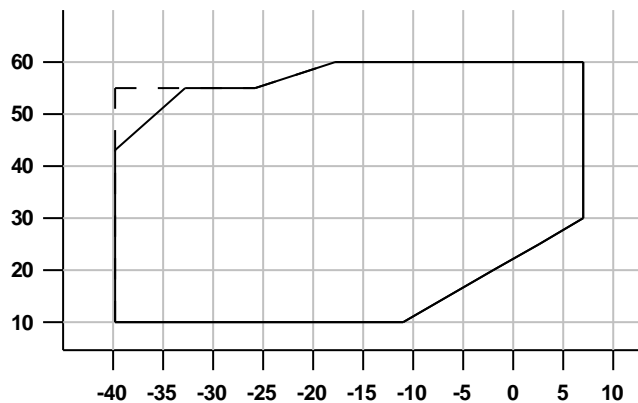


50Hz

ZFD18KVE-TFD EVI

R404A



Minimum evaporating temp. with:

———— 25°C Suction Gas Return

- - - 0°C Suction Gas Return

Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling included

| Cond °C | Capacity kW     |       |       |       |       |       |       |        |        |        |        |
|---------|-----------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
|         | -40             | -35   | -30   | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 7      |
| 10      | 5.28            | 6.59  | 8.04  | 9.67  | 11.50 | 13.55 |       |        |        |        |        |
| 20      | 5.09            | 6.30  | 7.68  | 9.24  | 11.00 | 13.00 | 15.25 | 17.80  |        |        |        |
| 30      | 4.99            | 6.10  | 7.38  | 8.85  | 10.55 | 12.45 | 14.65 | 17.10  | 19.90  | 23.00  | 24.40  |
| 35      | 4.96            | 6.02  | 7.24  | 8.66  | 10.30 | 12.15 | 14.30 | 16.75  | 19.50  | 22.60  | 23.90  |
| 40      | 4.95            | 5.95  | 7.11  | 8.47  | 10.05 | 11.90 | 14.00 | 16.35  | 19.10  | 22.10  | 23.50  |
| 45      |                 | 5.88  | 6.98  | 8.28  | 9.80  | 11.55 | 13.60 | 15.95  | 18.65  | 21.70  | 23.00  |
| 50      |                 | 5.81  | 6.84  | 8.07  | 9.53  | 11.25 | 13.25 | 15.55  | 18.15  | 21.10  | 22.40  |
| 55      |                 |       | 6.70  | 7.86  | 9.25  | 10.90 | 12.85 | 15.05  | 17.65  | 20.50  | 21.80  |
| 60      |                 |       |       |       |       | 10.55 | 12.40 | 14.55  | 17.05  | 19.95  | 21.20  |
|         | Power Input kW  |       |       |       |       |       |       |        |        |        |        |
|         | -40             | -35   | -30   | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 7      |
| 10      | 2.13            | 2.19  | 2.26  | 2.32  | 2.39  | 2.47  |       |        |        |        |        |
| 20      | 2.65            | 2.76  | 2.87  | 2.98  | 3.09  | 3.19  | 3.30  | 3.41   |        |        |        |
| 30      | 3.15            | 3.32  | 3.48  | 3.63  | 3.77  | 3.90  | 4.03  | 4.15   | 4.27   | 4.39   | 4.43   |
| 35      | 3.44            | 3.63  | 3.81  | 3.98  | 4.14  | 4.29  | 4.43  | 4.56   | 4.69   | 4.81   | 4.85   |
| 40      | 3.77            | 3.99  | 4.19  | 4.38  | 4.56  | 4.72  | 4.87  | 5.01   | 5.14   | 5.27   | 5.31   |
| 45      |                 | 4.41  | 4.64  | 4.85  | 5.04  | 5.22  | 5.38  | 5.53   | 5.67   | 5.79   | 5.84   |
| 50      |                 | 4.92  | 5.16  | 5.39  | 5.60  | 5.79  | 5.97  | 6.13   | 6.27   | 6.40   | 6.44   |
| 55      |                 |       | 5.79  | 6.04  | 6.27  | 6.47  | 6.66  | 6.82   | 6.97   | 7.11   | 7.16   |
| 60      |                 |       |       |       |       | 7.28  | 7.48  | 7.66   | 7.82   | 7.96   | 8.02   |
|         | Current 400V, A |       |       |       |       |       |       |        |        |        |        |
|         | -40             | -35   | -30   | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 7      |
| 10      | 5.25            | 5.29  | 5.34  | 5.40  | 5.47  | 5.54  |       |        |        |        |        |
| 20      | 5.79            | 5.90  | 6.02  | 6.14  | 6.26  | 6.38  | 6.51  | 6.63   |        |        |        |
| 30      | 6.33            | 6.51  | 6.70  | 6.88  | 7.05  | 7.22  | 7.38  | 7.53   | 7.68   | 7.82   | 7.87   |
| 35      | 6.65            | 6.88  | 7.10  | 7.31  | 7.51  | 7.70  | 7.88  | 8.05   | 8.20   | 8.35   | 8.41   |
| 40      | 7.06            | 7.32  | 7.57  | 7.81  | 8.03  | 8.25  | 8.45  | 8.63   | 8.80   | 8.96   | 9.02   |
| 45      |                 | 7.86  | 8.14  | 8.41  | 8.66  | 8.90  | 9.12  | 9.32   | 9.51   | 9.67   | 9.74   |
| 50      |                 | 8.53  | 8.84  | 9.14  | 9.42  | 9.68  | 9.92  | 10.14  | 10.34  | 10.52  | 10.59  |
| 55      |                 |       | 9.70  | 10.03 | 10.33 | 10.62 | 10.88 | 11.12  | 11.34  | 11.53  | 11.61  |
| 60      |                 |       |       |       |       | 11.76 | 12.04 | 12.31  | 12.55  | 12.77  | 12.85  |
|         | Mass Flow g/s   |       |       |       |       |       |       |        |        |        |        |
|         | -40             | -35   | -30   | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 7      |
| 10      | 24.90           | 32.10 | 40.30 | 49.90 | 61.10 | 74.40 |       |        |        |        |        |
| 20      | 24.40           | 31.30 | 39.30 | 48.70 | 60.00 | 73.30 | 89.00 | 107.50 |        |        |        |
| 30      | 24.40           | 30.90 | 38.60 | 47.80 | 58.80 | 72.10 | 88.00 | 106.50 | 128.00 | 153.00 | 164.00 |
| 35      | 24.50           | 30.70 | 38.30 | 47.30 | 58.30 | 71.40 | 87.00 | 105.50 | 127.00 | 152.00 | 163.00 |
| 40      | 24.60           | 30.70 | 38.00 | 46.90 | 57.70 | 70.70 | 86.50 | 105.00 | 126.50 | 152.00 | 163.00 |
| 45      |                 | 30.60 | 37.70 | 46.40 | 57.00 | 70.00 | 85.50 | 104.00 | 125.50 | 151.00 | 162.00 |
| 50      |                 | 30.50 | 37.40 | 45.90 | 56.30 | 69.10 | 84.50 | 103.00 | 124.50 | 150.00 | 161.00 |
| 55      |                 |       | 37.00 | 45.30 | 55.60 | 68.20 | 83.50 | 102.00 | 123.50 | 148.50 | 160.00 |
| 60      |                 |       |       |       |       | 67.20 | 82.50 | 100.50 | 122.00 | 147.00 | 158.00 |

