

# 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 <sup>1</sup>	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 566 kg	
Protection degree	: IP55	Moment of inertia (J)	: 1.69 kgm <sup>2</sup>	
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 <sup>2</sup>	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	0.78
	100%	0.84	0.84	0.82
Bearing type	: <u>Drive end</u> 6217 C3 <u>Non drive end</u> 6314 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 1020 kgf	
Lubrication interval	: 13507 h 14267 h	Max. compression	: 1582 kgf	
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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## Three Phase Induction Motor - Squirrel Cage



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

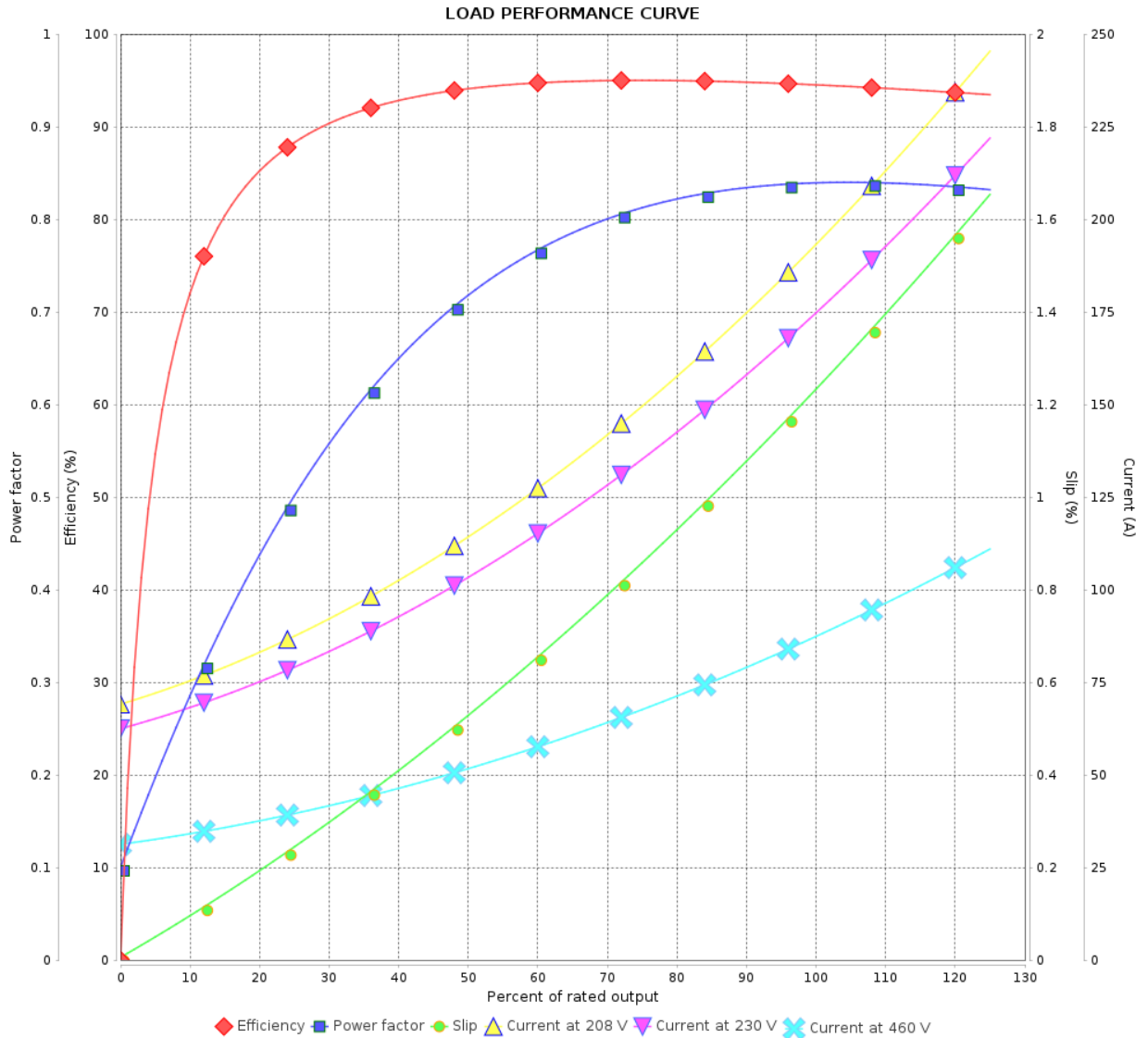
## Three Phase Induction Motor - Squirrel Cage



