

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11439852

Frame : 404/5T	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 : 566 kg
Protection degree : IP55	Moment of inertia (J) : 1.69 kgm ²
Design : B	

Output [HP]	75	60	60	60
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	174/87.0	86.6	84.3	81.8
L. R. Amperes [A]	1340/670	624	666	687
LRC [A]	7.7x(Code J)	7.2x(Code H)	7.9x(Code J)	8.4x(Code K)
No load current [A]	62.5/31.3	31.0	33.6	36.0
Rated speed [RPM]	1185	985	987	988
Slip [%]	1.25	1.50	1.30	1.20
Rated torque [kgfm]	45.9	44.2	44.1	44.1
Locked rotor torque [%]	250	229	260	280
Breakdown torque [%]	260	250	280	300
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	65.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%			
	50%	94.1	94.0	93.6
	75%	95.0	94.0	94.5
	100%	94.5	94.0	94.5
Power Factor	25%			
	50%	0.72	0.72	0.68
	75%	0.81	0.81	0.76
	100%	0.84	0.84	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6217 C3	6314 C3	Max. traction : 1020 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 1582 kgf
Lubrication interval :	13507 h	14267 h	
Lubricant amount :	21 g	27 g	
Lubricant type :	Mobil Polyrex EM		

Notes
USABLE @208V 192A SF 1.00 SFA 192A

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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Date	21/10/2024			

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Revision

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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LOAD PERFORMANCE CURVE

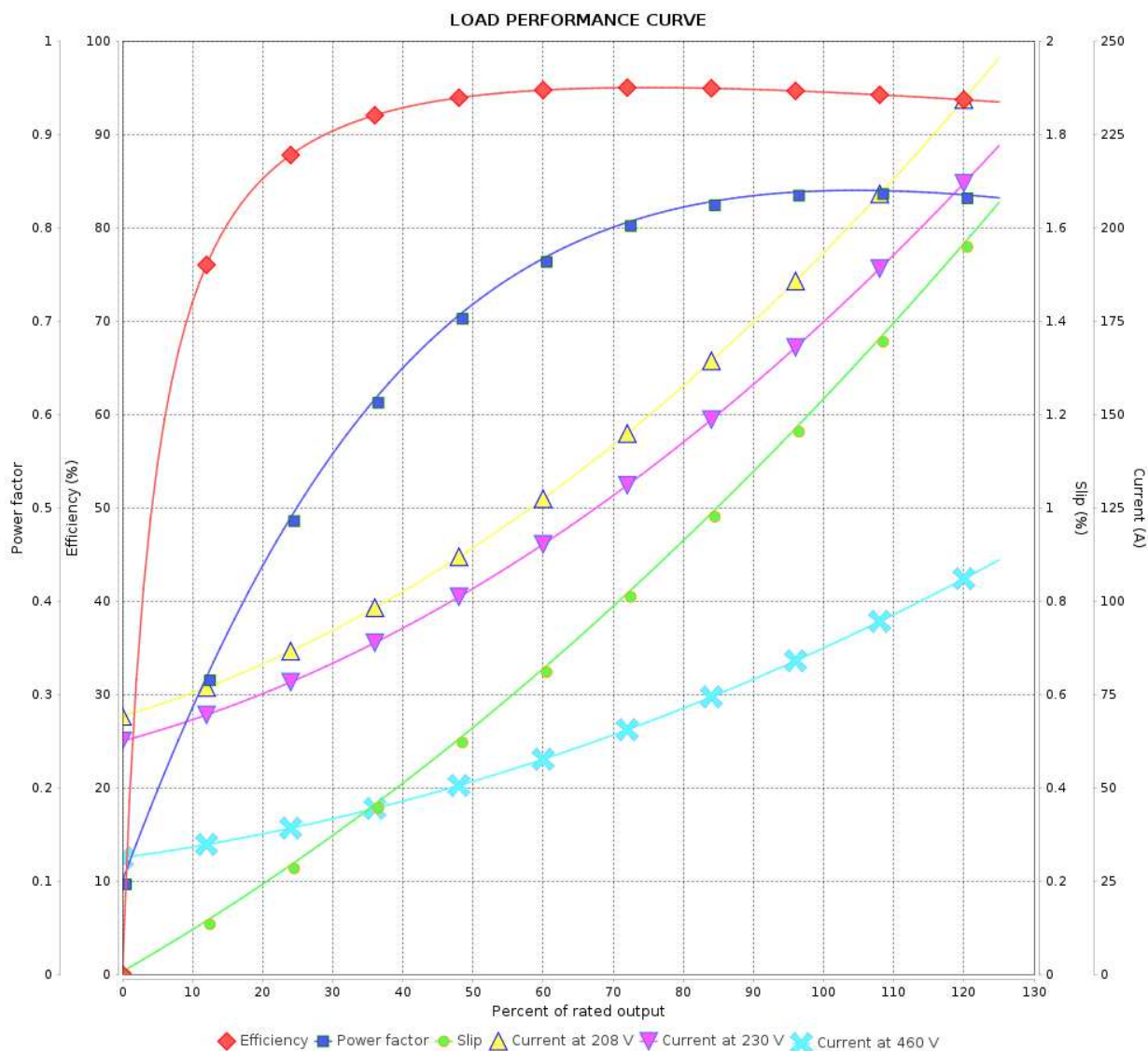
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11439852



