

Electronic Overload Guard

FEATURES

- Redundant safeguarding system with two independent inputs for load cells
- Meets category 3 EN 13849-1:2008, PL d standard
- Load limiter featuring double security design
- Integrated alarm for load cell malfunction or power failure
- Mountable on DIN rail

OPTIONS

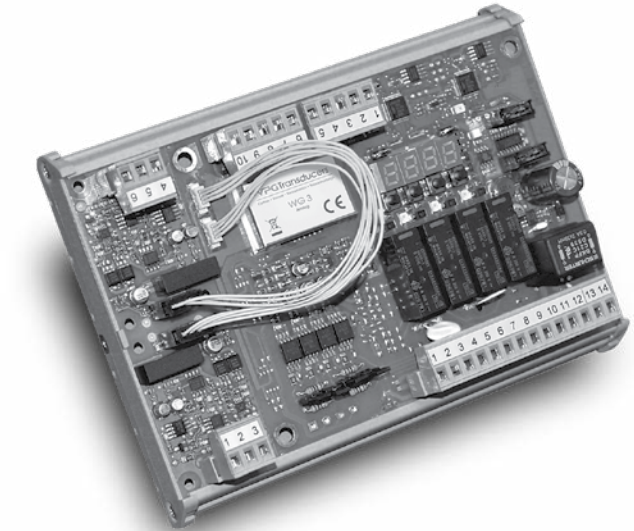
- Analog option

APPLICATIONS

- Off-highway vehicles
- Agricultural equipment
- Construction equipment
- Lifting machines
- Telescopic loaders

