MAINLINE®
Reliably Comfortable.™

Elite® Series iM Heat Pumps

MLP15AY

Cooling Efficiencies up to: 16 SEER2 / 11.7 EER2
Heating Efficiencies up to: 8.1 HSPF2
Nominal Sizes: 1.5 to 5 Tons [5.3 to 17.6 kW]
Cooling & Heating Capacities: 17.1 kBTU to 57 kBTU [5.0 to 16.7 kW]
Refrigerant Type: R-454B

Manufactured for
Mainline®
HVACmainline.com

ISO 9001:2015

AHRI CERTIFIED www.ahridirectory.org Unitary Small AC AHRI Standard 210/240

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ENERGY STAR

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR®. Ask your Contractor for details or visit www.energystar.gov.

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Features and Benefits

- **Two-Stage Scroll Compressor:** Features two speeds (high and low) of cooling and heating, providing more precise temperature control, lower humidity and greater efficiency when compared to single stage compressors
- **7mm Condenser Copper Coil:** Requires less refrigerant allowing for a smaller and lighter footprint while enhancing reliability
- **Inverted Reversing Valve:** Allows for faster heat transfer with gravity assist shifting and reduced joint stress for increased reliability
- **Expanded Valve Space:** 3 in. – 4 in. – 5 in. service valve space — provides a minimum working area of 27-square inches for easier access
- **Triple Service Access:** 15 in. wide, industry leading access makes repairs easier and faster
- **Refrigerant Detection System[1]:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with the any 24V thermostat application and system protection by automatically pausing outdoor unit operation – if excess refrigerant is detected
- **Designing for Sustainability with Low GWP:** For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%[2] lower GWP than previous-generation refrigerants — with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort

[1]When comparing the GWP of R-454B to R-410A refrigerant

[2]Factory or field installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L)

Heat Pumps

ML	P	15	A	Y	18	A	J	2	N	A
Brand	**Product Category**	**SEER2**	**Region**	**Refrigerant**	**Capacity**	**Major Series**	**Voltage**	**Type**	**Controls**	**Minor Series**
ML - Mainline	P - Heat Pump	15 - 15.2 SEER2	A - All Regions	Y - R-454B	18 - 18,000 [5.28 kW] 24 - 24,000 [7.03 kW] 30 - 30,000 [8.79 kW] 36 - 36,000 [10.55 kW] 42 - 42,000 [12.31 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	A - 1st Design	J - 1ph, C - 3ph, 208/230/60 D - 3ph, 460/60	2 - 2+ Stage	N - Non-Comm.	A - 1st Design

[ ] Designates Metric Conversions

AVAILABLE MODELS	DESCRIPTION
MLP15AY18AJ2NA	1.5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY24AJ2NA	2 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY30AJ2NA	2.5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY36AJ2NA	3 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY36AC2NA	3 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/3/60
MLP15AY36AD2NA	3 ton 15.2 SEER2 2-Stage Heat iM Pump-460/3/60
MLP15AY42AJ2NA	3.5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY42AC2NA	3.5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/3/60
MLP15AY42AD2NA	3.5 ton 15.2 SEER2 2-Stage Heat iM Pump-460/3/60
MLP15AY48AJ2NA	4 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY48AC2NA	4 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/3/60
MLP15AY48AD2NA	4 ton 15.2 SEER2 2-Stage Heat iM Pump-460/3/60
MLP15AY60AJ2NA	5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/1/60
MLP15AY60AC2NA	5 ton 15.2 SEER2 2-Stage Heat iM Pump-208/230/3/60
MLP15AY60AD2NA	5 ton 15.2 SEER2 2-Stage Heat iM Pump-460/3/60

STANDARD EQUIPMENT
R-454B Refrigerant
Scroll Compressor
Field Installed Filter Drier
Front Seating Service Valves
Internal Pressure Relief Valve
Internal Thermal Overload
Long Line capability
Low Ambient capability with Kit
3-4-5 Expanded Valve Space
Composite Basepan
2 Screw Control Box Access
15" Access to Internal Components
No fasteners to remove along bottom
Optimized Venturi Airflow
Powder coated paint
Rust resistant screws
QR code
External gauge ports
Service trays

