Job Name/Location: Tag No.:

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

GC: Architect:

Mech: Engr:

Rep:

(Project Manager)

### ARUM480DTE5

(a) ARUM121DTE5

(b) ARUM144DTE5

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



### **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

**M**IG

#### **Unit Data:**

Refrigerant Ty	rpe .		R410A
Refrigerant Co	ontrol		EEV
Max. Number	of Indoor Units <sup>3</sup>		64
Sound Pressu	re⁴ dB(A)		67
Weight			•
Frame	(a) ARUM121DTE5	(b) ARUM144DTE5	(c) ARUM216DTE5
Net (lbs.)	507	639	666
Shipping (lb	s.) 534	666	694
Communication	on Cable (No x AWG	)5	2 x 18
Heat Exchang	er Coating		Black Coated Fin™

### **Compressor:**

Туре	HSS DC Scroll
Quantity	5
Oil / Type	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.

Multi V™ 5 with LGRED° 460V ODU

#### Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	476,700
Power Input¹ (kW)	32.39

#### Heating Mode:

	Nominal Capacity (Btu/h)	540,000
١	Power Input¹ (kW)	37.49

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) ARUM144DTE5	(c) ARUM216DTE5
Power Supply (V/Hz/Ø	) <sup>1</sup> 460/60/3	460/60/3	460/60/3
MOP (A)	25	35	50
MCA (A)	18.4	26.4	38.3
Rated Amps (A)	15.7	23.8	34.4
Compressor A (A)	10.7	10.3	15.5
Compressor B (B)	-	8.5	13.9
Fan (A)	5.0	5.0	5.0

#### Piping:2

Frame	(a) ARUM121DTE5	(b) ARUM144DTE5	(c) ARUM216DTE5
Refrigerant Charge (lbs.)	23.2	26.5	37.5
Liquid (in., O.D.) High Pressure Vapor	1/2 Braze	1/2 Braze	5/8 Braze
(Heat Recov only; in, C Low Pressure Vapor	O.D.) 3/4 Braze	7/8 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)
- ☐ 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.





## ARUM480DTE5

(a) ARUM121DTE5 (b) ARUM144DTE5



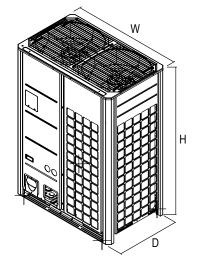
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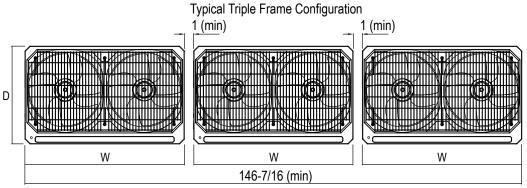
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Multi V™ 5 with LGRED° 460V ODU

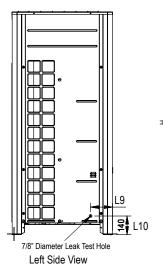
40 Ton Triple Frame Heat Pump and Heat Recovery(c) ARUM216DTE5

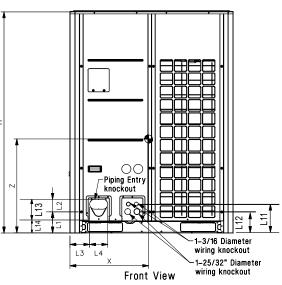
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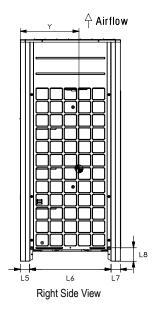




Note: Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.







Airflow \( \sqrt{\text{Airflow}} \)	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

	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"

14/	40 40/40"
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]



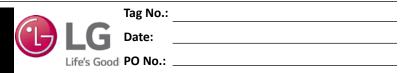
= Center of Gravity

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# ARUM480DTE5

Multi V™ 5 with LGRED° 460V ODU

40 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)
202524574	Ducted Indoor Units	454,000	9.70	18.00	18.50	510,000	3.21	332,000	2.12
202524573	Non-Ducted Indoor Units	454,000	9.60	19.00	19.00	510,000	3.21	332,000	2.27