

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997241

Frame	: 56C	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	: 12.4 kg
Design	: A	Moment of inertia (J)	: 0.0036 kgm ²

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]	3.14/1.57	3.54/1.77	3.34/1.77
L. R. Amperes [A]	23.9/11.9	20.9/10.4	22.0/11.7
LRC [A]	7.6x(Code L)	5.9x(Code H)	6.6x(Code K)
No load current [A]	2.20/1.10	2.09/1.05	2.42/1.28
Rated speed [RPM]	1760	1440	1450
Slip [%]	2.22	4.00	3.33
Rated torque [kgfm]	0.412	0.504	0.501
Locked rotor torque [%]	280	180	229
Breakdown torque [%]	320	250	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	32s (cold) 18s (hot)	27s (cold) 15s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%		
	50%	78.5	76.1
	75%	82.5	79.9
	100%	83.5	80.6
Power Factor	25%		
	50%	0.49	0.49
	75%	0.63	0.64
	100%	0.72	0.73

Bearing type	: Drive end	Non drive end	Foundation loads
	: 6204 ZZ	6202 ZZ	
Sealing	: Without	Without	Max. traction : 42 kgf
	: Bearing Seal	Bearing Seal	
Lubrication interval	: -	-	Max. compression : 54 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		

Notes

USABLE @208V 3.47A SF 1.00 SFA 3.47A

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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Revision

LOAD PERFORMANCE CURVE

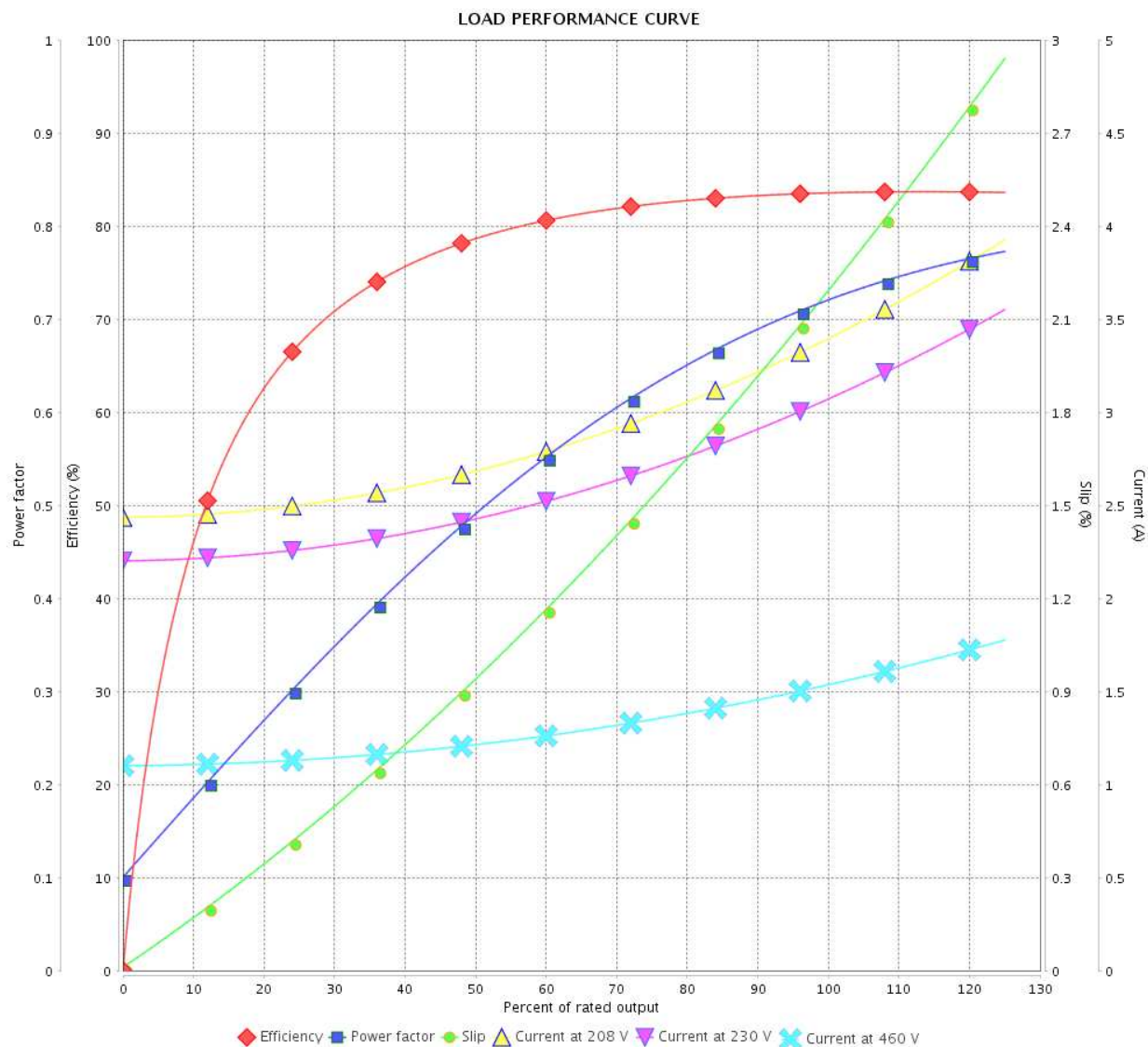
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997241



