

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13293056

Frame	: 56	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 12.5 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0036 kgm <sup>2</sup>
Design	: A		

Output [HP]	1	1	1
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.32/1.66	3.68/1.84	3.58/1.90
L. R. Amperes [A]	25.6/12.8	23.2/11.6	24.0/12.7
LRC [A]	7.7x(Code M)	6.3x(Code J)	6.7x(Code L)
No load current [A]	2.40/1.20	2.35/1.18	2.88/1.53
Rated speed [RPM]	1760	1445	1455
Slip [%]	2.22	3.67	3.00
Rated torque [kgfm]	0.412	0.502	0.499
Locked rotor torque [%]	270	200	250
Breakdown torque [%]	300	260	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	74.0	69.9
	75%	78.5	75.4
	100%	80.0	77.3
Power Factor	25%		
	50%	0.48	0.47
	75%	0.62	0.61
	100%	0.71	0.71

	Drive end	Non drive end	Foundation loads
Bearing type	: 6204 ZZ	6202 ZZ	Max. traction : 43 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 56 kgf
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

### Notes

USABLE @208V 3.67A SF 1.00 SFA 3.67A

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				
Date	11/05/2022			
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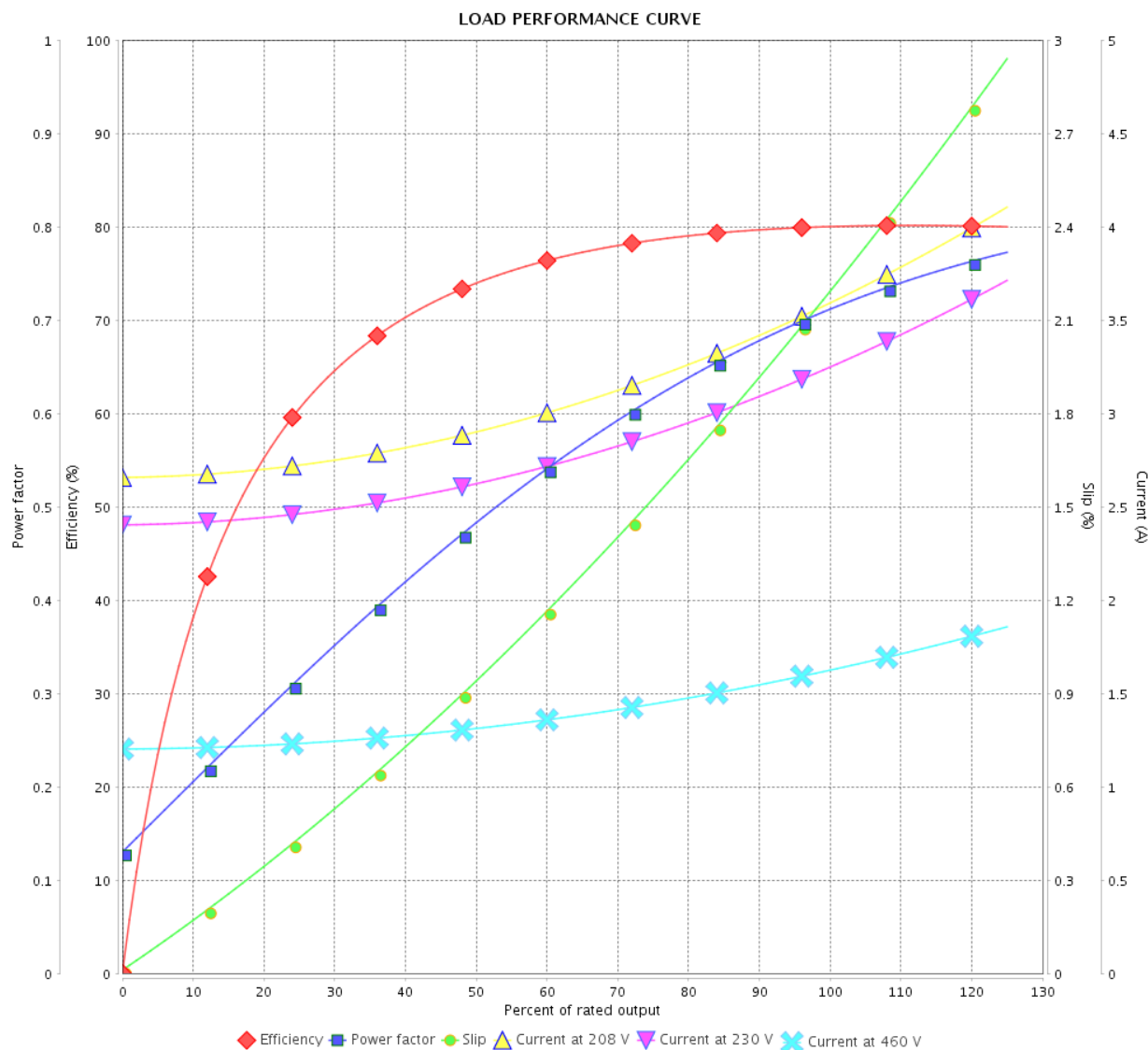
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13293056