Performance : 230/460 V 60 Hz 6P

Rated current : 174/87.0 A
LRC : 7.7
Rated torque : 45.9 kgfm
Locked rotor torque : 250 %
Breakdown torque : 260 %
Rated speed : 1185 rpm

Moment of inertia (J) : 1.69 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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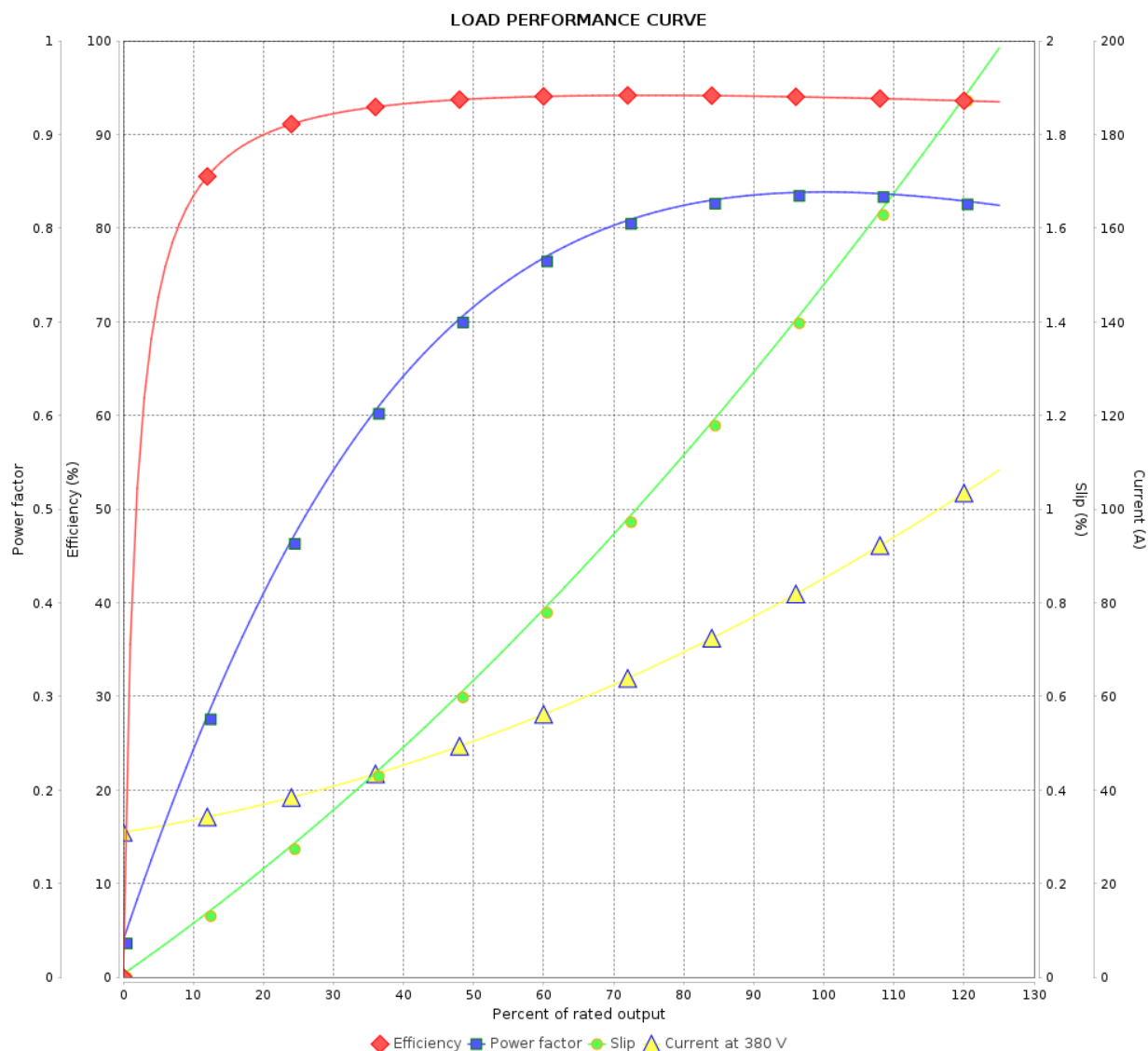
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11439852