Performance : 230/460 V 60 Hz 4P

Rated current : 3.14/1.57 A
 LRC : 7.6
 Rated torque : 0.412 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 320 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0036 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

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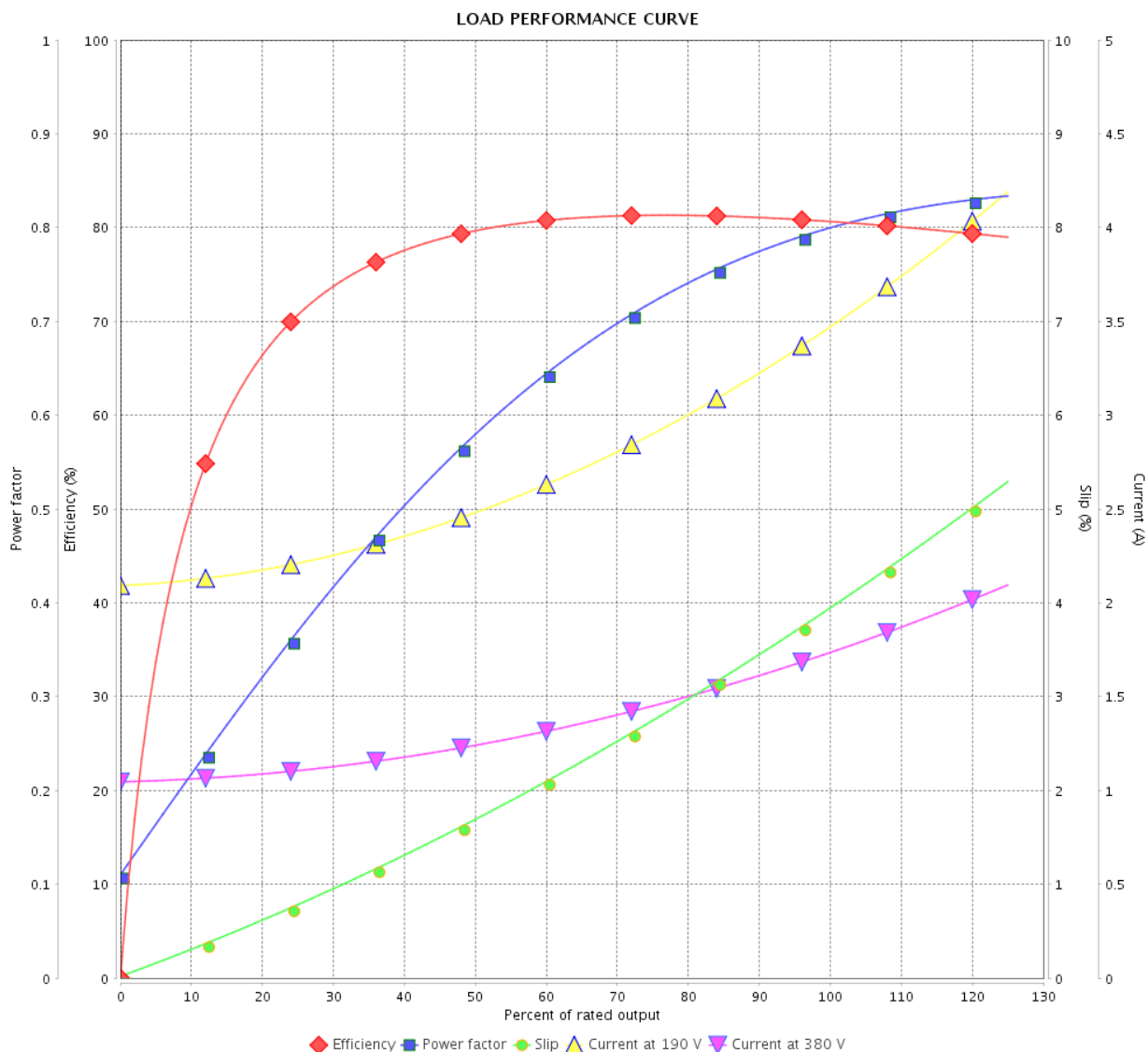
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997241



