

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	: 562 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

	<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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		1 / 6	

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Thermal protection

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 6	

LOAD PERFORMANCE CURVE

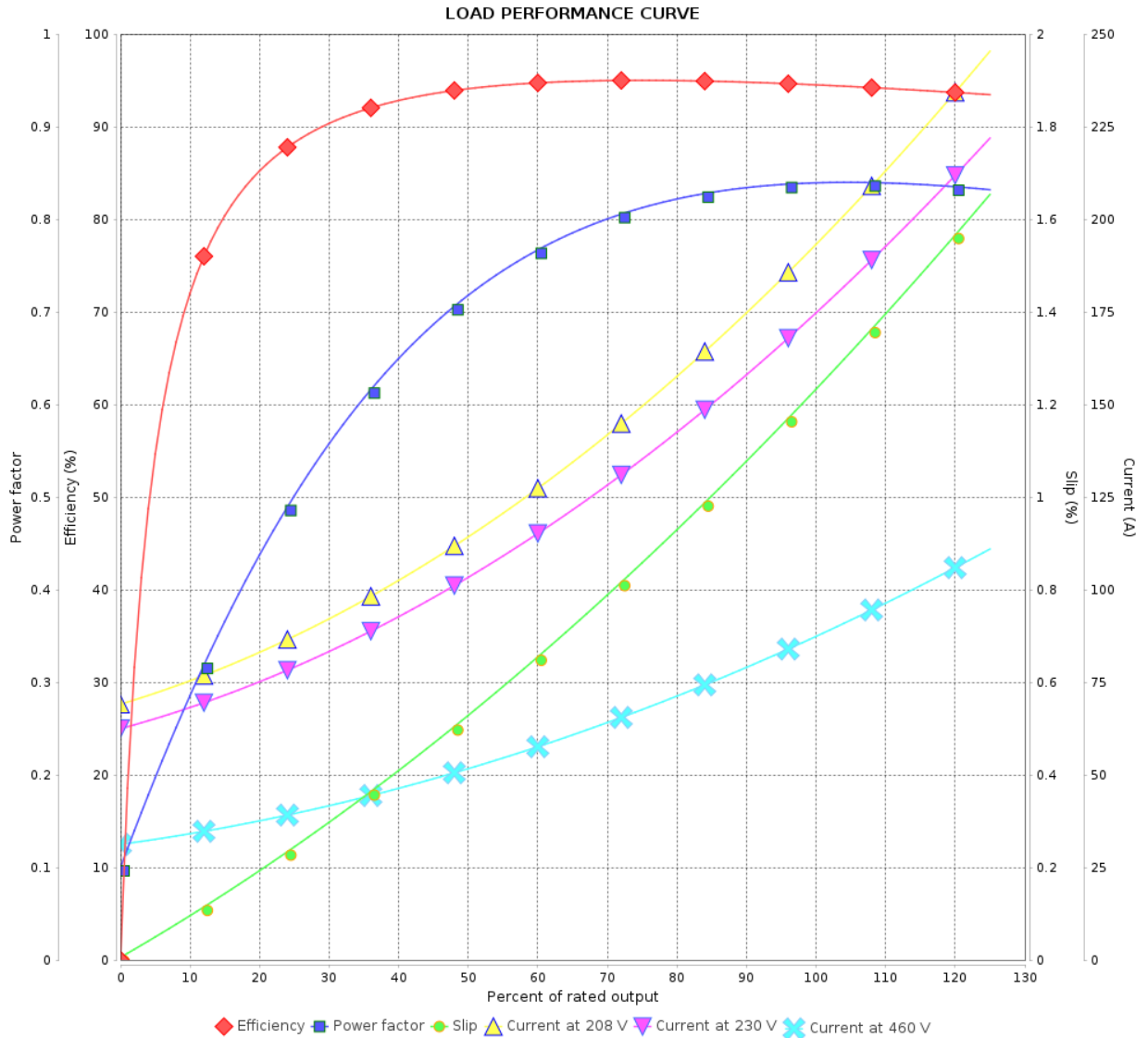
Three Phase Induction Motor - Squirrel Cage



