

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14865595

Frame	: 404/5TSD	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	: 427 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.3708 kgm ²
Design	: B		

Output [HP]	150	100	100	100
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	334/167	137	133	133
L. R. Amperes [A]	2204/1102	986	1051	1117
LRC [A]	6.6x(Code G)	7.2x(Code H)	7.9x(Code J)	8.4x(Code K)
No load current [A]	80.0/40.0	43.8	43.7	48.9
Rated speed [RPM]	3552	2960	2965	2965
Slip [%]	1.33	1.33	1.17	1.17
Rated torque [kgfm]	30.7	24.5	24.5	24.5
Locked rotor torque [%]	200	229	250	270
Breakdown torque [%]	250	290	330	360
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)	18s (cold) 10s (hot)
Noise level ²	84.0 dB(A)			
Efficiency (%)	25%			
	50%	93.6	93.7	93.2
	75%	94.1	94.4	94.2
	100%	94.1	94.7	94.7
Power Factor	25%			
	50%	0.79	0.76	0.70
	75%	0.86	0.85	0.81
	100%	0.88	0.88	0.86

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6314 C3	6212 Z C3	Max. traction	: 653 kgf
Sealing	: Without	Without	Max. compression	: 1080 kgf
	Bearing Seal	Bearing Seal		
Lubrication interval	: 14418 h	20000 h		
Lubricant amount	: 27 g	13 g		
Lubricant type	: Mobil Polyrex EM			

Notes
USABLE @208V 369A SF 1.15 SFA 425A

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	29/10/2024			

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Revision

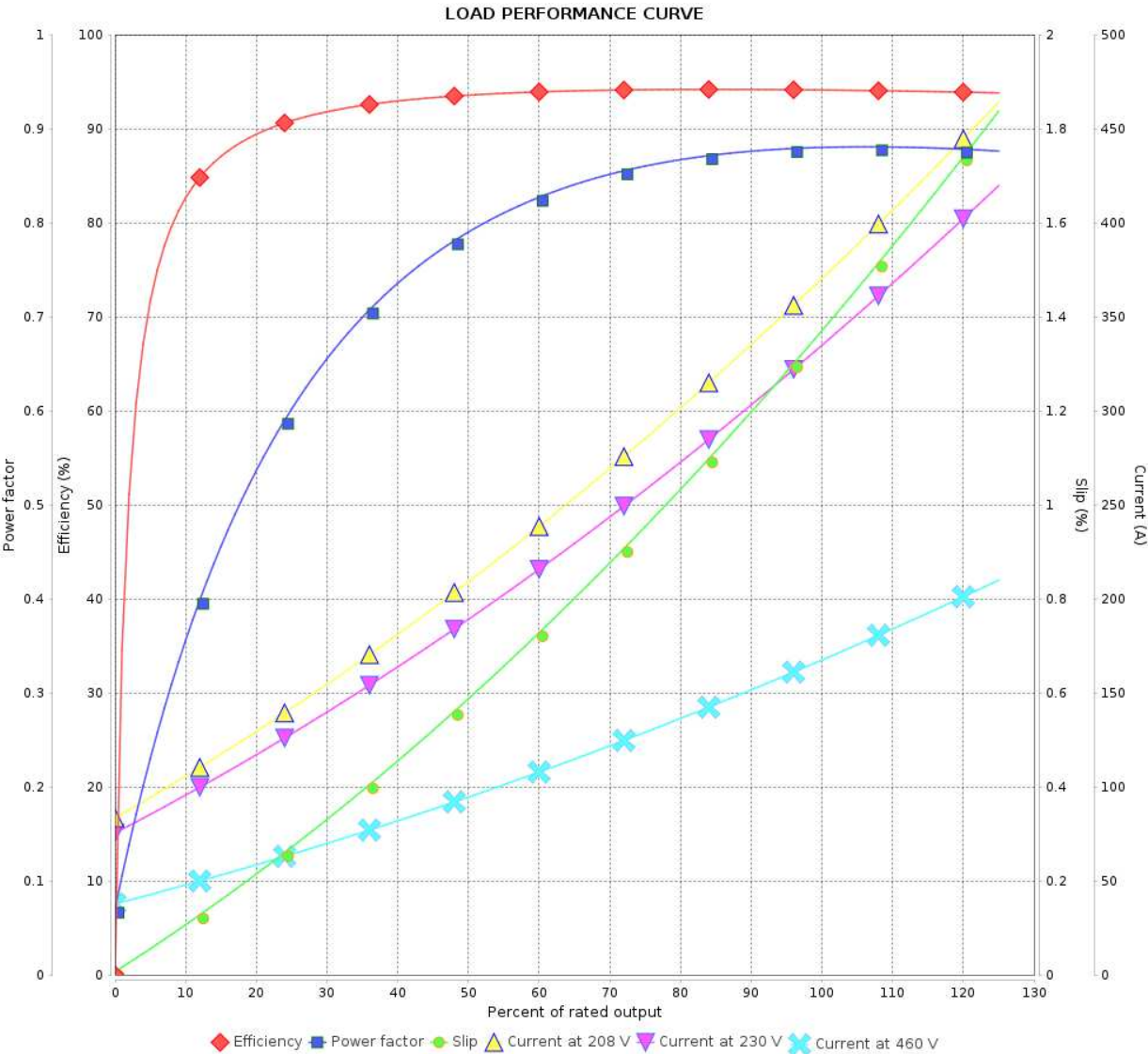
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14865595



