

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997115

Frame	: 56HC	Cooling method	: IC01 - ODP
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	: 18.1 kg
Design	: A	Moment of inertia (J)	: 0.0054 kgm ²

Output [HP]	3	3	3
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	7.18/3.59	8.78/4.39	7.56/4.01
L. R. Amperes [A]	57.4/28.7	53.6/26.8	56.0/29.7
LRC [A]	8.0x(Code J)	6.1x(Code G)	7.4x(Code J)
No load current [A]	2.60/1.30	2.60/1.30	2.91/1.54
Rated speed [RPM]	3480	2825	2860
Slip [%]	3.33	5.83	4.67
Rated torque [kgfm]	0.626	0.771	0.761
Locked rotor torque [%]	229	190	240
Breakdown torque [%]	300	229	270
Service factor		1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	16s (cold) 9s (hot)	16s (cold) 9s (hot)	14s (cold) 8s (hot)
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	86.2
	75%	85.5	85.9
	100%	85.5	83.9
Power Factor	25%		
	50%	0.76	0.76
	75%	0.86	0.86
	100%	0.90	0.91

Bearing type	: Drive end	Non drive end	Foundation loads
	: 6204 ZZ	6202 ZZ	
Sealing	: Without	Without	Max. traction : 57 kgf
	: Bearing Seal	Bearing Seal	
Lubrication interval	: -	-	Max. compression : 75 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes

USABLE @208V 7.94A SF 1.00 SFA 7.94A

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 1 / 4		
Checked by				
Date	11/05/2022			

LOAD PERFORMANCE CURVE

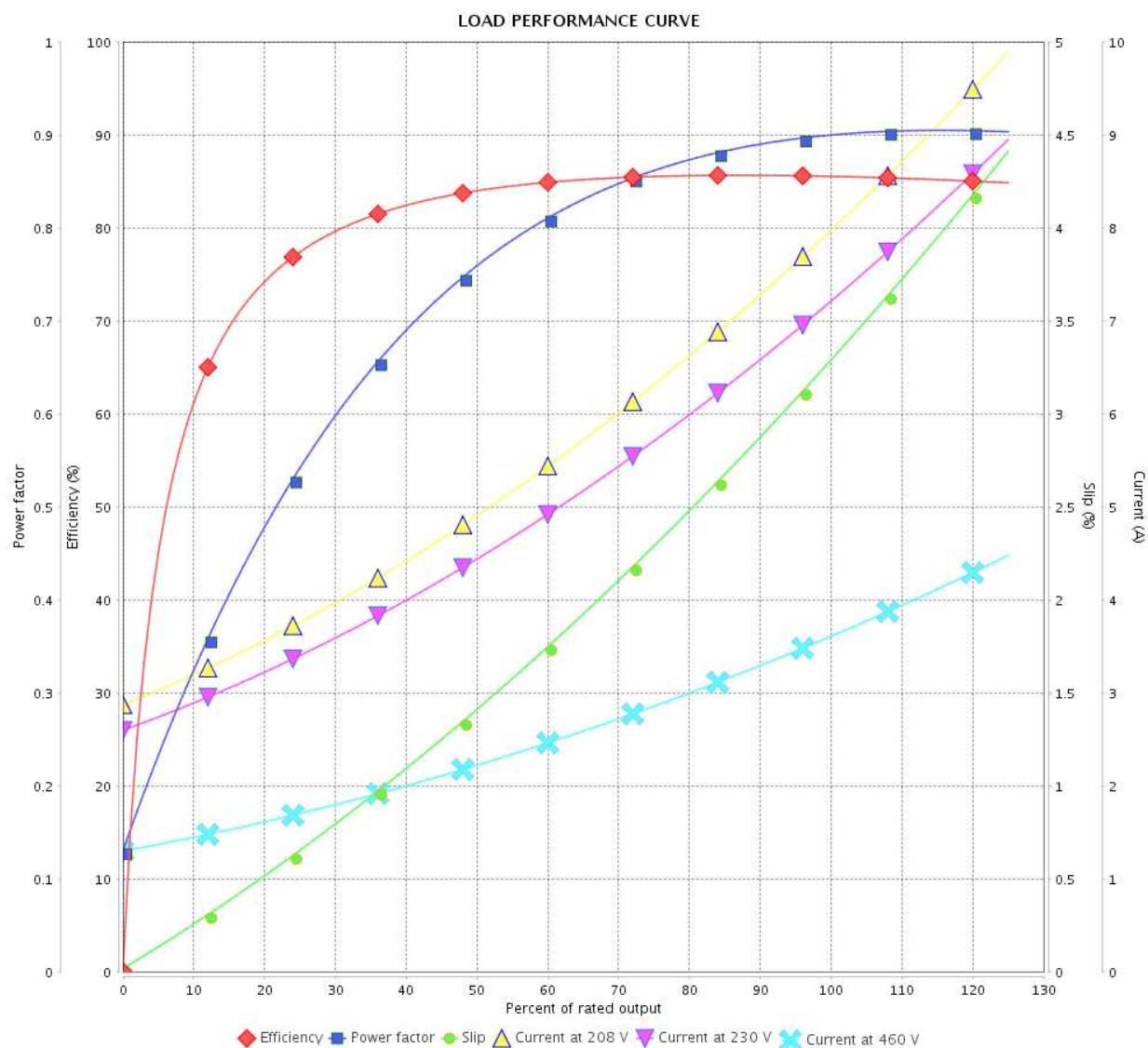
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997115



