



HELIX ENERGY PARTNERS LLC

CONSULTING ENGINEERS
Mechanical - Plumbing - Controls

HELIX-ENGINEERS.NET

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November 14, 2025

Esteemed Energy Modelers,

Please find within guidance and notes regarding the use of these Mitsubishi energy model objects. We are continually adding more models as the need arises. Should you not find the model you are looking for, please contact us and we would be glad to provide them to you.

Should you find any problems with these models, please report an issue in the repository here:

https://github.com/Ski90Moo/OpenStudio_Components_HEPLLC/issues

Sincerely,

Mike Lovejoy, PE

Bookmark Summary

PEFY-P06NMSU-ER2
PEFY-P30NMAU-E5
PKFY-P30NKMU-E2R1.TH
PLFY-P05NFMU_ER1_TH
PLFY-P08NFMU_ER1_TH
PLFY-P12NFMU_ER1_TH
PLFY-P15NFMU_ER1_TH
PLFY-P18NFMU_ER1_TH
PLFY-EP06NEMU1-E.TH
PLFY-EP08NEMU1-E.TH
PLFY-EP12NEMU1-E.TH
PLFY-EP15NEMU1-E.TH
PLFY-EP18NEMU1-E.TH
PLFY-EP24NEMU1-E.TH
PLFY-EP30NEMU1-E.TH
PLFY-EP36NEMU1-E.TH
PLFY-EP48NEMU1-E.TH
PUHY_EP72TNUYNU_A1
PUHY_EP96TNUYNU_A1
PUHY_EP120TNUYNU_A1
PUHY_EP144TNUYNU_A1
PUHY_EP168TNU_YNU_A1
PUHY_EP192TNU_YNU_A1
PUHY_EP192TSNU_YSNU_A1
PUHY_EP216TNU_YNU_A1
PURY_EP72TNU_YNU_A1
PURY_EP120TNU_YNU_A1



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Mitsubishi PEFY_P06NMSU-ER2 DUCTED VRF-TU,- Name

Energy Modeling Assumptions and Comments		Applicable Field
1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure is assumed to be maximum of equipment capability and maximum airflow capability. Actual ducting configuration may be less. Consult the design documents, engineer, or testing and balance report for actual pressure.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total cooling capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Cooling:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Cooling Capacity {W}
4	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
5	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

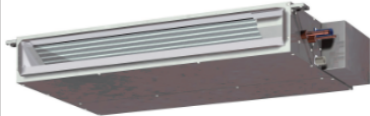
CITYMULTI®

Model: PEFY-P06NMSU-ER2

Job Name:

Schedule Reference:

Date:



GENERAL FEATURES

- Dual set point functionality
- Multiple fan speed settings
- Auto fan mode
- Built-in condensate lift; lifts to 21-11/16" (550 mm)
- 7-7/8" (200 mm) high for low ceiling heights

OPTIONS

- External Heater Adapter.....CN24RELAY-KIT-CM3
- Filter Box (Includes 1" MERV 8 filter).....FBL1-1
- Bottom Return Adapter Plate.....BRP-1

SPECIFICATIONS

Capacity*

Cooling.....6,000 Btu/h

Heating.....6,700 Btu/h

Power

Power Source.....208 / 230V, 1-phase, 60Hz

Power Consumption

Cooling.....0.05 kW

Heating.....0.03 kW

Current

Cooling (208/230V).....0.42 / 0.41A

Heating (208/230V).....0.32 / 0.31A

Minimum Circuit Ampacity (MCA) (208/230V).....0.47 / 0.50 A

Maximum Overcurrent Protection (MOCP) Fuse.....15 A

External Finish.....Galvanized Steel Sheets

External Dimensions

Inches.....7-7/8 h x 31-1/8 w x 27-9/16 d

mm.....200 h x 790 w x 700 d

Net Weight.....42 lbs / 19 kg

Coil Type.....CrossFin
(Aluminum Fin and Copper Tube)

Fan

Type x Quantity.....Sirocco Fan x 2

Airflow Rate (Low - Mid - High).....178 - 212 - 247 CFM

External Static Pressure.....0.02 - 0.06 - 0.14 - 0.20" WG

Motor Type.....DC Motor

Air Filter.....Polypropylene Honeycomb

Refrigerant Piping Dimensions

Liquid (High Pressure).....1/4" / 6.35 mm Braze

Gas (Low Pressure).....1/2" / 12.7 mm Braze

Drainpipe Dimension.....O.D. 1-1/4" / 32 mm

Sound Pressure Levels

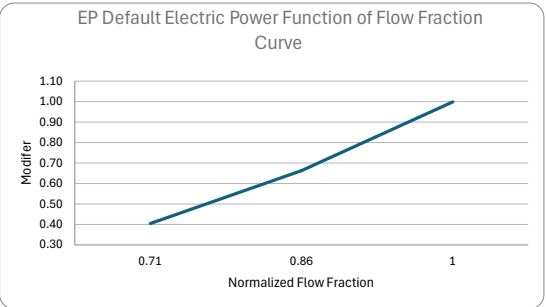
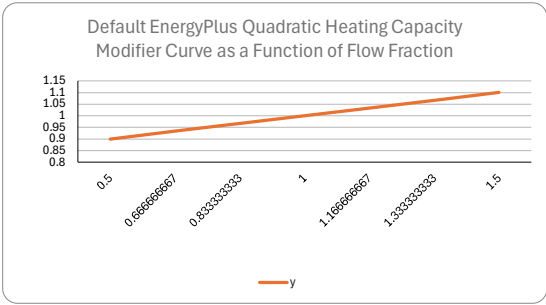
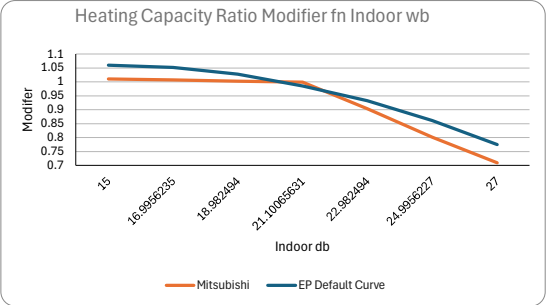
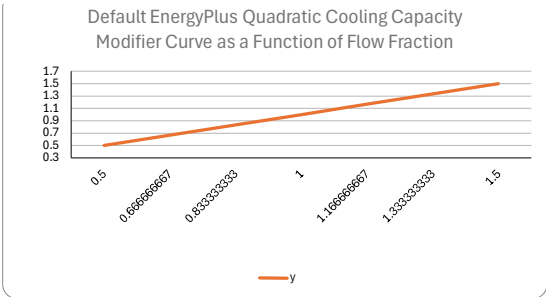
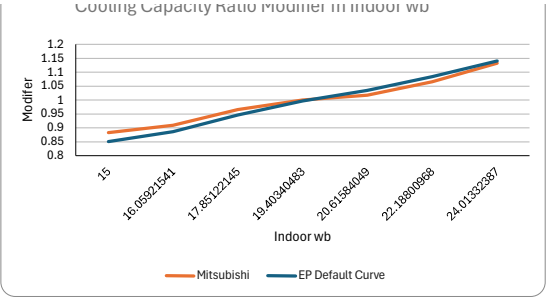
Low - Mid - High.....22 - 24 - 28 dB(A)

* Cooling / Heating capacity indicated at the maximum value at operation under the following conditions:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB, Outdoor 95° F (35° C) DB
Heating | Indoor: 70° F (21° C) DB, Outdoor 47° F (8° C) DB / 43° F (6° C) WB

Notes:



Specifications are subject to change without notice.
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Mitsubishi PEFY_P30NMAU-E5 DUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	!- Outdoor Air Flow Rate During Cooling Operation {m3/s} !- Outdoor Air Flow Rate During Heating Operation {m3/s} !- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure is assumed to be factory setting of equipment and maximum airflow capability. Actual ducting configuration may be less. Consult the design documents, engineer, or testing and balance report for actual pressure.	OS:Fan:SystemModel !- Design Maximum Air Flow Rate {m3/s} !- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total cooling capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Cooling:DX:VariableRefrigerantFlow !- Rated Air Flow Rate {m3/s} !- Rated Total Cooling Capacity {W}
4	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow !- Rated Air Flow Rate {m3/s} !- Rated Total Heating Capacity {W}
5	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	!- Speed Control Method

CITYMULTI®

PEFY-P30NMAU-E5
30,000 BTU/H MEDIUM STATIC DUCTED



Job Name:

System Reference:

Date:

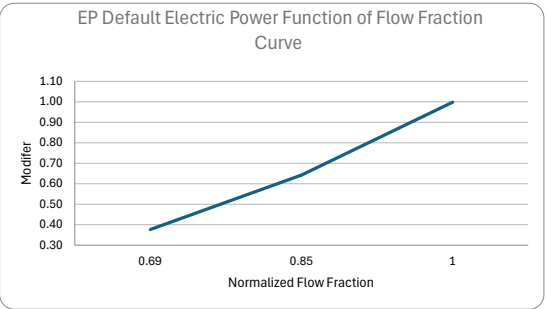
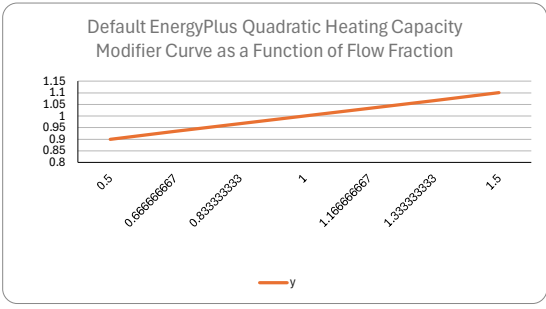
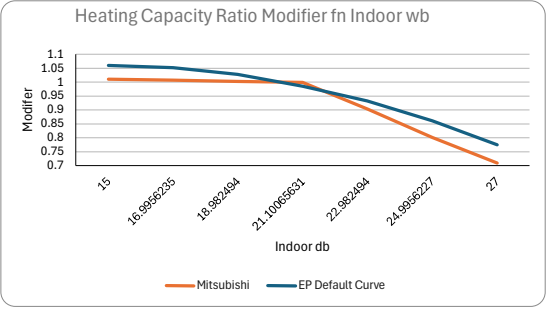
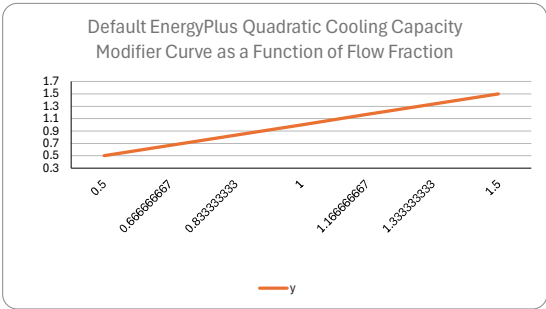
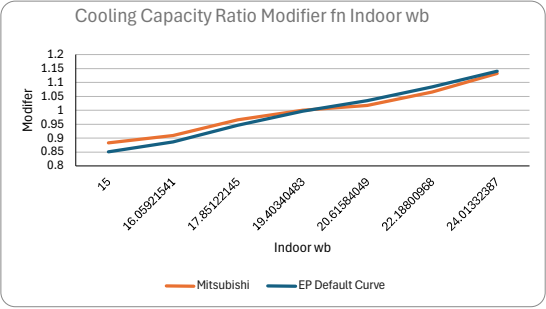


GENERAL FEATURES

- Dual set point functionality
- Multiple fan speed settings
- Auto fan mode
- 9-7/8" (250mm) high for low ceiling heights
- Built-in condensate lift; lifts to 27-9/16" (700 mm)
- Ducted fan coil supporting multiple configurations for flexible installation

Specifications		System	
Unit Type		PEFY-P30NMAU-E5	
Cooling capacity (Nominal)	BTU/H	30,000	
Heating capacity (Nominal)	BTU/H	34,000	
Power source	Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz	
Power Consumption	Cooling kW	0.222	
	Heating kW	0.22	
Current	Cooling A	2.01/1.82	
	Heating A	2.01/1.82	
MCA	A	4.23	
Maximum Overcurrent Protection (MOCP)	A	15	
External finish		Galvanized steel sheet	
External Dimensions	In. [mm]	55-1/8 x 28-7/8 x 9-7/8 [1,400 x 732 x 250]	
Net weight	Lbs [kg]	84 [38]	
Heat exchanger		Cross fin (Aluminum fin and copper tube)	
	Type x quantity	Sirocco fan x 3	
	External Static pressure	0.14, 0.2, 0.28, 0.4, 0.6 factory set to 0.2 in. WG	
	Airflow rate	CFM	883-1,077-1,271
	Motor type		DC Motor
	Motor Output	kW	0.3
	Motor FLA	A	3.4
Sound pressure level (Measured in anechoic room)		dB(A)	35-39-43
Air filter			PP Honeycomb fabric
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Braze
	Gas (Low Pressure)	In. [mm]	5/8 [15.88] Braze
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB





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Mitsubishi PKFY-P30NKMU-E2R1_TH NONDUCTED VRF-TU,- Name

Energy Modeling Assumptions and Comments		Applicable Field
1	Outdoor air flow is set to 0. There are not connections for outdoor/ventilation air. Keep in mind coil inlet (return air) temperature should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total cooling capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Cooling:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Cooling Capacity {W}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®**PKFY-P30NKMU-E2R1.TH**
30,000 BTU/H WALL MOUNT

Job Name:

System Reference:

Date:

GENERAL FEATURES

- Dual set point functionality
- Compact, lightweight, flat-white, flat-panel, modern design
- Quiet operation
- Multiple fan speed settings
- Easily removed intake grille filter for cleaning
- Back and right-side wiring take-out
- Wireless receiver on board

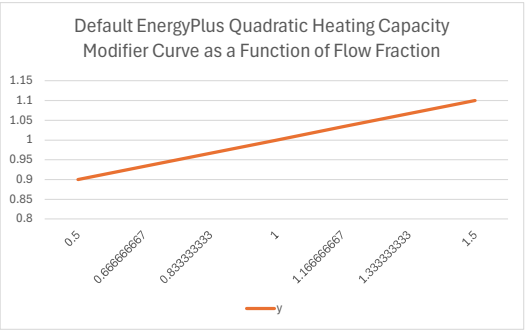
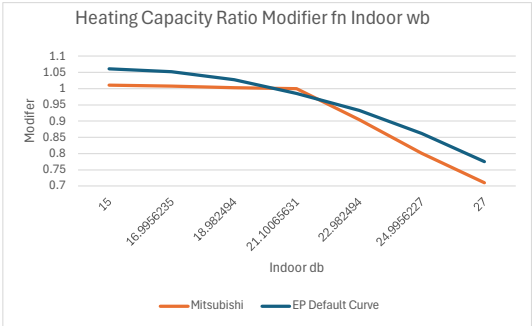
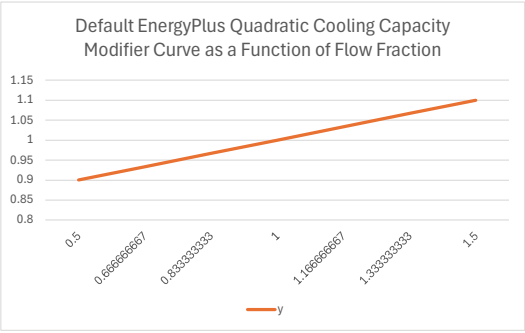
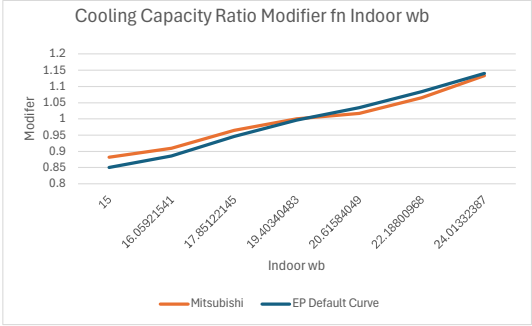


Specifications		System
Unit Type		PKFY-P30NKMU-E2R1.TH
Cooling capacity (Nominal) ¹		BTU/H 30,000
Heating capacity (Nominal) ¹		BTU/H 34,000
Power source		Voltage, Phase, Hertz 208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW 0.07
	Heating	kW 0.07
Current	Cooling	A 0.5
	Heating	A 0.5
MCA		A 0.63
Maximum Overcurrent Protection (MOCP)		A 15
External finish		Plastic, MUNSELL (1.0Y 9.2/0.2)
External Dimensions		In. [mm] 46-1/16 x 11-5/8 x 14-3/8 [1,170 x 295 x 365]
Net weight		Lbs [kg] 46 [21]
Heat exchanger		Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity	Line flow fan x 1
	Airflow rate	CFM 710-850
	Motor type	DC motor
	Motor Output	kW .056
Sound pressure level (Measured in anechoic room)		dB(A) 43-49
Air filter		PP honeycomb
Refrigerant		Type R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm] 3/8 [9.52] Flare
	Gas (Low Pressure)	In. [mm] 5/8 [15.88] Flare
Diameter of drain pipe		In. [mm] 1/2 [12.7]

NOTES:Cooling | Indoor: 81° F (27° C) DB / 68° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Specifications are subject to change without notice.

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Mitsubishi PLFY_P05NFMU_ER1_TH NONDUCTED VRF-TU, I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI[®]**PLFY-P05NFMU-ER1.TH**
5,000 BTU/H 22" X 22" 4-WAY CEILING CASSETTE



Job Name:
System Reference:

Date:



GENERAL FEATURES

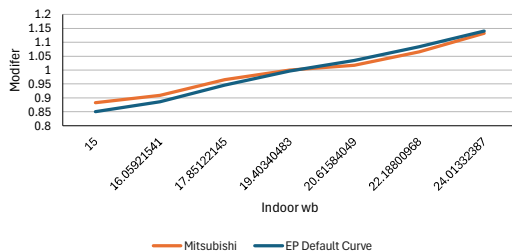
- Square edge, sleek design
- 3D i-see Sensor™ available as an option
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Individual vane settings
- 2' x 2' size matches size of many ceiling tiles
- Corner-pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33" of lift
- Ventilation air intake supported

*Requires a PAR-41MAAU controller

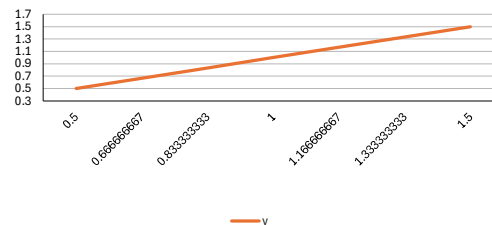
Specifications		Unit Type	System
			PLFY-P05NFMU-ER1.TH
Cooling capacity (Nominal)		BTU/H	5,000
Heating capacity (Nominal)		BTU/H	5,600
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.02
	Heating	kW	0.02
Current	Cooling	A	0.19
	Heating	A	0.14
MCA		A	0.24
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	22-7/16 x 22-7/16 x 8-3/16 (570 x 570 x 208)
Net weight		Lbs (kg)	28.9 (13.1)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
	Type x quantity		Turbo fan x 1
Fan	Airflow rate	CFM	230-265-280
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.19
Sound pressure level (Measured in anechoic room)		dB(A)	26-28-30
Air filter			PP honeycomb fabric (long life type)
Refrigerant	Type		R410A
	Liquid (High Pressure)	In. (mm)	1/4 (6.35) Flare
Diameter of refrigerant pipe (O.D.)	Gas (Low Pressure)	In. (mm)	1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

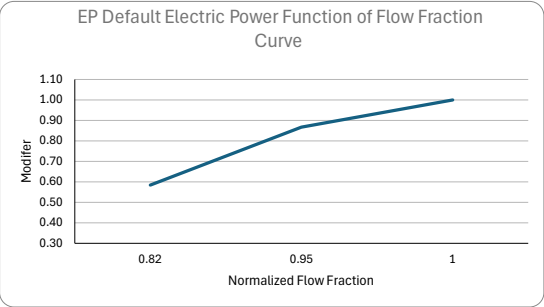
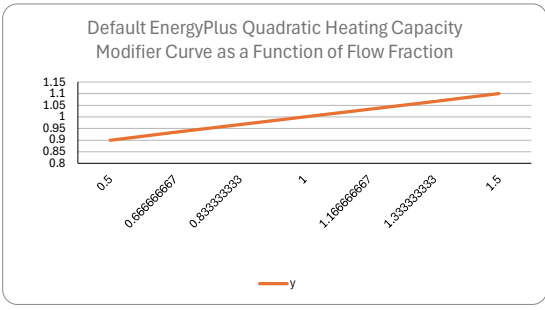
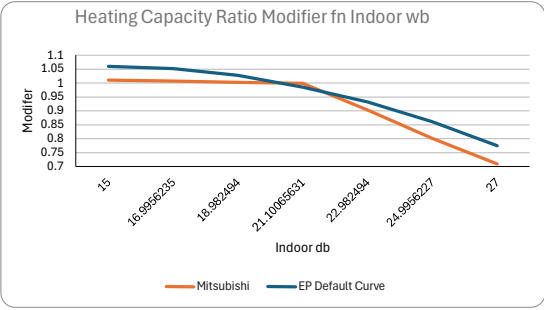
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_P08NFMU_ER1_TH NONDUCTED VRF-TU,-I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI[®]
PLFY-P08NFMU-ER1.TH
8,000 BTU/H 22" X 22" 4-WAY CEILING CASSETTE



Job Name:
System Reference:
Date:



GENERAL FEATURES

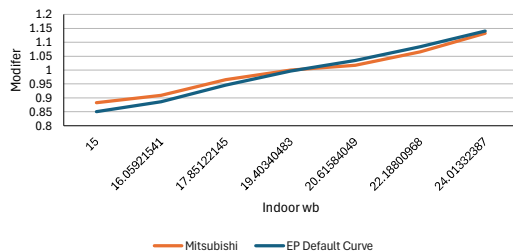
- Square edge, sleek design
- 3D i-see Sensor™ available as an option
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Individual vane settings
- 2' x 2' size matches size of many ceiling tiles
- Corner-pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33" of lift
- Ventilation air intake supported

*Requires a PAR-41MAU controller

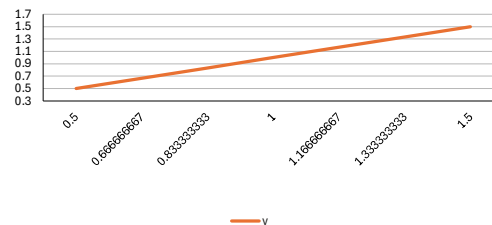
Specifications		System	
Unit Type		PLFY-P08NFMU-ER1.TH	
Cooling capacity (Nominal) ¹		BTU/H	8,000
Heating capacity (Nominal) ¹		BTU/H	8,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.02
	Heating	kW	0.02
Current	Cooling	A	22
	Heating	A	0.17
MCA		A	0.28
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	22-7/16 x 22-7/16 x 8-3/16 (570 x 570 x 208)
Net weight		Lbs (kg)	28.9 (13.1)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	230-280-315
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.22
Sound pressure level (Measured in anechoic room)		dB(A)	26-30-33
Air filter			PP honeycomb fabric (long life type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)	1/4 (6.35) Flare
	Gas (Low Pressure)	In. (mm)	1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

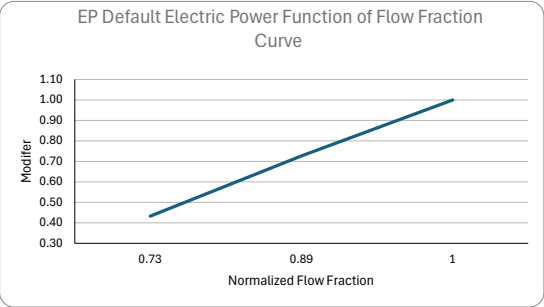
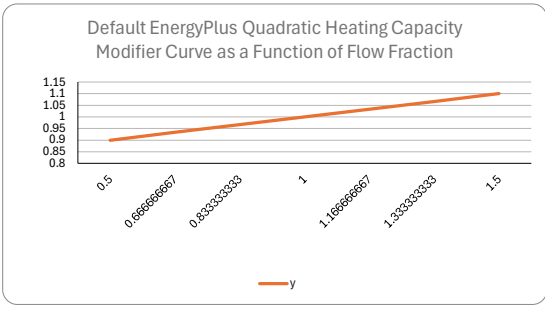
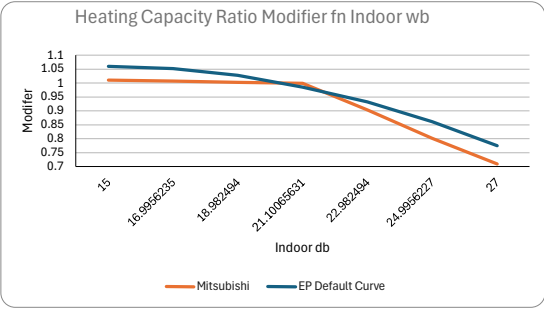
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_P12NFMU_ER1_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI™

PLFY-P12NFMU-ER1.TH
12,000 BTU/H 22" X 22" 4-WAY CEILING CASSETTE



Job Name: _____ Date: _____

System Reference: _____



GENERAL FEATURES

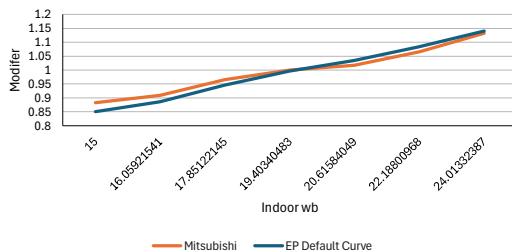
- Square edge, sleek design
- 3D i-see Sensor™ available as an option
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Individual vane settings
- 2' x 2' size matches size of many ceiling tiles
- Corner-pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33" of lift
- Ventilation air intake supported

*Requires a PAR-41MAAU controller

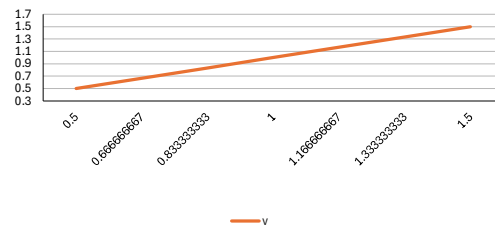
Specifications		Unit Type	System
		Unit Type	PLFY-P12NFMU-ER1.TH
Cooling capacity (Nominal)*		BTU/H	12,000
Heating capacity (Nominal)*		BTU/H	13,500
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.02
	Heating	kW	0.02
Current	Cooling	A	0.23
	Heating	A	0.18
MCA		A	0.29
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	22-7/16 x 22-7/16 x 8-3/16 (570 x 570 x 208)
Net weight		Lbs (kg)	31.3 (14.2)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	245-280-335
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.23
Sound pressure level (Measured in anechoic room)		dB(A)	26-30-34
Air filter			PP honeycomb fabric (long life type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)	1/4 (6.35) Flare
	Gas (Low Pressure)	In. (mm)	1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

