Job Name/Location: Tag No.: Resubmit

Mech:

For: File Date: Approval Other PO No.:

GC: Architect:

Rep: (Project Manager)

ARUM456BTE5

(a) ARUM121BTE5

Multi V™ 5 with LGRED° 208-230V ODU

(b) ARUM121BTE5

38 Ton Triple Frame Heat Pump and Heat Recovery (c) ARUM216BTE5

Performance:

Cooling Mode:

Engr:

Nominal Capacity (Btu/h)	455,700
Power Input¹ (kW)	30.81

Heating Mode:

Nominal Capacity (Btu/h)	513,000
Power Input¹ (kW)	36.15

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

Frame (a	a) ARUM121BTE5	(b) ARUM121BTE5	(c) ARUM216BTE5
Power Supply (V/Hz/Ø)¹	208-230/60/3	208-230/60/3	208-230/60/3
MOP (A)	40	40	80
MCA (A)	30.9	30.9	60.3
Rated Amps (A)	26.3	26.3	54.2
Compressor A (A)	18.3	18.3	24.3
Compressor B (B)	-	-	21.9
Fan (A)	8.0	8.0	8.0

Piping:2

Frame	(a) ARUM121BTE5	(b) ARUM121BTE5	(c) ARUM216BTE5
Refrigerant Charge (lbs.) 23.2	23.2	37.5
Liquid (in., O.D.) High Pressure Vapor	1/2 Braze	1/2 Braze	5/8 Braze
(Heat Recov only; in, Low Pressure Vapor	O.D.) 3/4 Braze	3/4 Braze	1-1/8 Braze
(in., O.D.)	1-1/8 Braze	1-1/8 Braze	1-1/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (High Pressure Oil Return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Heat Path Exchanger
- Subcooling and Vapor Injection
- Liquid Cooled Inverter Controller
- Advanced Comfort Cooling

Required Accessories:

☐ ARCNB31 (Frame Connector Y-branch, 3 pipe heat recovery) ☐ ARCNN31 (Frame Connector Y-branch, 2 pipe heat recovery)

Optional Accessories:

- ☐ Air Guide ZAGDKA52A (3 required)
- ☐ Hail Guard Kit ZHGDKA52A (3 required)
- ☐ Low Ambient Baffle Kit ZLABKA52A (3), Control Kit -

PRVC2 (1 per system)

- ☐ Base Pan Heater ZPLT1A52A
- **Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.



Operating Range:

Cooling (°F DB)**	5 - 122
Heating (°F WB)	-22 - 61
Synchronous	
Cooling Based (°F DB)	14 - 81
Heating Based (°F WB)	14 - 61

MIG

Unit Data

Onit Data.			
Refrigerant Ty	/pe		R410A
Refrigerant Co	ontrol		EEV
Max. Number	of Indoor Units ³		64
Sound Pressu	re⁴ dB(A)		66
Weight			
Frame	(a) ARUM121BTE5	(b) ARUM121BTE5	(c) ARUM216BTE5
Net (lbs.)	507	507	666
Shipping (lb	s.) 534	534	694
Communication Cable (No x AWG) ⁵		5	2 x 18
Heat Exchang	er Coating	I	Black Coated Fin™

Compressor:

Туре		HSS DC Scroll
Quar	ntity	4
Oil/	Туре	PVE / FVC68D

Fan:

Туре	Propeller
Quantity (a) + (b) + (c)	6
Motor Drive	Brushless Digitally Controlled Direct
Air Flow Rate (a) + (b) + (c) (CFM)	33.900

Notes:

- 1. Power wiring cable size must comply with the applicable local and national codes. Cables terminate at each frame.
- 2. For main pipe segment size, refer to the LATS Multi V tree diagram.
- 3. The combination ratio must be between 50-130%.
- 4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
- 5. Communication cable between ODU and IDUs must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
- 6. Acceptable operating voltage: 187V 253V
- 7. The order of these units on the submittal (i.e., a+b+c) does not represent the installation order. Highest capacity unit is used as the Master, followed by the next smaller size as Slave 1, and so on.
- 8. Low ambient performance with LGRED° heat technology is included in Multi V 5 units produced after February 2019.







ARUM456BTE5

(a) ARUM121BTE5 (b) ARUM121BTE5



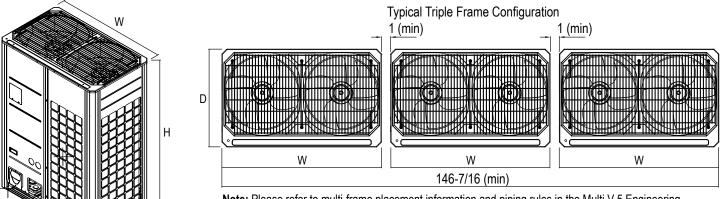
Tag No.:

Date:

PO No.:

Multi V™ 5 with LGRED° 208-230V ODU

38 Ton Triple Frame Heat Pump and Heat Recovery (c) ARUM216BTE5



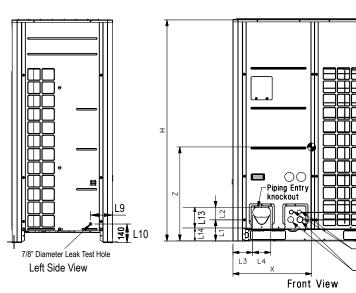
1–3/16 Diameter

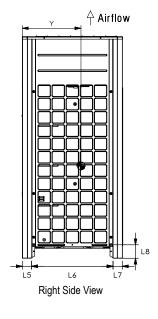
wiring knockout

wiring knockout

1-25/32" Diameter

Note: Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.





Piping Routing Holes (Bottom); two - ø2-5/8," ø2-1/8" Top View Piping Routing Holes (Bottom); two - ø2-5/8," ø2-1/8" M3 M4 M4 M4 M4 M4 M4 M5 M5

M1	28-25/32"
M2	5/8"
М3	3-15/16"
M4	40-15/16"
M5	11 – 15/16"
M6	11 – 1/16"
M7	10 – 1/2"
M8	8 – 7/16"
М9	8 – 1/8"
M10	6 – 1/16"
M11	4 – 15/16"
M12	7 – 1/2"
M13	4 – 13/16"
M14	4 – 5/16"
M15	3 – 5/8"
M16	3"

W	48-13/16"
Н	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6 – 1/2"
L10	5 – 9/16"
L11	8 – 5/8"
L12	6 – 7/16"
L13	9 – 15/16"
L14	3 – 5/8"

Center of Gravity

Х	23-7/32"
Υ	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in. [Unit: inch]



= Center of Gravity