

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12082757

Frame	: 160L	Locked rotor time	: 39s (cold) 22s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 20.0 A	Protection degree	: IP55
L. R. Amperes	: 166 A	Cooling method	: IC411 - TEFC
LRC	: 8.3	Mounting	: B35L(E)
No load current	: 8.80 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1778 rpm	Noise level ²	: 64.0 dB(A)
Slip	: 1.22 %	Starting method	: Direct On Line
Rated torque	: 8.16 kgfm	Approx. weight ³	: 157 kg
Locked rotor torque	: 300 %		
Breakdown torque	: 330 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1214 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	93.0	Max. traction	: 345 kgf
Power Factor	0.62	0.74	0.81	Max. compression	: 502 kgf

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)
7.2	5.5	4.9	4.2	2.7	2.0	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 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 NEMA MG-1.

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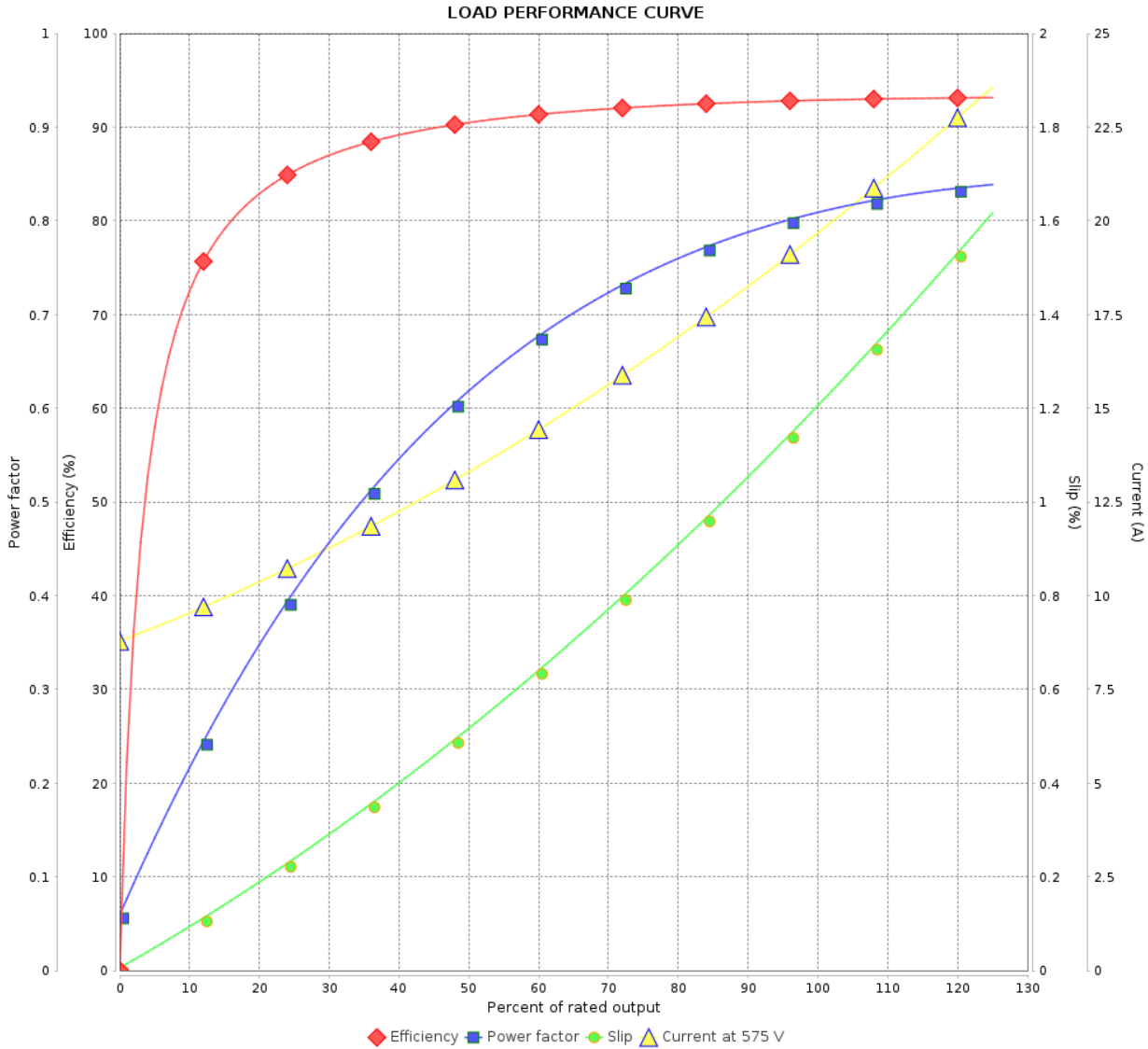
LOAD PERFORMANCE CURVE

