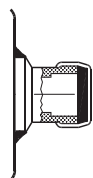




Combined filter drier and receiver Type DCC and DMC



— Solder connection (Cu-plated steel connectors)

Introduction


DCC and DMC are combined receivers and filter driers for use in small hermetic refrigeration systems.

Under operating conditions where the condenser cannot contain the total quantity of refrigerant, a receiver might be necessary.

This extra receiver capacity can be provided by using a DCC or a DMC combined receiver and filter drier.

DMC filter driers

These filters contain a solid core consisting of 100% Molecular Sieve (no activated aluminium oxide whatsoever).

DMC filter driers are especially suitable for A/C systems with HFC refrigerant and polyolester oil with additives.

DCC filter driers

These filters contain a solid core consisting of 3Å Molecular Sieve and activated aluminium oxide. DCC filter driers can be used in A/C systems with HCFC refrigerants and mineral oil, and also with HFC refrigerants and polyolester oil.

Features

- Combination of filter drier and receiver
- High drying capacity at high and low liquid temperatures
- Space-saving
- Fast installation
- Approved as HP container according to PED 97/23/EC - a3p3
- Available with solder connections (Cu-plated steel connectors)

Technical data
Surface and volume

Filter	Solid core surface [cm ²]	Solid core volume [cm ³]	Filter drier volume (shell volume) [l]	Filter drier volume (net volume) [l]
DCC/DMC 0432s	82.80	53.20	0.14	0.09
DCC/DMC 0732s	82.80	53.20	0.19	0.14
DCC/DMC 2032s DCC/DMC 2033s DMC 2034s	82.80	53.20	0.35	0.30
DCC/DMC 40163s DCC/DMC 40164s	220.30	234.10	0.77	0.54

Acid capacity

Filter	Acid capacity [g] (TAN ¹⁾)
DCC/DMC 0432s	0.71
DCC/DMC 0732s	0.71
DCC/DMC 2032s DCC/DMC 2033s DMC 2034s	0.71
DCC/DMC 40163s DCC/DMC 40164s	3.12

¹⁾ TAN = Total Acid Number, oleic acid

Temperature range

–40 to 70°C (–40 to 160°F)

Capacity
DCC
**R134a, R507, R404A,
R22, R407C, R410A**
Drying and liquid capacity

Type	Drying Capacity (kg of refrigerant) ¹⁾								Liquid Capacity (kW) ²⁾			Max. Working Pressure PS [bar]
	R410A R407C		R22		R134a R507		R404A		R22 R410A R407C	R134a	R404A R507	
	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C				
DCC 0432s	5.0	4.4	5.6	5.0	5.6	5.0	5.5	5.1	7.5	7.0	5.0	42
DCC 0732s	5.0	4.4	5.6	5.0	5.6	5.0	5.5	5.1	7.5	7.0	5.0	42
DCC 2032s DCC 2033s	5.0	4.4	5.6	5.0	5.6	5.0	5.5	5.1	7.5 21.0	7.0 19.0	5.0 14.0	42
DCC 40163s DCC 40164s	21.8	19.4	24.4	22.0	24.6	22.0	24.0	22.3	23.0 28.5	21.0 26.0	15.0 19.5	42

1) Drying capacity is based on following moisture content in the refrigerant before and after drying:

R22:

From 1050 ppm W to 60 ppm W in accordance with ARI 710-86.

R134a:

From 1050 ppm W to 75 ppm W. If drying of refrigerant to 50 ppm W is required, this can be achieved with a 15% reduction of the stated capacities.

R404A, R407C og R507:

From 1020 ppm W to 30 ppm W.

R410A:

From 1050 ppm W to 60 ppm W.

2) Given in accordance with

ARI 710-86 for

$t_e = -15^\circ\text{C}$ (5°F),

$t_c = 30^\circ\text{C}$ (86°F) and

$\Delta p = 0.07$ bar (1 psig).

