

Refrigeration

# Technical Data

Reciprocating Condensing Unit - JEHCCU



EEDEN13-780A

JEHCCU



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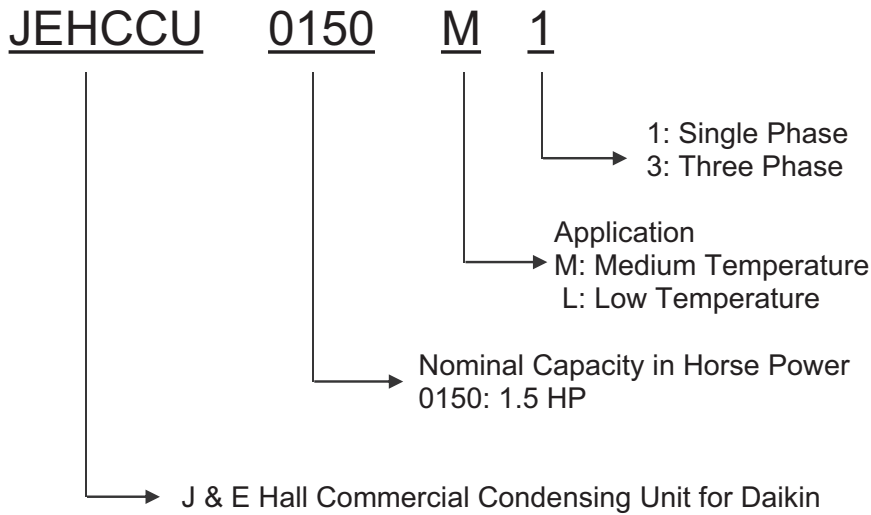


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# 1 Nomenclature



# 2 Product Overview

• R404 • R134a • R407C

| Capacity(kW)               | 0.5 | 1  | 2 | 3  | 4  | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|----------------------------|-----|----|---|----|----|---|---|---|---|---|----|----|----|----|----|
| <b>Medium temperature*</b> |     |    |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0050M1               | •   |    |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0088M1               |     | •  |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0150M1/3             |     | •• | • |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0225M1/3             |     | •  |   | •• |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0300M1/3             |     |    | • |    | •• |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0400M3               |     |    |   | •  |    | • | • |   |   |   |    |    |    |    |    |
| JEHCCU0500M3               |     |    |   |    | •  |   |   | • | • |   |    |    |    |    |    |
| JEHCCU0600M3               |     |    |   |    |    | • |   | • | • |   |    |    |    |    |    |
| JEHCCU0675M3               |     |    |   |    |    |   | • |   | • | • |    |    |    |    |    |
| JEHCCU0825M3               |     |    |   |    |    |   |   | • |   | • |    | •  |    |    |    |
| JEHCCU1000M3               |     |    |   |    |    |   |   |   | • |   |    |    |    | •• |    |
| <b>Low temperature*</b>    |     |    |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0075L1               | •   |    |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0175L1/3             | •   |    |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0225L1/3             |     | •  |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0350L3               |     | •  |   |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0400L3               |     |    | • |    |    |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0725L3               |     |    |   |    | •  |   |   |   |   |   |    |    |    |    |    |
| JEHCCU0825L3               |     |    |   |    |    | • |   |   |   |   |    |    |    |    |    |

\* Evaporation temperature = -10°C, Outside ambient temperature = 32°C

\*\* Evaporation temperature = -35°C, Outside ambient temperature = 32°C

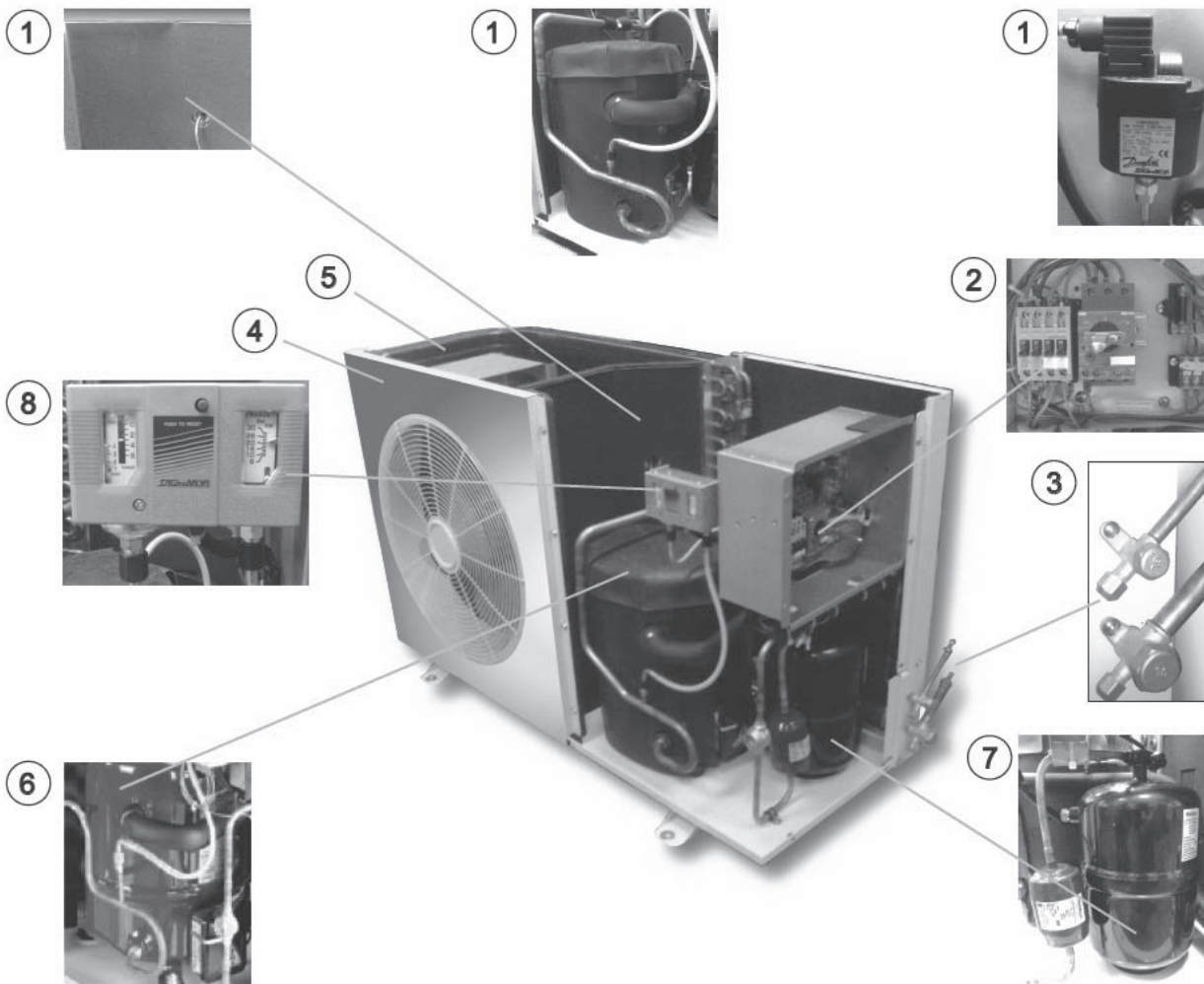
Note: Detailed Capacity Data refer to page 12.

### 3 Standard Product Configuration

- 1) Low sound emissions thanks to a sound proofing lining on the housing, a compressor jacket and fan speed controller  
(Note: except series 1 condensing unit)
- 2) IP54 rated switch box, with main power switch, magnetic contactor and overcurrent switch
- 3) External shut off valves for quick installation and easy access and maintenance
- 4) Weather proof housing made of epoxy coated steel
- 5) Condenser coil with anti-corrosion treatment "blue fin"
- 6) Reliable reciprocating compressor for medium and low temperature models with oil sight glass (Note: except series 1 condensing unit)  
Crankcase heater
- 7) Liquid receiver with fusible plug
- 8) Dual pressure switch
- 9) Oil separator and check valve for low temperature models (Note: except series 1 condensing unit)  
Sight glass and filter drier  
Flare adapter for filter drier

Designed for Environmental friendly refrigerant R404A (available for all range condensing units) or R134a and R407C (available for medium temperature application series 2, 3 & 4 condensing units).

Fully factory tested and filled up with nitrogen.



# 4 Specifications

| Model              | Series | Compressor |                                | Oil Charge (Liter) | O/S <sup>g</sup> | Oil Type           | Electrical Data |                                  |                |       | Receiver               |                      | Connection                  |                |                | Dimensions    |            |            | Weight (kg) | Sound pressure dB(A) at 1m <sup>c</sup> |             |    |
|--------------------|--------|------------|--------------------------------|--------------------|------------------|--------------------|-----------------|----------------------------------|----------------|-------|------------------------|----------------------|-----------------------------|----------------|----------------|---------------|------------|------------|-------------|---|-------------|----|
|                    |        | Type       | Swept volume m <sup>3</sup> /h |                    |                  |                    | Power Input     | Nominal Current <sup>a</sup> (A) |                |       | Lock Rotor current (A) | MFA <sup>b</sup> (A) | Airflow (m <sup>3</sup> /h) | Volume (Litre) | Suction (inch) | Liquid (inch) | Width (mm) | Depth (mm) |             |   | Height (mm) |    |
|                    |        |            |                                |                    |                  |                    | 1 <sup>d</sup>  | 2 <sup>e</sup>                   | 3 <sup>f</sup> |       | 1 <sup>d</sup>         | 2 <sup>e</sup>       | 3 <sup>f</sup>              |                |                |               |            |            |             |   |             |    |
| Medium temperature |        |            |                                |                    |                  |                    |                 |                                  |                |       |                        |                      |                             |                |                |               |            |            |             |   |             |    |
| JEHCCU0050M1       | 1      | SC10MLX    | 1.79                           | 0.60               | -                | Oil A <sup>h</sup> | 3.85            | -                                | -              | 18.4  | 15                     | -                    | -                           | 1910           | 1.2            | 3/8           | 1/4        | 884        | 430         | 489                                     | 46          | 49 |
| JEHCCU0088M1       | 1      | SC18MLX    | 3.08                           | 0.60               | -                | Oil A <sup>h</sup> | 4.62            | -                                | -              | 23.4  | 15                     | -                    | -                           | 1910           | 1.2            | 3/8           | 1/4        | 884        | 430         | 489                                     | 46          | 49 |
| JEHCCU0150M1       | 2      | MTZ18-5VM  | 5.26                           | 0.95               | -                |                    | 7.23            | 5.30                             | 5.70           | 40.0  | 15                     | 15                   | 15                          | 3040           | 4.6            | 1/2           | 3/8        | 1104       | 478         | 650                                     | 82          | 57 |
| JEHCCU0150M3       | 2      | MTZ18-4VM  | 5.26                           | 0.95               | -                |                    | 3.33            | 2.54                             | 3.05           | 20.0  | 15                     | 15                   | 15                          | 3040           | 4.6            | 1/2           | 3/8        | 1104       | 478         | 650                                     | 82          | 57 |
| JEHCCU0225M1       | 2      | MTZ28-5VM  | 8.36                           | 0.95               | -                |                    | 11.64           | 8.26                             | 9.66           | 51.0  | 25                     | 20                   | 20                          | 2620           | 4.6            | 1/2           | 3/8        | 1104       | 478         | 650                                     | 89          | 56 |
| JEHCCU0225M3       | 2      | MTZ28-4VM  | 8.36                           | 0.95               | -                |                    | 4.65            | 3.41                             | 4.14           | 23.0  | 15                     | 15                   | 15                          | 2620           | 4.6            | 1/2           | 3/8        | 1104       | 478         | 650                                     | 89          | 56 |
| JEHCCU0300M1       | 2      | MTZ36-5VM  | 10.52                          | 0.95               | -                |                    | 15.87           | 10.76                            | 10.13          | 60.0  | 30                     | 25                   | 25                          | 2620           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 89          | 57 |
| JEHCCU0300M3       | 2      | MTZ36-4VM  | 10.52                          | 0.95               | -                | Oil B <sup>i</sup> | 5.57            | 3.91                             | 5.12           | 30.0  | 15                     | 15                   | 15                          | 2620           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 89          | 57 |
| JEHCCU0400M3       | 3      | MTZ50-4VM  | 14.90                          | 1.80               | -                |                    | 6.97            | 5.28                             | 6.24           | 48.5  | 15                     | 15                   | 15                          | 6050           | 7.6            | 7/8           | 1/2        | 1347       | 556         | 884                                     | 122         | 57 |
| JEHCCU0500M3       | 3      | MTZ64-4VM  | 18.94                          | 1.80               | -                |                    | 8.93            | 6.78                             | 7.77           | 64.0  | 20                     | 20                   | 20                          | 6050           | 7.6            | 7/8           | 1/2        | 1347       | 556         | 884                                     | 122         | 60 |
| JEHCCU0600M3       | 3      | MTZ72-4VM  | 21.04                          | 1.80               | -                |                    | 9.80            | 6.62                             | 8.53           | 80.0  | 20                     | 20                   | 20                          | 5180           | 7.6            | 7/8           | 1/2        | 1347       | 556         | 884                                     | 126         | 60 |
| JEHCCU0675M3       | 3      | MTZ81-4VM  | 23.63                          | 1.80               | -                |                    | 11.44           | 8.23                             | 10.22          | 80.0  | 20                     | 20                   | 20                          | 5180           | 7.6            | 1 1/8         | 1/2        | 1352       | 556         | 884                                     | 126         | 62 |
| JEHCCU0825M3       | 4      | MTZ100-4VM | 29.80                          | 3.90               | -                |                    | 13.62           | 9.82                             | 12.04          | 90.0  | 25                     | 25                   | 25                          | 6770           | 14.0           | 1 1/8         | 1/2        | 1261       | 594         | 1435                                    | 205         | 62 |
| JEHCCU1000M3       | 4      | MTZ125-4VM | 37.49                          | 3.90               | -                |                    | 15.49           | 9.52                             | 13.17          | 105.0 | 30                     | 25                   | 30                          | 6770           | 14.0           | 1 1/8         | 1/2        | 1261       | 594         | 1435                                    | 205         | 62 |
| Low temperature    |        |            |                                |                    |                  |                    |                 |                                  |                |       |                        |                      |                             |                |                |               |            |            |             |   |             |    |
| JEHCCU0075L1       | 1      | SC18CLX    | 3.08                           | 0.60               | -                | Oil A <sup>h</sup> | 3.99            | -                                | -              | 20.0  | 15                     | -                    | -                           | 1910           | 1.2            | 3/8           | 1/4        | 884        | 430         | 489                                     | 46          | 50 |
| JEHCCU0175L1       | 2      | NTZ48-5VM  | 8.40                           | 0.95               | 0.50             |                    | 5.07            | -                                | -              | 37.0  | 15                     | -                    | -                           | 3040           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 86          | 55 |
| JEHCCU0175L3       | 2      | NTZ48-4VM  | 8.40                           | 0.95               | 0.50             |                    | 2.71            | -                                | -              | 16.0  | 15                     | -                    | -                           | 3040           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 86          | 55 |
| JEHCCU0225L1       | 2      | NTZ68-5VM  | 11.80                          | 0.95               | 0.50             |                    | 9.81            | -                                | -              | 53.0  | 20                     | -                    | -                           | 2620           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 92          | 58 |
| JEHCCU0225L3       | 2      | NTZ68-4VM  | 11.80                          | 0.95               | 0.50             | Oil B <sup>i</sup> | 4.05            | -                                | -              | 25.0  | 15                     | -                    | -                           | 2620           | 4.6            | 5/8           | 3/8        | 1104       | 478         | 650                                     | 92          | 58 |
| JEHCCU0350L3       | 3      | NTZ96-4VM  | 16.70                          | 1.80               | 0.60             |                    | 4.41            | -                                | -              | 32.0  | 15                     | -                    | -                           | 6050           | 7.6            | 7/8           | 1/2        | 1347       | 556         | 884                                     | 125         | 58 |
| JEHCCU0400L3       | 3      | NTZ136-4VM | 23.60                          | 1.80               | 0.60             |                    | 7.21            | -                                | -              | 51.0  | 15                     | -                    | -                           | 6050           | 7.6            | 1 1/8         | 1/2        | 1352       | 556         | 884                                     | 130         | 58 |
| JEHCCU0725L3       | 4      | NTZ215-4VM | 37.50                          | 3.90               | 0.60             |                    | 8.72            | -                                | -              | 74.0  | 25                     | -                    | -                           | 6770           | 14.0           | 1 1/8         | 1/2        | 1261       | 594         | 1435                                    | 203         | 61 |
| JEHCCU0825L3       | 4      | NTZ271-4VM | 47.30                          | 3.90               | 0.60             |                    | 10.88           | -                                | -              | 96.0  | 25                     | -                    | -                           | 6770           | 14.0           | 1 1/8         | 1/2        | 1261       | 594         | 1435                                    | 203         | 60 |

<sup>a</sup> Refer to condition: Outside ambient temperature= 32°C, Evaporation temperature = -10°C (medium temperature application); -35°C (low temperature application)

<sup>b</sup> MFA = Maximum Fuse Amps

<sup>c</sup> Sound pressure level measured in anechoic room

<sup>d</sup> refer to condensing unit charge with R404A

<sup>e</sup> refer to condensing unit charge with R134a

<sup>f</sup> refer to condensing unit charge with R407C

<sup>g</sup> O/S = Oil Separator

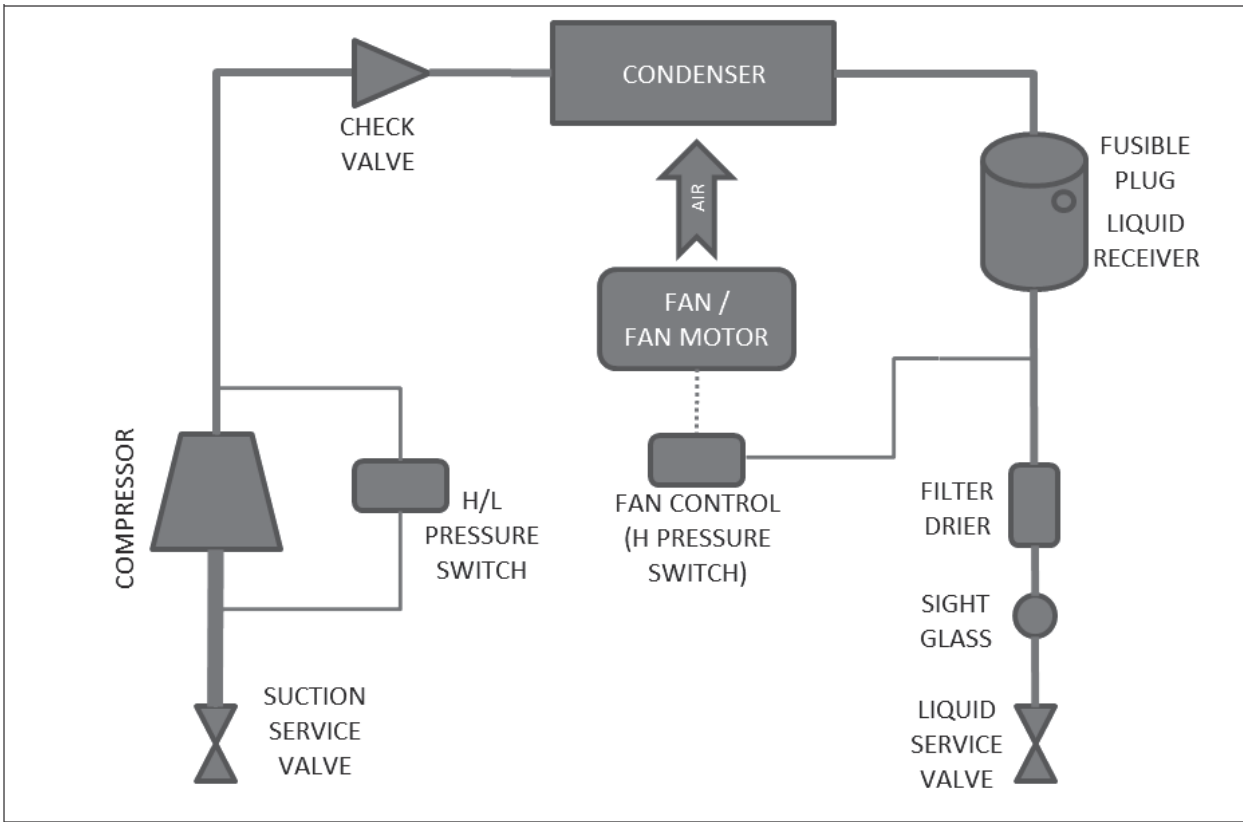
<sup>h</sup> Oil A = Polyester oil (Emkarate RL32H)

