

HVY75AT

High Energy-optimized Compressor

R600a

220-240V 50Hz

General

| | |
|-----------------------|-----------------------------|
| Code number | 102A4906 |
| Approvals | EN 60335-2-34 with Annex AA |
| Compressors on pallet | 125 |

Application

| | | | |
|--|-----|------------|----|
| Application | LBP | | |
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °C | -35 to -10 | - |
| Voltage range | V | 198 - 254 | - |
| Max. condensing temperature continuous (short) | °C | 60 (70) | - |
| Max. winding temperature continuous (short) | °C | 125 (135) | - |

Cooling requirements

| | | | | | | | |
|-------------------------|----|-----|-----|-----|-----|-----|-----|
| Frequency | Hz | 50 | | | 60 | | |
| Application | | LBP | MBP | HBP | LBP | MBP | HBP |
| 32°C | | S | - | - | - | - | - |
| 38°C | | S | - | - | - | - | - |
| 43°C | | S | - | - | - | - | - |
| Remarks on application: | | | | | | | |

Motor

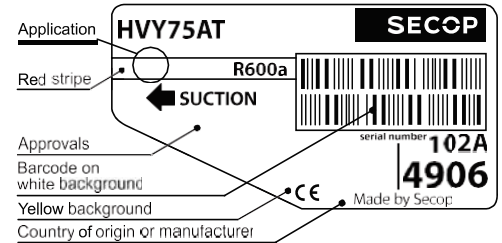
| | | | |
|---|-----------|------|------|
| Motor type | RSIR/RSCR | | |
| LRA (rated after 4 sec. UL984), HST LST | A | - | 3.3 |
| Cut in Current, HST LST | A | - | 7.2 |
| Resistance, main start winding (25°C) | Ω | 23.7 | 21.1 |

Design

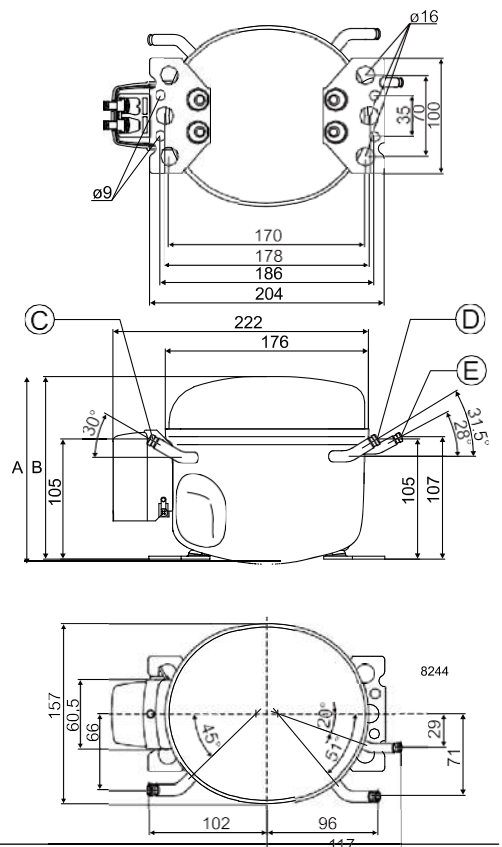
| | | |
|-------------------------------------|-----------------|---------------|
| Displacement | cm ³ | 7.48 |
| Oil quantity (type) | cm ³ | 180 (mineral) |
| Maximum refrigerant charge | g | 150 |
| Free gas volume in compressor | cm ³ | 1690 |
| Weight without electrical equipment | kg | 6.9 |

Dimensions

| | | | |
|----------------------|--------------------------|---------------------------|-------------|
| Height | mm | A | 163 |
| | | B | 159 |
| | | B1 | - |
| | | B2 | - |
| Suction connector | location/I.D. mm angle | C | 6.2 30° |
| | material comment | Copper Rubber plug | |
| Process connector | location/I.D. mm angle | D | 6.2 31.5° |
| | material comment | Copper Rubber plug | |
| Discharge connector | location/I.D. mm angle | E | 5.0 28° |
| | material comment | Copper Rubber plug | |
| Oil cooler connector | location/I.D. mm angle | F | - |
| | material comment | - | |
| Connector tolerance | I.D. mm | ±0.09, on 5.0 +0.12/+0.20 | |
| Remarks: | | | |



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



EN 12900 Household (CECOMAF) 220V, 50Hz, 2 W PTC consumption incl., static cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | 52.6 | 71.1 | 94.0 | 103 | 122 | 155 | 194 | | | | | | | | |
| Power cons. in W | | | 65.2 | 75.7 | 86.0 | 89.5 | 96.5 | 108 | 120 | | | | | | | | |
| Current cons. in A | | | 0.56 | 0.60 | 0.64 | 0.65 | 0.68 | 0.72 | 0.77 | | | | | | | | |
| COP in W/W | | | 0.81 | 0.94 | 1.09 | 1.15 | 1.26 | 1.44 | 1.62 | | | | | | | | |

EN 12900 Household (CECOMAF) 220V, 50Hz, RC 4µF, 2 W PTC consumption incl., static cooling

