

Technical Data Sheet

Compressor model **GL80ANc**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R134a**

| APPLICATION | | COMPRESSOR | | MOTOR | |
|----------------------|----------------------|--------------|----------------------|--------------------------|---------------|
| Application | Low Back Pressure | Displacement | 8,10 cm ³ | Nominal Power | 1/5 hp |
| Refrigerant | R134a | Diameter | 24,29 mm | Voltage/Frequency | 200-220V 50Hz |
| Evaporating Temp. | -35,0 °C to -10,0 °C | Stroke | 17,47 mm | Voltage range | 170-242 V |
| Expansion | Capillar/Valve | Net Weight | 9,90 Kg | Type | CSIR |
| Comp. Cooling | Static | Oil type | ISO VG 32 ESTER | Phase number | 1 PH |
| Max. ambient temp. | 43,0 °C | Oil charge | 450 cm ³ | Locked Rotor Amps (LRA) | 16,00 A |
| Compatible refriger. | R1234yf | | | Max. Cont. Current (MCC) | 2,50 A |
| | | | | Main W. resist. at 25°C | 8,90 Ω |
| | | | | Start W. resist. at 25°C | 14,10 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 174 kCal/h | 148 W |
| COP | 1,09 W/W | 0,83 W/W |
| EER | 0,94 kCal/Wh | 0,72 kCal/Wh |
| Input Power | 186 W | 178 W |
| Current | 1,70 A | 1,69 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

