

Datasheets

Maneurop® Reciprocating compressors MT / MTZ / MPZ / NTZ



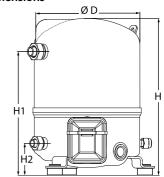


Datasheet, technical data

General Characteristics

| Model number (on compressor nameplate) | | MTZ32JF4B |
|---|--|------------------|
| Code number for Industrial pack** | | MTZ32-4M |
| Drawing number | | 8501032e |
| Suction and discharge connections | | Rotolock |
| Suction connection | | 1-1/4 " Rotolock |
| Discharge connection | | 1 " Rotolock |
| Suction connection with supplied sleeve | | 5/8 " ODF |
| Discharge connection with supplied sleeve | | 1/2 " ODF |
| Oil sight glass | | None |
| Oil equalisation connection | | None |
| Oil drain connection | | None |
| LP gauge port | | Schrader |
| IPR valve | | 30 bar / 8 bar |
| Cylinders | 1 | |
| Swept volume | 53,86 cm3/rev | |
| Displacement @ Nominal speed | 9.4 m3/h @ 2900 rpm - 11.3 m3/h @ 3500 rpm | |
| Net weight | 24 kg | |
| Oil charge | 0,95 litre, POE - 160PZ | |
| Maximum system test pressure Low Side / High side | 25 bar(g) / 30 bar(g) | |
| Maximum differential test pressure | 30 bar | |
| Maximum number of starts per hour | 12 | |
| Refrigerant charge limit | 2,5 kg | |
| Approved refrigerants | R404A, R507A, R134a, R407C | |

Dimensions



D=224 mm H=356 mm H1=263 mm H2=68 mm

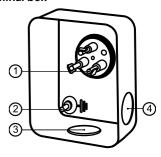
Electrical Characteristics

| Electrical Characteristics | |
|--|-------------------------------------|
| Nominal voltage | 380-400V/3/50Hz - 460V/3/60Hz |
| Voltage range | 340-440 V @ 50Hz - 414-506 V @ 60Hz |
| Winding resistance (between phases) +/- 7% at 25°C | 6.15 Ω |
| Maximum Continuous Current (MCC) | 8 A |
| Locked Rotor Amps (LRA) | 25 A |
| Motor protection | Internal overload protector |

Recommended Installation torques

| Oil sight glass | 0 Nm |
|--------------------------------------|-----------|
| Power connections / Earth connection | Nm / 2 Nm |
| Mounting bolts | 15 Nm |

Terminal box



IP55 (with cable gland)

- 1: Spade connectors 1/4"
- 2: Earth M4-12
- 3: Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83")

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA6873), -

 $[\]hbox{*Singlepack: Compressor in cardboard box}\\$

^{**}Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)



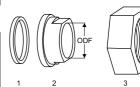
Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MTZ032-4

| Rotolock accessories, suction side | Code no. |
|---|----------|
| Solder sleeve, P09 (1-1/4" Rotolock, 5/8" ODF) | 8153011 |
| Angle adapter, C09 (1-1/4" Rotolock, 5/8" ODF) | 8168009 |
| Rotolock valve, V09 (1-1/4" Rotolock, 5/8" ODF) | 8168033 |
| Gasket, 1-1/4" | 8156131 |

Gaskets, sleeves and nuts

| Rotolock accessories, discharge side | Code no. |
|---|----------|
| Solder sleeve, P06 (1" Rotolock, 1/2" ODF) | 8153007 |
| Angle adapter, C06 (1" Rotolock, 1/2" ODF) | 8168007 |
| Rotolock valve, V06 (1" Rotolock, 1/2" ODF) | 8168031 |
| Gasket, 1" | 8156130 |

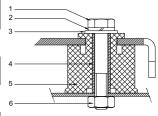


| Rotolock accessories, sets | Code no. |
|---|----------|
| Angle adapter set, C09 (1-1/4"~5/8"), C06 (1"~1/2") | 7703012 |
| Valve set, V09 (1-1/4"~5/8"), V06 (1"~1/2") | 7703005 |
| Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white | 8156009 |

| 1: Gasket |
|-------------------------------------|
| 2: Solder sleeve 3: Rotolock nut |
| 3: Rotolock nut |

| Oil / lubricants | Code no. |
|-----------------------------------|----------|
| POE lubricant, 160PZ, 1 litre can | 7754019 |
| POE lubricant, 160PZ, 2 litre can | 7754020 |

| Crankcase heaters | Code no. |
|--|----------|
| PTC heater 27W | 120Z0459 |
| Belt type crankcase heater, 54 W, 230 V, CE mark, UL | 7773106 |
| Belt type crankcase heater, 54 W, 400 V, UL | 7773013 |



| Miscellaneous accessories | Code no. |
|---|----------|
| Electronic soft start kit, MCI 15 C | 7705006 |
| Acoustic hood for 1 cylinder compressor | 7755001 |

| Spare parts | Code no. |
|---|----------|
| Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts | 8156001 |
| Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp | 8156134 |

1: Bolt (3x)

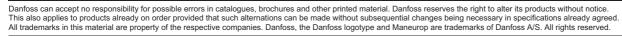
2: Lock washer (3x)

3: Flat washer (3x)

4: Sleeve (3x)

5: Grommet (3x)

6: Nut (3x)







Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|-------------------|------------|-------|-------|---------|-------------------|------------|--------|----|----------|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | | |
| , , | | | | | | | | l. | <u> </u> |
| Cooling capacity | y in W | | | | | | | | |
| 35 | 3 135 | 4 200 | 5 458 | 6 931 | 8 644 | 10 620 | 12 882 | - | - |
| 40 | 2 809 | 3 815 | 4 997 | 6 377 | 7 980 | 9 827 | 11 943 | - | - |
| 45 | 2 480 | 3 428 | 4 534 | 5 821 | 7 313 | 9 032 | 11 003 | - | - |
| 50 | - | 3 040 | 4 071 | 5 265 | 6 646 | 8 238 | 10 063 | - | - |
| 55 | - | - | 3 609 | 4 710 | 5 981 | 7 445 | 9 125 | - | - |
| 60 | - | - | - | 4 159 | 5 320 | 6 656 | 8 191 | - | - |
| 65 | - | - | - | 3 614 | 4 664 | 5 873 | 7 263 | - | - |
| | | | | | | | | | |
| Power input in V | | • | • | 1 | • | | 1 | • | |
| 35 | 1 449 | 1 615 | 1 749 | 1 857 | 1 942 | 2 011 | 2 068 | - | - |
| 40 | 1 487 | 1 689 | 1 856 | 1 991 | 2 101 | 2 190 | 2 262 | - | - |
| 45 | 1 503 | 1 748 | 1 953 | 2 124 | 2 265 | 2 381 | 2 476 | - | - |
| 50 | - | 1 786 | 2 038 | 2 250 | 2 429 | 2 579 | 2 704 | - | - |
| 55 | - | - | 2 103 | 2 365 | 2 588 | 2 779 | 2 940 | - | - |
| 60 | - | - | - | 2 463 | 2 738 | 2 976 | 3 181 | - | - |
| 65 | - | - | - | 2 539 | 2 873 | 3 165 | 3 421 | - | - |
| | | | | | | | | | |
| Current consum | ption in A | | | | | | | | |
| 35 | 3.29 | 3.47 | 3.64 | 3.78 | 3.91 | 4.01 | 4.10 | - | - |
| 40 | 3.34 | 3.57 | 3.78 | 3.95 | 4.11 | 4.24 | 4.35 | - | - |
| 45 | 3.38 | 3.66 | 3.91 | 4.13 | 4.33 | 4.50 | 4.65 | - | - |
| 50 | - | 3.72 | 4.04 | 4.32 | 4.57 | 4.79 | 4.98 | - | - |
| 55 | - | - | 4.14 | 4.49 | 4.81 | 5.09 | 5.33 | - | - |
| 60 | - | - | - | 4.65 | 5.04 | 5.39 | 5.71 | - | - |
| 65 | - | - | - | 4.80 | 5.27 | 5.70 | 6.10 | - | - |
| | | | | | | | | | |
| Mass flow in kg/ | | 1 | | 1 | T | T | 1 | | 1 |
| 35 | 68 | 90 | 115 | 143 | 176 | 213 | 255 | - | - |
| 40 | 64 | 86 | 110 | 138 | 170 | 207 | 248 | - | - |
| 45 | 60 | 81 | 105 | 133 | 164 | 200 | 240 | - | - |
| 50 | - | 76 | 100 | 127 | 158 | 192 | 231 | - | - |
| 55 | - | - | 94 | 121 | 151 | 185 | 222 | - | - |
| 60 | - | - | - | 114 | 144 | 176 | 213 | - | - |
| 65 | - | - | - | 107 | 136 | 168 | 203 | - | - |
| | | | | | | | | | |
| Coefficient of pe | • | · · | | T | 1 | T | T | | T |
| 35 | 2.16 | 2.60 | 3.12 | 3.73 | 4.45 | 5.28 | 6.23 | - | - |
| 40 | 1.89 | 2.26 | 2.69 | 3.20 | 3.80 | 4.49 | 5.28 | - | - |
| 45 | 1.65 | 1.96 | 2.32 | 2.74 | 3.23 | 3.79 | 4.44 | - | - |
| 50 | - | 1.70 | 2.00 | 2.34 | 2.74 | 3.19 | 3.72 | - | - |
| 55 | - | - | 1.72 | 1.99 | 2.31 | 2.68 | 3.10 | - | - |
| 60 | - | - | - | 1.69 | 1.94 | 2.24 | 2.58 | - | - |
| 65 | - | - | - | 1.42 | 1.62 | 1.86 | 2.12 | - | - |

