

Technical Data Sheet

Compressor model **GL45ANa**
 Voltage **200-240/220-230V 50/60Hz ~1**
 Refrigerant **R134a**

| APPLICATION | | COMPRESSOR | | MOTOR | |
|----------------------|----------------------|--------------|----------------------|--------------------------|---------------|
| Application | Low Back Pressure | Displacement | 4,56 cm ³ | Nominal Power | 1/8 hp |
| Refrigerant | R134a | Diameter | 19,09 mm | Voltage/Frequency | 200-240V 50Hz |
| Evaporating Temp. | -35,0 °C to -10,0 °C | Stroke | 15,93 mm | Voltage range | 170-264 V |
| Expansion | Capillar | Net Weight | 8,42 Kg | Type | RSIR |
| Comp. Cooling | Static | Oil type | ISO VG 32 ESTER | Phase number | 1 PH |
| Max. ambient temp. | 50,0 °C | Oil charge | 210 cm ³ | Locked Rotor Amps (LRA) | 11,50 A |
| Compatible refriger. | R1234yf | | | Max. Cont. Current (MCC) | 1,30 A |
| | | | | Main W. resist. at 25°C | 16,50 Ω |
| | | | | Start W. resist. at 25°C | 16,75 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 95 kCal/h | 80 W |
| COP | 1,03 W/W | 0,78 W/W |
| EER | 0,89 kCal/Wh | 0,68 kCal/Wh |
| Input Power | 107 W | 102 W |
| Current | 0,88 A | 0,87 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 | T0508 | AE15BU | | |
| Current | 6,50 A | 8,00 A | | |
| Time check | 7,5-14 seg | 7,5-14 seg | | |
| Disc temp. (Open/Close) | 135,00 / 62,00 °C | 120,00 / 62,00 °C | | |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 53 | 80 | 0,83 | 0,77 | 0,66 |
| 40 | -30 | 75 | 91 | 0,84 | 0,96 | 0,82 |
| 40 | -25 | 102 | 102 | 0,87 | 1,16 | 1,00 |
| 40 | -23,3 | 112 | 106 | 0,88 | 1,23 | 1,06 |
| 40 | -20 | 134 | 114 | 0,90 | 1,37 | 1,18 |
| 40 | -15 | 172 | 126 | 0,93 | 1,58 | 1,36 |
| 40 | -10 | 215 | 139 | 0,98 | 1,80 | 1,55 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 48 | 79 | 0,82 | 0,71 | 0,61 |
| 45 | -30 | 69 | 90 | 0,84 | 0,89 | 0,77 |
| 45 | -25 | 96 | 102 | 0,87 | 1,09 | 0,94 |
| 45 | -23,3 | 107 | 107 | 0,88 | 1,16 | 1,00 |
| 45 | -20 | 128 | 115 | 0,90 | 1,30 | 1,12 |
| 45 | -15 | 166 | 128 | 0,94 | 1,51 | 1,30 |
| 45 | -10 | 208 | 141 | 0,98 | 1,72 | 1,48 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 43 | 77 | 0,82 | 0,65 | 0,56 |
| 50 | -30 | 64 | 90 | 0,84 | 0,83 | 0,72 |
| 50 | -25 | 91 | 102 | 0,87 | 1,03 | 0,89 |
| 50 | -23,3 | 101 | 107 | 0,88 | 1,10 | 0,94 |
| 50 | -20 | 122 | 115 | 0,90 | 1,23 | 1,06 |
| 50 | -15 | 159 | 129 | 0,94 | 1,44 | 1,23 |
| 50 | -10 | 202 | 143 | 0,99 | 1,64 | 1,41 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 38 | 76 | 0,82 | 0,58 | 0,50 |
| 55 | -30 | 59 | 89 | 0,84 | 0,77 | 0,66 |
| 55 | -25 | 85 | 102 | 0,87 | 0,96 | 0,83 |
| 55 | -23,3 | 95 | 107 | 0,88 | 1,03 | 0,89 |
| 55 | -20 | 116 | 116 | 0,90 | 1,16 | 1,00 |
| 55 | -15 | 153 | 130 | 0,95 | 1,37 | 1,17 |
| 55 | -10 | 195 | 145 | 1,00 | 1,56 | 1,34 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 33 | 75 | 0,82 | 0,51 | 0,44 |
| 60 | -30 | 53 | 88 | 0,84 | 0,70 | 0,61 |
| 60 | -25 | 79 | 102 | 0,87 | 0,90 | 0,77 |
| 60 | -23,3 | 89 | 107 | 0,88 | 0,97 | 0,83 |
| 60 | -20 | 110 | 117 | 0,91 | 1,10 | 0,94 |
| 60 | -15 | 147 | 132 | 0,95 | 1,30 | 1,11 |
| 60 | -10 | 188 | 147 | 1,01 | 1,49 | 1,28 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 28 | 73 | 0,82 | 0,44 | 0,38 |
| 65 | -30 | 48 | 88 | 0,84 | 0,64 | 0,55 |
| 65 | -25 | 74 | 102 | 0,87 | 0,84 | 0,72 |
| 65 | -23,3 | 83 | 107 | 0,88 | 0,90 | 0,78 |
| 65 | -20 | 104 | 117 | 0,91 | 1,03 | 0,89 |
| 65 | -15 | 140 | 133 | 0,96 | 1,23 | 1,05 |
| 65 | -10 | 182 | 149 | 1,02 | 1,42 | 1,22 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 58 | 80 | 0,83 | 0,72 | 0,62 |
| 40 | -30 | 83 | 91 | 0,84 | 0,91 | 0,79 |
| 40 | -25 | 113 | 102 | 0,87 | 1,11 | 0,96 |
| 40 | -23,3 | 125 | 106 | 0,88 | 1,17 | 1,01 |
| 40 | -20 | 149 | 114 | 0,90 | 1,30 | 1,13 |
| 40 | -15 | 189 | 126 | 0,93 | 1,49 | 1,29 |
| 40 | -10 | 234 | 139 | 0,98 | 1,68 | 1,45 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 45 | -35 | 50 | 79 | 0,82 | 0,64 | 0,55 |
| 45 | -30 | 74 | 90 | 0,84 | 0,82 | 0,71 |
| 45 | -25 | 102 | 102 | 0,87 | 1,00 | 0,86 |
| 45 | -23,3 | 113 | 107 | 0,88 | 1,06 | 0,92 |
| 45 | -20 | 136 | 115 | 0,90 | 1,18 | 1,02 |
| 45 | -15 | 174 | 128 | 0,94 | 1,36 | 1,18 |
| 45 | -10 | 217 | 141 | 0,98 | 1,54 | 1,33 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 50 | -35 | 43 | 77 | 0,82 | 0,56 | 0,48 |
| 50 | -30 | 65 | 90 | 0,84 | 0,72 | 0,62 |
| 50 | -25 | 91 | 102 | 0,87 | 0,89 | 0,77 |
| 50 | -23,3 | 101 | 107 | 0,88 | 0,95 | 0,82 |
| 50 | -20 | 123 | 115 | 0,90 | 1,06 | 0,92 |
| 50 | -15 | 159 | 129 | 0,94 | 1,23 | 1,07 |
| 50 | -10 | 201 | 143 | 0,99 | 1,40 | 1,21 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 55 | -35 | 36 | 76 | 0,82 | 0,47 | 0,41 |
| 55 | -30 | 56 | 89 | 0,84 | 0,62 | 0,54 |
| 55 | -25 | 80 | 102 | 0,87 | 0,78 | 0,68 |
| 55 | -23,3 | 90 | 107 | 0,88 | 0,84 | 0,72 |
| 55 | -20 | 110 | 116 | 0,90 | 0,95 | 0,82 |
| 55 | -15 | 144 | 130 | 0,95 | 1,11 | 0,96 |
| 55 | -10 | 184 | 145 | 1,00 | 1,27 | 1,10 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 60 | -35 | 29 | 75 | 0,82 | 0,38 | 0,33 |
| 60 | -30 | 46 | 88 | 0,84 | 0,53 | 0,45 |
| 60 | -25 | 69 | 102 | 0,87 | 0,68 | 0,58 |
| 60 | -23,3 | 78 | 107 | 0,88 | 0,73 | 0,63 |
| 60 | -20 | 97 | 117 | 0,91 | 0,83 | 0,72 |
| 60 | -15 | 130 | 132 | 0,95 | 0,98 | 0,85 |
| 60 | -10 | 167 | 147 | 1,01 | 1,14 | 0,98 |

