

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14427833

Frame : 444/5TC	Cooling method : IC01 - ODP
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 : 688 kg
Protection degree : IP23	Moment of inertia (J) : 2.14 kgm ²
Design : B	

Output [HP]	250	200	200	200
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	289	283	272	269
L. R. Amperes [A]	1850	1953	1986	1991
LRC [A]	6.4x(Code G)	6.9x(Code H)	7.3x(Code H)	7.4x(Code J)
No load current [A]	106	105	115	125
Rated speed [RPM]	1780	1480	1480	1485
Slip [%]	1.11	1.33	1.33	1.00
Rated torque [kgfm]	102	98.1	98.1	97.7
Locked rotor torque [%]	210	200	229	250
Breakdown torque [%]	240	220	240	270
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)
Noise level ²	78.0 dB(A)			
Efficiency (%)	25%			
	50%	95.4	95.5	94.9
	75%	95.8	95.6	95.4
	100%	95.8	95.8	95.8
Power Factor	25%			
	50%	0.72	0.72	0.64
	75%	0.80	0.81	0.75
	100%	0.84	0.84	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6319 C3	6212 Z C3	Max. traction : 1964 kgf
Sealing :	Without	Without	Max. compression : 2652 kgf
	Bearing Seal	Bearing Seal	
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	45 g	13 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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Performed by				
Checked by				
Date	28/10/2024			

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Revision

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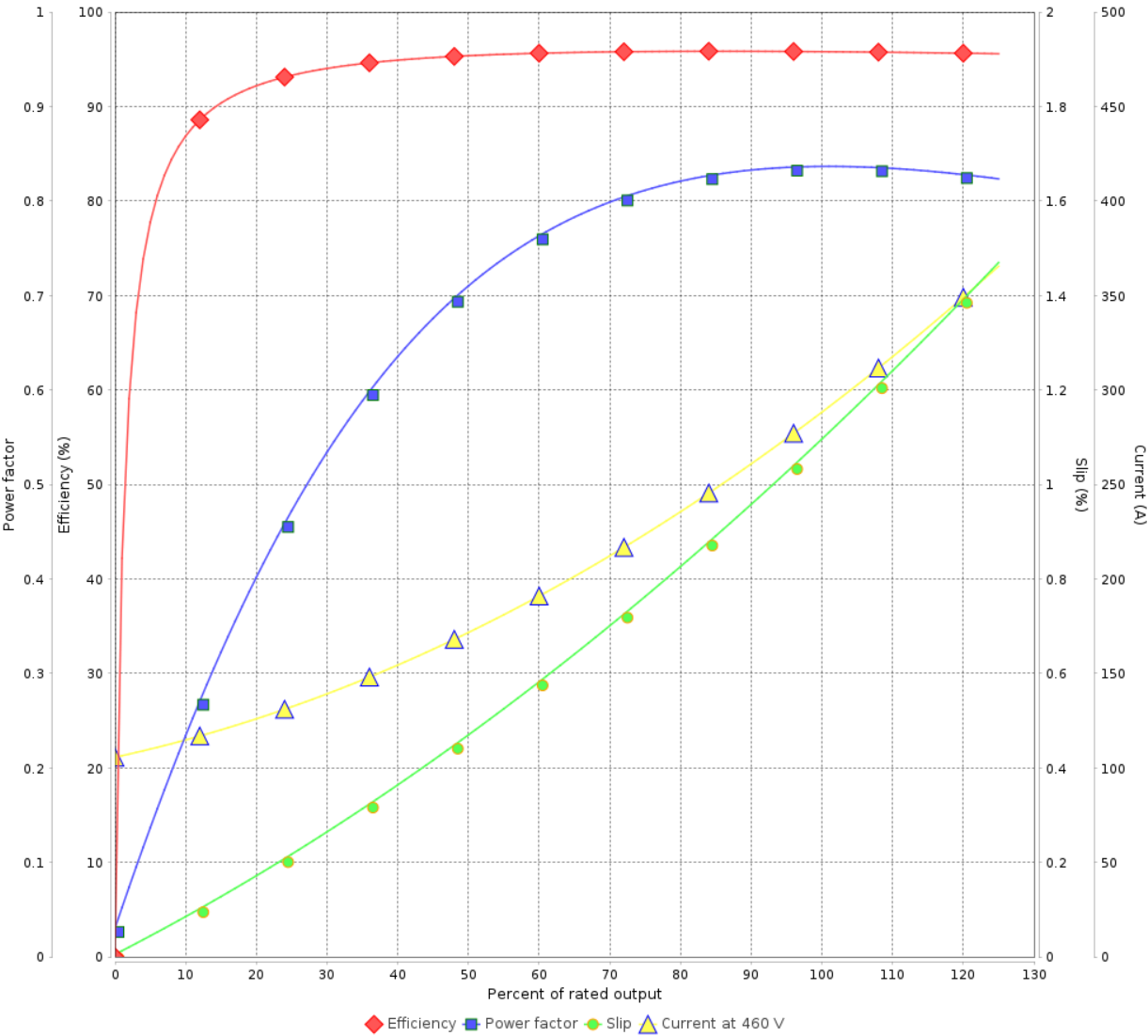
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14427833