Nominal performance at to = 5 °C, tc = 50 °C

| Cooling capacity | 6 646 | W |
|---------------------|-------|------|
| Power input | 2 429 | W |
| Current consumption | 4.57 | Α |
| Mass flow | 158 | kg/h |
| C.O.P. | 2.74 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Pressure switch settings

| Maximum HP switch setting | 29.4 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 1.3 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R407C

| Cond. temp. in | | | | Evapora | ting temperature | in °C (to) | | | |
|-------------------|--------|-------|-------|---------|------------------|------------|--------|---|---|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | | |
| | | • | • | • | • | • | • | • | |
| Cooling capacity | y in W | | | | | | | | |
| 35 | 3 375 | 4 515 | 5 860 | 7 434 | 9 261 | 11 366 | 13 773 | - | - |
| 40 | 3 040 | 4 123 | 5 393 | 6 875 | 8 591 | 10 568 | 12 830 | - | - |
| 45 | 2 701 | 3 728 | 4 923 | 6 312 | 7 919 | 9 768 | 11 884 | - | - |
| 50 | - | 3 330 | 4 452 | 5 748 | 7 245 | 8 967 | 10 939 | - | - |
| 55 | - | - | 3 980 | 5 186 | 6 573 | 8 168 | 9 996 | - | - |
| 60 | - | - | - | 4 626 | 5 905 | 7 374 | 9 058 | - | - |
| 65 | - | - | - | 4 072 | 5 244 | 6 587 | 8 129 | - | - |
| | | | | | | | | | |
| Power input in V | | T | 1 | T | T | T | 1 | Т | Γ |
| 35 | 1 449 | 1 615 | 1 749 | 1 857 | 1 942 | 2 011 | 2 068 | - | - |
| 40 | 1 487 | 1 689 | 1 856 | 1 991 | 2 101 | 2 190 | 2 262 | - | - |
| 45 | 1 503 | 1 748 | 1 953 | 2 124 | 2 265 | 2 381 | 2 476 | - | - |
| 50 | - | 1 786 | 2 038 | 2 250 | 2 429 | 2 579 | 2 704 | - | - |
| 55 | - | - | 2 103 | 2 365 | 2 588 | 2 779 | 2 940 | - | - |
| 60 | - | - | - | 2 463 | 2 738 | 2 976 | 3 181 | - | - |
| 65 | - | - | - | 2 539 | 2 873 | 3 165 | 3 421 | - | - |
| | | | | | | | | | |
| Current consum | - | T | T | I | 1 | T | T | Τ | |
| 35 | 3.29 | 3.47 | 3.64 | 3.78 | 3.91 | 4.01 | 4.10 | - | - |
| 40 | 3.34 | 3.57 | 3.78 | 3.95 | 4.11 | 4.24 | 4.35 | - | - |
| 45 | 3.38 | 3.66 | 3.91 | 4.13 | 4.33 | 4.50 | 4.65 | - | - |
| 50 | - | 3.72 | 4.04 | 4.32 | 4.57 | 4.79 | 4.98 | - | - |
| 55 | - | - | 4.14 | 4.49 | 4.81 | 5.09 | 5.33 | - | - |
| 60 | - | - | - | 4.65 | 5.04 | 5.39 | 5.71 | - | - |
| 65 | - | - | - | 4.80 | 5.27 | 5.70 | 6.10 | - | - |
| | _ | | | | | | | | |
| Mass flow in kg/ | | 1 00 | 1 | 140 | 1 | 1 040 | 1 054 | | |
| 35 | 68 | 89 | 114 | 142 | 175 | 212 | 254 | - | - |
| 40 | 64 | 85 | 110 | 137 | 169 | 205 | 246 | - | - |
| 45 | 59 | 81 | 105 | 132 | 163 | 198 | 238 | - | - |
| 50 | - | 76 | 100 | 126 | 157 | 191 | 230 | - | - |
| 55 | - | - | 94 | 120 | 150 | 183 | 221 | - | - |
| 60 | - | - | - | 114 | 143 | 175 | 212 | - | - |
| 65 | - | - | - | 107 | 135 | 167 | 202 | - | - |
| 0 651 - 1 4 - 5 | | | | | | | | | |
| Coefficient of pe | | _ | 0.05 | 4.00 | 1 4 | F 05 | 0.00 | I | |
| 35 | 2.33 | 2.80 | 3.35 | 4.00 | 4.77 | 5.65 | 6.66 | - | - |
| 40 | 2.04 | 2.44 | 2.91 | 3.45 | 4.09 | 4.83 | 5.67 | - | - |
| 45 | 1.80 | 2.13 | 2.52 | 2.97 | 3.50 | 4.10 | 4.80 | - | - |
| 50 | - | 1.86 | 2.18 | 2.55 | 2.98 | 3.48 | 4.05 | - | - |
| 55 | - | - | 1.89 | 2.19 | 2.54 | 2.94 | 3.40 | - | - |
| 60 | - | - | - | 1.88 | 2.16 | 2.48 | 2.85 | - | - |
| 65 | - | - | - | 1.60 | 1.83 | 2.08 | 2.38 | - | - |

Nominal performance at to = 7.2 °C, tc = 54.4 °C

| Cooling capacity | 7 335 | W |
|---------------------|-------|------|
| Power input | 2 655 | W |
| Current consumption | 4.90 | Α |
| Mass flow | 165 | kg/h |
| C.O.P. | 2.76 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

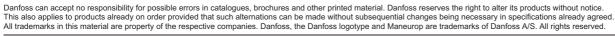
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| Maximum HP switch setting | 29.4 | bar(g) | |
|---------------------------|------|--------|--|
| Minimum LP switch setting | 0.2 | bar(g) | |
| LP pump down setting | 1.3 | bar(q) | |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |







Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

| Cond. temp. in | | | | Evapora | ting temperature | in °C (to) | | | |
|-------------------|------------|---------|-------|----------------|------------------|----------------|------------------|----------------|----------|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 | |
| I. | | | | | ı | | | | |
| Cooling capacity | | T | T | 1 | 1 | T | | 1 | |
| 35 | 1 794 | 2 474 | 3 326 | 4 372 | 5 639 | 7 150 | 8 931 | 11 006 | - |
| 40 | 1 604 | 2 244 | 3 046 | 4 033 | 5 230 | 6 662 | 8 354 | 10 330 | - |
| 45 | 1 428 | 2 022 | 2 768 | 3 691 | 4 813 | 6 160 | 7 757 | 9 628 | - |
| 50 | 1 268 | 1 811 | 2 497 | 3 348 | 4 389 | 5 646 | 7 142 | 8 902 | - |
| 55 | 1 128 | 1 614 | 2 233 | 3 007 | 3 962 | 5 122 | 6 511 | 8 154 | - |
| 60 | - | 1 433 | 1 979 | 2 672 | 3 535 | 4 592 | 5 869 | 7 389 | - |
| 65 | - | - | - | 2 344 | 3 110 | 4 059 | 5 218 | 6 609 | - |
| 70 | - | - | - | - | - | 3 526 | 4 560 | 5 816 | - |
| Power input in V | v | | | | | | | | |
| 35 | 1 034 | 1 173 | 1 299 | 1 408 | 1 494 | 1 551 | 1 574 | 1 557 | _ |
| 40 | 1 066 | 1 214 | 1 353 | 1 476 | 1 579 | 1 655 | 1 699 | 1 706 | |
| 45 | 1 088 | 1 248 | 1 400 | 1 540 | 1 661 | 1 758 | 1 825 | 1 858 | |
| 50 | 1 102 | 1 248 | 1 442 | 1 540 | 1 740 | 1 758 | 1 951 | 2 011 | <u> </u> |
| 55 | 1 102 | 1 274 | 1 442 | 1 652 | 1 815 | 1 958 | 2 077 | 2 165 | <u> </u> |
| 60 | | 1 301 | | | | 1 | | | |
| 65 | - | - 1 301 | 1 504 | 1 700 1 742 | 1 886 1 952 | 2 055 2 148 | 2 201 2 324 | 2 319 2 474 | <u> </u> |
| 70 | <u> </u> | - | - | - 1742 | 1 952 | 2 148 | 2 324 | 2 628 | <u> </u> |
| 10 | - | | | <u> </u> | <u> </u> | 2 230 | 2 111 | 2 020 | |
| urrent consum | ntion in A | | | | | | | | |
| 35 | 3.14 | 3.25 | 3.35 | 3.44 | 3.51 | 3.56 | 3.57 | 3.56 | _ |
| 40 | 3.17 | 3.29 | 3.41 | 3.52 | 3.61 | 3.68 | 3.72 | 3.73 | _ |
| 45 | 3.19 | 3.33 | 3.47 | 3.59 | 3.70 | 3.80 | 3.87 | 3.92 | _ |
| 50 | 3.20 | 3.36 | 3.51 | 3.66 | 3.80 | 3.92 | 4.02 | 4.10 | _ |
| 55 | 3.20 | 3.37 | 3.55 | 3.72 | 3.88 | 4.03 | 4.17 | 4.28 | |
| 60 | - | 3.38 | 3.57 | 3.77 | 3.96 | 4.14 | 4.31 | 4.46 | _ |
| 65 | _ | - | - | 3.81 | 4.03 | 4.24 | 4.44 | 4.63 | _ |
| 70 | - | - | - | - | - | 4.33 | 4.57 | 4.80 | _ |
| 7.0 | | I | I | I | 1 | 1.00 | 1.07 | 1.00 | |
| lass flow in kg/ | h | | | | | | | | |
| 35 | 44 | 59 | 77 | 99 | 126 | 156 | 192 | 233 | - |
| 40 | 41 | 56 | 74 | 96 | 122 | 153 | 188 | 229 | - |
| 45 | 38 | 53 | 71 | 93 | 118 | 148 | 183 | 223 | - |
| 50 | 36 | 50 | 68 | 89 | 114 | 143 | 177 | 217 | - |
| 55 | 34 | 48 | 65 | 85 | 109 | 138 | 171 | 210 | - |
| 60 | - | 46 | 61 | 81 | 104 | 132 | 164 | 202 | - |
| 65 | - | - | - | 77 | 99 | 125 | 156 | 193 | - |
| 70 | - | - | - | - | - | 118 | 148 | 183 | - |
| • | _ | | 1 | 1 | ı | - | | | |
| Coefficient of pe | • | · · | 0.50 | 0.40 | T 0 == | 4.04 | F 07 | 7.5- | |
| 35 | 1.73 | 2.11 | 2.56 | 3.10 | 3.77 | 4.61 | 5.67 | 7.07 | - |
| 40 | 1.50 | 1.85 | 2.25 | 2.73 | 3.31 | 4.03 | 4.92 | 6.05 | - |
| 45 | 1.31 | 1.62 | 1.98 | 2.40 | 2.90 | 3.50 | 4.25 | 5.18 | - |
| 50 | 1.15 | 1.42 | 1.73 | 2.09 | 2.52 | 3.04 | 3.66 | 4.43 | - |
| 55 | 1.02 | 1.25 | 1.51 | 1.82 | 2.18 | 2.62 | 3.14 | 3.77 | - |
| 60 | - | 1.10 | 1.32 | 1.57 | 1.87 | 2.24 | 2.67 | 3.19 | - |
| 65 | - | - | - | 1.35 | 1.59 | 1.89 | 2.25 | 2.67 | - |
| 70 | - | - | - | - | - | 1.58 | 1.87 | 2.21 | - |

