Ebac DD400 Industrial Desiccant Dehumidifier



Model Number: DD400

Ebac DD400 Industrial Desiccant Dehumidifier

Manufacturer: Ebac

Ebac: DD400 Desiccant Dehumidifier 10500SS-US (free shipping)

INTRODUCTION
Dehumidifiers remove moisture from the air that is circulating through the unit. The resulting reduction of relative humidity helps prevent rust, rot, mould, mildew and condensation within the room, or other enclosed spaces where the dehumidifier is used.
The DD400 is of the desiccant wheel type designed to dry air by passing a large volume of air, the “process” air through a slowly rotating Silica gel rotor.
Silica gel is a hygroscopic material that absorbs moisture direct from the air. As the air passes through the rotor the humidity of the air is reduced, whilst the moisture content of the rotor is increased. A smaller volume of air, the reactivation air, is heated by an internal heater and passes through a portion of the rotor in the opposite direction. As this heated air passes through the rotor it will “reactivate” it by removing the moisture content from the silica gel
material. The reactivation air will leave the humidifier as warm, moist air and must be vented to outside of the building.
Continuous circulation of the room air through the dehumidifier unit gradually reduces the relative humidity in the room.
The DD400 dehumidifier is a robust, compact unit designed to control the humidity in the enclosed space in which it is placed. The casing is fabricated from Stainless Steel 304 and has been designed for the exacting conditions which can prevail in offices, shops, houses, restaurants, public houses etc. It combines lightness and compactness with high reliability and strength. Carry handles are provide to contribute to its portability.
The unit is thermally protected and will switch off if the maximum operating temperature of 40ºC is exceeded.
The dehumidifier has a single filter positioned at the air inlet and is used to clean the air entering the dehumidifier.

KEY DESIGN FEATURES
• Stainless Steel Construction
• Auto / Manual Mode Selection
• Electronic Controls
• High Capacity PTC Heater
• Remote Humidistat Facility
• Low Temperature Operation
• Ammeter

SPECIFICATIONS

Steambrite Supply

Ebac DD400 Industrial Desiccant Dehumidifier

MODEL: DD400
HEIGHT: 340mm
WIDTH: 330mm
DEPTH: 380mm
WEIGHT: 17 Kg
DRY AIRFLOW: 180 M³/HR
WET AIRFLOW: 50 M³/HR
POWER SUPPLY: 115V, 1 ph, 60Hz
POWER 0.8 kW (max)
FINISH: Stainless steel 304
DEHUMIDIFICATION CAPACITY
(AT 27°C AND 60% RH)
0.9kg/h
NOISE 67dB(A)

INSTALLATION
POSITIONING:
The DD200 is designed for indoor use. Position the dehumidifier unit in the center of the room to be conditioned if at all possible.
NOTE: Both the air inlets and outlets of the dehumidifier unit must have clear space around them and not be obstructed in anyway.
DUCT CONNECTION
The wet air outlet from the dehumidifier must be exhausted to outside of the room being dried by means of a suitable duct. All duct connections to the dehumidifier have been designed for connections to standard size ducts.
The duct should be as short as possible to reduce the risk of condensation of the wet air. The duct should slope downwards away from the unit to stop any condensed water from flowing back into the unit.
The dry air outlet is also provided with a means of attaching a duct. This can be used to direct the air towards more severe damp patches.
WIRING:
The DD200 is provided with a standard plug and is designed to operate from a 13 Amp supply.
IMPORTANT – The wires in the mains lead are coloured in accordance with the following code:
GREEN…………….…………EARTH
WHITE..……………………….NEUTRAL
BLACK.....…………………….LIVE
If the supply cord is damaged it must be replaced by qualified Ebac Industrial Products Ltd personnel or other similar qualified persons in order to avoid hazard.

OPERATION
The electrical controls are located on the front of the unit. They are:
• ON / OFF Switch
0 Dehumidifier OFF
1 Dehumidifier ON

Ebac DD400 Industrial Desiccant Dehumidifier

• Humidity Switch
M Dehumidifier in continuous operation
A Dehumidifier operation by means of an external humidistat
• An ammeter is provided to display the current used by the unit.
• An hour counter is provided to display the total time the unit has been in operation
• A socket is provided for connection of a external humidistat
To start the dehumidifier, turn the On / Off switch to position 1.
Turn the humidity switch to position M.
After a slight delay the fan will operate – air can be felt blowing from the air outlets and the heater will come on.
The unit will operate continuously at this setting.
Note. The DD400 is controlled by an electronic circuit board and uses PTC (positive temperature coefficient) heater technology to provide the heat necessary to “reactivate” the rotor.
At switch on, the ammeter will initially show a higher current for a few seconds, prior to settling to a steady value. This is normal.
If an external humidistat control is fitted, turn the humidity switch to position A.
Depending on the setting of the humidistat, the dehumidifier may switch off as the relative humidity in the room decreases. As the humidity increase the unit will automatically switch back on.
The Humidistat plug supplied should be wired using pins numbered 1 & 2. Pin 3 is not required. See diagram 5010307 at back of manual.