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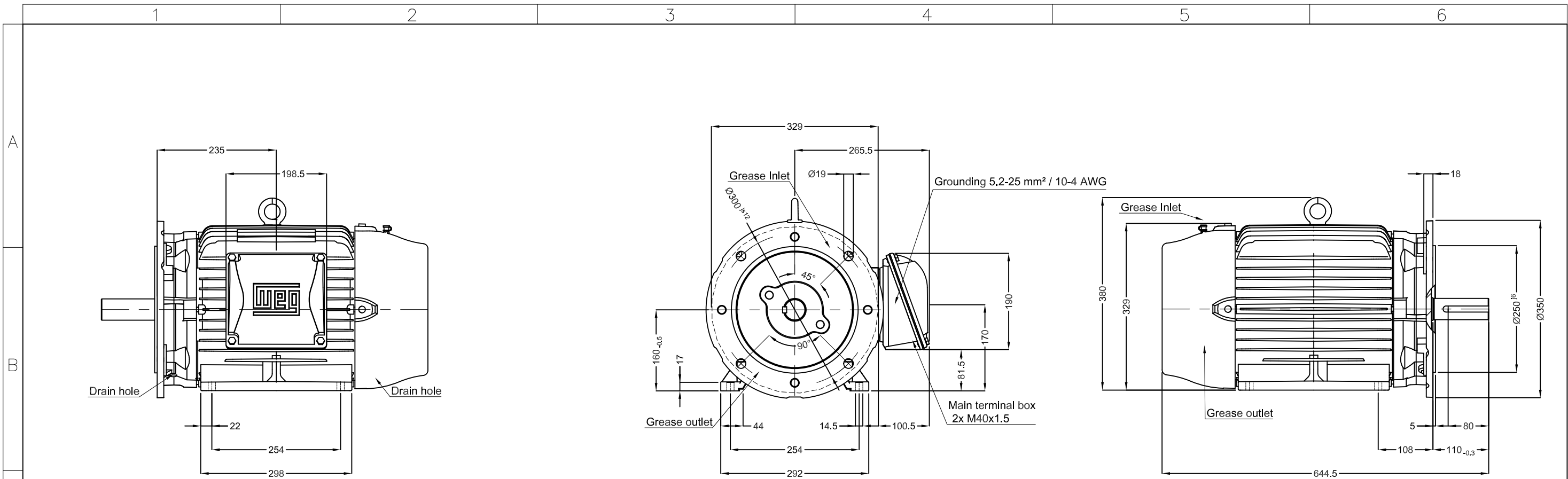


Performance : 575 V 60 Hz 4P

Rated current : 20.0 A
 LRC : 8.3
 Rated torque : 8.16 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 1778 rpm

Moment of inertia (J) : 0.1214 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
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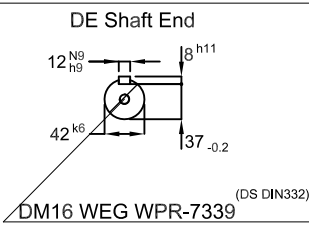


C

D

E

Without vertical jackscrews
 Color RAL 5009
 Painting plan 203A
 Mounting B35L(E)



20 HP 04 Poles 60 Hz						A
ECM	LOC	SUMMARY OF MODIFICATIONS			HYBRISUSER	00
EXECUTED	HYBRISUSER	EXECUTED	CHECKED	RELEASED	DATE	VER
CHECKED		THREE PH. MOTOR W22 IE3				PREVIEW
RELEASED		FRAME 160L IP55 TEFC				
REL. DATE						WDD 00
						SHEET /

