

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE1 Three-Phase Product code : 11096981

Frame	: 225S/M	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 45 kW	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 84.0/48.4 A	Protection degree	: IP55
L. R. Amperes	: 580/334 A	Cooling method	: IC411 - TEFC
LRC	: 6.9	Mounting	: B3T
No load current	: 24.0/13.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2955 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.50 %	Starting method	: Direct On Line
Rated torque	: 14.8 kgfm	Approx. weight ³	: 367 kg
Locked rotor torque	: 220 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.2471 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.9	92.5	92.5	Max. traction	: 259 kgf
Power Factor	0.80	0.86	0.88	Max. compression	: 625 kgf

	Drive end	Non drive end
Bearing type	: 6314 C3	6314 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 5000 h	5000 h
Lubricant amount	: 27 g	27 g
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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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

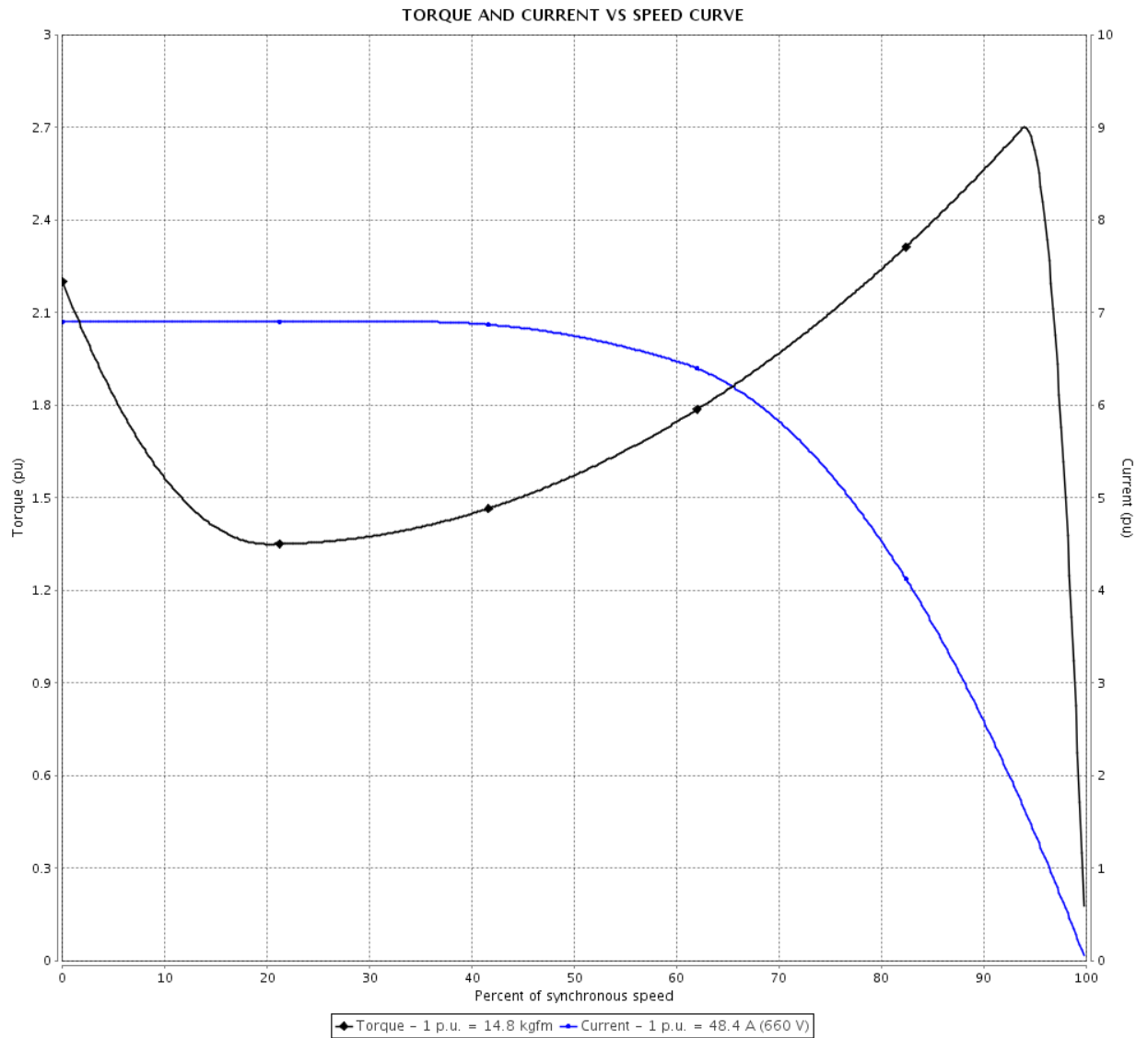
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE1 Three-Phase

Product code : 11096981



Performance : 380/660 V 50 Hz 2P

Rated current	: 84.0/48.4 A	Moment of inertia (J)	: 0.2471 kgm ²
LRC	: 6.9	Duty cycle	: S1
Rated torque	: 14.8 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: N

