

Technical Data Sheet

Compressor model **MS26FF_V**
 Voltage **208-230V 60Hz ~1**
 Refrigerant **R404A**

APPLICATION

| | |
|--------------------|----------------------|
| Application | Low Back Pressure |
| Refrigerant | R404A |
| Evaporating Temp. | -40,0 °C to -10,0 °C |
| Expansion | Capillar/Valve |
| Comp. Cooling | Fan cooled |
| Max. ambient temp. | 43,0 °C |

COMPRESSOR

| | |
|--------------|-----------------------|
| Displacement | 25,93 cm ³ |
| Diameter | 39,98 mm |
| Stroke | 20,65 mm |
| Net Weight | 22,15 Kg |
| Oil type | ISO VG 46 ESTER |
| Oil charge | 700 cm ³ |

MOTOR

| | |
|--------------------------|---------------|
| Nominal Power | 3/4 hp |
| Voltage/Frequency | 208-230V 60Hz |
| Voltage range | 177-253 V |
| Type | CSR |
| Phase number | 1 PH |
| Locked Rotor Amps (LRA) | 42,00 A |
| Max. Cont. Current (MCC) | 9,50 A |
| Main W. resist. at 25°C | 1,38 Ω |
| Start W. resist. at 25°C | 4,87 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 1.170 kCal/h | 909 W |
| COP | 1,30 W/W | 0,91 W/W |
| EER | 1,12 kCal/Wh | 0,79 kCal/Wh |
| Input Power | 1.045 W | 994 W |
| Current | 4,80 A | 4,58 A |

APPROVALS



TEST CYCLE CONDITIONS

| | ASHRAE LBP (B) | CECOMAF LBP (A) |
|---------------------------------------|-------------------|--------------------|
| Evaporating temp. (T _e) | -23,3 °C | -25,0 °C |
| Condensing temp. (T _c) | 55,0 °C | 55,0 °C |
| Liquid temp. (T _{liq.}) | 32,0 °C | 55,0 °C |
| Ambient temp. (T _{amb.}) | 32,0 °C | 32,0 °C |
| Suction temp. (T _{suction}) | 32,0 °C | 32,0 °C |
| Voltage/Frequency | 230 V 60 Hz | 230 V 60 Hz |