Performance : 230/460 V 60 Hz 2P

Rated current : 334/167 A
LRC : 6.6
Rated torque : 30.7 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 3552 rpm

Moment of inertia (J) : 0.3708 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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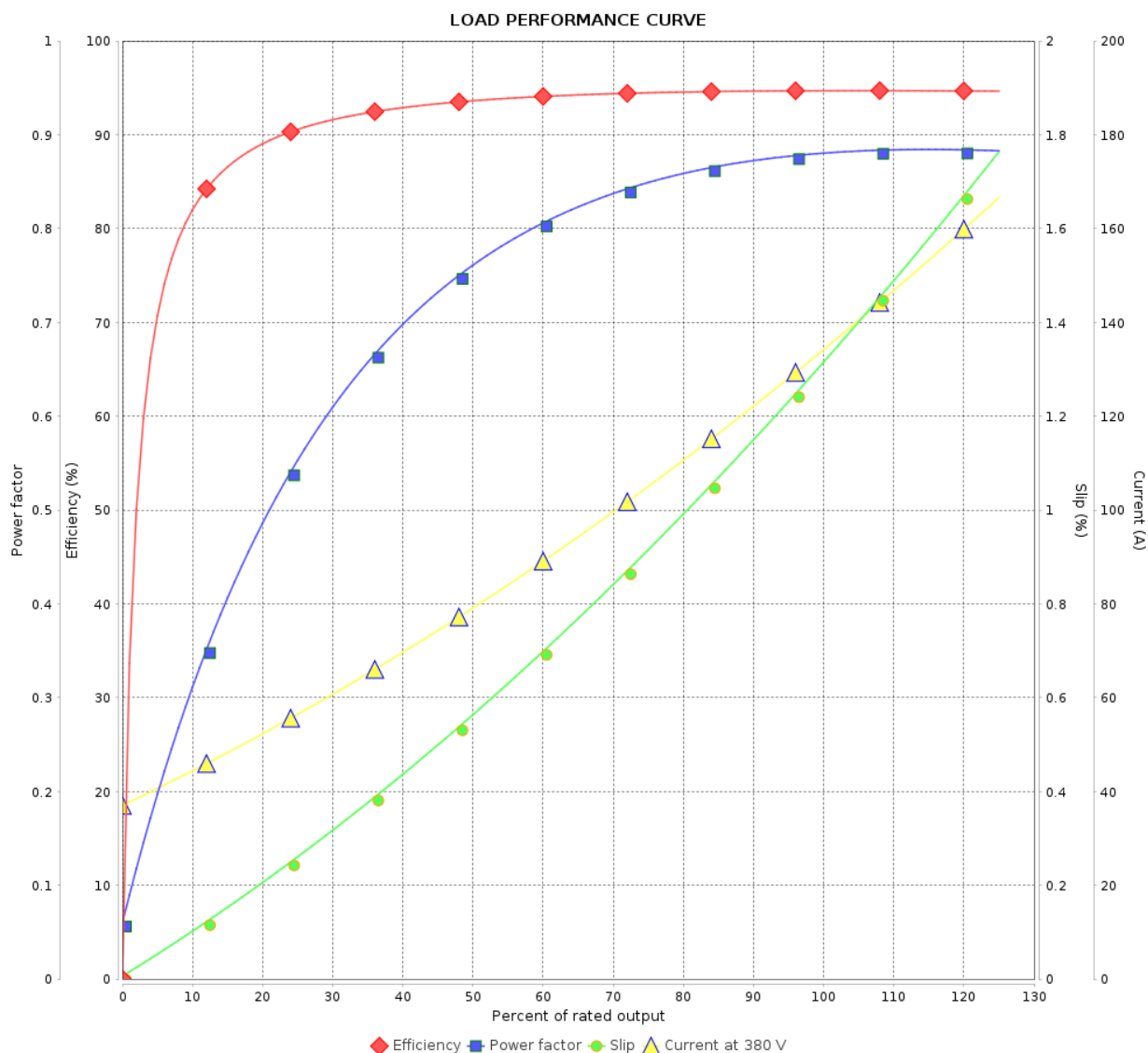
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14865595



