

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11442886

Frame : 324/6T	Cooling method : IC411 - TEFC
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 : 268 kg
Protection degree : IP55	Moment of inertia (J) : 0.5561 kgm ²
Design : B	

Output [HP]	30	25	25	25	30	30	30
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	72.4/36.2	36.9	36.2	35.4	43.7	41.7	40.7
L. R. Amperes [A]	449/224	214	228	237	214	225	236
LRC [A]	6.2x(Code G)	5.8x(Code G)	6.3x(Code H)	6.7x(Code H)	4.9x(Code E)	5.4x(Code F)	5.8x(Code G)
No load current [A]	29.0/14.5	14.0	15.0	16.0	14.0	15.0	16.0
Rated speed [RPM]	1180	975	980	980	970	975	980
Slip [%]	1.67	2.50	2.00	2.00	3.00	2.50	2.00
Rated torque [kgfm]	18.5	18.5	18.5	18.4	22.4	22.3	22.2
Locked rotor torque [%]	220	190	220	240	160	180	200
Breakdown torque [%]	240	229	260	280	200	220	240
Service factor	1.25	1.00	1.15	1.15	1.00	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%	91.5	91.2	91.2	90.4	92.1	91.3
	50%	91.7	91.3	91.3	90.7	91.7	91.0
	75%	93.0	91.8	92.2	91.9	91.7	92.4
	100%	93.0	91.7	92.1	92.0	91.0	91.7
Power Factor	25%	0.41	0.41	0.39	0.36	0.48	0.41
	50%	0.65	0.64	0.61	0.58	0.71	0.65
	75%	0.76	0.76	0.74	0.71	0.80	0.76
	100%	0.82	0.83	0.80	0.79	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	7.3	7.3	7.3	7.3	7.3	7.3
	P2 (0,5;1,0)	6.2	6.2	6.2	6.2	6.2	6.2
	P3 (0,25;1,0)	6.0	6.0	6.0	6.0	6.0	6.0
	P4 (0,9;0,5)	3.5	3.5	3.5	3.5	3.5	3.5
	P5 (0,5;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1

Bearing type : 6312 C3	Non drive end : 6212 C3	Foundation loads Max. traction : 537 kgf Max. compression : 805 kgf
Sealing : V'Ring	V'Ring	
Lubrication interval : 20000 h	20000 h	
Lubricant amount : 21 g	13 g	
Lubricant type : Mobil Polyrex EM		

This revision replaces and cancel the previous one, which must be eliminated.

(1) Looking the motor from the shaft end.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Notes
USABLE @208V 79.2A SF 1.15 SFA 91.0A

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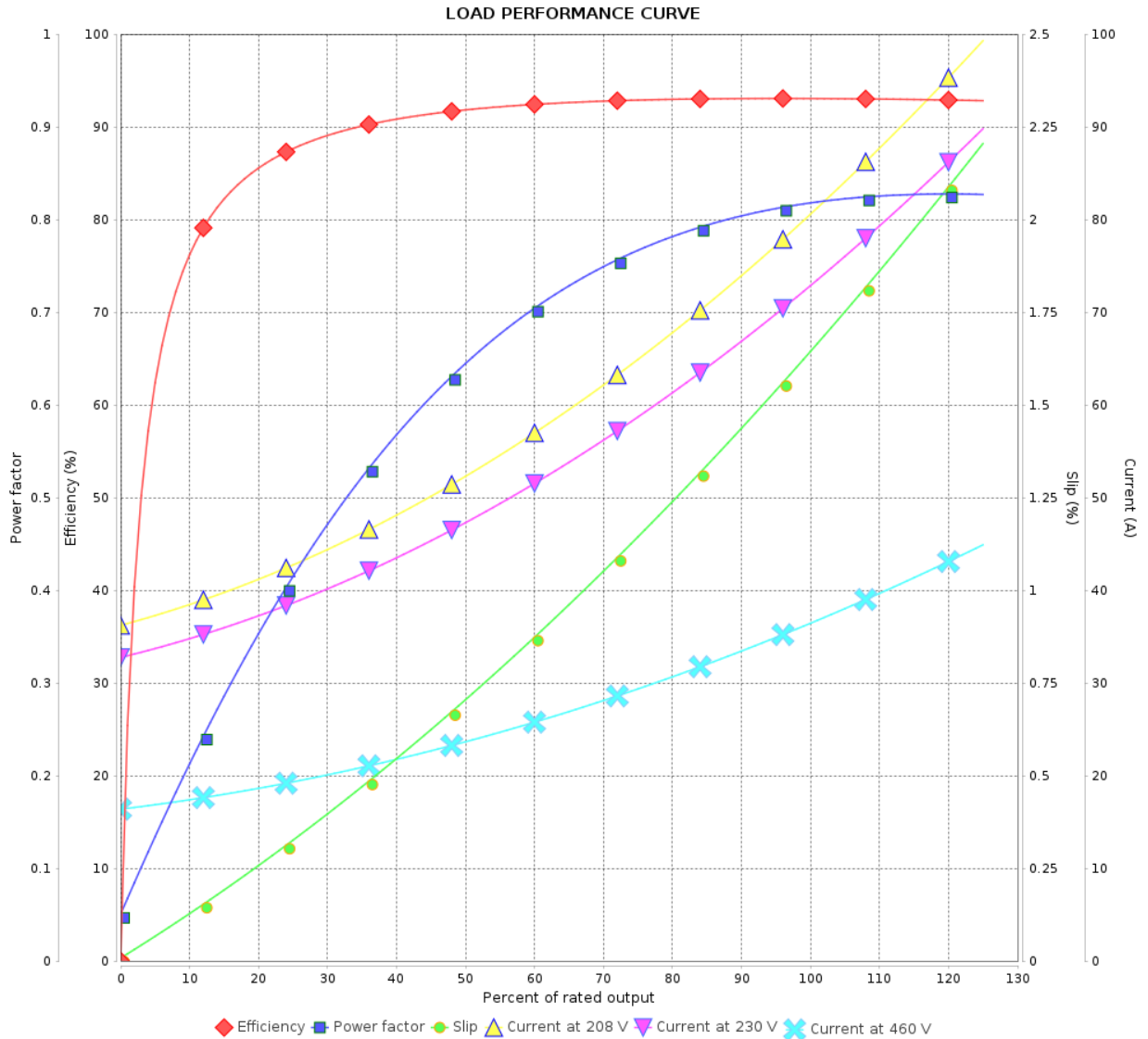
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 230/460 V 60 Hz 6P