<sup>i</sup> Oil B = Polyester oil 160PZ

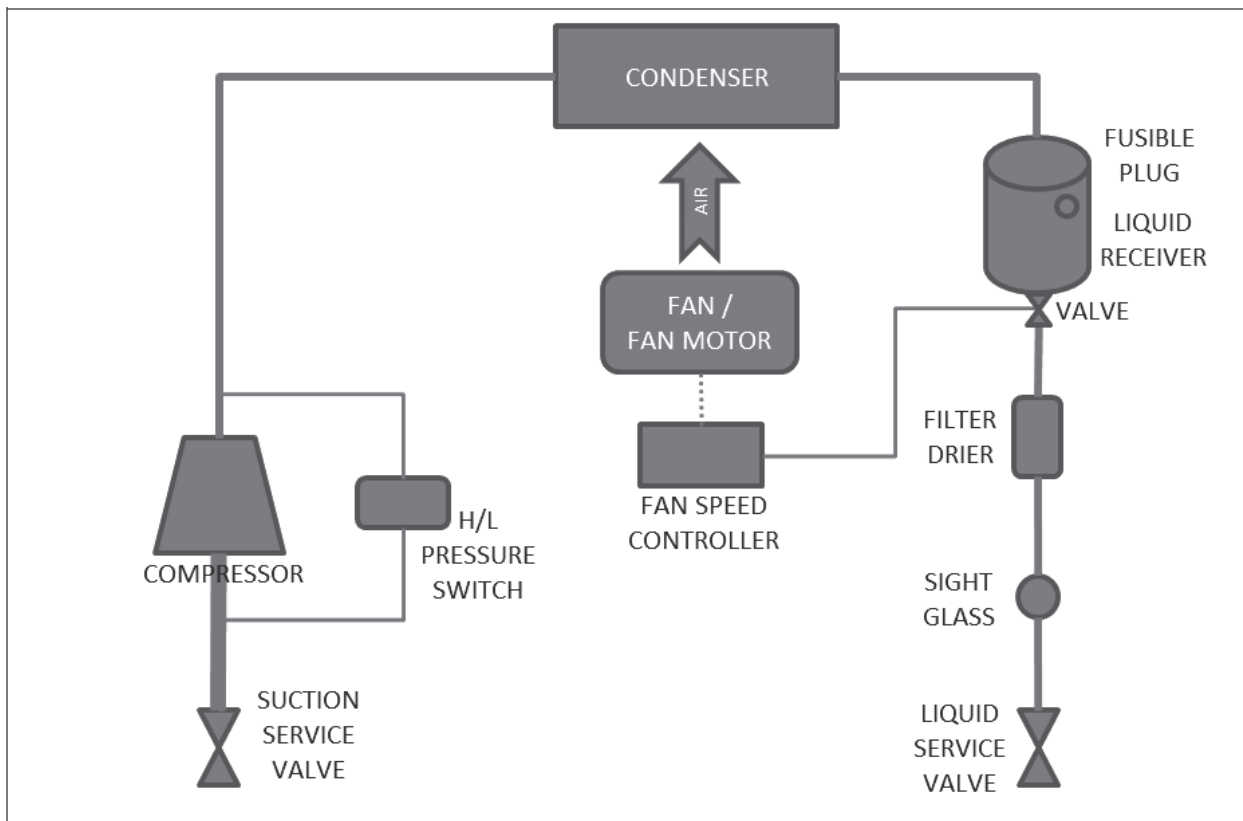
Note: condensing units are pre-charged with oil as stated in table

## 5 Product System Cycles

### Series 1: Medium & Low Temperature Models

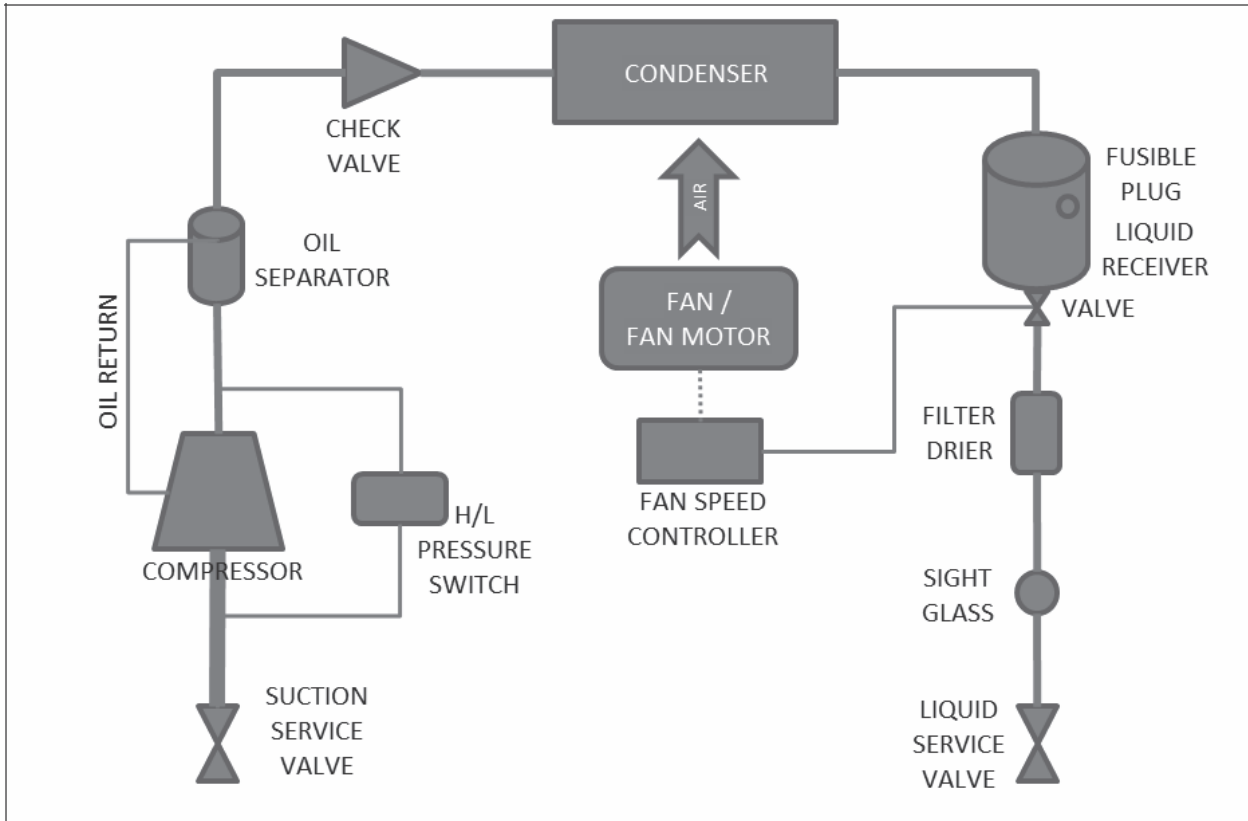


### Series 2 & 3: Medium Temperature Models

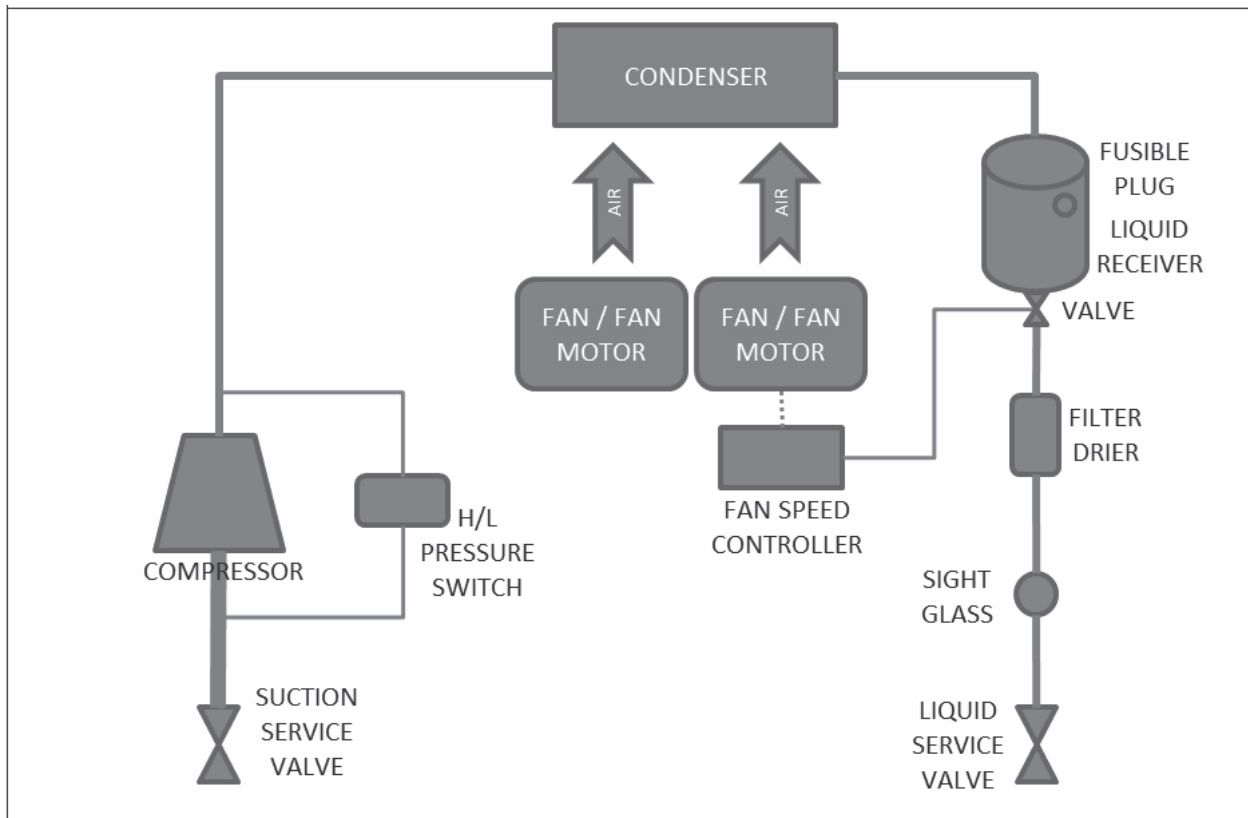


## 5 Product System Cycles

### Series 2 & 3: Low Temperature Models



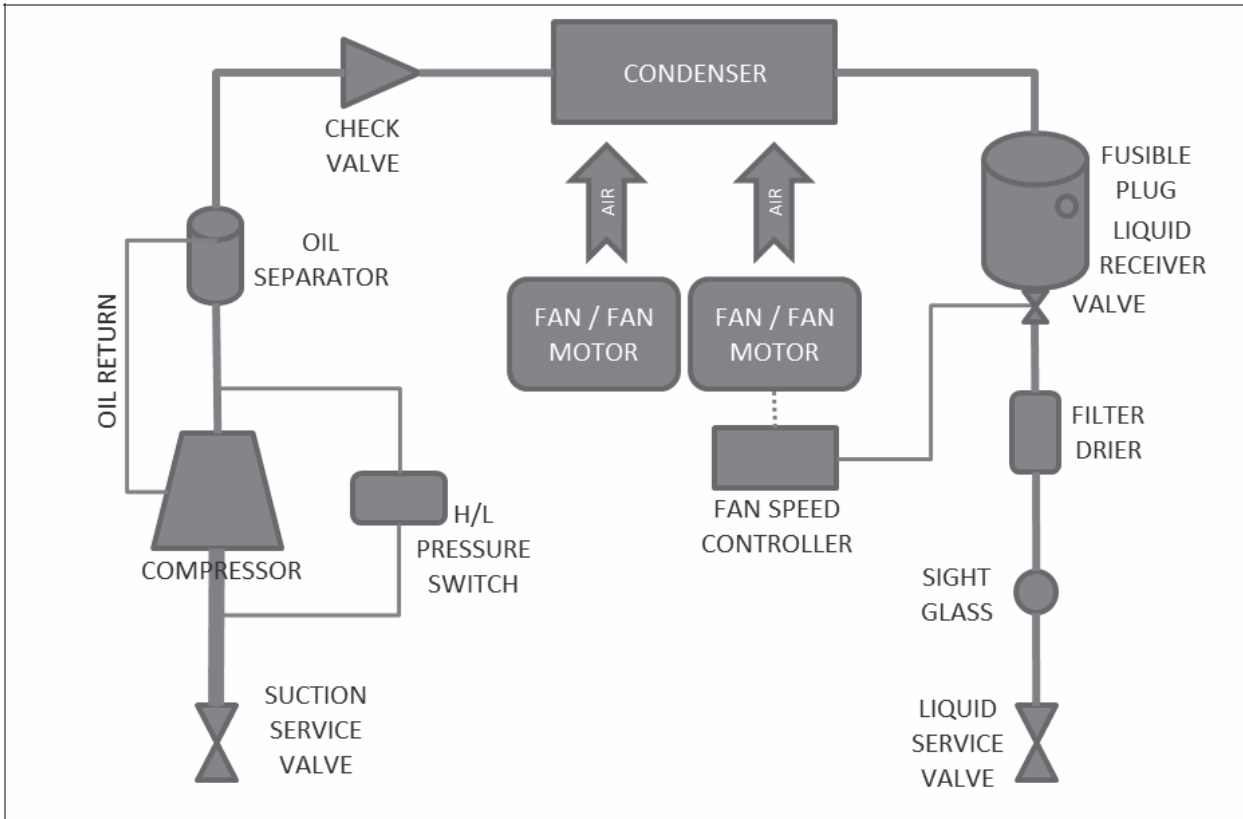
### Series 4: Medium Temperature Models





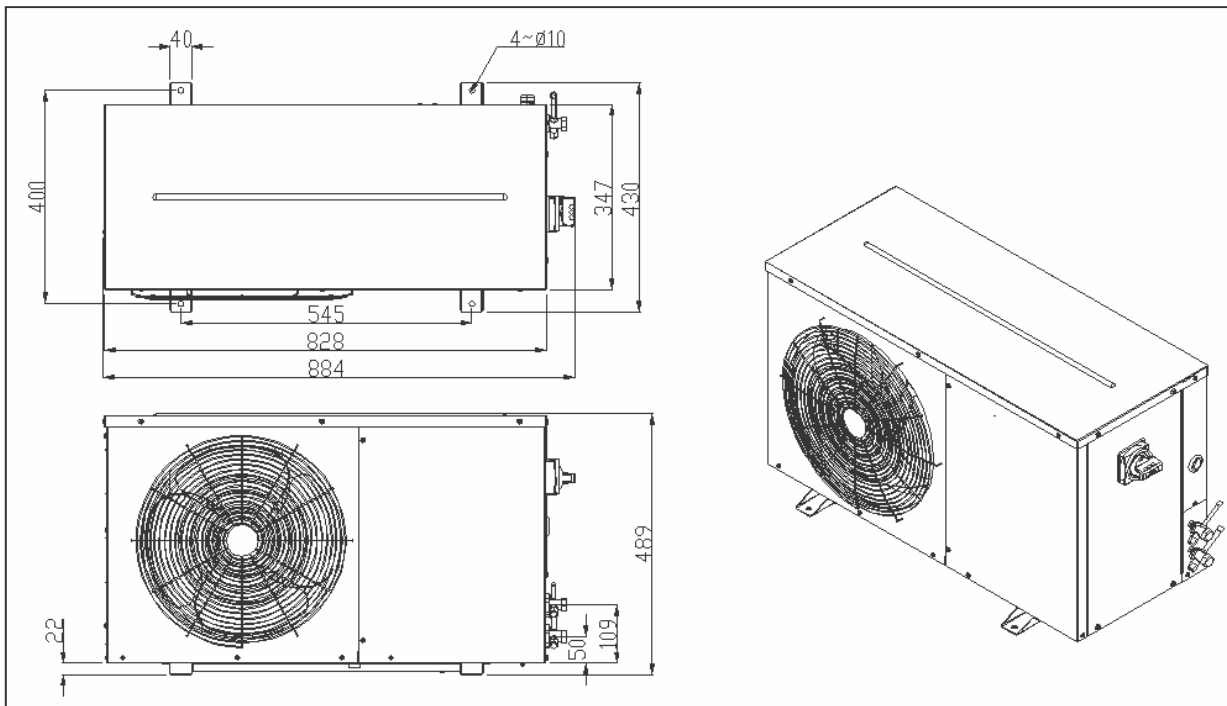
## 5 Product System Cycles

### Series 4: Low Temperature Models



## 6 Outline Drawings

**Series 1 (230V/1~/50Hz): Medium temperature: JEHCCU0050M1, JEHCCU0088M1,  
Low temperature: JEHCCU0075L1**

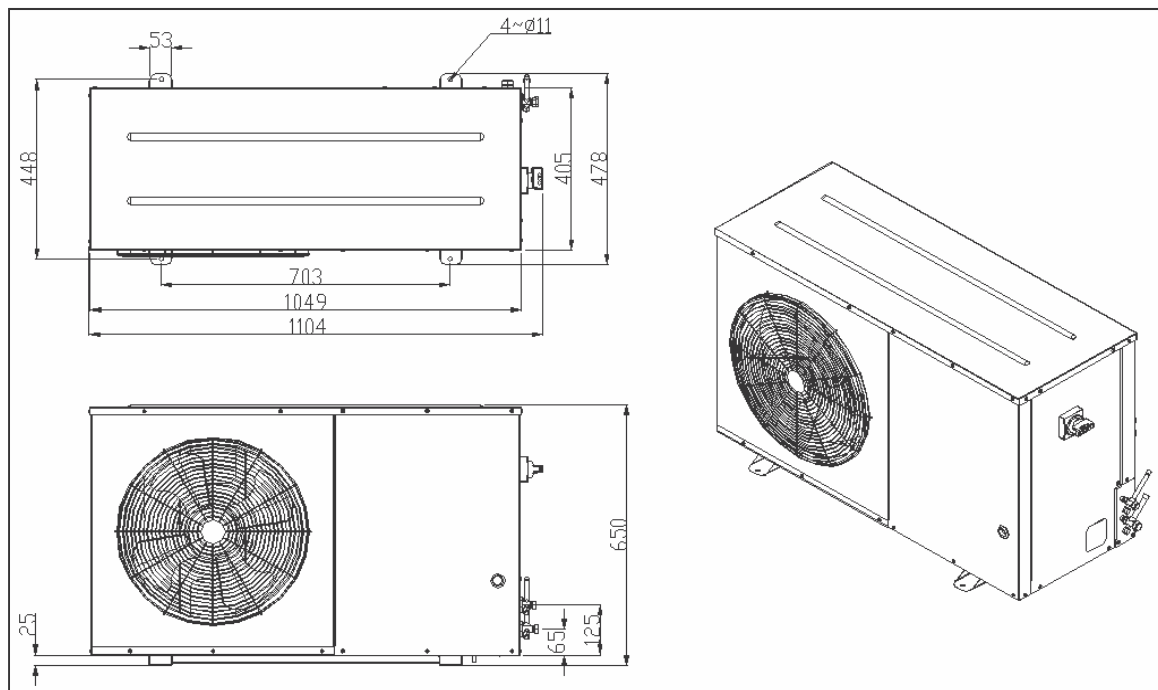


**Series 2 (230V/1~/50Hz): Medium temperature: JEHCCU0150M1, JEHCCU0225M1,  
JEHCCU0300M1**

**Low temperature: JEHCCU0225L1, JEHCCU0175L1**

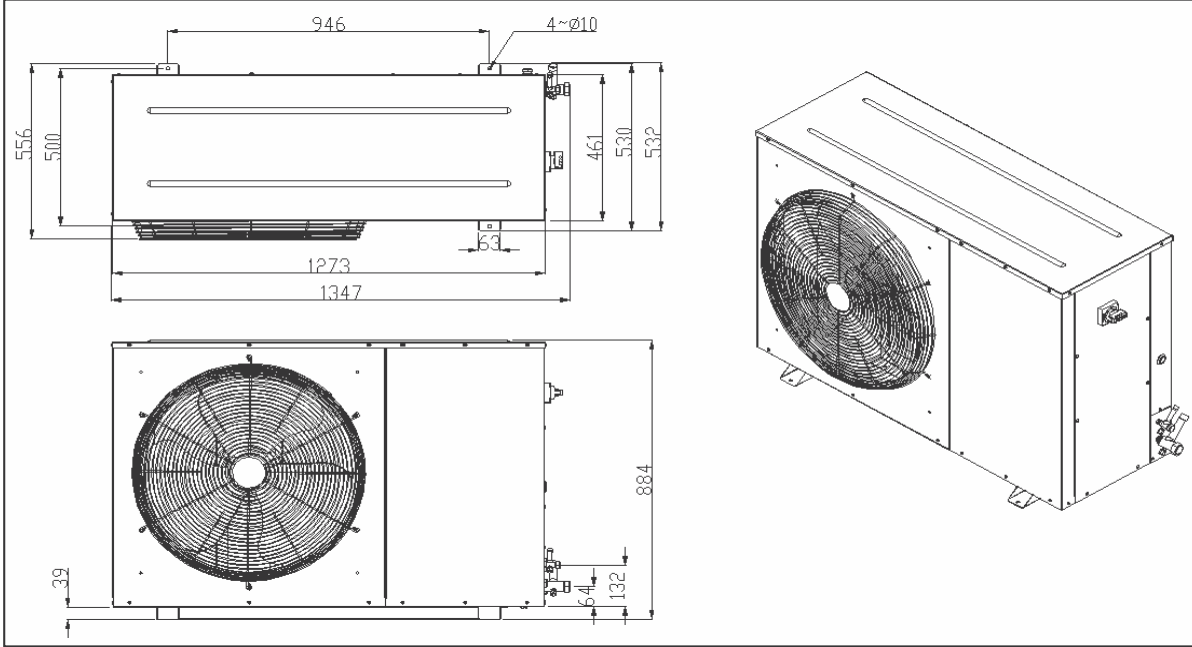
**Series 2 (400V/3~/50Hz): Medium temperature: JEHCCU0150M3, JEHCCU0225M3,  
JEHCCU0300M3**