Performance : 380 V 50 Hz 6P IE3

Rated current	: 86.6 A	Moment of inertia (J)	: 1.69 kgm ²
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 44.2 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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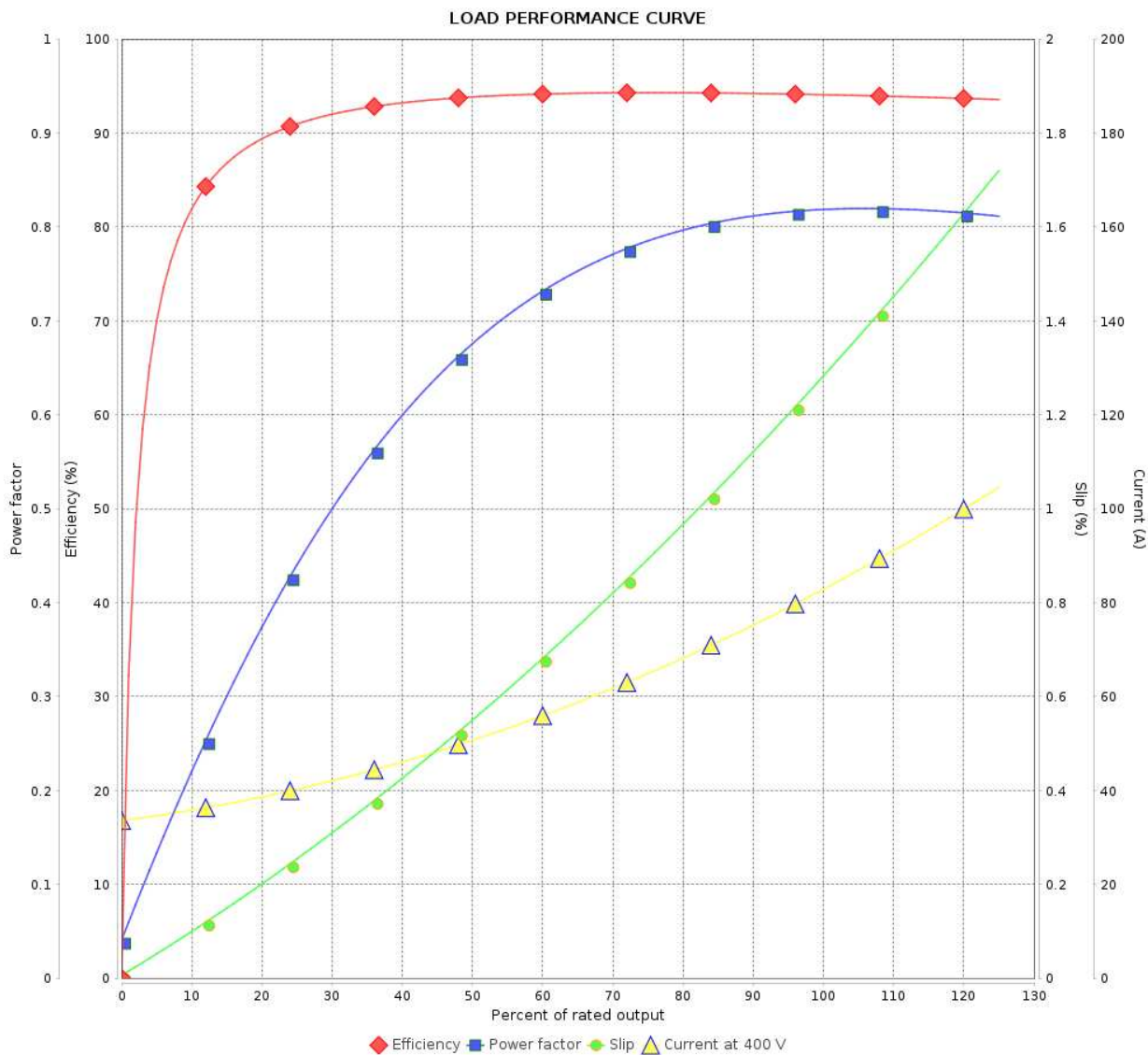
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11439852



