

Model: ZS75K4E-TWD

Data

Type: Hermetic scroll compressors

Producer: Copeland

Series: ZS

Model: ZS75K4E-TWD

Technical data

| | |
|-------------------------------------|-------|
| Displacement [m ³ /h]: | 28,9 |
| Sound power [dBA]: | 83 |
| Sound power with sound shell [dBA]: | 73 |
| Sound pressure level [dB]: | 72 |
| Net Weight [kg]: | 100,2 |
| Oil charge [dm ³]: | 4,1 |
| Maximum high pressure [bar]: | 32 |
| Maximum standstill pressure [bar]: | 22,6 |
| 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]: | 127 |
| Max. operating current [A]: | 21,7 |
| Winding resistance [Ω]: | 1,0 |

Connections

| | |
|--------------------------------------|---------------|
| | <u>inches</u> |
| Suction Rotolock valve connection: | 1 3/4" |
| Discharge Rotolock valve connection: | 1 1/4" |

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Capacity

R404A/R507

Cooling capacity [kW]

| $t_c \setminus t_e$ | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 |
|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 10 | 8.53 | 10.47 | 12.76 | 15.46 | 18.63 | 22.31 | - | - | - | - |
| 15 | 7.60 | 9.56 | 11.84 | 14.50 | 17.60 | 21.19 | 25.32 | - | - | - |
| 20 | 6.81 | 8.77 | 11.03 | 13.63 | 16.64 | 20.11 | 24.10 | 28.66 | - | - |
| 25 | 6.16 | 8.10 | 10.31 | 12.83 | 15.74 | 19.07 | 22.89 | 27.25 | 32.21 | - |
| 30 | 5.61 | 7.51 | 9.65 | 12.08 | 14.85 | 18.03 | 21.66 | 25.81 | 30.52 | 35.86 |
| 35 | 5.13 | 6.98 | 9.03 | 11.34 | 13.97 | 16.96 | 20.39 | 24.30 | 28.75 | 33.79 |
| 40 | - | 6.48 | 8.43 | 10.60 | 13.06 | 15.86 | 19.05 | 22.70 | 26.87 | 31.59 |
| 45 | - | - | 7.81 | 9.82 | 12.09 | 14.68 | 17.63 | 21.00 | 24.85 | 29.24 |
| 50 | - | - | - | 8.99 | 11.06 | 13.40 | 16.08 | 19.16 | 22.69 | 26.72 |
| 55 | - | - | - | - | 9.92 | 12.01 | 14.40 | 17.16 | 20.34 | 24.00 |
| 60 | - | - | - | - | - | 10.47 | 12.56 | 14.98 | 17.79 | 21.05 |

Power input [kW]

| $t_c \setminus t_e$ | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 |
|---------------------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 10 | 3.54 | 3.72 | 3.95 | 4.24 | 4.63 | 5.15 | - | - | - | - |
| 15 | 3.84 | 4.04 | 4.25 | 4.52 | 4.86 | 5.31 | 5.87 | - | - | - |
| 20 | 4.15 | 4.38 | 4.61 | 4.86 | 5.17 | 5.56 | 6.05 | 6.67 | - | - |
| 25 | 4.47 | 4.74 | 4.99 | 5.26 | 5.55 | 5.90 | 6.33 | 6.87 | 7.54 | - |
| 30 | 4.78 | 5.12 | 5.42 | 5.70 | 6.00 | 6.33 | 6.72 | 7.19 | 7.78 | 8.50 |
| 35 | 5.08 | 5.50 | 5.86 | 6.19 | 6.50 | 6.83 | 7.20 | 7.63 | 8.15 | 8.78 |
| 40 | - | 5.89 | 6.33 | 6.71 | 7.06 | 7.40 | 7.76 | 8.16 | 8.63 | 9.19 |
| 45 | - | - | 6.81 | 7.26 | 7.67 | 8.04 | 8.41 | 8.80 | 9.23 | 9.74 |
| 50 | - | - | - | 7.84 | 8.31 | 8.74 | 9.13 | 9.53 | 9.94 | 10.41 |
| 55 | - | - | - | - | 9.00 | 9.48 | 9.92 | 10.34 | 10.76 | 11.20 |
| 60 | - | - | - | - | - | 10.28 | 10.78 | 11.23 | 11.67 | 12.11 |