Rated current : 72.4/36.2 A
 LRC : 6.2
 Rated torque : 18.5 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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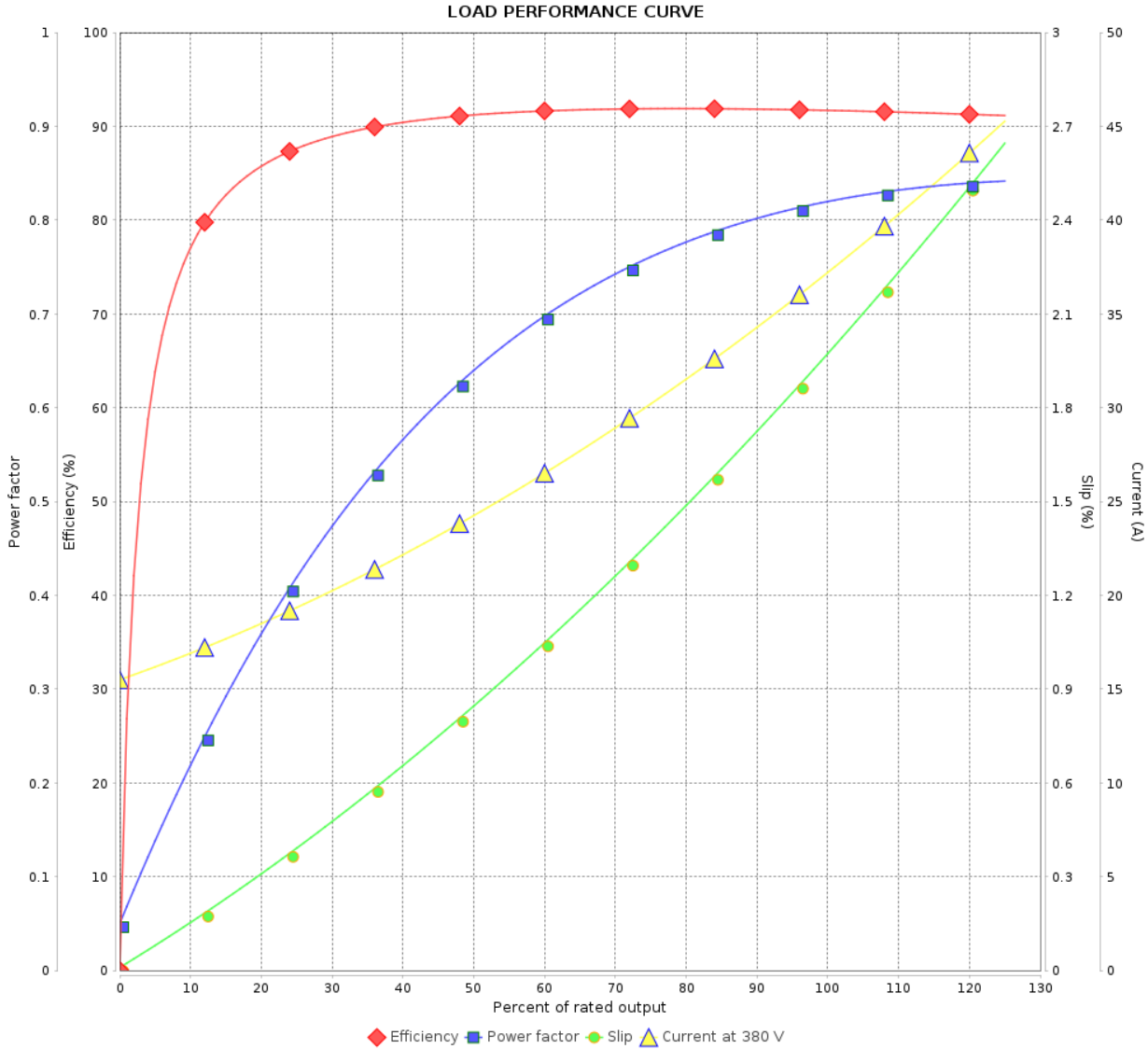
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 380 V 50 Hz 6P IE3

