



Submittal Data Sheet

R32 - 2.5-Ton Roundflow Sensing Cassette Unit

FCA30AAVJU-RZA30AAVJU

FEATURES

- True 360° Airflow and three room sensors enables optimized occupant comfort and efficiency
- 18 different possible airflow patterns, ensuring ideal air distribution to maximize comfort and efficiency
- Dependable heat pump operation from -4°F in heating to 122°F in cooling
- Code Compliant Refrigerant Detection System (RDS) integrated
- Direct Current Fan motor and auto logic that adjusts fan speed based on space load
- Compact design allows for installation in small ceiling voids
- Inverter technology delivers precise temperature control and superior energy efficiency
- Air Conditioning only option with switch on outdoor board
- Optional Outdoor Drain Pan Heater available

BENEFITS

- Compact design to allow for installation in small ceiling voids
- Long piping lengths allow layout flexibility
- 10-year parts limited warranty for residential/commercial applications
- Refrigerant Leak Detection integration with ventilation, dampers, alarms and monitoring systems
- Optional self-cleaning filter panel for filtration efficiency and low maintenance costs
- High Efficiency filter options
- Ventilation connection kit available

INDOOR UNIT



OUTDOOR UNIT





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SYSTEM PERFORMANCE

Indoor Unit Model No.	FCA30AAVJU	Indoor Unit Name:	R32 - 2.5-Ton Roundflow Sensing Cassette Unit
Outdoor Unit Model No.	RZA30AAVJU	Outdoor Unit Name:	R-32 SkyAir 2.5 T Heat Pump Single Zone
Rated Cooling Capacity (Btu/hr):	30,000	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Sensible Capacity (Btu/hr):	22,300	Rated Piping Length(ft):	25
		Rated Height Difference (ft):	0.00
Cooling Input Power (kW):	2.280		
SEER2 (Non-Ducted/Ducted):	21.00 /	HSPF2 (Non-Ducted/Ducted):	10.1 /
EER2 (Non-Ducted/Ducted):	13.20 /		
Rated Heating Capacity (Btu/hr):	34,000	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43

SYSTEM DETAILS

Refrigerant Type:	R-32	Cooling Operation Range (°F DB):	23 - 122
Holding Refrigerant Charge (lbs):	7.5	Heating Operation Range (°F WB):	-4 - 60
Additional Charge (oz/ft):	0.04	Max. Pipe Length (Vertical) (ft):	98
Pre-charge Piping (Length) (ft):	25	Cooling Range w/Baffle (°F DB):	23 - 122
Max. Pipe Length (Total) (ft):	230		

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INDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Airflow Rate (H/M/L) (CFM):	1059/882/671
Power Supply Connections:	L1, L2, G		
Min. Circuit Amps MCA (A):	1.0	Gas Pipe Connection (inch):	5/8
Max Overcurrent Protection (MOP) (A):	15	Liquid Pipe Connection (inch):	3/8
Dimensions (HxWxD) (in):	11-11/32 x 33-1/16 x 33-1/16	Condensate Connection (inch):	1-1/4
		Sound Pressure (H/M/L) (dBA):	42/37/32
Net Weight (lb):	58		

DIMENSIONAL DRAWING - INDOOR UNIT

Unit : in. (mm)

* [INSTALLATION LOCATION] (NOTE 6)

NOTE 1: STOCKING LOCATION FOR MANUFACTURER'S LABEL
MANUFACTURER'S LABEL FOR INDOOR UNIT: CONTROL BOX INSIDE SUCTION GRILLE
MANUFACTURER'S LABEL FOR DECORATION PANEL: INNER SURFACE OF CORNER COVER

NOTE 2: THOUGH INSTALLATION IS ACCEPTABLE UP TO 25-7/8 IN (650mm) SQUARE CEILING OPENING, KEEP THE CLEARANCE OF 1-3/8 IN (35mm) OR LESS BETWEEN THE INDOOR UNIT AND THE CEILING OPENING SO THAT THE PANEL OVERLAP ALLOWANCE CAN BE ENSURED.

NOTE 3: WHEN TEMPERATURE AND HUMIDITY IN THE CEILING EXCEEDS 86°F (30°C) AND RH 80%, OUTSIDE AIR IS INDUCED INTO THE CEILING OR THE UNIT CONTINUES 24 HOUR OPERATION. AN ADDITIONAL INSULATION (THICKNESS 3/8 IN (10mm) OR MORE OF GLASSWOOL OR POLYETHYLENE FOAM) IS REQUIRED.

NOTE 4: DO NOT PLACE ANYTHING SENSITIVE TO MOISTURE UNDER THE INDOOR UNIT CONDENSATION MAY FORM WHEN HUMIDITY IS 80% OR MORE. THE AIR OUTLET IS CLOGGED, OR THE AIR FILTER IS DIRTY.

