F&P 850

MR850 – RESPIRATORY HUMIDIFIER

Models: MR850ADU, MR850AEK, MR850AEU, MR850AFU, MR850AGC, MR850AGU, MR850ALU, MR850ANU, MR850ANZ, MR850APU, MR850ARU

Specifications

Intended Use	The MR850 Respiratory Humidifier is used to warm and humidify gases delivered to patients requiring mechanical ventilation, positive-pressure breathing assistance, or other medical gases.
Clinical Procedures	Invasive ventilation Noninvasive ventilation Nasal high flow Low flow oxygen therapy
Use	Multi-use
Service Life	7 years (if used in accordance with the User Instructions)
Dimensions	140 x 173 x 135 mm (5.5 x 6.8 x 1.4 inches) with no chamber fitted
Weight	2.8 kg (6.17 lbs) with no chamber fitted 3.1 kg (6.83 lbs) with chamber fitted and filled with water
Mounting Fixture	30 x 5 mm mounting tongue
Materials	Aluminum, Steel, Copper, Tin, Silver, PEEK, Silicon, PVC, Teflon, Fiberglass, Ceramic
Mercury Content	Not made with materials containing mercury or mercury compounds
Manufacturing Mode	Produced in a Controlled Working Environment
Disposal	At the end of service life, discard according to standard hospital procedure for electrical and electronic equipment

Electrical | Specifications

Supply Voltage	230 V~
Supply Current	1.0 A Max
Rated Power	220 VA
Supply Frequency	50 / 60 Hz, Sine Wave
Heater-wire Output	22 V~, 2.73 A, 60 W
Heater-plate Output	150 W

Performance | Specifications

	Invasive Mode	Noninvasive Mode
Humidity Performance	≥ 33 mg/L	≥ 12 mg/L
Flow Range (refer to Breathing Circuit User Instructions for specific range)	≤ 60 L/min	≤ 120 L/min
Chamber Outlet Control Temperature Range	35.5 – 42 °C	31 – 36 °C
Airway Control Temperature Range	35 – 40 °C	28 – 34 °C
Warm-up Time	< 30 mins	
Temperature Display Range	10 – 70 °C	
Gas Temperature Measurement Accuracy	± 2 °C (Temperature Probe accuracy: ± 0.3 °C, in 25 – 45 °C range)	
Maximum Operating Pressure	Refer to chamber and breathing circuit specifications	

Recommended Environmental Conditions | Specifications

Ambient Temperature Range	18 – 26 °C (Breathing circuit kits specify operating ranges within these limits)
Ambient Humidity	10 – 95% RH
Ambient Pressure	700 – 1060 hPa

Alarm Parameters | Specifications

Alarm Sound Pressure Level	> 50 dBA at 1 m
Audio Information Signal	Single beep or double beep
Alarm Conditions	High Temperature Low Temperature Water Out Temperature Probe Disconnect Heater Wire Disconnect Chamber Probe Out Airway Probe Out See Manual
Auditory Alarm Pause	120 sec

Packaging | Specifications

Quantity/Package	1 ea
Packaging Material	Cardboard box
Dimensions	214 x 212 x 196 mm (8.4 x 8.4 x 7.7 inches)
Typical Weight	3.12 kg (6.88 lbs)

Classifications | Specifications

Electrical Classification	Class I, continuous
Humidifier Classification	Category 1
Ingress Classification	IPx1
Degree of Protection against Electric Shock	Type BF applied part
Classification of Installation and Use	Portable

User Instructions | Available languages

Model	Included languages in the User Instructions (Instructions for use)
MR850ADU	Danish
MR850AEK	English
MR850AEU	Croatian, Czech, English, French, Greek, Korean, Romanian, Slovak, Spanish, Turkish, Vietnamese
MR850AFU	Dutch, French, German
MR850AGC	French, German, Italian
MR850AGU	French, German, Italian
MR850ALU	Italian, Portuguese, Spanish
MR850ANU	Finnish, Norwegian, Swedish
MR850ANZ	English, Latin American Spanish
MR850APU	Czech, English, French, Greek, Korean, Romanian, Slovak, Spanish, Thai, Turkish
MR850ARU	Bahasa Indonesian, Bulgarian, Croatian, Czech, English, Hungarian, Korean, Polish, Russian, Slovak

Regulatory | Specifications

Classification	Europe IIa	
Country of Origin	New Zealand	
Notified Body Identification Number	TÜV SÜD Product Services GmbH CE 0123	
GTIN and UNSPSC Numbers	GTIN Number	UNSPSC Number
MR850ADU MR850AEK MR850AEU MR850AFU MR850AGC MR850AGU MR850ALU MR850ANU MR850ANZ MR850APU MR850ARU	942012407106 942012407184 942012407207 942012407221 942012417480 942012407238 942012407254 942012407252 942012453075 942012424327 942012411631	- 42271801 42271801 - - - 42271801 - 42271801 - 42271801
GMDN Code	12050	

The MR850AXX humidifier (Models: MR850ADU, MR850AEK, MR850AEU, MR850AFU, MR850AGC, MR850AGU, MR850ALU, MR850ANU, MR850ANZ, MR850APU and MR850ARU) complies with the following standards when tested in combination with a representative Fisher & Paykel Healthcare breathing circuit:

ISO 80601-2-74:2017	Medical electrical equipment - Part 2-74: Particular requirements for basic safety and essential performance of respiratory humidifying equipment
IEC 60601-1:2005 + CORR.1(2006) + CORR.2(2007) + AM1(2012)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance.
IEC 60601-1-2:2014	Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic compatibility – Requirements and tests.
IEC 60601-1-8:2006 + AM1(2012)	Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance – Collateral Standard: General requirements, tests and guidance alarms systems in medical electrical equipment and medical electrical systems.
IEC 60601-1-6:2010 + AM1(2013)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance – Collateral standard: Usability.

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