



# Select 8

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



**EMERSON**<sup>™</sup>



## Project Report

Project Details: New Project

Contact:

Author Name:

|                                             |                 |
|---------------------------------------------|-----------------|
| Refrigerant                                 | R404A Dew Point |
| <b>High Side Properties:</b>                |                 |
| Condensing Temperature, °C                  | 43.38           |
| Condensing Abs. Pressure, bar               | 19.70           |
| Dew Point, °C                               | 43.38           |
| Bubble Point, °C                            | 43.03           |
| Saturated vapour enthalpy, kJ/kg            | 381.07          |
| Specific volume of saturated vapour, dm³/kg | 8.94            |
| Liquid Temperature, °C                      | 49.70           |
| Liquid enthalpy, kJ/kg                      | 276.83          |
| <b>Low Side Properties:</b>                 |                 |
| Evaporating Temperature, °C                 | -25.00          |
| Evaporating Abs. Pressure, bar              | 2.50            |
| Dew Point, °C                               | -25.00          |
| Bubble Point, °C                            | -25.67          |
| With vapour at, °C                          | -15.00          |
| Specific volume, dm³/kg                     | 81.63           |
| Enthalpy, kJ/kg                             | 360.46          |
| <b>Operating Conditions:</b>                |                 |
| Evaporating Temperature, °C                 | -25.00          |
| Suction Superheat, K                        | 10.00           |
| Ambient, °C                                 | 35.00           |
| Condensing Unit Selected                    | ZXLE030E-TFD    |

Additional restrictions, please see application guidelines

**PERFORMANCE AT SPECIFIED OPERATING POINT**  
**ZXLE030E-TFD Data at 50Hz**

|                            |       |
|----------------------------|-------|
| Cooling Capacity, kW       | 3.51  |
| Total Power Input, kW      | 2.50  |
| COP                        | 1.40  |
| Current at 400 V, A        | 4.53  |
| Mass Flow, g/s             | 24.90 |
| Heat Rejection, kW         | 5.77  |
| Condensing Temperature, °C | 43.40 |

**CONDENSING UNIT MECHANICAL AND PHYSICAL DATA**

|                              |                |
|------------------------------|----------------|
| Condenser/Fan Type           | ZX030E/60 W    |
| Base mounting (hole dia), mm | 580 x 388 (12) |
| Number of Fans               | 1              |
| Air Flow, m <sup>3</sup> /s  | 0.81           |
| Total Fan Power Input, W     | 116            |
| Height, mm                   | 840            |
| Depth/Width, mm              | 1035/446       |
| Suction Diameter, inch       | 3/4            |
| Liquid Line, inch            | 1/2            |
| Suction Type                 | Cu Tube        |
| High Side PS gauge, bar      | 28.8           |
| Receiver Capacity, l         | 4.1            |
| Sound Pressure @ 10m, dBA    | 40             |
| Low Side PS gauge, bar       | 21             |
| Net Weight, kg               | 81             |

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

|                                         |      |
|-----------------------------------------|------|
| Compressor Maximum Operating Current, A | 6.7  |
| Compressor Locked Rotor Current, A      | 35.7 |

Additional restrictions, please see application guidelines

### ***ACCESSORIES INCLUDED***

|                                     |                                |
|-------------------------------------|--------------------------------|
| Crankcase Heater                    | 70 W External                  |
| Oil separator                       | ALCO OSH-404                   |
| Liquid sight glass                  | ALCO MIA 012                   |
| Compressor contactor                | 18 A                           |
| Control circuit fuse                | S7-904-5355-0                  |
| HP Switch                           | ALCO PS3 WDS (Automatic reset) |
| Electronic controller               | Emerson XCM25D                 |
| Filter Drier                        | ALCO ADK Plus                  |
| Vapour Injection                    | Expansion Valve                |
| Circuit breaker, over current relay | 10 A                           |
| Suction Accumulator                 | ALCO A09-507                   |

### ***ACCESSORIES OPTIONAL***

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

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