

CO₂ solutions for small commercial cold rooms

Get a complete CO₂ cold room package with just four components. Follow these simple steps to find the right match for your application.



1. Expansion device TE 2 for R744

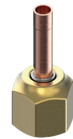
Valve (MWP 90 bar, MOPD 60 bar)

Refrigerant	Type	Range		MOP	Pressure equalization solder [In/mm]	Connection inlet x solder outlet		Code no. Multipack
		[°C]	[°C]	[°C]		[In]	[mm]	
		[°F]	[°F]	[°F]				
R744	TE 2	-40 - 0	5		¼	¾ x ½	-	068Z2900
		-40 - 32	41					
	TE 2	-40 - 0	5		6	-	¾ x 12	068Z2901
		-40 - 32	41					



Solder adaptor - without orifice assembly and filter

Connection ODF solder [In]	Connection ODF solder [mm]	Code no.
¼	-	068-2062
-	6	068-2063
¾	-	068-2060
-	10	068-2061



Orifice assembly with filter for solder adaptor

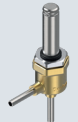
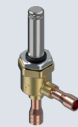
Orifice no.	Code no.
CZ	068Z2100
CY	068Z2101
CX	068Z2102
CO	068Z2103
01	068-2091
02	068-2092
03	068-2093



2. Solenoid valves

Solenoid valve EVT + coil (MWP 140 bar, MOPD 110 bar)

Type	Code no. [In] Copper	Code no. [mm] Stainless steel
EVT 1.2	068F0600	-
	068F0625	-
	-	068F0622 068F0626
EVT 2.0	068F0601	-
	068F0627	-
	-	068F0621 068F0628
EVT 3.0	068F0611	-
	068F0629	-
	-	068F0620 068F0630



Solenoid valve EVUL + coil (MWP 90 bar, MOPD 36 bar)

Type	Code no. (In)	Code no. (mm)
EVUL 1	032F9506	032F9508
EVUL 2	032F9510	032F9516
EVUL 3	032F9511	032F9517
EVUL 4	032F9512	032F9518
EVUL 5	032F9513	032F9519
EVUL 6	032F9514	032F9521



The solenoid coil must be selected from the datasheet based on power supply, IP grade, and cabling

3. Optyma™ cold room Controller

Type	Code no.
AK-RC 204B	080Z5001
AK-RC 205B	080Z5002
AK-RC 305W-SD	080Z5003



4. Optyma™ iCO₂ condensing unit

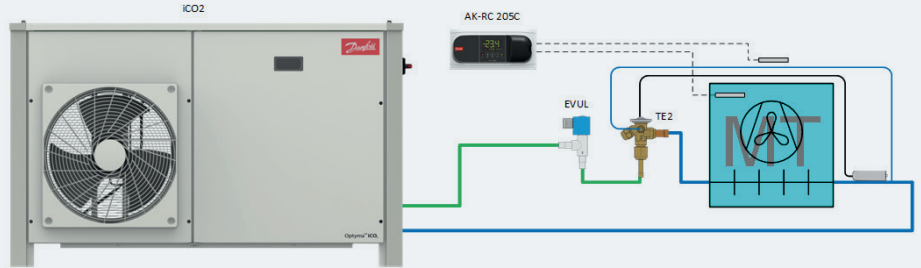
Type	Code no.	Cooling capacity Q [kW]*
OP-MPAM-005COP04G	114X6001	Variable load from 1.5 to 4.6 kW



* Working conditions EN134215, -10°C evap, 10K superheat, 0K subcooling, 32°C ambient temperature. The evaporator must be designed in accordance with the condensing unit.