Nominal performance at to = 5 °C, tc = 50 °C

| | •• • | |
|---------------------|-------|------|
| Cooling capacity | 4 389 | W |
| Power input | 1 740 | W |
| Current consumption | 3.80 | Α |
| Mass flow | 114 | kg/h |
| C.O.P. | 2.52 | |

to: Evaporating temperature at dew point

Pressure switch settings

| Maximum HP switch setting | 22.6 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%



tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R134a

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|-------------------|-----------------|-------|-------|---------|-------------------|------------|-------|--------------|---|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 | |
| J. | | 1 | 1 | U. | | 1 | U. | , | |
| Cooling capacity | | T | T | 1 | 1 | T | 1 | | |
| 35 | 1 943 | 2 676 | 3 590 | 4 713 | 6 069 | 7 684 | 9 585 | 11 796 | - |
| 40 | 1 746 | 2 439 | 3 305 | 4 368 | 5 656 | 7 193 | 9 006 | 11 120 | - |
| 45 | 1 564 | 2 211 | 3 021 | 4 020 | 5 233 | 6 685 | 8 404 | 10 415 | - |
| 50 | 1 400 | 1 995 | 2 743 | 3 670 | 4 802 | 6 164 | 7 782 | 9 683 | - |
| 55 | 1 255 | 1 792 | 2 472 | 3 321 | 4 366 | 5 631 | 7 143 | 8 927 | - |
| 60 | - | 1 606 | 2 212 | 2 977 | 3 928 | 5 090 | 6 489 | 8 151 | - |
| 65 | - | - | - | 2 640 | 3 491 | 4 543 | 5 823 | 7 356 | - |
| 70 | - | - | - | - | - | 3 994 | 5 149 | 6 547 | - |
| Power input in V | v | | | | | | | | |
| 35 | 1 034 | 1 173 | 1 299 | 1 408 | 1 494 | 1 551 | 1 574 | 1 557 | _ |
| 40 | 1 066 | 1 214 | 1 353 | 1 476 | 1 579 | 1 655 | 1 699 | 1 706 | |
| 45 | 1 088 | 1 248 | 1 400 | 1 540 | 1 661 | 1 758 | 1 825 | 1 858 | |
| 50 | 1 102 | 1 274 | 1 442 | 1 599 | 1 740 | 1 859 | 1 951 | 2 011 | |
| 55 | 1 105 | 1 292 | 1 476 | 1 652 | 1 815 | 1 958 | 2 077 | 2 165 | |
| 60 | - | 1 301 | 1 504 | 1 700 | 1 886 | 2 055 | 2 201 | 2 319 | |
| 65 | _ | - | - | 1 742 | 1 952 | 2 148 | 2 324 | 2 474 | |
| 70 | <u>-</u> | _ | _ | - | - | 2 238 | 2 444 | 2 628 | |
| 70 | | ı | ı | 1 | 1 | 2 200 | 2 | 2 020 | |
| urrent consum | ption in A | | | | | | | | |
| 35 | 3.14 | 3.25 | 3.35 | 3.44 | 3.51 | 3.56 | 3.57 | 3.56 | - |
| 40 | 3.17 | 3.29 | 3.41 | 3.52 | 3.61 | 3.68 | 3.72 | 3.73 | - |
| 45 | 3.19 | 3.33 | 3.47 | 3.59 | 3.70 | 3.80 | 3.87 | 3.92 | - |
| 50 | 3.20 | 3.36 | 3.51 | 3.66 | 3.80 | 3.92 | 4.02 | 4.10 | - |
| 55 | 3.20 | 3.37 | 3.55 | 3.72 | 3.88 | 4.03 | 4.17 | 4.28 | - |
| 60 | - | 3.38 | 3.57 | 3.77 | 3.96 | 4.14 | 4.31 | 4.46 | - |
| 65 | _ | - | _ | 3.81 | 4.03 | 4.24 | 4.44 | 4.63 | - |
| 70 | - | - | - | - | - | 4.33 | 4.57 | 4.80 | - |
| Į. | | • | • | | • | • | | | |
| lass flow in kg/ | 'h | | | | | | | | |
| 35 | 43 | 59 | 77 | 99 | 125 | 156 | 191 | 232 | - |
| 40 | 41 | 56 | 74 | 96 | 122 | 152 | 187 | 227 | - |
| 45 | 38 | 53 | 71 | 92 | 118 | 147 | 182 | 222 | - |
| 50 | 36 | 50 | 67 | 88 | 113 | 142 | 176 | 216 | - |
| 55 | 34 | 48 | 64 | 84 | 108 | 137 | 170 | 208 | - |
| 60 | - | 45 | 61 | 80 | 103 | 131 | 163 | 200 | - |
| 65 | - | - | - | 76 | 98 | 124 | 155 | 192 | - |
| 70 | - | - | - | - | - | 118 | 147 | 182 | - |
| Coefficient of no | erformance (C.C |) P) | | | | | | | |
| 35 | 1.88 | 2.28 | 2.76 | 3.35 | 4.06 | 4.95 | 6.09 | 7.58 | _ |
| 40 | 1.64 | 2.01 | 2.44 | 2.96 | 3.58 | 4.35 | 5.30 | 6.52 | _ |
| 45 | 1.44 | 1.77 | 2.16 | 2.61 | 3.15 | 3.80 | 4.60 | 5.61 | |
| 50 | 1.27 | 1.57 | 1.90 | 2.30 | 2.76 | 3.32 | 3.99 | 4.82 | _ |
| 55 | 1.14 | 1.39 | 1.67 | 2.01 | 2.70 | 2.88 | 3.44 | 4.12 | |
| 60 | - | 1.23 | 1.47 | 1.75 | 2.41 | 2.48 | 2.95 | 3.51 | |
| 65 | <u>-</u> | - | - | 1.75 | 1.79 | 2.40 | 2.95 | 2.97 | - |
| | - | - | _ | 1.52 | 1.79 | 2.12 | 2.51 | 2.31 | - |

Nominal performance at to = 7.2 °C, tc = 54.4 °C

| reciminal portermance at to 7.2 e, to | U-1 U | | |
|---------------------------------------|-------|------|--|
| Cooling capacity | 4 951 | W | |
| Power input | 1 871 | W | |
| Current consumption | 3.94 | Α | |
| Mass flow | 121 | kg/h | |
| C.O.P. | 2.65 | | |

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| Maximum HP switch setting | 22.6 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R404A

| Cond. temp. in | | | | Evapora | ting temperature i | n °C (to) | | | |
|-------------------|------------------|----------|----------|------------|--------------------|------------|------------|-------------|------------|
| °C (tc) | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| | | | | | | | | | |
| Cooling capacity | | 1 | 1 | | 1 | | | | T |
| 30 | 1 757 | 2 453 | 3 305 | 4 335 | 5 561 | 7 003 | 8 682 | 10 616 | 12 826 |
| 35 | 1 510 | 2 155 | 2 945 | 3 899 | 5 036 | 6 376 | 7 940 | 9 747 | 11 816 |
| 40 | 1 271 | 1 864 | 2 589 | 3 464 | 4 509 | 5 745 | 7 191 | 8 867 | 10 793 |
| 45 | 1 044 | 1 582 | 2 238 | 3 031 | 3 983 | 5 111 | 6 437 | 7 980 | 9 759 |
| 50 | 828 | 1 308 | 1 893 | 2 603 | 3 457 | 4 476 | 5 679 | 7 085 | 8 715 |
| 55 | - | 1 046 | 1 557 | 2 180 | 2 935 | 3 841 | 4 917 | 6 185 | 7 663 |
| 60 | - | 796 | 1 231 | 1 764 | 2 417 | 3 207 | 4 155 | 5 281 | 6 605 |
| Power input in \ | A/ | | | | | | | | |
| 30 | 1 246 | 1 436 | 1 610 | 1 767 | 1 904 | 2 021 | 2 115 | 2 187 | 2 234 |
| 35 | 1 243 | 1 456 | 1 653 | 1 834 | 1 997 | 2 141 | 2 265 | 2 367 | 2 445 |
| 40 | 1 227 | 1 463 | 1 685 | 1 892 | 2 083 | 2 256 | 2 409 | 2 542 | 2 654 |
| 45 | 1 198 | 1 458 | 1 706 | 1 941 | 2 160 | 2 363 | 2 548 | 2 714 | 2 860 |
| 50 | 1 154 | 1 441 | 1 716 | 1 980 | 2 229 | 2 464 | 2 682 | 2 882 | 3 063 |
| 55 | - | 1 410 | 1 715 | 2 008 | 2 289 | 2 557 | 2 809 | 3 045 | 3 263 |
| 60 | - | 1 367 | 1 701 | 2 026 | 2 340 | 2 642 | 2 930 | 3 203 | 3 460 |
| • | | • | • | | • | | | | |
| Current consum | ption in A | | | | | | | | |
| 30 | 3.07 | 3.27 | 3.49 | 3.71 | 3.91 | 4.08 | 4.20 | 4.27 | 4.26 |
| 35 | 3.08 | 3.30 | 3.54 | 3.78 | 4.01 | 4.21 | 4.37 | 4.47 | 4.50 |
| 40 | 3.08 | 3.33 | 3.59 | 3.86 | 4.12 | 4.36 | 4.57 | 4.72 | 4.80 |
| 45 | 3.06 | 3.33 | 3.63 | 3.94 | 4.25 | 4.53 | 4.79 | 4.99 | 5.14 |
| 50 | 3.00 | 3.31 | 3.65 | 4.01 | 4.36 | 4.70 | 5.02 | 5.28 | 5.49 |
| 55 | - | 3.25 | 3.64 | 4.05 | 4.46 | 4.86 | 5.24 | 5.58 | 5.86 |
| 60 | - | 3.13 | 3.58 | 4.04 | 4.52 | 4.99 | 5.44 | 5.86 | 6.22 |
| | | | | | | | | | |
| Mass flow in kg | / n 55 | 76 | 99 | 127 | 159 | 195 | 237 | 284 | 337 |
| 35 | 51 | 71 | 95 | 127 | 153 | 189 | 230 | 277 | 329 |
| 40 | 47 | 66 | 90 | 116 | 147 | 183 | 223 | 269 | 329 |
| | | | 1 | | | | | | 1 |
| 45 50 | 42 37 | 62 56 | 84 79 | 111 104 | 141 134 | 176 169 | 216 208 | 261 253 | 312 303 |
| 55 | - | 51 | 79 | 98 | 127 | 161 | 199 | 243 | 292 |
| 60 | | 45 | 66 | 91 | 119 | 152 | 199 | 233 | 292 |
| 00 | | 1 70 | 00 | J1 | 110 | 102 | 100 | 200 | 201 |
| Coefficient of pe | erformance (C.O | .P.) | | | | | | | |
| 30 | 1.41 | 1.71 | 2.05 | 2.45 | 2.92 | 3.47 | 4.10 | 4.85 | 5.74 |
| 35 | 1.21 | 1.48 | 1.78 | 2.13 | 2.52 | 2.98 | 3.51 | 4.12 | 4.83 |
| 40 | 1.04 | 1.27 | 1.54 | 1.83 | 2.16 | 2.55 | 2.98 | 3.49 | 4.07 |
| 45 | 0.87 | 1.08 | 1.31 | 1.56 | 1.84 | 2.16 | 2.53 | 2.94 | 3.41 |
| 50 | 0.72 | 0.91 | 1.10 | 1.31 | 1.55 | 1.82 | 2.12 | 2.46 | 2.85 |
| 55 | - | 0.74 | 0.91 | 1.09 | 1.28 | 1.50 | 1.75 | 2.03 | 2.35 |
| 55 | | | | | | | | | |

