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

# Filter drier, shell

## Type DCR, DCR/H, DCR E

#### **Refrigerants:**

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

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

For other refrigerants, please contact Danfoss representative. **Media Temperature:**  $-40 - 70 \,^{\circ}\text{C} / -40 - 160 \,^{\circ}\text{F}$  DCR/H (A2L, Group 1) – UL listed, <u>for American market use only</u> R1234yf, R1234ze, R32, R444B, R452B, R454A, R454B, R454C, R455A, R457A, R516A, etc.

\*Also compatible with DCR Standard Refrigerants.

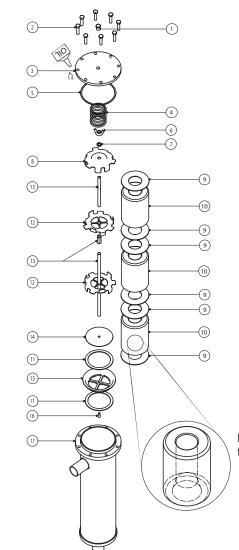
#### DCRE (A3, A2L, Group 1) - PED approved

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

\*Also compatible with DCR Standard Refrigerants.

#### Design

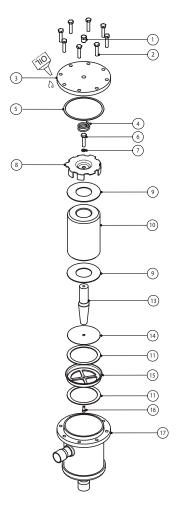
#### DCR and DCR/H



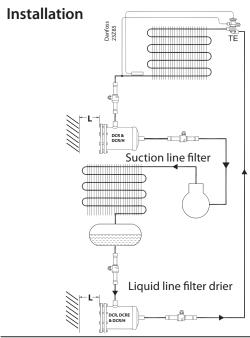
Pos.	Description			
1	Plug for cover			
2	Bolts for cover			
3	Top cover			
4	Spring			
5	Top cover gasket			
6	Wing nut (DCR) / Bolt (DCRE)			
7	Lock washer			
8	Top plate			
9	Core felt gasket			
10	Solid core			
11	Core holder felt gasket			
12	Core plate			
13	Distance rod			
14	Wire Mesh			
15	Core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





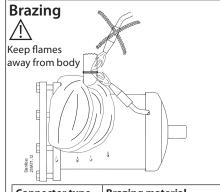


Туре		L minimum		Maximum working pressure	
		[mm]	[in]	PS / MWP [bar] / [psig]	
DCR DCR/H	048	170	7	46 / 667	
DCR DCR/H	096	310	13	46 / 667	
DCR	144	310	13	35 / 507 ¹)	
DCR/H				46 / 667 ²)	
DCR	192	310	13	28 / 406 1)	
DCR/H	132			40 / 580 ²)	
DCRE	048	170	7	50 / 725	

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

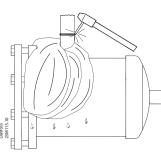


"The DCRE can only be use for A2L when the solid core is placed. DCRE is not allowed to be used as receiver."





#### 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.



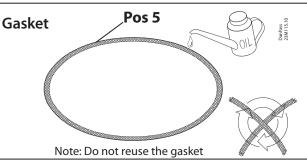
Do not install gasket before soldering.

**Note:** Confirm correct top cover Gasket is selected. There are 2 gaskets:

- DCR and DCR/H
- DCRE

#### **Recommendation:**

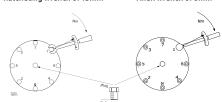
Apply a small amount of oil to the gasket before assembly. Preferably synthetic POE or PVE oil, although any general-purpose oil can be used.



### How to tighten the bolts DCR & 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			

<sup>\*</sup> Each step must be applied following the sequence of the image.