

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | |
|--|----------------------|-----------------------------|--|-------------------------|----------|
| Customer | | : ASTRAPROM | | | |
| Product line | | : W22 IE3 Three-Phase | | Product code : 12867354 | |
| Frame | : 90L | Cooling method | : IC411 - TEFC | | |
| Insulation class | : F | Mounting | : B3T | | |
| Duty cycle | : S1 | Rotation ¹ | : Both (CW and CCW) | | |
| Ambient temperature | : -20°C to +40°C | Starting method | : Direct On Line | | |
| Altitude | : 1000 m.a.s.l. | Approx. weight ³ | : 24.7 kg | | |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0026 kgm ² | | |
| Design | : N | | | | |
| Output [kW] | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Poles | 2 | 2 | 2 | 2 | 2 |
| Frequency [Hz] | 50 | 50 | 50 | 50 | 60 |
| Rated voltage [V] | 220/380 | 230/400 | 240/415 | 460 | |
| Rated current [A] | 8.10/4.69 | 8.03/4.62 | 8.01/4.63 | 3.99 | |
| L. R. Amperes [A] | 56.7/32.8 | 60.3/34.6 | 64.0/37.0 | 34.7 | |
| LRC [A] | 7.0 | 7.5 | 8.0 | 8.7 | |
| No load current [A] | 3.28/1.90 | 3.83/2.20 | 4.15/2.40 | 2.00 | |
| Rated speed [RPM] | 2870 | 2885 | 2895 | 3500 | |
| Slip [%] | 4.33 | 3.83 | 3.50 | 2.78 | |
| Rated torque [Nm] | 7.32 | 7.29 | 7.26 | 6.01 | |
| Locked rotor torque [%] | 310 | 350 | 370 | 409 | |
| Breakdown torque [%] | 320 | 360 | 380 | 440 | |
| Service factor | 1.00 | 1.00 | 1.00 | 1.00 | |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | |
| Locked rotor time | 18s (cold) 10s (hot) | 16s (cold) 9s (hot) | 16s (cold) 9s (hot) | 18s (cold) 10s (hot) | |
| Noise level ² | 62.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) | 68.0 dB(A) | |
| Efficiency (%) | 25% | | | | |
| | 50% | 85.0 | 83.0 | 83.0 | 84.0 |
| | 75% | 85.5 | 85.9 | 85.0 | 85.5 |
| | 100% | 85.9 | 85.9 | 85.9 | 86.5 |
| Power Factor | 25% | | | | |
| | 50% | 0.67 | 0.62 | 0.57 | 0.60 |
| | 75% | 0.78 | 0.73 | 0.69 | 0.73 |
| | 100% | 0.83 | 0.80 | 0.77 | 0.80 |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 16.1 | 16.1 | 16.1 | 15.3 |
| | P2 (0,5;1,0) | 14.4 | 14.4 | 14.4 | 13.7 |
| | P3 (0,25;1,0) | 13.4 | 13.4 | 13.4 | 12.8 |
| | P4 (0,9;0,5) | 7.3 | 7.3 | 7.3 | 7.0 |
| | P5 (0,5;0,5) | 5.1 | 5.1 | 5.1 | 4.9 |
| | P6 (0,5;0,25) | 3.3 | 3.3 | 3.3 | 3.1 |
| | P7 (0,25;0,25) | 2.3 | 2.3 | 2.3 | 2.2 |
| Bearing type | : Drive end 6205 ZZ | Non drive end 6204 ZZ | Foundation loads | | |
| Sealing | : V'Ring | V'Ring | Max. traction | : 633 N | |
| Lubrication interval | : - | - | Max. compression | : 876 N | |
| Lubricant amount | : - | - | | | |
| Lubricant type | : 00088 | | | | |
| This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load. | | | These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1. | | |
| Rev. | Changes Summary | | Performed | Checked | Date |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
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Three Phase Induction Motor - Squirrel Cage



Customer : ASTRAPROM

Notes

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
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DATA SHEET