Nominal performance at to = -10 °C, tc = 45 °C

| | | |
|---------------------|-------|------|
| Cooling capacity | 3 983 | W |
| Power input | 2 160 | W |
| Current consumption | 4.25 | Α |
| Mass flow | 141 | kg/h |
| C.O.P. | 1.84 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Pressure switch settings

| Maximum HP switch setting | 27.7 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.9 | bar(g) |

Sound power data

| Sound power level | 71 | dB(A) |
|---------------------|----|-------|
| With accoustic hood | 64 | dB(A) |

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R404A

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|------------------|-----------------|-------|-------|---------|-------------------|------------|-------|--------|--------|
| °C (tc) | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| | | | | | | | | | |
| Cooling capacit | | 0.700 | 0.000 | 4.700 | 0.400 | 7.704 | 0.507 | 44.007 | 14.004 |
| 30 | 1 956 | 2 723 | 3 660 | 4 788 | 6 128 | 7 701 | 9 527 | 11 627 | 14 021 |
| 35 | 1 699 | 2 417 | 3 293 | 4 347 | 5 600 | 7 073 | 8 787 | 10 762 | 13 019 |
| 40 | 1 449 | 2 117 | 2 930 | 3 907 | 5 070 | 6 441 | 8 040 | 9 888 | 12 006 |
| 45 | 1 210 | 1 825 | 2 570 | 3 468 | 4 540 | 5 806 | 7 288 | 9 007 | 10 983 |
| 50 | 981 | 1 541 | 2 218 | 3 034 | 4 011 | 5 171 | 6 534 | 8 123 | 9 957 |
| 55 | - | 1 267 | 1 874 | 2 607 | 3 488 | 4 540 | 5 784 | 7 242 | 8 934 |
| 60 | - | 1 006 | 1 541 | 2 190 | 2 976 | 3 921 | 5 047 | 6 375 | 7 929 |
| Power input in \ | N | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| 30 | 1 246 | 1 436 | 1 610 | 1 767 | 1 904 | 2 021 | 2 115 | 2 187 | 2 234 |
| 35 | 1 243 | 1 456 | 1 653 | 1 834 | 1 997 | 2 141 | 2 265 | 2 367 | 2 445 |
| 40 | 1 227 | 1 463 | 1 685 | 1 892 | 2 083 | 2 256 | 2 409 | 2 542 | 2 654 |
| 45 | 1 198 | 1 458 | 1 706 | 1 941 | 2 160 | 2 363 | 2 548 | 2 714 | 2 860 |
| 50 | 1 154 | 1 441 | 1 716 | 1 980 | 2 229 | 2 464 | 2 682 | 2 882 | 3 063 |
| 55 | - | 1 410 | 1 715 | 2 008 | 2 289 | 2 557 | 2 809 | 3 045 | 3 263 |
| 60 | - | 1 367 | 1 701 | 2 026 | 2 340 | 2 642 | 2 930 | 3 203 | 3 460 |
| Current consum | nption in A | | | | | | | | |
| 30 | 3.07 | 3.27 | 3.49 | 3.71 | 3.91 | 4.08 | 4.20 | 4.27 | 4.26 |
| 35 | 3.08 | 3.30 | 3.54 | 3.78 | 4.01 | 4.21 | 4.37 | 4.47 | 4.50 |
| 40 | 3.08 | 3.33 | 3.59 | 3.86 | 4.12 | 4.36 | 4.57 | 4.72 | 4.80 |
| 45 | 3.06 | 3.33 | 3.63 | 3.94 | 4.25 | 4.53 | 4.79 | 4.99 | 5.14 |
| 50 | 3.00 | 3.31 | 3.65 | 4.01 | 4.36 | 4.70 | 5.02 | 5.28 | 5.49 |
| 55 | - | 3.25 | 3.64 | 4.05 | 4.46 | 4.86 | 5.24 | 5.58 | 5.86 |
| 60 | - | 3.13 | 3.58 | 4.04 | 4.52 | 4.99 | 5.44 | 5.86 | 6.22 |
| Mass flow in kg | /h | | | | | | | | |
| 30 | 55 | 75 | 99 | 126 | 158 | 194 | 235 | 282 | 335 |
| 35 | 51 | 71 | 94 | 121 | 152 | 188 | 229 | 275 | 327 |
| 40 | 46 | 66 | 89 | 116 | 147 | 182 | 222 | 268 | 319 |
| 45 | 42 | 61 | 84 | 110 | 140 | 175 | 215 | 260 | 310 |
| 50 | 37 | 56 | 78 | 104 | 134 | 168 | 207 | 251 | 301 |
| 55 | - | 50 | 72 | 97 | 126 | 160 | 198 | 241 | 290 |
| 60 | - | 45 | 66 | 90 | 119 | 151 | 189 | 231 | 280 |
| Coefficient of p | erformance (C.C |).P.) | | | | | | | |
| 30 | 1.57 | 1.90 | 2.27 | 2.71 | 3.22 | 3.81 | 4.50 | 5.32 | 6.28 |
| 35 | 1.37 | 1.66 | 1.99 | 2.37 | 2.80 | 3.30 | 3.88 | 4.55 | 5.33 |
| 40 | 1.18 | 1.45 | 1.74 | 2.06 | 2.43 | 2.86 | 3.34 | 3.89 | 4.52 |
| 45 | 1.01 | 1.25 | 1.51 | 1.79 | 2.10 | 2.46 | 2.86 | 3.32 | 3.84 |
| 50 | 0.85 | 1.07 | 1.29 | 1.53 | 1.80 | 2.10 | 2.44 | 2.82 | 3.25 |
| 55 | - | 0.90 | 1.09 | 1.30 | 1.52 | 1.78 | 2.06 | 2.38 | 2.74 |
| 55 | | | | | | | | | |

| Nominal performance at to = -10 °C, tc = 45 °C |
|--|
|--|

| Cooling capacity | 4 540 | W |
|---------------------|-------|------|
| Power input | 2 160 | W |
| Current consumption | 4.25 | Α |
| Mass flow | 140 | kg/h |
| C.O.P. | 2.10 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

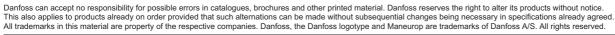
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| 27.7 | bar(g) |
|------|--------|
| 0.2 | bar(g) |
| 0.9 | bar(g) |
| | 0.2 |

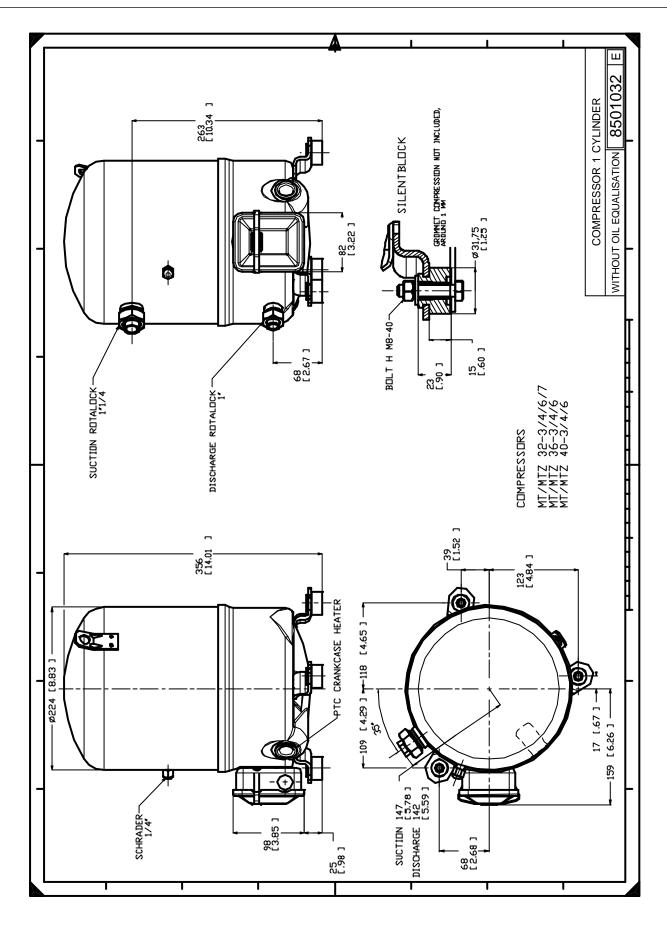
Sound power data

| Sound power level | 71 | dB(A) |
|---------------------|----|-------|
| With accoustic hood | 64 | dB(A) |











