

DM040GF Refrigerated Air Dryer

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Product Specifications

Max. Air Handling Capacity	4.0 Nm ³ /min
Pressure Dew Point	2-10°C
Standard Working Pressure	7 bar/0.7MPa
Max. Working Pressure	10.5bar/1.05Mpa
Standard/Max. Air Inlet Temperature	< 45°C/80°C
Ambient Temperature	≤38°C
Working System	Continuous Operation
Control Mode	Microcomputer Control
Pressure Drop	≤0.020Mpa

Blowdown Valve	Electronic Drain Valve
Cooling Method	Air-cooled
Refrigerant	R22
Power Supply V/PH/Hz	220V AC 50HZ
Refrigeration Power	1.25 HP
Fan Power	138W
Connection Type	Thread Connection
Inlet & Outlet Connection Size	1.5"(Female Thread) DN40
Overall Dimension (L*W*H)	850mmx475mm x 800mm
Net Weight	68Kg
Installation Method	Foundation-free Installation

Product Description

Core Product Advantages & Performance Features

1. Premium Pure Copper Bellows Dual Heat Exchange Barrel Design

Effectively prevent condensation at the outlet pipeline, avoiding pipeline blockage and equipment corrosion caused by condensed water.

Realize secondary heat exchange between cooled dewatered compressed air and high-temperature incoming compressed air, recovering excess kinetic energy and cooling capacity to eliminate energy waste, which can reduce electricity consumption by 5% effectively.

Bellows heat exchange efficiency is 10% higher than ordinary straight pipes with the same pipe diameter and length, boosting overall drying efficiency and shortening air treatment time.

2. Top-brand Energy Regulation Device

Effectively prevent evaporator icing and compressed air pipeline blockage under low-load operation, ensuring stable and uninterrupted air supply.

Avoid liquid compression inside the unit, greatly extending the service life of the refrigeration compressor and reducing later maintenance costs.

Keep the refrigerating capacity of the dryer balanced with the gas heat load at all times, improving operation economy and reducing overall energy consumption.

Reduce fluctuations in evaporation temperature (evaporation pressure), avoiding excessive gas temperature fluctuations that affect the stability of pressure dew point.

3. Precision Throttle Valve

Achieve precise adjustment of refrigerant flow, realizing constant temperature refrigeration and stable output of dry compressed air, with consistent dew point performance.

4. Enlarged High-efficiency Condenser

The condenser heat dissipation area is increased by 15% based on standard heat dissipation capacity; tested to save 3% more energy than standard condensers, effectively lowering long-term operation costs.

5. World-famous Brand Compressor Standard Configuration

Equipped with brand-new genuine refrigeration compressors from top global brands including Danfoss, Hitachi, Panasonic, Copeland, ensuring ultra-stable and reliable unit operation, low failure rate and long service life.

6. Optimized Heat Exchanger Installation Structure

Adopt high-low staggered installation for heat exchanger barrels, ensuring smooth discharge of condensed water without water accumulation, eliminating secondary moisture entrainment.

7. High-efficiency Clamp-on Gas-liquid Separator

With a separation rate up to 99.99%, it realizes thorough gas-liquid separation, stabilizes outlet air quality and maintains constant pressure dew point throughout operation.

8. Full-range Comprehensive Safety Protection

Standard configured with high and low pressure protection, over-current protection devices, effectively avoiding damage to core components when unit faults occur, enhancing equipment safety and service life.

Core Applications & Applicable Industries

Core Purpose

This DM040GF refrigerated air dryer is specially designed to remove moisture, water droplets and partial impurities from compressed air, providing clean, dry and stable compressed air for various pneumatic equipment and industrial production lines, protecting downstream pneumatic components, precision instruments and production equipment from moisture corrosion, blockage and damage.

