

RM140W Overfill Protection Rack Monitor

Overfill protection and grounding monitor for truck or rail loading in petro-chemical applications.

Built to function with all probes designed to the API code: API RP 1004 and the EU Standard EN13922, the RM140W Series is the world's most flexible and adaptable monitor.

The RM140W provides a fail-safe, state-of-the-art overfill protection and grounding monitoring system that is compatible with all commonly used overfill protection and grounding systems.

Key Features

- Automatic sensing of 2-wire/thermistor or 5-wire overfill systems, no manual switching or inspection required
- Supports up to (8) 2-wire/thermistor probes and up to (12) 5-wire probes
- High-output display visible in direct sunlight, provides flexibility for indoor/outdoor use
- Coded wireless by-pass key for secure and reliable operation
- Self-test at start up/continuous self-monitoring, ensures safety throughout the loading process
- Separate grounding and overfill control outputs
- Compact and functional design is easy to install, perfect for tight spaces or crowded work areas
- Global electronic compatibility, able to operate on almost any electric service
- RM140W is directly compatible with PD100 Probe Doctor as a "plug-in replacement"
- Rack monitor electronics mounted in a 100mm (4") deep flameproof enclosure.



Liquip RM140W shown

Models

- RM140W - Overfill and Ground Verification Rack Monitor.

Certification & Compliance

- Type of Protection: Explosion-proof enclosure for Group II, Zone 1, Ex d [ia]
- IEC Certificate: IECEx TSA 05.0049X
Marking: Ex d [ia] IIB T6 (Tamb=60oC) IP66
- ATEX Certificate: DEMKO 06 ATEX 140833X
Marking: 2813 II 2 (1) G
Ex db [ia Ga] IIB T6 Gb
(-20°C ≤ Tamb ≤ +70°C) IP66
- EU Directives: ATEX Directive 2014/34/EU
EMC Directive 2014/30/EU
RoHS 3 2015/863

- FM Approval:



FM Approved for US and Canada.
Explosion proof with I.S. Outputs
Intrinsically Safe Sécurité
Intrinsèque Exia
Class I, Division 1, Group C & D, T6
Ta = -25°C to 60°C

RM140W Overfill Protection Rack Monitor

Electrical

Power	240V Operation	110V Operation
Minimum Input Voltage:	185VAC	85VAC
Maximum Input Voltage:	275VAC	135VAC
In-rush Current:	2.2A	2.3A
Maximum Current:	400mA	400mA
Normal Power Consumption:	8.6W (No probe) 20W (8x 2-wire probes)	8.6W (No probe) 20W (8x 2-wire probes)
Mains Power Fuse Rating:	250V, 400mA anti-surge 1500A Breaking Capacity	250V, 400mA anti-surge 1500A Breaking Capacity

Intrinsically Safe Signals

Nominal Voltage:	10.5V, 13.02V Max
Nominal Current:	116mA, 121mA Max
Relay Outputs:	1 x Overfill Monitoring Relay 1 x Ground Monitoring Relay
Relay Contacts:	Common, Normally Open, Normally Closed
Maximum Contact Voltage:	250VAC
Maximum Contact Load:	5A (resistive), 2.5A (inductive)
Relay Fuse Rating:	250V @ 5A anti-surge

