

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12744465

Frame : 182/4TC	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 : 44.2 kg
Protection degree : IP55	Moment of inertia (J) : 0.0206 kgm ²
Design : B	

Output [HP]	1.5	1.5	1.5	1.5
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	5.08/2.54	2.68	2.62	2.64
L. R. Amperes [A]	39.6/19.8	16.9	18.1	19.5
LRC [A]	7.8x(Code M)	6.3x(Code J)	6.9x(Code K)	7.4x(Code L)
No load current [A]	3.25/1.63	1.60	1.71	1.80
Rated speed [RPM]	1170	955	960	965
Slip [%]	2.50	4.50	4.00	3.50
Rated torque [kgfm]	0.930	1.14	1.13	1.13
Locked rotor torque [%]	320	250	300	330
Breakdown torque [%]	400	290	330	370
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	28s (cold) 16s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%			
	50%	84.0	85.5	84.5
	75%	86.5	86.5	86.5
	100%	87.5	85.5	86.5
Power Factor	25%			
	50%	0.45	0.52	0.48
	75%	0.54	0.63	0.60
	100%	0.62	0.73	0.70

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	13.4	13.4	13.4	13.4
	P2 (0,5;1,0)	10.3	10.3	10.3	10.3
	P3 (0,25;1,0)	9.3	9.3	9.3	9.3
	P4 (0,9;0,5)	8.8	8.8	8.8	8.8
	P5 (0,5;0,5)	5.8	5.8	5.8	5.8
	P6 (0,5;0,25)	4.8	4.8	4.8	4.8
	P7 (0,25;0,25)	3.5	3.5	3.5	3.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6207 ZZ	6206 ZZ	Max. traction : 65 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 109 kgf
Lubrication interval :	-	-	
Lubricant amount :	-	-	
Lubricant type :	Mobil Polyrex EM		

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.

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	13/07/2025		Page 1 / 6	Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Notes
USABLE @208V 5.62A SF 1.15 SFA 6.46A

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	13/07/2025				

LOAD PERFORMANCE CURVE

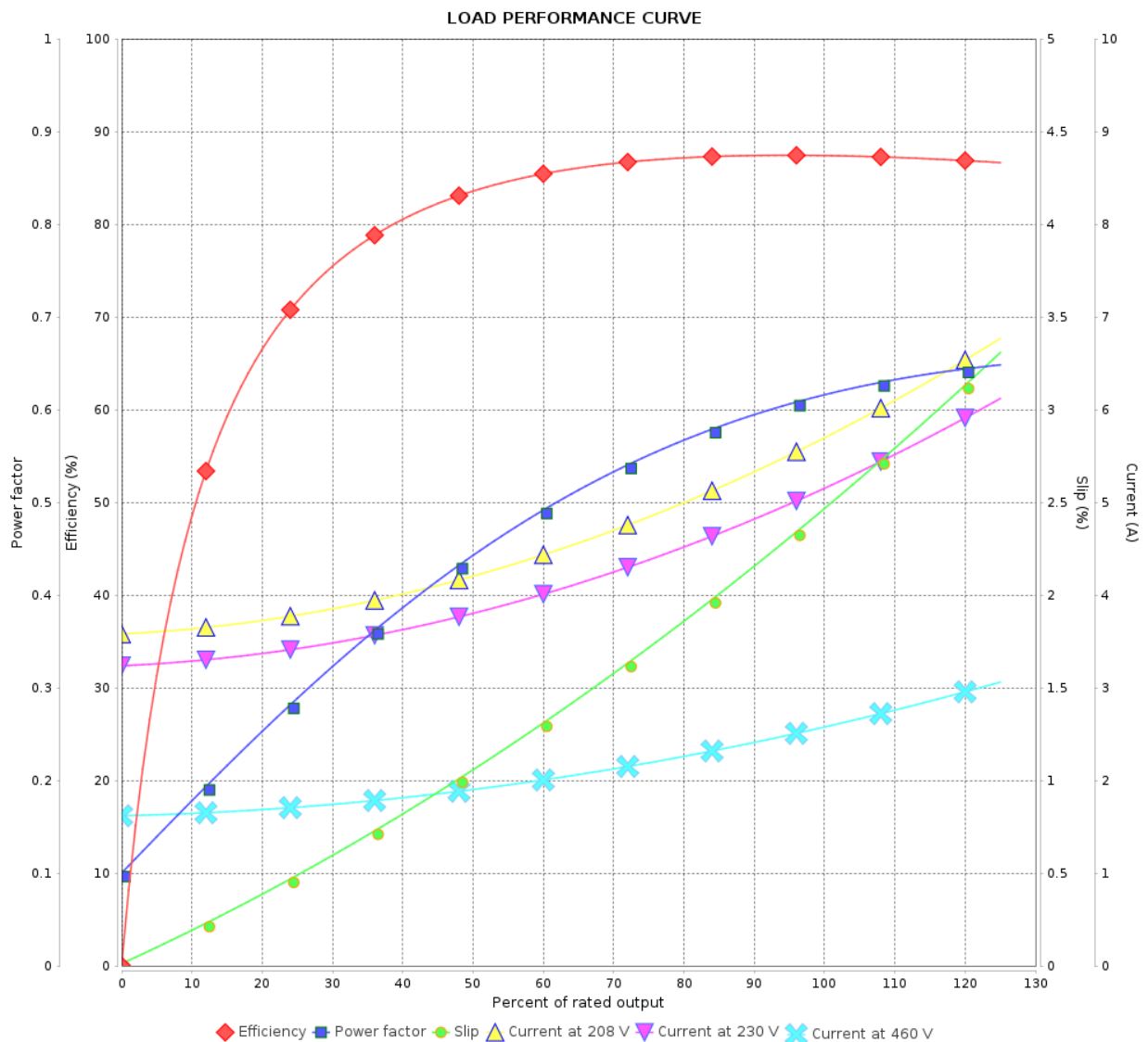
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12744465