Locked rotor time : 18s (cold) 10s (hot)

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		Revision		

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Subject to change without notice

LOAD PERFORMANCE CURVE

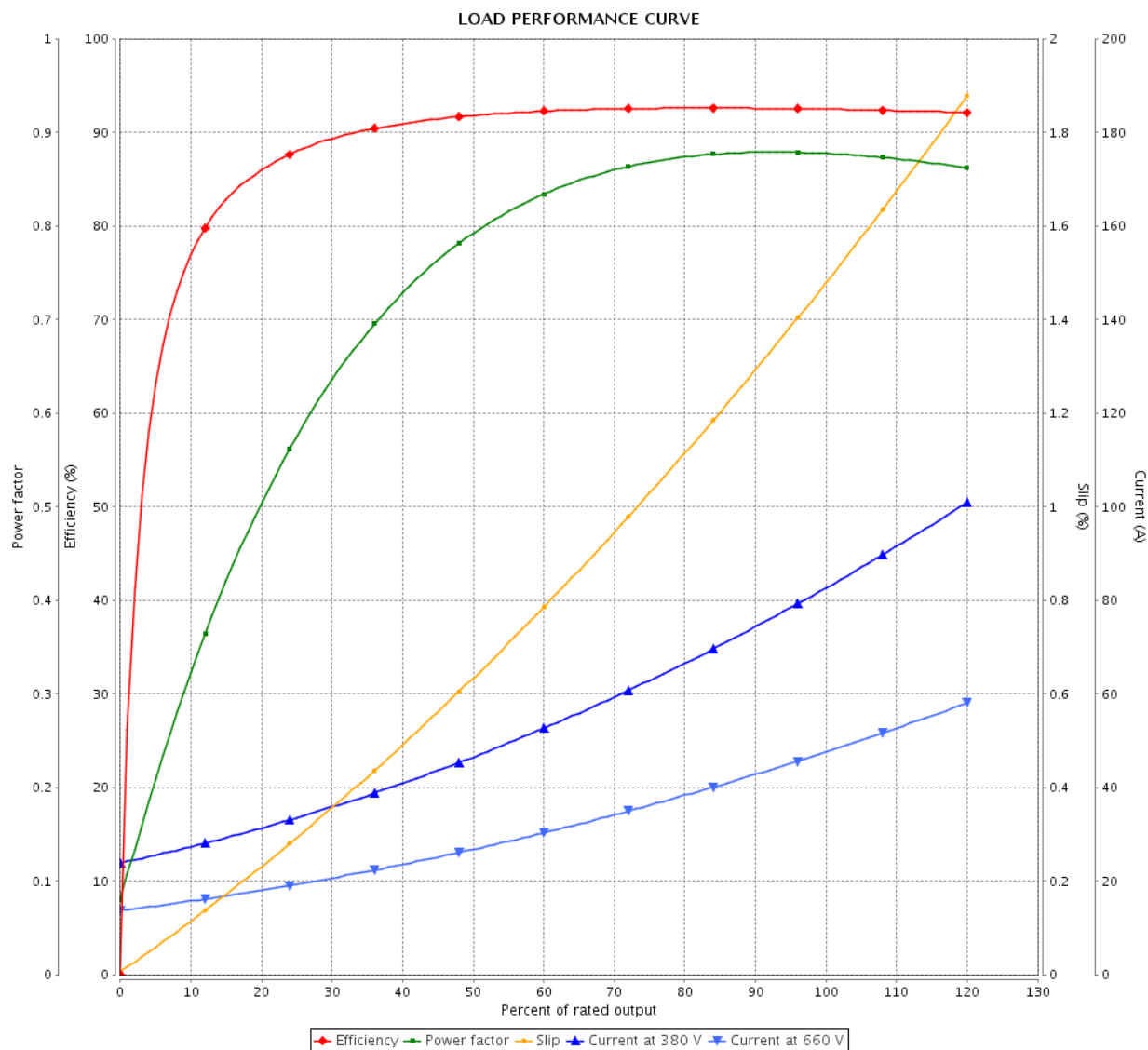
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE1 Three-Phase

