



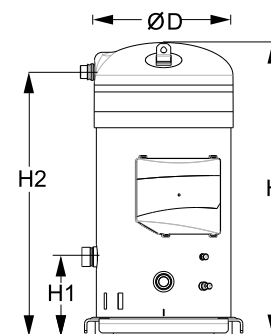
Datasheets

Performer[®] scroll compressors SM / SY / SZ / SH



General Characteristics

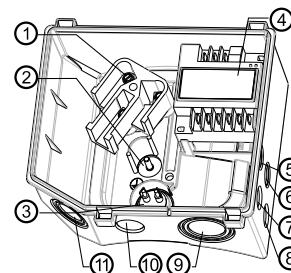
| Model number (on compressor nameplate) | SZ240A4PBD | SZ240A4CBD |
|---|---|-------------------|
| Code number for Singlepack* | SZ240A4PBI | SZ240A4CBI |
| Code number for Industrial pack** | SZ240A4PBM | SZ240A4CBM |
| Drawing number | 8556098b | 8556092b |
| Suction and discharge connections | Rotolock | Brazed |
| Suction connection | 2-1/4" Rotolock | 1-5/8" ODF |
| Discharge connection | 1-3/4" Rotolock | 1-1/8" ODF |
| Suction connection with supplied sleeve | 1-5/8" ODF | |
| Discharge connection with supplied sleeve | 1-1/8" ODF | |
| Oil sight glass | Threaded | Threaded |
| Oil equalisation connection | 1/2" flare | 1/2" flare |
| Oil drain connection | 1/4" flare | 1/4" flare |
| LP gauge port | Schrader | Schrader |
| IPR valve | Yes | Yes |
| Reverse rotation protection | Electronic module | Electronic module |
| Swept volume | 347,8 cm ³ /rev | |
| Displacement @ Nominal speed | 60.5 m ³ /h @ 2900 rpm - 73.0 m ³ /h @ 3500 rpm | |
| Net weight | 150 kg | |
| Oil charge | 8 litre, POE - 160SZ | |
| Maximum system test pressure Low Side / High side | 20 bar(g) / 32 bar(g) | |
| Maximum differential test pressure | 24 bar | |
| Maximum number of starts per hour | 12 | |
| Refrigerant charge limit | 16 kg | |
| Approved refrigerants | R407C, R134a | |

Dimensions


D=344 mm
H=726,9 mm
H1=195,7 mm
H2=654 mm

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 | 0.616 Ω |
| Rated Load Amps (RLA) | 35.7 A |
| Maximum Continuous Current (MCC) | 50 A |
| Locked Rotor Amps (LRA) | 215 A |
| Motor protection | Electronic protection module, 115/230 V |

Terminal box


- IP54 (with cable gland)
- 1: Power connection, 3 x 4.8 mm (3/16")
 - 2: Earth M5
 - 3: Thermistor connector
 - 4: Electronic protection module
 - 5: Double knock-out Ø 22.5 mm (7/8") & Ø 16.5 mm (0.65")
 - 6: Double knock-out Ø 22.5 mm (7/8") & Ø 16.5 mm (0.65")
 - 7: Knock-out Ø 20.7 mm (0.81")
 - 8: Knock-out Ø 20.7 mm (0.81")
 - 9: Triple knock-out Ø 50.8 mm (2") & Ø 43.7 mm (1.72") & Ø 34.5 mm (1.35")
 - 10: Knock-out Ø 25.5 mm (1.00")
 - 11: Triple knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27") & Ø 25.5 mm (1")

Recommended Installation torques

| | |
|--------------------------------------|-------------|
| Suction Rotolock nut or valve | 130 Nm |
| Discharge Rotolock nut or valve | 110 Nm |
| Oil sight glass | 50 Nm |
| Power connections / Earth connection | 3 Nm / 2 Nm |
| Mounting bolts | 40 Nm |

Parts shipped with compressor

| |
|--|
| Mounting kit with grommets and sleeves |
| Electronic protection module mounted in terminal box |
| Initial oil charge |
| Installation instructions |

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

*Singlepack: Compressor in cardboard box

**Industrial pack: 4 Unboxed compressors on pallet (order per multiples of 4)

Rotolock accessories, suction side

Code no.

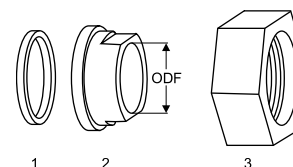
| | |
|---|---------|
| Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF) | 8153006 |
| Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF) | 8168026 |
| Gasket, 2-1/4" | 8156133 |

Gaskets, sleeves and nuts

Rotolock accessories, discharge side

Code no.

| | |
|---|---------|
| Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF) | 8153004 |
| Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF) | 8168005 |
| Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF) | 8168028 |
| Gasket, 1-3/4" | 8156132 |



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

Rotolock accessories, sets

Code no.

| | |
|---|---------|
| Solder sleeve adapter set, (2-1/4" Rotolock, 1-5/8" ODF), (1-3/4" Rotolock, 7/8" ODF) | 7765028 |
| Valve set, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8") | 7703383 |
| Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white | 8156013 |

Oil / lubricants

Code no.

