



# Select8

**Copeland**<sup>™</sup>  
brand products



**EMERSON**<sup>™</sup>



## Project Report

Project Details: New Project

Contact:

Author Name:

Refrigerant R404A Dew Point

**High Side Properties:**

|                                                          |        |
|----------------------------------------------------------|--------|
| Condensing Temperature, °C                               | 45.77  |
| Condensing Abs. Pressure, bar                            | 20.84  |
| Dew Point, °C                                            | 45.77  |
| Bubble Point, °C                                         | 45.45  |
| Saturated vapour enthalpy, kJ/kg                         | 381.36 |
| Specific volume of saturated vapour, dm <sup>3</sup> /kg | 8.32   |
| Liquid Temperature, °C                                   | 49.70  |
| Liquid enthalpy, kJ/kg                                   | 276.83 |

**Low Side Properties:**

|                                      |        |
|--------------------------------------|--------|
| Evaporating Temperature, °C          | -10.00 |
| Evaporating Abs. Pressure, bar       | 4.34   |
| Dew Point, °C                        | -10.00 |
| Bubble Point, °C                     | -10.59 |
| With vapour at, °C                   | 0.00   |
| Specific volume, dm <sup>3</sup> /kg | 47.99  |
| Enthalpy, kJ/kg                      | 369.46 |

**Operating Conditions:**

|                             |        |
|-----------------------------|--------|
| Evaporating Temperature, °C | -10.00 |
| Suction Superheat, K        | 10.00  |
| Ambient, °C                 | 35.00  |

Condensing Unit Selected ZXDE-060E-TFD

**PERFORMANCE AT SPECIFIED OPERATING POINT**  
**ZXDE-060E-TFD Data at 50Hz**

|                            |       |
|----------------------------|-------|
| Cooling Capacity, kW       | 9.31  |
| Total Power Input, kW      | 5.07  |
| COP                        | 1.84  |
| Current at 400 V, A        | 8.68  |
| Mass Flow, g/s             | 93.00 |
| Heat Rejection, kW         | 13.90 |
| Condensing Temperature, °C | 45.80 |
| Subcooling, K              | 0.00  |

**CONDENSING UNIT MECHANICAL AND PHYSICAL DATA**

|                              |                |
|------------------------------|----------------|
| Condenser/Fan Type           | ZXM_2F/60 W    |
| Base mounting (hole dia), mm | 580 x 388 (12) |
| Number of Fans               | 2              |
| Air Flow, m <sup>3</sup> /s  | 1.64           |
| Total Fan Power Input, W     | 246            |
| Height, mm                   | 1244           |
| Depth/Width, mm              | 1035/447       |
| Suction Diameter, inch       | 7/8            |
| Liquid Line, inch            | 1/2            |
| Suction Type                 | Cu Tube        |
| High Side PS gauge, bar      | 28.8           |
| Receiver Capacity, l         | 5.9            |
| Sound Pressure @ 10m, dBA    | 41             |
| Low Side PS gauge, bar       | 21             |
| Net Weight, kg               | 112            |

**CONDENSING UNIT ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)**

|                                         |      |
|-----------------------------------------|------|
| Compressor Maximum Operating Current, A | 11.4 |
| Compressor Locked Rotor Current, A      | 74   |

***ACCESSORIES INCLUDED***

|                                     |                                |
|-------------------------------------|--------------------------------|
| Crankcase Heater                    | 70 W External                  |
| Liquid Injection                    | DTC Valve                      |
| Oil separator                       | ALCO OSH-404                   |
| Liquid sight glass                  | ALCO MIA 012                   |
| Compressor contactor                | 12 A                           |
| Control circuit fuse                | S7-904-5355-0                  |
| HP Switch                           | ALCO PS3 WDS (Automatic reset) |
| Electronic controller               | Emerson XCM25D                 |
| Filter Drier                        | ALCO ADK Plus                  |
| Circuit breaker, over current relay | 20 A                           |

***ACCESSORIES OPTIONAL***

|                               |              |
|-------------------------------|--------------|
| LP Adjustable Pressure Switch | Alco PS1-A3A |
|-------------------------------|--------------|

