



Submittal Data Sheet

Outdoor Unit Model#: ES-48Z-M6C*

Multi-Zone Heat Pump System

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

Product Code: 810175551043



EFFICIENCY RATINGS

Cooling		Heating	
SEER2	20.4	HSPF2-4	10.6
EER2	12	COP	3.9

COOLING PERFORMANCE

Cooling (Btu/hr)	
Rated Capacity	45000
Min/Max Capacity	12000~52000
Moisture Removal (L/h)	2.5
Standard Operating Range (°F/°C)	-13~122 / (-25~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

HEATING PERFORMANCE

Heating (Btu/hr)	
1. @ 47°F Rated	47000
1. @ 47°F Min/Max Capacity	13000~53000
2. @ 17°F Rated (H32)	37000
3. @ 5°F Rated: Capacity / COP (H42)	38000 / 2.1
3. @ 5°F Max: Capacity	38000
Standard Operating Range (°F/°C)	-13~75 / (-25~24)
1. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Conditions	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

OUTDOOR UNIT SPECIFICATIONS

Compressor Type		ROTARY
Compressor Model		KTQ420D1UMU
Refrigerant		R454B
Refrigerant Oil Charge (mL)		1400
Refrigerant Oil		V74
Outdoor Air Flow (Max) (CFM)		4503
Outdoor Noise Level (dBA)		63
Dimension (W×D×H)	inch	37.48 x 16.34 x 52.48
	mm	952 x 415 x 1333
Package (W×D×H)	inch	43.11 x 19.49 x 58.27
	mm	1095 x 495 x 1480
Net/Gross Weight	lbs	222.00 / 254.19
	kg	100.7 / 115.3

ELECTRICAL SPECIFICATIONS

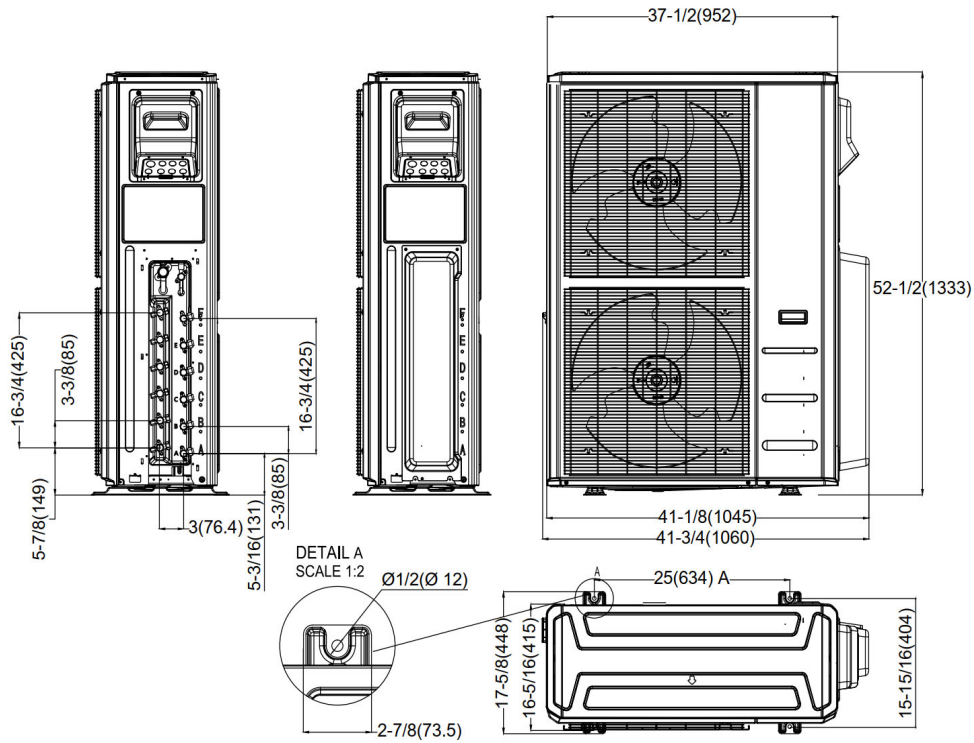
Power Supply	208/230V, 60Hz, 1Ph
System MCA	40
Connection Wiring	AWG 14-4
System MOP	45
Compressor RLA	24
Outdoor Fan Motor RLA	2.5
Outdoor Fan Motor W	85
Indoor Fan Motor RLA	/
Indoor Fan Motor W	/
System Power Input @ Cooling (W)	3740 / (800 ~ 6000)
System Power Input @ Heating (W)	3532 / (800 ~ 5200)
MCA: Min. circuit amps (A)	MOP: Max. overcurrent protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

REFRIGERANT PIPING SPECIFICATIONS

Liquid Size	6 x 6.35mm (6 x 1/4in)
Gas Size	4 x 9.52mm + 2 x 12.7mm (4 x 3/8in + 2 x 1/2in)
Max. Piping Length for all rooms (ft/m)	262.4 / (80)
Max. Piping Length for one IDU (ft/m)	114.8 / (35)
Max. Height Difference of IDU and ODU (ft/m)	49.2 / (15)
Refrigerant Pre-charged Amount (oz/kg)	148.15 / (4.2)
Refrigerant Precharge Length (ft/m)	24.6 (7.5) x 6
Additional Charge of Refrigerant (Φ6.35 (1/4") liquid pipe) ((oz/ft)/(g/m))	0.16 / (15)
Additional Charge of Refrigerant (Φ9.52 (3/8") liquid pipe) ((oz/ft)/(g/m))	0.32 (30)
Connection Method	Flared

*System performance figures & efficiency ratings above achieved by testing condenser with (5) 9K multi-zone compatible ducted air handlers

Outdoor Unit Dimensions



Installation Instructions

