

Technical Data Sheet

Compressor model **MLY45LRb**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R404A**

| APPLICATION | | COMPRESSOR | | MOTOR | |
|--------------------|----------------------|--------------|----------------------|--------------------------|---------------|
| Application | Low Back Pressure | Displacement | 4,56 cm ³ | Nominal Power | 1/6 hp |
| Refrigerant | R404A | Diameter | 19,10 mm | Voltage/Frequency | 115-127V 60Hz |
| Evaporating Temp. | -40,0 °C to -10,0 °C | Stroke | 15,93 mm | Voltage range | 98-140 V |
| Expansion | Capillar/Valve | Net Weight | 9,30 Kg | Type | CSR |
| Comp. Cooling | Fan cooled | Oil type | ISO VG 32 ESTER | Phase number | 1 PH |
| Max. ambient temp. | 43,0 °C | Oil charge | 300 cm ³ | Locked Rotor Amps (LRA) | 21,50 A |
| | | | | Max. Cont. Current (MCC) | 4,50 A |
| | | | | Main W. resist. at 25°C | 2,98 Ω |
| | | | | Start W. resist. at 25°C | 9,22 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 244 kCal/h | 192 W |
| COP | 1,27 W/W | 0,90 W/W |
| EER | 1,09 kCal/Wh | 0,78 kCal/Wh |
| Input Power | 223 W | 213 W |
| Current | 2,52 A | 2,45 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 | 115 V 60 Hz | 115 V 60 Hz |