General Data

MODEL NO.	MLP15AY18A	MLP15AY24A	MLP15AY30A	MLP15AY36A	MLP15AY42A	MLP15AY48A	MLP15AY60A
Nominal Tonnage	1.5	2.0	2.5	3.0	3.5	4.0	5.0
Valve Connections							
Liquid Line O.D. – in.	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Suction Line O.D. – in.	3/4	3/4	3/4	3/4	7/8	7/8	7/8
Refrigerant (R-454B) furnished oz.[1]	83	83	85	88	130	130	234
Compressor Type	2-stage Scroll						
Outdoor Coil							
Net face area – Outer Coil	10.9	10.9	19.5	21.5	21.5	21.5	23.4
Net face area – Inner Coil	10.5	10.5	—	—	—	—	22.7
Tube diameter – in.	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Number of rows	2	2	1	1	1	1	2
Fins per inch	22	22	22	22	22	22	22
Outdoor Fan							
Diameter – in.	20	20	24	24	24	24	26
Number of blades	2	2	3	3	3	3	3
Motor hp	1/6	1/6	1/5	1/5	1/5	1/5	1/5
CFM	2582	2582	4077	4206	4206	4206	4396
RPM	1075	1075	850	850	850	850	850
Watts	145	145	222	246	246	246	284
Shipping weight – lbs.	157	157	209	221	247	247	282
Operating weight – lbs.	150	150	202	214	240	240	275

Electrical Data

Line Voltage Data (Volts-Phase-Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Maximum overcurrent protection (amps)[2]	20	25	30	30	40	45	50
Minimum circuit ampacity[3]	13	16	20	20	24	27	33
Compressor							
Rated load amps	10	12	15	15	18	20	25
Locked rotor amps	52	65	82	90	106	141	147
Condenser Fan Motor							
Full load amps	0.8	0.8	1.2	1.2	1.2	1.2	1.2
Locked rotor amps	1.5	1.5	2.6	2.6	2.6	2.6	2.6
Line Voltage Data (Volts-Phase-Hz)	—	—	—	208/230-3-60	208/230-3-60	208/230-3-60	208/230-3-60
Maximum overcurrent protection (amps)[2]	—	—	—	15.0	25.0	25.0	30.0
Minimum circuit ampacity[3]	—	—	—	9.0	16.0	17.0	19.0
Compressor							
Rated load amps	—	—	—	9.4	11.2	10.8	13.8
Locked rotor amps	—	—	—	82.0	123.0	123.0	150.0
Condenser Fan Motor							
Full load amps	—	—	—	0.8	1.0	1.0	1.0
Locked rotor amps	—	—	—	2.6	2.6	2.6	2.6
Line Voltage Data (Volts-Phase-Hz)	—	—	—	460-3-60	460-3-60	460-3-60	460-3-60
Maximum overcurrent protection (amps)[2]	—	—	—	15.0	15.0	15.0	15.0
Minimum circuit ampacity[3]	—	—	—	8.0	9.0	10.0	10.0
Compressor							
Rated load amps	—	—	—	5.0	5.8	5.9	6.5
Locked rotor amps	—	—	—	44.3	60.0	60.0	60.0
Condenser Fan Motor							
Full load amps	—	—	—	0.80	0.80	0.80	0.80
Locked rotor amps	—	—	—	1.40	1.40	1.40	1.40

[1]Refrigerant charge sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the installation instructions for information about set length and additional refrigerant charge required.
[2]HACR type circuit breaker of fuse.
[3]Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

Accessories

MODEL NO.		MLP15AY18A	MLP15AY24A	MLP15AY30A	MLP15AY36A	MLP15AY42A	MLP15AY48A	MLP15AY60A
Compressor crankcase heater*		44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-45	Factory Standard
Low ambient control		RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08
Compressor sound cover		68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-25	68-23427-25
Compressor hard start kit		SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1
Low pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard
High pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard
Liquid Line Solenoid (24 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V
Liquid Line Solenoid (120/240 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V

*Bi-flow kits are required when installing a liquid line solenoid on a heat pump.