**Low temperature: JEHCCU0225L3, JEHCCU0175L3**

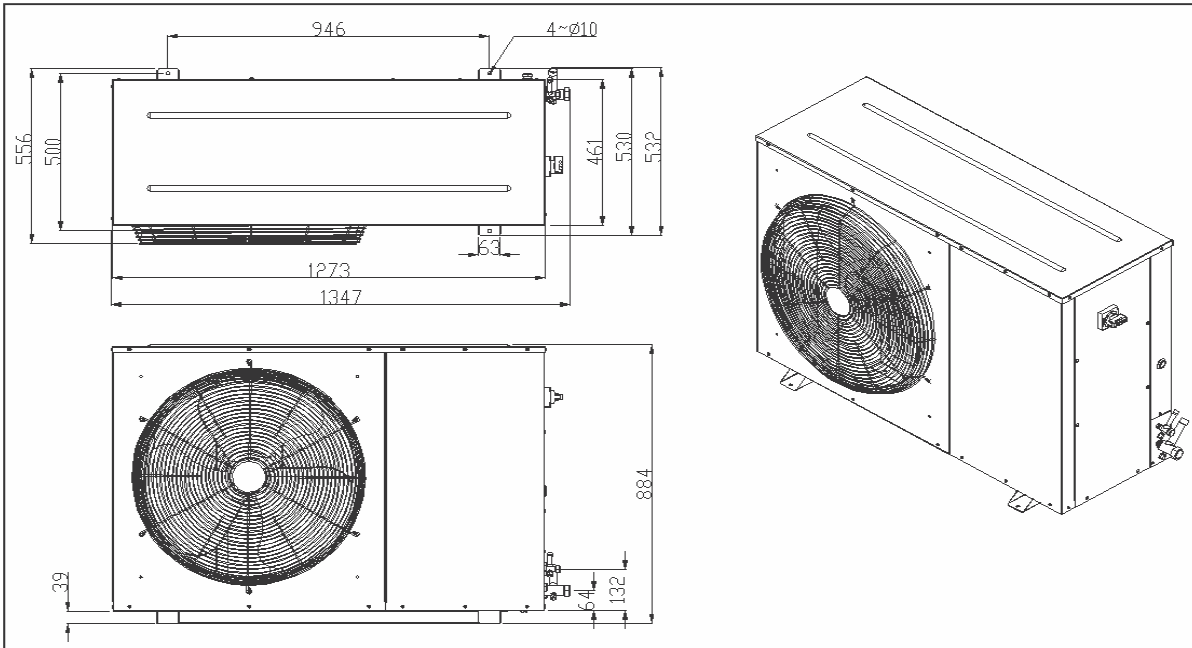


## 6 Outline Drawings

**Series 3 (400V/3~/50Hz): Medium temperature: JEHCCU0400M3, JEHCCU0500M3, JEHCCU0600M3,  
Low temperature: JEHCCU0350L3**

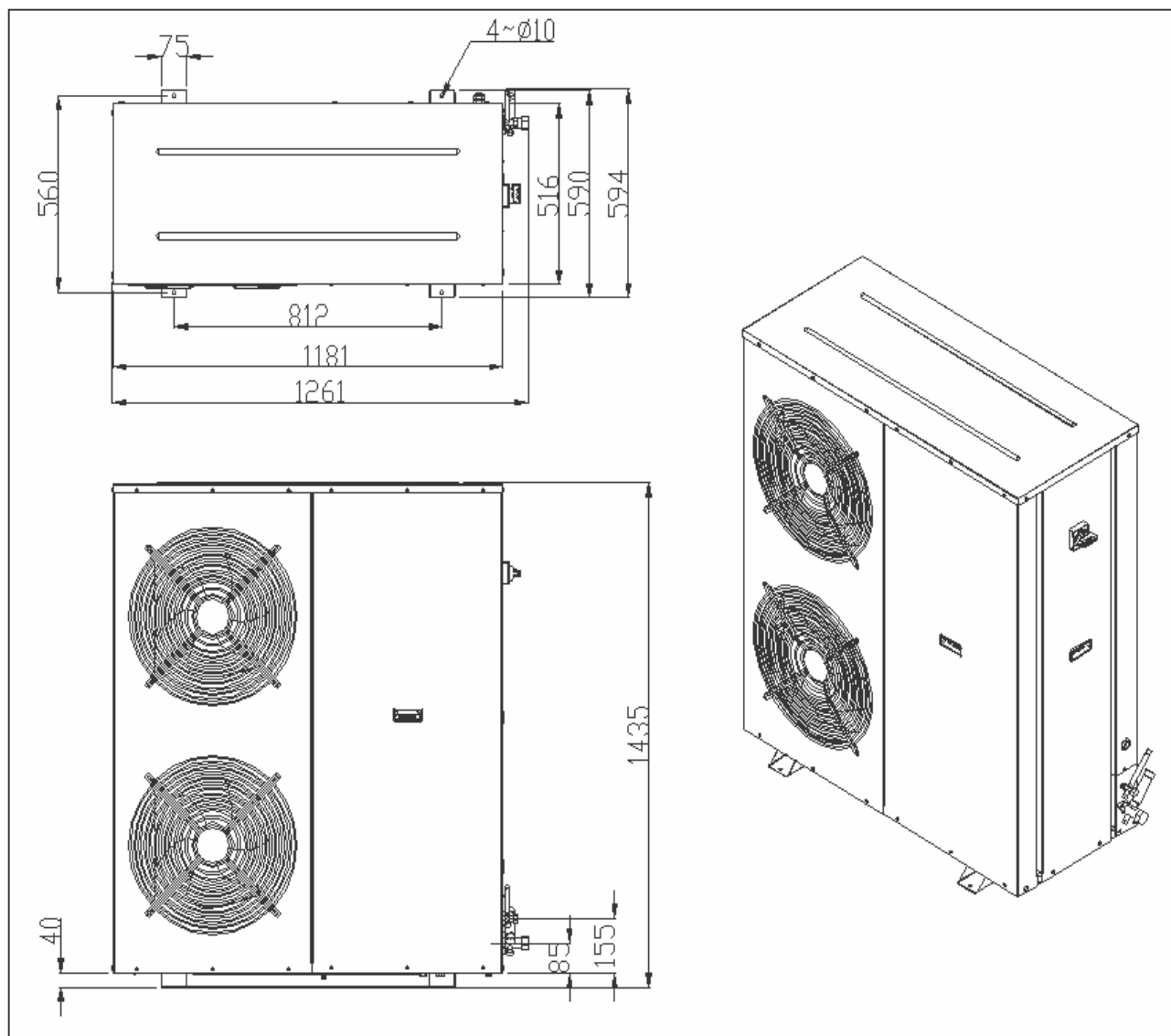


**Series 3 (400V/3~/50Hz): Medium temperature: JEHCCU0675M3  
Low temperature: JEHCCU0400L3**



## 6 Outline Drawings

**Series 4 (400V/3~/50Hz): Medium temperature: JEHCCU0825M3, JEHCCU1000M3**  
**Low temperature: JEHCCU0725L3, JEHCCU0825L3**



# 7 Performance Data

## R404A Medium Temperature (Rating Condition: Superheat 10K, Sub cooling 0K)

| MODEL                        |          | HP                           | TE     |        |        |      |      |      |      |      |      |      |      |      |      |
|------------------------------|----------|------------------------------|--------|--------|--------|------|------|------|------|------|------|------|------|------|------|
|                              |          |                              | TA     | -45    | -40    | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    |      |      |
| MEDIUM TEMPERATURE           | Series 1 | JEHCCU0050M1                 | 0.5    | 27     | CC (W) | -    | -    | -    | -    | -    | 694  | 851  | 1037 | 1254 | 1500 |
|                              |          |                              |        |        | PC (W) | -    | -    | -    | -    | -    | 492  | 530  | 570  | 611  | 654  |
|                              |          |                              | 32     | CC (W) | -      | -    | -    | -    | -    | 532  | 686  | 871  | 1085 | 1330 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | -    | -    | 509  | 548  | 590  | 633  | 679  |      |
|                              |          |                              | 38     | CC (W) | -      | -    | -    | -    | -    | 391  | 543  | 725  | 937  | 1179 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | -    | -    | 526  | 569  | 614  | 661  | 710  |      |
|                              |          | 43                           | CC (W) | -      | -      | -    | -    | -    | 246  | 397  | 576  | 786  | 1026 |      |      |
|                              |          |                              | PC (W) | -      | -      | -    | -    | -    | 542  | 587  | 634  | 683  | 735  |      |      |
|                              |          | JEHCCU0088M1                 | 0.88   | 27     | CC (W) | -    | -    | -    | -    | -    | 1057 | 1320 | 1619 | 1952 | 2321 |
|                              |          |                              |        |        | PC (W) | -    | -    | -    | -    | -    | 781  | 847  | 918  | 993  | 1073 |
|                              |          |                              | 32     | CC (W) | -      | -    | -    | -    | -    | 990  | 1214 | 1478 | 1782 | 2126 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | -    | -    | 790  | 859  | 933  | 1011 | 1094 |      |
|                              | 38       |                              | CC (W) | -      | -      | -    | -    | -    | 868  | 1065 | 1302 | 1579 | 1896 |      |      |
|                              |          |                              | PC (W) | -      | -      | -    | -    | -    | 798  | 871  | 949  | 1031 | 1118 |      |      |
|                              | 43       | CC (W)                       | -      | -      | -      | -    | -    | 787  | 951  | 1158 | 1408 | -    |      |      |      |
|                              |          | PC (W)                       | -      | -      | -      | -    | -    | 806  | 882  | 963  | 1049 | -    |      |      |      |
|                              | Series 2 | JEHCCU0150M1<br>JEHCCU0150M3 | 1.5    | 27     | CC (W) | -    | -    | -    | 649  | 961  | 1338 | 1780 | 2287 | 2859 | 3496 |
|                              |          |                              |        |        | PC (W) | -    | -    | -    | 853  | 945  | 1040 | 1137 | 1237 | 1339 | 1444 |
|                              |          |                              | 32     | CC (W) | -      | -    | -    | 558  | 837  | 1180 | 1589 | 2062 | 2601 | 3204 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | 856  | 959  | 1063 | 1169 | 1276 | 1385 | 1495 |      |
|                              |          |                              | 38     | CC (W) | -      | -    | -    | 431  | 679  | 987  | 1355 | 1783 | 2271 | 2819 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | 865  | 973  | 1084 | 1197 | 1313 | 1431 | 1552 |      |
|                              |          | 43                           | CC (W) | -      | -      | -    | 334  | 552  | 828  | 1163 | 1555 | 2006 | 2515 |      |      |
|                              |          |                              | PC (W) | -      | -      | -    | 870  | 987  | 1105 | 1226 | 1349 | 1474 | 1602 |      |      |
| JEHCCU0225M1<br>JEHCCU0225M3 |          | 2.25                         | 27     | CC (W) | -      | -    | -    | 1172 | 1722 | 2341 | 3031 | 3790 | 4620 | 5519 |      |
|                              |          |                              |        | PC (W) | -      | -    | -    | 1189 | 1394 | 1597 | 1799 | 1999 | 2198 | 2395 |      |
|                              |          | 32                           | CC (W) | -      | -      | -    | 977  | 1491 | 2074 | 2728 | 3451 | 4245 | 5108 |      |      |
|                              |          |                              | PC (W) | -      | -      | -    | 1197 | 1409 | 1621 | 1831 | 2041 | 2249 | 2457 |      |      |
|                              | 38       | CC (W)                       | -      | -      | -      | 819  | 1293 | 1826 | 2420 | 3073 | 3787 | 4560 |      |      |      |
|                              |          | PC (W)                       | -      | -      | -      | 1199 | 1418 | 1637 | 1859 | 2081 | 2306 | 2531 |      |      |      |
| 43                           | CC (W)   | -                            | -      | -      | 649    | 1087 | 1583 | 2135 | 2743 | 3408 | 4131 |      |      |      |      |
|                              | PC (W)   | -                            | -      | -      | 1204   | 1429 | 1656 | 1886 | 2120 | 2355 | 2592 |      |      |      |      |
| JEHCCU0300M1<br>JEHCCU0300M3 | 3        | 27                           | CC (W) | -      | -      | -    | 1681 | 2306 | 3036 | 3871 | 4811 | 5856 | 7006 |      |      |
|                              |          |                              | PC (W) | -      | -      | -    | 1689 | 1936 | 2193 | 2460 | 2737 | 3024 | 3321 |      |      |
|                              | 32       | CC (W)                       | -      | -      | -      | 1524 | 2120 | 2815 | 3611 | 4506 | 5502 | 6597 |      |      |      |
|                              |          | PC (W)                       | -      | -      | -      | 1716 | 1957 | 2213 | 2484 | 2770 | 3071 | 3387 |      |      |      |
|                              | 38       | CC (W)                       | -      | -      | -      | 1281 | 1869 | 2546 | 3314 | 4171 | 5119 | 6156 |      |      |      |
|                              |          | PC (W)                       | -      | -      | -      | 1787 | 2015 | 2262 | 2530 | 2817 | 3125 | 3452 |      |      |      |
| 43                           | CC (W)   | -                            | -      | -      | 1106   | 1673 | 2324 | 3058 | 3877 | 4777 | 5764 |      |      |      |      |
|                              | PC (W)   | -                            | -      | -      | 1827   | 2046 | 2290 | 2559 | 2852 | 3170 | 3513 |      |      |      |      |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%

# 7 Performance Data

## R404A Medium Temperature (Rating Condition: Superheat 10K, Sub cooling 0K)

| MODEL              |              | HP           | TE     |        |        | -45  | -40  | -35  | -30   | -25   | -20   | -15   | -10   | -5    | 0     |
|--------------------|--------------|--------------|--------|--------|--------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
|                    |              |              | TA     |        |        |      |      |      |       |       |       |       |       |       |       |
| MEDIUM TEMPERATURE | Series 3     | JEHCCU0400M3 | 4      | 27     | CC (W) | -    | -    | -    | 2434  | 3338  | 4434  | 5735  | 7248  | 8983  | 10946 |
|                    |              |              |        |        | PC (W) | -    | -    | -    | 2155  | 2450  | 2737  | 3016  | 3288  | 3551  | 3807  |
|                    |              |              | 32     | CC (W) | -      | -    | -    | 2201 | 3042  | 4059  | 5265  | 6672  | 8288  | 10115 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 2159 | 2471  | 2777  | 3077  | 3369  | 3654  | 3934  |       |
|                    |              |              | 38     | CC (W) | -      | -    | -    | 1868 | 2630  | 3548  | 4637  | 5912  | 7376  | 9052  |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 2154 | 2493  | 2827  | 3155  | 3476  | 3791  | 4098  |       |
|                    |              | 43           | CC (W) | -      | -      | -    | 1597 | 2293 | 3130  | 4129  | 5304  | 6678  | 8247  |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 2138 | 2502 | 2861  | 3214  | 3559  | 3894  | 4223  |       |       |
|                    |              | JEHCCU0500M3 | 5      | 27     | CC (W) | -    | -    | -    | 3055  | 4125  | 5413  | 6929  | 8683  | 10676 | 12916 |
|                    |              |              |        |        | PC (W) | -    | -    | -    | 2609  | 3037  | 3463  | 3890  | 4318  | 4752  | 5191  |
|                    |              |              | 32     | CC (W) | -      | -    | -    | 2732 | 3737  | 4943  | 6364  | 8017  | 9901  | 12035 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 2593 | 3047  | 3501  | 3955  | 4410  | 4868  | 5330  |       |
|                    | 38           |              | CC (W) | -      | -      | -    | 2318 | 3242 | 4342  | 5632  | 7211  | 8844  | 10782 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 2552 | 3043 | 3535  | 4027  | 4525  | 5018  | 5520  |       |       |
|                    | 43           | CC (W)       | -      | -      | -      | 1974 | 2830 | 3848 | 5045  | 6438  | 8052  | 9878  |       |       |       |
|                    |              | PC (W)       | -      | -      | -      | 2499 | 3024 | 3549 | 4074  | 4598  | 5122  | 5650  |       |       |       |
|                    | Series 4     | JEHCCU0600M3 | 6      | 27     | CC (W) | -    | -    | -    | 3326  | 4604  | 6076  | 7744  | 9606  | 11664 | 13916 |
|                    |              |              |        |        | PC (W) | -    | -    | -    | 3053  | 3517  | 4001  | 4505  | 5029  | 5573  | 6137  |
|                    |              |              | 32     | CC (W) | -      | -    | -    | 2979 | 4181  | 5568  | 7140  | 8897  | 10839 | 12966 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 3147 | 3608  | 4093  | 4604  | 5139  | 5700  | 6285  |       |
|                    |              |              | 38     | CC (W) | -      | -    | -    | 2471 | 3635  | 4943  | 6397  | 7995  | 9739  | 11627 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 3222 | 3680  | 4173  | 4701  | 5264  | 5862  | 6495  |       |
|                    |              | 43           | CC (W) | -      | -      | -    | 2093 | 3199 | 4431  | 5787  | 7273  | 8880  | 10616 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 3302 | 3757 | 4254  | 4792  | 5371  | 5990  | 6653  |       |       |
| JEHCCU0675M3       |              | 6.75         | 27     | CC (W) | -      | -    | -    | 3656 | 5119  | 6756  | 8569  | 10556 | 12719 | 15056 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 3242 | 3840  | 4447  | 5065  | 5692  | 6330  | 6977  |       |
|                    |              | 32           | CC (W) | -      | -      | -    | 3172 | 4593 | 6164  | 7885  | 9756  | 11777 | 13948 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 3279 | 3911 | 4548  | 5190  | 5837  | 6489  | 7146  |       |       |
|                    | 38           | CC (W)       | -      | -      | -      | 2694 | 4060 | 5546 | 7152  | 8878  | 10724 | 12690 |       |       |       |
|                    |              | PC (W)       | -      | -      | -      | 3453 | 4047 | 4666 | 5310  | 5979  | 6673  | 7392  |       |       |       |
| 43                 | CC (W)       | -            | -      | -      | 2244   | 3567 | 4987 | 6500 | 8107  | 9809  | 11606 |       |       |       |       |
|                    | PC (W)       | -            | -      | -      | 3532   | 4134 | 4766 | 5424 | 6113  | 6829  | 7575  |       |       |       |       |
| Series 4           | JEHCCU0825M3 | 8.25         | 27     | CC (W) | -      | -    | -    | 3832 | 5545  | 7467  | 9600  | 11942 | 14495 | 17257 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 4227 | 4916  | 5601  | 6282  | 6959  | 7632  | 8301  |       |
|                    |              | 32           | CC (W) | -      | -      | -    | 3322 | 4982 | 6816  | 8826  | 11010 | 13370 | 15904 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 4340 | 5013 | 5696  | 6389  | 7092  | 7805  | 8528  |       |       |
|                    |              | 38           | CC (W) | -      | -      | -    | 2809 | 4349 | 6043  | 7893  | 9897  | 12057 | 14371 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 4504 | 5148 | 5817  | 6511  | 7230  | 7974  | 8743  |       |       |
|                    | 43           | CC (W)       | -      | -      | -      | -    | 3800 | 5396 | 7121  | 8966  | -     | -     |       |       |       |
|                    |              | PC (W)       | -      | -      | -      | -    | 5251 | 5914 | 6615  | 7356  | -     | -     |       |       |       |
|                    | JEHCCU1000M3 | 10           | 27     | CC (W) | -      | -    | -    | 5786 | 7709  | 9811  | 12094 | 14556 | 17199 | 20021 |       |
|                    |              |              |        | PC (W) | -      | -    | -    | 5365 | 6158  | 7000  | 7893  | 8835  | 9828  | 10870 |       |
|                    |              | 32           | CC (W) | -      | -      | -    | 4952 | 6931 | 9020  | 11219 | 13528 | 15947 | 18476 |       |       |
|                    |              |              | PC (W) | -      | -      | -    | 5504 | 6286 | 7127  | 8029  | 8990  | 10012 | 11093 |       |       |
| 38                 |              | CC (W)       | -      | -      | -      | 4351 | 6155 | 8073 | 10107 | 12255 | 14519 | 16897 |       |       |       |
|                    |              | PC (W)       | -      | -      | -      | 5627 | 6424 | 7281 | 8198  | 9175  | 10212 | 11309 |       |       |       |
| 43                 | CC (W)       | -            | -      | -      | -      | 5433 | 7286 | 9215 | 11217 | -     | -     |       |       |       |       |
|                    | PC (W)       | -            | -      | -      | -      | 6546 | 7407 | 8336 | 9329  | -     | -     |       |       |       |       |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%