Rated current : 36.9 A
 LRC : 5.8
 Rated torque : 18.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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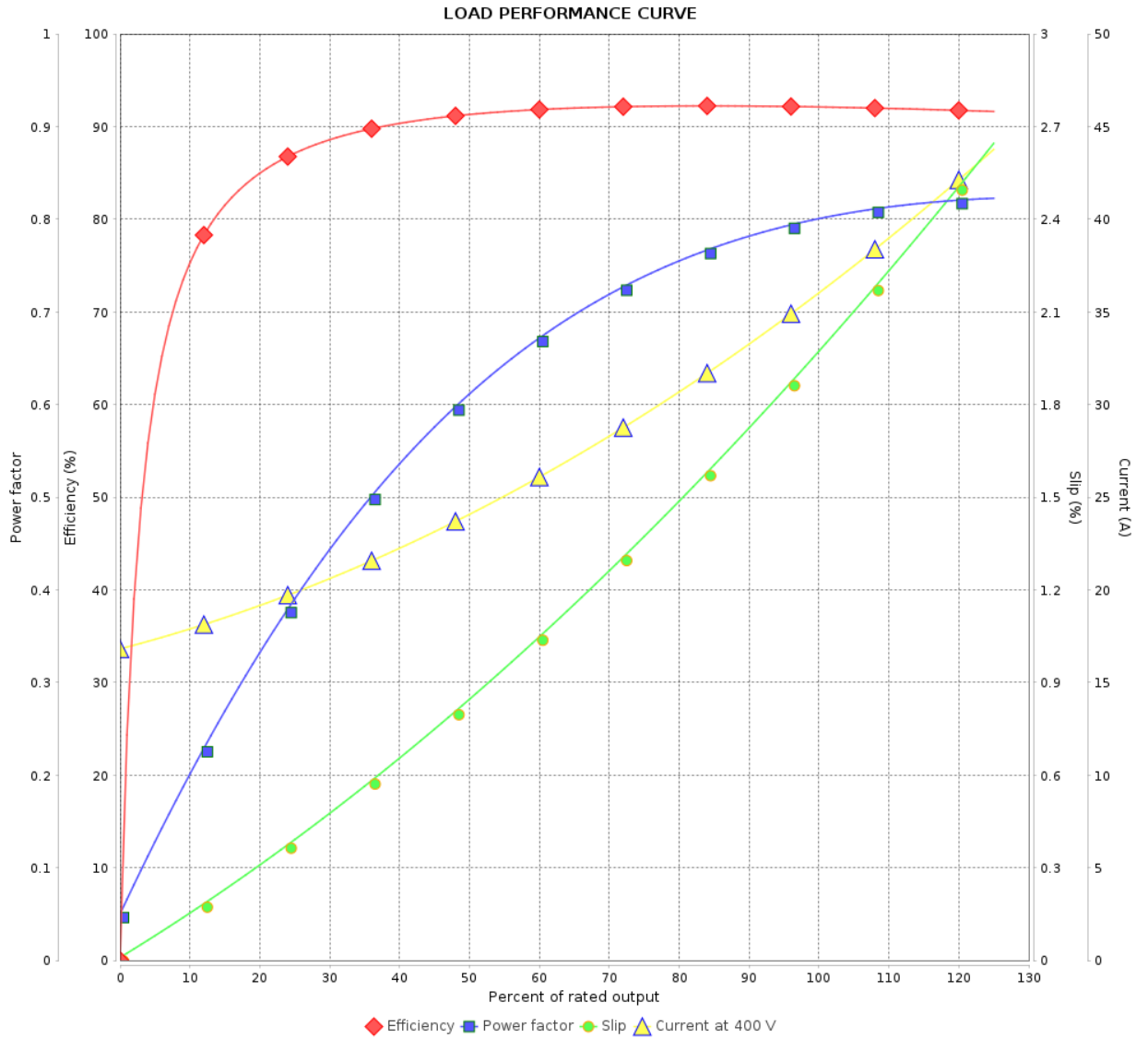
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 400 V 50 Hz 6P IE3

