



DRYAIR DK Series

Downstream Equipments

DALGAKIRAN
COMPRESSED AIR TECHNOLOGIES

Dryair DK SERIES 10 / 20 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 110 / 120 / 130 / 140 / 150 / 160 / 170 / 180 / 190 / 200 / 210 / 220 / 230 / 240 / 250 / 260

Dalgakiran Dryair DK series clean and dry the compressed air, till the dewpoint reachesto +30 °C. Integrated 2 air filters clean compressed air till 0,01 micron particle size and 0,01 mg/m³ max. oil carryover.

> REFRIGERATED TYPE DRYAIR DK COMPRESSED AIR Dryers

- * 3°C pressure dew point
- * Very Low Pressure Drop
- * Designed for Tropical Conditions
- * Dryer easily runs at 60 °C Max. Inlet Temp. and 50 °C Ambient Temp.due to R134a refrigerant (all through the range) and oversized condenser.

> COMPACT DESIGN

As the canopy of the dryer is designed not to leave any unused space inside, DK series cover minimal space where they are placed.

> ENERGY SAVING DEVICE

Digital Controller with a lot of economy features and alarm capabilities is standard for all 3Ph dryers (Dryair DK 140 and up)

> ALUMINUM HEAT EXCHANGER IS STANDARD (from DK 40)

Very Low Pressure Drop (100mbar), Very Efficient (3°C real pressure dew point)

> EASY TO ACCESS

Easy to access in to the cooling components in seconds by the help of screw free panels and plastic handles.

> SCROLL COMPRESSORS (from DK 120)

Scroll Compressors which are energy efficient and durable against liquid shocks are employed.

> ELECTRICAL WIRES ARE SEPARATED FROM REFRIGERANT SIDE

No electrical wires inside the refrigerant side of the dryer. Electrical Box has an external cover which has an access from the outside of the dryer. No need to open dryer panels to go in to electrical box.





TECHNICAL DATA

| MODEL | Voltage | Capacity (m³/h) | Connection Size | Refrigerant | Maximum Working Pressure (bars) | Maximum Ambient Temperature (°C) | Maximum Inlet Temperature (°C) | Inlet and Outlet Filters | Length (mm) | Width (mm) | Height (mm) |
|---------------|----------|-----------------|-----------------|-------------|---------------------------------|----------------------------------|--------------------------------|--------------------------|-------------|------------|-------------|
| Dryair DK 10 | 230/1/50 | 21 | 1/2" | R-134a | 16 | 50 | 60 | Included | 413 | 363 | 557 |
| Dryair DK 20 | 230/1/50 | 35 | 1/2" | R-134a | 16 | 50 | 60 | Included | 413 | 363 | 557 |
| Dryair DK 30 | 230/1/50 | 50 | 1/2" | R-134a | 16 | 50 | 60 | Included | 413 | 363 | 557 |
| Dryair DK 40 | 230/1/50 | 87 | 3/4" | R-134a | 16 | 50 | 60 | Included | 473 | 453 | 832 |
| Dryair DK 50 | 230/1/50 | 130 | 3/4" | R-134a | 16 | 50 | 60 | Included | 473 | 453 | 832 |
| Dryair DK 60 | 230/1/50 | 170 | 3/4" | R-134a | 16 | 50 | 60 | Included | 473 | 453 | 832 |
| Dryair DK 70 | 230/1/50 | 198 | 1 1/2" | R-134a | 16 | 50 | 60 | Included | 553 | 503 | 874 |
| Dryair DK 80 | 230/1/50 | 283 | 1 1/2" | R-134a | 16 | 50 | 60 | Included | 553 | 503 | 874 |
| Dryair DK 90 | 230/1/50 | 354 | 1 1/2" | R-134a | 16 | 50 | 60 | Included | 553 | 503 | 874 |
| Dryair DK 100 | 230/1/50 | 467 | 2" | R-134a | 16 | 50 | 60 | Included | 678 | 648 | 1157 |
| Dryair DK 110 | 230/1/50 | 588 | 2" | R-134a | 16 | 50 | 60 | Included | 678 | 648 | 1157 |
| Dryair DK 120 | 230/1/50 | 825 | 2" | R-134a | 16 | 50 | 60 | Included | 948 | 728 | 1370 |
| Dryair DK 130 | 230/1/50 | 1100 | 2" | R-134a | 16 | 50 | 60 | Included | 948 | 728 | 1370 |
| Dryair DK 140 | 400/3/50 | 1310 | 3" | R-134a | 16 | 50 | 60 | Included | 948 | 798 | 1460 |
| Dryair DK 150 | 400/3/50 | 1628 | 3" | R-134a | 16 | 50 | 60 | Included | 948 | 798 | 1460 |
| Dryair DK 160 | 400/3/50 | 2200 | 3" | R-134a | 16 | 50 | 60 | Included | 1163 | 778 | 1725 |
| Dryair DK 170 | 400/3/50 | 2620 | 3" | R-134a | 16 | 50 | 60 | Included | 1163 | 778 | 1725 |
| Dryair DK 180 | 400/3/50 | 3144 | DN100 | R-134a | 16 | 50 | 60 | Not Included | 1397 | 847 | 1770 |
| Dryair DK 190 | 400/3/50 | 3696 | DN100 | R-134a | 16 | 50 | 60 | Not Included | 1397 | 847 | 1770 |
| Dryair DK 200 | 400/3/50 | 4800 | DN100 | R-134a | 16 | 50 | 60 | Not Included | 1467 | 1077 | 1930 |
| Dryair DK 210 | 400/3/50 | 5522 | DN100 | R-134a | 16 | 50 | 60 | Not Included | 1467 | 1077 | 1930 |
| Dryair DK 220 | 400/3/50 | 6584 | DN150 | R-134a | 16 | 50 | 60 | Not Included | 2188 | 1062 | 1925 |
| Dryair DK 230 | 400/3/50 | 7434 | DN150 | R-134a | 16 | 50 | 60 | Not Included | 2188 | 1062 | 1925 |
| Dryair DK 240 | 400/3/50 | 8496 | DN150 | R-134a | 16 | 50 | 60 | Not Included | 2697 | 897 | 1975 |
| Dryair DK 250 | 400/3/50 | 9912 | DN200 | R-134a | 16 | 50 | 60 | Not Included | 2697 | 897 | 1975 |
| Dryair DK 260 | 400/3/50 | 11800 | DN200 | R-134a | 16 | 50 | 60 | Not Included | 2550 | 1550 | 2100 |

1. Capacity is given at atmospheric pressure at 20 °C (ISO 1217) in accordance with norms ISO 7183-8573-1 and Pneurop 6611 (7 bar -35 °C IN-25 °C ambient, 2-7 °C dew point)

2. DALGAKIRAN reserves its rights to changes the specifications without any prior notice.

CORRECTION FACTORS FOR DRYAIR - DK AIR DRYERS

| 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 | 50 | - | - |
| F2 | 1,05 | 1 | 0,98 | 0,93 | 0,84 | 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 |

Example for choosing the correct dryair air dryer model;

If compressor delivers 200 m³ / h at 6 bars, the dryer inlet temperature is 40 °C and the ambient temperature is 30 °C, please choose your dryer as follows;

$$\text{Dryer Capacity} / 200 / 0.94 / 0.92 / 0.98 = 236 \text{ m}^3 / \text{h}$$

The correct dryer model for this application is DryAir DK 80