CO₂ system examples

iCO₂ condensing unit for medium temperature cold room



MT evaporator load

kW	MT	Type	Type
1,44	CZ	EVUL 1	EVT 1.2
1,97	CY	EVUL 1	EVT 1.2
2,19	CX	EVUL 1	EVT 1.2
3,46	C0	EVUL 2	EVT 2
5,58	01	EVUL 3	EVT 2
10,6	02	EVUL 4	EVT 3
15,0	03	EVUL 5	-

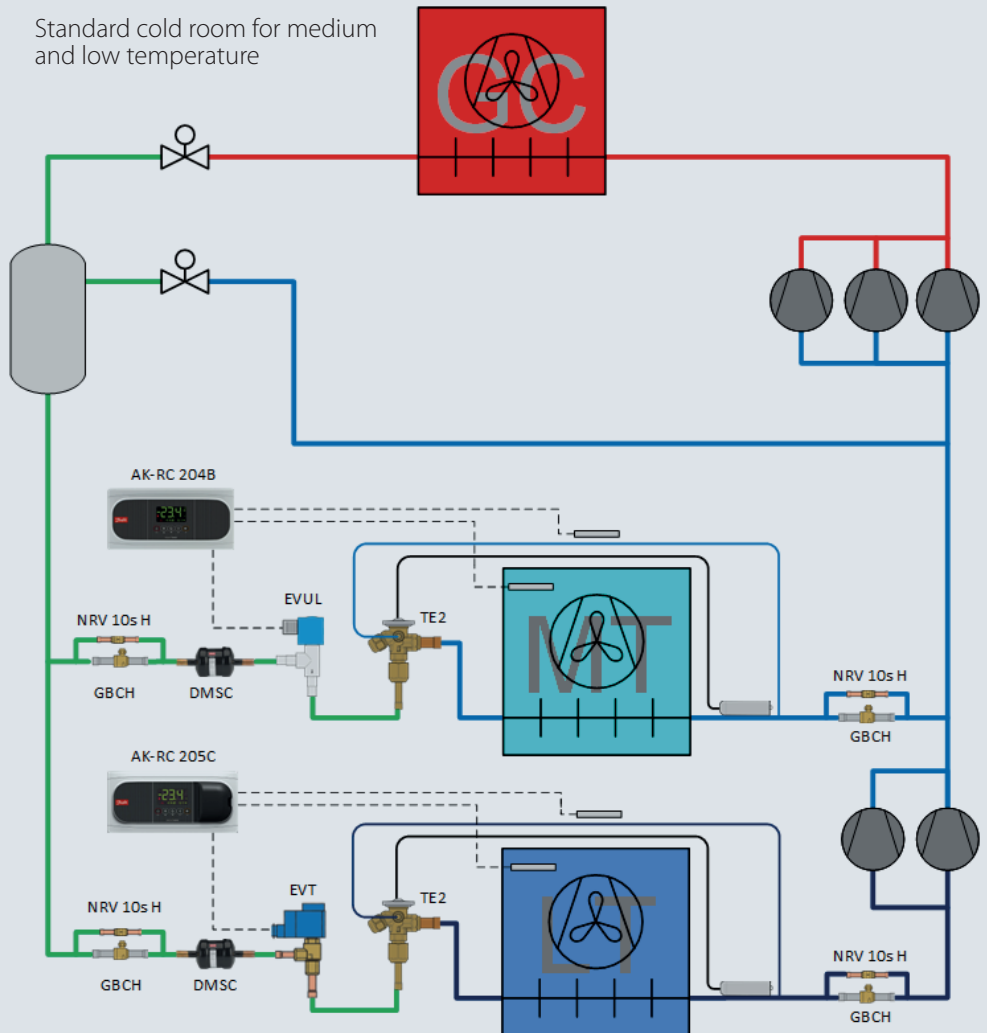
Evaporating temperature $t_e = -10\text{ }^\circ\text{C}$
Receiver temperature $t_c = 0\text{ }^\circ\text{C}$

LT evaporator load

kW	LT	Type	Type
1,66	CZ	EVUL 1	EVT 1.2
2,23	CY	EVUL 1	EVT 1.2
2,42	CX	EVUL 2	EVT 1.2
4,23	C0	EVUL 2	EVT 2
6,75	01	EVUL 3	EVT 3
11,6	02	EVUL 4	EVT 3
16,4	03	EVUL 5	-

Evaporating temperature $t_e = -30\text{ }^\circ\text{C}$
Receiver temperature $t_c = 0\text{ }^\circ\text{C}$

Standard cold room for medium and low temperature



For regular updates and detailed capacities, please refer to Coolselector^{®2} software coolselector.danfoss.com

www.danfoss.com

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