

CARLO GAVAZZI
Automation Components



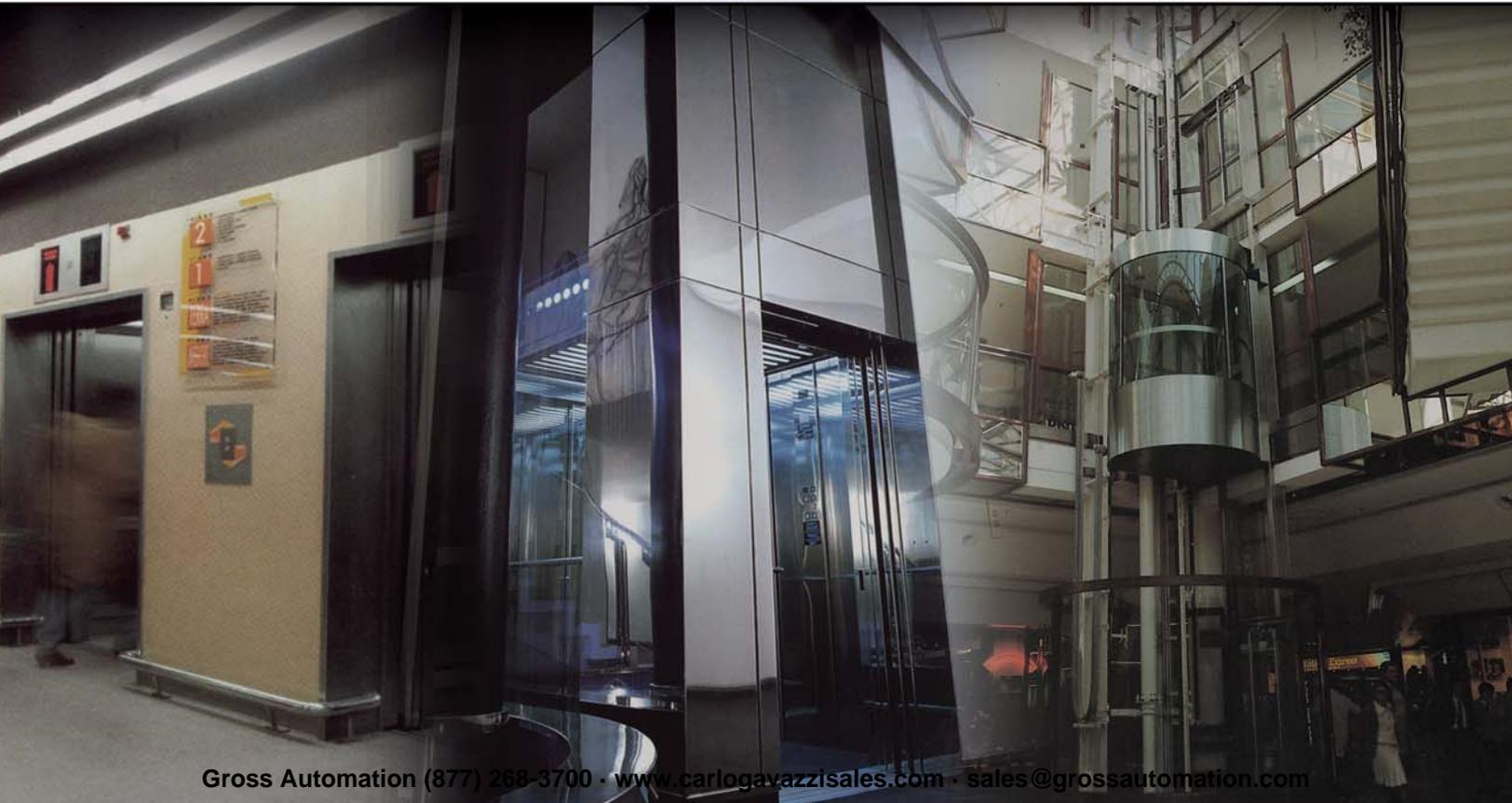
Elevator/Lift Solutions

*Components
Designed
for Your
Requirements*



Carlo Gavazzi

brings several decades of expertise in Inductive, Magnetic and Photoelectric Sensors, in Timers, Phase Monitoring Relays, Electromechanical Relays, Limit Switches and Soft Starts — enabling us to match different requirements and provide fully customized solutions.