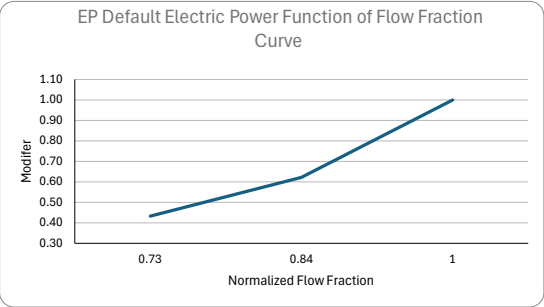
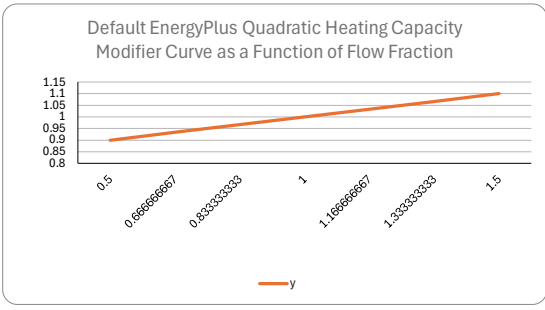
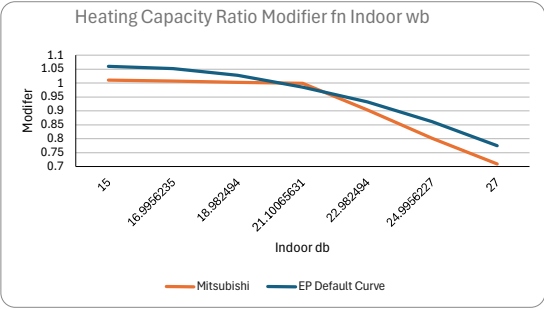
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_P15NFMU_ER1_TH NONDUCTED VRF-TU,-I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI™

PLFY-P15NFMU-ER1.TH
15,000 BTU/H 22" X 22" 4-WAY CEILING CASSETTE



Job Name: _____ Date: _____

System Reference: _____



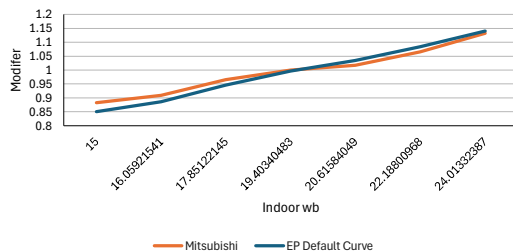
GENERAL FEATURES

- Square edge, sleek design
- 3D i-see Sensor™ available as an option
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Individual vane settings
- 2' x 2' size matches size of many ceiling tiles
- Corner-pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33" of lift
- Ventilation air intake supported
- Requires a PAR-41MAAU controller

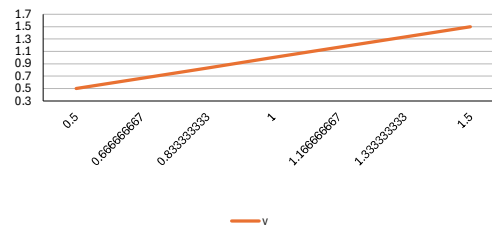
Specifications		Unit Type	System
Cooling capacity (Nominal)*		BTU/H	15,000
Heating capacity (Nominal)*		BTU/H	17,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.03
	Heating	kW	0.03
Current	Cooling	A	0.28
	Heating	A	0.23
MCA		A	0.35
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	22-7/16 x 22-7/16 x 8-3/16 (570 x 570 x 208)
Net weight		Lbs (kg)	31.3 (14.2)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	265-315-390
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.28
Sound pressure level (Measured in anechoic room)		dB(A)	28-33-39
Air filter			PP honeycomb fabric (long life type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)	1/4 (6.35) Flare
	Gas (Low Pressure)	In. (mm)	1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

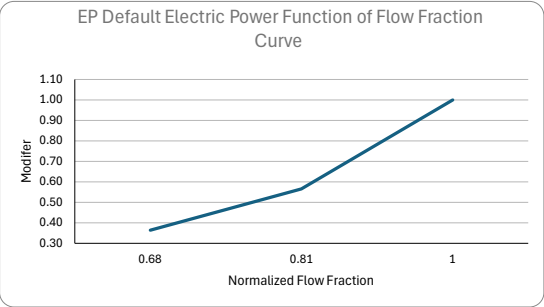
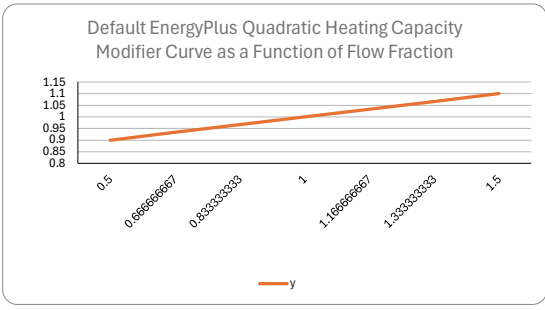
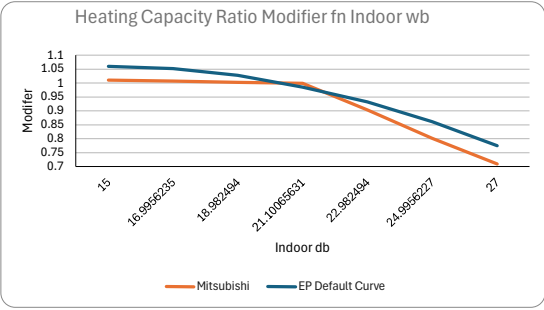
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_P18NFMU_ER1_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI[®]
PLFY-P18NFMU-ER1.TH
18,000 BTU/H 22" X 22" 4-WAY CEILING CASSETTE

Job Name:
System Reference:

Date:

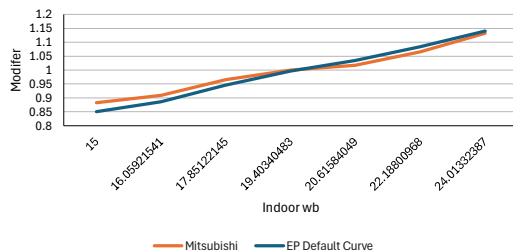
GENERAL FEATURES

- Square edge, sleek design
- 3D i-see Sensor™ available as an option
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Individual vane settings
- 2" x 2" size matches size of many ceiling tiles
- Corner-pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33" of lift
- Ventilation air intake supported
- Requires a PAR-41MAAU controller

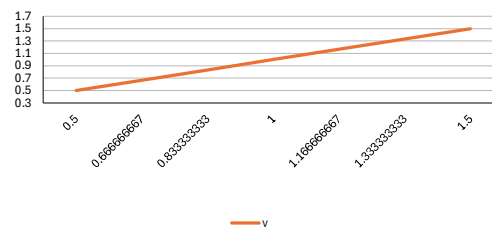
Specifications		Unit Type	System
			PLFY-P18NFMU-ER1.TH
Cooling capacity (Nominal)*		BTU/H	18,000
Heating capacity (Nominal)*		BTU/H	20,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.04
	Heating	kW	0.04
Current	Cooling	A	0.4
	Heating	A	0.35
MCA		A	0.5
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	22-7/16 x 22-7/16 x 8-3/16 [570 x 570 x 208]
Net weight		Lbs [kg]	31.3 [14.2]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
	Type x quantity		Turbo fan x 1
Fan	Airflow rate	CFM	315-390-460
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.4
Sound pressure level (Measured in anechoic room)		dB(A)	33-39-43
Air filter			PP honeycomb fabric (long life type)
Refrigerant	Type		R410A
	Liquid (High Pressure)	In. [mm]	1/4 [6.35] Flare
Diameter of refrigerant pipe (O.D.)	Gas (Low Pressure)	In. [mm]	1/2 [12.7] Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

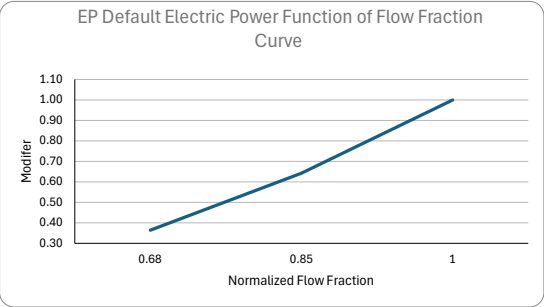
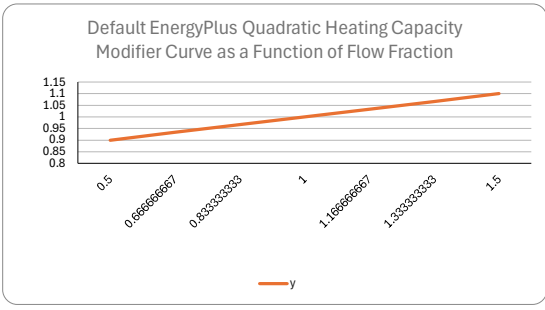
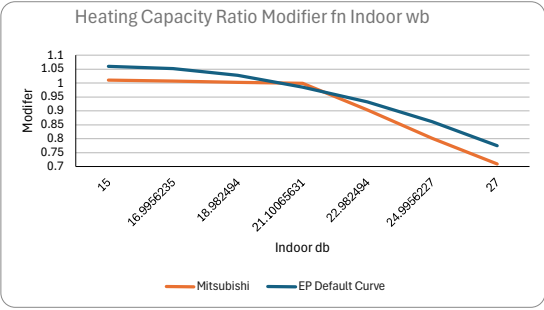
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP06NEMU1_E_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI[®]
PLFY-EP06NEMU1-E.TH
6,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE

Job Name:
System Reference:

Date:



GENERAL FEATURES

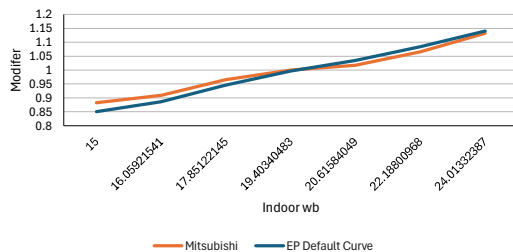
- Square edge, sleek design
- 3D turbo fan enabling increased airflow
- Built-in 3D i-see Sensor**
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Corner pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
- Ventilation air intake supported

**3D i-See sensor* settings requires the PAR-41MAAU controller

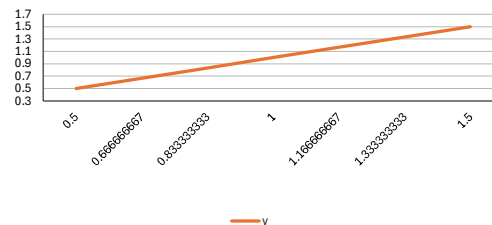
Specifications		Unit	Type	System
Cooling capacity (Nominal)		BTU/H		6,000
Heating capacity (Nominal)		BTU/H		6,700
Power source		Voltage, Phase, Hertz		208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW		0.02
	Heating	kW		0.02
Current	Cooling	A		0.2
	Heating	A		0.1
MCA		A		0.24
Maximum Overcurrent Protection (MOCP)		A		15
External finish				Galvanized steel sheet
External Dimensions		In. (mm)		33-3/32 x 33-3/32 x 19-3/16 (840 x 840 x 256)
Net weight		Lbs (kg)		46 (21)
Heat exchanger				Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity			Turbo fan x 1
	Airflow rate	CFM		300-424-459-494
	Motor type			DC motor
	Motor Output	kW		0.05
	Motor FLA	A		0.19
Sound pressure level (Measured in anechoic room)		dB(A)		19-23-25-27
Air filter				PP honeycomb (long life filter, anti-bacterial type)
Refrigerant	Type			R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)		1/4 (6.35) Flare
	Gas (Low Pressure)	In. (mm)		1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)		O.D. 1-1/4 (32)

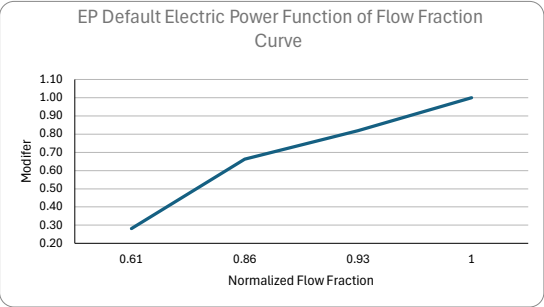
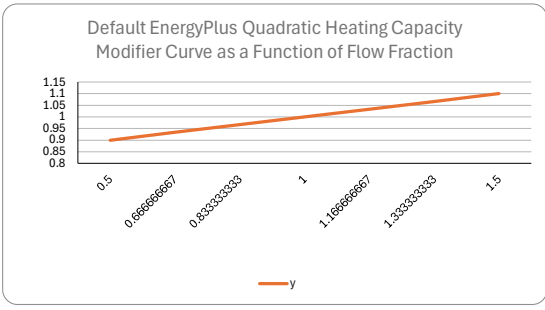
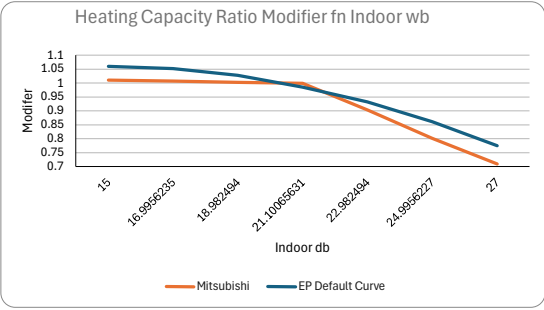
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 86° F (30° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP08NEMU1_E_TH NONDUCTED VRF-TU, I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®

PLFY-EP08NEMU1-E.TH
8,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTEJob Name:
System Reference:

Date:

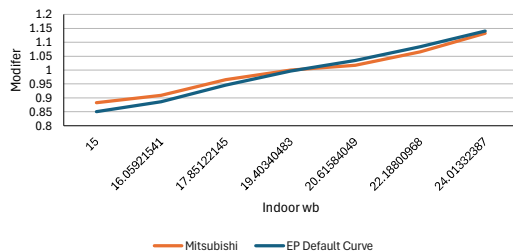
**GENERAL FEATURES**

- Square edge, sleek design
- 3D turbo fan enabling increased airflow
- Built-in 3D i-see Sensor®*
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Corner pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
- Ventilation air intake supported
- **3D i-See sensor® settings requires the PAR-41MAAU controller

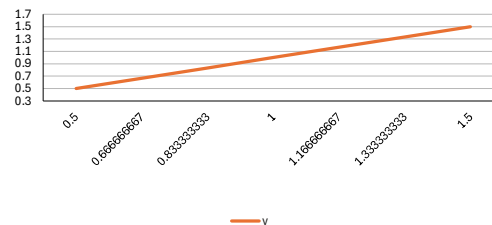
Specifications		Unit Type	System
Cooling capacity (Nominal)		BTU/H	8,000
Heating capacity (Nominal)		BTU/H	9,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.02
	Heating	kW	0.02
Current	Cooling	A	0.3
	Heating	A	0.3
MCA		A	0.39
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	33-3/32 x 33-3/32 x 10-3/16 (840 x 840 x 258)
Net weight		Lbs (kg)	46 (21)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	494-530-565-600
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.31
Sound pressure level (Measured in anechoic room)		dB(A)	27-29-30-31
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant		Type	R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)	1/4 (8.35) Flare
	Gas (Low Pressure)	In. (mm)	1/2 (12.7) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

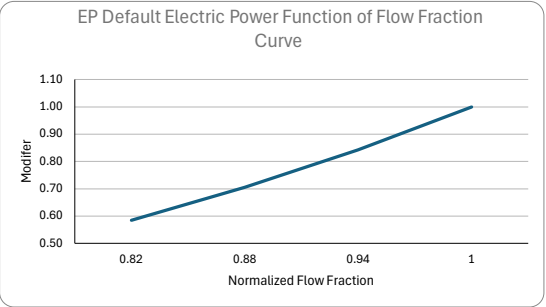
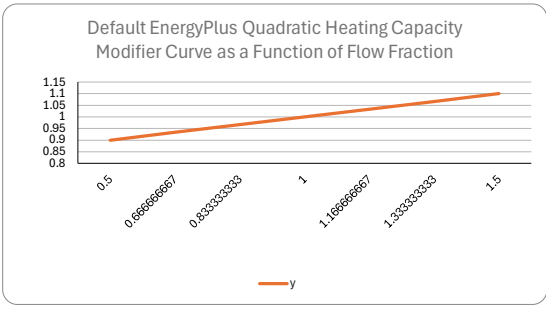
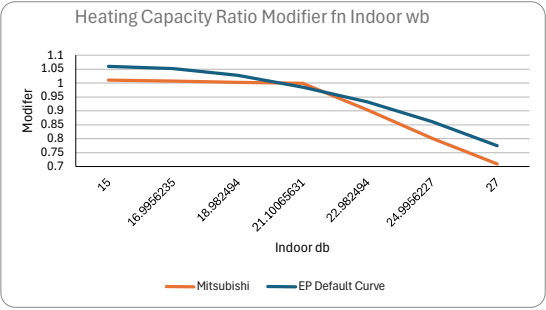
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP12NEMU1_E_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI® **PLFY-EP12NEMU1-E.TH**
12,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE



Job Name: _____ Date: _____
System Reference: _____

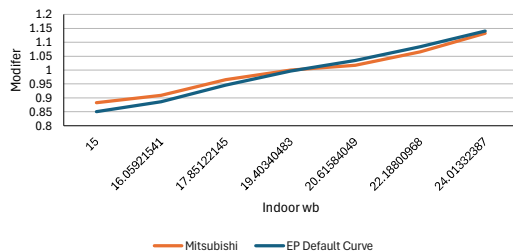
**GENERAL FEATURES**

- Square edge, sleek design
 - 3D turbo fan enabling increased airflow
 - Built-in 3D i-see Sensor™
 - Improved installation features*
 - Occupancy detection*
 - Energy saving features*
 - Improved occupant comfort
 - Four fan speed settings including auto-fan
 - Corner pocket design for simplified installation
 - Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
 - Ventilation air intake supported
- *3D i-See sensor™ settings requires the PAR-41MAAU controller

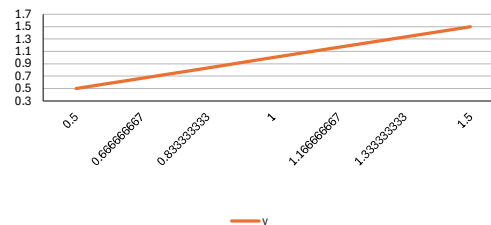
Specifications		System	
Unit Type		PLFY-EP12NEMU1-E.TH	
Cooling capacity (Nominal)*		BTU/H	12,000
Heating capacity (Nominal)*		BTU/H	13,500
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.02
	Heating	kW	0.02
Current	Cooling	A	0.3
	Heating	A	0.3
MCA		A	0.39
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	33-3/32 x 33-3/32 x 10-3/16 (840 x 840 x 258)
Net weight		Lbs [kg]	46 [21]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	494-530-565-565
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.31
Sound pressure level (Measured in anechoic room)		dB(A)	27-29-30-31
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	1/4 (6.35) Flare
	Gas (Low Pressure)	In. [mm]	1/2 (12.7) Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 (32)

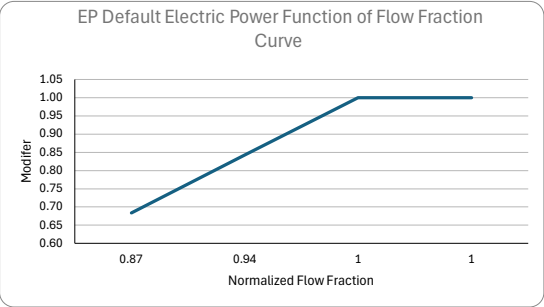
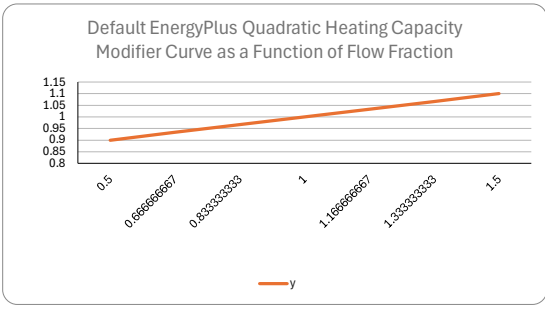
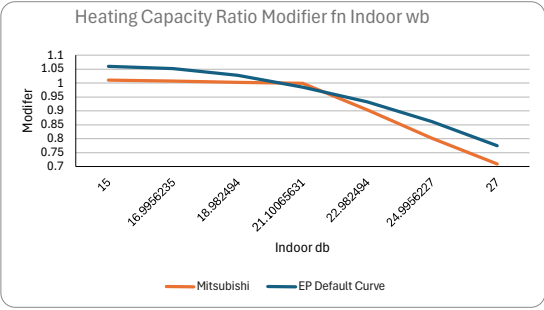
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB, Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB, Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP15NEMU1_E_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®

PLFY-EP15NEMU1-E.TH
15,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE



Job Name:
System Reference:
Date:



GENERAL FEATURES

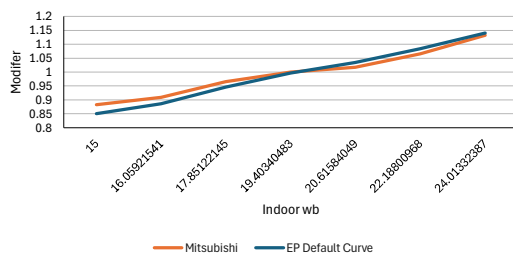
- Square edge, sleek design
- 3D turbo fan enabling increased airflow
- Built-in 3D i-see Sensor**
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Corner pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
- Ventilation air intake supported

3D i-See sensor settings requires the PAR-41MAAU controller

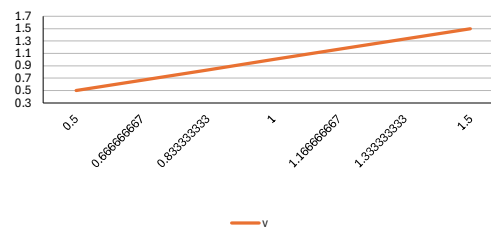
Specifications		System	
Unit Type		PLFY-EP15NEMU1-E.TH	
Cooling capacity (Nominal)		BTU/H	15,000
Heating capacity (Nominal)		BTU/H	17,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.03
	Heating	kW	0.02
Current	Cooling	A	0.3
	Heating	A	0.3
MCA		A	0.39
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	33-3/32 x 33-3/32 x 10-3/16 [840 x 840 x 258]
Net weight		Lbs [kg]	46 [21]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
	Type x quantity		Turbo fan x 1
Fan	Airflow rate	CFM	530-547-565-600
	Motor type		DC motor
	Motor Output	kW	0.05
	Motor FLA	A	0.31
Sound pressure level (Measured in anechoic room)		dB(A)	28-29-30-31
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	1/4 [6.35] Flare
	Gas (Low Pressure)	In. [mm]	1/2 [12.7] Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

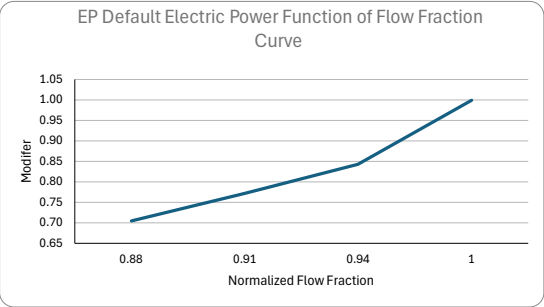
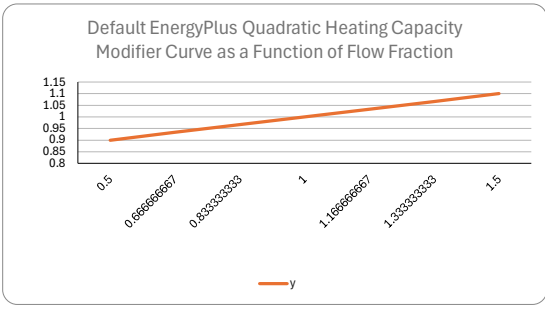
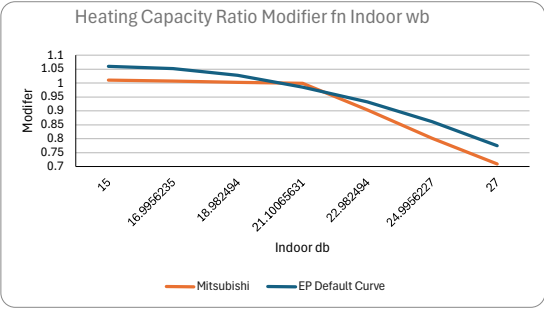
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP18NEMU1_E_TH NONDUCTED VRF-TU, I- Name

Energy Modeling Assumptions and Comments		Applicable Field
1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS: Fan: SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS: Coil: Heating: DX: VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI® **PLFY-EP18NEMU1-E.TH**
18,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE



Job Name: _____ Date: _____
System Reference: _____

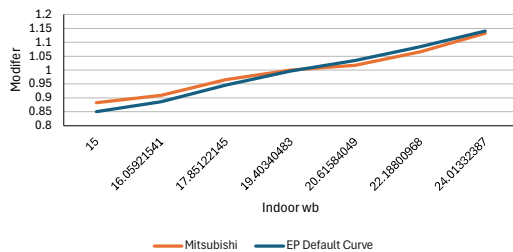
**GENERAL FEATURES**

- Square edge, sleek design
 - 3D turbo fan enabling increased airflow
 - Built-in 3D i-see Sensor®*
 - Improved installation features*
 - Occupancy detection*
 - Energy saving features*
 - Improved occupant comfort
 - Four fan speed settings including auto-fan
 - Corner pocket design for simplified installation
 - Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
 - Ventilation air intake supported
- *3D i-See sensor® settings requires the PAR-41MAAU controller

