

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 16572113

Frame	: 200L	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B35L(E)
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: VFD
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 258 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.3468 kgm ²
Design	: N		

Output [HP]	40	40	40
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	208-230/460	380	415
Rated current [A]	109-98.8/49.4	58.0	55.7
L. R. Amperes [A]	1005-909/454	423	457
LRC [A]	9.2	7.3	8.2
No load current [A]	44.0-51.0/25.5	24.5	27.0
Rated speed [RPM]	1785	1480	1485
Slip [%]	0.83	1.33	1.00
Rated torque [kgfm]	16.3	19.6	19.5
Locked rotor torque [%]	340	250	310
Breakdown torque [%]	350	280	310
Service factor	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	19s (cold) 11s (hot)	16s (cold) 9s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%	0.000	0.000
	50%	92.6	93.4
	75%	93.7	93.7
	100%	94.1	93.6
Power Factor	25%	0.00	0.00
	50%	0.63	0.69
	75%	0.75	0.79
	100%	0.81	0.84

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	6.0	6.6	6.6
	P2 (0,5;1,0)	4.7	5.1	5.1
	P3 (0,25;1,0)	4.3	4.6	4.6
	P4 (0,9;0,5)	3.5	3.9	3.9
	P5 (0,5;0,5)	2.3	2.5	2.5
	P6 (0,5;0,25)	1.8	1.9	1.9
	P7 (0,25;0,25)	1.2	1.3	1.3

	Drive end	Non drive end	Foundation loads
Bearing type	: 6312 C3	6212 C3	Max. traction : 633 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 891 kgf
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 21 g	13 g	
Lubricant type	: Mobil Polyrex EM		

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	25/10/2024			

Page 1 / 5
Revision

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Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	25/10/2024				

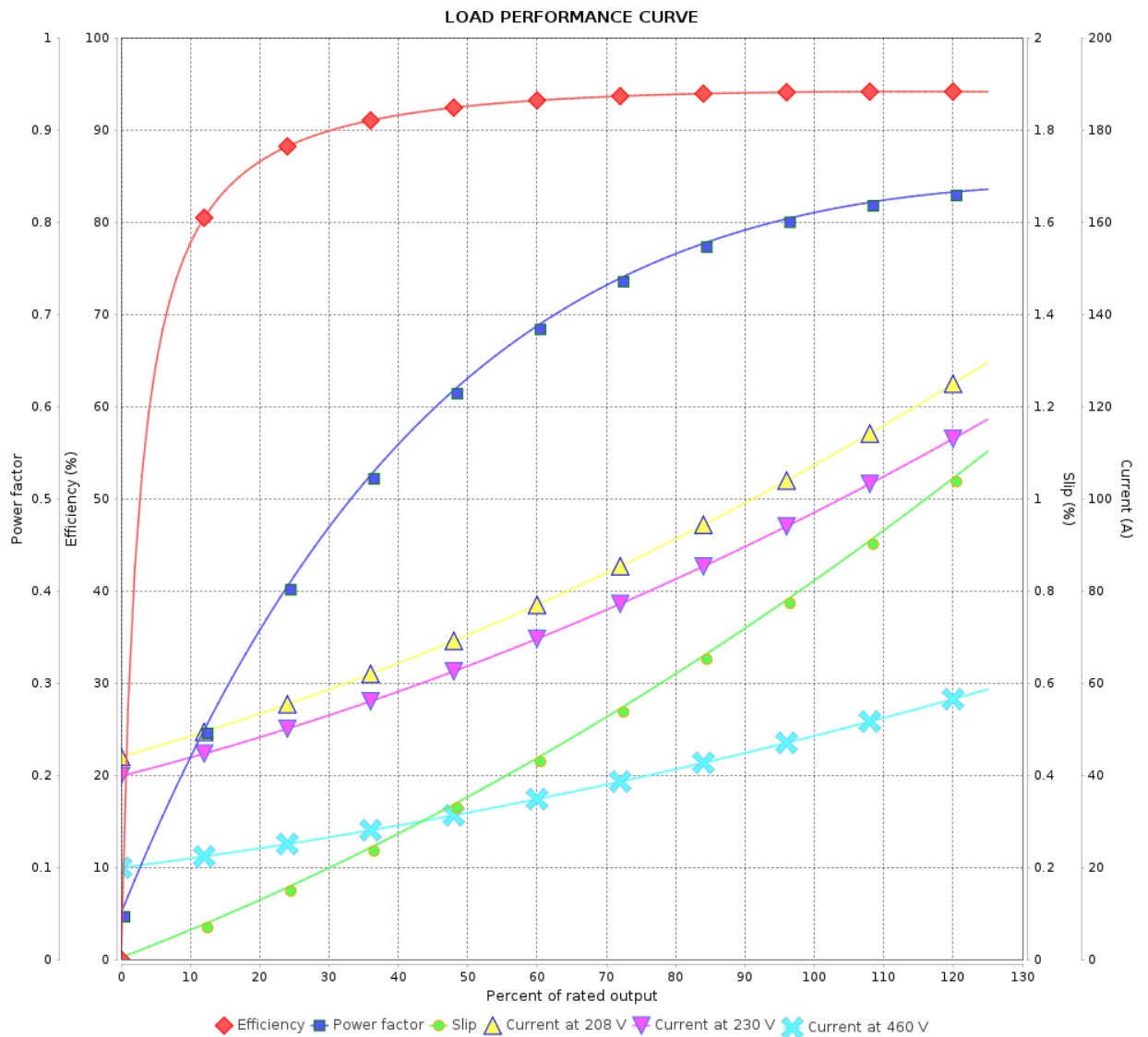
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Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 16572113



