

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12376409

Frame : 213/5T	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : F-1
Duty cycle : Cont.(S1)	Rotation ¹ : Both (CW and CCW)
Ambient temperature : -20°C to +40°C	Starting method : Direct On Line
Altitude : 1000 m.a.s.l.	Approx. weight ³ : 76.8 kg
Protection degree : IP56	Moment of inertia (J) : 0.0504 kgm ²
Design : B	

Output [HP]	3	3	3	3
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	4.41	5.09	4.92	4.87
L. R. Amperes [A]	30.9	29.5	31.5	33.1
LRC [A]	7.0x(Code K)	5.8x(Code H)	6.4x(Code J)	6.8x(Code J)
No load current [A]	2.75	2.72	2.91	3.05
Rated speed [RPM]	1175	965	970	970
Slip [%]	2.08	3.50	3.00	3.00
Rated torque [kgfm]	1.85	2.26	2.24	2.24
Locked rotor torque [%]	200	170	200	220
Breakdown torque [%]	280	210	240	270
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	104s (cold) 58s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%			
	50%	86.5	87.5	86.5
	75%	88.5	88.5	88.5
	100%	89.5	87.5	88.5
Power Factor	25%			
	50%	0.50	0.57	0.53
	75%	0.63	0.70	0.66
	100%	0.70	0.75	0.73

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

Losses (%)	P1 (0,9;1,0)	11.0	11.0	11.0	11.0
	P2 (0,5;1,0)	8.5	8.5	8.5	8.5
	P3 (0,25;1,0)	7.7	7.7	7.7	7.7
	P4 (0,9;0,5)	6.7	6.7	6.7	6.7
	P5 (0,5;0,5)	4.4	4.4	4.4	4.4
	P6 (0,5;0,25)	3.4	3.4	3.4	3.4
	P7 (0,25;0,25)	2.5	2.5	2.5	2.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6308 C3	6207 C3	Max. traction : 73 kgf
Sealing	: Inpro/Seal	Inpro/Seal	Max. compression : 150 kgf
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 11 g	7 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.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Customer :

Notes

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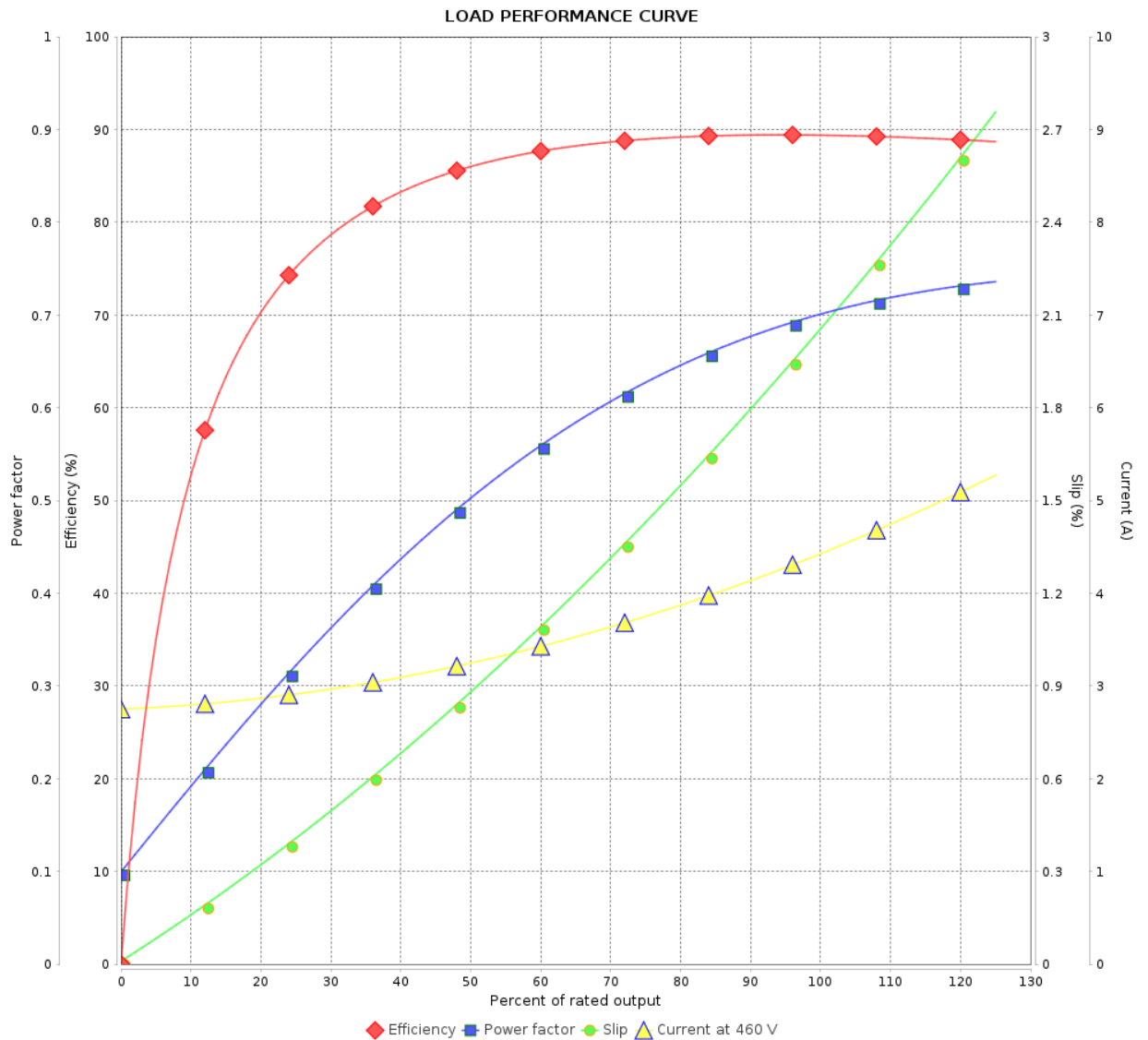
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 460 V 60 Hz 6P