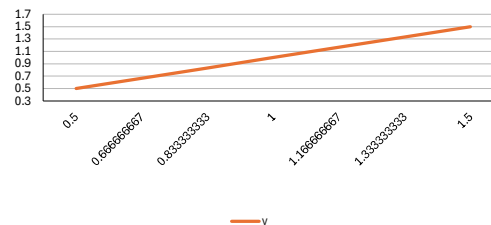
Specifications		Unit Type	System
			PLFY-EP18NEMU1-E.TH
Cooling capacity (Nominal)		BTU/H	18,000
Heating capacity (Nominal)		BTU/H	20,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.04
	Heating	kW	0.04
Current	Cooling	A	0.4
	Heating	A	0.4
MCA		A	0.54
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	33-3/32 x 33-3/32 x 11-3/4 [840 x 840 x 258]
Net weight		Lbs [kg]	55 [25]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	636-671-742-812
	Motor type		DC motor
	Motor Output	kW	0.12
Sound pressure level (Measured in anechoic room)	Motor FLA	A	0.43
		dB(A)	28-30-32-34
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant		Type	R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	1/4 [6.35] Flare
	Gas (Low Pressure)	In. [mm]	1/2 [12.7] Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

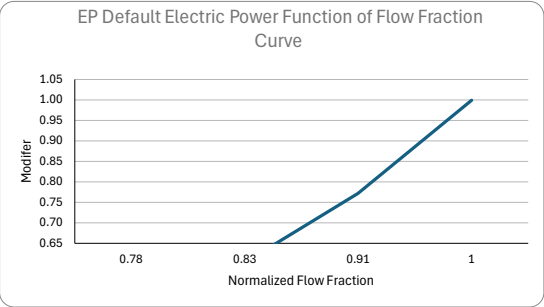
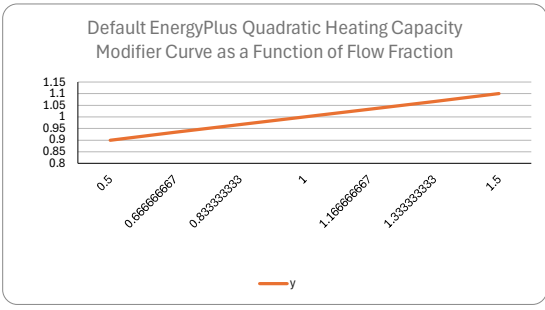
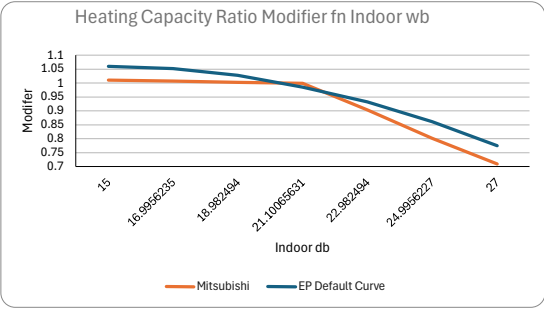
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP24NEMU1_E_TH NONDUCTED VRF-TU,-I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®**PLFY-EP24NEMU1-E.TH**
24,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE

Job Name:

System Reference:

Date:

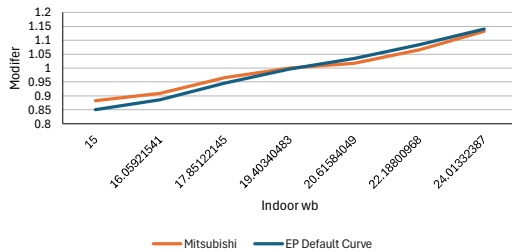
**GENERAL FEATURES**

- Square edge, sleek design
 - 3D turbo fan enabling increased airflow
 - Built-in 3D i-see Sensor**
 - Improved installation features*
 - Occupancy detection*
 - Energy saving features*
 - Improved occupant comfort
 - Four fan speed settings including auto-fan
 - Corner pocket design for simplified installation
 - Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
 - Ventilation air intake supported
- **3D i-See sensor** settings requires the PAR-41MAAU controller

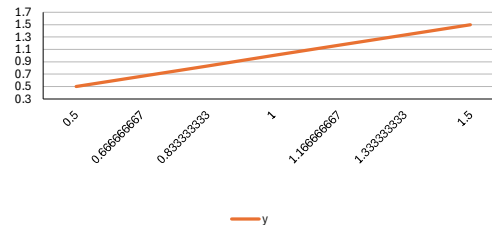
Specifications		Unit Type	System
Cooling capacity (Nominal)		BTU/H	PLFY-EP24NEMU1-E.TH
Heating capacity (Nominal)		BTU/H	24,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.04
	Heating	kW	0.04
	Cooling	A	0.4
	Heating	A	0.4
MCA		A	0.54
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. (mm)	33-3/32 x 33-3/32 x 11-3/4 (840 x 840 x 298)
Net weight		Lbs (kg)	55 (25)
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	636-671-742-812
	Motor type		DC motor
	Motor Output	kW	0.12
Sound pressure level (Measured in anechoic room)	Motor FLA	A	0.43
		dB(A)	28-30-32-34
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant		Type	R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. (mm)	3/8 (9.52) Flare
	Gas (Low Pressure)	In. (mm)	5/8 (15.88) Flare
Diameter of drain pipe		In. (mm)	O.D. 1-1/4 (32)

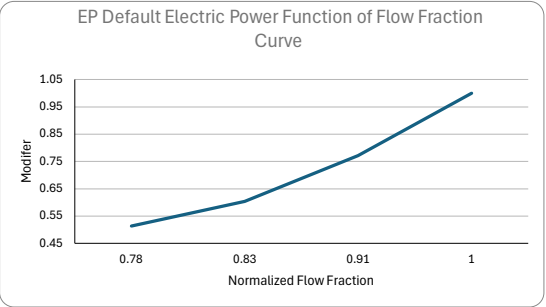
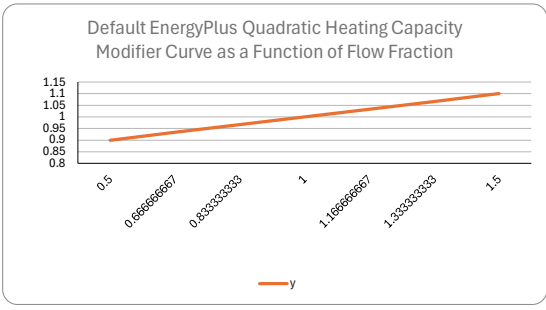
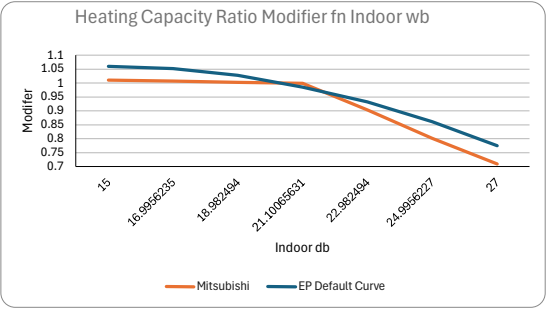
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP30NEMU1_E_TH NONDUCTED VRF-TU, I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS: Fan: SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS: Coil: Heating: DX: VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®

PLFY-EP30NEMU1-E.TH
30,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE



Job Name:

System Reference:

Date:

**GENERAL FEATURES**

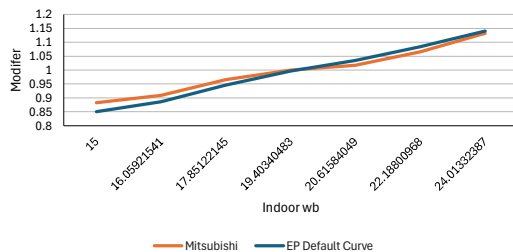
- Square edge, sleek design
- 3D turbo fan enabling increased airflow
- Built-in 3D i-see Sensor®
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Corner pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
- Ventilation air intake supported

**3D i-See sensor® settings requires the PAR-41MAAU controller

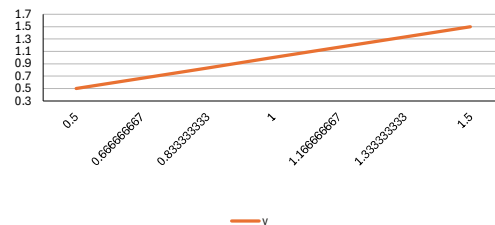
Specifications		Unit Type	System
			PLFY-EP30NEMU1-E.TH
Cooling capacity (Nominal)		BTU/H	30,000
Heating capacity (Nominal)		BTU/H	34,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.04
	Heating	kW	0.04
Current	Cooling	A	0.5
	Heating	A	0.4
MCA		A	0.57
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	33-3/32 x 33-3/32 x 11-3/4 [840 x 840 x 298]
Net weight		Lbs [kg]	55 [25]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity		Turbo fan x 1
	Airflow rate	CFM	636~706~777~812
	Motor type		DC motor
	Motor Output	kW	0.12
Sound pressure level (Measured in anechoic room)	Motor FLA	A	0.45
		dB(A)	28~31~33~35
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Flare
	Gas (Low Pressure)	In. [mm]	5/8 [15.88] Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

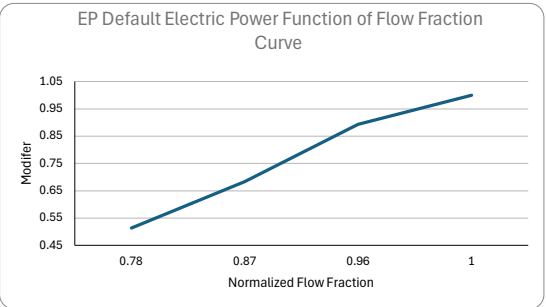
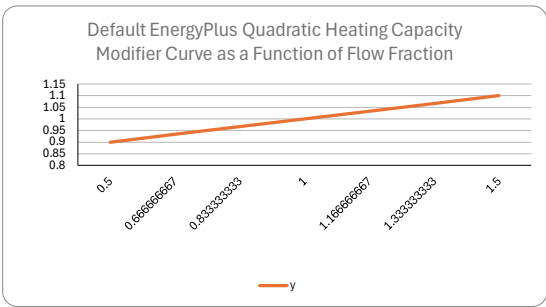
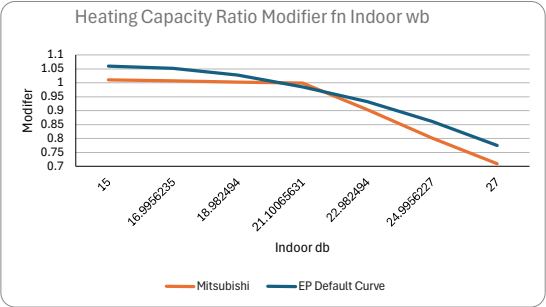
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP36NEMU1_E_TH NONDUCTED VRF-TU,-I- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®

PLFY-EP36NEMU1-E.TH
36,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE



Job Name:
System Reference:
Date:



GENERAL FEATURES

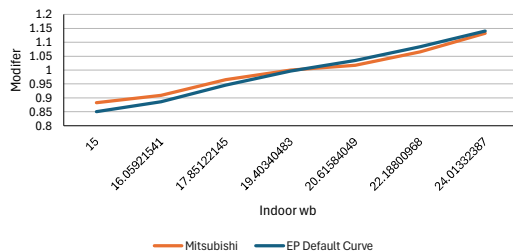
- Square edge, sleek design
- 3D turbo fan enabling increased airflow
- Built-in 3D I-see Sensor**
- Improved installation features*
- Occupancy detection*
- Energy saving features*
- Improved occupant comfort
- Four fan speed settings including auto-fan
- Corner pocket design for simplified installation
- Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
- Ventilation air intake supported

3D I-See sensor settings requires the PAR-41MAAU controller

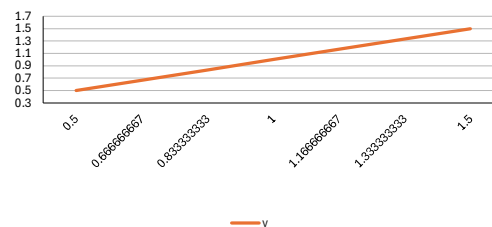
Specifications		System	
Unit Type		PLFY-EP36NEMU1-E.TH	
Cooling capacity (Nominal)		BTU/H	36,000
Heating capacity (Nominal)		BTU/H	40,000
Power source		Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling	kW	0.07
	Heating	kW	0.07
Current	Cooling	A	0.7
	Heating	A	0.7
MCA		A	0.92
Maximum Overcurrent Protection (MOCP)		A	15
External finish			Galvanized steel sheet
External Dimensions		In. [mm]	33-3/32 x 33-3/32 x 11-3/4 [840 x 840 x 298]
Net weight		Lbs [kg]	55 [25]
Heat exchanger			Cross fin (Aluminum fin and copper tube)
	Type x quantity		Turbo fan x 1
Fan	Airflow rate	CFM	777-863-869-1,095
	Motor type		DC motor
	Motor Output	kW	0.12
	Motor FLA	A	0.73
Sound pressure level (Measured in anechoic room)		dB(A)	35-37-39-41
Air filter			PP honeycomb (long life filter, anti-bacterial type)
Refrigerant	Type		R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Flare
	Gas (Low Pressure)	In. [mm]	5/8 [15.88] Flare
Diameter of drain pipe		In. [mm]	O.D. 1-1/4 [32]

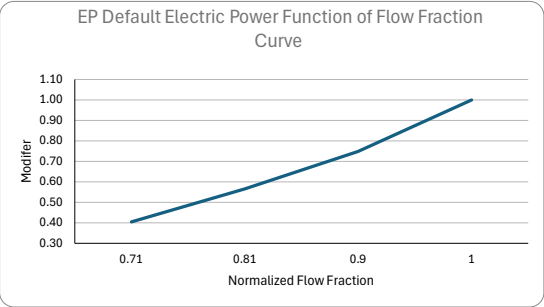
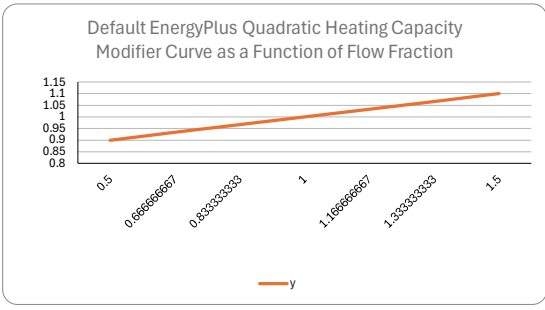
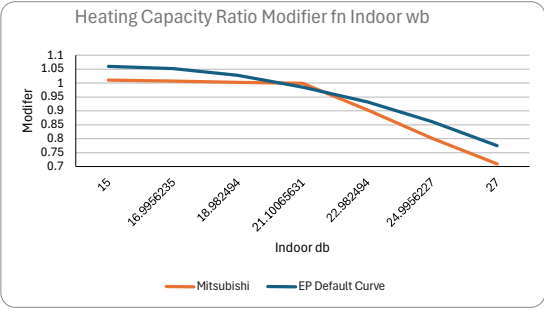
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PLFY_EP48NEMU1_E_TH NONDUCTED VRF-TU,- Name**Energy Modeling Assumptions and Comments****Applicable Field**

1	Outdoor air flow is set to autosize. This field may need to be modified for specific conditions. Outdoor airflow coil inlet temperature (based on mixing with return air) should be within the following mitsubishi limits:	I- Outdoor Air Flow Rate During Cooling Operation {m3/s} I- Outdoor Air Flow Rate During Heating Operation {m3/s} I- Outdoor Air Flow Rate When No Cooling or Heating is Needed {m3/s}
	Cooling:	15-24°C / 59-75.2°F (Wet Bulb)
	Heating:	15-27°C / 59-80.6°F (Dry Bulb)
2	Default static pressure accounts for internal losses only (250Pa). Additional pressure drop may be required if the cassette is connected to outside air ducting. This will also inversely affect supply airflow.	OS:Fan:SystemModel I- Design Maximum Air Flow Rate {m3/s} I- Design Pressure Rise {Pa}
3	These fields may produce a Warning: "Rated air volume flow rate per watt of rated total heating capacity is out of range.". This warning is only a guideline put in place by EnergyPlus. AHRI 1230 does not have these limitations on this range of performance.	OS:Coil:Heating:DX:VariableRefrigerantFlow I- Rated Air Flow Rate {m3/s} I- Rated Total Heating Capacity {W}
4	As of EP version 1.10, EnergyPlus speed control set to discrete operates correctly.	I- Speed Control Method

CITYMULTI®**PLFY-EP48NEMU1-E.TH**
48,000 BTU/H 33" X 33" 4-WAY CEILING CASSETTE

Job Name:

System Reference:

Date:

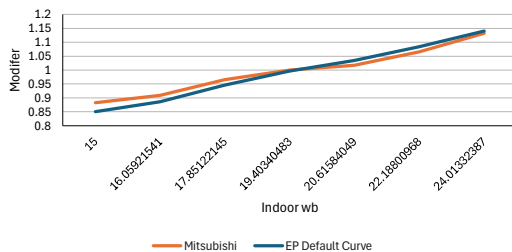
**GENERAL FEATURES**

- Square edge, sleek design
 - 3D turbo fan enabling increased airflow
 - Built-in 3D i-see Sensor**
 - Improved installation features*
 - Occupancy detection*
 - Energy saving features*
 - Improved occupant comfort
 - Four fan speed settings including auto-fan
 - Corner pocket design for simplified installation
 - Built-in condensate lift mechanism designed to provide up to 33-7/16" of lift
 - Ventilation air intake supported
- **3D i-See sensor[®] settings requires the PAR-41MAAU controller

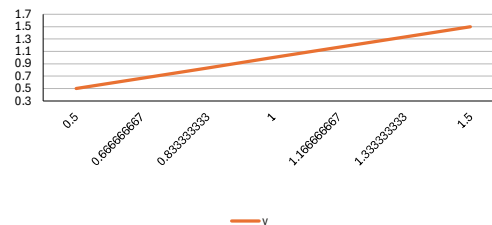
Specifications		Unit	Type	System
Cooling capacity (Nominal) ¹			BTU/H	PLFY-EP48NEMU1-E.TH
Heating capacity (Nominal) ¹			BTU/H	48,000
Power source			Voltage, Phase, Hertz	208/230V, 1-phase, 60 Hz
Power Consumption	Cooling		kW	0.11
	Heating		kW	0.11
Current	Cooling		A	1.0
	Heating		A	1.0
MCA			A	1.27
			A	15
Maximum Overcurrent Protection (MOCP)				
External finish				Galvanized steel sheet
External Dimensions			In. [mm]	33-3/32 x 33-3/32 x 11-3/4 [840 x 840 x 298]
Net weight			Lbs [kg]	55 [25]
Heat exchanger				Cross fin (Aluminum fin and copper tube)
Fan	Type x quantity			Turbo fan x 1
	Airflow rate		CFM	777-954-1,095-1,238
	Motor type			DC motor
	Motor Output		kW	0.12
	Motor FLA		A	1.01
Sound pressure level (Measured in anechoic room)			dB(A)	36-39-42-45
Air filter				PP honeycomb (long life filter, anti-bacterial type)
Refrigerant				R410A
Diameter of refrigerant pipe (O.D.)	Liquid (High Pressure)		In. [mm]	3/8 [9.52] Flare
	Gas (Low Pressure)		In. [mm]	5/8 [15.88] Flare
Diameter of drain pipe			In. [mm]	O.D. 1-1/4 [32]

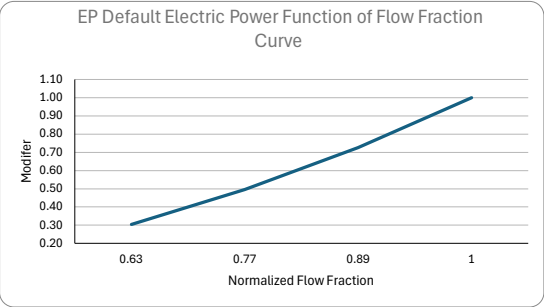
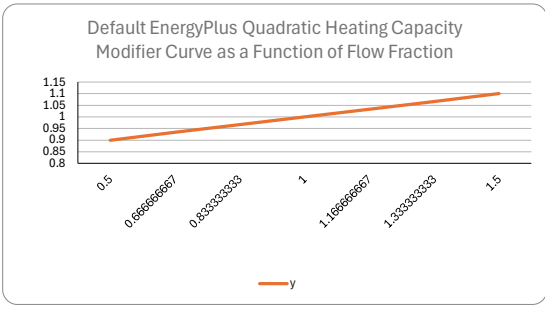
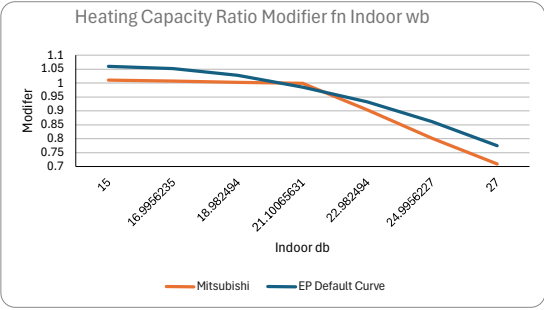
NOTES:
Cooling | Indoor: 81° F (27° C) DB / 66° F (19° C) WB; Outdoor 95° F (35° C) DB
Heating | Indoor: 68° F (20° C) DB; Outdoor 45° F (7° C) DB / 43° F (6° C) WB

Cooling Capacity Ratio Modifier fn Indoor wb



Default EnergyPlus Quadratic Cooling Capacity Modifier Curve as a Function of Flow Fraction







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Mitsubishi PUHY-EP72TNU/YNU-A1 NONDUCTED-VRF-OU,!- Name**Mitsubishi PUHY-EP72TNU/YNU-A1 DUCTED-VRF-OU,!- Name****Mitsubishi PUHY-EP72TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,!- Name****Mitsubishi PUHY-EP72TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU,!- Name****Energy Modeling Assumptions and Comments****Applicable Field**

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated Cooling COP {W/W} !- Rated Heating COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

6-TON PUHY-EP72TNU-A1

Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM**UNIT OPTION**☒ Standard Model.....PUHY-EP72TNU-A1**ACCESSORIES**☐ Big Foot Stand.....for details see Big Foot Stands submittals☐ Header Kit.....for details see Pipe Accessories Submittal☐ Joint Kit.....for details see Pipe Accessories Submittal☐ Low Ambient Kit.....for details see Low Ambient Kit Submittal☐ Panel Heater Kit.....for details see Panel Heater Kit Submittal☐ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PUHY-EP72TNU-A1
Cooling Capacity (Nominal)		BTU/H	72,000
Heating Capacity (Nominal)		BTU/H	80,000
Guaranteed Operating Range	Cooling	°F [°C]	23-126 [-5.0-52.0]
	Heating	°F [°C]	-13-60 [-25.0-15.6]
Extended Operating Range	Heating	°F [°C]	-27.4-60 [-33.0-15.6]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 36-1/4 x 29-3/16 [1,818 x 920 x 740]
Net Weight		Lbs. [kg]	512 [232]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	32.0/29.0
Maximum Overcurrent Protection		A	50/45
Recommended Fuse Size		A	35/30
Recommended Minimum Wire Size	AWG [mm]		8/10 [8.4/5.3]
SCCR	kA		5

Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Braze
	Gas (Low Pressure)	In. [mm]	7/8 [22.2] Braze
Max. Total Refrigerant Line Length		FL	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		FL	541 [165]
Max. Control Wiring Length		FL	1,640 [500]
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity
	Model/Quantity		P04-P72/1.0~18.0
Sound Pressure Levels		dB(A)	55.0/57.0
Sound Power Levels		dB(A)	74.5/76.0
FAN ¹	Type x Quantity		Propeller fan x 1
	Fan Motor Output	kW	0.92
	Airflow Rate	CFM	6,000
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 14.0 lbs + 5.0 oz [6.5 kg]
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		12.2/13.7
	IEER		22.2/27.1
	COP		4.05/4.57

NOTES:

Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.

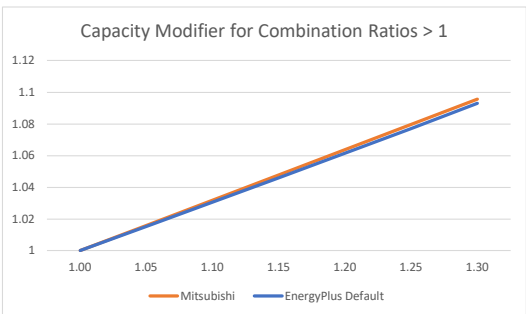
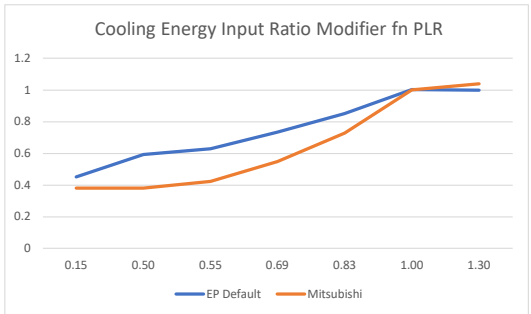
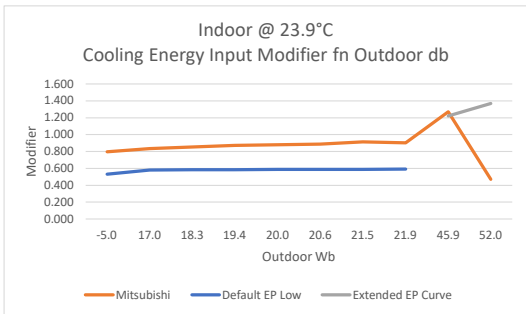
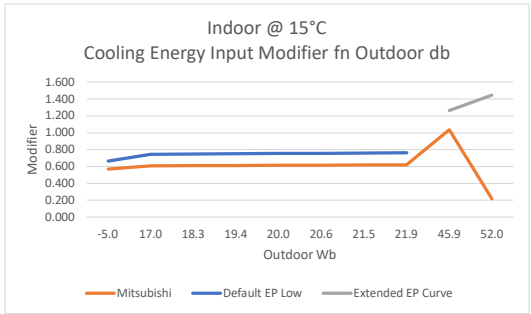
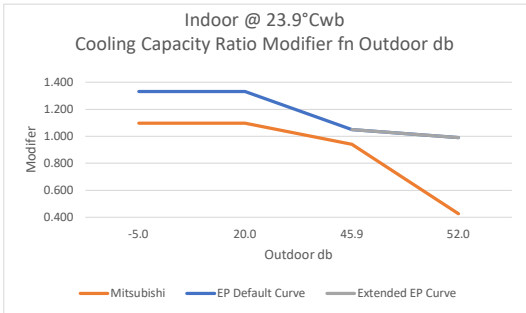
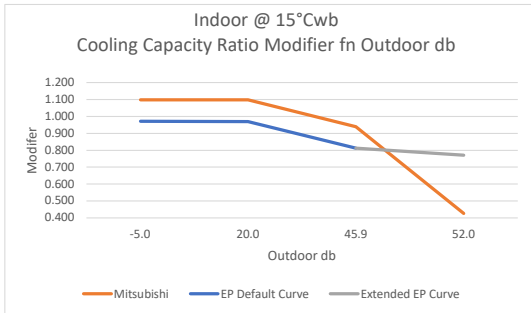
²For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal.