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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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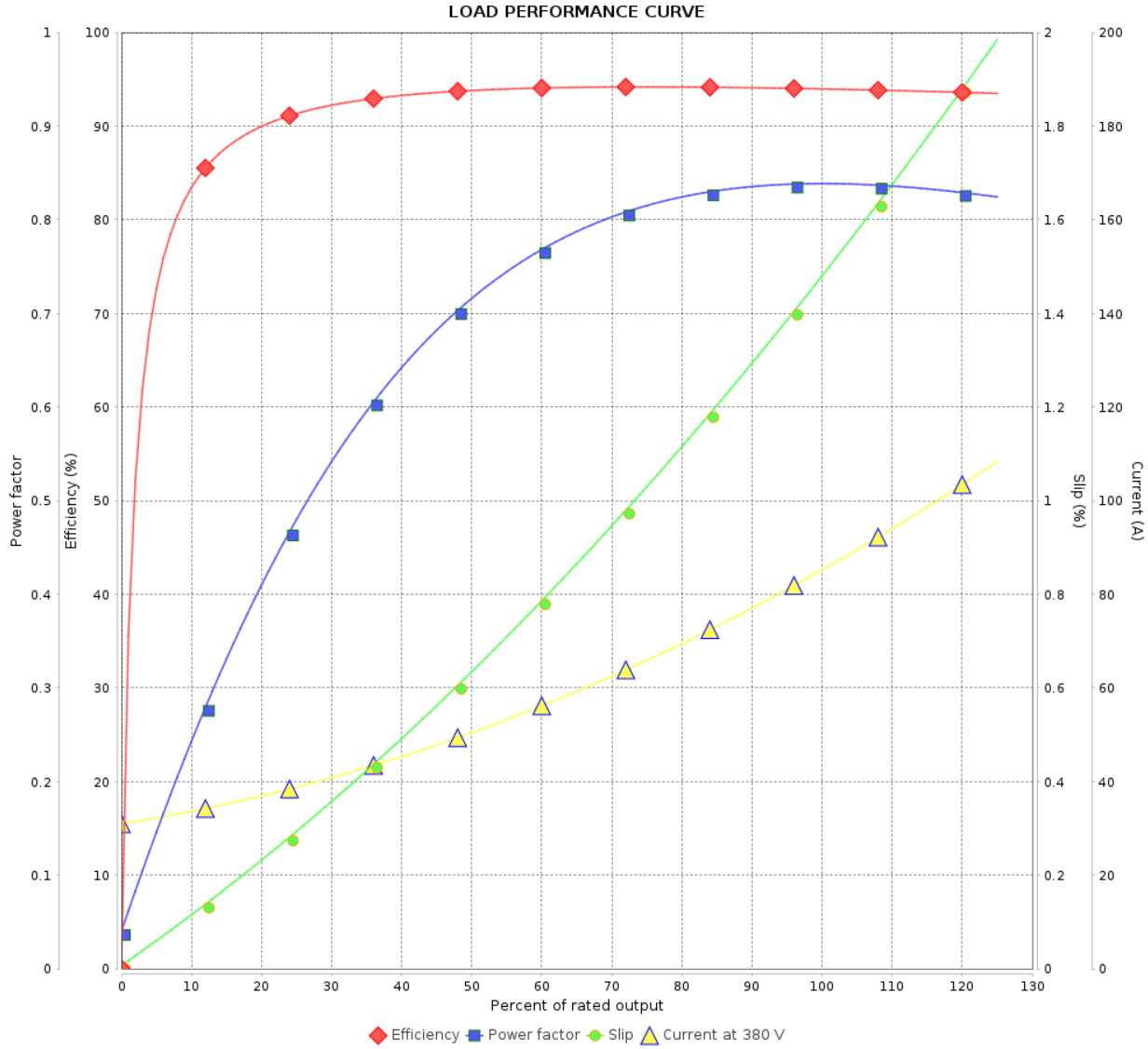
Three Phase Induction Motor - Squirrel Cage



