

DATA SHEET

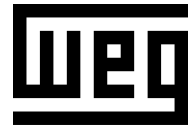


Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|--|-----------------|---------------|--|--|----------------------|----------------|
| Customer : | | | | | | |
| Product line : W20 Three-Phase | | | Product code : 17689164 | | | |
| Frame : S132S Output : 5.5 kW (7.5 HP) Poles : 4 Frequency : 50 Hz Rated voltage : 400/690 V Rated current : 10.9/6.33 A L. R. Amperes : 92.9/53.8 A LRC : 8.5 No load current : 5.81/3.37 A Rated speed : 1465 rpm Slip : 2.33 % Rated torque : 35.9 Nm Locked rotor torque : 220 % Breakdown torque : 330 % Insulation class : F Service factor : 1.00 Moment of inertia (J) : 0.0528 kgm ² Design : N | | | Locked rotor time : 25s (cold) 14s (hot) Temperature rise : 80 K Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : B3T Rotation ¹ : Both (CW and CCW) Noise level ² : 56.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 55.4 kg | | | |
| Output 50% 75% 100% Efficiency (%) 89.0 89.6 89.6 Power Factor 0.62 0.74 0.81 | | | Foundation loads Max. traction : 1920 N Max. compression : 2463 N | | | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | | |
| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
| 11.3 | 9.6 | 8.9 | 6.1 | 4.3 | 3.1 | 2.2 |
| | | | <u>Drive end</u> | | <u>Non drive end</u> | |
| Bearing type : | | | 6208 ZZ | | 6207 ZZ | |
| Sealing : | | | V'Ring | | V'Ring | |
| Lubrication interval : | | | - | | - | |
| Lubricant amount : | | | - | | - | |
| Lubricant type : | | | Mobil Polyrex EM | | | |
| Notes | | | | | | |
| 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. | | |
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Customer : _____

Thermal protection

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

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TORQUE AND CURRENT VS SPEED CURVE

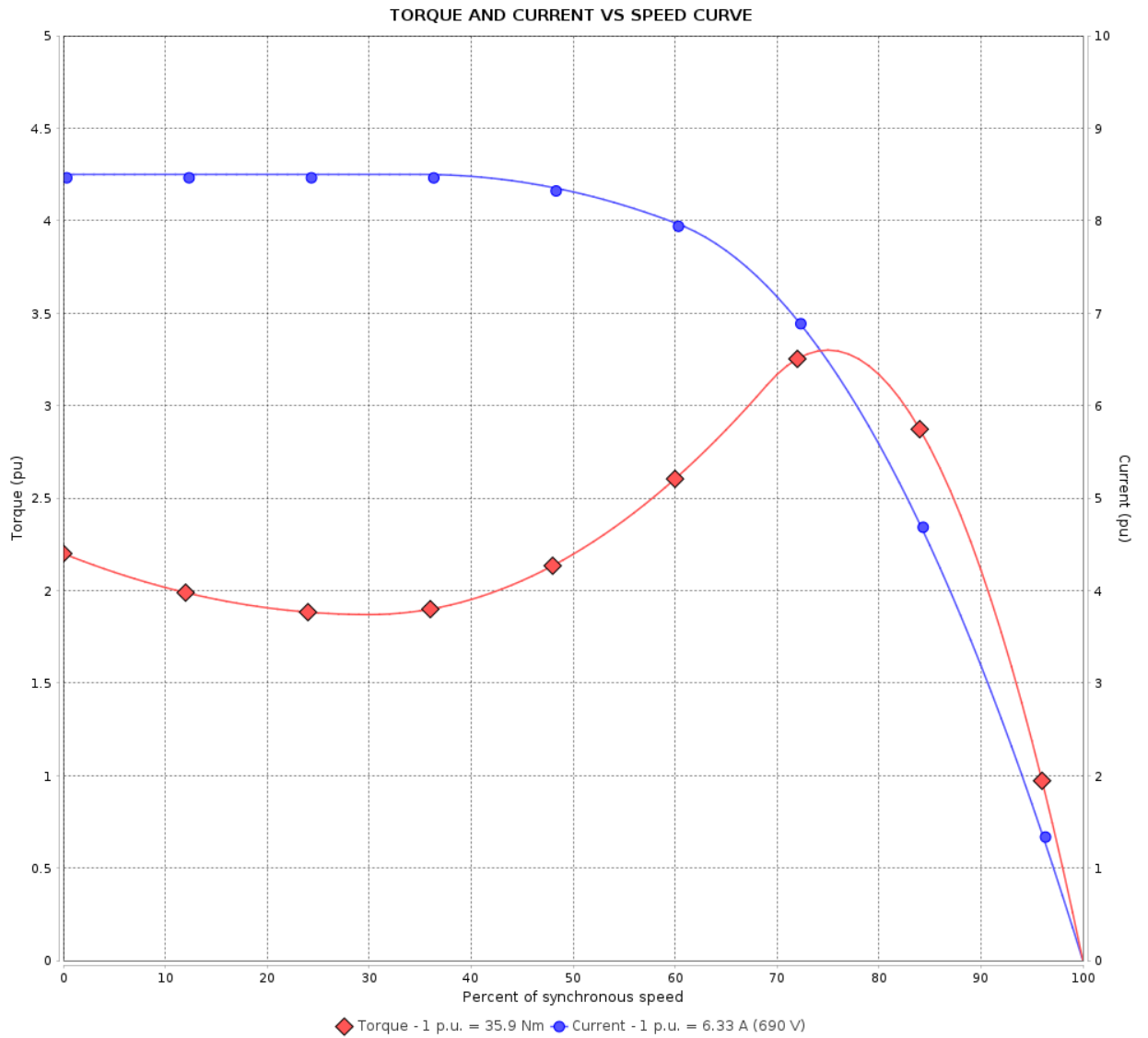
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W20 Three-Phase

