

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12385057

Frame : 254/6T	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 : 138 kg
Protection degree : IP56	Moment of inertia (J) : 0.1652 kgm ²
Design : B	

Output [HP]	7.5	7.5	7.5	7.5
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	9.48	11.4	10.8	10.5
L. R. Amperes [A]	63.5	58.1	61.6	64.0
LRC [A]	6.7x(Code H)	5.1x(Code F)	5.7x(Code G)	6.1x(Code H)
No load current [A]	4.50	4.50	4.75	4.95
Rated speed [RPM]	1175	970	970	975
Slip [%]	2.08	3.00	3.00	2.50
Rated torque [kgfm]	4.62	5.61	5.61	5.58
Locked rotor torque [%]	240	160	190	210
Breakdown torque [%]	290	210	229	250
Service factor	1.25	1.00	1.15	1.15
Temperature rise	80 K	105 K	105 K	80 K
Locked rotor time	54s (cold) 30s (hot)	48s (cold) 27s (hot)	48s (cold) 27s (hot)	48s (cold) 27s (hot)
Noise level ²	59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)
Efficiency (%)	25%			
	50%	89.5	89.5	89.5
	75%	90.2	89.5	89.5
	100%	91.0	89.5	90.2
Power Factor	25%			
	50%	0.63	0.70	0.64
	75%	0.74	0.79	0.75
	100%	0.80	0.83	0.81

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

Losses (%)	P1 (0,9;1,0)	10.9	14.5	13.0	12.0
	P2 (0,5;1,0)	9.4	13.0	11.5	10.5
	P3 (0,25;1,0)	8.9	12.4	11.0	10.0
	P4 (0,9;0,5)	5.6	7.2	6.5	6.1
	P5 (0,5;0,5)	4.0	5.4	4.8	4.4
	P6 (0,5;0,25)	2.9	3.8	3.4	3.2
	P7 (0,25;0,25)	2.0	2.9	2.5	2.3

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 C3	6209 C3	Max. traction : 150 kgf
Sealing :	Inpro/Seal	Inpro/Seal	Max. compression : 288 kgf
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	13 g	9 g	
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	30/10/2024		Page 1 / 6	Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	30/10/2024				

LOAD PERFORMANCE CURVE

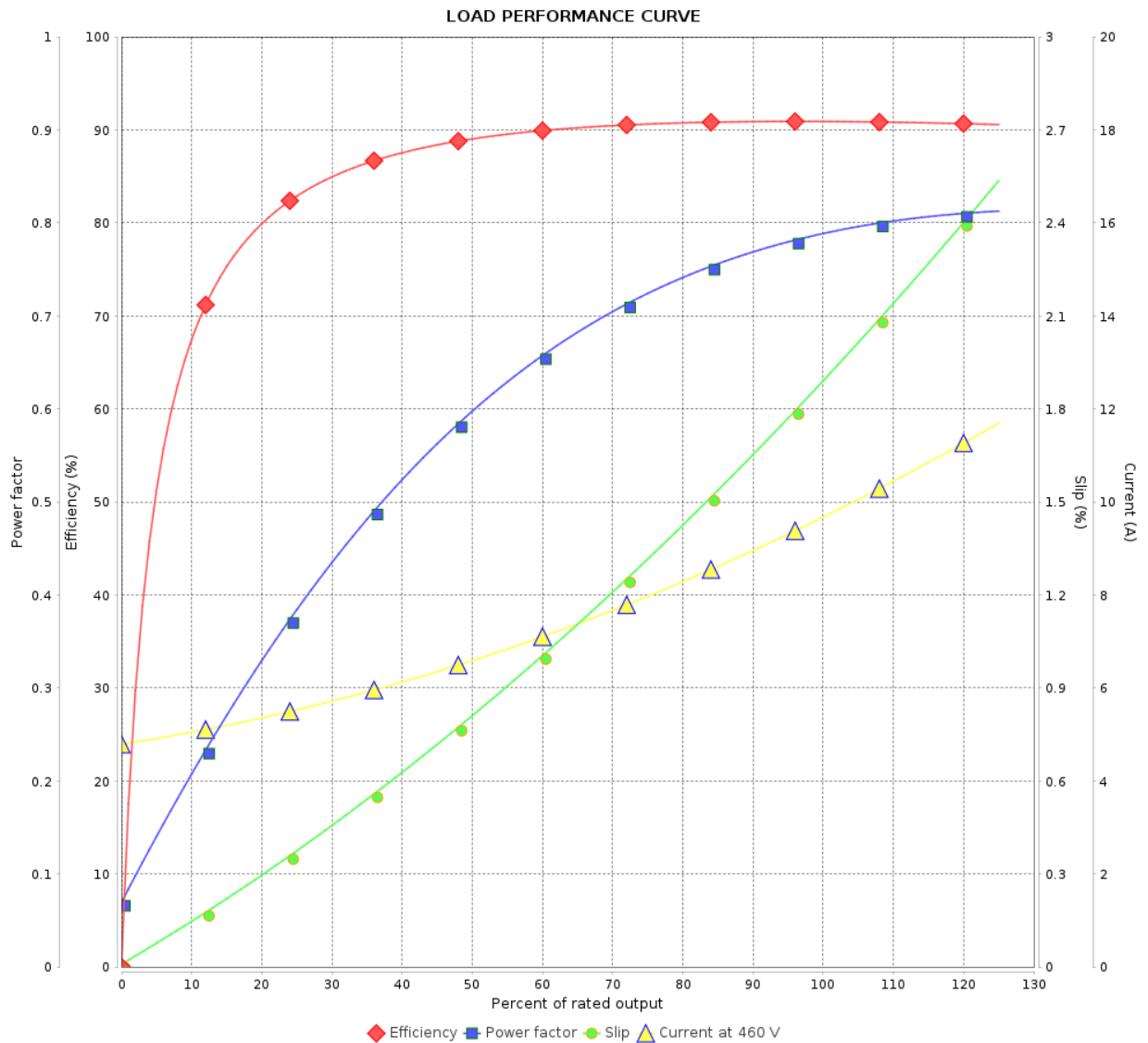
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12385057