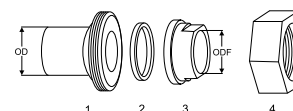
| | |
|-----------------------------------|---------|
| POE lubricant, 160SZ, 1 litre can | 7754023 |
| POE lubricant, 160SZ, 2 litre can | 7754024 |

Solder sleeve adapter set

Crankcase heaters

Code no.

| | |
|---|----------|
| Surface sump heater + bottom insulation, 80 W, 24 V, CE mark, UL | 120Z0359 |
| Surface sump heater + bottom insulation, 80 W, 230 V, CE mark, UL | 120Z0372 |
| Surface sump heater + bottom insulation, 80 W, 400 V, CE mark, UL | 120Z0373 |
| Surface sump heater + bottom insulation, 80 W, 460 V, CE mark | 120Z0374 |
| Belt type crankcase heater, 130 W, 230 V, CE mark, UL | 7773122 |
| Belt type crankcase heater, 130 W, 400 V, CE mark, UL | 7773123 |



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

Miscellaneous accessories

Code no.

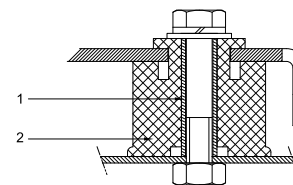
| | |
|---|---------|
| Electronic soft start kit, MCI 50 CM | 7705009 |
| Acoustic hood for scroll compressor S240-S300 | 7755016 |
| Discharge thermostat kit | 7750009 |

Mounting kit

Spare parts

Code no.

| | |
|--|----------|
| Electronic motor protection module, 115/230 V | 8169016 |
| Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves | 8156144 |
| Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 2 rotolock nuts, 2 solder sleeves, 2 gaskets | 8156148 |
| Oil sight glass with gaskets (black & white) | 8156019 |
| Gasket for oil sight glass (white teflon) | 8156129 |
| Terminal box 210 x 190 incl. cover | 120Z0458 |
| T block connector 60 x 75 mm | 8173021 |



- 1: Sleeve (4x)
 - 2: Grommet (4x)
- Bolts, nuts and washers not included

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Performance data at 50 Hz, EN 12900 rating conditions
R407C

| Cond. temp. in °C (tc) | Evaporating temperature in °C (to) | | | | | | | |
|---------------------------|------------------------------------|-----|-----|----|---|---|----|----|
| | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |

Cooling capacity in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|---|
| 30 | 22 179 | 28 382 | 35 758 | 44 467 | 54 671 | 66 532 | 80 209 | 95 865 | - |
| 35 | 20 769 | 26 758 | 33 849 | 42 203 | 51 982 | 63 346 | 76 456 | 91 475 | - |
| 40 | 19 313 | 25 061 | 31 840 | 39 811 | 49 137 | 59 977 | 72 493 | 86 846 | - |
| 45 | 17 825 | 23 304 | 29 744 | 37 305 | 46 150 | 56 439 | 68 333 | 81 993 | - |
| 50 | - | 21 504 | 27 576 | 34 700 | 43 036 | 52 746 | 63 991 | 76 931 | - |
| 55 | - | 19 673 | 25 351 | 32 010 | 39 810 | 48 914 | 59 481 | 71 674 | - |
| 60 | - | - | 23 084 | 29 249 | 36 486 | 44 956 | 54 819 | 66 237 | - |
| 65 | - | - | - | - | 33 079 | 40 887 | 50 018 | 60 633 | - |

Power input in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|---|
| 30 | 10 577 | 10 687 | 10 818 | 10 958 | 11 096 | 11 220 | 11 320 | 11 385 | - |
| 35 | 11 690 | 11 798 | 11 934 | 12 086 | 12 244 | 12 395 | 12 530 | 12 636 | - |
| 40 | 12 937 | 13 041 | 13 180 | 13 343 | 13 520 | 13 697 | 13 865 | 14 013 | - |
| 45 | 14 347 | 14 446 | 14 588 | 14 761 | 14 955 | 15 157 | 15 358 | 15 544 | - |
| 50 | - | 16 046 | 16 189 | 16 371 | 16 581 | 16 807 | 17 038 | 17 263 | - |
| 55 | - | 17 872 | 18 015 | 18 205 | 18 429 | 18 678 | 18 939 | 19 201 | - |
| 60 | - | - | 20 097 | 20 293 | 20 531 | 20 801 | 21 090 | 21 389 | - |
| 65 | - | - | - | - | 22 918 | 23 208 | 23 525 | 23 858 | - |

