

Technical Data Sheet

Compressor model **GLY80RDb**
 Voltage **115V 60Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

| | | | | | |
|----------------------|---------------------------|--------------|----------------------|--------------------------|-----------|
| Application | High-Medium Back Pressure | Displacement | 8,10 cm ³ | Nominal Power | 1/5 hp |
| Refrigerant | R134a | Diameter | 24,29 mm | Voltage/Frequency | 115V 60Hz |
| Evaporating Temp. | -25,0 °C to 10,0 °C | Stroke | 17,47 mm | Voltage range | 98-132 V |
| Expansion | Capillar/Valve | Net Weight | 9,85 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 | 295 cm ³ | Locked Rotor Amps (LRA) | 28,60 A |
| Compatible refriger. | R1234yf | | | Max. Cont. Current (MCC) | 6,40 A |
| | | | | Main W. resist. at 25°C | 1,70 Ω |
| | | | | Start W. resist. at 25°C | 6,80 Ω |

NOMINAL PERFORMANCE

APPROVALS

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 800 kCal/h | 775 W |
| COP | 2,51 W/W | 2,17 W/W |
| EER | 2,16 kCal/Wh | 1,87 kCal/Wh |
| Input Power | 370 W | 357 W |
| Current | 3,60 A | 3,50 A |



TEST CYCLE CONDITIONS

| | ASHRAE HMBP (D) | CECOMAF HMBP (C) |
|---------------------------------------|--------------------|---------------------|
| Evaporating temp. (T _e) | 7,2 °C | 5,0 °C |
| Condensing temp. (T _c) | 55,0 °C | 55,0 °C |
| Liquid temp. (T _{liq.}) | 46,0 °C | 55,0 °C |
| Ambient temp. (T _{amb.}) | 35,0 °C | 32,0 °C |
| Suction temp. (T _{suction}) | 35,0 °C | 32,0 °C |
| Voltage/Frequency | 115 V 60 Hz | 115 V 60 Hz |