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 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

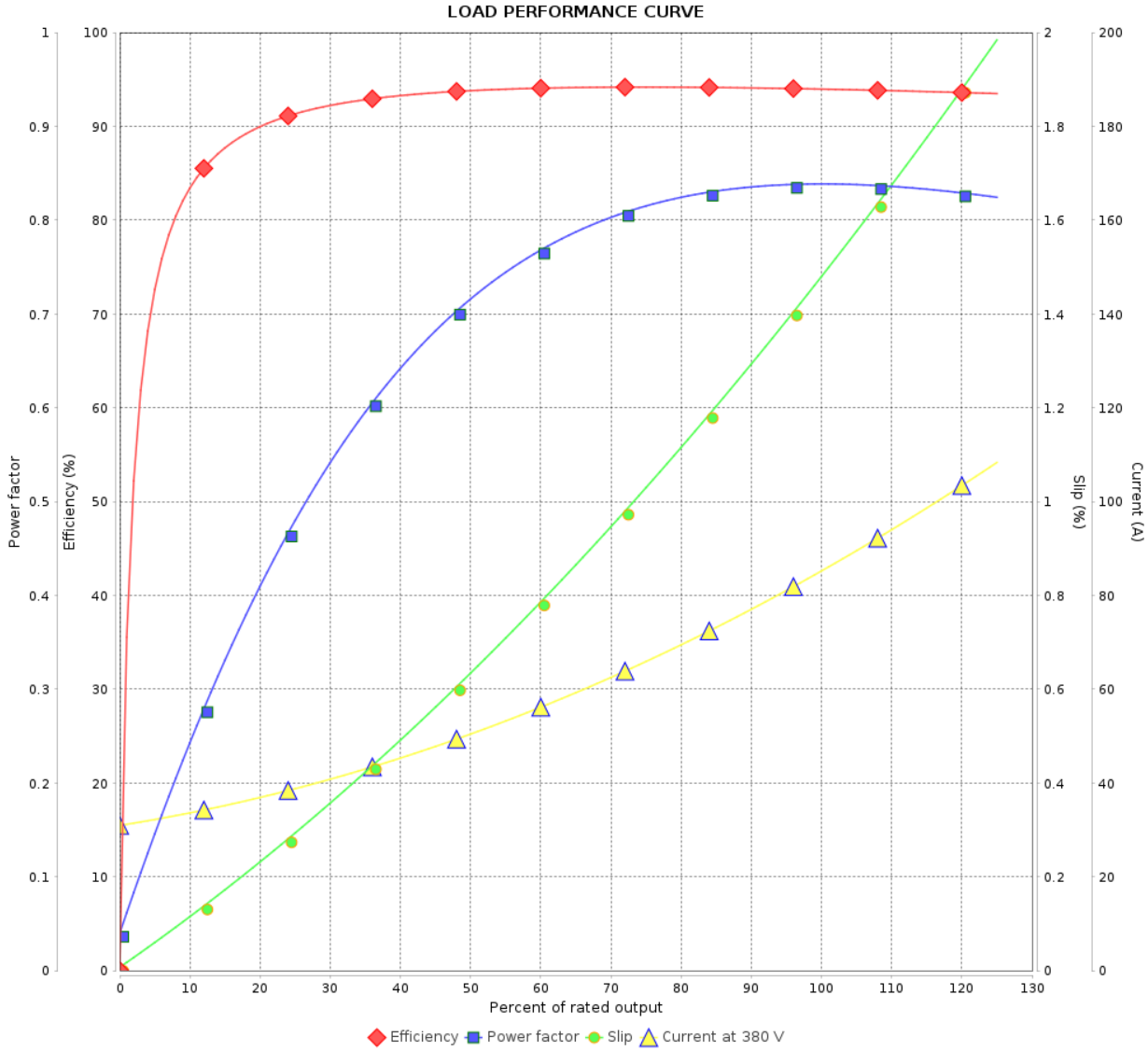
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11439852