Current consumption in A

| | | | | | | | | | |
|----|-------|-------|-------|-------|-------|-------|-------|-------|---|
| 30 | 20.74 | 21.18 | 21.53 | 21.81 | 22.06 | 22.31 | 22.58 | 22.91 | - |
| 35 | 22.08 | 22.51 | 22.84 | 23.10 | 23.32 | 23.54 | 23.78 | 24.07 | - |
| 40 | 23.56 | 24.00 | 24.33 | 24.59 | 24.81 | 25.01 | 25.23 | 25.51 | - |
| 45 | 25.24 | 25.71 | 26.06 | 26.34 | 26.57 | 26.78 | 27.00 | 27.28 | - |
| 50 | - | 27.67 | 28.07 | 28.38 | 28.64 | 28.88 | 29.13 | 29.42 | - |
| 55 | - | 29.94 | 30.40 | 30.76 | 31.08 | 31.36 | 31.66 | 31.98 | - |
| 60 | - | - | 33.09 | 33.54 | 33.92 | 34.27 | 34.63 | 35.01 | - |
| 65 | - | - | - | - | 37.21 | 37.65 | 38.09 | 38.55 | - |

Mass flow in kg/h

| | | | | | | | | | |
|----|-----|-----|-----|-----|-------|-------|-------|-------|---|
| 30 | 466 | 588 | 729 | 892 | 1 081 | 1 296 | 1 542 | 1 821 | - |
| 35 | 459 | 581 | 722 | 886 | 1 074 | 1 289 | 1 534 | 1 812 | - |
| 40 | 449 | 572 | 714 | 877 | 1 065 | 1 279 | 1 523 | 1 800 | - |
| 45 | 439 | 562 | 703 | 866 | 1 053 | 1 267 | 1 510 | 1 785 | - |
| 50 | - | 549 | 691 | 853 | 1 040 | 1 252 | 1 494 | 1 767 | - |
| 55 | - | 535 | 676 | 838 | 1 023 | 1 235 | 1 475 | 1 746 | - |
| 60 | - | - | 659 | 820 | 1 004 | 1 214 | 1 453 | 1 722 | - |
| 65 | - | - | - | - | 983 | 1 191 | 1 428 | 1 695 | - |

Coefficient of performance (C.O.P.)

| | | | | | | | | | |
|----|------|------|------|------|------|------|------|------|---|
| 30 | 2.10 | 2.66 | 3.31 | 4.06 | 4.93 | 5.93 | 7.09 | 8.42 | - |
| 35 | 1.78 | 2.27 | 2.84 | 3.49 | 4.25 | 5.11 | 6.10 | 7.24 | - |
| 40 | 1.49 | 1.92 | 2.42 | 2.98 | 3.63 | 4.38 | 5.23 | 6.20 | - |
| 45 | 1.24 | 1.61 | 2.04 | 2.53 | 3.09 | 3.72 | 4.45 | 5.27 | - |
| 50 | - | 1.34 | 1.70 | 2.12 | 2.60 | 3.14 | 3.76 | 4.46 | - |
| 55 | - | 1.10 | 1.41 | 1.76 | 2.16 | 2.62 | 3.14 | 3.73 | - |
| 60 | - | - | 1.15 | 1.44 | 1.78 | 2.16 | 2.60 | 3.10 | - |
| 65 | - | - | - | - | 1.44 | 1.76 | 2.13 | 2.54 | - |

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

| | | |
|---------------------|--------|------|
| Cooling capacity | 52 746 | W |
| Power input | 16 807 | W |
| Current consumption | 28.88 | A |
| Mass flow | 1 252 | kg/h |
| C.O.P. | 3.14 | |

Pressure switch settings

| | | |
|---------------------------|------|--------|
| Maximum HP switch setting | 29.5 | bar(g) |
| Minimum LP switch setting | 0.5 | bar(g) |
| LP pump down setting | 1 | bar(g) |

Sound power data

| | | |
|--------------------|------|-------|
| Sound power level | 83.5 | dB(A) |
| With acoustic hood | 76 | dB(A) |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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Performance data at 50 Hz, ARI rating conditions
R407C

| Cond. temp. in °C (tc) | Evaporating temperature in °C (to) | | | | | | | |
|---------------------------|------------------------------------|-----|-----|----|---|---|----|----|
| | -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |

Cooling capacity in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|---------|---|
| 30 | 23 788 | 30 405 | 38 264 | 47 533 | 58 381 | 70 975 | 85 485 | 102 077 | - |
| 35 | 22 384 | 28 801 | 36 389 | 45 316 | 55 753 | 67 867 | 81 828 | 97 804 | - |
| 40 | 20 931 | 27 122 | 34 411 | 42 969 | 52 967 | 64 575 | 77 960 | 93 293 | - |
| 45 | 19 447 | 25 382 | 32 345 | 40 507 | 50 040 | 61 114 | 73 898 | 88 562 | - |
| 50 | - | 23 598 | 30 208 | 37 947 | 46 988 | 57 501 | 69 658 | 83 630 | - |
| 55 | - | 21 787 | 28 017 | 35 306 | 43 828 | 53 756 | 65 261 | 78 516 | - |
| 60 | - | - | 25 790 | 32 604 | 40 582 | 49 900 | 60 731 | 73 247 | - |
| 65 | - | - | - | - | 37 277 | 45 963 | 56 098 | 67 858 | - |