Performance : 230/460 V 60 Hz 2P

Rated current : 7.18/3.59 A
LRC : 8.0
Rated torque : 0.626 kgfm
Locked rotor torque : 229 %
Breakdown torque : 300 %
Rated speed : 3480 rpm

Moment of inertia (J) : 0.0054 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : A

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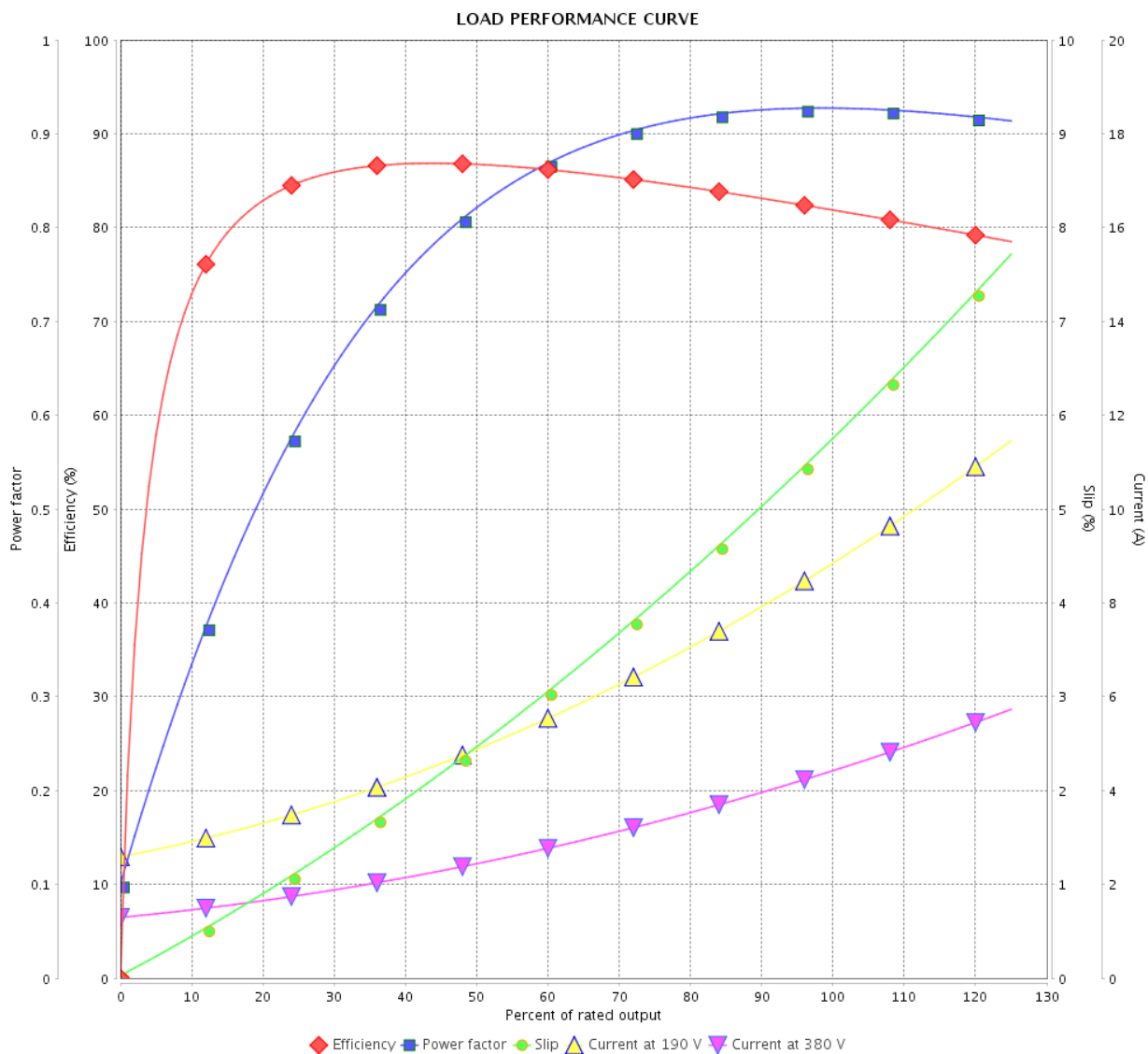
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997115



