

Technical Data Sheet

Compressor model **HUY55MAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R600a**

APPLICATION

COMPRESSOR

MOTOR

| | | | | | |
|--------------------|---------------------------|--------------|----------------------|--------------------------|---------------|
| Application | High-Medium Back Pressure | Displacement | 5,50 cm ³ | Nominal Power | 1/10 hp |
| Refrigerant | R600a | Diameter | 21,99 mm | Voltage/Frequency | 220-240V 50Hz |
| Evaporating Temp. | -25,0 °C to 10,0 °C | Stroke | 14,50 mm | Voltage range | 187-255 V |
| Expansion | Capillar | Net Weight | 8,95 Kg | Type | RSIR |
| Comp. Cooling | Static | Oil type | ISO VG 10 MINER | Phase number | 1 PH |
| Max. ambient temp. | 43,0 °C | Oil charge | 200 cm ³ | Locked Rotor Amps (LRA) | 4,60 A |
| | | | | Max. Cont. Current (MCC) | 0,90 A |
| | | | | Main W. resist. at 25°C | 26,16 Ω |
| | | | | Start W. resist. at 25°C | 15,10 Ω |

NOMINAL PERFORMANCE

APPROVALS

| | ASHRAE | CECOMAF |
|------------------|--------------|--------------|
| Cooling Capacity | 278 kCal/h | 272 W |
| COP | 2,86 W/W | 2,47 W/W |
| EER | 2,46 kCal/Wh | 2,13 kCal/Wh |
| Input Power | 113 W | 110 W |
| Current | 0,73 A | 0,72 A |

TEST CYCLE CONDITIONS

| | ASHRAE HMBP (D) | CECOMAF HMBP (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 | 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 | AE24AHS | B41-110 | | |
| Current | 4,10 A | | | |
| Time check | 7,5-14 seg | | | |
| Disc temp. (Open/Close) | 110,00 / 62,00 °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 | -25 | 75 | 59 | 0,58 | 1,48 | 1,27 |
| 40 | -20 | 100 | 65 | 0,59 | 1,79 | 1,54 |
| 40 | -15 | 131 | 71 | 0,60 | 2,14 | 1,84 |
| 40 | -10 | 167 | 77 | 0,61 | 2,53 | 2,18 |
| 40 | -5 | 208 | 82 | 0,63 | 2,95 | 2,54 |
| 40 | 0 | 255 | 87 | 0,64 | 3,39 | 2,92 |
| 40 | 5 | 308 | 93 | 0,66 | 3,86 | 3,32 |
| 40 | 7,2 | 333 | 95 | 0,67 | 4,08 | 3,51 |
| 40 | 10 | 366 | 98 | 0,68 | 4,35 | 3,74 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 45 | -25 | 70 | 60 | 0,58 | 1,36 | 1,17 |
| 45 | -20 | 93 | 66 | 0,59 | 1,63 | 1,40 |
| 45 | -15 | 121 | 73 | 0,61 | 1,93 | 1,66 |
| 45 | -10 | 155 | 80 | 0,62 | 2,27 | 1,95 |
| 45 | -5 | 195 | 86 | 0,64 | 2,63 | 2,27 |
| 45 | 0 | 240 | 92 | 0,66 | 3,02 | 2,60 |
| 45 | 5 | 291 | 98 | 0,68 | 3,44 | 2,95 |
| 45 | 7,2 | 315 | 101 | 0,69 | 3,62 | 3,12 |
| 45 | 10 | 347 | 104 | 0,70 | 3,87 | 3,32 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 50 | -25 | 65 | 60 | 0,58 | 1,25 | 1,08 |
| 50 | -20 | 86 | 68 | 0,59 | 1,47 | 1,26 |
| 50 | -15 | 112 | 75 | 0,61 | 1,73 | 1,49 |
| 50 | -10 | 144 | 83 | 0,63 | 2,02 | 1,74 |
| 50 | -5 | 182 | 90 | 0,65 | 2,35 | 2,02 |
| 50 | 0 | 225 | 97 | 0,67 | 2,69 | 2,31 |
| 50 | 5 | 273 | 104 | 0,70 | 3,06 | 2,63 |
| 50 | 7,2 | 296 | 107 | 0,71 | 3,22 | 2,77 |
| 50 | 10 | 327 | 111 | 0,72 | 3,44 | 2,95 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -25 | 60 | 61 | 0,58 | 1,14 | 0,98 |
| 55 | -20 | 79 | 69 | 0,60 | 1,32 | 1,13 |
| 55 | -15 | 103 | 78 | 0,62 | 1,54 | 1,33 |
| 55 | -10 | 133 | 86 | 0,64 | 1,80 | 1,55 |
| 55 | -5 | 168 | 94 | 0,66 | 2,08 | 1,79 |
| 55 | 0 | 209 | 102 | 0,69 | 2,39 | 2,05 |
| 55 | 5 | 256 | 110 | 0,72 | 2,71 | 2,33 |
| 55 | 7,2 | 278 | 113 | 0,73 | 2,86 | 2,46 |
| 55 | 10 | 308 | 117 | 0,75 | 3,05 | 2,63 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -25 | 55 | 62 | 0,58 | 1,04 | 0,89 |
| 60 | -20 | 72 | 71 | 0,60 | 1,18 | 1,01 |
| 60 | -15 | 94 | 80 | 0,62 | 1,36 | 1,17 |
| 60 | -10 | 122 | 89 | 0,65 | 1,59 | 1,37 |
| 60 | -5 | 155 | 98 | 0,68 | 1,84 | 1,58 |
| 60 | 0 | 194 | 107 | 0,71 | 2,11 | 1,82 |
| 60 | 5 | 238 | 115 | 0,74 | 2,40 | 2,07 |
| 60 | 7,2 | 260 | 119 | 0,75 | 2,54 | 2,18 |
| 60 | 10 | 288 | 124 | 0,77 | 2,71 | 2,33 |

