

Model: ZB19KCE-TFD

Data

Type: Hermetic scroll compressors

Producer: Copeland

Series: ZB

Model: ZB19KCE-TFD

Technical data

| | |
|------------------------------------|------|
| Displacement [m ³ /h]: | 6,8 |
| Sound power [dBA]: | 66 |
| Sound pressure level [dB]: | 55 |
| Net Weight [kg]: | 27,2 |
| Oil charge [dm ³]: | 1,5 |
| Maximum high pressure [bar]: | 28,8 |
| Maximum standstill pressure [bar]: | 21 |
| Minimal lowside temperature [°C]: | -35 |
| Maximum lowside temperature [°C]: | 50 |
| PED category: | 1 |

Electrical data

| | |
|-----------------------------|-----------------|
| Power supply [V/~ /Hz]: | 380-420V/3/50Hz |
| Locked rotor current [A]: | 32 |
| Max. operating current [A]: | 6,5 |
| Winding resistance [Ω]: | 5,9 |

Connections

| | |
|--------------------------------------|-------------------------|
| Suction Rotolock valve connection: | <u>inches</u> 1 1/4" |
| Discharge Rotolock valve connection: | 1" |

Model: ZB19KCE-TFD

Capacity

R134a

Cooling capacity [kW]

| $t_c \setminus t_e$ | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |
|---------------------|------|------|------|------|------|------|------|------|
| 30 | 1.62 | 2.10 | 2.71 | 3.45 | 4.32 | 5.30 | 6.40 | - |
| 35 | 1.53 | 1.98 | 2.56 | 3.27 | 4.09 | 5.02 | 6.06 | - |
| 40 | 1.44 | 1.87 | 2.42 | 3.09 | 3.87 | 4.75 | 5.74 | 6.83 |
| 45 | - | 1.76 | 2.28 | 2.91 | 3.65 | 4.49 | 5.42 | 6.45 |
| 50 | - | 1.65 | 2.14 | 2.74 | 3.43 | 4.22 | 5.10 | 6.07 |
| 55 | - | - | 2.00 | 2.56 | 3.21 | 3.95 | 4.78 | 5.69 |
| 60 | - | - | - | 2.36 | 2.98 | 3.67 | 4.45 | 5.30 |
| 65 | - | - | - | 2.16 | 2.73 | 3.38 | 4.11 | 4.90 |
| 70 | - | - | - | - | 2.47 | 3.08 | 3.75 | 4.49 |
| 75 | - | - | - | - | 2.19 | 2.75 | 3.38 | 4.06 |

Power input [kW]

| $t_c \setminus t_e$ | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |
|---------------------|------|------|------|------|------|------|------|------|
| 30 | 0.89 | 0.90 | 0.90 | 0.89 | 0.87 | 0.85 | 0.84 | - |
| 35 | 1.00 | 1.02 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | - |
| 40 | 1.12 | 1.14 | 1.15 | 1.15 | 1.13 | 1.12 | 1.11 | 1.11 |
| 45 | - | 1.28 | 1.29 | 1.29 | 1.28 | 1.27 | 1.26 | 1.25 |
| 50 | - | 1.44 | 1.45 | 1.45 | 1.44 | 1.42 | 1.41 | 1.40 |
| 55 | - | - | 1.63 | 1.63 | 1.61 | 1.60 | 1.58 | 1.57 |
| 60 | - | - | - | 1.83 | 1.81 | 1.79 | 1.77 | 1.75 |
| 65 | - | - | - | 2.05 | 2.03 | 2.00 | 1.98 | 1.95 |
| 70 | - | - | - | - | 2.28 | 2.25 | 2.21 | 2.18 |
| 75 | - | - | - | - | 2.57 | 2.53 | 2.48 | 2.44 |