ELECTRICAL COMPONENTS

| | | | | |
|-------------------------|-------------------|--|--|--|
| Starting capacitor | 150 µF 160 V | | | |
| Run capacitor | 15 µF 250 V | | | |
| Relay | Option 1 | | | |
| Reference | 2014 158. + NTC3Ω | | | |
| Pick-Up | 9,05 A | | | |
| Drop-Out | 7,70 A | | | |
| Protector | Option 1 | | | |
| Reference | T0252 | | | |
| Current | 11,50 A | | | |
| Time check | 7,5-14 seg | | | |
| Disc temp. (Open/Close) | 105,00 / 52,00 °C | | | |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -40 | 104 | 139 | 1,96 | 0,87 | 0,75 |
| 40 | -35 | 148 | 160 | 2,09 | 1,08 | 0,93 |
| 40 | -30 | 201 | 182 | 2,24 | 1,28 | 1,10 |
| 40 | -25 | 261 | 207 | 2,40 | 1,47 | 1,26 |
| 40 | -23,3 | 283 | 215 | 2,46 | 1,53 | 1,32 |
| 40 | -20 | 329 | 232 | 2,59 | 1,65 | 1,42 |
| 40 | -15 | 405 | 260 | 2,79 | 1,82 | 1,56 |
| 40 | -10 | 490 | 289 | 3,02 | 1,97 | 1,70 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -40 | 94 | 135 | 1,94 | 0,81 | 0,70 |
| 45 | -35 | 137 | 158 | 2,08 | 1,01 | 0,87 |
| 45 | -30 | 189 | 182 | 2,24 | 1,20 | 1,03 |
| 45 | -25 | 248 | 209 | 2,42 | 1,38 | 1,19 |
| 45 | -23,3 | 270 | 218 | 2,48 | 1,44 | 1,24 |
| 45 | -20 | 315 | 236 | 2,62 | 1,55 | 1,34 |
| 45 | -15 | 391 | 265 | 2,84 | 1,71 | 1,47 |
| 45 | -10 | 474 | 296 | 3,08 | 1,86 | 1,60 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -40 | 84 | 132 | 1,92 | 0,74 | 0,64 |
| 50 | -35 | 126 | 156 | 2,07 | 0,94 | 0,81 |
| 50 | -30 | 177 | 183 | 2,24 | 1,13 | 0,97 |
| 50 | -25 | 235 | 211 | 2,43 | 1,30 | 1,12 |
| 50 | -23,3 | 257 | 220 | 2,50 | 1,36 | 1,17 |
| 50 | -20 | 302 | 240 | 2,64 | 1,46 | 1,26 |
| 50 | -15 | 376 | 271 | 2,88 | 1,61 | 1,39 |
| 50 | -10 | 459 | 304 | 3,15 | 1,76 | 1,51 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -40 | 74 | 128 | 1,90 | 0,67 | 0,58 |
| 55 | -35 | 116 | 155 | 2,06 | 0,87 | 0,75 |
| 55 | -30 | 165 | 183 | 2,24 | 1,05 | 0,90 |
| 55 | -25 | 223 | 213 | 2,45 | 1,22 | 1,05 |
| 55 | -23,3 | 244 | 223 | 2,52 | 1,27 | 1,09 |
| 55 | -20 | 288 | 244 | 2,67 | 1,37 | 1,18 |
| 55 | -15 | 362 | 277 | 2,93 | 1,52 | 1,31 |
| 55 | -10 | 443 | 311 | 3,21 | 1,66 | 1,42 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -40 | 64 | 125 | 1,88 | 0,60 | 0,51 |
| 60 | -35 | 105 | 153 | 2,05 | 0,80 | 0,68 |
| 60 | -30 | 153 | 183 | 2,24 | 0,97 | 0,84 |
| 60 | -25 | 210 | 215 | 2,46 | 1,14 | 0,98 |
| 60 | -23,3 | 231 | 226 | 2,54 | 1,19 | 1,02 |
| 60 | -20 | 274 | 248 | 2,70 | 1,29 | 1,11 |
| 60 | -15 | 347 | 282 | 2,97 | 1,43 | 1,23 |
| 60 | -10 | 428 | 319 | 3,27 | 1,56 | 1,34 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -40 | 109 | 139 | 1,96 | 0,79 | 0,68 |
| 40 | -35 | 161 | 160 | 2,09 | 1,01 | 0,87 |
| 40 | -30 | 219 | 182 | 2,24 | 1,20 | 1,04 |
| 40 | -25 | 284 | 207 | 2,40 | 1,38 | 1,19 |
| 40 | -23,3 | 308 | 215 | 2,46 | 1,43 | 1,24 |
| 40 | -20 | 356 | 232 | 2,59 | 1,53 | 1,32 |
| 40 | -15 | 434 | 260 | 2,79 | 1,67 | 1,45 |
| 40 | -10 | 519 | 289 | 3,02 | 1,80 | 1,55 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -40 | 94 | 135 | 1,94 | 0,70 | 0,60 |
| 45 | -35 | 141 | 158 | 2,08 | 0,89 | 0,77 |
| 45 | -30 | 194 | 182 | 2,24 | 1,06 | 0,92 |
| 45 | -25 | 254 | 209 | 2,42 | 1,22 | 1,05 |
| 45 | -23,3 | 275 | 218 | 2,48 | 1,26 | 1,09 |
| 45 | -20 | 320 | 236 | 2,62 | 1,35 | 1,17 |
| 45 | -15 | 393 | 265 | 2,84 | 1,48 | 1,28 |
| 45 | -10 | 472 | 296 | 3,08 | 1,60 | 1,38 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -40 | 79 | 132 | 1,92 | 0,60 | 0,52 |
| 50 | -35 | 120 | 156 | 2,07 | 0,77 | 0,67 |
| 50 | -30 | 168 | 183 | 2,24 | 0,92 | 0,80 |
| 50 | -25 | 223 | 211 | 2,43 | 1,06 | 0,91 |
| 50 | -23,3 | 243 | 220 | 2,50 | 1,10 | 0,95 |
| 50 | -20 | 284 | 240 | 2,64 | 1,18 | 1,02 |
| 50 | -15 | 351 | 271 | 2,88 | 1,30 | 1,12 |
| 50 | -10 | 426 | 304 | 3,15 | 1,40 | 1,21 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -40 | 64 | 128 | 1,90 | 0,50 | 0,43 |
| 55 | -35 | 100 | 155 | 2,06 | 0,65 | 0,56 |
| 55 | -30 | 143 | 183 | 2,24 | 0,78 | 0,67 |
| 55 | -25 | 192 | 213 | 2,45 | 0,90 | 0,78 |
| 55 | -23,3 | 210 | 223 | 2,52 | 0,94 | 0,81 |
| 55 | -20 | 248 | 244 | 2,67 | 1,02 | 0,88 |
| 55 | -15 | 310 | 277 | 2,93 | 1,12 | 0,97 |
| 55 | -10 | 379 | 311 | 3,21 | 1,22 | 1,05 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -40 | 49 | 125 | 1,88 | 0,39 | 0,34 |
| 60 | -35 | 80 | 153 | 2,05 | 0,52 | 0,45 |
| 60 | -30 | 117 | 183 | 2,24 | 0,64 | 0,55 |
| 60 | -25 | 161 | 215 | 2,46 | 0,75 | 0,65 |
| 60 | -23,3 | 177 | 226 | 2,54 | 0,79 | 0,68 |
| 60 | -20 | 211 | 248 | 2,70 | 0,85 | 0,74 |
| 60 | -15 | 269 | 282 | 2,97 | 0,95 | 0,82 |
| 60 | -10 | 332 | 319 | 3,27 | 1,04 | 0,90 |

