

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12810583

Frame	: 143/5TD	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 2.23 A	Protection degree	: IP55
L. R. Amperes	: 18.5 A	Cooling method	: IC411 - TEFC
LRC	: 8.3x(Code L)	Mounting	: F-1
No load current	: 1.30 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1750 rpm	Noise level <sup>2</sup>	: 51.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 0.829 kgfm	Approx. weight <sup>3</sup>	: 25.9 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 320 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	85.5	86.5	86.5	Max. traction	: 63 kgf
Power Factor	0.57	0.70	0.78	Max. compression	: 88 kgf

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
15.0	12.8	12.1	8.4	6.0	4.7	3.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

### Notes

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		Page		Revision
Checked by		1 / 2		
Date	20/10/2024			

# LOAD PERFORMANCE CURVE

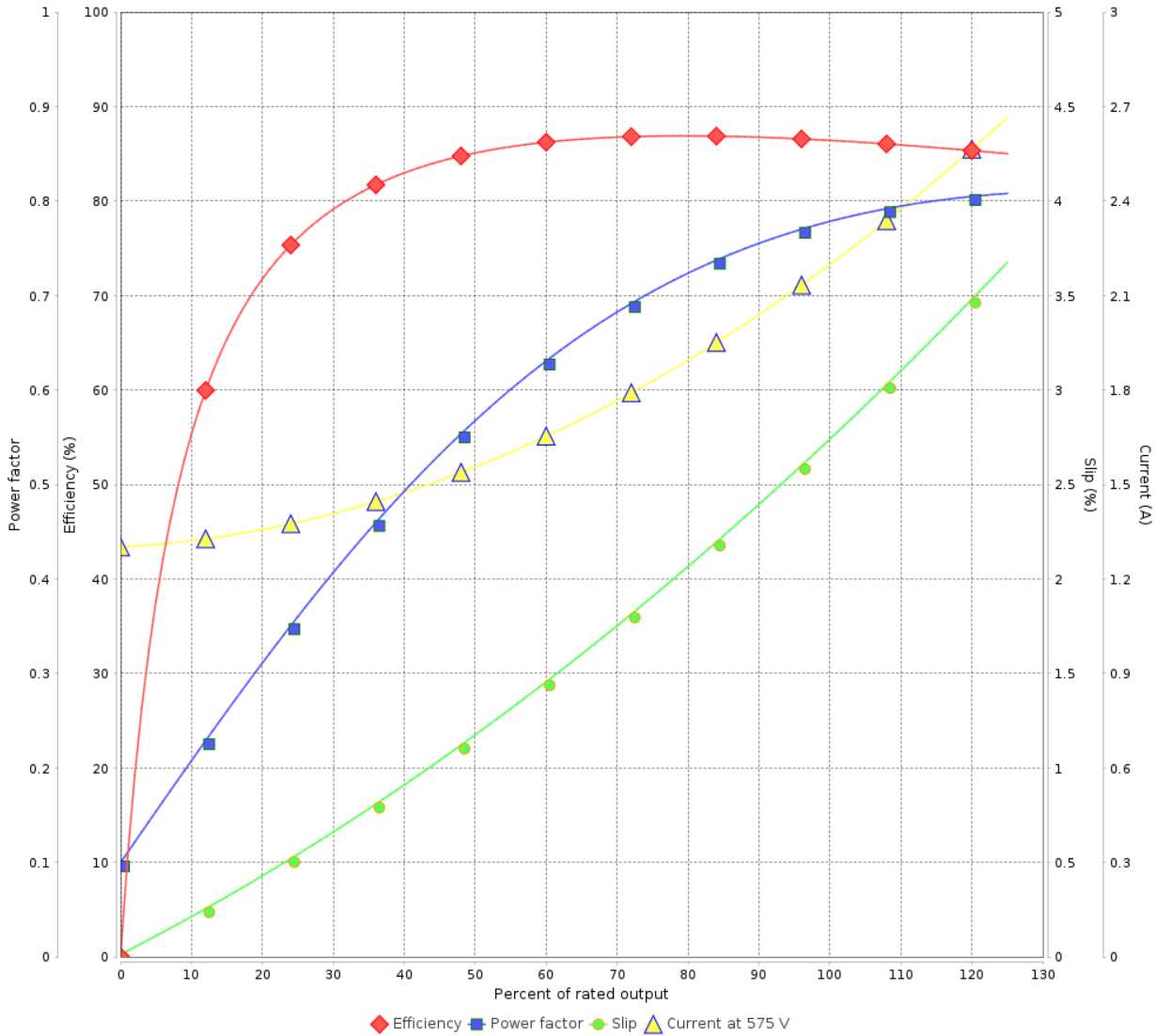
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 12810583

