

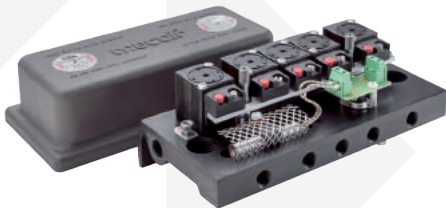


CSN

RAINTIGHT ENCLOSURE

MECAIR - CSN RAINTIGHT ENCLOSURE

PRODUCT LEAFLET



DESCRIPTION

The CSN waterproof enclosure is designed for the piloting of diaphragm valves type VEM, and is available in the following models:

- **CSN 5:** from 1 to 5 solenoid pilots
- **CSN 8:** from 6 to 8 solenoid pilots
- **CSN 12:** from 9 to 12 solenoid pilots

The CSN enclosure is IP67 approved. Each solenoid pilot, energised in sequence, commands a corresponding VEM type diaphragm valve, by way of O.D. 8 mm pneumatic tube being less than 2 metres in length. The CSN enclosures are supplied complete with fixing brackets. The common terminal is pre-wired. The CSN solenoid base is manufactured from extruded aluminium, while the cover is in diecast aluminium, both anodised for protection against aggressive agents. The CSN enclosure features a common exhaust port, located on the underside of the unit. The exhaust is open to the atmosphere and can be piped or muted with a silencer. For low-temperature applications, enclosures are available with a thermostatically controlled heating device model "GRT" that keeps the internal temperature at +4°C.

The GRT is available in two models:

- **GRT 70:** for CSN 5
- **GRT 120:** for CSN 8 and CSN 12.

The CSN Enclosure conforms to ATEX II 3D Extc IIIC T100°C DC IP67.

GENERAL CHARACTERISTICS

OPERATING TEMPERATURE	-20°C/+60°C
WEIGHT	CSN 5 - 3.5 kg CSN 8 - 5 kg CSN 12 - 7 kg

CONSTRUCTION FEATURES - ENCLOSURE

COVER	Diecast aluminium (anodised)
BASE	Extruded aluminium (anodised)
PLUNGER	Stainless steel
SPRING	Stainless steel
GASKETS	NBR

ELECTRICAL CHARACTERISTICS

COIL INSULATION	Class H
ELECTRICAL CONNECTION	3/4" female Gas
ELECTRICAL PROTECTION	IP67, CENELEC Certificate GR-93 / 032409
VOLTAGE AND FREQUENCY	AC: 50/60 Hz: 24/110/220 V DC: 24/110 V
PNEUMATIC CONNECTIONS	To VEM 1/4" valve female Gas Common exhaust No. 2 connections 3/8" female Gas

HOW TO ORDER

Part Number Code: **CSN 5 - ..V/..Hz - R**

CSN

Waterproof enclosure IP67

CSN 1 ÷ 5 (small enclosure)
CSN 6 ÷ 8 (medium enclosure)
CSN 9 ÷ 12 (large enclosure)

Heater with thermostat

Available in two versions:
GRT70 = 70 WATT (for CSN 1 ÷ 5)
GRT120 = 120 WATT (for CSN 6 ÷ 12)

Coil voltage/frequency

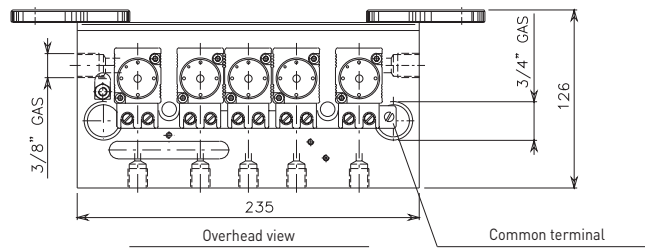
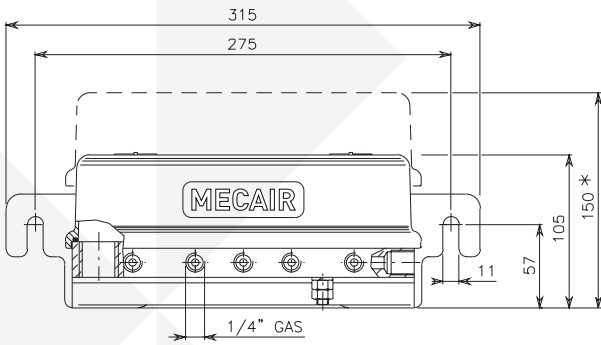
Nominal values	Operating range
24/50	24 V/50 Hz
24/60	24 V/60 Hz
24/DC	24 V/DC 15 W
110/50	110-127 V/50 Hz
110/60	110-127 V/60 Hz
220/50	220-240 V/50 Hz
220/60	220-240 V/60 Hz