Power input in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|---|
| 30 | 10 577 | 10 687 | 10 818 | 10 958 | 11 096 | 11 220 | 11 320 | 11 385 | - |
| 35 | 11 690 | 11 798 | 11 934 | 12 086 | 12 244 | 12 395 | 12 530 | 12 636 | - |
| 40 | 12 937 | 13 041 | 13 180 | 13 343 | 13 520 | 13 697 | 13 865 | 14 013 | - |
| 45 | 14 347 | 14 446 | 14 588 | 14 761 | 14 955 | 15 157 | 15 358 | 15 544 | - |
| 50 | - | 16 046 | 16 189 | 16 371 | 16 581 | 16 807 | 17 038 | 17 263 | - |
| 55 | - | 17 872 | 18 015 | 18 205 | 18 429 | 18 678 | 18 939 | 19 201 | - |
| 60 | - | - | 20 097 | 20 293 | 20 531 | 20 801 | 21 090 | 21 389 | - |
| 65 | - | - | - | - | 22 918 | 23 208 | 23 525 | 23 858 | - |

Current consumption in A

| | | | | | | | | | |
|----|-------|-------|-------|-------|-------|-------|-------|-------|---|
| 30 | 20.74 | 21.18 | 21.53 | 21.81 | 22.06 | 22.31 | 22.58 | 22.91 | - |
| 35 | 22.08 | 22.51 | 22.84 | 23.10 | 23.32 | 23.54 | 23.78 | 24.07 | - |
| 40 | 23.56 | 24.00 | 24.33 | 24.59 | 24.81 | 25.01 | 25.23 | 25.51 | - |
| 45 | 25.24 | 25.71 | 26.06 | 26.34 | 26.57 | 26.78 | 27.00 | 27.28 | - |
| 50 | - | 27.67 | 28.07 | 28.38 | 28.64 | 28.88 | 29.13 | 29.42 | - |
| 55 | - | 29.94 | 30.40 | 30.76 | 31.08 | 31.36 | 31.66 | 31.98 | - |
| 60 | - | - | 33.09 | 33.54 | 33.92 | 34.27 | 34.63 | 35.01 | - |
| 65 | - | - | - | - | 37.21 | 37.65 | 38.09 | 38.55 | - |

Mass flow in kg/h

| | | | | | | | | | |
|----|-----|-----|-----|-----|-------|-------|-------|-------|---|
| 30 | 464 | 585 | 725 | 887 | 1 075 | 1 289 | 1 533 | 1 810 | - |
| 35 | 456 | 578 | 718 | 881 | 1 068 | 1 282 | 1 525 | 1 801 | - |
| 40 | 447 | 569 | 710 | 872 | 1 059 | 1 272 | 1 514 | 1 789 | - |
| 45 | 436 | 559 | 699 | 862 | 1 047 | 1 260 | 1 501 | 1 774 | - |
| 50 | - | 546 | 687 | 849 | 1 034 | 1 245 | 1 485 | 1 756 | - |
| 55 | - | 532 | 672 | 833 | 1 018 | 1 228 | 1 466 | 1 736 | - |
| 60 | - | - | 656 | 816 | 999 | 1 207 | 1 444 | 1 712 | - |
| 65 | - | - | - | - | 977 | 1 184 | 1 419 | 1 685 | - |

Coefficient of performance (C.O.P.)

| | | | | | | | | | |
|----|------|------|------|------|------|------|------|------|---|
| 30 | 2.25 | 2.85 | 3.54 | 4.34 | 5.26 | 6.33 | 7.55 | 8.97 | - |
| 35 | 1.91 | 2.44 | 3.05 | 3.75 | 4.55 | 5.48 | 6.53 | 7.74 | - |
| 40 | 1.62 | 2.08 | 2.61 | 3.22 | 3.92 | 4.71 | 5.62 | 6.66 | - |
| 45 | 1.36 | 1.76 | 2.22 | 2.74 | 3.35 | 4.03 | 4.81 | 5.70 | - |
| 50 | - | 1.47 | 1.87 | 2.32 | 2.83 | 3.42 | 4.09 | 4.84 | - |
| 55 | - | 1.22 | 1.56 | 1.94 | 2.38 | 2.88 | 3.45 | 4.09 | - |
| 60 | - | - | 1.28 | 1.61 | 1.98 | 2.40 | 2.88 | 3.42 | - |
| 65 | - | - | - | - | 1.63 | 1.98 | 2.38 | 2.84 | - |

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

| | | |
|---------------------|--------|------|
| Cooling capacity | 59 103 | W |
| Power input | 18 553 | W |
| Current consumption | 31.17 | A |
| Mass flow | 1 331 | kg/h |
| C.O.P. | 3.19 | |

