

Technical Data Sheet

Compressor model **GE70TG**
 Voltage **220-240/230V 50/60Hz ~1**
 Refrigerant **R134a**

| APPLICATION | | COMPRESSOR | | MOTOR | |
|----------------------|---------------------|--------------|----------------------|--------------------------|-----------|
| Application | High Back Pressure | Displacement | 6,70 cm ³ | Nominal Power | 1/5 hp |
| Refrigerant | R134a | Diameter | 24,28 mm | Voltage/Frequency | 230V 60Hz |
| Evaporating Temp. | -15,0 °C to 10,0 °C | Stroke | 14,50 mm | Voltage range | 196-253 V |
| Expansion | Capillar/Valve | Net Weight | 8,80 Kg | Type | CSIR |
| Comp. Cooling | Fan cooled | Oil type | ISO VG 22 ESTER | Phase number | 1 PH |
| Max. ambient temp. | 43,0 °C | Oil charge | 220 cm ³ | Locked Rotor Amps (LRA) | 14,00 A |
| Compatible refriger. | R1234yf | | | Main W. resist. at 25°C | 10,50 Ω |
| | | | | Start W. resist. at 25°C | 23,30 Ω |

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 721 kCal/h | 701 W |
| COP | 2,44 W/W | 2,11 W/W |
| EER | 2,10 kCal/Wh | 1,82 kCal/Wh |
| Input Power | 343 W | 333 W |
| Current | 1,90 A | 1,86 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 | 230 V 60 Hz | 230 V 60 Hz |

ELECTRICAL COMPONENTS

| | | | | |
|-------------------------|-------------------|--|--|--|
| Starting capacitor | 60-61 µF 330 V | | | |
| Relay | Option 1 | | | |
| Reference | QLZ-6.1A | | | |
| Pick-Up | 6.10 A | | | |
| Drop-Out | 5.20 A | | | |
| Protector | Option 1 | | | |
| Reference | B85-105 | | | |
| Current | 8,50 A | | | |
| Time check | 7,5-14 seg | | | |
| Disc temp. (Open/Close) | 105,00 / 61,00 °C | | | |

