

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 11889522	
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	: 550 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	0.78	
	100%	0.84	0.84	0.82	
Bearing type	: <u>Drive end</u> NU-217 C3	<u>Non drive end</u> 6314 C3	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction	: 1026 kgf	
Lubrication interval	: 10272 h	14267 h	Max. compression	: 1576 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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Customer : _____

Thermal protection

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

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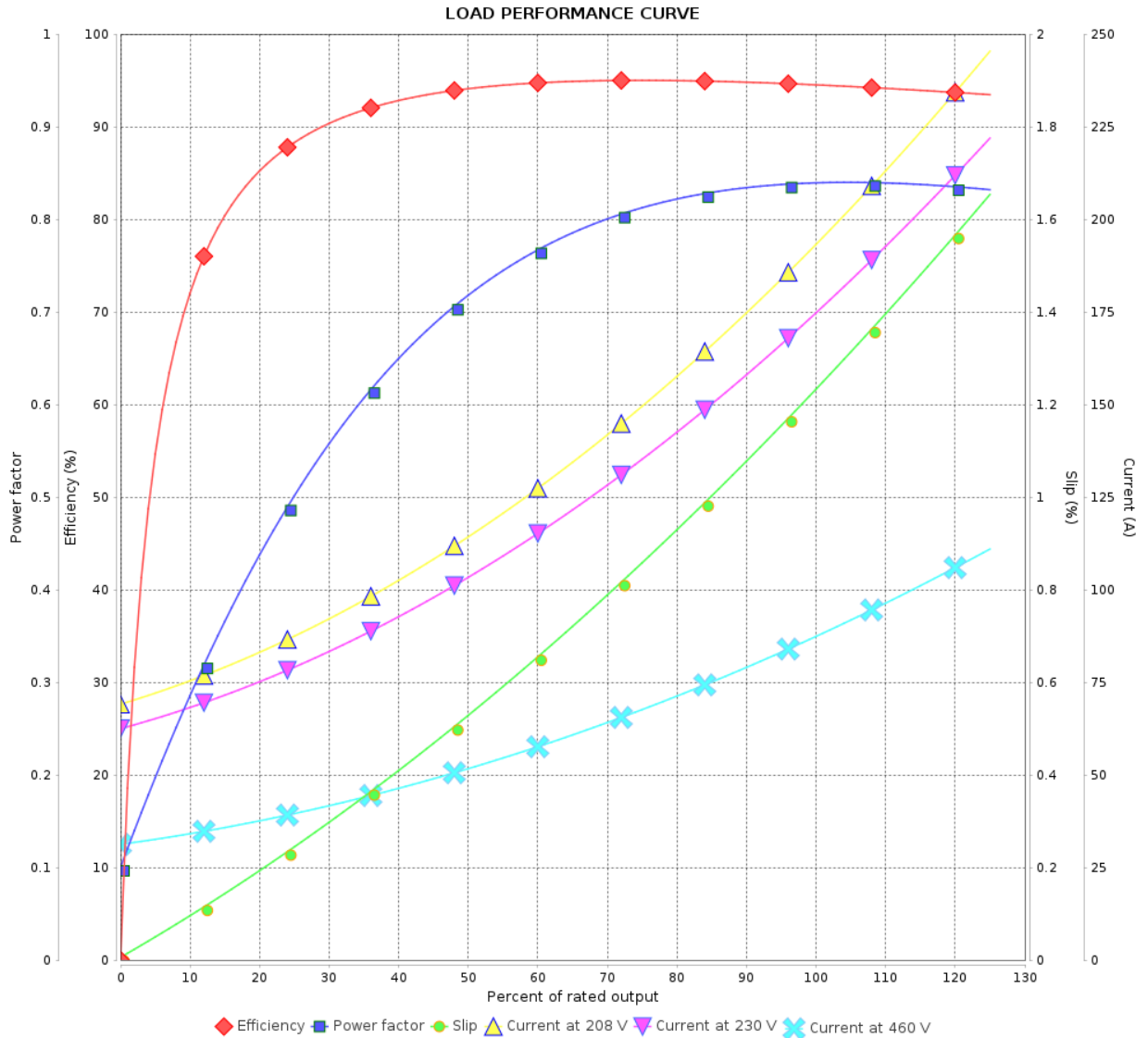
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



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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Date				