NOTE 5: INSTALL IN ACCORDANCE WITH THE ABOVE FIGURE SINCE THE CEILING SURFACE MAY GET DIRTY IF THE DEVICES THAT DISTURB THE AIR FLOW SUCH AS VENTILATION OPENINGS AND LIGHTING EQUIPMENT ARE CLOSE BY.

NOTE 6: INSTALLATION LOCATIONS OF THE INFRARED PRESENCE SENSOR AND INFRARED FLOOR SENSOR ARE SHOWN IN THE ABOVE FIGURE. (LOCATION CHANGE IS NOT PERMITTED.)

NOTE 7: JOINT INSULATING MATERIAL ATTACHED TO THE UNIT IS FOR FIELD PIPING THAT IS INSULATED TO A THICKNESS OF 2.6 IN (66mm) OR LESS. IF THE FIELD PIPING IS INSULATED TO A THICKNESS OF MORE THAN 2.6 IN (66mm), INSTEAD OF USING JOINT INSULATING MATERIAL ATTACHED TO THE UNIT, USE INSULATING MATERIAL AND CLAMPS (BOTH FIELD SUPPLY) THAT ARE SUITABLE FOR THE FIELD PIPING, AND BE SURE TO CARRY OUT INSULATION ACCORDING TO THE PROCEDURE IN INSTALLATION MANUAL. IF NOT INSULATED, WATER LEAKAGE MAY BE CAUSED BY CONDENSATION.

NOTE 8: DEPENDING ON ROOM AIRFLOW CONDITION (SUCH AS AIR STREAM BY FAN, CIRCULATOR OR OPENING DOOR) AND TEMPERATURE, HUMIDITY AND AIRFLOW CONDITIONS IN ATTIC BY OUTSIDE AIR INTAKE AND SO ON, CONDENSATION MAY OCCUR ON CEILING NEAR THE CORNER AIR OUTLET. IN THAT CASE, CLOSE THE CORNER AIR OUTLET USING THE SEALING MATERIAL (KIT SOLD SEPARATELY).

REQUIRED SPACE:
60 (1500) OR MORE
7-7/8 (200) OR MORE
90 (1500) OR MORE
7-7/8 (200) OR MORE
60 (1500) OR MORE

REMARKS:
* THE REQUIRED SPACE IS 10-11/16 IN (260mm) OR MORE WHEN THE AIR OUTLET IS CLOGGED WITH THE ACCESSORY. MOREOVER WHEN THE CORNER AREAS ARE CLOGGED (BOTH RIGHT AND LEFT OF THE CLOGGED AIR OUTLET), THE REQUIRED SPACE IS 7-3/8 IN (200mm) OR MORE.
* WHEN THE AIR OUTLET IS CLOSE TO THE WALL, BOTH SIDE OF THE AIR OUTLET, THE RECOMMENDED SPACE IS 30 IN (762mm) OR MORE.

ITEM	PART NAME	REMARK
1 3	LIQUID PIPE JOINT INSULATING MATERIAL (ACCESSORY)	L : 7-1/2 (190)
1 2	GAS PIPE JOINT INSULATING MATERIAL (ACCESSORY)	L : 7-1/2 (190)
1 1	DRAIN HOSE CONNECTION	VP20 (OD φ 1 (φ 26))
1 0	DRAIN HOSE (ACCESSORY)	
9	SENSOR	INFRARED PRESENCE SENSOR INFRARED FLOOR SENSOR
8	CORNER COVER	
7	SUCTION GRILLE	
6	AIR OUTLET	
5	REMOTE CONTROLLER AND TRANSMISSION WIRING CONNECTION	
4	POWER SUPPLY WIRING CONNECTION	
3	DRAIN PIPE CONNECTION	VP25 (OD φ 1-1/4 (φ 32))
2	GAS PIPE CONNECTION	φ 5/8 (φ 15.9) (FLARE CONNECTION)
1	LIQUID PIPE CONNECTION	φ 3/8 (φ 9.5) (FLARE CONNECTION)

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Power Supply (V/Hz/Ph):	208-230 / 60 / 1	Compressor Stage:	Inverter
Power Supply Connections:	L1, L2, G		
Min. Circuit Amps MCA (A):	34.6	Airflow Rate (H) (CFM):	3000
Max Overcurrent Protection (MOP) (A):	35	Gas Pipe Connection (inch):	5/8
		Liquid Pipe Connection (inch):	3/8
		Sound Pressure (H) (dBA):	56
Dimensions (HxWxD) (in):	34-1/4 x 43-5/16 x 18-1/8		
Net Weight (lb):	234		

DIMENSIONAL DRAWING - OUTDOOR UNIT