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
LRC : 7.2
Rated torque : 44.2 kgfm
Locked rotor torque : 229 %
Breakdown torque : 250 %
Rated speed : 985 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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	13/01/2024			

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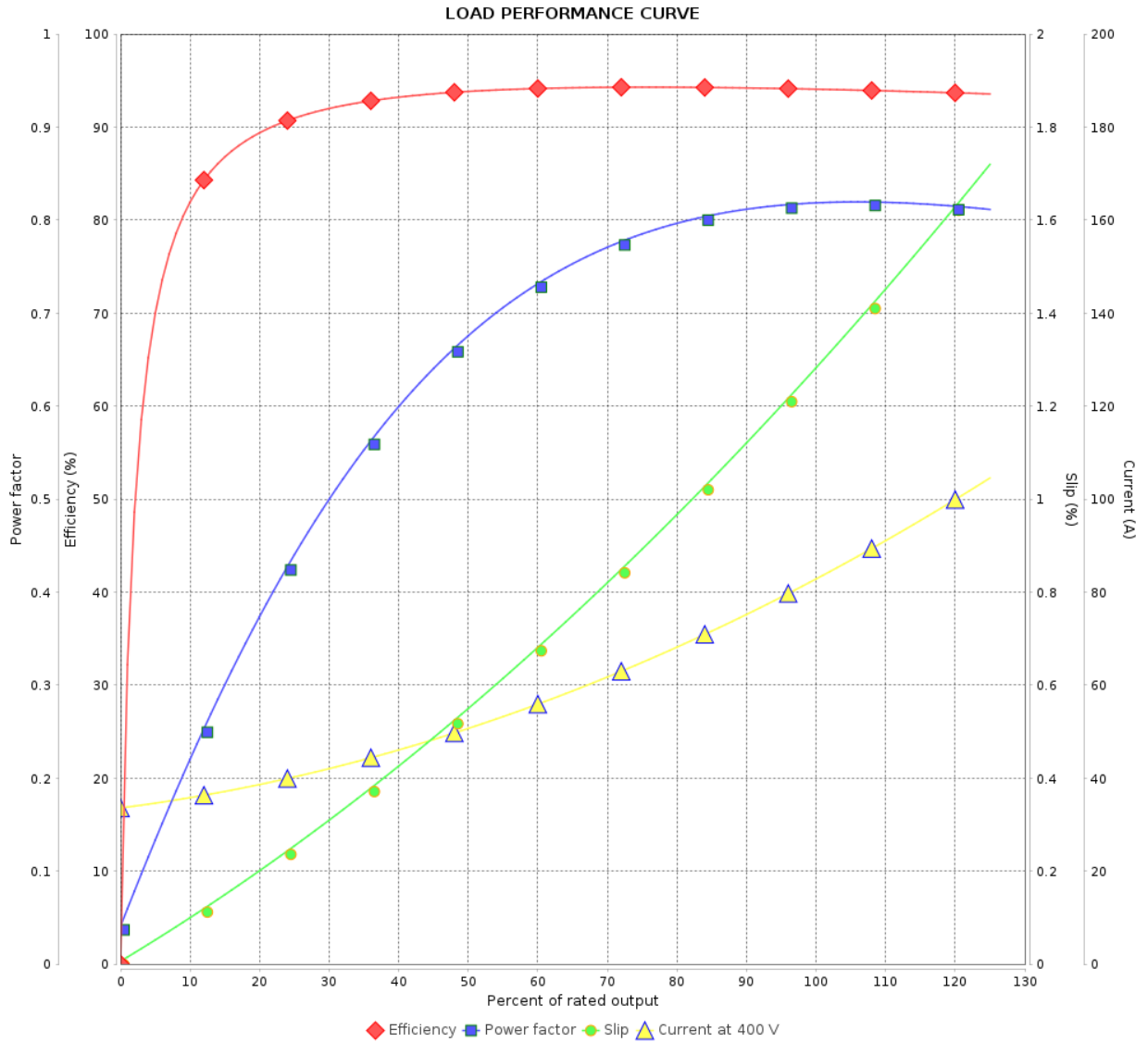
Three Phase Induction Motor - Squirrel Cage