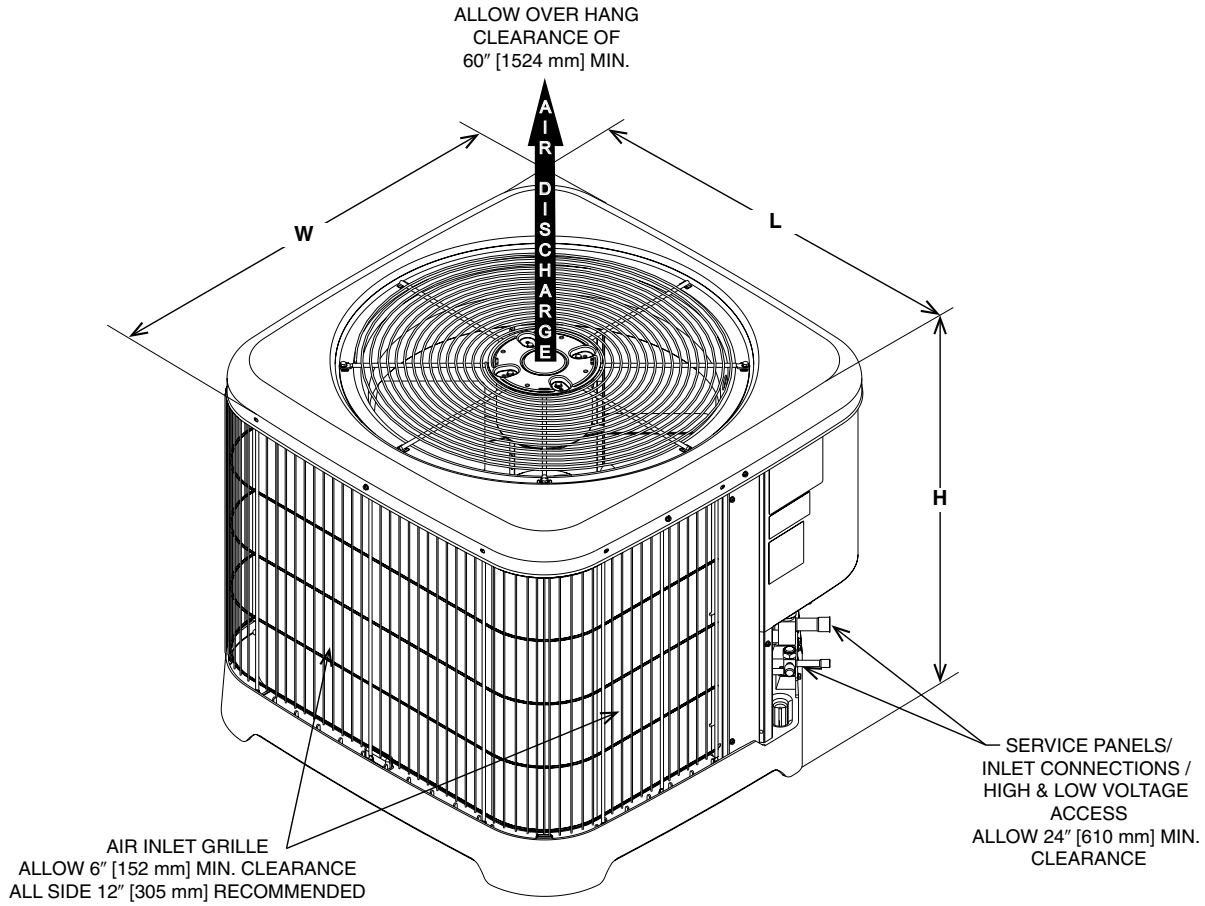
Weighted Sound Power Level (dBA)

UNIT SIZE - VOLTAGE, SERIES	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA WITHOUT TONE ADJUSTMENT)						
		125	250	500	1000	2000	4000	8000
MLP15AY18A	73	58.0	58.8	62.0	62.3	59.2	56.6	50.5
MLP15AY24A	73	56.6	59.6	62.2	62.1	58.8	55.4	50.8
MLP15AY30A	73	55.1	58.3	65.6	63.5	58.5	54.9	48.5
MLP15AY36A	74	51.2	56.4	63.1	63.8	60.8	57.4	56.5
MLP15AY42A	74	56.6	57.4	64.9	64.0	62.0	57.4	50.4
MLP15AY48A	74	57.3	57.0	64.1	64.0	61.1	58.0	56.5
MLP15AY60A	74	43.9	55.2	63.4	65.8	61.7	57.9	52.9

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI)

Unit Dimensions

MODEL NO.	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
MLP15AY18A	25.00	635	29.75	756	29.75	756	27.90	709	33.25	845	33.25	845
MLP15AY24A	25.00	635	29.75	756	29.75	756	27.90	709	33.25	845	33.25	845
MLP15AY30A	35.00	889	33.75	857	33.75	857	38.35	974	37.64	956	37.64	956
MLP15AY36A	39.00	991	35.75	908	35.75	908	40.50	1029	38.38	975	38.38	975
MLP15AY42A	39.00	991	35.75	908	35.75	908	40.50	1029	38.38	975	38.38	975
MLP15AY48A	39.00	991	35.75	908	35.75	908	40.50	1029	38.38	975	38.38	975
MLP15AY60A	39.00	991	35.75	908	35.75	908	40.50	1029	38.38	975	38.38	975