Performance : 380 V 50 Hz 2P IE3

Rated current : 137 A
LRC : 7.2
Rated torque : 24.5 kgfm
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 2960 rpm

Moment of inertia (J) : 0.3708 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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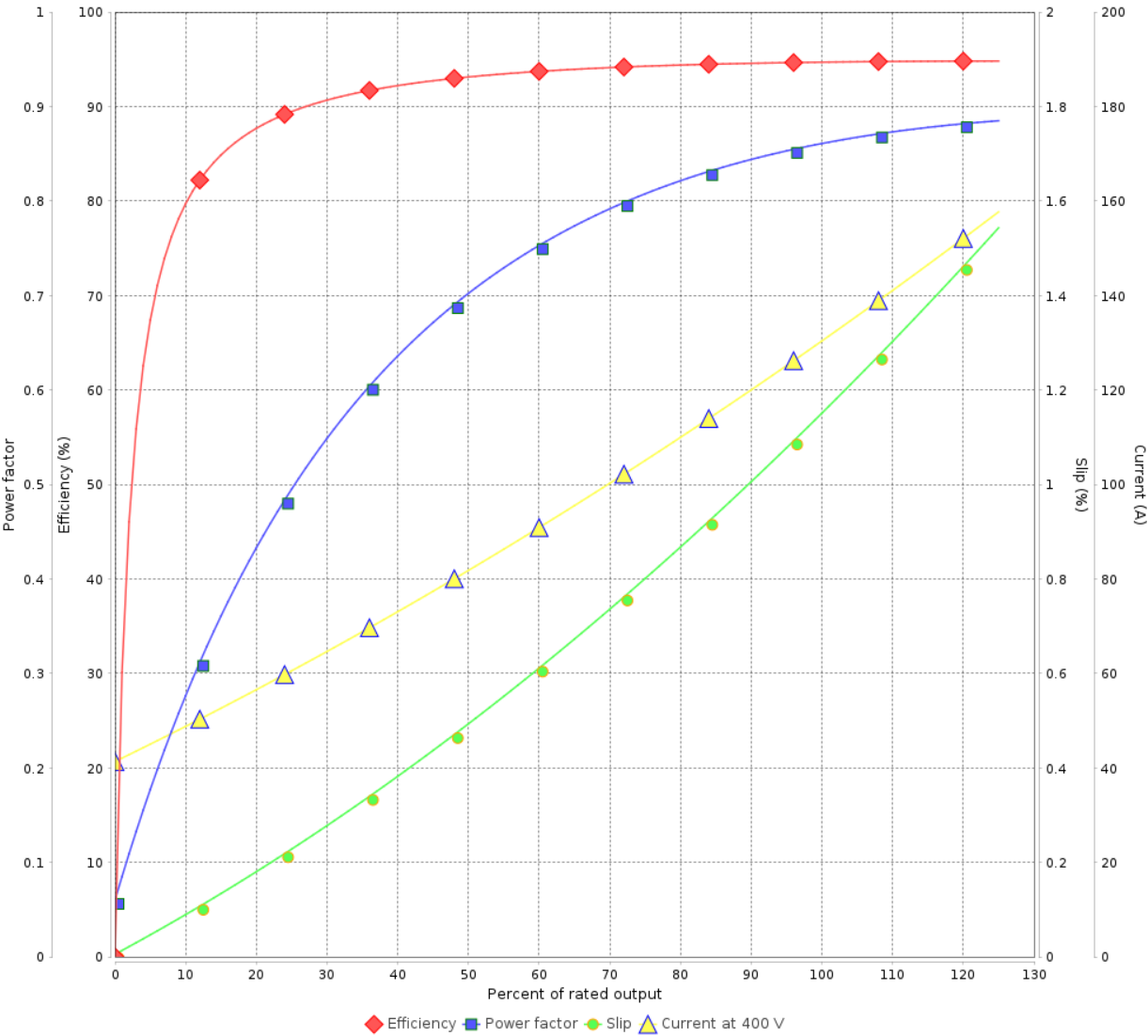
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14865595