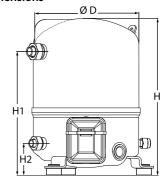


Datasheet, technical data

General Characteristics

| Model number (on compressor nameplate) | MTZ32JF4BVE | | |
|---|-----------------------|----------------------|--|
| Code number for Singlepack* | | MTZ32-4VI | |
| Code number for Industrial pack** | | MTZ32-4VM | |
| Drawing number | | 8501025f | |
| Suction and discharge connections | | Rotolock | |
| Suction connection | | 1-1/4 " Rotolock | |
| Discharge connection | | 1 " Rotolock | |
| Suction connection with supplied sleeve | | 5/8 " ODF | |
| Discharge connection with supplied sleeve | | 1/2 " ODF | |
| Oil sight glass | | Threaded | |
| Oil equalisation connection | | 3/8" flare SAE | |
| Oil drain connection | | None | |
| LP gauge port | | Schrader | |
| IPR valve | | 30 bar / 8 bar | |
| Cylinders | 1 | l | |
| Swept volume | 53,86 c | m3/rev | |
| Displacement @ Nominal speed | 9.4 m3/h @ 2900 rpm - | 11.3 m3/h @ 3500 rpm | |
| Net weight | 24 | kg | |
| Oil charge | 0,95 litre, P | OE - 160PZ | |
| Maximum system test pressure Low Side / High side | 25 bar(g) / | ' 30 bar(g) | |
| Maximum differential test pressure | 30 | bar | |
| Maximum number of starts per hour | 1 | 2 | |
| Refrigerant charge limit | 2,5 | kg | |
| Approved refrigerants | R404A, R507A, | R134a, R407C | |

Dimensions



D=224 mm H=356 mm H1=263 mm H2=68 mm

Terminal box

①

Flectrical Characteristics

| Electrical Characteristics | |
|--|-------------------------------------|
| Nominal voltage | 380-400V/3/50Hz - 460V/3/60Hz |
| Voltage range | 340-440 V @ 50Hz - 414-506 V @ 60Hz |
| Winding resistance (between phases) +/- 7% at 25°C | 6.15 Ω |
| Maximum Continuous Current (MCC) | 8 A |
| Locked Rotor Amps (LRA) | 25 A |
| Motor protection | Internal overload protector |

Recommended Installation torques

| Oil sight glass | 50 Nm |
|--------------------------------------|-----------|
| Power connections / Earth connection | Nm / 2 Nm |
| Mounting bolts | 15 Nm |

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only) Initial oil charge Installation instructions

IP55 (with cable gland) 1:

- Spade connectors 1/4"
- 2: Earth M4-12
- Knock-out Ø 21 mm (0.83") 3:
- 4: Hole Ø 21 mm (0.83")

Approvals: CE certified, UL certified (file SA6873), CCC certified

- *Singlepack: Compressor in cardboard box
- **Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)





Datasheet, accessories and spare parts

Oil sight glass with gaskets (black & white)

Gasket for oil sight glass (black chloroprene)

Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp

Maneurop reciprocating compressor, MTZ032-4

| Rotolock accessories, suction side | Code no. | |
|---|----------|---------------------------|
| Solder sleeve, P09 (1-1/4" Rotolock, 5/8" ODF) | 8153011 | |
| Angle adapter, C09 (1-1/4" Rotolock, 5/8" ODF) | 8168009 | |
| Rotolock valve, V09 (1-1/4" Rotolock, 5/8" ODF) | 8168033 | Gaskets, sleeves and nuts |
| Gasket, 1-1/4" | 8156131 | |
| Rotolock accessories, discharge side | Code no. | |
| Solder sleeve, P06 (1" Rotolock, 1/2" ODF) | 8153007 | |
| Angle adapter, C06 (1" Rotolock, 1/2" ODF) | 8168007 | |
| Rotolock valve, V06 (1" Rotolock, 1/2" ODF) | 8168031 | |
| Gasket, 1" | 8156130 | 1 2 3 |
| Rotolock accessories, sets | Code no. | 1: Gasket |
| Angle adapter set, C09 (1-1/4"~5/8"), C06 (1"~1/2") | 7703012 | 2: Solder sleeve |
| Valve set, V09 (1-1/4"~5/8"), V06 (1"~1/2") | 7703005 | 3: Rotolock nut |
| Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white | 8156009 | |
| Oil / lubricants | Code no. | |
| POE lubricant, 160PZ, 1 litre can | 7754019 | |
| POE lubricant, 160PZ, 2 litre can | 7754020 | |
| Crankcase heaters | Code no. | Mounting kit |
| PTC heater 27W | 120Z0459 | |
| Belt type crankcase heater, 54 W, 230 V, CE mark, UL | 7773106 | 1 |
| Belt type crankcase heater, 54 W, 400 V, UL | 7773013 | 2 |
| Miscellaneous accessories | Code no. | |
| Electronic soft start kit, MCI 15 C | 7705006 | 4 |
| Acoustic hood for 1 cylinder compressor | 7755001 | |
| Oil equalisation nut | 8153127 | |
| Spare parts | Code no. | 0 |
| Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts | 8156001 | |
| | 1 | 1.0-1/2.) |

5: Grommet (3x) 6: Nut (3x)

1: Bolt (3x)

2: Lock washer (3x)

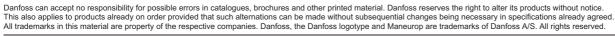
3: Flat washer (3x)

4: Sleeve (3x)

8156019

8156145

8156134







Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|-------------------|------------|-------|-------|---------|-------------------|------------|--------|----|----------|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | | |
| , , | | | | | | | | l. | <u> </u> |
| Cooling capacity | y in W | | | | | | | | |
| 35 | 3 135 | 4 200 | 5 458 | 6 931 | 8 644 | 10 620 | 12 882 | - | - |
| 40 | 2 809 | 3 815 | 4 997 | 6 377 | 7 980 | 9 827 | 11 943 | - | - |
| 45 | 2 480 | 3 428 | 4 534 | 5 821 | 7 313 | 9 032 | 11 003 | - | - |
| 50 | - | 3 040 | 4 071 | 5 265 | 6 646 | 8 238 | 10 063 | - | - |
| 55 | - | - | 3 609 | 4 710 | 5 981 | 7 445 | 9 125 | - | - |
| 60 | - | - | - | 4 159 | 5 320 | 6 656 | 8 191 | - | - |
| 65 | - | - | - | 3 614 | 4 664 | 5 873 | 7 263 | - | - |
| | | | | | | | | | |
| Power input in V | | • | • | 1 | • | | 1 | • | |
| 35 | 1 449 | 1 615 | 1 749 | 1 857 | 1 942 | 2 011 | 2 068 | - | - |
| 40 | 1 487 | 1 689 | 1 856 | 1 991 | 2 101 | 2 190 | 2 262 | - | - |
| 45 | 1 503 | 1 748 | 1 953 | 2 124 | 2 265 | 2 381 | 2 476 | - | - |
| 50 | - | 1 786 | 2 038 | 2 250 | 2 429 | 2 579 | 2 704 | - | - |
| 55 | - | - | 2 103 | 2 365 | 2 588 | 2 779 | 2 940 | - | - |
| 60 | - | - | - | 2 463 | 2 738 | 2 976 | 3 181 | - | - |
| 65 | - | - | - | 2 539 | 2 873 | 3 165 | 3 421 | - | - |
| | | | | | | | | | |
| Current consum | ption in A | | | | | | | | |
| 35 | 3.29 | 3.47 | 3.64 | 3.78 | 3.91 | 4.01 | 4.10 | - | - |
| 40 | 3.34 | 3.57 | 3.78 | 3.95 | 4.11 | 4.24 | 4.35 | - | - |
| 45 | 3.38 | 3.66 | 3.91 | 4.13 | 4.33 | 4.50 | 4.65 | - | - |
| 50 | - | 3.72 | 4.04 | 4.32 | 4.57 | 4.79 | 4.98 | - | - |
| 55 | - | - | 4.14 | 4.49 | 4.81 | 5.09 | 5.33 | - | - |
| 60 | - | - | - | 4.65 | 5.04 | 5.39 | 5.71 | - | - |
| 65 | - | - | - | 4.80 | 5.27 | 5.70 | 6.10 | - | - |
| | | | | | | | | | |
| Mass flow in kg/ | | 1 | | 1 | T | T | 1 | | 1 |
| 35 | 68 | 90 | 115 | 143 | 176 | 213 | 255 | - | - |
| 40 | 64 | 86 | 110 | 138 | 170 | 207 | 248 | - | - |
| 45 | 60 | 81 | 105 | 133 | 164 | 200 | 240 | - | - |
| 50 | - | 76 | 100 | 127 | 158 | 192 | 231 | - | - |
| 55 | - | - | 94 | 121 | 151 | 185 | 222 | - | - |
| 60 | - | - | - | 114 | 144 | 176 | 213 | - | - |
| 65 | - | - | - | 107 | 136 | 168 | 203 | - | - |
| | | | | | | | | | |
| Coefficient of pe | • | · · | | T | | T | T | | T |
| 35 | 2.16 | 2.60 | 3.12 | 3.73 | 4.45 | 5.28 | 6.23 | - | - |
| 40 | 1.89 | 2.26 | 2.69 | 3.20 | 3.80 | 4.49 | 5.28 | - | - |
| 45 | 1.65 | 1.96 | 2.32 | 2.74 | 3.23 | 3.79 | 4.44 | - | - |
| 50 | - | 1.70 | 2.00 | 2.34 | 2.74 | 3.19 | 3.72 | - | - |
| 55 | - | - | 1.72 | 1.99 | 2.31 | 2.68 | 3.10 | - | - |
| 60 | - | - | - | 1.69 | 1.94 | 2.24 | 2.58 | - | - |
| 65 | - | - | - | 1.42 | 1.62 | 1.86 | 2.12 | - | - |

