

AHU Heat Pump System

Location: _____
Engineer: _____
Submitted to: _____
Submitted by: _____
Reference: _____

Approval: _____
Date: _____
Construction: _____
Unit #: _____
Drawing #: _____

Set Code CH-48AHU
Indoor unit code CH-N48LCU-230V CH-48AHU
Outdoor unit code 208/230, 1, 60 CH-N48LCU-230VO

Certified AHRI
UL



SYSTEM PERFORMANCE DATA

Power supply

Normal Operational Voltage (V, Ph, Hz) 8.6
Voltage Range (V) 16.2

Electrical

Minimum circuit ampacity (A) 36.5
Max.fuse (A) 50.0
Connection wiring Optional

Cooling

Rated Capacity (Btu/h) 48000
Capacity Range (Btu/h) 11836-51920
Power Input (W) 5900
Rated current (A) 26.5
SEER (Btu/W) 16.2
EER (Btu/W) 8.6

Heating at 47F

Rated Capacity (Btu/h) 60000
Capacity Range (Btu/h) 11908-63000
Power Input (W) 28000
Rated current (A) 1.75
HSPF4 (Btu/W) 8
HSPF5 (Btu/W) 15
COP W/W 0

REFRIGERANT PIPE DATA

Throttle type Indoor unit EXV
Outdoor unit

Design pressure (PSIG) 550/340
Refrigerant Type (Oz) R410A/158.7
Refrigerant precharge (ft) 25.0
(m) 7.5
Additional charge for each ft (oz/ft) 0.32
(g/m) 30
Liquid side/ Gas side (inch) 3/8" / 5/8"
(mm) 9.52/15.9
Max. pipe length (ft) 213.0
(m) 65.0
Max. difference in level (ft) 98.0
(m) 30
Connection method Flared

Indoor(cooling/ heating) (Deg. °F) 60~90/32~86
(Deg. °C) 16~32/0~30
Outdoor(cooling/heating) (Deg. °F) 5~122/5~75
(Deg. °C) -15~-50/ -15~-24
Application area (sq.ft) Yes
(m2) Yes

INDOOR UNIT DATA

Indoor fan motor

Type Centrifugal
Model
Qty
Input (W) 2180/1860/1540
RLA (A) ---
LRA (A) ---
Winding Resistance (Ω) ---
Capacitor (uF) ---
Speed(Hi/Mi/Lo) (r/min) 0.20

Air flow & Noise level

Indoor air flow (Hi/Med/Lo) (↑) (CFM) 0-0.8
Indoor noise level (Hi/Med/Lc) [dB(A)] 0.00
Dehumidification (Pint/H) ---

Indoor unit

Dimension (WxDxH) (inch) 9.52 / 15.9
(mm) 132.50/155.87
Packing(WxDxH) (inch) 3/4
(mm) 3/8 " / 5/8 "
Net/Gross weight (lbs.) 14AWG*2 Stranded, shielded
(kg) 0.00

OUTDOOR UNIT DATA

Compressor

Type ROTARY
Model KTQ420D1UMU
Brand GMCC
Capacity (Btu/h) 46744
Input (W) 3700
Rated current (RLA) (A) ---
Refrigerant oil/oil charge (ml) VG74/1400

Outdoor fan motor

Model ZKFN-85-8-22-5
Qty 2
Input (W) 126.00
RLA (A) ---
Speed (r/min) 850/750/650/550

