

Model: ZP182KCE-TFD

Data

Type: Hermetic scroll compressors

Producer: Copeland

Series: ZP

Model: ZP182KCE-TFD

Technical data

| | |
|------------------------------------|------|
| Displacement [m ³ /h]: | 29,1 |
| Sound power [dBA]: | 77 |
| Sound pressure level [dB]: | 66 |
| Net Weight [kg]: | 66,0 |
| Gross Weight [kg]: | 77 |
| Oil charge [dm ³]: | 3,3 |
| Maximum high pressure [bar]: | 45 |
| Maximum standstill pressure [bar]: | 29,5 |
| Minimal lowside temperature [°C]: | -35 |
| Maximum lowside temperature [°C]: | 50 |
| PED category: | 2 |

Electrical data

| | |
|-----------------------------|-----------------|
| Power supply [V/~/Hz]: | 380-420V/3/50Hz |
| Locked rotor current [A]: | 174,0 |
| Max. operating current [A]: | 34,0 |
| Winding resistance [Ω]: | 0,9 |

Connections

| | |
|--|---------------|
| | <u>inches</u> |
| Suction connection with supplied sleeve: | 1 3/8" |
| Discharge connection with supplied sleeve: | 7/8" |

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Capacity

R410A

Cooling capacity [kW]

| t_c \ t_e | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 |
|--------------------------------------|------------|------------|------------|------------|-----------|----------|----------|-----------|-----------|-----------|
| 25 | 16.97 | 21.04 | 25.75 | 31.20 | 37.48 | 44.71 | 52.97 | 62.37 | 73.01 | 84.99 |
| 30 | 15.73 | 19.76 | 24.38 | 29.69 | 35.78 | 42.76 | 50.73 | 59.79 | 70.03 | 81.55 |
| 35 | 14.48 | 18.44 | 22.94 | 28.08 | 33.95 | 40.66 | 48.30 | 56.98 | 66.79 | 77.83 |
| 40 | - | 17.05 | 21.40 | 26.34 | 31.96 | 38.37 | 45.66 | 53.93 | 63.28 | 73.82 |
| 45 | - | - | 19.75 | 24.46 | 29.80 | 35.87 | 42.78 | 50.61 | 59.48 | 69.47 |
| 50 | - | - | - | 22.40 | 27.43 | 33.14 | 39.63 | 47.00 | 55.35 | 64.78 |
| 55 | - | - | - | - | 24.85 | 30.16 | 36.21 | 43.09 | 50.89 | 59.72 |
| 60 | - | - | - | - | 22.01 | 26.91 | 32.48 | 38.83 | 46.06 | 54.26 |
| 65 | - | - | - | - | - | 23.35 | 28.43 | 34.22 | 40.84 | 48.39 |

Power input [kW]

| t_c \ t_e | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 |
|--------------------------------------|------------|------------|------------|------------|-----------|----------|----------|-----------|-----------|-----------|
| 25 | 6.80 | 6.98 | 7.14 | 7.24 | 7.24 | 7.12 | 6.82 | 6.32 | 5.58 | 4.57 |
| 30 | 7.49 | 7.66 | 7.83 | 7.99 | 8.08 | 8.09 | 7.96 | 7.66 | 7.17 | 6.44 |
| 35 | 8.35 | 8.46 | 8.61 | 8.78 | 8.94 | 9.03 | 9.03 | 8.91 | 8.62 | 8.13 |
| 40 | - | 9.43 | 9.53 | 9.68 | 9.85 | 10.00 | 10.09 | 10.10 | 9.97 | 9.69 |
| 45 | - | - | 10.63 | 10.73 | 10.87 | 11.04 | 11.19 | 11.28 | 11.28 | 11.16 |
| 50 | - | - | - | 11.96 | 12.05 | 12.19 | 12.36 | 12.50 | 12.60 | 12.61 |
| 55 | - | - | - | - | 13.43 | 13.51 | 13.65 | 13.82 | 13.97 | 14.06 |
| 60 | - | - | - | - | 15.06 | 15.05 | 15.13 | 15.27 | 15.43 | 15.58 |
| 65 | - | - | - | - | - | 16.84 | 16.82 | 16.90 | 17.04 | 17.20 |

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Capacity

Current [A]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 25 | 16.81 | 17.01 | 17.19 | 17.31 | 17.32 | 17.18 | 16.84 | 16.25 | 15.37 | 14.15 |
| 30 | 17.56 | 17.73 | 17.93 | 18.11 | 18.24 | 18.25 | 18.11 | 17.76 | 17.18 | 16.29 |
| 35 | 18.57 | 18.67 | 18.85 | 19.05 | 19.24 | 19.37 | 19.38 | 19.24 | 18.89 | 18.30 |
| 40 | - | 19.89 | 20.00 | 20.18 | 20.39 | 20.58 | 20.71 | 20.72 | 20.58 | 20.24 |
| 45 | - | - | 21.45 | 21.56 | 21.75 | 21.96 | 22.16 | 22.28 | 22.30 | 22.16 |
| 50 | - | - | - | 23.25 | 23.37 | 23.56 | 23.78 | 23.98 | 24.11 | 24.12 |
| 55 | - | - | - | - | 25.32 | 25.44 | 25.64 | 25.86 | 26.06 | 26.19 |
| 60 | - | - | - | - | 27.64 | 27.66 | 27.79 | 27.99 | 28.22 | 28.42 |
| 65 | - | - | - | - | - | 30.28 | 30.30 | 30.44 | 30.64 | 30.87 |

