

Installation guide

# Electric regulating valves

## Type CCMT 2 – CCMT 8 / CCMT 16 – CCMT 42

027R9803

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<b>Refrigerant:</b> R744 For other refrigerants, contact Danfoss.	<b>Ambient temperature:</b> Min. -40 °C / -40 °F Max. 60 °C / 140 °F	<b>Fluid temperature:</b> Min. -40 °C / -40 °F Max. 60 °C / 140 °F
<b>Stepper motor type:</b> Bipolar	<b>Max working pressure:</b> 140 Bar / 2030 psig	<b>Total full steps</b> CCMT 2 - CCMT 8 : 1100 CCMT 16 : 800 CCMT 24 : 1400 CCMT 30 : 2300 CCMT 42 : 2200
<b>Phase Current:</b> CCMT 2 – CCMT 8: 100 mA RMS CCMT 16 – CCMT 42: 300 mA RMS	<b>Coil resistance:</b> CCMT 2 – CCMT 8: 52 Ohm CCMT 16 – CCMT 42: 29 Ohm	



**Note!**

- CCMT valves are delivered in open position, ready for brazing.
- For CCMT 2 - CCMT 8, Filter with a maximum mesh of 100 µm recommended to install on the inlet line that can resist articles size above 100 µm.

CCMT 16 - CCMT 42.

**Pressure transmitter**, type MBS 8250

Connection : round packard metripack.

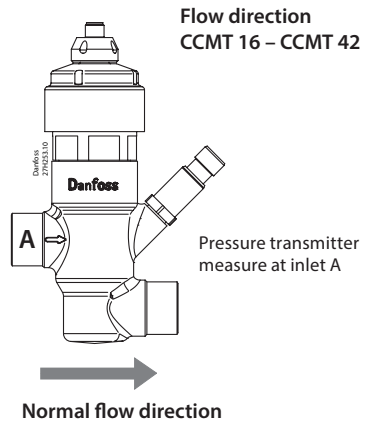
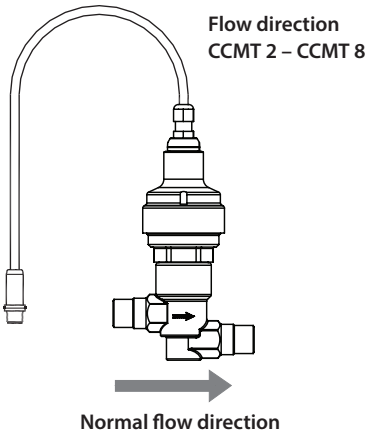
Supply voltage : 5 V DC ± 0.5 V

Output signal : 10 – 90 % of supply voltage.

Pressure range : 1 – 159 bar gauge / 14.5 – 2306 psi



**Warning!** Do not connect directly to AC / DC power source. Connect valve to appropriate controller/driver only. Do not operate valve while assembling or disassembling.

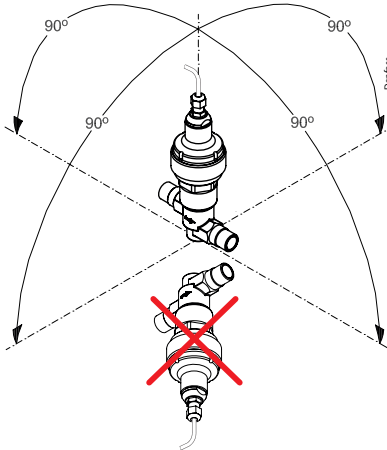


For more language options and more information on the valve refer to the website.

ccmt.danfoss.com

**Mounting direction CCMT 2 - CCMT 42**

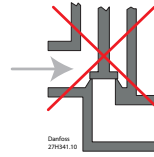
1



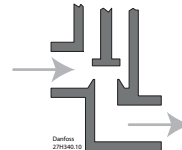
**Warning!**

2

- Do not disassemble the valve before brazing or welding.
- Valve must be open during brazing and welding.



Fully closed

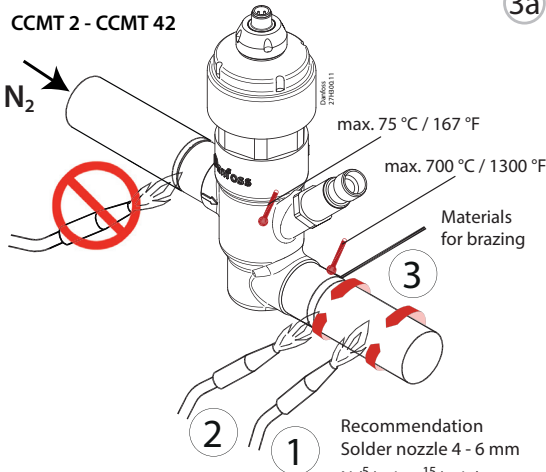


Open

**Brazing**

**CCMT 2 - CCMT 42**

3a



**For CCMT 2 - CCMT 42**

Materials used for brazing:

- Flux: Metalli tenacity No. 5 Powder or Braze Tec special h paste.
- Filler: Silver-Flo 55 (BS:AG 14/ DIN L-Ag55 Sn) or Silver-Flo 56 (AWS B Ag-7).



