

Oil Pressure monitoring box



In HV bushing for SF6 switchgear installation oil is a critical parameter.

Hence the monitoring of this pressure is very important to guarantee a safe operation for the bushing itself and also the performance of connected transformer.

Temperature of oil can be locally very high so the pressure transducer in contact with oil must be specifically designed to resist to such a condition and also be very accurate to convert the signal.

Pressure monitor box is taking the signal from pressure transducer and simply indicate on its LED display the realtime digital value.

In addition a local series of indicating alarms are available to indicate if the pressure inside the bushing is too low (L1) or too high (L2, L3).

These information are remoted by changeover dry contacts to control room for maintenance and control.

An autodiagnostic routine continuously check the integrity of electronic board in order to guarantee a safe operation.

Pressure monitor box is not only able to read pressure of oil but of any kind of fluid or gas; its functionality is independent from type of media, the important is to read a 4-20mA analogue signal which is converted and a logic creates alarms.

Device can be customized according to different requests coming from market.

APPLICATIONS

- Realtime reading of oil pressure inside the HV bushing
- Safe operation: bistable relays allow to keep frozen indication of alarm status even in case of AUX trip
- Up to 4 local alarm indication and remote dry contacts
- Auto-diagnostic alarm status in case of malfunction of electronic device
- Conversion of standard 4-20mA analogue signal coming from pressure transducer
- Heavy duty and durable materials for long lasting and high resistance in harsh environment
- LED indication for clear and safe reading even in the most extreme temperature range
- Suitable for indoor or outdoor, IP65 protection
- Values of alarms are factory or locally adjustable
- Industrial, medical or aerospace fields

HIGHLIGHTS

- Extreme temperature range -40° to + 70°C
- Suitable for high vibration conditions, all internal components are tested accordingly
- Suitable for wall mounting with elastic dumpers
- Excellent long term stability
- Quick response time
- Factory calibration
- 14 bit ASIC core
- Wide range of AUX voltage input 110-230Vac 50/60Hz

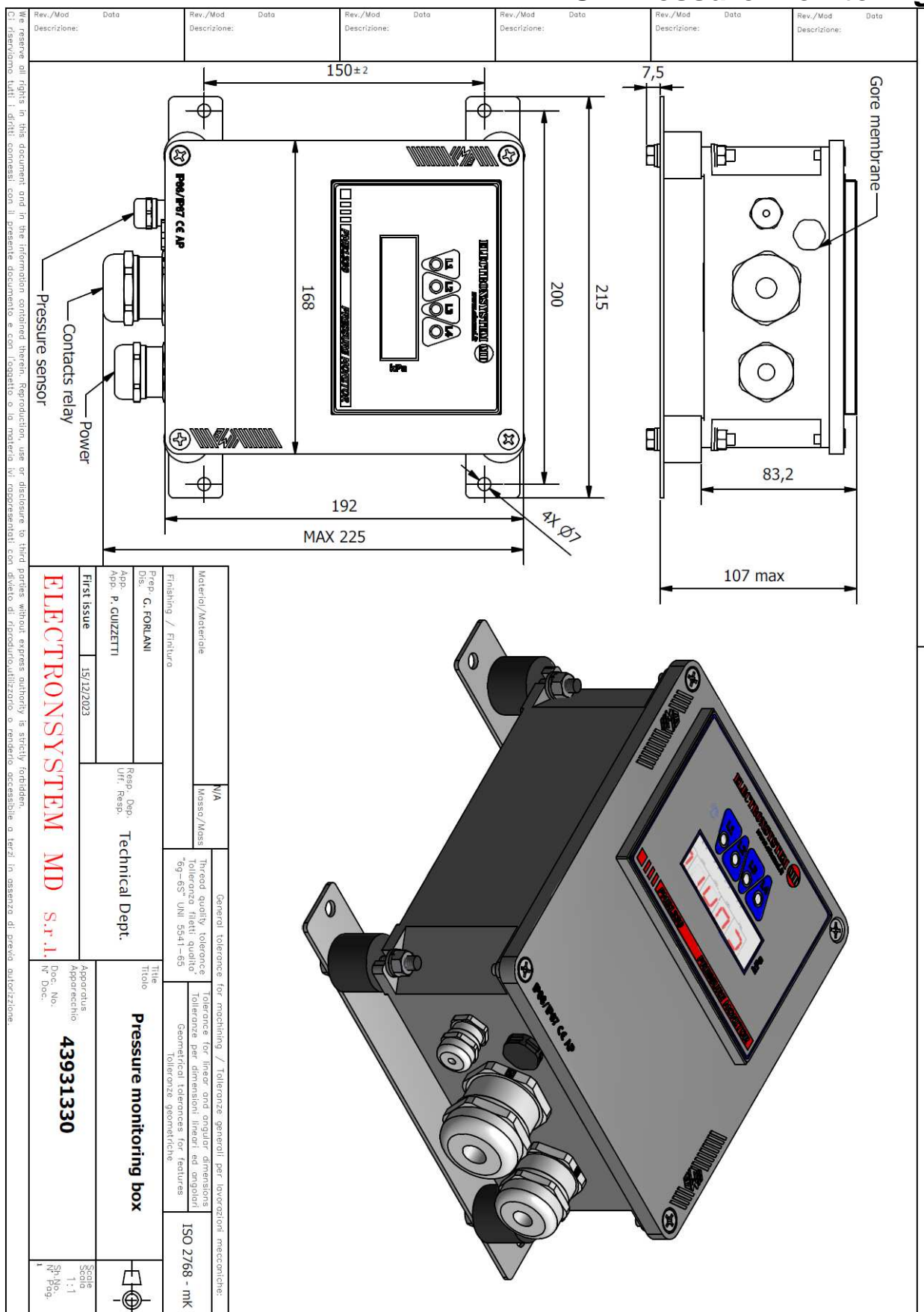
All specs are subject to change without notice