Performance : 380 V 50 Hz 6P IE3

Rated current	: 86.6 A	Moment of inertia (J)	: 1.69 kgm <sup>2</sup>
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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# LOAD PERFORMANCE CURVE

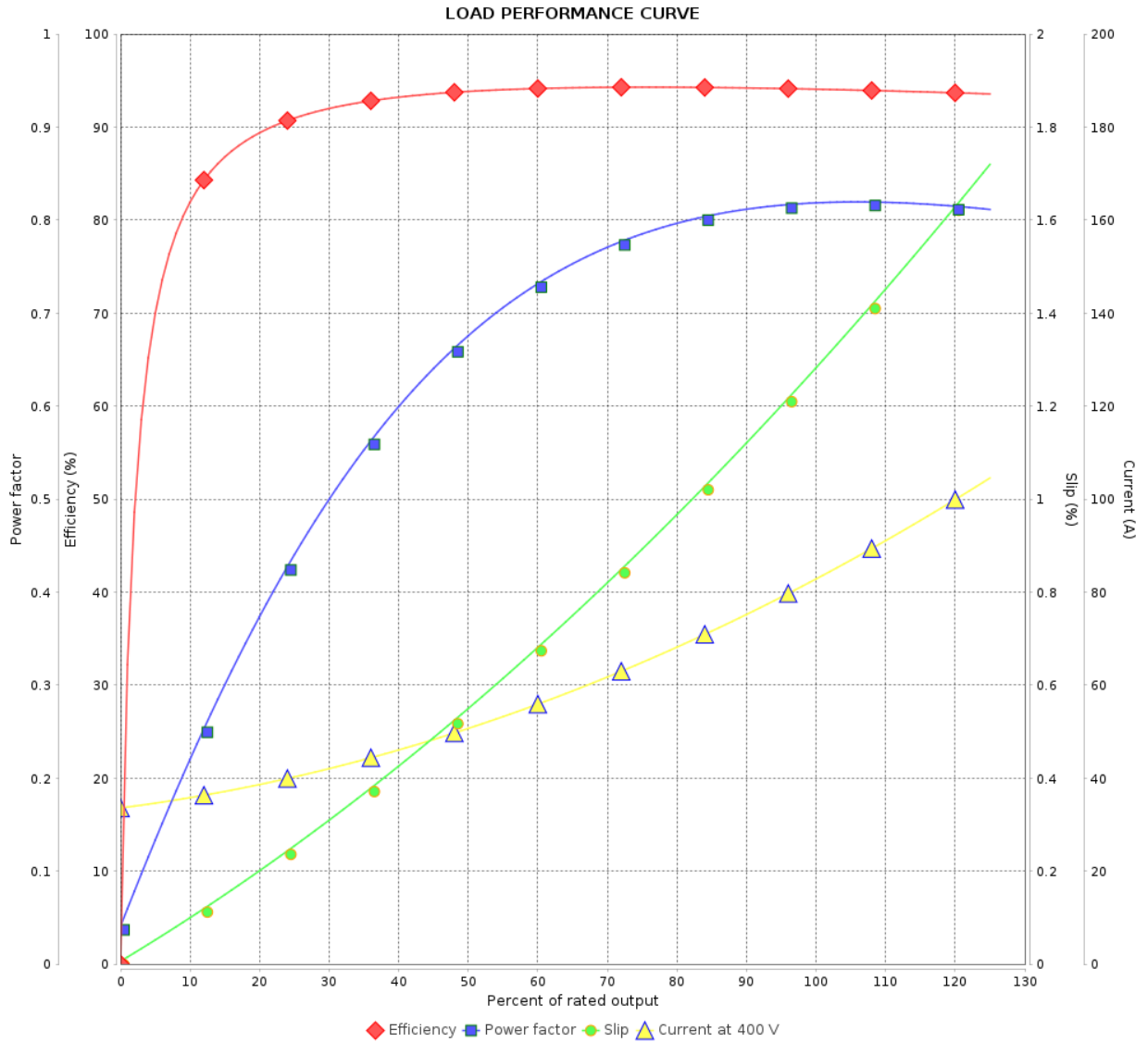
## Three Phase Induction Motor - Squirrel Cage