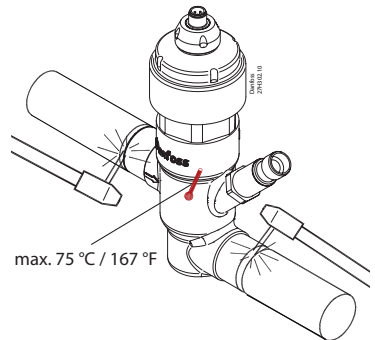
**Warning!**

Filler metals containing Phosphor i.e. BS: CP 1/ DIN L-Ag 15P or BS: CP 3/ DIN L-Ag P7 must not be used.

**Welding**

**CCMT 2 - CCMT 42**

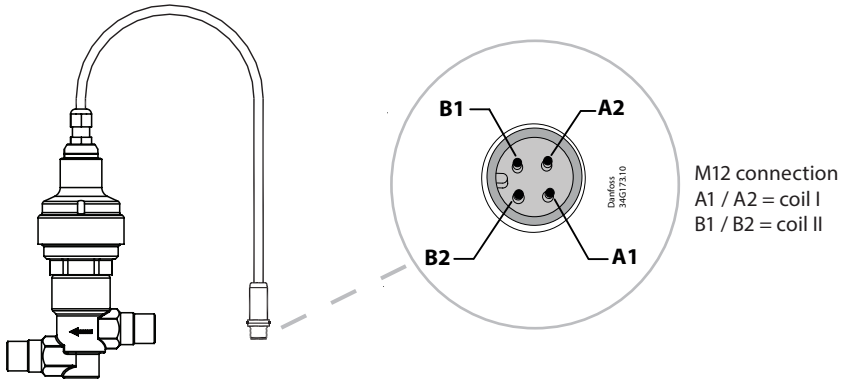
3b



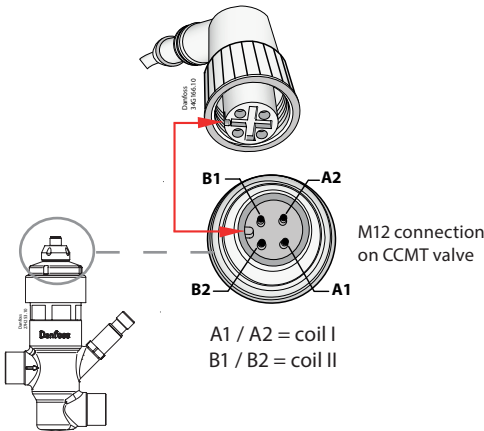
**Recommendation for TIG welding**

- Power approximately 60A.
- Use Shield gas charge - Argon.
- Material for welding - approximately 2 mm thick stainless steel alloy.

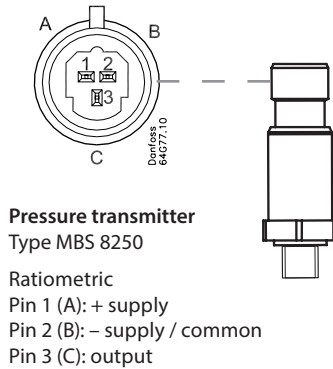
Electrical connections for CCMT 2 - CCMT 8



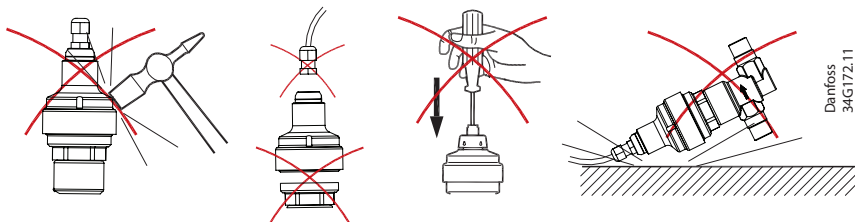
Electrical connections for CCMT 16 - CCMT 42



Pressure transmitter connections CCMT 16 - CCMT 42



 **Warning**



**Service only**

**CCMT 2 - CCMT 8**

1 Compressed air to remove dirt

2 Replace O-ring  
Kit code no: 027H7230

3 Max. torque:  
130 Nm/ 95.9 ft-lbf

**CCMT 16 - CCMT 42**

1 Compressed air blown from inside filter to remove dirt

2 Replace O-ring  
Kit code no: 027H7230

3 Max. torque:  
130 Nm/ 95.9 ft-lbf

1

2 Replace O-ring  
Kit code no: 027H7230

3 Max. torque: 30 – 35 Nm