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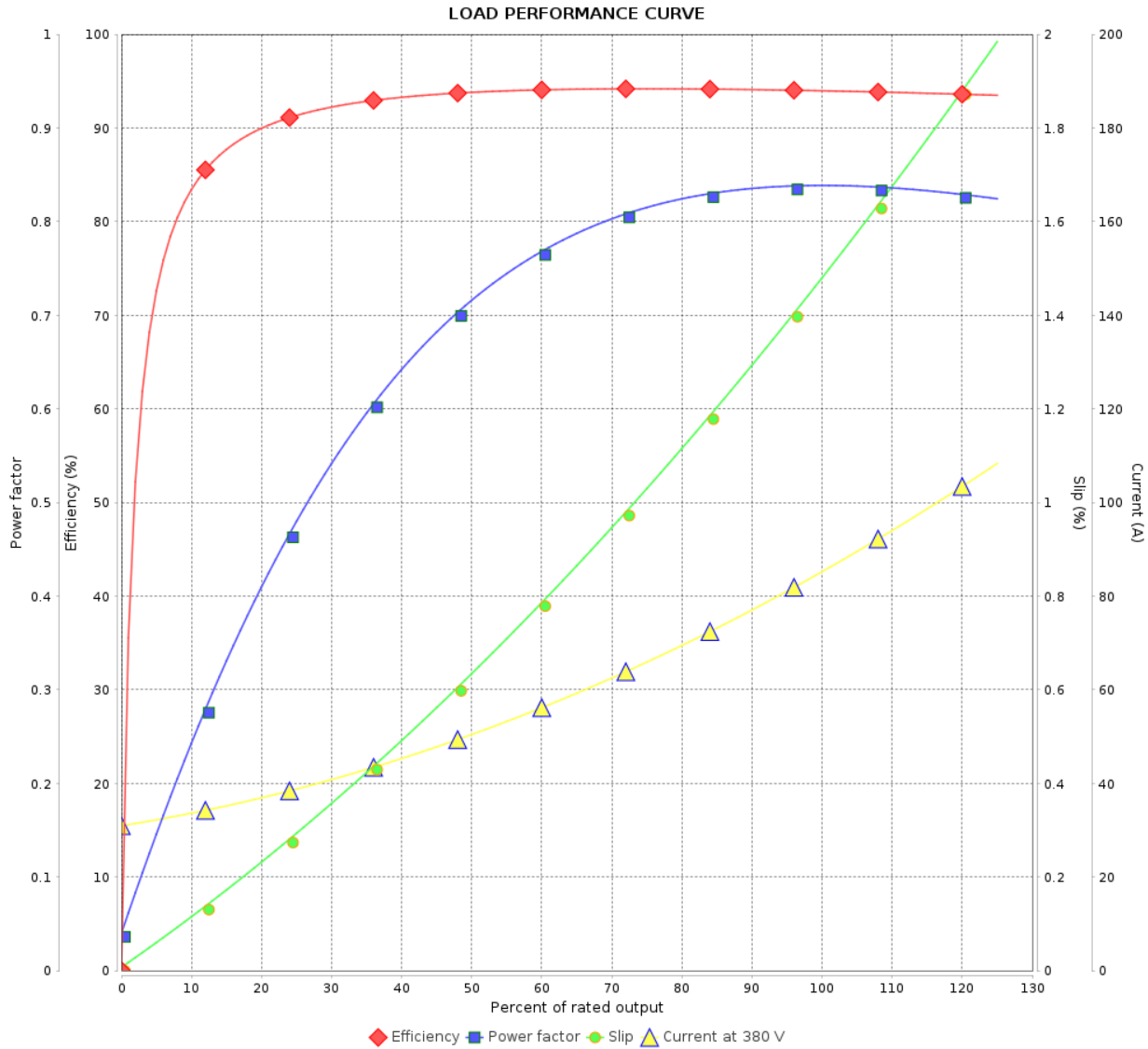
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