Performance : 460 V 60 Hz 6P

Rated current : 9.48 A
LRC : 6.7
Rated torque : 4.62 kgfm
Locked rotor torque : 240 %
Breakdown torque : 290 %
Rated speed : 1175 rpm

Moment of inertia (J) : 0.1652 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		Page 3 / 6Revision		
Checked by				
Date	30/10/2024			

LOAD PERFORMANCE CURVE

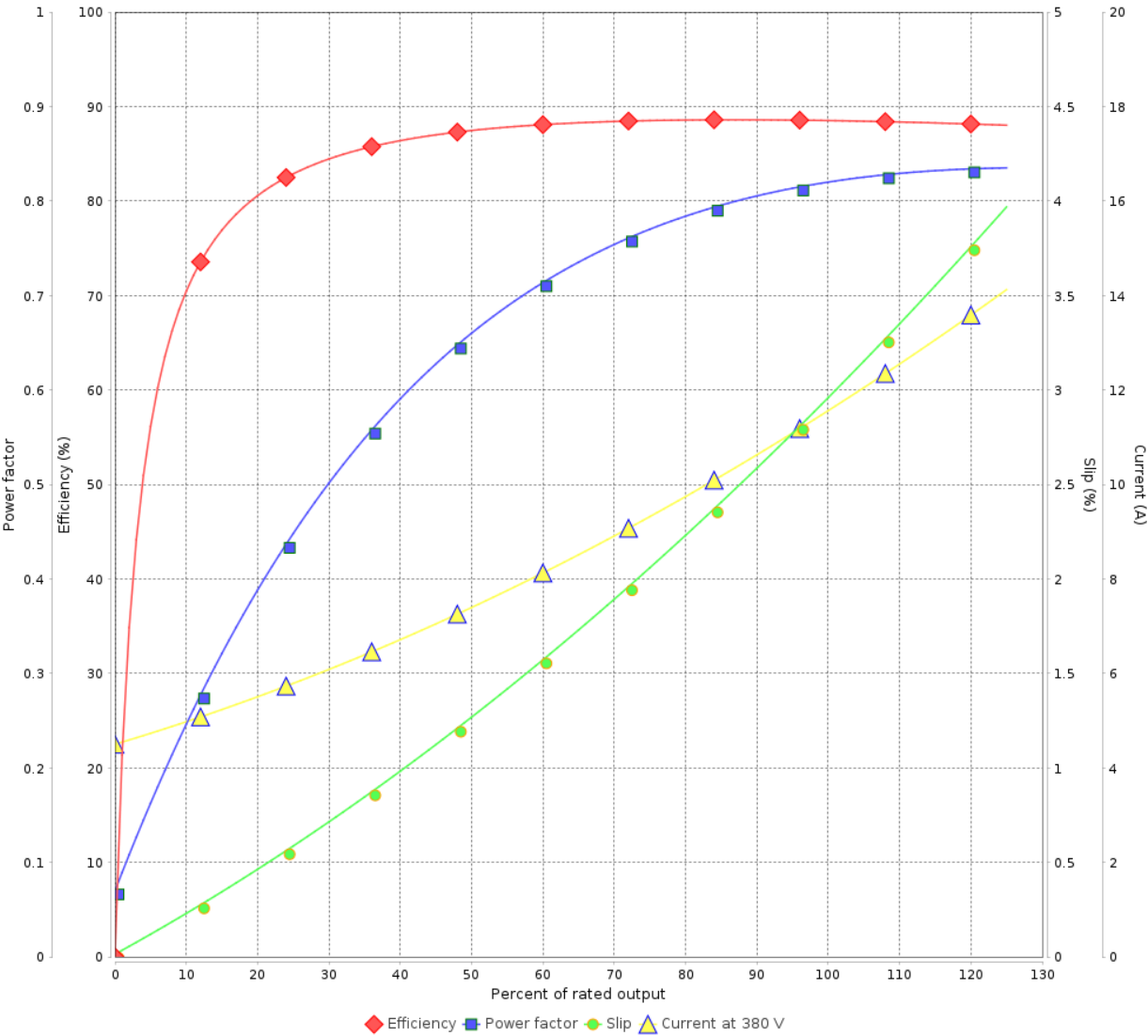
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12385057

