



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Evaporating Temperature, °C

Liquid Subcooling 0.0K

| Cond<br>°C | Cooling Capacity, kW |       |       |       |       |        |        |        |
|------------|----------------------|-------|-------|-------|-------|--------|--------|--------|
|            | 20.0-                | 15.0- | 10.0- | 5.0-  | 0.0   | 5.0    | 7.0    | 10.0   |
| 10.0       | 44.30                | 56.00 | 70.30 |       |       |        |        |        |
| 15.0       | 41.60                | 52.90 | 66.70 | 83.30 |       |        |        |        |
| 20.0       | 38.90                | 49.80 | 63.20 | 79.10 | 97.90 |        |        |        |
| 25.0       | 36.20                | 46.80 | 59.60 | 74.90 | 92.90 | 114.00 | 123.50 |        |
| 30.0       | 33.50                | 43.70 | 56.00 | 70.60 | 87.90 | 108.00 | 117.00 | 131.50 |
| 35.0       | 30.90                | 40.60 | 52.40 | 66.30 | 82.80 | 102.00 | 110.50 | 124.50 |
| 40.0       | 28.30                | 37.60 | 48.80 | 62.00 | 77.70 | 96.10  | 104.50 | 117.50 |
| 45.0       | 25.70                | 34.60 | 45.20 | 57.70 | 72.60 | 90.00  | 97.80  | 110.50 |
| 50.0       | 23.20                | 31.60 | 41.60 | 53.40 | 67.40 | 83.90  | 91.30  | 103.00 |
| 55.0       | 20.70                | 28.60 | 38.00 | 49.10 | 62.20 | 77.80  | 84.70  | 96.00  |
| 60.0       |                      | 25.70 | 34.40 | 44.70 | 57.00 | 71.60  | 78.10  | 88.70  |
| 65.0       |                      |       | 30.80 | 40.40 | 51.80 | 65.30  | 71.40  | 81.40  |
| 70.0       |                      |       | 27.30 | 36.00 | 46.50 | 59.00  | 64.70  | 74.00  |
| 75.0       |                      |       |       | 31.70 | 41.20 | 52.70  | 58.00  | 66.60  |
| 80.0       |                      |       |       | 27.40 | 36.00 | 46.40  | 51.20  | 59.00  |

50Hz

8DL-370X

R134a

| Cond<br>°C | Power, kW |       |       |       |       |       |       |       |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|
|            | 20.0-     | 15.0- | 10.0- | 5.0-  | 0.0   | 5.0   | 7.0   | 10.0  |
| 10.0       | 10.60     | 10.95 | 11.00 |       |       |       |       |       |
| 15.0       | 11.45     | 12.10 | 12.45 | 12.50 |       |       |       |       |
| 20.0       | 12.30     | 13.15 | 13.80 | 14.15 | 14.15 |       |       |       |
| 25.0       | 13.05     | 14.15 | 15.05 | 15.70 | 16.05 | 16.00 | 15.85 |       |
| 30.0       | 13.75     | 15.10 | 16.25 | 17.20 | 17.85 | 18.15 | 18.15 | 18.05 |
| 35.0       | 14.45     | 15.95 | 17.35 | 18.60 | 19.55 | 20.20 | 20.30 | 20.50 |
| 40.0       | 15.05     | 16.75 | 18.40 | 19.90 | 21.20 | 22.10 | 22.40 | 22.80 |
| 45.0       | 15.65     | 17.55 | 19.40 | 21.10 | 22.70 | 24.00 | 24.40 | 24.90 |
| 50.0       | 16.20     | 18.30 | 20.30 | 22.30 | 24.10 | 25.70 | 26.30 | 27.00 |
| 55.0       | 16.75     | 18.95 | 21.20 | 23.40 | 25.50 | 27.40 | 28.10 | 29.00 |
| 60.0       |           | 19.65 | 22.10 | 24.50 | 26.80 | 29.00 | 29.80 | 30.90 |
| 65.0       |           |       | 22.90 | 25.50 | 28.00 | 30.50 | 31.40 | 32.70 |
| 70.0       |           |       | 23.70 | 26.50 | 29.20 | 31.90 | 33.00 | 34.50 |
| 75.0       |           |       |       | 27.40 | 30.40 | 33.30 | 34.50 | 36.10 |
| 80.0       |           |       |       | 28.30 | 31.50 | 34.60 | 35.90 | 37.70 |