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -15 | 327 | 200 | 1,43 | 1,90 | 1,64 |
| 40 | -10 | 415 | 221 | 1,50 | 2,18 | 1,88 |
| 40 | -5 | 518 | 242 | 1,56 | 2,49 | 2,14 |
| 40 | 0 | 634 | 263 | 1,63 | 2,81 | 2,41 |
| 40 | 5 | 765 | 284 | 1,70 | 3,13 | 2,70 |
| 40 | 7,2 | 827 | 293 | 1,73 | 3,28 | 2,82 |
| 40 | 10 | 910 | 305 | 1,77 | 3,47 | 2,99 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 45 | -15 | 308 | 206 | 1,45 | 1,73 | 1,49 |
| 45 | -10 | 392 | 230 | 1,52 | 1,99 | 1,71 |
| 45 | -5 | 491 | 253 | 1,60 | 2,26 | 1,94 |
| 45 | 0 | 604 | 276 | 1,67 | 2,54 | 2,19 |
| 45 | 5 | 731 | 300 | 1,75 | 2,84 | 2,44 |
| 45 | 7,2 | 792 | 310 | 1,78 | 2,97 | 2,56 |
| 45 | 10 | 872 | 323 | 1,83 | 3,15 | 2,70 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 50 | -15 | 288 | 213 | 1,47 | 1,58 | 1,36 |
| 50 | -10 | 370 | 238 | 1,55 | 1,80 | 1,55 |
| 50 | -5 | 465 | 264 | 1,63 | 2,05 | 1,76 |
| 50 | 0 | 574 | 290 | 1,72 | 2,31 | 1,98 |
| 50 | 5 | 698 | 315 | 1,80 | 2,57 | 2,21 |
| 50 | 7,2 | 756 | 326 | 1,84 | 2,70 | 2,32 |
| 50 | 10 | 835 | 341 | 1,89 | 2,85 | 2,45 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -15 | 269 | 219 | 1,49 | 1,43 | 1,23 |
| 55 | -10 | 347 | 247 | 1,58 | 1,63 | 1,40 |
| 55 | -5 | 438 | 275 | 1,67 | 1,85 | 1,59 |
| 55 | 0 | 544 | 303 | 1,76 | 2,09 | 1,80 |
| 55 | 5 | 664 | 331 | 1,86 | 2,33 | 2,01 |
| 55 | 7,2 | 721 | 343 | 1,90 | 2,44 | 2,10 |
| 55 | 10 | 798 | 358 | 1,96 | 2,59 | 2,23 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -15 | 250 | 225 | 1,51 | 1,29 | 1,11 |
| 60 | -10 | 324 | 256 | 1,60 | 1,47 | 1,27 |
| 60 | -5 | 412 | 286 | 1,70 | 1,67 | 1,44 |
| 60 | 0 | 514 | 316 | 1,81 | 1,89 | 1,62 |
| 60 | 5 | 630 | 346 | 1,91 | 2,12 | 1,82 |
| 60 | 7,2 | 686 | 360 | 1,96 | 2,22 | 1,91 |
| 60 | 10 | 760 | 376 | 2,02 | 2,35 | 2,02 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 65 | -15 | 230 | 232 | 1,53 | 1,16 | 0,99 |
| 65 | -10 | 301 | 264 | 1,63 | 1,32 | 1,14 |
| 65 | -5 | 385 | 297 | 1,74 | 1,51 | 1,30 |
| 65 | 0 | 484 | 330 | 1,85 | 1,71 | 1,47 |
| 65 | 5 | 596 | 362 | 1,97 | 1,92 | 1,65 |
| 65 | 7,2 | 650 | 376 | 2,02 | 2,01 | 1,73 |
| 65 | 10 | 723 | 394 | 2,09 | 2,13 | 1,83 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -15 | 352 | 201 | 1,44 | 1,75 | 1,51 |
| 40 | -10 | 448 | 222 | 1,50 | 2,01 | 1,74 |
| 40 | -5 | 558 | 244 | 1,57 | 2,29 | 1,98 |
| 40 | 0 | 684 | 265 | 1,63 | 2,58 | 2,23 |
| 40 | 5 | 824 | 286 | 1,70 | 2,88 | 2,49 |
| 40 | 7,2 | 890 | 295 | 1,73 | 3,02 | 2,61 |
| 40 | 10 | 978 | 307 | 1,77 | 3,19 | 2,76 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 45 | -15 | 330 | 207 | 1,46 | 1,59 | 1,37 |
| 45 | -10 | 421 | 231 | 1,53 | 1,82 | 1,57 |
| 45 | -5 | 527 | 255 | 1,60 | 2,07 | 1,79 |
| 45 | 0 | 647 | 278 | 1,68 | 2,33 | 2,01 |
| 45 | 5 | 783 | 301 | 1,75 | 2,60 | 2,24 |
| 45 | 7,2 | 847 | 312 | 1,79 | 2,72 | 2,35 |
| 45 | 10 | 933 | 325 | 1,84 | 2,87 | 2,48 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 50 | -15 | 307 | 214 | 1,47 | 1,44 | 1,24 |
| 50 | -10 | 394 | 240 | 1,55 | 1,64 | 1,42 |
| 50 | -5 | 495 | 266 | 1,64 | 1,86 | 1,61 |
| 50 | 0 | 611 | 291 | 1,72 | 2,10 | 1,81 |
| 50 | 5 | 742 | 317 | 1,81 | 2,34 | 2,02 |
| 50 | 7,2 | 804 | 328 | 1,85 | 2,45 | 2,12 |
| 50 | 10 | 888 | 343 | 1,90 | 2,59 | 2,24 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -15 | 285 | 220 | 1,49 | 1,29 | 1,12 |
| 55 | -10 | 367 | 248 | 1,58 | 1,48 | 1,27 |
| 55 | -5 | 463 | 277 | 1,67 | 1,67 | 1,45 |
| 55 | 0 | 575 | 305 | 1,77 | 1,89 | 1,63 |
| 55 | 5 | 701 | 333 | 1,86 | 2,11 | 1,82 |
| 55 | 7,2 | 761 | 345 | 1,91 | 2,21 | 1,91 |
| 55 | 10 | 842 | 361 | 1,96 | 2,33 | 2,02 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -15 | 262 | 227 | 1,51 | 1,16 | 1,00 |
| 60 | -10 | 339 | 257 | 1,61 | 1,32 | 1,14 |
| 60 | -5 | 432 | 288 | 1,71 | 1,50 | 1,30 |
| 60 | 0 | 539 | 318 | 1,81 | 1,69 | 1,46 |
| 60 | 5 | 660 | 349 | 1,92 | 1,89 | 1,64 |
| 60 | 7,2 | 719 | 362 | 1,97 | 1,99 | 1,72 |
| 60 | 10 | 797 | 379 | 2,03 | 2,10 | 1,82 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 65 | -15 | 239 | 233 | 1,53 | 1,03 | 0,89 |
| 65 | -10 | 312 | 266 | 1,64 | 1,17 | 1,01 |
| 65 | -5 | 400 | 299 | 1,75 | 1,34 | 1,16 |
| 65 | 0 | 502 | 332 | 1,86 | 1,51 | 1,31 |
| 65 | 5 | 620 | 364 | 1,98 | 1,70 | 1,47 |
| 65 | 7,2 | 676 | 379 | 2,03 | 1,78 | 1,54 |
| 65 | 10 | 752 | 397 | 2,10 | 1,89 | 1,64 |

