MARQUARDT + SCHAUPP
LUFTENTFEUCHTUNGSSYSTEME

Adsorption dehumidifier type series DryQube

MSL DryQube 340

1,58 kg/h
Dehumidifying capacity*

160 - 400 m³/h
Dry air volume flow*

*nominal values at 20°C, 60% r.F.

Product description MSL DryQube 340

Compact dehumidifier series in an industrial standard for dehumidifying atmospheric air by means of a high-capacity silica gel sorption rotor.
All casing models, manufactured ourselves, are made of stainless steel.
A technically sophisticated and energy-efficient system enables economically efficient and long-term operation. Well thought out, detailed engineering also ensures minimal maintenance by the operating and service personnel.

The DryQube series is available for indoor and outdoor installation. Additional, optional accessories allow the series to cover a wide performance spectrum in a range of usage areas.

(Ill. MSL DryQube 340)

Applications

Our high-performance adsorption dryers can be used wherever conventional systems, such as condensation dryers, work inefficiently or are not sufficient in order to achieve the required level of dehumidification.

The adsorption principle we apply allows significantly lower dew points and works highly efficiently.

Adsorption dryers are primarily used in areas requiring low air humidity and consistent process conditions. These include ventilation, climate and process air technology, as well as the construction industry, production plants and storage spaces.

Series specification

- Z-Line air filter in G4 process and regeneration air
- Digital display: operating hours, elec. power, consumption
- PTC self-regulating heat register
- Energy-saving, low-noise radial fan
- Internal heat recovery

Further application areas

- Automobile industry
- Pharmaceutical industry
- Electrical industry
- Food industry
- Defence technology
- Energy generation
- Steel industry
- Archives/museums
- Tool construction
- Shipping/shipyards/naval industry

Options/Accessories

- Filter monitoring
- Function monitoring
- Pre-filtering M5/F7
- Humidity switch controls
- Increased ext. pressure (add. 200Pa)
- Weather protection model
- Floor or wall bracket
- Throttle valves
- Duct adapter
- Connection adapter Ø 80 (for mixed air operation)

MARQUARDT + SCHAUPP
LUFTENTFEUCHTUNGSSYSTEME
100%
MADE IN GERMANY

LUFTENTFEUCHTUNGSSYSTEME

Adsorption dehumidifier type series DryQube

MSL DryQube 340

Technical data

Dehumidifying capacity (nominal)	kg/h	1,57
Humidity difference Δ X	g/kg	3,83
Dry air volume (nominal)	m³/h	340
External pressure process air (nominal)	Pa	300
Regeneration air volume (nominal)	m³/h	104
External pressure regeneration air (nominal)	Pa	220
Power input (nominal/max.)	kW	1,6 / 2,1
Nominal current input (nominal/max)	A	7,5 / 9,7
Electricity connection		230 V – 50/60Hz*
Recommended fuse		C16 / 16A
Weight of basic model	kg	17,5
L x W x H	mm	335 x 350 x 432
Maintenance space		1 x high of unit
Noise level	dB	65

(nominal values at 340m³/h; 20°C/60%r.F./technical modifications excepted)
(*with minimal reduction of dehumidifying performance)

Δx-diagram

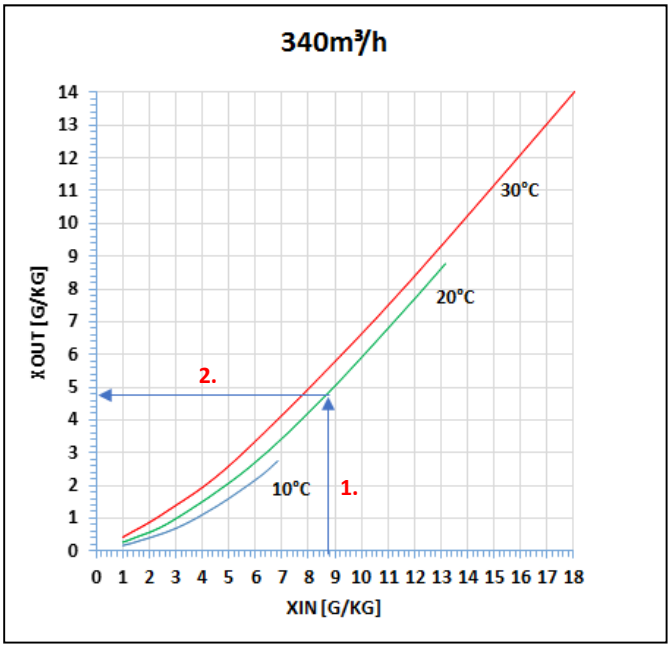


Diagram to determine the discharge humidity in different air intake conditions. (valid for the same process and regeneration air intake conditions)

Determination of dehumidifying capacity

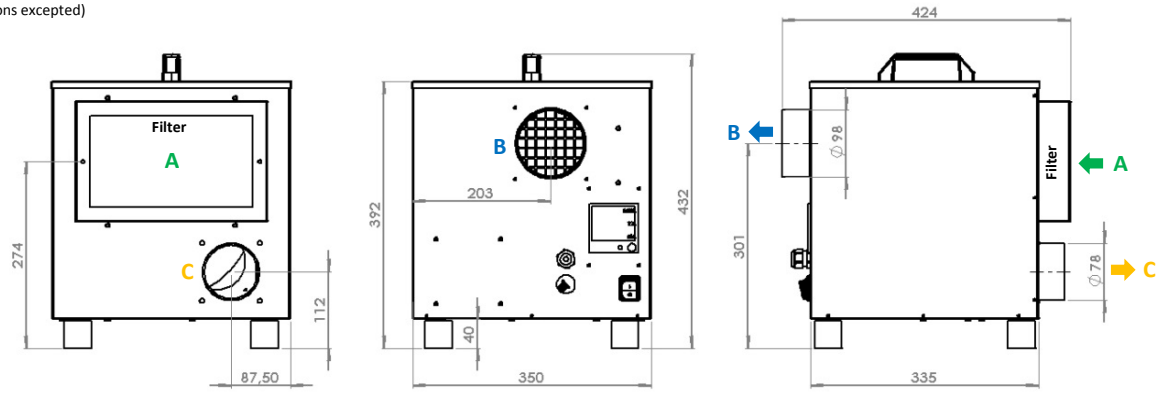
1. Determine ambient conditions
   (Temperature in °C and absolute humidity in g/kg)
2. Take a reading of the air discharge humidity on the correctional diagram

Example of calculation:
Volume flow: V=280 m³/h
Air intake: T_{IN}=20 °C, X_{IN}=8,7 g/kg
Air output: X_{OUT}=5,7 g/kg

Dehumidifying capacity W:
$W = [V \cdot \rho_{Luft} \cdot (X_{IN} - X_{OUT})] / 1000$
$W = [280\ m^3/h \cdot 1{,}204\ kg/m^3 \cdot (8{,}7\ g/kg - 5{,}67\ g/kg)] / 1000$
$W = 1{,}02\ kg/h$

Measurements

(technical modifications excepted)



A: Process and regeneration air inlet
B: Process air outlet
C: Regeneration air outlet

MARQUARDT + SCHAUPP LUFTENTFEUCHTUNGSSYSTEME

Marquardt + Schaupp
Luftentfeuchtungssysteme GmbH
Rosenstraße 9
D-75387 Neubulach/Oberhaugstett

Telefon: +49 (0)7053 92590-0
Telefax: +49 (0)7053 92590-10
E-Mail: info@marquardt-schaupp.de
Web: www.marquardt-schaupp.de