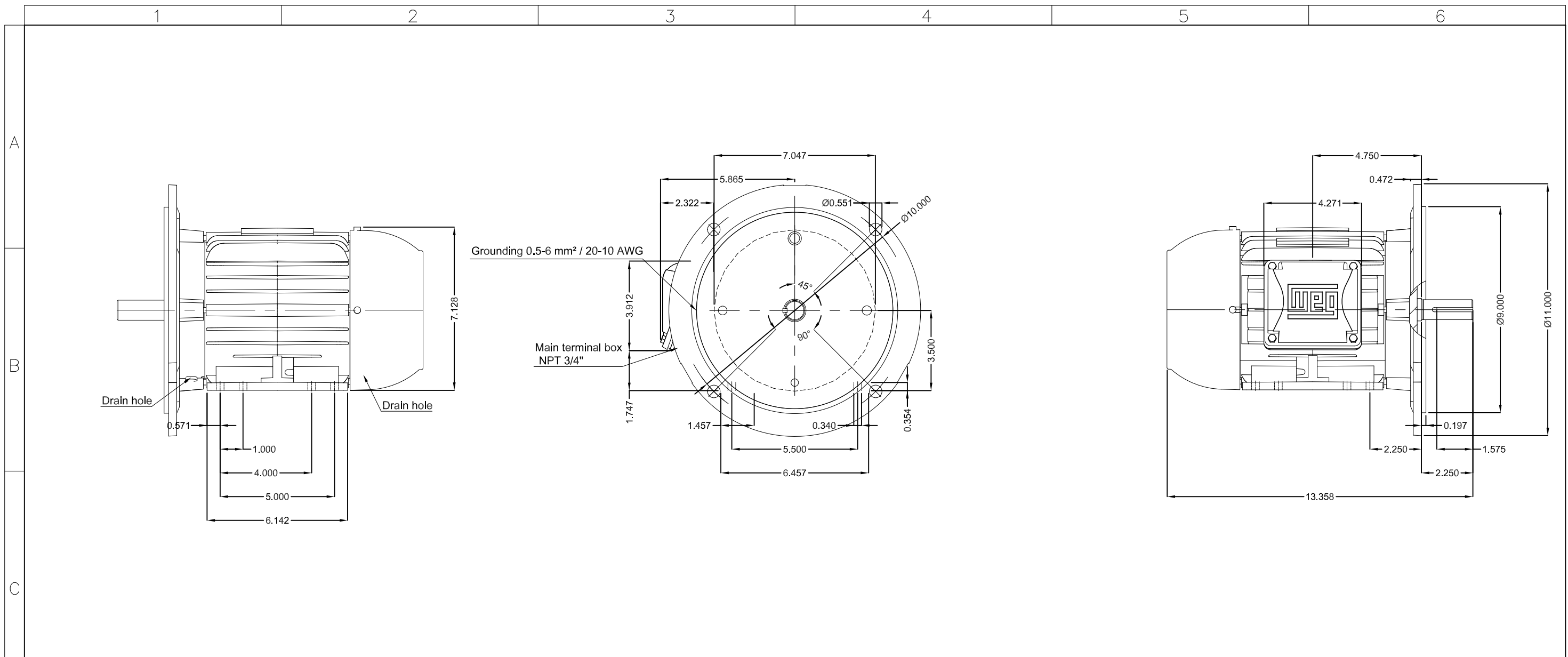
LOAD PERFORMANCE CURVE



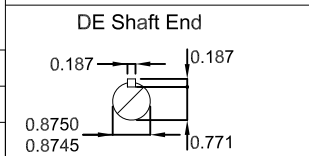
Performance : 575 V 60 Hz 4P


Rated current	: 2.23 A	Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 0.829 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 2	Revision
Checked by				
Date	20/10/2024			



Packing - crate  
 Color RAL 5009  
 Painting plan 207A  
 Mounting NEMA F-1  
 Mounting B35R(D)



2 HP 04 Poles 60 Hz										A
HYBRISUSER										00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.								
CHECKED		FRAME 143/5TD IP55 TEFC								
RELEASED										
REL. DATE										
						PREVIEW		WDD 00		
						SHEET /				