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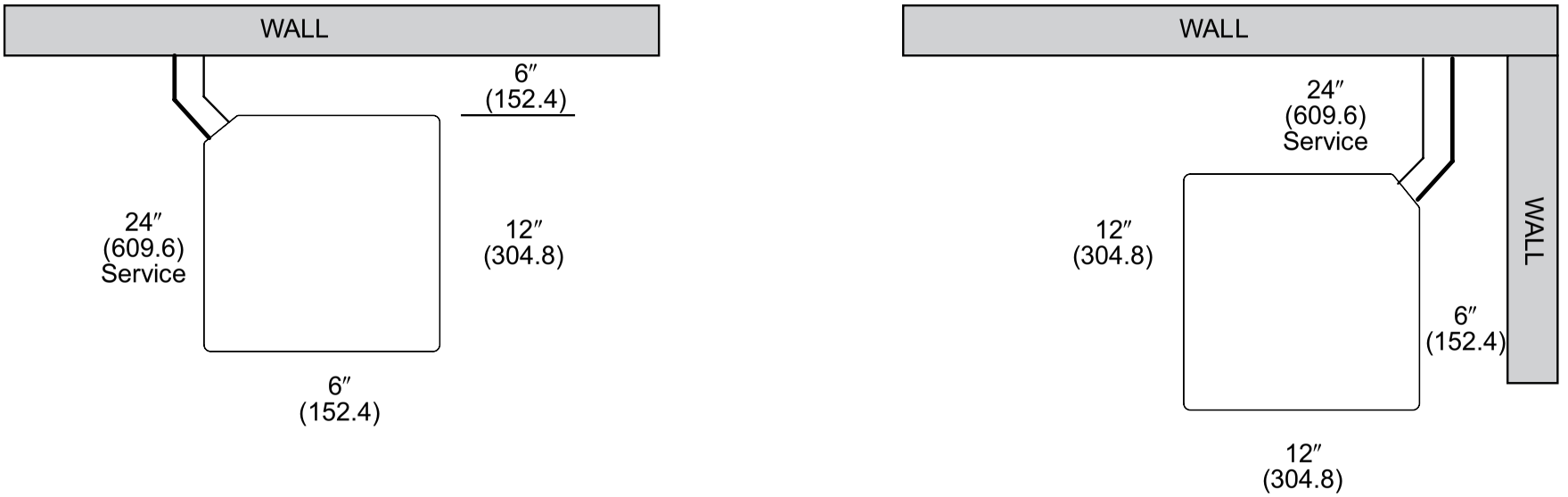
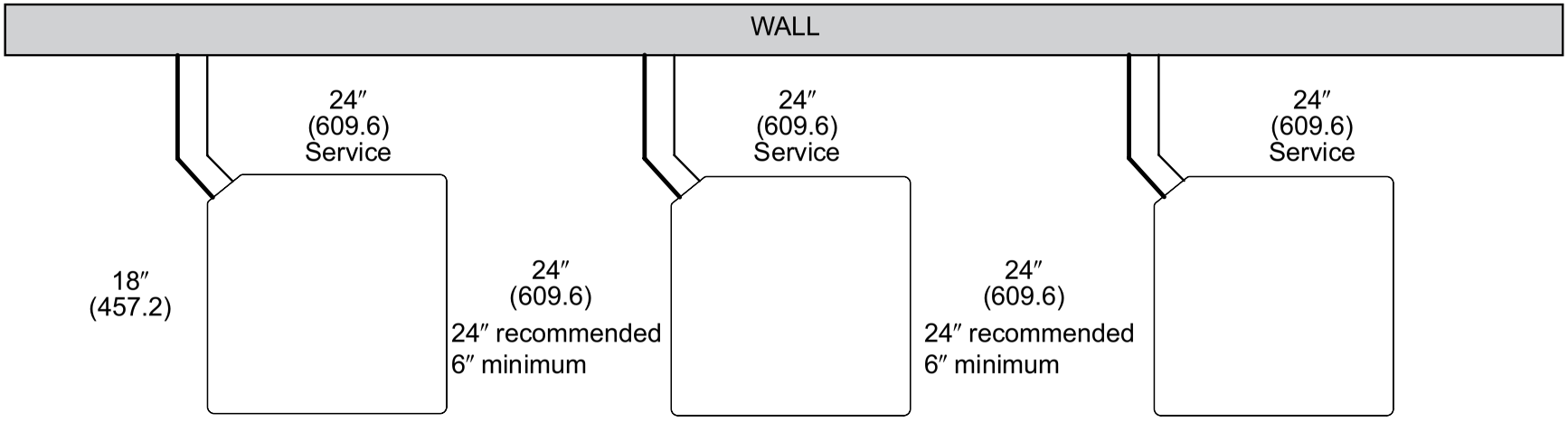
[ ] Designates Metric Conversions

CLEARANCES





NOTE: NUMBERS IN () = mm

IMPORTANT: When installing multiple units in an alcove, roof well or partially enclosed area, ensure there is adequate ventillation to prevent re-circulation of discharge air.