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Performance : 460 V 60 Hz 4P

Rated current	: 289 A	Moment of inertia (J)	: 2.14 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 102 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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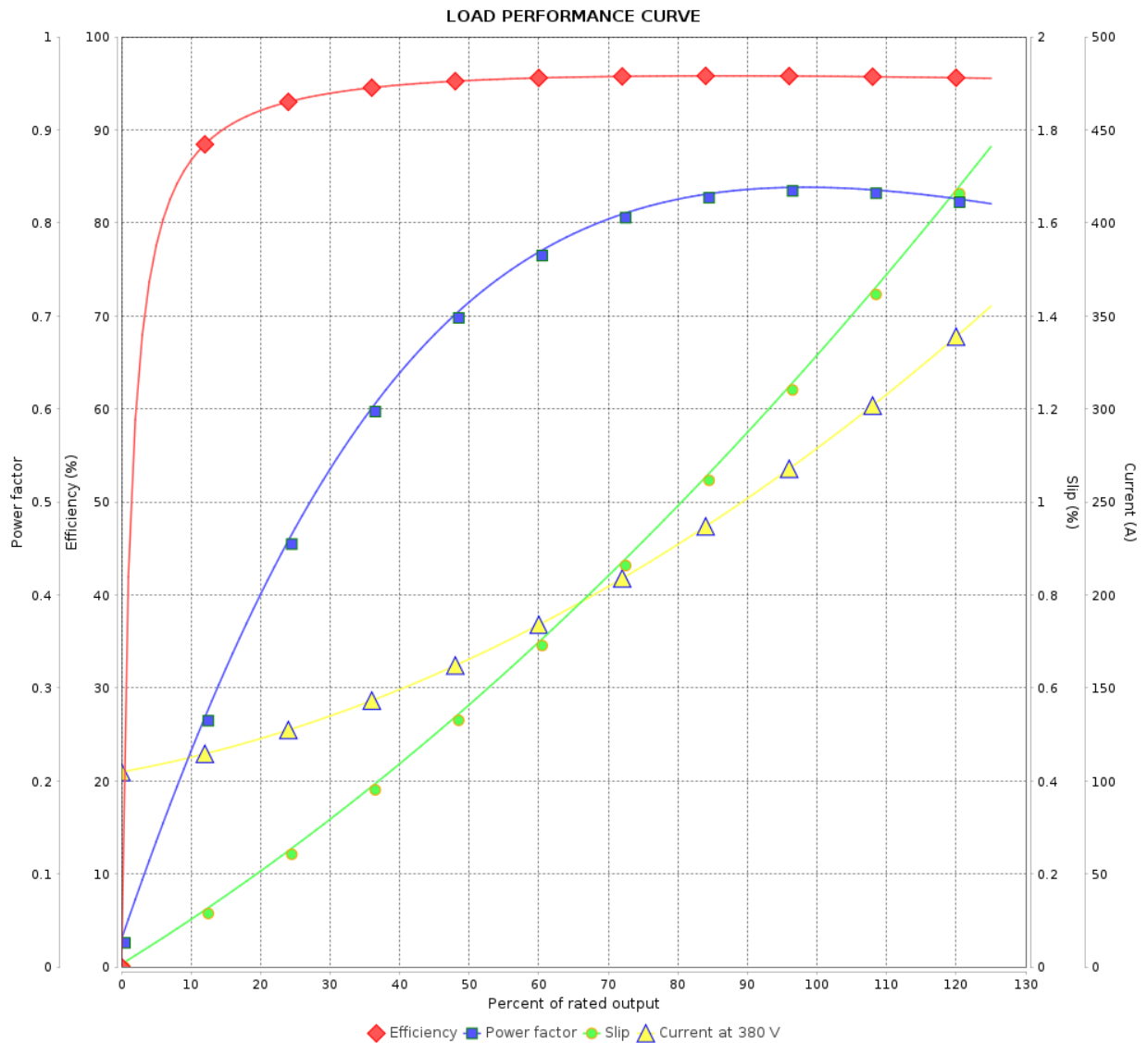
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14427833