Mechanical

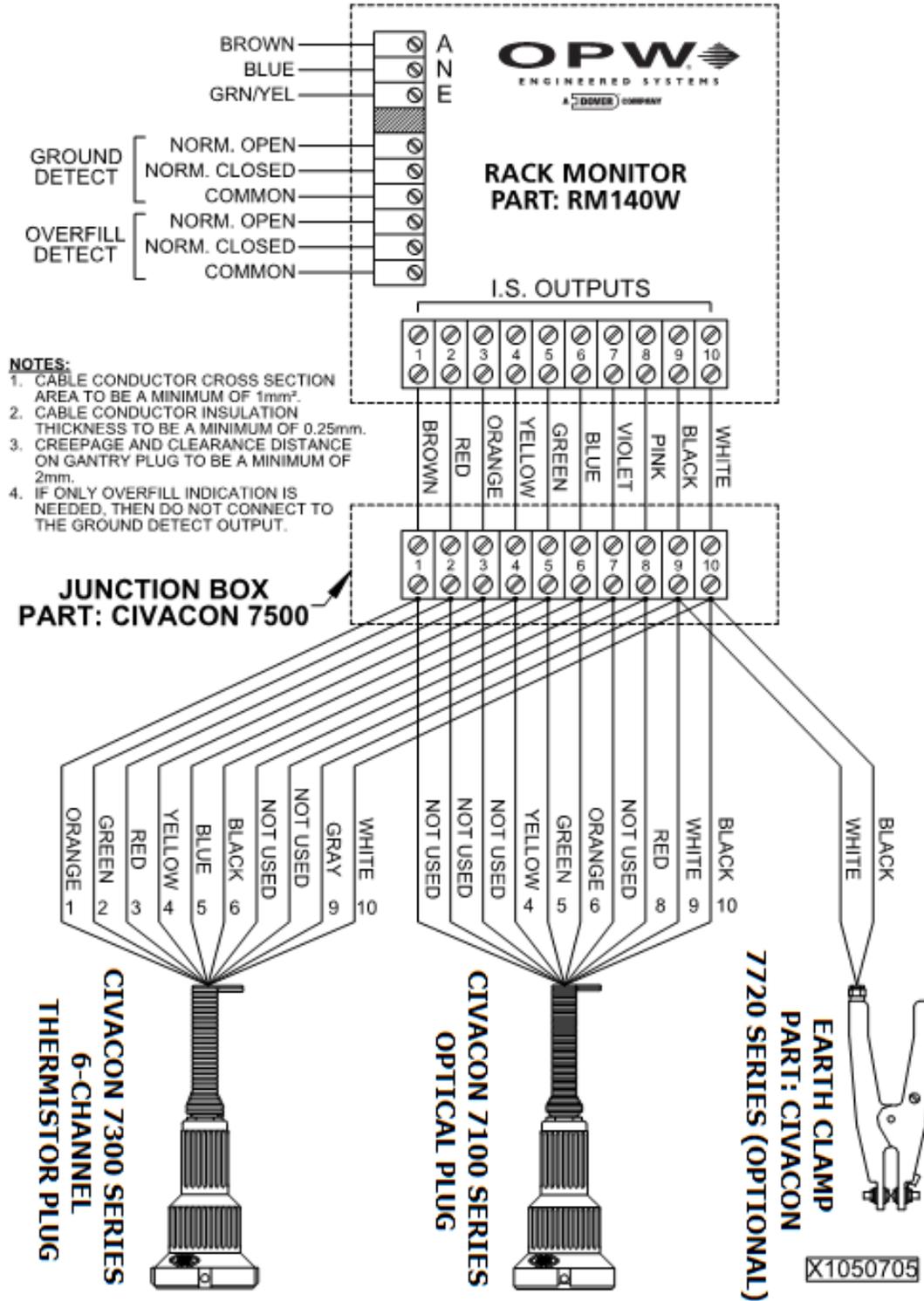
	Standard	Metric
Width	12.8"	324mm
Height	13.4"	340mm
Depth	6.7"	170mm
Weight	36.37 lb	16.5 kg
Material	Aluminium Housing Base and Cover, Laminated Glass Window	

Parts & Accessories

Part Number	Description	Part Number	Description
6987	Fuse 400mA, 250VAC anti-surge, 1500A Breaking Capacity	6983	RM140W Bypass Fob
5542	Fuse 5A @ 250VAC anti-surge	7500 Series	Civacon Junction Box
6985	RM100 Safety Ground Harness	7300 Series	Civacon 6-Channel Termistor Plug
RM100-3	RM100 Aluminium Safety Barrier	7100 Series	Civacon Optic Plug
RM100-4	RM100 Polycarbonate Terminal Cover	7720-7720	Civacon Earth Clamp with Straight Cable
RM100-5K	RM100 PCB Assembly Complete Kit (RM100-5 + 6959 Display)	6959	Display PCB Assembly