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A
LRC : 7.8
Rated torque : 0.930 kgfm
Locked rotor torque : 320 %
Breakdown torque : 400 %
Rated speed : 1170 rpm

Moment of inertia (J) : 0.0206 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	13/07/2025			

Page	Revision
3 / 6	

LOAD PERFORMANCE CURVE

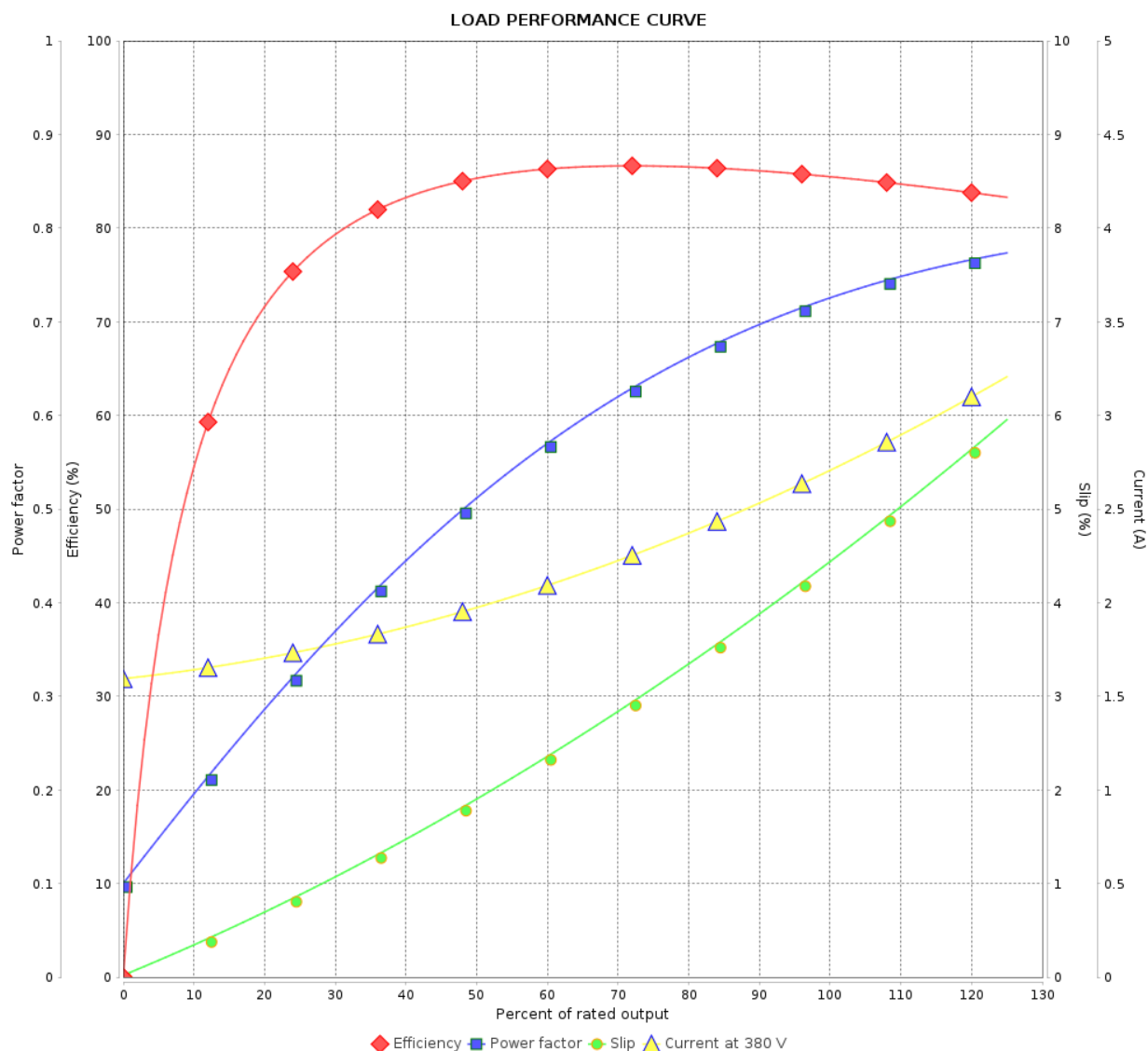
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12744465



Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A
LRC : 6.3
Rated torque : 1.14 kgfm
Locked rotor torque : 250 %
Breakdown torque : 290 %
Rated speed : 955 rpm

Moment of inertia (J) : 0.0206 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 / 6Revision		
Checked by				
Date	13/07/2025			

LOAD PERFORMANCE CURVE

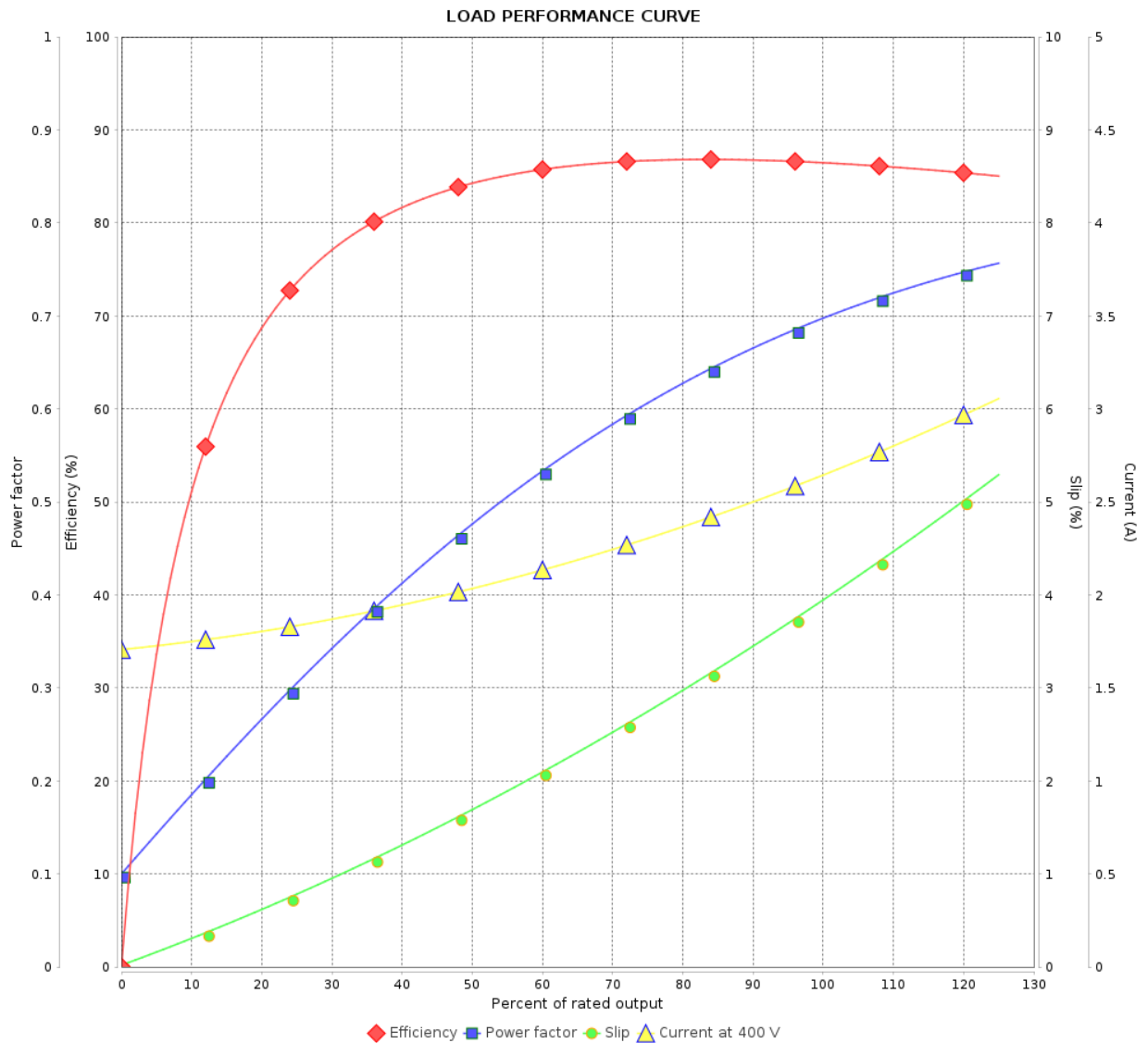
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12744465



Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A
LRC : 6.9
Rated torque : 1.13 kgfm
Locked rotor torque : 300 %
Breakdown torque : 330 %
Rated speed : 960 rpm

Moment of inertia (J) : 0.0206 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 5 / 6Revision		
Checked by				
Date	13/07/2025			

LOAD PERFORMANCE CURVE

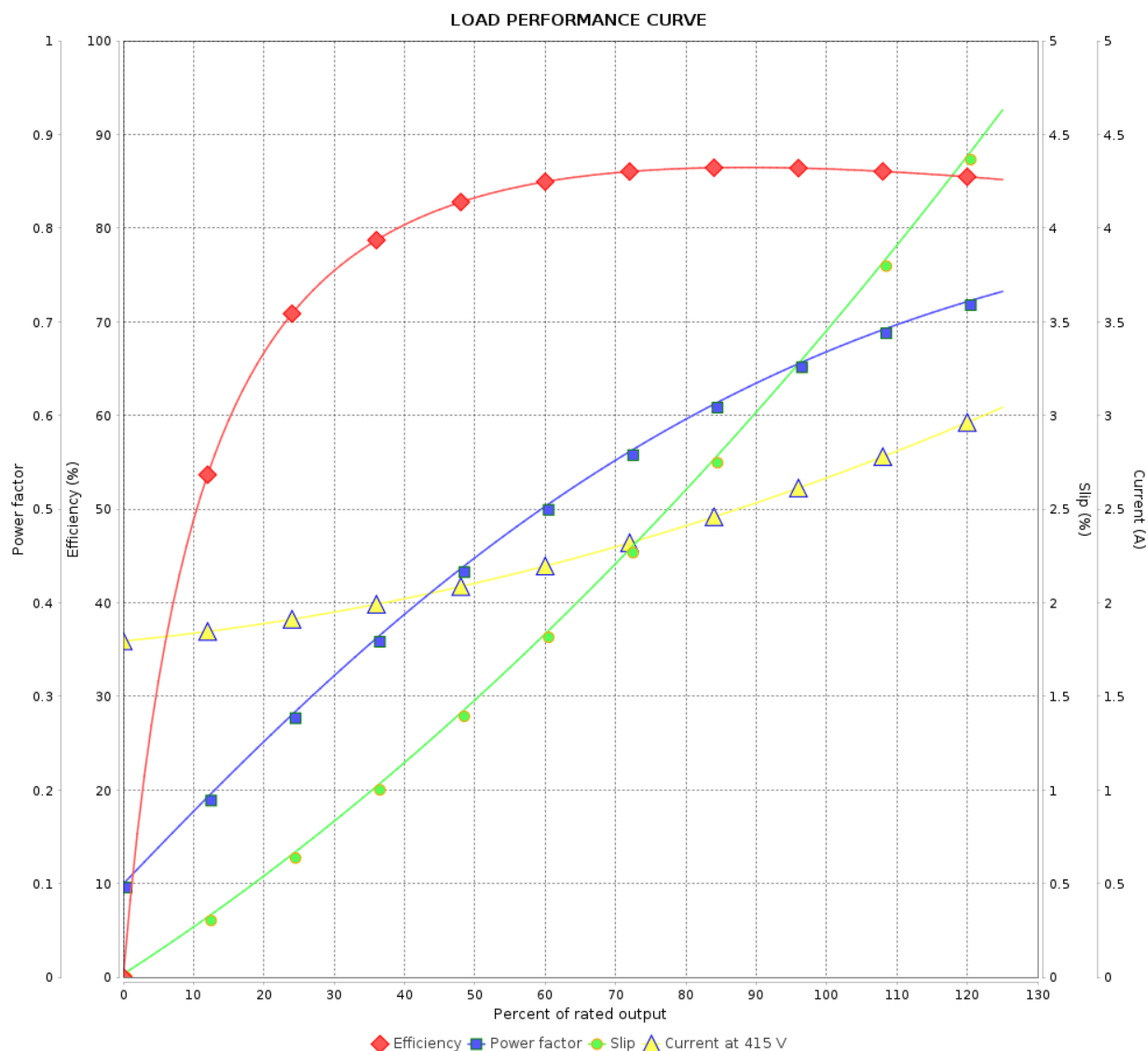
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12744465