ELECTRICAL COMPONENTS

| | | | | |
|-------------------------|--------------------|--|--|--|
| Starting capacitor | 200 µF 160 V | | | |
| Run capacitor | 15 µF 250 V | | | |
| Relay | Option 1 | | | |
| Reference | 2014 170. + NTC3î© | | | |
| Pick-Up | 12,10 A | | | |
| Drop-Out | 10,30 A | | | |
| Protector | Option 1 | | | |
| Reference | T0253 | | | |
| Current | 15,00 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 | -25 | 210 | 177 | 2,05 | 1,38 | 1,19 |
| 40 | -20 | 278 | 196 | 2,20 | 1,65 | 1,42 |
| 40 | -15 | 364 | 216 | 2,37 | 1,96 | 1,68 |
| 40 | -10 | 467 | 238 | 2,54 | 2,28 | 1,96 |
| 40 | -5 | 586 | 261 | 2,73 | 2,61 | 2,24 |
| 40 | 0 | 723 | 286 | 2,93 | 2,95 | 2,53 |
| 40 | 5 | 877 | 311 | 3,13 | 3,28 | 2,82 |
| 40 | 7,2 | 950 | 323 | 3,23 | 3,42 | 2,94 |
| 40 | 10 | 1.048 | 338 | 3,35 | 3,60 | 3,10 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 45 | -25 | 193 | 177 | 2,05 | 1,27 | 1,09 |
| 45 | -20 | 257 | 198 | 2,22 | 1,50 | 1,29 |
| 45 | -15 | 337 | 221 | 2,41 | 1,77 | 1,52 |
| 45 | -10 | 434 | 245 | 2,60 | 2,06 | 1,77 |
| 45 | -5 | 549 | 271 | 2,81 | 2,36 | 2,03 |
| 45 | 0 | 680 | 298 | 3,02 | 2,66 | 2,29 |
| 45 | 5 | 829 | 326 | 3,25 | 2,96 | 2,54 |
| 45 | 7,2 | 900 | 339 | 3,35 | 3,09 | 2,66 |
| 45 | 10 | 995 | 355 | 3,48 | 3,26 | 2,80 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 50 | -25 | 177 | 177 | 2,05 | 1,16 | 1,00 |
| 50 | -20 | 235 | 201 | 2,24 | 1,36 | 1,17 |
| 50 | -15 | 310 | 226 | 2,45 | 1,59 | 1,37 |
| 50 | -10 | 402 | 253 | 2,66 | 1,85 | 1,59 |
| 50 | -5 | 512 | 281 | 2,89 | 2,12 | 1,82 |
| 50 | 0 | 638 | 310 | 3,12 | 2,39 | 2,06 |
| 50 | 5 | 781 | 340 | 3,36 | 2,67 | 2,30 |
| 50 | 7,2 | 850 | 354 | 3,48 | 2,79 | 2,40 |
| 50 | 10 | 942 | 372 | 3,62 | 2,94 | 2,53 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -25 | 160 | 177 | 2,05 | 1,05 | 0,90 |
| 55 | -20 | 213 | 203 | 2,26 | 1,22 | 1,05 |
| 55 | -15 | 283 | 231 | 2,49 | 1,42 | 1,22 |
| 55 | -10 | 370 | 260 | 2,72 | 1,66 | 1,42 |
| 55 | -5 | 474 | 290 | 2,96 | 1,90 | 1,63 |
| 55 | 0 | 595 | 322 | 3,22 | 2,15 | 1,85 |
| 55 | 5 | 734 | 355 | 3,48 | 2,40 | 2,07 |
| 55 | 7,2 | 800 | 370 | 3,60 | 2,51 | 2,16 |
| 55 | 10 | 889 | 389 | 3,75 | 2,66 | 2,28 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -25 | 143 | 177 | 2,05 | 0,94 | 0,81 |
| 60 | -20 | 191 | 206 | 2,28 | 1,08 | 0,93 |
| 60 | -15 | 256 | 236 | 2,53 | 1,26 | 1,08 |
| 60 | -10 | 338 | 267 | 2,78 | 1,47 | 1,26 |
| 60 | -5 | 437 | 300 | 3,04 | 1,69 | 1,46 |
| 60 | 0 | 553 | 334 | 3,31 | 1,92 | 1,65 |
| 60 | 5 | 686 | 370 | 3,60 | 2,16 | 1,86 |
| 60 | 7,2 | 750 | 386 | 3,72 | 2,26 | 1,94 |
| 60 | 10 | 836 | 406 | 3,89 | 2,39 | 2,06 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 65 | -25 | 127 | 177 | 2,05 | 0,83 | 0,72 |
| 65 | -20 | 169 | 208 | 2,30 | 0,95 | 0,81 |
| 65 | -15 | 229 | 241 | 2,56 | 1,11 | 0,95 |
| 65 | -10 | 306 | 275 | 2,84 | 1,29 | 1,11 |
| 65 | -5 | 399 | 310 | 3,12 | 1,50 | 1,29 |
| 65 | 0 | 510 | 346 | 3,41 | 1,71 | 1,47 |
| 65 | 5 | 638 | 384 | 3,71 | 1,93 | 1,66 |
| 65 | 7,2 | 700 | 401 | 3,85 | 2,03 | 1,74 |
| 65 | 10 | 783 | 423 | 4,02 | 2,15 | 1,85 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -25 | 226 | 178 | 2,06 | 1,27 | 1,10 |
| 40 | -20 | 301 | 197 | 2,21 | 1,53 | 1,32 |
| 40 | -15 | 394 | 218 | 2,38 | 1,81 | 1,56 |
| 40 | -10 | 504 | 239 | 2,55 | 2,11 | 1,82 |
| 40 | -5 | 633 | 263 | 2,74 | 2,41 | 2,08 |
| 40 | 0 | 780 | 287 | 2,94 | 2,71 | 2,34 |
| 40 | 5 | 944 | 313 | 3,15 | 3,01 | 2,60 |
| 40 | 7,2 | 1.022 | 325 | 3,24 | 3,14 | 2,72 |
| 40 | 10 | 1.127 | 341 | 3,37 | 3,31 | 2,86 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 45 | -25 | 207 | 178 | 2,06 | 1,16 | 1,01 |
| 45 | -20 | 276 | 200 | 2,23 | 1,38 | 1,19 |
| 45 | -15 | 362 | 222 | 2,42 | 1,63 | 1,41 |
| 45 | -10 | 467 | 247 | 2,61 | 1,89 | 1,63 |
| 45 | -5 | 589 | 272 | 2,82 | 2,16 | 1,87 |
| 45 | 0 | 729 | 300 | 3,04 | 2,44 | 2,10 |
| 45 | 5 | 888 | 328 | 3,26 | 2,71 | 2,34 |
| 45 | 7,2 | 963 | 341 | 3,37 | 2,83 | 2,44 |
| 45 | 10 | 1.064 | 358 | 3,50 | 2,98 | 2,57 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 50 | -25 | 188 | 178 | 2,06 | 1,06 | 0,91 |
| 50 | -20 | 251 | 202 | 2,25 | 1,24 | 1,07 |
| 50 | -15 | 331 | 227 | 2,46 | 1,45 | 1,26 |
| 50 | -10 | 429 | 254 | 2,67 | 1,69 | 1,46 |
| 50 | -5 | 545 | 282 | 2,90 | 1,93 | 1,67 |
| 50 | 0 | 679 | 312 | 3,14 | 2,18 | 1,88 |
| 50 | 5 | 831 | 343 | 3,38 | 2,43 | 2,10 |
| 50 | 7,2 | 904 | 357 | 3,49 | 2,54 | 2,19 |
| 50 | 10 | 1.002 | 375 | 3,64 | 2,67 | 2,31 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -25 | 169 | 178 | 2,06 | 0,95 | 0,82 |
| 55 | -20 | 225 | 204 | 2,27 | 1,10 | 0,95 |
| 55 | -15 | 299 | 232 | 2,50 | 1,29 | 1,11 |
| 55 | -10 | 391 | 261 | 2,73 | 1,50 | 1,29 |
| 55 | -5 | 501 | 292 | 2,98 | 1,72 | 1,48 |
| 55 | 0 | 629 | 324 | 3,23 | 1,94 | 1,68 |
| 55 | 5 | 775 | 357 | 3,50 | 2,17 | 1,87 |
| 55 | 7,2 | 845 | 372 | 3,62 | 2,27 | 1,96 |
| 55 | 10 | 939 | 392 | 3,77 | 2,40 | 2,07 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -25 | 150 | 178 | 2,06 | 0,85 | 0,73 |
| 60 | -20 | 200 | 207 | 2,29 | 0,97 | 0,84 |
| 60 | -15 | 268 | 237 | 2,54 | 1,13 | 0,98 |
| 60 | -10 | 354 | 269 | 2,79 | 1,32 | 1,14 |
| 60 | -5 | 457 | 302 | 3,06 | 1,52 | 1,31 |
| 60 | 0 | 579 | 336 | 3,33 | 1,72 | 1,49 |
| 60 | 5 | 719 | 372 | 3,62 | 1,93 | 1,67 |
| 60 | 7,2 | 786 | 388 | 3,74 | 2,02 | 1,75 |
| 60 | 10 | 876 | 409 | 3,91 | 2,14 | 1,85 |

