

JOURNEY
OF
AIR

0,17-16,67
m³/min

6-589
cfm

14-16
bar



REFRIGERATED TYPE COMPRESSED AIR DRYERS



What is a Refrigerated Air Dryer?

Dryair DKN Series dryers keep the compressed air dry up to +3°C dew point by cooling the compressed air passing through it. Offering high efficiency and superior performance, Dryair DKN saves energy with Microchannel Condenser technology.

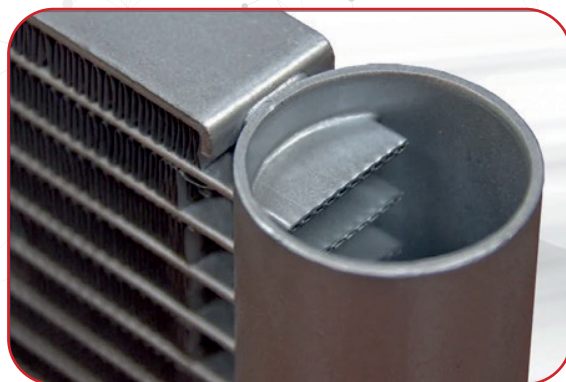


Key Features

- Very low pressure losses
- Increased efficiency, high performance with 'Microchannel' Condenser
- High efficiency R-513A refrigerant gas
- Safe working environment with hermetic system (closed system)
- Easily accessible and compact design
- Hot Gas Bypass Valve (DKN 75 - DKN 130)
- Temperature controlled fan
- Critical alarm at high temperature
- User-friendly with digital controller
- 3-in-1 heat exchanger (Air-Air/Air-Gas/Water Separator) for less footprint
- Time-adjusted drain
- Specialised filter kits for filter installation (DKN 5 - DKN 50)
- Condenser contamination filter

Microchannel Condenser

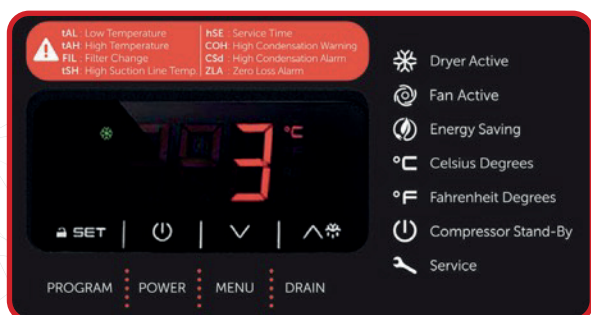
- Energy efficiency
- High heat transfer rate
- High corrosion resistance
- Compact structure
- Less pressure loss on the air side
- 70% lower refrigerant charge
- 50% - 70% lighter
- Easy to clean and recyclable



R513-A Refrigerant Type

- Environmentally friendly with low GWP value
- Non-flammable, safe to use with zero ODP value
- Thermodynamics suitable for difficult field conditions with features

Refrigerant Fluid	GWP
R404a	3922
R407c	1744
R134a	1430
R513a	631



Digital Controller

- Periodic maintenance indicators with filter change warning
- User-friendly
- Energy saving mode
- Digital dew point value
- Temperature unit option (°C or °F)

Model	Max. Pressure		Capacity*		Air Connection	Filter Set	Voltage (V/ph/Hz)	Dimensions (mm)			Weight (kg)	Controller	Refrigerant Type
	bar	psi	m³/min	cfm				Length	Width	Height			
Dryair DKN 5	14	203	0,17	6	G 3/4"	GO-40 MX&MY	230V / 1 / 50Hz	307	258	651	25	DigiPro	R513a
Dryair DKN 10	14	203	0,33	12	G 3/4"	GO-40 MX&MY	230V / 1 / 50Hz	307	258	651	25	DigiPro	R513a
Dryair DKN 20	14	203	0,50	18	G 3/4"	GO-40 MX&MY	230V / 1 / 50Hz	307	258	651	25	DigiPro	R513a
Dryair DKN 30	14	203	0,83	29	G 3/4"	GO-71 MX&MY	230V / 1 / 50Hz	327	354	681	30	DigiPro	R513a
Dryair DKN 35	14	203	1,17	41	G 3/4"	GO-71 MX&MY	230V / 1 / 50Hz	327	354	681	30	DigiPro	R513a
Dryair DKN 40	14	203	1,67	59	G 3/4"	GO-131 MX&MY	230V / 1 / 50Hz	327	354	681	30	DigiPro	R513a
Dryair DKN 50	14	203	2,17	77	G 3/4"	GO-131 MX&MY	230V / 1 / 50Hz	327	354	681	35	DigiPro	R513a
Dryair DKN 60	16	232	2,67	94	G1"	GON-225 MX&MY	230V / 1 / 50Hz	377	406	688	45	DigiPro	R513a
Dryair DKN 70	16	232	3,17	112	G1"	GON-225 MX&MY	230V / 1 / 50Hz	377	406	688	45	DigiPro	R513a
Dryair DKN 75	16	232	3,75	132	G1 1/2"	GON-300 MX&MY	230V / 1 / 50Hz	531	454	881	55	DigiPro	R513a
Dryair DKN 80	16	232	5,08	179	G1 1/2"	GON-300 MX&MY	230V / 1 / 50Hz	531	454	881	60	DigiPro	R513a
Dryair DKN 100	16	232	7,50	265	G1 1/2"	GON-500 MX&MY	230V / 1 / 50Hz	531	454	881	62	DigiPro	R513a
Dryair DKN 110	16	232	9,17	324	G1 1/2"	GON-600 MX&MY	230V / 1 / 50Hz	531	454	783	70	DigiPro	R513a
Dryair DKN 115	16	232	10,83	382	G2"	GON-800 MX&MY	230V / 1 / 50Hz	611	544	833	82	DigiPro	R513a
Dryair DKN 120	16	232	14,50	512	G2"	GON-1000 MX&MY	230V / 1 / 50Hz	661	544	941	90	DigiPro	R513a
Dryair DKN 130	16	232	16,67	589	G2"	GON-1000 MX&MY	230V / 1 / 50Hz	661	544	941	95	DigiPro	R513a

All models are air-cooled. Please contact our sales representative for water-cooled options.

- DALGAKIRAN reserves its rights to change the specifications without any prior notice.

* Capacity is given at atmospheric Pressure at 20 °C (ISO 1217) in accordance with norms ISO 7183-8573-1 and Pneuop 6611- Class 4-7 bar -35 °C inlet - 25 °C ambient.

PRE FILTER (X)

Efficiency rating:
1 Micron particle
removal & 0.5mg/m³
oil removal

FINE FILTER (Y)

Efficiency rating:
0.01 Micron particle
removal & 0.01mg/m³
oil removal

Dryair DKN AIR DRYERS CORRECTION FACTORS

Inlet Temperature °C	30	35	40	45	50	60	-	-
F1	1,29	1	0,92	0,78	0,65	0,45	-	-
Ambient Temperature °C	20	25	30	35	40	45	50	-
F2	1,05	1	0,98	0,93	0,84	0,76	0,7	-
Pressure Bar	4	6	7	8	10	12	14	16
F3	0,8	0,94	1	1,04	1,11	1,16	1,22	1,25

Formula: Dryer capacity = Compressor air delivery capacity / F1 / F2 / F3

DRYAIR DKN Dryer Sizing Example;

If a compressor delivers 5 m³/min at 6 bar, the dryer inlet temperature is 40°C and the ambient temperature is 30°C, please choose your dryer as follows;

Dryer Capacity = 5 / 0,94 / 0,92 / 0,98 = 5,89 m³/min

The correct dryer model for this application is DKN 100