# 7 Performance Data

## R404A Low temperature (Rating Condition: Superheat 10K, Sub cooling 0K)

| MODEL           |              | HP                           | TE<br>TA                     |        | -45    | -40    | -35  | -30  | -25  | -20   | -15   | -10  | -5 | 0 |   |   |
|-----------------|--------------|------------------------------|------------------------------|--------|--------|--------|------|------|------|-------|-------|------|----|---|---|---|
|                 |              |                              |                              |        |        |        |      |      |      |       |       |      |    |   |   |   |
| LOW TEMPERATURE | Series 1     | JEHCCU0075L1                 | 0.75                         | 27     | CC (W) | 245    | 365  | 500  | 650  | 815   | 995   | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 430    | 494  | 564  | 638  | 718   | 802   | -    | -  | - | - |   |
|                 |              |                              |                              | 32     | CC (W) | 175    | 289  | 418  | 562  | 721   | 895   | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 440    | 506  | 577  | 653  | 734   | 820   | -    | -  | - | - |   |
|                 |              |                              |                              | 38     | CC (W) | 104    | 209  | 329  | 464  | 614   | 779   | -    | -  | - | - |   |
|                 | PC (W)       | 452                          | 520                          |        | 592    | 670    | 752  | 840  | -    | -     | -     | -    |    |   |   |   |
|                 | 43           | CC (W)                       | 39                           | 124    | 251    | 379    | 522  | 680  | -    | -     | -     | -    |    |   |   |   |
|                 |              | PC (W)                       | 462                          | 531    | 605    | 684    | 768  | 857  | -    | -     | -     | -    |    |   |   |   |
|                 | Series 2     | JEHCCU0175L1<br>JEHCCU0175L3 | 1.75                         | 27     | CC (W) | 455    | 738  | 1051 | 1394 | 1767  | 2170  | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 513    | 720  | 937  | 1164 | 1401  | 1648  | -    | -  | - | - |   |
|                 |              |                              |                              | 32     | CC (W) | 363    | 643  | 947  | 1277 | 1631  | 2011  | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 551    | 756  | 971  | 1196 | 1431  | 1676  | -    | -  | - | - |   |
|                 |              |                              |                              | 38     | CC (W) | -      | 492  | 800  | 1132 | 1490  | 1872  | -    | -  | - | - |   |
|                 |              | PC (W)                       | -                            |        | 793    | 995    | 1212 | 1444 | 1691 | -     | -     | -    | -  |   |   |   |
|                 |              | 43                           | CC (W)                       | -      | 384    | 688    | 1013 | 1360 | 1730 | -     | -     | -    | -  |   |   |   |
|                 |              |                              | PC (W)                       | -      | 827    | 1023   | 1236 | 1466 | 1712 | -     | -     | -    | -  |   |   |   |
|                 |              | Series 3                     | JEHCCU0225L1<br>JEHCCU0225L3 | 2.25   | 27     | CC (W) | 829  | 1253 | 1718 | 2222  | 2767  | 3351 | -  | - | - | - |
|                 |              |                              |                              |        |        | PC (W) | 1147 | 1348 | 1579 | 1840  | 2131  | 2452 | -  | - | - | - |
|                 | 32           |                              |                              |        | CC (W) | 762    | 1139 | 1567 | 2044 | 2572  | 3149  | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 1248   | 1443 | 1667 | 1922 | 2206  | 2521  | -    | -  | - | - |   |
| 38              | CC (W)       |                              |                              |        | -      | 1017   | 1410 | 1868 | 2391 | 2979  | -     | -    | -  | - |   |   |
|                 | PC (W)       | -                            | 1449                         | 1689   | 1955   | 2245   | 2561 | -    | -    | -     | -     |      |    |   |   |   |
| Series 4        | JEHCCU0350L3 | 3.5                          | 27                           | CC (W) | 996    | 1506   | 2141 | 2901 | 3786 | 4796  | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 1298   | 1621   | 1953 | 2296 | 2648 | 3011  | -     | -    | -  | - |   |   |
|                 |              |                              | 32                           | CC (W) | 789    | 1252   | 1845 | 2567 | 3420 | 4402  | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 1363   | 1687   | 2021 | 2365 | 2719 | 3083  | -     | -    | -  | - |   |   |
|                 |              |                              | 38                           | CC (W) | -      | 1080   | 1603 | 2272 | 3085 | 4044  | -     | -    | -  | - |   |   |
|                 | PC (W)       | -                            |                              | 1779   | 2101   | 2438   | 2790 | 3157 | -    | -     | -     | -    |    |   |   |   |
|                 | 43           | CC (W)                       | -                            | 869    | 1344   | 1973   | 2753 | 3688 | -    | -     | -     | -    |    |   |   |   |
|                 |              | PC (W)                       | -                            | 1849   | 2168   | 2504   | 2856 | 3225 | -    | -     | -     | -    |    |   |   |   |
|                 | Series 4     | JEHCCU0400L3                 | 4                            | 27     | CC (W) | 1629   | 2354 | 3200 | 4165 | 5251  | 6456  | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 2097   | 2554 | 3047 | 3574 | 4137  | 4734  | -    | -  | - | - |   |
| 32              |              |                              |                              | CC (W) | 1347   | 2020   | 2824 | 3757 | 4821 | 6014  | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 2109   | 2567   | 3065 | 3603 | 4181 | 4799  | -     | -    | -  | - |   |   |
| 38              |              |                              |                              | CC (W) | -      | 1749   | 2495 | 3396 | 4452 | 5663  | -     | -    | -  | - |   |   |
|                 | PC (W)       | -                            | 2578                         | 3079   | 3625   | 4216   | 4852 | -    | -    | -     | -     |      |    |   |   |   |
| Series 4        | JEHCCU0725L3 | 7.25                         | 27                           | CC (W) | 2363   | 3485   | 4717 | 6059 | 7511 | 9073  | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 2768   | 3454   | 4220 | 5066 | 5992 | 6998  | -     | -    | -  | - |   |   |
|                 |              |                              | 32                           | CC (W) | 2026   | 3070   | 4245 | 5549 | 6984 | 8548  | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 2803   | 3497   | 4272 | 5126 | 6061 | 7075  | -     | -    | -  | - |   |   |
|                 |              |                              | 38                           | CC (W) | -      | 2563   | 3716 | 5014 | 6457 | 8045  | -     | -    | -  | - |   |   |
|                 | PC (W)       | -                            |                              | 3551   | 4318   | 5169   | 6106 | 7127 | -    | -     | -     | -    |    |   |   |   |
|                 | 43           | CC (W)                       | -                            | 2145   | 3256   | 4530   | 5964 | 7562 | -    | -     | -     | -    |    |   |   |   |
|                 |              | PC (W)                       | -                            | 3594   | 4363   | 5219   | 6161 | 7190 | -    | -     | -     | -    |    |   |   |   |
|                 | Series 4     | JEHCCU0825L3                 | 8.25                         | 27     | CC (W) | 3293   | 4813 | 6469 | 8259 | 10185 | 12245 | -    | -  | - | - |   |
|                 |              |                              |                              |        | PC (W) | 3967   | 4796 | 5726 | 6755 | 7885  | 9114  | -    | -  | - | - |   |
| 32              |              |                              |                              | CC (W) | 2890   | 4276   | 5818 | 7514 | 9366 | 11372 | -     | -    | -  | - |   |   |
|                 |              |                              |                              | PC (W) | 4037   | 4868   | 5805 | 6846 | 7993 | 9244  | -     | -    | -  | - |   |   |
| 38              |              |                              |                              | CC (W) | -      | 3713   | 5111 | 6694 | 8462 | 10415 | -     | -    | -  | - |   |   |
|                 | PC (W)       | -                            | 4931                         | 5877   | 6932   | 8098   | 9373 | -    | -    | -     | -     |      |    |   |   |   |
| 43              | CC (W)       | -                            | 3203                         | 4485   | 5977   | 7673   | 9574 | -    | -    | -     | -     |      |    |   |   |   |
|                 | PC (W)       | -                            | 4995                         | 5948   | 7014   | 8197   | 9493 | -    | -    | -     | -     |      |    |   |   |   |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%

# 7 Performance Data

R134a (Rating Condition: Superheat 10K, Sub cooling 0K)

| MODEL                        | HP                           | TE     | TA     |        | -30 | -25  | -20  | -15  | -10   | -5    | 0     | 5     | 10    | 15    |
|------------------------------|------------------------------|--------|--------|--------|-----|------|------|------|-------|-------|-------|-------|-------|-------|
|                              |                              |        |        |        | P.F | P.F  | P.F  | P.F  | P.F   | P.F   | P.F   | P.F   | P.F   | P.F   |
|                              |                              |        |        |        |     |      |      |      |       |       |       |       |       |       |
| Series 2                     | JEHCCU0150M1<br>JEHCCU0150M3 | 1.5    | 27     | CC (W) | -   | -    | -    | -    | -     | 1826  | 2355  | 2934  | 3563  | 4242  |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | -     | 801   | 853   | 905   | 959   | 1013  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 842  | 1229 | 1671  | 2168  | 2720  | 3327  | 3989  |       |
|                              |                              |        | PC (W) | -      | -   | -    | 721  | 775  | 831   | 889   | 949   | 1011  | 1075  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 761  | 1091 | 1481  | 1931  | 2441  | 3011  | 3641  |       |
|                              |                              |        | PC (W) | -      | -   | -    | 738  | 800  | 864   | 932   | 1002  | 1076  | 1152  |       |
|                              | JEHCCU0225M1<br>JEHCCU0225M3 | 2.25   | 27     | CC (W) | -   | -    | -    | -    | -     | 2823  | 3634  | 4559  | 5600  | 6755  |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | -     | 1163  | 1280  | 1403  | 1533  | 1670  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 1436 | 1958 | 2595  | 3347  | 4214  | 5196  | 6293  |       |
|                              |                              |        | PC (W) | -      | -   | -    | 973  | 1082 | 1197  | 1320  | 1449  | 1586  | 1730  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 1310 | 1763 | 2330  | 3013  | 3810  | 4723  | 5750  |       |
|                              |                              |        | PC (W) | -      | -   | -    | 1002 | 1113 | 1234  | 1365  | 1506  | 1657  | 1818  |       |
| JEHCCU0300M1<br>JEHCCU0300M3 | 3                            | 27     | CC (W) | -      | -   | -    | -    | 3160 | 3998  | 4942  | 5990  | 7144  | 8402  |       |
|                              |                              |        | PC (W) | -      | -   | -    | -    | 1456 | 1609  | 1772  | 1945  | 2128  | 2321  |       |
|                              | 32                           | CC (W) | -      | -      | -   | 2279 | 2948 | 3721 | 4600  | 5583  | 6672  | 7865  |       |       |
|                              |                              | PC (W) | -      | -      | -   | 1353 | 1510 | 1677 | 1854  | 2041  | 2238  | 2445  |       |       |
|                              | 38                           | CC (W) | -      | -      | -   | 1941 | 2584 | 3332 | 4185  | 5143  | 6206  | 7374  |       |       |
|                              |                              | PC (W) | -      | -      | -   | 1396 | 1570 | 1754 | 1948  | 2152  | 2366  | 2590  |       |       |
| Series 3                     | JEHCCU0400M3                 | 4      | 27     | CC (W) | -   | -    | -    | -    | -     | 7143  | 8888  | 10865 | 13093 |       |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | -     | 2208  | 2348  | 2484  | 2617  |       |
|                              |                              | 32     | CC (W) | -      | -   | -    | 2938 | 3934 | 5129  | 6536  | 8167  | 10029 | 12127 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 1753 | 1948 | 2130  | 2301  | 2464  | 2622  | 2777  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 2562 | 3475 | 4568  | 5860  | 7363  | 9085  | 11042 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 1773 | 1998 | 2211  | 2412  | 2605  | 2792  | 2974  |       |
|                              | JEHCCU0500M3                 | 5      | 27     | CC (W) | -   | -    | -    | -    | -     | 6540  | 8346  | 10389 | 12664 | 15159 |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | -     | 2505  | 2736  | 2969  | 3209  | 3461  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 3292 | 4546 | 6021  | 7718  | 9639  | 11781 | 14130 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2056 | 2322 | 2583  | 2844  | 3108  | 3379  | 3662  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 2877 | 4045 | 5412  | 6984  | 8761  | 10747 | 12936 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2074 | 2373 | 2669  | 2967  | 3269  | 3579  | 3900  |       |
|                              | JEHCCU0600M3                 | 6      | 27     | CC (W) | -   | -    | -    | -    | 6092  | 7814  | 9762  | 11934 | 14332 | 16954 |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | 2658  | 2947  | 3267  | 3616  | 3996  | 4405  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 4309 | 5680 | 7272  | 9083  | 11115 | 13366 | 15838 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2413 | 2717 | 3046  | 3400  | 3779  | 4183  | 4612  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 3811 | 5052 | 6507  | 8178  | 10063 | 12164 | 14479 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2429 | 2765 | 3126  | 3512  | 3923  | 4359  | 4820  |       |
|                              | JEHCCU0675M3                 | 6.75   | 27     | CC (W) | -   | -    | -    | -    | 6653  | 8519  | 10625 | 12971 | 15557 | 18383 |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | 2878  | 3188  | 3532  | 3912  | 4326  | 4776  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 4667 | 6153 | 7879  | 9845  | 12051 | 14497 | 17183 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2634 | 2945 | 3292  | 3673  | 4090  | 4541  | 5028  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 4355 | 5676 | 7242  | 9053  | 11109 | 13410 | 15956 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 2675 | 3030 | 3421  | 3846  | 4307  | 4802  | 5333  |       |
| Series 4                     | JEHCCU0825M3                 | 8.25   | 27     | CC (W) | -   | -    | -    | -    | 7728  | 9922  | 12380 | 15104 | 18092 | 21346 |
|                              |                              |        |        | PC (W) | -   | -    | -    | -    | 3955  | 4369  | 4829  | 5335  | 5888  | 6487  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 5322 | 7083 | 9110  | 11401 | 13958 | 16779 | 19866 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 3654 | 4067 | 4523  | 5024  | 5568  | 6157  | 6789  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 4796 | 6349 | 8172  | 10265 | 12628 | 15261 | 18164 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 3720 | 4187 | 4694  | 5243  | 5833  | 6465  | 7137  |       |
|                              | JEHCCU1000M3                 | 10     | 27     | CC (W) | -   | -    | -    | 7256 | 9494  | 11993 | 14751 | 17770 | 21048 | 24587 |
|                              |                              |        |        | PC (W) | -   | -    | -    | 4354 | 4855  | 5388  | 5952  | 6548  | 7175  | 7834  |
|                              |                              | 32     | CC (W) | -      | -   | -    | 6615 | 8667 | 10980 | 13552 | 16385 | 19477 | 22830 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 4381 | 4935 | 5517  | 6129  | 6769  | 7439  | 8137  |       |
|                              |                              | 38     | CC (W) | -      | -   | -    | 5875 | 7701 | 9792  | 12148 | 14769 | 17655 | 20806 |       |
|                              |                              |        | PC (W) | -      | -   | -    | 4388 | 5005 | 5648  | 6316  | 7010  | 7729  | 8474  |       |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%



# 7 Performance Data

R134a (Rating Condition: Superheat 10K, Sub cooling 0K)

| MEDIUM TEMPERATURES | MODEL                        | HP     | TE     | TA     | -30 | -25  | -20  | -15   | -10   | -5    | 0     | 5     |
|---------------------|------------------------------|--------|--------|--------|-----|------|------|-------|-------|-------|-------|-------|
|                     |                              |        |        |        | P.F | P.F  | P.F  | P.F   | P.F   | P.F   | P.F   | P.F   |
|                     |                              |        |        |        |     |      |      |       |       |       |       |       |
| Series 2            | JEHCCU0150M1<br>JEHCCU0150M3 | 1.5    | 27     | CC (W) | -   | -    | -    | 1408  | 1969  | 2642  | 3415  | 4306  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 948   | 1041  | 1122  | 1196  | 1262  |
|                     |                              |        | 32     | CC (W) | -   | -    | -    | 1285  | 1815  | 2448  | 3173  | 4006  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 960   | 1063  | 1155  | 1240  | 1317  |
|                     |                              |        | 38     | CC (W) | -   | -    | -    | 1122  | 1614  | 2183  | 2870  | 3647  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 969   | 1087  | 1198  | 1295  | 1385  |
|                     | 43                           | CC (W) | -      | -      | -   | -    | 1452 | 2001  | 2628  | 3362  |       |       |
|                     |                              | PC (W) | -      | -      | -   | -    | 1103 | 1225  | 1339  | 1442  |       |       |
|                     | JEHCCU0225M1<br>JEHCCU0225M3 | 2.25   | 27     | CC (W) | -   | -    | -    | 2390  | 3273  | 4310  | 5491  | 6830  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1428  | 1616  | 1787  | 1945  | 2089  |
|                     |                              |        | 32     | CC (W) | -   | -    | -    | 2222  | 3059  | 4037  | 5152  | 6424  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1441  | 1648  | 1842  | 2023  | 2189  |
|                     |                              |        | 38     | CC (W) | -   | -    | -    | 1997  | 2781  | 3680  | 4723  | 5779  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1447  | 1679  | 1903  | 2113  | 2339  |
|                     | 43                           | CC (W) | -      | -      | -   | -    | 2529 | 3394  | 4359  | 5460  |       |       |
|                     |                              | PC (W) | -      | -      | -   | -    | 1697 | 1943  | 2182  | 2409  |       |       |
|                     | JEHCCU0300M1<br>JEHCCU0300M3 | 3      | 27     | CC (W) | -   | -    | -    | 3387  | 4429  | 5630  | 6990  | 8528  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1923  | 2178  | 2408  | 2616  | 2798  |
|                     |                              |        | 32     | CC (W) | -   | -    | -    | 3237  | 4233  | 5376  | 6672  | 8115  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1942  | 2218  | 2472  | 2703  | 2912  |
|                     |                              |        | 38     | CC (W) | -   | -    | -    | 2987  | 3986  | 5033  | 6307  | 7691  |
|                     |                              |        |        | PC (W) | -   | -    | -    | 1963  | 2263  | 2554  | 2801  | 3032  |
|                     | 43                           | CC (W) | -      | -      | -   | -    | 4124 | 5281  | 5977  | 7297  |       |       |
|                     |                              | PC (W) | -      | -      | -   | -    | 2821 | 3082  | 2887  | 3144  |       |       |
| Series 3            | JEHCCU0400M3                 | 4      | 27     | CC (W) | -   | -    | -    | 4621  | 6159  | 7981  | 10108 | 12564 |
|                     |                              |        |        | PC (W) | -   | -    | -    | 2524  | 2801  | 3043  | 3259  | 3454  |
|                     |                              |        | 32     | CC (W) | -   | -    | -    | 4320  | 5766  | 7474  | 9465  | 11767 |
|                     |                              |        |        | PC (W) | -   | -    | -    | 2560  | 2874  | 3154  | 3405  | 3632  |
|                     |                              |        | 38     | CC (W) | -   | -    | -    | 3895  | 5243  | 6774  | 8665  | 10791 |
|                     |                              |        |        | PC (W) | -   | -    | -    | 2592  | 2957  | 3295  | 3584  | 3854  |
|                     | 43                           | CC (W) | -      | -      | -   | -    | 4784 | 6266  | 7984  | 10000 |       |       |
|                     |                              | PC (W) | -      | -      | -   | -    | 3008 | 3384  | 3726  | 4030  |       |       |
|                     | JEHCCU0500M3                 | 5      | 27     | CC (W) | -   | -    | -    | 5774  | 7602  | 9766  | 12289 | 15193 |
|                     |                              |        |        | PC (W) | -   | -    | -    | 3104  | 3481  | 3824  | 4146  | 4457  |
|                     |                              |        | 32     | CC (W) | -   | -    | -    | 5417  | 7137  | 9182  | 11574 | 14344 |
|                     |                              |        |        | PC (W) | -   | -    | -    | 3141  | 3560  | 3944  | 4302  | 4644  |
| 38                  |                              |        | CC (W) | -      | -   | -    | -    | 6544  | 8364  | 10629 | 13171 |       |
|                     |                              |        | PC (W) | -      | -   | -    | -    | 3643  | 4096  | 4502  | 4902  |       |
| 43                  | CC (W)                       | -      | -      | -      | -   | 6043 | 7798 | 9851  | 12276 |       |       |       |
|                     | PC (W)                       | -      | -      | -      | -   | 3695 | 4189 | 4657  | 5096  |       |       |       |
| JEHCCU0600M3        | 6                            | 27     | CC (W) | -      | -   | -    | 6100 | 8165  | 10567 | 13323 | 16446 |       |
|                     |                              |        | PC (W) | -      | -   | -    | 3486 | 3983  | 4481  | 4976  | 5464  |       |
|                     |                              | 32     | CC (W) | -      | -   | -    | 5701 | 7660  | 9940  | 12544 | 15511 |       |
|                     |                              |        | PC (W) | -      | -   | -    | 3523 | 4041  | 4567  | 5099  | 5628  |       |
|                     |                              | 38     | CC (W) | -      | -   | -    | -    | 7032  | 9076  | 11518 | 14209 |       |
|                     |                              |        | PC (W) | -      | -   | -    | -    | 4109  | 4683  | 5259  | 5855  |       |
| 43                  | CC (W)                       | -      | -      | -      | -   | 6471 | 8422 | 10638 | 13195 |       |       |       |
|                     | PC (W)                       | -      | -      | -      | -   | 4165 | 4769 | 5396  | 6032  |       |       |       |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%