Rated current : 4.41 A
LRC : 7.0
Rated torque : 1.85 kgfm
Locked rotor torque : 200 %
Breakdown torque : 280 %
Rated speed : 1175 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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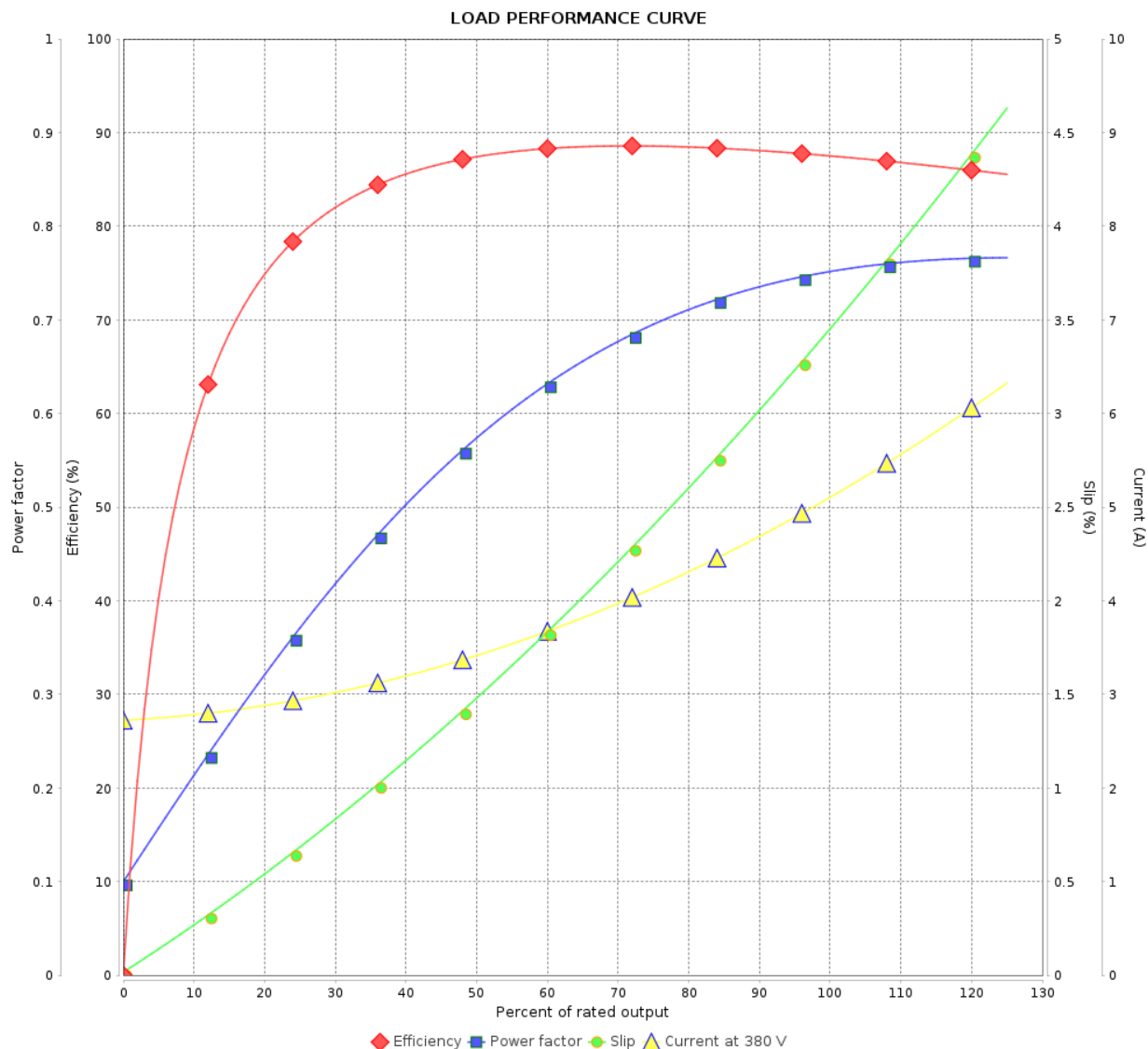
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 6P IE4