Rated current : 36.2 A
 LRC : 6.3
 Rated torque : 18.5 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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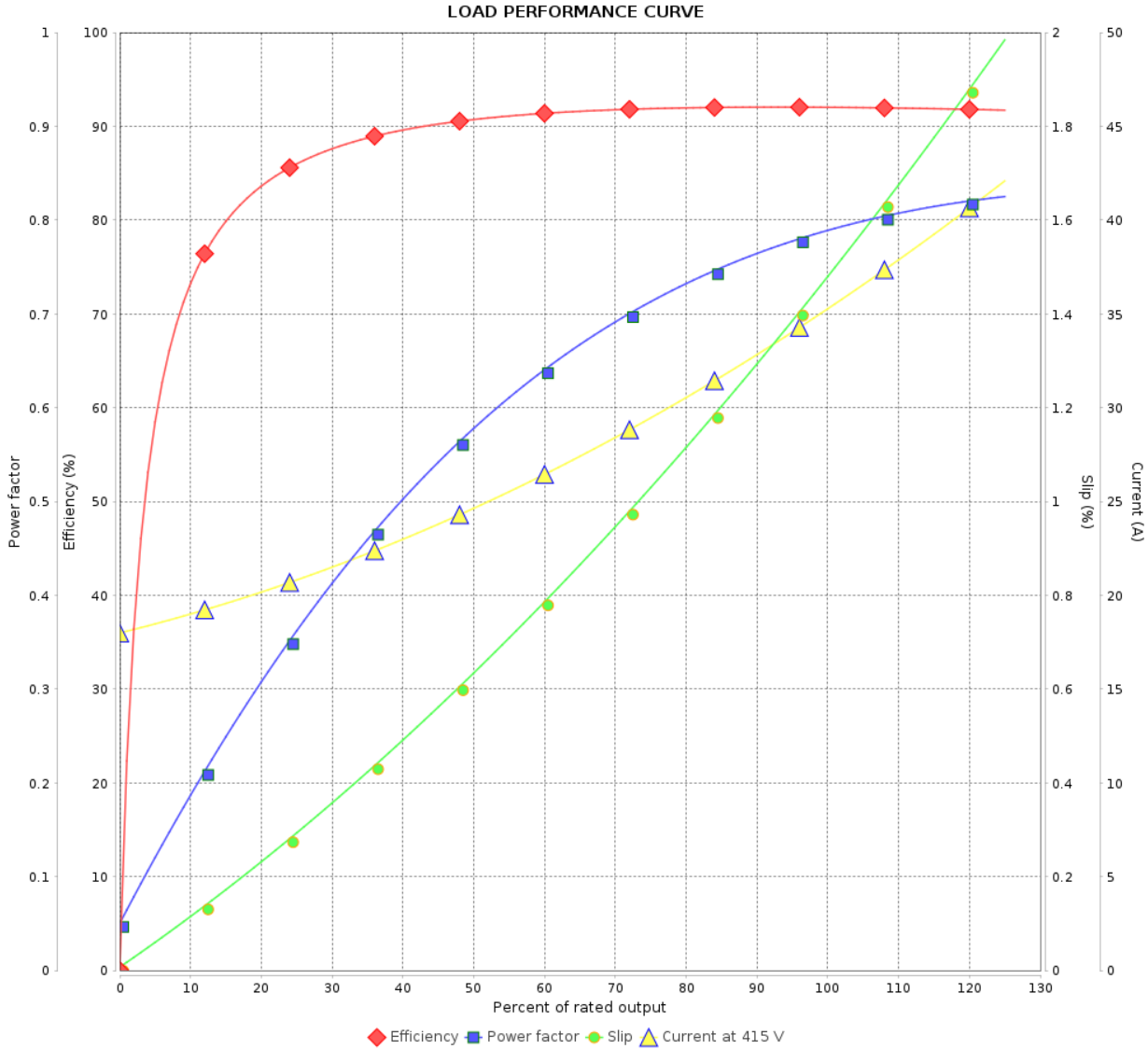
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 415 V 50 Hz 6P IE3

