

Technical Data Sheet

Compressor model **L22CL**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R600a**

APPLICATION

Application Low Back Pressure
 Refrigerant R600a
 Evaporating Temp. -35,0 °C to -15,0 °C
 Expansion Capillar
 Comp. Cooling Static
 Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 2,20 cm³
 Diameter 14,70 mm
 Stroke 13,40 mm
 Net Weight 3,60 Kg
 Oil type ISO VG 10 MINER
 Oil charge 110 cm³

MOTOR

Nominal Power 1/18 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-255 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 1,15 A
 Max. Cont. Current (MCC) 0,38 A
 Main W. resist. at 25°C 103,00 Ω
 Start W. resist. at 25°C 12,50 Ω

NOMINAL PERFORMANCE

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 26 kCal/h | 23 W |
| COP | 0,86 W/W | 0,69 W/W |
| EER | 0,74 kCal/Wh | 0,60 kCal/Wh |
| Input Power | 35 W | 33 W |
| Current | 0,29 A | 0,28 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 | QP2-15 | | | |
| Voltage | 220-240 V | | | |
| Resistance | Ω | | | |
| Protector | Option 1 | Option 2 | | |
| Reference | DRB10K61A1 | BT18-105A64D3 | | |
| Current | 2,00 A | | | |
| Time check | 7-16 seg | | | |
| Disc temp. (Open/Close) | 135,00 / 61,00 °C | 135,00 / 61,00 °C | | |

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

ASHRAE

| Tc °C | Te °C | Cooling Capacity kCal/h | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|-------------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 16 | 26 | 0,25 | 0,72 | 0,62 |
| 40 | -30 | 21 | 30 | 0,27 | 0,82 | 0,70 |
| 40 | -25 | 28 | 34 | 0,29 | 0,94 | 0,81 |
| 40 | -23,3 | 30 | 36 | 0,29 | 0,99 | 0,85 |
| 40 | -20 | 36 | 38 | 0,31 | 1,08 | 0,93 |
| 40 | -15 | 45 | 42 | 0,33 | 1,23 | 1,06 |
| 40 | -10 | 55 | 46 | 0,35 | 1,39 | 1,20 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 45 | -35 | 15 | 25 | 0,25 | 0,72 | 0,62 |
| 45 | -30 | 20 | 29 | 0,27 | 0,80 | 0,69 |
| 45 | -25 | 26 | 34 | 0,29 | 0,91 | 0,78 |
| 45 | -23,3 | 29 | 35 | 0,29 | 0,95 | 0,81 |
| 45 | -20 | 34 | 38 | 0,31 | 1,03 | 0,88 |
| 45 | -15 | 43 | 43 | 0,33 | 1,16 | 1,00 |
| 45 | -10 | 53 | 47 | 0,36 | 1,30 | 1,12 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 50 | -35 | 15 | 23 | 0,24 | 0,73 | 0,63 |
| 50 | -30 | 19 | 29 | 0,26 | 0,79 | 0,68 |
| 50 | -25 | 25 | 34 | 0,28 | 0,87 | 0,75 |
| 50 | -23,3 | 27 | 35 | 0,29 | 0,91 | 0,78 |
| 50 | -20 | 32 | 38 | 0,31 | 0,98 | 0,84 |
| 50 | -15 | 41 | 43 | 0,33 | 1,09 | 0,94 |
| 50 | -10 | 50 | 48 | 0,36 | 1,22 | 1,05 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 55 | -35 | 14 | 22 | 0,24 | 0,74 | 0,64 |
| 55 | -30 | 18 | 28 | 0,26 | 0,77 | 0,66 |
| 55 | -25 | 24 | 33 | 0,28 | 0,84 | 0,72 |
| 55 | -23,3 | 26 | 35 | 0,29 | 0,86 | 0,74 |
| 55 | -20 | 31 | 39 | 0,31 | 0,92 | 0,79 |
| 55 | -15 | 39 | 44 | 0,34 | 1,03 | 0,88 |
| 55 | -10 | 48 | 49 | 0,37 | 1,14 | 0,98 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 60 | -35 | 13 | 21 | 0,24 | 0,75 | 0,65 |
| 60 | -30 | 17 | 27 | 0,26 | 0,75 | 0,65 |
| 60 | -25 | 22 | 33 | 0,28 | 0,80 | 0,69 |
| 60 | -23,3 | 25 | 35 | 0,29 | 0,82 | 0,71 |
| 60 | -20 | 29 | 39 | 0,31 | 0,87 | 0,75 |
| 60 | -15 | 37 | 44 | 0,34 | 0,96 | 0,83 |
| 60 | -10 | 46 | 50 | 0,38 | 1,06 | 0,91 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -35 | 17 | 26 | 0,25 | 0,67 | 0,58 |
| 40 | -30 | 24 | 30 | 0,27 | 0,78 | 0,68 |
| 40 | -25 | 31 | 34 | 0,29 | 0,90 | 0,78 |
| 40 | -23,3 | 34 | 36 | 0,29 | 0,94 | 0,82 |
| 40 | -20 | 39 | 38 | 0,31 | 1,03 | 0,89 |
| 40 | -15 | 49 | 42 | 0,33 | 1,16 | 1,01 |
| 40 | -10 | 60 | 46 | 0,35 | 1,31 | 1,13 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 45 | -35 | 16 | 25 | 0,25 | 0,65 | 0,57 |
| 45 | -30 | 22 | 29 | 0,27 | 0,74 | 0,64 |
| 45 | -25 | 28 | 34 | 0,29 | 0,83 | 0,72 |
| 45 | -23,3 | 31 | 35 | 0,29 | 0,87 | 0,75 |
| 45 | -20 | 36 | 38 | 0,31 | 0,94 | 0,81 |
| 45 | -15 | 45 | 43 | 0,33 | 1,06 | 0,91 |
| 45 | -10 | 55 | 47 | 0,36 | 1,18 | 1,02 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 50 | -35 | 15 | 23 | 0,24 | 0,63 | 0,55 |
| 50 | -30 | 20 | 29 | 0,26 | 0,69 | 0,59 |
| 50 | -25 | 26 | 34 | 0,28 | 0,76 | 0,66 |
| 50 | -23,3 | 28 | 35 | 0,29 | 0,79 | 0,68 |
| 50 | -20 | 33 | 38 | 0,31 | 0,85 | 0,73 |
| 50 | -15 | 41 | 43 | 0,33 | 0,95 | 0,82 |
| 50 | -10 | 51 | 48 | 0,36 | 1,06 | 0,91 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 55 | -35 | 13 | 22 | 0,24 | 0,61 | 0,53 |
| 55 | -30 | 18 | 28 | 0,26 | 0,63 | 0,55 |
| 55 | -25 | 23 | 33 | 0,28 | 0,69 | 0,60 |
| 55 | -23,3 | 25 | 35 | 0,29 | 0,71 | 0,61 |
| 55 | -20 | 29 | 39 | 0,31 | 0,76 | 0,66 |
| 55 | -15 | 37 | 44 | 0,34 | 0,84 | 0,73 |
| 55 | -10 | 46 | 49 | 0,37 | 0,94 | 0,81 |