Pressure switch settings

| | | |
|---------------------------|------|--------|
| Maximum HP switch setting | 29.5 | bar(g) |
| Minimum LP switch setting | 0.5 | bar(g) |
| LP pump down setting | 1 | bar(g) |

Sound power data

| | | |
|--------------------|------|-------|
| Sound power level | 83.5 | dB(A) |
| With acoustic hood | 76 | dB(A) |

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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Performance data at 50 Hz, EN 12900 rating conditions
R134a

| Cond. temp. in °C (tc) | Evaporating temperature in °C (to) | | | | | | | |
|---------------------------|------------------------------------|-----|----|---|---|----|----|--|
| | -15 | -10 | -5 | 0 | 5 | 10 | 15 | |

Cooling capacity in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|---|---|
| 35 | 17 486 | 22 107 | 27 687 | 34 422 | 42 505 | 52 133 | 63 500 | - | - |
| 40 | 16 457 | 20 891 | 26 197 | 32 573 | 40 211 | 49 309 | 60 060 | - | - |
| 45 | 15 377 | 19 637 | 24 685 | 30 716 | 37 925 | 46 506 | 56 655 | - | - |
| 50 | 14 227 | 18 329 | 23 133 | 28 834 | 35 628 | 43 708 | 53 270 | - | - |
| 55 | - | 16 949 | 21 524 | 26 911 | 33 303 | 40 897 | 49 887 | - | - |
| 60 | - | - | 19 841 | 24 927 | 30 933 | 38 055 | 46 488 | - | - |
| 65 | - | - | - | 22 867 | 28 502 | 35 167 | 43 056 | - | - |
| 70 | - | - | - | - | 25 990 | 32 213 | 39 575 | - | - |

Power input in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|---|---|
| 35 | 8 409 | 8 510 | 8 596 | 8 671 | 8 738 | 8 799 | 8 856 | - | - |
| 40 | 9 210 | 9 328 | 9 431 | 9 523 | 9 607 | 9 684 | 9 758 | - | - |
| 45 | 10 089 | 10 224 | 10 345 | 10 455 | 10 557 | 10 652 | 10 744 | - | - |
| 50 | 11 056 | 11 211 | 11 351 | 11 479 | 11 599 | 11 713 | 11 823 | - | - |
| 55 | - | 12 299 | 12 459 | 12 607 | 12 746 | 12 880 | 13 009 | - | - |
| 60 | - | - | 13 682 | 13 850 | 14 010 | 14 163 | 14 313 | - | - |
| 65 | - | - | - | 15 220 | 15 401 | 15 576 | 15 746 | - | - |
| 70 | - | - | - | - | 16 932 | 17 129 | 17 321 | - | - |

Current consumption in A

| | | | | | | | | | |
|----|-------|-------|-------|-------|-------|-------|-------|---|---|
| 35 | 19.07 | 19.08 | 19.16 | 19.26 | 19.36 | 19.43 | 19.44 | - | - |
| 40 | 19.82 | 19.86 | 19.95 | 20.08 | 20.21 | 20.31 | 20.35 | - | - |
| 45 | 20.70 | 20.76 | 20.88 | 21.03 | 21.18 | 21.31 | 21.38 | - | - |
| 50 | 21.73 | 21.81 | 21.95 | 22.12 | 22.30 | 22.46 | 22.56 | - | - |
| 55 | - | 23.03 | 23.19 | 23.39 | 23.60 | 23.78 | 23.92 | - | - |
| 60 | - | - | 24.64 | 24.86 | 25.09 | 25.30 | 25.46 | - | - |
| 65 | - | - | - | 26.55 | 26.80 | 27.04 | 27.23 | - | - |
| 70 | - | - | - | - | 28.76 | 29.03 | 29.25 | - | - |

Mass flow in kg/h

| | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-------|-------|---|---|
| 35 | 425 | 526 | 645 | 785 | 949 | 1 143 | 1 368 | - | - |
| 40 | 421 | 523 | 641 | 780 | 942 | 1 132 | 1 354 | - | - |
| 45 | 416 | 519 | 637 | 775 | 935 | 1 123 | 1 340 | - | - |
| 50 | 409 | 513 | 632 | 769 | 928 | 1 113 | 1 328 | - | - |
| 55 | - | 505 | 625 | 762 | 920 | 1 104 | 1 316 | - | - |
| 60 | - | - | 616 | 753 | 911 | 1 093 | 1 303 | - | - |
| 65 | - | - | - | 743 | 901 | 1 082 | 1 289 | - | - |
| 70 | - | - | - | - | 888 | 1 068 | 1 275 | - | - |

Coefficient of performance (C.O.P.)