Product code : 11096981

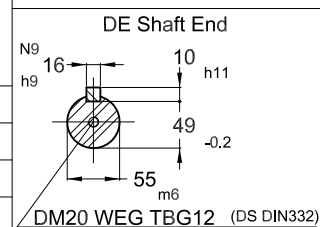
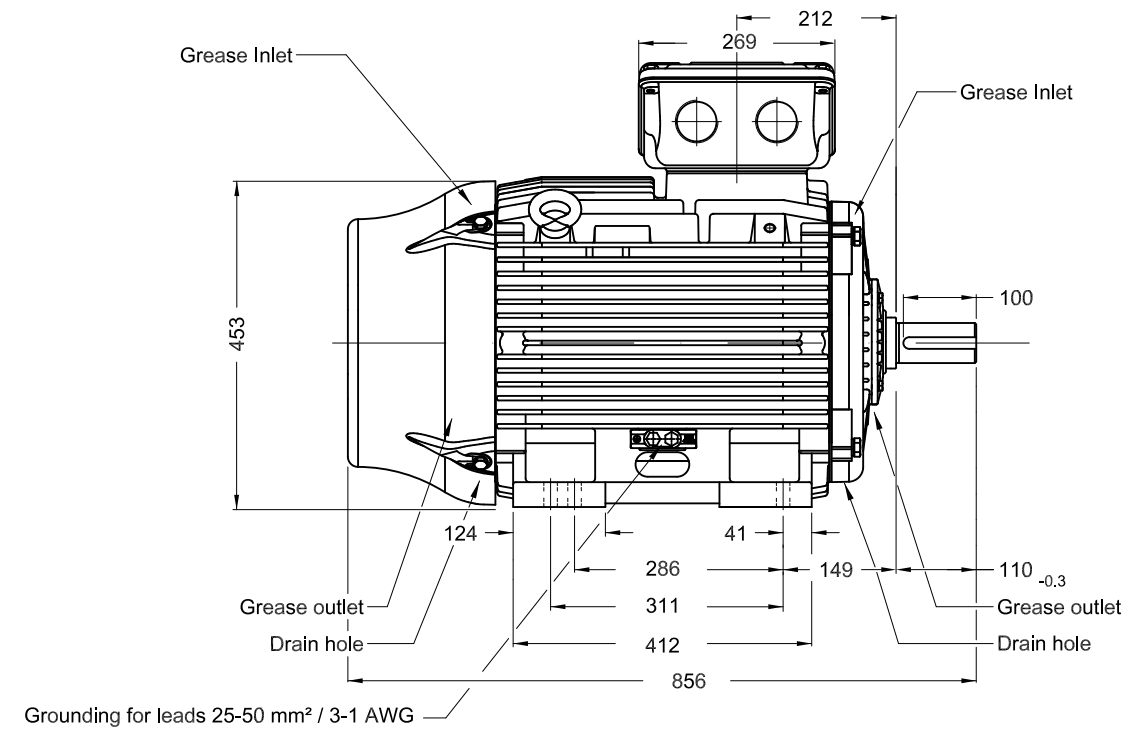
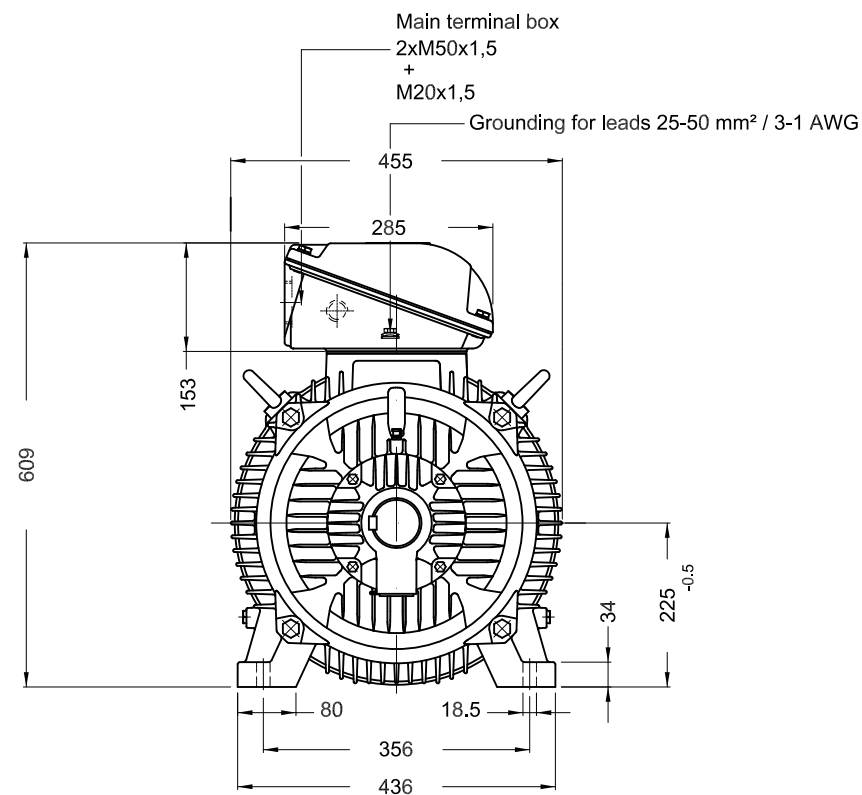


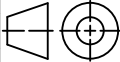
Performance : 380/660 V 50 Hz 2P

Rated current : 84.0/48.4 A
LRC : 6.9
Rated torque : 14.8 kgfm
Locked rotor torque : 220 %
Breakdown torque : 250 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.2471 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : N

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45 kW 02 Poles 50 Hz							A
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED
EXECUTED	USERADMIN		THREE PHASE W22 MOTOR FRAME 225S/M IP55 TEFC			PREVIEW WDD	
CHECKED							
RELEASED							
REL DT		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1	
							