MECAIR - CSN RAINTIGHT ENCLOSURE

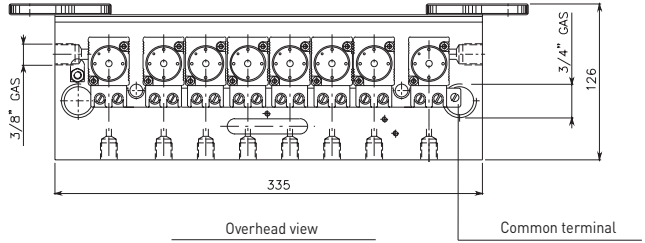
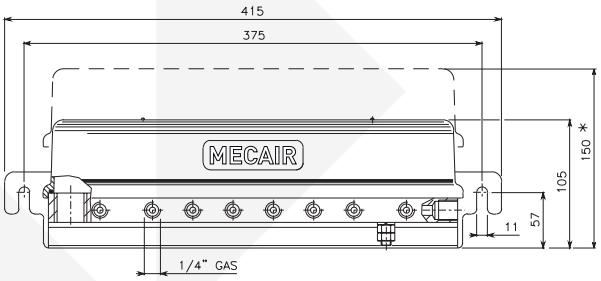
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DIMENSIONS (MM)

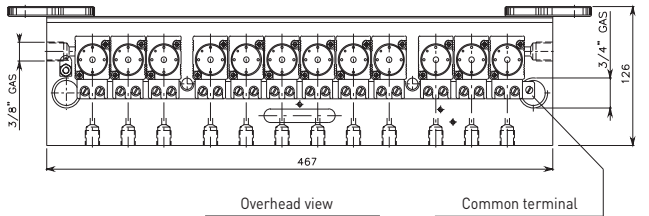
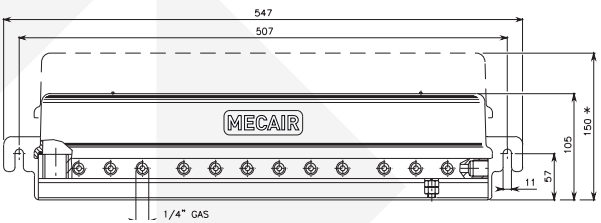
CSN 5



