

Installation guide

# Filter drier, shell

## Type DCR, DCR/H, DCR E



023R9504

023R9504

**Refrigerants:**

**DCR Standard (A1, Group 2)**

R1233zd, R134a, R407A, R407C, R407F, R407H, R410A, R422B, R422D, R448A, R449A, R449B, R450A, R452A, R513A, R515B, etc.

**DCR/H (A2L, Group 1) – UL listed, for American market use only**

R1234yf, R1234ze, R32, R444B, R452B, R454A, R454B, R454C, R455A, R457A, R516A, etc.

\*Also compatible with DCR Standard Refrigerants.

**DCRE (A3, A2L, Group 1) – PED approved**

R1234yf, R1234ze, R32, R444B, R452B, R454A, R454B, R454C, R455A, R457A, R516A, R290, R600a, etc.

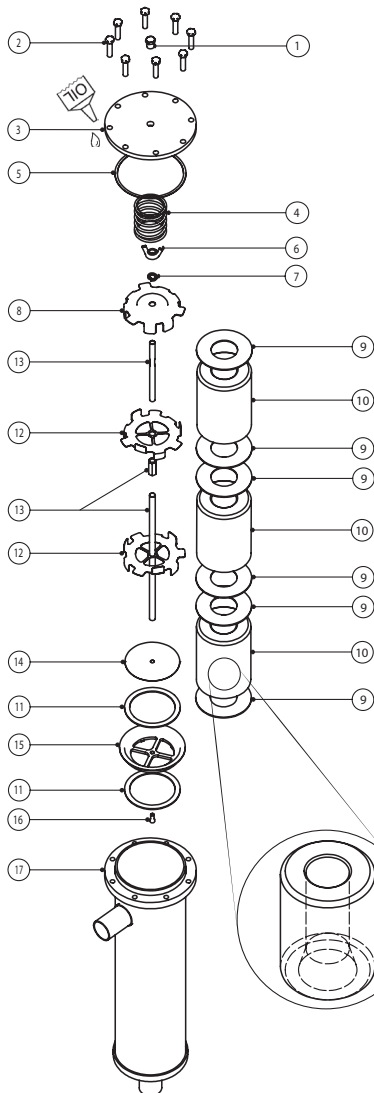
\*Also compatible with DCR Standard Refrigerants.

For other refrigerants, please contact Danfoss representative.

**Media Temperature:** -40 - 70 °C / -40 - 160 °F

### Design

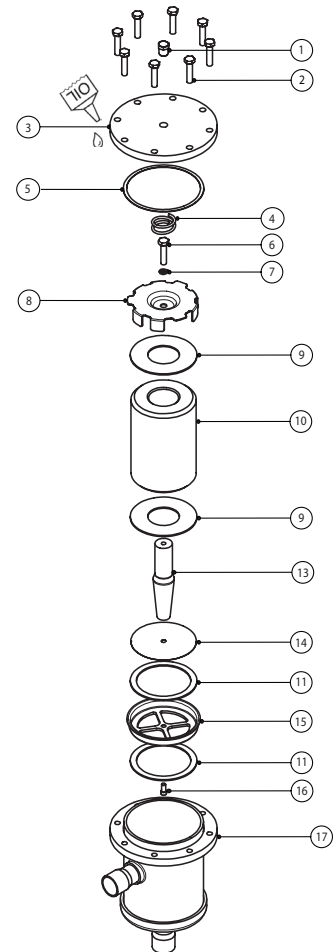
#### DCR and DCR/H



Pos.	Description
1	Plug for cover
2	Bolts for cover
3	Top cover
4	Spring
5	Top cover gasket
6	Wing nut (DCR) / Bolt (DCRE)
7	Lock washer
8	Top plate
9	Core felt gasket
10	Solid core
11	Core holder felt gasket
12	Core plate
13	Distance rod
14	Wire Mesh
15	Core holder
16	Hex Socket Head Screw
17	Shell

Inner taper of core always facing towards filter outlet. This apply for all DCR Families.

