

**Type:** Semi-hermetic piston compressors  
**Producer:** Copeland  
**Series:** DK

## **Model: DKM-5 X**

### **Technical data**

|                                       |      |
|---------------------------------------|------|
| Nominal motor power [kW]:             |      |
| Cylinder count:                       | 2    |
| Displacement [m <sup>3</sup> /h]:     | 3,97 |
| Cylinder capacity [cm <sup>3</sup> ]: |      |
| RPM [min <sup>-1</sup> ]:             | 1450 |
| Weight [kg]:                          | 41   |
| Oil charge [dm <sup>3</sup> ]:        | 0,6  |
| Power supply [V/~/Hz]:                |      |

### **Connections**

|                 | <u>milimeters</u> | <u>inches</u> |
|-----------------|-------------------|---------------|
| Suction line:   | 12                | 1/2"          |
| Discharge line: | 12                | 1/2"          |

R134a

### **Cooling capacity [W]**

| <b>t<sub>c</sub> \ t<sub>e</sub></b> | <b>-20</b> | <b>-15</b> | <b>-10</b> | <b>-5</b> | <b>0</b> | <b>5</b> | <b>7</b> | <b>10</b> | <b>12.5</b> |
|--------------------------------------|------------|------------|------------|-----------|----------|----------|----------|-----------|-------------|
| <b>30</b>                            | 850        | 1 110      | 1 410      | 1 760     | 2 170    | 2 650    | 2 870    | 3 210     | 3 510       |
| <b>35</b>                            | 780        | 1 020      | 1 300      | 1 640     | 2 030    | 2 490    | 2 690    | 3 010     | 3 300       |
| <b>40</b>                            | 710        | 930        | 1 200      | 1 520     | 1 890    | 2 320    | 2 510    | 2 820     | 3 090       |
| <b>45</b>                            | 630        | 850        | 1 100      | 1 390     | 1 740    | 2 150    | 2 330    | 2 620     | 2 880       |
| <b>50</b>                            | 560        | 760        | 990        | 1 270     | 1 600    | 1 980    | 2 140    | 2 410     | 2 660       |
| <b>55</b>                            | 480        | 670        | 890        | 1 150     | 1 450    | 1 800    | 1 960    | 2 210     | 2 440       |
| <b>60</b>                            | 400        | 580        | 790        | 1 030     | 1 300    | 1 630    | 1 770    | 2 000     | -           |
| <b>62</b>                            | 370        | 550        | 750        | 980       | 1 240    | 1 560    | 1 690    | 1 920     | -           |

### **Power input [kW]**

| <b>t<sub>c</sub> \ t<sub>e</sub></b> | <b>-20</b> | <b>-15</b> | <b>-10</b> | <b>-5</b> | <b>0</b> | <b>5</b> | <b>7</b> | <b>10</b> | <b>12.5</b> |
|--------------------------------------|------------|------------|------------|-----------|----------|----------|----------|-----------|-------------|
| <b>30</b>                            | 0.43       | 0.47       | 0.50       | 0.52      | 0.53     | 0.54     | 0.53     | 0.53      | 0.52        |
| <b>35</b>                            | 0.45       | 0.49       | 0.53       | 0.56      | 0.58     | 0.59     | 0.60     | 0.60      | 0.60        |
| <b>40</b>                            | 0.46       | 0.51       | 0.55       | 0.59      | 0.62     | 0.65     | 0.66     | 0.66      | 0.66        |
| <b>45</b>                            | 0.47       | 0.53       | 0.58       | 0.62      | 0.66     | 0.70     | 0.71     | 0.72      | 0.73        |
| <b>50</b>                            | 0.48       | 0.54       | 0.60       | 0.65      | 0.70     | 0.74     | 0.76     | 0.77      | 0.79        |
| <b>55</b>                            | 0.48       | 0.55       | 0.61       | 0.67      | 0.73     | 0.78     | 0.80     | 0.82      | 0.84        |
| <b>60</b>                            | 0.48       | 0.55       | 0.62       | 0.69      | 0.75     | 0.81     | 0.83     | 0.86      | -           |
| <b>62</b>                            | 0.48       | 0.55       | 0.62       | 0.69      | 0.76     | 0.82     | 0.85     | 0.88      | -           |

Operating conditions: suction gas temperature 25°C + additional cooling

t<sub>c</sub> - Condensing temperature [°C]

t<sub>e</sub> - Evaporating temperature [°C]

R404A/R507

### **Cooling capacity [W]**

| <b>t<sub>c</sub> \ t<sub>e</sub></b> | <b>-50</b> | <b>-45</b> | <b>-40</b> | <b>-35</b> | <b>-30</b> | <b>-25</b> | <b>-20</b> |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| <b>20</b>                            | 330        | 490        | 690        | 930        | 1 220      | 1 560      | 1 950      |
| <b>25</b>                            | 270        | 420        | 610        | 840        | 1 110      | 1 430      | 1 800      |
| <b>30</b>                            | 210        | 360        | 540        | 750        | 1 000      | 1 300      | 1 640      |
| <b>35</b>                            | -          | 290        | 460        | 660        | 890        | 1 170      | 1 490      |
| <b>40</b>                            | -          | 230        | 380        | 570        | 780        | 1 040      | 1 330      |
| <b>45</b>                            | -          | -          | 310        | 480        | 670        | 910        | 1 180      |
| <b>50</b>                            | -          | -          | 240        | 390        | 570        | 780        | 1 030      |
| <b>55</b>                            | -          | -          | -          | 310        | 470        | 660        | 880        |

### **Power input [kW]**

| <b>t<sub>c</sub> \ t<sub>e</sub></b> | <b>-50</b> | <b>-45</b> | <b>-40</b> | <b>-35</b> | <b>-30</b> | <b>-25</b> | <b>-20</b> |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| <b>20</b>                            | 0.35       | 0.40       | 0.44       | 0.49       | 0.53       | 0.56       | 0.59       |
| <b>25</b>                            | 0.34       | 0.39       | 0.44       | 0.49       | 0.54       | 0.59       | 0.63       |
| <b>30</b>                            | 0.32       | 0.38       | 0.44       | 0.50       | 0.55       | 0.61       | 0.66       |
| <b>35</b>                            | -          | 0.36       | 0.43       | 0.49       | 0.56       | 0.62       | 0.68       |
| <b>40</b>                            | -          | 0.34       | 0.41       | 0.49       | 0.56       | 0.64       | 0.71       |
| <b>45</b>                            | -          | -          | 0.40       | 0.48       | 0.56       | 0.64       | 0.73       |
| <b>50</b>                            | -          | -          | 0.37       | 0.46       | 0.56       | 0.65       | 0.74       |
| <b>55</b>                            | -          | -          | -          | 0.44       | 0.55       | 0.65       | 0.75       |

Operating conditions: suction gas temperature 25°C + additional cooling

t<sub>c</sub> - Condensing temperature [°C]

t<sub>e</sub> - Evaporating temperature [°C]