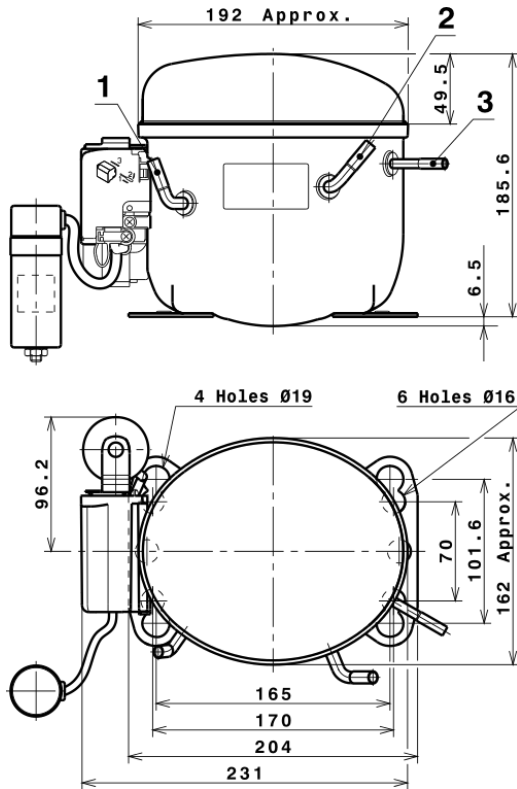
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|----|-----|-----|-----|------|------|------|
| 65 | -25 | 131 | 178 | 2,06 | 0,74 | 0,64 |
| 65 | -20 | 175 | 209 | 2,31 | 0,84 | 0,72 |
| 65 | -15 | 236 | 242 | 2,58 | 0,98 | 0,84 |
| 65 | -10 | 316 | 276 | 2,85 | 1,14 | 0,99 |
| 65 | -5 | 413 | 312 | 3,13 | 1,33 | 1,15 |
| 65 | 0 | 529 | 348 | 3,43 | 1,52 | 1,31 |
| 65 | 5 | 662 | 387 | 3,73 | 1,71 | 1,48 |
| 65 | 7,2 | 727 | 404 | 3,87 | 1,80 | 1,55 |
| 65 | 10 | 814 | 426 | 4,05 | 1,91 | 1,65 |

EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|----------------------|
| 1 | 1.185,6603943103 | 194,0547244355 | 2,1977114248 | 19,56022155087 |
| 2 | 41,2259118839 | 1,2373047470 | 0,0099892729 | 0,76841833937459 |
| 3 | -10,3971769642 | 2,5170684167 | 0,0200544968 | -0,061204073630559 |
| 4 | 0,3530814515 | 0,0300461909 | 0,0002267614 | 0,010119769703703 |
| 5 | -0,2625383909 | 0,1006827367 | 0,0008021799 | -0,00066072467343889 |

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

COMPRESSOR DIMENSIONS

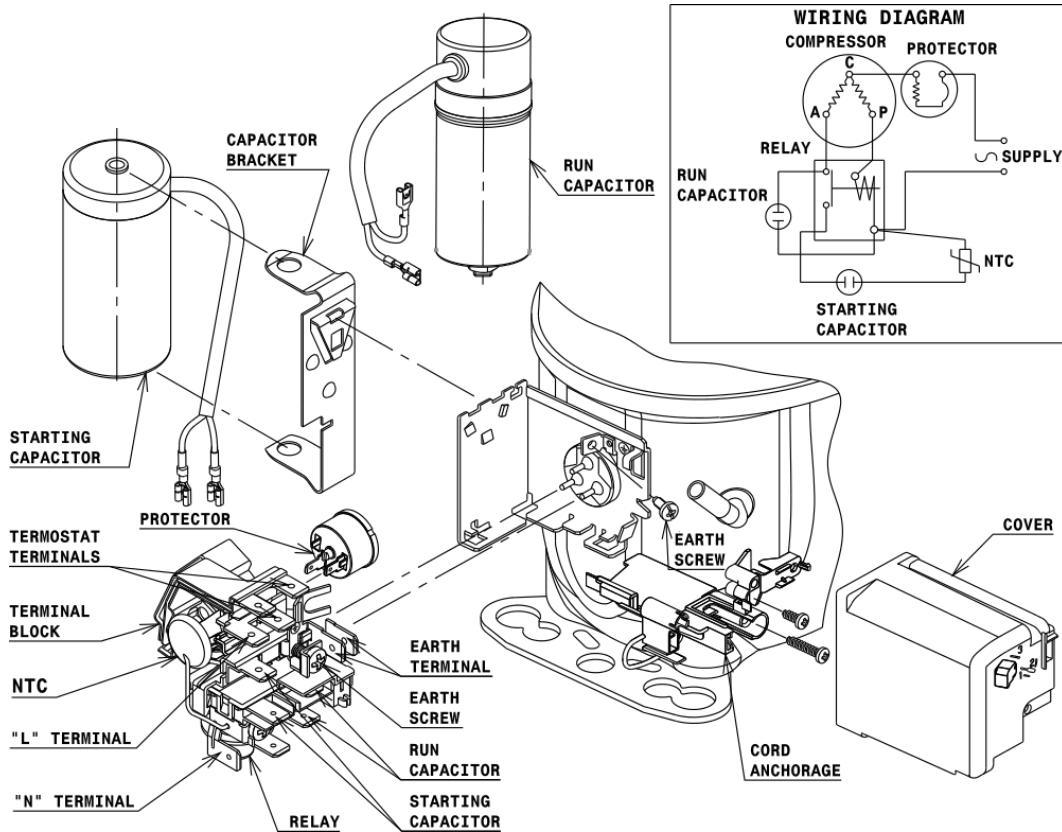


DESIGNATION INTERNAL DIAM.

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

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



AMERICAN FEET

$\varnothing 19$ holes (165x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HMBP