Applicable Industries

- **Manufacturing & Machinery Industry:** Automobile manufacturing, mechanical processing, injection molding, pneumatic tool supporting
- **Electronics & Electrical Industry:** Electronic component production, circuit board processing, electrical appliance assembly
- **Food & Beverage Industry:** Food packaging, beverage production, food processing (pneumatic conveying & packaging)
- **Pharmaceutical Industry:** Pharmaceutical production, medical equipment supporting, clean workshop pneumatic system
- **Textile & Printing Industry:** Textile machinery, printing equipment, dyeing and finishing pneumatic control
- **Petroleum & Chemical Industry:** Chemical pneumatic transmission, industrial gas purification, pipeline air supply
- **General Industrial Air Compressor Supporting:** Small and medium-sized air compressor stations, factory centralized air supply system

Model	Capacity (Nm³/min)	Power	Compressor Power (HP)	Weight (kg)	Dimensions (L×W×H)
DM010GF	1	220/50	0.65	50	720*375*670
DM015GF	1.5	220/50	0.85	60	750*400*700
DM026GF	2.6	220/50	1	80	800*450*730
DM040GF	4	220/50	1.25	105	800*475*800
DM065GF	6.5	220/50	1.75	136	950*500*880
DM085GF	8.5	220/50	2	165	1060*560*983
DM110GF	11	380/50	3	195	1180*630*1092
DM138GF	13.8	380/50	3.5	255	1180*670*1092
DM150GF	17	380/50	4	300	1240*670*1188
DM200GF	23	380/50	5	385	1420*790*1340
DM250GF	27	380/50	6	400	1650*820*1370
DM300GF	35	380/50	8	550	1650*820*1370
DM400GF	45	380/50	10	630	1850*920*1550
DM500GF	55	380/50	12	680	1980*930*1826
DM600GF	65	380/50	15	720	2080*930*1834

Refrigerated Air Dryer & Desiccant Air Dryer - Demargo

Demargo (Shanghai) Energy-Saving Technology Co., Ltd. is a national high-tech enterprise and a Shanghai "Specialized, Refined, Characteristic and Innovative" enterprise, devoting itself to the R&D, production, sales and after-sales service of compressed air purification equipment for 19 years. With a firm commitment to energy conservation, environmental protection and technological innovation, we have grown into a leading manufacturer in the air compression post-treatment industry, providing high-quality, customized solutions for global industrial customers.

Our core strength lies in strong technological research and development capabilities. Up to now, we have owned 24 authorized patents and 22 patents under application, covering key technologies of air drying and purification equipment, which effectively guarantees the stability and energy efficiency of our products. We have passed ISO9001 and QS certifications, and our products comply with international industrial standards, with dew point ranging from -23°C to -70°C, air treatment capacity of 1~500Nm³/min, and outlet oil content as low as 0.003PPM, reaching the industry-leading precision level.

We boast a comprehensive and diverse product portfolio, covering more than 60 product categories, including 21 standard products and a variety of non-standard customized products that lead the industry. Our main products include air compressors and their accessories, air receivers, refrigerated dryers (including plate heat exchanger type, high-temperature air-cooled type, DC inverter type, etc.), adsorption dryers, combined dryers, heat of compression adsorption dryers, filters, zero-air-consumption blower-heated dryers, self-cleaning air filters, compressed air pre-cooling units, low-temperature high-pressure nitrogen pre-cooling units, industrial chillers, oil-water separators, oil removers and aftercoolers, etc.. We support 12 types of product configurations such as air-cooled/water-cooled, fluorine-free/high-temperature, inverter/explosion-proof, and can provide intelligent solutions such as industrial computer and programmable control according to customer needs.

With excellent product quality and professional service, we have won wide recognition in the global market. Our customers are distributed in more than 20 countries and regions around the world, including Brazil, Australia, etc., and we have established in-depth cooperation with more than 20 OEM manufacturers and 2299 brand agents. Our annual output reaches 9,682 sets, and the cumulative sales volume exceeds 100,000 sets, which fully demonstrates the market influence and customer trust in our brand.

Customer-centricity is our consistent service philosophy. We provide a full-cycle service system from pre-sales design, in-sales installation to after-sales maintenance: we promise 30-minute response, 24-hour online guidance and 48-hour on-site service, and ensure spare parts supply response within 24 hours, effectively solving the worries of customers in product use. We are committed to tailoring the most suitable compressed air purification solutions for customers in more than 30 industries such as power, aerospace, electronics, and chemical industry, helping enterprises reduce energy consumption, improve production efficiency and product quality.

Looking forward to the future, Demargo will continue to increase R&D investment, accelerate technological innovation, expand the global market layout, and strive to become a world-class provider of compressed air purification and energy-saving solutions. We sincerely look forward to cooperating with partners from all over the world to jointly promote the development of the global industrial energy-saving and environmental protection industry!

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