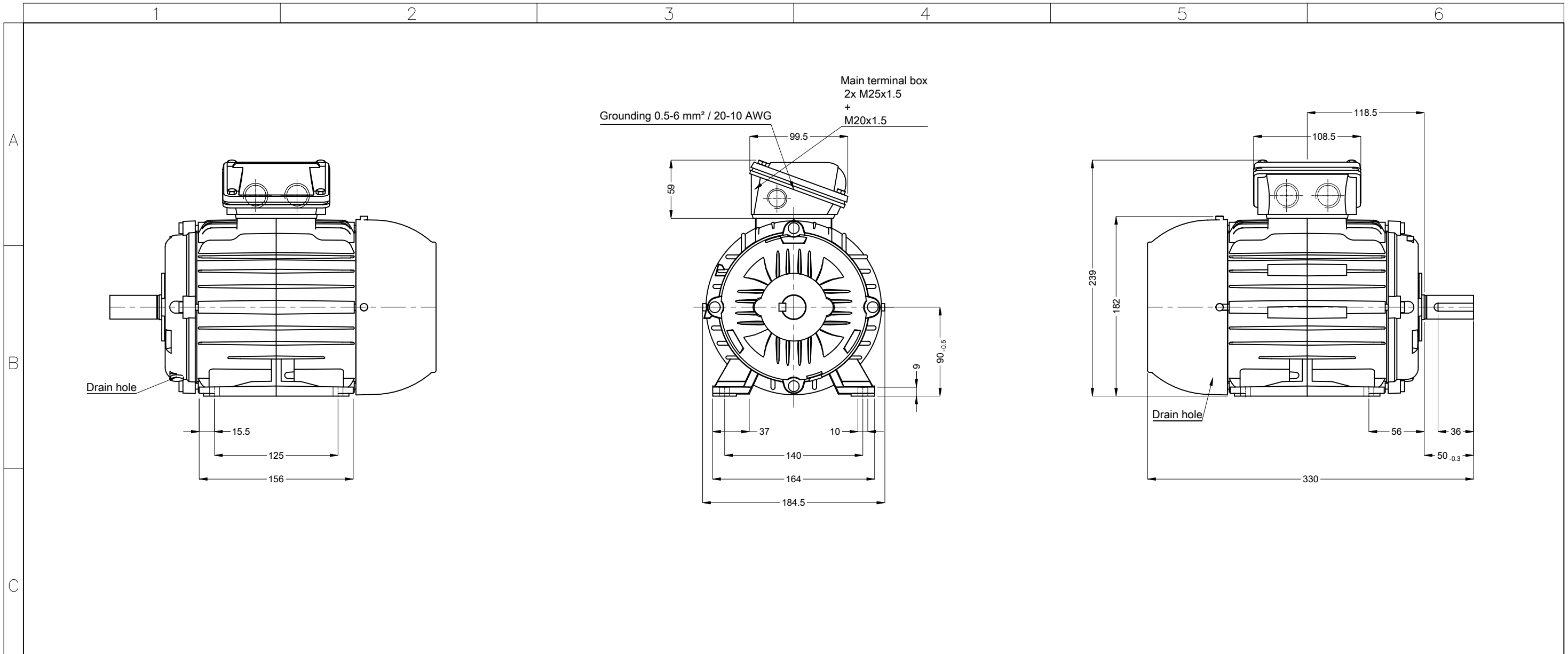
Three Phase Induction Motor - Squirrel Cage

Customer : ASTRAPROM

Thermal protection

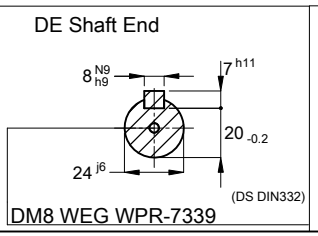
| ID | Application | Type | Quantity | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1 | Winding | Thermistor - 2 wires | 1 x Phase | 155 °C |

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|--------------|-----------------|-----------|---------|---------------|
| | | | | |
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| Checked by | | | | |
| Date | 27/03/2026 | | | |
| | | | | Revision |



| | | | | | |
|---|----------|------------|--------------------------|-----------|----------|
| D | | | 2.2 kW 02 Poles 50 Hz | | A |
| | | | Scale 1 : 4 | | |
| E | | | HYBRISUSER | | 00 |
| | ECM | LOC | SUMMARY OF MODIFICATIONS | | EXECUTED |
| | EXECUTED | HYBRISUSER | THREE PH. MOTOR W22 IE3 | | CHECKED |
| | CHECKED | | FRAME 90L IP55 TEFC | | RELEASED |
| | | | | DATE | VER |
| | | | | REL. DATE | |

Thermal protection to switch off - thermistors 155°C
 Color RAL 5009
 Painting plan 207A
 Mounting NEMA F-3
 Mounting B3T



| | | | | | | | | |
|-----------|--|------------|--|-------------------------|--|-------------|--|-----|
| EXECUTED | | HYBRISUSER | | THREE PH. MOTOR W22 IE3 | | PREVIEW | | WEG |
| CHECKED | | | | FRAME 90L IP55 TEFC | | WDD 00 | | |
| RELEASED | | | | | | SHEET 1 / 1 | | |
| REL. DATE | | | | | | | | |