## D/ALG/AKIR/AN

# **DRD H Series** High Temperature Air Dryers

Many smaller compressors do not use an aftercooler in their designs. Therefore compressed air exits the compressor at about 100 °C temperature. Dalgakıran high temperature dryers incorporate an aftercooler to reduce the inlet temperature, providing efficient dewpoint management.

### HIGH TEMPERATURE DRYER-DRD H SERIES

- · High operating inlet temprature
- Integrated condenser
- · Independent air cooled aftercooler
- Moisture separator
- Auto drain
- · Easy installation and maintenance



## DALGAKIRAN AIR QUALITY FOCUS

Dalgakıran knows the importance of high quality compressed air and provides customers with the highest quality air possible. Using clean, dry air is extremely important for most air powered applications. Moisture or contamination in the air from the compressor discharge will result in many complications to production equipment. These complications will decrease productivity and may affect the production quality of final products.



# THE REFRIGERANT CIRCUT AND INSULATION

Dalgakıran exclusivesly uses environmentally friendly R134a refrigerant gas in the dryers. This refrigerant is suitable for both high temperature applications. R-134a has excellent thermodynamic properties and can operate at very low pressure compared to other refrigerants.

This will in turn increase the refrigerant compressor's service life. With R-134a Dalgakıran dryers can operate at very high ambient temperatures. Dalgakıran engineers add extra capability to the heat exchangers with a superior no loss insulation system.

Dalgakıran DRD H Series Digital Cycling air dryers supply constant dewpoint at all flow ranges. This perfect insulation philosophy continues to the refrigeration circuit side also. Superior insulation and oversized condensers (for ultra-high ambient temperatures) enable the DRD H Series Dryers to offer continuous air quality.

AFTER COOLER CONDENSER INSIDE



# **DRD H Series** High Temperature Air Dryers

TECHNICAL DATA													
Model	Capacity*		Connection Size	Voltage**	Max. Working Pressure	Max. Ambient Temp.	Max. Max. nbient Inlet remp. Temp.	Refrigerant	Recom- mended Filter and	Dimensions (mm)			Weight
	m³/min	cfm			bar	°C	٥C		Туре	Length	Width	Height	Kg
DRD H 31	0,52	18	G ½"	230V/1/50 Hz	16	45	104	R134a	C/F	445	445	955	62
DRD H 52	0,87	31	G ½"	230V/1/50 Hz	16	45	104	R134a	C/F	445	445	955	62
DRD H 75	1,25	44	G ½"	230V/1/50 Hz	16	45	104	R134a	C/F	445	445	955	63
DRD H 106	1,77	62	G ¾"	230V/1/50 Hz	16	45	104	R134a	C/F	445	445	955	64
DRD H 160	2,67	94	G ¾"	230V/1/50 Hz	16	45	104	R134a	C/F	625	510	910	88
DRD H 212	3,53	125	G ¾"	230V/1/50 Hz	16	45	104	R134a	C/F	625	510	910	97

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

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

\*\* Consult sales representative for optional voltages

#### PRE FILTER (X)

Efficiency rating: 1 Micron particle removal & 0.5mg/m<sup>3</sup> oil removal

#### FINE FILTER (Y)

Efficiency rating: 0.01 Micron particle removal & 0.01mg/m<sup>3</sup> oil removal

#### PARTICLE FILTER (P)

Efficiency rating: 5 Micron particle removal (removes desiccant particles after the dryer)

#### ACTIVATED CARBON FILTER (A)

Efficiency rating: 0.01 Micron particle removal & 0.003 mg/m<sup>3</sup> oil removal

#### **CORRECTION FACTORS FOR DRD H AIR DRYERS**

Pressure (bar)	4	5	6	7	8	8,5	10	11	12	13	14	16
F1	0,70	0,75	0,80	0,83	0,86	0,90	0,93	0,96	1	1,1	1,12	1,15
Ambient Temperature °C	24	29	35	38	40	46	49	-	-	-	-	-
F2	1,10	1,07	1,03	1,00	0,96	0,82	0,55	-	-	-	-	-
Inlet Temperature °C	32	38	65	82	93	98	104	-	-	-	-	-
F3	1,30	1,27	1,06	1,00	0,85	0,78	0,75	-	-	-	-	-

#### DRD H Dryer Sizing Example;

If a compressor delivers 2 m<sup>3</sup>/min at 10 bar, the dryer inlet temperature is  $93^{\circ}$ C and the ambient temperature is  $35^{\circ}$ C, please choose your dryer as follows;

Dryer Capacity=2/0,93/1,03/0,85=2,46 m<sup>3</sup>/min

The correct dryer model for this application is DRD H 160.