Rated current : 5.09 A
LRC : 5.8
Rated torque : 2.26 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 965 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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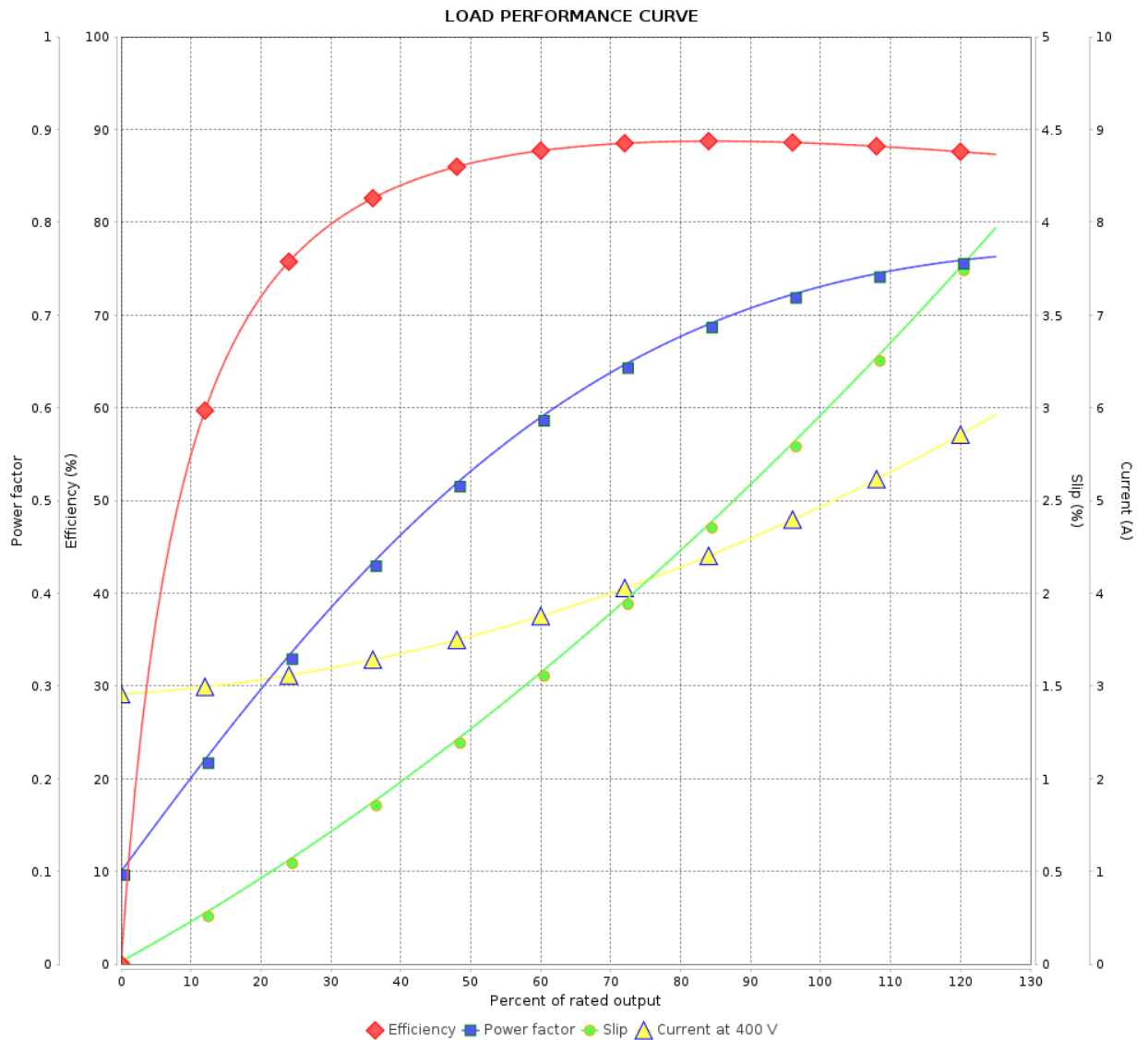
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 6P IE4