Product code : 17689164



Performance : 400/690 V 50 Hz 4P

| | | | |
|---------------------|---------------|-----------------------|---------------------------|
| Rated current | : 10.9/6.33 A | Moment of inertia (J) | : 0.0528 kgm ² |
| LRC | : 8.5 | Duty cycle | : S1 |
| Rated torque | : 35.9 Nm | Insulation class | : F |
| Locked rotor torque | : 220 % | Service factor | : 1.00 |
| Breakdown torque | : 330 % | Temperature rise | : 80 K |
| Rated speed | : 1465 rpm | Design | : N |

Locked rotor time : 25s (cold) 14s (hot)

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LOAD PERFORMANCE CURVE

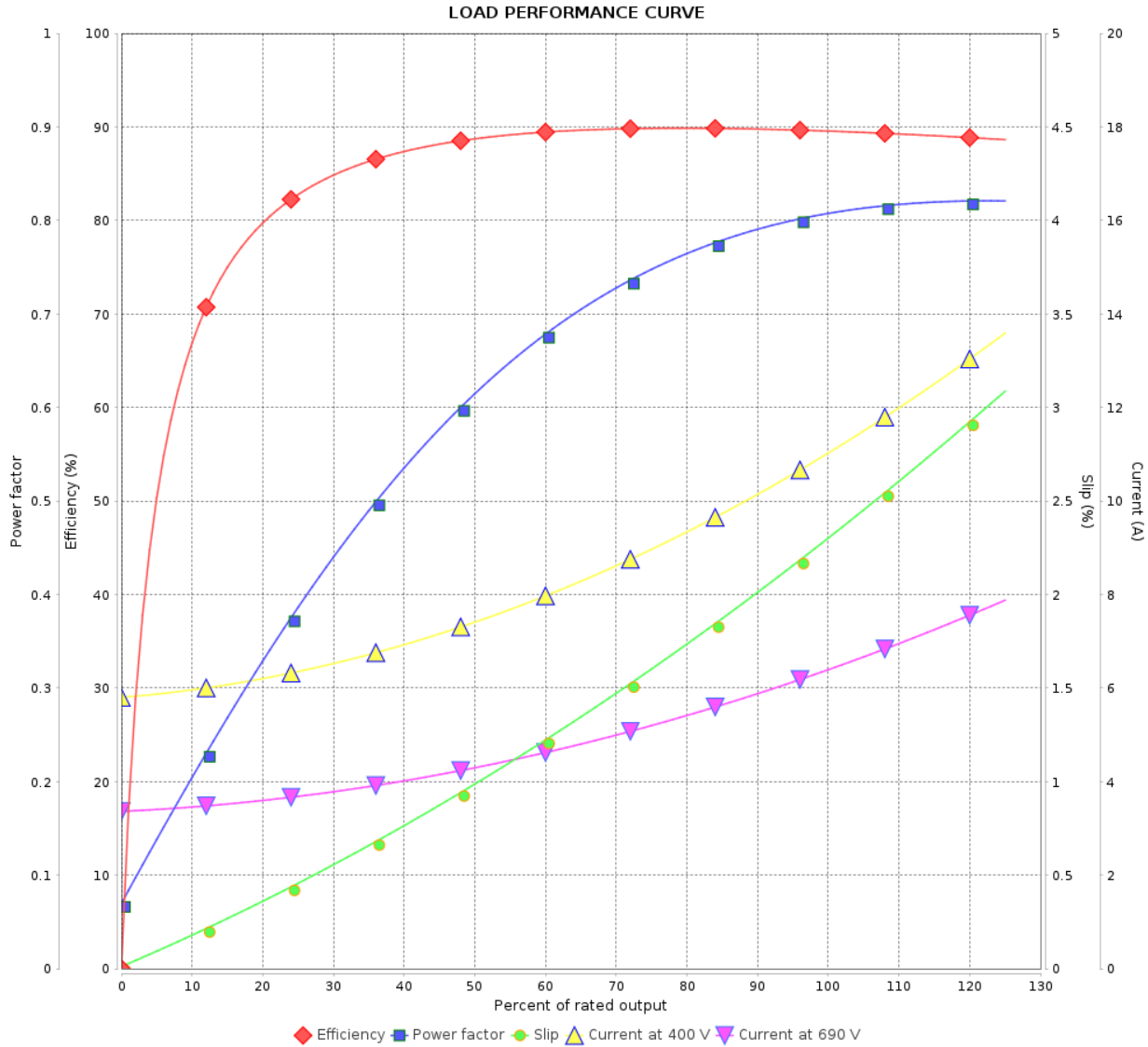
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W20 Three-Phase