| | | | | | | | | | |
|----|------|------|------|------|------|------|------|---|---|
| 35 | 2.08 | 2.60 | 3.22 | 3.97 | 4.86 | 5.93 | 7.17 | - | - |
| 40 | 1.79 | 2.24 | 2.78 | 3.42 | 4.19 | 5.09 | 6.15 | - | - |
| 45 | 1.52 | 1.92 | 2.39 | 2.94 | 3.59 | 4.37 | 5.27 | - | - |
| 50 | 1.29 | 1.63 | 2.04 | 2.51 | 3.07 | 3.73 | 4.51 | - | - |
| 55 | - | 1.38 | 1.73 | 2.13 | 2.61 | 3.18 | 3.83 | - | - |
| 60 | - | - | 1.45 | 1.80 | 2.21 | 2.69 | 3.25 | - | - |
| 65 | - | - | - | 1.50 | 1.85 | 2.26 | 2.73 | - | - |
| 70 | - | - | - | - | 1.53 | 1.88 | 2.28 | - | - |

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

| | | |
|---------------------|--------|------|
| Cooling capacity | 35 628 | W |
| Power input | 11 599 | W |
| Current consumption | 22.30 | A |
| Mass flow | 928 | kg/h |
| C.O.P. | 3.07 | |

Pressure switch settings

| | | |
|---------------------------|------|--------|
| Maximum HP switch setting | 20.5 | bar(g) |
| Minimum LP switch setting | 0.5 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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Performance data at 50 Hz, ARI rating conditions

R134a

| Cond. temp. in °C (tc) | Evaporating temperature in °C (to) | | | | | | | |
|---------------------------|------------------------------------|-----|----|---|---|----|----|--|
| | -15 | -10 | -5 | 0 | 5 | 10 | 15 | |

Cooling capacity in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|---|---|
| 35 | 18 940 | 23 905 | 29 890 | 37 103 | 45 748 | 56 030 | 68 153 | - | - |
| 40 | 17 923 | 22 709 | 28 426 | 35 282 | 43 484 | 53 238 | 64 747 | - | - |
| 45 | 16 851 | 21 474 | 26 940 | 33 456 | 41 232 | 50 473 | 61 384 | - | - |
| 50 | 15 703 | 20 183 | 25 414 | 31 608 | 38 974 | 47 718 | 58 049 | - | - |
| 55 | - | 18 815 | 23 830 | 29 720 | 36 692 | 44 958 | 54 725 | - | - |
| 60 | - | - | 22 170 | 27 773 | 34 372 | 42 177 | 51 398 | - | - |
| 65 | - | - | - | 25 752 | 31 996 | 39 361 | 48 056 | - | - |
| 70 | - | - | - | - | 29 551 | 36 497 | 44 689 | - | - |

Power input in W

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|---|---|
| 35 | 8 409 | 8 510 | 8 596 | 8 671 | 8 738 | 8 799 | 8 856 | - | - |
| 40 | 9 210 | 9 328 | 9 431 | 9 523 | 9 607 | 9 684 | 9 758 | - | - |
| 45 | 10 089 | 10 224 | 10 345 | 10 455 | 10 557 | 10 652 | 10 744 | - | - |
| 50 | 11 056 | 11 211 | 11 351 | 11 479 | 11 599 | 11 713 | 11 823 | - | - |
| 55 | - | 12 299 | 12 459 | 12 607 | 12 746 | 12 880 | 13 009 | - | - |
| 60 | - | - | 13 682 | 13 850 | 14 010 | 14 163 | 14 313 | - | - |
| 65 | - | - | - | 15 220 | 15 401 | 15 576 | 15 746 | - | - |
| 70 | - | - | - | - | 16 932 | 17 129 | 17 321 | - | - |

Current consumption in A

| | | | | | | | | | |
|----|-------|-------|-------|-------|-------|-------|-------|---|---|
| 35 | 19.07 | 19.08 | 19.16 | 19.26 | 19.36 | 19.43 | 19.44 | - | - |
| 40 | 19.82 | 19.86 | 19.95 | 20.08 | 20.21 | 20.31 | 20.35 | - | - |
| 45 | 20.70 | 20.76 | 20.88 | 21.03 | 21.18 | 21.31 | 21.38 | - | - |
| 50 | 21.73 | 21.81 | 21.95 | 22.12 | 22.30 | 22.46 | 22.56 | - | - |
| 55 | - | 23.03 | 23.19 | 23.39 | 23.60 | 23.78 | 23.92 | - | - |
| 60 | - | - | 24.64 | 24.86 | 25.09 | 25.30 | 25.46 | - | - |
| 65 | - | - | - | 26.55 | 26.80 | 27.04 | 27.23 | - | - |
| 70 | - | - | - | - | 28.76 | 29.03 | 29.25 | - | - |