Oil Pressure monitoring box**Electrical characteristics PMB1330**

Power supply		115 / 230 V AC 15 %, 50-60 Hz
Indication		4 Red led and Up to 5 LED 14mm 7 segment
Measuring range	kPa	0 kPa ÷ +500 kPa ABS
Indication accuracy		1 %
Switch differential	kPa	20 kPa
Temperature range	°C	--40° to 70°
IP degree protection	IP	IP55 IEC 60529 with ventilated Gore membrane
Connection input		3X Cable glands, brass nickel plated
Box		Aluminium die-cast, painted & INOX AISI 316

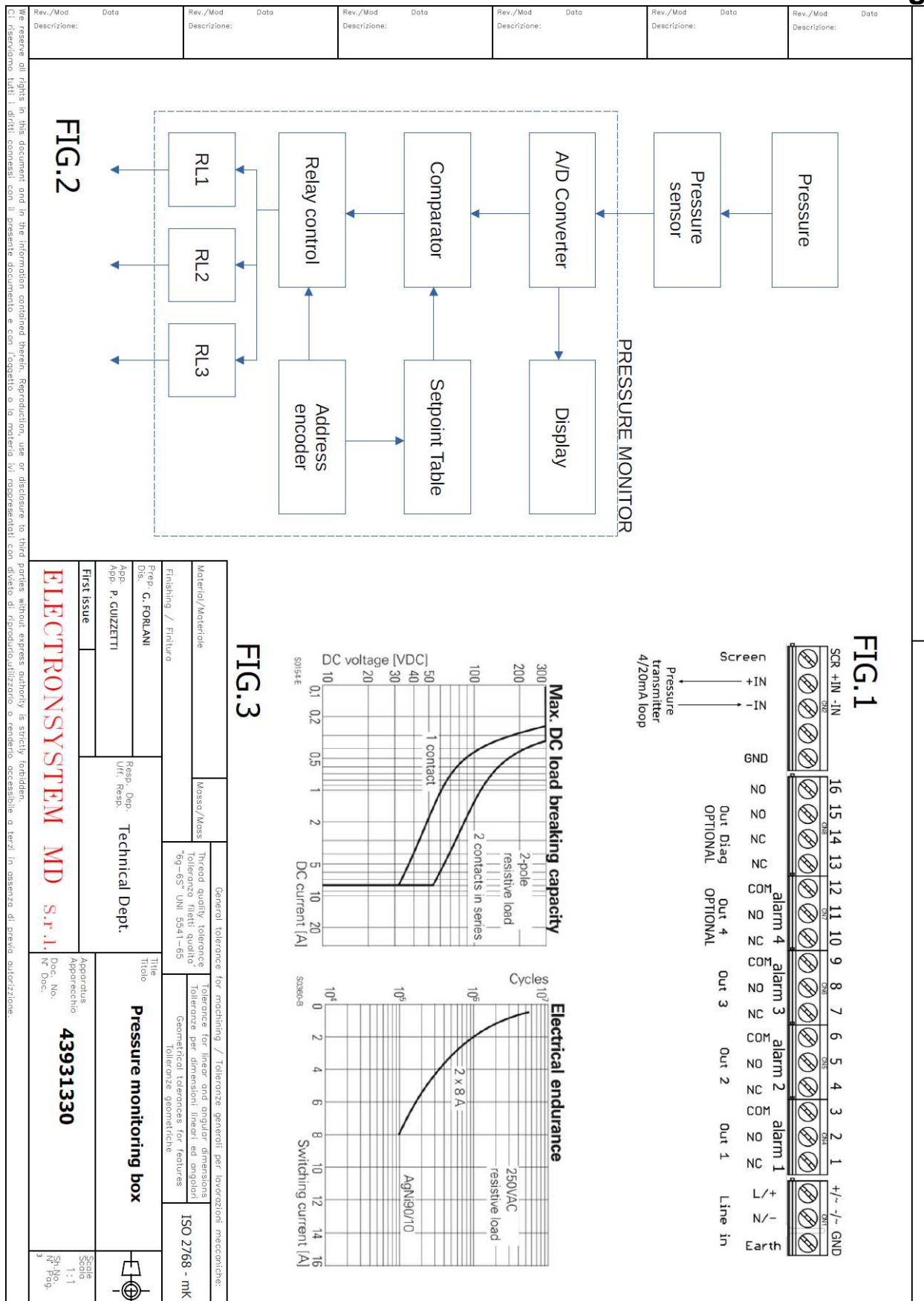
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STORAGE

If the complex must be storage before use, please keep dry and repaired.

Do not leave outdoor, please keep the parts in its original package.

Device is strongly sensitive to humidity hence avoid to store where relative humidity is more than 90%

STORAGE TEMPERATURE: $-30^{\circ}\text{C} \div +70^{\circ}\text{C}$

RELATIVE HUMIDITY: max 90% @ $+40^{\circ}\text{C}$

MAINTENANCE

Maintenance of pressure monitoring box must be done compulsory in factory. We recommend every 5 years to send back pressure monitor box for check of calibration, functionality test and cleaning. If available a new FW will be uploaded.

WARRANTY

Device is covered by 24 months after installation or max 36 months after delivery.

In case of service the pressure monitoring box must be sent back to factory for inspection.

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WARNINGS

CAUTION

Do not drop or hit the item. The pressure monitoring box is fragile and may be scratched or damaged from sudden shock.

When transporting the item, use the original shipping box from Electronsystm MD.

NOTE

Keep the item dry and clean.

Do not remove the transport protection caps before you are ready to install the item; please connect to pressure monitoring box only the original pressure transmitter made by Electronsystm MD.

NOTE

The use of original cable wiring is advised to have the better protection performances and assure rated accuracy. Do not connect not tested items, cables or other without prior authorization

INSTALLATION

Device must be mounted on a flat and robust surface using the proper flanges support.

Check the drawing to draw the assembly points of wall mounting before proceeding to drill the surface.

Control all the surroundings of the box are free and do not come in contrast with metal frames.

DISCLAIMER NOTE:

While we provide application assistance it is up to the customer to determine the suitability for its use. Specification may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However we assume no responsibility for its use.

The quality of ElectronsystmMD products is guaranteed by a Quality, Safety and Environmental management system certified by DNV according to ISO 9001, ISO 18001 and ISO 14001. Electronsystm MD works in partnership with its customers in designing customized executions in order to meet specific requirements, please contact us.

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