Rated current : 35.4 A
 LRC : 6.7
 Rated torque : 18.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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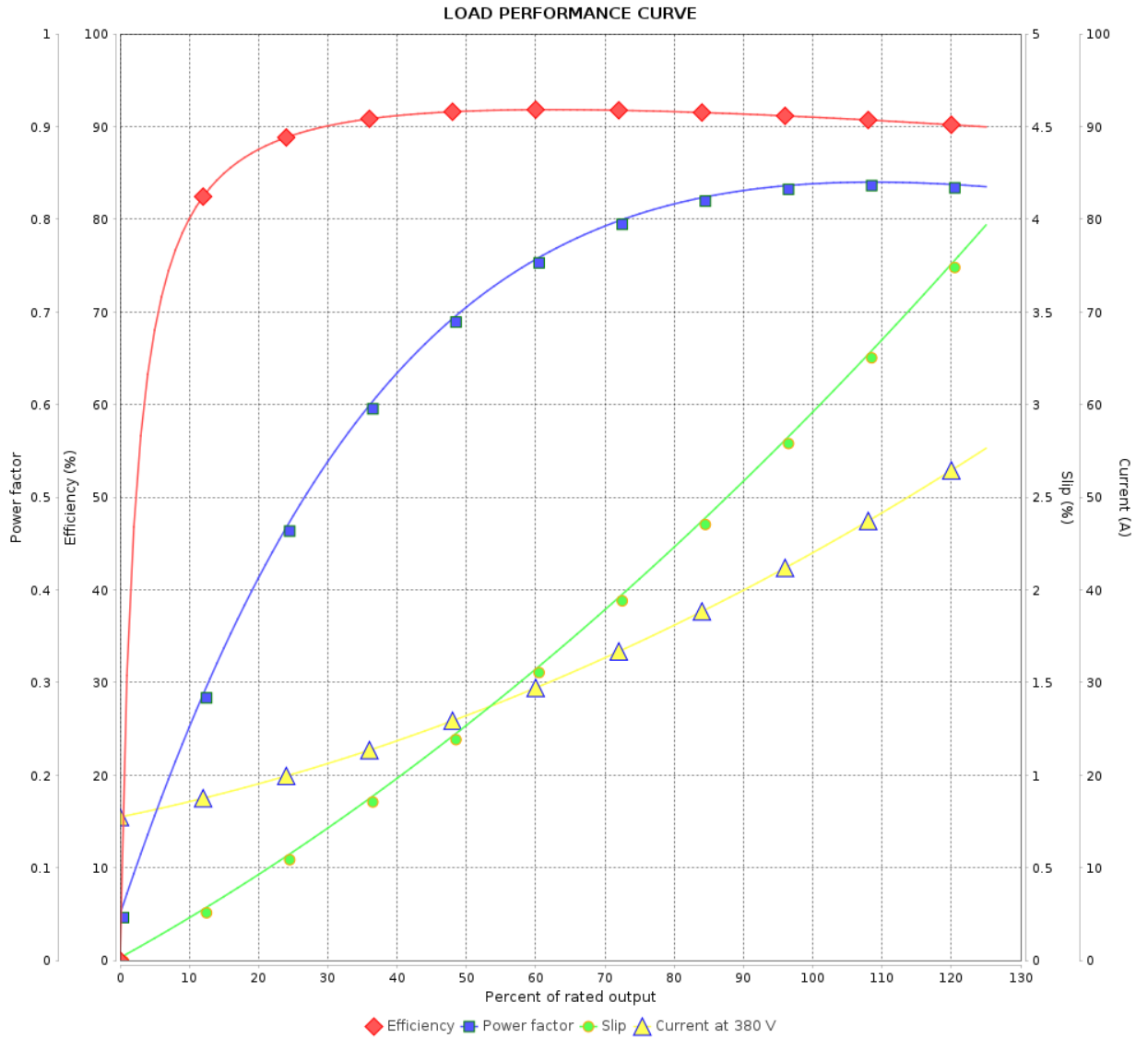
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 380 V 50 Hz 6P IE2

