

Type: Semi-hermetic piston tandem compressors

Producer: Frascold

Series: QQ

## Model: QQ 5 33 Y

### Technical data

|                                       |          |
|---------------------------------------|----------|
| Nominal motor power [kW/HP]:          | 7,5 / 10 |
| Cylinder count:                       | 8        |
| Displacement [m <sup>3</sup> /h]:     | 65,32    |
| Cylinder capacity [cm <sup>3</sup> ]: | 93,9     |
| Cylinder bore [mm]:                   | 54       |
| Cylinder stroke [mm]:                 | 41       |
| RPM [min <sup>-1</sup> ]:             | 1450     |
| Weight net [kg]:                      | 161      |
| Weight gross [kg]:                    | 166      |
| Oil charge [dm <sup>3</sup> ]:        | 3,6      |

### Electrical data

|                             |               |               |
|-----------------------------|---------------|---------------|
| Power supply [V/~ /Hz]:     | 230V/3/50Hz Δ | 400V/3/50Hz Y |
| Locked rotor current [A]:   | 98,6          | 56,9          |
| Max. operating current [A]: | 21,2          | 12,2          |

### Connections

|                 | <u>milimeters</u> | <u>inches</u> |
|-----------------|-------------------|---------------|
| Suction line:   | 42                | 1 5/8"        |
| Discharge line: | 28,6              | 1 1/8"        |

R22

**Cooling capacity [W]**

| $t_c \setminus t_e$ | -5     | -10    | -15    | -20    | -25    | -30    | -35    | -40   | -45   |
|---------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 30                  | 45 620 | 37 820 | 31 040 | 25 180 | 20 140 | 15 840 | 12 220 | 9 180 | 6 620 |
| 40                  | 41 440 | 34 240 | 27 980 | 22 580 | 17 920 | 13 960 | 10 600 | 7 800 | 5 460 |
| 45                  | 39 280 | 32 420 | 26 420 | 21 240 | 16 780 | 12 980 | 9 780  | 7 120 | 4 880 |
| 50                  | 37 100 | 30 540 | 24 820 | 19 880 | 15 620 | 12 020 | 8 960  | 6 420 | -     |

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R134a

**Cooling capacity [W]**

| $t_c \setminus t_e$ | 12.5   | 7.5    | 5      | 0      | -5     | -10    | -15    | -20    |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| 30                  | 62 780 | 51 940 | 47 100 | 38 460 | 31 060 | 24 760 | 19 400 | 14 880 |
| 40                  | 56 140 | 46 280 | 41 880 | 34 000 | 27 260 | 21 500 | 16 620 | 12 480 |
| 45                  | 52 740 | 43 380 | 39 220 | 31 740 | 25 320 | 19 840 | 15 180 | 11 240 |
| 50                  | 49 300 | 40 460 | 36 500 | 29 420 | 23 340 | 18 160 | 13 740 | 10 000 |

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R404A/R507

**Cooling capacity [W]**

| $t_c \setminus t_e$ | -10    | -15    | -20    | -25    | -30    | -35    | -40    | -45   |
|---------------------|--------|--------|--------|--------|--------|--------|--------|-------|
| 30                  | 41 360 | 34 000 | 27 720 | 12 260 | 17 720 | 13 780 | 10 500 | 7 540 |
| 40                  | 35 760 | 29 280 | 23 700 | 18 900 | 14 860 | 11 360 | 8 460  | 5 840 |
| 45                  | 32 840 | 26 800 | 21 640 | 17 160 | 13 400 | 10 140 | 7 440  | 4 980 |
| 50                  | -      | 24 140 | 19 400 | 15 280 | 11 840 | 8 840  | 6 360  | 4 100 |

