

Technical Data Sheet

Compressor model **GLY80AAa**
 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 8,10 cm³
 Diameter 24,29 mm
 Stroke 17,47 mm
 Net Weight 9,51 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 400 cm³

MOTOR

Nominal Power 1/5 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-255 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 9,50 A
 Max. Cont. Current (MCC) 1,70 A
 Main W. resist. at 25°C 11,00 Ω
 Start W. resist. at 25°C 15,60 Ω

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 191 kCal/h | 164 W |
| COP | 1,37 W/W | 1,07 W/W |
| EER | 1,18 kCal/Wh | 0,92 kCal/Wh |
| Input Power | 162 W | 154 W |
| Current | 1,12 A | 1,09 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 | Option 1 | | | |
| Reference | PTC K100 | | | |
| Voltage | 200-240 V | | | |
| Resistance | 14.00 Ω | | | |
| Protector | Option 1 | Option 2 | | |
| Reference | T0490 | AE11FU | | |
| Current | 9,40 A | 9,40 A | | |
| Time check | 7,5-14 seg | 7,5-14 seg | | |
| Disc temp. (Open/Close) | 130,00 / 62,00 °C | 120,00 / 62,00 °C | | |

Technical Data Sheet

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 128 | 114 | 0,95 | 1,31 | 1,12 |
| 40 | -30 | 161 | 131 | 1,01 | 1,43 | 1,23 |
| 40 | -25 | 205 | 150 | 1,07 | 1,59 | 1,37 |
| 40 | -23,3 | 222 | 156 | 1,10 | 1,65 | 1,42 |
| 40 | -20 | 259 | 170 | 1,15 | 1,78 | 1,53 |
| 40 | -15 | 325 | 191 | 1,23 | 1,98 | 1,70 |
| 40 | -10 | 401 | 214 | 1,31 | 2,18 | 1,87 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 118 | 112 | 0,94 | 1,23 | 1,05 |
| 45 | -30 | 151 | 131 | 1,01 | 1,34 | 1,15 |
| 45 | -25 | 194 | 151 | 1,08 | 1,50 | 1,29 |
| 45 | -23,3 | 212 | 158 | 1,11 | 1,56 | 1,34 |
| 45 | -20 | 249 | 173 | 1,16 | 1,68 | 1,44 |
| 45 | -15 | 314 | 196 | 1,25 | 1,87 | 1,60 |
| 45 | -10 | 391 | 221 | 1,34 | 2,06 | 1,77 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 107 | 109 | 0,93 | 1,14 | 0,98 |
| 50 | -30 | 140 | 130 | 1,00 | 1,25 | 1,08 |
| 50 | -25 | 184 | 152 | 1,08 | 1,41 | 1,21 |
| 50 | -23,3 | 201 | 160 | 1,11 | 1,46 | 1,26 |
| 50 | -20 | 239 | 176 | 1,17 | 1,58 | 1,36 |
| 50 | -15 | 304 | 201 | 1,26 | 1,76 | 1,51 |
| 50 | -10 | 380 | 227 | 1,36 | 1,95 | 1,67 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 97 | 107 | 0,92 | 1,05 | 0,91 |
| 55 | -30 | 130 | 130 | 1,00 | 1,17 | 1,00 |
| 55 | -25 | 174 | 154 | 1,09 | 1,32 | 1,13 |
| 55 | -23,3 | 191 | 162 | 1,12 | 1,37 | 1,18 |
| 55 | -20 | 228 | 179 | 1,18 | 1,48 | 1,28 |
| 55 | -15 | 294 | 206 | 1,28 | 1,66 | 1,43 |
| 55 | -10 | 370 | 234 | 1,39 | 1,84 | 1,58 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 87 | 105 | 0,91 | 0,96 | 0,83 |
| 60 | -30 | 120 | 129 | 1,00 | 1,08 | 0,93 |
| 60 | -25 | 163 | 155 | 1,09 | 1,23 | 1,06 |
| 60 | -23,3 | 181 | 164 | 1,13 | 1,28 | 1,10 |
| 60 | -20 | 218 | 182 | 1,19 | 1,39 | 1,20 |
| 60 | -15 | 283 | 211 | 1,30 | 1,56 | 1,35 |
| 60 | -10 | 360 | 241 | 1,42 | 1,74 | 1,49 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 76 | 102 | 0,90 | 0,87 | 0,75 |
| 65 | -30 | 109 | 128 | 1,00 | 0,99 | 0,85 |
| 65 | -25 | 153 | 156 | 1,10 | 1,14 | 0,98 |
| 65 | -23,3 | 170 | 166 | 1,13 | 1,20 | 1,03 |
| 65 | -20 | 208 | 185 | 1,21 | 1,30 | 1,12 |
| 65 | -15 | 273 | 215 | 1,32 | 1,47 | 1,27 |
| 65 | -10 | 349 | 247 | 1,44 | 1,64 | 1,41 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 139 | 114 | 0,95 | 1,22 | 1,06 |
| 40 | -30 | 179 | 131 | 1,01 | 1,36 | 1,18 |
| 40 | -25 | 228 | 150 | 1,07 | 1,52 | 1,31 |
| 40 | -23,3 | 247 | 156 | 1,10 | 1,58 | 1,36 |
| 40 | -20 | 287 | 170 | 1,15 | 1,69 | 1,46 |
| 40 | -15 | 357 | 191 | 1,23 | 1,87 | 1,61 |
| 40 | -10 | 436 | 214 | 1,31 | 2,04 | 1,76 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 124 | 112 | 0,94 | 1,11 | 0,96 |
| 45 | -30 | 160 | 131 | 1,01 | 1,22 | 1,06 |
| 45 | -25 | 207 | 151 | 1,08 | 1,37 | 1,18 |
| 45 | -23,3 | 225 | 158 | 1,11 | 1,42 | 1,23 |
| 45 | -20 | 263 | 173 | 1,16 | 1,52 | 1,32 |
| 45 | -15 | 330 | 196 | 1,25 | 1,68 | 1,46 |
| 45 | -10 | 407 | 221 | 1,34 | 1,85 | 1,59 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 108 | 109 | 0,93 | 0,98 | 0,85 |
| 50 | -30 | 141 | 130 | 1,00 | 1,09 | 0,94 |
| 50 | -25 | 185 | 152 | 1,08 | 1,22 | 1,05 |
| 50 | -23,3 | 203 | 160 | 1,11 | 1,26 | 1,09 |
| 50 | -20 | 239 | 176 | 1,17 | 1,36 | 1,18 |
| 50 | -15 | 304 | 201 | 1,26 | 1,51 | 1,31 |
| 50 | -10 | 378 | 227 | 1,36 | 1,66 | 1,44 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 92 | 107 | 0,92 | 0,86 | 0,74 |
| 55 | -30 | 123 | 130 | 1,00 | 0,95 | 0,82 |
| 55 | -25 | 164 | 154 | 1,09 | 1,07 | 0,92 |
| 55 | -23,3 | 180 | 162 | 1,12 | 1,11 | 0,96 |
| 55 | -20 | 215 | 179 | 1,18 | 1,20 | 1,04 |
| 55 | -15 | 277 | 206 | 1,28 | 1,35 | 1,16 |
| 55 | -10 | 349 | 234 | 1,39 | 1,49 | 1,29 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 76 | 105 | 0,91 | 0,72 | 0,63 |
| 60 | -30 | 104 | 129 | 1,00 | 0,81 | 0,70 |
| 60 | -25 | 143 | 155 | 1,09 | 0,92 | 0,80 |
| 60 | -23,3 | 158 | 164 | 1,13 | 0,97 | 0,83 |
| 60 | -20 | 192 | 182 | 1,19 | 1,05 | 0,91 |
| 60 | -15 | 251 | 211 | 1,30 | 1,19 | 1,03 |
| 60 | -10 | 320 | 241 | 1,42 | 1,33 | 1,15 |