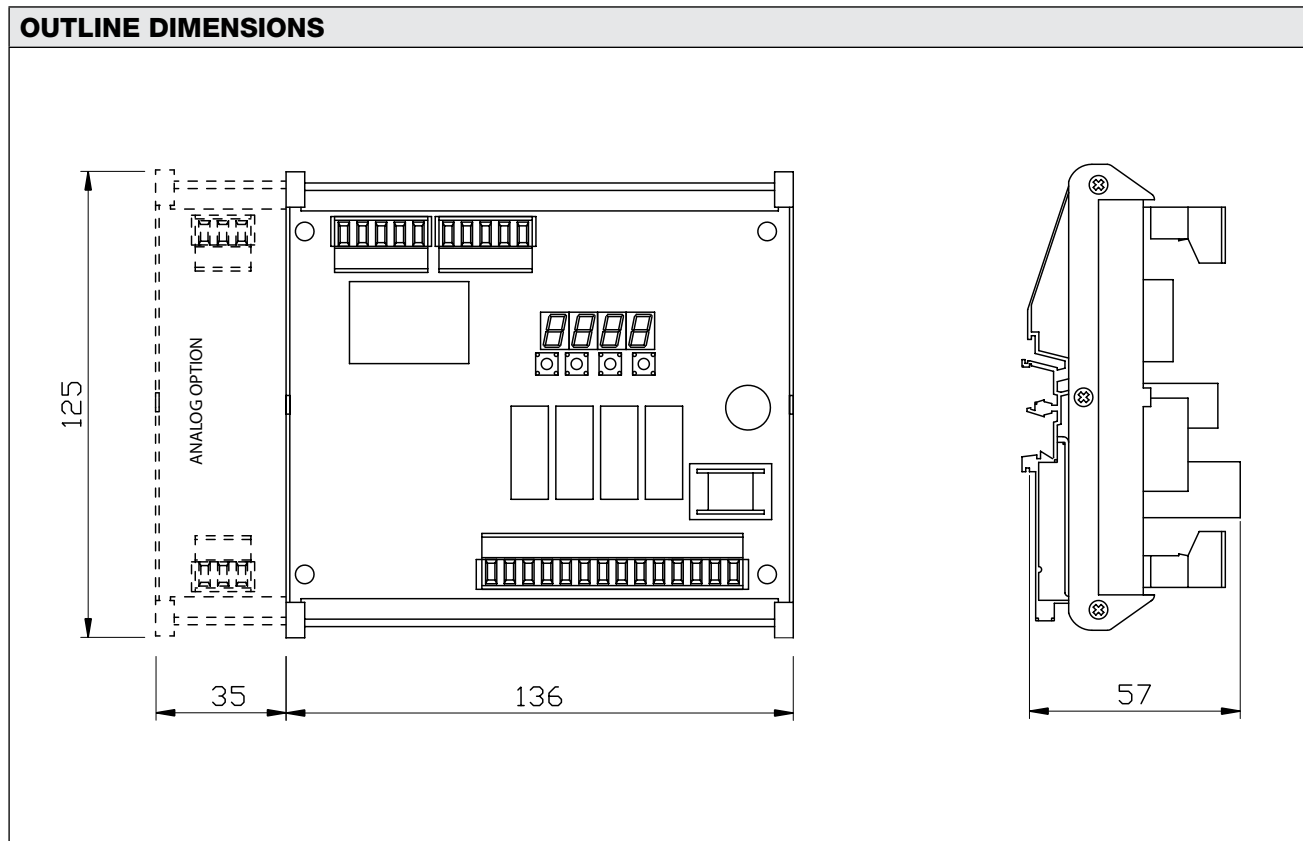
DESCRIPTION

The WG3 is specifically designed to prevent a weight bearing machine from exceeding its capacity. It can monitor and convert the outputs of up to four 350 Ω load cells and prevent their combined output from surpassing



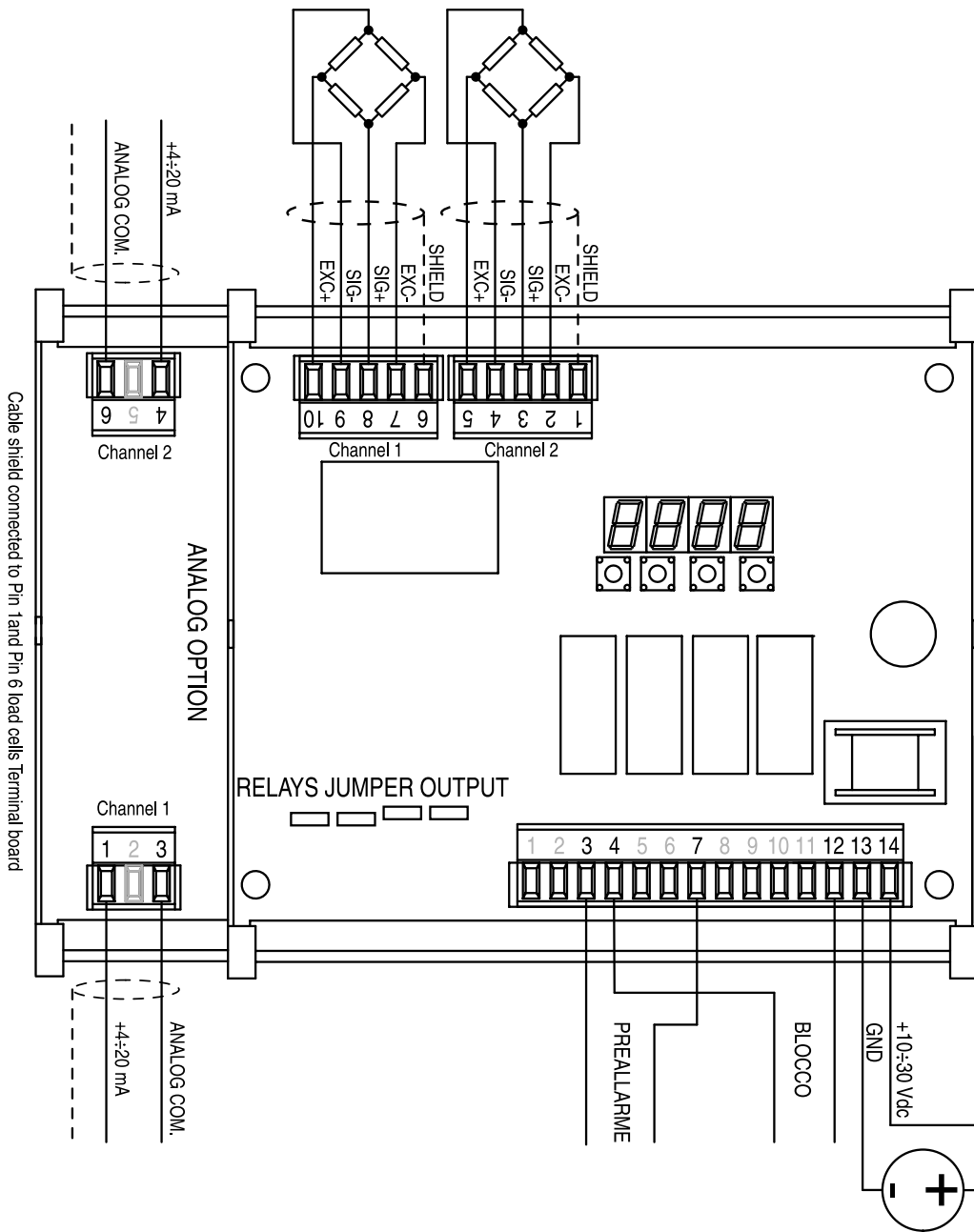
the limit set. It boasts a redundant safeguarding system that allows the load cells to be connected as independent pairs. The WG3 also features an integrated alarm for detecting load cell malfunctions or power failure, and a 60°C operating temperature range