| | | | | |
|-------------------------|-------------------|--|--|--|
| Starting capacitor | 64- 77 μF 330 V | | | |
| Relay | Option 1 | | | |
| Reference | 2014 131. | | | |
| Pick-Up | 5,30 A | | | |
| Drop-Out | 4,50 A | | | |
| Protector | Option 1 | | | |
| Reference | T0170 | | | |
| Current | 11,00 A | | | |
| Time check | 7,5-14 seg | | | |
| Disc temp. (Open/Close) | 120,00 / 69,00 °C | | | |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 97 | 136 | 1,63 | 0,83 | 0,71 |
| 40 | -30 | 133 | 154 | 1,65 | 1,00 | 0,86 |
| 40 | -25 | 180 | 173 | 1,68 | 1,21 | 1,04 |
| 40 | -23,3 | 198 | 180 | 1,69 | 1,28 | 1,10 |
| 40 | -20 | 237 | 194 | 1,71 | 1,42 | 1,22 |
| 40 | -15 | 305 | 215 | 1,76 | 1,65 | 1,42 |
| 40 | -10 | 383 | 237 | 1,82 | 1,88 | 1,62 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 91 | 134 | 1,63 | 0,79 | 0,68 |
| 45 | -30 | 126 | 154 | 1,65 | 0,95 | 0,82 |
| 45 | -25 | 172 | 175 | 1,68 | 1,14 | 0,98 |
| 45 | -23,3 | 190 | 182 | 1,69 | 1,21 | 1,04 |
| 45 | -20 | 228 | 197 | 1,72 | 1,35 | 1,16 |
| 45 | -15 | 295 | 219 | 1,77 | 1,56 | 1,35 |
| 45 | -10 | 372 | 243 | 1,84 | 1,78 | 1,53 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 86 | 133 | 1,63 | 0,75 | 0,65 |
| 50 | -30 | 120 | 154 | 1,65 | 0,90 | 0,78 |
| 50 | -25 | 164 | 176 | 1,68 | 1,08 | 0,93 |
| 50 | -23,3 | 182 | 184 | 1,70 | 1,15 | 0,99 |
| 50 | -20 | 220 | 200 | 1,73 | 1,28 | 1,10 |
| 50 | -15 | 285 | 224 | 1,79 | 1,48 | 1,28 |
| 50 | -10 | 362 | 249 | 1,86 | 1,69 | 1,45 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 80 | 131 | 1,63 | 0,71 | 0,61 |
| 55 | -30 | 113 | 154 | 1,65 | 0,86 | 0,74 |
| 55 | -25 | 157 | 178 | 1,69 | 1,03 | 0,88 |
| 55 | -23,3 | 174 | 186 | 1,70 | 1,09 | 0,94 |
| 55 | -20 | 211 | 202 | 1,73 | 1,21 | 1,04 |
| 55 | -15 | 276 | 228 | 1,80 | 1,40 | 1,21 |
| 55 | -10 | 351 | 255 | 1,88 | 1,60 | 1,38 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 74 | 129 | 1,63 | 0,67 | 0,57 |
| 60 | -30 | 106 | 154 | 1,65 | 0,81 | 0,69 |
| 60 | -25 | 149 | 179 | 1,69 | 0,97 | 0,83 |
| 60 | -23,3 | 166 | 188 | 1,70 | 1,03 | 0,88 |
| 60 | -20 | 202 | 205 | 1,74 | 1,15 | 0,98 |
| 60 | -15 | 266 | 233 | 1,81 | 1,33 | 1,14 |
| 60 | -10 | 340 | 261 | 1,90 | 1,52 | 1,30 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 69 | 128 | 1,63 | 0,63 | 0,54 |
| 65 | -30 | 100 | 154 | 1,65 | 0,76 | 0,65 |
| 65 | -25 | 141 | 180 | 1,69 | 0,91 | 0,78 |
| 65 | -23,3 | 158 | 190 | 1,71 | 0,97 | 0,83 |
| 65 | -20 | 194 | 208 | 1,75 | 1,08 | 0,93 |
| 65 | -15 | 256 | 237 | 1,82 | 1,26 | 1,08 |
| 65 | -10 | 330 | 267 | 1,92 | 1,44 | 1,23 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 106 | 136 | 1,63 | 0,78 | 0,67 |
| 40 | -30 | 148 | 154 | 1,65 | 0,96 | 0,83 |
| 40 | -25 | 201 | 173 | 1,68 | 1,16 | 1,00 |
| 40 | -23,3 | 221 | 180 | 1,69 | 1,22 | 1,06 |
| 40 | -20 | 263 | 194 | 1,71 | 1,36 | 1,17 |
| 40 | -15 | 335 | 215 | 1,76 | 1,56 | 1,35 |
| 40 | -10 | 417 | 237 | 1,82 | 1,76 | 1,52 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 96 | 134 | 1,63 | 0,71 | 0,62 |
| 45 | -30 | 134 | 154 | 1,65 | 0,87 | 0,75 |
| 45 | -25 | 183 | 175 | 1,68 | 1,05 | 0,90 |
| 45 | -23,3 | 202 | 182 | 1,69 | 1,11 | 0,96 |
| 45 | -20 | 242 | 197 | 1,72 | 1,23 | 1,06 |
| 45 | -15 | 310 | 219 | 1,77 | 1,41 | 1,22 |
| 45 | -10 | 388 | 243 | 1,84 | 1,60 | 1,38 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 86 | 133 | 1,63 | 0,65 | 0,56 |
| 50 | -30 | 121 | 154 | 1,65 | 0,78 | 0,68 |
| 50 | -25 | 166 | 176 | 1,68 | 0,94 | 0,81 |
| 50 | -23,3 | 183 | 184 | 1,70 | 0,99 | 0,86 |
| 50 | -20 | 220 | 200 | 1,73 | 1,10 | 0,95 |
| 50 | -15 | 285 | 224 | 1,79 | 1,27 | 1,10 |
| 50 | -10 | 360 | 249 | 1,86 | 1,44 | 1,25 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 76 | 131 | 1,63 | 0,58 | 0,50 |
| 55 | -30 | 107 | 154 | 1,65 | 0,70 | 0,60 |
| 55 | -25 | 148 | 178 | 1,69 | 0,83 | 0,72 |
| 55 | -23,3 | 164 | 186 | 1,70 | 0,88 | 0,76 |
| 55 | -20 | 199 | 202 | 1,73 | 0,98 | 0,85 |
| 55 | -15 | 260 | 228 | 1,80 | 1,14 | 0,98 |
| 55 | -10 | 331 | 255 | 1,88 | 1,30 | 1,12 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 66 | 129 | 1,63 | 0,51 | 0,44 |
| 60 | -30 | 93 | 154 | 1,65 | 0,61 | 0,52 |
| 60 | -25 | 131 | 179 | 1,69 | 0,73 | 0,63 |
| 60 | -23,3 | 146 | 188 | 1,70 | 0,77 | 0,67 |
| 60 | -20 | 178 | 205 | 1,74 | 0,87 | 0,75 |
| 60 | -15 | 235 | 233 | 1,81 | 1,01 | 0,87 |
| 60 | -10 | 302 | 261 | 1,90 | 1,16 | 1,00 |