Performance : 190/380 V 50 Hz 4P

Rated current : 3.54/1.77 A
 LRC : 5.9
 Rated torque : 0.504 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0036 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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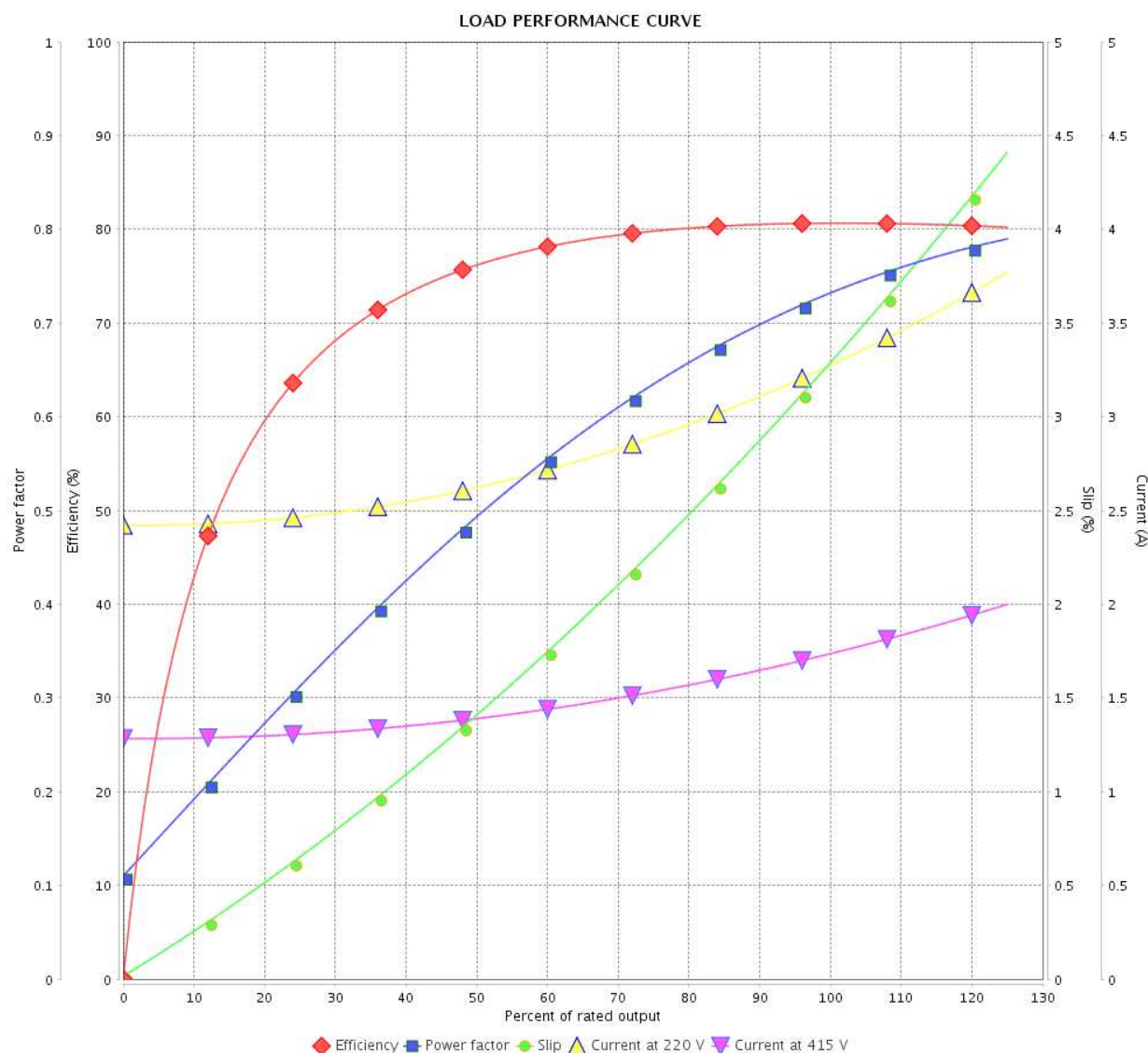
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Three-Phase

