

MOK Series Direct Expansion Refrigerated Dryers With Dual Filtration. Capacity Range 10 m³/h to 1000 m³/h (6 cfm to 586 cfm).

ULTRA COMPACT, ECOLOGICAL AND SIMPLE TO INSTALL

15 FORTNUM CLOSE • KITTS GREEN • BIRMINGHAM • B33 OLG

COMPRESSED



MOK Series air dryers are designed to offer all users of compressed air a reliable and efficient system that is compact, easy to install and with low ownership costs. The system arrives complete with two high efficiency filters that combine to ensure a continuous supply of dry and clean air, suitable for thousands of modern industrial applications.



How The Dryer Works

MOK Series dryers use a standard refrigeration cycle to separate naturally occurring water from compressed air.

- Refrigerant Compressor
- Air Condenser (Optional Water Condenser)
- Expansion Valve
- Aluminum Exchanger
- Refrigerant Outlet

 Refrigerant Inlet

 Air Outlet



MOK Series Advantages

Special Components;

- "Piston" Compressor (MOK 10-130)
- "Scroll" Compressor (MOK 160-1000)
- "Microchannel" Condenser
- Temperature-Driven Fan
- High Temperature Critical Alarm
- Digital Controller (Digi-Pro)
- 3-in-1 Exchanger (Air-Air / Air-Gas / Water Separator)
- Exclusive Aluminium Plate Exchanger Technology (MOK 10-130)

- Aluminium "Bar-Plate" Exchanger (MOK 160-1000)
- Hermetic System (Closed to Atmosphere)
- Special Filter Kits for Filter Installation (MOK 10-130)
- Time-Driven Drain
 (Optional Electronic "Zero-Loss" Drain)
- Condenser Filter
- Hot Gas Bypass Valve (MOK 225-1000)

Microchannel Condenser

New condenser technology provides better efficiency and high performance.



Electronic Zero-Loss Drain

Optional Zero-Loss drain alternative



Digital Controller (Digi-Pro)

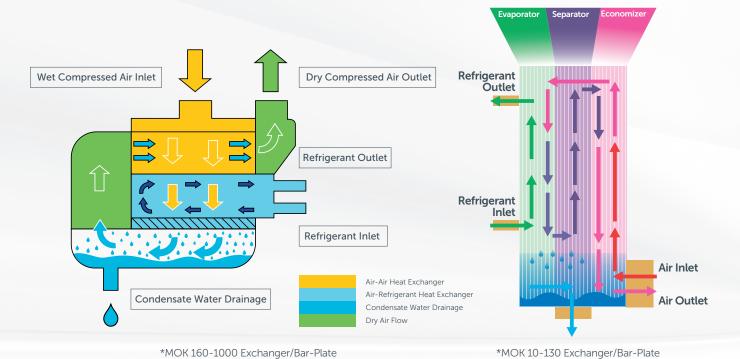


Hermetic System

The refrigeration element comprises a completely sealed system featuring only welded connections, that means a much lower risk of leaks.



3-in-1 Air Exchanger



Onboard Filters

MOK 10-130 models include 2 oil removing filters Grade 1 micron and 0.01 micron) and easy installation manifolds.



Much Lower Global Warming Impact

| Refrigerant | GWP |
|-------------|------|
| R404a | 3922 |
| R407c | 1744 |
| R134a | 1430 |
| R513a | 631 |
| R513 | |

- Low GWP (Global Warming Potential) value.
- Zero ODP (Ozone Depletion Potential) value.
- Non-flammable
- Termodynamic properties are suitable for harsh environment conditions.

