

Technical Data Sheet

Compressor model **GLY12RGa**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R134a**

| APPLICATION | | COMPRESSOR | | MOTOR | |
|----------------------|---------------------|--------------|-----------------------|--------------------------|---------------|
| Application | High Back Pressure | Displacement | 10,70 cm ³ | Nominal Power | 3/8 hp |
| Refrigerant | R134a | Diameter | 25,40 mm | Voltage/Frequency | 200-220V 50Hz |
| Evaporating Temp. | -15,0 °C to 10,0 °C | Stroke | 21,12 mm | Voltage range | 170-233 V |
| Expansion | Capillar/Valve | Net Weight | 10,43 Kg | Type | CSIR |
| Comp. Cooling | Fan cooled | Oil type | ISO VG 32 ESTER | Phase number | 1 PH |
| Max. ambient temp. | 43,0 °C | Oil charge | 345 cm ³ | Locked Rotor Amps (LRA) | 16,50 A |
| Compatible refriger. | R1234yf | | | Max. Cont. Current (MCC) | 4,20 A |
| | | | | Main W. resist. at 25°C | 6,30 Ω |
| | | | | Start W. resist. at 25°C | 17,00 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 900 kCal/h | 867 W |
| COP | 2,19 W/W | 1,87 W/W |
| EER | 1,88 kCal/Wh | 1,62 kCal/Wh |
| Input Power | 479 W | 464 W |
| Current | 3,25 A | 3,19 A |

APPROVALS



TEST CYCLE CONDITIONS

| | ASHRAE HBP (D) | CECOMAF HBP (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 | 200 V 50 Hz | 200 V 50 Hz |