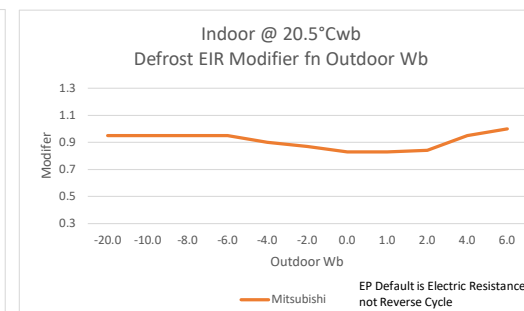
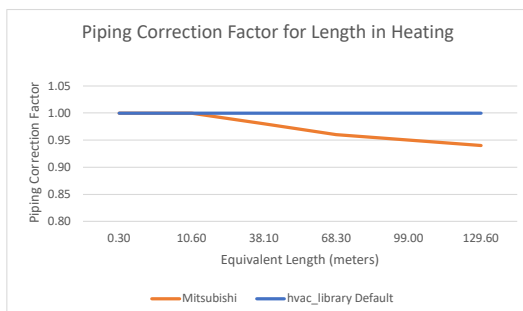
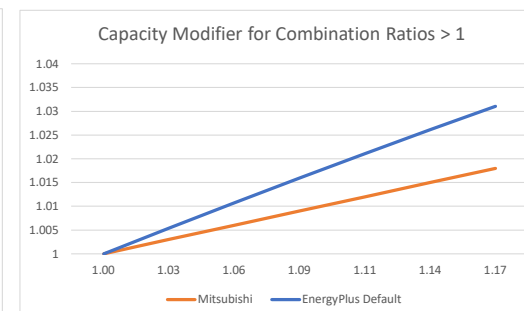
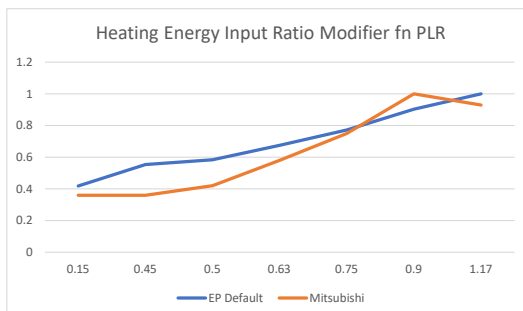
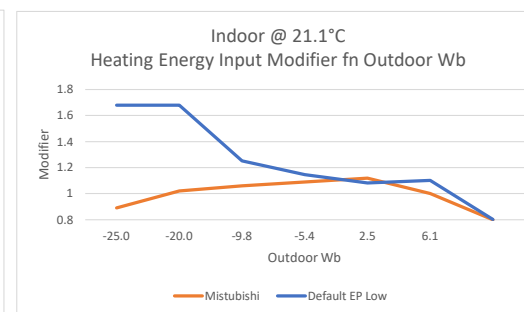
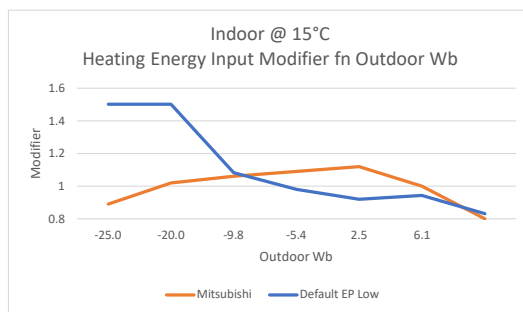
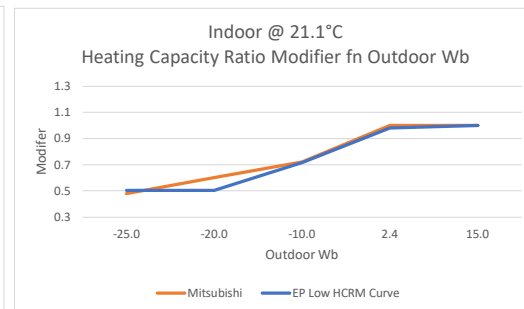
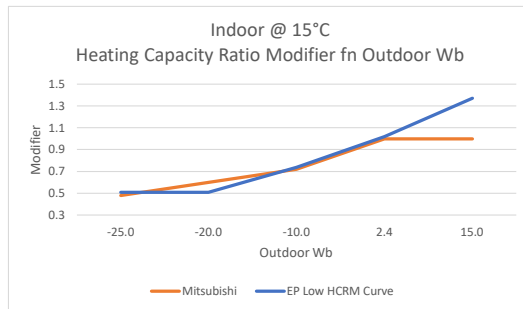
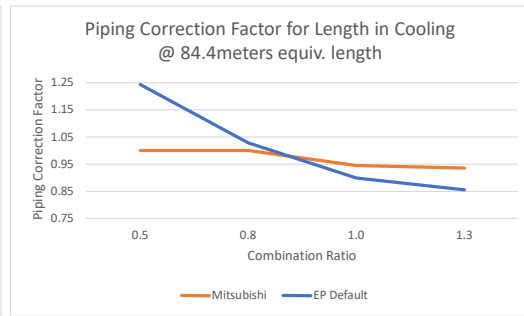
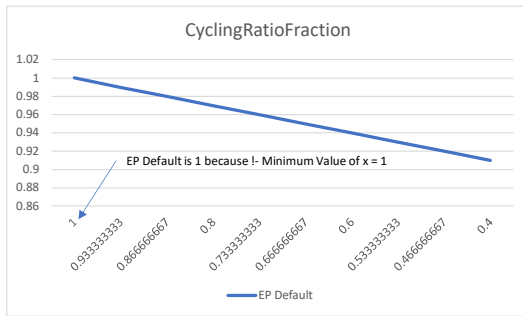
³When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.

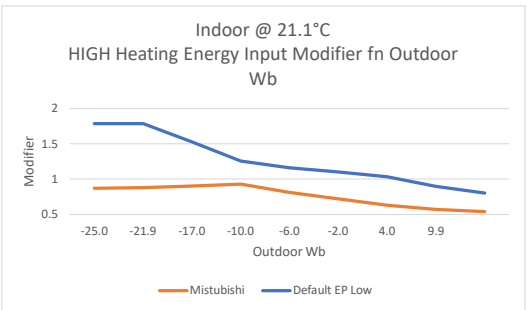
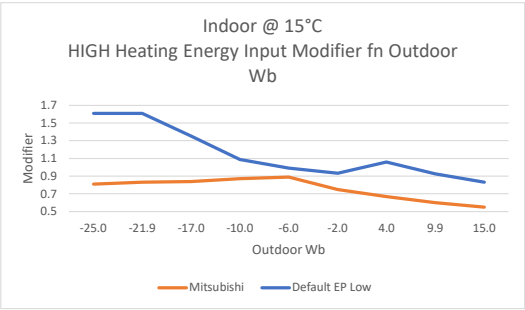
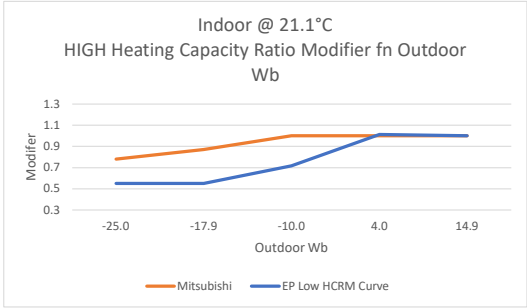
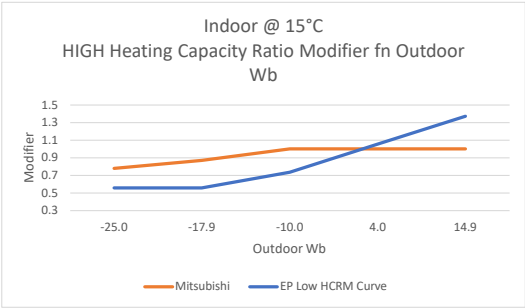
⁴Unit will continue to operate in extended operating range, but capacity is not guaranteed.

Specifications are subject to change without notice.

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Mitsubishi PUHY-EP96TNU/YNU-A1 NONDUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP96TNU/YNU-A1 DUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP96TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name

Mitsubishi PUHY-EP96TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name

Energy Modeling Assumptions and Comments		Applicable Field
1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field - Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated Cooling COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field - Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi does not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi does not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

8-TON PUHY-EP96TNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM



UNIT OPTION

☐ Standard Model.....PUHY-EP96TNU-A1

ACCESSORIES

☐ Big Foot Stand.....for details see Big Foot Stands submittals

☐ Header Kit.....for details see Pipe Accessories Submittal

☐ Joint Kit.....for details see Pipe Accessories Submittal

☐ Low Ambient Kit.....for details see Low Ambient Kit Submittal

☐ Panel Heater Kit.....for details see Panel Heater Kit Submittal

☐ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal

Specifications		System	
Unit Type		PUHY-EP96TNU-A1	
Cooling Capacity (Nominal)		BTU/H	96,000
Heating Capacity (Nominal)		BTU/H	108,000
Guaranteed Operating Range	Cooling	°F [°C]	23~126 [-5.0~52.0]
	Heating	°F [°C]	-13~60 [-25.0~15.5]
Extended Operating Range	Heating	°F [°C]	-27.4~60 [-33.0~15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight		Lbs. [kg]	622 [282]
External Finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]	
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity	A		44.0/40.0
Maximum Overcurrent Protection	A		70/60
Recommended Fuse Size	A		45/40

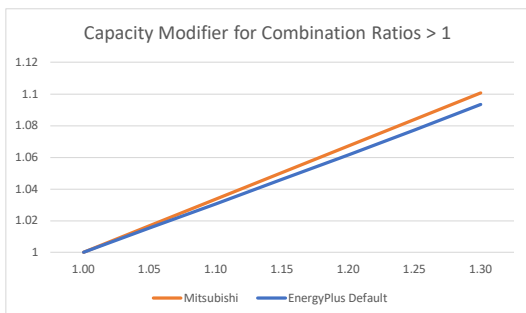
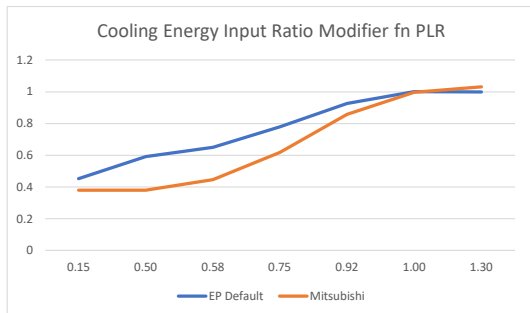
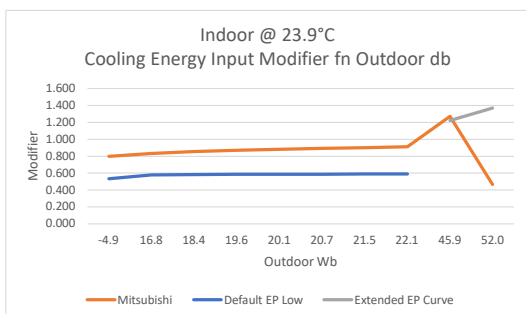
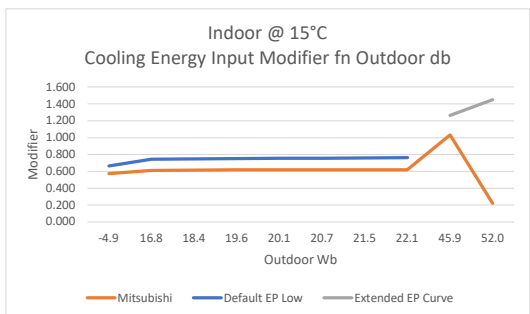
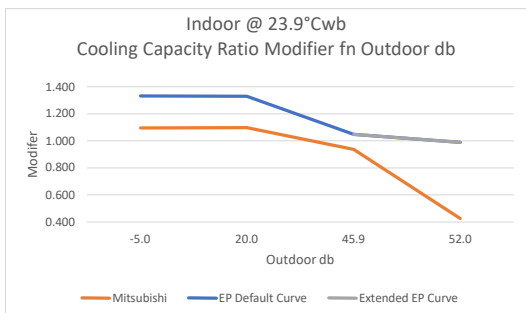
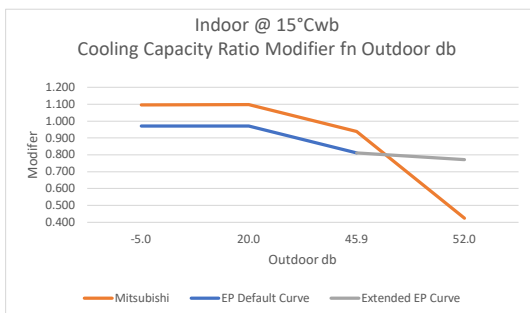
Recommended Minimum Wire Size		AWG [mm]	6/8 [13.3/8.4]
SCCR		kA	5
Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Braze (Pipe Size Dependent on Piping Length)
	Gas (Low Pressure)	In. [mm]	7/8 [22.2] Braze
Max. Total Refrigerant Line Length		Ft.	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		Ft.	541 [165]
Max. Control Wiring Length		Ft.	1,640 [500]
Indoor Unit Connectable	Total Capacity		50.0–130.0% of outdoor unit capacity
	Model/Quantity		P04–P96/1.0–24.0
Sound Pressure Levels		dB(A)	56.0/58.5
Sound Power Levels		dB(A)	75.0/77.5
FAN ¹	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.46±0.46
	Airflow Rate	CFM	6,700
	External Static Pressure	In. WG	Selectable: 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor		Type x Quantity	Inverter scroll hermetic compressor x 1
Refrigerant		Type x Original Charge	R410A x 21.0 lbs + 9.0 oz [9.8 kg]
Protection Devices		High Pressure Protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
		Inverter Circuit (Comp./Fan)	Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		11.9/12.3
	IEER		23.5/26.5
	COP		4.04/4.39

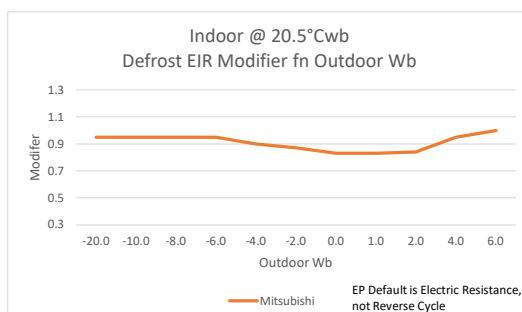
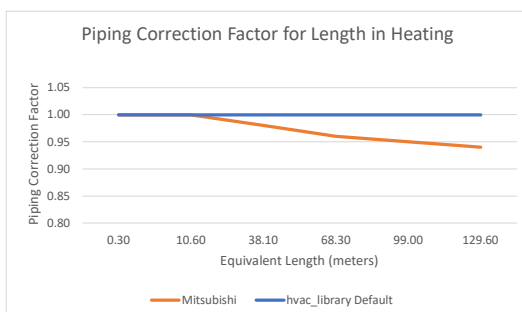
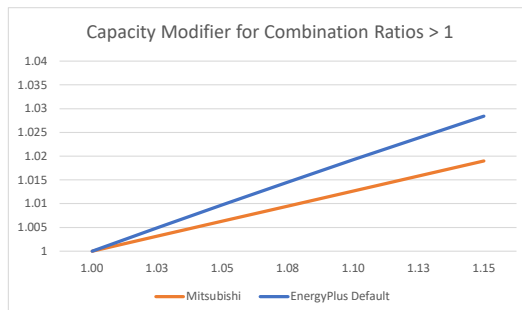
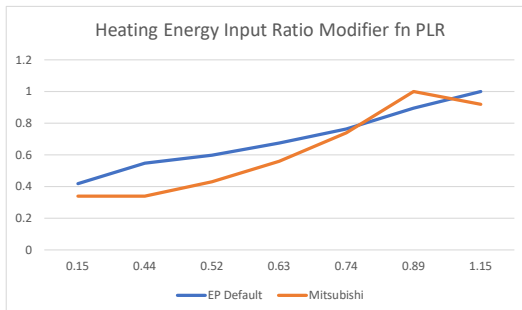
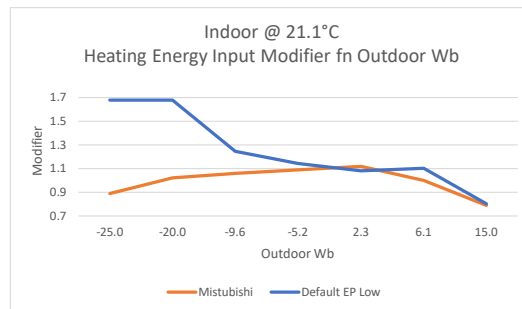
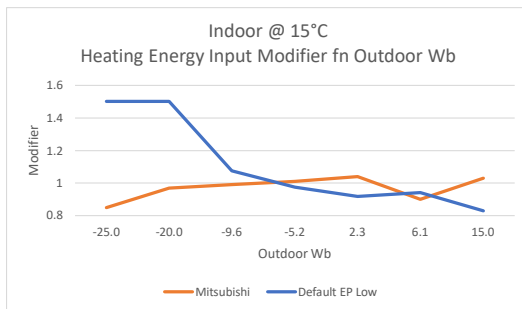
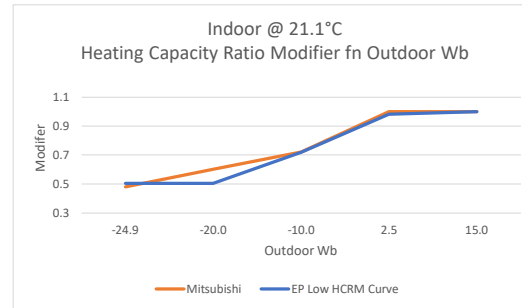
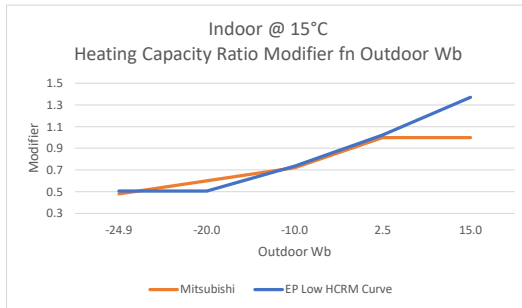
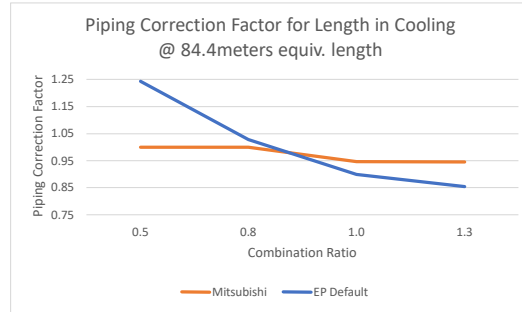
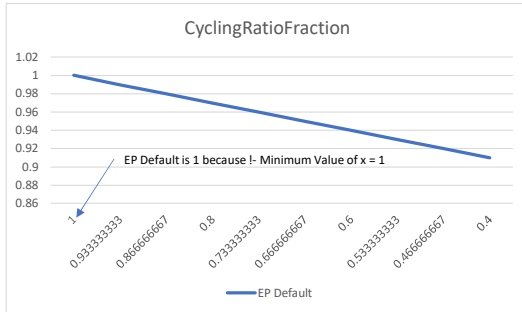
NOTES:
Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

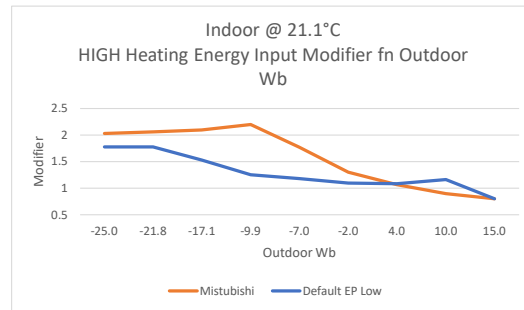
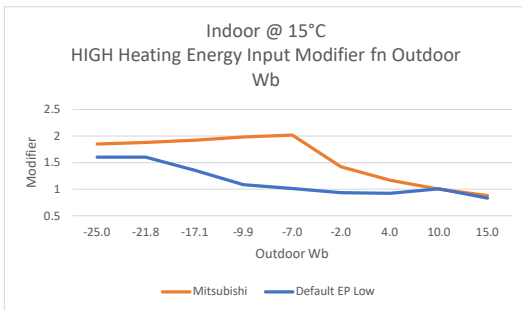
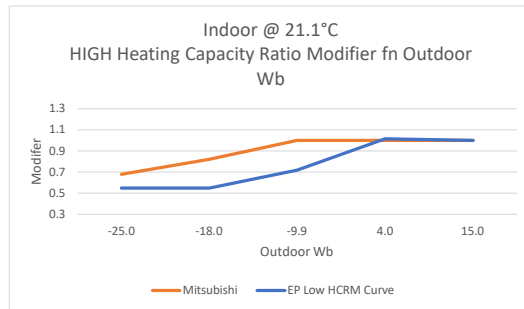
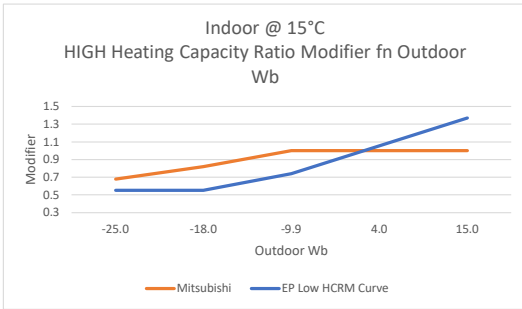
¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
²For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal
³When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating
⁴Unit will continue to operate in extended operating range, but capacity is not guaranteed

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Mitsubishi PUHY-EP120TNU/YNU-A1 NONDUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP120TNU/YNU-A1 DUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP120TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name

Mitsubishi PUHY-EP120TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name

Energy Modeling Assumptions and Comments		Applicable Field
1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field - Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated Cooling COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field - Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi does not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi does not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI		10-TON PUHY-EP120TNU-A1	
Job Name:			
System Reference:		Date:	
208/230V OUTDOOR VRF HEAT PUMP SYSTEM			
		UNIT OPTION ☒ Standard Model.....PUHY-EP120TNU-A1	
ACCESSORIES			
☒ Big Foot Stand.....for details see Big Foot Stands submittals			
☒ Header Kit.....for details see Pipe Accessories Submittal			
☒ Joint Kit.....for details see Pipe Accessories Submittal			
☒ Low Ambient Kit.....for details see Low Ambient Kit Submittal			
☒ Panel Heater Kit.....for details see Panel Heater Kit Submittal			
☒ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal			
Specifications			
Unit Type		System PUHY-EP120TNU-A1	
Cooling Capacity (Nominal)		BTU/H	120,000
Heating Capacity (Nominal)		BTU/H	135,000
Guaranteed Operating Range	Cooling	°F {°C}	23-126 [-5.0-52.0]
	Heating	°F {°C}	-13-60 [-25.0-15.5]
Extended Operating Range	Heating	°F {°C}	-27.4-60 [-33.0-15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight		Lbs. [kg]	633 [287]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) (MUNSELL 3Y 7.8/1.1 or similar)
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	55.0/49.0
Maximum Overcurrent Protection		A	90/80
Recommended Fuse Size		A	60/50
Recommended Minimum Wire Size		AWG [mm]	4/6 [21.2/13.3]
SCCR		kA	5

Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Braze (Pipe Size Dependent on Piping Length)
	Gas (Low Pressure)	In. [mm]	1-1/8 [28.58] Braze
Max. Total Refrigerant Line Length		ft.	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		ft.	541 [165]
Max. Control Wiring Length		ft.	1,640 [500]
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity
	Model/Quantity		P04~P96/1.0~30.0
Sound Pressure Levels		dB(A)	59.5/61.5
Sound Power Levels		dB(A)	79.5/81.0
FAN ¹	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.46~0.46
	Airflow Rate	CFM	7,750
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 21.0 lbs + 9.0 oz [9.8 kg]
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		10.7/10.9
	IEER		21.9/24.8
	COP		3.8/4.21

NOTES:

Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.

