

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

# LOAD PERFORMANCE CURVE

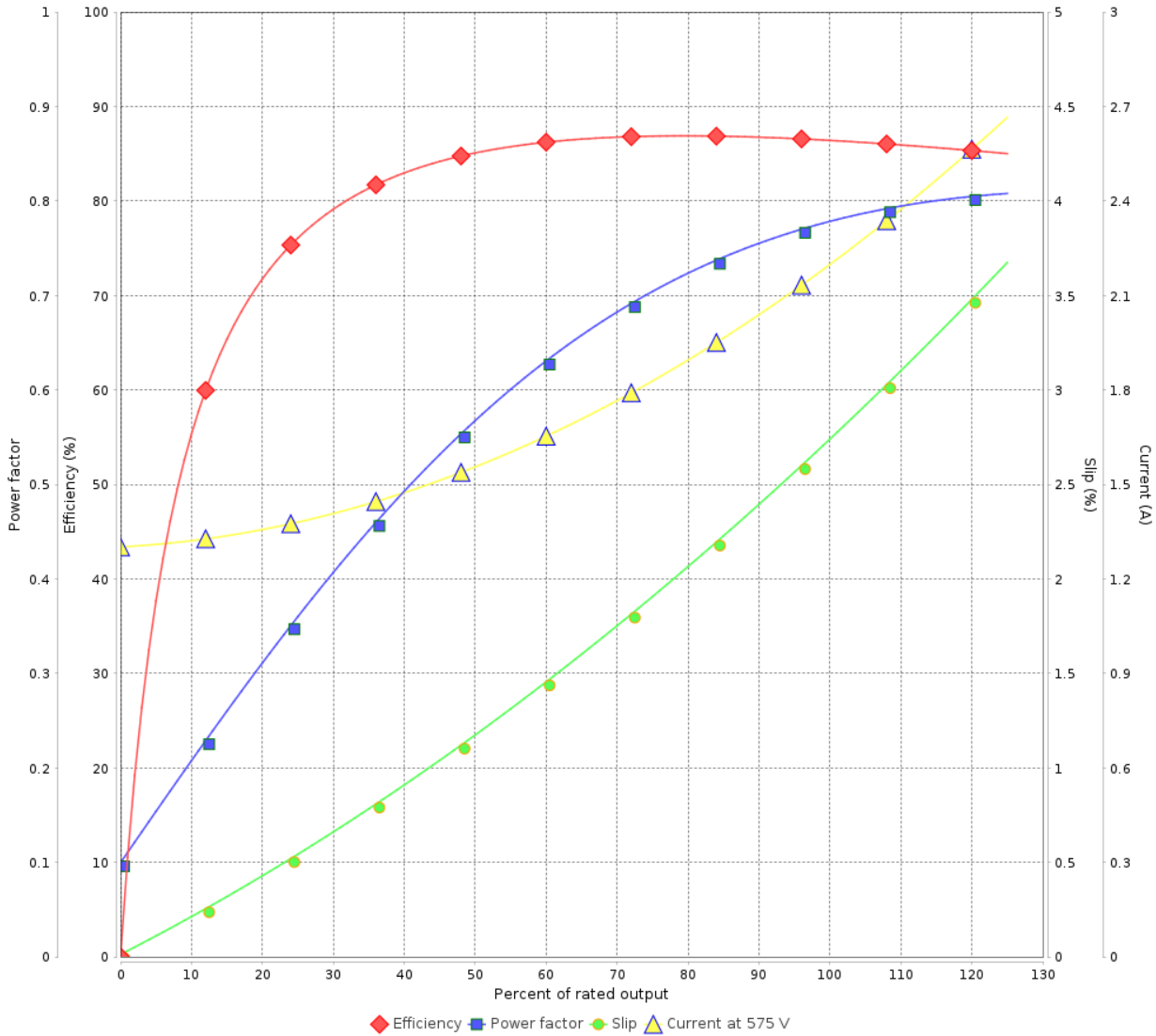
Three Phase Induction Motor - Squirrel Cage



Customer :