Model: ZB19KCE-TFD

Capacity

Current [A]

| $t_c \setminus t_e$ | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |
|---------------------|------|------|------|------|------|------|------|------|
| 30 | 2.40 | 2.44 | 2.45 | 2.44 | 2.42 | 2.40 | 2.38 | - |
| 35 | 2.50 | 2.54 | 2.55 | 2.55 | 2.53 | 2.52 | 2.51 | - |
| 40 | 2.61 | 2.66 | 2.67 | 2.67 | 2.66 | 2.65 | 2.64 | 2.64 |
| 45 | - | 2.80 | 2.82 | 2.82 | 2.81 | 2.79 | 2.78 | 2.78 |
| 50 | - | 2.98 | 3.00 | 2.99 | 2.98 | 2.96 | 2.95 | 2.95 |
| 55 | - | - | 3.21 | 3.20 | 3.19 | 3.16 | 3.15 | 3.14 |
| 60 | - | - | - | 3.46 | 3.43 | 3.40 | 3.38 | 3.36 |
| 65 | - | - | - | 3.76 | 3.73 | 3.69 | 3.65 | 3.63 |
| 70 | - | - | - | - | 4.07 | 4.02 | 3.97 | 3.94 |
| 75 | - | - | - | - | 4.48 | 4.42 | 4.35 | 4.30 |

Mass flow [kg/h]

| $t_c \setminus t_e$ | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |
|---------------------|-------|-------|-------|-------|-------|--------|--------|--------|
| 30 | 32.45 | 42.63 | 55.42 | 70.89 | 89.15 | 110.26 | 134.32 | - |
| 35 | 32.05 | 42.11 | 54.76 | 70.09 | 88.17 | 109.10 | 132.96 | - |
| 40 | 31.59 | 41.58 | 54.15 | 69.38 | 87.35 | 108.15 | 131.86 | 158.57 |
| 45 | - | 40.95 | 53.48 | 68.66 | 86.57 | 107.29 | 130.90 | 157.50 |
| 50 | - | 40.09 | 52.64 | 67.82 | 85.72 | 106.41 | 129.98 | 156.51 |
| 55 | - | - | 51.53 | 66.76 | 84.69 | 105.40 | 128.98 | 155.51 |
| 60 | - | - | - | 65.36 | 83.38 | 104.17 | 127.80 | 154.37 |
| 65 | - | - | - | 63.53 | 81.68 | 102.59 | 126.33 | 152.99 |
| 70 | - | - | - | - | 79.48 | 100.57 | 124.47 | 151.27 |
| 75 | - | - | - | - | 76.68 | 97.98 | 122.09 | 149.09 |

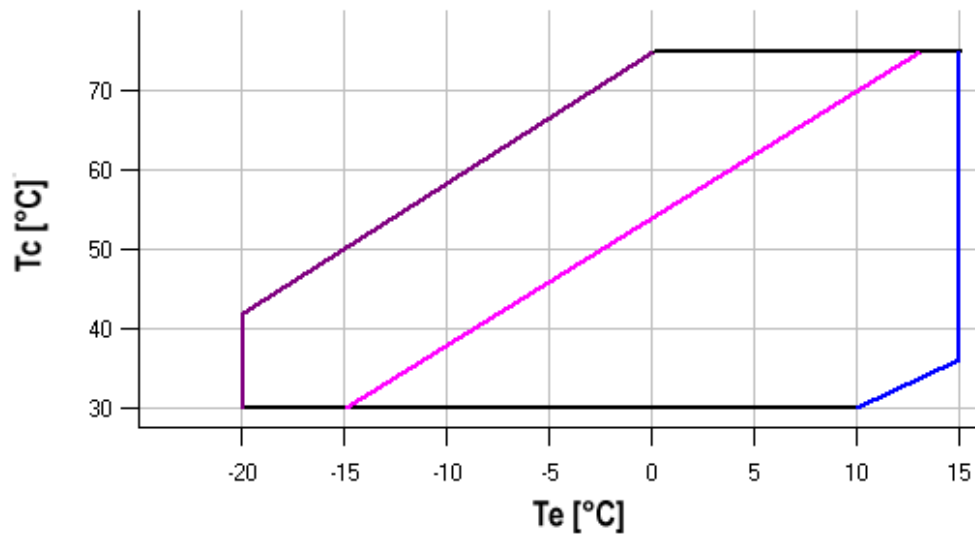
Model: ZB19KCE-TFD

Capacity

C.O.P. [W/W]