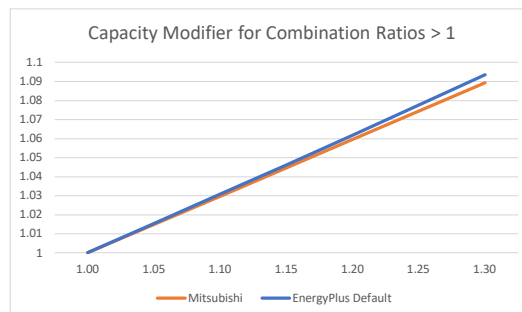
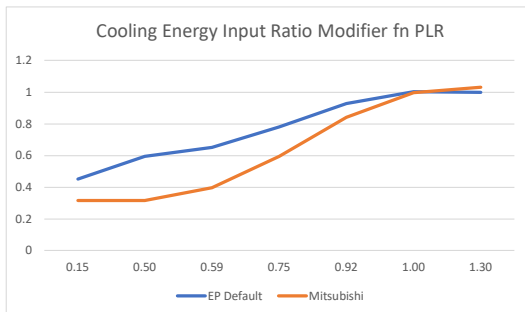
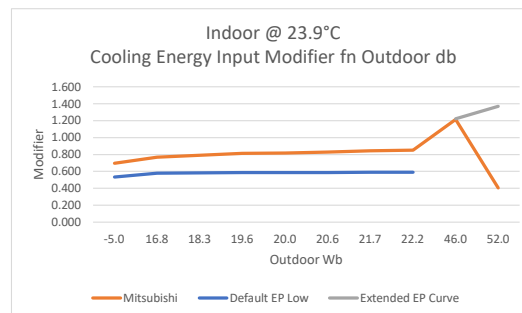
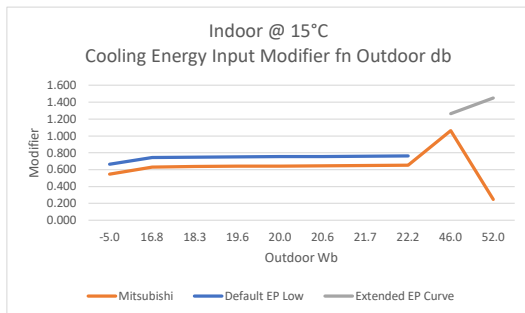
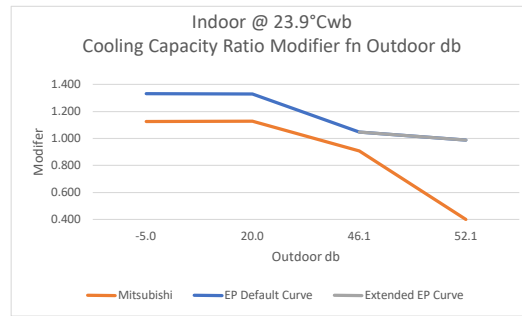
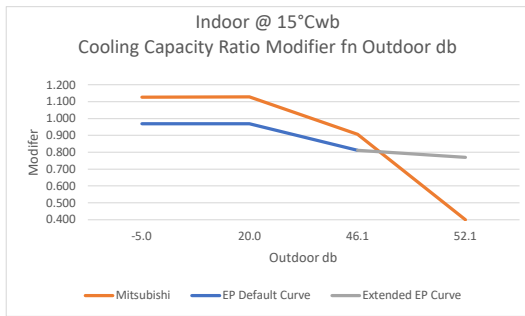
²For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal

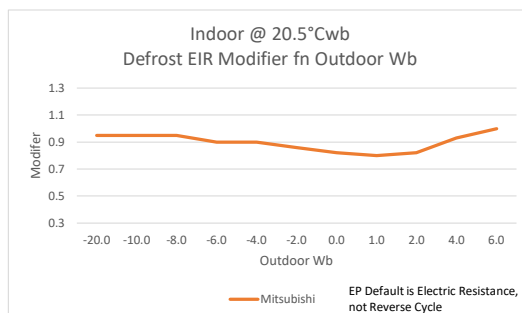
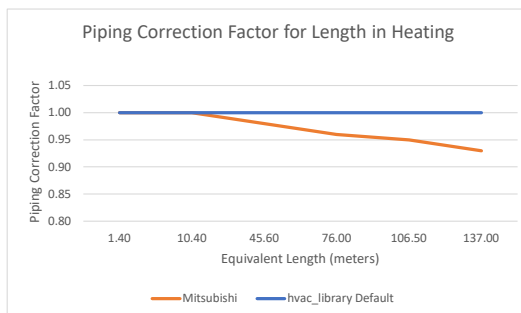
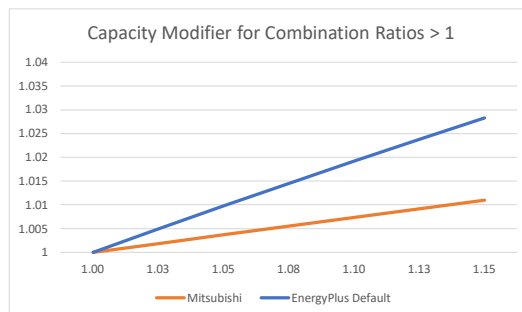
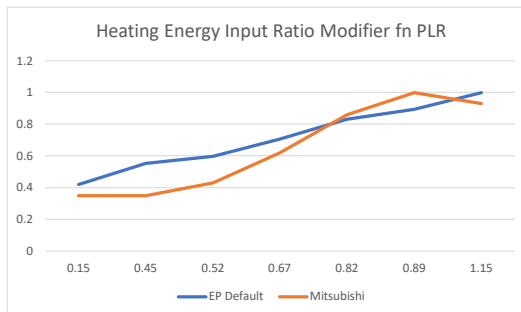
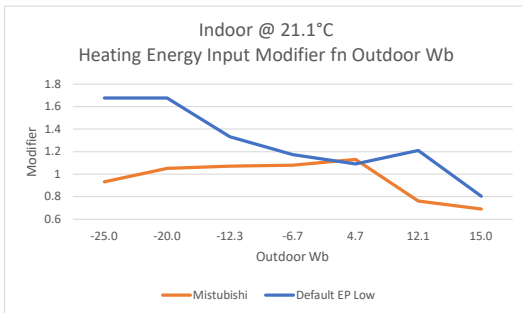
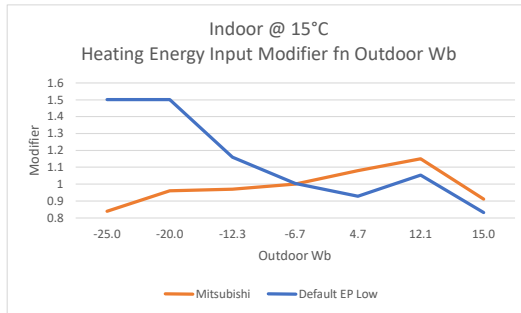
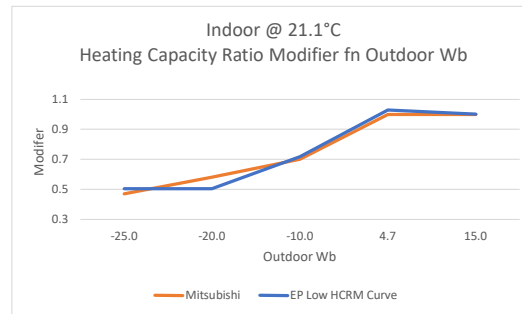
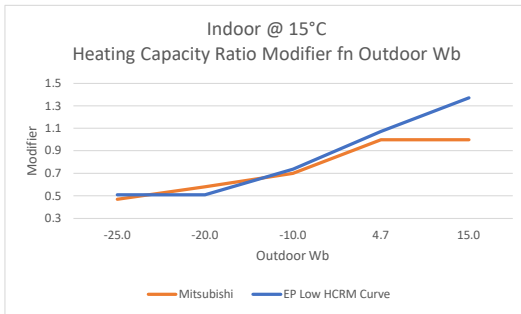
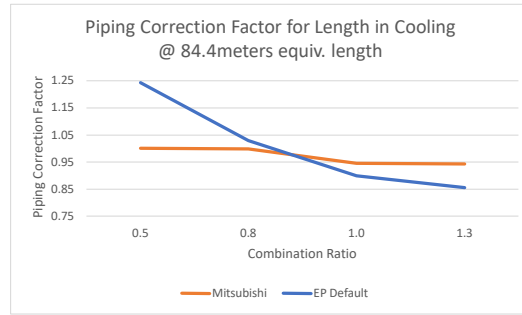
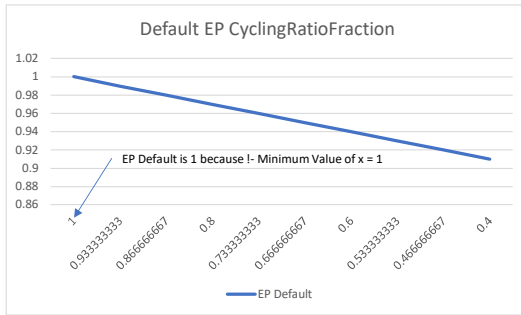
³When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating

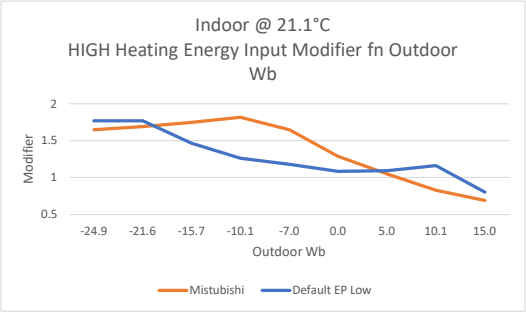
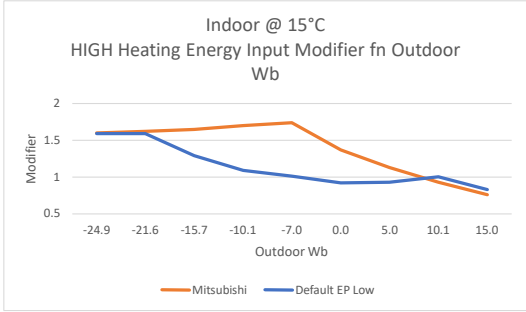
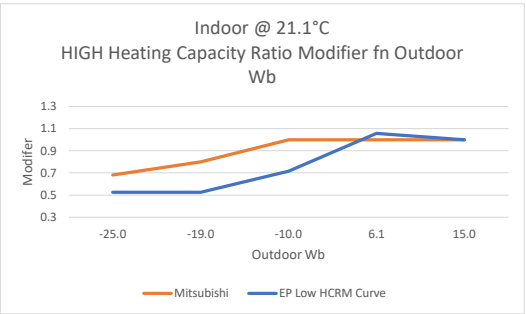
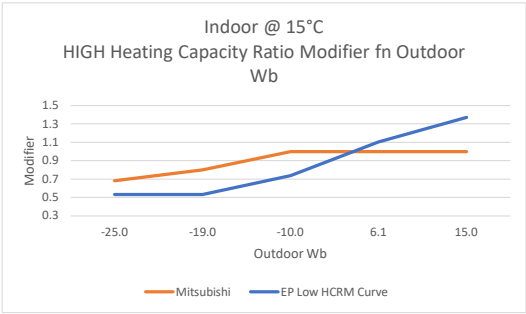
⁴Unit will continue to operate in extended operating range, but capacity is not guaranteed

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Mitsubishi PUHY-EP144TNU/YNU-A1 NONDUCTED-VRF-OU, !- Name

Mitsubishi PUHY-EP144TNU/YNU-A1 DUCTED-VRF-OU, !- Name

Mitsubishi PUHY-EP144TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU, !- Name

Mitsubishi PUHY-EP144TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU, !- Name

Energy Modeling Assumptions and Comments

Applicable Field

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated Cooling COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

12-TON PUHY-EP144TNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM



UNIT OPTION

☐ Standard Model.....PUHY-EP144TNU-A1

ACCESSORIES

☐ Big Foot Stand.....for details see Big Foot Stands submittals

☐ Header Kit.....for details see Pipe Accessories Submittal

☐ Joint Kit.....for details see Pipe Accessories Submittal

☐ Low Ambient Kit.....for details see Low Ambient Kit Submittal

☐ Panel Heater Kit.....for details see Panel Heater Kit Submittal

☐ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PUHY-EP144TNU-A1
Cooling Capacity (Nominal)		BTU/h	144,000
Heating Capacity (Nominal)		BTU/h	160,000
Guaranteed Operating Range	Cooling	°F {°C}	23-126 [-5.0-52.0]
	Heating	°F {°C}	-13-60 [-25.0-15.5]
Extended Operating Range	Cooling	°F {°C}	-27.4-60 [-33.0-15.5]
	Heating	°F {°C}	
External Dimensions (H x W x D)		In. (mm)	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight		Lbs. (kg)	680 (308)
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) (MUNSELL 3Y 7.8/1.1 or similar)
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	60,0160.0
Maximum Overcurrent Protection		A	100/100
Recommended Fuse Size		A	60/60
Recommended Minimum Wire Size		AWG (mm)	4/4 [21.2/21.2]
SCCR		kA	5
	Liquid (High Pressure)	In. (mm)	1/2 (12.7) Brazed

Refrigerant Piping Diameter	Gas (Low Pressure)	In. (mm)	1-1/8 [28.58] Braze
Max. Total Refrigerant Line Length		Ft.	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		Ft.	541 [165]
Max. Control Wiring Length		Ft.	1,840 [500]
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity
	Model/Quantity		P04-P96/1.0~36.0
Sound Pressure Levels		dB(A)	62.0/64.5
Sound Power Levels		dB(A)	84.0/83.5
FAN*	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.46±0.46
	Airflow Rate	CFM	9,200
	External Static Pressure	In. WG	Selectable: 0.00, 0.12, 0.24, 0.32, In. WG, factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 23.0 lbs ± 12.0 oz (10.8 kg)
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		10.5/10.7
	IEER		21.2/23.2
	COP		3.68/4.01

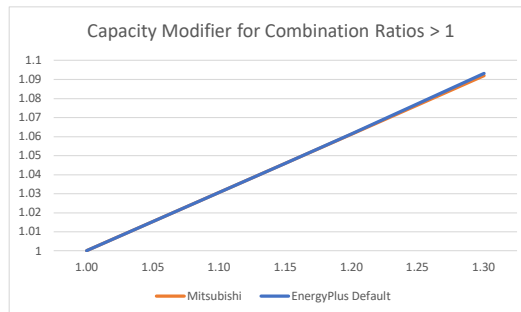
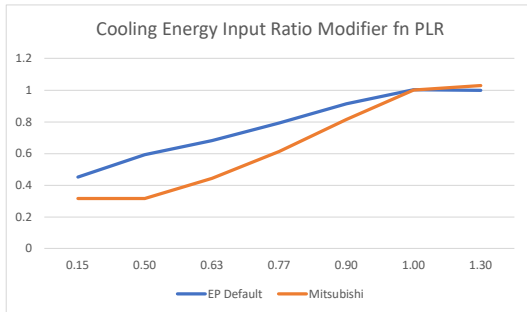
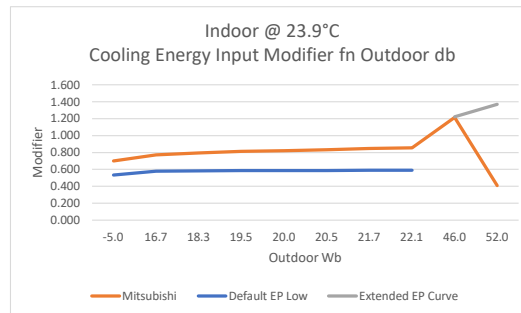
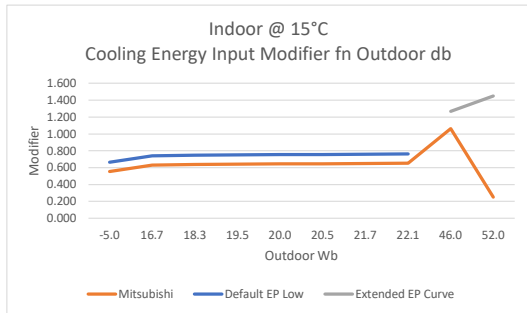
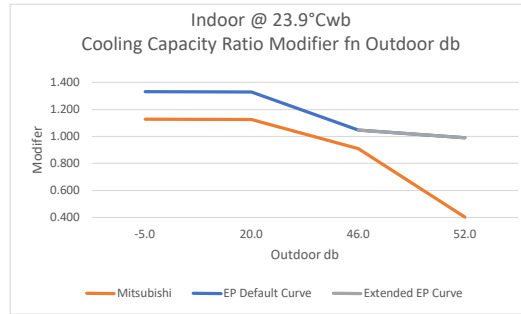
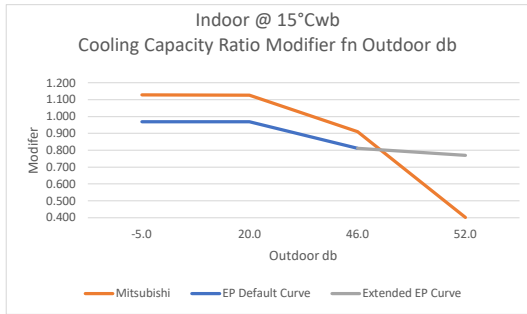
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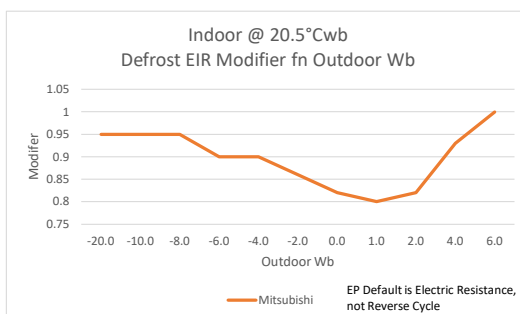
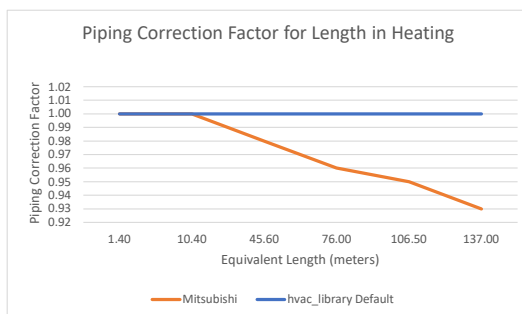
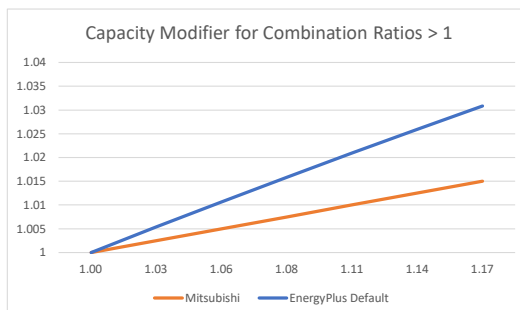
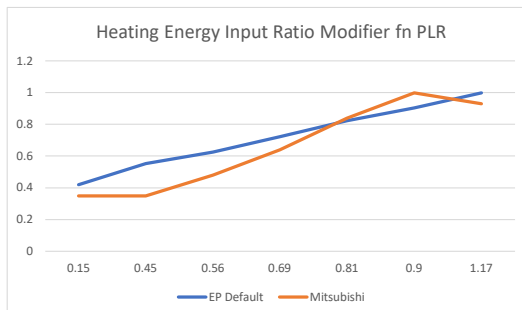
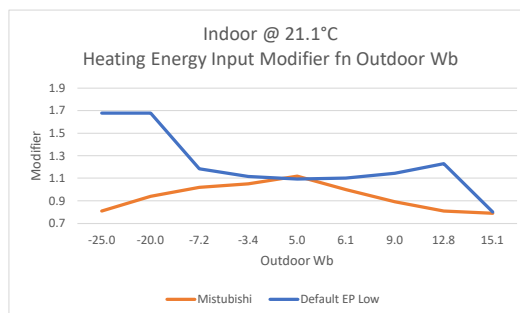
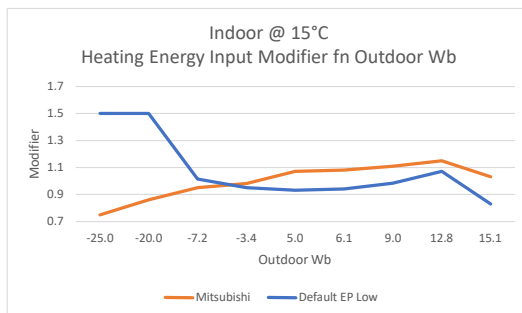
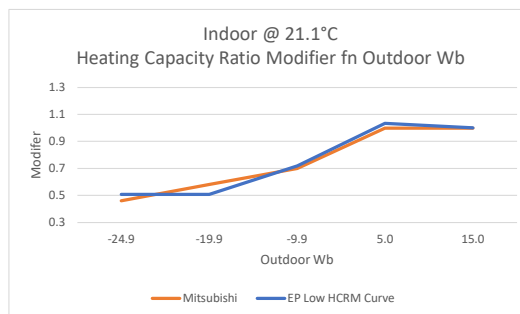
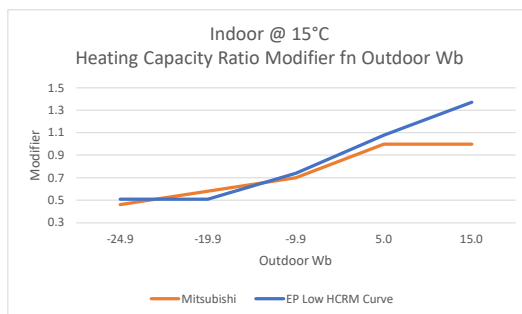
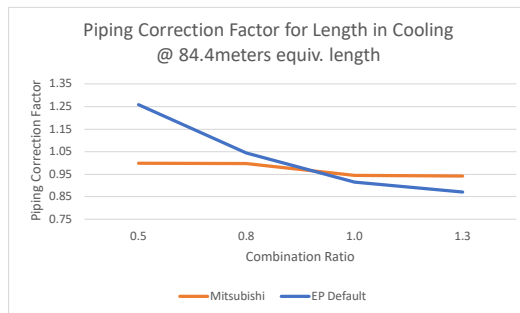
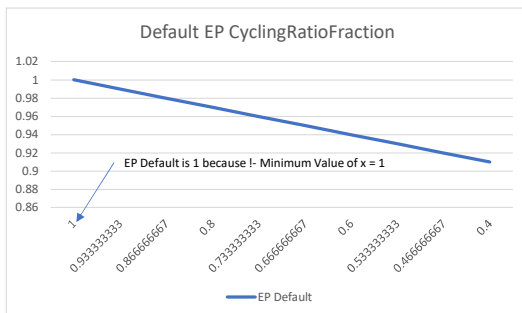
Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

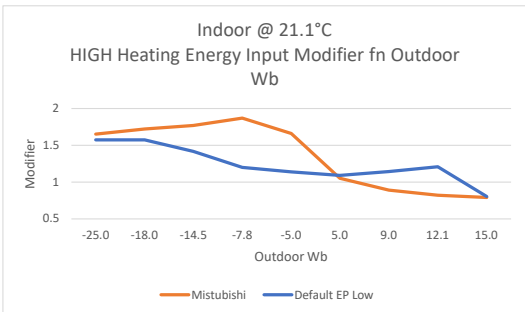
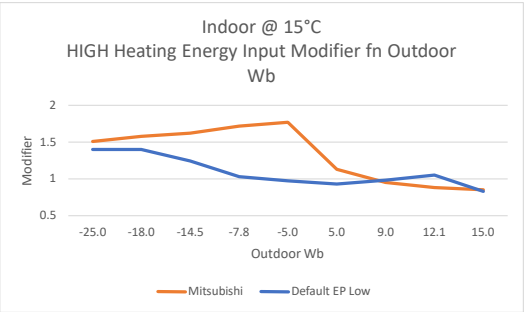
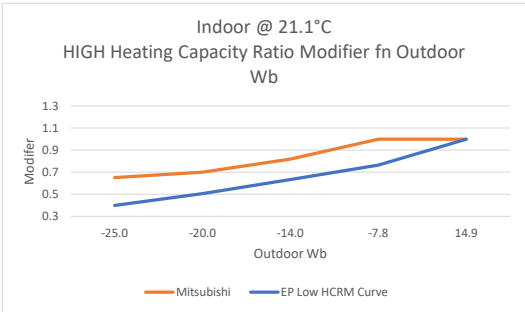
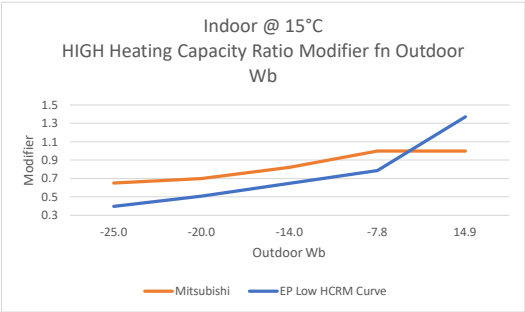
*Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
*For details on extended cooling operation range down to -10° F D.B., see Low Ambient Kit Submittal
*When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating
*Unit will continue to operate in extended operating range, but capacity is not guaranteed

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Mitsubishi PUHY-EP168TNU/YNU-A1 NONDUCTED-VRF-OU,- Name**Mitsubishi PUHY-EP168TNU/YNU-A1 DUCTED-VRF-OU,- Name****Mitsubishi PUHY-EP168TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name****Mitsubishi PUHY-EP168TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name****Energy Modeling Assumptions and Comments****Applicable Field**

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated Cooling/Heating COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI™**14-TON PUHY-EP168TNU-A1**

Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM**UNIT OPTION**☒ Standard Model _____ PUHY-EP168TNU-A1**ACCESSORIES**☐ Big Foot Stand _____ for details see Big Foot Stands submittals☐ Header Kit _____ for details see Pipe Accessories Submittal☐ Joint Kit _____ for details see Pipe Accessories Submittal☐ Low Ambient Kit _____ for details see Low Ambient Kit Submittal☐ Panel Heater Kit _____ for details see Panel Heater Kit Submittal☐ Snow/Hail Guards Kit _____ for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PUHY-EP168TNU-A1
Cooling Capacity (Nominal)		BTU/H	168,000
Heating Capacity (Nominal)		BTU/H	188,000
Guaranteed Operating Range	Cooling	°F [°C]	23-126 [-5.0-52.0]
	Heating	°F [°C]	-13-60 [-25.0-15.5]
Extended Operating Range	Heating	°F [°C]	-27.4-60 [-33.0-15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 68-15/16 x 29-3/16 [1,818 x 1,750 x 740]
Net Weight		Lbs. [kg]	757 [343]
External Finish	Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]		
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	70.0/67.0
Maximum Overcurrent Protection		A	110/110
Recommended Fuse Size		A	70/70
Recommended Minimum Wire Size		AWG [mm]	4/4 [21.2/21.2]

