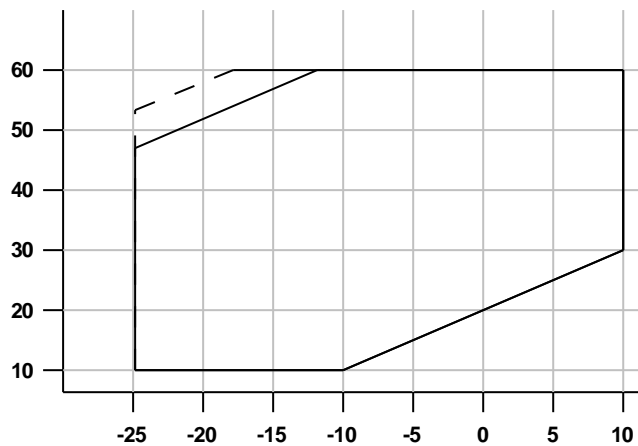


## 50Hz

## ZB45KCE-TFD

## R404A Dew Point



Minimum evaporating temp. with:

———— 25°C Suction Gas Return

- - - - 10K Suction Superheat

Suction Return Temperature 20,0°C

**Evaporating Temperature °C**

Liquid subcooling 0,0K

| Cond °C | Capacity kW     |       |       |       |        |        |        |        |        |
|---------|-----------------|-------|-------|-------|--------|--------|--------|--------|--------|
|         | -25             | -20   | -15   | -10   | -5     | 0      | 5      | 7      | 10     |
| 10      | 8,79            | 10,90 | 13,35 | 16,15 |        |        |        |        |        |
| 20      | 7,90            | 9,77  | 11,95 | 14,50 | 17,40  | 20,70  |        |        |        |
| 30      | 6,96            | 8,60  | 10,55 | 12,75 | 15,30  | 18,25  | 21,50  | 23,00  | 25,30  |
| 35      | 6,47            | 8,00  | 9,79  | 11,85 | 14,25  | 17,00  | 20,10  | 21,40  | 23,60  |
| 40      | 5,98            | 7,39  | 9,05  | 10,95 | 13,15  | 15,70  | 18,60  | 19,85  | 21,80  |
| 45      | 5,48            | 6,77  | 8,29  | 10,05 | 12,10  | 14,40  | 17,10  | 18,25  | 20,10  |
| 50      |                 | 6,14  | 7,52  | 9,12  | 10,95  | 13,10  | 15,55  | 16,65  | 18,35  |
| 55      |                 |       | 6,74  | 8,18  | 9,85   | 11,80  | 14,00  | 15,00  | 16,55  |
| 60      |                 |       |       | 7,22  | 8,72   | 10,45  | 12,45  | 13,35  | 14,75  |
|         | Power Input kW  |       |       |       |        |        |        |        |        |
|         | -25             | -20   | -15   | -10   | -5     | 0      | 5      | 7      | 10     |
| 10      | 2,09            | 2,08  | 2,06  | 2,04  |        |        |        |        |        |
| 20      | 2,70            | 2,69  | 2,68  | 2,65  | 2,63   | 2,60   |        |        |        |
| 30      | 3,44            | 3,43  | 3,42  | 3,40  | 3,38   | 3,34   | 3,31   | 3,30   | 3,28   |
| 35      | 3,85            | 3,86  | 3,85  | 3,83  | 3,81   | 3,77   | 3,74   | 3,72   | 3,70   |
| 40      | 4,30            | 4,31  | 4,31  | 4,30  | 4,28   | 4,24   | 4,21   | 4,19   | 4,16   |
| 45      | 4,79            | 4,81  | 4,82  | 4,81  | 4,79   | 4,76   | 4,72   | 4,70   | 4,67   |
| 50      |                 | 5,35  | 5,36  | 5,36  | 5,34   | 5,31   | 5,28   | 5,26   | 5,23   |
| 55      |                 |       | 5,95  | 5,95  | 5,94   | 5,92   | 5,88   | 5,86   | 5,83   |
| 60      |                 |       |       | 6,59  | 6,59   | 6,57   | 6,53   | 6,52   | 6,49   |
|         | Current 400V, A |       |       |       |        |        |        |        |        |
|         | -25             | -20   | -15   | -10   | -5     | 0      | 5      | 7      | 10     |
| 10      | 6,48            | 6,47  | 6,47  | 6,47  |        |        |        |        |        |
| 20      | 7,00            | 7,01  | 7,01  | 7,01  | 7,01   | 7,01   |        |        |        |
| 30      | 7,74            | 7,76  | 7,76  | 7,76  | 7,76   | 7,75   | 7,73   | 7,73   | 7,72   |
| 35      | 8,22            | 8,25  | 8,25  | 8,25  | 8,24   | 8,22   | 8,20   | 8,19   | 8,17   |
| 40      | 8,80            | 8,83  | 8,84  | 8,84  | 8,82   | 8,79   | 8,76   | 8,74   | 8,72   |
| 45      | 9,49            | 9,52  | 9,53  | 9,53  | 9,51   | 9,47   | 9,42   | 9,40   | 9,36   |
| 50      |                 | 10,34 | 10,35 | 10,34 | 10,31  | 10,27  | 10,21  | 10,18  | 10,13  |
| 55      |                 |       | 11,30 | 11,28 | 11,25  | 11,19  | 11,12  | 11,09  | 11,03  |
| 60      |                 |       |       | 12,38 | 12,33  | 12,27  | 12,18  | 12,14  | 12,08  |
|         | Mass Flow g/s   |       |       |       |        |        |        |        |        |
|         | -25             | -20   | -15   | -10   | -5     | 0      | 5      | 7      | 10     |
| 10      | 49,50           | 61,60 | 76,00 | 92,50 |        |        |        |        |        |
| 20      | 48,40           | 60,20 | 74,20 | 90,50 | 109,50 | 132,00 |        |        |        |
| 30      | 47,00           | 58,50 | 72,10 | 88,00 | 107,00 | 129,00 | 154,00 | 166,00 | 184,00 |
| 35      | 46,30           | 57,60 | 71,00 | 86,50 | 105,50 | 127,00 | 152,00 | 164,00 | 182,00 |
| 40      | 45,40           | 56,50 | 69,70 | 85,50 | 103,50 | 125,00 | 150,00 | 162,00 | 180,00 |
| 45      | 44,40           | 55,40 | 68,30 | 83,50 | 102,00 | 123,00 | 148,50 | 160,00 | 178,00 |
| 50      |                 | 54,10 | 66,90 | 82,00 | 100,00 | 121,50 | 146,50 | 158,00 | 177,00 |
| 55      |                 |       | 65,40 | 80,50 | 98,00  | 119,50 | 145,00 | 157,00 | 176,00 |
| 60      |                 |       |       | 79,00 | 97,00  | 118,50 | 144,00 | 156,00 | 176,00 |