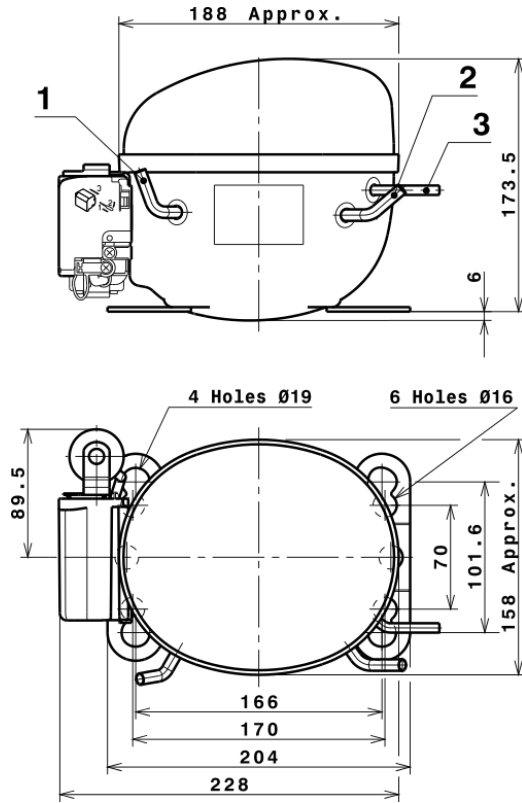
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|---------------|--------------------|
| 1 | 977,8122562554 | 161,3310191893 | 1,2714295481 | 15,821031911072 |
| 2 | 34,1590306571 | 0,5293190843 | -0,0002560315 | 0,58534664204515 |
| 3 | -7,5830749154 | 2,7530545463 | 0,0094911361 | -0,01959673785308 |
| 4 | 0,2918594601 | 0,0011789504 | 0,0000825412 | 0,0089415188526004 |
| 5 | -0,1977379678 | 0,0966478793 | 0,0003716487 | 0,001002186280297 |