Our Product Range



**Proximity
Magnetic Sensors**

FMP/FS/S/SP.B.2

- Dimensions:
M10, M12, M16 (FMP, FS)
Ø16 (FSLP)
21.2 x 11.5 x 79mm (S)
24 x 25.5 x 85mm (SP.B.2)
- Housing material:
plastic or metallic
- Housing shape:
cylindrical and
rectangular
- Hermetically sealed and
dipped in resin
- Degree of protection IP67
- CE Mark



**Photoelectric
Sensors**

PE12

- Dimensions: Ø12 x 26mm
- Stand alone sensor, with
no external amplifier
required
- Power supply: 10-30 VDC
- Output: NPN or PNP
100mA
- Sensing distance: 15m
- Optical angle (degrees):
Max ±5 degree
- Degree of protection: IP67
- CE Mark



**Three Phase
Monitoring Relays**

DPA53

- Dimensions:
81.5 x 17.5 x 67mm
- Phase sequence, total
and partial phase loss
monitoring relay,
undervoltage
- DIN housing or plug-in
- 1 x SPDT relay
- Electrical life:
>1x10⁵ operations
- Power supply:
208-480 VAC
- UL/CSA Approved
- CE Mark



**Safety
Modules**

NA1/ MA1

- Dimensions:
99 x 22.5 x 114.5 (NA1)mm
75 x 45 x 105 (MA1)mm
- Output function
Safety: 2NO force guide
Auxiliary: 1 NPN opt.
55V/50mA (MA1DLIFT)
- Power supply: 24VAC/DC
±15% (50-60Hz)
- Power drain: 100mA
- Response time: ≤ 25ms
- Degree of protection IP30
- Safety category 4

www.GavazziOnline.com/Elevators

Designed to Market Requirements

Dedicated application engineering teams design special products upon request from the customer.

Solution to Applications Challenges

Carlo Gavazzi's individual product ranges complement one another, thereby offering the customer all the advantages of a synergistic range of products in terms of application and availability.

Guaranteed Reliability

Each product group is designed and manufactured in a center of excellence to assure that each individual product is the best in its field. Carlo Gavazzi products are subject to stringent quality tests to guarantee they exceed the performance we specify.

Visit www.GavazziOnline.com/Elevators to download data sheets or to check price and delivery

for Your Elevator/Lift



Midi Industrial Relays

RMI

- Dimensions: 36x21.5x28
- 2 or 3 poles
- Long life (minimum 100,000 electrical ops.)
- Standard with LED, and mechanical flag indicator
- Max load: 12A / 250VAC
- DC coils: 6 to 110VDC
- AC coils: 6 to 230VAC
- Degree of protection IP40
- Approvals/Marks:
UL - CSA - TUV - IMQ



Soft Start/Stop Motor Controllers

RSHR

- Dimensions: 90x90x100
- Soft starting and stopping of 3-phase motors
- Up to 22 kW at 400VAC
- Control input range: A1-A2 24-550VAC/DC
- Rated operational current: 25A, 45A
- Rated operational voltage: 127/220 or 230/400 or 227/480 or 346/600
- UL/cUL Approved
- CE Mark



Limit Switches

E102, E202, E302 E402, E600, E700

- Head type:
plunger rounded,
plunger with roller,
side rotary lever,
- Housing material:
thermoplastic or metal
- Available horizontal
or vertical actuation
- Mechanical life:
>15,000 cycles
- Degree of protection IP67
- UL/cUL Approved
- CE Mark



Dupline Modules

G21x0/G2196

- G21x0 ... :**
- Open PCB I/O-boards
 - 2, 4 or 8 Input/Output
 - NPN or PNP Outputs
 - Connections: terminals
- G2196 ... :**
- PLC interface RS232/RS485 on open PC
 - Dedicated versions for all major PLC brands
 - Channel Generator function integrated
 - Connections: terminals
 - DC powered

Expertise in Standards/Norms & Providing Reliable Solutions

- If one of the three phase mains is lost, damage might occur to the lift: blocking of the car, overheating and burning of the motor.
- A phase loss is detected by the DPA53 and the lift can go to a safe status or positioned in a safe position.
- The DPA53 is the smallest multi-voltage phase sequence / loss and undervoltage relay offered on the market. This means smaller enclosures with lower costs.