Refrigerant Line Size Information

TWO-STAGE HEAT PUMPS												
UNIT SIZE	ALLOWABLE LIQUID LINE SIZE	ALLOWABLE SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH (FEET)									
			0-25	26-50	51-75	76-100	101-125	126-150	151-175	176-200	201-225	226-250
			MAXIMUM VERTICAL SEPARATION / CAPACITY MULTIPLIER									
1.5 Ton	1/4"	1/2"	25/1	50/0.98	66/0.97	47/0.95	27/0.94	7/0.92	0/0.91	0/0.89	0/0.88	0/0.87
	5/16"	1/2"	25/1	50/0.98	75/0.97	100/0.95	99/0.94	94/0.92	89/0.91	84/0.89	79/0.88	76/0.87
	3/8"	1/2"	25/1	50/0.98	75/0.97	100/0.95	117/0.94	116/0.92	115/0.91	113/0.89	111/0.88	110/0.87
	1/4"	5/8"	25/1	50/1	66/0.99	47/0.99	27/0.98	7/0.98	0/0.97	0/0.97	0/0.97	0/0.96
	5/16"	5/8"	25/1	50/1	75/0.99	100/0.99	99/0.98	94/0.98	89/0.97	84/0.97	79/0.97	76/0.96
	3/8"	5/8"	25/1	50/1	75/0.99	100/0.99	117/0.98	116/0.98	115/0.97	113/0.97	111/0.97	110/0.96
	1/4"	3/4"	25/1	50/1	66/1	47/1	27/0.99	7/0.99	0/0.99	0/0.99	0/0.99	0/0.99
	5/16"	3/4"	25/1	50/1	75/1	100/1	99/0.99	94/0.99	89/0.99	84/0.99	79/0.99	76/0.99
	3/8"	3/4"	25/1	50/1	75/1	100/1	117/0.99	116/0.99	115/0.99	113/0.99	111/0.99	110/0.99
2 Ton	1/4"	5/8"	25/1	50/0.99	33/0.98	3/0.98	0/0.97	0/0.96	0/0.95	0/0.95	0/0.94	0/0.94
	5/16"	5/8"	25/1	50/0.99	75/0.98	91/0.98	82/0.97	73/0.96	65/0.95	56/0.95	48/0.94	42/0.94
	3/8"	5/8"	25/1	50/0.99	75/0.98	100/0.98	110/0.97	107/0.96	104/0.95	101/0.95	98/0.94	95/0.94
	1/4"	3/4"	25/1	50/1	33/0.99	3/0.99	0/0.99	0/0.99	0/0.98	0/0.98	0/0.98	0/0.98
	5/16"	3/4"	25/1	50/1	75/0.99	91/0.99	82/0.99	73/0.99	65/0.98	56/0.98	48/0.98	42/0.98
	3/8"	3/4"	25/1	50/1	75/0.99	100/0.99	110/0.99	107/0.99	104/0.98	101/0.98	98/0.98	95/0.98
2.5 Ton	1/4"	5/8"	25/1	42/0.99	1/0.98	0/0.97	0/0.95	0/0.94	0/0.93	0/0.92	0/0.91	0/0.9
	5/16"	5/8"	25/1	50/0.99	75/0.98	73/0.97	60/0.95	47/0.94	34/0.93	22/0.92	10/0.91	1/0.9
	3/8"	5/8"	25/1	50/0.99	75/0.98	100/0.97	103/0.95	98/0.94	93/0.93	89/0.92	85/0.91	80/0.9
	1/4"	3/4"	25/1	42/1	1/0.99	0/0.99	0/0.98	0/0.98	0/0.97	0/0.97	0/0.97	0/0.96
	5/16"	3/4"	25/1	50/1	75/0.99	73/0.99	60/0.98	47/0.98	34/0.97	22/0.97	10/0.97	1/0.96
	3/8"	3/4"	25/1	50/1	75/0.99	100/0.99	103/0.98	98/0.98	93/0.97	89/0.97	85/0.97	80/0.96
3 Ton	5/16"	5/8"	25/1	50/0.98	71/0.97	53/0.95	35/0.93	17/0.92	0/0.9	0/0.89	0/0.87	0/0.87
	3/8"	5/8"	25/1	50/0.98	75/0.97	100/0.95	94/0.93	87/0.92	81/0.9	75/0.89	68/0.87	62/0.87
	5/16"	3/4"	25/1	50/0.99	71/0.99	53/0.98	35/0.98	17/0.97	0/0.96	0/0.96	0/0.95	0/0.95
	3/8"	3/4"	25/1	50/0.99	75/0.99	100/0.98	94/0.98	87/0.97	81/0.96	75/0.96	68/0.95	62/0.95
	1/2"	3/4"	25/1	50/0.99	75/0.99	100/0.98	119/0.98	118/0.97	116/0.96	115/0.96	114/0.95	113/0.95
	3/8"	7/8"	25/1	50/1	75/0.99	100/0.99	94/0.99	87/0.99	81/0.98	75/0.98	68/0.98	62/0.98
	1/2"	7/8"	25/1	50/1	75/0.99	100/0.99	119/0.99	118/0.99	116/0.98	115/0.98	114/0.98	113/0.98
3.5 Ton	3/8"	3/4"	25/1	50/0.99	75/0.98	92/0.98	83/0.97	75/0.96	67/0.95	59/0.94	50/0.94	42/0.93
	1/2"	3/4"	25/1	50/0.99	75/0.98	100/0.98	117/0.97	115/0.96	113/0.95	112/0.94	110/0.94	109/0.93
	3/8"	7/8"	25/1	50/1	75/0.99	92/0.99	83/0.99	75/0.98	67/0.98	59/0.98	50/0.97	42/0.97
	1/2"	7/8"	25/1	50/1	75/0.99	100/0.99	117/0.99	115/0.98	113/0.98	112/0.98	110/0.97	109/0.97
4 Ton	3/8"	3/4"	25/1	50/0.99	75/0.98	83/0.97	72/0.96	61/0.95	51/0.94	40/0.93	29/0.92	19/0.91
	1/2"	3/4"	25/1	50/0.99	75/0.98	100/0.97	114/0.96	112/0.95	110/0.94	108/0.93	106/0.92	105/0.91
	3/8"	7/8"	25/1	50/1	75/0.99	83/0.99	72/0.98	61/0.98	51/0.97	40/0.97	29/0.96	19/0.96
	1/2"	7/8"	25/1	50/1	75/0.99	100/0.99	114/0.98	112/0.98	110/0.97	108/0.97	106/0.96	105/0.96
5 Ton	3/8"	3/4"	25/1	50/0.98	75/0.97	61/0.95	45/0.94	29/0.92	13/0.9	0/0.89	0/0.87	0/0.86
	1/2"	3/4"	25/1	50/0.98	75/0.97	100/0.95	109/0.94	106/0.92	102/0.9	99/0.89	96/0.87	94/0.86
	3/8"	7/8"	25/1	50/0.99	75/0.99	61/0.98	45/0.97	29/0.97	13/0.96	0/0.95	0/0.95	0/0.94
	1/2"	7/8"	25/1	50/0.99	75/0.99	100/0.98	109/0.97	106/0.97	102/0.96	99/0.95	96/0.95	94/0.94