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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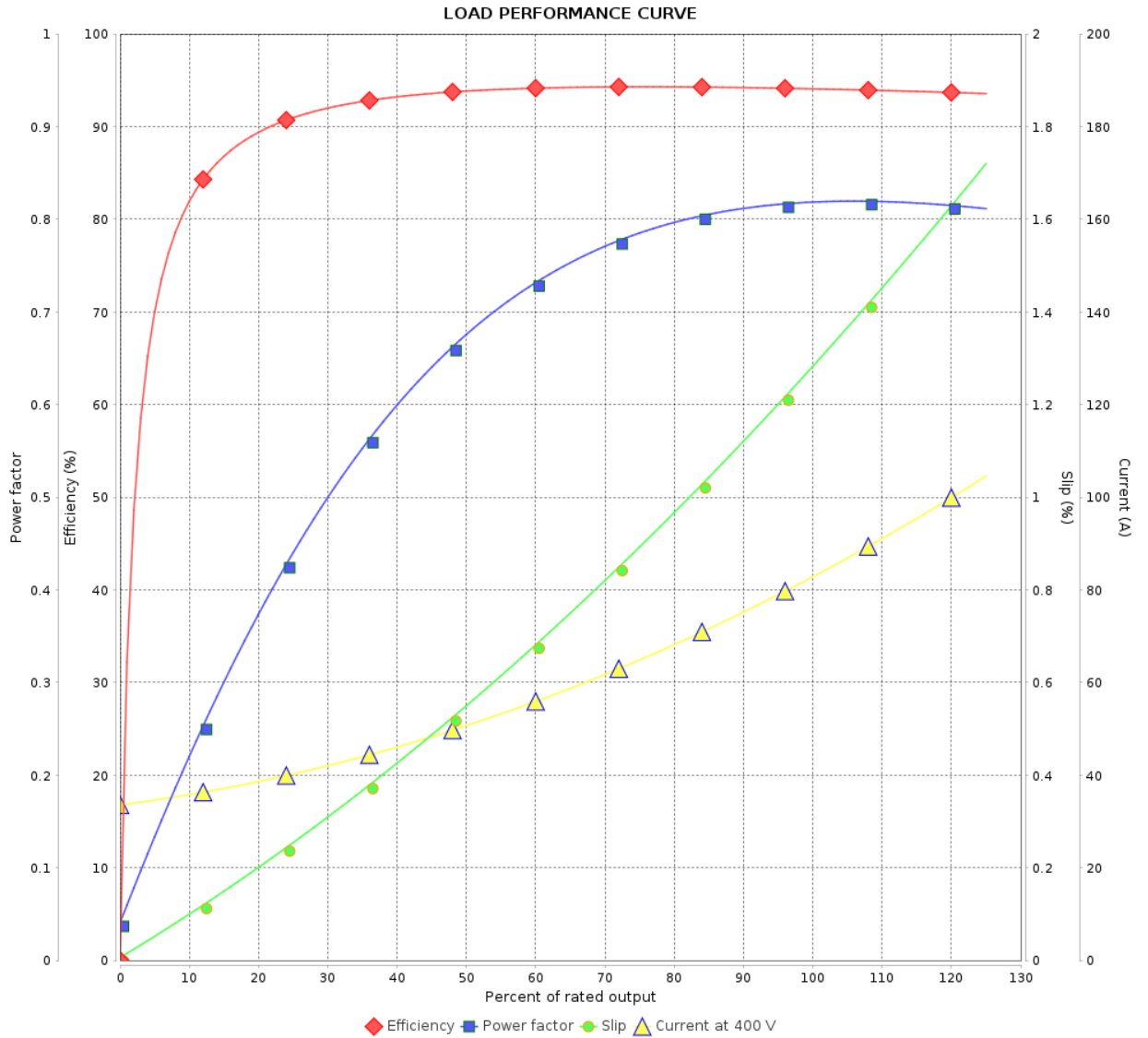
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11889522



