Job Name/Location: Tag No.:

For: File Resubmit Date: Approval Other PO No.:

GC: Architect:

Mech: Engr:

Rep:

(Project Manager)

## ARUM456DTE5

(a) ARUM121DTE5

Multi V™ 5 with LGRED° 460V ODU

(b) ARUM121DTE5

38 Ton Triple Frame Heat Pump and Heat Recovery (c) ARUM216DTE5

### Performance:

Cooling Mode:

Non	ninal Capacity (Btu/h)	455,700
Pow	er 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) ARUM121DTE5	(b) ARUM121DTE5	(c) ARUM216DTE5
Power Supply (V/Hz/Ø	) <sup>1</sup> 460/60/3	460/60/3	460/60/3
MOP (A)	25	25	50
MCA (A)	18.4	18.4	38.3
Rated Amps (A)	15.7	15.7	34.4
Compressor A (A)	10.7	10.7	15.5
Compressor B (B)	-	-	13.9
Fan (A)	5.0	5.0	5.0

## Piping:2

Frame	(a) ARUM121DTE5	(b) ARUM121DTE5	(c) ARUM216DTE5
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,	O.D.) 3/4 Braze	3/4 Braze	1-1/8 Braze
Low Pressure Vapor (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)
- ☐ ARCNB21 (Frame Connector Y-branch, 3 pipe heat recovery)
- ☐ ARCNN31 (Frame Connector Y-branch, 2 pipe heat pump)
- ☐ ARCNN21 (Frame Connector Y-branch, 2 pipe heat pump)

## **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 ZPLT2A52A
- \*\*Cooling operating range can be extended to -13°F if the optional low ambient baffle kit and low ambient control kit are installed. This is the range in which the unit can operate as continuous operation.



## **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

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#### Unit Data

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Refrigerant Ty	Refrigerant Type				
Refrigerant Co	ontrol		EEV		
Max. Number	of Indoor Units <sup>3</sup>		64		
Sound Pressu	re <sup>4</sup> dB(A)		66		
Weight			00		
Frame	(a) ARUM121DTE5	(b) ARUM121DTE5	(c) ARUM216DTE5		
Net (lbs.)	507	507	666		
Shipping (lbs	s.) 534	534	694		
Communication	on Cable (No x AWG)	5	2 x 18		
Heat Exchange	er Coating		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 Main 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: 414V 528V
- 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 Main, followed by the next smaller size as Sub 1, and so on.







# ARUM456DTE5

(a) ARUM121DTE5 (b) ARUM121DTE5

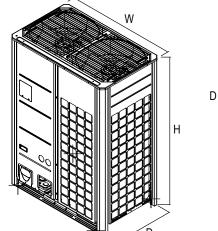


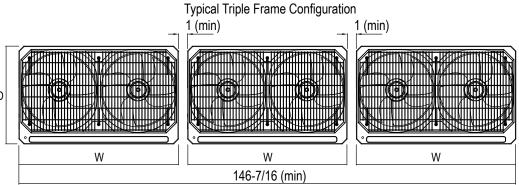
Tag No.: \_\_\_\_\_

Multi V<sup>™</sup> 5 with LGRED° 460V ODU (b) ARUM121DTE5

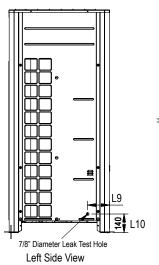
38 Ton Triple Frame Heat Pump and Heat Recovery (c) ARUM216DTE5

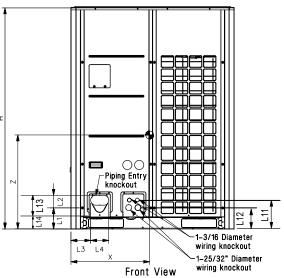
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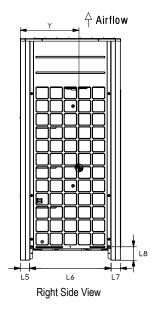




**Note:** Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.







			LIOHE AIGA
Airflow	D Airflow	W	M5 M6 Power Cord Routing Hole (Bottom); two (2) - ø2"  Two (2) 7/8" Diameter Wire Routing Holes (Bottom)  19/32" Dameter Hole  Piping Routing Holes (Bottom); two - ø2-5/8," ø2-1/8"  M3 M4
			(Pitch of foundation bolt holes)
	Top View		Bottom Mounting Holes

0.04	00 05 (00"
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"
M9	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  $\pm\,0.25$  in. [Unit: inch]



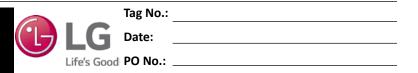
= Center of Gravity

loh	Name	/Location:
300	IVALLIC	, Location.

# ARUM456DTE5

Multi V™ 5 with LGRED° 460V ODU

38 Ton Triple Frame Heat Pump and Heat Recovery



#### **AHRI Data:**

Reference Number	Indoor Type	Cooling Capacity (95°F)	EER (95°F)	IEER	SCHE	High Heating Capacity (47°F)	High COP (47°F)	Low Heating Capacity (17°F)	Low COP (17°F)
202524572	Ducted Indoor Units	434,000	9.80	18.50	18.80	484,000	3.22	318,000	2.15
202524571	Non-Ducted Indoor Units	434,000	9.70	19.20	21.00	484,000	3.23	318,000	2.30