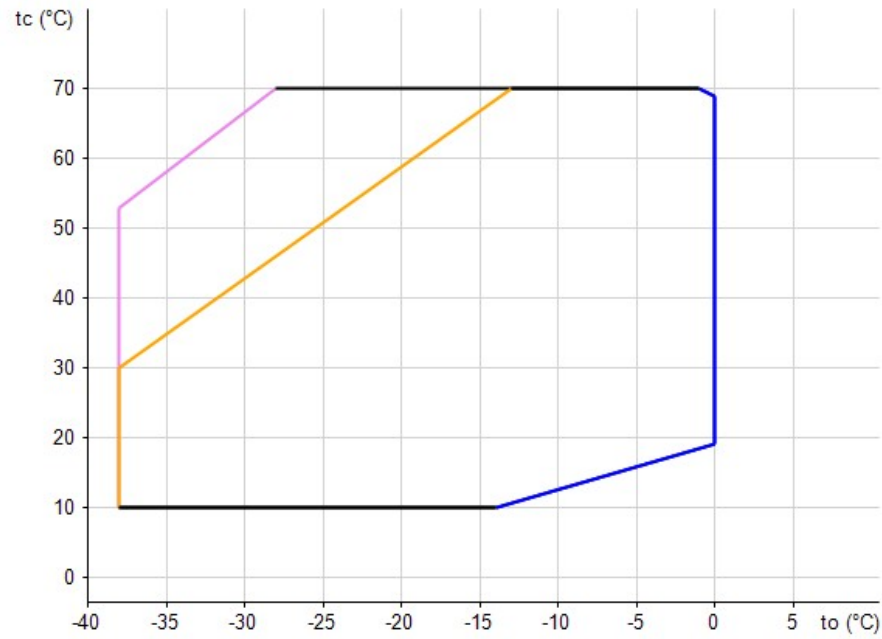




Minimum Evaporating Temp. With:

- 10 K Suction Superheat    — 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

|                                   |        |                        |
|-----------------------------------|--------|------------------------|
| 50 Hz                             | 4MU-25 | R454C Dew Point        |
| Suction Return Temperature 18.3°C |        | Liquid Subcooling 0.0K |

Evaporating Temperature, °C

| Cond<br>°C | Cooling Capacity, kW |       |       |       |       |       |       |       |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|
|            | -35.0                | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  | 0.0   |
| 10.0       | 21.10                | 27.50 | 35.40 | 44.80 | 55.80 |       |       |       |
| 15.0       | 19.75                | 25.90 | 33.30 | 42.20 | 52.70 | 64.90 |       |       |
| 20.0       | 18.45                | 24.30 | 31.30 | 39.70 | 49.60 | 61.20 | 74.40 | 89.60 |
| 25.0       | 17.20                | 22.70 | 29.40 | 37.30 | 46.60 | 57.50 | 70.00 | 84.30 |
| 30.0       | 16.00                | 21.20 | 27.40 | 34.90 | 43.70 | 53.90 | 65.70 | 79.20 |
| 35.0       |                      | 19.70 | 25.60 | 32.50 | 40.70 | 50.30 | 61.30 | 74.00 |
| 40.0       |                      | 18.25 | 23.70 | 30.20 | 37.80 | 46.70 | 57.00 | 68.90 |
| 45.0       |                      |       | 21.90 | 27.90 | 35.00 | 43.20 | 52.80 | 63.80 |
| 50.0       |                      |       | 20.10 | 25.60 | 32.10 | 39.70 | 48.50 | 58.70 |
| 55.0       |                      |       |       | 23.30 | 29.20 | 36.20 | 44.30 | 53.70 |
| 60.0       |                      |       |       |       | 26.40 | 32.70 | 40.10 | 48.60 |
| 65.0       |                      |       |       |       | 23.60 | 29.20 | 35.80 | 43.60 |
| 70.0       |                      |       |       |       |       | 25.70 | 31.60 |       |