CSN 8



CSN 12

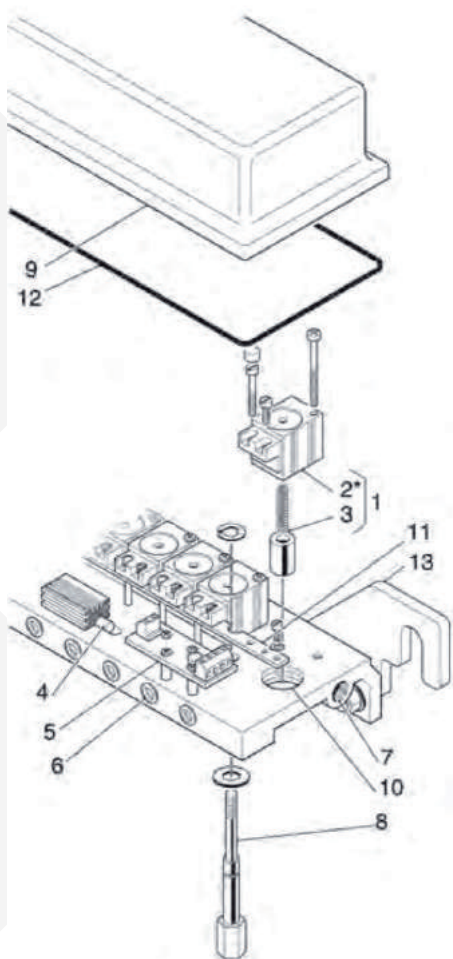


MECAIR - CSN RAINTIGHT ENCLOSURE

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SPARE PARTS

CSN 5 - CSN 8 - CSN 12



POS.	DESCRIPTION	CODE
1 (2+3)	Pilot group complete with plunger, spring and coil	KIT SB2N - ../..*
2	Solenoid coil*	KIT SB2 - ../..*
3	Plunger with spring	KIT ESL 28
4	Heater + thermostat for CSN 1-2-3-4-5	KIT GRT 70 - 220 V
5	Heater + thermostat for CSN 6-7-8-9-10-11-12	KIT GRT 120 - 220 V

* Specify voltage, frequency (or DC)

RECOMMENDED SPARE PARTS

For start-up:

≥ 5% of supply (min. 1 piece):

- pilot group (1), complete with plunger, spring and coil.

For first 2 years of service:

≥ 10% of supply (min. 2 pieces):

- pilot group (1), complete with plunger, spring and coil.

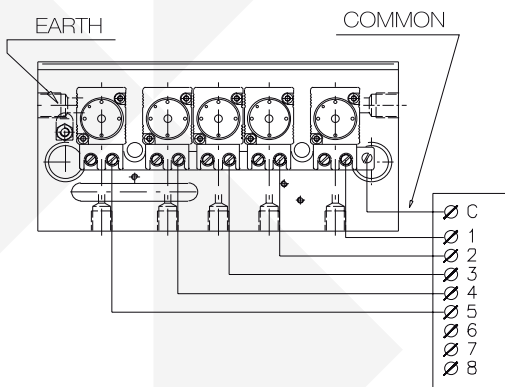
MECAIR - CSN RAINTIGHT ENCLOSURE

PRODUCT LEAFLET

ELECTRICAL CONNECTIONS

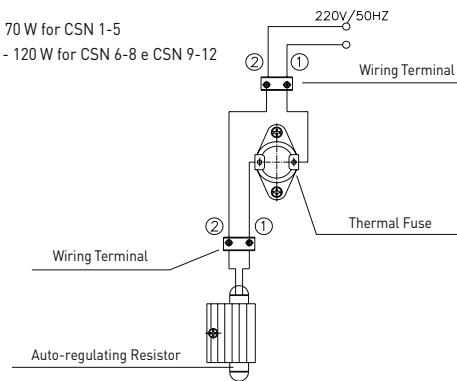
A	Unscrew the screw [8] and remove cover [9]
B	Connect electric wires as shown [E1] on following sheet. Cable entry [10]: 3/4" Gas cylindrical thread. Use multi-core cable: 1 wire to common pre-wired [11], +1 wire to each coil.
C	Connect heater thermostat (optional); see [E2] on following sheet
D	Reassemble the cover [9]; make sure of correct position of gasket [12]

E1 - Sequencer (plug-in terminal connector)



E2 - Thermostatically controlled resistor

KIT GRT 70 - 70 W for CSN 1-5
KIT GRT 120 - 120 W for CSN 6-8 e CSN 9-12



PNEUMATIC ASSEMBLY AND CONNECTIONS

Pneumatic Connections [6] 1/4" female Gas - valve connection with:

- Tube Ø 6/8 mm - Rilsan or stainless steel
- Max length 2 metres.

