

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11584390

Frame	: 284/6T	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	: 194 kg
Protection degree	: IP56	Moment of inertia (J)	: 0.3448 kgm ²
Design	: B		

Output [HP]	15	15	15	15
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	19.6	23.6	22.7	22.1
L. R. Amperes [A]	108	101	109	113
LRC [A]	5.5x(Code G)	4.3x(Code D)	4.8x(Code F)	5.1x(Code F)
No load current [A]	9.80	9.70	10.5	11.1
Rated speed [RPM]	880	720	725	730
Slip [%]	2.22	4.00	3.33	2.67
Rated torque [kgfm]	12.4	15.1	15.0	14.9
Locked rotor torque [%]	200	150	170	190
Breakdown torque [%]	229	180	200	220
Service factor	1.25	1.00	1.00	1.15
Temperature rise	80 K	105 K	105 K	105 K
Locked rotor time	45s (cold) 25s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	54.0 dB(A)	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)
Efficiency (%)	25%			
	50%	85.5	88.0	88.0
	75%	90.0	88.5	88.5
	100%	90.2	88.6	88.6
Power Factor	25%			
	50%	0.62	0.68	0.62
	75%	0.72	0.76	0.73
	100%	0.78	0.80	0.79

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

Losses (%)	P1 (0,9;1,0)	10.3	10.3	10.3	10.3
	P2 (0,5;1,0)	8.2	8.2	8.2	8.2
	P3 (0,25;1,0)	7.6	7.6	7.6	7.6
	P4 (0,9;0,5)	5.5	5.5	5.5	5.5
	P5 (0,5;0,5)	3.7	3.7	3.7	3.7
	P6 (0,5;0,25)	2.7	2.7	2.7	2.7
	P7 (0,25;0,25)	1.8	1.8	1.8	1.8

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6311 C3	6211 C3	Max. traction	: 372 kgf
Sealing	: Inpro/Seal	Inpro/Seal	Max. compression	: 566 kgf
Lubrication interval	: 20000 h	20000 h		
Lubricant amount	: 18 g	11 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	27/10/2024		Page 1 / 6	Revision

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Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	27/10/2024				

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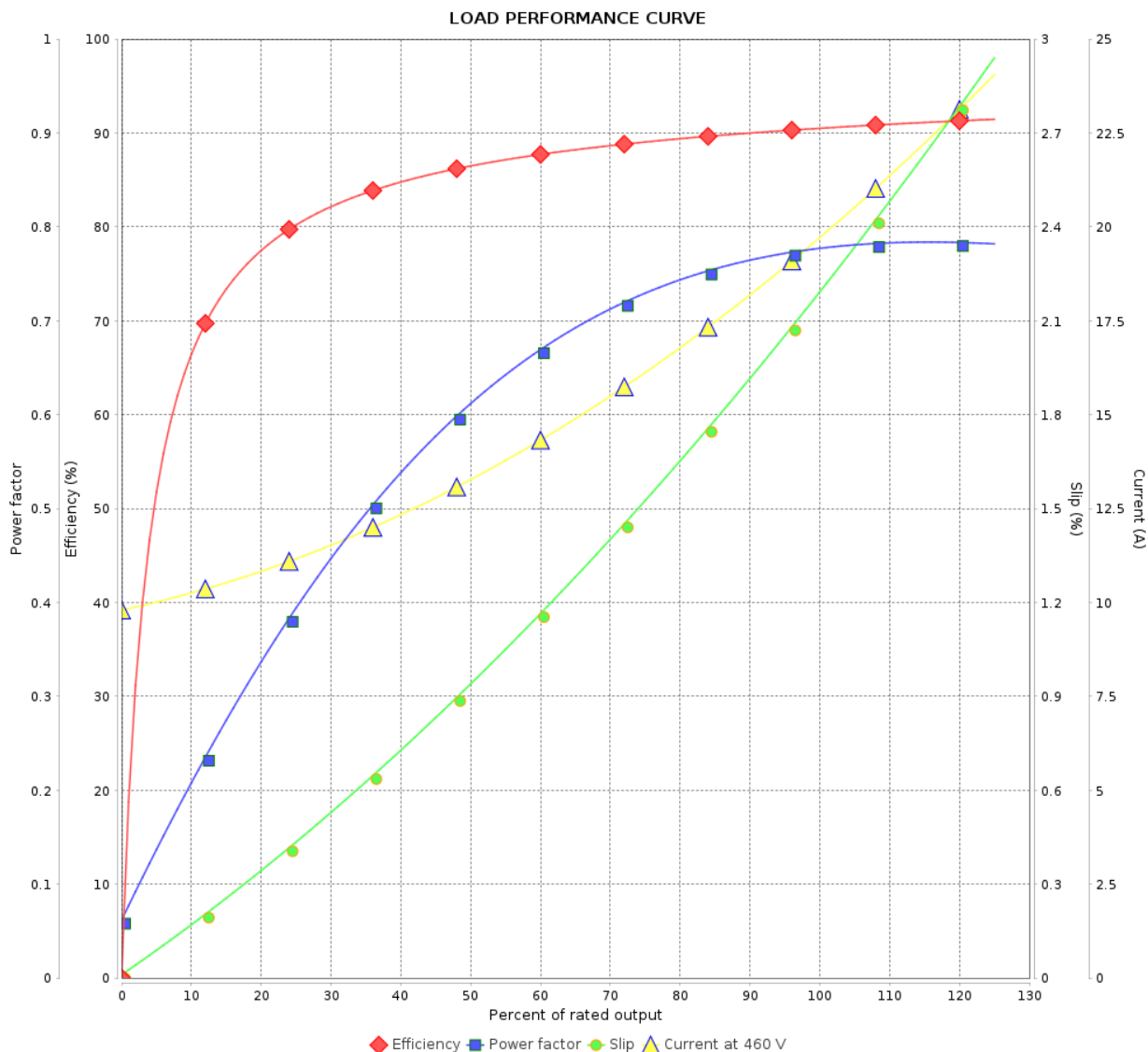
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11584390