Rated current : 43.7 A
 LRC : 4.9
 Rated torque : 22.4 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 970 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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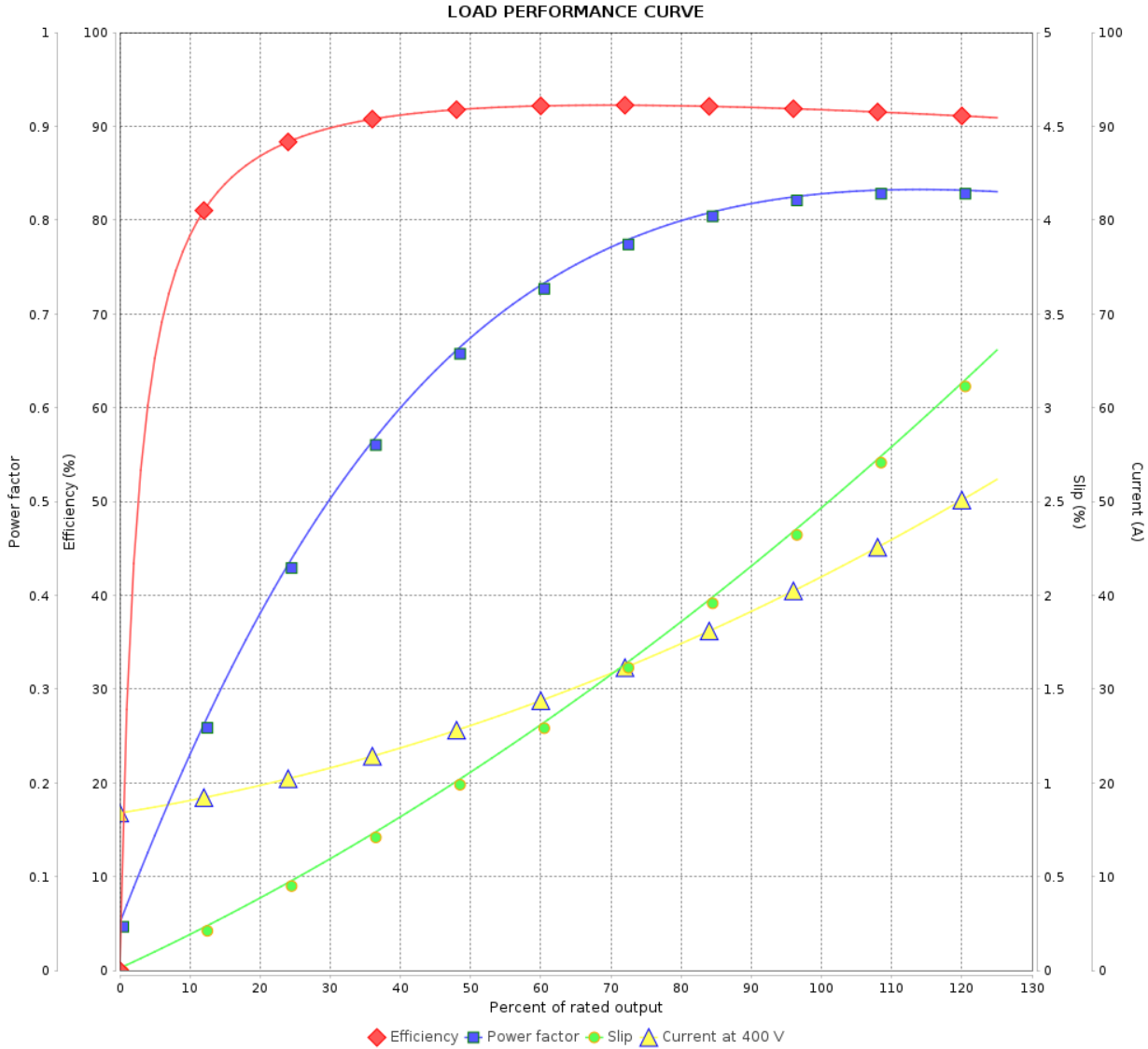
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 400 V 50 Hz 6P IE2