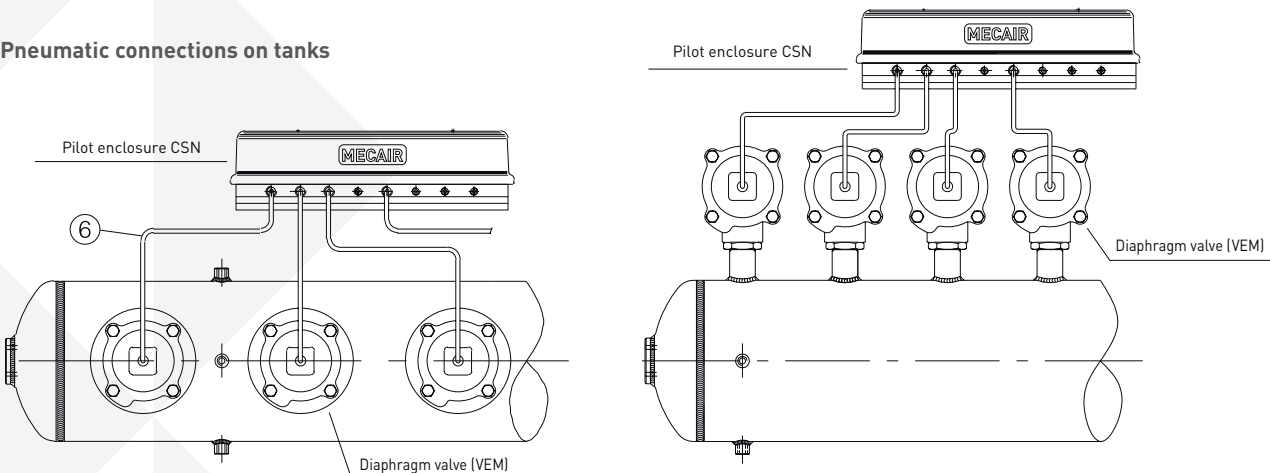
Fluid: Compressed air (or nitrogen) dried, filtered and oil free.

Min/max pressure 0.5-7.5 bar (when 7.5 bar exceeded, the plunger opens to avoid pressure build-up).

Exhaust Connections [7]: connection 3/8" female Gas:

- open to atmosphere
- or muted with silencer
- or piped to an external tank for nitrogen recovery