Rated current	: 4.92 A	Moment of inertia (J)	: 0.0504 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 2.24 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

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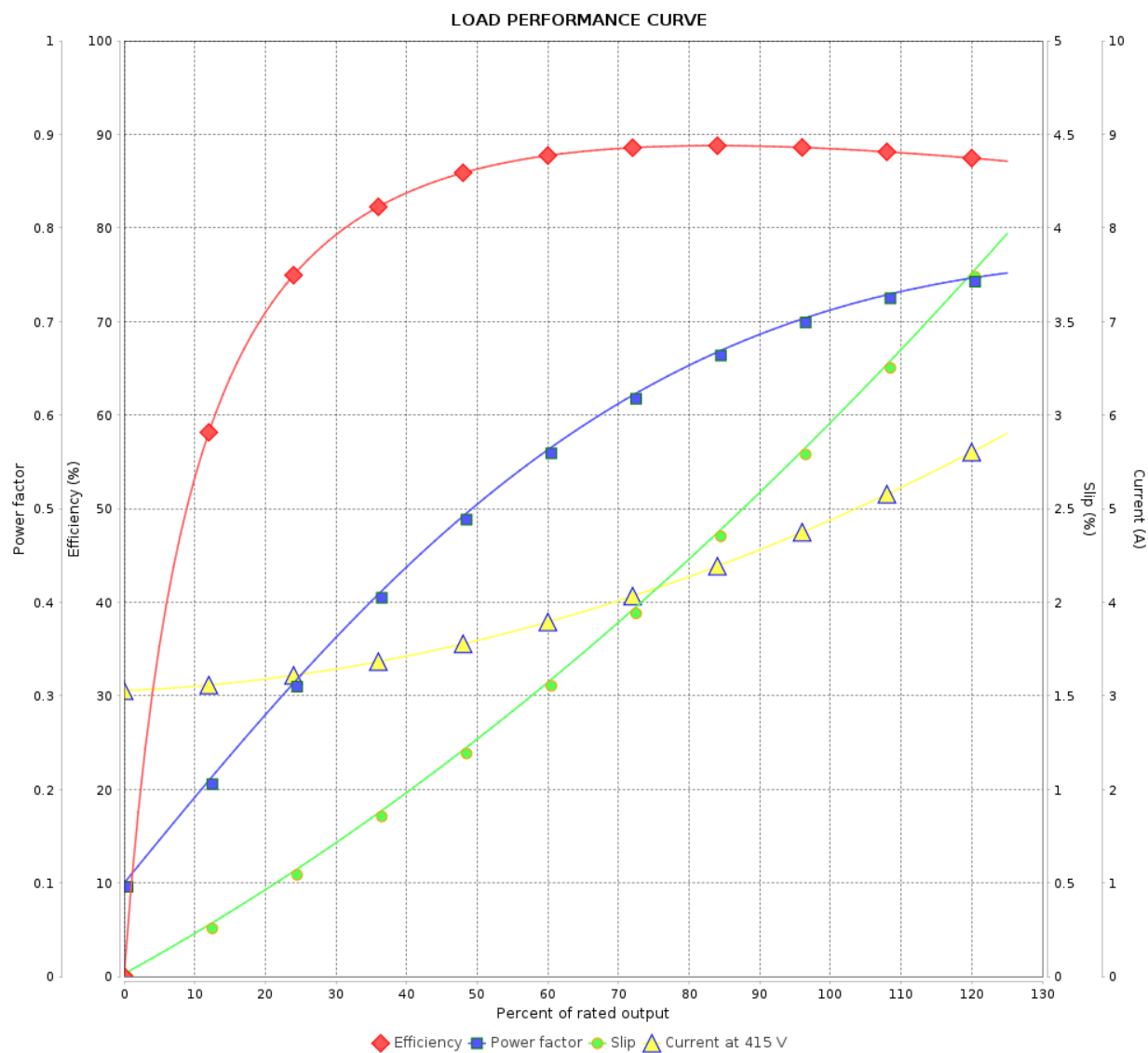
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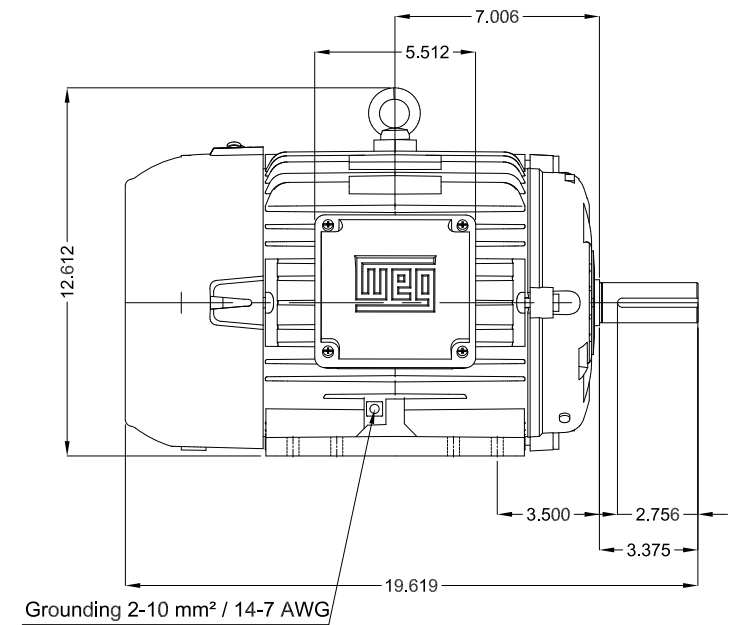


Performance : 415 V 50 Hz 6P IE4

Rated current : 4.87 A
LRC : 6.8
Rated torque : 2.24 kgfm
Locked rotor torque : 220 %
Breakdown torque : 270 %
Rated speed : 970 rpm

Moment of inertia (J) : 0.0504 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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DE Shaft End



0.313

0.313

1.3750

1.3745

1.203

3 HP 06 Poles 60 Hz										A		
							HYBRISUSER					
										00		
ECM		LOC		SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER			THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF. FRAME 213/5T IP56 TEFC					PREVIEW WDD 00			
CHECKED												
RELEASED												
REL. DATE												