Rated current : 41.7 A
 LRC : 5.4
 Rated torque : 22.3 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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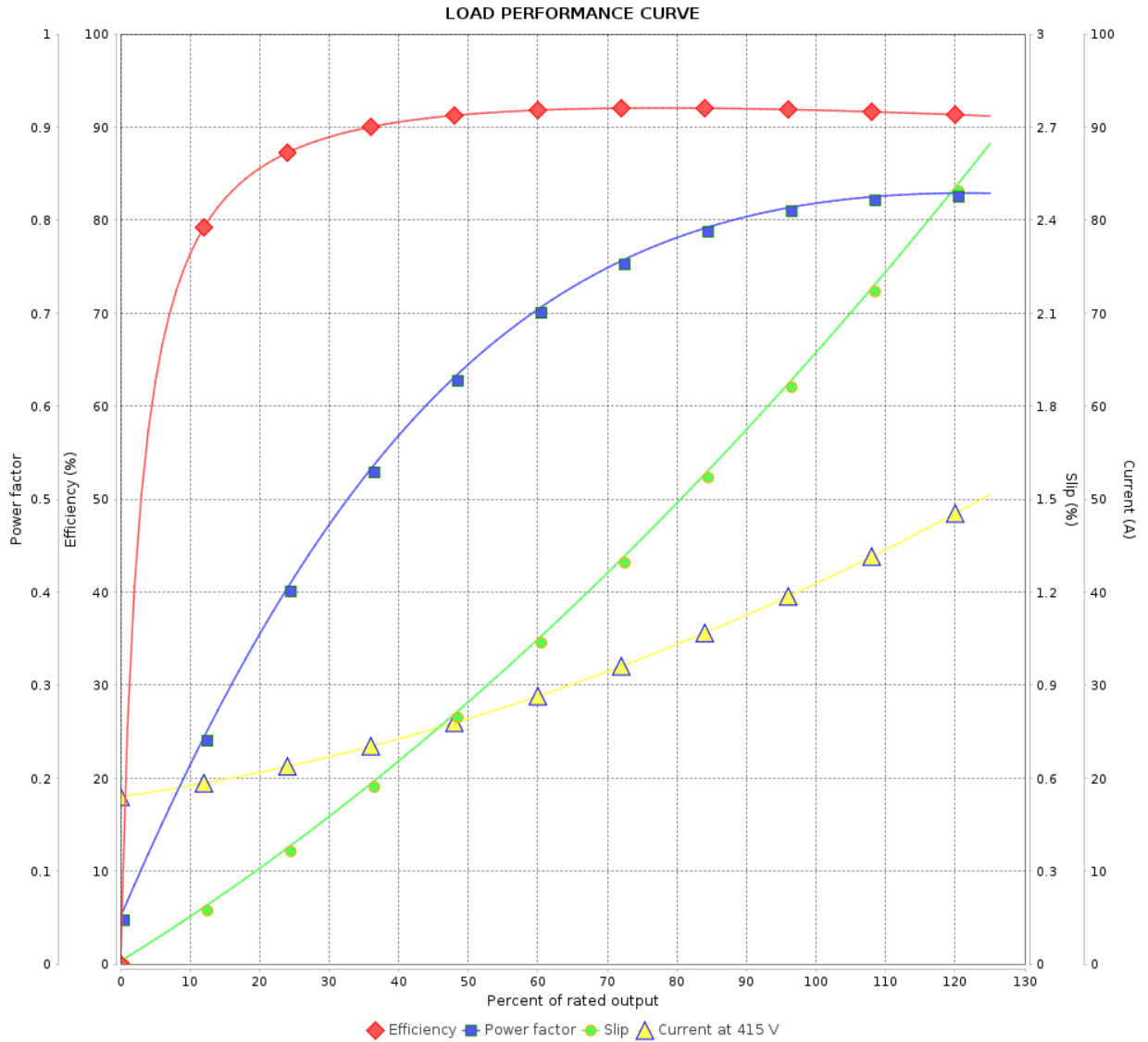
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Customer : _____

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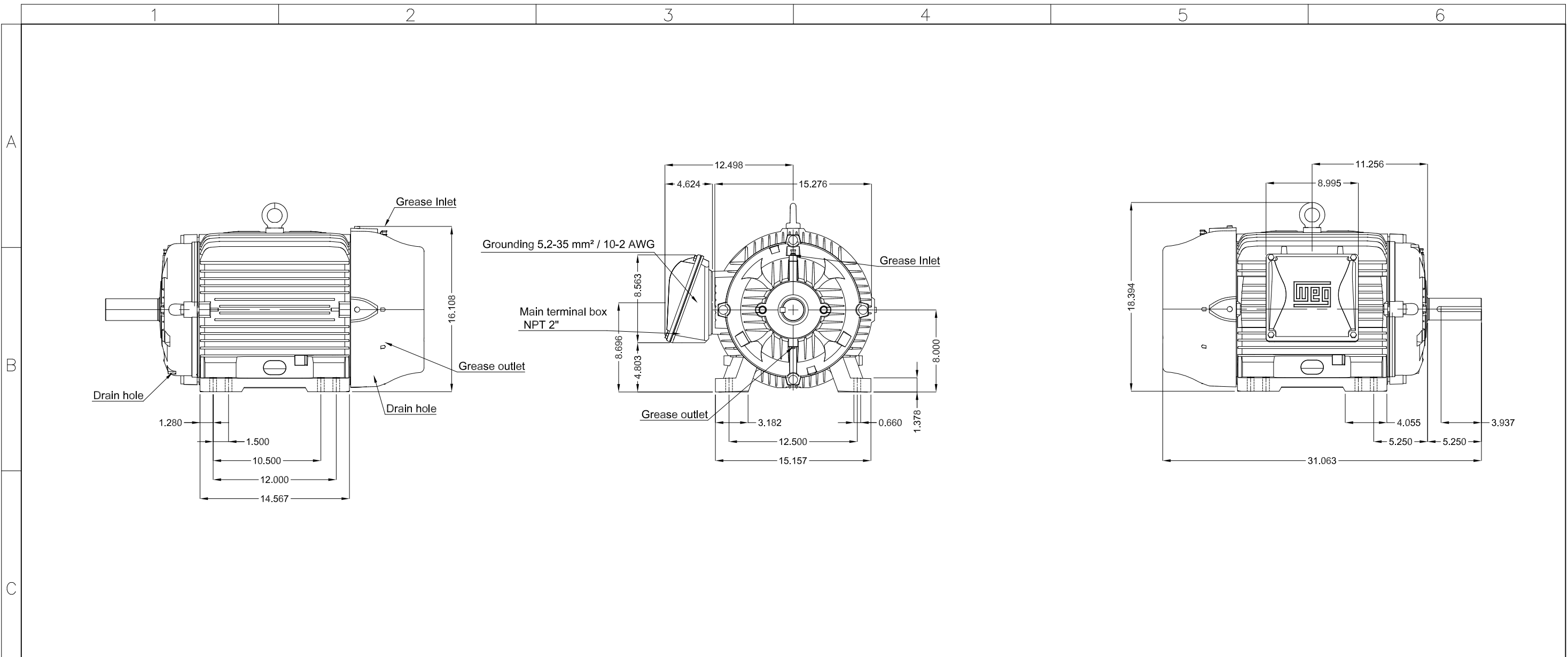