Performance : 460 V 60 Hz 8P

Rated current : 19.6 A
LRC : 5.5
Rated torque : 12.4 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 880 rpm

Moment of inertia (J) : 0.3448 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6Revision		
Checked by				
Date	27/10/2024			

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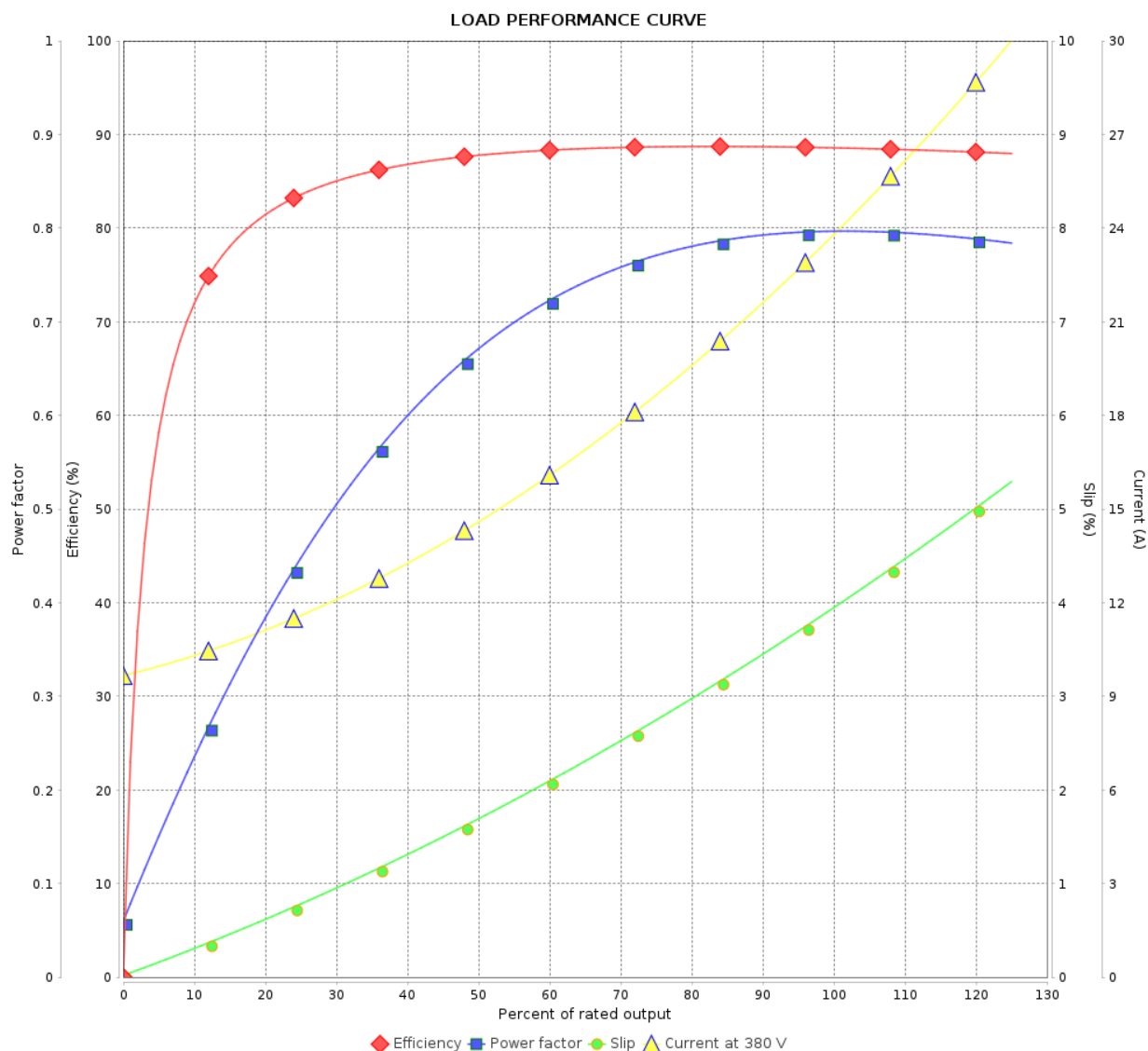
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11584390



Performance : 380 V 50 Hz 8P IE3

Rated current : 23.6 A
LRC : 4.3
Rated torque : 15.1 kgfm
Locked rotor torque : 150 %
Breakdown torque : 180 %
Rated speed : 720 rpm

Moment of inertia (J) : 0.3448 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				4 / 6	
Date					