NOTES:

1) Maximum Equivalent Line Length may not exceed 250'.
2) Maximum Actual Line Length may not exceed 200'.
3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

Refrigerant Line Size Information (Con't.)

TWO-STAGE HEAT PUMPS												
UNIT SIZE	ALLOWABLE LIQUID LINE SIZE	ALLOWABLE SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH (METERS)									
			0-8	8-15	16-23	23-30	31-38	38-46	46-53	54-61	61-69	69-76
			MAXIMUM VERTICAL SEPARATION / CAPACITY MULTIPLIER									
1.5 Ton	1/4"	1/2"	8/1	15/0.98	20/0.97	14/0.95	8/0.94	2/0.92	0/0.91	0/0.89	0/0.88	0/0.87
	5/16"	1/2"	8/1	15/0.98	23/0.97	30/0.95	30/0.94	29/0.92	27/0.91	26/0.89	24/0.88	23/0.87
	3/8"	1/2"	8/1	15/0.98	23/0.97	30/0.95	36/0.94	35/0.92	35/0.91	34/0.89	34/0.88	34/0.87
	1/4"	5/8"	8/1	15/1	20/0.99	14/0.99	8/0.98	2/0.98	0/0.97	0/0.97	0/0.97	0/0.96
	5/16"	5/8"	8/1	15/1	23/0.99	30/0.99	30/0.98	29/0.98	27/0.97	26/0.97	24/0.97	23/0.96
	3/8"	5/8"	8/1	15/1	23/0.99	30/0.99	36/0.98	35/0.98	35/0.97	34/0.97	34/0.97	34/0.96
	1/4"	3/4"	8/1	15/1	20/1	14/1	8/0.99	2/0.99	0/0.99	0/0.99	0/0.99	0/0.99
	5/16"	3/4"	8/1	15/1	23/1	30/1	30/0.99	29/0.99	27/0.99	26/0.99	24/0.99	23/0.99
	3/8"	3/4"	8/1	15/1	23/1	30/1	36/0.99	35/0.99	35/0.99	34/0.99	34/0.99	34/0.99
2 Ton	1/4"	5/8"	8/1	15/0.99	10/0.98	1/0.98	0/0.97	0/0.96	0/0.95	0/0.95	0/0.94	0/0.94
	5/16"	5/8"	8/1	15/0.99	23/0.98	28/0.98	25/0.97	22/0.96	20/0.95	17/0.95	15/0.94	13/0.94
	3/8"	5/8"	8/1	15/0.99	23/0.98	30/0.98	34/0.97	33/0.96	32/0.95	31/0.95	30/0.94	29/0.94
	1/4"	3/4"	8/1	15/1	10/0.99	1/0.99	0/0.99	0/0.99	0/0.98	0/0.98	0/0.98	0/0.98
	5/16"	3/4"	8/1	15/1	23/0.99	28/0.99	25/0.99	22/0.99	20/0.98	17/0.98	15/0.98	13/0.98
	3/8"	3/4"	8/1	15/1	23/0.99	30/0.99	34/0.99	33/0.99	32/0.98	31/0.98	30/0.98	29/0.98
2.5 Ton	1/4"	5/8"	8/1	13/0.99	0.3/0.98	0/0.97	0/0.95	0/0.94	0/0.93	0/0.92	0/0.91	0/0.9
	5/16"	5/8"	8/1	15/0.99	23/0.98	22/0.97	18/0.95	14/0.94	10/0.93	7/0.92	3/0.91	0.3/0.9