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Capacity

Current [A]

| t_c \ t_e | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|-----------|----------|----------|
| 10 | 10.80 | 11.00 | 11.24 | 11.55 | 11.98 | 12.58 | - | - | - | - |
| 15 | 11.03 | 11.24 | 11.46 | 11.73 | 12.09 | 12.59 | 13.26 | - | - | - |
| 20 | 11.27 | 11.54 | 11.77 | 12.02 | 12.34 | 12.75 | 13.31 | 14.07 | - | - |
| 25 | 11.52 | 11.87 | 12.15 | 12.41 | 12.70 | 13.07 | 13.55 | 14.19 | 15.04 | - |
| 30 | 11.78 | 12.22 | 12.58 | 12.88 | 13.18 | 13.52 | 13.95 | 14.50 | 15.23 | 16.18 |
| 35 | 12.01 | 12.59 | 13.05 | 13.42 | 13.76 | 14.10 | 14.50 | 14.99 | 15.63 | 16.46 |
| 40 | - | 12.96 | 13.55 | 14.02 | 14.42 | 14.79 | 15.19 | 15.65 | 16.23 | 16.96 |
| 45 | - | - | 14.06 | 14.65 | 15.15 | 15.58 | 16.01 | 16.47 | 17.01 | 17.67 |
| 50 | - | - | - | 15.32 | 15.94 | 16.46 | 16.94 | 17.43 | 17.96 | 18.59 |
| 55 | - | - | - | - | 16.77 | 17.41 | 17.98 | 18.52 | 19.07 | 19.68 |
| 60 | - | - | - | - | - | 18.42 | 19.10 | 19.72 | 20.32 | 20.95 |

Mass flow [kg/h]

| t_c \ t_e | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|-----------|----------|----------|
| 10 | 167.79 | 211.36 | 260.32 | 316.59 | 382.11 | 458.84 | - | - | - | - |
| 15 | 156.55 | 200.86 | 250.77 | 308.24 | 375.21 | 453.61 | 545.40 | - | - | - |
| 20 | 149.07 | 193.67 | 244.12 | 302.37 | 370.35 | 450.00 | 543.28 | 652.12 | - | - |
| 25 | 144.74 | 189.22 | 239.78 | 298.38 | 366.94 | 447.43 | 541.77 | 651.90 | 779.79 | - |
| 30 | 142.97 | 186.90 | 237.15 | 295.67 | 364.40 | 445.28 | 540.26 | 651.27 | 780.27 | 929.19 |
| 35 | 143.16 | 186.11 | 235.63 | 293.65 | 362.11 | 442.97 | 538.16 | 649.63 | 779.31 | 929.16 |
| 40 | - | 186.27 | 234.62 | 291.72 | 359.50 | 439.91 | 534.89 | 646.38 | 776.33 | 926.67 |
| 45 | - | - | 233.54 | 289.29 | 355.95 | 435.49 | 529.83 | 640.92 | 770.71 | 921.13 |
| 50 | - | - | - | 285.76 | 350.89 | 429.12 | 522.40 | 632.67 | 761.87 | 911.94 |
| 55 | - | - | - | - | 343.70 | 420.21 | 512.00 | 621.02 | 749.21 | 898.51 |
| 60 | - | - | - | - | - | 408.16 | 498.04 | 605.38 | 732.13 | 880.24 |

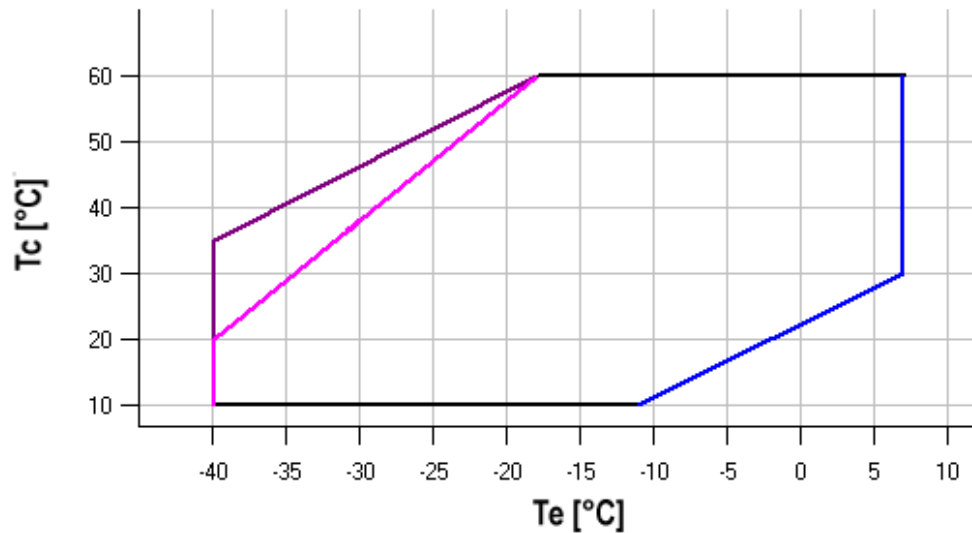
Model: ZS75K4E-TWD

Capacity

C.O.P. [W/W]

