ENGINEERING
TOMORROW

Installation guide

Filter drier, shell with cross gasket

Type DCR / DCR E

Refrigerants:

DCR Standard (A1, Group 2)
R22, R23, R113, R125, R134a R404A, R407A, R407C, R407F, R410A, R438A, R448A, R449A, R449B, R450A, R452A, R507A, R513A, R1233zd, R1234ze, etc.

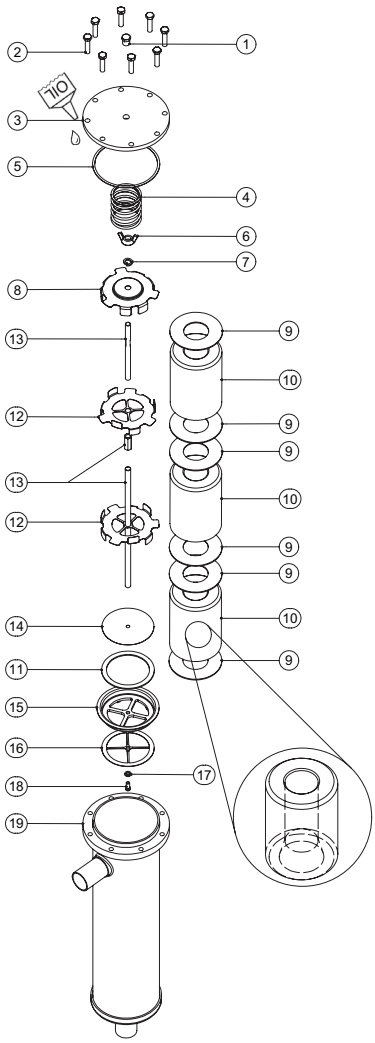
DCR E Flammables (A2L, Group 1)
R32, R444A, R444B, R445A, R446A, R447A, R451A, R452B, R454B, R455A, R1234yf, etc.

For other refrigerants, please contact Danfoss representative.

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

Design

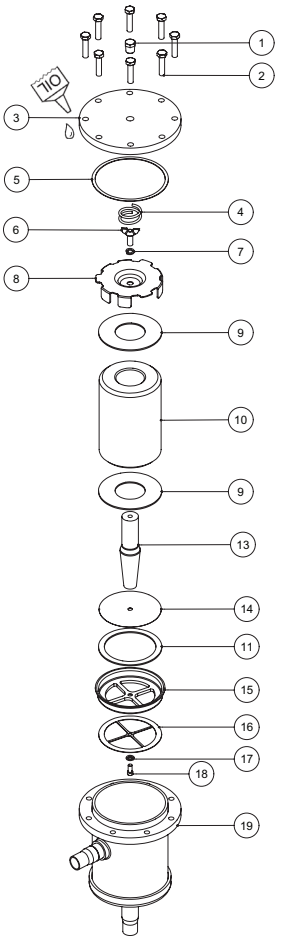
DCR



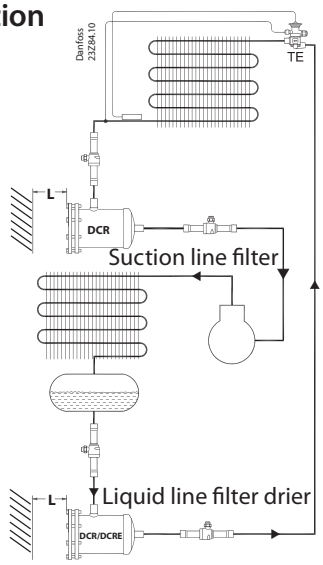
Pos.	Description
1	Plug for cover
2	Bolts for cover
3	Top cover
4	Spring
5	Top cover gasket
6	Wing nut (DCR) / Bolt (DCRE)
7	Lock washer
8	Top plate
9	Core felt gasket
10	Solid core
11	Core holder felt gasket
12	Core plate
13	Distance rod
14	Wire Mesh
15	Core holder
16	Cross gasket
17	Washer
18	Hex socket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

Inner taper of core always facing towards filter outlet. This apply for DCR and DCRE components.