Performance : 208-230/460 V 60 Hz 4P

Rated current : 109-98.8/49.4 A
LRC : 9.2
Rated torque : 16.3 kgfm
Locked rotor torque : 340 %
Breakdown torque : 350 %
Rated speed : 1785 rpm

Moment of inertia (J) : 0.3468 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 3 / 5Revision		
Checked by				
Date	25/10/2024			

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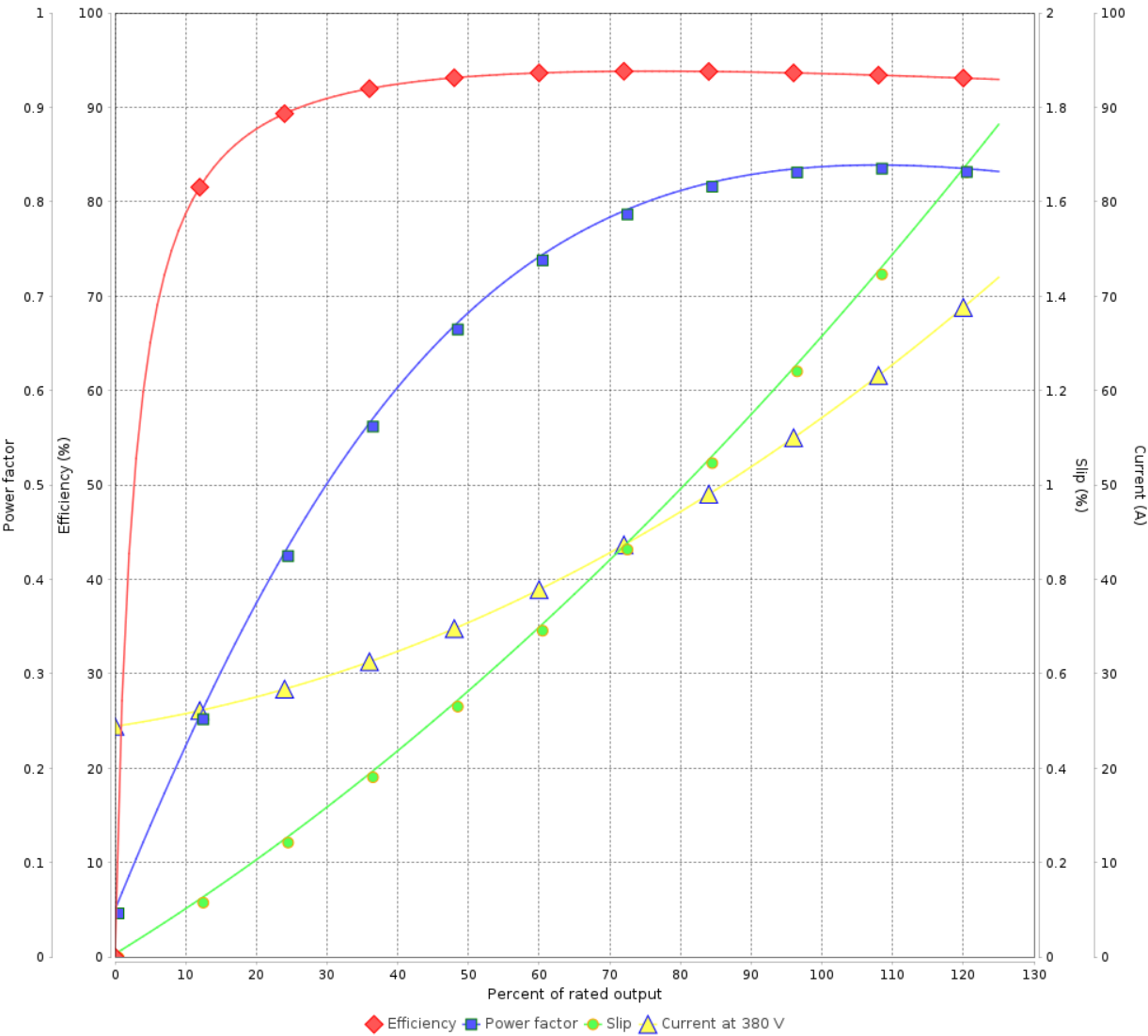
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P