ELECTRICAL COMPONENTS

| | | | |
|-------------------------|-------------------|-------------------|--|
| Starting capacitor | 88-108 μF 330 V | | |
| Run capacitor | 20 μF 450 V | | |
| Relay | Option 1 | Option 2 | |
| Reference | 3ARR3 10S3 | RVA 3AG.. | |
| Pick-Up | 180-195 V | 180-195 V | |
| Drop-Out | 40-105 V | 40-105 V | |
| Protector | Option 1 | Option 2 | |
| Reference | MST16AHN | T0258 | |
| Current | 23,00 A | 23,50 A | |
| Time check | 7,5-14 seg | 7,5-14 seg | |
| Disc temp. (Open/Close) | 120,00 / 69,00 °C | 120,00 / 52,00 °C | |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -40 | 444 | 624 | 2,95 | 0,83 | 0,71 |
| 40 | -35 | 717 | 730 | 3,42 | 1,14 | 0,98 |
| 40 | -30 | 1.029 | 843 | 3,92 | 1,42 | 1,22 |
| 40 | -25 | 1.380 | 961 | 4,44 | 1,67 | 1,44 |
| 40 | -23,3 | 1.508 | 1.003 | 4,62 | 1,75 | 1,50 |
| 40 | -20 | 1.769 | 1.085 | 4,97 | 1,90 | 1,63 |
| 40 | -15 | 2.196 | 1.215 | 5,53 | 2,10 | 1,81 |
| 40 | -10 | 2.663 | 1.350 | 6,10 | 2,29 | 1,97 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 45 | -40 | 374 | 605 | 2,87 | 0,72 | 0,62 |
| 45 | -35 | 635 | 722 | 3,39 | 1,02 | 0,88 |
| 45 | -30 | 934 | 844 | 3,93 | 1,29 | 1,11 |
| 45 | -25 | 1.272 | 972 | 4,48 | 1,52 | 1,31 |
| 45 | -23,3 | 1.395 | 1.017 | 4,68 | 1,60 | 1,37 |
| 45 | -20 | 1.648 | 1.106 | 5,06 | 1,73 | 1,49 |
| 45 | -15 | 2.063 | 1.245 | 5,66 | 1,93 | 1,66 |
| 45 | -10 | 2.516 | 1.390 | 6,27 | 2,11 | 1,81 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 50 | -40 | 304 | 587 | 2,78 | 0,60 | 0,52 |
| 50 | -35 | 552 | 713 | 3,35 | 0,90 | 0,77 |
| 50 | -30 | 838 | 845 | 3,93 | 1,15 | 0,99 |
| 50 | -25 | 1.163 | 983 | 4,53 | 1,38 | 1,18 |
| 50 | -23,3 | 1.283 | 1.031 | 4,74 | 1,45 | 1,24 |
| 50 | -20 | 1.527 | 1.126 | 5,15 | 1,58 | 1,36 |
| 50 | -15 | 1.929 | 1.275 | 5,78 | 1,76 | 1,51 |
| 50 | -10 | 2.370 | 1.430 | 6,43 | 1,93 | 1,66 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 55 | -40 | 234 | 568 | 2,70 | 0,48 | 0,41 |
| 55 | -35 | 469 | 704 | 3,31 | 0,77 | 0,67 |
| 55 | -30 | 743 | 846 | 3,93 | 1,02 | 0,88 |
| 55 | -25 | 1.055 | 994 | 4,58 | 1,24 | 1,06 |
| 55 | -23,3 | 1.170 | 1.045 | 4,80 | 1,30 | 1,12 |
| 55 | -20 | 1.406 | 1.147 | 5,24 | 1,43 | 1,23 |
| 55 | -15 | 1.795 | 1.306 | 5,91 | 1,60 | 1,38 |
| 55 | -10 | 2.223 | 1.470 | 6,60 | 1,76 | 1,51 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 60 | -40 | 164 | 550 | 2,62 | 0,35 | 0,30 |
| 60 | -35 | 386 | 695 | 3,27 | 0,65 | 0,56 |
| 60 | -30 | 647 | 847 | 3,94 | 0,89 | 0,76 |
| 60 | -25 | 947 | 1.004 | 4,62 | 1,10 | 0,94 |
| 60 | -23,3 | 1.057 | 1.059 | 4,86 | 1,16 | 1,00 |
| 60 | -20 | 1.285 | 1.167 | 5,32 | 1,28 | 1,10 |
| 60 | -15 | 1.661 | 1.336 | 6,04 | 1,45 | 1,24 |
| 60 | -10 | 2.077 | 1.510 | 6,77 | 1,60 | 1,38 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -40 | 461 | 624 | 2,95 | 0,74 | 0,64 |
| 40 | -35 | 773 | 730 | 3,42 | 1,06 | 0,91 |
| 40 | -30 | 1.116 | 843 | 3,92 | 1,32 | 1,14 |
| 40 | -25 | 1.492 | 961 | 4,44 | 1,55 | 1,34 |
| 40 | -23,3 | 1.627 | 1.003 | 4,62 | 1,62 | 1,40 |
| 40 | -20 | 1.900 | 1.085 | 4,97 | 1,75 | 1,51 |
| 40 | -15 | 2.339 | 1.215 | 5,53 | 1,93 | 1,66 |
| 40 | -10 | 2.810 | 1.350 | 6,10 | 2,08 | 1,80 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 45 | -40 | 375 | 605 | 2,87 | 0,62 | 0,53 |
| 45 | -35 | 650 | 722 | 3,39 | 0,90 | 0,78 |
| 45 | -30 | 958 | 844 | 3,93 | 1,14 | 0,98 |
| 45 | -25 | 1.298 | 972 | 4,48 | 1,33 | 1,15 |
| 45 | -23,3 | 1.420 | 1.017 | 4,68 | 1,40 | 1,21 |
| 45 | -20 | 1.669 | 1.106 | 5,06 | 1,51 | 1,30 |
| 45 | -15 | 2.072 | 1.245 | 5,66 | 1,66 | 1,44 |
| 45 | -10 | 2.508 | 1.390 | 6,27 | 1,80 | 1,56 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 50 | -40 | 288 | 587 | 2,78 | 0,49 | 0,42 |
| 50 | -35 | 528 | 713 | 3,35 | 0,74 | 0,64 |
| 50 | -30 | 800 | 845 | 3,93 | 0,95 | 0,82 |
| 50 | -25 | 1.103 | 983 | 4,53 | 1,12 | 0,97 |
| 50 | -23,3 | 1.214 | 1.031 | 4,74 | 1,18 | 1,02 |
| 50 | -20 | 1.439 | 1.126 | 5,15 | 1,28 | 1,10 |
| 50 | -15 | 1.806 | 1.275 | 5,78 | 1,42 | 1,22 |
| 50 | -10 | 2.205 | 1.430 | 6,43 | 1,54 | 1,33 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 55 | -40 | 202 | 568 | 2,70 | 0,36 | 0,31 |
| 55 | -35 | 406 | 704 | 3,31 | 0,58 | 0,50 |
| 55 | -30 | 641 | 846 | 3,93 | 0,76 | 0,66 |
| 55 | -25 | 909 | 994 | 4,58 | 0,91 | 0,79 |
| 55 | -23,3 | 1.007 | 1.045 | 4,80 | 0,96 | 0,83 |
| 55 | -20 | 1.208 | 1.147 | 5,24 | 1,05 | 0,91 |
| 55 | -15 | 1.539 | 1.306 | 5,91 | 1,18 | 1,02 |
| 55 | -10 | 1.902 | 1.470 | 6,60 | 1,29 | 1,12 |