Performance : 230/460 V 60 Hz 4P

Rated current : 3.32/1.66 A  
 LRC : 7.7  
 Rated torque : 0.412 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : A

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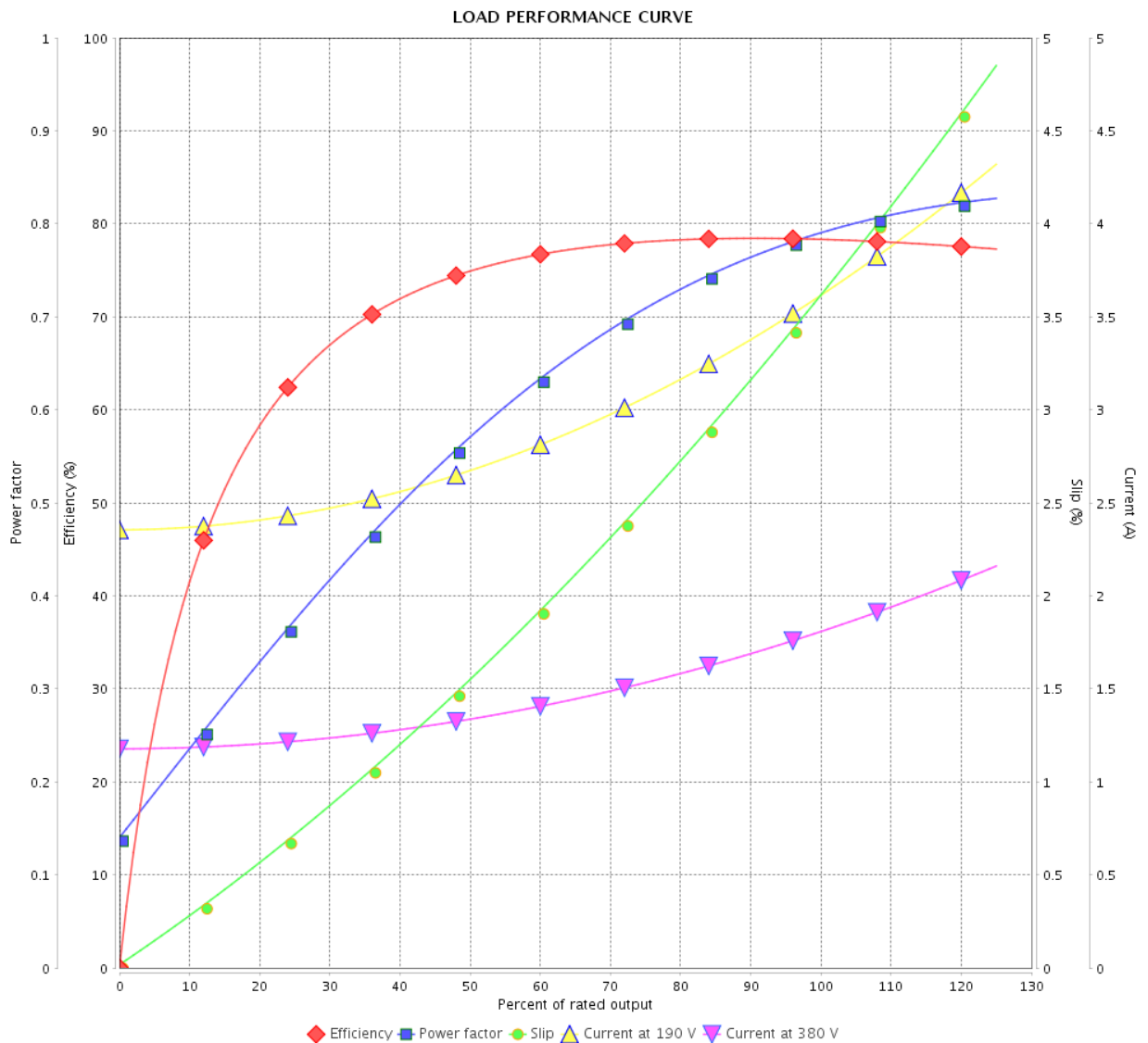
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13293056



