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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 40°C 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

MODEL: DD400

HEIGHT: 340mm

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- 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 an 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 increases 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!

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

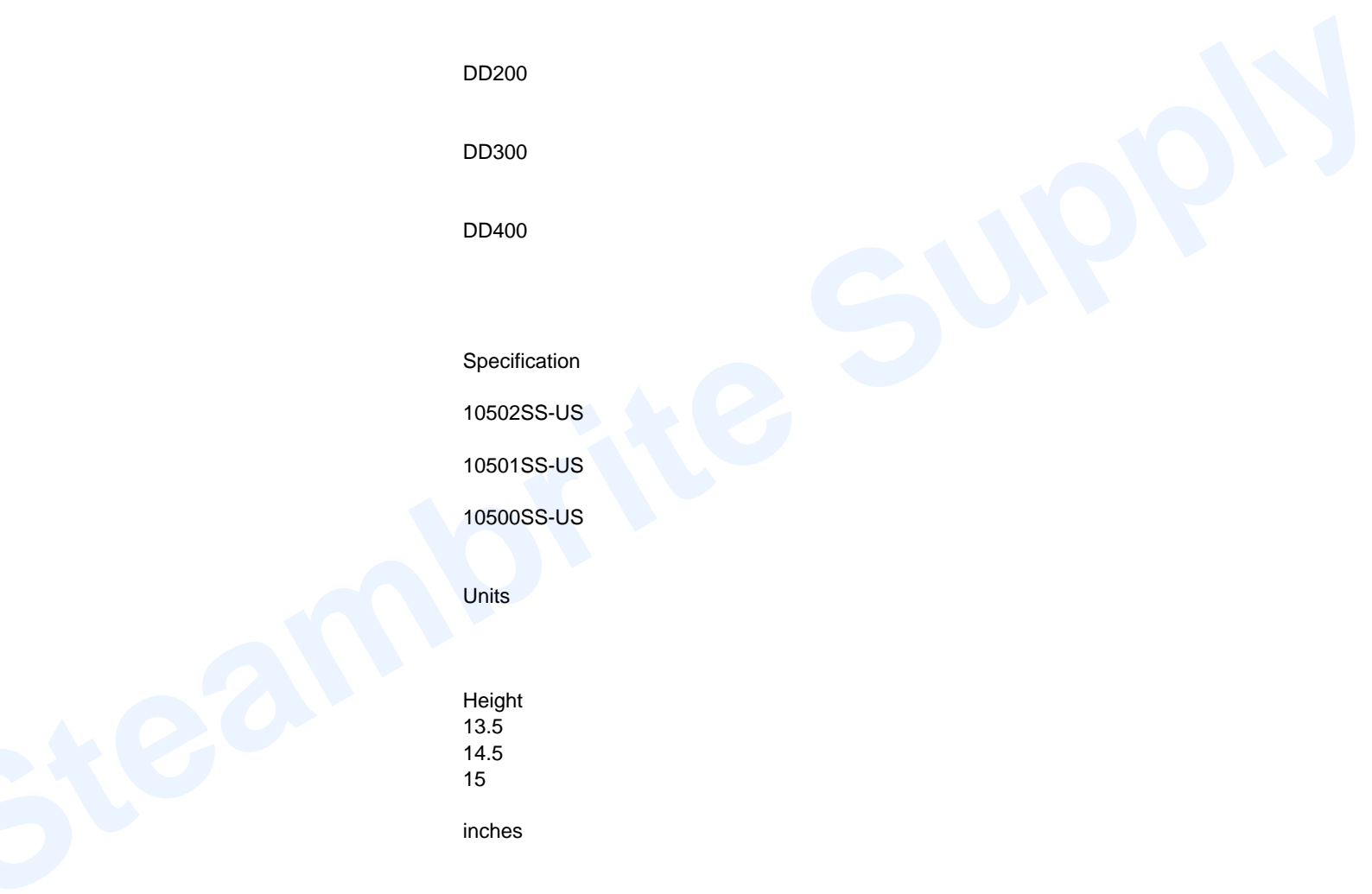
14

17

inches

Depth

15





16
21.5
inches

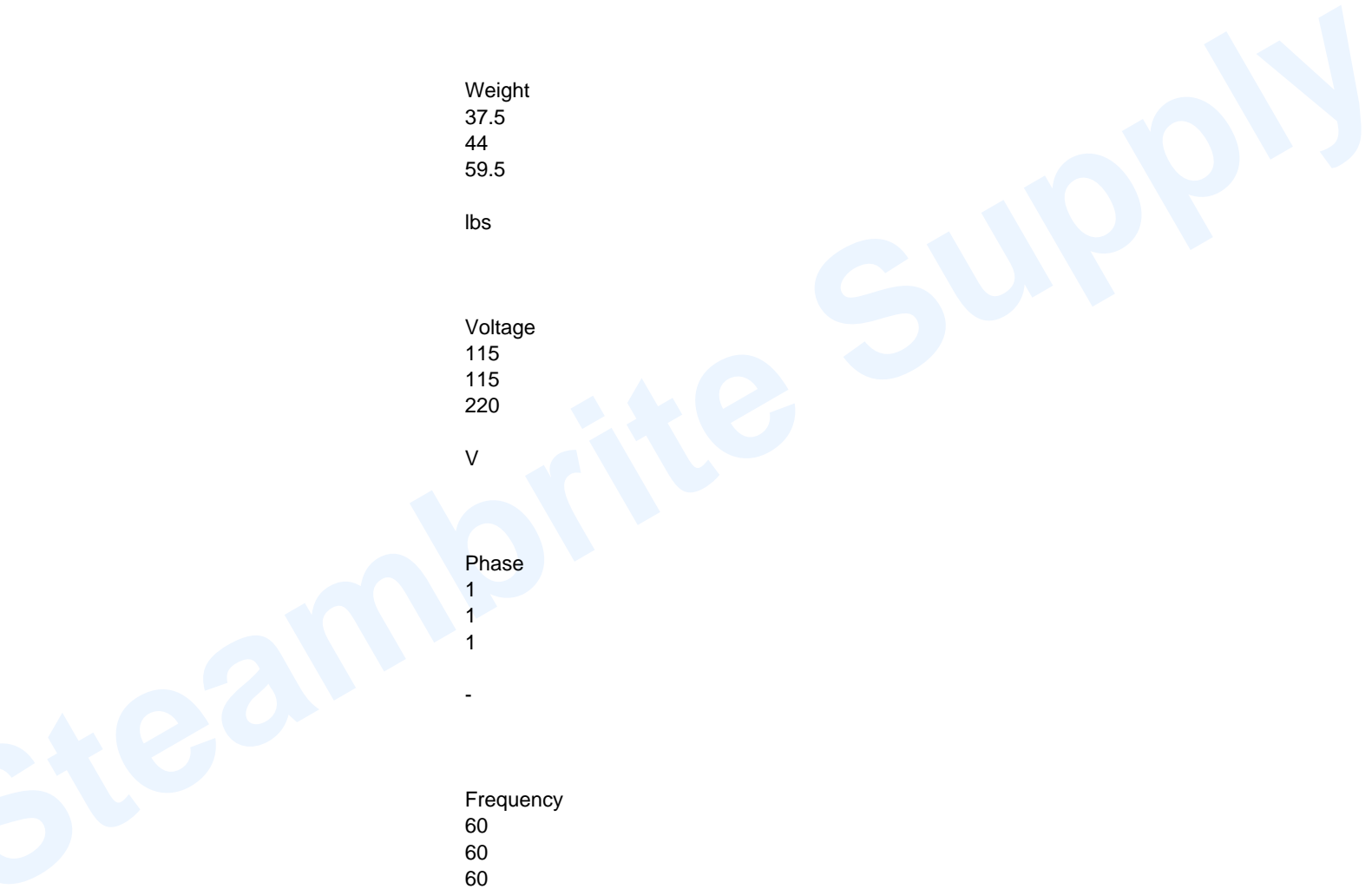
Weight
37.5
44
59.5
lbs

Voltage
115
115
220
V

Phase
1
1
1
-

Frequency
60
60
60
Hz

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