Mass flow in kg/h

| | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-------|-------|---|---|
| 35 | 423 | 523 | 641 | 781 | 944 | 1 137 | 1 360 | - | - |
| 40 | 419 | 520 | 638 | 776 | 937 | 1 126 | 1 346 | - | - |
| 45 | 414 | 516 | 634 | 771 | 930 | 1 117 | 1 333 | - | - |
| 50 | 407 | 510 | 628 | 765 | 923 | 1 107 | 1 321 | - | - |
| 55 | - | 503 | 622 | 758 | 915 | 1 098 | 1 308 | - | - |
| 60 | - | - | 613 | 750 | 907 | 1 087 | 1 296 | - | - |
| 65 | - | - | - | 739 | 896 | 1 076 | 1 282 | - | - |
| 70 | - | - | - | - | 883 | 1 063 | 1 268 | - | - |

Coefficient of performance (C.O.P.)

| | | | | | | | | | |
|----|------|------|------|------|------|------|------|---|---|
| 35 | 2.25 | 2.81 | 3.48 | 4.28 | 5.24 | 6.37 | 7.70 | - | - |
| 40 | 1.95 | 2.43 | 3.01 | 3.70 | 4.53 | 5.50 | 6.64 | - | - |
| 45 | 1.67 | 2.10 | 2.60 | 3.20 | 3.91 | 4.74 | 5.71 | - | - |
| 50 | 1.42 | 1.80 | 2.24 | 2.75 | 3.36 | 4.07 | 4.91 | - | - |
| 55 | - | 1.53 | 1.91 | 2.36 | 2.88 | 3.49 | 4.21 | - | - |
| 60 | - | - | 1.62 | 2.01 | 2.45 | 2.98 | 3.59 | - | - |
| 65 | - | - | - | 1.69 | 2.08 | 2.53 | 3.05 | - | - |
| 70 | - | - | - | - | 1.75 | 2.13 | 2.58 | - | - |

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

| | | |
|---------------------|--------|------|
| Cooling capacity | 40 457 | W |
| Power input | 12 661 | W |
| Current consumption | 23.52 | A |
| Mass flow | 993 | kg/h |
| C.O.P. | 3.20 | |

Pressure switch settings

| | | |
|---------------------------|------|--------|
| Maximum HP switch setting | 20.5 | bar(g) |
| Minimum LP switch setting | 0.5 | bar(g) |
| LP pump down setting | 0.5 | bar(g) |

Sound power data

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

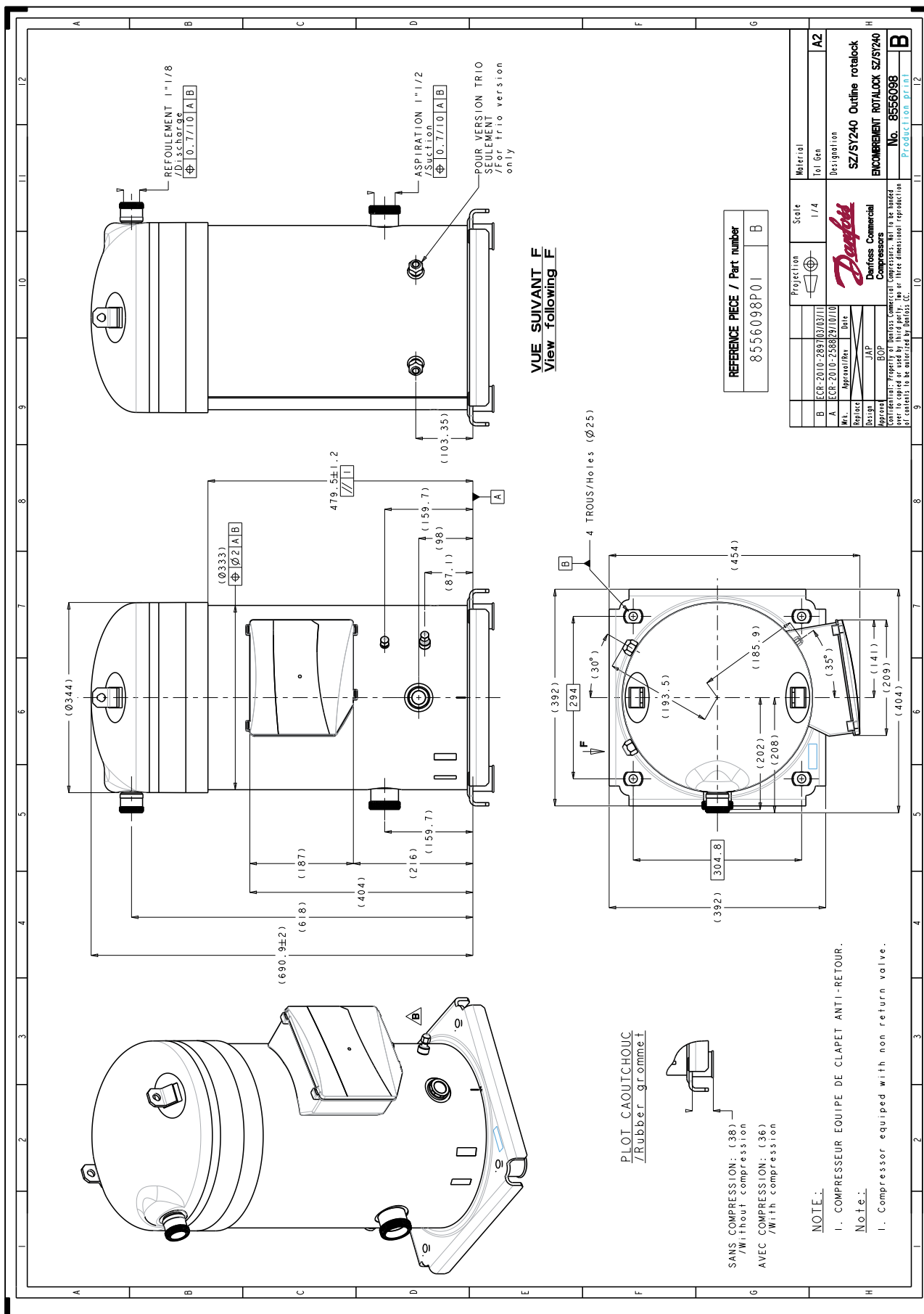
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