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current	: 11.4 A	Moment of inertia (J)	: 0.1652 kgm ²
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 5.61 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 970 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 6 Revision			
Checked by					
Date	30/10/2024				

LOAD PERFORMANCE CURVE

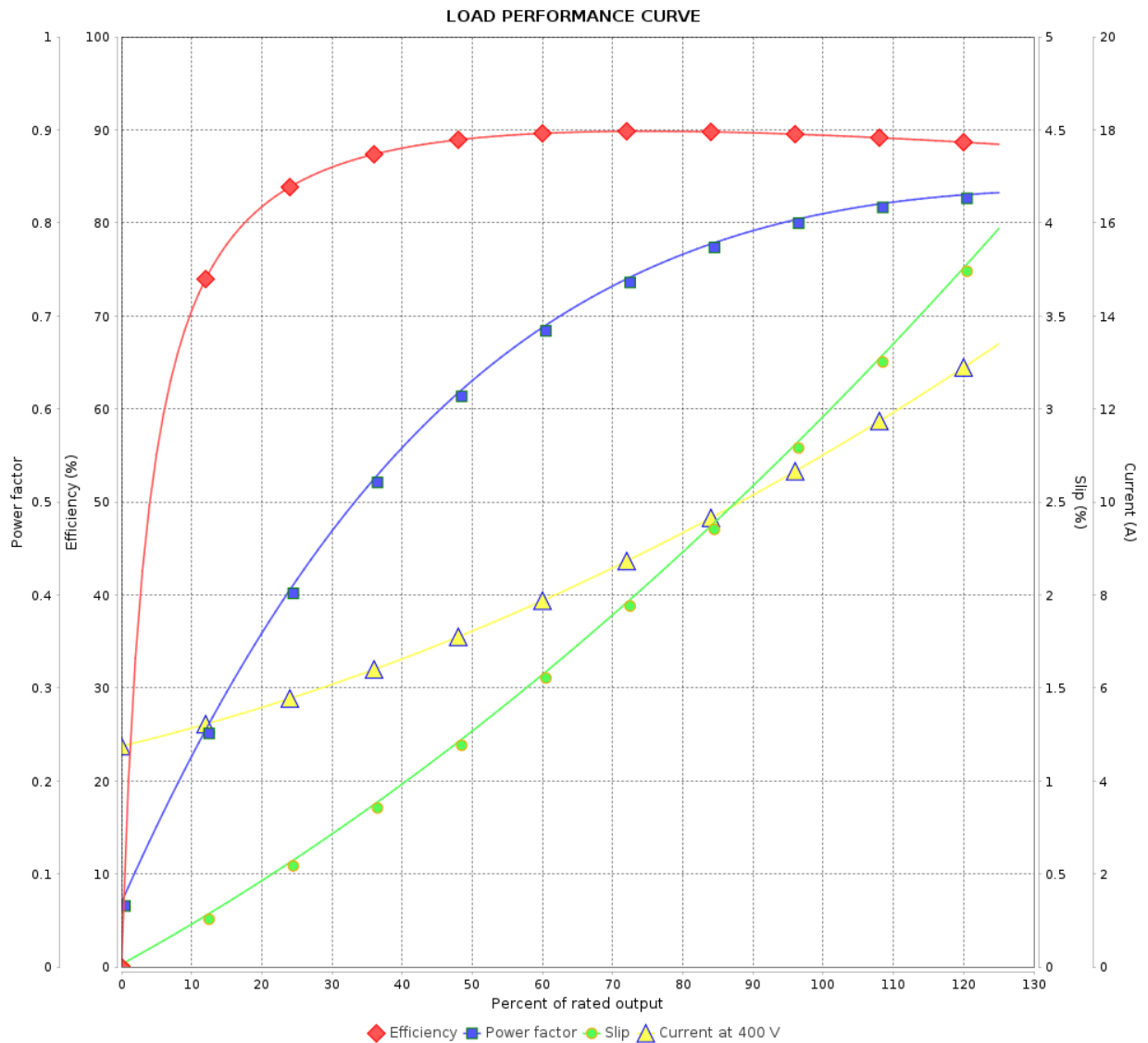
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12385057