Pneumatic connections on tanks

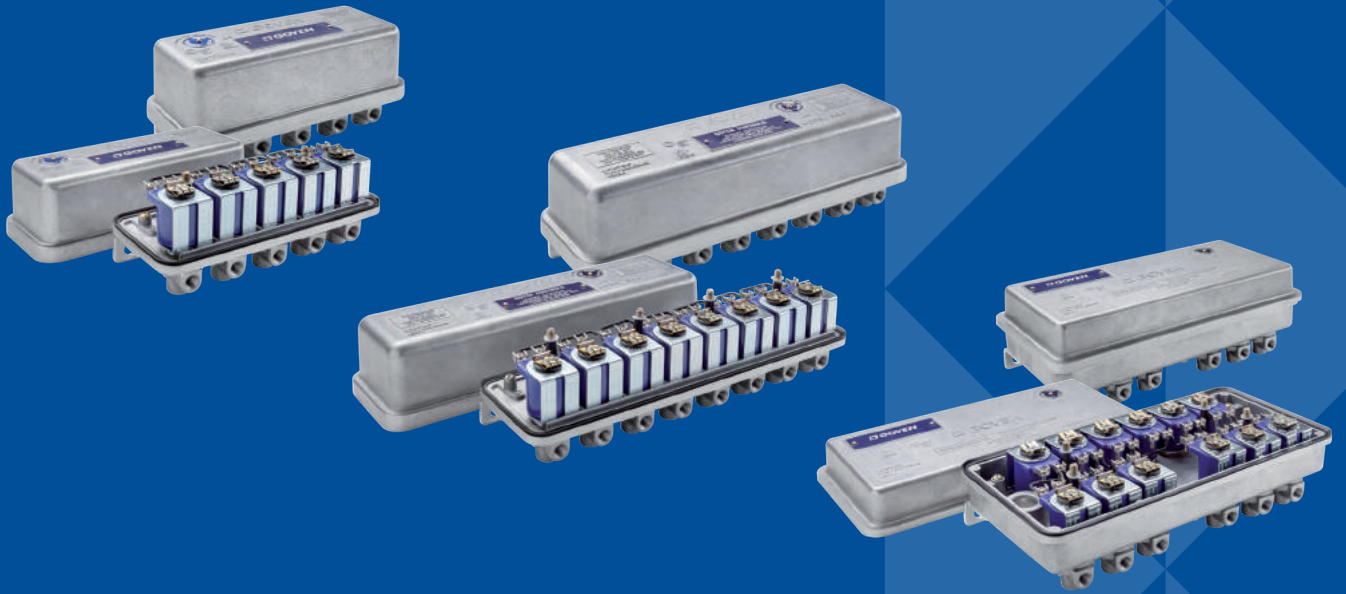




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PILOT VALVE ENCLOSURES FOR NON-HAZARDOUS LOCATIONS

GOYEN - NEMA4/RAINTIGHT/ATEX II 3 D G DIECAST PILOT VALVE ENCLOSURES (5, 8, 12 VALVE) FOR NON-HAZARDOUS LOCATIONS

PRODUCT LEAFLET

DIECAST ALUMINIUM ENCLOSURES FOR GOYEN RCA3D PILOT VALVES



3-5 V Enclosure



3-8 V Enclosure



3-12 V Enclosure

For reliable operation, ensure supply voltage is within -10% and +15% of rated solenoid voltage.

To guarantee NEMA4 performance ensure gasket is in place when attaching lid to enclosure base. Replace components within 1 million cycles (refer to Spare Parts).

CONSTRUCTION

Body: Aluminium (diecast)
Pilot Body: Aluminium (diecast)
Ferrule: 305 SS
Armature: 430FR SS
Seals: Nitrile
Screws: 302 SS or 304 SS
Clip: Mild steel (plated)

SPARE PARTS

K0380 Nitrile replacement seal, armature, spring & ferrule kit.
 K0384 As above in viton.
 RCA3D0-*** } Replacement pilot assemblies.
 RCA3D1-*** } Refer to page 3 of RCA3 Solenoid Pilot Valves brochure.

OPERATION

Recommended on time range: 50-500 ms
Recommended time between pulses: 1 minute or greater

OPTIONS

- Heater, see order code below
- Anti-condensation heater, see order code below

APPROVALS

- C-Tick
- CE - EMC (2004/108/EC) and LV (2006/95/EC)
- CSA
- UL Listed J&P 42V8
- ATEX Ex II 3 D G

Approvals do not apply when heaters or slave cards are installed.

PRODUCT PERFORMANCE

FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE MIN	TEMPERATURE MAX	FLUID MEDIA
0.32 Cv/ 0.27 Kv	860 kPa/ 125 psi	0 kPa/0 psi	-40°C/-40°F	82°C/180°F	Air or inert gas

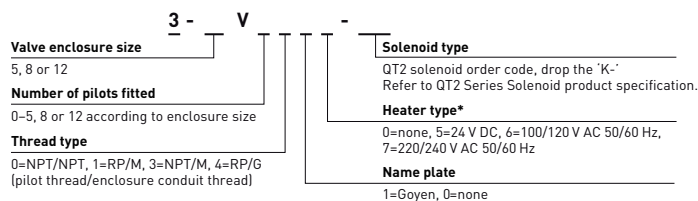
SUITABLE FOR

ATEX Category Ex II 3 GD and IP65 and all other non-hazardous applications, for piloting Goyen diaphragm valves.

INSTALLATION

Ensure device is disconnected from power before opening the enclosure. These enclosures are all finished with the common solenoid terminals pre-wired.

ANTI-CONDENSATION HEATER, SEE ORDER CODE BELOW



Note that enclosures are pre-wired with QT2 type solenoids only.
 * = heaters currently not available in 3-5V5 enclosures.