pints/day

Process Air Duct Size
TBC
TBC
TBC



Regen Air Duct Size
TBC
TBC
TBC

Features

10502SS-US

10501SS-US

10500SS-US

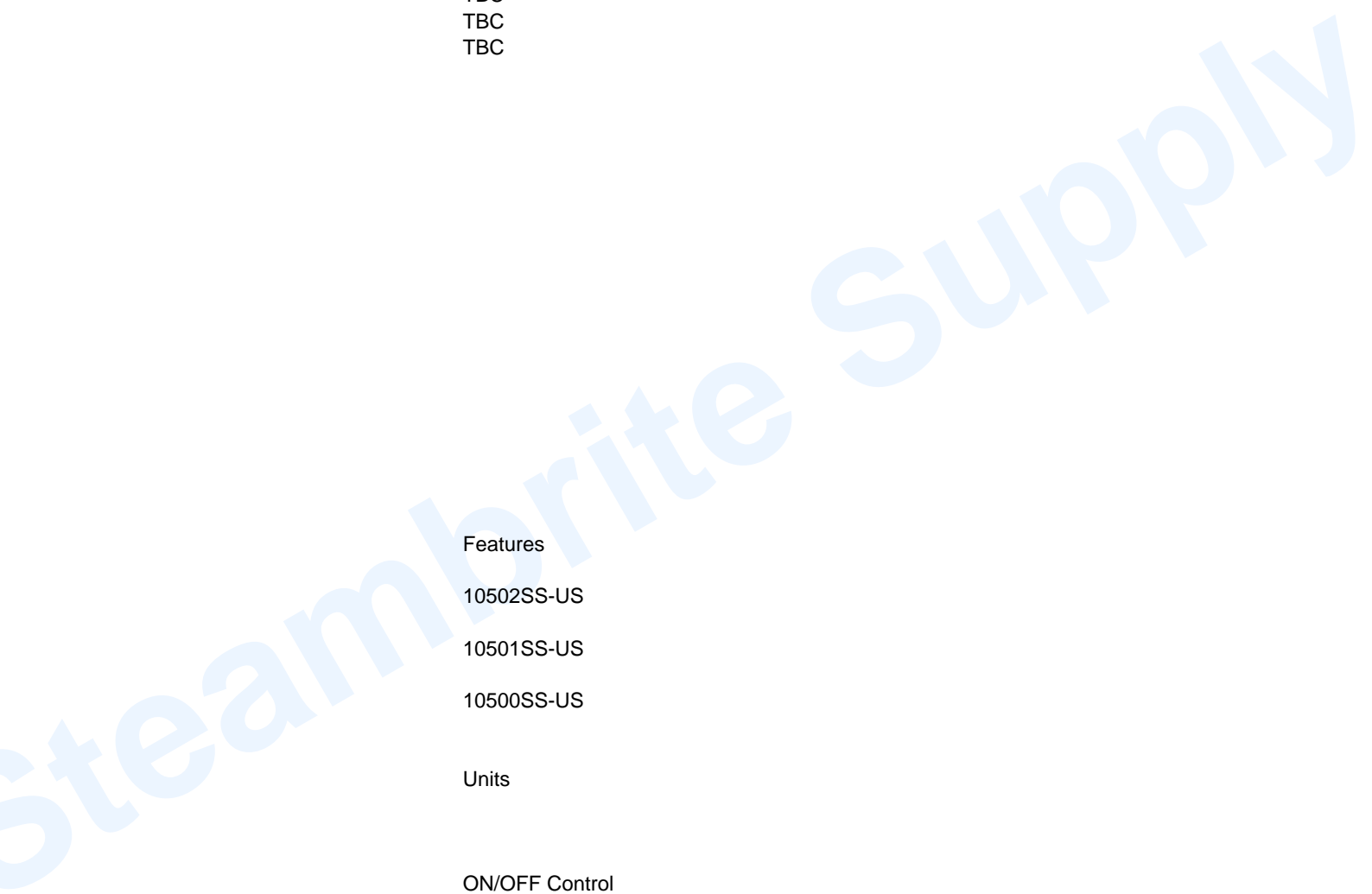
Units

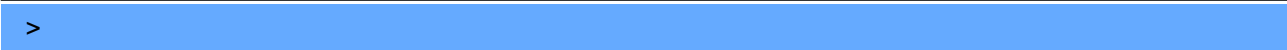
ON/OFF Control

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

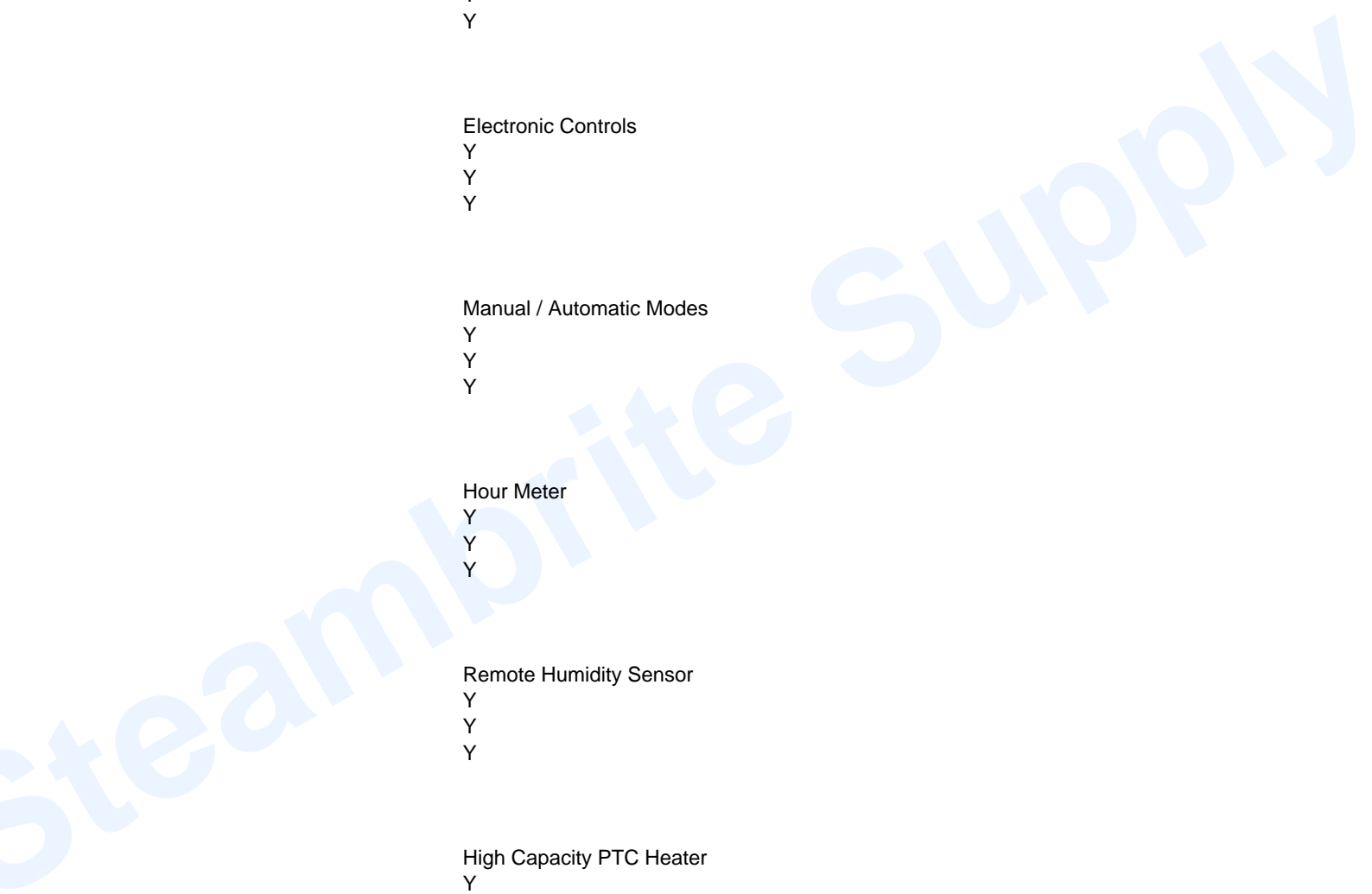
- Y
- Y
- Y

High Capacity PTC Heater

- Y
- Y
- Y

Rubber Anti Vibration Feet

- Y
- Y
- Y



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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
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

Inlet Duct Attachments

See Wire Diagram

Wire Schematics

Brochure

Owners Manual

20101030 dc

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