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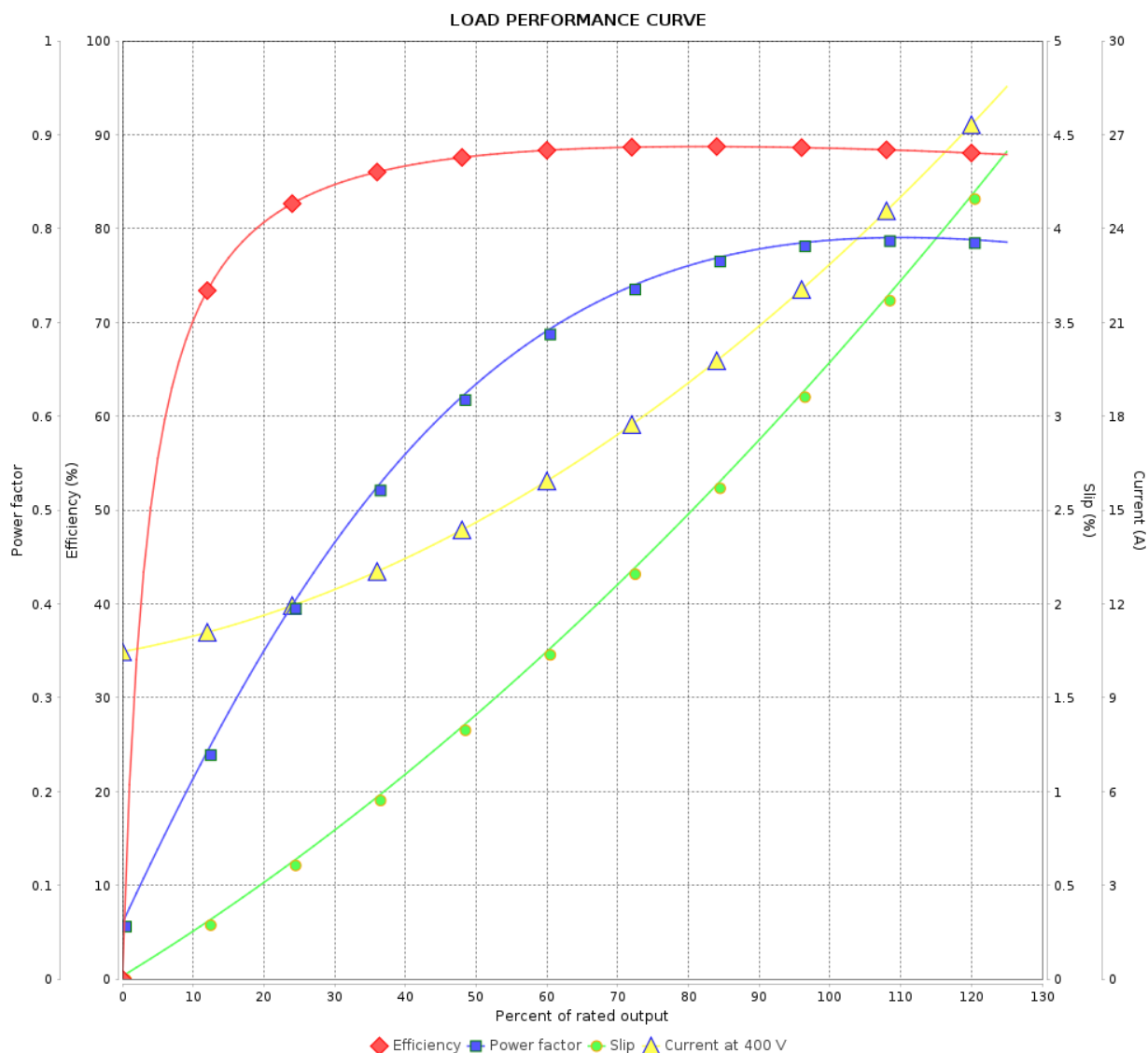
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 8P IE3

Rated current : 22.7 A
LRC : 4.8
Rated torque : 15.0 kgfm
Locked rotor torque : 170 %
Breakdown torque : 200 %
Rated speed : 725 rpm

Moment of inertia (J) : 0.3448 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6 Revision		
Checked by				
Date	27/10/2024			