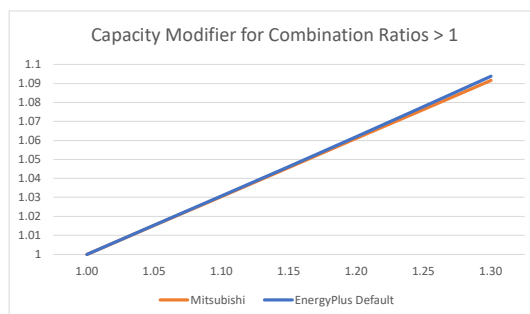
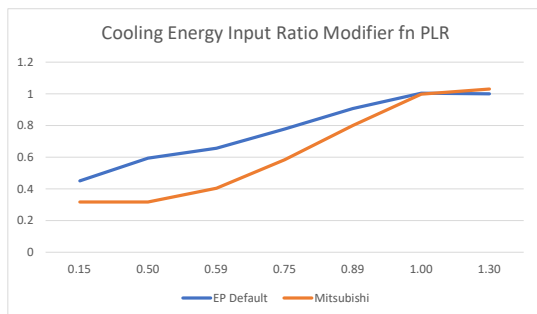
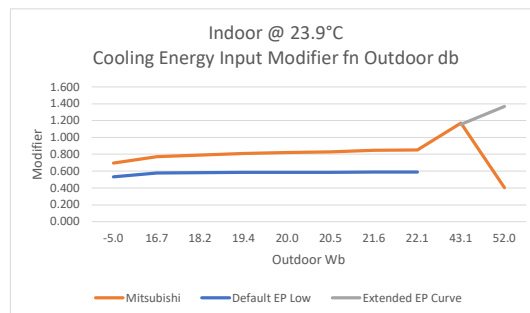
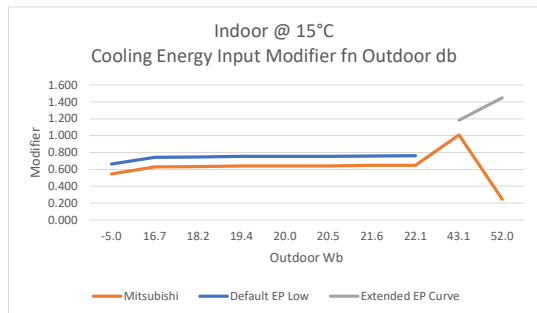
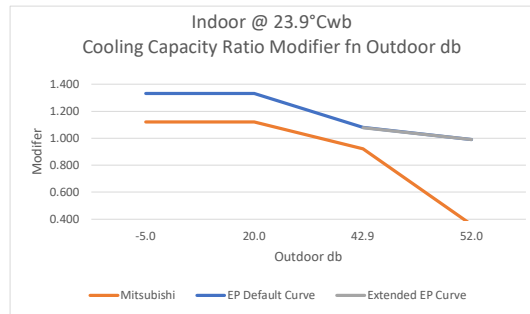
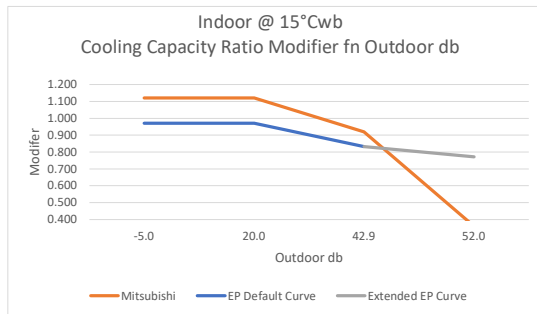
SCCR		KA	5
Refrigerant Piping Diameter	Liquid (High Pressure)	In. (mm)	5/8 (15.88) Braze
	Gas (Low Pressure)	In. (mm)	1-1/8 (28.58) Braze
Max. Total Refrigerant Line Length		FL	3,280 (1,000)
Max. Refrigerant Line Length (Between ODU & IDU)		FL	541 (165)
Max. Control Wiring Length		FL	1,640 (500)
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity
	Model/Quantity		PQ4~P96/1.0~42.0
Sound Pressure Levels		dB(A)	60.0/61.5
Sound Power Levels		dB(A)	81.0/80.5
FAN ¹⁾	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.92~0.92
	Airflow Rate	CFM	10,600
	External Static Pressure	In. WG	Selectable: 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 23.0 lbs + 12.0 oz (10.8 kg)
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		10.1/10.1
	IEER		20.4/23.2
	COP		3.61/4.11

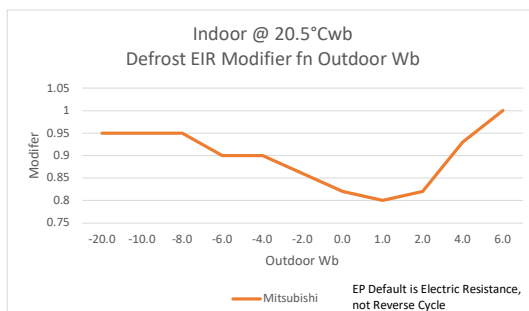
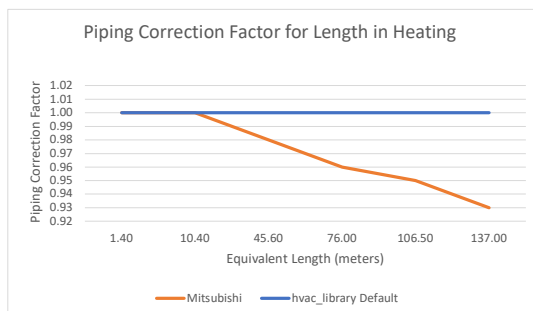
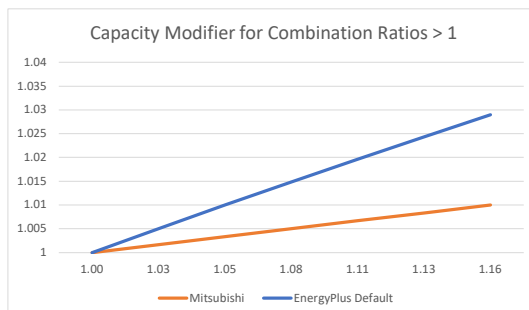
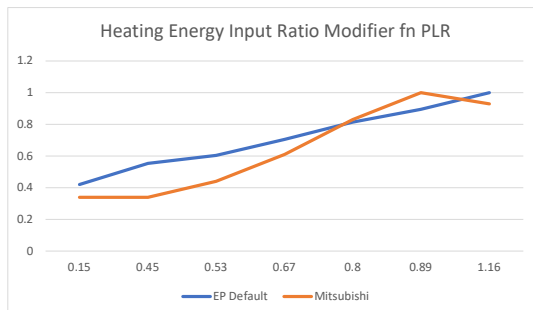
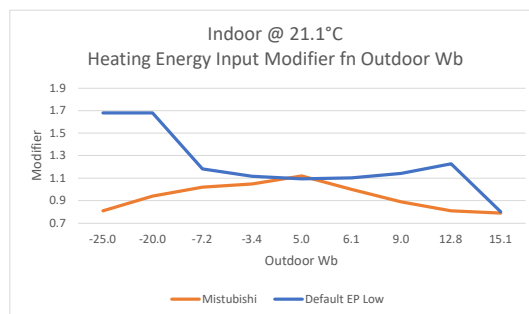
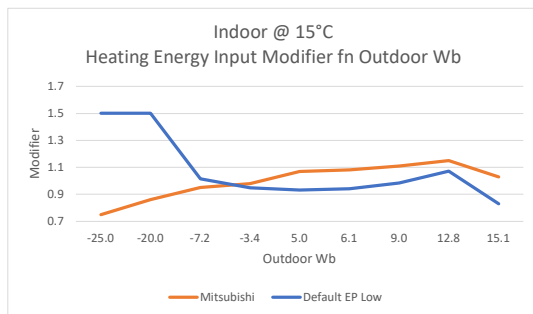
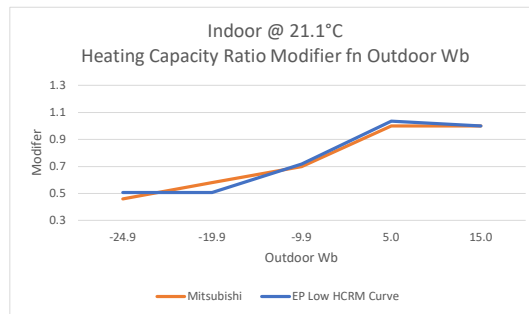
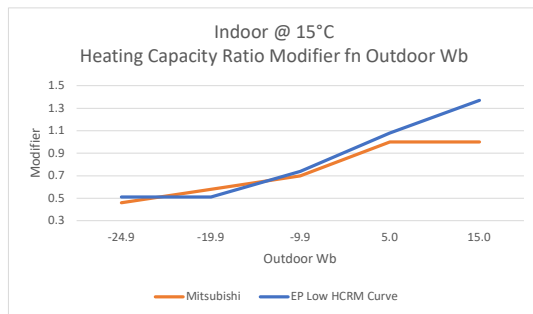
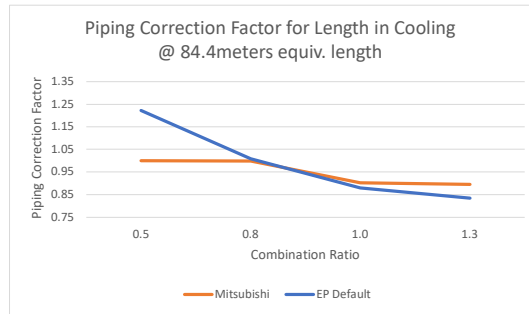
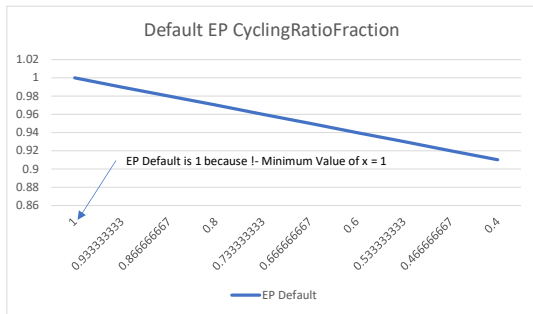
NOTES:
 Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
 Indoor: 80°F D.B./67°F W.B. (28.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
 Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
 Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

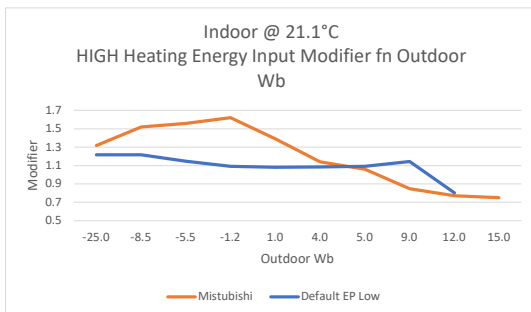
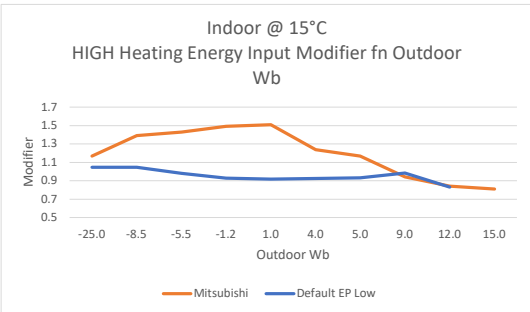
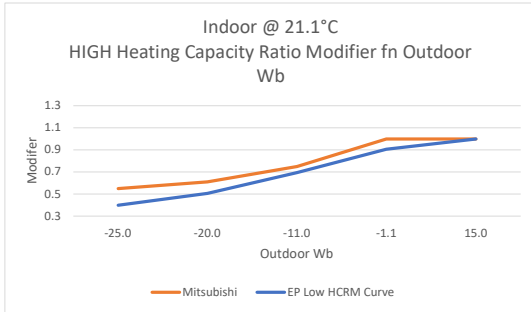
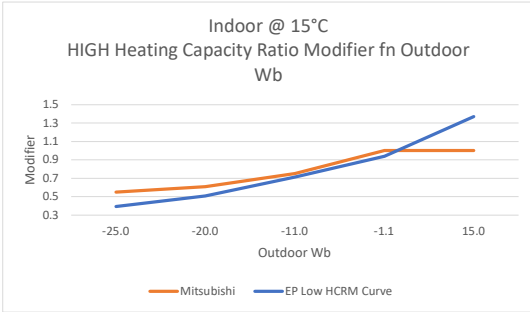
¹⁾Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
²⁾For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal
³⁾When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.
⁴⁾Unit will continue to operate in extended operating range, but capacity is not guaranteed

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Mitsubishi PUHY-EP192TNU/YNU-A1 NONDUCTED-VRF-OU,- Name**Mitsubishi PUHY-EP192TNU/YNU-A1 DUCTED-VRF-OU,- Name****Mitsubishi PUHY-EP192TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name****Mitsubishi PUHY-EP192TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name****Energy Modeling Assumptions and Comments****Applicable Field**

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field - Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	I- Gross Rated <u>Cooling/Heating</u> COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: I- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C I- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	I- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field - Name with HIGHHEAT	I- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name I- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	I- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	I- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	I- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	I- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	I- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	I- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	I- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	I- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	I- Condenser Inlet Node
13	No heat recovery for this model	I- Minimum Outdoor Temperature in Heat Recovery Mode {C} I- Maximum Outdoor Temperature in Heat Recovery Mode {C} I- Heat Recovery Cooling Capacity Modifier Curve Name I- Initial Heat Recovery Cooling Capacity Fraction {W/W} I- Heat Recovery Cooling Capacity Time Constant {hr} I- Heat Recovery Cooling Energy Modifier Curve Name I- Initial Heat Recovery Cooling Energy Fraction {W/W} I- Heat Recovery Cooling Energy Time Constant {hr} I- Heat Recovery Heating Capacity Modifier Curve Name I- Initial Heat Recovery Heating Capacity Fraction {W/W} I- Heat Recovery Heating Capacity Time Constant {hr} I- Heat Recovery Heating Energy Modifier Curve Name I- Initial Heat Recovery Heating Energy Fraction {W/W} I- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

16-TON PUHY-EP192TNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM**UNIT OPTION**

✓ Standard Model

PUHY-EP192TNU-A1

ACCESSORIES

- ✓ Big Foot Stand
- ✓ Header Kit
- ✓ Joint Kit
- ✓ Low Ambient Kit
- ✓ Panel Heater Kit
- ✓ Snow/Hail Guards Kit

for details see Big Foot Stands submittals
for details see Pipe Accessories Submittal
for details see Pipe Accessories Submittal
for details see Low Ambient Kit Submittal
for details see Panel Heater Kit Submittal
for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PUHY-EP192TNU-A1
Cooling Capacity (Nominal)		BTU/h	192,000
Heating Capacity (Nominal)		BTU/h	215,000
Guaranteed Operating Range	Cooling	°F [°C]	23-126 [-5.0-52.0]
	Heating	°F [°C]	-13-60 [-25.0-15.5]
Extended Operating Range	Cooling	°F [°C]	-27-4-60 [-33.0-15.5]
	Heating	°F [°C]	-27-4-60 [-33.0-15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 68-15/16 x 29-3/16 [1,818 x 1,750 x 740]
Net Weight		Lbs. [kg]	757 [343]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	80/074.0
Maximum Overcurrent Protection		A	125/125
Recommended Fuse Size		A	80/80
Recommended Minimum Wire Size		AWG [mm]	2/2 [33.6/33.6]
SCCR		kA	5
	1 inch (25.4 mm)	In. [mm]	6.8 1/4 (88.9 mm)

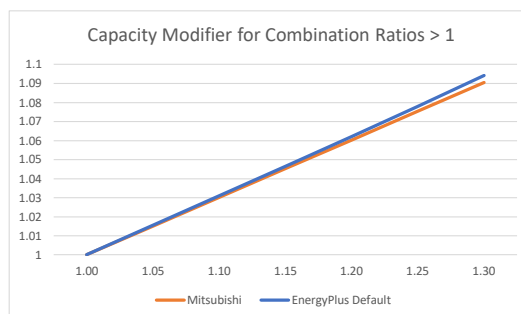
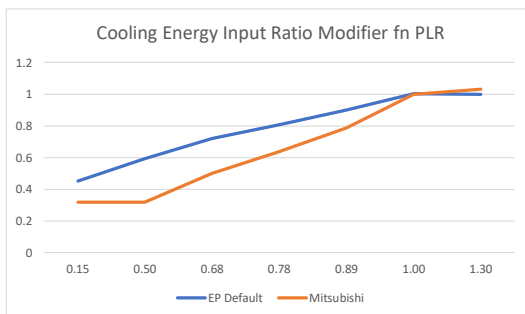
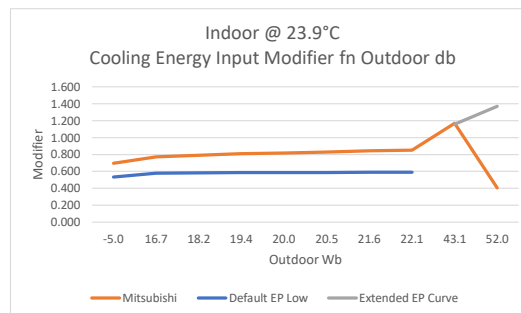
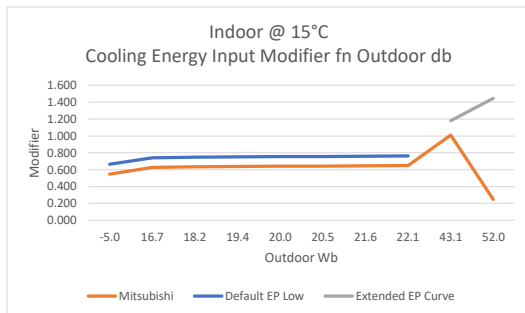
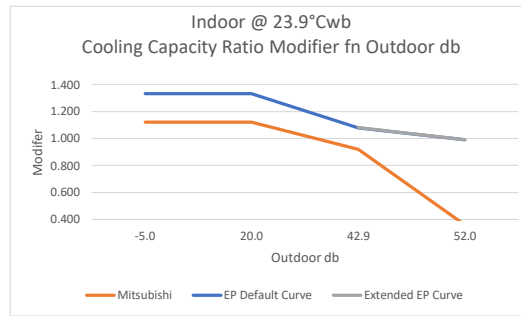
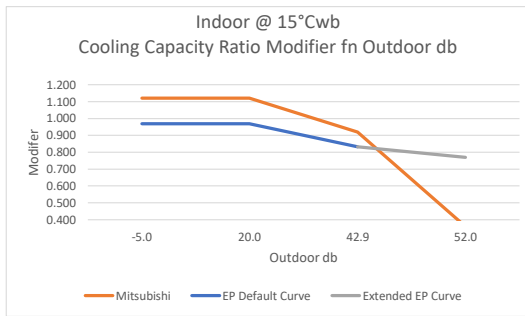
Refrigerant Piping Diameter	Liquid (High Pressure)	Gas (Low Pressure)	Unit (mm)	Unit (inches)
Max. Total Refrigerant Line Length			1-1/8 [28.58] Braze	
Max. Refrigerant Line Length (Between ODU & IDU)			3,280 [1,000]	
Max. Control Wiring Length			541 [165]	
			1,640 [500]	
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity	
Sound Pressure Levels	Model/Quantity		P04~P06/1.0~48.0	
Sound Power Levels			61.5/63.5	
			81.0/80.5	
	Type x Quantity		Propeller fan x 2	
FAN*	Fan Motor Output	KW	0.92+0.92	
	Airflow Rate	CFM	12,700	
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG	
Compressor Operating Range			15.0% to 100.0%	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	
Refrigerant	Type x Original Charge		R410A x 26.0 lbs + 1.0 oz [11.8 kg]	
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter Circuit (Comp./Fan)		Over-current protection	
AHRI Ratings (Ducted/Non-ducted)	EER		10.2/10.3	
	IEER		21.0/22.4	
	COP		3.51/4.04	

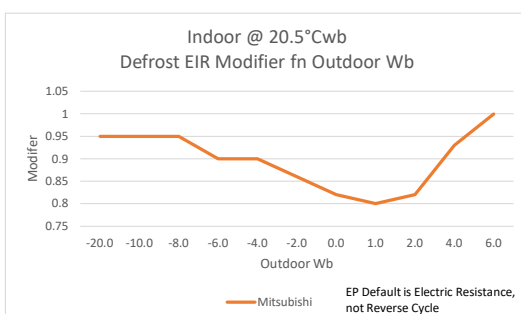
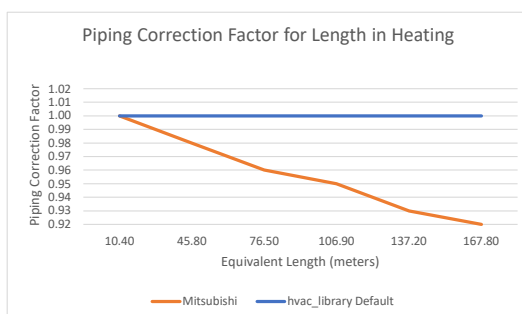
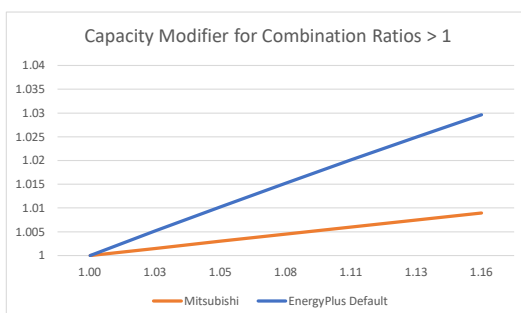
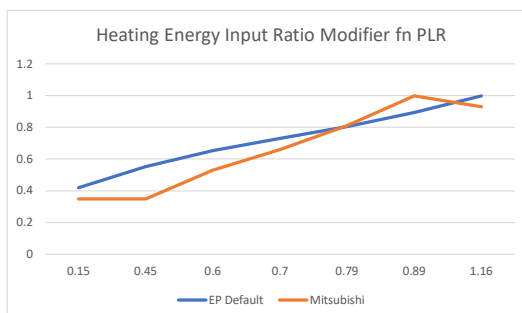
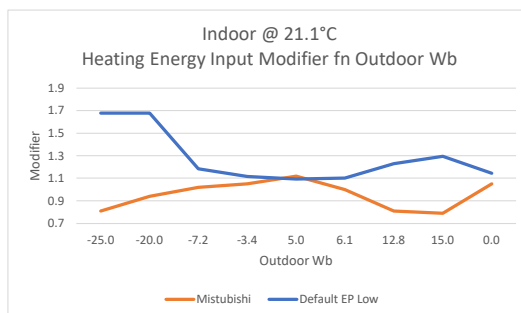
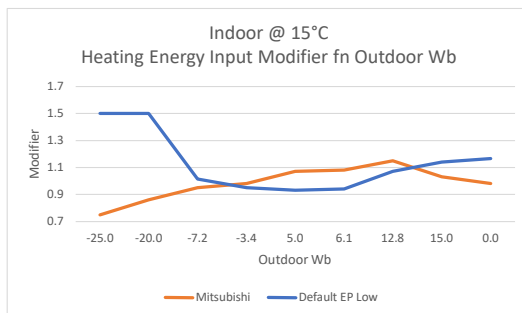
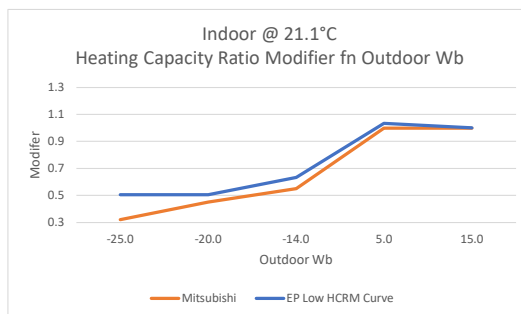
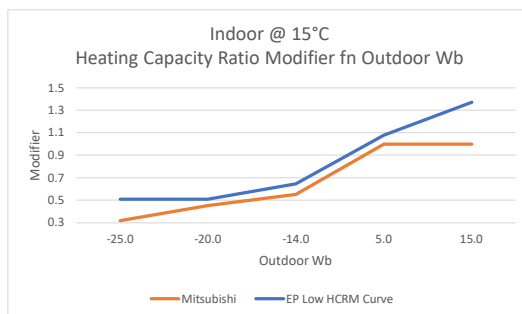
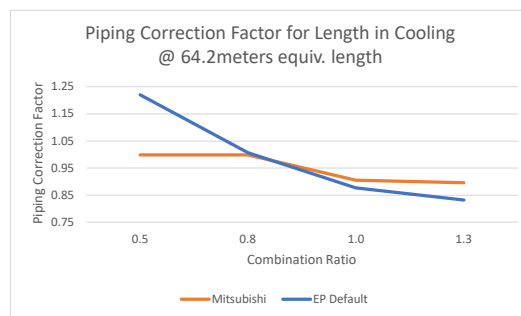
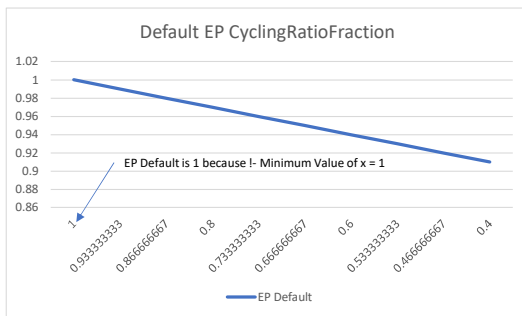
NOTES:
Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F DB/67°F WB (26.7°C DB/19.4°C WB), Outdoor: 95°F DB (35°C DB)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F DB (21.1°C DB), Outdoor: 47°F DB/43°F WB (8.3°C DB/6.1°C WB)

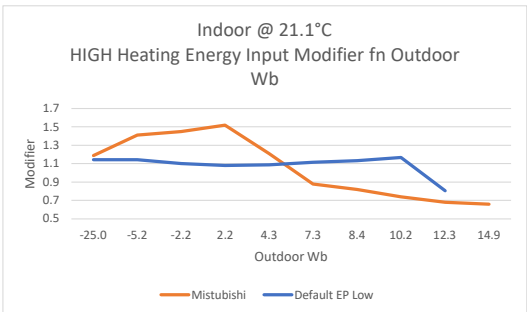
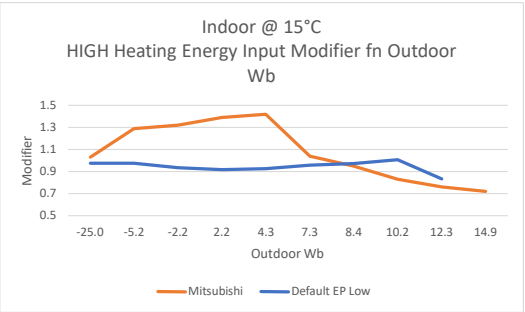
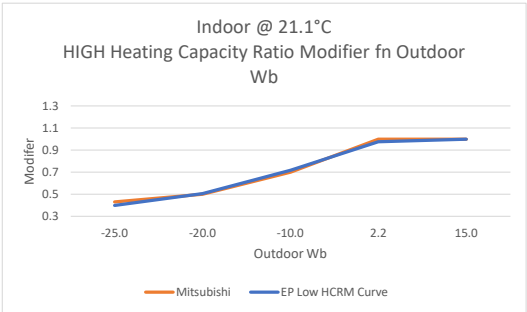
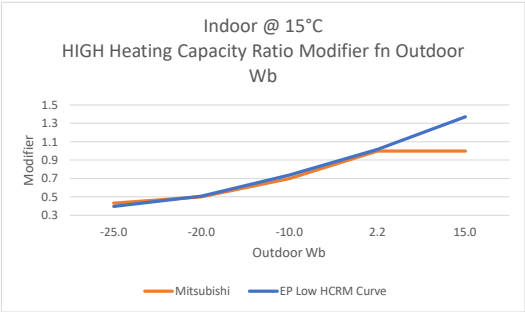
*Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region
*For details on extended cooling operation range down to -10°F DB, see Low Ambient Kit Submittal
*When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating
*Unit will continue to operate in extended operating range, but capacity is not guaranteed

Specifications are subject to change without notice.

