

**MECAIR** 



# csn RAINTIGHT ENCLOSURE

PRODUCT LEAFLET

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# 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 lowtemperature 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**

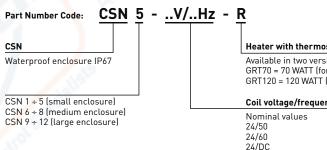
COVER	Diecast aluminium (anodised)	
BASE	Extruded aluminium (anodised)	
PLUNGER	Stainless steel	
SPRING	Stainless steel	
GASKETS	NBR	

# **ELECTRICAL CHARACTERISTICS**

COIL INSULATION	Class H
ELECTRICAL CONNECTION	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 3/8" female Gas

1

# **HOW TO ORDER**



Heater with thermostat

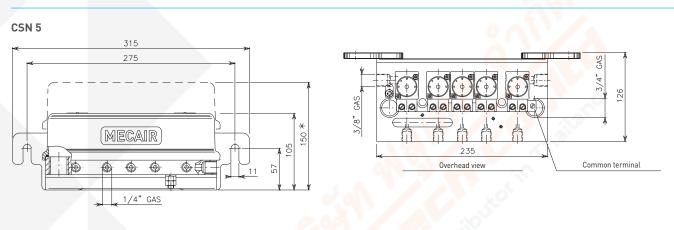
Available in two versions: GRT70 = 70 WATT (for CSN 1 ÷ 5) GRT120 = 120 WATT (for CSN 6 ÷ 12)

oil voltage/frequency		
Jominal values 4/50 4/60 4/DC 10/50 10/60 20/50	Operating range 24 V/50 Hz 24 V/60 Hz 24 V/60 Hz 24 V/DC 15 W 110–127 V/50 Hz 110–127 V/60 Hz 220–240 V/50 Hz	
20/60	220–240 V/60 Hz	

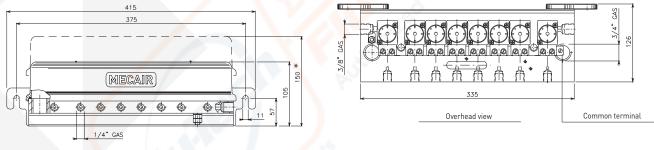
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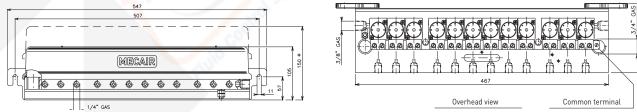
# **DIMENSIONS (MM)**



#### CSN 8



# **CSN 12**



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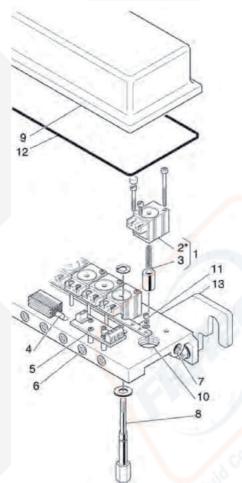
RAINTIGHT ENCLOSURE

126

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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.

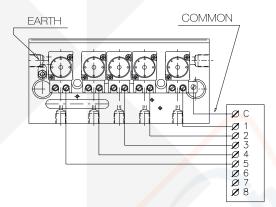
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# PRODUCT LEAFLET

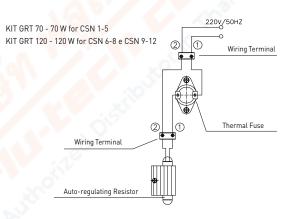
# **ELECTRICAL CONNECTIONS**

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

### E1 – Sequencer (plug-in terminal connector)



#### E2 – Thermostatically controlled resistor



# 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