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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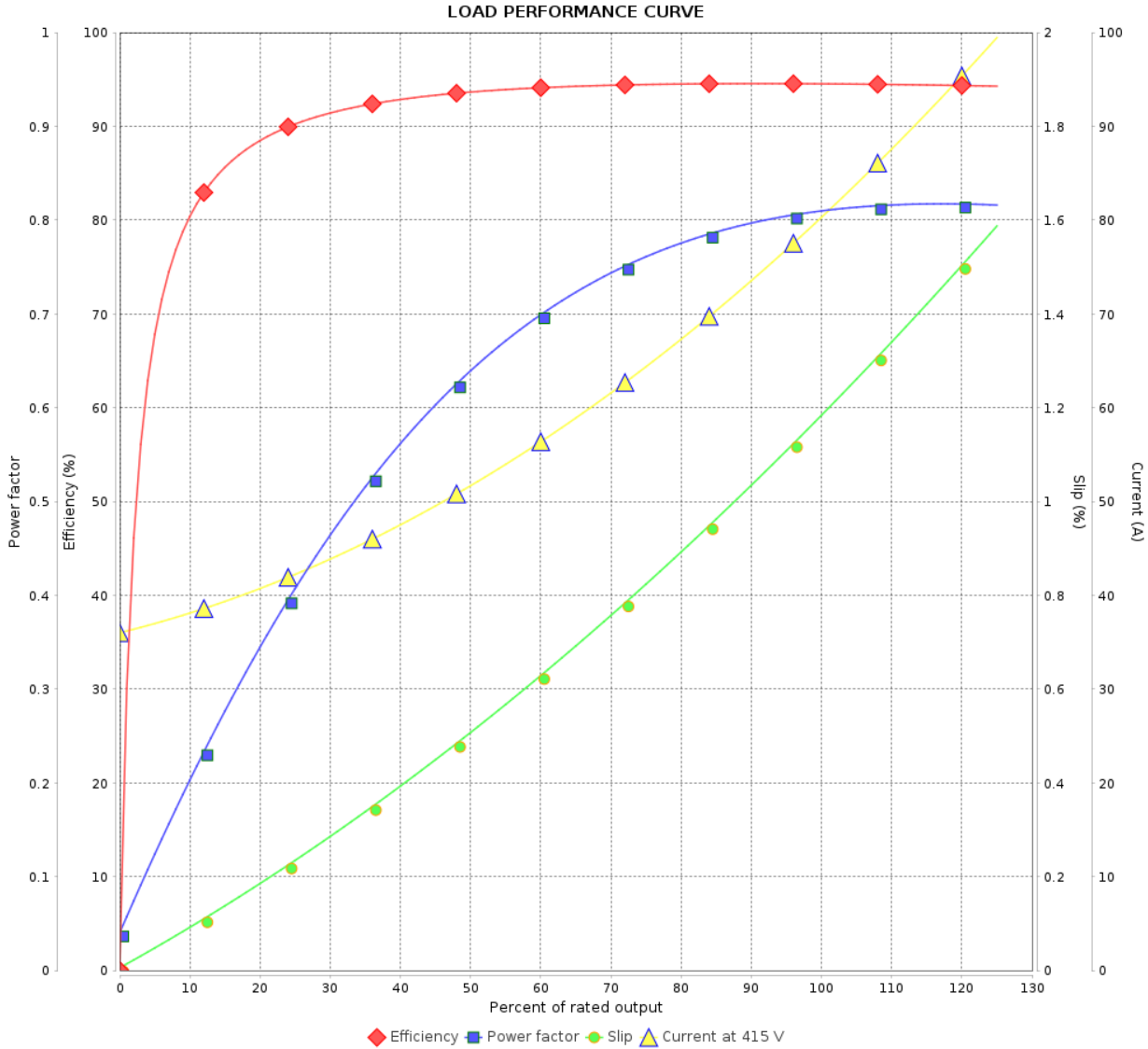
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Customer : _____