Performance : 415 V 50 Hz 6P IE2

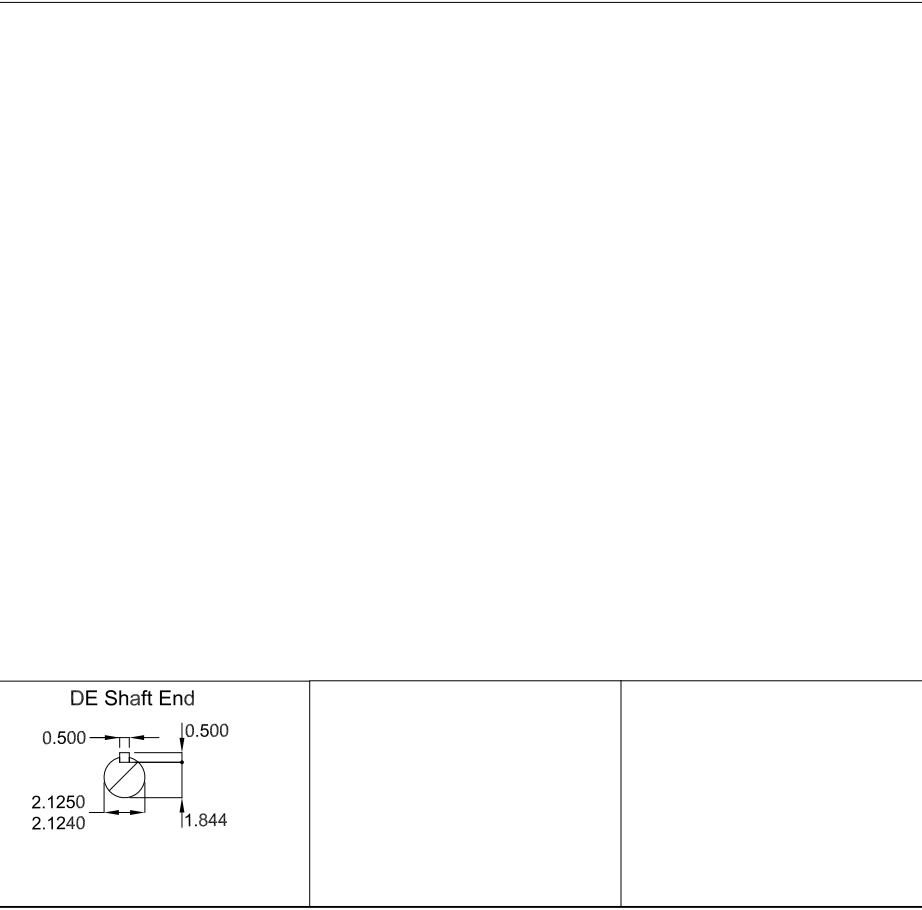
Rated current : 40.7 A
 LRC : 5.8
 Rated torque : 22.2 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Without vertical jackscrews
Color RAL 5009
Painting plan 203A
Mounting B3R(D)



30 HP 06 Poles 60 Hz							A
ECM	LOC	SUMMARY OF MODIFICATIONS			HYBRISUSER		00
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.			EXECUTED	CHECKED	RELEASED
CHECKED		FRAME 324/6T IP55 TEFC			WDD	00	
RELEASED					SHEET	/	
REL. DATE							

Dimensions in inches

A3