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

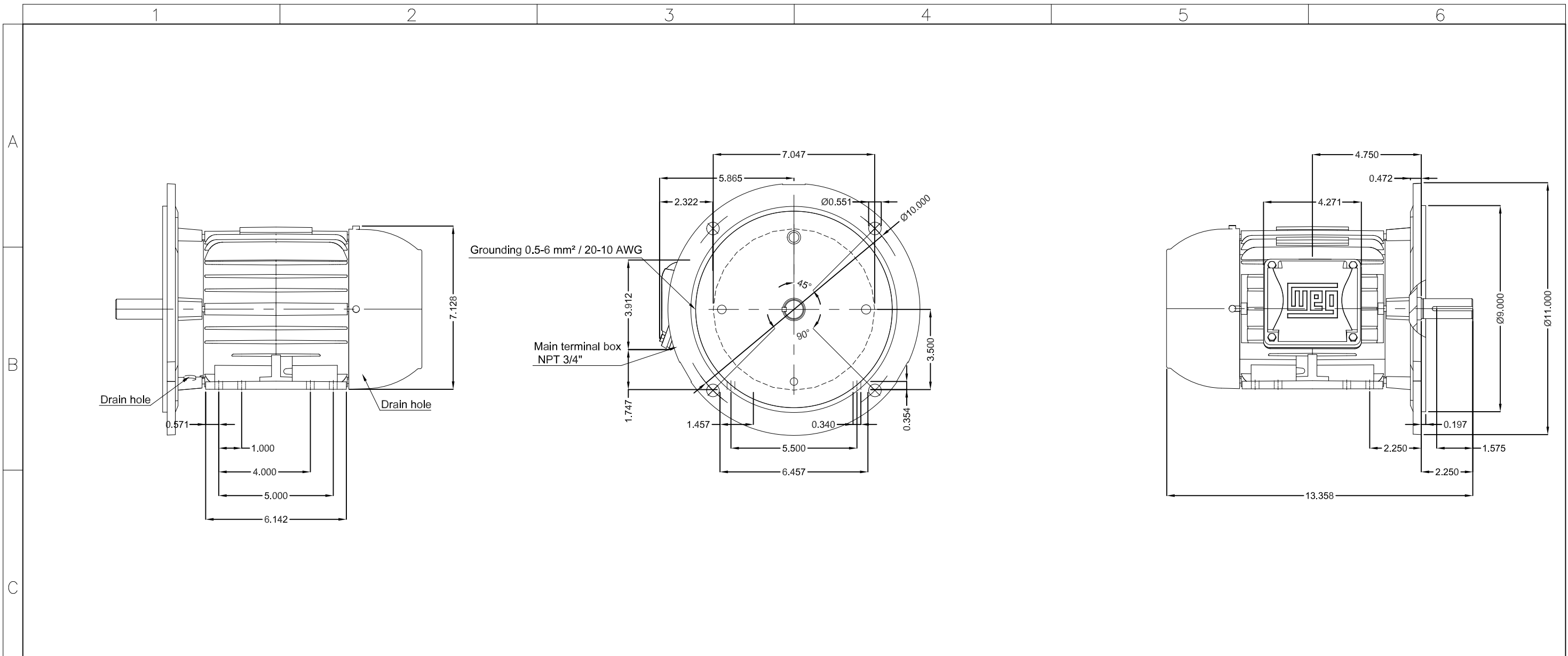
LOAD PERFORMANCE CURVE



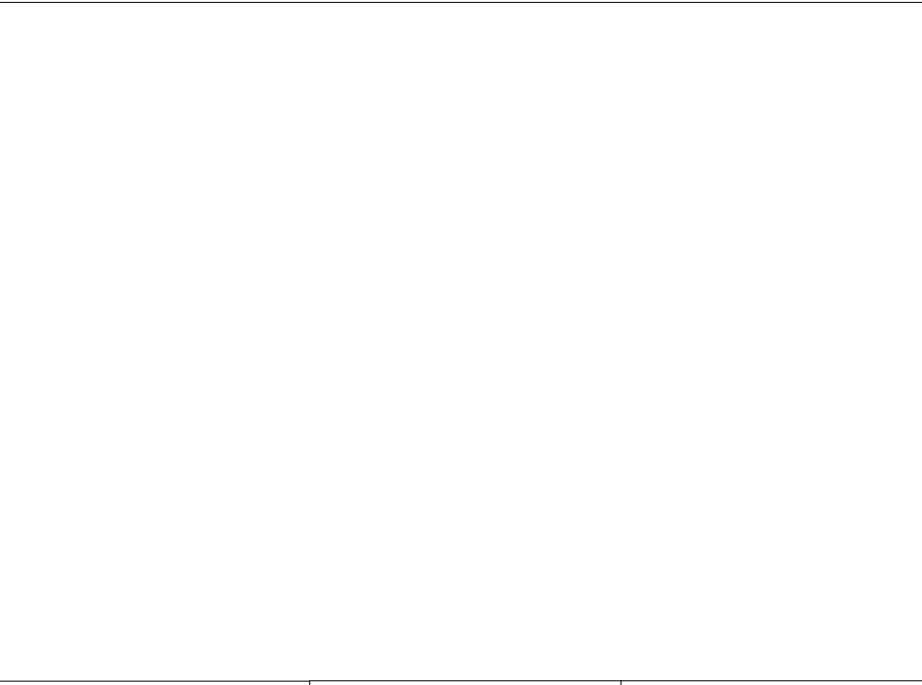
Performance : 575 V 60 Hz 4P

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
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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.					PREVIEW				
CHECKED		FRAME 143/5TD IP55 TEFC					WDD   00				
RELEASED							SHEET /				
REL. DATE											

DE Shaft End