Performance : 380 V 50 Hz 4P IE3

Rated current : 283 A
LRC : 6.9
Rated torque : 98.1 kgfm
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 1480 rpm

Moment of inertia (J) : 2.14 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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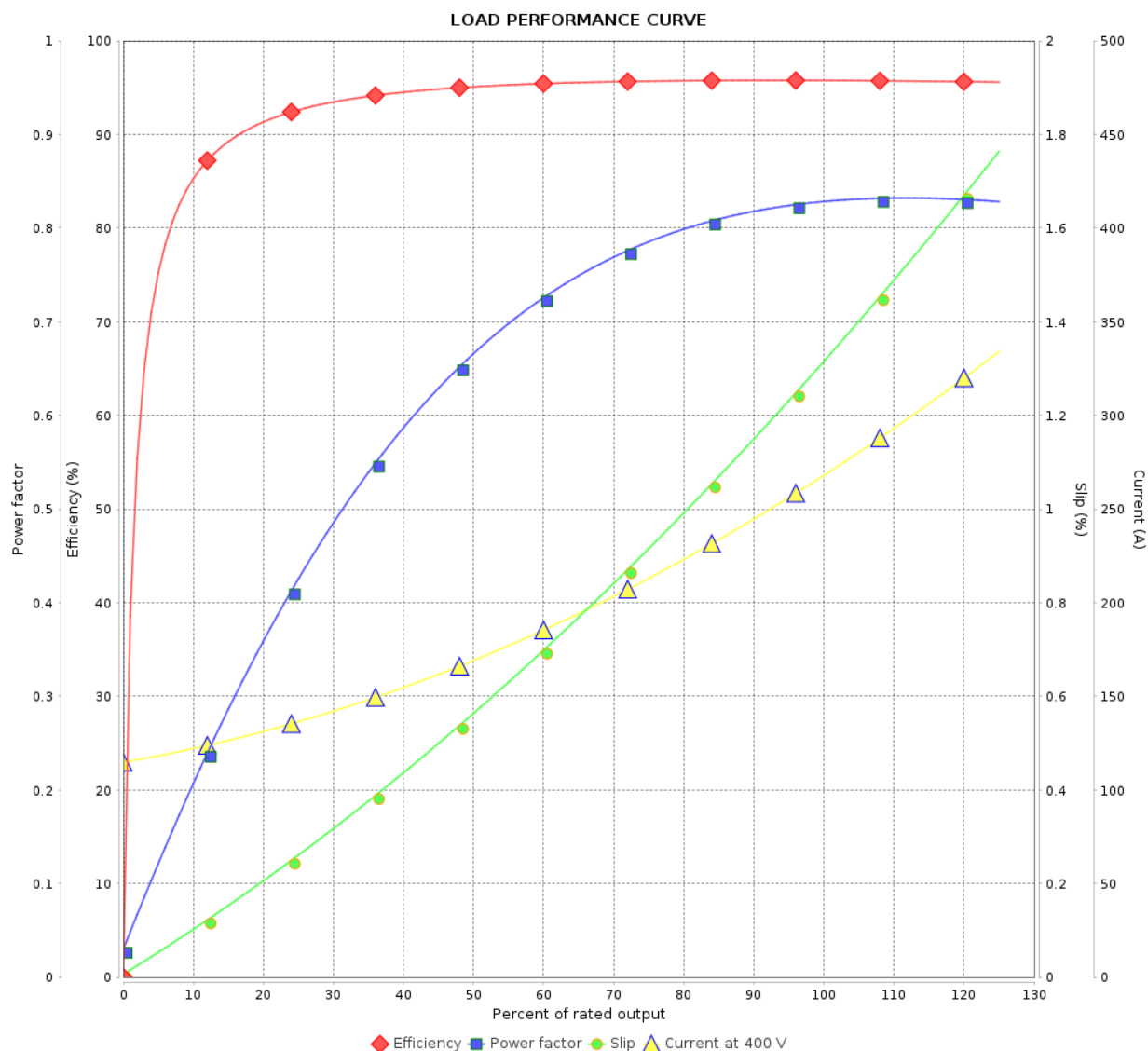
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14427833