| $t_c \setminus t_e$ | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 |
|---------------------|------|------|------|------|------|------|------|------|------|------|
| 10 | 2.41 | 2.81 | 3.23 | 3.65 | 4.02 | 4.34 | - | - | - | - |
| 15 | 1.98 | 2.37 | 2.78 | 3.21 | 3.62 | 3.99 | 4.31 | - | - | - |
| 20 | 1.64 | 2.00 | 2.40 | 2.80 | 3.22 | 3.62 | 3.98 | 4.30 | - | - |
| 25 | 1.38 | 1.71 | 2.06 | 2.44 | 2.83 | 3.23 | 3.61 | 3.96 | 4.27 | - |
| 30 | 1.17 | 1.47 | 1.78 | 2.12 | 2.48 | 2.85 | 3.22 | 3.59 | 3.92 | 4.22 |
| 35 | 1.01 | 1.27 | 1.54 | 1.83 | 2.15 | 2.48 | 2.83 | 3.19 | 3.53 | 3.85 |
| 40 | - | 1.10 | 1.33 | 1.58 | 1.85 | 2.14 | 2.45 | 2.78 | 3.11 | 3.44 |
| 45 | - | - | 1.15 | 1.35 | 1.58 | 1.83 | 2.10 | 2.39 | 2.69 | 3.00 |
| 50 | - | - | - | 1.15 | 1.33 | 1.53 | 1.76 | 2.01 | 2.28 | 2.57 |
| 55 | - | - | - | - | 1.10 | 1.27 | 1.45 | 1.66 | 1.89 | 2.14 |
| 60 | - | - | - | - | - | 1.02 | 1.17 | 1.33 | 1.52 | 1.74 |

Application range



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

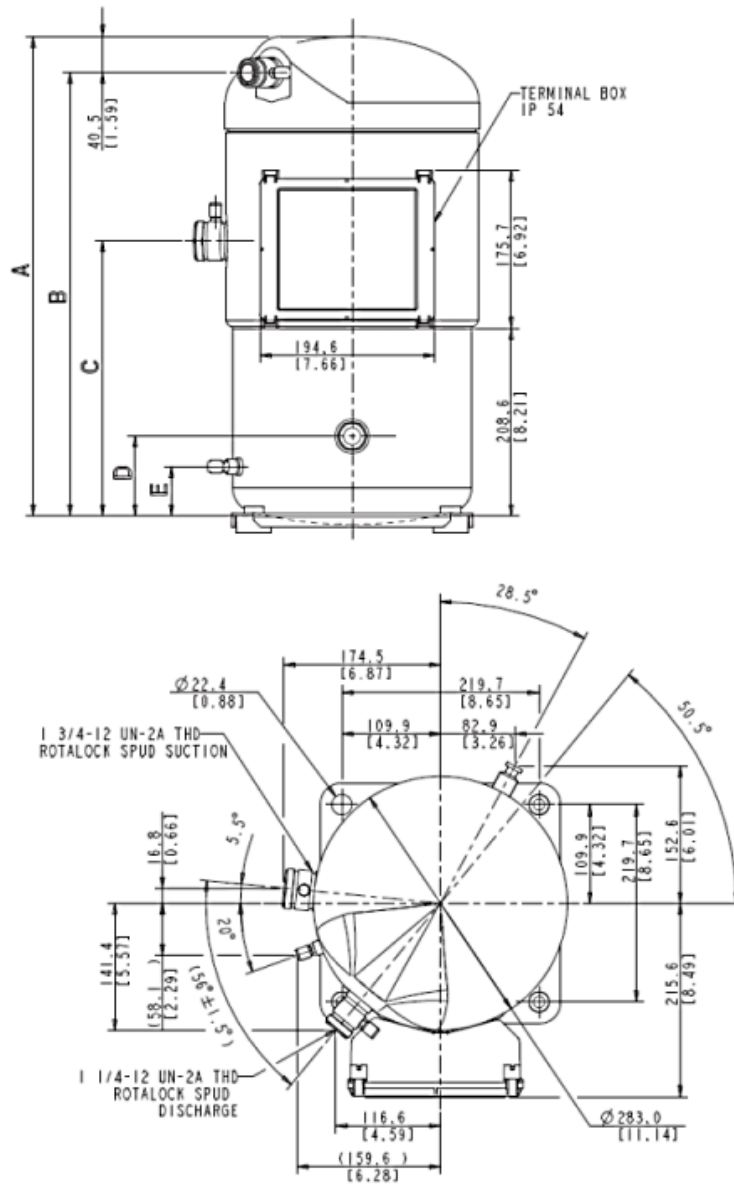
Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



| | |
|---|--------|
| A | 532 mm |
| B | 492 mm |
| C | 306 mm |
| D | 88 mm |
| E | 54 mm |

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Image