Performance : 400 V 50 Hz 6P IE3

Rated current : 10.8 A
LRC : 5.7
Rated torque : 5.61 kgfm
Locked rotor torque : 190 %
Breakdown torque : 229 %
Rated speed : 970 rpm

Moment of inertia (J) : 0.1652 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6Revision		
Checked by				
Date	30/10/2024			

LOAD PERFORMANCE CURVE

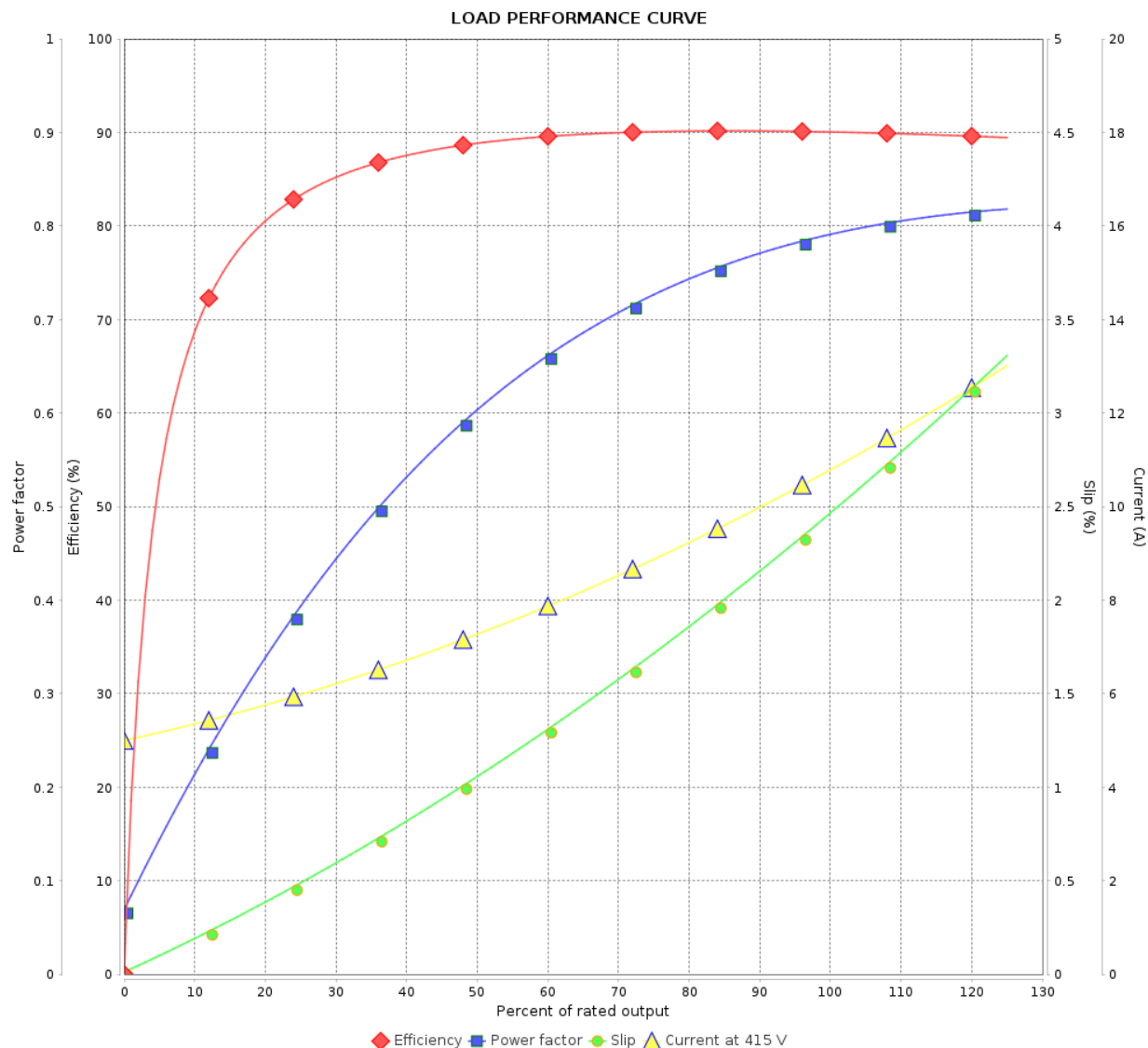
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12385057