	3/8"	5/8"	8/1	15/0.99	23/0.98	30/0.97	31/0.95	30/0.94	28/0.93	27/0.92	26/0.91	24/0.9
	1/4"	3/4"	8/1	13/1	0.3/0.99	0/0.99	0/0.98	0/0.98	0/0.97	0/0.97	0/0.97	0/0.96
	5/16"	3/4"	8/1	15/1	23/0.99	22/0.99	18/0.98	14/0.98	10/0.97	7/0.97	3/0.97	0.3/0.96
	3/8"	3/4"	8/1	15/1	23/0.99	30/0.99	31/0.98	30/0.98	28/0.97	27/0.97	26/0.97	24/0.96
3 Ton	5/16"	5/8"	8/1	15/0.98	22/0.97	16/0.95	11/0.93	5/0.92	0/0.9	0/0.89	0/0.87	0/0.87
	3/8"	5/8"	8/1	15/0.98	23/0.97	30/0.95	29/0.93	27/0.92	25/0.9	23/0.89	21/0.87	19/0.87
	5/16"	3/4"	8/1	15/0.98	22/0.99	16/0.98	11/0.98	5/0.97	0/0.96	0/0.96	0/0.95	0/0.95
	3/8"	3/4"	8/1	15/0.98	23/0.99	30/0.98	29/0.98	27/0.97	25/0.96	23/0.96	21/0.95	19/0.95
	1/2"	3/4"	8/1	15/0.98	23/0.99	30/0.98	36/0.98	36/0.97	35/0.96	35/0.96	35/0.95	34/0.95
	3/8"	7/8"	8/1	15/1	23/0.99	30/0.99	29/0.99	27/0.99	25/0.98	23/0.98	21/0.98	19/0.98
	1/2"	7/8"	8/1	15/1	23/0.99	30/0.99	36/0.99	36/0.99	35/0.98	35/0.98	35/0.98	34/0.98
3.5 Ton	3/8"	3/4"	8/1	15/0.99	23/0.98	28/0.98	25/0.97	23/0.96	20/0.95	18/0.94	15/0.94	13/0.93
	1/2"	3/4"	8/1	15/0.99	23/0.98	30/0.98	36/0.97	35/0.96	34/0.95	34/0.94	34/0.94	33/0.93
	3/8"	7/8"	8/1	15/1	23/0.99	28/0.99	25/0.99	23/0.98	20/0.98	18/0.98	15/0.97	13/0.97
	1/2"	7/8"	8/1	15/1	23/0.99	30/0.99	36/0.99	35/0.98	34/0.98	34/0.98	34/0.97	33/0.97
4 Ton	3/8"	3/4"	8/1	15/0.99	23/0.98	25/0.97	22/0.96	19/0.95	16/0.94	12/0.93	9/0.92	6/0.91
	1/2"	3/4"	8/1	15/0.99	23/0.98	30/0.97	35/0.96	34/0.95	34/0.94	33/0.93	32/0.92	32/0.91
	3/8"	7/8"	8/1	15/1	23/0.99	25/0.99	22/0.98	19/0.98	16/0.97	12/0.97	9/0.96	6/0.96
	1/2"	7/8"	8/1	15/1	23/0.99	30/0.99	35/0.98	34/0.98	34/0.97	33/0.97	32/0.96	32/0.96
5 Ton	3/8"	3/4"	8/1	15/0.98	23/0.97	19/0.95	14/0.94	9/0.92	4/0.9	0/0.89	0/0.87	0/0.86
	1/2"	3/4"	8/1	15/0.98	23/0.97	30/0.95	33/0.94	32/0.92	31/0.9	30/0.89	29/0.87	29/0.86
	3/8"	7/8"	8/1	15/0.99	23/0.99	19/0.98	14/0.97	9/0.97	4/0.96	0/0.95	0/0.95	0/0.94
	1/2"	7/8"	8/1	15/0.99	23/0.99	30/0.98	33/0.97	32/0.97	31/0.96	30/0.95	29/0.95	29/0.94

