

# Pressure Sensing Mat Safety Module NT1/2-D

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- Safety Category 3 together with SM Safety mats according to EN 954-1
- Redundant and self monitoring circuit
- Mat integrity monitoring
- Four wire input
- Feedback circuit for external contactors monitoring
- Possibility to add /amplify safety output contacts
- Mat detection simulating through a TEST push-button
- Manual or automatic restart
- Failure diagnosis by LEDs
- Approval:



## Product Description

Pressure sensing mat safety module in conformity with EN 954-1, EN 60904-1, EN 292-1/-2 and EN 1760-1. The module has been designed to be employed along with the SM.. Safety mat; this safety system

constitute an effective and reliable safety package of Safety Category 3. The module is provided with safety output contacts with force guided relay contacts, four wire input and manual or automatic restart.

## Ordering Key

NT1/2-D

Case \_\_\_\_\_  
 Application \_\_\_\_\_  
 Controlled Devices \_\_\_\_\_  
 Safety Outputs \_\_\_\_\_  
 Safety Category \_\_\_\_\_

## Electrical Specifications

Power supply	24 Vac $\pm$ 10% 50-60Hz / 24 Vdc $\pm$ 10%
Power consumption	5 VA / 5 W
Input current/voltage	70 mA @ 24 Vdc, without load
Safety outputs	2 NO

Auxiliary outputs	--
Safety output switching voltage/current /capability	230Vac/6A/1500VA
Safety output contact fuse protection	4 A fast or 1 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	2 sec $\pm$ 15%
Delay on de-energisation	$\leq$ 150 ms (NT1/2-D+SM)
Channel simultaneity	$\infty$

## Environmental Specifications

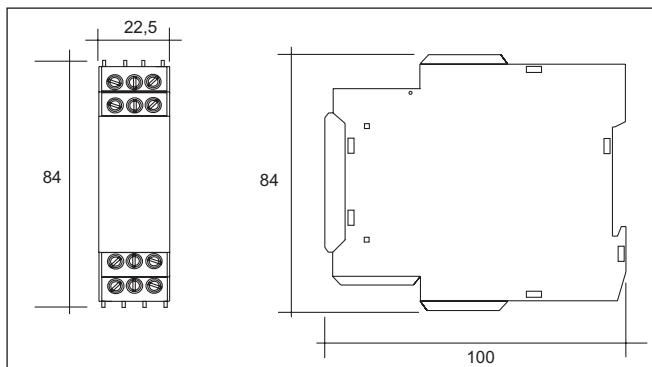
Operating temperature	0°C to + 55°C
Storage temperature	-25°C to + 55°C

## Mechanical Specifications

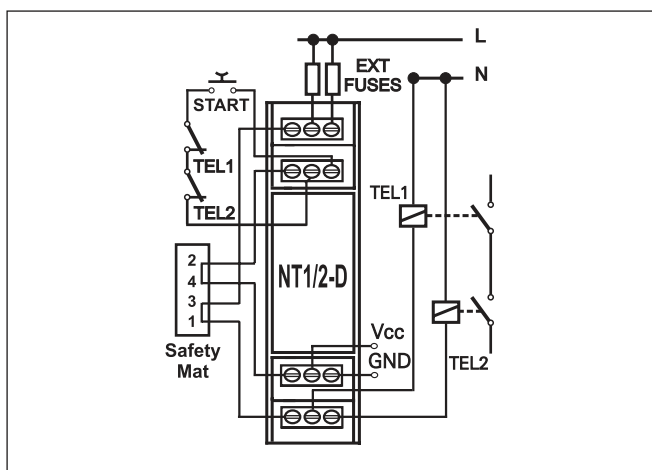
Protection degree terminals	IP 20
Protection degree housing	IP 30
Housing material	ABS
Housing type	22.5 mm housing models
Mounting	DIN rail

Max cross section of external conductors	2.5 mm <sup>2</sup> flexible wire 4 mm <sup>2</sup> rigid wire
Dimensions (H x W x D)	84x22.5x100 mm
Weight	160 g

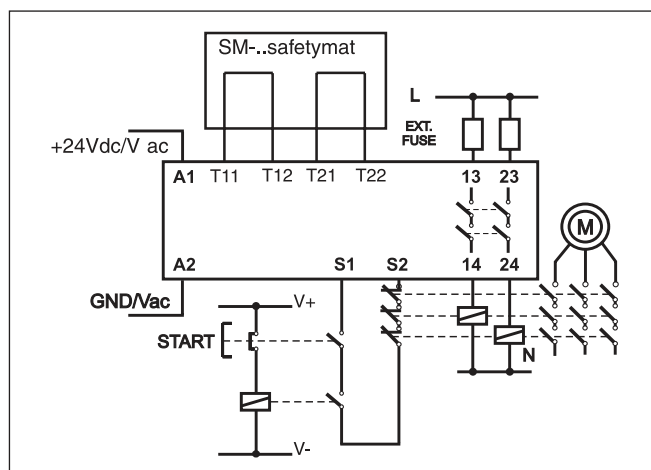
## Dimensions



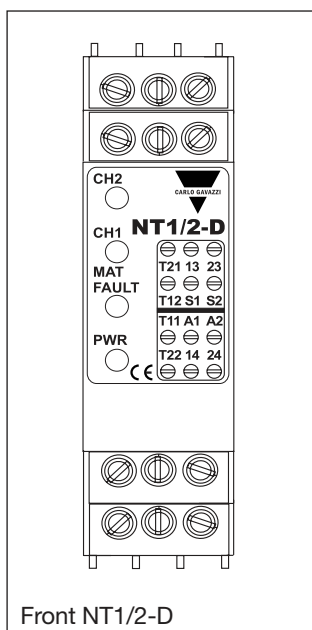
## Wiring Diagrams



## Application



## Connection Sample



## Connections

Terminal	Function/Connection
A1	+24 Vdc or AC supply
A2	GND or AC supply
S1-S2	START (automatic or manual) and feedback input for external contactors monitoring
13-14	First safety output (NO)
23-24	Second safety output (NO)
T11-T12	Safety mat layer 1 inputs
T21-T22	Safety mat layer 2 inputs