| Cond<br>°C | Power, kW |       |       |       |       |       |       |       |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|
|            | -35.0     | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  | 0.0   |
| 10.0       | 7.76      | 8.65  | 9.43  | 10.05 | 10.50 |       |       |       |
| 15.0       | 8.25      | 9.25  | 10.15 | 10.95 | 11.60 | 12.05 |       |       |
| 20.0       | 8.67      | 9.79  | 10.85 | 11.80 | 12.60 | 13.25 | 13.75 | 14.00 |
| 25.0       | 9.04      | 10.25 | 11.45 | 12.55 | 13.55 | 14.45 | 15.15 | 15.65 |
| 30.0       | 9.36      | 10.70 | 12.00 | 13.30 | 14.45 | 15.55 | 16.50 | 17.25 |
| 35.0       |           | 11.05 | 12.50 | 13.95 | 15.35 | 16.60 | 17.80 | 18.85 |
| 40.0       |           | 11.40 | 13.00 | 14.55 | 16.15 | 17.65 | 19.05 | 20.30 |
| 45.0       |           |       | 13.40 | 15.15 | 16.90 | 18.60 | 20.30 | 21.80 |
| 50.0       |           |       | 13.70 | 15.65 | 17.60 | 19.50 | 21.40 | 23.20 |
| 55.0       |           |       |       | 16.10 | 18.25 | 20.40 | 22.50 | 24.60 |
| 60.0       |           |       |       |       | 18.85 | 21.20 | 23.60 | 25.90 |
| 65.0       |           |       |       |       | 19.40 | 22.00 | 24.60 | 27.20 |
| 70.0       |           |       |       |       |       | 22.70 | 25.50 |       |

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

50 Hz

4MU-25

R454C Dew Point

| Cond<br>°C | Current at 400 V, A |       |       |       |       |       |       |       |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|
|            | -35.0               | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  | 0.0   |
| 10.0       | 19.90               | 20.80 | 21.61 | 22.28 | 22.77 |       |       |       |
| 15.0       | 20.36               | 21.38 | 22.35 | 23.23 | 23.96 | 24.49 |       |       |
| 20.0       | 20.78               | 21.93 | 23.08 | 24.17 | 25.15 | 25.97 | 26.57 | 26.89 |
| 25.0       | 21.17               | 22.45 | 23.78 | 25.09 | 26.32 | 27.44 | 28.37 | 29.07 |
| 30.0       | 21.50               | 22.93 | 24.44 | 25.97 | 27.47 | 28.89 | 30.17 | 31.25 |
| 35.0       |                     | 23.35 | 25.05 | 26.82 | 28.59 | 30.31 | 31.94 | 33.42 |
| 40.0       |                     | 23.72 | 25.62 | 27.62 | 29.67 | 31.71 | 33.69 | 35.57 |
| 45.0       |                     |       | 26.12 | 28.36 | 30.70 | 33.06 | 35.41 | 37.69 |
| 50.0       |                     |       | 26.55 | 29.05 | 31.67 | 34.37 | 37.09 | 39.78 |
| 55.0       |                     |       |       | 29.67 | 32.59 | 35.63 | 38.72 | 41.83 |
| 60.0       |                     |       |       |       | 33.43 | 36.81 | 40.30 | 43.82 |
| 65.0       |                     |       |       |       | 34.20 | 37.93 | 41.80 | 45.76 |
| 70.0       |                     |       |       |       |       | 38.97 | 43.24 |       |

| Cond<br>°C | Suction Mass Flow, g/s |        |        |        |        |        |        |        |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|
|            | -35.0                  | -30.0  | -25.0  | -20.0  | -15.0  | -10.0  | -5.0   | 0.0    |
| 10.0       | 100.50                 | 131.50 | 169.50 | 215.00 | 269.00 |        |        |        |
| 15.0       | 97.40                  | 128.00 | 165.00 | 210.00 | 263.00 | 326.00 |        |        |
| 20.0       | 94.50                  | 124.50 | 161.00 | 205.00 | 258.00 | 319.00 | 391.00 | 474.00 |
| 25.0       | 91.60                  | 121.00 | 157.00 | 201.00 | 252.00 | 312.00 | 383.00 | 465.00 |
| 30.0       | 88.80                  | 118.00 | 153.50 | 195.50 | 246.00 | 306.00 | 375.00 | 456.00 |
| 35.0       |                        | 114.50 | 149.50 | 191.00 | 240.00 | 299.00 | 367.00 | 447.00 |
| 40.0       |                        | 111.50 | 145.50 | 186.00 | 234.00 | 292.00 | 359.00 | 437.00 |
| 45.0       |                        |        | 141.50 | 181.00 | 228.00 | 284.00 | 350.00 | 427.00 |
| 50.0       |                        |        | 137.50 | 176.00 | 222.00 | 277.00 | 342.00 | 418.00 |
| 55.0       |                        |        |        | 171.00 | 216.00 | 269.00 | 333.00 | 408.00 |
| 60.0       |                        |        |        |        | 209.00 | 262.00 | 324.00 | 398.00 |
| 65.0       |                        |        |        |        | 203.00 | 254.00 | 315.00 | 388.00 |
| 70.0       |                        |        |        |        |        | 246.00 | 307.00 |        |

