

Ceiling & Floor Heat Pump System

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

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

Set Model
 Indoor unit model: CH-60LCFC/I
 Outdoor unit model: CH-N60LCU-230VO

Certified
 AHRI
 CSA



SYSTEM PERFORMANCE DATA

Power supply
 Normal Operational Voltage (V, Ph, Hz) 208/230V, 1Ph, 60Hz
 Voltage Range (V) 187-253

Electrical
 Minimum circuit ampacity (Outdoor) (A) 39.0
 Max. fuse (Outdoor) (A) 50.0
 Connection wiring 14AWG*2 Stranded, shielded

Cooling
 Capacity (Btu/h) 54000(15000-54000)
 Power Input (W) 5500(1400-5800)
 Current (A) 24.10(5.10-26.0)
 SEER2 (Btu/W) 19.8
 EER2 (Btu/W) 9.8

Heating
 Capacity (Btu/h) 60000(17000-60000)
 Power Input (W) 5800(1500-5800)
 Current (A) 25.5(6.70-25.5)
 HSPF2-4 (Btu/W) 9.0
 HSPF2-5 (Btu/W) 7.0
 COP W/W 3.03
 Heat at 17F(H32) (Btu/h) 35000
 Heat at 5F(H42) (Btu/h) 34400
 COP at 5F(H42) W/W 2.02

INDOOR UNIT DATA

Indoor fan motor

| | |
|-------------------------|----------------|
| Model | ZKFN-160-8-1-2 |
| Qty | 1 |
| Input (W) | / |
| Output (W) | 160.0 |
| RLA (A) | 2.40 |
| Speed(Hi/Mi/Lo) (r/min) | 1350/1050/850 |

Air flow & Noise level
 Indoor air flow (Hi/Med/Lo) (No duct) (CFM) //1384, 12/1028, 82/795, 29
 Indoor noise level (Hi/Med/Lo) [dB(A)] 55/48/42
 Dehumidification (LH) 7.5

Indoor unit
 Dimension (WxDxH) (inch) 64.96x26.57x9.25
 (mm) 1650x675x235
 Packing(WxDxH) (inch) 67.91x29.72x12.52
 (mm) 1725x755x318
 Net/Gross weight (lbs.) 96.56/111.99
 (kg) 43.8/50.8

OUTDOOR UNIT DATA

Compressor
 Type ROTARY
 Model KTQ420/U/MU
 Brand GMCC
 Capacity (Btu/h) 46744
 Input (W) 3700
 Rated current (RLA) (A) 25.0
 Refrigerant oil/oil charge (ml) VG74/1400

Outdoor fan motor

| | |
|---------------|----------------|
| Model | ZKFN-85-8-22-5 |
| Qty | 2 |
| Input (W) | 126.00 |
| Output (W) | 85.00 |
| RLA (A) | 1.50 |
| Speed (r/min) | 850/750/650 |

Air flow & Noise level
 Outdoor air flow (Max.) (CFM) 2647.1
 Outdoor noise level [dB(A)] 64.0

Outdoor unit
 Dimension (WxDxH) (inch) 37.48x16.34x52.48
 (mm) 952x415x1333
 Packing (WxDxH) (inch) 43.11x19.49x58.27
 (mm) 1095x495x1480
 Net/ Gross weight (lbs.) 217.15/248.24
 (kg) 98.5/112.6

Accessories
 Adaptor (7/8" to 3/4") Qty 1

REFRIGERANT PIPE DATA

| | | |
|--------------------------------|--------------|----------------------------|
| Throttle type | Indoor unit | N/A |
| Design pressure (PSIG) | Outdoor unit | EXV+Throttle valve 550/340 |
| Refrigerant Type | | R410A |
| Refrigerant charge | oz | 169.32 |
| Refrigerant precharge | (fl) | 25.0 |
| Additional charge for each ft | (oz/ft) | 0.32 |
| Additional charge for each m | (g/m) | 30.0 |
| Liquid side/ Gas side(indoor) | (inch) | 3/8"3/4" |
| | (mm) | 9.52/19 |
| Liquid side/ Gas side(outdoor) | (inch) | 3/8"7/8" |
| | (mm) | 9.52/22 |
| Max. pipe length | (ft) | 213.3 |
| | (m) | 65.0 |
| Max. difference in level | (ft) | 98.4 |
| | (m) | 30.0 |
| Connection method | | Flared |
| Indoor(cooling) | (Deg. °F) | 62~90 |
| | (Deg. °C) | 17~32 |
| Indoor(heating) | (Deg. °F) | 32~86 |
| | (Deg. °C) | 0~30 |
| Outdoor(cooling) | (Deg. °F) | 5~122 |
| | (Deg. °C) | -15~50 |
| Outdoor(heating) | (Deg. °F) | 5~75 |
| | (Des. °C) | -15~-24 |

Indoor unit dimension

2-φ40 Drain discharge port
 φ120 Fresh air intake
 2-φ3/32 Wiring connection port
 φ120 Refrigerant pipe hole

| Capacity (Btu/h) | Unit | A | B | C | D |
|------------------|------|-------|-------|------|-------|
| 18K / 24K | mm | 1068 | 675 | 235 | 983 |
| | inch | 42.05 | 26.57 | 9.25 | 38.70 |
| 36K | mm | 1285 | 675 | 235 | 1200 |
| | inch | 50.59 | 26.57 | 9.25 | 47.24 |
| 48K/60K | mm | 1650 | 675 | 235 | 1565 |
| | inch | 64.96 | 26.57 | 9.25 | 61.61 |

Outdoor unit dimension

952 W
 1333 H
 634 A
 1045 W1
 457 C
 415 D
 404 B

DETAIL A SCALE 1:3