Performance : 190/380 V 50 Hz 2P

Rated current : 8.78/4.39 A
 LRC : 6.1
 Rated torque : 0.771 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.0054 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

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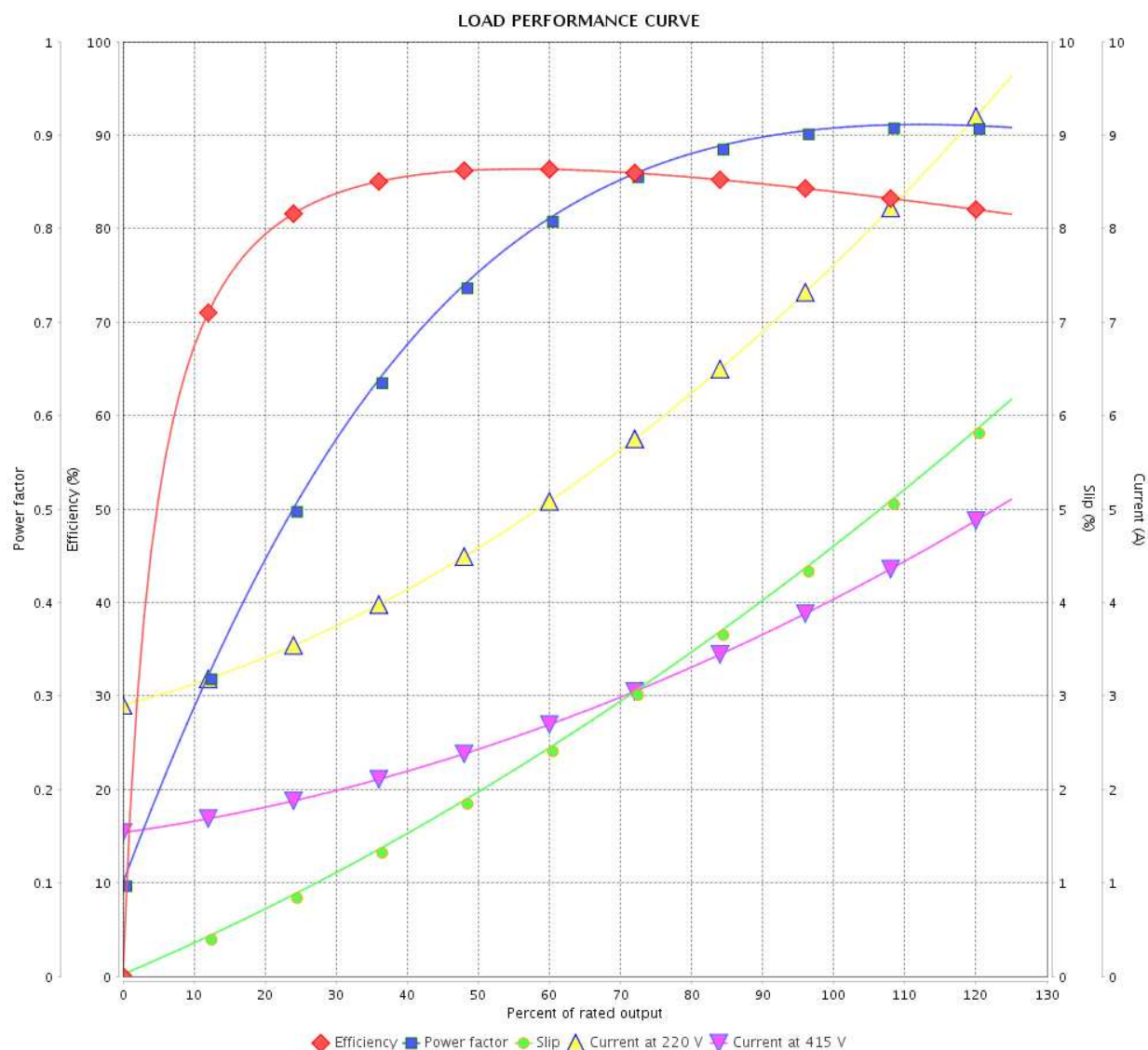
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997115