CECOMAF

| Tc °C | Te °C | Cooling Capacity W | Consumption W | Current A | COP W/W | EER kCal/Wh |
|----------|----------|--------------------------|------------------|--------------|------------|----------------|
| 40 | -25 | 81 | 59 | 0,58 | 1,37 | 1,18 |
| 40 | -20 | 108 | 65 | 0,59 | 1,66 | 1,43 |
| 40 | -15 | 141 | 71 | 0,60 | 1,99 | 1,72 |
| 40 | -10 | 180 | 77 | 0,62 | 2,34 | 2,03 |
| 40 | -5 | 225 | 83 | 0,63 | 2,73 | 2,36 |
| 40 | 0 | 276 | 88 | 0,65 | 3,14 | 2,71 |
| 40 | 5 | 333 | 93 | 0,66 | 3,57 | 3,08 |
| 40 | 7,2 | 359 | 96 | 0,67 | 3,76 | 3,25 |
| 40 | 10 | 395 | 98 | 0,68 | 4,02 | 3,47 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 45 | -25 | 75 | 60 | 0,58 | 1,26 | 1,08 |
| 45 | -20 | 100 | 67 | 0,59 | 1,50 | 1,29 |
| 45 | -15 | 131 | 74 | 0,61 | 1,78 | 1,54 |
| 45 | -10 | 167 | 80 | 0,62 | 2,09 | 1,81 |
| 45 | -5 | 210 | 87 | 0,64 | 2,43 | 2,10 |
| 45 | 0 | 258 | 93 | 0,66 | 2,78 | 2,40 |
| 45 | 5 | 312 | 99 | 0,68 | 3,16 | 2,73 |
| 45 | 7,2 | 338 | 102 | 0,69 | 3,33 | 2,88 |
| 45 | 10 | 373 | 105 | 0,70 | 3,55 | 3,07 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 50 | -25 | 70 | 61 | 0,58 | 1,15 | 0,99 |
| 50 | -20 | 92 | 68 | 0,60 | 1,35 | 1,16 |
| 50 | -15 | 120 | 76 | 0,61 | 1,59 | 1,37 |
| 50 | -10 | 154 | 83 | 0,63 | 1,85 | 1,60 |
| 50 | -5 | 195 | 91 | 0,65 | 2,15 | 1,86 |
| 50 | 0 | 240 | 98 | 0,68 | 2,46 | 2,13 |
| 50 | 5 | 292 | 105 | 0,70 | 2,79 | 2,41 |
| 50 | 7,2 | 317 | 108 | 0,71 | 2,94 | 2,54 |
| 50 | 10 | 350 | 111 | 0,72 | 3,14 | 2,71 |

| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 55 | -25 | 64 | 61 | 0,58 | 1,04 | 0,90 |
| 55 | -20 | 84 | 70 | 0,60 | 1,20 | 1,04 |
| 55 | -15 | 110 | 78 | 0,62 | 1,40 | 1,21 |
| 55 | -10 | 141 | 86 | 0,64 | 1,64 | 1,41 |
| 55 | -5 | 179 | 95 | 0,67 | 1,89 | 1,64 |
| 55 | 0 | 223 | 102 | 0,69 | 2,17 | 1,88 |
| 55 | 5 | 272 | 110 | 0,72 | 2,47 | 2,13 |
| 55 | 7,2 | 296 | 114 | 0,73 | 2,60 | 2,25 |
| 55 | 10 | 327 | 118 | 0,75 | 2,78 | 2,40 |

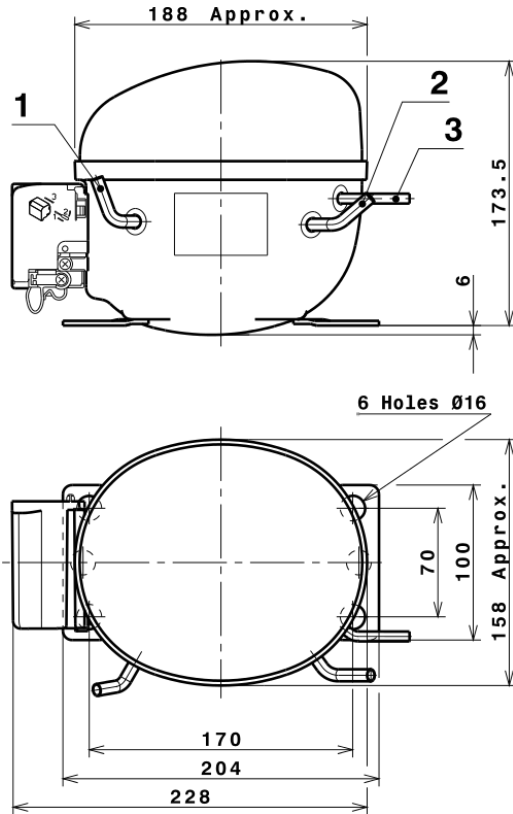
| | | | | | | |
|----|-----|-----|-----|------|------|------|
| 60 | -25 | 58 | 62 | 0,58 | 0,94 | 0,81 |
| 60 | -20 | 76 | 71 | 0,60 | 1,06 | 0,92 |
| 60 | -15 | 99 | 81 | 0,63 | 1,23 | 1,06 |
| 60 | -10 | 129 | 90 | 0,65 | 1,43 | 1,24 |
| 60 | -5 | 164 | 99 | 0,68 | 1,66 | 1,44 |
| 60 | 0 | 205 | 107 | 0,71 | 1,91 | 1,65 |
| 60 | 5 | 252 | 116 | 0,74 | 2,17 | 1,88 |
| 60 | 7,2 | 274 | 120 | 0,76 | 2,29 | 1,98 |
| 60 | 10 | 305 | 124 | 0,78 | 2,45 | 2,12 |

EN12900

| X | Cooling Capacity (W) | Consumption (W) | Current (A) | Mass Flow (kg/h) |
|---|----------------------|-----------------|---------------|----------------------|
| 1 | 416,3388691037 | 50,4213089103 | 0,5060846477 | 3,9043150938284 |
| 2 | 14,4986163503 | -0,2555413588 | -0,0014372355 | 0,15010781231306 |
| 3 | -3,6507843779 | 0,9908424454 | 0,0035261394 | -0,01494884805082 |
| 4 | 0,1142930581 | -0,0027221996 | 0,0000421939 | 0,0017149826698942 |
| 5 | -0,0997912989 | 0,0341570799 | 0,0001302388 | -0,00033942656937718 |

