

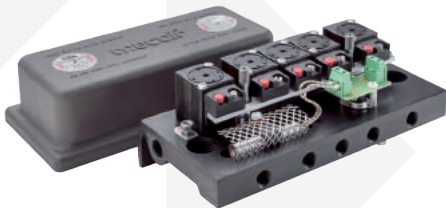


CSN

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

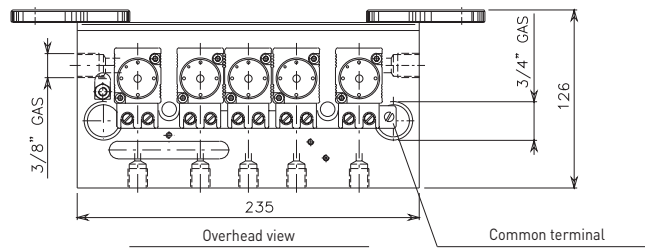
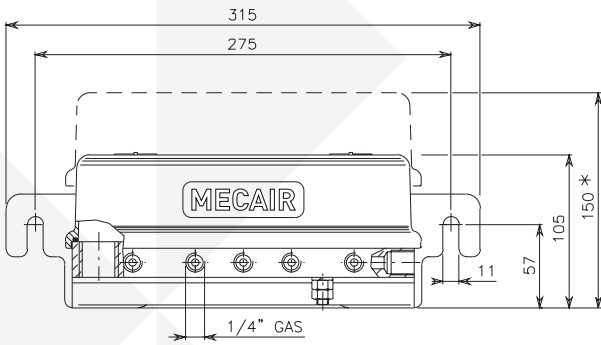
| Nominal values | Operating range |
|----------------|-----------------|
| 24/50 | 24 V/50 Hz |
| 24/60 | 24 V/60 Hz |
| 24/DC | 24 V/DC 15 W |
| 110/50 | 110-127 V/50 Hz |
| 110/60 | 110-127 V/60 Hz |
| 220/50 | 220-240 V/50 Hz |
| 220/60 | 220-240 V/60 Hz |

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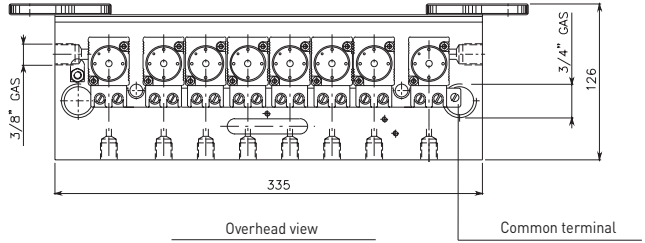
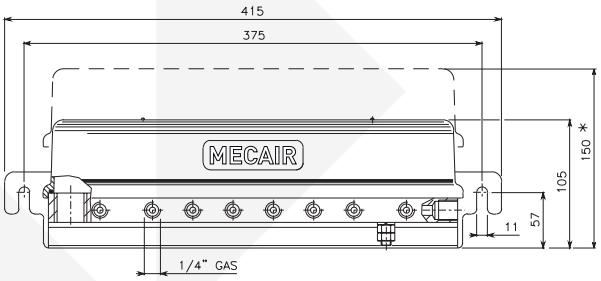
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DIMENSIONS (MM)

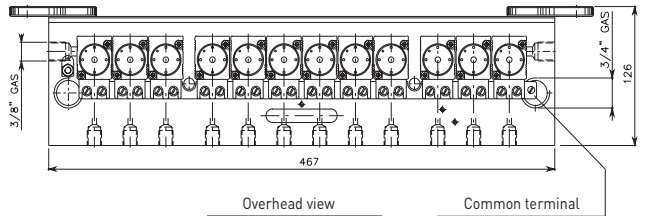
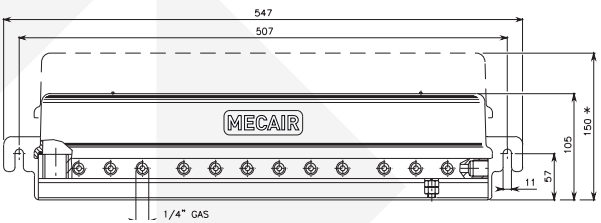
CSN 5



CSN 8



CSN 12

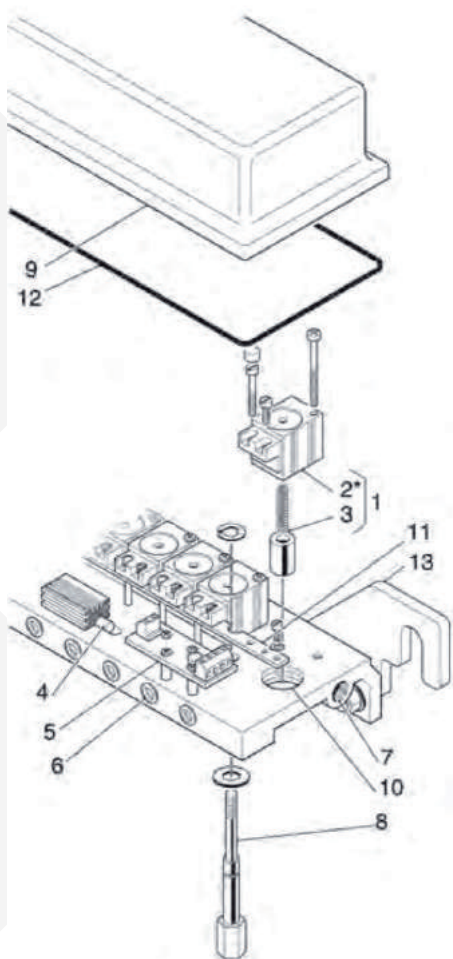


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SPARE PARTS

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.

