



mecair CSN

RAINTIGHT ENCLOSURE

MECAIR RAINTIGHT ENCLOSURE

CSN



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 Ex tc 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	¾" 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 ¼" valve female Gas Common exhaust No. 2 connections ¾" female Gas

HOW TO ORDER

Part Number Code:

CSN	CSN 5 - ..V/..Hz - R	Heater with thermostat
Waterproof enclosure IP67		Available in two versions: GRT70 = 70 WATT (for CSN 1 + 5) GRT120 = 120 WATT (for CSN 6 + 12)
CSN 1 + 5 (small enclosure) CSN 6 + 8 (medium enclosure) CSN 9 + 12 (large enclosure)		Coil voltage/frequency

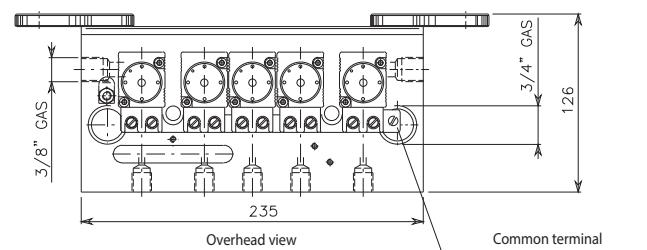
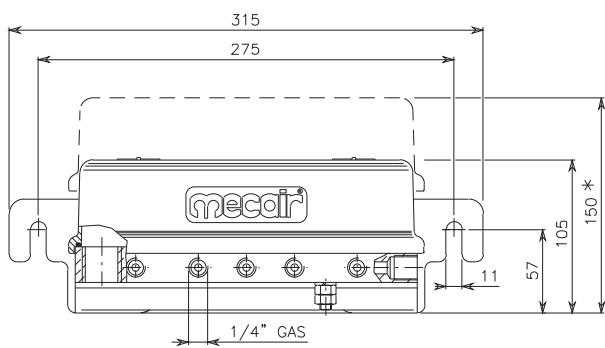
Nominal values	Operating range
24/50	24 V/50 Hz
24/60	24 V/60 Hz
24/DC	24 V/DC 15 W
110/50	110-127 V/50 Hz
110/60	110-127 V/60 Hz
220/50	220-240 V/50 Hz
220/60	220-240 V/60 Hz

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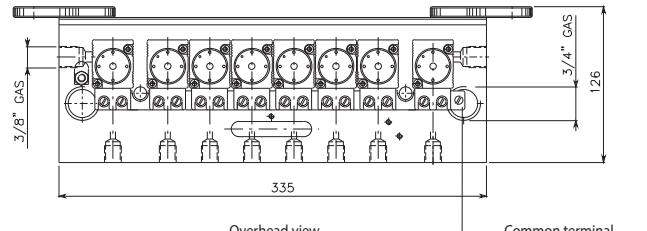
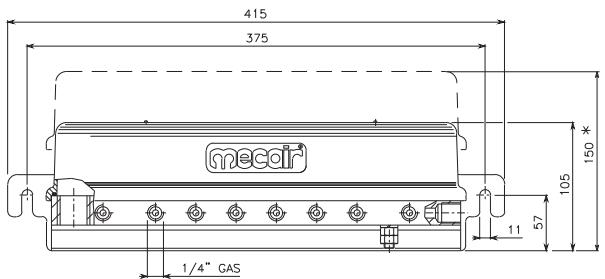
CSN

DIMENSIONS (mm)

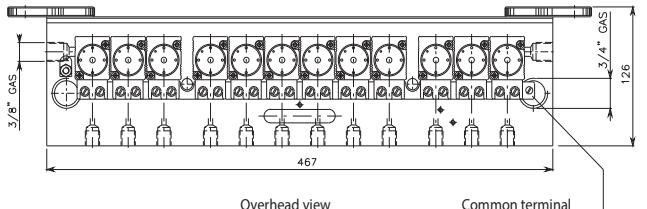
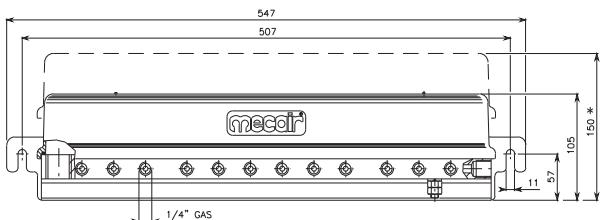
CSN 5