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|                                                                            |                           |
|----------------------------------------------------------------------------|---------------------------|
| Number of cylinders                                                        | 4                         |
| Displacement @ 50 Hz, m <sup>3</sup> /h                                    | 99.4                      |
| Bore/Stroke, mm                                                            | 80.6/56.0                 |
| Length/Width, mm                                                           | 657/501                   |
| Height, mm                                                                 | 452                       |
| Net Weight, kg                                                             | 186                       |
| Suction, inch                                                              | 2 1/8                     |
| Discharge, inch                                                            | 1 3/8                     |
| Oil Quantity, l                                                            | 3.3                       |
| Oil type (original charge)                                                 | POE RL32-3MAF             |
| Oil type (approved oils)                                                   | POE RL32-3MAF             |
| Base mounting (hole dia), mm                                               | 381 x 305 (18)            |
| Sound Pressure @ 1m (LT), dBA                                              | 72                        |
| Sound Power (LT), dBA                                                      | 83                        |
| Sound Conditions (LT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | -35 / 40 / 20 °C at 50 Hz |
| Sound Pressure @ 1m (MT), dBA                                              | 73                        |
| Sound Power (MT), dBA                                                      | 84                        |
| Sound Conditions (MT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | -10 / 45 / 20 °C at 50 Hz |
| High Side PS gauge, bar                                                    | 32.5                      |
| Low Side PS gauge, bar                                                     | 22.5                      |
| Refrigerant's GWP                                                          | 148                       |
| Refrigerant's classification                                               | A2L                       |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 51.9           |
| Locked Rotor Current, A      | 199            |
| Default Enclosure Class      | IP 54 (IEC 34) |

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only

### ACCESSORIES INCLUDED

|                                     |                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Mounting Parts                      | Spring                                                                                                             |
| CoreSense Protection (-P)           | Motor protection                                                                                                   |
| Oil Pressure Switch (-P)            | OPS2 Sensor                                                                                                        |
| Copeland Compressor Electronic (-N) | Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement |

### ACCESSORIES OPTIONAL

|                                       |                              |
|---------------------------------------|------------------------------|
| Additional Cooling                    | 70 W Vertical Air Flow Fan   |
| Capacity Control                      | Capacity Steps 50%           |
| Crankcase Heater                      | 100 W Internal               |
| Oil Pressure Switch                   | OPS2 Electronic Switch       |
| Adapter Kit                           | For Parallel Operation       |
| Check Valve                           | For unloaded start operation |
| Sound Attenuation                     | Sound Shell                  |
| Mounting Parts                        | Rubber                       |
| Copeland Compressor Electronic module | Modbus extension module      |

### MOTOR OPTIONS

| <i>Motor Code</i> | <i>Power Supply</i>    | <i>Nominal Voltage, V</i> | <i>Start Connection</i> | <i>DOL Connection</i> | <i>Amps Factor</i> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| AWM               | 380-420 V / 3~ / 50 Hz | 400                       | YY/Y                    | Y                     | 1.00               |
| EWL               | 220-240 V / 3~ / 50 Hz | 230                       | Y/DELTA                 | DELTA                 | 1.73               |
| EWL               | 380-420 V / 3~ / 50 Hz | 400                       |                         | Y                     | 1.00               |
| EWM               | 380-420 V / 3~ / 50 Hz | 400                       | Y/DELTA                 | DELTA                 | 1.00               |
| AWR               | 220-240 V / 3~ / 50 Hz | 230                       | YY/Y                    | Y                     | 1.73               |
| AWY               | 500-550 V / 3~ / 50 Hz | 525                       | YY/Y                    | Y                     | 0.76               |
| EWK               | 220-240 V / 3~ / 60 Hz | 230                       | Y/DELTA                 | DELTA                 | 2.10               |
| EWK               | 380-420 V / 3~ / 60 Hz | 380                       |                         | Y                     | 1.20               |
| EWD               | 440-480 V / 3~ / 60 Hz | 460                       | Y/DELTA                 | DELTA                 | 1.00               |
| AWC               | 208-230 V / 3~ / 60 Hz | 230                       | YY/Y                    | Y                     | 2.19               |
| AWX               | 380 V / 3~ / 60 Hz     | 380                       | YY/Y                    | Y                     | 1.20               |
| AWD               | 440-480 V / 3~ / 60 Hz | 460                       | YY/Y                    | Y                     | 1.00               |

Compatibility with A2L refrigerants for manufacturing date after 10 2021 only