| $t_c \setminus t_e$ | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |
|---------------------|------|------|------|------|------|------|------|------|
| 30 | 1.82 | 2.33 | 3.02 | 3.90 | 4.97 | 6.21 | 7.59 | - |
| 35 | 1.53 | 1.95 | 2.52 | 3.23 | 4.09 | 5.10 | 6.21 | - |
| 40 | 1.29 | 1.64 | 2.11 | 2.70 | 3.41 | 4.24 | 5.16 | 6.15 |
| 45 | - | 1.38 | 1.77 | 2.26 | 2.85 | 3.54 | 4.32 | 5.15 |
| 50 | - | 1.15 | 1.48 | 1.89 | 2.39 | 2.97 | 3.62 | 4.33 |
| 55 | - | - | 1.23 | 1.57 | 1.99 | 2.48 | 3.03 | 3.63 |
| 60 | - | - | - | 1.30 | 1.65 | 2.05 | 2.52 | 3.03 |
| 65 | - | - | - | 1.05 | 1.35 | 1.69 | 2.08 | 2.51 |
| 70 | - | - | - | - | 1.08 | 1.37 | 1.69 | 2.06 |
| 75 | - | - | - | - | 0.85 | 1.09 | 1.36 | 1.66 |

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: ZB19KCE-TFD**Capacity**

R404A/R507

Cooling capacity [kW]

| t_c \ t_e | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|--------------------------------------|------------|------------|------------|------------|------------|-----------|----------|----------|-----------|
| 10 | 2.88 | 3.58 | 4.41 | 5.40 | - | - | - | - | - |
| 15 | 2.75 | 3.42 | 4.21 | 5.15 | 6.24 | - | - | - | - |
| 20 | 2.62 | 3.25 | 4.00 | 4.89 | 5.92 | 7.11 | - | - | - |
| 25 | 2.48 | 3.08 | 3.78 | 4.62 | 5.58 | 6.71 | 8.00 | - | - |
| 30 | 2.33 | 2.89 | 3.56 | 4.34 | 5.24 | 6.30 | 7.51 | 8.90 | 10.48 |
| 35 | 2.16 | 2.70 | 3.32 | 4.05 | 4.89 | 5.87 | 7.01 | 8.31 | 9.79 |
| 40 | 1.99 | 2.49 | 3.07 | 3.75 | 4.53 | 5.44 | 6.50 | 7.71 | 9.09 |
| 45 | 1.80 | 2.27 | 2.81 | 3.43 | 4.16 | 5.00 | 5.97 | 7.10 | 8.38 |
| 50 | - | 2.04 | 2.54 | 3.11 | 3.77 | 4.55 | 5.44 | 6.47 | 7.66 |
| 55 | - | - | 2.25 | 2.77 | 3.38 | 4.08 | 4.89 | 5.84 | 6.93 |
| 60 | - | - | - | 2.42 | 2.97 | 3.60 | 4.33 | 5.19 | 6.18 |