## 7 Performance Data

R134a (Rating Condition: Superheat 10K, Sub cooling 0K)

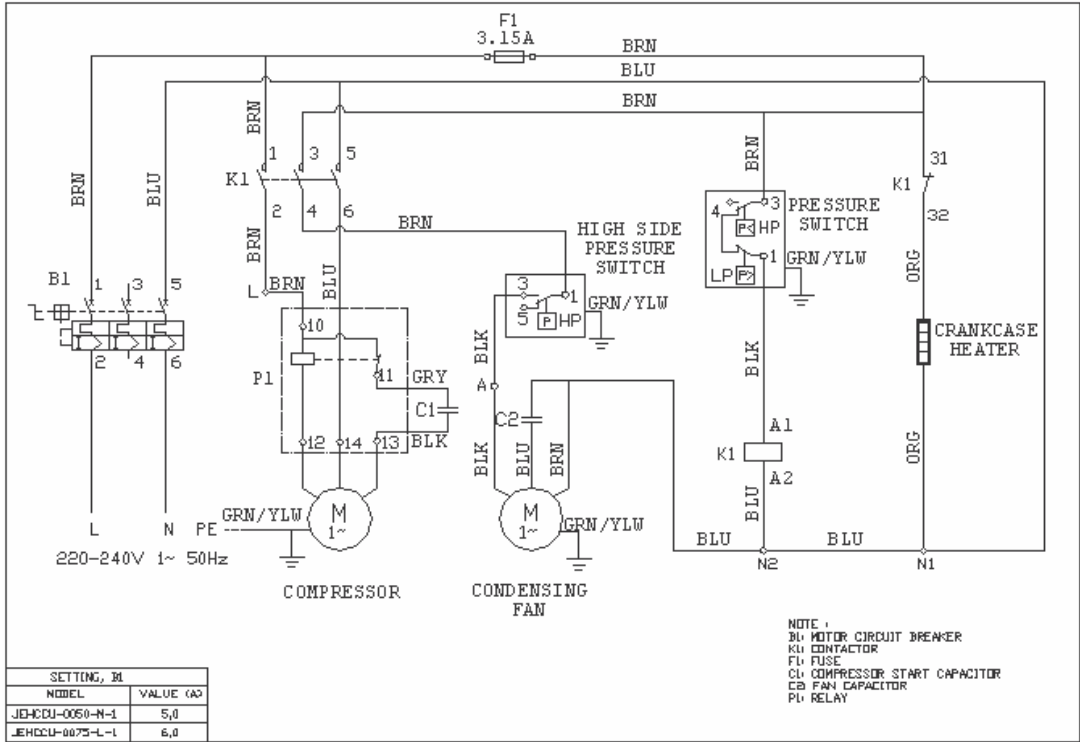
| MODEL               |          | HP           | TE     | TA     | -30    | -25 | -20 | -15   | -10   | -5    | 0     | 5     |       |
|---------------------|----------|--------------|--------|--------|--------|-----|-----|-------|-------|-------|-------|-------|-------|
|                     |          |              |        |        | P.F    | P.F | P.F | P.F   | P.F   | P.F   | P.F   | P.F   |       |
| MEDIUM TEMPERATURES | Series 3 | JEHCCU0675M3 | 6.75   | 27     | CC (W) | -   | -   | -     | 7120  | 9406  | 12040 | 15027 | 18402 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | 4274  | 4814  | 5290  | 5805  | 6277  |
|                     |          |              |        | 32     | CC (W) | -   | -   | -     | 6766  | 8930  | 11422 | 14253 | 17438 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | 4320  | 4906  | 5462  | 5997  | 6521  |
|                     |          |              |        | 38     | CC (W) | -   | -   | -     | -     | 8254  | 10971 | 13184 | 16085 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | -     | 5014  | 5559  | 6245  | 6848  |
|                     | 43       | CC (W)       | -      | -      | -      | -   | -   | 9866  | 12262 | 14909 |       |       |       |
|                     |          | PC (W)       | -      | -      | -      | -   | -   | 5769  | 6442  | 7118  |       |       |       |
|                     | Series 4 | JEHCCU0825M3 | 8.25   | 27     | CC (W) | -   | -   | -     | 7714  | 10463 | 13676 | 17341 | 21501 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | 5031  | 5680  | 6282  | 6858  | 7420  |
|                     |          |              |        | 32     | CC (W) | -   | -   | -     | 7286  | 9867  | 12862 | 16284 | 20144 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | 5061  | 5764  | 6430  | 7073  | 7708  |
|                     |          |              |        | 38     | CC (W) | -   | -   | -     | -     | 9090  | 11826 | 15057 | 18621 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | -     | 5851  | 6597  | 7306  | 8019  |
|                     |          | 43           | CC (W) | -      | -      | -   | -   | 8374  | 10973 | 13910 | 17149 |       |       |
|                     |          |              | PC (W) | -      | -      | -   | -   | 5905  | 6715  | 7507  | 8306  |       |       |
|                     |          | JEHCCU1000M3 | 10     | 27     | CC (W) | -   | -   | -     | 10528 | 13730 | 17374 | 21396 | 25812 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | 6392  | 7297  | 8180  | 9073  | 9993  |
|                     |          |              |        | 32     | CC (W) | -   | -   | -     | -     | 13038 | 16336 | 20027 | 24130 |
|                     |          |              |        |        | PC (W) | -   | -   | -     | -     | 7393  | 8374  | 9368  | 10383 |
|                     | 38       |              |        | CC (W) | -      | -   | -   | -     | 12040 | 15219 | 18736 | 22542 |       |
|                     |          |              |        | PC (W) | -      | -   | -   | -     | 7495  | 8551  | 9620  | 10726 |       |
|                     | 43       | CC (W)       | -      | -      | -      | -   | -   | 14096 | 17310 | 20793 |       |       |       |
|                     | PC (W)   | -            | -      | -      | -      | -   | -   | 8692  | 9862  | 11071 |       |       |       |

TE: Evaporating Temperature (°C)  
 TA: Ambient Temperature (°C)  
 CC: Cooling Capacity (W), ± 10%  
 PC: Power consumption (W), ± 10%

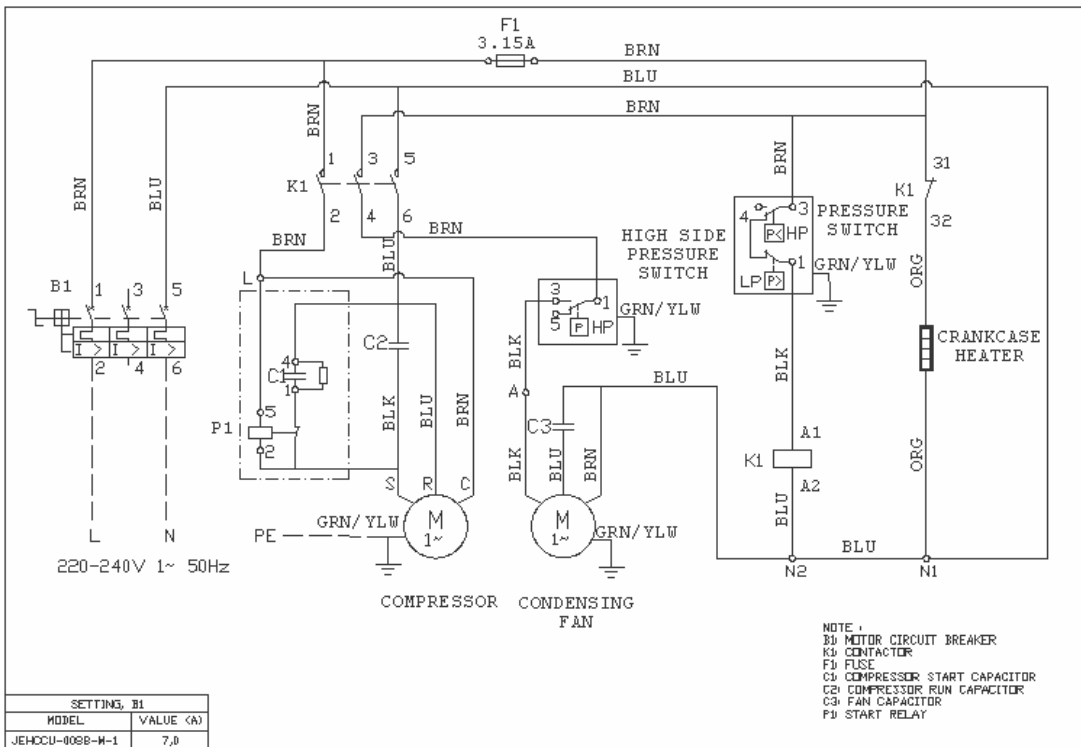
# 8 Electrical Data

**Important Note:** All wiring and connections to the condensing unit must be made in accordance to the local codes.

## Series 1 (230V/1~/50Hz): Medium temperature: JEHCCU0050M1 Low Temperature: JEHCCU0075L1

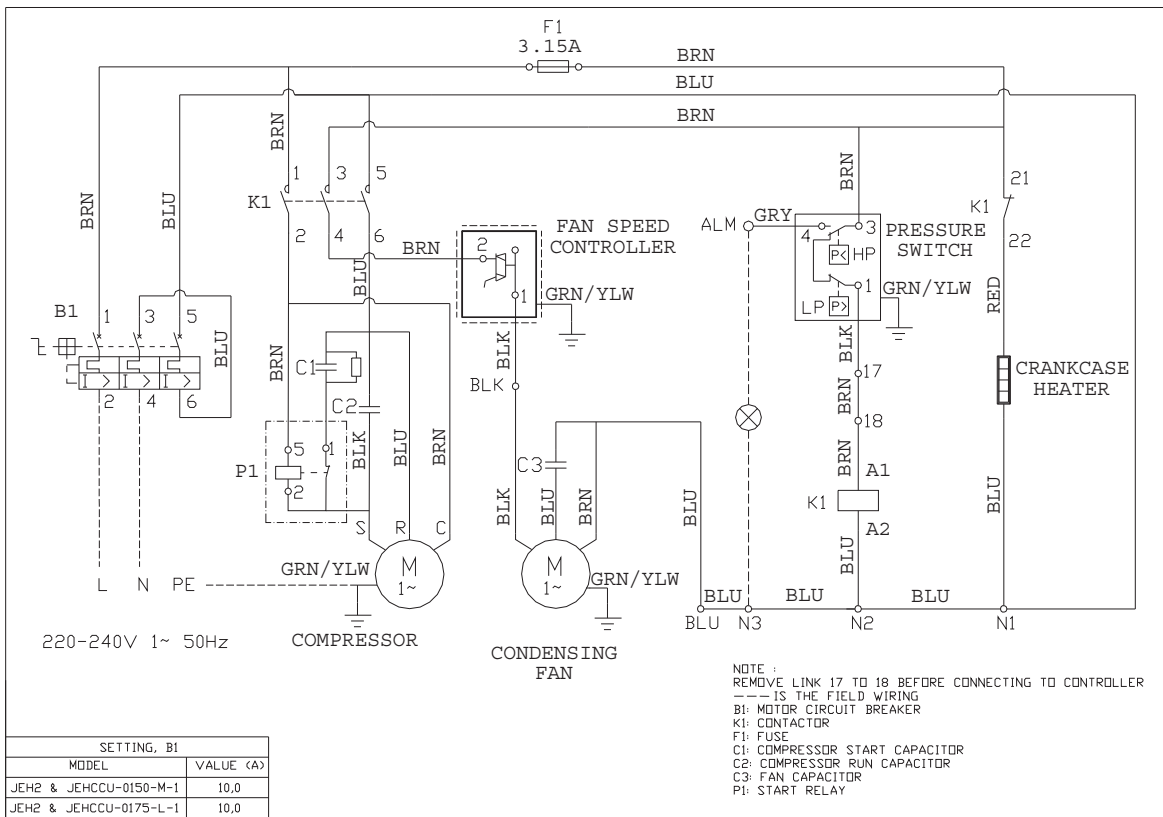


## Series 1 (230V/1~/50Hz): Medium temperature: JEHCCU0088M1

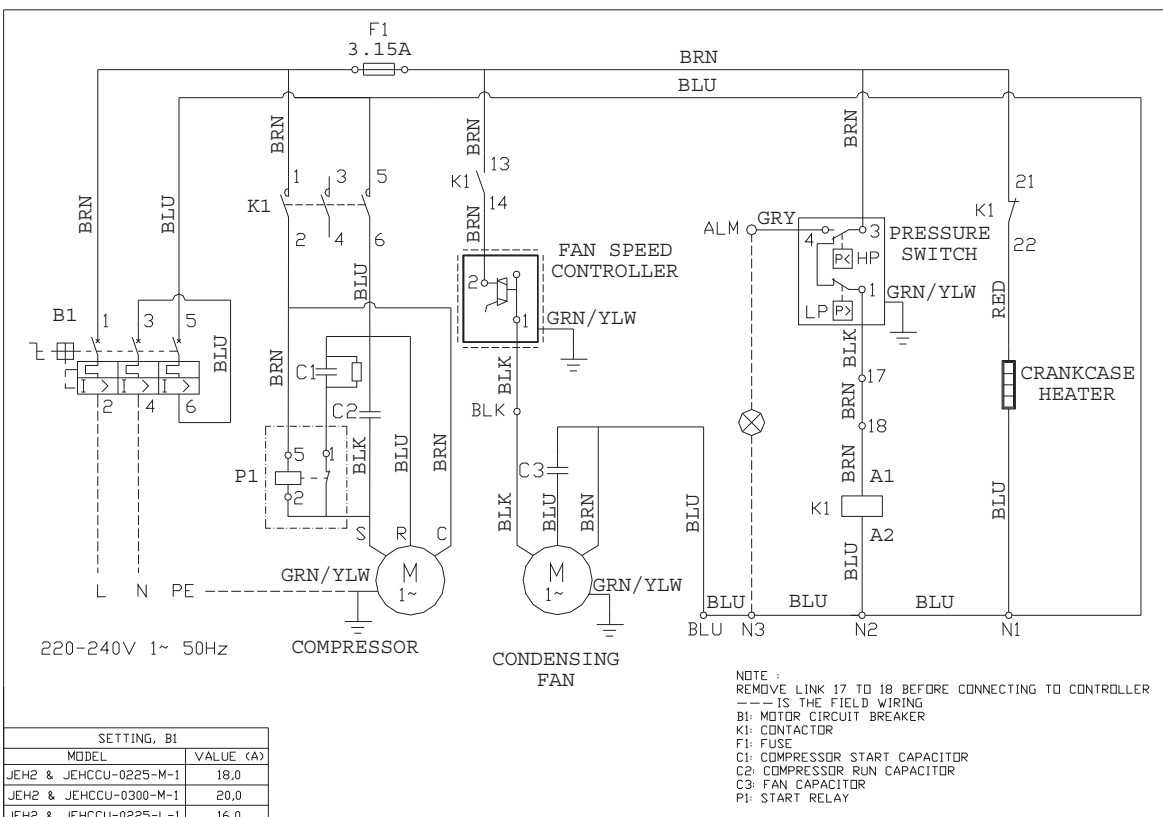


## 8 Electrical Data

**Series 2 (230V/1~/50Hz): Medium temperature: JEHCCU0150M1**  
**Low Temperature: JEHCCU0175L1**



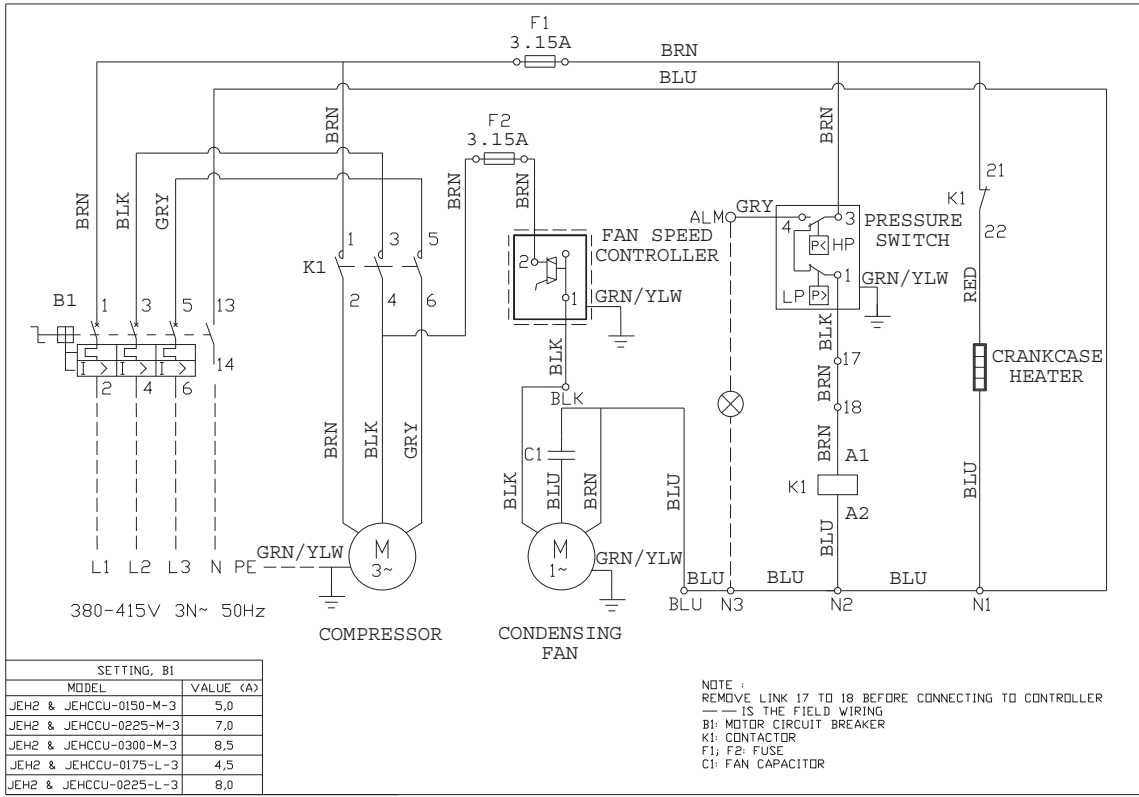
**Series 2 (230V/1~/50Hz): Medium temperature: JEHCCU0225M1, JEHCCU0300M1**  
**Low Temperature: JEHCCU0225L1**



# 8 Electrical Data

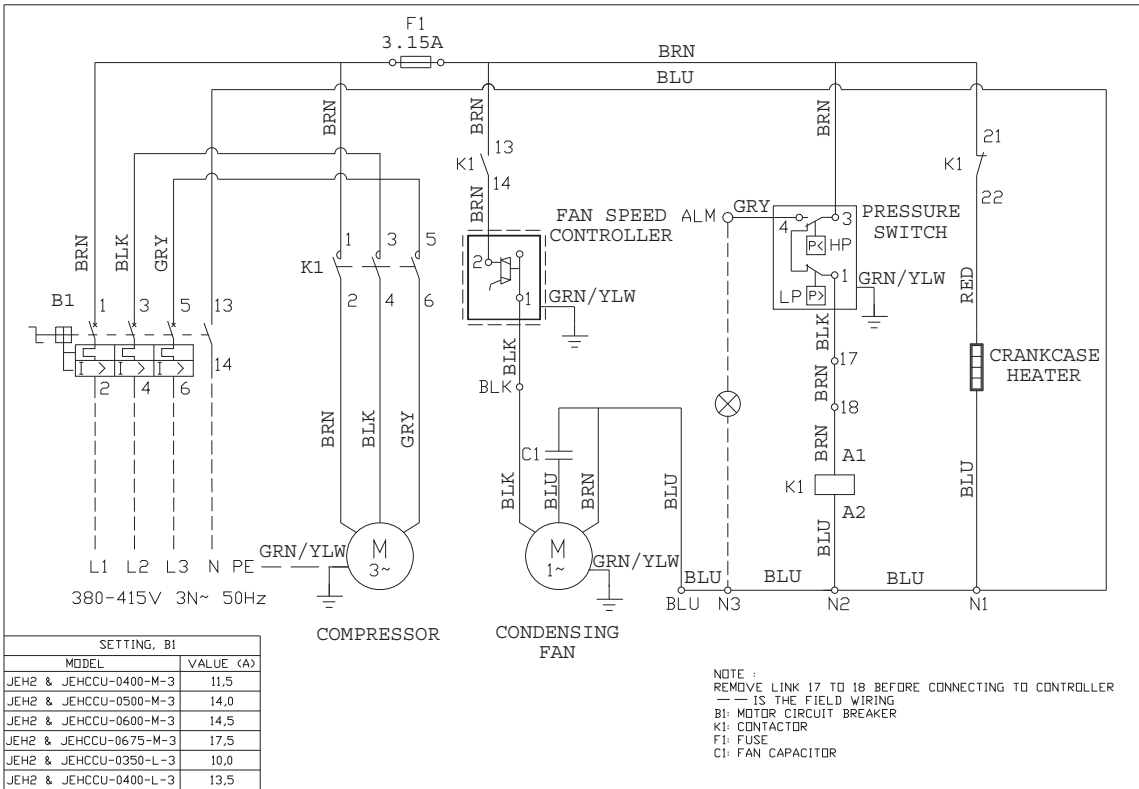
**Series 2 (400V/3~/50Hz): Medium temperature: JEHCCU0150M3, JEHCCU0225M3, JEHCCU0300M3**