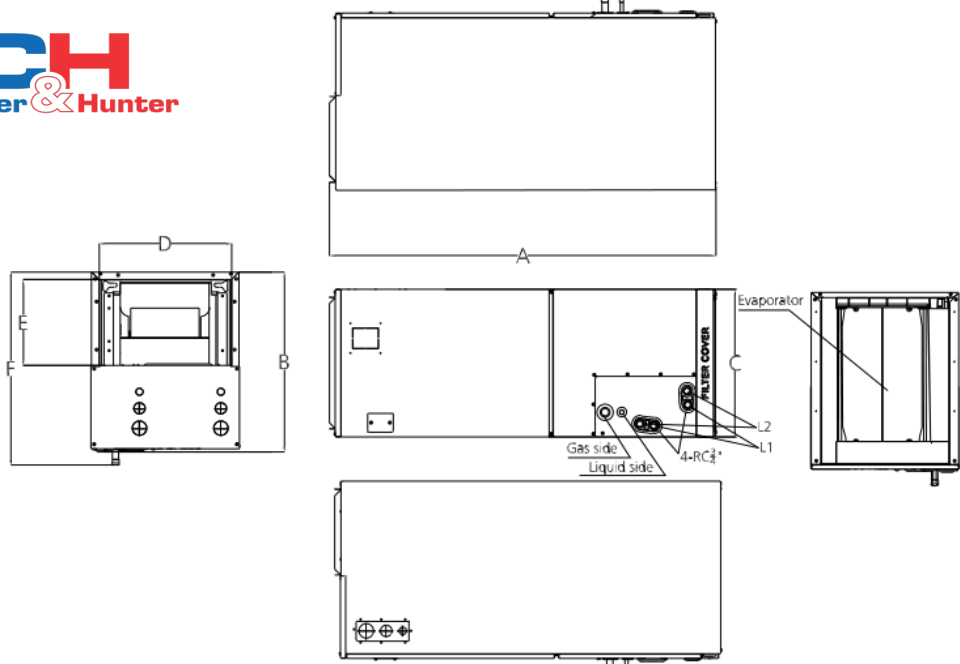
Air flow & Noise level

Outdoor air flow (Max.) (CFM) 4500
Outdoor noise level [dB(A)] 63.5

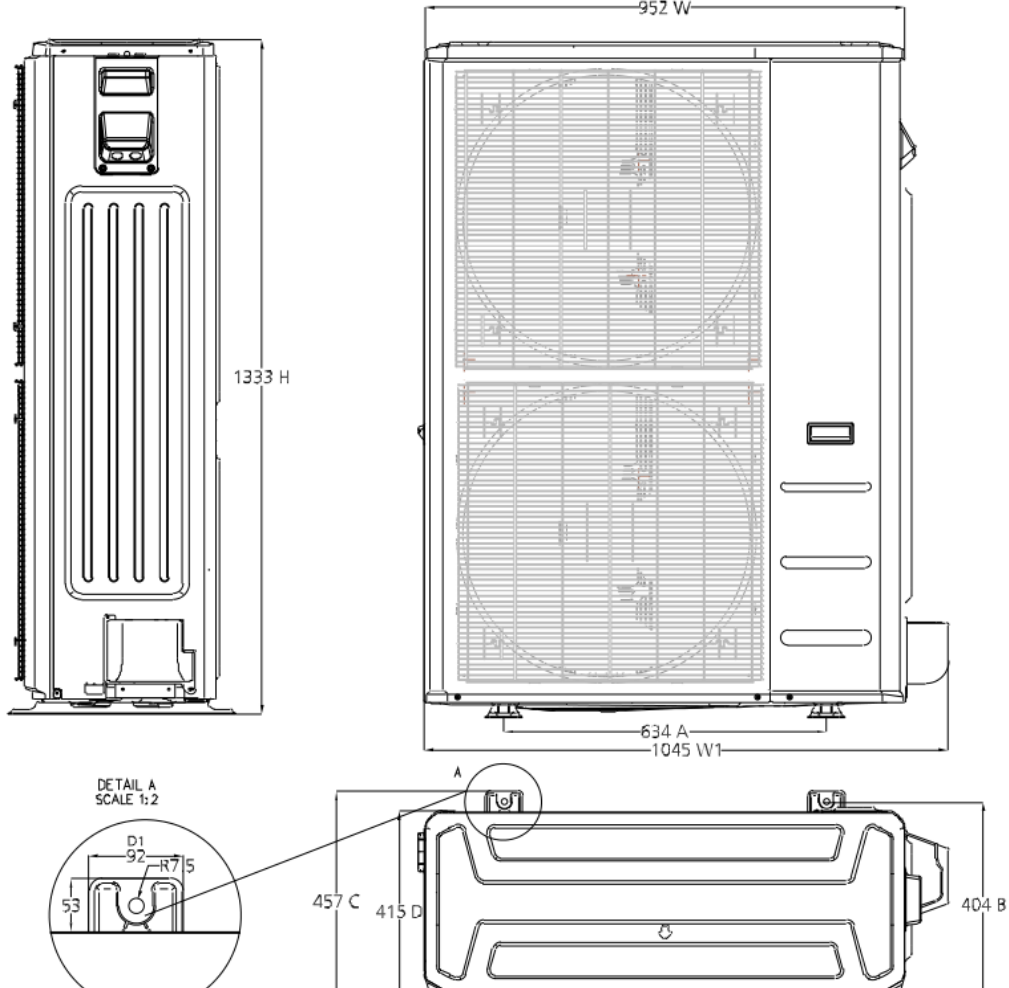
Outdoor unit

Dimension (W×D×H) (inch) 37.48x16.34x52.48
(mm) 952x415x1333
Packing (W×D×H) (inch) 43.11x19.49x58.27
(mm) 1095x495x1480
Net/ Gross weight (lbs.) 219.14/249.12
(kg) 99.4/113

Indoor unit dimension



Model	Unit	Dimensions(mm)						Drain hole	
		A	B	C	D	E	F	L1	L2
18k~24k	mm	1143	534	445	400	260	585	Main drain	Overflow drain
	inch	45	21	17-1/2	15-3/4	10-1/4	23		
30k-48k	mm	1245	534	534	490	260	585		
	inch	49	21	21	19-5/16	10-1/4	23		
Outdoor 60k	mm	1346	534	622	580	260	585		



Fan performance