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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 6		
Date		13/01/2024		

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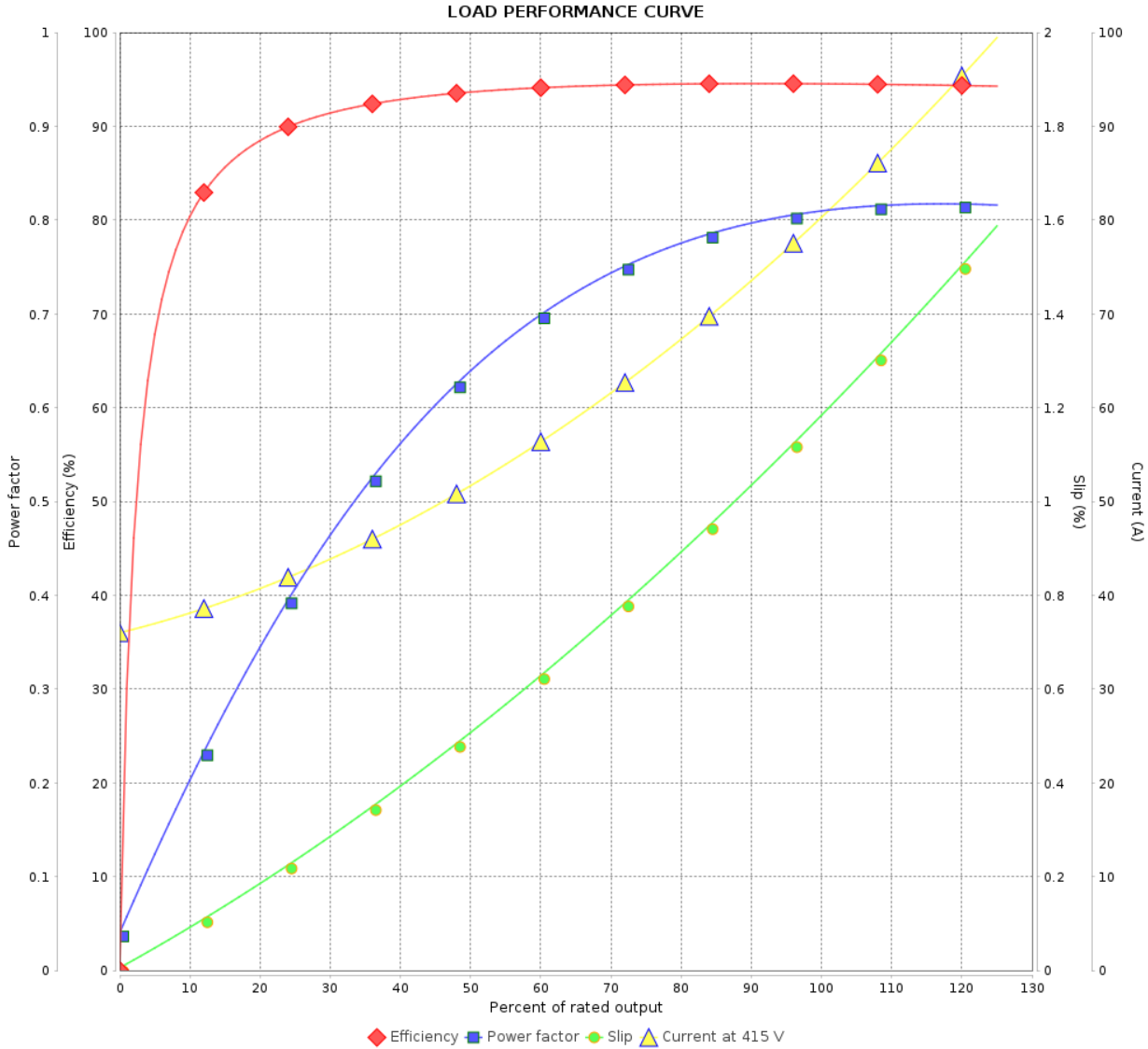
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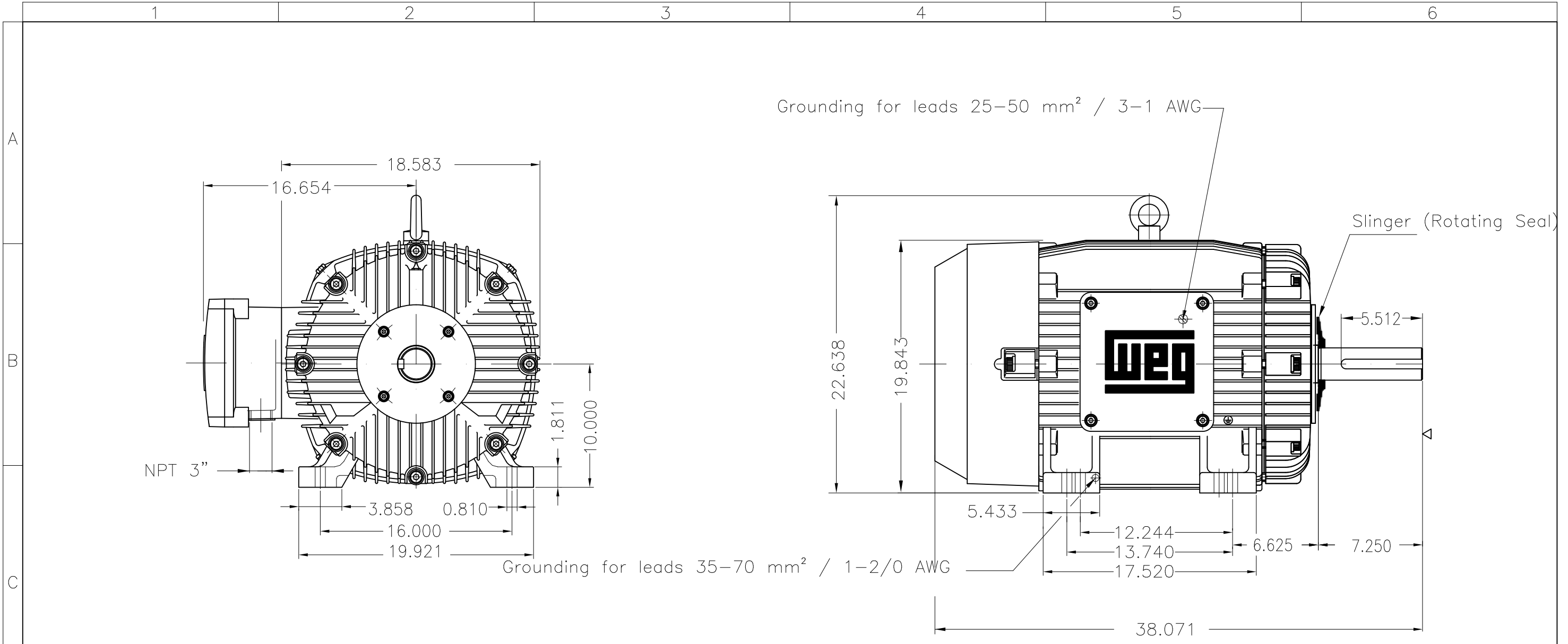


Performance : 415 V 50 Hz 6P IE3

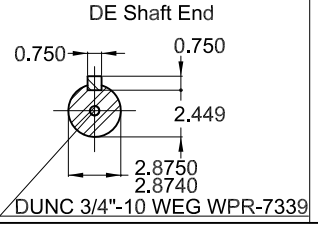
Rated current : 81.8 A
 LRC : 8.4
 Rated torque : 44.1 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 988 rpm

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/01/2024			



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



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

PREVIEW
 WDD 00
 SHEET 1 / 1

