

Technical Data Sheet

Compressor model **GLY90AAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R134a**

APPLICATION

Application Low Back Pressure
 Refrigerant R134a
 Evaporating Temp. -35,0 °C to -10,0 °C
 Expansion Capillar
 Comp. Cooling Static
 Max. ambient temp. 43,0 °C
 Compatible refriger. R1234yf

COMPRESSOR

Displacement 9,09 cm³
 Diameter 24,29 mm
 Stroke 19,62 mm
 Net Weight 9,43 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 295 cm³

MOTOR

Nominal Power 1/4 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 198-255 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 14,50 A
 Max. Cont. Current (MCC) 1,70 A
 Main W. resist. at 25°C 11,36 Ω
 Start W. resist. at 25°C 15,70 Ω

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 216 kCal/h | 186 W |
| COP | 1,37 W/W | 1,07 W/W |
| EER | 1,18 kCal/Wh | 0,92 kCal/Wh |
| Input Power | 183 W | 174 W |
| Current | 1,24 A | 1,21 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 | 220 V 50 Hz | 220 V 50 Hz |

ELECTRICAL COMPONENTS

| | | | | |
|-------------------------|-------------------|-------------------|-------------------|-------------------|
| Relay | | | | |
| Reference | | | | |
| Voltage | | | | |
| Resistance | | | | |
| Protector | Option 1 | Option 2 | Option 3 | Option 4 |
| Reference | 4TM308NFBYY | T0377 | AE11FQ | MRA38085 |
| Current | 11,00 A | 12,00 A | 10,80 A | 10,90 A |
| Time check | 5-15 seg | 7,5-14 seg | 7,5-14 seg | 7,5-14 seg |
| Disc temp. (Open/Close) | 120,00 / 61,00 °C | 120,00 / 62,00 °C | 125,00 / 62,00 °C | 125,00 / 61,00 °C |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 133 | 126 | 1,07 | 1,23 | 1,06 |
| 40 | -30 | 172 | 148 | 1,13 | 1,36 | 1,17 |
| 40 | -25 | 223 | 170 | 1,20 | 1,52 | 1,31 |
| 40 | -23,3 | 243 | 179 | 1,22 | 1,58 | 1,36 |
| 40 | -20 | 285 | 194 | 1,28 | 1,70 | 1,46 |
| 40 | -15 | 357 | 220 | 1,38 | 1,89 | 1,63 |
| 40 | -10 | 441 | 246 | 1,49 | 2,08 | 1,79 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 125 | 125 | 1,07 | 1,17 | 1,00 |
| 45 | -30 | 164 | 148 | 1,13 | 1,29 | 1,11 |
| 45 | -25 | 214 | 172 | 1,20 | 1,45 | 1,25 |
| 45 | -23,3 | 234 | 180 | 1,23 | 1,51 | 1,30 |
| 45 | -20 | 275 | 197 | 1,29 | 1,63 | 1,40 |
| 45 | -15 | 347 | 223 | 1,39 | 1,81 | 1,56 |
| 45 | -10 | 431 | 250 | 1,51 | 2,00 | 1,72 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 118 | 124 | 1,06 | 1,10 | 0,95 |
| 50 | -30 | 156 | 148 | 1,13 | 1,23 | 1,06 |
| 50 | -25 | 206 | 173 | 1,21 | 1,38 | 1,19 |
| 50 | -23,3 | 225 | 182 | 1,23 | 1,44 | 1,24 |
| 50 | -20 | 266 | 199 | 1,30 | 1,56 | 1,34 |
| 50 | -15 | 338 | 226 | 1,40 | 1,74 | 1,49 |
| 50 | -10 | 420 | 255 | 1,53 | 1,92 | 1,65 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 110 | 123 | 1,06 | 1,04 | 0,89 |
| 55 | -30 | 148 | 148 | 1,13 | 1,16 | 1,00 |
| 55 | -25 | 197 | 174 | 1,21 | 1,32 | 1,13 |
| 55 | -23,3 | 216 | 183 | 1,24 | 1,37 | 1,18 |
| 55 | -20 | 257 | 201 | 1,31 | 1,49 | 1,28 |
| 55 | -15 | 328 | 229 | 1,42 | 1,66 | 1,43 |