NOTES:

1) Maximum Equivalent Line Length may not exceed 76 Meters.
2) Maximum Actual Line Length may not exceed 61 Meters.
3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

Performance Data @ AHRI Standard Conditions – Cooling

DESIGNATED TESTED COMBINATION (DTC)												
OUTDOOR UNIT	AIR HANDLER	TOTAL CAPACITY BTU/H [kW]	NET SENSIBLE BTU/H [kW]	NET LATENT BTU/H [kW]	SEER2	EER2	INDOOR CFM [L/S]	47 DEGREE HEATING CAPACITY BTU/H [KW]	47 DEGREE COP	17 DEGREE HEATING CAPACITY BTU/H [KW]	17 DEGREE COP	REGION IV HSPF2
MLP15AY18AJ2N	MLH2CY2417STANN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	15.2	11.7	625 [295.0]	17,100 [5.0]	3.60	10,000 [2.9]	2.40	7.8
MLP15AY24AJ2N	MLH2CY2417STANN	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	15.2	11.7	775 [365.8]	22,600 [6.6]	3.60	14,000 [4.3]	2.50	7.8
MLP15AY30AJ2N	MLH2CY3617STANN	28,600 [8.4]	21,900 [6.4]	6,700 [2.0]	15.2	11.7	950 [448.4]	28,600 [8.4]	3.40	18,000 [5.3]	2.40	7.8
MLP15AY36AJ2N	MLH2CY3617STANN	34,200 [10.0]	26,200 [7.7]	8,000 [2.3]	15.2	11.7	1,050 [495.5]	33,200 [9.7]	3.10	22,200 [6.9]	2.50	7.8
MLP15AY42AJ2N	MLH2CY4821STANN	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	15.2	11.7	1,300 [613.5]	40,000 [11.7]	3.60	25,000 [7.3]	2.50	7.8
MLP15AY48AJ2N	MLH2CY4821STANN	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	15.2	11.7	1,450 [684.3]	44,000 [13.0]	3.60	29,600 [8.6]	2.50	7.8
MLP15AY60AJ2N	MLH2CY6024STANN	57,000 [16.7]	43,700 [12.8]	13,300 [3.9]	15.2	11.7	1,800 [849.5]	55,000 [16.1]	3.60	32,000 [10.0]	2.50	7.8
MLP15AY36AC2N	MLH2CY3617STANN	34,200 [10.0]	26,200 [7.7]	8,000 [2.3]	15.2	11.7	1,050 [495.5]	33,200 [9.7]	3.10	22,200 [6.9]	2.50	7.8
MLP15AY42AC2N	MLH2CY4821STANN	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	15.2	11.7	1,300 [613.5]	40,000 [11.7]	3.60	25,000 [7.3]	2.50	7.8
MLP15AY48AC2N	MLH2CY4821STANN	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	15.2	11.7	1,450 [684.3]	44,000 [13.0]	3.60	29,600 [8.6]	2.50	7.8
MLP15AY60AC2N	MLH2CY6024STANN	57,000 [16.7]	43,700 [12.8]	13,300 [3.9]	15.2	11.7	1,800 [849.5]	55,000 [16.1]	3.60	32,000 [10.0]	2.50	7.8
MLP15AY36AD2N	MLH2CY3617STANN	34,200 [10.0]	26,200 [7.7]	8,000 [2.3]	15.2	11.7	1,050 [495.5]	33,200 [9.7]	3.10	22,200 [6.9]	2.50	7.8
MLP15AY42AD2N	MLH2CY4821STANN	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	15.2	11.7	1,300 [613.5]	40,000 [11.7]	3.60	25,000 [7.3]	2.50	7.8
MLP15AY48AD2N	MLH2CY4821STANN	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	15.2	11.7	1,450 [684.3]	44,000 [13.0]	3.60	29,600 [8.6]	2.50	7.8
MLP15AY60AD2N	MLH2CY6024STANN	57,000 [16.7]	43,700 [12.8]	13,300 [3.9]	15.2	11.7	1,800 [849.5]	55,000 [16.1]	3.60	32,000 [10.0]	2.50	7.8

NOTE: This data includes DTC (Designated Test Combination) ratings and is for reference purposes only. A full listing of official ratings and system match-ups, along with downloadable certificates, will be accessible from the AHRI website: www.ahridirectory.org later this year.

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