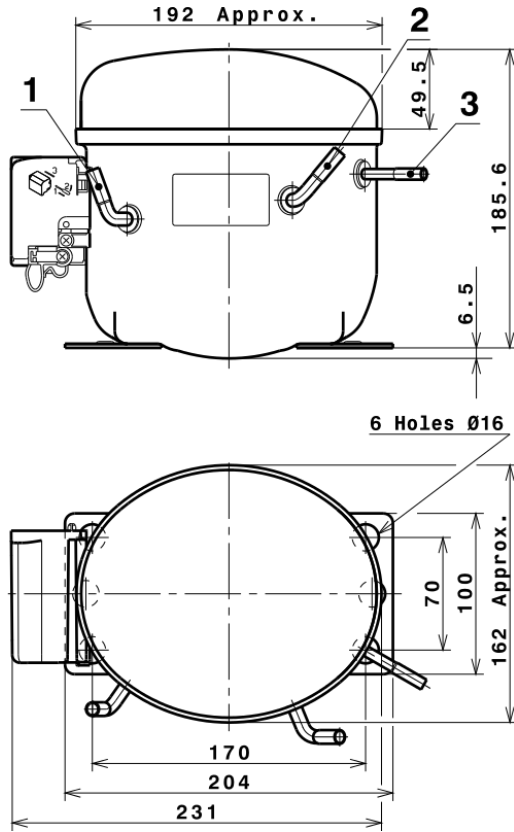
| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 60 | 102 | 0,90 | 0,59 | 0,51 |
| 65 | -30 | 86 | 128 | 1,00 | 0,67 | 0,58 |
| 65 | -25 | 122 | 156 | 1,10 | 0,78 | 0,67 |
| 65 | -23,3 | 136 | 166 | 1,13 | 0,82 | 0,71 |
| 65 | -20 | 168 | 185 | 1,21 | 0,91 | 0,78 |
| 65 | -15 | 224 | 215 | 1,32 | 1,04 | 0,90 |
| 65 | -10 | 290 | 247 | 1,44 | 1,17 | 1,01 |

EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|---------------------|
| 1 | 900,0994307440 | 186,5842508803 | 1,2140242646 | 16,034525537044 |
| 2 | 25,1179781707 | 2,5073583083 | 0,0101953115 | 0,50469065707322 |
| 3 | -7,0991038576 | 2,1019534178 | 0,0079605146 | -0,04964665310482 |
| 4 | 0,1986200843 | 0,0299531985 | 0,0001350166 | 0,0053573331784602 |
| 5 | -0,1119093420 | 0,0736758500 | 0,0002764436 | -3,5500307208669E-5 |

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

COMPRESSOR DIMENSIONS

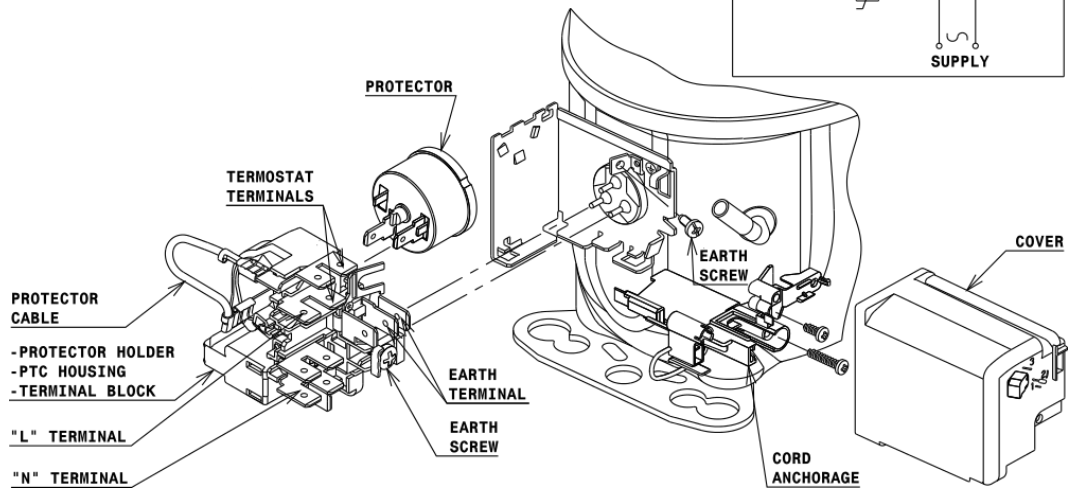
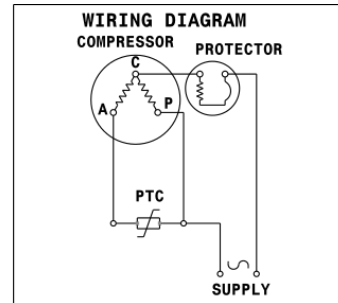


DESIGNATION INTERNAL DIAM.

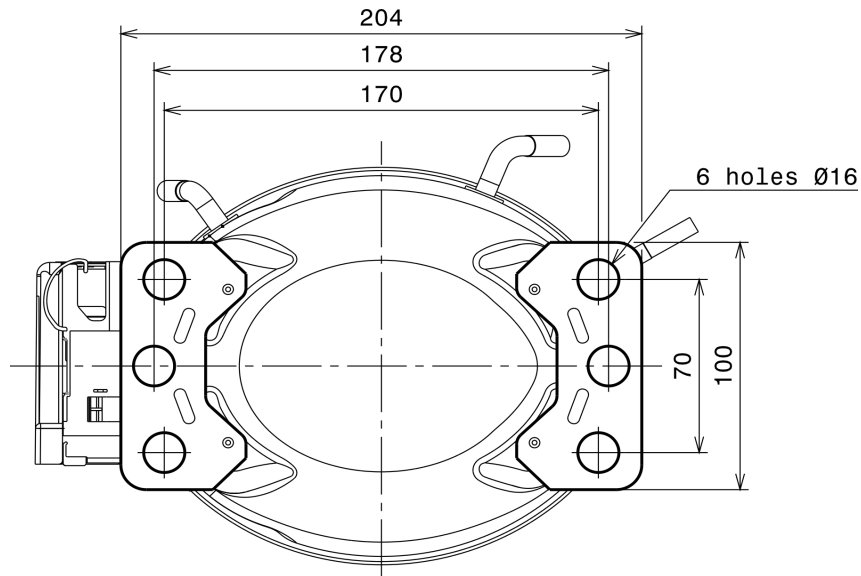
| DESIGNATION | INTERNAL DIAM. |
|-------------|----------------|
| 1 Suction | 6,5 mm |
| 2 Service | 6,5 mm |
| 3 Discharge | 4,9 mm |

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

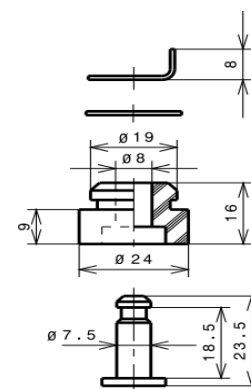
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a LBP