| | | | | | | |
|----|-------|----|----|------|------|------|
| 60 | -35 | 12 | 21 | 0,24 | 0,58 | 0,50 |
| 60 | -30 | 15 | 27 | 0,26 | 0,58 | 0,50 |
| 60 | -25 | 20 | 33 | 0,28 | 0,61 | 0,53 |
| 60 | -23,3 | 22 | 35 | 0,29 | 0,63 | 0,55 |
| 60 | -20 | 26 | 39 | 0,31 | 0,67 | 0,58 |
| 60 | -15 | 33 | 44 | 0,34 | 0,74 | 0,64 |
| 60 | -10 | 41 | 50 | 0,38 | 0,82 | 0,71 |

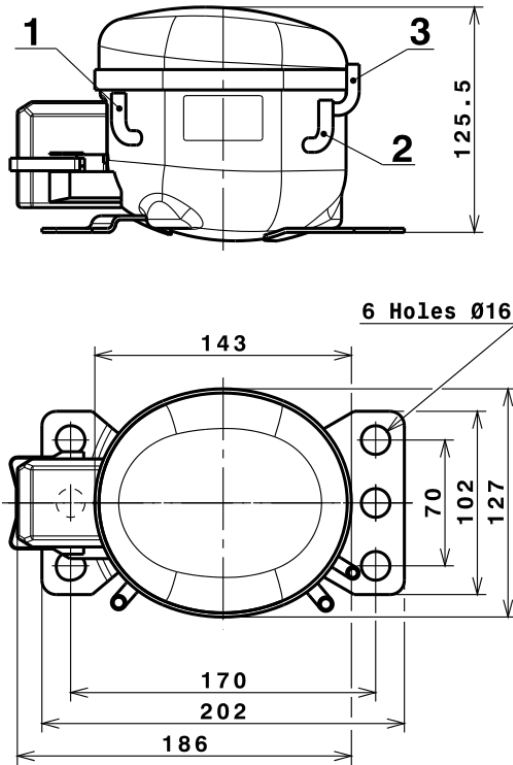
EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|--------------|----------------------|
| 1 | 132,5033661423 | 38,6170171040 | 0,3335731661 | 1,3601397770956 |
| 2 | 3,7989093216 | -0,0466781886 | 0,0037968194 | 0,042759955292813 |
| 3 | -1,2243902894 | 0,3952137691 | 0,0022549103 | -0,0078772385764781 |
| 4 | 0,0232408069 | -0,0022939819 | 0,0000734888 | 0,00033755886670161 |
| 5 | -0,0271688466 | 0,0190716923 | 0,0000900494 | -0,00017559057476427 |