Product code : 17689164



Performance : 400/690 V 50 Hz 4P

Rated current : 10.9/6.33 A
 LRC : 8.5
 Rated torque : 35.9 Nm
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.0528 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

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THERMAL LIMIT CURVE

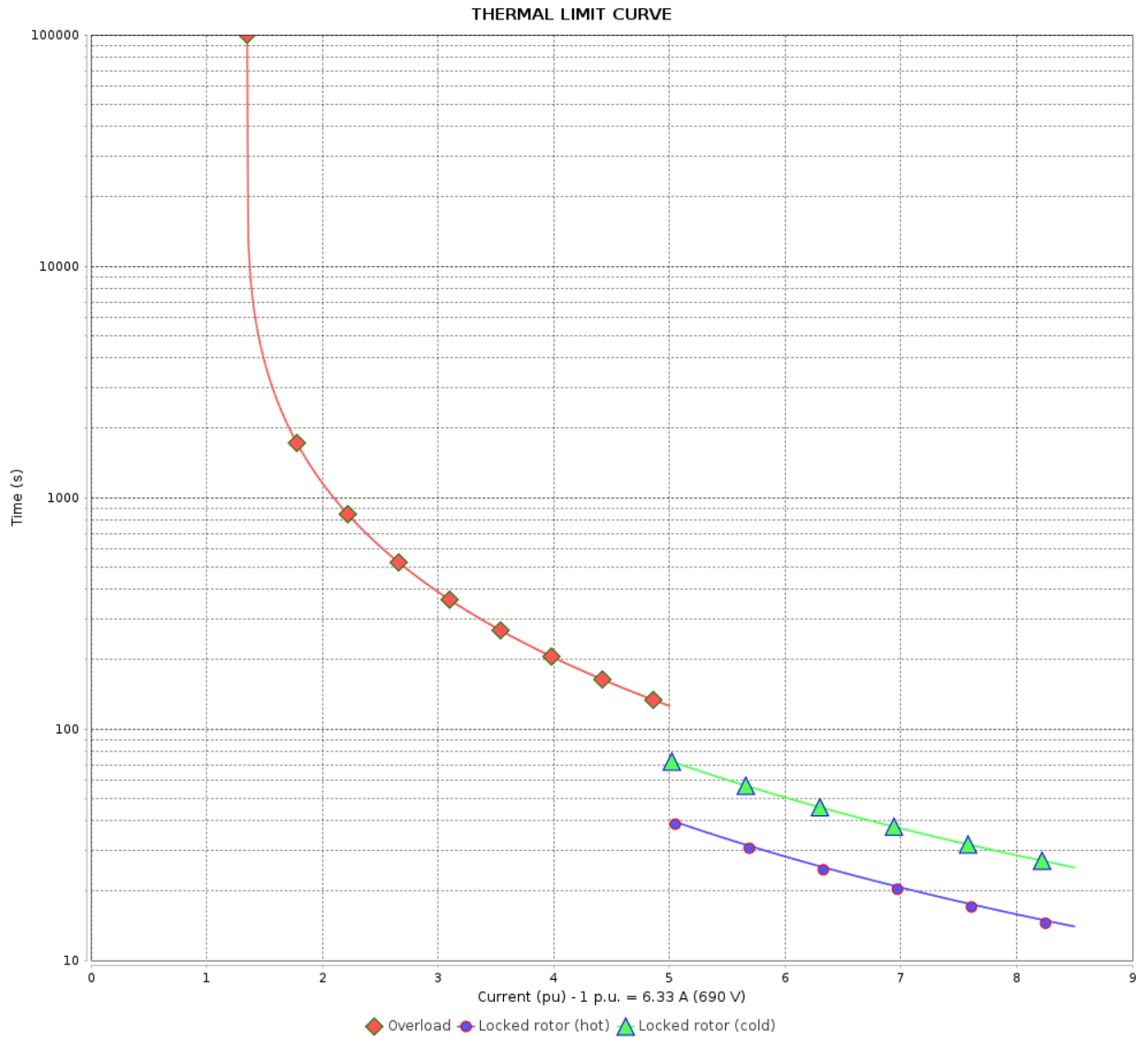
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 Breakdown torque : 330 %
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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant
 Cooling constant