One of several applications



Proximity Magnetic Switches

I/O Module Floor Display



3-Phase Monitoring Relay



I/O Master Module



Safety Limit Switch



Enclosures

Photoelectric Sensors for Industrial Doors



I/O Module for Floor Call



Industrial Relays



Safety Relay for Car Leveling



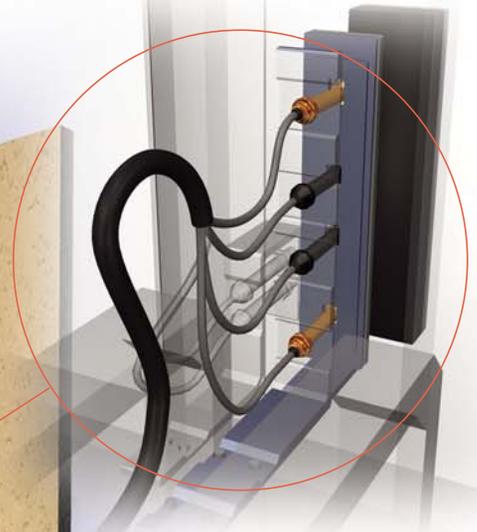
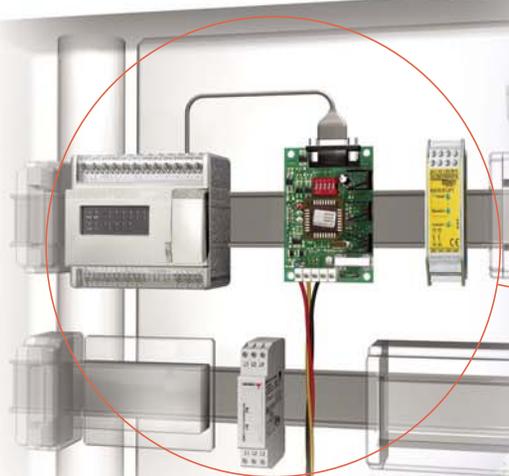
Soft Start Motor Controller



Contactors and Overloads



G2196... Dupline master module,
NA1... / MA1... Lift level modules and
DPA53 3-phase voltage relays

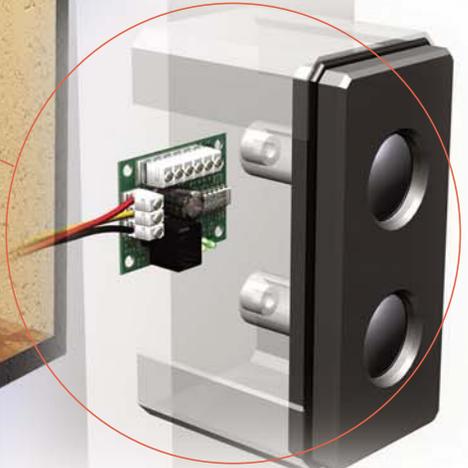


Cylindrical and rectangular proximity magnetic sensors FMP, FSA and FSLP series



Dupline I/O module floor call
G21x0... series

Dupline I/O module floor display G21x0... series



- Dirty and dusty environments will no longer be a problem, our magnetic sensors are totally sealed and dipped in resin for maximum insulation and durability.
- FSLP magnetic sensors make your life easier thanks to their mounting kit ensuring you fast and accurate installations.
- Carlo Gavazzi brings decades of expertise in magnetic sensors, enabling us to match different requirements and to provide fully customized solutions.
- "Repeatability" is the characteristic of our magnetic sensors, a direct consequence of the high accuracy we put into selecting the reeds for each switch.

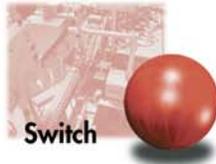
- Dupline® is our bus system, which is easy and fast to install: the 3-wire structure simplifies diagnosis and troubleshooting procedures, thus reducing downtime time and costs.
- Worried about EMC environments? Dupline® grants you a very limited risk of false troubleshooting calls thanks to a high noise immunity, proven by more than a thousand installations in the lift market.
- NA1D LIFT is a safety relay designed to detect false signals and is immune to very small interruptions caused by unstable power, thus reducing false alarms (stopping of the entire lift) and reducing needless technical calls.

Carlo Gavazzi is a proud member of **NAEC**

The Complete Product Package



Sense
 Inductive Proximity Sensors
 Tripleshield™ Capacitive Sensors
 Photoelectric Sensors
 Ultrasonic Sensors
 Level Sensors
 Limit Switches
 Magnetic Switches



Switch
 Solid State Relays
 Contactors and Overloads
 Motor Controllers
 Manual Motor Starters
 Electromechanical Relays
 Pilot Devices
 Cam Switches
 Rotary Disconnects
 Enclosures



Control
 Energy Management
 Digital Panel Meters
 PID Controllers
 Time Delay Relays
 Current Monitoring Relays
 Voltage Monitoring Relays
 Three Phase Monitoring Relays
 Current Transformers



Safety
 Safety Light Curtains
 Safety Control Modules
 Safety Interlock Switches
 Safety Mat Systems
 Safety Magnetic Sensors



Dupline
 Dupline Field & Installation Bus
 Building Automation Systems
 Elevator Systems

A Global Force in Industrial Automation

CARLO GAVAZZI has a multitude of sales offices spanning North America (*not to mention our hundreds of distributors*). Therefore, we can be viewed as "your local automation resource" - assisting you every step of the way in finding the proper solution for your various application requirements. Naturally, our job is greatly simplified as we have such a vast range of solutions to offer you via our comprehensive *product package*.

Our worldwide sales offices make us an ideal business partner, *especially for manufacturers of exported machinery*, as our products are available locally and they are CE marked.

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Elevator/Lift Solutions Brochure 9/04

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 Automation Components

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