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

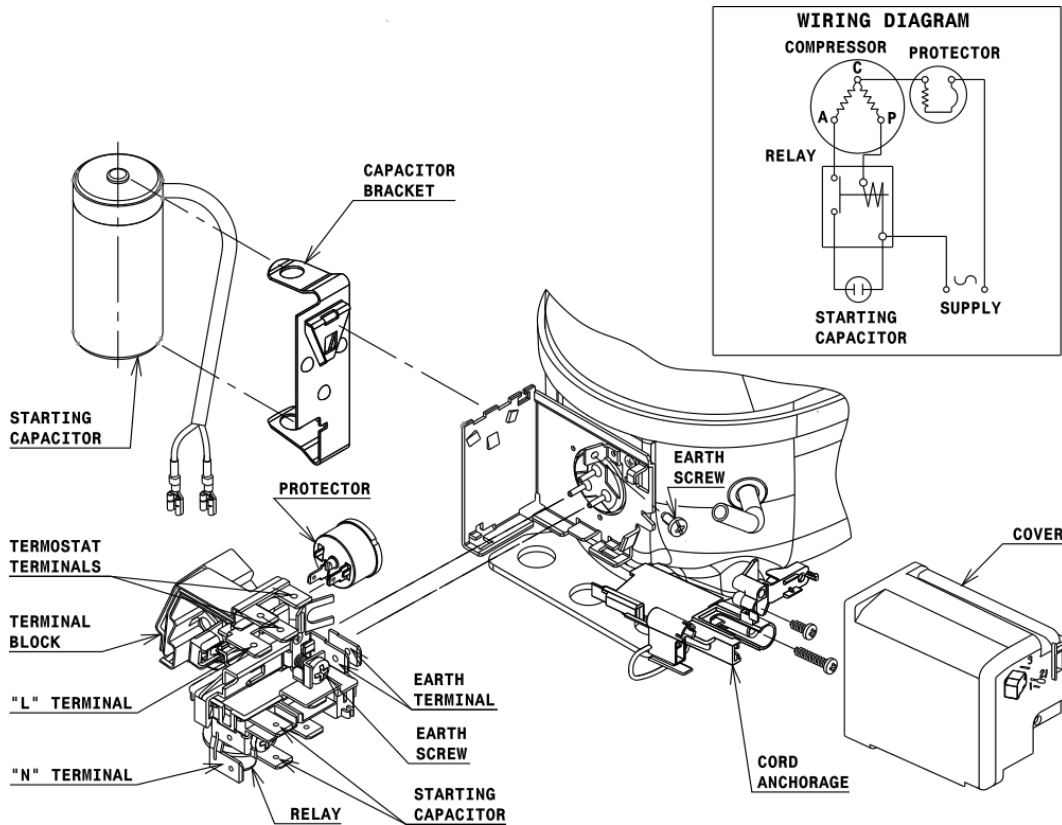


DESIGNATION INTERNAL DIAM.

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

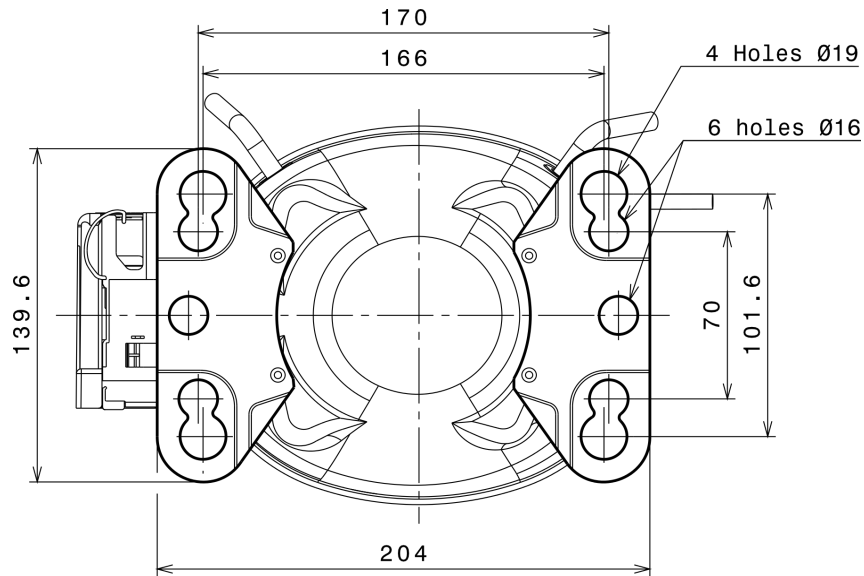
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

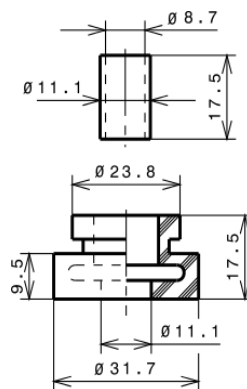
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