Performance : 400 V 50 Hz 4P IE3

Rated current : 272 A
LRC : 7.3
Rated torque : 98.1 kgfm
Locked rotor torque : 229 %
Breakdown torque : 240 %
Rated speed : 1480 rpm

Moment of inertia (J) : 2.14 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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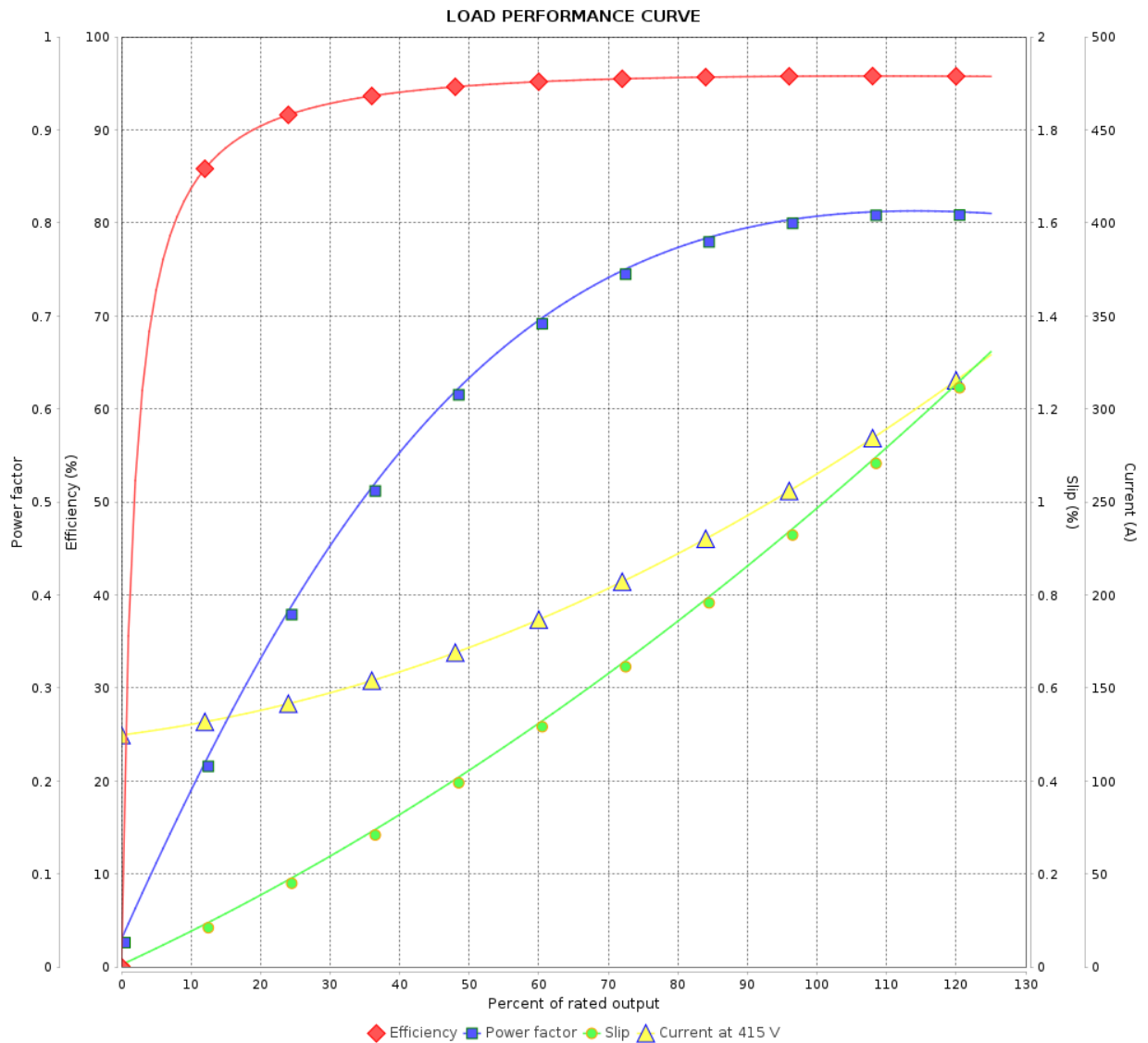
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14427833

