

# MODEL UACU-PHE

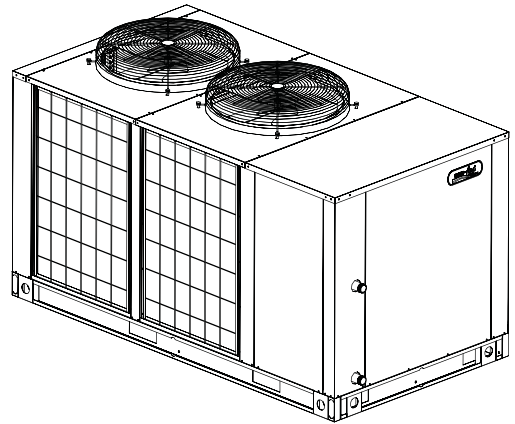
## PACKAGED AIR COOLED CHILLER

5.83 -30.83 TR

20.51 - 108.44 kW

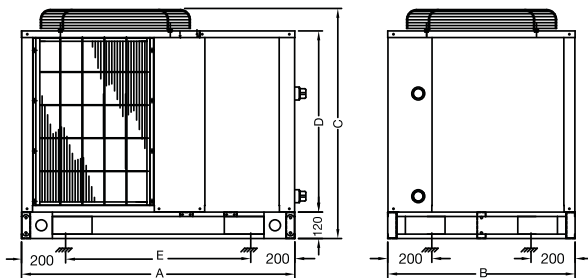
### FEATURES

- COMPACT SIZE AND EASY INSTALLATION.
- HIGH EFFICIENCY HERMETIC SCROLL COMPRESSOR.
- MICROPROCESSOR CONTROL
- EVAPORATOR USED PLATE HEAT EXCHANGER.
- FREEZE PROTECTION.
- HIGH AND LOW PRESSURE SWITCHES FOR PROTECTION OF VALUABLE EQUIPMENT AND STANDARD ON ALL UNITS.
- REFRIGERANT ARE R-407C OR R-410A (OPTION).



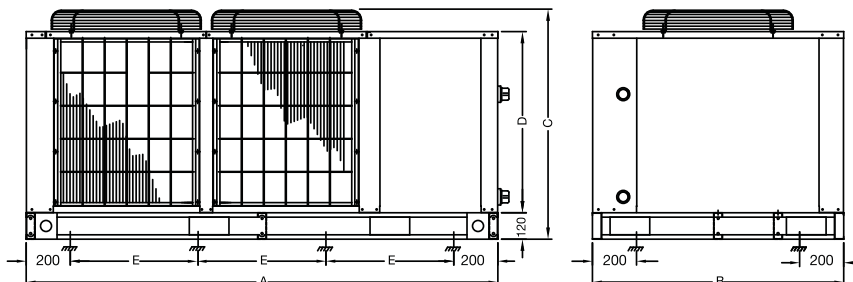
### DIMENSIONAL DATA

#### MODEL UACU-PHE 007-012



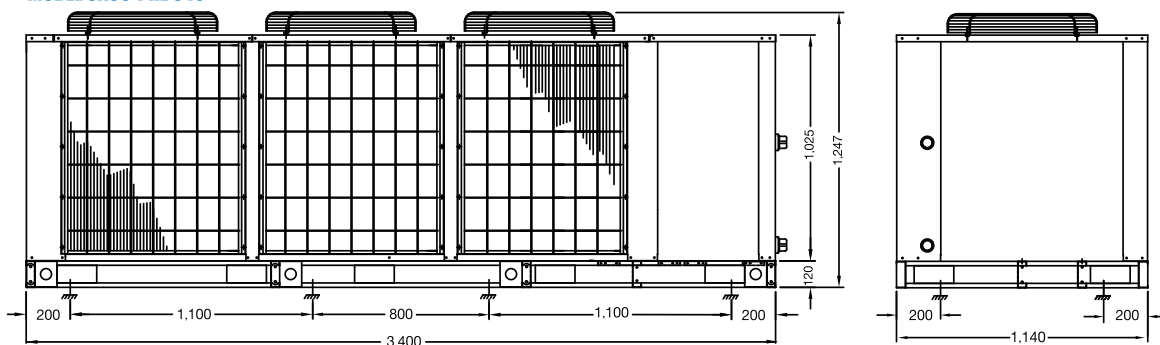
| MODEL              | A     | B     | C     | D   | E     |
|--------------------|-------|-------|-------|-----|-------|
| UACU-PHE 007 (mm.) | 1,240 | 850   | 1,044 | 822 | 840   |
| UACU-PHE 009 (mm.) | 1,240 | 850   | 1,044 | 822 | 840   |
| UACU-PHE 010 (mm.) | 1,600 | 1,140 | 1,044 | 822 | 1,200 |
| UACU-PHE 012 (mm.) | 1,600 | 1,140 | 1,044 | 822 | 1,200 |