**Copeland Scroll - Compressor - Refrigeration - Digital**
**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|                                   |                 |
|-----------------------------------|-----------------|
| Displacement @ 50 Hz, cu.m/h      | 17.1            |
| Length/Width, mm                  | 300/299         |
| Height, mm                        | 494             |
| Net Weight, kg                    | 43.1            |
| Rotalock Suction, inch            | 1 1/4           |
| Rotalock Discharge, inch          | 1               |
| Oil Quantity, l                   | 1.9             |
| Base mounting (hole dia), mm      | 190 x 190 (8.5) |
| Sound Pressure @ 1m, dBA          | 62              |
| Sound Power, dBA                  | 73              |
| Sound Power with Sound Shell, dBA | 63              |
| High Side PS, bar(g)              | 28              |
| Low Side PS, bar(g)               | 19              |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 13.8           |
| Locked Rotor Current, A      | 74             |
| Winding Resistance, ohm      | 2.3            |
| Default Enclosure Class      | IP 21 (IEC 34) |

**ACCESSORIES INCLUDED**

|                                  |            |
|----------------------------------|------------|
| Discharge Temperature Protection | NTC sensor |
| Mounting Grommets                | Standard   |

**ACCESSORIES OPTIONAL**

|                     |                             |
|---------------------|-----------------------------|
| Crankcase Heater    | 70W External                |
| Mounting Grommets   | Hard Mounts for Paralleling |
| Oil Control System  | ALCO Trax-Oil               |
| Sound Attenuation   | Sound Shell (10dBA)         |
| Valve Coil          | 220V                        |
| Valve Coil          | 24V AC                      |
| Solenoid Valve Kit  | 220 V Ac 12" lead Length    |
| Solenoid Valve Kit  | 24 V Ac 12" lead Length     |
| Digital Tubing Kit  | 220 V 0.3m Rotalock         |
| Digital Tubing Kit  | 24 V 0.3m Rotalock          |
| Digital Control Kit | EC2-552                     |
| Digital Control Kit | EC3-652                     |
| Digital Driver      | EC3-D13                     |

**MOTOR OPTIONS**

| <i>Power Supply</i> | <i>Nominal Voltage</i> | <i>Motor Code</i> | <i>Start Connection</i> | <i>DOL Connection</i> | <i>Amps Factor</i> |
|---------------------|------------------------|-------------------|-------------------------|-----------------------|--------------------|
| 380-420 V/3~/50H    | 400                    | TFD               |                         | Y                     | 1.00               |