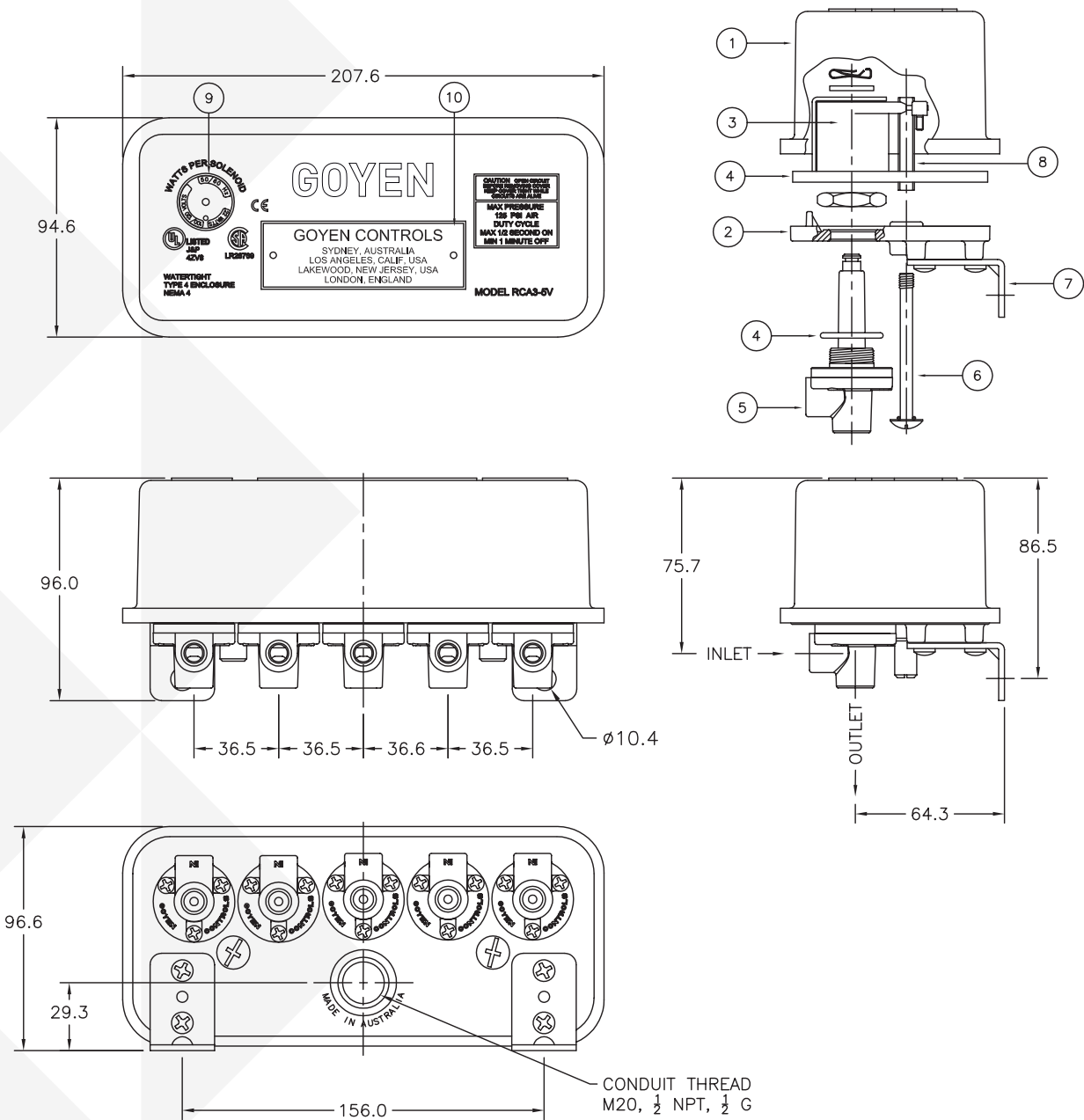
EXAMPLE

3-8V6010-330
 8 valve enclosure, fitted with 6 pilots, with NPT pilot and conduit thread type, Goyen name plate, no heater and 220/240 V AC 50/60 Hz solenoids.