| 55 | -10 | 410 | 259 | 1,55 | 1,84 | 1,58 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 102 | 122 | 1,06 | 0,98 | 0,84 |
| 60 | -30 | 140 | 148 | 1,13 | 1,10 | 0,94 |
| 60 | -25 | 188 | 175 | 1,21 | 1,25 | 1,07 |
| 60 | -23,3 | 207 | 184 | 1,25 | 1,31 | 1,12 |
| 60 | -20 | 248 | 203 | 1,31 | 1,42 | 1,22 |
| 60 | -15 | 318 | 233 | 1,43 | 1,59 | 1,37 |
| 60 | -10 | 400 | 263 | 1,57 | 1,77 | 1,52 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 95 | 121 | 1,05 | 0,91 | 0,78 |
| 65 | -30 | 131 | 148 | 1,13 | 1,03 | 0,89 |
| 65 | -25 | 179 | 176 | 1,22 | 1,18 | 1,02 |
| 65 | -23,3 | 198 | 186 | 1,25 | 1,24 | 1,07 |
| 65 | -20 | 238 | 205 | 1,32 | 1,35 | 1,16 |
| 65 | -15 | 308 | 236 | 1,45 | 1,52 | 1,31 |
| 65 | -10 | 389 | 268 | 1,59 | 1,69 | 1,45 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 145 | 126 | 1,07 | 1,15 | 0,99 |
| 40 | -30 | 191 | 148 | 1,13 | 1,30 | 1,12 |
| 40 | -25 | 248 | 170 | 1,20 | 1,45 | 1,26 |
| 40 | -23,3 | 270 | 179 | 1,22 | 1,51 | 1,30 |
| 40 | -20 | 315 | 194 | 1,28 | 1,62 | 1,40 |
| 40 | -15 | 392 | 220 | 1,38 | 1,79 | 1,54 |
| 40 | -10 | 480 | 246 | 1,49 | 1,95 | 1,69 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 131 | 125 | 1,07 | 1,05 | 0,91 |
| 45 | -30 | 174 | 148 | 1,13 | 1,18 | 1,02 |
| 45 | -25 | 227 | 172 | 1,20 | 1,32 | 1,14 |
| 45 | -23,3 | 248 | 180 | 1,23 | 1,38 | 1,19 |
| 45 | -20 | 291 | 197 | 1,29 | 1,48 | 1,28 |
| 45 | -15 | 365 | 223 | 1,39 | 1,64 | 1,41 |
| 45 | -10 | 449 | 250 | 1,51 | 1,79 | 1,55 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 118 | 124 | 1,06 | 0,95 | 0,82 |
| 50 | -30 | 157 | 148 | 1,13 | 1,06 | 0,92 |
| 50 | -25 | 207 | 173 | 1,21 | 1,20 | 1,03 |
| 50 | -23,3 | 226 | 182 | 1,23 | 1,24 | 1,08 |
| 50 | -20 | 267 | 199 | 1,30 | 1,34 | 1,16 |
| 50 | -15 | 337 | 226 | 1,40 | 1,49 | 1,29 |
| 50 | -10 | 418 | 255 | 1,53 | 1,64 | 1,42 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 104 | 123 | 1,06 | 0,85 | 0,73 |
| 55 | -30 | 140 | 148 | 1,13 | 0,95 | 0,82 |
| 55 | -25 | 186 | 174 | 1,21 | 1,07 | 0,92 |
| 55 | -23,3 | 204 | 183 | 1,24 | 1,11 | 0,96 |
| 55 | -20 | 242 | 201 | 1,31 | 1,21 | 1,04 |
| 55 | -15 | 309 | 229 | 1,42 | 1,35 | 1,16 |
| 55 | -10 | 387 | 259 | 1,55 | 1,49 | 1,29 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 90 | 122 | 1,06 | 0,74 | 0,64 |
| 60 | -30 | 123 | 148 | 1,13 | 0,83 | 0,72 |
| 60 | -25 | 165 | 175 | 1,21 | 0,94 | 0,82 |
| 60 | -23,3 | 182 | 184 | 1,25 | 0,99 | 0,85 |
| 60 | -20 | 218 | 203 | 1,31 | 1,07 | 0,93 |
| 60 | -15 | 282 | 233 | 1,43 | 1,21 | 1,05 |
| 60 | -10 | 355 | 263 | 1,57 | 1,35 | 1,17 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 77 | 121 | 1,05 | 0,63 | 0,55 |
| 65 | -30 | 106 | 148 | 1,13 | 0,71 | 0,62 |
| 65 | -25 | 145 | 176 | 1,22 | 0,82 | 0,71 |
| 65 | -23,3 | 160 | 186 | 1,25 | 0,86 | 0,74 |
| 65 | -20 | 194 | 205 | 1,32 | 0,95 | 0,82 |
| 65 | -15 | 254 | 236 | 1,45 | 1,08 | 0,93 |
| 65 | -10 | 324 | 268 | 1,59 | 1,21 | 1,05 |