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

COMPRESSOR DIMENSIONS

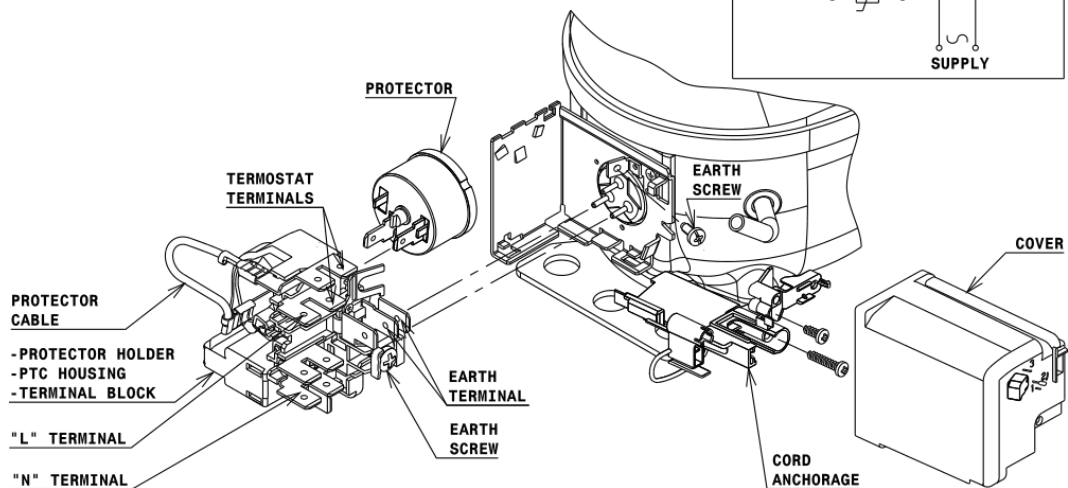
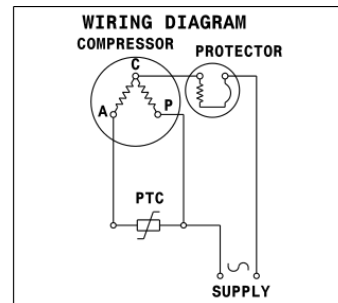


DESIGNATION INTERNAL DIAM.

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

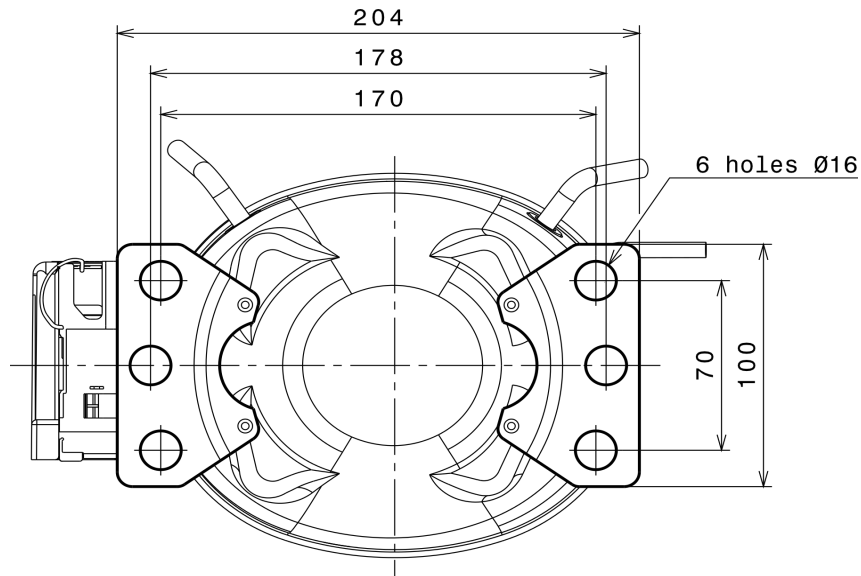
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (U range)



Technical Data Sheet

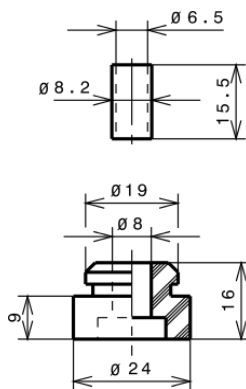
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

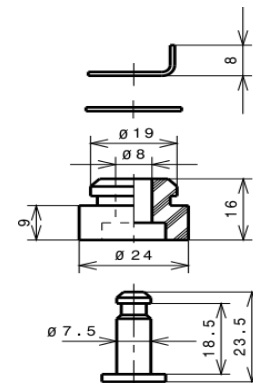
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R600a HMBP