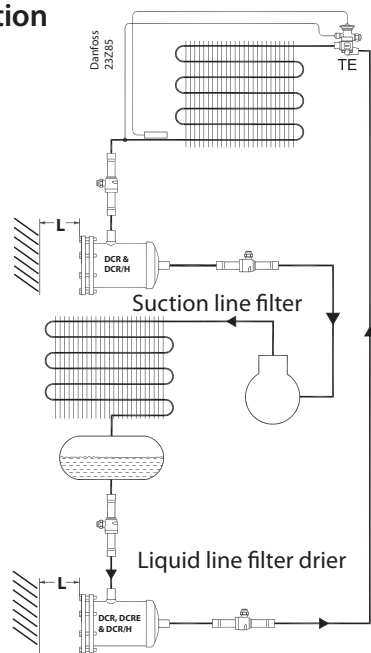
#### DCR E



Імпортер: ТОВ з іі "Данфосс ТОВ" 04080, Київ 80, п/с 168, Україна

Info for UK customers only: Danfoss Ltd., 22 Wycombe End, HP9 1NB, GB

## Installation



Type		L minimum		Maximum working pressure PS / MWP [bar] / [psig]
		[mm]	[in]	
DCR DCR/H	048	170	7	46 / 667
DCR DCR/H	096	310	13	46 / 667
DCR DCR/H	144	310	13	35 / 507 <sup>1)</sup>
				46 / 667 <sup>2)</sup>
DCR DCR/H	192	310	13	28 / 406 <sup>1)</sup>
				40 / 580 <sup>2)</sup>
DCRE	048	170	7	50 / 725

<sup>1)</sup> For usage with strainer or as a receiver application  
<sup>2)</sup> For "drier" application using all the permissible cores

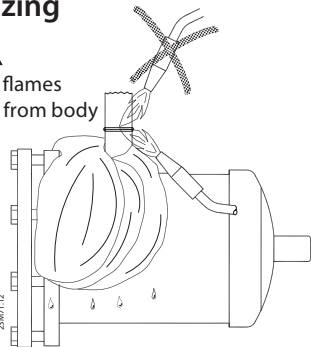


"The DCRE can only be use for A2L when the solid core is placed. DCRE is not allowed to be used as receiver."

## Brazing

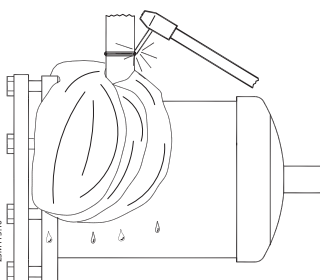


Keep flames away from body



Connector type	Brazing material
Copper	Min. 5 % Ag
Steel	Silver-flo 55 + Easy-flow flux

## Welding



Customer best practice will still be needed:

- Use wet wrap when installing.
- Braze the joints.
- Let them cool down.
- Clean the brazing /welding area after the installation (remove remaining flux with a brush).
- This is an important operation and needs to be done with great care to remove all remaining flux.
- Paint / Anti-corrosive needs to cover all open steel parts, areas where the black original paint has been burnt due to brazing and at least 3 cm approx of the copper.
- Paint the joints twice.



Do not install gasket before soldering.

**Note:** Confirm correct top cover Gasket is selected.

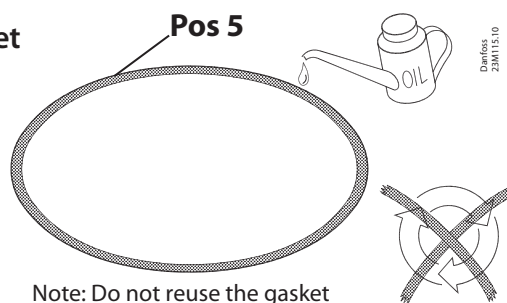
There are 2 gaskets:  
 - DCR and DCR/H  
 - DCRE

### Recommendation:

Apply a small amount of oil to the gasket before assembly. Preferably synthetic POE or PVE oil, although any general-purpose oil can be used.

## Gasket

Pos 5



Note: Do not reuse the gasket

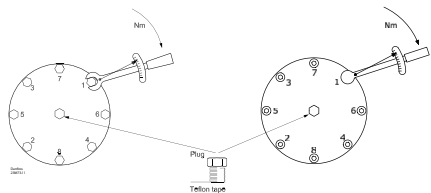
## How to tighten the bolts

DCR & DCRE

DCR/H

Ratcheting wrench of 13mm

Allen wrench of 6mm



Optional Plug, recommended tightening torque:  
 Plug: 1/4" NPT: 50 Nm / 36.87 ft-lb applying 2 to 3 wraps of teflon tape.

The torque values mentioned only apply to bolts supplied by Danfoss.

	DCR M8-1.5 x 35mm A2-70 Hex head	DCRE M10-1.5 x 40mm A2-70 Hex head	DCR/H M8-1.5 x 35mm G12.9 Socket head
Step 1	Fingertighten all bolts		
Step 2	3 Nm / 2.21 ft lb	5 Nm / 3.69 ft lb	4 Nm / 2.95 ft lb
Step 3	10 Nm / 7.37 ft lb	20 Nm / 14.75 ft lb	13 Nm / 9.59 ft lb
Step 4	20 Nm / 14.75 ft lb	35 Nm / 25.81 ft lb	25 Nm / 18.44 ft lb
Step 5	28 Nm / 20.65 ft lb	50 Nm / 36.88 ft lb	35 Nm / 25.81 ft lb

\* Each step must be applied following the sequence of the image.