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Performance : 400 V 50 Hz 2P IE3

Rated current	: 133 A	Moment of inertia (J)	: 0.3708 kgm ²
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 24.5 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

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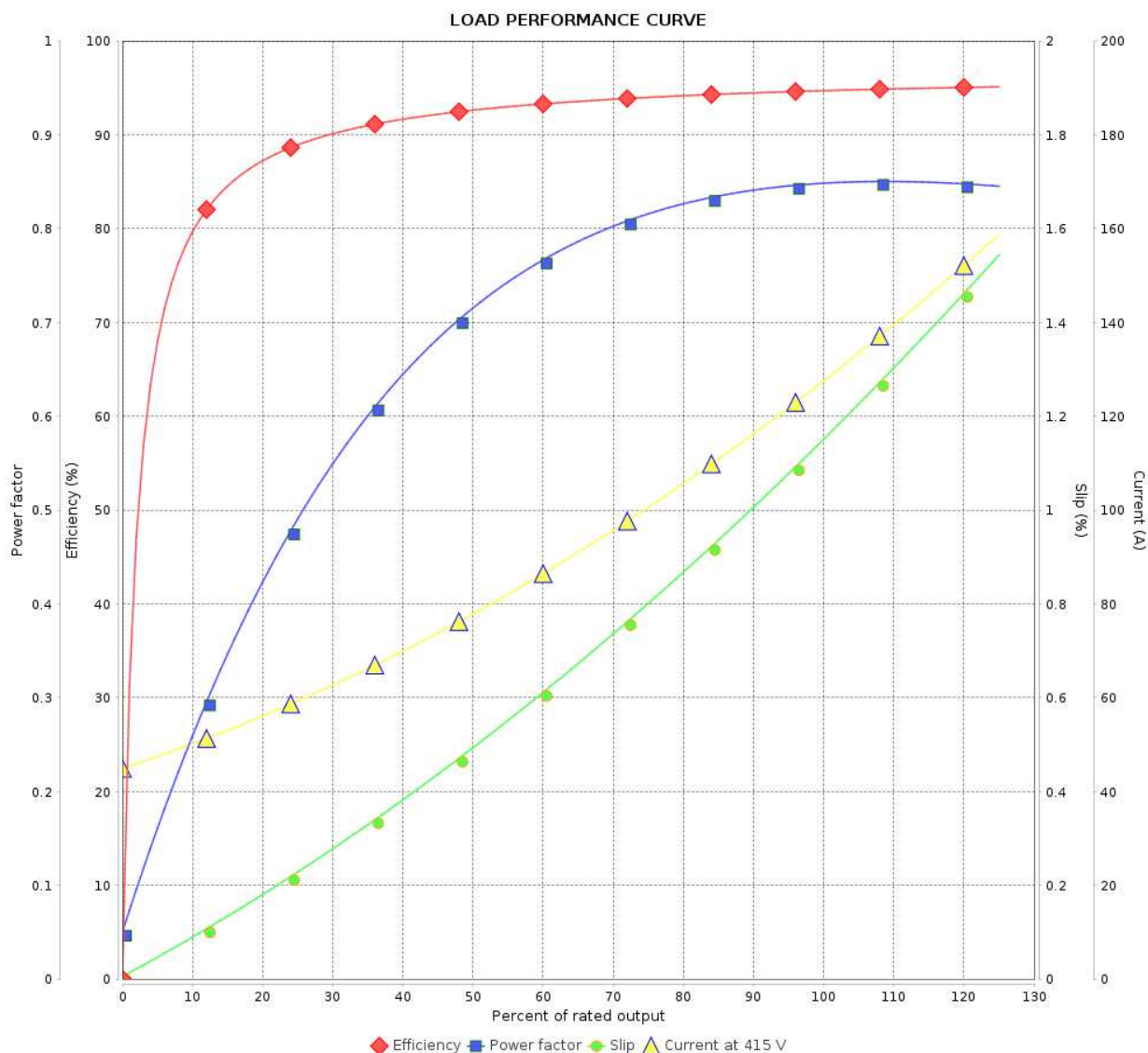
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Three-Phase