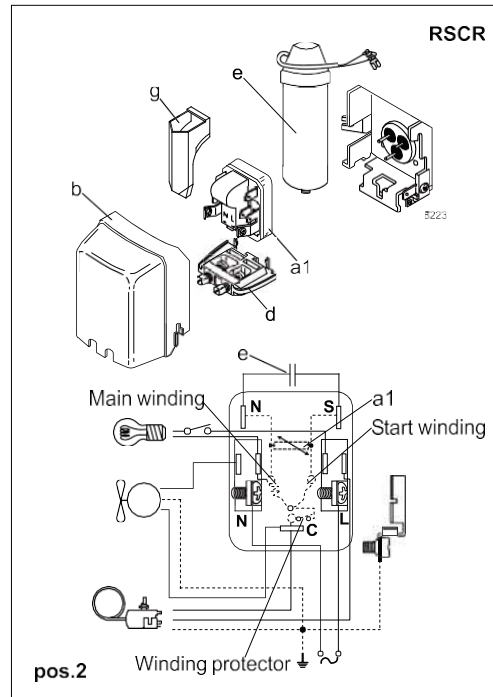
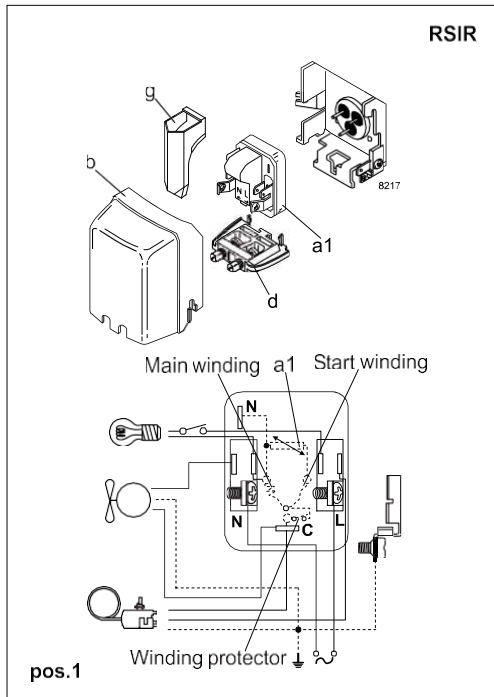
| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | 52.6 | 71.1 | 94.0 | 103 | 122 | 155 | 194 | | | | | | | | |
| Power cons. in W | | | 64.0 | 73.4 | 82.5 | 85.6 | 91.8 | 102 | 113 | | | | | | | | |
| Current cons. in A | | | 0.34 | 0.38 | 0.42 | 0.43 | 0.46 | 0.50 | 0.54 | | | | | | | | |
| COP in W/W | | | 0.82 | 0.97 | 1.14 | 1.20 | 1.33 | 1.52 | 1.73 | | | | | | | | |

ASHRAE LBP 220V, 50Hz, 2 W PTC consumption incl., static cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | 64.3 | 86.9 | 115 | 126 | 149 | 189 | 237 | | | | | | | | |
| Power cons. in W | | | 65.4 | 75.7 | 85.8 | 89.3 | 96.2 | 107 | 119 | | | | | | | | |
| Current cons. in A | | | 0.56 | 0.60 | 0.64 | 0.65 | 0.68 | 0.72 | 0.76 | | | | | | | | |
| COP in W/W | | | 0.98 | 1.15 | 1.34 | 1.41 | 1.55 | 1.76 | 1.99 | | | | | | | | |

ASHRAE LBP 220V, 50Hz, RC 4µF, 2 W PTC consumption incl., static cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | 64.3 | 86.9 | 115 | 126 | 149 | 189 | 237 | | | | | | | | |
| Power cons. in W | | | 64.2 | 73.3 | 82.3 | 85.4 | 91.5 | 101 | 112 | | | | | | | | |
| Current cons. in A | | | 0.34 | 0.38 | 0.42 | 0.43 | 0.46 | 0.50 | 0.54 | | | | | | | | |
| COP in W/W | | | 1.00 | 1.19 | 1.39 | 1.47 | 1.62 | 1.87 | 2.12 | | | | | | | | |



| Accessories for | HVY75AT | Figure | Code number |
|-------------------------------|-------------------------|---------------|-------------|
| PTC starting device | 6.3 mm spade connectors | a1 (pos.1) | 103N0011 |
| | 4.8 mm spade connectors | | 103N0018 |
| PTC starting device | 6.3 mm spade connectors | a1 (pos.2) | 103N0016 |
| | 4.8 mm spade connectors | | 103N0021 |
| ePTC starting device | 4.8 mm spade connectors | | 103N0050 |
| Cover | | b | 103N2010 |
| Cord relief | | d | 103N1010 |
| Run capacitor 4 µF (optional) | 6.3 mm spade connectors | e | 117-7117 |
| | 4.8 mm spade connectors | | 117-7119 |
| Protection screen for PTC | | g | 103N0476 |

| Test conditions | EN 12900/CECOMAF | ASHRAE |
|-------------------------|------------------|--------|
| Condensing temperature | 55°C | 54.4°C |
| Ambient temperature | 32°C | 32°C |
| Suction gas temperature | 32°C | 32°C |
| Liquid temperature | no subcooling | 32°C |

| Mounting accessories | | Code number |
|--------------------------|----------|-------------|
| Bolt joint for one comp. | Ø: 16 mm | 118-1917 |
| Bolt joint in quantities | Ø: 16 mm | 118-1918 |
| Snap-on in quantities | Ø: 16 mm | 118-1919 |

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