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VFD OPERATION CURVE

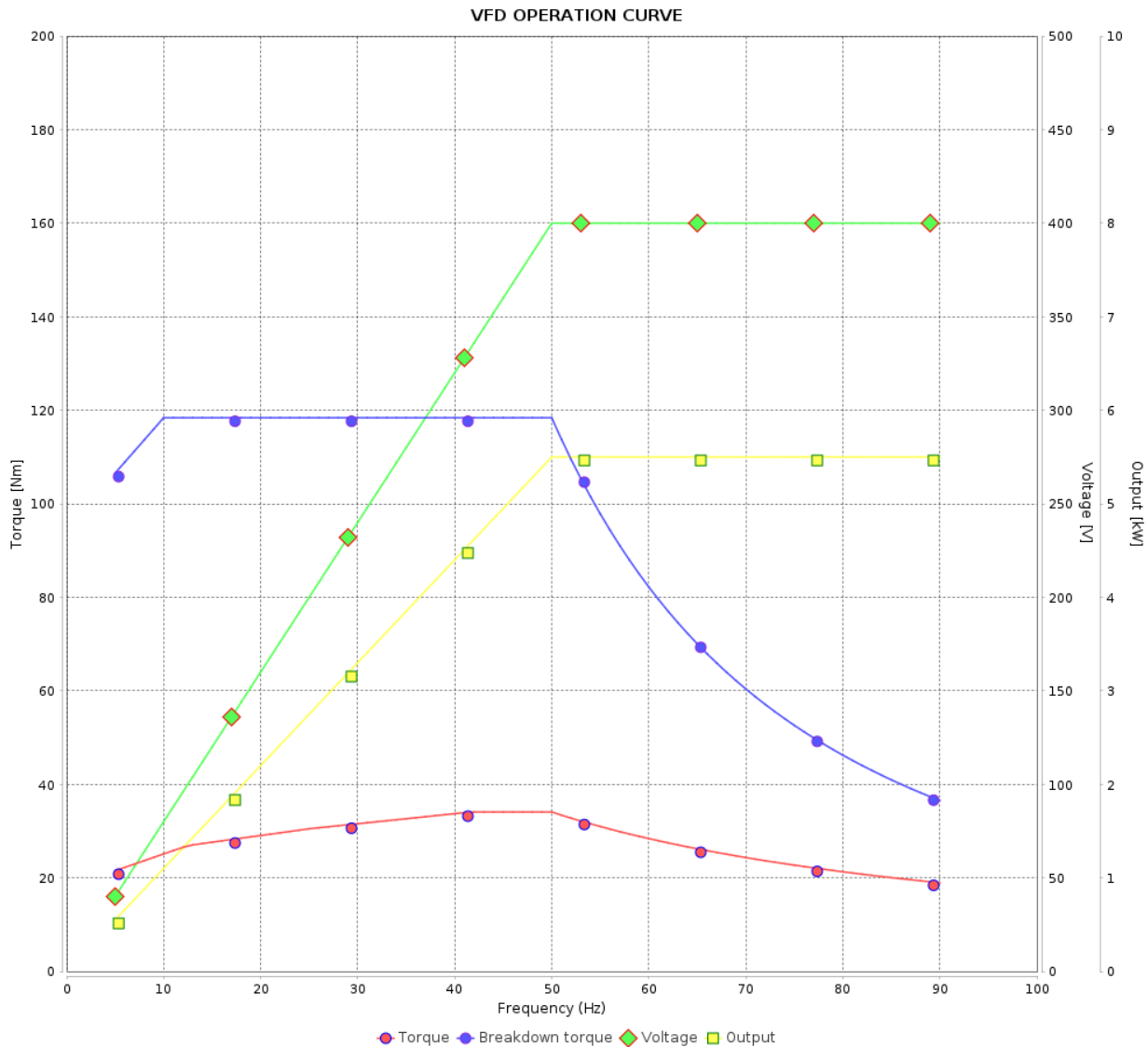
Three Phase Induction Motor - Squirrel Cage



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 Insulation class : F
 Service factor : 1.00
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