Power input [kW]

| t_c \ t_e | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|--------------------------------------|------------|------------|------------|------------|------------|-----------|----------|----------|-----------|
| 10 | 0.92 | 0.93 | 0.92 | 0.92 | - | - | - | - | - |
| 15 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | - | - | - | - |
| 20 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | - | - | - |
| 25 | 1.32 | 1.32 | 1.32 | 1.32 | 1.32 | 1.31 | 1.31 | - | - |
| 30 | 1.48 | 1.49 | 1.49 | 1.48 | 1.48 | 1.47 | 1.47 | 1.47 | 1.47 |
| 35 | 1.67 | 1.67 | 1.67 | 1.67 | 1.66 | 1.65 | 1.65 | 1.64 | 1.64 |
| 40 | 1.88 | 1.88 | 1.88 | 1.88 | 1.87 | 1.86 | 1.85 | 1.84 | 1.83 |
| 45 | 2.12 | 2.12 | 2.12 | 2.11 | 2.10 | 2.09 | 2.07 | 2.06 | 2.04 |
| 50 | - | 2.38 | 2.38 | 2.37 | 2.36 | 2.34 | 2.32 | 2.30 | 2.29 |
| 55 | - | - | 2.67 | 2.66 | 2.65 | 2.63 | 2.60 | 2.58 | 2.56 |
| 60 | - | - | - | 2.99 | 2.97 | 2.94 | 2.92 | 2.89 | 2.86 |

Model: ZB19KCE-TFD

Capacity

Current [A]

| $t_c \setminus t_e$ | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|------|------|------|------|------|------|------|------|------|
| 10 | 2.86 | 2.86 | 2.87 | 2.86 | - | - | - | - | - |
| 15 | 2.95 | 2.97 | 2.98 | 2.98 | 2.97 | - | - | - | - |
| 20 | 3.07 | 3.09 | 3.10 | 3.11 | 3.11 | 3.09 | - | - | - |
| 25 | 3.21 | 3.23 | 3.25 | 3.26 | 3.26 | 3.25 | 3.22 | - | - |
| 30 | 3.38 | 3.40 | 3.42 | 3.44 | 3.44 | 3.44 | 3.41 | 3.37 | 3.30 |
| 35 | 3.60 | 3.61 | 3.63 | 3.65 | 3.65 | 3.65 | 3.63 | 3.59 | 3.53 |
| 40 | 3.86 | 3.87 | 3.88 | 3.90 | 3.90 | 3.90 | 3.89 | 3.85 | 3.79 |
| 45 | 4.18 | 4.18 | 4.19 | 4.19 | 4.20 | 4.20 | 4.18 | 4.15 | 4.10 |
| 50 | - | 4.55 | 4.55 | 4.55 | 4.55 | 4.54 | 4.53 | 4.49 | 4.44 |
| 55 | - | - | 4.97 | 4.97 | 4.96 | 4.95 | 4.93 | 4.89 | 4.84 |
| 60 | - | - | - | 5.46 | 5.44 | 5.42 | 5.40 | 5.36 | 5.30 |

Mass flow [kg/h]

| $t_c \setminus t_e$ | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 10 | 56.67 | 72.57 | 90.56 | 111.40 | - | - | - | - | - |
| 15 | 57.35 | 72.80 | 90.36 | 110.78 | 134.87 | - | - | - | - |
| 20 | 57.60 | 72.65 | 89.83 | 109.90 | 133.65 | 161.84 | - | - | - |
| 25 | 57.42 | 72.13 | 88.99 | 108.76 | 132.22 | 160.16 | 193.34 | - | - |
| 30 | 56.85 | 71.27 | 87.85 | 107.37 | 130.60 | 158.33 | 191.33 | 230.37 | 276.23 |
| 35 | 55.88 | 70.06 | 86.42 | 105.75 | 128.81 | 156.38 | 189.24 | 228.17 | 273.94 |
| 40 | 54.54 | 68.53 | 84.73 | 103.90 | 126.84 | 154.31 | 187.10 | 225.97 | 271.70 |
| 45 | 52.83 | 66.69 | 82.77 | 101.86 | 124.73 | 152.15 | 184.91 | 223.77 | 269.52 |
| 50 | - | 64.55 | 80.57 | 99.62 | 122.47 | 149.90 | 182.68 | 221.60 | 267.41 |
| 55 | - | - | 78.14 | 97.21 | 120.10 | 147.58 | 180.44 | 219.46 | 265.39 |
| 60 | - | - | - | 94.63 | 117.61 | 145.20 | 178.20 | 217.36 | 263.48 |