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Mitsubishi PUHY-EP192TSNU/YSNU-A1 NONDUCTED-VRF-OU,- Name**Mitsubishi PUHY-EP192TSNU/YSNU-A1 DUCTED-VRF-OU,- Name****Mitsubishi PUHY-EP192TSNU/YSNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name****Mitsubishi PUHY-EP192TSNU/YSNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name****Energy Modeling Assumptions and Comments****Applicable Field**

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated <u>Cooling/Heating</u> COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient (1/m)
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

16-TON PUHY-EP192TSNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM



UNIT OPTION

☒ Standard Model PUHY-EP192TSNU-A1

ACCESSORIES

☒ Big Foot Stand for details see Big Foot Stands submittals☒ Twinning Kit (Required) CMY-Y100CBK3R1☒ Header Kit for details see Pipe Accessories Submittal☒ Joint Kit for details see Pipe Accessories Submittal☒ Low Ambient Kit for details see Low Ambient Kit Submittal☒ Panel Heater Kit for details see Panel Heater Kit Submittal☒ Snow/Hail Guards Kit for details see Snow/Hail Guards Kit Submittal

Specifications		System	
Unit Type		PUHY-EP192TSNU-A1	
Cooling Capacity (Nominal)	BTU/H	192,000	
Heating Capacity (Nominal)	BTU/H	216,000	
Net Weight	Lbs. [kg]	1,244 [564]	
Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	5/8 [15.88] Brazed
	Gas (Low Pressure)	In. [mm]	1-1/8 [28.58] Brazed
Max. Total Refrigerant Line Length		Ft.	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		Ft.	541 [165]
Max. Control Wiring Length		Ft.	1,640 [500]
Indoor Unit Connectable	Total Capacity	50.0~130.0% of outdoor unit capacity	
	Model/Quantity	P04~P96/1.0~48.0	
Sound Pressure Levels		dB(A)	59.5/62.0
Sound Power Levels		dB(A)	78.5/81.0
Compressor Operating Range			7.5% to 100.0%
	EER	11.2/11.4	

AHRI Ratings (Ducted/Non-ducted)

IEER
COP22.4/24.5
3.75/4.11

Specifications		Module 1	Module 2
Unit Type		PUHY-EP96TNU-A1	PUHY-EP96TNU-A1
Cooling Capacity (Nominal)	BTU/H	96,000	96,000
Heating Capacity (Nominal)	BTU/H	108,000	108,000
Guaranteed Operating Range ¹	Cooling ² °F [°C]	23–126 [-5.0–52.0]	23–126 [-5.0–52.0]
Guaranteed Operating Range	Heating °F [°C]	-13–60 [-25.0–15.5]	-13–60 [-25.0–15.5]
Extended Operating Range	Heating °F [°C]	-27.4–60 [-33.0–15.5]	-27.4–60 [-33.0–15.5]
External Dimensions (H x W x D)	In. [mm]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight	Lbs. [kg]	622 [282]	622 [282]
External Finish		Pre-coated galvanized steel sheet (powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]	Pre-coated galvanized steel sheet (powder coating for -BS type) [MUNSELL 3Y 7.8/1.1 or similar]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance	208/230V, 3-phase, 60 Hz, ±10%	208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity	A	44.0/40.0	44.0/40.0
Maximum Overcurrent Protection	A	70/60	70/60
Recommended Fuse Size	A	45/40	45/40
Recommended Minimum Wire Size	AWG [mm]	6/8 [13.3/8.4]	6/8 [13.3/8.4]
SCCR	kA	5	5
FAN ³	Type x Quantity	Propeller fan x 2	Propeller fan x 2
	Airflow Rate	CFM	6,700
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge	R410A x 21.0 lbs + 9.0 oz [9.8 kg]	R410A x 21.0 lbs + 9.0 oz [9.8 kg]
Protection Devices	High Pressure Protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)	Over-current protection	Over-current protection

NOTES:

Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)

Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)

Nominal heating conditions (Test conditions are based on AHRI 1230-2023)

Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi

Electric representative for more details about your region

²For details on extended cooling operation range down to -10°F DB, see Low Ambient Kit Submittal³When applying product below -4°F, consult your design engineer for cold climate application best

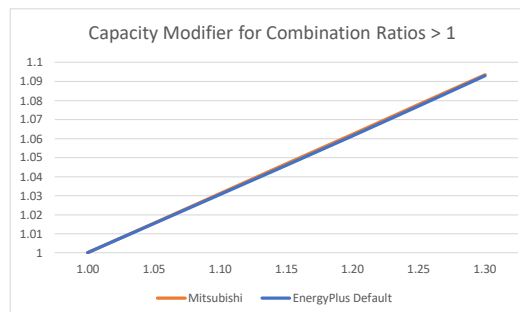
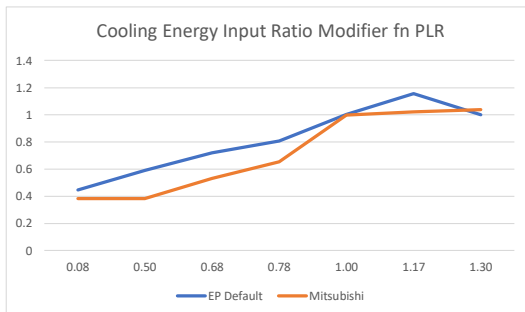
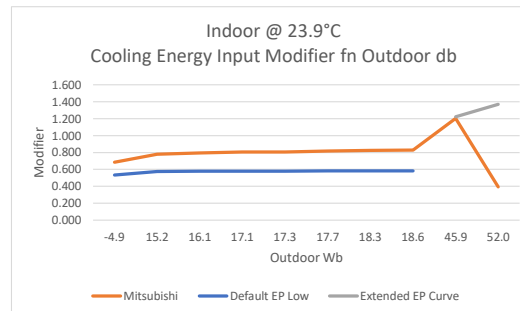
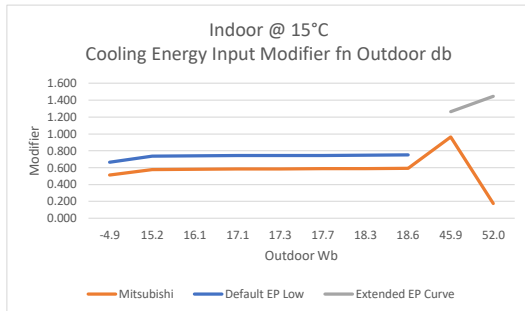
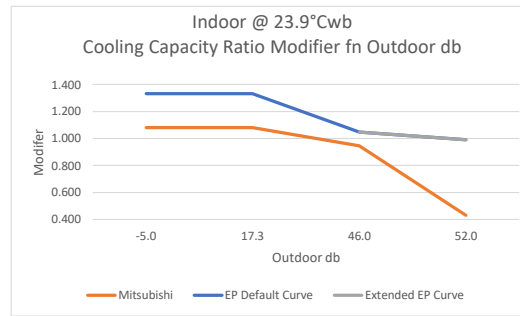
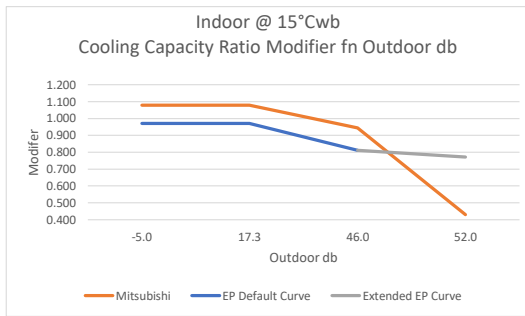
practices, including the use of a backup source for heating

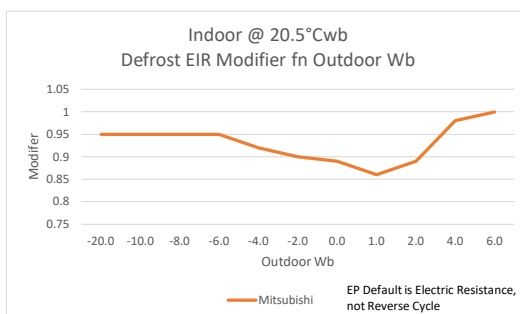
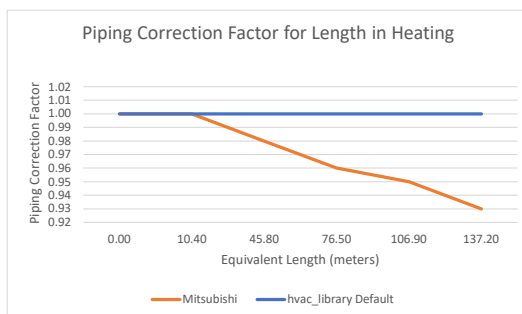
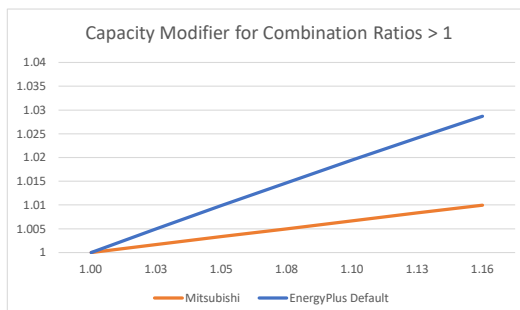
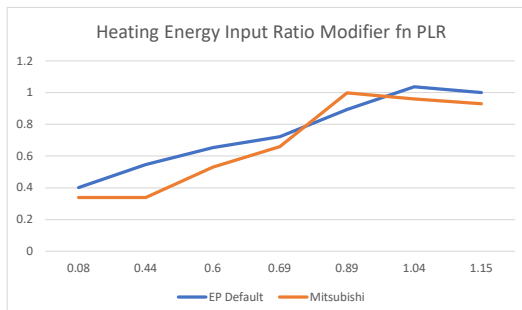
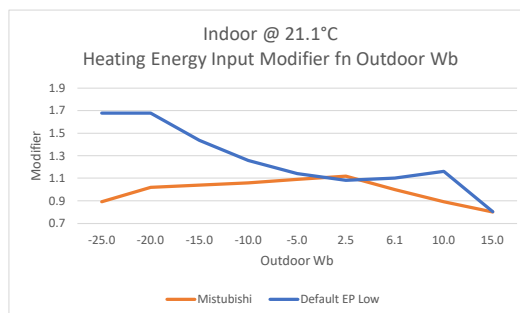
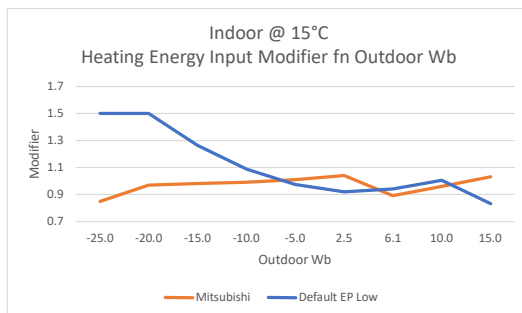
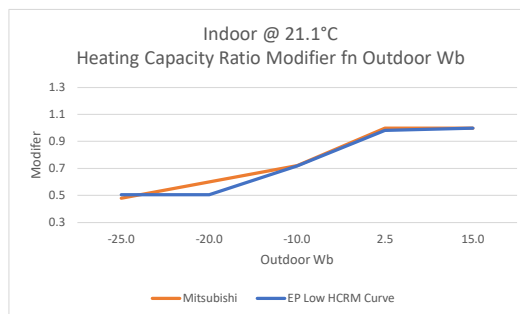
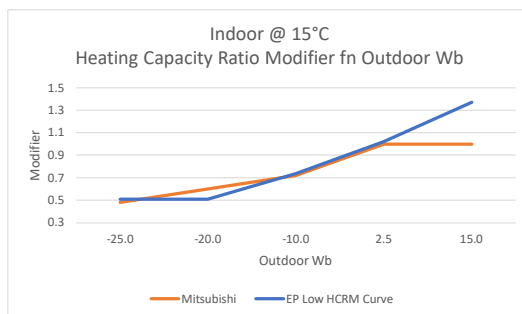
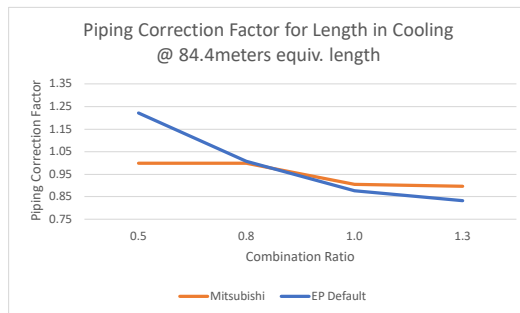
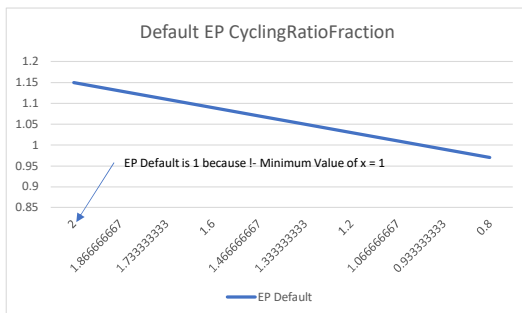
⁴Unit will continue to operate in extended operating range, but capacity is not guaranteed

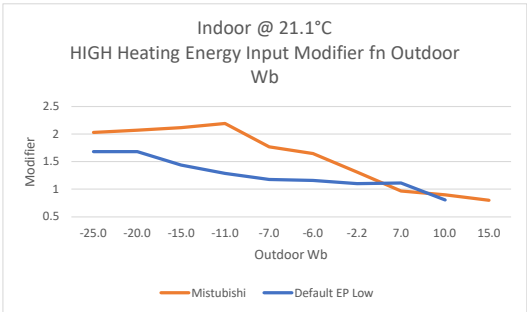
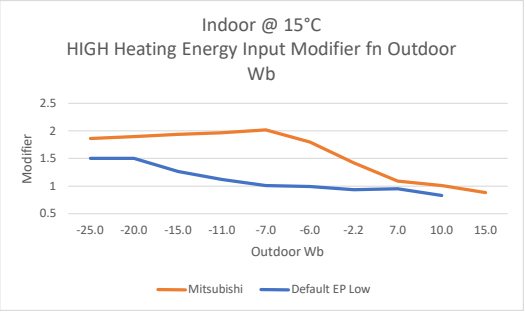
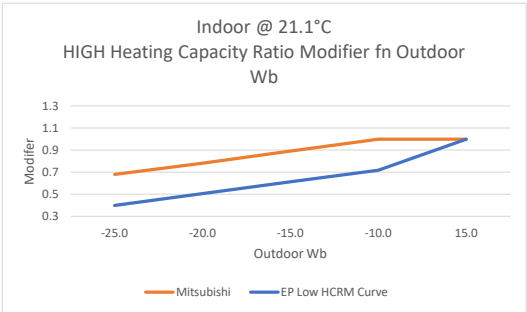
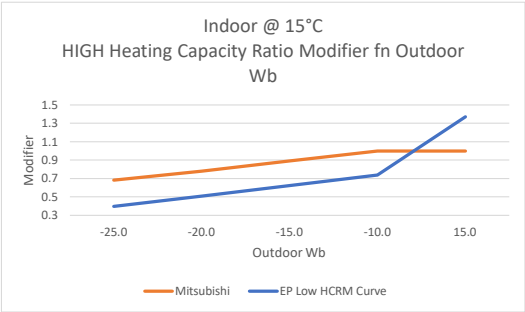
Each individual module requires a separate electrical connection. Refer to electrical data for each individual module.

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Mitsubishi PUHY-EP216TNU_YNU-A1 NONDUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP216TNU_YNU-A1 DUCTED-VRF-OU,- Name

Mitsubishi PUHY-EP216TNU_YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU,- Name

Mitsubishi PUHY-EP216TNU_YNU-A1 DUCTED-HIGHHEAT-VRF-OU,- Name

Energy Modeling Assumptions and Comments

Applicable Field

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated <u>Cooling/Heating</u> COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	No heat recovery for this model	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C} !- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI®

18-TON PUHY-EP216TNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT PUMP SYSTEM

UNIT OPTION

✓ Standard Model

PUHY-EP216TNU-A1

ACCESSORIES

✓ Big Foot Stand

for details see Big Foot Stands submittals

✓ Header Kit

for details see Pipe Accessories Submittal

✓ Joint Kit

for details see Pipe Accessories Submittal

✓ Low Ambient Kit

for details see Low Ambient Kit Submittal

✓ Panel Heater Kit

for details see Panel Heater Kit Submittal

✓ Snow/Hail Guards Kit

for details see Snow/Hail Guards Kit Submittal



Specifications			System
Unit Type			PUHY-EP216TNU-A1
Cooling Capacity (Nominal)		BTU/H	216,000
Heating Capacity (Nominal)		BTU/H	243,000
Guaranteed Operating Range	Cooling	°F [°C]	23~126 [-5.0~52.0]
	Heating	°F [°C]	-13~60 [-25.0~15.5]
Extended Operating Range	Heating	°F [°C]	-27.4~60 [-33.0~15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 68-15/16 x 29-3/16 [1,818 x 1,750 x 740]
Net Weight		Lbs. [kg]	874 [396]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 5Y 8/1]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	88.0/80.0
Maximum Overcurrent Protection		A	150/125
Recommended Fuse Size		A	90/80
Recommended Minimum Wire Size		AWG [mm]	2/2 [33.6/33.6]

Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	5/8 [15.88] Braze
	Gas (Low Pressure)	In. [mm]	1-3/8 [34.93] Braze
Max. Total Refrigerant Line Length		FL	3,280 [1,000]
Max. Refrigerant Line Length (Between ODU & IDU)		FL	541 [165]
Max. Control Wiring Length		FL	1,640 [500]
Indoor Unit Connectable	Total Capacity		50.0-130.0% of outdoor unit capacity
Sound Pressure Levels	Model/Quantity		P04-P96/2.0-50.0
Sound Power Levels		dB(A)	66.5/67.5
		dB(A)	88.0/86.5
	Type x Quantity		Propeller fan x 2
	Fan Motor Output	KW	0.92+0.92
FAN ⁴	Airflow Rate	CFM	14,100
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 26.0 lbs + 1.0 oz [11.8 kg]
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
	EER		9.9/9.9
AHRI Ratings (Ducted/Non-ducted)	IEER		20.2/21.7
	COP		3.3/3.72

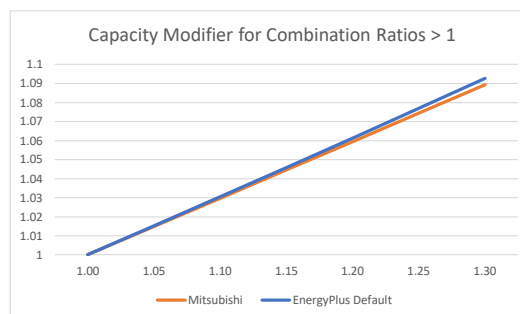
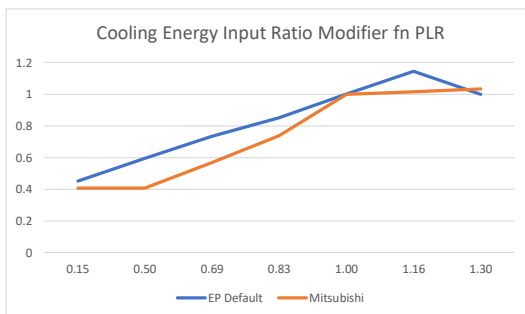
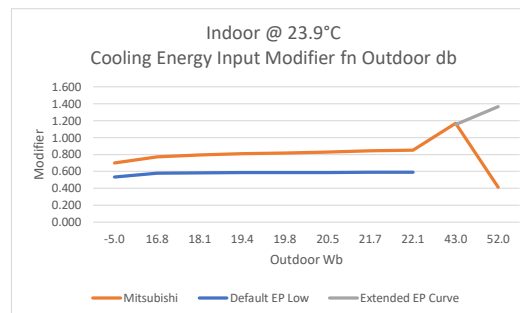
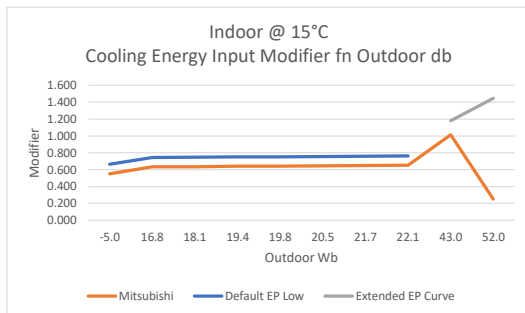
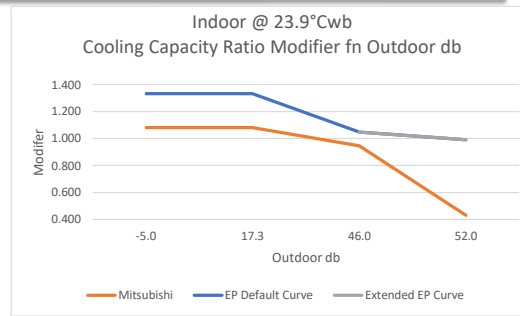
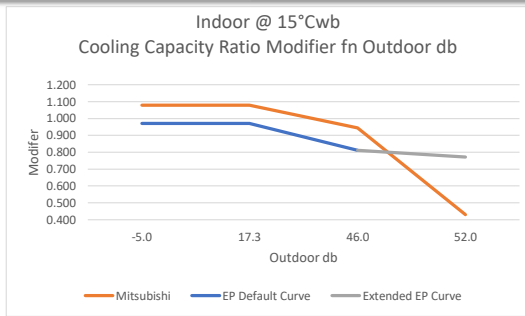
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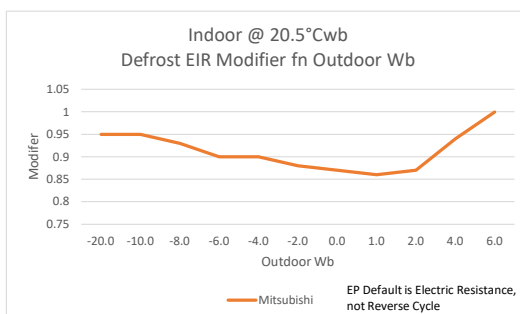
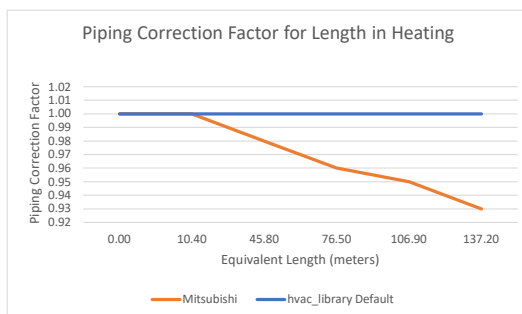
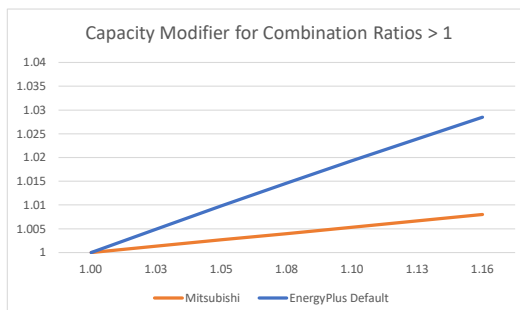
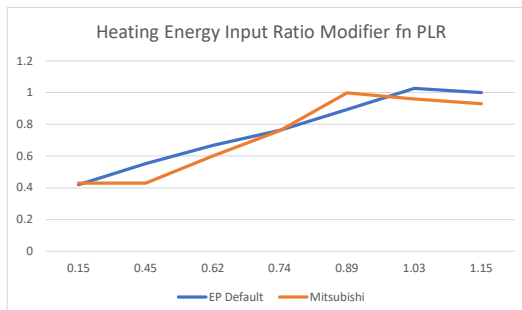
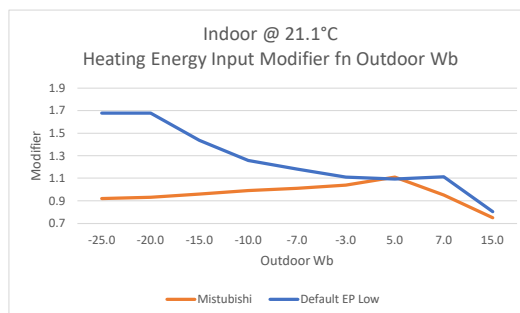
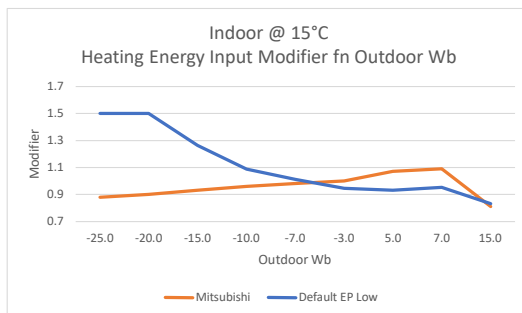
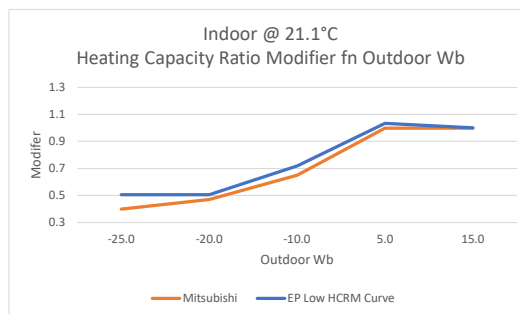
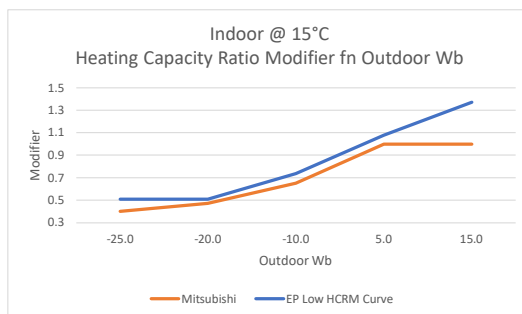
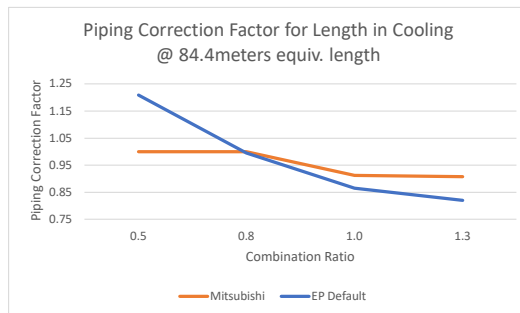
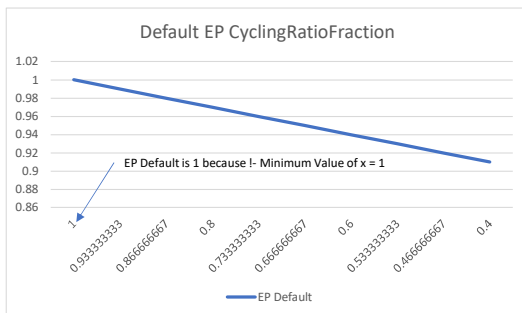
Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

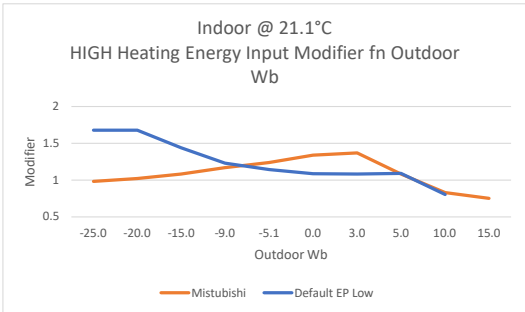
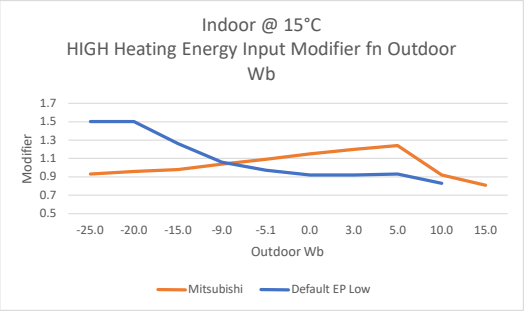
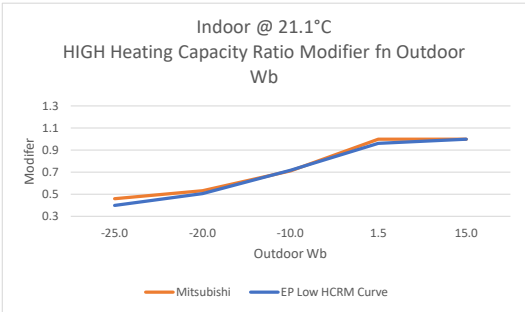
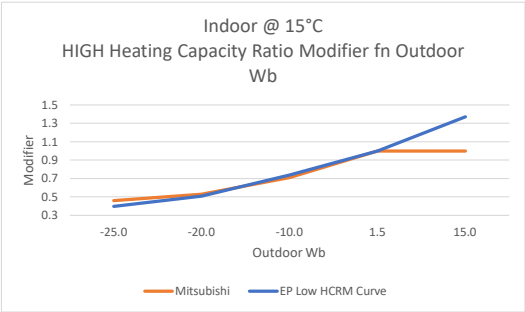
¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
²For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal.
³When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.
⁴Unit will continue to operate in extended operating range, but capacity is not guaranteed.

