



DB – Series Bi-Flow Filter Drier

<p><b>DB Filter Drier for heat pumps and reverse cycle applications:</b>  <b>The compact solution for Operating Pressures up to 46 bar (i.e. R410A).</b>  <b>Block Type Drier, no loose fill type.</b></p> <p><b>CE</b></p>	<p><b>Product highlights:</b></p> <ul style="list-style-type: none"> <li>• Bi-Flow Filter Drier for Heat Pumps and reverse Cycle applications</li> <li>• with integrated check valves</li> <li>• Outlet Screen Mesh size 120 micron</li> <li>• 80% Molecular Sieve for high moisture capacity and quick removal of moisture</li> <li>• 20% Activated Alumina for Acid removal</li> <li>• High water capacity even at high liquid temperatures due to high MS content (3 Å Material)</li> </ul>
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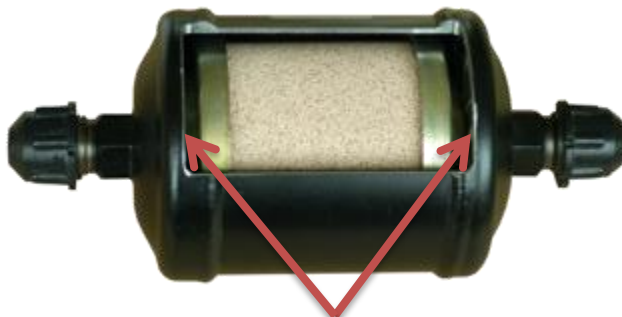
<b>CE mark in compliance with Pressure Equipment Directive</b>	97/23/EC	<b>Medium Compatibility</b>	HCFC, HFC, mineral, synthetic and ester oils
<b>Applicable standards</b>	EN 378/-1/-2, EN 14276-1, EN 1593, EN 1779	<b>Materials</b>	Housing: steel Connections: steel, nickel plated
<b>Pressure rating:</b>	Max. operating pressure PS: 46 bar Test pressure: PT: 51 bar	<b>Medium Temperature</b>	46 bar: -10°C to 75°C 34,5 bar: -35°C to 75°C

**Drying capacity (kg of refrigerant)**

Typ	Liquid temperature 25°C*			Liquid temperature 52°C*			Acid
	R404A	R134a	R407C/R410A	R404A	R134a	R407C/R410A	
DB-08	17	10,6	9,9	8,5	9,5	7,9	1,4
DB-16	37	23	21,8	18,5	20	17	3,2
DB-30	78	48	46	39	43	36	6,3

\*acc. ARI 710-86

**Cut away**



Check valves

**Models and Capacity**

Type	P/N	Flow Capacity kW			
		R404A	R134a	R407C	R410A
DB-082	16500	10	12	14	14
DB-082 S	16501				
DB-086 S	16502				
DB-083	16503	18	26	28	29
DB-083 S	16504				
DB-0810 S	16505				
DB-084	16506	22	32	34	35
DB-084 S	16507				
DB-0812 S	16508				
DB-162	16509	22	30	32	33
DB-163	16510				
DB-163 S	16511				
DB-1610 S	16512				
DB-164	16513	30	38	40	41
DB-164 S	16514				
DB-1612 S	16515				
DB-165	16516	32	48	50	52
DB-165 S	16517				
DB-303	16518	32	48	50	52
DB-304	16519				
DB-304 S	16520				
DB-3012 S	16521				
DB-305	16522	38	53	55	57
DB-305 S	16523				
DB-307 S	16524				

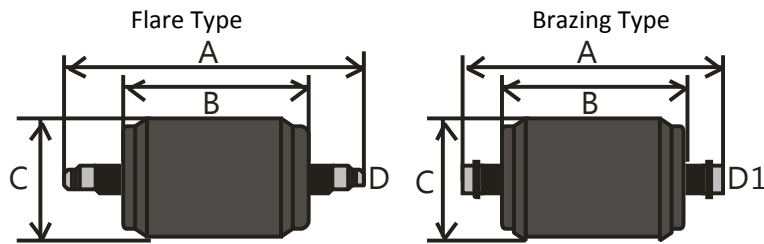
\*acc. ARI 710-2002, to = -15°C, tc = 30°C, pressure Drop 0,07 bar