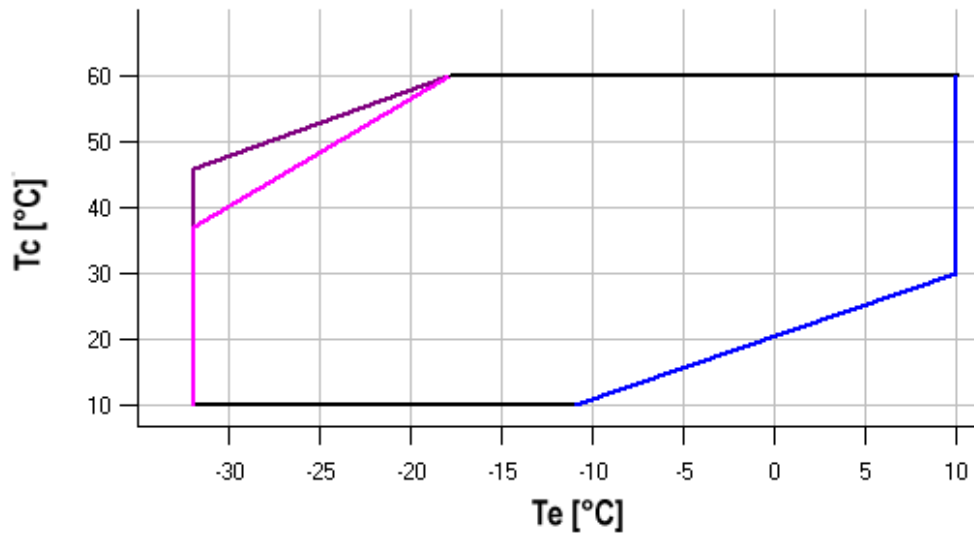
Model: ZB19KCE-TFD

Capacity

C.O.P. [W/W]

| $t_c \setminus t_e$ | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|------|------|------|------|------|------|------|------|------|
| 10 | 3.11 | 3.86 | 4.77 | 5.85 | - | - | - | - | - |
| 15 | 2.64 | 3.28 | 4.04 | 4.94 | 6.00 | - | - | - | - |
| 20 | 2.24 | 2.77 | 3.41 | 4.17 | 5.06 | 6.09 | - | - | - |
| 25 | 1.88 | 2.33 | 2.87 | 3.50 | 4.24 | 5.11 | 6.11 | - | - |
| 30 | 1.57 | 1.95 | 2.39 | 2.92 | 3.55 | 4.27 | 5.11 | 6.07 | 7.15 |
| 35 | 1.30 | 1.61 | 1.99 | 2.43 | 2.94 | 3.55 | 4.26 | 5.06 | 5.98 |
| 40 | 1.06 | 1.32 | 1.63 | 2.00 | 2.43 | 2.93 | 3.52 | 4.20 | 4.97 |
| 45 | 0.85 | 1.07 | 1.33 | 1.63 | 1.98 | 2.40 | 2.88 | 3.45 | 4.10 |
| 50 | - | 0.86 | 1.07 | 1.31 | 1.60 | 1.94 | 2.34 | 2.81 | 3.35 |
| 55 | - | - | 0.84 | 1.04 | 1.28 | 1.55 | 1.88 | 2.26 | 2.71 |
| 60 | - | - | - | 0.81 | 1.00 | 1.22 | 1.49 | 1.80 | 2.16 |