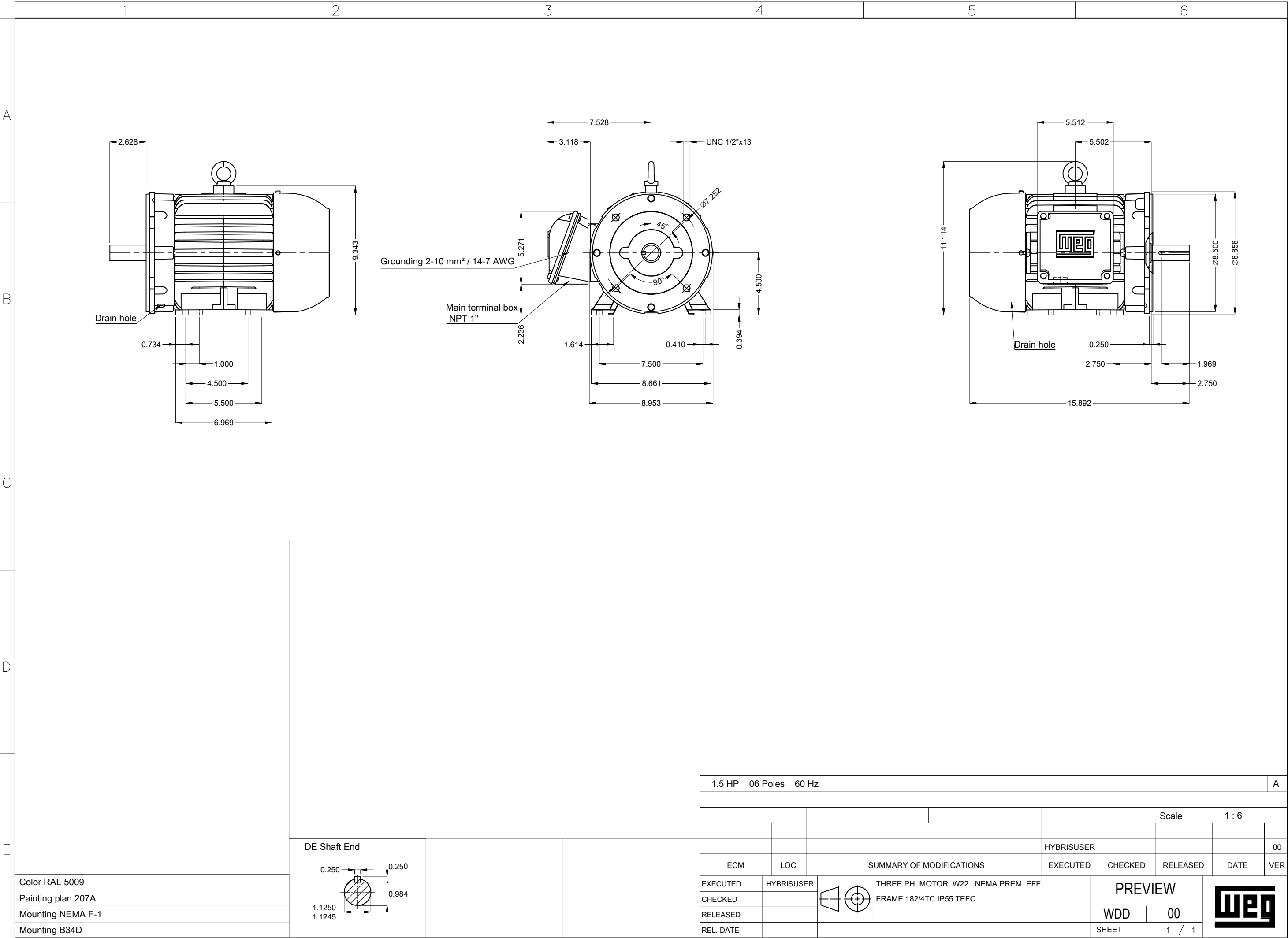


Performance : 415 V 50 Hz 6P IE4

Rated current : 2.64 A
LRC : 7.4
Rated torque : 1.13 kgfm
Locked rotor torque : 330 %
Breakdown torque : 370 %
Rated speed : 965 rpm

Moment of inertia (J) : 0.0206 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				6 / 6	
Date					



Dimensions in inches

A3