

High Pressure Non Cycling Refrigeration Dryers

Reliable High Quality Air for Demanding Environments

“ Maximise efficiency and reliability with CompAir’s environmentally friendly high pressure compressed air systems solution. ”



Maximum reliability at working pressures up to 45 barg

CompAir high-pressure refrigeration dryers deliver safe and constant quality, dry compressed air for various demanding environments such as PET bottle blowing, water jet cuts and aeronautical valves, in ambient temperatures of up to 50°C.

Delivering consistent dew point control of +3°C for reliable and dry compressed air, this range of ten robust, compact and space-saving dryers provide maximum reliability at flow rates of between 88m³/h to 1,200m³/h (at a nominal pressure of 40 barg).

The easy-to-use controller automatically manages dryer operation while monitoring critical parameters to deliver optimal air treatment efficiency.

Fully integrated three in one stainless steel heat exchangers offer reliability and long life. At the same time, energy efficiency is increased by 10% over previous models, and CO₂ footprint is reduced with the use of the new R513A refrigerant.

High-pressure non-cycling refrigeration dryers from CompAir – efficiency and reliability by design support the sustainability of our product and customer operations.

Features

	CD14F HP45 to CD60F HP45	CD80F HP45 to CD200F HP45
Dew Point Indication	Yes	Yes
ON/OFF Switch	No Switch, Schuko Plug	Yes
Terminal for Remote Alarm Signal	Yes	Yes
Antifreezing	Yes	Yes
Refrigerant Pressure Safety Relief Valve	Yes	Yes
Variable Speed Fan	Yes	Yes
History of Last 10 Alarms	Yes	Yes
Hot Gas By-pass Valve	-	Yes
Timed Electronic Drain Valve	Yes	Yes
Electric Frequency	STD 50/60Hz	STD 50Hz, Optional 60Hz



Technical Data

Model	Part No. [CCN]	Air Flow 40 barg		Max Pressure [barg]	Power [kW]	Refrigerant	Dimensions W x D x H [mm]	Connections [BSP]	Weight [kg]
		[m³/h]	[m³/min]						
CD14F HP45	47757390001	88	1.47	45	0.371	R513A	390 x 432 x 443	3/4"	27
CD18F HP45	47757391001	108	1.80	45	0.371	R513A	390 x 432 x 443	3/4"	28
CD30F HP45	47757392001	180	3.00	45	0.605	R513A	420 x 516 x 551	3/4"	31
CD38F HP45	47757393001	225	3.75	45	0.605	R513A	420 x 516 x 551	3/4"	33
CD45F HP45	47757394001	270	4.50	45	0.879	R513A	420 x 516 x 551	3/4"	36
CD60F HP45	47757395001	360	6.00	45	1.405	R513A	420 x 516 x 551	3/4"	40
CD80F HP45	47757396001	480	8.00	45	1.41	R407C	500 x 680 x 980	1-1/4"	80
CD80F HP45	47757397001	480	8.00	45	1.71	R407C	500 x 680 x 980	1-1/4"	80
CD110F HP45	47757398001	660	11.00	45	1.92	R407C	500 x 680 x 980	1-1/4"	83
CD110F HP45	47757399001	660	11.00	45	2.28	R407C	500 x 680 x 980	1-1/4"	83
CD165F HP45	47757400001	990	16.50	45	1.92	R407C	520 x 770 x 1195	1-1/4"	110
CD165F HP45	47757401001	990	16.50	45	2.28	R407C	520 x 770 x 1195	1-1/4"	110
CD200F HP45	47757402001	1200	20.00	45	2.24	R407C	520 x 770 x 1195	1-1/4"	120
CD200F HP45	47757403001	1200	20.00	45	2.28	R407C	520 x 770 x 1195	1-1/4"	120

Correction Factors

FC1 - Correction factor for working pressure

bar	15	20	25	30	35	40	45
psi	218	290	363	435	508	580	653
FC1	0.70	0.82	0.93	0.97	0.99	1	1.02

FC2 - Correction factor for inlet air temperature

°C	10	15	20	25	30	35	40	45	50	55	60
°F	50	59	68	77	86	95	104	113	122	131	140
FC2	2.00	1.80	1.60	1.40	1.20	1	0.85	0.71	0.58	0.49	0.42

FC3 - Correction factor for ambient temperature

°C	5	10	15	20	25	30	35	40	42	45	50
°F	41	50	59	68	77	86	95	104	107,6	113	122
FC3	1.16	1.12	1.08	1.04	1	0.96	0.92	0.88	0.85	0.80	0.70

Calculation of the dryer real flow rate = nominal dryer flow rate x FC1 x FC2 x [FC3]