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 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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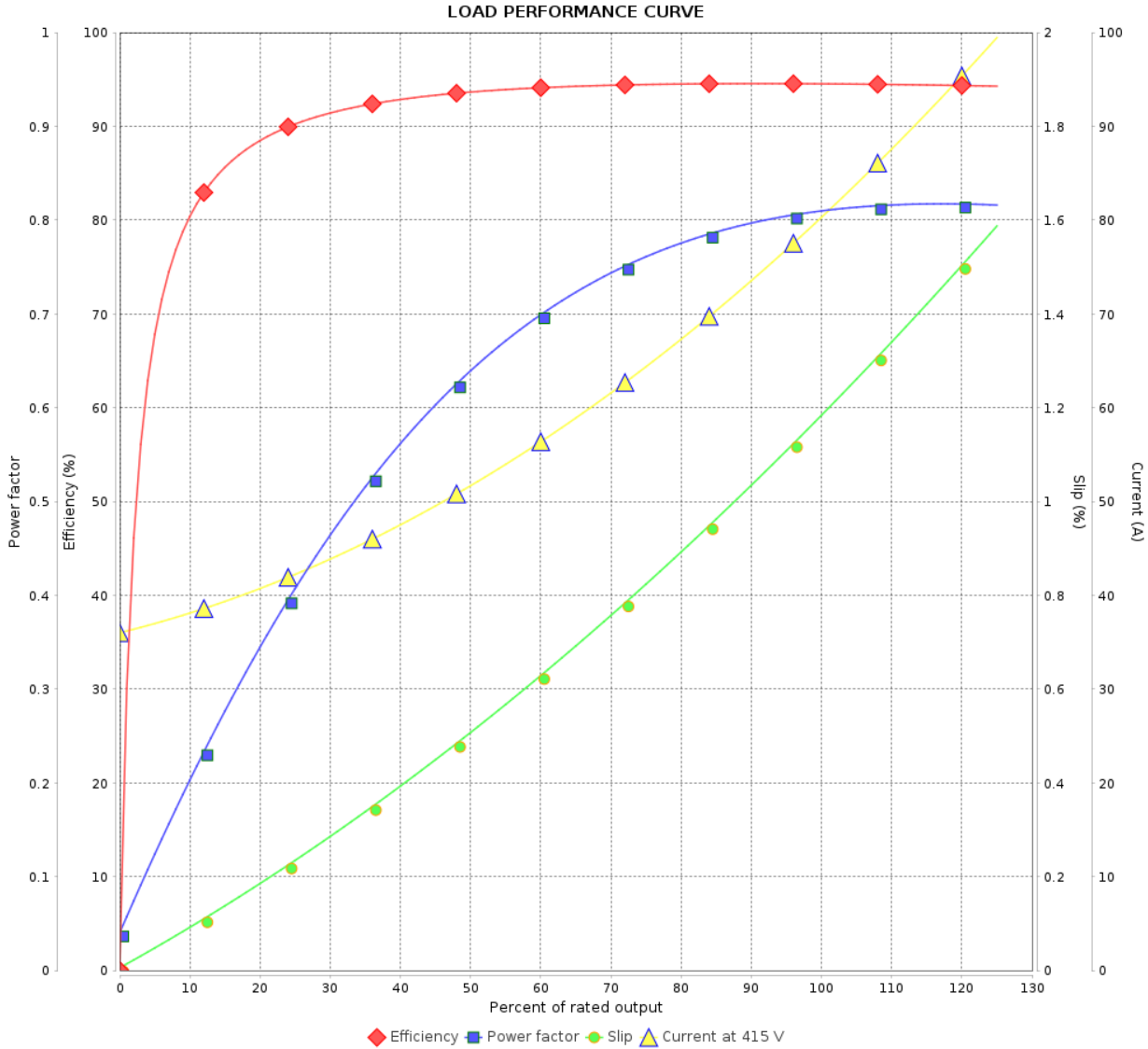
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