| | | | | | | |
|----|-------|-----|-----|------|------|------|
| 65 | -35 | 21 | 73 | 0,82 | 0,29 | 0,25 |
| 65 | -30 | 37 | 88 | 0,84 | 0,43 | 0,37 |
| 65 | -25 | 58 | 102 | 0,87 | 0,57 | 0,49 |
| 65 | -23,3 | 66 | 107 | 0,88 | 0,62 | 0,53 |
| 65 | -20 | 84 | 117 | 0,91 | 0,71 | 0,62 |
| 65 | -15 | 115 | 133 | 0,96 | 0,86 | 0,74 |
| 65 | -10 | 150 | 149 | 1,02 | 1,01 | 0,87 |

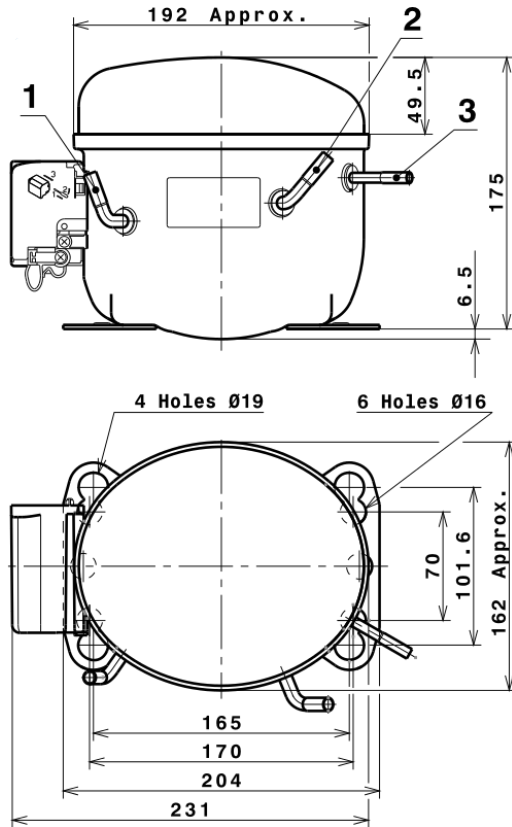
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|----------------------|
| 1 | 501,5973311724 | 142,4053948060 | 1,0175223113 | 8,999661016842 |
| 2 | 14,4432397539 | 1,7362442032 | 0,0107193329 | 0,2869719841652 |
| 3 | -4,1982767230 | 0,6823421698 | 0,0023699232 | -0,035142908998178 |
| 4 | 0,0968607735 | 0,0089627843 | 0,0001654600 | 0,0026302568609156 |
| 5 | -0,0785104104 | 0,0272783694 | 0,0000795154 | -0,00033494451227748 |

| | |
|----------|-------------------------------------------|
| 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)



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