AIR MOVING SYSTEM:
The DD400 is a single fan balanced system providing both the “Process” air
and “Regeneration” air flow. As the air passes over the rotor, it will be heated
as a result of the regeneration cycle. The air leaving the unit will be hotter than the air entering
During normal operation some parts of the dehumidifier may become hot. This is normal.
HIGH TEMPERATURE CUT OUT:
The DD400 dehumidifier has been designed to work in ambient conditions of -20ºC to +40ºC. Should the temperature in the room become excessive an
overheat protector will operate, switching off the PTC heaters. The fan and drive motor will continue to operate. This is a manual reset device. Prior to resetting the protector, check that the dehumidifier is installed correctly and the ambient temperature does not exceed 40°C.
See repairs section for details on resetting device.
DEHUMIDIFICATION CAPACITY
Approximate capacity in Kg/h at different inlet process air temperature and relative humidity (%)
FREE SHIPPING ON COMMERCIAL DELIVERIES ONLY!! THERE WILL BE A SURCHARGE FOR RESIDENTIAL DELIVERIES!

Ebac DD400 Industrial Desiccant Dehumidifier

As a reminder, customers MUST be present to sign for shipments. Ebac is not liable for any damages or warranty claims that are brought to our attention after a customer has left a note telling the carrier that it is OK TO LEAVE a shipment at the customer's residence or delivery address without them being present. All shipments should be carefully inspected before accepting delivery to ensure item is delivered free of damage.

DD200

DD300

DD400

Specification

10502SS-US

10501SS-US

10500SS-US

Units

Height
13.5
14.5
15

inches

Width
13
14

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Ebac DD400 Industrial Desiccant Dehumidifier

17

inches

Depth
15
16
21.5

inches

Weight
37.5
44
59.5

lbs

Voltage
115
115
220

V

Phase
1
1
1

-

Frequency
60
60
60

Hz

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Ebac DD400 Industrial Desiccant Dehumidifier

Power
TBC
TBC
TBC

watts

Current
TBC
TBC
TBC

A

Airflow - Dry Air
TBC
TBC
TBC

cfm

Airflow - Wet Air
TBC
TBC
TBC
cfm

Noise Level
TBC
TBC
TBC
dba

Typical Extraction (27ºC60%RH)
TBC
TBC
TBC

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Ebac DD400 Industrial Desiccant Dehumidifier

pints/day

Process Air Duct Size
TBC
TBC
TBC

Regen Air Duct Size
TBC
TBC
TBC

Features

10502SS-US

10501SS-US

10500SS-US

Units

Steambrite Supply

Ebac DD400 Industrial Desiccant Dehumidifier

ON/OFF Control
Y
Y
Y

Carrying HandleS
Y
Y
Y

Amp Meter
Y
Y
Y

Electronic Controls
Y
Y
Y

Manual / Automatic Modes
Y
Y
Y

Hour Meter
Y
Y
Y

Remote Humidity Sensor
Y
Y
Y

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Ebac DD400 Industrial Desiccant Dehumidifier

High Capacity PTC Heater
Y
Y
Y

Rubber Anti Vibration Feet
Y
Y
Y

Single Air Inlet Design
Y
Y
N

Dual Air Inlet Design
N
N
Y

Free Standing
Y
Y
Y

High Temperature Safety Cutout
Y
Y
Y

Min Temp
-4
-4
-4

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Ebac DD400 Industrial Desiccant Dehumidifier

ºF

Max Temp
104
104
104
°F

Moulded Mains Plug
Y
Y
Y

Air Filters
Y
Y
Y

Stainless Steel Construction
Y
Y
Y

Humidstat
O
O
O

Inlet Duct Attachments
O
O
O

See Wire Diagram

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Equipment: Restoration > Dehumidifier > Desiccant Dehumidifiers > Ebac DD400 Industrial Desiccant Dehumidifier

Ebac DD400 Industrial Desiccant Dehumidifier

Wire Schematics

Brochure

Owners Manual

20101030 dc

Options available for Ebac DD400 Industrial Desiccant Dehumidifier :

Extended Warranty

+ No Extended Warranty, 2 Additional Years Parts Plus On Site Labor (Items under $5000.00) [SBMW2-5000], 4 Additional Years Parts Plus On Site Labor (Items under $5000.00) [SBMW4-5000].

Shipping Surcharges

+Home Delivery Needs Liftgate Curb Service Because No Forklift On Site With Appointment Delivery Time, Commercial Address But Needs Liftgate Service Because No Forklift or Dock on Site No Appointment Provided, Home Delivery Needs Liftgate Curb Service Because No Forklift On Site (Required) No Appointment Provided, None Commercial Address Forklift / Loading Dock On Site No Appointment Provided.

Availability: This product was added to our catalog on Friday 29 October, 2010

Steambrite Supply