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: ZB19KCE-TFD**Capacity**

R407C

Cooling capacity [kW]

| t_c \ t_e | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|--------------------------------------|------------|------------|------------|------------|-----------|----------|----------|-----------|
| 15 | 2.49 | 2.95 | 3.58 | 4.39 | 5.38 | 6.56 | - | - |
| 20 | 2.34 | 2.82 | 3.46 | 4.28 | 5.27 | 6.44 | 7.79 | - |
| 25 | 2.19 | 2.67 | 3.32 | 4.13 | 5.11 | 6.27 | 7.60 | - |
| 30 | 2.03 | 2.51 | 3.16 | 3.96 | 4.92 | 6.05 | 7.35 | 8.82 |
| 35 | 1.87 | 2.35 | 2.98 | 3.76 | 4.70 | 5.80 | 7.06 | 8.49 |
| 40 | 1.72 | 2.19 | 2.79 | 3.54 | 4.44 | 5.50 | 6.72 | 8.09 |
| 45 | - | 2.02 | 2.60 | 3.31 | 4.17 | 5.18 | 6.34 | 7.65 |
| 50 | - | - | 2.40 | 3.07 | 3.88 | 4.83 | 5.92 | 7.17 |
| 55 | - | - | - | 2.83 | 3.57 | 4.46 | 5.48 | 6.64 |
| 60 | - | - | - | - | 3.26 | 4.07 | 5.01 | 6.09 |
| 65 | - | - | - | - | - | 3.67 | 4.52 | 5.50 |

Power input [kW]

| t_c \ t_e | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|--------------------------------------|------------|------------|------------|------------|-----------|----------|----------|-----------|
| 15 | 0.86 | 0.83 | 0.81 | 0.80 | 0.79 | 0.79 | - | - |
| 20 | 0.97 | 0.95 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | - |
| 25 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | - |
| 30 | 1.23 | 1.22 | 1.21 | 1.21 | 1.20 | 1.20 | 1.18 | 1.16 |
| 35 | 1.38 | 1.38 | 1.37 | 1.37 | 1.37 | 1.36 | 1.35 | 1.32 |
| 40 | 1.56 | 1.56 | 1.56 | 1.56 | 1.56 | 1.55 | 1.53 | 1.50 |
| 45 | - | 1.76 | 1.76 | 1.77 | 1.76 | 1.75 | 1.73 | 1.70 |
| 50 | - | - | 1.99 | 2.00 | 2.00 | 1.99 | 1.97 | 1.93 |
| 55 | - | - | - | 2.26 | 2.26 | 2.25 | 2.23 | 2.18 |
| 60 | - | - | - | - | 2.56 | 2.55 | 2.52 | 2.47 |
| 65 | - | - | - | - | - | 2.88 | 2.85 | 2.80 |

Model: ZB19KCE-TFD

Capacity

Current [A]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|------|------|------|------|------|------|------|------|
| 15 | 2.51 | 2.45 | 2.42 | 2.40 | 2.39 | 2.38 | - | - |
| 20 | 2.57 | 2.53 | 2.50 | 2.49 | 2.48 | 2.48 | 2.46 | - |
| 25 | 2.66 | 2.63 | 2.61 | 2.60 | 2.60 | 2.59 | 2.58 | - |
| 30 | 2.78 | 2.75 | 2.74 | 2.74 | 2.74 | 2.73 | 2.72 | 2.69 |
| 35 | 2.93 | 2.91 | 2.91 | 2.91 | 2.91 | 2.91 | 2.89 | 2.85 |
| 40 | 3.12 | 3.11 | 3.11 | 3.12 | 3.12 | 3.11 | 3.09 | 3.05 |
| 45 | - | 3.36 | 3.36 | 3.37 | 3.37 | 3.36 | 3.34 | 3.29 |
| 50 | - | - | 3.66 | 3.67 | 3.67 | 3.66 | 3.63 | 3.58 |
| 55 | - | - | - | 4.02 | 4.02 | 4.01 | 3.97 | 3.91 |
| 60 | - | - | - | - | 4.43 | 4.41 | 4.37 | 4.30 |
| 65 | - | - | - | - | - | 4.88 | 4.83 | 4.75 |

