



# CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : AHMAD ASYRAF BIN AMIL  
Created By : AHMAD ASYRAF BIN AMIL

## Customer Input

Selected Model / Type : UAM60CFM / Fixed Speed Scroll Chiller Version C  
Ambient Temperature : 95.0 °F Frequency : 50 Hz  
Chilled Water : EWT 54.00 °F Voltage : 380-415 V  
LWT 44.01 °F Country of Origin : Malaysia

## Generated Outputs

| Full Load Performance |            | Nominal Data (AHRI Standard)                                                                                                                                                                                                                                                                                                                       |       | Input Conditions    |  |
|-----------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------|--|
| Cooling Capacity      |            | 58.57                                                                                                                                                                                                                                                                                                                                              | 58.58 | TR                  |  |
|                       |            | 206.0                                                                                                                                                                                                                                                                                                                                              | 206.0 | kW                  |  |
| Current               | Compressor | 115                                                                                                                                                                                                                                                                                                                                                | 115   | A                   |  |
|                       | Fan        | 18                                                                                                                                                                                                                                                                                                                                                 | 18    | A                   |  |
|                       | Total      | 133                                                                                                                                                                                                                                                                                                                                                | 133   | A                   |  |
| Power Input           | Compressor | 67.17                                                                                                                                                                                                                                                                                                                                              | 67.17 | kW                  |  |
|                       | Fan        | 12.00                                                                                                                                                                                                                                                                                                                                              | 12.00 | kW                  |  |
|                       | Total      | 79.17                                                                                                                                                                                                                                                                                                                                              | 79.17 | kW                  |  |
| COP                   |            | 2.602                                                                                                                                                                                                                                                                                                                                              | 2.602 | kW/kW               |  |
| Flow Rate             |            | 140.6                                                                                                                                                                                                                                                                                                                                              | 140.7 | gpm                 |  |
| Pressure Drop         |            | 10.5                                                                                                                                                                                                                                                                                                                                               | 10.5  | ft H <sub>2</sub> O |  |
| Note                  |            | 1. Nominal data is based on the AHRI (550/590) standard condition of EWT/LWT of 54.00/44.00°F, and ambient temperature of 95.0°F.<br>2. Input Condition data is based on customer's input condition of EWT/LWT, and ambient temperature.<br>3. Evaporator rating fouling factor = 0.000100 h.ft <sup>2</sup> .°F/Btu, and rating altitude at 0 ft. |       |                     |  |

## Part Load Performance

|                        |  |       |       |       |       |   |   |   |   |   |    |                     |
|------------------------|--|-------|-------|-------|-------|---|---|---|---|---|----|---------------------|
| IPLV                   |  | 3.855 |       |       |       |   |   |   |   |   |    | kW/kW               |
| Point                  |  | 1     | 2     | 3     | 4     | 5 | 6 | 7 | 8 | 9 | 10 |                     |
| Corresponding Capacity |  | 100.0 | 75.0  | 50.0  | 25.0  | - | - | - | - | - | -  | %                   |
| Total Cooling Capacity |  | 58.58 | 43.93 | 29.29 | 14.64 | - | - | - | - | - | -  | TR                  |
| Total Cooling Capacity |  | 206.0 | 154.5 | 103.0 | 51.50 | - | - | - | - | - | -  | kW                  |
| Total Power Input      |  | 79.17 | 60.38 | 39.59 | 20.79 | - | - | - | - | - | -  | kW                  |
| Total Current          |  | 133   | 101   | 67    | 35    | - | - | - | - | - | -  | A                   |
| COP                    |  | 2.602 | 2.559 | 2.602 | 2.477 | - | - | - | - | - | -  | kW/kW               |
| Ambient Temperature    |  | 95.0  | 95.0  | 95.0  | 95.0  | - | - | - | - | - | -  | °F                  |
| EEWT                   |  | 54.00 | 51.50 | 49.00 | 46.50 | - | - | - | - | - | -  | °F                  |
| ELWT                   |  | 44.01 | 44.01 | 44.01 | 44.01 | - | - | - | - | - | -  | °F                  |
| Flow Rate              |  | 140.7 | 140.7 | 140.7 | 140.7 | - | - | - | - | - | -  | gpm                 |
| Pressure Drop          |  | 10.5  | 10.5  | 10.5  | 10.5  | - | - | - | - | - | -  | ft H <sub>2</sub> O |

## Others

|                            |            |                  |           |
|----------------------------|------------|------------------|-----------|
| MCA                        |            | 164              | A         |
| No. of Refrigerant Circuit |            | 2                | -         |
| Refrigerant Type           |            | R410A            | -         |
| Refrigerant Charge         | System 1/2 | 46.3 / 46.3      | lb/System |
| Chiller Dimension          | W / D / H  | 7.3 / 10.7 / 7.1 | ft        |
| Weight                     | Shipping   | 4525             | lb        |
|                            | Operating  | 4794             | lb        |

## Evaporator

|                       |           |                    |                     |
|-----------------------|-----------|--------------------|---------------------|
| Type                  |           | S&T                | -                   |
| Inlet/Outlet Diameter |           | 4" Victaulic Joint | -                   |
| Flow Rate             | Min / Max | 60.32 / 269.5      | gpm                 |
| Pressure Drop         | Min / Max | 2.34 / 30.1        | ft H <sub>2</sub> O |

## Compressor

|            |            |                          |               |
|------------|------------|--------------------------|---------------|
| Quantity   | System 1/2 | 2 / 2                    | -             |
| Type       |            | Hermetic-sealed (Scroll) | -             |
| Oil Charge | System 1/2 | 3.5 / 3.5                | gallon/System |

## Condenser

|                     |      |                |                       |
|---------------------|------|----------------|-----------------------|
| Coil                |      |                |                       |
| Tube                | Type | Copper Tube    | -                     |
| Fin                 | Type | Aluminium Fin  | -                     |
| Surface Area/ Coil  |      | 124.00         | ft <sup>2</sup> /Coil |
| Fan                 |      |                |                       |
| Type/ Drive         |      | Axial / Direct | -                     |
| Quantity per System |      | 3              | -                     |

Note : For any enquiry, please contact your authorized sales agent.

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