GOYEN - NEMA4/RAINTIGHT/ATEX II 3 D G DIECAST PILOT VALVE ENCLOSURES (5, 8, 12 VALVE) FOR NON-HAZARDOUS LOCATIONS

PRODUCT LEAFLET

DIMENSIONS AND WEIGHTS IN MM

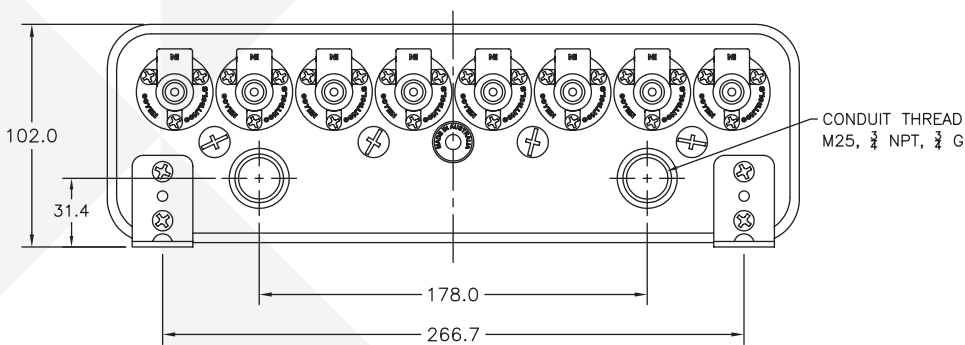
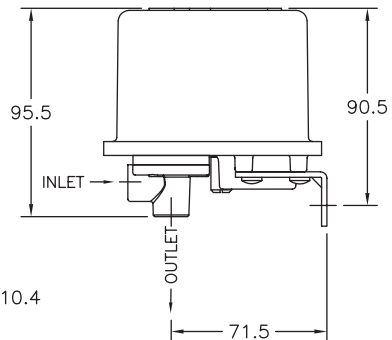
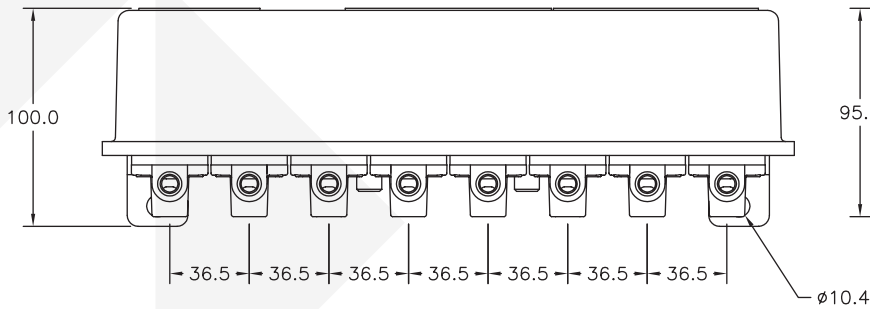
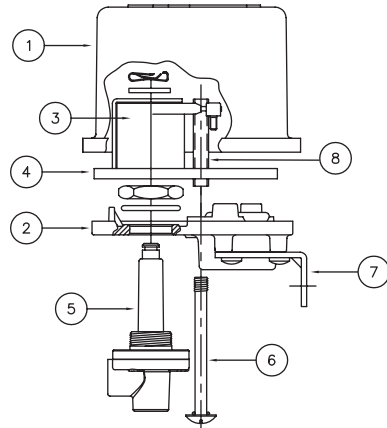
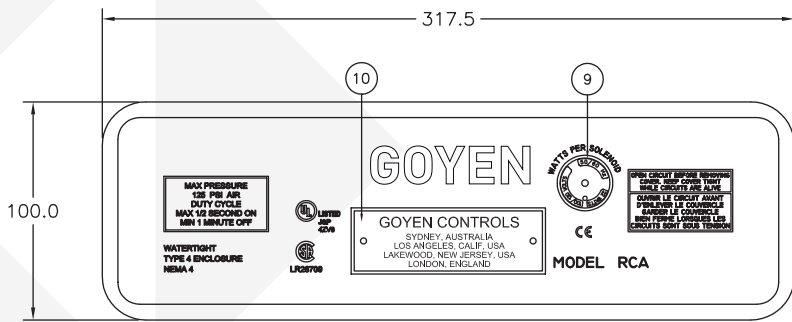


3-5V5 Series

Mass = 0.814 kg + 0.174 kg per valve pilot fitted
 (1.795 lb + 0.384 lb per pilot valve fitted)