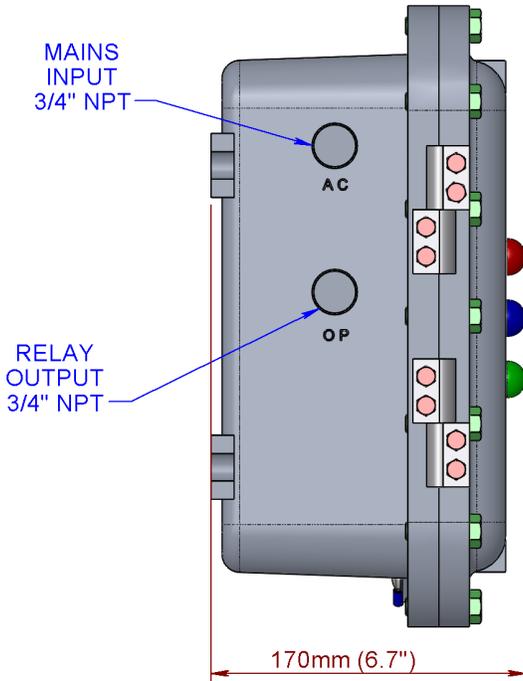
RM140W Overfill Protection Rack Monitor

WIRING DIAGRAM RM100 TO CIVACON GANTRY PLUG & EARTH CLAMP

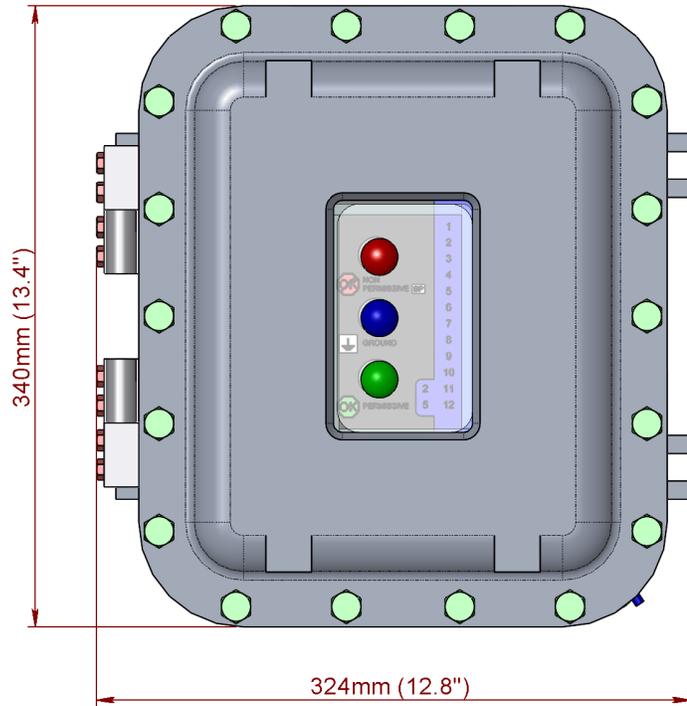


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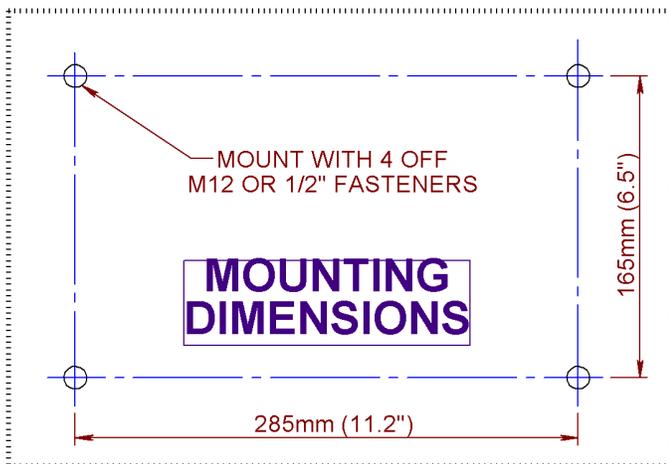
Dimensions



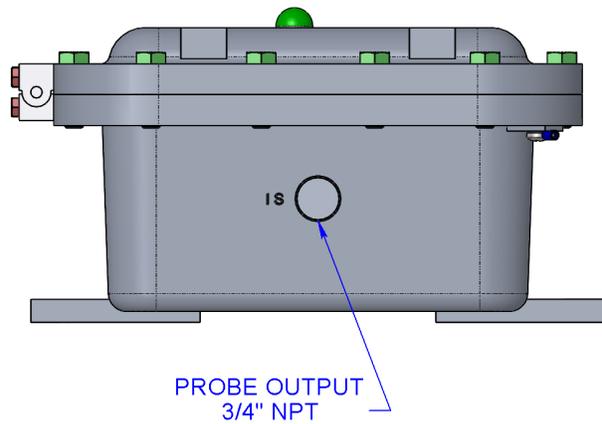
SIDE VIEW



FRONT VIEW



MOUNTING DIMENSIONS



BOTTOM VIEW

X1051205