ELECTRICAL COMPONENTS

| | | | | |
|-------------------------|-------------------|----------|--|--|
| Starting capacitor | 47- 56 µF 330 V | | | |
| Relay | Option 1 | Option 2 | | |
| Reference | 2014 138. | QLZ-6.1A | | |
| Pick-Up | 6,10 A | 6.1 A | | |
| Drop-Out | 5,20 A | 5.2 A | | |
| Protector | Option 1 | | | |
| Reference | T0266 | | | |
| Current | 11,00 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 | -15 | 405 | 323 | 2,77 | 1,46 | 1,25 |
| 40 | -10 | 509 | 346 | 2,83 | 1,71 | 1,47 |
| 40 | -5 | 638 | 371 | 2,89 | 2,00 | 1,72 |
| 40 | 0 | 793 | 396 | 2,96 | 2,33 | 2,00 |
| 40 | 5 | 974 | 423 | 3,05 | 2,68 | 2,30 |
| 40 | 7,2 | 1.061 | 435 | 3,09 | 2,84 | 2,44 |
| 40 | 10 | 1.179 | 451 | 3,14 | 3,04 | 2,62 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 45 | -15 | 380 | 318 | 2,76 | 1,39 | 1,20 |
| 45 | -10 | 477 | 346 | 2,82 | 1,61 | 1,38 |
| 45 | -5 | 600 | 375 | 2,90 | 1,86 | 1,60 |
| 45 | 0 | 749 | 405 | 2,99 | 2,15 | 1,85 |
| 45 | 5 | 923 | 436 | 3,09 | 2,46 | 2,12 |
| 45 | 7,2 | 1.007 | 450 | 3,14 | 2,61 | 2,24 |
| 45 | 10 | 1.122 | 468 | 3,21 | 2,79 | 2,40 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 50 | -15 | 355 | 312 | 2,75 | 1,32 | 1,14 |
| 50 | -10 | 446 | 345 | 2,82 | 1,50 | 1,29 |
| 50 | -5 | 562 | 378 | 2,91 | 1,73 | 1,49 |
| 50 | 0 | 704 | 413 | 3,01 | 1,98 | 1,71 |
| 50 | 5 | 872 | 448 | 3,13 | 2,26 | 1,94 |
| 50 | 7,2 | 954 | 464 | 3,19 | 2,39 | 2,05 |
| 50 | 10 | 1.065 | 485 | 3,27 | 2,55 | 2,20 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 55 | -15 | 330 | 307 | 2,74 | 1,25 | 1,07 |
| 55 | -10 | 414 | 344 | 2,82 | 1,40 | 1,20 |
| 55 | -5 | 524 | 382 | 2,92 | 1,60 | 1,37 |
| 55 | 0 | 660 | 421 | 3,04 | 1,82 | 1,57 |
| 55 | 5 | 821 | 461 | 3,18 | 2,07 | 1,78 |
| 55 | 7,2 | 900 | 479 | 3,25 | 2,19 | 1,88 |
| 55 | 10 | 1.008 | 502 | 3,34 | 2,33 | 2,01 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -15 | 305 | 302 | 2,73 | 1,18 | 1,01 |
| 60 | -10 | 383 | 343 | 2,82 | 1,30 | 1,12 |
| 60 | -5 | 487 | 386 | 2,93 | 1,47 | 1,26 |
| 60 | 0 | 616 | 429 | 3,07 | 1,67 | 1,43 |
| 60 | 5 | 770 | 474 | 3,23 | 1,89 | 1,63 |
| 60 | 7,2 | 846 | 494 | 3,31 | 1,99 | 1,71 |
| 60 | 10 | 950 | 519 | 3,42 | 2,13 | 1,83 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 65 | -15 | 280 | 296 | 2,72 | 1,10 | 0,94 |
| 65 | -10 | 352 | 342 | 2,82 | 1,19 | 1,03 |
| 65 | -5 | 449 | 389 | 2,94 | 1,34 | 1,15 |
| 65 | 0 | 571 | 437 | 3,10 | 1,52 | 1,31 |
| 65 | 5 | 719 | 486 | 3,28 | 1,72 | 1,48 |
| 65 | 7,2 | 793 | 508 | 3,37 | 1,81 | 1,56 |
| 65 | 10 | 893 | 537 | 3,50 | 1,94 | 1,66 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -15 | 436 | 325 | 2,78 | 1,34 | 1,16 |
| 40 | -10 | 549 | 348 | 2,83 | 1,58 | 1,36 |
| 40 | -5 | 689 | 373 | 2,90 | 1,85 | 1,59 |
| 40 | 0 | 855 | 399 | 2,97 | 2,14 | 1,85 |
| 40 | 5 | 1.048 | 426 | 3,06 | 2,46 | 2,13 |
| 40 | 7,2 | 1.142 | 438 | 3,10 | 2,61 | 2,25 |
| 40 | 10 | 1.268 | 454 | 3,15 | 2,80 | 2,42 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 45 | -15 | 407 | 319 | 2,77 | 1,27 | 1,10 |
| 45 | -10 | 512 | 348 | 2,83 | 1,47 | 1,27 |
| 45 | -5 | 644 | 377 | 2,91 | 1,71 | 1,48 |
| 45 | 0 | 803 | 407 | 3,00 | 1,97 | 1,70 |
| 45 | 5 | 988 | 438 | 3,10 | 2,25 | 1,95 |
| 45 | 7,2 | 1.078 | 453 | 3,15 | 2,38 | 2,06 |
| 45 | 10 | 1.200 | 471 | 3,22 | 2,55 | 2,20 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 50 | -15 | 378 | 314 | 2,75 | 1,20 | 1,04 |
| 50 | -10 | 475 | 347 | 2,83 | 1,37 | 1,18 |
| 50 | -5 | 599 | 380 | 2,92 | 1,57 | 1,36 |
| 50 | 0 | 750 | 415 | 3,02 | 1,81 | 1,56 |
| 50 | 5 | 928 | 451 | 3,14 | 2,06 | 1,78 |
| 50 | 7,2 | 1.014 | 467 | 3,20 | 2,17 | 1,88 |
| 50 | 10 | 1.132 | 488 | 3,29 | 2,32 | 2,00 |