#### MODEL UACU-PHE 015-030



| MODEL              | A     | B     | C     | D     | E   |
|--------------------|-------|-------|-------|-------|-----|
| UACU-PHE 015 (mm.) | 2,140 | 1,140 | 1,044 | 822   | 580 |
| UACU-PHE 020 (mm.) | 2,140 | 1,140 | 1,247 | 1,025 | 580 |
| UACU-PHE 025 (mm.) | 2,500 | 1,140 | 1,247 | 1,025 | 700 |
| UACU-PHE 030 (mm.) | 2,500 | 1,140 | 1,247 | 1,025 | 700 |

#### MODEL UACU-PHE 040



# GUIDE SPECIFICATION

## THE UACU-PHE IS A PACKAGE AIR COOLED CHILLER.

### UNIT CASING

- CONSTRUCTED OF ZINC COATED HEAVY GAUGE, GALVANIZED STEEL.
- POWDER COATING FOR PROTECTION AGAINST RUST.

### COMPRESSOR

- HERMETIC SCROLL COMPRESSOR(S).
- ALL COMPRESSOR ARE MOUNTED ON VIBRATION ISOLATORS.

### AIR COOLED CONDENSER

- SEAMLESS COPPER TUBES, MECHANICALLY EXPANDED INTO ALUMINIUM FINNS WITH FULL HEIGHT COLLAS.
- LEAK TESTED AT 350 PSIG FROM FACTORY.
- FAN SHALL BE DYNAMICALLY AND STATICALLY BALANCED, DIRECT DRIVE.

### EVAPORATOR

- INDEPENDENT REFRIGERANT CIRCUIT.
- BRAZED PLATE HEAT EXCHANGER.
- INSULATED WITH A CLOSED-CELL INSULATION.



### CONTROL

- THE CHILLER SHALL BE COMPLETELY FACTORY-WIRED WITH NECESSARY SAFETY CONTROL.
- SAFETY CONTROL SHALL INCLUDE HIGH AND LOW PRESSURE SWITCHES WITH MANUAL RESET, COMPRESSOR TIMER DELAY, WATER TEMPERATURE ERROR SENSOR, AND DISPLAY FOR ERROR CODES

## STANDARD ACCESSORIES

### STANDARD ACCESSORIES

- REFRIGERATION PARTS
- THERMOSTATIC EXPANSION VALVES
- SIGHT GLASSES
- FILTER DRIERS
- CHECK VALVES FOR PARALLEL CIRCUIT COMPRESSORS

### ELECTRICAL PARTS

- MAGNETIC CONTACTOR W/OVERLOAD FOR FAN MOTOR
- MAGNETIC CONTACTOR W/OVERLOAD FOR COMPRESSOR
- HIGH-LOW PRESSURE SWITCHES
- MICROPROCESSOR CONTROL (PLC)
- DISPLAY TEMP CONTROL
- TIMER DELAY RELAY DEVICES (ON BOARD)
- TEMPERATURE CONTROL DEVICE (ON BOARD)
- FREEZESTAT (ON BOARD)