DCR E



Installation



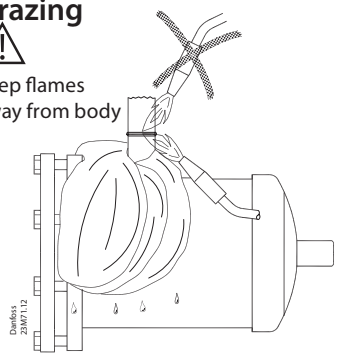
Type	L minimum		Maximum working pressure PS / MWP [bar] / [psig]
	[mm]	[in]	
DCR 048	170	7	46 / 667 *
DCR 096	310	13	46 / 667 *
DCR 144	310	13	35 / 507 [1])
			46 / 667 [2])
DCR 192	310	13	28 / 406 [1])
			40 / 580 [2])
DCRE 048	170	7	50 / 725

[1]) For usage with strainer or as a receiver application
[2]) For "drier" application using all the permissible cores
[3]) * For either 1* or 2*
MWP shall not be less than the pressure outlined in sect 9.2 of ANSI/ ASHRAE 15 for the refrigerant used in the system. After charging, the system shall be marked with the refrigerant and oil used.

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

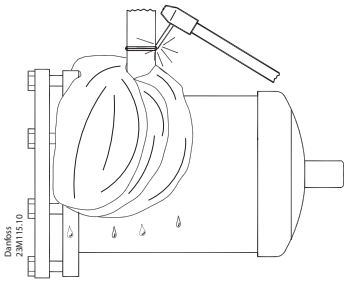
Brazing

⚠ Keep flames away from body



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

Welding

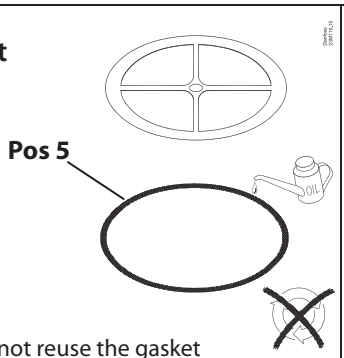


Customer best practice will still be needed:
- Use wet wrap when installing.
- Braze the joints.
- Let them cool down.
- Clean the brazing /welding area after the installation (remove remaining flux with a brush).
- This is an important operation and needs to be done with great care to remove all remaining 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 DCR / DCRE insert before soldering

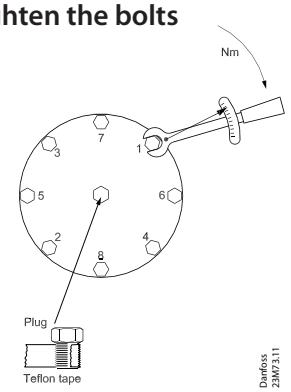
Note: Confirm correct top cover gasket is selected for DCR or DCRE

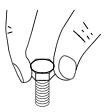
Gasket

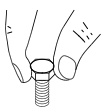


Note: Do not reuse the gasket

How to tighten the bolts



DCRE - Bolts M10 x 1.5	
Step 1	 Fingertighten all bolts
Step 2	5 Nm / 3.69 ft lb
Step 3	20 Nm / 14.75 ft lb
Step 4	35 Nm / 25.81 ft lb
Step 5*	50 Nm / 36.88 ft lb

DCR - Bolts M8 x 1.25	
Step 1	 Fingertighten all bolts
Step 2	3 Nm / 2.21 ft lb
Step 3	10 Nm / 7.37 ft lb
Step 4	20 Nm / 14.75 ft lb
Step 5*	28 Nm / 20.65 ft lb

* Repeat until complete tightness has been reached.

Optional Fuse and/or Plug, recommended tightening torques:
Fuse: 1/4"NPT - 3/8" Flare: 20 Nm / 14.75 ft-lb applying 2 to 3 wraps of teflon tape.
Plug: 1/4" NPT: 50 Nm / 36.87 ft-lb applying 2 to 3 wraps of teflon tape.

Reference