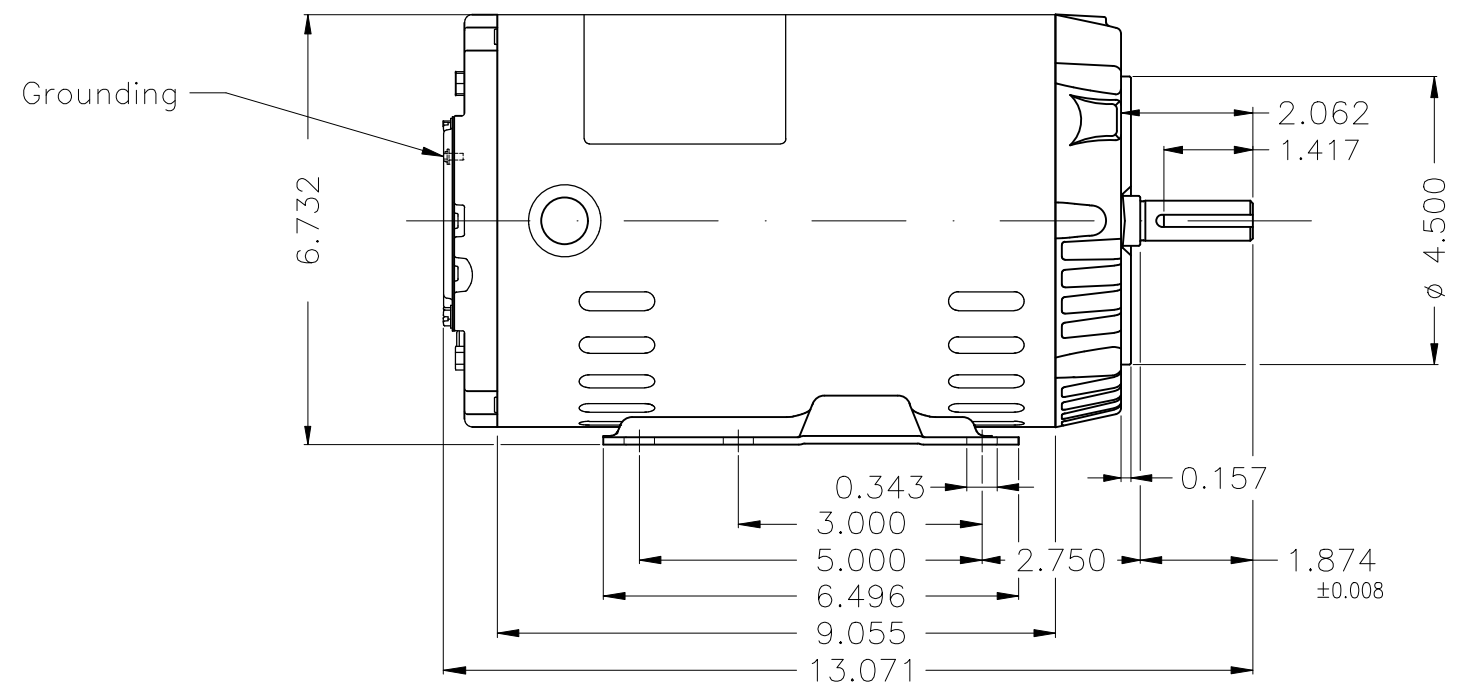
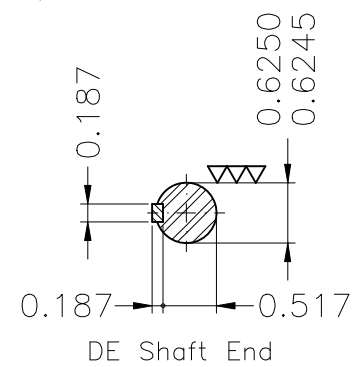
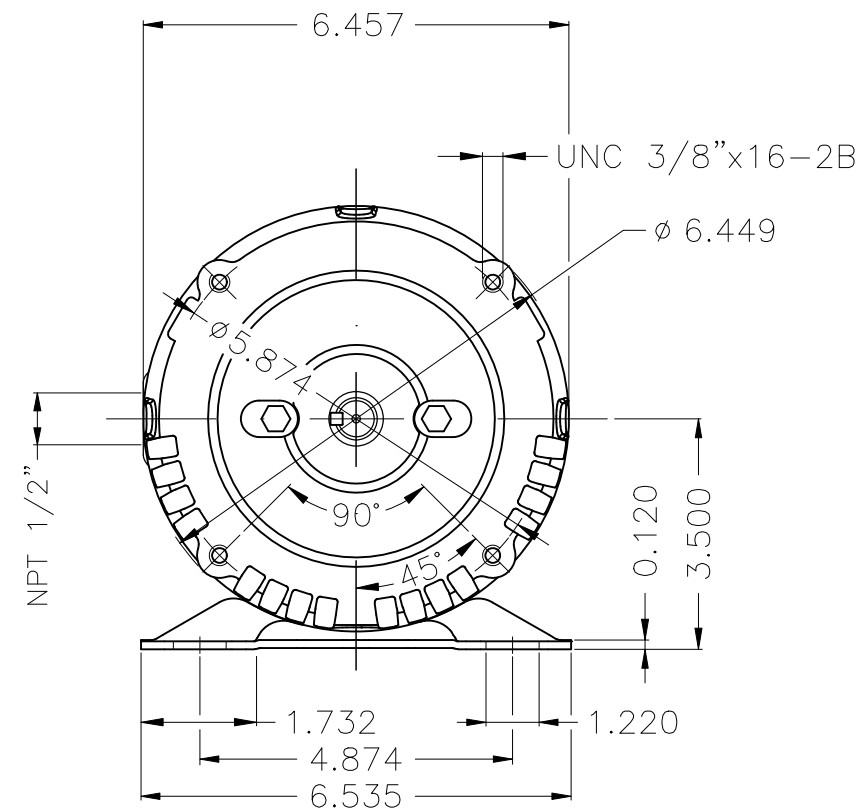


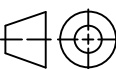
Performance : 220/415 V 50 Hz 2P

Rated current : 7.56/4.01 A
 LRC : 7.4
 Rated torque : 0.761 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0054 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

Rev.	Changes Summary		Performed	Checked	Date
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Color Munsell N 1 matte black									
Painting plan 207N									
Mounting B34D									
				HYBRISUSER					00
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 56HC IP21 ODP			PREVIEW WDD 00			
CHECKED									
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			