Mass flow [kg/h]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|-------------|-------------|-------------|
| 25 | 332.82 | 411.48 | 499.42 | 598.67 | 711.27 | 839.23 | 984.59 | 1 149.36 | 1 335.58 | 1 545.27 |
| 30 | 328.03 | 408.17 | 497.46 | 597.90 | 711.55 | 840.41 | 986.51 | 1 151.89 | 1 338.56 | 1 548.56 |
| 35 | 320.27 | 401.86 | 492.44 | 594.04 | 708.69 | 838.40 | 985.21 | 1 151.15 | 1 338.24 | 1 548.51 |
| 40 | - | 392.57 | 484.41 | 587.12 | 702.73 | 833.26 | 980.74 | 1 147.19 | 1 334.65 | 1 545.14 |
| 45 | - | - | 473.40 | 577.17 | 693.70 | 825.00 | 973.11 | 1 140.04 | 1 327.83 | 1 538.50 |
| 50 | - | - | - | 564.25 | 681.65 | 813.69 | 962.37 | 1 129.74 | 1 317.82 | 1 528.63 |
| 55 | - | - | - | - | 666.61 | 799.34 | 948.56 | 1 116.33 | 1 304.65 | 1 515.56 |
| 60 | - | - | - | - | 648.62 | 781.99 | 931.72 | 1 099.83 | 1 288.36 | 1 499.32 |
| 65 | - | - | - | - | - | 761.69 | 911.88 | 1 080.30 | 1 268.99 | 1 479.96 |

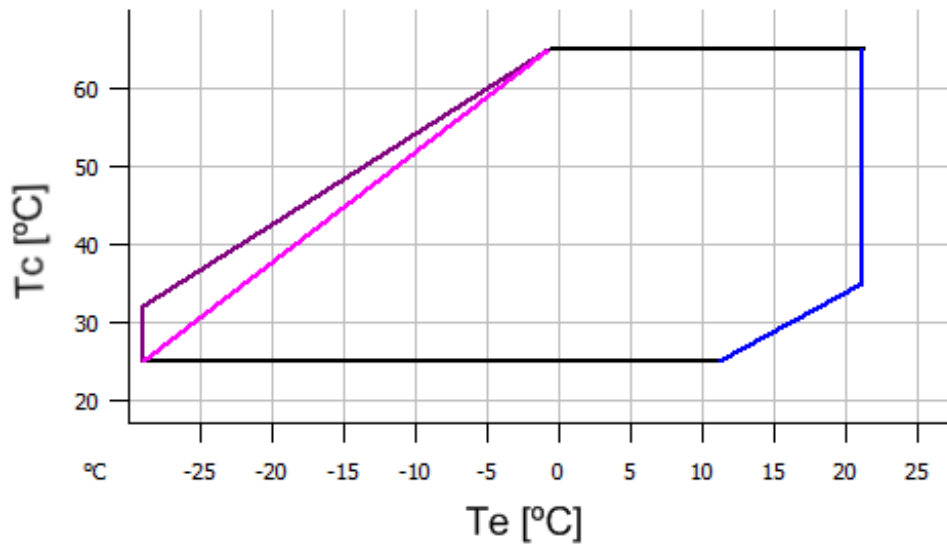
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Capacity

C.O.P. [W/W]

| $t_c \setminus t_e$ | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 |
|---------------------|------|------|------|------|------|------|------|------|-------|-------|
| 25 | 2.50 | 3.01 | 3.61 | 4.31 | 5.18 | 6.28 | 7.77 | 9.87 | 13.08 | 18.60 |
| 30 | 2.10 | 2.58 | 3.11 | 3.72 | 4.43 | 5.29 | 6.38 | 7.80 | 9.77 | 12.67 |
| 35 | 1.73 | 2.18 | 2.66 | 3.20 | 3.80 | 4.50 | 5.35 | 6.40 | 7.75 | 9.58 |
| 40 | - | 1.81 | 2.25 | 2.72 | 3.24 | 3.84 | 4.52 | 5.34 | 6.35 | 7.62 |
| 45 | - | - | 1.86 | 2.28 | 2.74 | 3.25 | 3.82 | 4.49 | 5.27 | 6.22 |
| 50 | - | - | - | 1.87 | 2.28 | 2.72 | 3.21 | 3.76 | 4.39 | 5.14 |
| 55 | - | - | - | - | 1.85 | 2.23 | 2.65 | 3.12 | 3.64 | 4.25 |
| 60 | - | - | - | - | 1.46 | 1.79 | 2.15 | 2.54 | 2.99 | 3.48 |
| 65 | - | - | - | - | - | 1.39 | 1.69 | 2.03 | 2.40 | 2.81 |

Application range



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

Operating conditions: 10K suction superheat, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions

