



## **MCCX-20-C-1 Direct Expansion Ceiling Concealed**

**Direct Expansion Fan Coil 60,000 BTUH**

# HVAC Guide Specifications

## Direct Expansion Fan Coil

Nominal Size:

**60,000 BTUH**

MultiAqua Model Number:

**MCCX-20-C-1**

### Part 1-General

#### **1.01 System Description**

MultiAqua Direct Expansion Fan Coils are manufactured with heavy gauge galvanized steel to resist corrosion.

#### **1.02 Quality Assurance**

- A. Certified in accordance with U.L. Standard 95, latest version (U.S.A.)
- B. Manufactured in a facility registered to ISO 9002, Manufacturing Quality Standard.
- C. Fully load tested at the factory.
- D. Damage resistant packaging.

#### **1.03 Delivery, Storage and Handling**

- A. Packaged and readied for shipment from the factory.
- B. Controls shall be capable of withstanding 150°F storage temperatures in the control compartment.
- C. Stored and handled per manufacturer's recommendations.

### Part 2-Product

#### **2.01 Equipment**

- A. General:
  1. Unit shall be a factory assembled and tested direct expansion fan coil.
  2. Shall be assembled with heavy gauge galvanized steel.
  3. Contained with the unit shall be all factory wiring, piping, associated controls and special accessories required prior to start up.
- B. Unit Cabinet:
  1. Composed of heavy gauge galvanized steel casing with a baked polyester powder.
  2. Shall be internally insulated to ensure quiet operation.
- C. Fan Motors:
  1. Shall be available in 208/230-1-50/60 vac.
  2. Fan motors shall be three speed, direct drive, and PSC type.
  3. Totally enclosed.
  4. Internal overload protected.
- D. Blower Wheels:
  1. Blower wheels are forward curved and dynamically balanced.
- E. DX Coil:
  1. Manufactured with 3/8" copper rifled tubing mechanically bonded to aluminum fins.
  2. Contains a thermal expansion valve.
  3. Coils shall be pressure tested to U.L. Standard 95
- F. Drain Pan:
  1. All drain pans shall be coated on both the interior and exterior with baked polyester powder to resist corrosion.
  2. The exterior of all drain pans shall be insulated with closed cell to prevent condensation.
  3. Pans shall contain a left and right hand primary sloped drain connection as well as a sloped right hand secondary drain connection.

### Part 3-Controls and Safeties

**3.01 Controls**

- A. Fan coils shall be completely factory wired and tested.
- B. All components shall be wired to an internal terminal block to allow for a field installed thermostat and or fan speed control.
- C. Controls shall include the following components.
  - 1. 24vac transformer.
  - 2. Fan relays.
  - 3. Optional thermostats.

**3.02 Safeties**

- A. Fan coil shall contain a non reusable fuse on the secondary voltage side of the transformer.

**Part 4-Operating Characteristics****4.01 Electrical Requirements**

- A. Primary electrical power supply shall enter the unit at a single location.
- B. Electrical power supply shall be rated to withstand 120°F operating ambient temperatures.
- C. Control and high voltage points shall be accessed through terminal block.

**Part 5- Definitions:****5.01 Abbreviations**

- A. CFM = Cubic Feet per Minute
- B. DB = Dry Bulb Temperature
- C. EWT = Entering Water Temperature
- D. GPM = US Gallons Per Minute
- E. MBH = BTU X 1000
- F. SC = Sensible Cooling
- G. TC = Total Cooling = Sensible + Latent
- H. WB = Wet Bulb Temperature
- I. WPD = Water Pressure Drop in feet of head
- J. dB = Decibel Level
- K. m = Meter
- L. In = Inches
- M. FPI = Fins per Inch
- N. OD = Outside Diameter
- O. ID = Inside Diameter
- P. MCA = Minimum Circuit Amps
- Q. MOP = Maximum Over current Protection
- R. LBS = Pounds U.S.

**5.02 Measurements**

- A. All measurements with regard to length, width, and height shall be in inches.

## MCCX-20-C-1 Product Specifications & Capacity

Physical Data									
Model Number	Height (in)	Width (in)	Depth (in)	Weight (lbs)	Coil Rows FPI	Copper Diameter (in)	Liquid Line (in)	Suction Line (in)	Drain (in)
MCCX-20-C-1	13.78	56.10	20.00	72.80	3-14	3/8	3/8	3/4	1/2

Electrical Data						
Model Number	Nominal CFM	Volts/ Phase/ Hertz	Motor HP	Full Load Ampacity	Fuse or HACR Circuit Breaker Per Circuit	
					MCA	MOP
MCCX-20-C-1	2000	208/230-1-50/60	1/2	2.72	3.40	7

Performance Data		
Model Number	Nominal CFM	Cooling Capacity
MCCX-20-C-1	2000	58,000

## MCCX-20-C-1 CFM Adjustments

Nominal CFM vs. External Static Pressure Table						
Model Number	Hi Speed					
	0.05	0.10	0.15	0.20	0.25	0.30
MCCX-20-C-1	1435	1415	1400	1363	1325	1290

## MCCX-20-C-1 Sound Data

MODEL #	MCCX-20-C-1
Fan Speed	dB @ 1 m
H	46

# MCCX-20-C-1 Dimensional Drawing