Mass flow [kg/h]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|-------|-------|-------|-------|-------|--------|--------|--------|
| 15 | 40.16 | 48.43 | 59.30 | 73.05 | 89.92 | 110.20 | - | - |
| 20 | 39.14 | 47.86 | 59.25 | 73.57 | 91.09 | 112.08 | 136.78 | - |
| 25 | 38.07 | 47.12 | 58.90 | 73.67 | 91.71 | 113.27 | 138.62 | - |
| 30 | 36.99 | 46.24 | 58.27 | 73.37 | 91.80 | 113.81 | 139.67 | 169.64 |
| 35 | 35.92 | 45.23 | 57.40 | 72.69 | 91.37 | 113.70 | 139.95 | 170.36 |
| 40 | 34.88 | 44.13 | 56.29 | 71.65 | 90.46 | 112.98 | 139.48 | 170.21 |
| 45 | - | 42.94 | 54.98 | 70.27 | 89.08 | 111.66 | 138.28 | 169.21 |
| 50 | - | - | 53.48 | 68.58 | 87.25 | 109.77 | 136.38 | 167.37 |
| 55 | - | - | - | 66.58 | 85.00 | 107.32 | 133.80 | 164.72 |
| 60 | - | - | - | - | 82.34 | 104.34 | 130.56 | 161.27 |
| 65 | - | - | - | - | - | 100.84 | 126.67 | 157.06 |