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Mitsubishi PURY-EP72TNU/YNU-A1 NONDUCTED-VRF-OU, !- Name

Mitsubishi PURY-EP72TNU/YNU-A1 DUCTED-VRF-OU, !- Name

Mitsubishi PURY-EP72TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU, !- Name

Mitsubishi PURY-EP72TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU, !- Name

Energy Modeling Assumptions and Comments

Applicable Field

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field !- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	!- Gross Rated <u>Cooling/Heating</u> COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: !- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C !- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	!- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field !- Name with HIGHHEAT	!- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name !- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	!- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	!- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	!- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	!- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	!- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	!- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	!- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	!- Condenser Inlet Node
13	Mitsubishi heat recovery is limited to a range of outdoor temperatures dependent on the mode. This model uses the wider range (ie. Heating mode): Heating Mode Minimum {C} = 15°C Heating Mode Maximum {C} = 27°C Cooling Mode Minimum {C} = 15°C Cooling Mode Maximum {C} = 24°C However, EnergyPlus has an inbuilt limitation on Heat Recovery Inlet Condenser Temperatures, which effectively renders the Heat Recovery temperature band for this equipment to be: HR Mode Minimum {C} = 15°C HR Mode Maximum {C} = 15°C This has been noted on Github, NREL/EnergyPlus issue #11303	!- Minimum Outdoor Temperature in Heat Recovery Mode {C} !- Maximum Outdoor Temperature in Heat Recovery Mode {C}
14	Heat recovery performance is not provided by Mitsubishi. Default EnergyPlus performance is used.	!- Heat Recovery Cooling Capacity Modifier Curve Name !- Initial Heat Recovery Cooling Capacity Fraction {W/W} !- Heat Recovery Cooling Capacity Time Constant {hr} !- Heat Recovery Cooling Energy Modifier Curve Name !- Initial Heat Recovery Cooling Energy Fraction {W/W} !- Heat Recovery Cooling Energy Time Constant {hr} !- Heat Recovery Heating Capacity Modifier Curve Name !- Initial Heat Recovery Heating Capacity Fraction {W/W} !- Heat Recovery Heating Capacity Time Constant {hr} !- Heat Recovery Heating Energy Modifier Curve Name !- Initial Heat Recovery Heating Energy Fraction {W/W} !- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI

6-TON PURY-EP72TNU-A1

Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT RECOVERY SYSTEM

UNIT OPTION
☐ Standard ModelPURY-EP72TNU-A1

ACCESSORIES
☐ Big Foot Stand for details see Big Foot Stands submittals
☒ BC Controller (Required) for details see BC Controller Submittals
☐ Joint Kit for details see Pipe Accessories Submittal
☐ Low Ambient Kit for details see Low Ambient Kit Submittal
☐ Panel Heater Kit for details see Panel Heater Kit Submittal
☐ Snow/Hail Guards Kit for details see Snow/Hail Guards Kit Submittal

Specifications		System	
Unit Type		PURY-EP72TNU-A1	
Cooling Capacity (Nominal)		BTU/H	72,000
Heating Capacity (Nominal)		BTU/H	80,000
Guaranteed Operating Range	Cooling	°F [°C]	23-126 [-5.0-52.0]
Extended Operating Range	Heating	°F [°C]	-13-60 [-25.0-15.5]
	Heating	°F [°C]	-27-40 [-33.0-15.5]

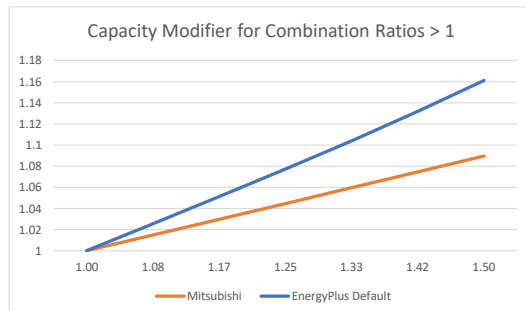
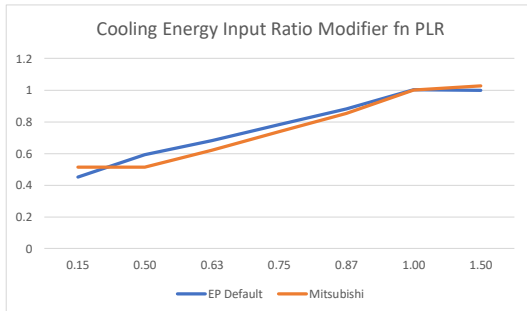
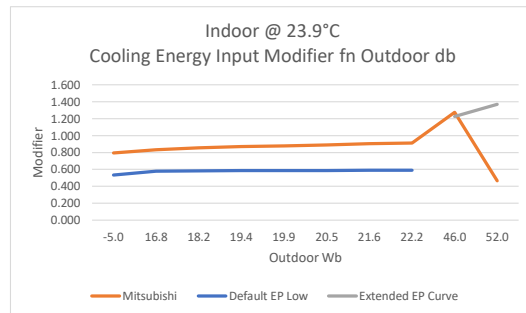
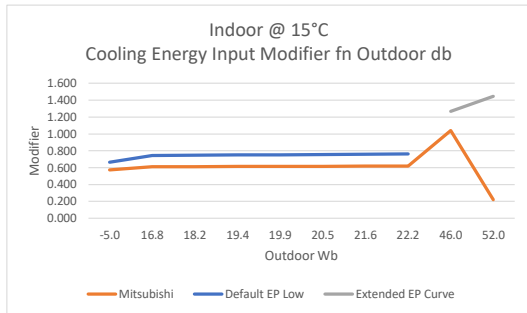
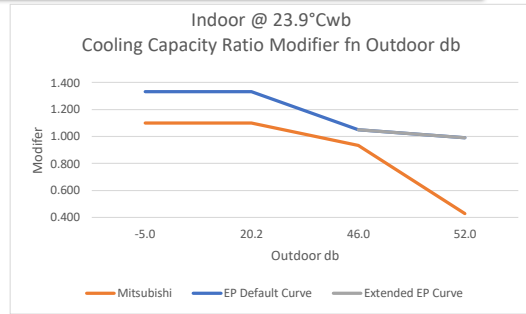
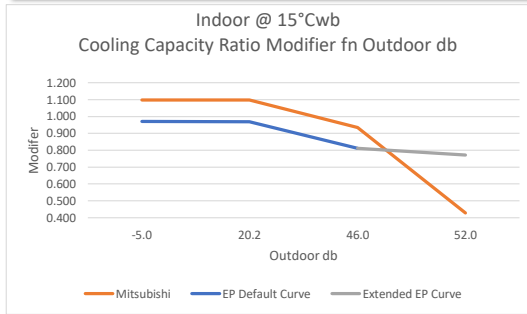
External Dimensions (H x W x D)	In. [mm]	71-5/8 x 36-1/4 x 29-3/16 [1,818 x 920 x 740]
Net Weight	Lbs. [kg]	519 [235]
External Finish	Pre-coated galvanized steel sheet (*powder coating for -BS type) (MUNSELL 9Y 8/1)	
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance	208/230V, 3 phase, 60 Hz, ±10%
Minimum Circuit Ampacity	A	33.0/30.0
Maximum Overcurrent Protection	A	50/50
Recommended Fuse Size	A	35/30
Recommended Minimum Wire Size	AWG [mm]	8/10 [8.4/5.3]
SCCR	KA	5
Refrigerant Piping Diameter	Liquid (High Pressure)	5/8 [15.88] Braze
	Gas (Low Pressure)	3/4 [19.05] Braze
Max. Total Refrigerant Line Length	FL	1,804
Max. Refrigerant Line Length (Between ODU & IDU)	FL	541
Max. Control Wiring Length	FL	1,640
Indoor Unit Connectable	Total Capacity	50.0~150.0% of outdoor unit capacity
	Model/Quantity	P04~P96/1.0~18.0
Sound Pressure Levels		dB(A)
Sound Power Levels		dB(A)
FAN*	Type x Quantity	Propeller fan x 1
	Fan Motor Output	kW
	Airflow Rate	CFM
	External Static Pressure	In. WG
Compressor Operating Range		15.0% to 100.0%
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge	R410A x 11.0 lbs + 7.0 oz [5.2 kg]
Protection Devices	High Pressure Protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)	Over-current protection
AHRl Ratings (Ducted/Non-ducted)	EER	11.8/12.2
	IEER	22.2/23.5
	COP	3.8/4.37
	SCHE	25.9/25.5

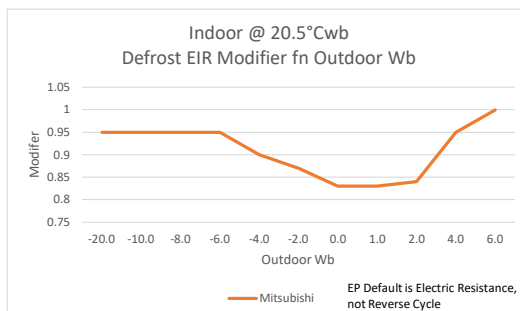
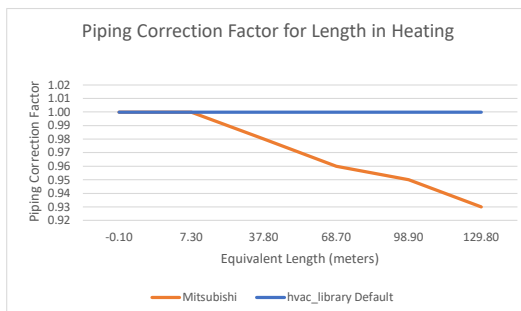
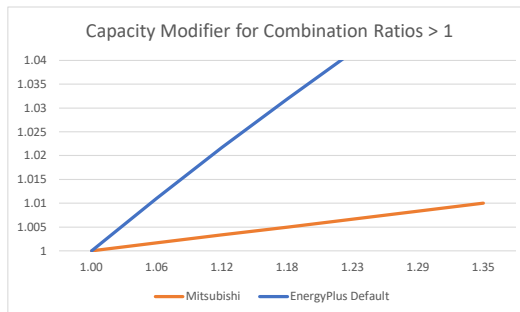
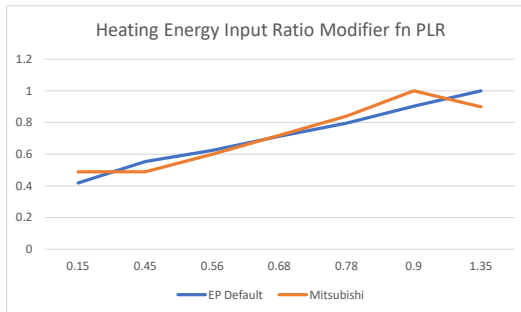
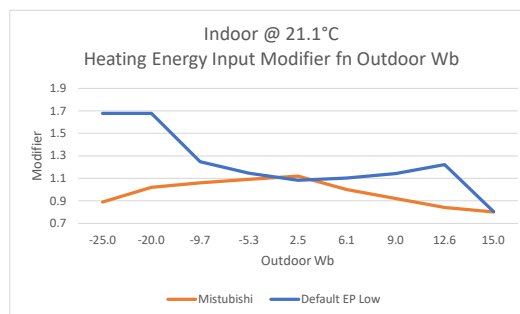
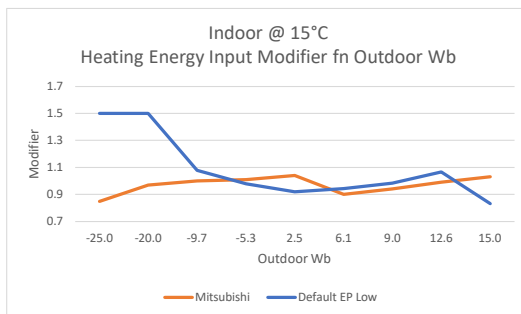
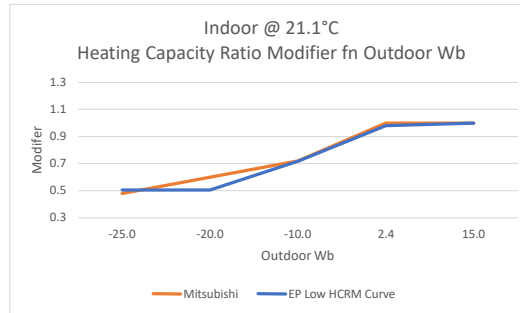
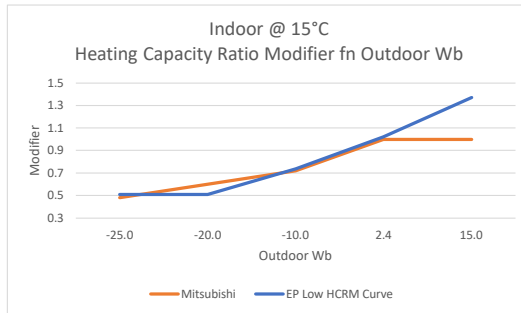
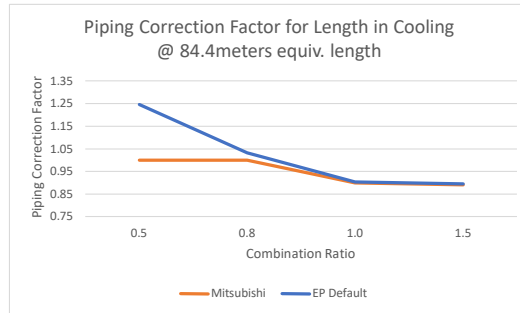
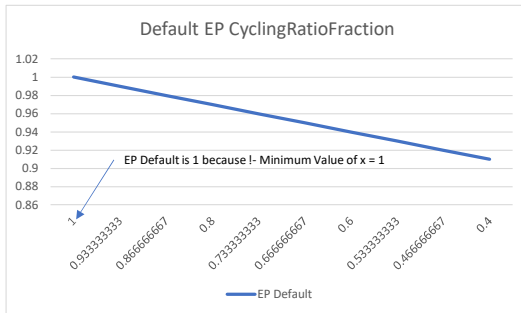
NOTES:
 Nominal cooling conditions (Test conditions are based on AHRl 1230-2023)
 Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
 Nominal heating conditions (Test conditions are based on AHRl 1230-2023)
 Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

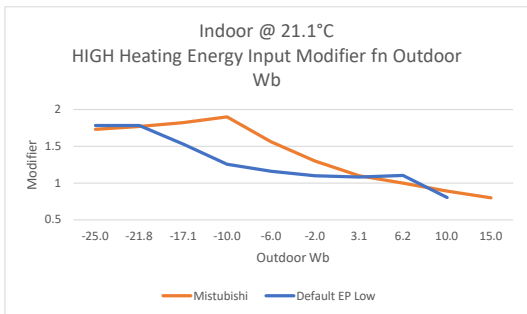
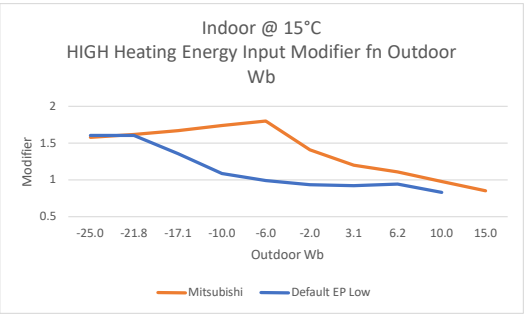
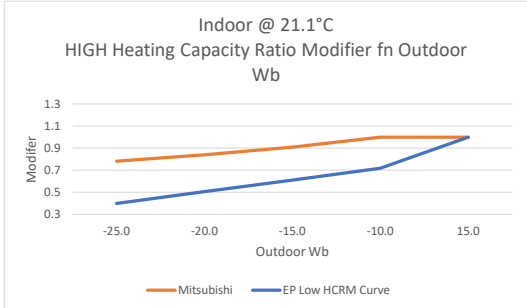
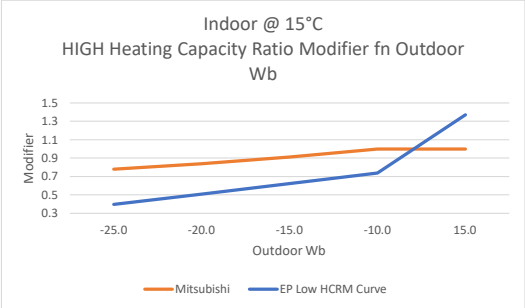
*Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
 *For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal
 *When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating
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Mitsubishi PURY-EP120TNU/YNU-A1 NONDUCTED-VRF-OU, I- Name**Mitsubishi PURY-EP120TNU/YNU-A1 DUCTED-VRF-OU, I- Name****Mitsubishi PURY-EP120TNU/YNU-A1 NONDUCTED-HIGHHEAT-VRF-OU, I- Name****Mitsubishi PURY-EP120TNU/YNU-A1 DUCTED-HIGHHEAT-VRF-OU, I- Name****Energy Modeling Assumptions and Comments****Applicable Field**

1	Coefficient of Performance is calculated assuming either Ducted or Non-Ducted indoor units, as specified in the field I- Name . If the project has a mix of ducted and non-ducted indoor units, it is recommended to modify these parameters to suit the project. A proportional calculation based on the ratio of ducted to non-ducted equipment is a good approximation.	I- Gross Rated <u>Cooling/Heating</u> COP {W/W}
2	Outdoor unit is installed in location above indoor units (this affects cooling operating outdoor temperature range). If the outdoor unit will be installed below the indoor units, adjust the fields: I- Minimum Outdoor Temperature in Cooling Mode {C} = 0°C I- Maximum Outdoor Temperature in Cooling Mode {C} = 43°C	I- Maximum Outdoor Temperature in Cooling Mode {C}
3	Standard performance mode: Dip switch toggle is off (it will not allow for high heating performance mode). For high heating performance, select the object with field I- Name with HIGHHEAT	I- Heating Capacity Ratio Modifier Function of Low Temperature Curve Name I- Heating Energy Input Ratio Modifier Function of Low Temperature Curve Name
4	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	I- Cooling Part-Load Fraction Correlation Curve Name
5	Mitsubishi does not publish information on operation below part load. EPLUS default is used. EPLUS Default curve has output of 1: It does not account for operational inefficiencies below minimum plr (compressor cycling).	I- Heating Part-Load Fraction Correlation Curve Name
6	No waste heat recovery for this model	I- Heat Pump Waste Heat Recovery
7	30 meters. Adjust this parameter to suit your project conditions	I- Equivalent Piping Length used for Piping Correction Factor in Cooling Mode {m}
8	10 meters: This is not used, see next...↓	I- Vertical Height used for Piping Correction Factor {m}
9	No published derate for height between IDU and ODU, used EPLUS default essentially zero (-0.00036)	I- Piping Correction Factor for Height in Cooling Mode Coefficient {1/m}
10	Mitsubishi docs do not indicate any crank case heater. Mitsubishi has an optional drain pan heater. However, this is currently only for Evaporative condensers in EP. Neither are modeled for this Mitsubishi equipment.	I- Crankcase Heater Power per Compressor {W}
11	Mitsubishi docs do not indicate any dependence on indoor wetbulb temperature.	I- Defrost Energy Input Ratio Modifier Function of Temperature Curve Name
12	Default (null value) for this field will use the weatherfile outdoor conditions. If condenser is located up high, another file may be necessary.	I- Condenser Inlet Node
13	Mitsubishi heat recovery is limited to a range of outdoor temperatures dependent on the mode. This model uses the wider range (ie. Heating mode): Heating Mode Minimum {C} = 15°C Heating Mode Maximum {C} = 27°C Cooling Mode Minimum {C} = 15°C Cooling Mode Maximum {C} = 24°C However, EnergyPlus has an inbuilt limitation on Heat Recovery Inlet Condenser Temperatures, which effectively renders the Heat Recovery temperature band for this equipment to be: HR Mode Minimum {C} = 15°C HR Mode Maximum {C} = 15°C This has been noted on Github, NREL/EnergyPlus issue #11303	I- Minimum Outdoor Temperature in Heat Recovery Mode {C} I- Maximum Outdoor Temperature in Heat Recovery Mode {C}
14	Heat recovery performance is not provided by Mitsubishi. Default EnergyPlus performance is used.	I- Heat Recovery Cooling Capacity Modifier Curve Name I- Initial Heat Recovery Cooling Capacity Fraction {W/W} I- Heat Recovery Cooling Capacity Time Constant {hr} I- Heat Recovery Cooling Energy Modifier Curve Name I- Initial Heat Recovery Cooling Energy Fraction {W/W} I- Heat Recovery Cooling Energy Time Constant {hr} I- Heat Recovery Heating Capacity Modifier Curve Name I- Initial Heat Recovery Heating Capacity Fraction {W/W} I- Heat Recovery Heating Capacity Time Constant {hr} I- Heat Recovery Heating Energy Modifier Curve Name I- Initial Heat Recovery Heating Energy Fraction {W/W} I- Heat Recovery Heating Energy Time Constant {hr}

CITYMULTI™

10-TON PURY-EP120TNU-A1



Job Name:

System Reference:

Date:

208/230V OUTDOOR VRF HEAT RECOVERY SYSTEM



UNIT OPTION
☐ Standard Model _____ PURY-EP120TNU-A1

ACCESSORIES
☐ Big Foot Stand _____ for details see Big Foot Stands submittals
☒ BC Controller (Required) _____ for details see BC Controller Submittals
☐ Joint Kit _____ for details see Pipe Accessories Submittal
☐ Low Ambient Kit _____ for details see Low Ambient Kit Submittal
☐ Panel Heater Kit _____ for details see Panel Heater Kit Submittal
☐ Snow/Hail Guards Kit _____ for details see Snow/Hail Guards Kit Submittal

Specifications		System	
Unit Type		PURY-EP120TNU-A1	
Cooling Capacity (Nominal)	BTU/H	120,000	
Heating Capacity (Nominal)	BTU/H	135,000	
Guaranteed Operating Range	Cooling	°F [°C]	23-126 [-5.0-52.0]
	Heating	°F [°C]	-13-60 [-25.0-15.5]
Extended Operating Range	Heating	°F [°C]	-27-4-60 [-33.0-15.5]

External Dimensions (H x W x D)	In. [mm]		71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight	Lbs. [kg]		622 [282]
External Finish	Pre-coated galvanized steel sheet (powder coating for -BS type) (MUNSELL S9 8/1)		
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity	A		56.0/55.0
Maximum Overcurrent Protection	A		90/90
Recommended Fuse Size	A		60/60
Recommended Minimum Wire Size	AWG [mm]		4/4 [21.2/21.2]
SCCR	kA		5
Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	3/4 [19.05] Braze
	Gas (Low Pressure)	In. [mm]	1-1/8 [28.58] Braze
Max. Total Refrigerant Line Length	FL		1,968
Max. Refrigerant Line Length (Between ODU & IDU)	FL		541
Max. Control Wiring Length	FL		1,640
Indoor Unit Connectable	Total Capacity		50.0~150.0% of outdoor unit capacity
	Model/Quantity		P04~P96/1.0~30.0
Sound Pressure Levels	dB(A)		60.0/62.0
Sound Power Levels	dB(A)		80.0/80.5
FAN*	Type x Quantity	Propeller fan x 2	
	Fan Motor Output	kW	0.46±0.46
	Airflow Rate	CFM	6,300
	External Static Pressure	In. WG	Selectable: 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 in. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 17.0 lbs ± 10.0 oz [8.0 kg]
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-current protection
AHR Ratings (Ducted/Non-ducted)	EER		10.4/10.6
	IEER		21.7/23.0
	COP		3.71/4.04
	SCHE		25.3/29.1

NOTES:
 Nominal cooling conditions (Test conditions are based on AHR1 1230-2023)
 Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
 Nominal heating conditions (Test conditions are based on AHR1 1230-2023)
 Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)

*Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region.
 *For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal
 *When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating
 *Unit will continue to operate in extended operating range, but capacity is not guaranteed

Specifications are subject to change without notice.

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