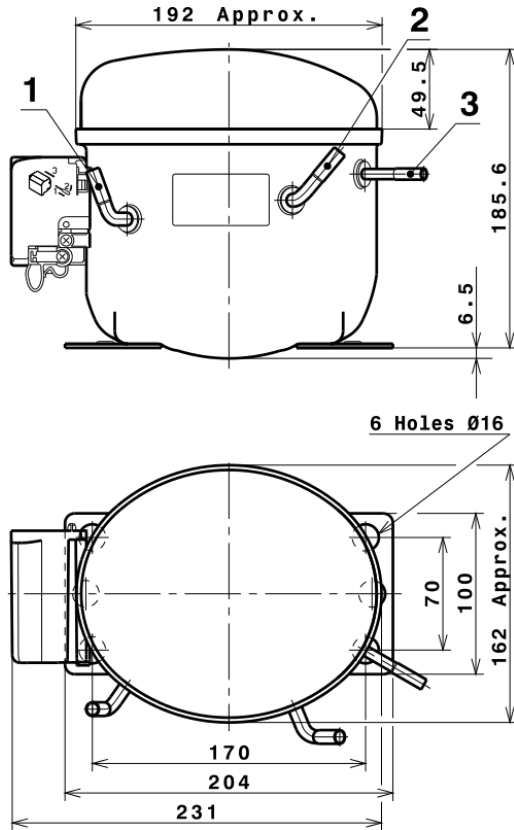
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|---------------------|
| 1 | 989,0845002201 | 256,8816875352 | 1,5708339521 | 17,564355219069 |
| 2 | 28,1394765550 | 4,2983289565 | 0,0253287921 | 0,56358445556584 |
| 3 | -7,8453882626 | 1,3240476037 | 0,0060189260 | -0,054650379917279 |
| 4 | 0,2022850756 | 0,0248499657 | 0,0003359270 | 0,0054790650586658 |
| 5 | -0,1458238119 | 0,0436670907 | 0,0001870891 | -0,0005351774297323 |