| Cond<br>°C | Current at 400 V, A |       |       |       |       |       |       |       |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|
|            | 20.0-               | 15.0- | 10.0- | 5.0-  | 0.0   | 5.0   | 7.0   | 10.0  |
| 10.0       | 31.33               | 31.58 | 31.53 |       |       |       |       |       |
| 15.0       | 32.04               | 32.57 | 32.86 | 32.79 |       |       |       |       |
| 20.0       | 32.74               | 33.54 | 34.16 | 34.47 | 34.36 |       |       |       |
| 25.0       | 33.42               | 34.50 | 35.44 | 36.13 | 36.44 | 36.27 | 36.03 |       |
| 30.0       | 34.10               | 35.43 | 36.69 | 37.74 | 38.48 | 38.78 | 38.75 | 38.52 |
| 35.0       | 34.76               | 36.35 | 37.91 | 39.32 | 40.47 | 41.24 | 41.41 | 41.50 |
| 40.0       | 35.41               | 37.24 | 39.10 | 40.86 | 42.42 | 43.64 | 44.01 | 44.42 |
| 45.0       | 36.04               | 38.11 | 40.26 | 42.37 | 44.32 | 46.00 | 46.56 | 47.27 |
| 50.0       | 36.66               | 38.95 | 41.39 | 43.83 | 46.18 | 48.29 | 49.05 | 50.07 |
| 55.0       | 37.26               | 39.78 | 42.48 | 45.26 | 47.98 | 50.54 | 51.49 | 52.80 |
| 60.0       |                     | 40.58 | 43.55 | 46.64 | 49.74 | 52.73 | 53.86 | 55.47 |
| 65.0       |                     |       | 44.58 | 47.99 | 51.45 | 54.86 | 56.17 | 58.08 |
| 70.0       |                     |       | 45.58 | 49.29 | 53.11 | 56.93 | 58.43 | 60.62 |
| 75.0       |                     |       |       | 50.55 | 54.72 | 58.94 | 60.62 | 63.09 |
| 80.0       |                     |       |       | 51.77 | 56.28 | 60.90 | 62.75 | 65.49 |

| Cond<br>°C | Mass Flow, g/s |        |        |        |        |        |        |        |
|------------|----------------|--------|--------|--------|--------|--------|--------|--------|
|            | 20.0-          | 15.0-  | 10.0-  | 5.0-   | 0.0    | 5.0    | 7.0    | 10.0   |
| 10.0       | 245.00         | 304.00 | 375.00 |        |        |        |        |        |
| 15.0       | 239.00         | 299.00 | 370.00 | 454.00 |        |        |        |        |
| 20.0       | 233.00         | 293.00 | 364.00 | 448.00 | 545.00 |        |        |        |
| 25.0       | 227.00         | 287.00 | 359.00 | 442.00 | 538.00 | 649.00 | 697.00 |        |
| 30.0       | 220.00         | 281.00 | 352.00 | 436.00 | 532.00 | 642.00 | 690.00 | 766.00 |
| 35.0       | 213.00         | 274.00 | 346.00 | 429.00 | 525.00 | 634.00 | 682.00 | 758.00 |
| 40.0       | 206.00         | 267.00 | 339.00 | 421.00 | 517.00 | 626.00 | 673.00 | 749.00 |
| 45.0       | 198.00         | 260.00 | 331.00 | 413.00 | 508.00 | 617.00 | 664.00 | 740.00 |
| 50.0       | 190.00         | 252.00 | 323.00 | 405.00 | 499.00 | 607.00 | 654.00 | 730.00 |
| 55.0       | 181.50         | 244.00 | 314.00 | 396.00 | 489.00 | 597.00 | 644.00 | 719.00 |
| 60.0       |                | 235.00 | 305.00 | 386.00 | 478.00 | 585.00 | 632.00 | 707.00 |
| 65.0       |                |        | 295.00 | 375.00 | 467.00 | 573.00 | 620.00 | 695.00 |
| 70.0       |                |        | 285.00 | 364.00 | 455.00 | 560.00 | 606.00 | 682.00 |
| 75.0       |                |        |        | 352.00 | 442.00 | 546.00 | 593.00 | 668.00 |
| 80.0       |                |        |        | 339.00 | 428.00 | 532.00 | 579.00 | 654.00 |

