

**Type:** Semi-hermetic piston compressors

**Producer:** Copeland

**Series:** DISCUS

## **Model: D4DF-100 X**

### **Technical data**

Nominal motor power [kW]:

Cylinder count:

4

Displacement [m<sup>3</sup>/h]:

56

Cylinder capacity [cm<sup>3</sup>]:

RPM [min<sup>-1</sup>]:

1450

Weight [kg]:

195

Oil charge [dm<sup>3</sup>]:

4,5

Power supply [V/~/Hz]:

### **Connections**

Suction line:

milimeters

42

inches

1 5/8"

Discharge line:

28

1 1/8"

R404A/R507

**Cooling capacity [W]**

| $t_c \setminus t_e$ | -50   | -45   | -40    | -35    | -30    | -25    | -20    | -15    | -10    |
|---------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| <b>20</b>           | 5 320 | 7 660 | 10 550 | 14 030 | 18 190 | 23 100 | 28 840 | 35 480 | 43 130 |
| <b>25</b>           | 4 530 | 6 740 | 9 430  | 12 690 | 16 570 | 21 150 | 26 510 | 32 720 | 39 870 |
| <b>30</b>           | 3 740 | 5 810 | 8 330  | 11 350 | 14 950 | 19 210 | 24 180 | 29 960 | 36 620 |
| <b>35</b>           | 2 970 | 4 900 | 7 230  | 10 020 | 13 350 | 17 270 | 21 870 | 27 220 | -      |
| <b>40</b>           | -     | 4 010 | 6 150  | 8 720  | 11 770 | 15 360 | 19 580 | 24 490 | -      |
| <b>45</b>           | -     | 3 150 | 5 110  | 7 440  | 10 210 | 13 480 | 17 320 | -      | -      |
| <b>50</b>           | -     | -     | 4 100  | 6 200  | 8 700  | 11 640 | 15 110 | -      | -      |
| <b>55</b>           | -     | -     | 3 160  | 5 020  | 7 230  | 9 850  | 12 940 | -      | -      |

**Power input [kW]**

| $t_c \setminus t_e$ | -50  | -45  | -40  | -35  | -30  | -25  | -20   | -15   | -10   |
|---------------------|------|------|------|------|------|------|-------|-------|-------|
| <b>20</b>           | 3.53 | 4.36 | 5.21 | 6.06 | 6.89 | 7.68 | 8.42  | 9.07  | 9.63  |
| <b>25</b>           | 3.49 | 4.38 | 5.30 | 6.24 | 7.17 | 8.08 | 8.95  | 9.75  | 10.47 |
| <b>30</b>           | 3.43 | 4.37 | 5.36 | 6.39 | 7.42 | 8.44 | 9.43  | 10.38 | 11.26 |
| <b>35</b>           | 3.34 | 4.33 | 5.39 | 6.49 | 7.62 | 8.76 | 9.87  | 10.96 | -     |
| <b>40</b>           | -    | 4.26 | 5.38 | 6.56 | 7.78 | 9.03 | 10.27 | 11.49 | -     |
| <b>45</b>           | -    | 4.14 | 5.33 | 6.59 | 7.90 | 9.25 | 10.61 | -     | -     |
| <b>50</b>           | -    | -    | 5.23 | 6.57 | 7.97 | 9.42 | 10.90 | -     | -     |
| <b>55</b>           | -    | -    | 5.09 | 6.50 | 7.99 | 9.54 | 11.14 | -     | -     |

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