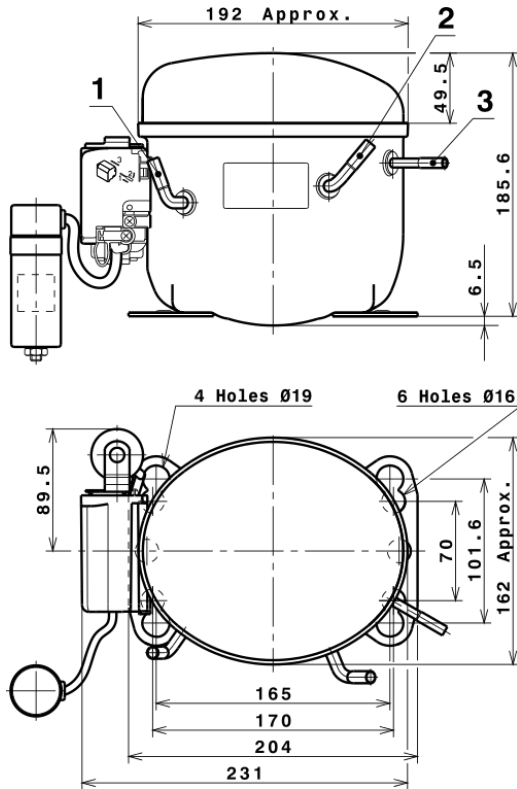
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|--------------------|
| 1 | 1.154,9574405718 | 269,4574290572 | 2,9115112991 | 24,083227406382 |
| 2 | 28,2594534695 | 3,8158648157 | 0,0401695170 | 0,67819032028037 |
| 3 | -11,7347007616 | 2,2921889287 | 0,0188358722 | -0,10401270284613 |
| 4 | 0,1252194886 | 0,0333522784 | 0,0005284279 | 0,0051081944144621 |
| 5 | -0,2187455693 | 0,0751921913 | 0,0005770767 | -0,001201491899887 |