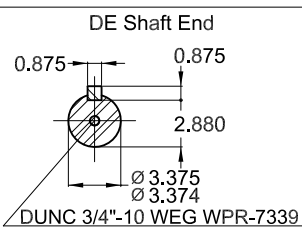
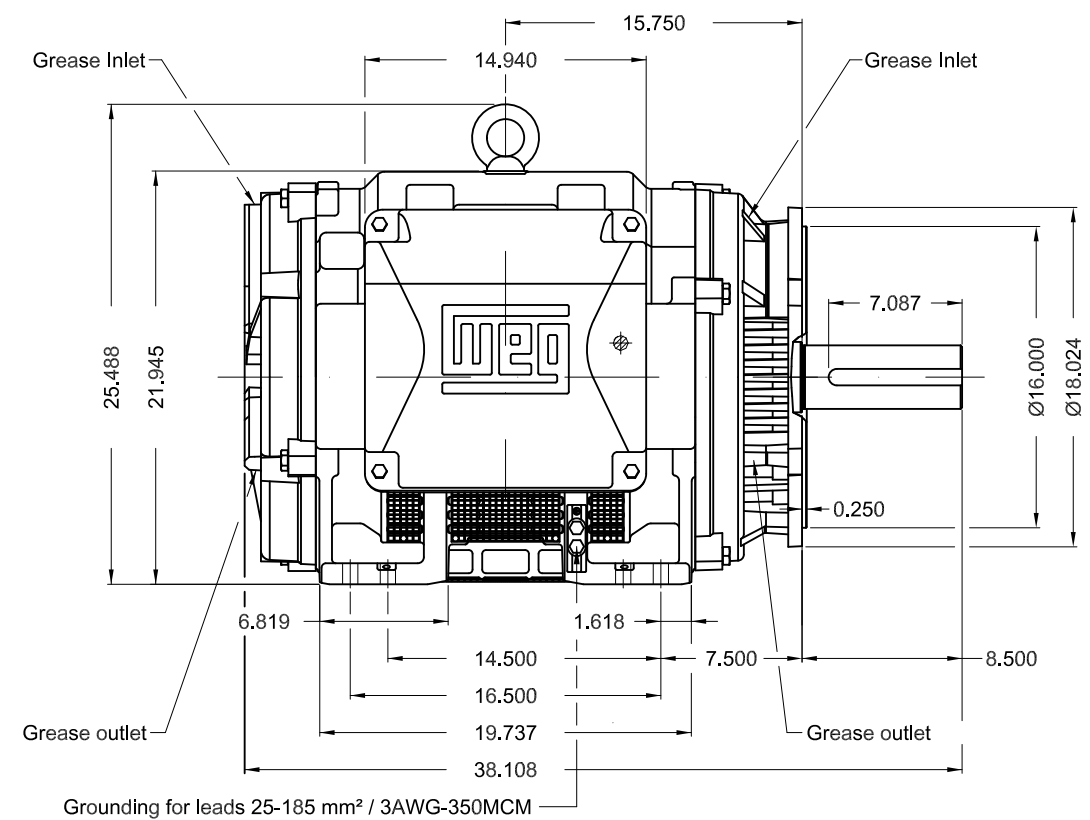
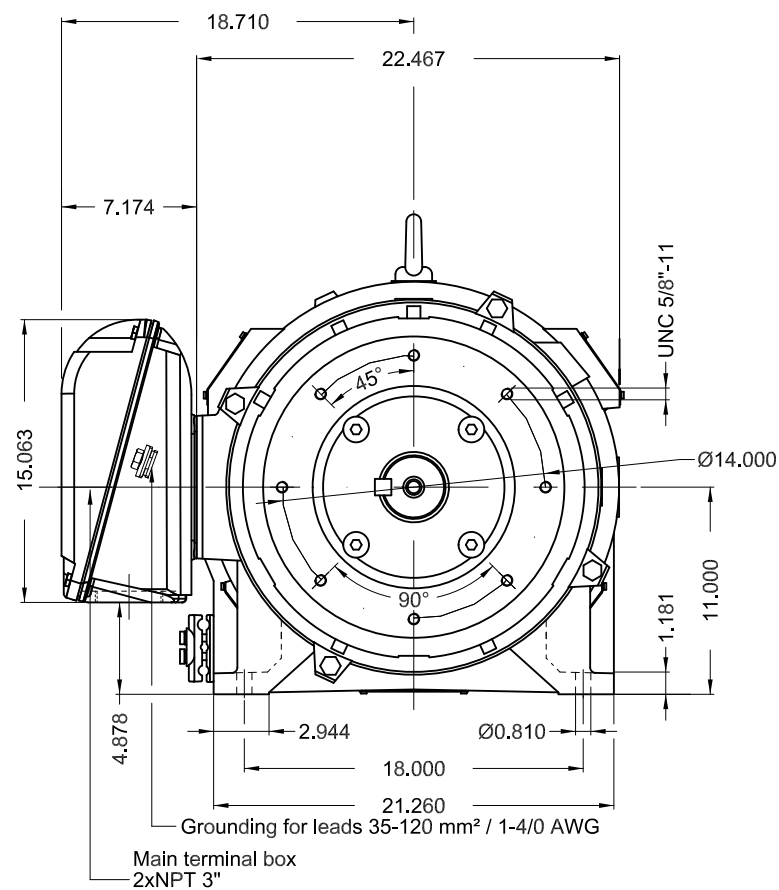


Performance : 415 V 50 Hz 4P IE3



Rated current : 269 A
LRC : 7.4
Rated torque : 97.7 kgfm
Locked rotor torque : 250 %
Breakdown torque : 270 %
Rated speed : 1485 rpm

Moment of inertia (J) : 2.14 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

250 HP 04 Poles 60 Hz										A	
										1:10	
								HYBRISUSER			00
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED		HYBRISUSER		THREE PH. MOTOR W40 NEMA PREM. EFF. FRAME 444/5TC IP23 ODP				PREVIEW WDD 00			
CHECKED											
RELEASED											
REL. DATE			WMO	Jaragua do Sul		Product Engineering		SHEET		1 / 1	