Performance : 190/380 V 50 Hz 4P

Rated current : 3.68/1.84 A  
 LRC : 6.3  
 Rated torque : 0.502 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 260 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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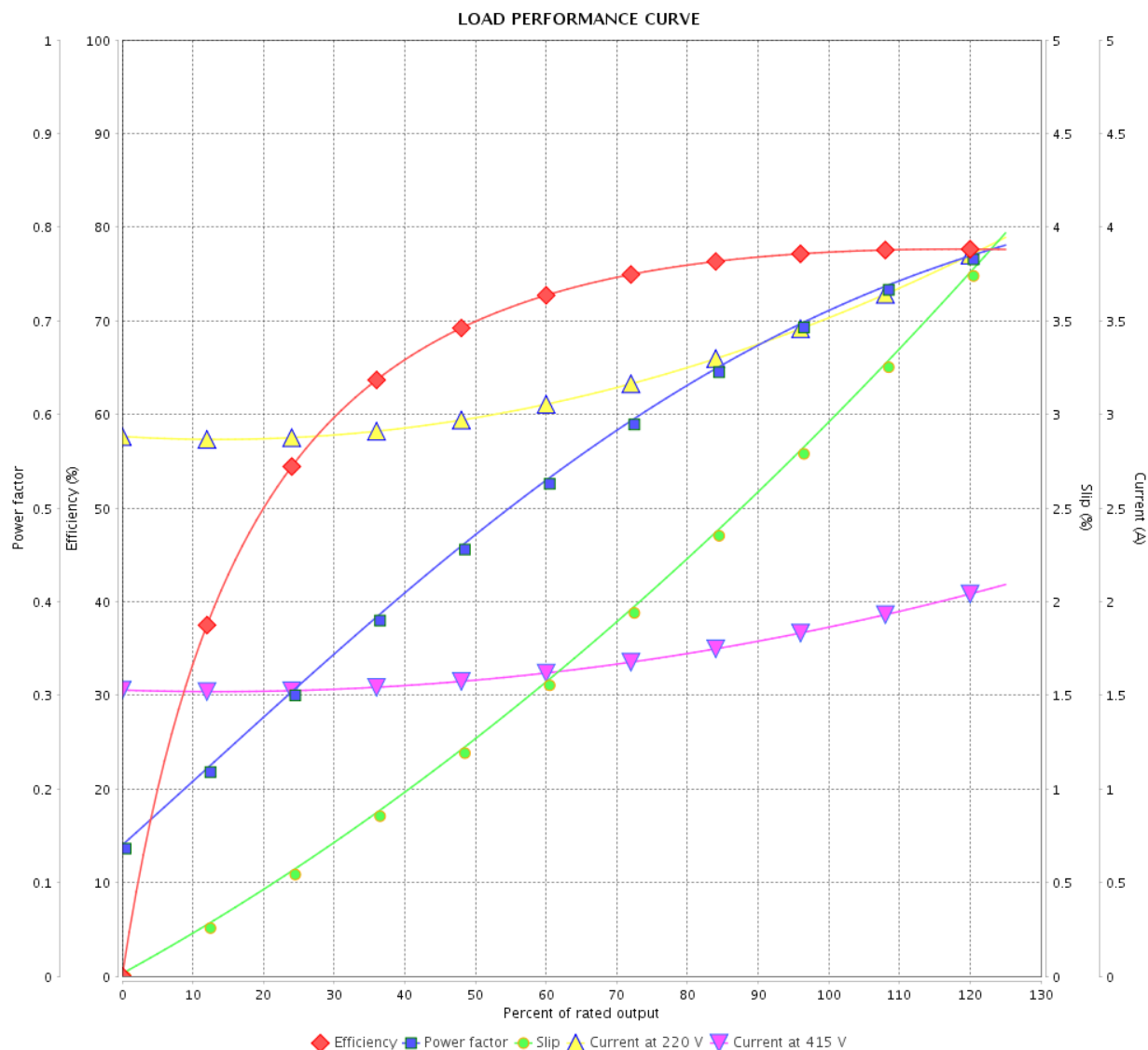
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 13293056

