led indication.	1-phase AC. Output 4-20 mA DC. Cable hole. DIN-rail mounting.	Zero current transformer for DEA71 and DEB71.
Size (mm)	45 x 52 x 16 [5/20] 67.5 x 95 x 20 [100/500]	45 x 120 x 16 [5/20] 114 x 150 x 23 [100/500]	67.5 x 95 x 20	56 x 22.5 x 49	Hole Ø 35, 50, 70, 120, 160 or 210
Output type	0.4 - 4 Vp	0.4 - 4 Vp	4-20 mA 0-20 mA 0-10 V	4-20 mA	Bi-polar

## OUR SALES NETWORK IN EUROPE

### AUSTRIA

Carlo Gavazzi GmbH  
Ketzergasse 374,  
A-1230 Wien  
Tel: +43 1 888 4112  
Fax: +43 1 889 1053  
office@carlogavazzi.at

### BELGIUM

Carlo Gavazzi NV/SA  
Mechelsesteenweg 311,  
B-1800 Vilvoorde  
Tel: +32 2 257 41 20  
sales@carlogavazzi.be

### DENMARK

Carlo Gavazzi Handel A/S  
Over Hadstenvej 40,  
DK-8370 Hadsten  
Tel: +45 89 60 61 00  
Fax: +45 86 98 15 30  
handel@gavazzi.dk

### FINLAND

Carlo Gavazzi OY AB  
Ahventie, 4 B  
FI-02170 Espoo  
Tel: +358 9 756 2000  
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 81 00 00  
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 854110  
Fax: +44 1 276 682140  
sales@carlogavazzi.co.uk

### ITALY

Carlo Gavazzi SpA  
Via Milano 13,  
I-20045 Lainate  
Tel: +39 02 931 76 1  
Fax: +39 02 931 76 301  
info@gavazziacbu.it

### NETHERLANDS

Carlo Gavazzi BV  
Wijkermeerweg 23,  
NL-1948 NT Beverwijk  
Tel: +31 251 22 93 45  
Fax: +31 251 22 60 55  
info@carlogavazzi.nl

### NORWAY

Carlo Gavazzi AS  
Melkeveien 13,  
N-3919 Porsgrunn  
Tel: +47 35 93 08 00  
Fax: +47 35 93 08 01  
post@gavazzi.no

### PORUGAL

Carlo Gavazzi Ida  
Rua das Jerónimos 38-B,  
P-1400-212 Lisboa  
Tel: +351 21 361 70 60  
Fax: +351 21 362 13 73  
carlogavazzi@carlogavazzi.pt

### SPAIN

Carlo Gavazzi SA  
Avda. Iparragirre, 80-82,  
E-48940 Leioa (Bizkaia)  
Tel: +34 94 480 40 37  
Fax: +34 94 431 60 81  
gavazzi@gavazzi.es

### SWEDEN

Carlo Gavazzi AB  
V:a Kyrkogatan 1,  
S-652 24 Karlstad  
Tel: +46 54 85 11 25  
Fax: +46 54 85 11 77  
info@carlogavazzi.se

### SWITZERLAND

Carlo Gavazzi AG  
Verkauf Schweiz/Vente Suisse  
Sumpfsstrasse 3,  
CH-6312 Steinhausen  
Tel: +41 41 747 45 35  
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 60089-6904, USA  
Tel: +1 847 465 61 00  
Fax: +1 847 465 73 73  
sales@carlogavazzi.com

### CANADA

Carlo Gavazzi Inc.  
2660 Meadowvale Boulevard,  
Mississauga, ON L5N 6M6, Canada  
Tel: +1 905 542 0979  
Fax: +1 905 542 2248  
gavazzi@carlogavazzi.com

### MEXICO

Carlo Gavazzi Mexico S.A. de C.V.  
Circuito Puericultores 22, Ciudad Satelite  
Naucalpan de Juárez, Edo Mex. CP 53100  
Mexico  
T +52 55 5373 7042  
F +52 55 5373 7042  
mexicosales@carlogavazzi.com

### BRAZIL

Carlo Gavazzi Automação Ltda.  
Av. Francisco Matarazzo, 1752  
Conj 2108 05001-200 - 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  
Print Media Hub @ Paya Lebar iPark  
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,  
Putas Perdagangan Dana 1,  
Jalan PJU 1A/46, 47301 - Petaling Jaya,  
Selangor, Malaysia  
Tel: +60 3 7842 7299  
Fax: +60 3 7842 7399  
info@gavazzi-asia.com

### CHINA

Carlo Gavazzi Automation (China) Co. Ltd.  
Unit 2308, 23/F.,  
News Building, Block 1, 1002  
Middle Shennan Zhong Road, Futian District,  
Shenzhen, China  
Tel: +86 755 8369 9500  
Fax: +86 755 8369 9300  
sales@carlogavazzi.cn

### HONG KONG

Carlo Gavazzi Automation  
Hong Kong Ltd.  
Unit No. 16 on 25<sup>th</sup> Floor, One Midtown,  
No. 11 Hoi Shing Road, Tsuen Wan,  
New Territories, Hong Kong  
Tel: +852 26261332 / 26261333  
Fax: +852 26261316

### TAIWAN

Branch of Carlo Gavazzi Automation  
Singapore Pte. Ltd.  
22F-1, No.500 Shizheng Rd, Xitun Dist,  
Taichung City 407,  
Taiwan, China  
Tel. +886 4 2258 4001  
Fax +886 4 2258 4002

## 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-20045 - Lainate (MI) - ITALY  
Tel: +39 02 931 76 1  
info@gavazziautomation.com

*Energy to Components!*  
[www.gavazziautomation.com](http://www.gavazziautomation.com)