**Copeland Scroll - Compressor - Refrigeration - MT Standard**

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|  |                 |
|--|-----------------|
| Displacement @ 50 Hz, cu.m/h           | 17.1            |
| Length/Width, mm                       | 242/242         |
| Height, mm                             | 438             |
| Net Weight, kg                         | 39.5            |
| 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 (MT), dBA          | 61              |
| Sound Power (MT), dBA                  | 72              |
| Sound Power with Sound Shell (MT), dBA | 62              |
| PED Category                           | 1               |
| Internal Free Volume, l                | 5.9             |
| High Side PS, bar(g)                   | 32              |
| Low Side PS, bar(g)                    | 21              |
| Low Side TS Max., °C                   | 50              |
| Low Side TS Min., °C                   | -35             |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 13.1           |
| Locked Rotor Current, A      | 74             |
| Winding Resistance, ohm      | 2.27           |
| Default Enclosure Class      | IP 21 (IEC 34) |

**ACCESSORIES INCLUDED**

|                                  |                     |
|----------------------------------|---------------------|
| Discharge Temperature Protection | Internal Thermodisk |
| Mounting Grommets                | Standard            |

**ACCESSORIES OPTIONAL**

|                    |                       |
|--------------------|-----------------------|
| Crankcase Heater   | 70 W External         |
| Oil Control System | ALCO Trax-Oil OM3     |
| Sound Attenuation  | Sound Shell (10 dBA)  |
| Rotalock valves    | suction and discharge |

**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               |
| 460 V/3~/60Hz       | 460                    | TFD               |                         | Y                     | 1,04               |