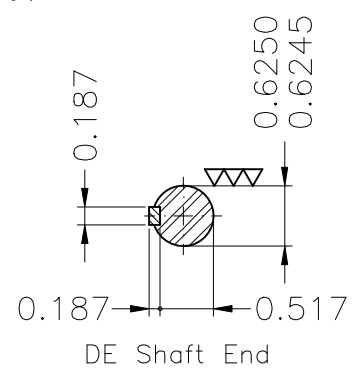
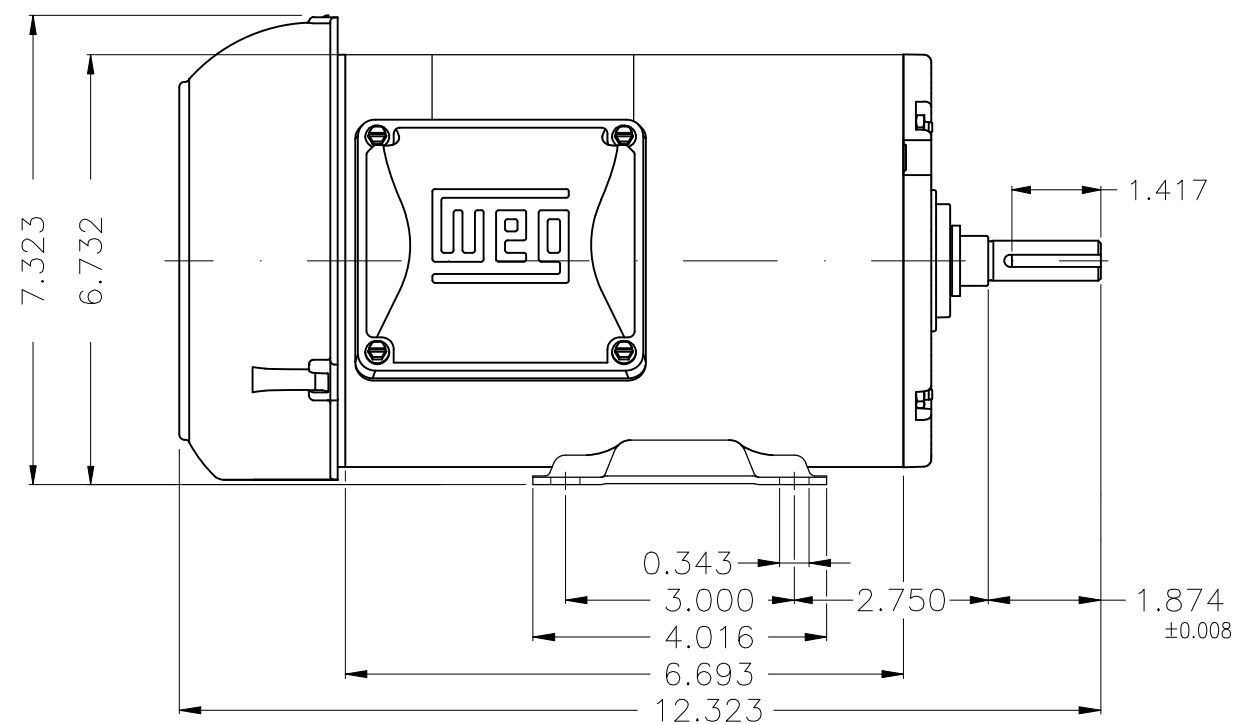


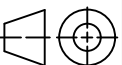

Performance : 220/415 V 50 Hz 4P

Rated current : 3.58/1.90 A  
 LRC : 6.7  
 Rated torque : 0.499 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 310 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B3R(D)									
						HYBRISUSER			00
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR ROLLED STEEL FRAME 56 IP55 TEFC			PREVIEW WDD   00			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			