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

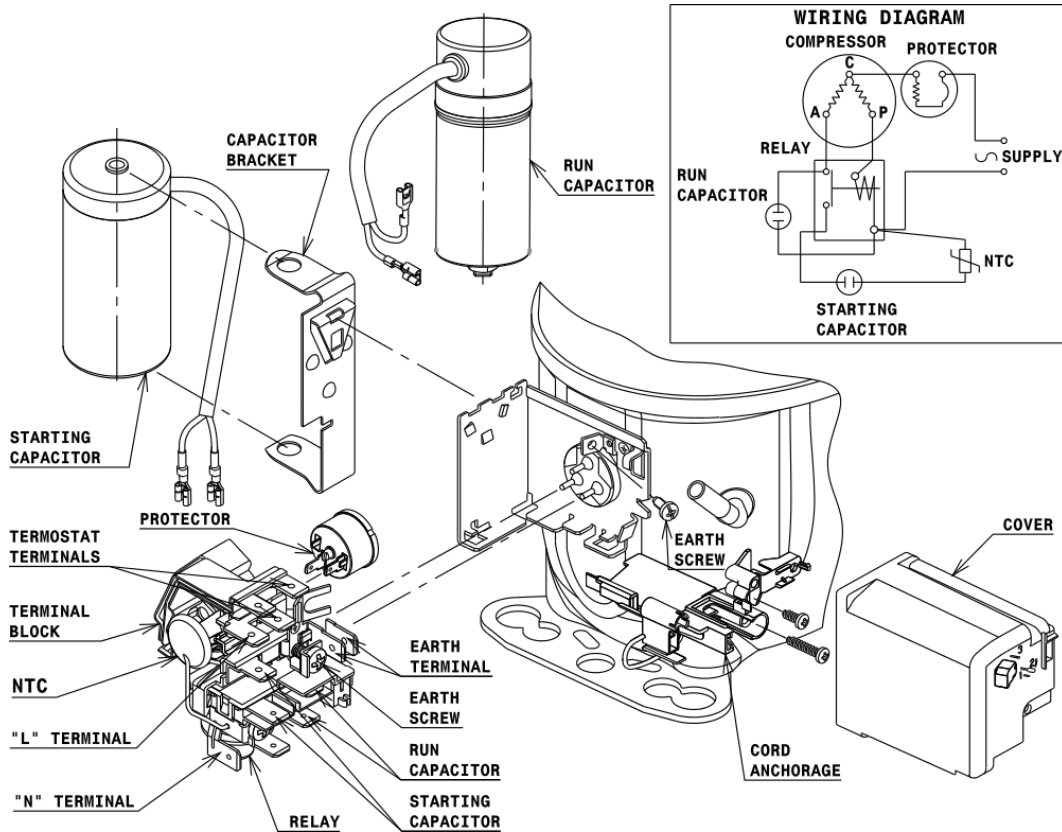


DESIGNATION INTERNAL DIAM.

| DESIGNATION | INTERNAL DIAM. |
|-------------|----------------|
| 1 Suction | 6,5 mm |
| 2 Service | 6,5 mm |
| 3 Discharge | 4,9 mm |

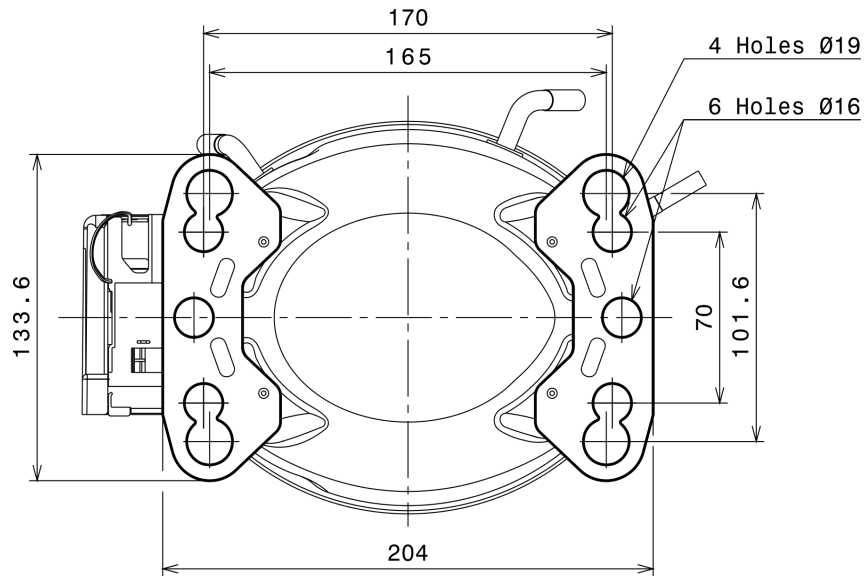
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

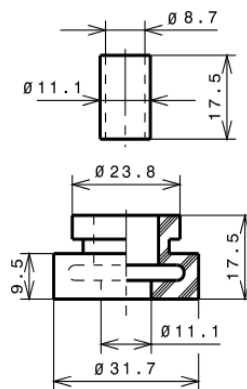
STANDARD

Ø16 holes (170x70 net)



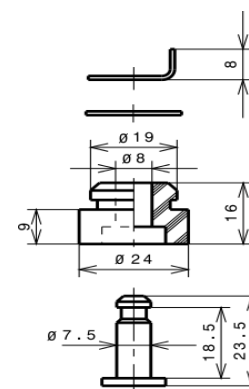
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A LBP