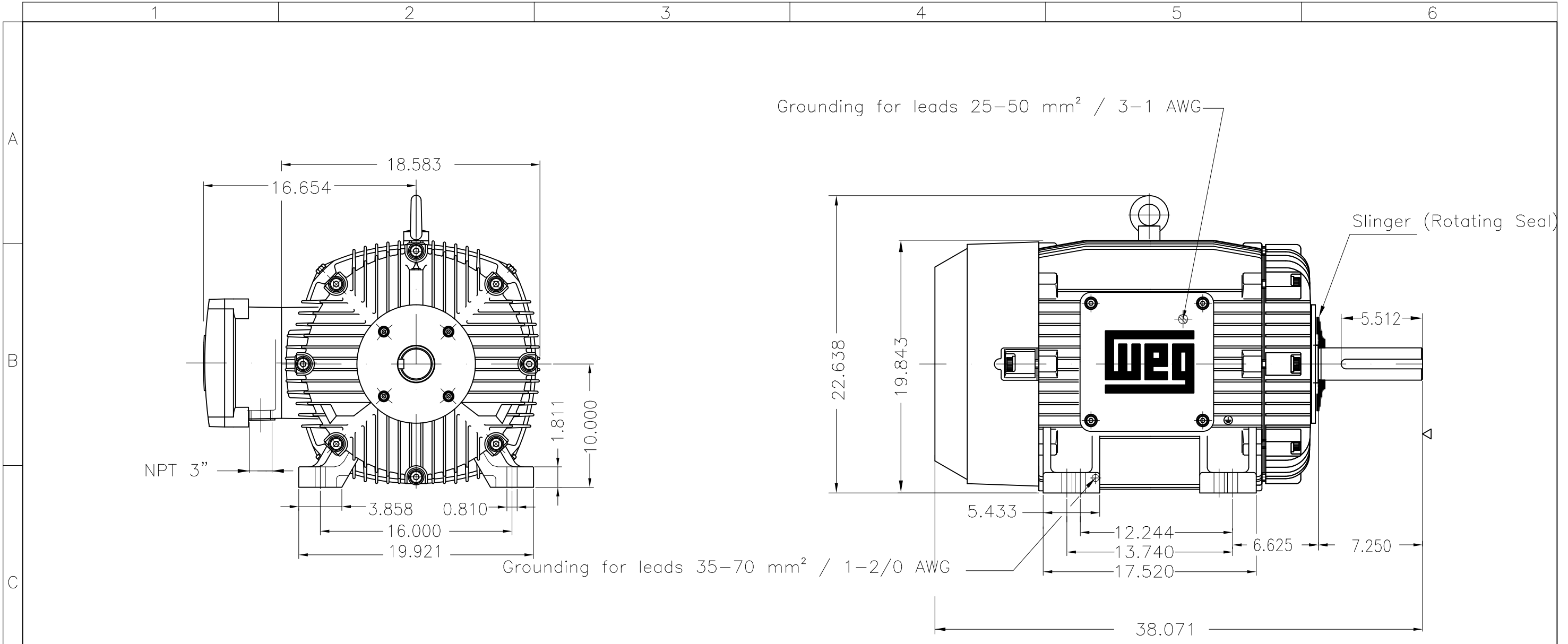
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase      Product code : 11439852



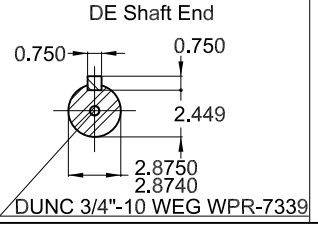
Performance : 415 V 50 Hz 6P IE3

Rated current	: 81.8 A	Moment of inertia (J)	: 1.69 kgm <sup>2</sup>
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

Rev.	Changes Summary	Performed	Checked	Date
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Color RAL 5009		Painting plan 202P		Mounting B3R(D)		DE Shaft End		75 HP 06 Poles 60 Hz		A	
						DUNC 3/4"-10 WEG WPR-7339					
						HYBRISUSER				00	
ECM		LOC		SUMMARY OF MODIFICATIONS		EXECUTED		CHECKED		RELEASED	
EXECUTED		HYBRISUSER		THREE PH. MOTOR EXPLOSION PROOF NEMA PREM. EFF.		EXECUTED		CHECKED		RELEASED	
CHECKED				FRAME 404/5T IP55 TEFC		EXECUTED		CHECKED		RELEASED	
RELEASED						EXECUTED		CHECKED		RELEASED	
REL. DATE		WMO		Jaragua do Sul		Product Engineering		SHEET		1 / 1	



Color RAL 5009  
 Painting plan 202P  
 Mounting B3R(D)

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

**PREVIEW**  
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