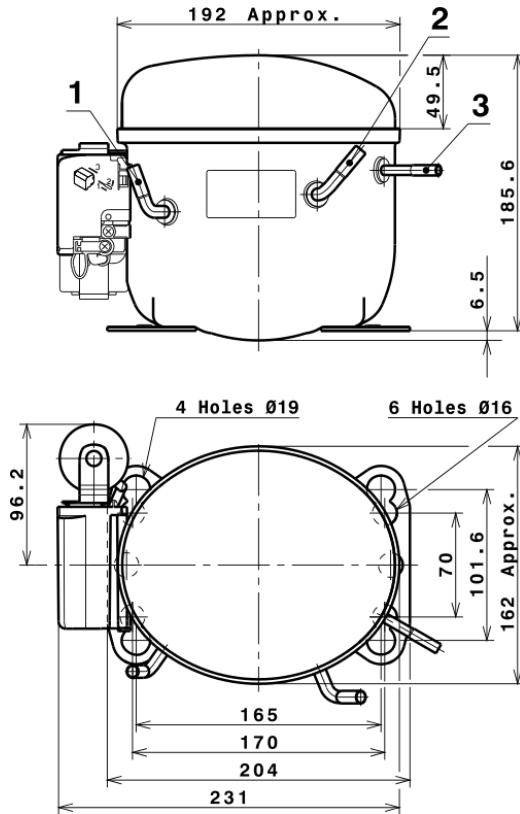
| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 56 | 128 | 1,63 | 0,44 | 0,38 |
| 65 | -30 | 79 | 154 | 1,65 | 0,52 | 0,45 |
| 65 | -25 | 113 | 180 | 1,69 | 0,63 | 0,54 |
| 65 | -23,3 | 127 | 190 | 1,71 | 0,67 | 0,58 |
| 65 | -20 | 157 | 208 | 1,75 | 0,75 | 0,65 |
| 65 | -15 | 210 | 237 | 1,82 | 0,89 | 0,77 |
| 65 | -10 | 274 | 267 | 1,92 | 1,02 | 0,89 |

EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|----------------------|
| 1 | 896,3191968447 | 217,1717468165 | 1,8038168923 | 16,111045020428 |
| 2 | 27,1010628472 | 2,5731534471 | 0,0157026103 | 0,54739417104216 |
| 3 | -7,3959256878 | 1,8563459772 | 0,0057587943 | -0,060607360857608 |
| 4 | 0,1931121934 | 0,0207616732 | 0,0003205558 | 0,0052088193103618 |
| 5 | -0,1537888283 | 0,0627670551 | 0,0001722798 | -0,00097310369594206 |

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

COMPRESSOR DIMENSIONS



DESIGNATION INTERNAL DIAM.

| | | |
|---|-----------|--------|
| 1 | Suction | 6,5 mm |
| 2 | Service | 6,5 mm |
| 3 | Discharge | 4,9 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 LBP

