

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

	Drive end	Non drive end
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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	24/10/2024		Page 1 / 2	Revision

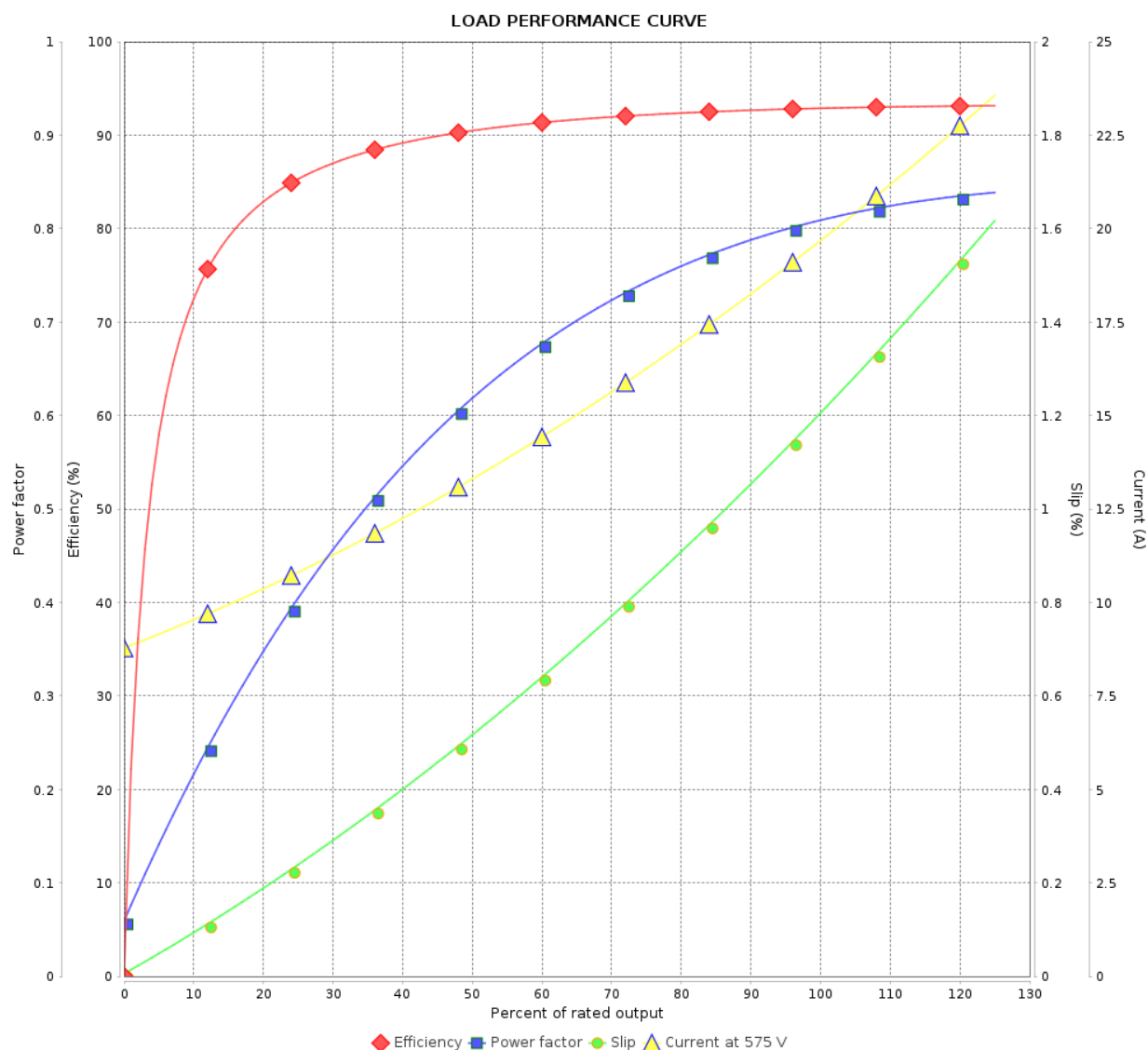
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