CSN 8



CSN 12

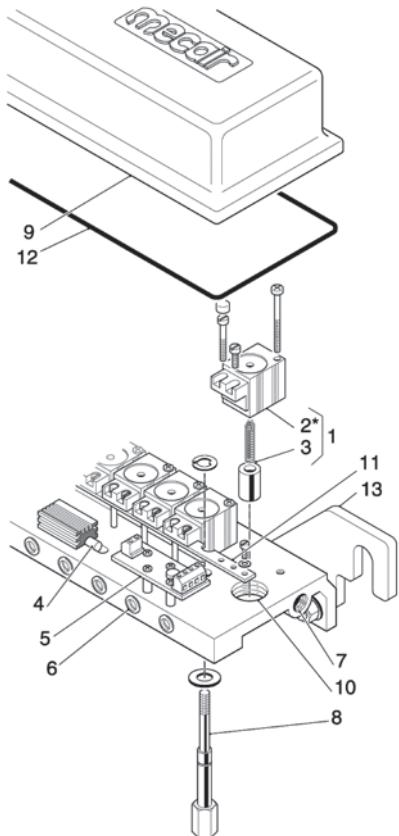


MECAIR RAINTIGHT ENCLOSURE

CSN

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 - 220V
5	Heater + thermostat for CSN 6-7-8-9-10-11-12	KIT GRT 120 - 220V

(*) 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.

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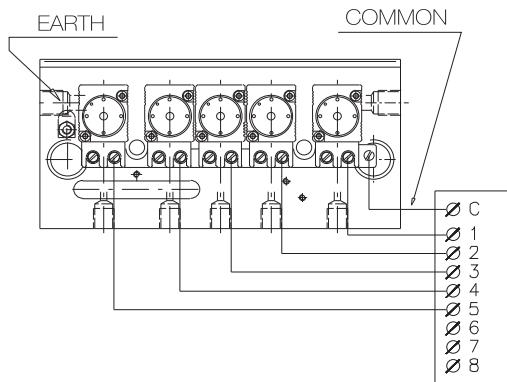
CSN

ELECTRICAL AND PNEUMATIC CONNECTIONS

ELECTRICAL CONNECTION

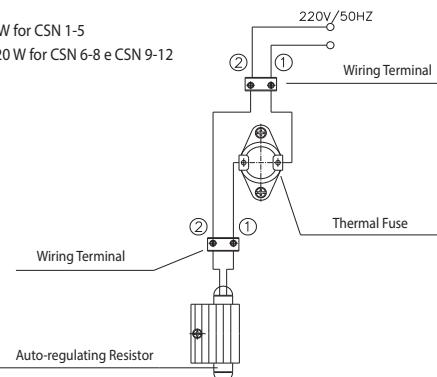
- A Unscrew the screw [8] and remove cover [9].
- B Connect electric wires as shown [E1] on following sheet.
Cable entry [10]: $\frac{3}{4}$ " Gas cylindrical thread.
Use multi-core cable: 1 wire to common pre-wired [11], +1 wire to each coil.
- C Connect heater thermostat (optional); see [E2] on following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

E1 – SEQUENCER (plug-in terminal connector)



E2 – THERMOSTATIALLY 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) $\frac{1}{4}$ " female Gas – valve connection with:

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

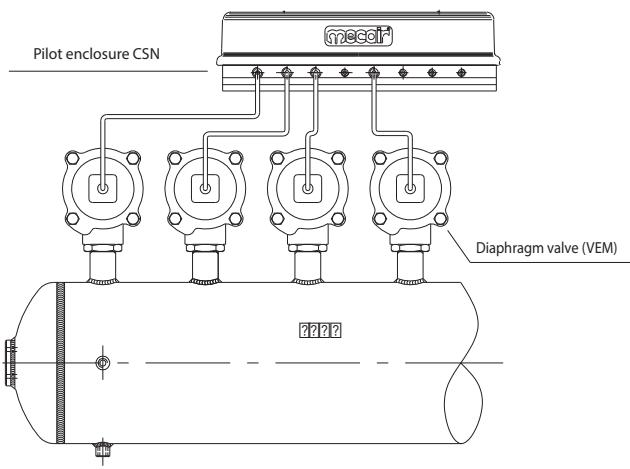
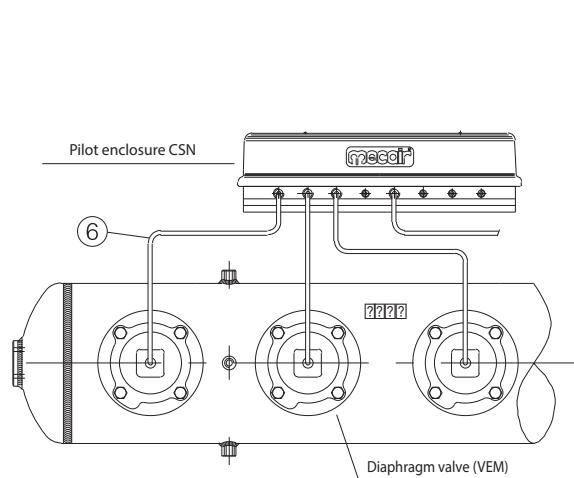
Fluid: Compressed air (or nitrogen) dried, filtered and oil free.

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 $\frac{3}{8}$ " 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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