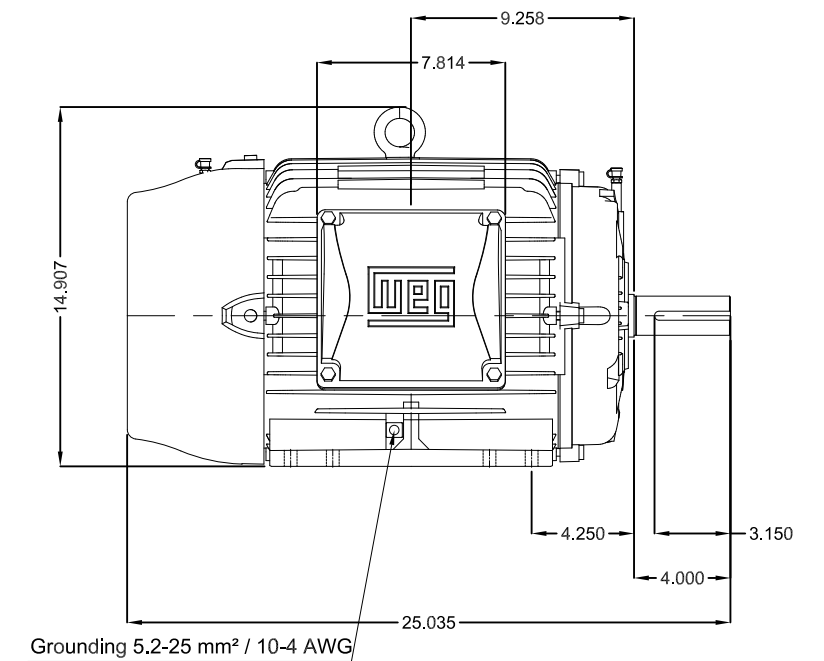
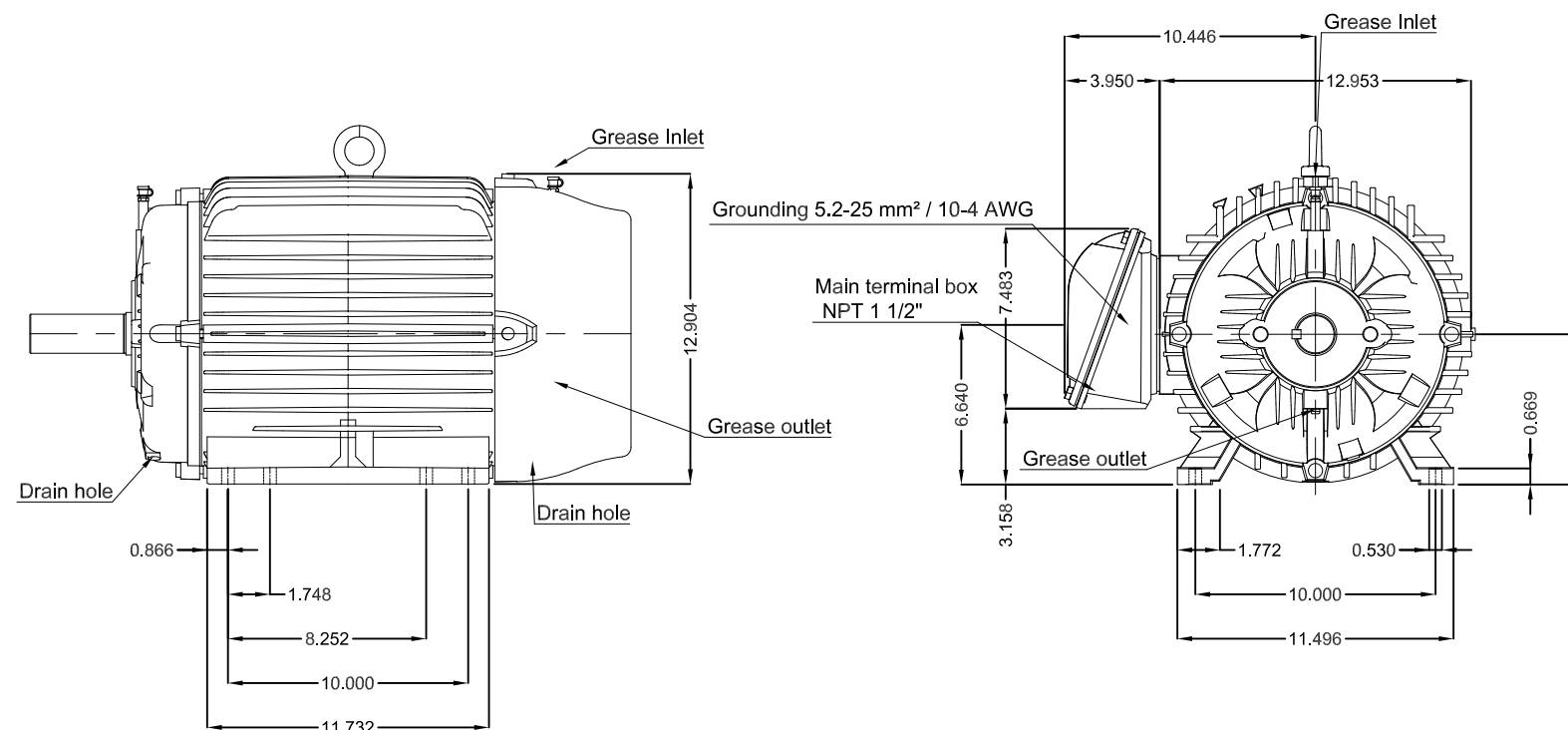


Performance : 415 V 50 Hz 6P IE3

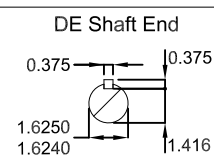
Rated current : 10.5 A
LRC : 6.1
Rated torque : 5.58 kgfm
Locked rotor torque : 210 %
Breakdown torque : 250 %
Rated speed : 975 rpm



Moment of inertia (J) : 0.1652 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 6 / 6	Revision
Checked by					
Date	30/10/2024				



Grease outlet according to IEEE841
Color RAL 5009
Painting plan 202E
Mounting B3R(D)



7.5 HP 06 Poles 60 Hz										A	
							HYBRISUSER			00	
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF. FRAME 254/6T IP56 TEFC					PREVIEW			
CHECKED								WDD	00		
RELEASED											
REL. DATE											
							SHEET		/		