**Low Temperature: JEHCCU0175L3, JEHCCU0225L3**



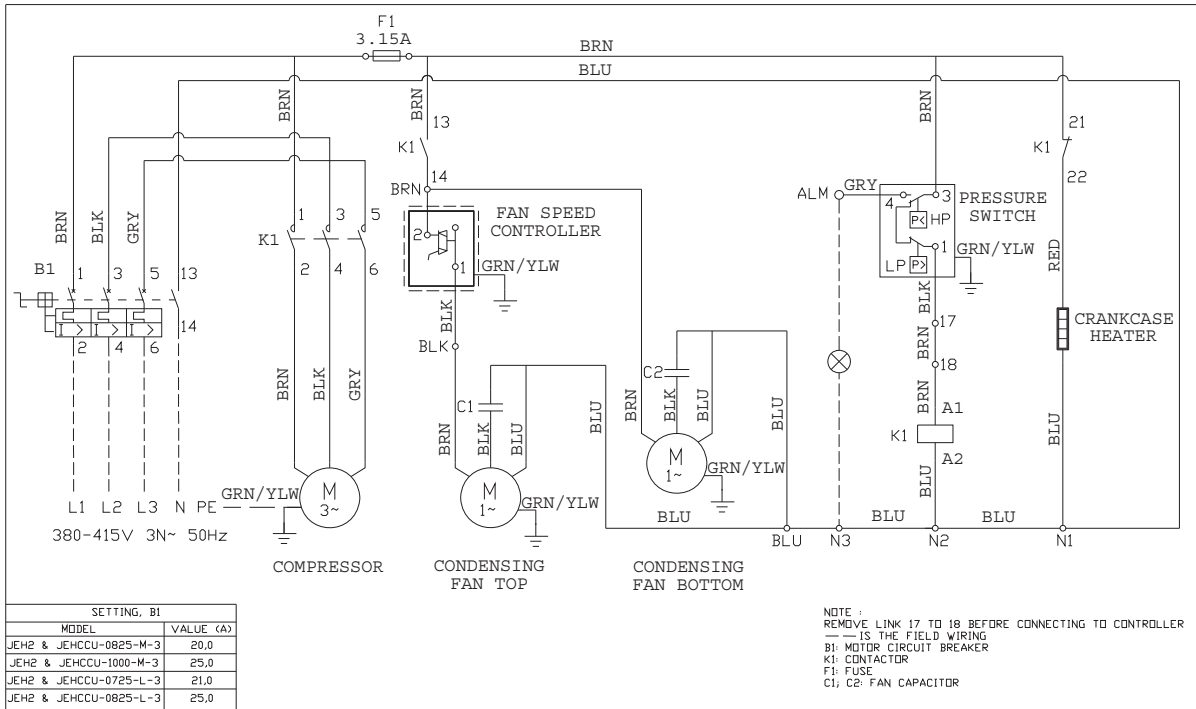
**Series 3 (400V/3~/50Hz): Medium temperature: JEHCCU0400M3, JEHCCU0500M3, JEHCCU0600M3, JEHCCU0675M3**

**Low Temperature: JEHCCU0350L3, JEHCCU0400L3**



## 8 Electrical Data

**Series 4 (400V/3~/50Hz): Medium temperature: JEHCCU0825M3, JEHCCU1000M3**  
**Low Temperature: JEHCCU0725L3, JEHCCU0825L3**



## 9 Safety and Health

### Important Note

Only a qualified refrigeration engineer who is familiar with refrigeration systems and components, including all controls should perform the installation and start-up of the system. To avoid potential injury, use care when working around coil surfaces or sharp edges of metal cabinets. All piping and electrical wiring should be installed in accordance with all applicable codes, ordinances and local by-laws.

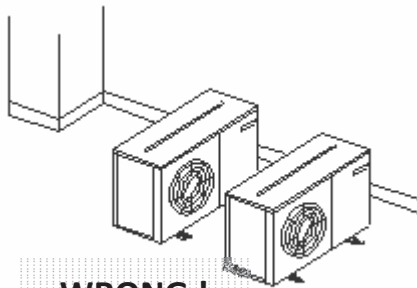
### General Information

- Ensure the unit received is the correct model for the intended application.
- Ensure refrigerant, voltage, are suitable for the proposed application and environment.
- Installation and maintenance are to be performed only by qualified personnel who are familiar with local codes and regulations, and experienced with this type of equipment.
- The condensing unit is delivered with a nitrogen holding charge.
- The condensing unit contains moving machinery and electrical power hazards. May cause severe injury or death. Disconnect and shut off power before installation or service of the equipment.
- Refrigerant release into the atmosphere is illegal. Proper evacuation, handling and leak testing procedures must be observed at all times.
- Units must be earthed and no maintenance work should be attempted prior to disconnecting the electrical supply.
- The electrical covers and condenser fan guard must remain fitted at all times.
- Use of the condensing unit outside of design conditions and application for which units were intended may be unsafe and be detrimental to the unit, regardless short or long term operation.
- The condensing units are not designed to withstand loads or stresses from other equipment or personnel. Such extraneous loads or stress may cause failure/leak/injury.
- Wherever possible the system should be installed to utilize a pump down configuration.
- After installation, the system should be allowed to run for 3 - 4 hours. The oil level should be checked after 3 - 4 hours run time and topped up as necessary. The oil level should not be lower than quarter of the compressor oil sight glass.

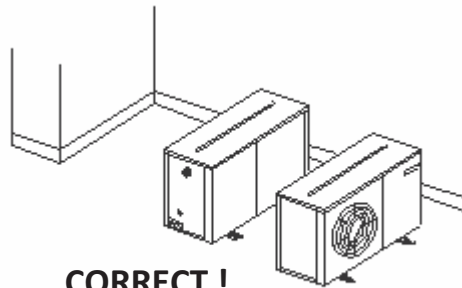
## 10 Installation & Commissioning

### Unit site location

- In order to achieve maximum cooling capacity, the installation location for condensing unit should be carefully selected.
- Install the condensing unit in such a way so that hot air distributed by the condensing unit cannot be drawn in again (as in the case of short circuit of hot discharge air). Allow sufficient space for maintenance around the unit.

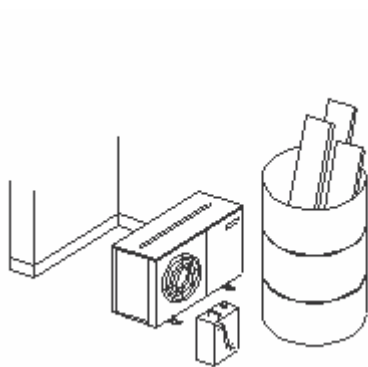


**WRONG !**

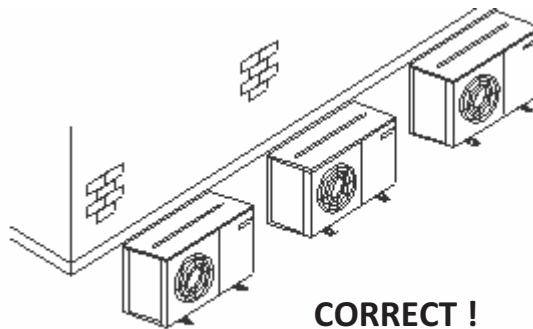


**CORRECT !**

- Ensure that there is no obstruction of air flow into or out of the unit. Remove obstacles which block air intake or discharge.



**WRONG !**



**CORRECT !**

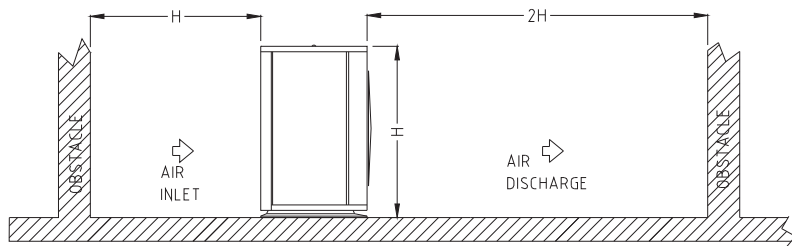
- The location must be well ventilated, so the unit can draw in and distribute plenty of air thus lowering the condensing temperature.
- To optimize the unit running conditions, the condenser coil must be cleaned at regular intervals.



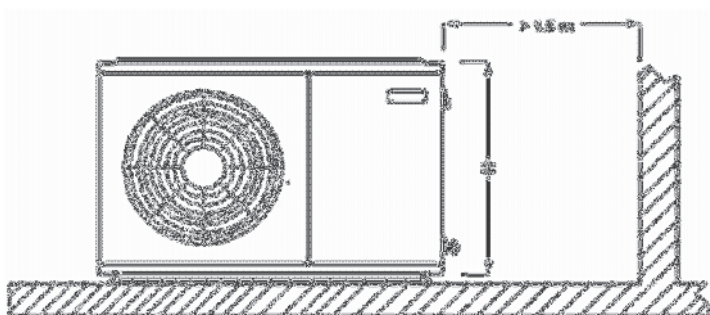
## 10 Installation & Commissioning

### Installation Clearance

- The installation location should allow sufficient space for air flow and maintenance around the unit.



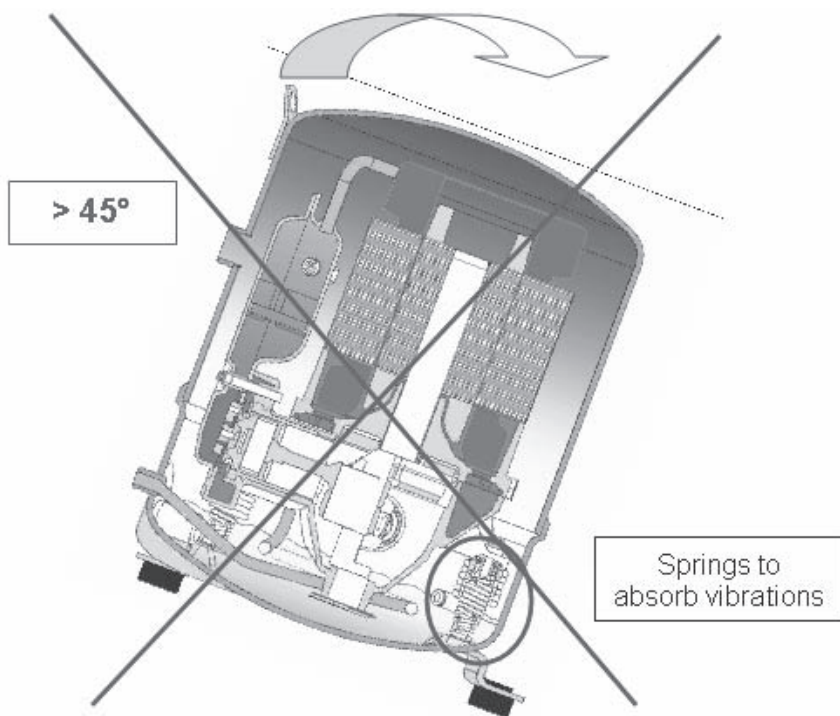
- To allow sufficient space for doing service or installation.



### Compressor handling

To ensure compressor reliability, the condensing unit and the compressor must not be tilt greater than an angle of 45°.

Otherwise, the component can fall from its 3 compressor housing springs, which results in noisy vibrations during operation and possible to breakdown.



# 10 Installation & Commissioning

## Field Piping

### Important Note

Line sizing should only be determined by qualified personnel. All local codes of practice must be observed in the installation of refrigerant piping

To ensure satisfactory operation and performance, the following points should be noted for field piping arrangements,

- Couples one indoor unit with one outdoor condensing unit only.
- Release all the pre-charged nitrogen before pipework connection.
- Connecting pipe size for suction and liquid line must same as attaches to the condensing unit. Correct line sizing will minimize the pressure drop and maintain sufficient gas velocity for proper oil return.
- Pipework routes must be as simple and as short as possible. Avoid low points on pipework where oil can accumulate.
- Use only clean, dehydrated refrigeration grade copper tube with large radius elbows. The piping shall be kept with enough bending radius.
- Braze without over filling to ensure there is no excess solder into the tube.
- To prevent oxidation, blow nitrogen through pipework when brazing.
- Install insulation on all suction lines after pressure test.
- Adequately support all pipe work at a maximum of 2 meter intervals.
- For the condition where the outdoor condensing unit is above the indoor unit, the height difference between units shall be less than 25 m and install oil trap on suction pipe every 4 m height. The suction pipe must always be fitted with U-trap at the bottom.
- For the condition where the outdoor condensing unit is below the indoor unit, the height difference between units shall be less than 4 m. Pipe trap shall be installed upward on outlet of indoor unit (suction pipe).
- The recommended piping length is 25 m or less.
- In horizontal pipework, suction pipe is not required any liquid trap.
- Additional oil might be required if piping length exceeds 20m or with many oil traps. Check the oil level of the compressor to decide to add the oil after minimum 2 hours operation.
- For systems operating with low evaporating temperature units (eg. JEHCCUXXXXLX), we recommend using an expansion valve fitted with MOP (Maximum Operation Pressure), to protect the compressor against high pressures in suction during the start procedure especially after defrosts cycle.

Nevertheless, it is recommended as well to install the MOP (Maximum Operation Pressure), expansion valve for medium evaporating temperature units (eg. JEHCCUXXXXMX) if the working suction pressure during start procedure especially after defrost cycle, is out of the limit, as refer to the table provided.

## 10 Installation & Commissioning

Recommend compressor working pressure range

| Compressor Model                        | Medium Temp |             |            | Low Temp    |
|---|-------------|-------------|------------|-------------|
|   | MTZ         | MTZ         | MTZ        | NTZ         |
| Refrigerant                             | R404A       | R407C       | R134a      | R404A       |
| Working Pressure Range High Side (barg) | 13.2 - 27.7 | 12.5 - 29.4 | 7.9 - 22.6 | 13.2 - 27.7 |
| Working Pressure Range Low Side (barg)  | 1.0 - 7.2   | 1.4 - 6.6   | 0.6 - 4.7  | 0.1 - 3.3   |

### Pressure testing

- Make sure that both service valves are closed
- When running a pressure test on field piping, always use an inert, dry gas such as Nitrogen
- The pressure differential between the high and low side should not exceed 30 barg (435 psig)
- Test pressures shall be as shown follows.

| Series  | Test pressure         |                       |
|---------|-----------------------|-----------------------|
|         | High side             | Low side              |
| 1       | 24 barg<br>(350 psig) | 12 barg<br>(175 psig) |
| 2, 3, 4 | 28 barg<br>(405 psig) | 19 barg<br>(275 psig) |

- If there is pressure drop, check the leakage portion.

### Vacuum - moisture removal

**Important Note**

Moisture prevents proper functioning of the compressor and the refrigeration system

Air and moisture reduce service life and increase condensing pressure causing abnormally high discharge temperatures likely to destroy the oil's lubricating properties. The risk of acid formation is also increased by air and moisture and copper plating can be generated in this way. All these phenomena can be cause mechanical and electrical failure.

# 10 Installation & Commissioning

### Important Note

Ensure that a good quality vacuum pump is used to pull a vacuum of 0.67 mbar.abs (-1.0 barg) or less. Ensure that no pressure increase during 1 hour or more after stop vacuuming. If pressure increase, there is moisture or leakage along the pipeline.

### Safety pressure switch settings

The pressure switch fitted to condensing units with auto reset for low pressure and manual reset for high pressure are NOT factory preset.

### High pressure safety (Manual reset)

The high pressure safety switch is required to stop the compressor, should the discharge pressure exceed the values shown in the following table. The high pressure switch can be set to lower values depending on the application and the ambient conditions

| Model          | Series 1 | Series 2, 3, 4 |       |
|----------------|----------|----------------|-------|
| Refrigerant    | R404A    | R404A/ R407C   | R134a |
| Cut Out (barg) | 24       | 28             | 23    |
| Cut Out (psig) | 350      | 405            | 330   |

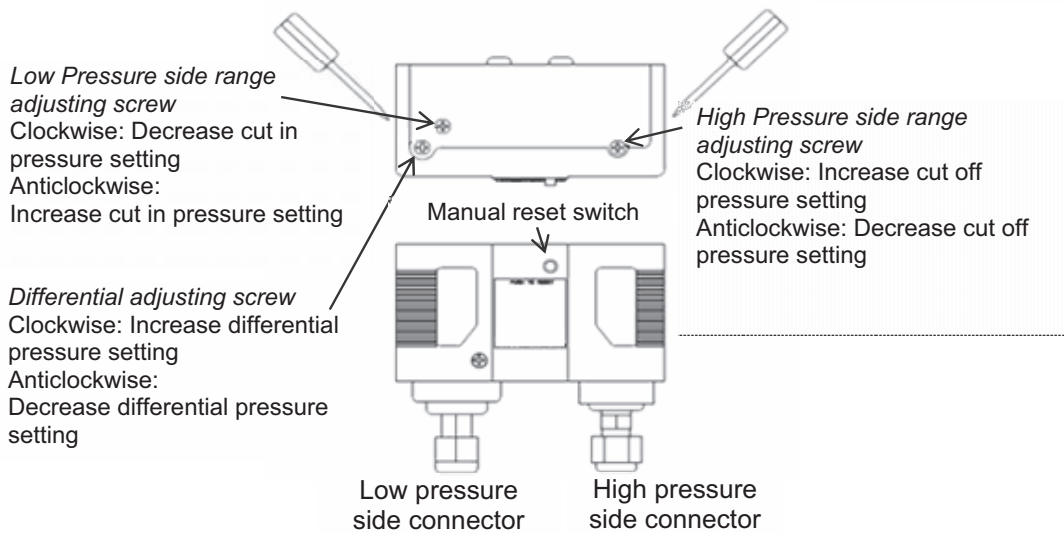
### Low pressure safety (Auto reset)

The low pressure safety switch is recommended to avoid compressor operation at too lower suction pressure and vacuum condition. The low pressure safety cut should never be set below value as shown in the following table.

| Model          | Series 1 | Series 2, 3, 4 |       |
|----------------|----------|----------------|-------|
| Refrigerant    | R404A    | R404A/ R407C   | R134a |
| Cut Out (barg) | 24       | 28             | 23    |
| Cut Out (psig) | 350      | 405            | 330   |

\* M: Medium temperature; L: Low temperature

**Low pressure cut off pressure = Setting of the cut in - Setting of the differential**



# 10 Installation & Commissioning

### Important Note

There must be no more than 10 compressor starts per hour. A higher number reduces the service life of the compressor. If necessary, use an anti-short-cycle timer in the control circuit. Minimum a 3 minute runtime after each start of compressor and a 3 minute idle time after each stop are recommended. Only during the pump down cycle may the compressor run for much shorter intervals.

### Fan speed controller setting

(Note: not applicable for JEHCCU0050M1, JEHCCU0088M1 and JEHCCU0075L1)

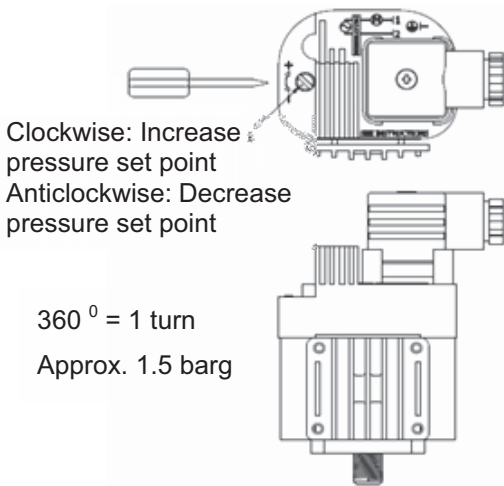
The fan speed controller controls the speed of the condenser's fan.

It keeps the condensing pressure at a steady level by changing the speed of the fan according to the required condensing pressure.

Factory setting is 19 barg and the operation during low pressure is "cut off" mode.