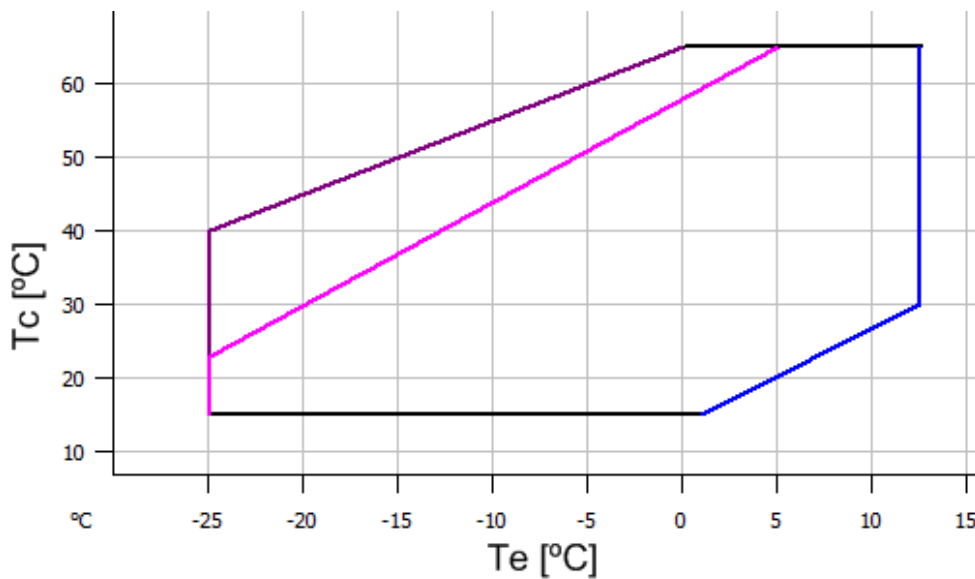
Model: ZB19KCE-TFD

Capacity

C.O.P. [W/W]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
|---------------------|------|------|------|------|------|------|------|------|
| 15 | 2.90 | 3.57 | 4.43 | 5.51 | 6.80 | 8.32 | - | - |
| 20 | 2.41 | 2.98 | 3.72 | 4.64 | 5.74 | 7.05 | 8.59 | - |
| 25 | 2.00 | 2.48 | 3.12 | 3.90 | 4.85 | 5.98 | 7.31 | - |
| 30 | 1.65 | 2.06 | 2.61 | 3.28 | 4.09 | 5.05 | 6.20 | 7.58 |
| 35 | 1.35 | 1.71 | 2.17 | 2.74 | 3.43 | 4.25 | 5.24 | 6.42 |
| 40 | 1.11 | 1.41 | 1.79 | 2.27 | 2.86 | 3.56 | 4.39 | 5.40 |
| 45 | - | 1.15 | 1.47 | 1.88 | 2.36 | 2.95 | 3.65 | 4.50 |
| 50 | - | - | 1.21 | 1.54 | 1.94 | 2.43 | 3.01 | 3.72 |
| 55 | - | - | - | 1.25 | 1.58 | 1.98 | 2.46 | 3.04 |
| 60 | - | - | - | - | 1.27 | 1.60 | 1.99 | 2.46 |
| 65 | - | - | - | - | - | 1.27 | 1.58 | 1.97 |

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

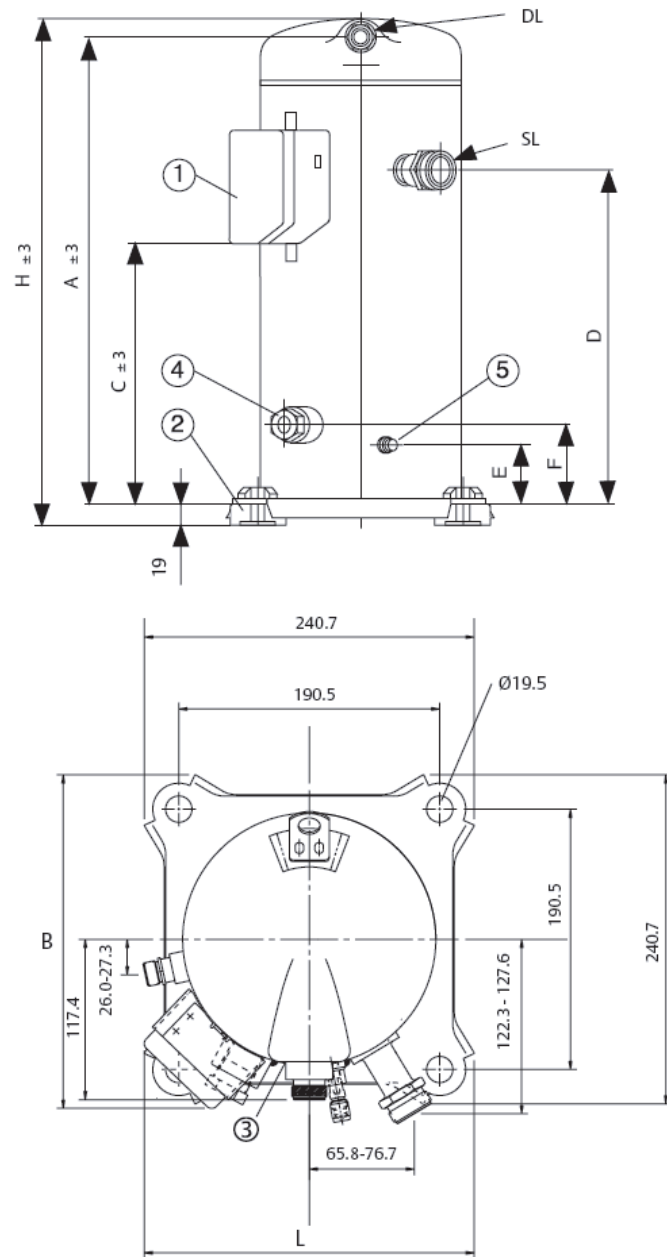
Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: ZB19KCE-TFD

Dimensions



| | |
|---|--------|
| A | 344 mm |
| B | 242 mm |
| C | 202 mm |
| D | 245 mm |
| E | 44 mm |
| F | 69 mm |
| H | 369 mm |
| L | 242 mm |

Model: ZB19KCE-TFD

Image