**Correction factors**

Refrigerant	Condensing temperature °C	Evaporating temperature °C			
		5	-10	-20	-35
R404A	50	1,38	1,53	1,66	1,90
	40	1,09	1,18	1,26	1,40
	30	0,91	0,97	1,03	1,13
	25	0,84	0,90	0,94	1,03
R134a	50	1,19	1,27	1,34	
	40	1,04	1,11	1,16	
	30	0,93	0,98	1,02	
	25	0,88	0,93	0,96	
R407C	50	1,22	1,30	1,36	
	40	1,05	1,11	1,16	
	30	0,93	0,98	1,02	
	25	0,88	0,93	0,96	
R410A	50	1,32	1,37	1,42	1,51
	40	1,10	1,14	1,18	1,24
	30	0,96	0,99	1,01	1,06
	25	0,90	0,93	0,95	0,99



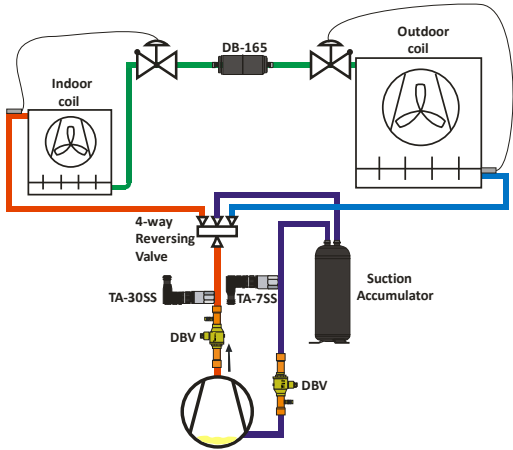
**Dimension DB (mm)**



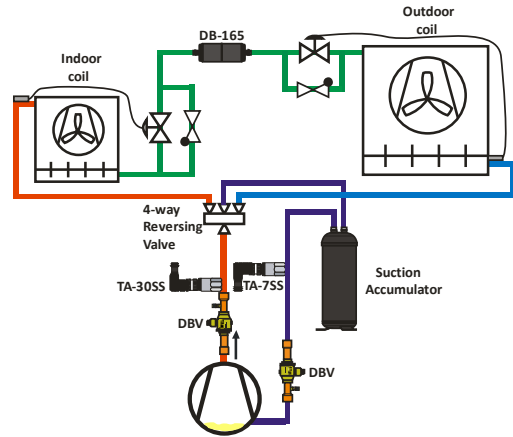
Type	P/N	A	D (SAE)	D1 (ODF)	Volume (l)	Weight (kg)	B	C	PED Category
DB-082	16500	144	¼" (6mm)		0,2	0,36 0,41 0,39 0,39 0,42	102		Article 3.3 PED
DB-082 S	16501	148		¼"					
DB-086 S	16502	119		6mm					
DB-083	16503	158	3/8" (10mm)						
DB-083 S	16504	154		3/8"					
DB-0810 S	16505	154		10 mm					
DB-084	16506	166	½" (12mm)						
DB-084 S	16507	162		½"					
DB-0812 S	16508	162		12 mm					
DB-162	16509	157	¼" (6mm)		0,46	110	80		
DB-163	16510	166	3/8" (10mm)						
DB-163 S	16511	162		3/8"					
DB-1610 S	16512	162		10 mm					
DB-164	16513	174	½" (12mm)						
DB-164 S	16514	170		½"					
DB-1612 S	16515	170		12 mm					
DB-165	16516	178	5/8" (16mm)						
DB-165 S	16517	170		16mm – 5/8"					
DB-303	16518	256	3/8" (10mm)		0,85	200	78		
DB-304	16519	264	½" (12mm)						
DB-304 S	16520	260		½"					
DB-3012 S	16521	260		12 mm					
DB-305	16522	268	5/8" (16mm)						
DB-305 S	16523	260		16 mm - 5/8"					
DB-307 S	16524	267		22mm – 7/8"					

### Heat Pump-/ Reverse Cycle

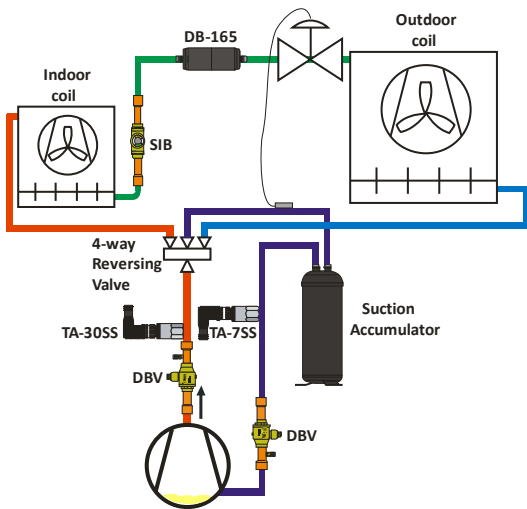
1. TXV with integrated check valves



2. Two TXV with external check valves



3. Bi-Flow Thermo Expansionsvalve



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