Recommend setting for range setting pointer/ range adjusting screw as table below:

| Refrigerant    | R404A/<br>R407C | R134a |
|----------------|-----------------|-------|
| Setting (barg) | 19              | 10    |



### Commissioning of the Condensing Unit

Please make sure that all manual service valves are fully open when starting the system for the first time. This includes external shut off valves as well as liquid receiver valve in the unit.

# 11 Service & Maintenance

## Important Note

Warning! - Disconnect the mains electrical supply before servicing or opening the unit

Warning! - Ensure there is no refrigerant in refrigerant circuit before dismantle it

Warning! - If the supply cord is damaged, it must be replaced by the qualified service agent in order to avoid a hazard.

The condensing units are designed to give long life operation with minimum maintenance. However, they should be routinely checked and the following service schedule is recommended under normal circumstances:

The removal of the top, side and front panels ensures that all parts are accessible.

1. Compressor - Inspect at regular intervals
  - Check for refrigerant leaks on all joints and fittings.
  - Ensure that no abnormal noise or vibration is detected during test run.
  - Check the compressor oil levels and top up if required. The oil level should not be lower than quarter of the compressor oil sight glass.
  
2. Condenser Fan Motor & Blade - Clean and inspect at regular intervals
  - Check for abnormal noise, vibration and fan imbalance.
  - Ensure that the fan motor is clean and spins freely.
  - Check that the condenser fan blade is clean and free from restriction.
  - Note: The Fan Motor is pre-lubricated and factory sealed so no maintenance is necessary.
  
3. Condenser Coil - Clean and inspect at regular intervals
  - Check and remove the dirt and debris between the fins using a suitable chemical coil cleaner.
  - Check and remove any obstacles which may hinder the airflow through the condenser coil.
  
4. Power Supply - Inspect at regular intervals
  - Check the running current and voltage for the condensing unit.
  - Check the electrical wiring and tighten the wires onto the terminal blocks if necessary.

Under normal circumstances:

- Clean condenser coil every three months
- Carry out leak test every month
- Examine electrical cables and enclosures each year
- Check and verify operation of all safety devices every three months, ensure crankcase heater is operational
- Check sight glass and operating conditions
- Check security of compressor mountings and the bolts that hold down the unit each year

## 12 Checkpoints

- Ensure the high low pressure controls are configured properly.
- Ensure crankcase heater is energized minimum 12 hours prior to start up and permanently energized.
- Check the refrigerant is correct for intended use
- Check all electrical connections.
- Check all electrical termination and circuits are correct.
- Check compressor oil level via compressor sight glass, the oil level should not be lower than quarter of sight glass.
- Ensure fan motor and fan blades are installed properly.
- Check the TXV capacity sizing based on indoor unit capacity. Check TXV applicable refrigerant. Check position and condition of the sensing bulb fixing
- Observed the system pressures during the charging and initial operation process.
- Ensure that suction pressure will decrease, discharge pressure will increase. No abnormal noise from the compressor.
- Continue to charge the system until sight glass is clear. Make sure that high pressure is > 14.2 barg for R404A, > 15.0 barg for R407C and > 7.9 barg for R134a when doing this charge adjustment operation. Continuous flow of clear refrigerant through the sight glass, with perhaps an occasional bubble at very high temperature indicates the refrigerant is at optimum.
- Check the compressor's discharge and suction pressure, ensure it's within operating range. Discharge temperature should be within 50 to 90 °C and pressure should be around 15 to 26 barg (for system charged with R404A and R407C) and 8 to 16 barg (for system charged with R134a).
- Check the current of condensing unit and ensure it below the isolator setting value.
- Check condenser fan, ensure warm air blowing off the condenser coil.
- Check evaporator blower, ensure it's discharging cool air.
- Check suction superheat and adjust expansion valve to prevent liquid flood back to the compressor. Recommended 5 to 20 K of suction superheat.
- Do not leave the system unattended until the system has reached its normal operating condition and the oil charge has properly adjusted itself to maintain the proper level in the sight glass.
- Check periodically the compressor performance and all the moving components during the first day of operation.
- Check the liquid line sight glass and expansion valve operation. If there is an indication that the system is low on refrigerant, thoroughly check the system for leaks before adding refrigerant.

## 13 Trouble Shooting

This troubleshooting guide describes some common condensing unit failure. Consult qualified personnel before any corrective actions are taken.

| Failure                   | Possible Causes   |
|---------------------------|---|
| Fan does not work         | <ul style="list-style-type: none"> <li>• Improper wiring</li> <li>• Fan motor faulty</li> </ul>   |
| Compressor does not start | <ul style="list-style-type: none"> <li>• Improper wiring</li> <li>• Defective contactor or coil</li> <li>• System stopped because of tripped of safety device.</li> <li>• Defective start/run capacitor</li> <li>• Compressor faulty</li> </ul> |
| Insufficient cooling      | <ul style="list-style-type: none"> <li>• Low refrigerant charge</li> <li>• Condenser coil dirty</li> <li>• Obstacle blocking air inlet/outlet</li> <li>• Improper thermostat setting</li> </ul>   |

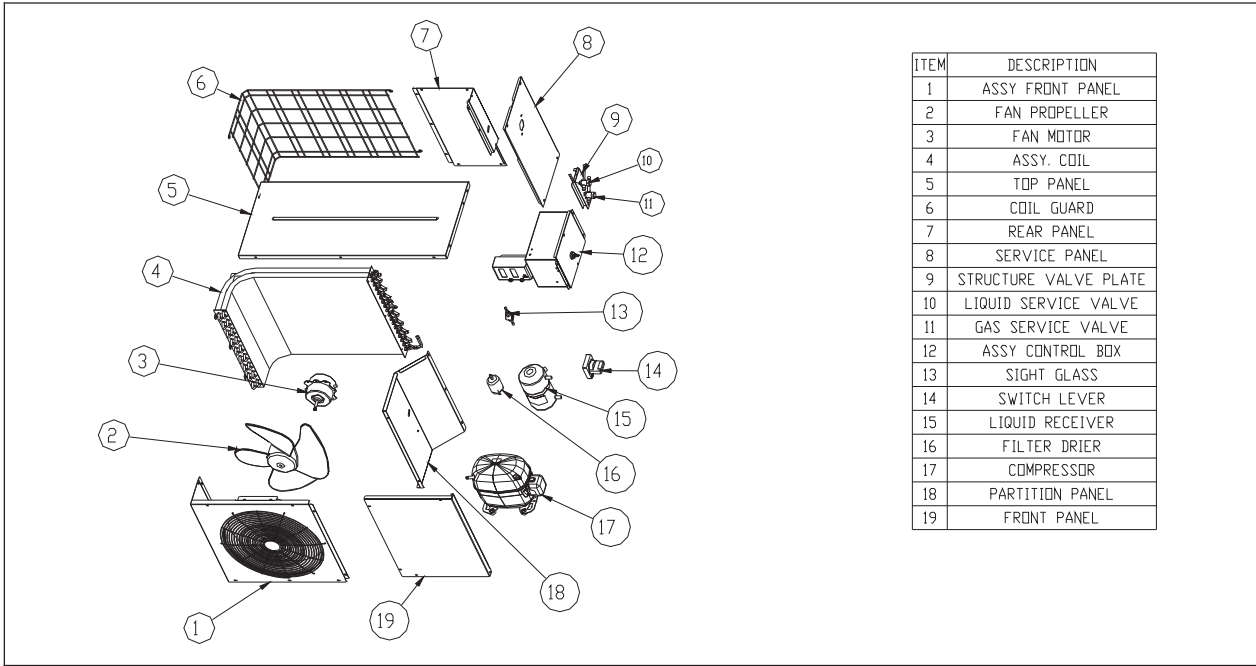
**Important Note**

Warning! - Immediately shut off power of the unit if there is any event of accident or breakdown.

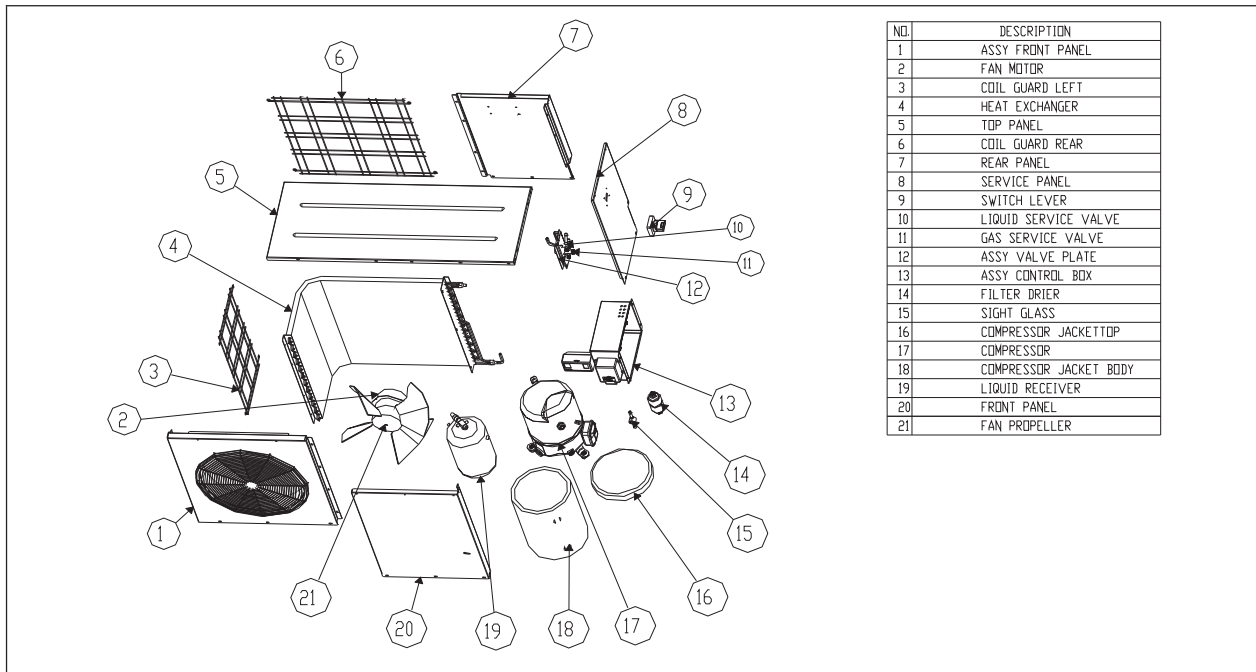


## 14 Exploded view of the condensing unit

**Series 1 (230V/1~/50Hz): Medium temperature: JEHCCU0050M1, JEHCCU088M1**  
**Low temperature: JEHCCU0075L1**

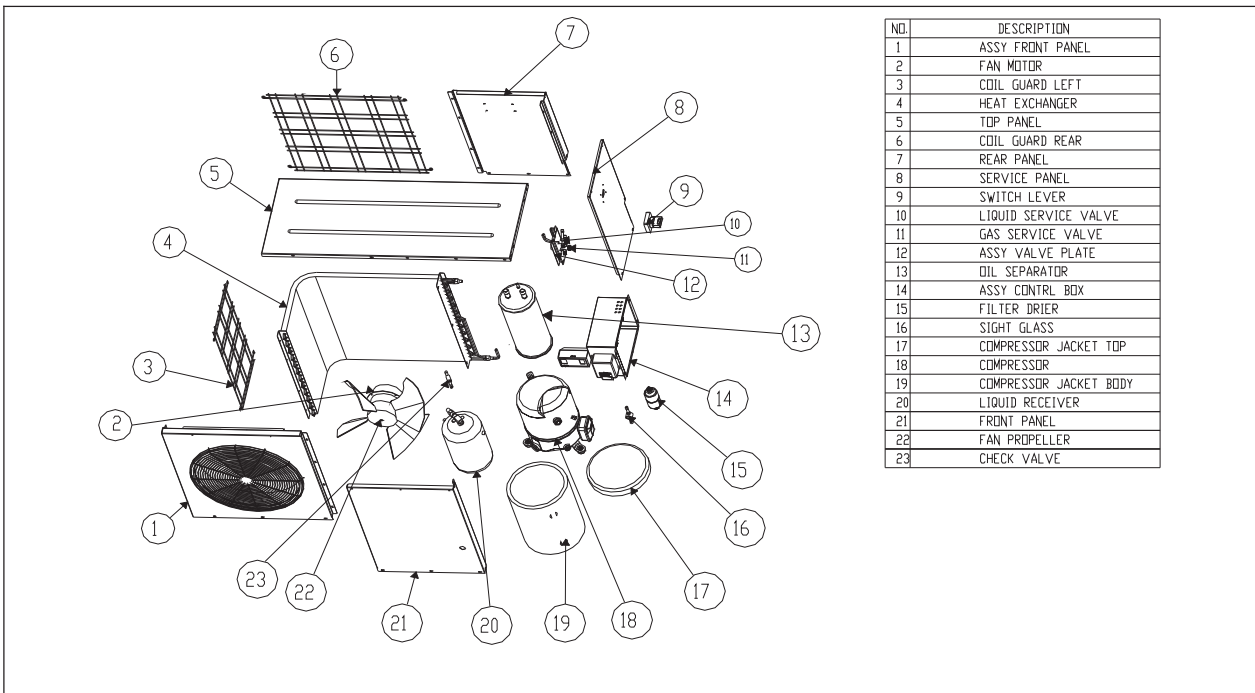


**Series 2 (230V/1~/50Hz): Medium temperature: JEHCCU0150M1, JEHCCU0225M1, JEHCCU0300M1**  
**Series 2 (400V/3~/50Hz): Medium temperature: JEHCCU0150M3, JEHCCU0225M3, JEHCCU0300M3**

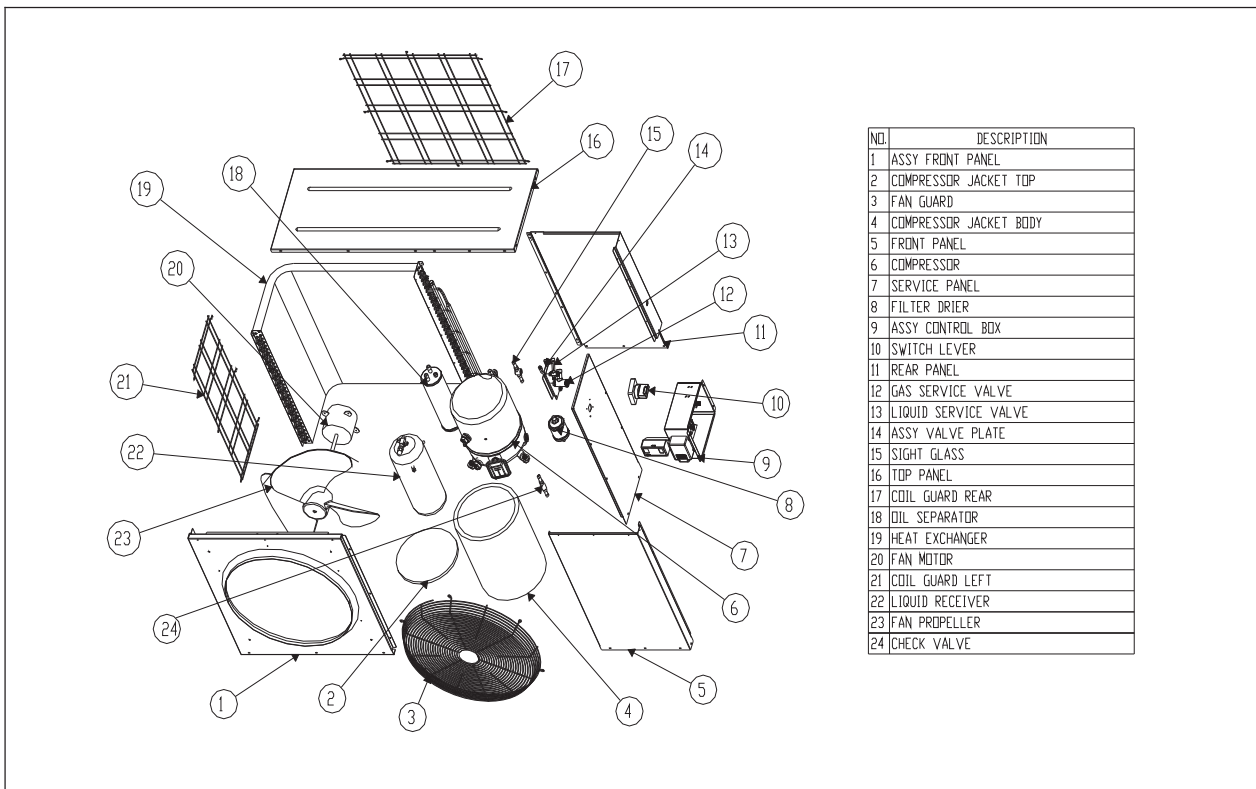


# 14 Exploded view of the condensing unit

**Series 2 (230V/1~/50Hz): Low temperature: JEHCCU0225L1, JEHCCU-0175L1**  
**Series 2 (400V/3~/50Hz): Low temperature: JEHCCU0225L3, JEHCCU-0175L3**