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

Technical Data Sheet

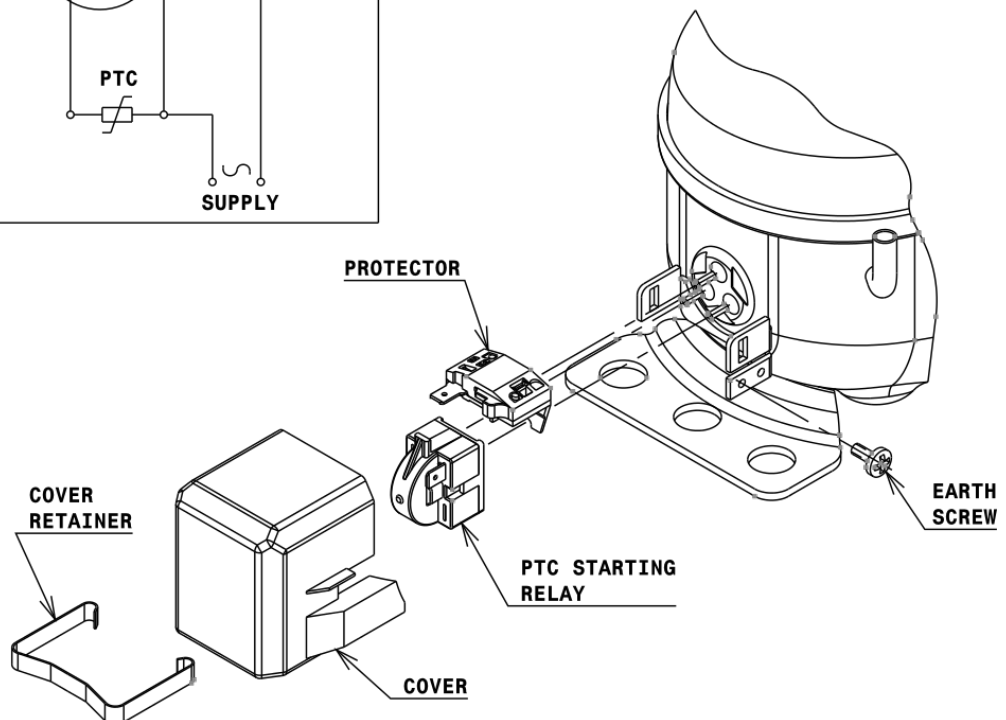
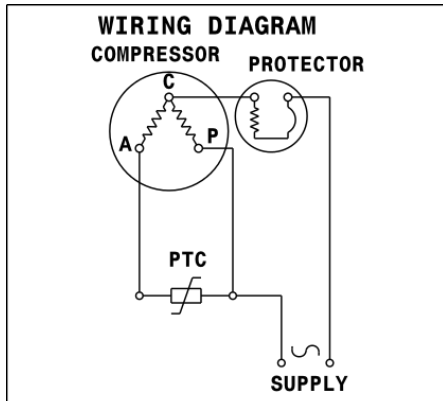
COMPRESSOR DIMENSIONS



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

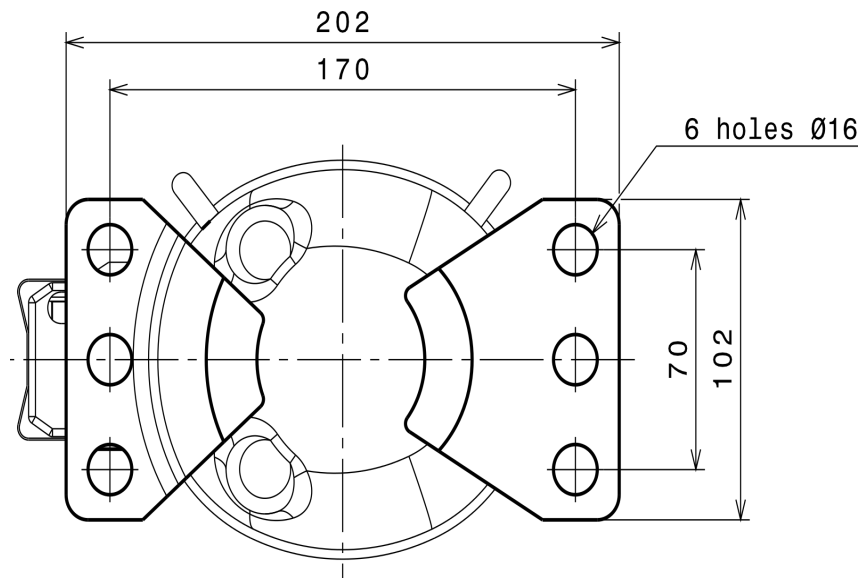
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (B, Small L ranges)



Technical Data Sheet

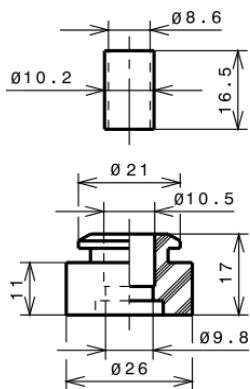
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