Nominal performance at to = 5 °C, tc = 50 °C

| Cooling capacity | 6 646 | W |
|---------------------|-------|------|
| Power input | 2 429 | W |
| Current consumption | 4.57 | Α |
| Mass flow | 158 | kg/h |
| C.O.P. | 2.74 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Pressure switch settings

| Maximum HP switch setting | 29.4 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 1.3 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R407C

| Cond. temp. in | | | | Evapora | ting temperature | in °C (to) | | | |
|-------------------|--------|-------|-------|---------|------------------|------------|--------|---|---|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | | |
| | | • | • | • | • | • | • | • | |
| Cooling capacity | y in W | | | | | | | | |
| 35 | 3 375 | 4 515 | 5 860 | 7 434 | 9 261 | 11 366 | 13 773 | - | - |
| 40 | 3 040 | 4 123 | 5 393 | 6 875 | 8 591 | 10 568 | 12 830 | - | - |
| 45 | 2 701 | 3 728 | 4 923 | 6 312 | 7 919 | 9 768 | 11 884 | - | - |
| 50 | - | 3 330 | 4 452 | 5 748 | 7 245 | 8 967 | 10 939 | - | - |
| 55 | - | - | 3 980 | 5 186 | 6 573 | 8 168 | 9 996 | - | - |
| 60 | - | - | - | 4 626 | 5 905 | 7 374 | 9 058 | - | - |
| 65 | - | - | - | 4 072 | 5 244 | 6 587 | 8 129 | - | - |
| | | | | | | | | | |
| Power input in V | | T | 1 | T | T | T | 1 | Т | Γ |
| 35 | 1 449 | 1 615 | 1 749 | 1 857 | 1 942 | 2 011 | 2 068 | - | - |
| 40 | 1 487 | 1 689 | 1 856 | 1 991 | 2 101 | 2 190 | 2 262 | - | - |
| 45 | 1 503 | 1 748 | 1 953 | 2 124 | 2 265 | 2 381 | 2 476 | - | - |
| 50 | - | 1 786 | 2 038 | 2 250 | 2 429 | 2 579 | 2 704 | - | - |
| 55 | - | - | 2 103 | 2 365 | 2 588 | 2 779 | 2 940 | - | - |
| 60 | - | - | - | 2 463 | 2 738 | 2 976 | 3 181 | - | - |
| 65 | - | - | - | 2 539 | 2 873 | 3 165 | 3 421 | - | - |
| | | | | | | | | | |
| Current consum | - | T | T | I | 1 | T | T | Τ | |
| 35 | 3.29 | 3.47 | 3.64 | 3.78 | 3.91 | 4.01 | 4.10 | - | - |
| 40 | 3.34 | 3.57 | 3.78 | 3.95 | 4.11 | 4.24 | 4.35 | - | - |
| 45 | 3.38 | 3.66 | 3.91 | 4.13 | 4.33 | 4.50 | 4.65 | - | - |
| 50 | - | 3.72 | 4.04 | 4.32 | 4.57 | 4.79 | 4.98 | - | - |
| 55 | - | - | 4.14 | 4.49 | 4.81 | 5.09 | 5.33 | - | - |
| 60 | - | - | - | 4.65 | 5.04 | 5.39 | 5.71 | - | - |
| 65 | - | - | - | 4.80 | 5.27 | 5.70 | 6.10 | - | - |
| | _ | | | | | | | | |
| Mass flow in kg/ | | 1 00 | 1 | 140 | 1 | 1 040 | 1 054 | | |
| 35 | 68 | 89 | 114 | 142 | 175 | 212 | 254 | - | - |
| 40 | 64 | 85 | 110 | 137 | 169 | 205 | 246 | - | - |
| 45 | 59 | 81 | 105 | 132 | 163 | 198 | 238 | - | - |
| 50 | - | 76 | 100 | 126 | 157 | 191 | 230 | - | - |
| 55 | - | - | 94 | 120 | 150 | 183 | 221 | - | - |
| 60 | - | - | - | 114 | 143 | 175 | 212 | - | - |
| 65 | - | - | - | 107 | 135 | 167 | 202 | - | - |
| 0 651 - 1 4 - 5 | | | | | | | | | |
| Coefficient of pe | | _ | 0.05 | 4.00 | 1 4 | F 05 | 0.00 | I | |
| 35 | 2.33 | 2.80 | 3.35 | 4.00 | 4.77 | 5.65 | 6.66 | - | - |
| 40 | 2.04 | 2.44 | 2.91 | 3.45 | 4.09 | 4.83 | 5.67 | - | - |
| 45 | 1.80 | 2.13 | 2.52 | 2.97 | 3.50 | 4.10 | 4.80 | - | - |
| 50 | - | 1.86 | 2.18 | 2.55 | 2.98 | 3.48 | 4.05 | - | - |
| 55 | - | - | 1.89 | 2.19 | 2.54 | 2.94 | 3.40 | - | - |
| 60 | - | - | - | 1.88 | 2.16 | 2.48 | 2.85 | - | - |
| 65 | - | - | - | 1.60 | 1.83 | 2.08 | 2.38 | - | - |

Nominal performance at to = 7.2 °C, tc = 54.4 °C

| Cooling capacity | 7 335 | W |
|---------------------|-------|------|
| Power input | 2 655 | W |
| Current consumption | 4.90 | Α |
| Mass flow | 165 | kg/h |
| C.O.P. | 2.76 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

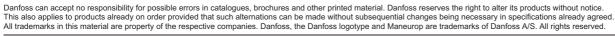
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| Maximum HP switch setting | 29.4 | bar(g) | |
|---------------------------|------|--------|--|
| Minimum LP switch setting | 0.2 | bar(g) | |
| LP pump down setting | 1.3 | bar(q) | |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |







Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

| Cond. temp. in | | | | Evapora | ting temperature | in °C (to) | | | |
|-------------------|------------|---------|-------|----------------|------------------|----------------|------------------|----------------|----------|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 | |
| I. | | | | | ı | | | | |
| Cooling capacity | | T | T | 1 | | T | _ | 1 | |
| 35 | 1 794 | 2 474 | 3 326 | 4 372 | 5 639 | 7 150 | 8 931 | 11 006 | - |
| 40 | 1 604 | 2 244 | 3 046 | 4 033 | 5 230 | 6 662 | 8 354 | 10 330 | - |
| 45 | 1 428 | 2 022 | 2 768 | 3 691 | 4 813 | 6 160 | 7 757 | 9 628 | - |
| 50 | 1 268 | 1 811 | 2 497 | 3 348 | 4 389 | 5 646 | 7 142 | 8 902 | - |
| 55 | 1 128 | 1 614 | 2 233 | 3 007 | 3 962 | 5 122 | 6 511 | 8 154 | - |
| 60 | - | 1 433 | 1 979 | 2 672 | 3 535 | 4 592 | 5 869 | 7 389 | - |
| 65 | - | - | - | 2 344 | 3 110 | 4 059 | 5 218 | 6 609 | - |
| 70 | - | - | - | - | - | 3 526 | 4 560 | 5 816 | - |
| Power input in V | v | | | | | | | | |
| 35 | 1 034 | 1 173 | 1 299 | 1 408 | 1 494 | 1 551 | 1 574 | 1 557 | _ |
| 40 | 1 066 | 1 214 | 1 353 | 1 476 | 1 579 | 1 655 | 1 699 | 1 706 | |
| 45 | 1 088 | 1 248 | 1 400 | 1 540 | 1 661 | 1 758 | 1 825 | 1 858 | |
| 50 | 1 102 | 1 248 | 1 442 | 1 540 | 1 740 | 1 758 | 1 951 | 2 011 | <u> </u> |
| 55 | 1 102 | 1 274 | 1 442 | 1 652 | 1 815 | 1 958 | 2 077 | 2 165 | <u> </u> |
| 60 | - | 1 301 | | | | 1 | | | |
| 65 | - | - 1 301 | 1 504 | 1 700 1 742 | 1 886 1 952 | 2 055 2 148 | 2 201 2 324 | 2 319 2 474 | <u> </u> |
| 70 | <u> </u> | - | - | - 1742 | 1 952 | 2 148 | 2 324 | 2 628 | <u> </u> |
| 10 | - | | | <u> </u> | <u> </u> | 2 230 | 2 111 | 2 020 | |
| urrent consum | ntion in A | | | | | | | | |
| 35 | 3.14 | 3.25 | 3.35 | 3.44 | 3.51 | 3.56 | 3.57 | 3.56 | _ |
| 40 | 3.17 | 3.29 | 3.41 | 3.52 | 3.61 | 3.68 | 3.72 | 3.73 | _ |
| 45 | 3.19 | 3.33 | 3.47 | 3.59 | 3.70 | 3.80 | 3.87 | 3.92 | _ |
| 50 | 3.20 | 3.36 | 3.51 | 3.66 | 3.80 | 3.92 | 4.02 | 4.10 | _ |
| 55 | 3.20 | 3.37 | 3.55 | 3.72 | 3.88 | 4.03 | 4.17 | 4.28 | |
| 60 | - | 3.38 | 3.57 | 3.77 | 3.96 | 4.14 | 4.31 | 4.46 | _ |
| 65 | _ | - | - | 3.81 | 4.03 | 4.24 | 4.44 | 4.63 | _ |
| 70 | - | - | - | - | - | 4.33 | 4.57 | 4.80 | _ |
| 7.0 | | I | I | I | 1 | 1.00 | 1.07 | 1.00 | |
| lass flow in kg/ | h | | | | | | | | |
| 35 | 44 | 59 | 77 | 99 | 126 | 156 | 192 | 233 | - |
| 40 | 41 | 56 | 74 | 96 | 122 | 153 | 188 | 229 | - |
| 45 | 38 | 53 | 71 | 93 | 118 | 148 | 183 | 223 | - |
| 50 | 36 | 50 | 68 | 89 | 114 | 143 | 177 | 217 | - |
| 55 | 34 | 48 | 65 | 85 | 109 | 138 | 171 | 210 | - |
| 60 | - | 46 | 61 | 81 | 104 | 132 | 164 | 202 | - |
| 65 | - | - | - | 77 | 99 | 125 | 156 | 193 | - |
| 70 | - | - | - | - | - | 118 | 148 | 183 | - |
| • | _ | | 1 | 1 | ı | - | | | |
| Coefficient of pe | • | · · | 0.50 | 0.40 | T 0 == | 4.04 | F 07 | 7.5- | |
| 35 | 1.73 | 2.11 | 2.56 | 3.10 | 3.77 | 4.61 | 5.67 | 7.07 | - |
| 40 | 1.50 | 1.85 | 2.25 | 2.73 | 3.31 | 4.03 | 4.92 | 6.05 | - |
| 45 | 1.31 | 1.62 | 1.98 | 2.40 | 2.90 | 3.50 | 4.25 | 5.18 | - |
| 50 | 1.15 | 1.42 | 1.73 | 2.09 | 2.52 | 3.04 | 3.66 | 4.43 | - |
| 55 | 1.02 | 1.25 | 1.51 | 1.82 | 2.18 | 2.62 | 3.14 | 3.77 | - |
| 60 | - | 1.10 | 1.32 | 1.57 | 1.87 | 2.24 | 2.67 | 3.19 | - |
| 65 | - | - | - | 1.35 | 1.59 | 1.89 | 2.25 | 2.67 | - |
| 70 | - | - | - | - | - | 1.58 | 1.87 | 2.21 | - |