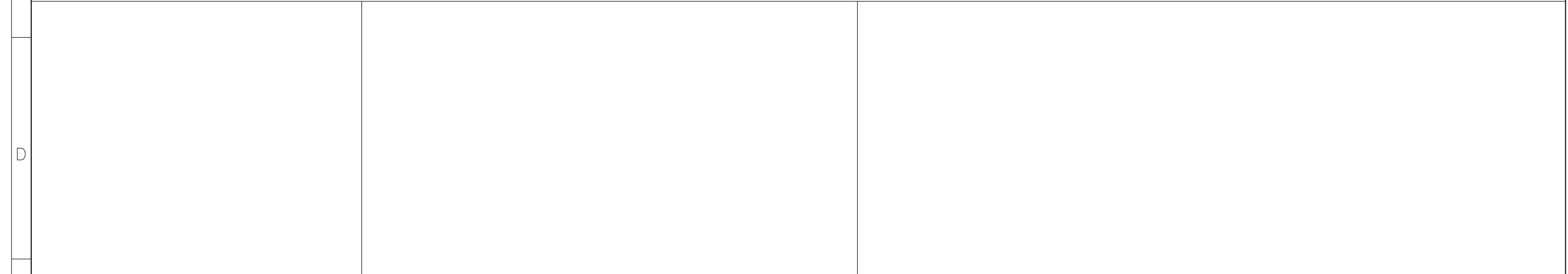
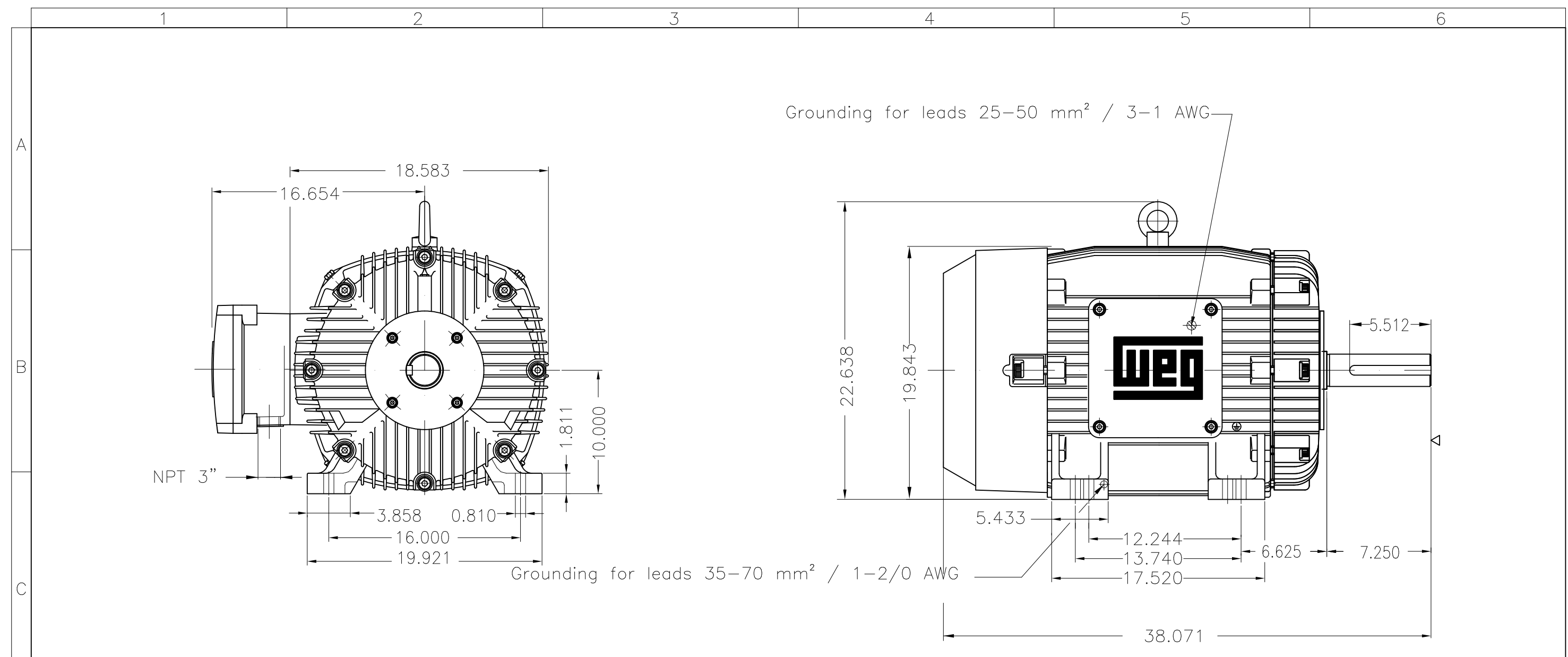
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11889522



Performance : 415 V 50 Hz 6P IE3

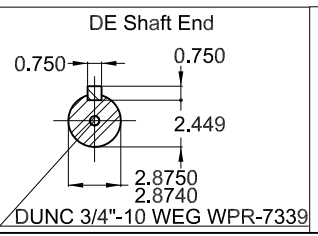
Rated current	: 81.8 A	Moment of inertia (J)	: 1.69 kgm ²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.1 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 988 rpm	Design	: B

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75 HP 06 Poles 60 Hz A

- DE roller bearing
- Shaft locking device
- Color RAL 5009
- Painting plan 202P
- Mounting B3R(D)



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