OUTLINE DIMENSIONS



Electronic Overload Guard

WIRING DIAGRAM



Electronic Overload Guard

SPECIFICATIONS**PERFORMANCE****Power Output**

10 to 30 VDC

Insulation

Class III

Measuring Range

-3.9 to +3.9 mV/V

Input Sensitivity0.02 μ V/division**Internal Resolution**

24 bit

Calibration Type

Digital, from the keyboard

Frequency Signal Updates

12 to 1000 Hz

Filter (Adjustable)

0.25 to 3 Hz

ENVIRONMENTS**Operating Temperature**

-10 to +50°C (max humidity before condensation 85%)

Storage Temperature

-20 to 60°C

ELECTRICAL**Maximum Power Consumption**

6 W

DISPLAY AND KEYBOARD**Display**

4 digit, 7 segment LED

Digit Height

7 mm

Keyboard

4 key mechanical keyboard

Functions Executable From Keyboard

Calibration of Zero and Full Scale values

INPUT AND OUTPUTS**Load Cell Inputs**4 at 350 Ω for both measuring channels**Logic Outputs Alarm**

4 relay outputs

Interruption Control for Load Cell Cable

Indication on the display and via relay

Optional Analogue Output

4 to 20 mA (1 output per channel)

Resolution

16 bit

Linearity

<0.03% of full scale

Impedance300 Ω **ENCLOSURES****Dimensions**

136 x 125 x 57 mm L x H x D;

171 x 125 x 57 mm L x H x D with analog option

Mounting

DIN rail mount

Electrical Connections

5.08 mm terminal screw blocks

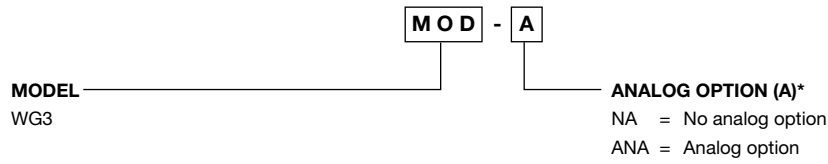
APPROVALS**EN**

EN 61000-6-2; EN 61000-6-3 EMC to EN 61010-1 for electrical safety;

EN 13849-1 parts of control systems related to safety

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ORDERING INFORMATION FOR WG3



Example Completed Part Numbers:

WG3-ANA is the part number for a WG3 with an analog output.

WG3-NA is the part number for a WG3 with no analog output.

***This is mandatory: customers must select an output option.**

All specifications subject to change without notice. For inquiries within Italy please contact the VPG Transducers Marketing Department directly using the email address vpgt.marketing@vpgsensors.com.