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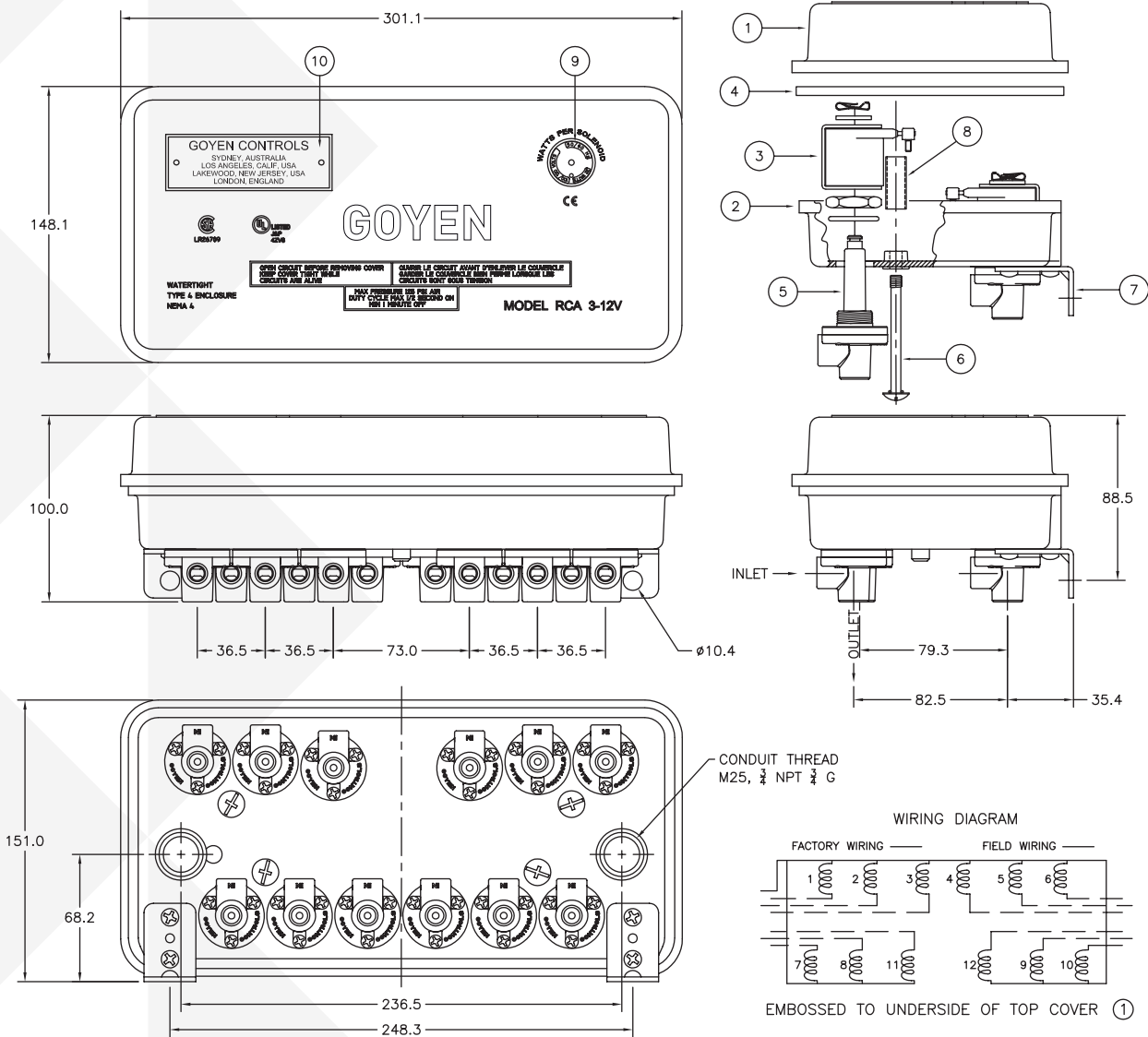


3-8V8

Mass = 1.280 kg + 0.174 kg per pilot valve fitted
(2.820 lb + 0.384 lb per pilot valve fitted)

GOYEN - NEMA4/RAINTIGHT/ATEX II 3 D G DIECAST PILOT VALVE ENCLOSURES (5, 8, 12 VALVE) FOR NON-HAZARDOUS LOCATIONS

PRODUCT LEAFLET



3-12V12

Mass = 1.574 kg + 0.174 kg per pilot valve fitted
 (3.470 lb + 0.384 lb per pilot valve fitted)



GOYEN CONTROLS PTY LIMITED

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