| | | | | | | |
|----|-------|-------|-------|------|------|------|
| 60 | -40 | 116 | 550 | 2,62 | 0,21 | 0,18 |
| 60 | -35 | 284 | 695 | 3,27 | 0,41 | 0,35 |
| 60 | -30 | 483 | 847 | 3,94 | 0,57 | 0,49 |
| 60 | -25 | 714 | 1.004 | 4,62 | 0,71 | 0,61 |
| 60 | -23,3 | 800 | 1.059 | 4,86 | 0,76 | 0,65 |
| 60 | -20 | 978 | 1.167 | 5,32 | 0,84 | 0,72 |
| 60 | -15 | 1.273 | 1.336 | 6,04 | 0,95 | 0,82 |
| 60 | -10 | 1.600 | 1.510 | 6,77 | 1,06 | 0,92 |

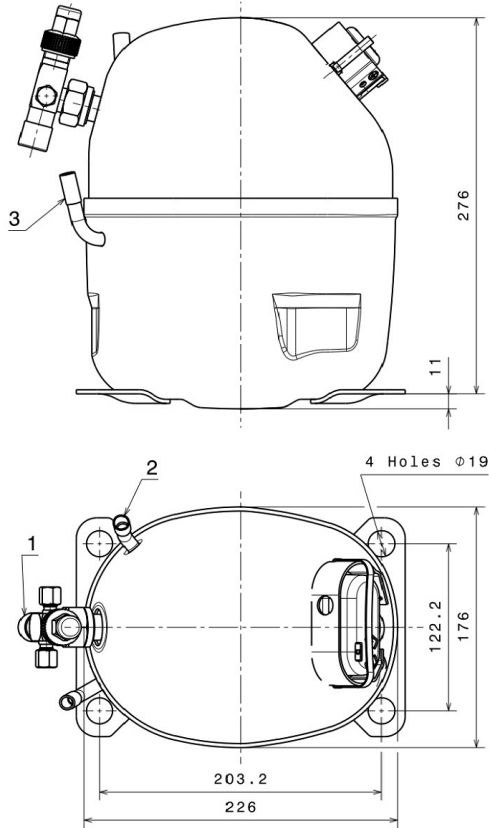
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|------------------|--------------|--------------------|
| 1 | 6.757,2296215155 | 1.196,8827228943 | 5,4265479194 | 148,90808445937 |
| 2 | 165,1138038532 | 15,1618530796 | 0,0576522368 | 4,0215098098423 |
| 3 | -75,8664482491 | 12,2136504971 | 0,0511795231 | -1,0140763666048 |
| 4 | 0,6034568431 | 0,1238582543 | 0,0003548157 | 0,024934798015213 |
| 5 | -1,4757209766 | 0,3998893079 | 0,0017029945 | -0,015598819795429 |

| | |
|----------|---|
| Equation | $x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$ |
|----------|---|