| | | | | | | |
|----|-----|-------|-----|------|------|------|
| 55 | -15 | 349 | 309 | 2,74 | 1,13 | 0,98 |
| 55 | -10 | 438 | 346 | 2,83 | 1,27 | 1,10 |
| 55 | -5 | 555 | 384 | 2,93 | 1,44 | 1,25 |
| 55 | 0 | 698 | 424 | 3,05 | 1,65 | 1,42 |
| 55 | 5 | 867 | 464 | 3,19 | 1,87 | 1,62 |
| 55 | 7,2 | 951 | 482 | 3,26 | 1,97 | 1,70 |
| 55 | 10 | 1.064 | 505 | 3,36 | 2,10 | 1,82 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -15 | 320 | 303 | 2,73 | 1,06 | 0,91 |
| 60 | -10 | 402 | 345 | 2,82 | 1,16 | 1,01 |
| 60 | -5 | 510 | 388 | 2,94 | 1,31 | 1,14 |
| 60 | 0 | 645 | 432 | 3,08 | 1,49 | 1,29 |
| 60 | 5 | 807 | 477 | 3,24 | 1,69 | 1,46 |
| 60 | 7,2 | 887 | 497 | 3,32 | 1,78 | 1,54 |
| 60 | 10 | 996 | 523 | 3,43 | 1,90 | 1,65 |

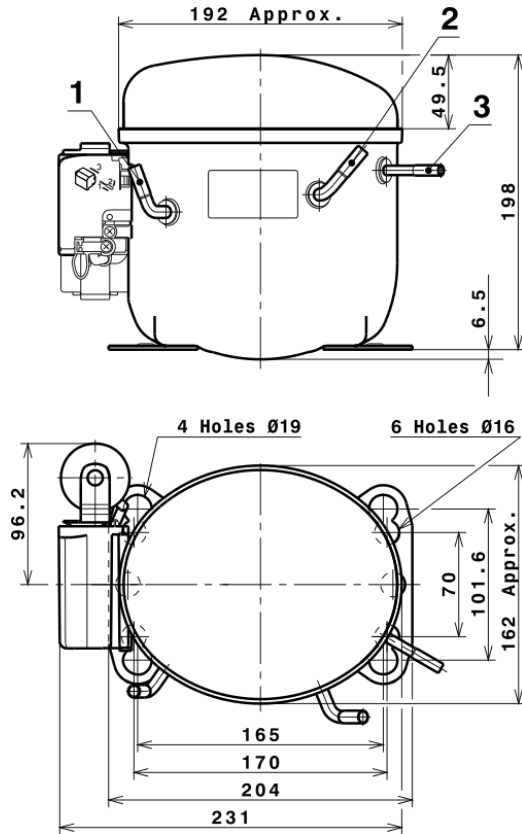
| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 65 | -15 | 291 | 298 | 2,72 | 0,98 | 0,84 |
| 65 | -10 | 365 | 344 | 2,82 | 1,06 | 0,92 |
| 65 | -5 | 465 | 392 | 2,95 | 1,19 | 1,03 |
| 65 | 0 | 593 | 440 | 3,10 | 1,35 | 1,16 |
| 65 | 5 | 747 | 489 | 3,29 | 1,53 | 1,32 |
| 65 | 7,2 | 823 | 512 | 3,39 | 1,61 | 1,39 |
| 65 | 10 | 928 | 540 | 3,51 | 1,72 | 1,48 |

EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|---------------|----------------------|
| 1 | 1.279,5018276928 | 341,3345400186 | 2,6901112781 | 21,04530739461 |
| 2 | 48,7930641042 | -1,9423479876 | -0,0062846340 | 0,87282978679483 |
| 3 | -10,8943357141 | 1,6947477631 | 0,0071903736 | -0,057424055662675 |
| 4 | 0,5283064870 | 0,0257016325 | 0,0004657887 | 0,015482000001125 |
| 5 | -0,3305744215 | 0,1861529446 | 0,0006383487 | -0,00059514599310485 |

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

COMPRESSOR DIMENSIONS



DESIGNATION INTERNAL DIAM.

| DESIGNATION | INTERNAL DIAM. |
|-------------|----------------|
| 1 Suction | 8,1 mm |
| 2 Service | 8,1 mm |
| 3 Discharge | 6,5 mm |

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (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 R134a HBP