Rated current	: 58.0 A	Moment of inertia (J)	: 0.3468 kgm ²
LRC	: 7.3	Duty cycle	: S1
Rated torque	: 19.6 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: N

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 5Revision			
Checked by					
Date	25/10/2024				

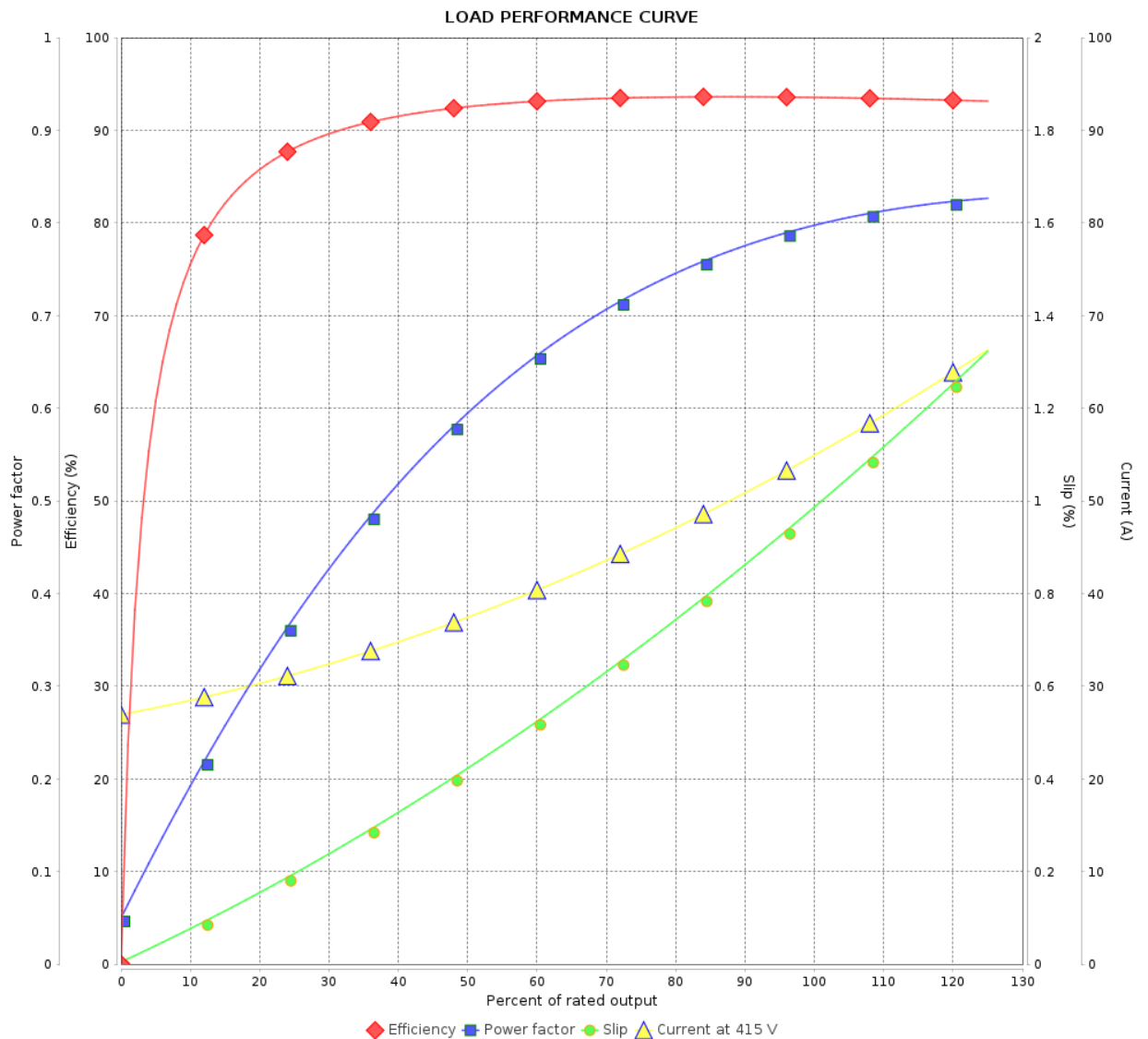
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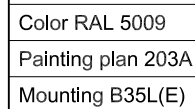
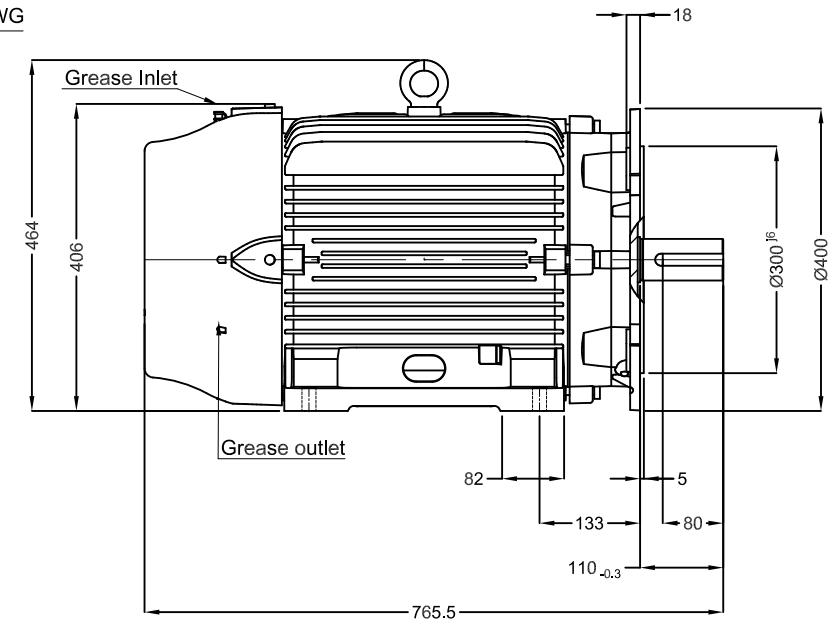
Product line : W22 Tru-Metric IE3 Three-Phase Product code : 16572113



Performance : 415 V 50 Hz 4P

Rated current	: 55.7 A	Moment of inertia (J)	: 0.3468 kgm ²
LRC	: 8.2	Duty cycle	: S1
Rated torque	: 19.5 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: N

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	25/10/2024		Page 5 / 5	Revision



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