## PHYSICAL DATA

| MODEL                       | UACU-PHE            | 007                                                      | 009   | 010    | 012    | 015    | 020    | 025    | 030    | 040    |
|-----------------------------|---------------------|----------------------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|
| NOMINAL COOLING CAPACTY     | MBH                 | 70                                                       | 80    | 95     | 120    | 145    | 185    | 240    | 290    | 370    |
| POWER CONSUMPTION           | KW                  | 7.39                                                     | 8.67  | 10.43  | 12.27  | 14.47  | 19.05  | 23.07  | 28.71  | 37.87  |
| COMPRESSOR                  | TYPE                | HERMETIC (SCROLL)                                        |       |        |        |        |        |        |        |        |
|                             | HP.                 | 7.5                                                      | 9     | 10     | 12     | 15     | 20     | 12     | 15     | 20     |
|                             | Qty. / Unit         | 1                                                        | 1     | 1      | 1      | 1      | 1      | 2      | 2      | 2      |
| CONDENSER COIL              | Type / Material     | ALUMINIUM CORRUGATED FIN / ALUMINIUM FIN AND COPPER TUBE |       |        |        |        |        |        |        |        |
|                             | Face Area (Sq.ft.)  | 14.22                                                    | 14.22 | 24.00  | 24.00  | 32.00  | 41.67  | 47.78  | 47.78  | 67.22  |
|                             | Rows.... (Fin/in)   | 2.16                                                     | 2.16  | 2.16   | 2.16   | 2.16   | 2.16   | 2.16   | 3.14   | 3.10   |
|                             | Tube Size (in)      | 3/8                                                      | 3/8   | 3/8    | 3/8    | 3/8    | 3/8    | 3/8    | 3/8    | 3/8    |
| CONDENSER FAN               | Type                | PROPELLER FAN : VERTICAL DISCHARGE : DIRECT DRIVE        |       |        |        |        |        |        |        |        |
|                             | Diameter (in)       | 24                                                       | 24    | 30     | 30     | 24     | 24     | 30     | 30     | 30     |
|                             | Each Motor(HP.)     | 3/4                                                      | 3/4   | 1      | 1      | 3/4    | 3/4    | 1      | 1      | 1      |
|                             | Rpm.                | 900                                                      |       |        |        |        |        |        |        |        |
|                             | Qty./Unit           | 1                                                        | 1     | 1      | 1      | 2      | 2      | 2      | 2      | 3      |
|                             | Air Quantity (Cfm.) | 7,000                                                    | 8,000 | 10,000 | 10,000 | 14,000 | 14,000 | 20,000 | 20,000 | 30,000 |
| REFRIGERANT                 | Type                | R-22                                                     |       |        |        |        |        |        |        |        |
|                             | Charge              | HOLDING                                                  |       |        |        |        |        |        |        |        |
| WATER CHILLER               |                     | PLATE HEAT EXCHANGER                                     |       |        |        |        |        |        |        |        |
| No. Of Circuits             |                     | SINGLE                                                   |       |        |        |        |        |        |        |        |
| Chilled Water Flow Rate     | (GPM)               | 14                                                       | 16    | 19     | 24     | 29     | 37     | 48     | 58     | 74     |
| Chilled Water Temp. In/Out  | (°F)                | 55 / 45                                                  |       |        |        |        |        |        |        |        |
| Chilled Water Pressure Drop | (Ft. WG)            | 7.38                                                     | 6.71  | 6.87   | 6.07   | 7.50   | 7.15   | 6.07   | 7.50   | 7.15   |
| Water Connection In/Out     | inch                | 1                                                        | 1     | 1      | 1-1/4  | 1-1/4  | 1-1/4  | 2      | 2      | 2      |
| COMPRESSOR (Each)           | V / PH / Hz         | 380 / 3 / 50                                             |       |        |        |        |        |        |        |        |
|                             | Power Input (Watt)  | 6,542                                                    | 7,821 | 8,957  | 10,800 | 13,622 | 18,200 | 10,800 | 13,622 | 18,200 |
|                             | FLA. (Amp.)         | 12.1                                                     | 14.3  | 20.7   | 22.9   | 24.2   | 35.7   | 22.9   | 24.2   | 35.7   |
|                             | LRA. (Amp.)         | 98                                                       | 130   | 130    | 145    | 175    | 215    | 145    | 175    | 215    |
| FAN MOTOR (Each)            | V / PH / Hz         | 380 / 3 / 50                                             |       |        |        |        |        |        |        |        |
|                             | Power Input (Watt)  | 850                                                      | 850   | 1,470  | 1,470  | 850    | 850    | 1,470  | 1,470  | 1470   |
|                             | FLA. (Amp.)         | 1.2                                                      | 1.2   | 2.3    | 2.3    | 1.2    | 1.2    | 2.3    | 2.3    | 2.3    |
| WEIGHT                      | Operation (Kgs.)    | 214                                                      | 233   | 302    | 337    | 427    | 470    | 514    | 572    | 740    |

FLA = Full load Amp.

LRA = Locked Rotor Amp.

Nominal Cooling Capacity Based on 38 °F Suction Temp. and 95 °F Ambient Temp  
Liquid Subcooled 15 °F

Specifications are subjected to change without notice for future improvement.



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