

CCMT Electric Regulating Valve

Cost-efficient, safe & simple

For a better control of CO₂ applications

Designed for better high-pressure transcritical control and medium pressure by-pass control.



The CCMT is a highly reliable electric pressure regulating valve optimized for transcritical CO₂ refrigeration. The valve has versatile applications in the transcritical system. First, the valve is capable of high pressure gas cooler control (transcritical). Second, the CCMT can be used as gas by-pass valve (medium pressure control). If desired, the valve can also be used as a normal expansion valve for evaporators*.

CCMT 16, 24, 30, 42

With the CCMT electric regulating valve sizes 16, 24, 30 & 42 you get a fully serviceable three-in-one solution with valve, transmitter** and filter integrated into one, compact unit. The cartridge design of the component means that all functional parts are easy to service and replace; not even the orifice remains in the housing when the valve is disassembled. When you exchange the cartridge, you get a brand new valve, in a matter of seconds. At the same time, the integration of valve, transmitter and filter into one unit allows easy installation with fewer connections and thus reduced risk of leakage. CCMT comes with solder, brazing and weld connections to make it fit in any system.

* Does not apply to CCMT Light – verification tests in progress
** There are code numbers without MBS transmitter available

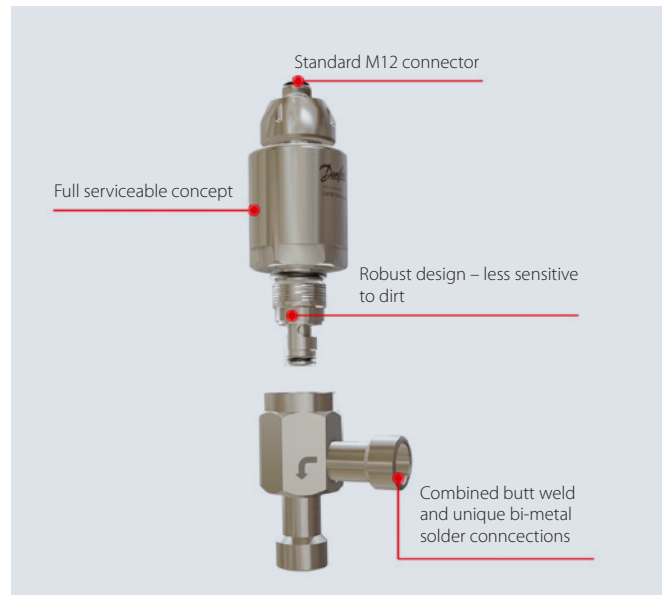


CCMT 3L, 5L, 8L

The CCMT Light is the latest addition to our CO₂ portfolio. The valve is robust, accurate and easy-to-use and focuses on stress-free valve installation and field service. It is designed to have a high tolerance for dirt and debris which reduces service-related incidences and improves long-term system reliability. Installation time is decreased because the valve is delivered in open position – this means it is ready for welding / brazing which lowers production costs and increases productivity.

A perfect fit for all CO₂ refrigeration systems

The complete CCMT range covers CO₂ refrigeration systems of all types sizes – from very small applications to large systems. The complete CCMT range covers CO₂ refrigeration systems of all types sizes – from very small applications to large systems. The CCMT Light is optimum for condensing units or small packs up to 100kW and the CCMT 16-42 for medium to large packs from 100 kW up to 600 kW.



	CCMT 16-42	CCMT 3L - 8L
Compatible refrigerants	R744	
MOPD	90 bar / 1305 psi	
Max. working pressure (PS/MWP)	140 bar / 2030 psig	140 bar / 2030 psig with steel connections 130 bar / 1885 psig with Bi-metal connections
Material specification	Stainless steel Weld/solder combo connections	
Build in strainer / filter	Yes, 250micron	No
Comply with P.E.D.	Fluid group I / Article 3, paragraph 3	
Approval	CE, UL, EAC, CRN	CE, EAC
Stepper motor type	Bi-polar – permanent magnet	
Motor enclosure	IP 67	
Duty cycle	100% is allowed 20% recommended	20% duty cycle
Step rate	Max 150 steps/sec (constant voltage drive) Max 200 steps/sec. (chopper current drive)	Max 100 steps/sec. (chopper current drive)
Total full steps	CCMT 16: 800 CCMT 24: 1400 CCMT 30: 2300 CCMT 42: 2200	210
Full travel time	CCMT 16 : 4 sec. CCMT 24 : 7 sec. CCMT 30 : 11.5 sec. CCMT 42 : 11 sec.	2.1 sec. (at 100 steps sec.)
Electrical connection	Integrated M12	
Compatible controllers/drivers	EKE 1A/1B/1C/1P, AK-PC 572, AK-PC 772A/781A/782A, AK-XM 208C	
Battery back-up module	EKE 2U	
Pressure transmitter	Yes	No

* For full technical details, please refer to the product datasheet at ccmt.danfoss.com

Related products

Superheat controller/driver,
type EKE 1A/1B/1C/1P

Pack Controller, type AK-PC 572

Pack Controller,
type AK-PC 772A/781A/782A

Electronic driver, type AK-XM 208C



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.