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

|   |  |
|---|--|
| Number of cylinders                     | 8  |
| Displacement @ 50 Hz, m <sup>3</sup> /h | 151  |
| Bore/Stroke, mm                         | 68.3/59.2                                    |
| Length/Width, mm                        | 835/475                                      |
| Height, mm                              | 610  |
| Net Weight, kg                          | 323  |
| Gross Weight, kg                        | 344  |
| Suction, inch                           | 2 5/8  |
| Discharge, inch                         | 1 5/8  |
| Oil Quantity, l                         | 7.6  |
| Frequency Range, Hz                     | 25 - 60                                      |
| Oil type (original charge)              | POE RL32-3MAF                                |
| Oil type (approved oils)                | POE RL32-3MAF, POE MOBIL<br>EAL Arctic 22 CC |
| Base mounting (hole dia), mm            | 457 x 305 (18.0)                             |
| Sound Pressure @ 1m, dBA                | 75   |
| Sound Power, dBA                        | 86   |
| High Side PS, bar(g)                    | 32.5   |
| Low Side PS, bar(g)                     | 22.5   |
| Refrigerant's GWP                       | 1430   |
| Refrigerant's classification            | A1   |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 74.3           |
| Locked Rotor Current, A      | 349            |
| Default Enclosure Class      | IP 54 (IEC 34) |

### **ACCESSORIES INCLUDED**

|                     |             |
|---------------------|-------------|
| Oil Pressure Switch | OPS2 Sensor |
| Mounting Springs    | 4           |
| Deep Oil Sump       | Mounted     |

### **ACCESSORIES OPTIONAL**

|                     |  |
|---------------------|--|
| Additional Cooling  | 70 W Vertical Air Flow Fan                                 |
| Capacity Control    | Capacity Steps 75%   |
| Crankcase Heater    | 200 W Internal   |
| Enclosure Class     | IP 56  |
| Oil Pressure Switch | OPS2 Electronic Switch                                     |
| Unloaded start      | Available  |
| Adapter Kit         | For Parallel Operation                                     |
| Check Valve         | For unloaded start operation                               |
| Oil Control System  | ALCO Trax-Oil OM3  |
| Inverter            | Emerson Industrial Automation,<br>Unidrive M400 07 401 000 |

### **MOTOR OPTIONS**

| <b>Motor Code</b> | <b>Power Supply</b>    | <b>Nominal Voltage, V</b> | <b>Start Connection</b> | <b>DOL Connection</b> | <b>Amps Factor</b> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| AWM               | 380-420 V / 3~ / 50 Hz | 400                       | YYY                     | 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                       | YYY                     | Y                     | 1.73               |
| AWY               | 500-550 V / 3~ / 50 Hz | 525                       | YYY                     | 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                       | YYY                     | Y                     | 2.19               |
| AWX               | 380 V / 3~ / 60 Hz     | 380                       | YYY                     | Y                     | 1.20               |
| AWD               | 440-480 V / 3~ / 60 Hz | 460                       | YYY                     | Y                     | 1.00               |