

A SERIES WITH MPU SPECIFICATION

WRITTEN SPECIFICATION

Description

Fan shall be G90 galvanized steel, roof mounted, belt drive or direct drive, forward curved, filtered supply fan. Unit contains pre-charged and pre-piped condenser(s)

Certifications

Fan shall be listed by ETL and conforms to UL705 and CSA Std. C22.2, No. 113 standards.

Construction

Housing: The fan shall be constructed of heavy gauge G90 galvanized steel for maximum corrosion resistance. Doors are removable for easy access to interior components for service. Intake hood shall be designed with a large intake area to assure low pressure drop and maximum weather resistance. Weather hood shall include 2" washable filters and inlet screen to prevent large debris from clogging filters.

Base: The base shall be constructed of galvanized steel for improved rigidity. Base shall be structurally reinforced to accommodate the blower assembly.

Blower: The blower wheel shall be forward curved centrifugal, constructed G-90 galvanized steel. Wheels shall be balanced in two planes and done in accordance with AMCA standard 204-96, Balance Quality and Vibration Levels for Fans. The wheel blades shall be aerodynamically designed to minimize turbulence, increase efficiency and reduce noise. The wheel blades shall be securely attached to the wheel inlet ring. The wheel shall be firmly attached to the fan shaft with set screws and keys. The blower assembly shall be isolated from the fan structure with vibration isolators.

Cooling Equipment

Standard: All cooling equipment should conform to local code requirements. All gas manifold components shall be piped and wired at the factory.

Components Include:

- 14 SEER minimum condenser
- Thermal Expansion Valve
- Filter/Dryer
- Hard Start Kit for Condenser
- Insulated Suction Lines
- Multiple Stages where required
- Pre Charged System
- R-410A Refrigerant

Motor & Motor Compartment: Motors shall be heavy duty ball bearing type and furnished at the specified voltage, phase and enclosure. Motor mounting plate shall be constructed of heavy gauge galvanized steel and shall be designed to provide easy adjustment of belt tension (belt drive units only).

Shaft & Bearings (Belt Drive Units Only): Shafts shall be precision ground and polished. Heavy duty, pre-lubricated bearings shall be selected for a minimum (L50) life in excess of 200,000 hours of operation at maximum cataloged operating speed. They shall be designed for, and individually tested specifically for use in air handling applications.

Belts & Drives (Belt Drive Units Only): Belts shall be oil and heat resistant, non-static type. Drives shall be cast type, precision machined and keyed and secured attached to the fan and motor shafts. Drives shall be sized for a minimum of 150% of the installed motor horsepower. Fan operating speed shall be factory set using adjustable pitch motor pulleys.

Product

Fan shall be model A Series as manufactured by CaptiveAir Systems.

TYPICAL INSTALLATION

OUTDOOR DOWN DISCHARGE MOD PACKAGE UNIT, INTAKE HOOD AND OPTIONAL MIXING BOX

DIM "A" DIM "G" DIM "U" DIM "S" DIM "R" DIM "T" DIM "N" DIM "K" DIM "B" DIM "L" DIM "M" DIM "P" DIM "D" DIM "E" DIM "F" DIM "H" DIM "J" DIM "C" DIM "CC"

FLEX CONDUIT FOR FIELD WIRING
1" NPT CONNECTION FOR S.S. PITCHED DRAIN PAN
CURB
OPTIONAL RETURN DAMPER
AIRFLOW
COOLING COIL MODULE
BLOWER DISCHARGE
48 IN CLEARANCE REQUIRED ABOVE CONDENSERS
CONDENSER 1
CONDENSER 2
SERVICE DISCONNECT SWITCH
COIL ACCESS DOOR
BLOWER/MOTOR ACCESS DOOR
OPTIONAL INTAKE DAMPER
OPTIONAL RETURN DAMPER
INTAKE HOOD
CURB OUTER WALL
LIFTING LUGS
12 IN HIGH EQUIPMENT CURB

CONDENSER INFORMATION

MODEL	WEIGHT*	#1	#2	TONNAGE	CC	DD	EE
2 TON-G10	110 LBS	2 TON	N/A	25-5/16	55-1/16	51-3/8	
3 TON-G10	141 LBS	3 TON	N/A	32-5/16	62-1/16	58-3/8	
5 TON-G10	251 LBS	2 TON	3 TON	32-5/16	62-1/16	58-3/8	
5 TON-G10	222 LBS	2.5 TON	2.5 TON	28-11/16	58-7/16	54-3/4	
5 TON-G12	190 LBS	5 TON	N/A	25-1/2	62-1/4	58-3/16	
7.5 TON-G12	301 LBS	2.5 TON	5 TON	28-11/16	65-7/16	61-3/4	
10 TON-G12	388 LBS	5 TON	5 TON	25-1/2	62-1/4	58-3/16	
5 TON-G15	190 LBS	5 TON	N/A	25-1/2	62-1/4	58-9/16	
7.5 TON-G15	301 LBS	2.5 TON	5 TON	28-11/16	65-7/16	61-3/4	
10 TON-G15	388 LBS	5 TON	5 TON	28-11/16	65-7/16	61-3/4	
10 TON-G18	388 LBS	5 TON	5 TON	25-1/2	62-1/4	58-3/16	

R410A REFRIGERANT

CONDENSER INFORMATION

MODEL	WEIGHT*	A	B	C	D	E	F	G	J	H	K	L	M	N	P	R	S	T	U	TONNAGE RANGE
G10	760 LBS	116-5/8	39-3/8	42-3/4	39	3-3/4	21	44-3/8	98-5/8	65-13/16	14	8	14	12-1/2	18	13-1/4	11-1/2	3-7/8	1-3/4	2 Ton 5 Ton
G12	1060 LBS	124-5/8	49-3/8	47-3/4	44	3-3/4	31	53-5/8	112-9/16	74-5/8	22-3/4	8	11	7-1/2	24	15-3/4	13-9/16	7-5/8	7-15/16	5 Ton 10 Ton
G15	1070 LBS	124-5/8	49-3/8	47-3/4	44	3-3/4	31	53-5/8	112-5/8	74-5/8	22-3/4	8	11	7-1/2	24	18-3/4	16	6-1/8	5-1/2	5 Ton 10 Ton
G18	1310 LBS	129-5/8	54-3/8	56-3/8	51-1/8	5-1/4	35	51-5/8	120-1/8	79-3/16	28	8	7	4-1/2	30	22	19	6-1/2	7	10 Ton 10 Ton

UNIT DIMENSIONS

UNIT INFORMATION

MODEL	FILTER SIZE & QTY	MAX. FILTER VELOCITY
G10	16"x20"x2" (3)	@3500 CFM = 667 FPM
G12	20"x25"x2" (3)	@5000 CFM = 500 FPM
G15	20"x25"x2" (3)	@6000 CFM = 696 FPM
G18	16"x20"x2" (6)	@8000 CFM = 762 FPM

*ADD CONDENSING UNIT WEIGHT TO WEIGHT IN TABLE ABOVE

SUGGESTED SPECIFICATION