Performance : 400 V 50 Hz 6P IE3

Rated current : 84.3 A
LRC : 7.9
Rated torque : 44.1 kgfm
Locked rotor torque : 260 %
Breakdown torque : 280 %
Rated speed : 987 rpm

Moment of inertia (J) : 1.69 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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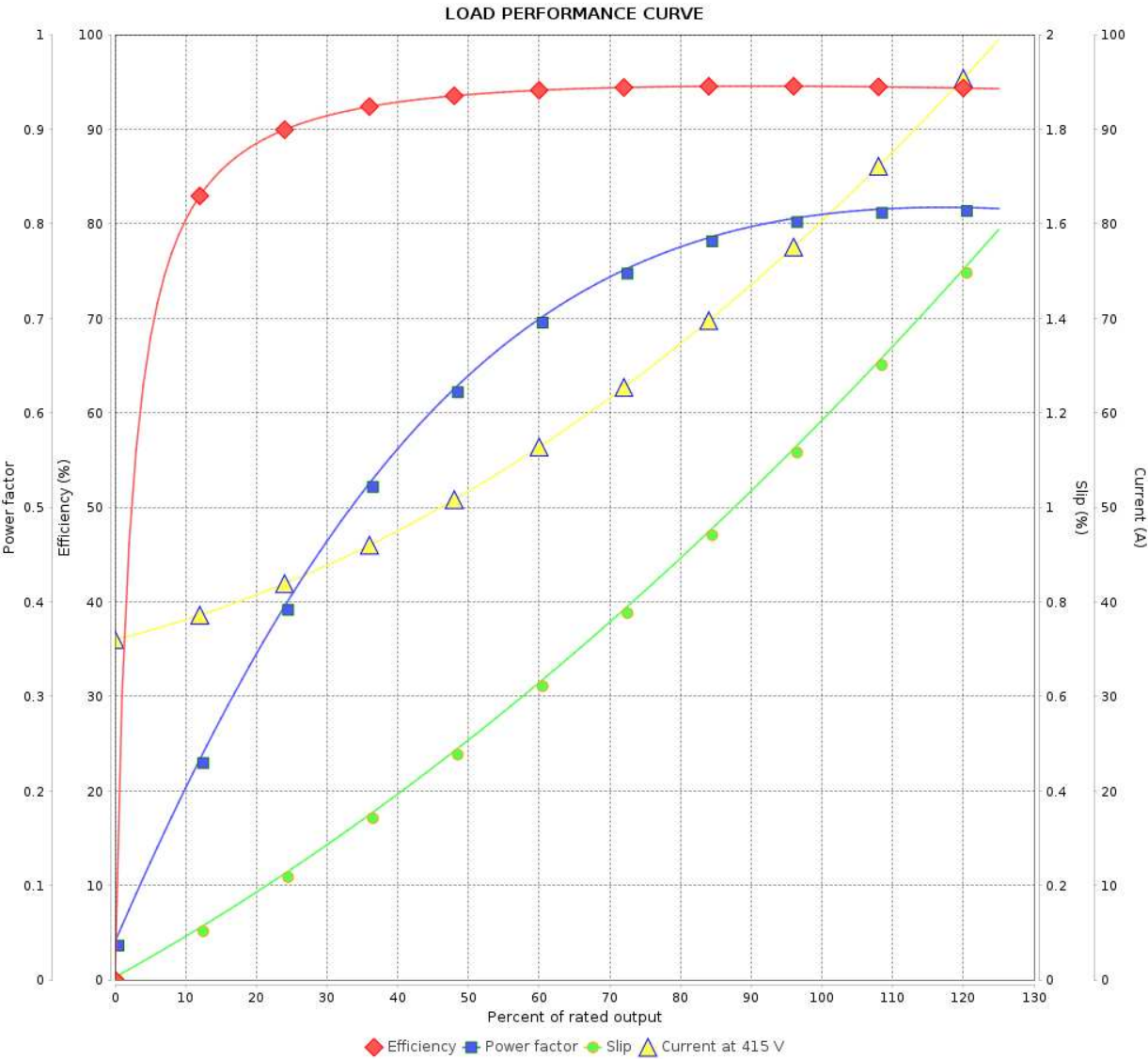
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Three Phase Induction Motor - Squirrel Cage