| Model | Capacity (m ³ /h) | C.F.M. | Unit Air Connection Size | Filter Connection Size** | Filter Types | Element Types | Length (mm) | Width (mm) | Height (mm) | Weight (kg) | |
|----------|---------------------------------|--------|--------------------------------|--------------------------------|----------------|----------------|----------------|---------------|----------------|----------------|---------------|
| MOK 10 | 10 | 6 | G 3/4" | G1/2" | GO-40 MX&MY | MO-40 MX&MY | 258 | 307 | 501 | 25 | |
| MOK 20 | 20 | 12 | G 3/4" | G1/2" | GO-40 MX&MY | MO-40 MX&MY | 258 | 307 | 501 | 25 | <u> </u> |
| MOK 30 | 30 | 18 | G 3/4" | G1/2" | GO-40 MX&MY | MO-40 MX&MY | 258 | 307 | 501 | 25 | ifol |
| MOK 50 | 50 | 29 | G 3/4" | G1/2" | GO-71 MX&MY | MO-71 MX&MY | 333 | 338 | 531 | 35 | Mar |
| MOK 70 | 70 | 41 | G 3/4" | G1/2" | GO-71 MX&MY | MO-71 MX&MY | 333 | 338 | 531 | 35 | With Manifold |
| MOK 100 | 100 | 59 | G 3/4" | G3/4" | GO-131 MX&MY | MO-131 MX&MY | 333 | 338 | 531 | 35 | > |
| MOK 130 | 130 | 77 | G 3/4" | G3/4" | GO-131 MX&MY | MO-131 MX&MY | 333 | 338 | 531 | 35 | |
| MOK 160 | 160 | 94 | G 1″ | N/A | GON-225 MX&MY | MON-225 MX&MY | 405 | 389 | 588 | 45 | |
| MOK 190 | 190 | 112 | G 1" | N/A | GON-225 MX&MY | MON-225 MX&MY | 405 | 389 | 588 | 45 | |
| MOK 225 | 225 | 133 | G 1 1/2" | N/A | GON-300 MX&MY | MON-300 MX&MY | 454 | 531 | 881 | 92 | S. |
| MOK 305 | 305 | 180 | G 1 1/2" | N/A | GON-300 MX&MY | MON-300 MX&MY | 454 | 531 | 881 | 92 | Filters |
| MOK 450 | 430 | 265 | G 1 1/2" | N/A | GON-500 MX&MY | MON-500 MX&MY | 454 | 531 | 881 | 105 | ose |
| MOK 550 | 553 | 324 | G 1 1/2" | N/A | GON-600 MX&MY | MON-600 MX&MY | 454 | 531 | 793 | 105 | With Loose |
| MOK 650 | 700 | 383 | G2" | N/A | GON-800 MX&MY | MON-800 MX&MY | 544 | 612 | 831 | 120 | × × |
| MOK 870 | 860 | 512 | G2" | N/A | GON-1000 MX&MY | MON-1000 MX&MY | 544 | 660 | 931 | 120 | |
| MOK-1000 | 1000 | 589 | G2" | N/A | GON-1000 MX&MY | MON-1000 MX&MY | 544 | 660 | 931 | 120 | |

^{*}Pressure drops according to the referred capacity values.

| Nominal Working Pressure | 7 barg |
|---|---------|
| Maximum Working Pressure (MOK 10-130) | 14 barg |
| Maximum Working Pressure (MOK 160-1000) | 16 barg |
| Minimum Working Pressure | 4 barg |
| Nominal Inlet Temperature | 35 ℃ |
| Maximum Inlet Temperature | 60 °C |
| Minimum Inlet Temperature | 5 °C |
| Nominal Ambient Temperature | 25 °C |
| Maximum Ambient Temperature | 50 °C |
| Minimum Ambient Temperature | 5 ℃ |
| Refrigerant | R513a |

Correction Factors

| Correction Factors (°C) | F1 | Ambient Temperature (°C) | F2 | Pressure (barg) | F3 |
|----------------------------|------|-----------------------------|------|--------------------|------|
| 30 | 1.29 | 20 | 1.05 | 4 | 0.80 |
| 35 | 1 | 25 | 1 | 6 | 0.94 |
| 40 | 0.92 | 30 | 0.98 | 7 | 1 |
| 45 | 0.78 | 35 | 0.93 | 8 | 1.04 |
| 50 | 0.65 | 40 | 0.84 | 10 | 1.11 |
| 60 | 0.45 | 45 | 0.76 | 12 | 1.16 |
| - | - | 50 | 0.7 | 14 | 1.22 |
| - | - | - | - | 16 | 1.25 |

Dryer Selection Example

If an air compressor delivers 30 m³/h @6 barg, the dryer inlet temperature 40 °C and ambient temperature is 30 °C, please choose your dryer model as follows: $30 / 0.94 / 0.92 / 0.98 = 40 \text{ m}^3/\text{h}$

MOK-50 should be chosen for this application.



^{**}Filter kit included and the filter inlet/outlet dimensions
***All models 230V / 50Hz / 1 Phase

Compressed Air Systems UK 15 Fortnum Close Kitts Green Birmingham B33 0LG

Web: www.tanaircompressors.com Tel: 01217533330 Email: orders@tanaircompressors.com