Nominal performance at to = 5 °C, tc = 50 °C

| | •• • | |
|---------------------|-------|------|
| Cooling capacity | 4 389 | W |
| Power input | 1 740 | W |
| Current consumption | 3.80 | Α |
| Mass flow | 114 | kg/h |
| C.O.P. | 2.52 | |

to: Evaporating temperature at dew point

Pressure switch settings

| Maximum HP switch setting | 22.6 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%



tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R134a

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|-------------------|-----------------|-------|-------|---------|-------------------|------------|-------|--------------|---|
| °C (tc) | -15 | -10 | -5 | 0 | 5 | 10 | 15 | 20 | |
| J. | | 1 | 1 | U. | | 1 | U. | , | |
| Cooling capacity | | T | T | 1 | 1 | T | 1 | | |
| 35 | 1 943 | 2 676 | 3 590 | 4 713 | 6 069 | 7 684 | 9 585 | 11 796 | - |
| 40 | 1 746 | 2 439 | 3 305 | 4 368 | 5 656 | 7 193 | 9 006 | 11 120 | - |
| 45 | 1 564 | 2 211 | 3 021 | 4 020 | 5 233 | 6 685 | 8 404 | 10 415 | - |
| 50 | 1 400 | 1 995 | 2 743 | 3 670 | 4 802 | 6 164 | 7 782 | 9 683 | - |
| 55 | 1 255 | 1 792 | 2 472 | 3 321 | 4 366 | 5 631 | 7 143 | 8 927 | - |
| 60 | - | 1 606 | 2 212 | 2 977 | 3 928 | 5 090 | 6 489 | 8 151 | - |
| 65 | - | - | - | 2 640 | 3 491 | 4 543 | 5 823 | 7 356 | - |
| 70 | - | - | - | - | - | 3 994 | 5 149 | 6 547 | - |
| Power input in V | v | | | | | | | | |
| 35 | 1 034 | 1 173 | 1 299 | 1 408 | 1 494 | 1 551 | 1 574 | 1 557 | _ |
| 40 | 1 066 | 1 214 | 1 353 | 1 476 | 1 579 | 1 655 | 1 699 | 1 706 | |
| 45 | 1 088 | 1 248 | 1 400 | 1 540 | 1 661 | 1 758 | 1 825 | 1 858 | |
| 50 | 1 102 | 1 274 | 1 442 | 1 599 | 1 740 | 1 859 | 1 951 | 2 011 | |
| 55 | 1 105 | 1 292 | 1 476 | 1 652 | 1 815 | 1 958 | 2 077 | 2 165 | |
| 60 | - | 1 301 | 1 504 | 1 700 | 1 886 | 2 055 | 2 201 | 2 319 | |
| 65 | _ | - | - | 1 742 | 1 952 | 2 148 | 2 324 | 2 474 | |
| 70 | <u>-</u> | _ | _ | - | - | 2 238 | 2 444 | 2 628 | |
| 70 | | ı | ı | 1 | 1 | 2 200 | 2 | 2 020 | |
| urrent consum | ption in A | | | | | | | | |
| 35 | 3.14 | 3.25 | 3.35 | 3.44 | 3.51 | 3.56 | 3.57 | 3.56 | - |
| 40 | 3.17 | 3.29 | 3.41 | 3.52 | 3.61 | 3.68 | 3.72 | 3.73 | - |
| 45 | 3.19 | 3.33 | 3.47 | 3.59 | 3.70 | 3.80 | 3.87 | 3.92 | - |
| 50 | 3.20 | 3.36 | 3.51 | 3.66 | 3.80 | 3.92 | 4.02 | 4.10 | - |
| 55 | 3.20 | 3.37 | 3.55 | 3.72 | 3.88 | 4.03 | 4.17 | 4.28 | - |
| 60 | - | 3.38 | 3.57 | 3.77 | 3.96 | 4.14 | 4.31 | 4.46 | - |
| 65 | _ | - | _ | 3.81 | 4.03 | 4.24 | 4.44 | 4.63 | - |
| 70 | - | - | - | - | - | 4.33 | 4.57 | 4.80 | - |
| Į. | | • | • | | • | • | | | |
| lass flow in kg/ | 'h | | | | | | | | |
| 35 | 43 | 59 | 77 | 99 | 125 | 156 | 191 | 232 | - |
| 40 | 41 | 56 | 74 | 96 | 122 | 152 | 187 | 227 | - |
| 45 | 38 | 53 | 71 | 92 | 118 | 147 | 182 | 222 | - |
| 50 | 36 | 50 | 67 | 88 | 113 | 142 | 176 | 216 | - |
| 55 | 34 | 48 | 64 | 84 | 108 | 137 | 170 | 208 | - |
| 60 | - | 45 | 61 | 80 | 103 | 131 | 163 | 200 | - |
| 65 | - | - | - | 76 | 98 | 124 | 155 | 192 | - |
| 70 | - | - | - | - | - | 118 | 147 | 182 | - |
| Coefficient of no | erformance (C.C |) P) | | | | | | | |
| 35 | 1.88 | 2.28 | 2.76 | 3.35 | 4.06 | 4.95 | 6.09 | 7.58 | _ |
| 40 | 1.64 | 2.01 | 2.44 | 2.96 | 3.58 | 4.35 | 5.30 | 6.52 | _ |
| 45 | 1.44 | 1.77 | 2.16 | 2.61 | 3.15 | 3.80 | 4.60 | 5.61 | |
| 50 | 1.27 | 1.57 | 1.90 | 2.30 | 2.76 | 3.32 | 3.99 | 4.82 | _ |
| 55 | 1.14 | 1.39 | 1.67 | 2.01 | 2.70 | 2.88 | 3.44 | 4.12 | |
| 60 | - | 1.23 | 1.47 | 1.75 | 2.41 | 2.48 | 2.95 | 3.51 | |
| 65 | <u>-</u> | - | - | 1.75 | 1.79 | 2.40 | 2.95 | 2.97 | - |
| | - | - | _ | 1.52 | 1.79 | 2.12 | 2.51 | 2.31 | - |

Nominal performance at to = 7.2 °C, tc = 54.4 °C

| reciminal portermance at to 7.2 e, to | U-1 U | | |
|---------------------------------------|-------|------|--|
| Cooling capacity | 4 951 | W | |
| Power input | 1 871 | W | |
| Current consumption | 3.94 | Α | |
| Mass flow | 121 | kg/h | |
| C.O.P. | 2.65 | | |

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| Maximum HP switch setting | 22.6 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

| Sound power level | 0 | dB(A) |
|---------------------|---|-------|
| With accoustic hood | 0 | dB(A) |

All performance data +/- 5%



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, EN 12900 rating conditions

