Two hand safety Modules MD1D

CARLO GAVAZZI

- Safety Category III C according to EN 574
- Safety Category 4 according to EN 954-1
- Redundant circuit
- 2 NO safety outputs
- Dual channel inputs
- Automatic RESET
- Self monitoring
- Failure diagnosis by LEDs
- Max delay between inputs 500 ms

Product Description

Two hand safety module according to EN 60204-1, EN 292-1 /-2 , EN 574 and 954-1, safety category IIIC according to EN 574.

These safety module is suited to be used in applications at the highest risk level as presses and punches.

Ordering Key

MD1 D

Housing
Application
Controlled Devices
Safety Category

Electrical Specifications

Power supply	24 VAC± 10% 50-60Hz / 24 VDC ± 10%
Power consumption	< 7 VA / 7 W
Input current/voltage	150 mA @ 24 VDC
Safety outputs	2 NO
Auxiliary outputs	1 NPN 50 mA, 40 V

Safety output switching voltage /current /capability	230VAC/6A/2000VA
Safety output contact fuse protection	6 A fast or 4 A delayed
Insulation voltage	2.5 KV for signal parts; 4.0 KV for safety output parts: Pollution degree 2 Overvoltage category III

Time Specifications

Delay on energisation	≤ 150 ms
Delay on de-energisation	≤ 25 ms
Recovery time	≥ 25 ms
Channel simultaneity	≤ 500 ms

Environmental Specifications

Operating temperature	0°C ... + 55°C
Storage temperature	-25°C ... + 55°C

Mechanical Specifications

Protection degree terminals	IP 20
Protection degree housing	IP 30
Housing material	ABS
Housing type	45 mm housing models
Mounting	DIN rail

Max cross section of external conductors	2.5 mm^2 flexible wire 4 mm^2 rigid wire
Dimensions	45 x 75 x 110 mm
Weight	300 g

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Dimensions
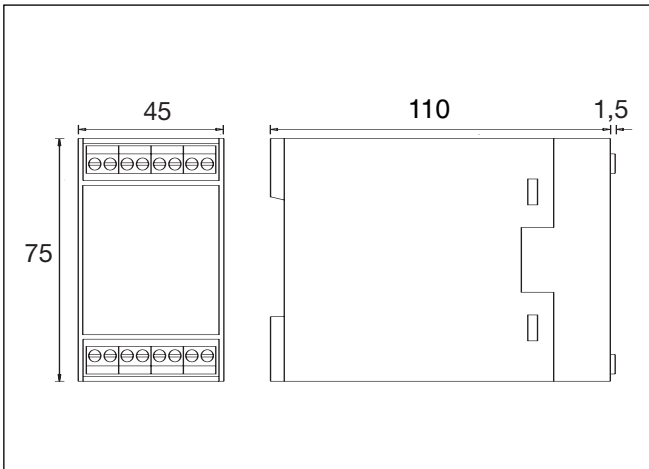
Wiring Diagrams
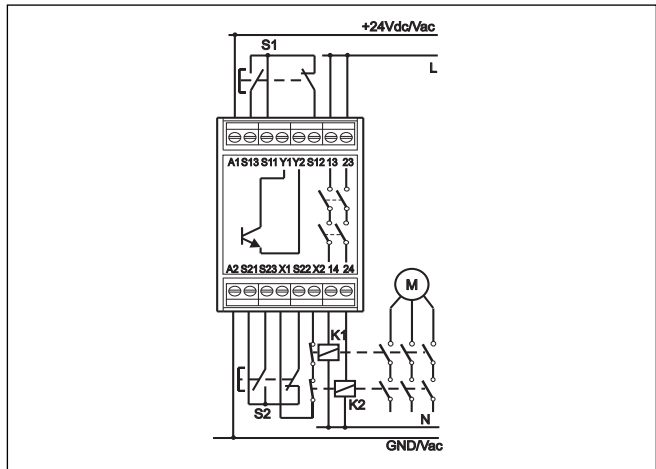
Connection Sample

Front MD1D
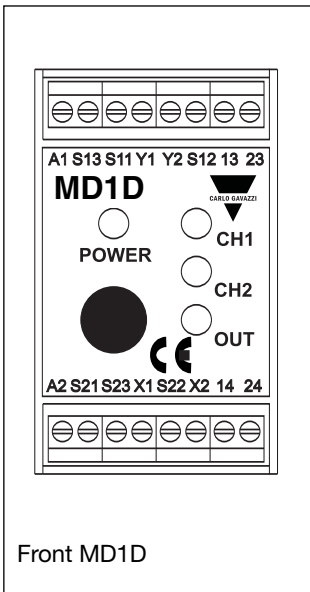
Connections

Terminal Function	Connection
A1	+24 VDC or AC supply
A2	GND or AC supply
S11-S12-S13	First input botton
S21-S22-S23	Second input button
X1-X2	Feedback input circuit for the control of external force guided contacts relays
13-14	First safety output (NO)
23-24	Second safety output (NO)
Y1	Collector Auxiliary NPN output (NO)
Y2	Emitter Auxiliary NPN output (NO)

Specifications are subjected to change without notice (23.04.07)