DMC
**R134a, R507, R404A,
R22, R407C, R410A**
Drying and liquid capacity

Type	Drying Capacity (kg of refrigerant) ¹⁾								Liquid Capacity (kW) ²⁾			Max. Working Pressure PS [bar]
	R410A R407C		R22		R134a R507		R404A		R22 R410A R407C	R134a	R404A R507	
	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C				
DMC 0432s	5.9	5.4	6.4	5.9	6.4	5.9	6.3	6.0	7.5	7.0	5.0	42
DMC 0732s	5.9	5.4	6.4	5.9	6.4	5.9	6.3	6.0	7.5	7.0	5.0	42
DMC 2032s DMC 2033s DMC 2034s	5.9	5.4	6.4	5.9	6.4	5.9	6.3	6.0	7.5 21.0 26.5	7.0 19.0 24.0	5.0 14.0 18.5	42
DMC 40163s DMC 40164s	25.8	23.7	28.1	26.0	28.3	26.0	27.8	26.2	23.0 28.5	21.0 26.0	15.0 19.5	42

Ordering

Type	Connections Cu-plated (ODF)	Industrial pack	
		Code no.	Qty.
DCC 0432s	6 mm	023Z7000	16
DCC 0732s	6 mm	023Z7001	16
DCC 2032s	6 mm	023Z7002	10
DCC 2032s	1/4 in	023Z7003	10
DCC 2033s	10 mm	023Z7004	10
DCC 40163s	10 mm	023Z7005	6
DCC 40164s	12 mm	023Z7006	6

Type	Connections Cu-plated (ODF)	Industrial pack		Multi-pack	
		Code no.	Qty.	Code no.	Qty.
DMC 0432s	6 mm	023Z7012	16	023Z7019	28
DMC 0732s	6 mm	023Z7013	16	023Z7020	28
DMC 2032s	6 mm	023Z7007	10	023Z7021	18
DMC 2032s	1/4 in	023Z7008	10	023Z7022	18
DMC 2033s	10 mm	023Z7014	10	023Z7023	18
DMC 2033s	3/8 in	023Z7009	10	023Z7024	18
DMC 2034s	12 mm	023Z7015	10	023Z7025	18
DMC 2034s	1/2 in	023Z7010	10	023Z7026	18
DMC 40163s	10 mm	023Z7016	6	023Z7027	10
DMC 40163s	3/8 in	023Z7017	6	023Z7028	10
DMC 40164s	12 mm	023Z7018	6	023Z7029	10
DMC 40164s	1/2 in	023Z7011	6	023Z7030	10

Identification

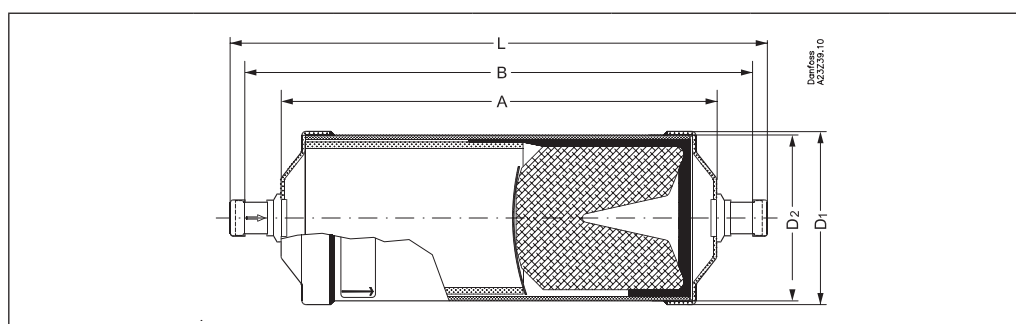
Example for type codes

D M C 20 3 2 s

Type codes

Filter drier	D	
Solid core	C	C = Core with 80% molecular sieve and 20% activated aluminium oxide
	M	M = Core with 100% molecular sieve
Application	C	Combined filter drier/receiver
Filter housing volume (approx.)	04	4 in ³
	07	7 in ³
	20	20 in ³
	40	40 in ³
Solid core size (in ³)	03	3 in ³
	16	16 in ³
Connection (filter connection in 1/8 of an inch increments)	2	1/4 in. / 6 mm
	3	3/8 in. / 10 mm
	4	1/2 in. / 12 mm
Connection type	s	Solder connection

Dimensions and weights



Type	L mm	A mm	B mm	D ₁ mm	D ₂ mm	Weight kg
DCC/DMC 0432s	113	81	99	58	54	0.44
DCC/DMC 0732s	139	107	125	58	54	0.57
DCC/DMC 2032s	220		206			1.01
DCC/DMC 2033s	226	188	208	58	54	1.02
DMC 2034s	230		210			1.03
DCC/DMC 40163s	237	199	219	80	76	1.58
DCC/DMC 40164s	241	199	221	80	76	1.59

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.