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R407C

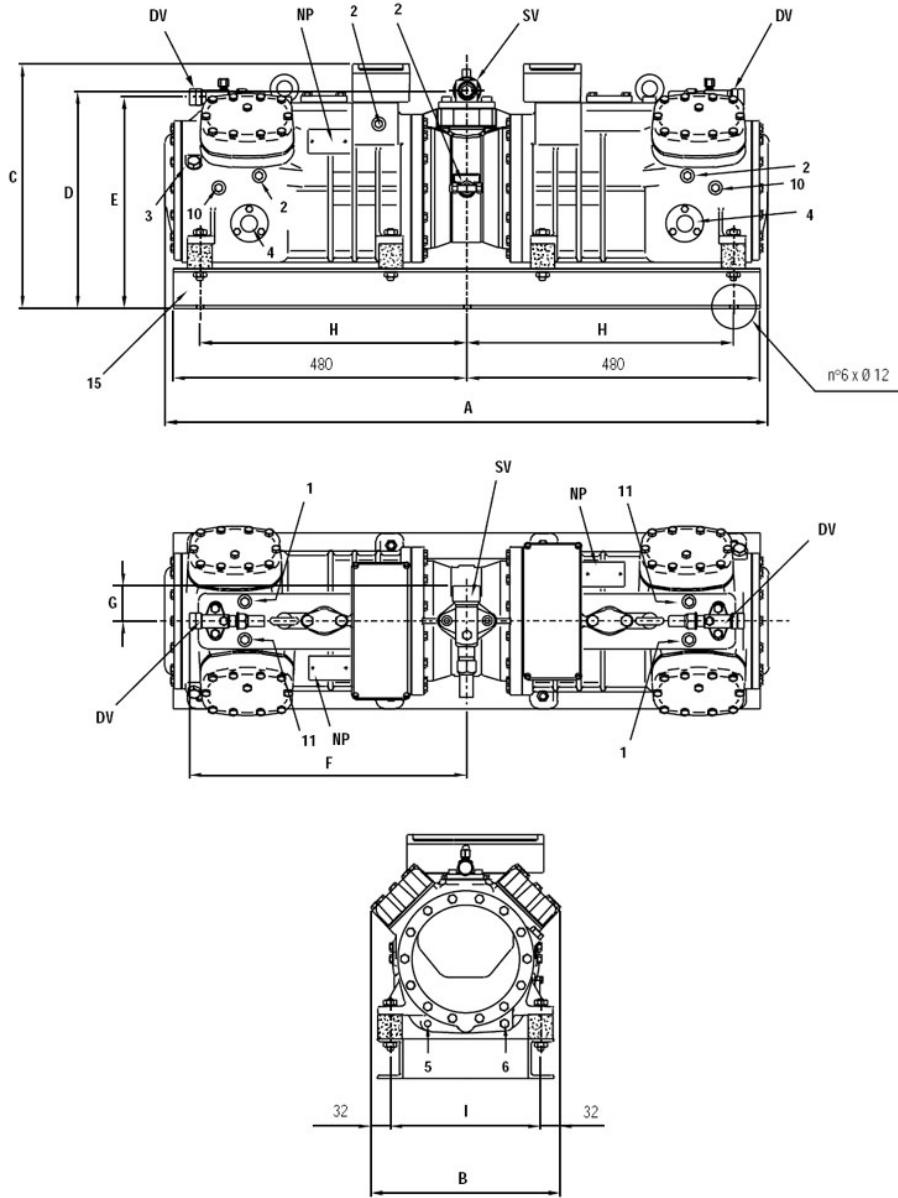
**Cooling capacity [W]**

| $t_c \setminus t_e$ | 0      | -5     | -10    | -15    | -20    | -25    |
|---------------------|--------|--------|--------|--------|--------|--------|
| 30                  | 56 880 | 46 480 | 37 620 | 30 080 | 23 680 | 18 300 |
| 40                  | 50 580 | 41 160 | 33 100 | 26 240 | 20 420 | 15 520 |
| 45                  | -      | 38 380 | 30 760 | 24 240 | 18 720 | 14 080 |
| 50                  | -      | -      | 28 340 | 22 200 | 17 000 | 12 620 |

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



|   |        |
|---|--------|
| A | 986 mm |
| B | 310 mm |
| C | 399 mm |
| D | 355 mm |
| E | 349 mm |
| F | 460 mm |
| G | 61 mm  |
| H | 436 mm |
| I | 246 mm |

