KD20 Series Dehydrator

KD20 Automatic Dehydrator, 0.27 SCFM, 460L/h, 0.2 to 7psi Field Adjustable Pressure

The automatic dehydrator series KD20 is specifically engineered to pressurize elliptical waveguides, coaxial cables, rigid transmission lines, and antenna systems reliably. By utilizing dry pressurized air in the distribution system, condensation is prevented, ensuring optimal system performance.
The KD20 dehydrators feature high-activited aluminum oxide to absorb moisture, along with a dual-chamber system that delivers pressurized dry air while automatically regenerating the desiccant by purging collected moisture to the atmosphere. This innovative design eliminates the need for desiccant replacement or manual reactivation, making the dehydrators perfect for unattended operation, even in remote locations. With proper installation, operation, and maintenance, these units can provide years of trouble-free service.

FEATURES / BENEFITS

• High flow rate and capacity to support telecom, small to medium size broadcasting and radar applications: 0.27SCFM or 7.7L/min (+/-10% at 25°C)
• Pre-programed in the factory to minimize installation time on the site.
• High pressure, low pressure, excess run and dew point alarms come as standard configuration.
• 2 gas outlet ports with supplied tubing support up to 2 transmission lines, optional gas distribution manifold is available.
• Unique leakage detection function aids in inspecting the airtighness of the system.
• Compact 2U height enclose with supplied brackets supports versatile mounting including desktop, rack and wall mount.
• 110VAC, 220VAC and 48VDC power models available.
• KD20S/KD22S/KD24S models can be managed by network management system using SNMP and other popular protocols.

Technical features

GENERAL SPECIFICATIONS

Product Model		KD20	KD20S	KD22	KD22S	KD24-DC	KD24S-DC
Dehydrator Type		Automatic Pressurization, Automatic Regeneration					
System Capacity		Standard					
60 Hz Output Capacity Nl/h (SCFM)		460 (0.27) +/- 10%		460 (0.27) +/- 10%		420 (0.25) +/- 10%	
50 Hz Output Capacity Nl/h (SCFM)		420 (0.25) +/- 10%		420 (0.25) +/- 10%			
Output Dew Point	°C (°F)	Better than -45 (-49)					
Factory Set Output Pressure (on/off)	kPa (psig)	21 / 35 (3 / 5)					
Field Adjustable Output Pressure Range	kPa (psig)	Field configurable from 1 - 50 (0.2 - 7)					
Number of Outlets		2					
Output Fitting		Push-on quick fit for 3/8" OD tube					
Network Management Protocols		KD20/22/24: N/A			KD20S/22S/24S: SNMP, TCP Server/Client, UDP, Multicast		

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ELECTRICAL SPECIFICATIONS

Product Model		KD20	KD20S	KD22	KD22S	KD24-DC	KD24S-DC
Operating Voltage	V	110 +/- 10%, 60Hz		220 +/- 10%, 50/60Hz		-48VDC +/- 10%	
Max. Active Current	A	2		1		4.2	
Max. Power Consumption	Watt	200					
Electrical Feed Circuit Configuration		Single phase, 3-Conductor (Phase/Neutral/Ground)					
Electrical Inlet Connector		IEC 320 Type C 14					

ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature Range	°C (°F)	-25 to 65 (-13 to 149)					
Ambient Humidity Range, relative	%	0 - 95					
Noise, dBA @ 1 m, Active	dBA	65					

MECHANICAL SPECIFICATIONS

Dimensions, H x W x D	mm (in)	88 x 482 x 345 (3.5 x 19 x 17.1)					
Net Weight	kg (lb)	9 (20)					
Mounting		Desktop, 19" Rack (2U space required) and Wall Mount					

INTERFACE

Front Panel Indicators		Alarm (red), Working (green), L D (yellow)					
Display		4 Segment Numeric Display to Show Pressure Values, Alarm Codes, Dehydrator State Codes and Other Information					
Control Buttons		4, including +Add/P, -Dec/Q, Set and LeakDetection buttons					
Keypad Tone		Field adjustable to On or Off					

ALARMS

Alarm Configuration		Low Pressure Alarm, High Pressure Alarm, Excess Run Alarm, Dew Point Alarm					
Low Pressure Alarm		Factory set at 0.1 psi lower than the low pressure limit setting					
High Pressure Alarm		Factory set at 0.5 psi higher than the high pressure limit setting					
Excess Run Alarm	minutes	30					
Dew Point Alarm		When unit output air dew point is higher than -5°C (23°F)					
Event Log		Unit power-on time, Accumulated inflating time, Number of inflating, Alarm Code, Working State, Regenerating State					

COMPLIANCE

Compliance		CE, RoHS LVD: EN 60204-1:2018 EMC: EN IEC 61000-6-2: 2019, EN IEC 61000-6-4: 2019					

STANDARD ACCESSORIES

Item	Quantity	Description
Power Cord	1 pc	6ft (1.8m) long, 110V and 220V AC models with plug, 48V DC model has lugs
Fuse	2 pcs	Spare fuse
Gas Inlet Adaptor	2 pcs	1/8 thread and 3/8" OD screw-on

Plastic Tube	33 ft (10m)	Black, 3/8" OD
Mount Bracket	2 pairs	One for rack mount and one for wall mount
Rubber feet	4 pcs	For desktop mount
Handle	1 pair	Stainless Steel
Teflon Tape	1 roll	For Air-tightness in Connections

External Document Links

Quick Installation Guide

Product Manual

Notes

1) All specifiactions at 23°C (73°F) and 50% relative humidity at mean sea level (MSL) unless otherwise noted.