R404A

| Cond. temp. in Evaporating temperature in °C (to) | | | | | | | | | |
|---|------------------|----------|----------|------------|------------|------------|------------|-------------|------------|
| °C (tc) | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| | | | | | | | | | |
| Cooling capacity | | 1 | 1 | | 1 | | | | T |
| 30 | 1 757 | 2 453 | 3 305 | 4 335 | 5 561 | 7 003 | 8 682 | 10 616 | 12 826 |
| 35 | 1 510 | 2 155 | 2 945 | 3 899 | 5 036 | 6 376 | 7 940 | 9 747 | 11 816 |
| 40 | 1 271 | 1 864 | 2 589 | 3 464 | 4 509 | 5 745 | 7 191 | 8 867 | 10 793 |
| 45 | 1 044 | 1 582 | 2 238 | 3 031 | 3 983 | 5 111 | 6 437 | 7 980 | 9 759 |
| 50 | 828 | 1 308 | 1 893 | 2 603 | 3 457 | 4 476 | 5 679 | 7 085 | 8 715 |
| 55 | - | 1 046 | 1 557 | 2 180 | 2 935 | 3 841 | 4 917 | 6 185 | 7 663 |
| 60 | - | 796 | 1 231 | 1 764 | 2 417 | 3 207 | 4 155 | 5 281 | 6 605 |
| Power input in \ | A/ | | | | | | | | |
| 30 | 1 246 | 1 436 | 1 610 | 1 767 | 1 904 | 2 021 | 2 115 | 2 187 | 2 234 |
| 35 | 1 243 | 1 456 | 1 653 | 1 834 | 1 997 | 2 141 | 2 265 | 2 367 | 2 445 |
| 40 | 1 227 | 1 463 | 1 685 | 1 892 | 2 083 | 2 256 | 2 409 | 2 542 | 2 654 |
| 45 | 1 198 | 1 458 | 1 706 | 1 941 | 2 160 | 2 363 | 2 548 | 2 714 | 2 860 |
| 50 | 1 154 | 1 441 | 1 716 | 1 980 | 2 229 | 2 464 | 2 682 | 2 882 | 3 063 |
| 55 | - | 1 410 | 1 715 | 2 008 | 2 289 | 2 557 | 2 809 | 3 045 | 3 263 |
| 60 | - | 1 367 | 1 701 | 2 026 | 2 340 | 2 642 | 2 930 | 3 203 | 3 460 |
| | | • | • | | • | | | | |
| Current consum | ption in A | | | | | | | | |
| 30 | 3.07 | 3.27 | 3.49 | 3.71 | 3.91 | 4.08 | 4.20 | 4.27 | 4.26 |
| 35 | 3.08 | 3.30 | 3.54 | 3.78 | 4.01 | 4.21 | 4.37 | 4.47 | 4.50 |
| 40 | 3.08 | 3.33 | 3.59 | 3.86 | 4.12 | 4.36 | 4.57 | 4.72 | 4.80 |
| 45 | 3.06 | 3.33 | 3.63 | 3.94 | 4.25 | 4.53 | 4.79 | 4.99 | 5.14 |
| 50 | 3.00 | 3.31 | 3.65 | 4.01 | 4.36 | 4.70 | 5.02 | 5.28 | 5.49 |
| 55 | - | 3.25 | 3.64 | 4.05 | 4.46 | 4.86 | 5.24 | 5.58 | 5.86 |
| 60 | - | 3.13 | 3.58 | 4.04 | 4.52 | 4.99 | 5.44 | 5.86 | 6.22 |
| | | | | | | | | | |
| Mass flow in kg | / n 55 | 76 | 99 | 127 | 159 | 195 | 237 | 284 | 337 |
| 35 | 51 | 71 | 95 | 127 | 153 | 189 | 230 | 277 | 329 |
| 40 | 47 | 66 | 90 | 116 | 147 | 183 | 223 | 269 | 329 |
| | | | 1 | | | | | | 1 |
| 45 50 | 42 37 | 62 56 | 84 79 | 111 104 | 141 134 | 176 169 | 216 208 | 261 253 | 312 303 |
| 55 | - | 51 | 79 | 98 | 127 | 161 | 199 | 243 | 292 |
| 60 | | 45 | 66 | 91 | 119 | 152 | 199 | 233 | 292 |
| 00 | | 1 70 | 00 | J1 | 110 | 102 | 100 | 200 | 201 |
| Coefficient of pe | erformance (C.O | .P.) | | | | | | | |
| 30 | 1.41 | 1.71 | 2.05 | 2.45 | 2.92 | 3.47 | 4.10 | 4.85 | 5.74 |
| 35 | 1.21 | 1.48 | 1.78 | 2.13 | 2.52 | 2.98 | 3.51 | 4.12 | 4.83 |
| 40 | 1.04 | 1.27 | 1.54 | 1.83 | 2.16 | 2.55 | 2.98 | 3.49 | 4.07 |
| 45 | 0.87 | 1.08 | 1.31 | 1.56 | 1.84 | 2.16 | 2.53 | 2.94 | 3.41 |
| 50 | 0.72 | 0.91 | 1.10 | 1.31 | 1.55 | 1.82 | 2.12 | 2.46 | 2.85 |
| 55 | - | 0.74 | 0.91 | 1.09 | 1.28 | 1.50 | 1.75 | 2.03 | 2.35 |
| 55 | | | | | | | | | |

Nominal performance at to = -10 °C, tc = 45 °C

| | | |
|---------------------|-------|------|
| Cooling capacity | 3 983 | W |
| Power input | 2 160 | W |
| Current consumption | 4.25 | Α |
| Mass flow | 141 | kg/h |
| C.O.P. | 1.84 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



Pressure switch settings

| Maximum HP switch setting | 27.7 | bar(g) |
|---------------------------|------|--------|
| Minimum LP switch setting | 0.2 | bar(g) |
| LP pump down setting | 0.9 | bar(g) |

Sound power data

| Sound power level | 71 | dB(A) |
|---------------------|----|-------|
| With accoustic hood | 64 | dB(A) |

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ032-4

Performance data at 50 Hz, ARI rating conditions

R404A

| Cond. temp. in | | | | Evapora | iting temperature | in °C (to) | | | |
|------------------|-----------------|-------|-------|---------|-------------------|------------|-------|--------|--------|
| °C (tc) | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| | | | | | | | | | |
| Cooling capacit | | 0.700 | 0.000 | 4.700 | 0.400 | 7.704 | 0.507 | 44.007 | 44.004 |
| 30 | 1 956 | 2 723 | 3 660 | 4 788 | 6 128 | 7 701 | 9 527 | 11 627 | 14 021 |
| 35 | 1 699 | 2 417 | 3 293 | 4 347 | 5 600 | 7 073 | 8 787 | 10 762 | 13 019 |
| 40 | 1 449 | 2 117 | 2 930 | 3 907 | 5 070 | 6 441 | 8 040 | 9 888 | 12 006 |
| 45 | 1 210 | 1 825 | 2 570 | 3 468 | 4 540 | 5 806 | 7 288 | 9 007 | 10 983 |
| 50 | 981 | 1 541 | 2 218 | 3 034 | 4 011 | 5 171 | 6 534 | 8 123 | 9 957 |
| 55 | - | 1 267 | 1 874 | 2 607 | 3 488 | 4 540 | 5 784 | 7 242 | 8 934 |
| 60 | - | 1 006 | 1 541 | 2 190 | 2 976 | 3 921 | 5 047 | 6 375 | 7 929 |
| Power input in \ | N | 1 | 1 | 1 | 1 | T | | | T |
| 30 | 1 246 | 1 436 | 1 610 | 1 767 | 1 904 | 2 021 | 2 115 | 2 187 | 2 234 |
| 35 | 1 243 | 1 456 | 1 653 | 1 834 | 1 997 | 2 141 | 2 265 | 2 367 | 2 445 |
| 40 | 1 227 | 1 463 | 1 685 | 1 892 | 2 083 | 2 256 | 2 409 | 2 542 | 2 654 |
| 45 | 1 198 | 1 458 | 1 706 | 1 941 | 2 160 | 2 363 | 2 548 | 2 714 | 2 860 |
| 50 | 1 154 | 1 441 | 1 716 | 1 980 | 2 229 | 2 464 | 2 682 | 2 882 | 3 063 |
| 55 | - | 1 410 | 1 715 | 2 008 | 2 289 | 2 557 | 2 809 | 3 045 | 3 263 |
| 60 | - | 1 367 | 1 701 | 2 026 | 2 340 | 2 642 | 2 930 | 3 203 | 3 460 |
| Current consum | nption in A | | | | | | | | |
| 30 | 3.07 | 3.27 | 3.49 | 3.71 | 3.91 | 4.08 | 4.20 | 4.27 | 4.26 |
| 35 | 3.08 | 3.30 | 3.54 | 3.78 | 4.01 | 4.21 | 4.37 | 4.47 | 4.50 |
| 40 | 3.08 | 3.33 | 3.59 | 3.86 | 4.12 | 4.36 | 4.57 | 4.72 | 4.80 |
| 45 | 3.06 | 3.33 | 3.63 | 3.94 | 4.25 | 4.53 | 4.79 | 4.99 | 5.14 |
| 50 | 3.00 | 3.31 | 3.65 | 4.01 | 4.36 | 4.70 | 5.02 | 5.28 | 5.49 |
| 55 | - | 3.25 | 3.64 | 4.05 | 4.46 | 4.86 | 5.24 | 5.58 | 5.86 |
| 60 | - | 3.13 | 3.58 | 4.04 | 4.52 | 4.99 | 5.44 | 5.86 | 6.22 |
| Mass flow in kg | /h | | | | | | | | |
| 30 | 55 | 75 | 99 | 126 | 158 | 194 | 235 | 282 | 335 |
| 35 | 51 | 71 | 94 | 121 | 152 | 188 | 229 | 275 | 327 |
| 40 | 46 | 66 | 89 | 116 | 147 | 182 | 222 | 268 | 319 |
| 45 | 42 | 61 | 84 | 110 | 140 | 175 | 215 | 260 | 310 |
| 50 | 37 | 56 | 78 | 104 | 134 | 168 | 207 | 251 | 301 |
| 55 | - | 50 | 72 | 97 | 126 | 160 | 198 | 241 | 290 |
| 60 | - | 45 | 66 | 90 | 119 | 151 | 189 | 231 | 280 |
| Coefficient of p | erformance (C.C | D.P.) | | | | | | | |
| 30 | 1.57 | 1.90 | 2.27 | 2.71 | 3.22 | 3.81 | 4.50 | 5.32 | 6.28 |
| 35 | 1.37 | 1.66 | 1.99 | 2.37 | 2.80 | 3.30 | 3.88 | 4.55 | 5.33 |
| 40 | 1.18 | 1.45 | 1.74 | 2.06 | 2.43 | 2.86 | 3.34 | 3.89 | 4.52 |
| 45 | 1.01 | 1.25 | 1.51 | 1.79 | 2.10 | 2.46 | 2.86 | 3.32 | 3.84 |
| | 0.85 | 1.07 | 1.29 | 1.53 | 1.80 | 2.10 | 2.44 | 2.82 | 3.25 |
| 50 I | | 1 | | | | | 1 | | |
| 50 55 | - | 0.90 | 1.09 | 1.30 | 1.52 | 1.78 | 2.06 | 2.38 | 2.74 |

| Nominal performance at to = -10 °C, tc = 45 °C | 3 |
|--|---|
|--|---|

| Cooling capacity | 4 540 | W |
|---------------------|-------|------|
| Power input | 2 160 | W |
| Current consumption | 4.25 | Α |
| Mass flow | 140 | kg/h |
| C.O.P. | 2.10 | |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

| 27.7 | bar(g) |
|------|--------|
| 0.2 | bar(g) |
| 0.9 | bar(g) |
| | 0.2 |

Sound power data

| Sound power level | 71 | dB(A) |
|---------------------|----|-------|
| With accoustic hood | 64 | dB(A) |