Customer :

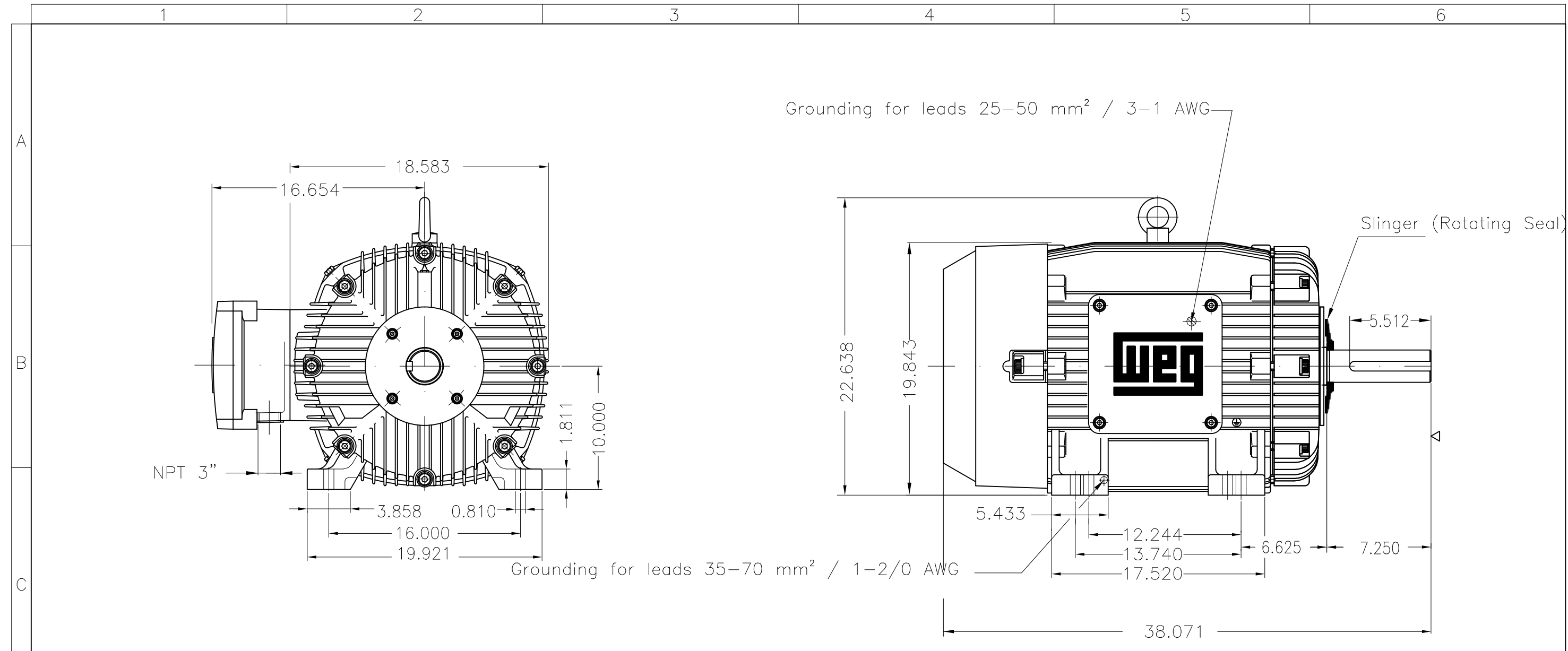
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11439852



Performance : 415 V 50 Hz 6P IE3

Rated current	: 81.8 A	Moment of inertia (J)	: 1.69 kgm ²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.1 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 988 rpm	Design	: B

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D										
E	75 HP 06 Poles 60 Hz									
						HYBRISUSER				00
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED		HYBRISUSER	THREE PH. MOTOR EXPLOSION PROOF NEMA PREM. EFF.				PREVIEW			
CHECKED			FRAME 404/5T IP55 TEFC				WDD 00			
RELEASED										
REL. DATE			WMO Jaragua do Sul		Product Engineering		SHEET		1 / 1	

Color RAL 5009

Painting plan 202P

Mounting B3R(D)

DE Shaft End

0.750

0.750

2.449

2.8750

2.8740

DUNC 3/4"-10 WEG WPR-7339

WEG