Technical Data Sheet

COMPRESSOR DIMENSIONS

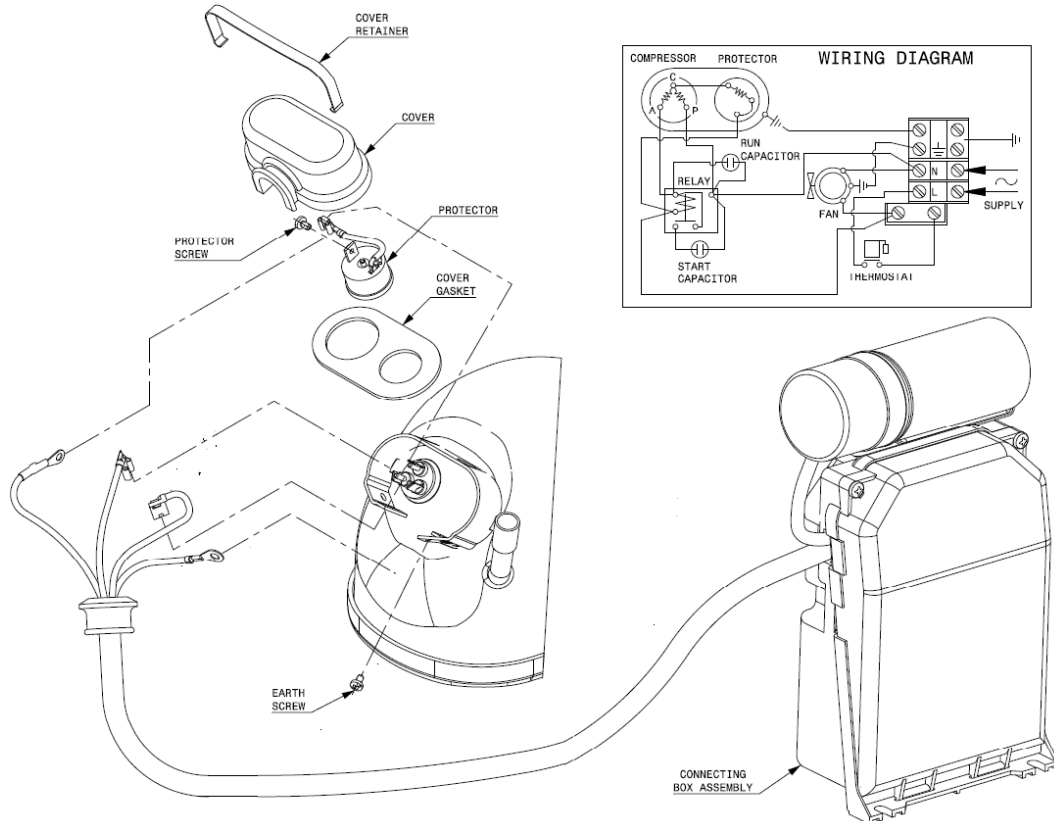


DESIGNATION INTERNAL DIAM.

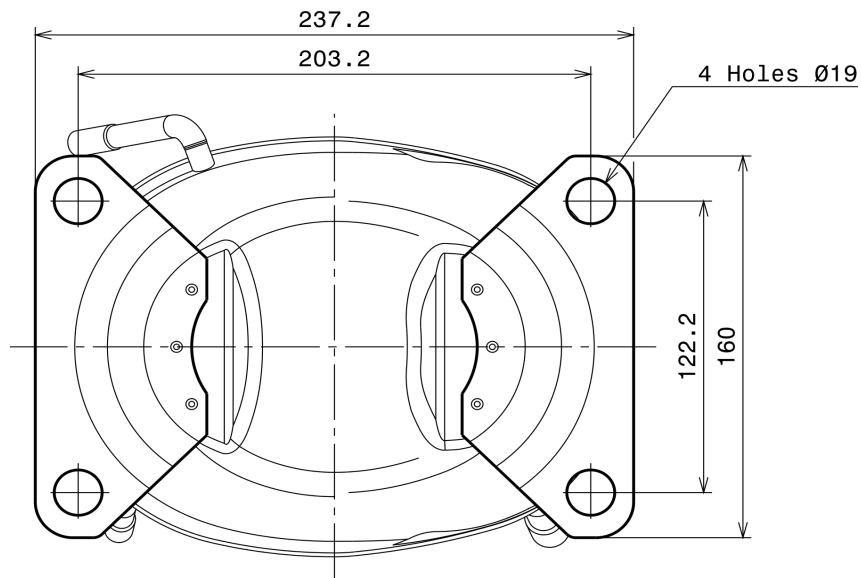
| | | |
|---|---------------|----------|
| 1 | Service Valve | 1/2" SAE |
| 2 | Service | 9,7 mm |
| 3 | Discharge | 8,0 mm |

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (NS Range)



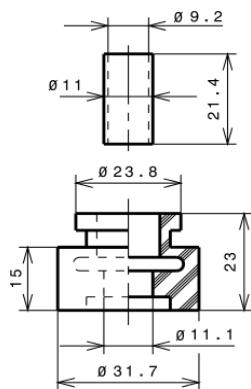
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A LBP