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

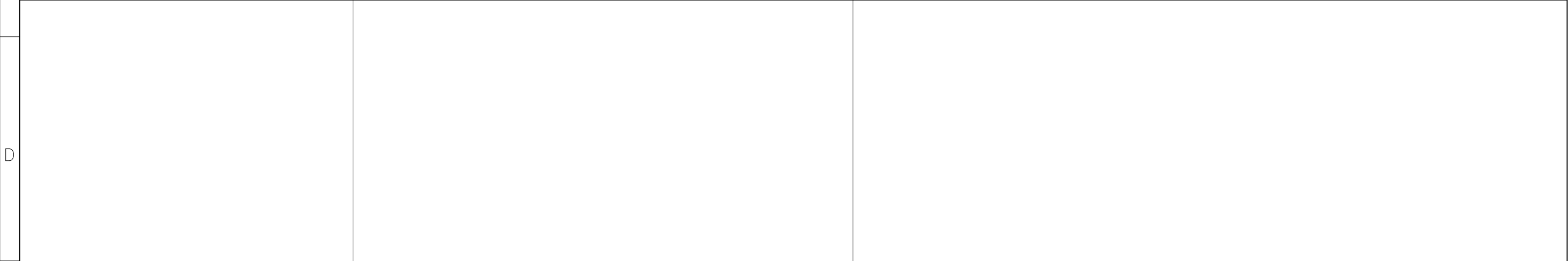
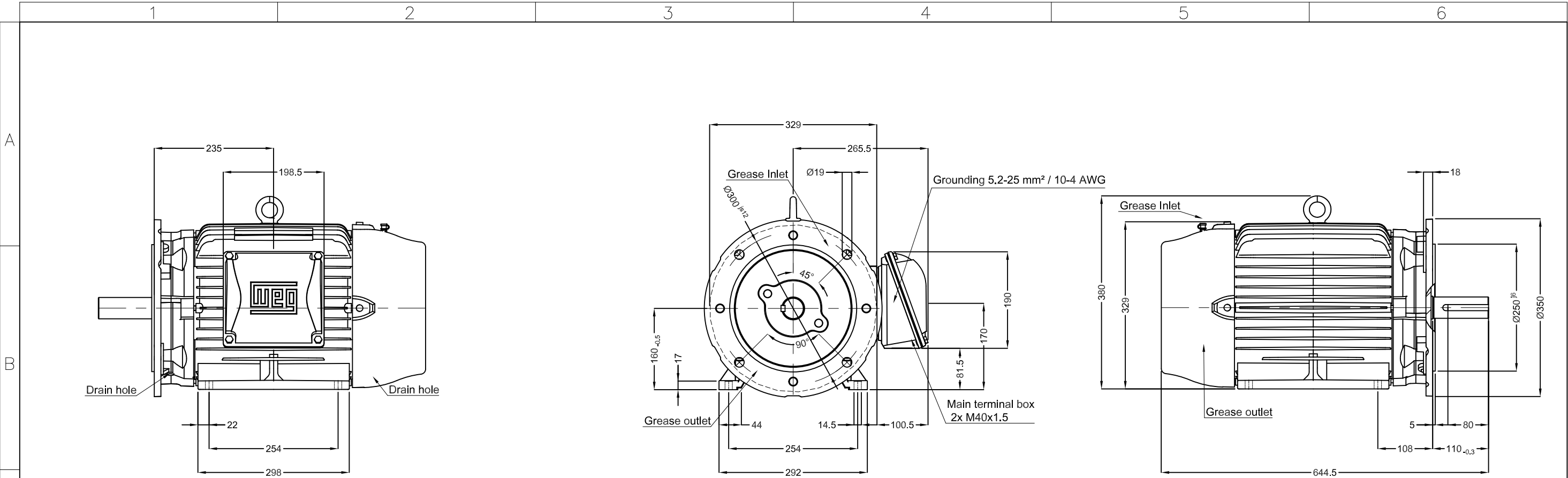


Performance : 575 V 60 Hz 4P

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
Performed by		Page 2 / 2Revision		
Checked by				
Date	24/10/2024			



E					20 HP 04 Poles 60 Hz										A			