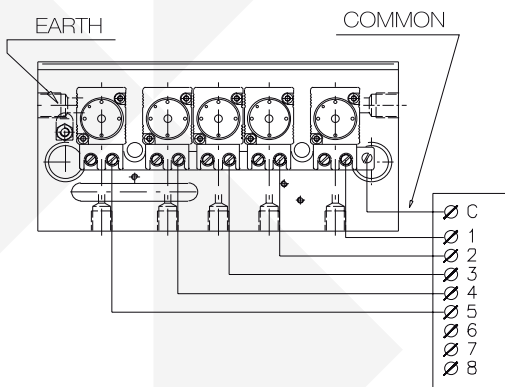
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ELECTRICAL CONNECTIONS

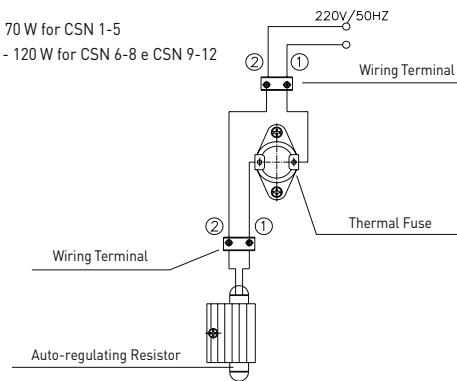
| | |
|---|--|
| A | Unscrew the screw [8] and remove cover [9] |
| B | Connect electric wires as shown [E1] on following sheet. Cable entry [10]: 3/4" Gas cylindrical thread. Use multi-core cable: 1 wire to common pre-wired [11], +1 wire to each coil. |
| C | Connect heater thermostat (optional); see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

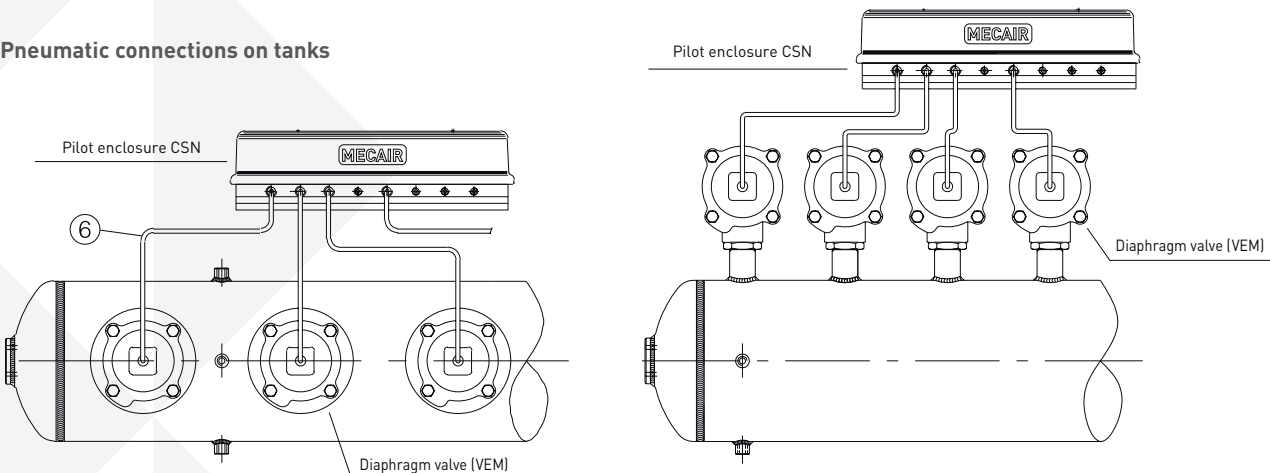
Fluid: Compressed air (or nitrogen) dried, filtered and oil free.

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





MECAIR SRL

VIA BERTACCIOLA, 50, 20813 BOVISIO MASCIAGO (MB), ITALY WWW.GOYENMECAIR.PENTAIR.COM

Note: The information and data contained in this document are based on our general experience and are believed to be correct. They are given in good faith and are intended to provide a guideline for the selection and use of our products. Since the conditions under which our products may be used are beyond our control, this information does not imply any guarantee of final product performance and we cannot accept any liability with respect to the use of our products. The quality of our products is guaranteed under our conditions of sale. Existing industrial property rights must be observed.
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