Dryers

Main Line

Pneumatic Components (Refrigeration Air Dryer) **Safety Precautions**

Be sure to read this section before use. For general precautions for pneumatic equipment, refer to Intro 15.

Product-specific cautions: Refrigeration air dryer GX Series

Manufacturer's Disclaimer

WARNING

- ■The manufacturer cannot be held liable in the following cases:
- In the case where there are serious errors in the operator's use.
- Illegal modifications or repairs using non-standard parts by user.

Design / Selection

Applications

WARNING

■Do not use for applications other than removing moisture from compressed air.

■Do not use for caisson shields or medical devices such as breathing devices.

Doing so may result in serious injury.

CAUTION

■Do not mount and use this device on transportation equipment such as vehicles or ships. Vibration may cause internal damage.

- ■When using the product in a compressed air line subject to rapid fluctuations of pressure, install an air tank, etc., after the air dryer to ensure that the fluctuations of pressure are kept at 0.34 MPa/min or less. Rapid fluctuations of pressure may cause failure.
- ■When sudden load fluctuations can be expected to occur, select a model with a margin of capacity.

Air Quality

A CAUTION

■Do not use when the inlet air contains corrosive gas, chemical solutions, organic solvents, or combustible gas.

■Refrigeration air dryers use copper pipes (phosphorus deoxidized copper pipes) for the refrigerant gas pipes and pipes within the heat exchanger. When corrosion causes a hole in these copper pipes, the refrigerant gas will leak and make it impossible to operate the unit, or cause failure such as water leaking from the compressed air outlet side of the air dryer. In addition, copper is also used as conductive materials for the electrical wiring, etc. Corrosion thereof may cause breakdowns such as electrical leakage accidents. In particular, copper piping in heat exchangers is subject to repeated condensation and drying, and if corrosive components

are present, they are likely to be concentrated on the copper piping surface and accelerate corrosion. Therefore, sufficient attention should be paid not only to the installation environment of air dryers but also to the intake air from air compressors. Failures caused by corrosion are not covered by the warranty. Plant exhaust may contain NOx (nitrogen oxides), SOx (sulfur oxides), Co, (carbon dioxide), and other substances that may promote corrosion, and consideration must be given to the installation location of air dryers and air compressors to ensure that they are not affected by factory exhaust. In rare cases, if chlorine-based organic solvents (trichloroethylene, etc.), aldehyde or alcohol (formaldehyde generated from building materials or methanol in the chemicals used) are absorbed by the air dryer and hydrolyzed, the copper piping could corrode (like an ant nest). Caution is required in these cases.

Air temperature

CAUTION

■Do not use in an environment that exceeds the max. inlet air temperature or max, working pressure.

■When the inlet air temperature is high, install an after cooler, etc., in order to lower the temperature to the max. inlet air temperature or below for use. The drainage generated with the after cooler should be removed before the dryer.

Maintenance Space

A CAUTION

■Make sure that the space is well ventilated, and secure enough space for maintenance and inspection.

Series: GX3203D to 3255D, GX5203D to 5237D

All 4 sides: 600 mm or more

Applicable models: GX5255D, 5275D

Front: 1000 mm or more, either left or right side: 600 mm or

Other

WARNING

■This product uses Freon (HFC) and falls under the Freon Gas Emissions Act (April 1, 2015) as a Class 1 Specified components (commercial refrigeration air conditioning product). Management responsibility is imposed and penalties apply for violations. Be sure to collect the Freon gas when repairing or disposing of the product, and perform a simple inspection at least once every three months. Contact CKD for inspection and Freon gas collection.

During transport

WARNING

■This product is filled with less than 12 kg of refrigerant (R-134a, R-410A, R-407C). Upon transport (land, sea, air), be sure to comply with the laws and regulations applicable to each situation.

Main Line

For precautions during mounting, installation, adjustment, use and maintenance, refer to the CKD Components Product Site (https://www.ckd.co.jp/kiki/en/) → "Model No. → Instruction Manual

Ending

CKD

Ending