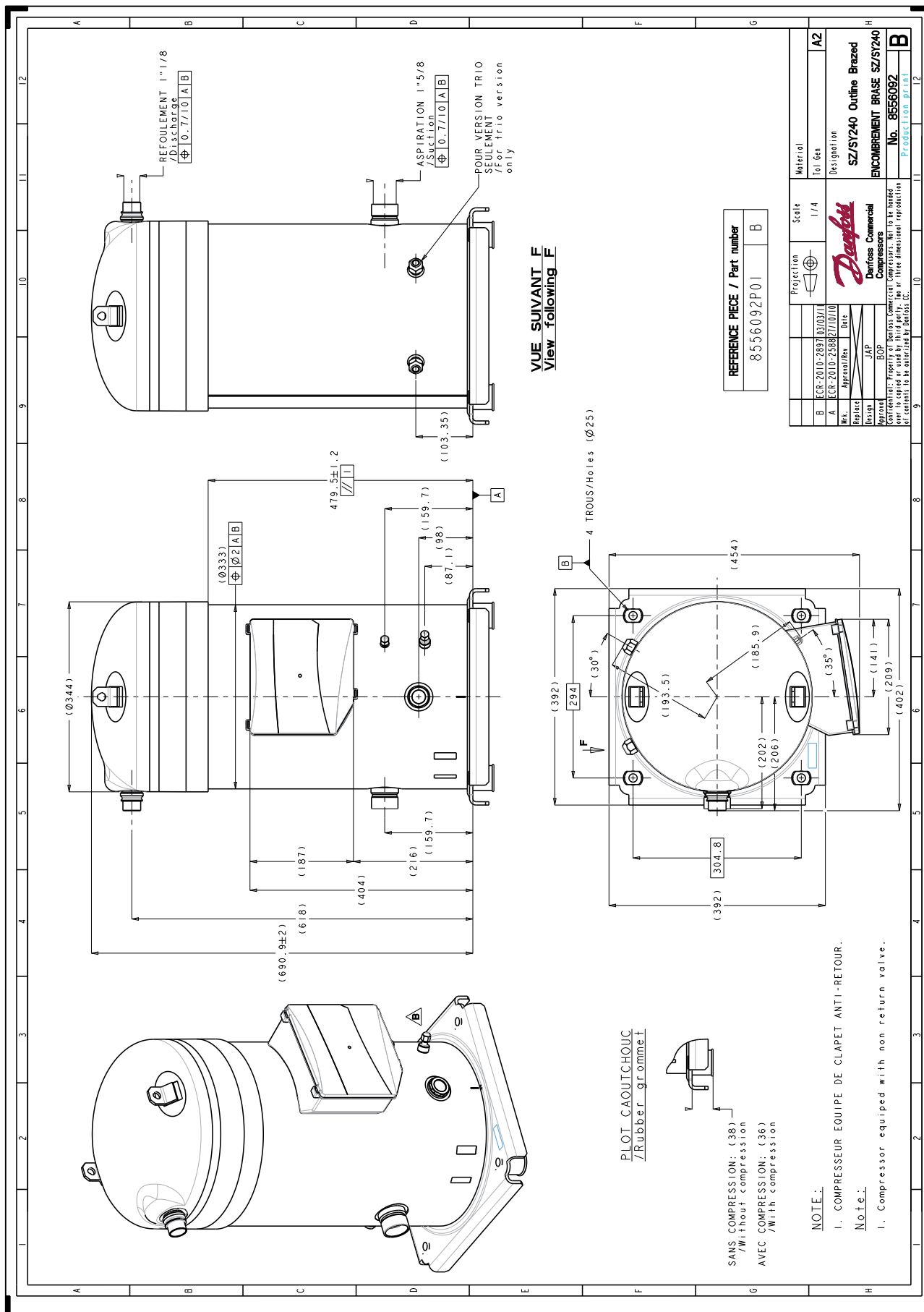
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

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