Product code : 13997241

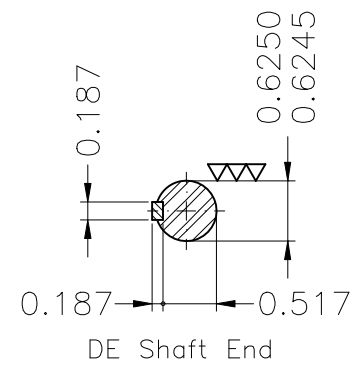
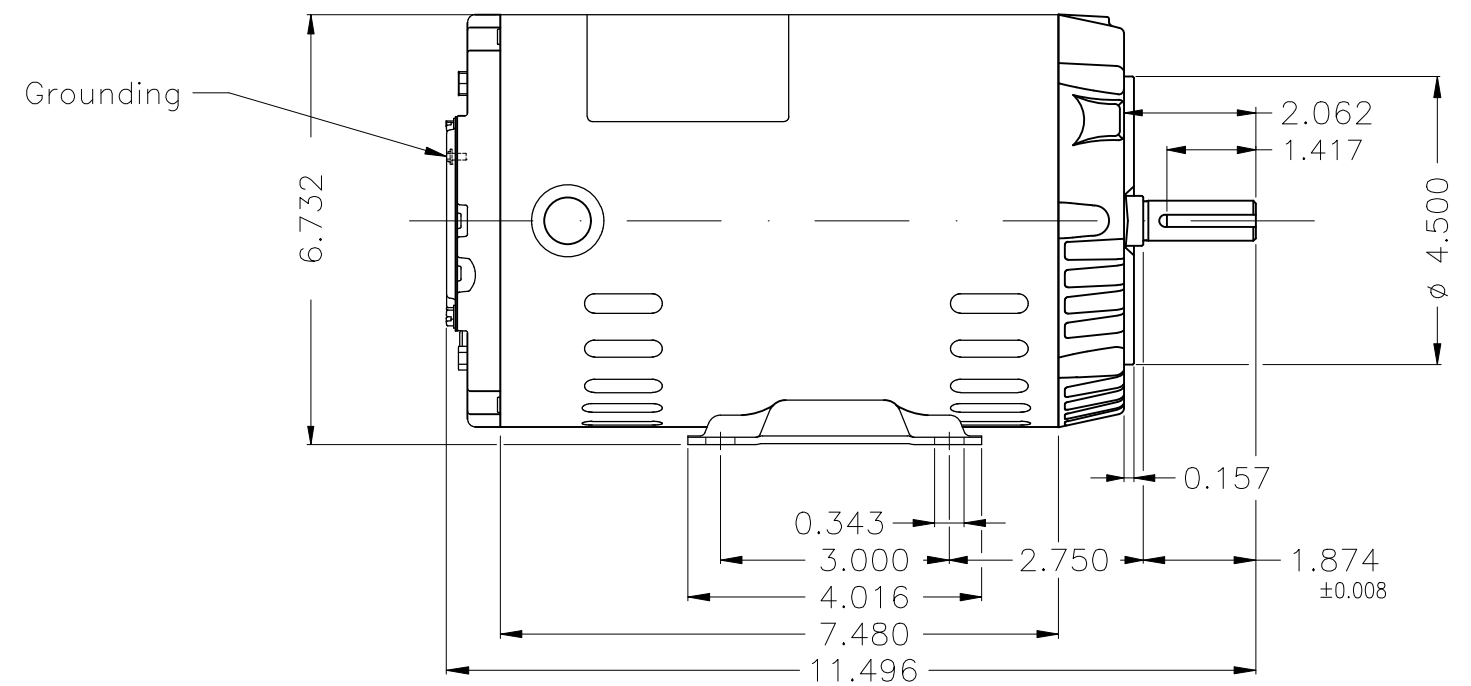
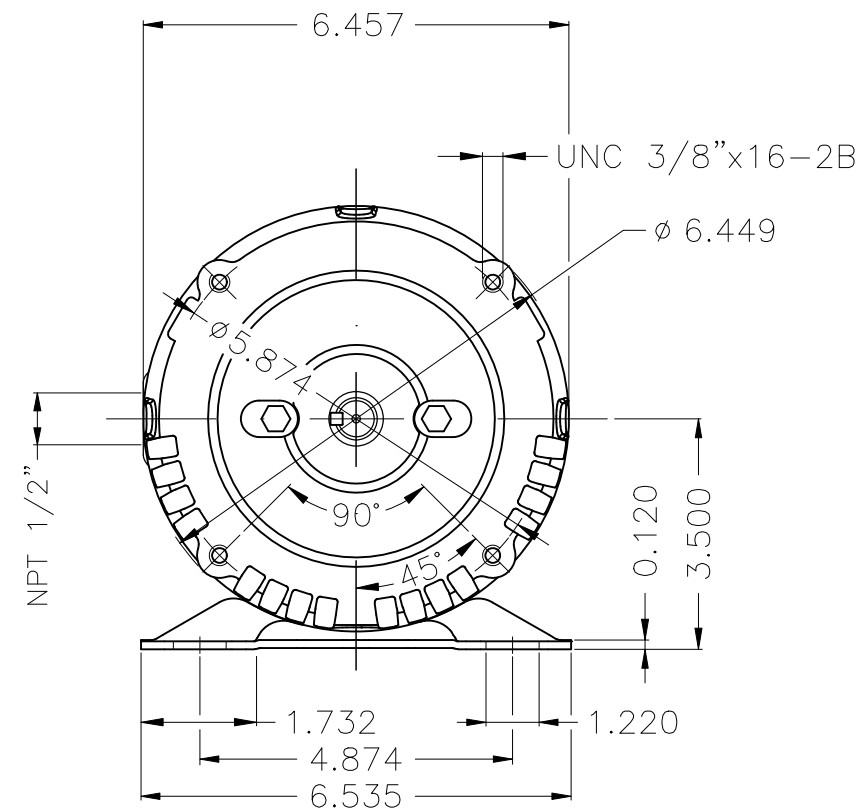


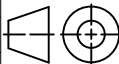
Performance : 220/415 V 50 Hz 4P

Rated current : 3.34/1.77 A
 LRC : 6.6
 Rated torque : 0.501 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0036 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 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 56C IP21 ODP				PREVIEW WDD 00							
CHECKED																	
RELEASED																	
REL. DATE				WMO		Jaragua do Sul		Product Engineering		SHEET		1 / 1					