Product code : 14865595

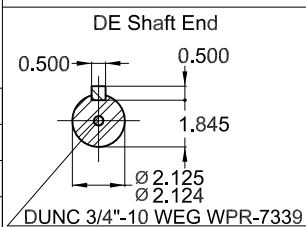
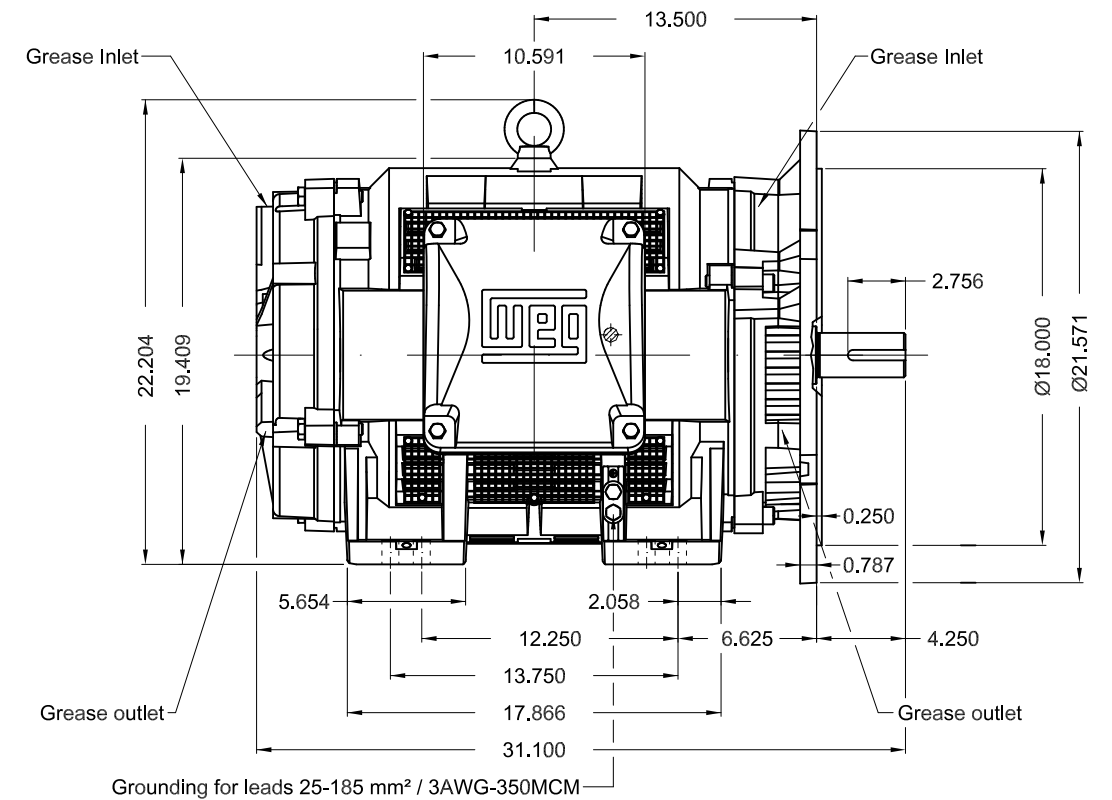
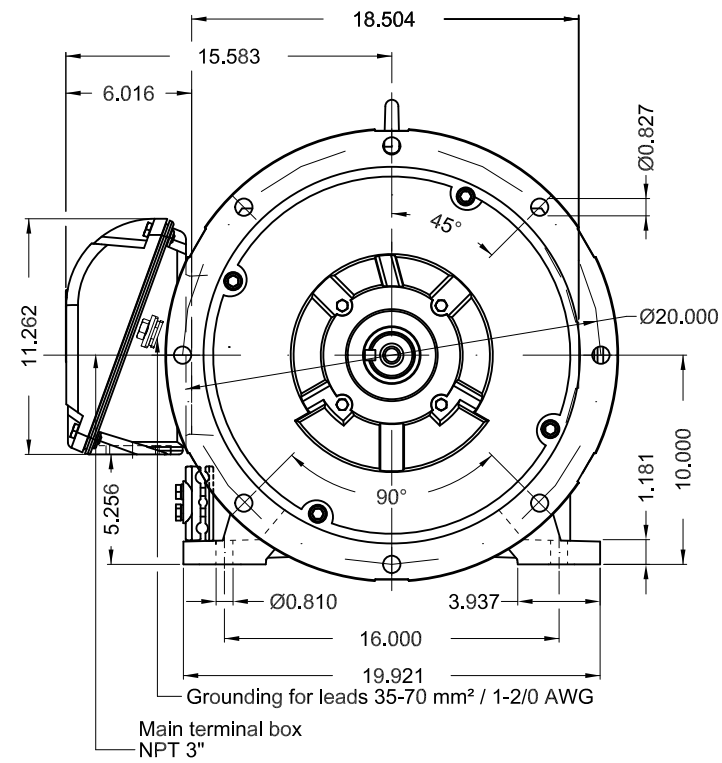


Performance : 415 V 50 Hz 2P IE3

Rated current : 133 A
LRC : 8.4
Rated torque : 24.5 kgfm
Locked rotor torque : 270 %
Breakdown torque : 360 %
Rated speed : 2965 rpm

Moment of inertia (J) : 0.3708 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 B35R(D)

150 HP 02 Poles 60 Hz										A		
										1:9		
								HYBRISUSER				00
ECM	LOC	SUMMARY OF MODIFICATIONS						EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER			THREE PH. MOTOR W40 NEMA PREM. EFF. FRAME 404/5TSD IP23 ODP				PREVIEW WDD 00				
CHECKED												
RELEASED												
REL. DATE		WMO	Jaragua do Sul				Product Engineering		SHEET	1 / 1		