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

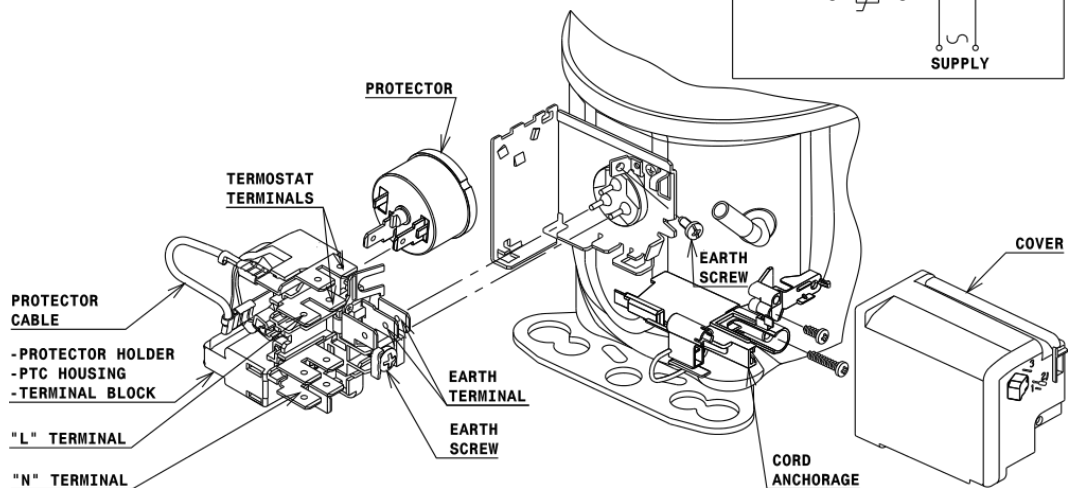
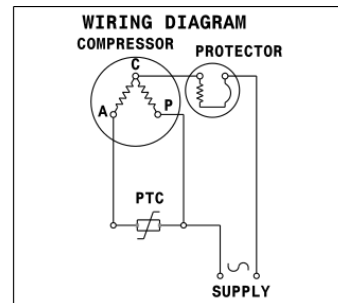


DESIGNATION INTERNAL DIAM.

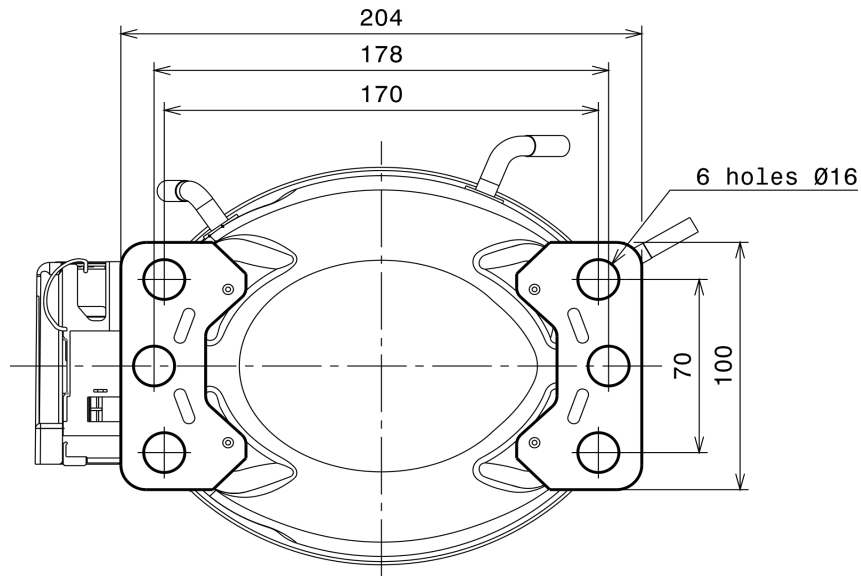
| DESIGNATION | INTERNAL DIAM. |
|-------------|----------------|
| 1 Suction | 6,5 mm |
| 2 Service | 6,5 mm |
| 3 Discharge | 4,9 mm |

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



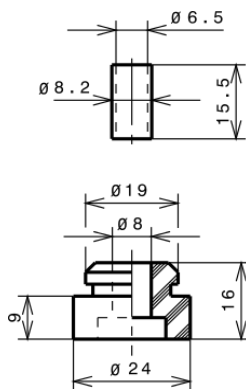
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

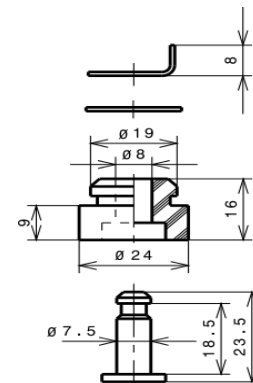
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a LBP