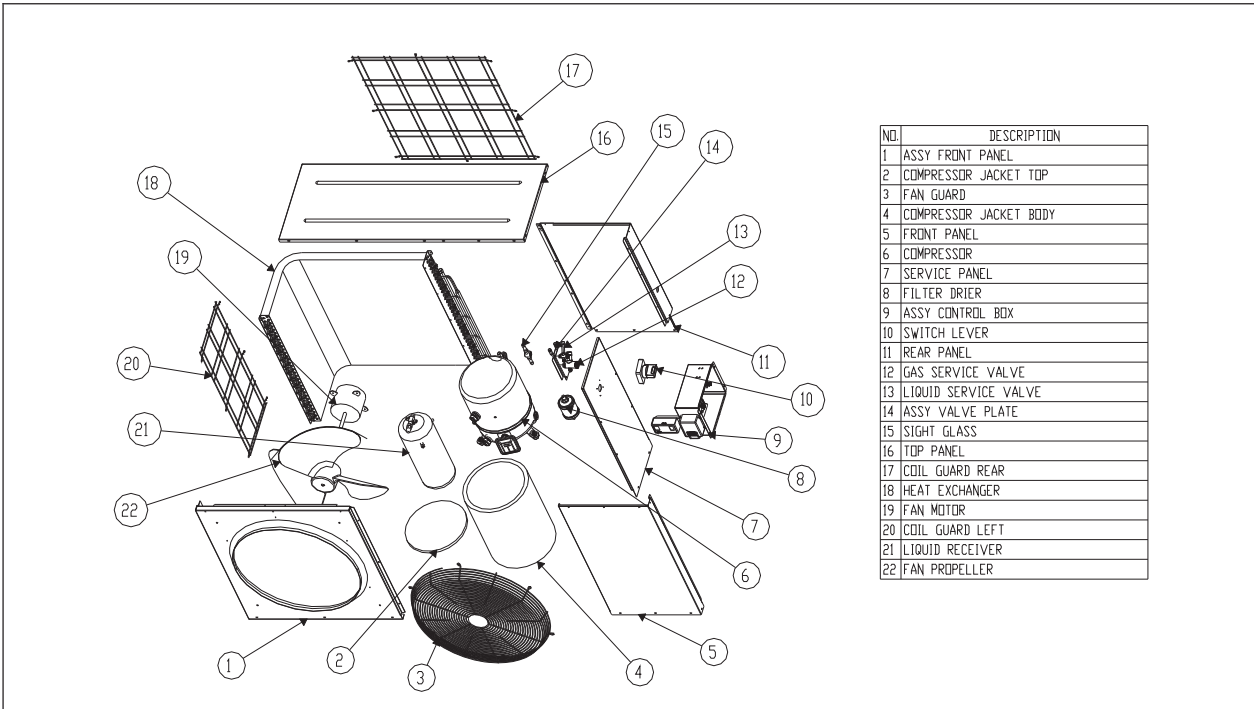


**Series 3 (400V/3~/50Hz): Low temperature: JEHCCU0350L3, JEHCCU0400L3**

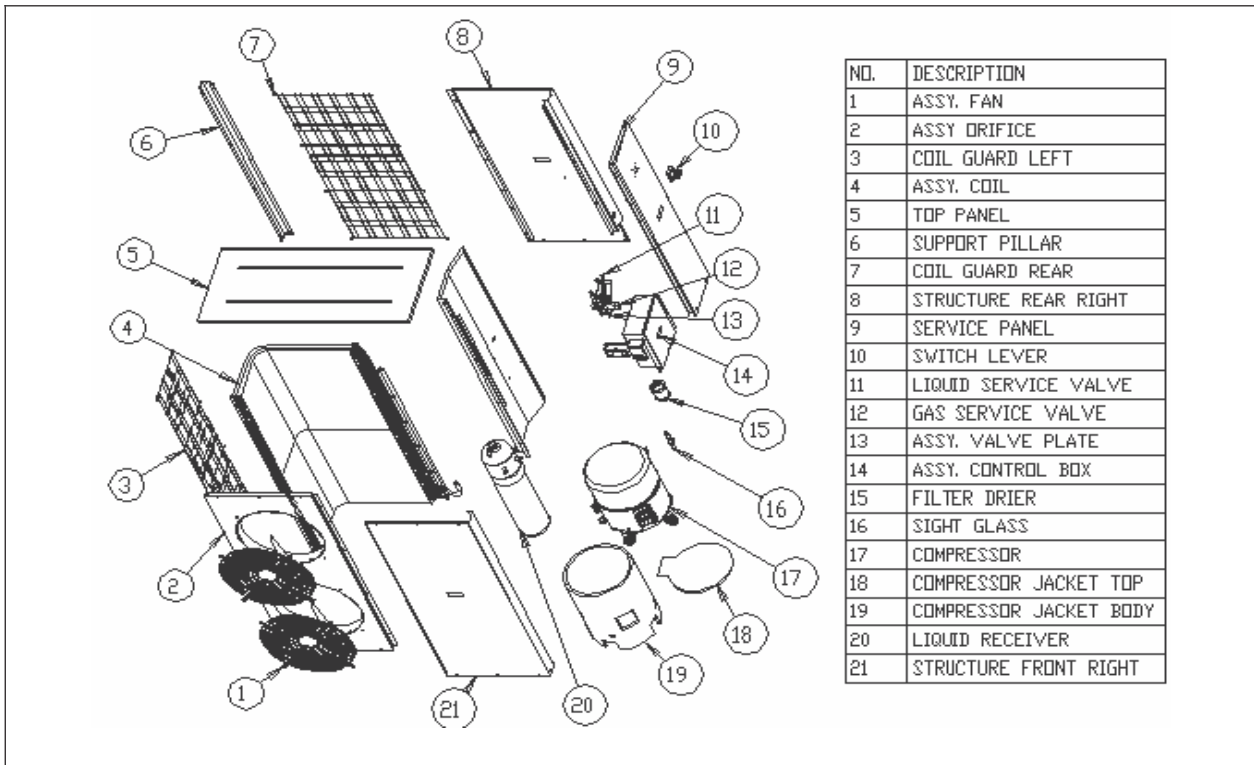


## 14 Exploded view of the condensing unit

**Series 3 (400V/3~/50Hz): Medium temperature: JEHCCU0400M3, JEHCCU0500M3, JEHCCU0600M3, JEHCCU0675M3**

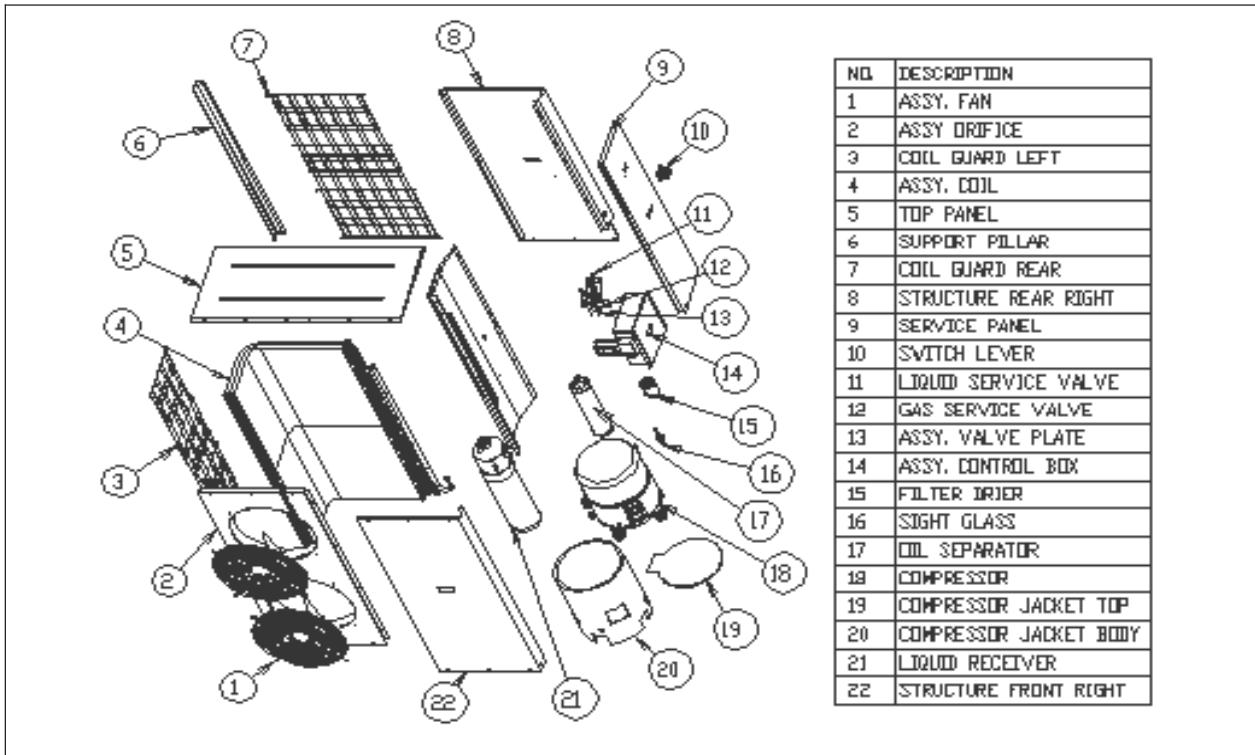


**Series 4 (400V/3~/50Hz): Medium temperature: JEHCCU0825M3, JEHCCU1000M3**



## 14 Exploded view of the condensing unit

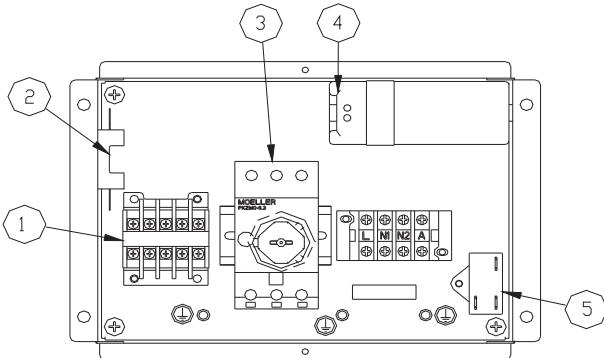
Series 4 (400V/3~/50Hz): Low temperature: JEHCCU0725L3, JEHCCU0825L3



## 15 Exploded view of the control box

### SERIES 1 CONTROL BOX (SINGLE PHASE)

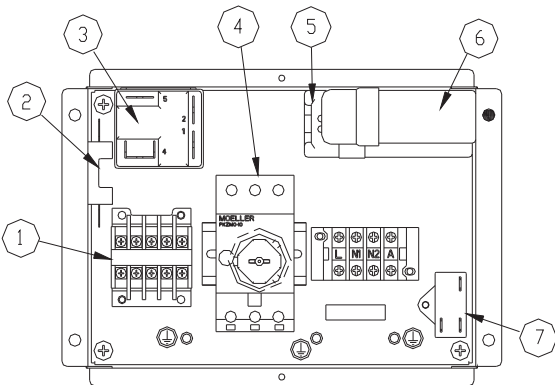
Model: JEHCCU0050M1 & JEHCCU0075L1



| Item | Description     |
|------|-----------------|
| 1    | CONTACTOR       |
| 2    | FUSE 3.15 A     |
| 3    | ISOLATOR        |
| 4    | START CAPACITOR |
| 5    | FAN CAPACITOR   |

### SERIES 1 CONTROL BOX (SINGLE PHASE)

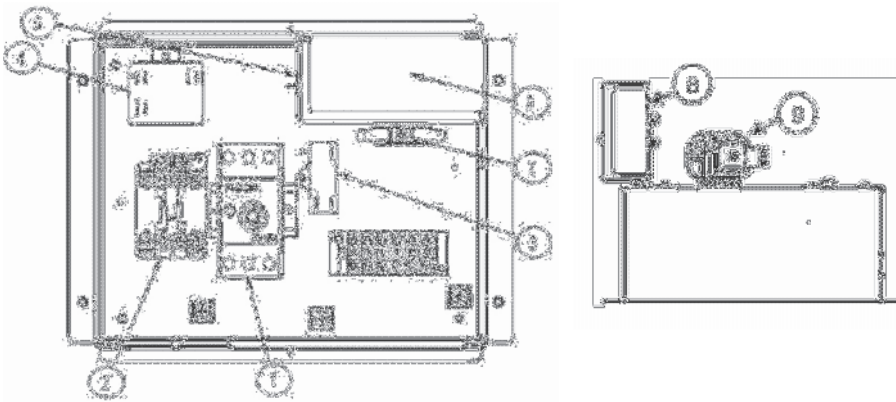
Model: JEHCCU0088M1



| Item | Description     |
|------|-----------------|
| 1    | CONTACTOR       |
| 2    | FUSE 3.15 A     |
| 3    | START RELAY     |
| 4    | ISOLATOR        |
| 5    | START CAPACITOR |
| 6    | RUN CAPACITOR   |
| 7    | FAN CAPACITOR   |

### SERIES 2 CONTROL BOX (SINGLE PHASE)

Model: JEHCCU0150M1, JEHCCU0175L1, JEHCCU0225L1, JEHCCU0225M1, JEHCCU0300M1

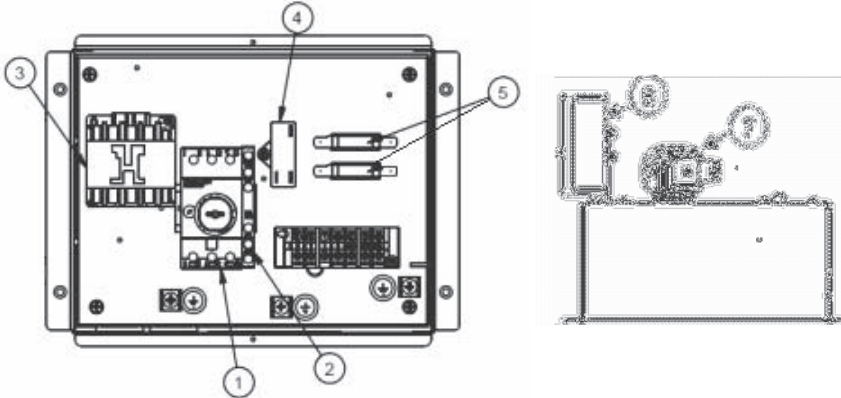


| Item | Description          |
|------|----------------------|
| 1    | ISOLATOR             |
| 2    | CONTACTOR            |
| 3    | FAN CAPACITOR        |
| 4    | START RELAY          |
| 5    | RUN CAPACITOR        |
| 6    | START CAPACITOR      |
| 7    | FUSE 3.15 A          |
| 8    | H/L PRESS.SWITCH     |
| 9    | FAN SPEED CONTROLLER |

## 15 Exploded view of the control box

### SERIES 2 CONTROL BOX (THREE PHASE)

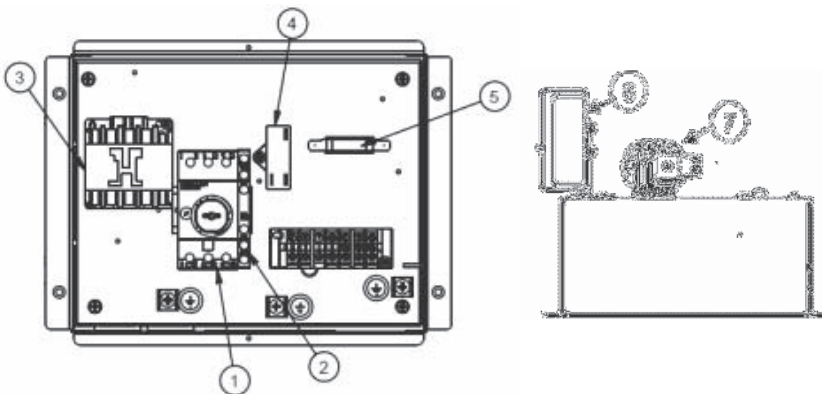
Model: JEHCCU0150M3, JEHCCU0175L3, JEHCCU0225L3, JEHCCU0225M3, JEHCCU0300M3



| Item | Description          |
|------|----------------------|
| 1    | ISOLATOR             |
| 2    | AUXILLARY CONTACTOR  |
| 3    | CONTACTOR            |
| 4    | FAN CAPACITOR        |
| 5    | FUSE 3.15 A          |
| 6    | H/L PRESS.SWITCH     |
| 7    | FAN SPEED CONTROLLER |

### SERIES 3 CONTROL BOX (THREE PHASE)

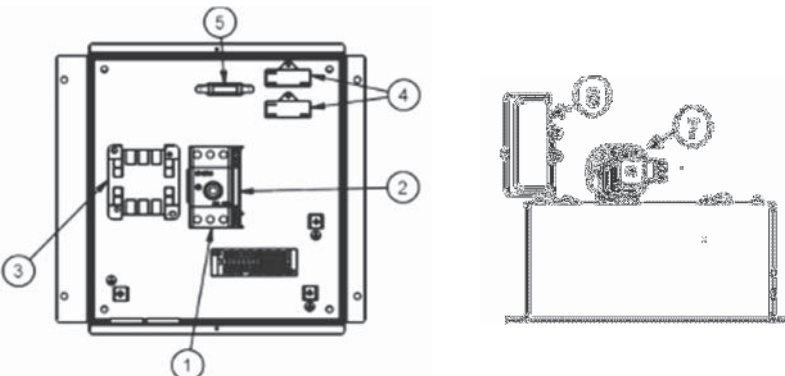
Models: JEHCCU0350L3, JEHCCU0400L3, JEHCCU0400M3, JEHCCU0500M3, JEHCCU0600M3, JEHCCU0675M3



| Item | Description          |
|------|----------------------|
| 1    | ISOLATOR             |
| 2    | AUXILLARY CONTACTOR  |
| 3    | CONTACTOR            |
| 4    | FAN CAPACITOR        |
| 5    | FUSE 3.15 A          |
| 6    | H/L PRESS.SWITCH     |
| 7    | FAN SPEED CONTROLLER |

### SERIES 4 CONTROL BOX (THREE PHASE)

Models: JEHCCU0725L3, JEHCCU0825L3, JEHCCU0825M3, JEHCCU1000M3



| Item | Description          |
|------|----------------------|
| 1    | ISOLATOR             |
| 2    | AUXILLARY CONTACTOR  |
| 3    | CONTACTOR            |
| 4    | FAN CAPACITOR        |
| 5    | FUSE 3.15 A          |
| 6    | H/L PRESS.SWITCH     |
| 7    | FAN SPEED CONTROLLER |

# 16 Declaration of Conformity

J&E/DOC/001-09(2)



## Declaration of Conformity

Konformitätsbescheinigung  
 Déclaration de Conformité  
 Conformiteitsverklaring  
 Declaracion de Conformidad  
 Dichiarazione di Conformità  
 Overensstemmelseserklæring  
 Declaração de Conformidade  
 Δήλωση Συμμόρφωσης

J & E HALL REFRIGERATION SDN. BHD.

LOT 10, JALAN PERUSAHAAN 8, KAWASAN PERUSAHAAN PEKAN BANTING,  
 42700 BANTING, SELANGOR DARUL EHSAN, MALAYSIA.

declare under our sole responsibility that the products  
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 declaramos sobre nuestra sola responsabilidad que los productos  
 dichiariamo sotto nostra sola responsabilità che i prodotti  
 erklærer som eneansvarlige, at produktet  
 declaramos sob a nossa responsabilidade exclusiva que os produtos  
 δηλώνει υπό την αποκλειστική της ευθύνη ότι τα προϊόντα

**COMMERCIAL REFRIGERATION CONDENSING UNIT**  
 Unidad que condensa comercial de la refrigeración  
 Unité de condensation commerciale de réfrigération  
 Commerciële condenserende koel-unit  
 Kommerzielle kondensierende Maschine der Abkühlung  
 Unita condensate commerciale di refrigerazione  
 kolekondenseringsenheten til kommercielt brug  
 Unidade de condensação de refrigeração  
 Εμπορική Μονάδα Συμπύκνωσης Ψύξης

|                                 |   |
|---------------------------------|---|
| <b>Model Designations:</b>      | See Appendix 1 overleaf                           |
| <i>Baumuster-Bezeichnungen:</i> | <i>Sehen sie anhang 1 umseitig</i>                |
| <b>Designations Modèles:</b>    | <i>Voir l'annexe 1 au verso</i>                   |
| <i>Aanduidingen Model:</i>      | <i>Zie ommezijde voor bijlage 1</i>               |
| <b>Designaciones Modelo:</b>    | <i>Vea el apéndice 1 a la vuelta</i>              |
| <i>indicazioni de Modello:</i>  | <i>Veda overleaf l'appendice 1</i>                |
| <b>modellbetegnelser:</b>       | <i>se appendix 1 på bagsiden</i>                  |
| <b>Designações do modelo:</b>   | <i>Ver Apêndice 1 verso</i>                       |
| <i>Όνομασίες μοντέλων:</i>      | <i>βλ. Παράρτημα 1 στο πίσω μέρος της σελίδας</i> |

which this declaration relates is in conformity with the requirements of the following directives  
 auf diese Bescheinigung sich beziehen, sind den Vorschriften der Normen entsprechend  
 auxquels se réfèrent cette déclaration, sont conformes aux prescriptions des directives  
 waarop deze verklaring betrekking heeft, in overeenstemming is/zijn met de eisen van de volgende richtlijnen  
 a los cuales se refieren esta declaración, son conformes a las prescripciones de las directivas  
 alla quale si riferisce questa dichiarazione, sono conformi alle prescrizioni delle direttive  
 som denne erklæring vedrører, er i overensstemmelse med kravene fremst i følgende direktiver  
 que esta declaração esta conforme os requerimentos das seguintes directivas  
 τα οποία αφορά αυτή η δήλωση συμμορφώνεται με τις απαιτήσεις των παρακάτω οδηγιών

|  |                    |
|--|--------------------|
| <b>Electromagnetic Compatibility Directive</b> | <b>2004/108/EC</b> |
| <b>Machinery Directive *</b>                   | <b>2006/42/EC</b>  |

The conformity was checked for EMC & MD in accordance with the following harmonised EN standard:  
 Die Konformität wurde auf EMC u. MD in Übereinstimmung mit dem folgenden harmonisierten en-Standard überprüft:  
 La conformité a été vérifiée pour EMC et MD conformément aux normes EN-harmonisées:  
 De conformiteit is gecontroleerd voor EMC en MD in overeenstemming met de volgende geharmoniseerde EN-norm:  
 La conformidad se repasa para EMC y MD de acuerdo con el siguiente EN-armonizadas:  
 La conformità è stata controllata per EMC e MD in conformità con il seguente standard armonizzato dell' EN:  
 Overensstemmelsen blev tjekket for EMC & MD i henhold til den harmoniserede EN-standard:  
 A conformidade foi verificada por EMC & MD de acordo com a norma harmonizada EN seguinte:  
 Η συμμόρφωση ελέγχθηκε ως προς τις οδηγίες EMC και MD σύμφωνα με το παρακάτω εναρμονισμένο πρότυπο EN:

|            |                           |  |
|------------|---------------------------|--|
| <b>EMC</b> | <b>EN 61000-6-1(2001)</b> | Immunity for residential, commercial and light-industrial environments           |
|            | <b>EN 61000-6-3(2001)</b> | Emission standards for residential, commercial and light-industrial environments |
| <b>MD</b>  | <b>EN 60335-1</b>         | Safety of Household and Similar Electrical Appliances: Part I                    |
|            | <b>EN 60335-2-89</b>      | Safety of Household and Similar Electrical Appliances: Part II                   |

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Daikin Europe N.V., Zandvoordestraat 300, 8400 Oostende (Belgium)

J & E HALL REFRIGERATION SDN. BHD  
 General Manager

Teh Yeow Chen  
 Issue Date: 30 April 2012

## 16 Declaration of conformity

J&E/DOC/001-09(2)



### Declaration of Conformity

Konformitätsbescheinigung  
 Déclaration de Conformité  
 Conformanceverklaring  
 Declaracion de Conformidad  
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 BANTING, 42700 BANTING, SELANGOR DARUL EHSAN, MALAYSIA.

*Model Designations:*  
*Baumuster-Bezeichnungen:*  
*Designation Modèles:*  
*Aanduidingen Model:*  
*Designaciones Modelo:*  
*Indicazioni de Modello:*  
*modelbetegneise:*  
*Designações do modelo:*  
*Όνομασίες μοντέλων:*

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| JEHCCU0050M1 | JEHCCU0088M1 | JEHCCU0150M1 | JEHCCU0150M3 |
| JEHCCU0225M1 | JEHCCU0225M3 | JEHCCU0300M1 | JEHCCU0300M3 |
| JEHCCU0400M3 | JEHCCU0500M3 | JEHCCU0600M3 | JEHCCU0675M3 |
| JEHCCU0825M3 | JEHCCU1000M3 |              |              |
| JEHCCU0075L1 | JEHCCU0175L1 | JEHCCU0175L3 | JEHCCU0225L1 |
| JEHCCU0225L3 | JEHCCU0350L3 | JEHCCU0400L3 | JEHCCU0725L3 |
| JEHCCU0825L3 |              |              |              |







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