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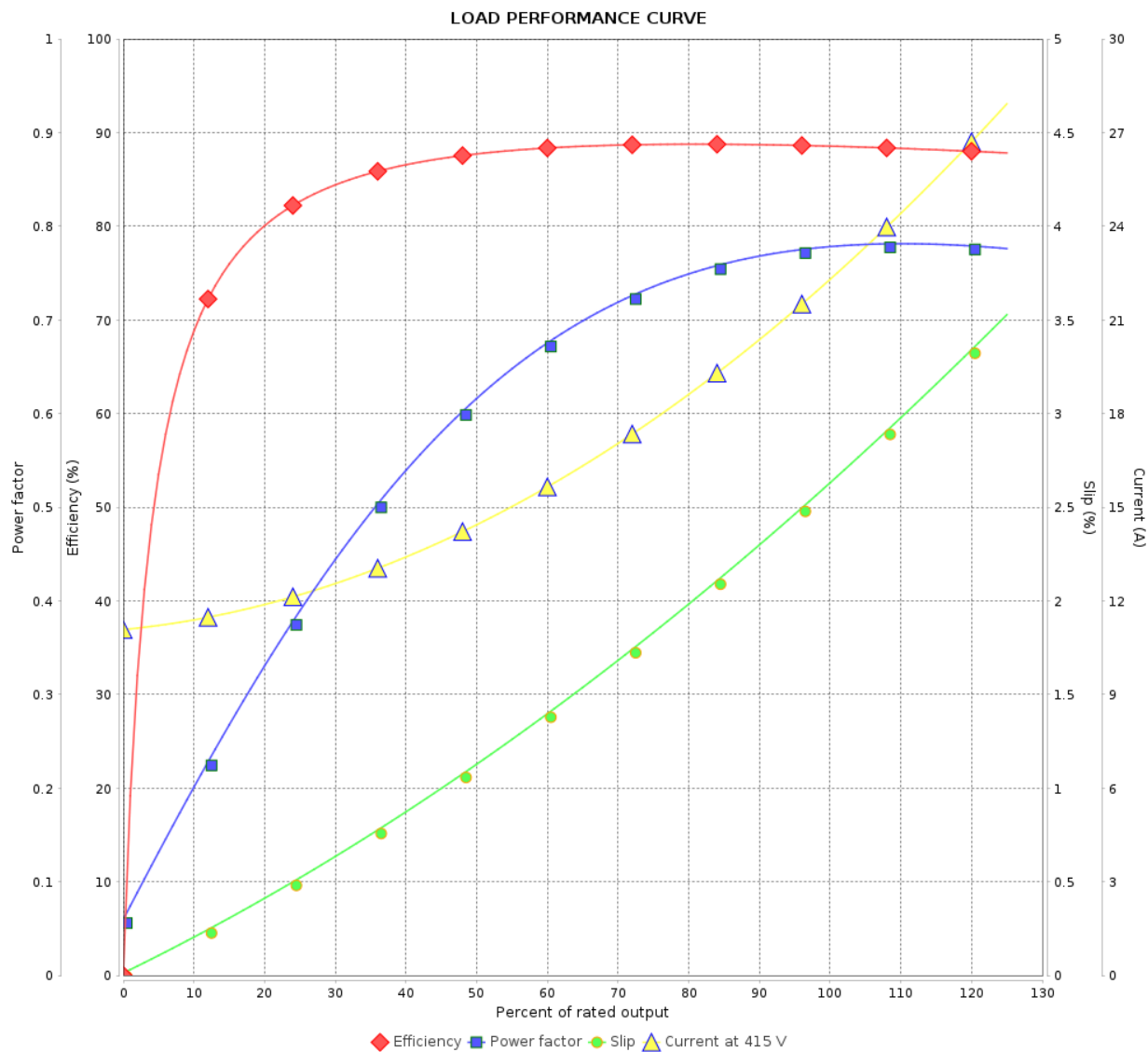
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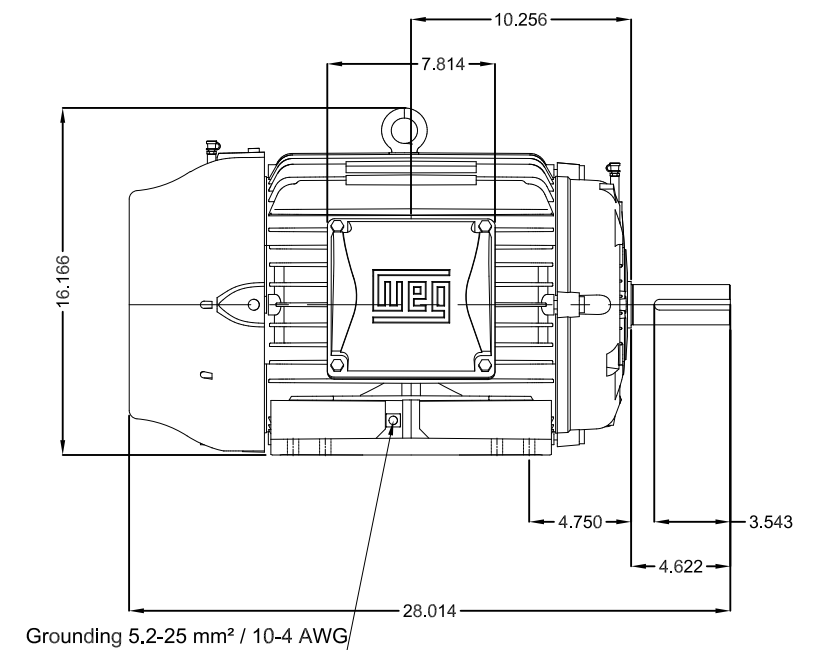
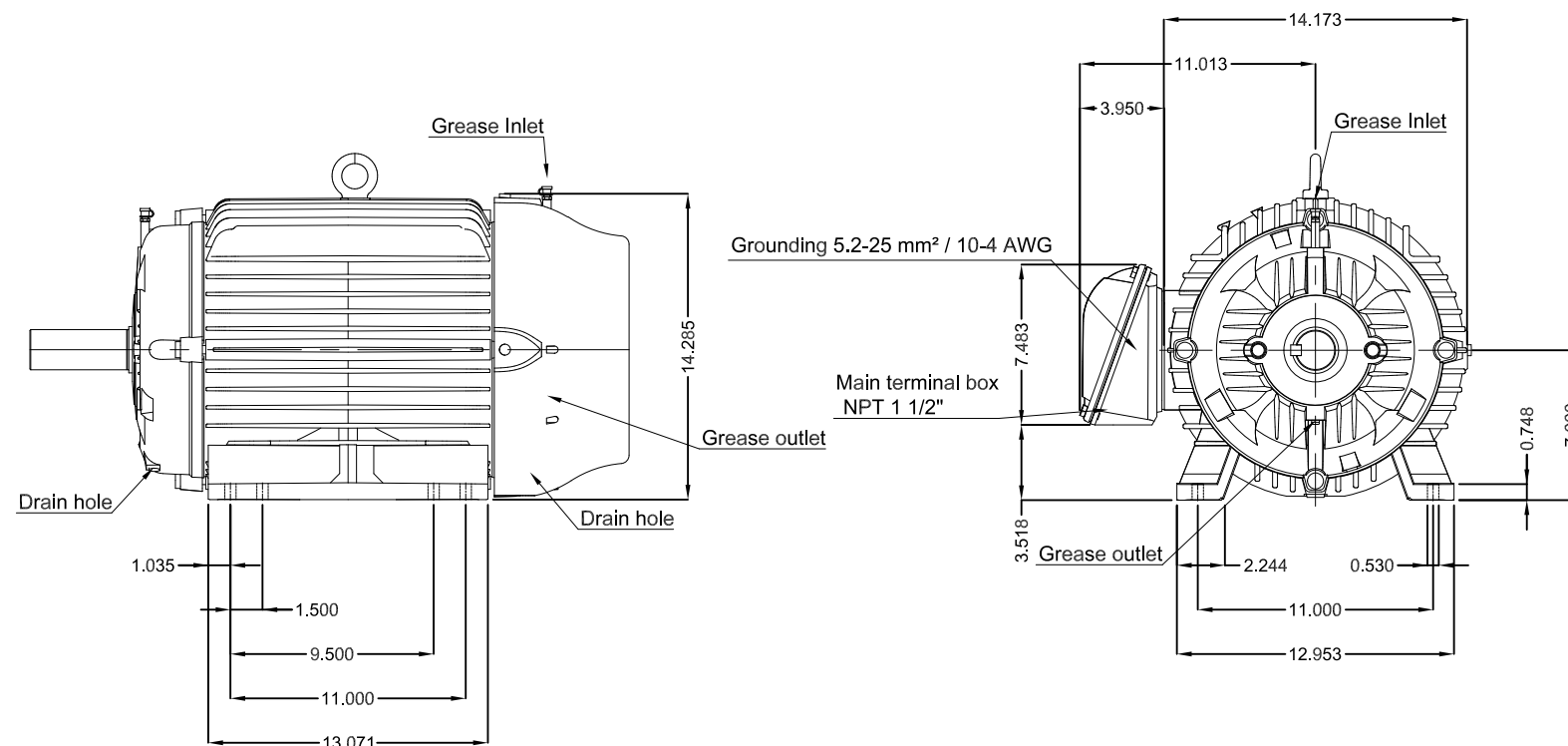




Performance : 415 V 50 Hz 8P IE3

Rated current : 22.1 A
LRC : 5.1
Rated torque : 14.9 kgfm
Locked rotor torque : 190 %
Breakdown torque : 220 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.3448 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 6	
Date					



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ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF. FRAME 284/6T IP56 TEFC				PREVIEW WDD 00			
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RELEASED										
REL. DATE										