

# 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 <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>	: 246 kg				
Protection degree	: IP55	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>				
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	37.4	36.2	35.4	43.7	41.7	40.7
L. R. Amperes [A]	449/225	217	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]	32.8/16.4	15.5	16.8	18.0	15.5	16.8	18.0
Rated speed [RPM]	1180	980	980	985	970	975	980
Slip [%]	1.67	2.00	2.00	1.50	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 <sup>2</sup>	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%						
	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%						
	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	0.82	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	8.8	8.3	8.4	9.6	8.8
	P2 (0,5;1,0)	6.1	7.4	7.0	7.1	8.1	7.4
	P3 (0,25;1,0)	6.0	7.2	6.8	6.9	7.9	7.2
	P4 (0,9;0,5)	3.6	4.3	4.1	4.2	4.8	4.3
	P5 (0,5;0,5)	2.5	3.1	2.9	2.9	3.3	3.1
	P6 (0,5;0,25)	1.7	2.1	2.0	2.0	2.3	2.1
	P7 (0,25;0,25)	1.2	1.5	1.4	1.4	1.6	1.5
Bearing type	: Drive end : 6312 C3	Non drive end : 6212 C3	Foundation loads				
Sealing	: V'Ring	V'Ring	Max. traction : 548 kgf				
Lubrication interval	: 20000 h	20000 h	Max. compression : 794 kgf				
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.			
Rev.	Changes Summary			Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	21/10/2024				1 / 9		

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	21/10/2024		2 / 9	

# LOAD PERFORMANCE CURVE

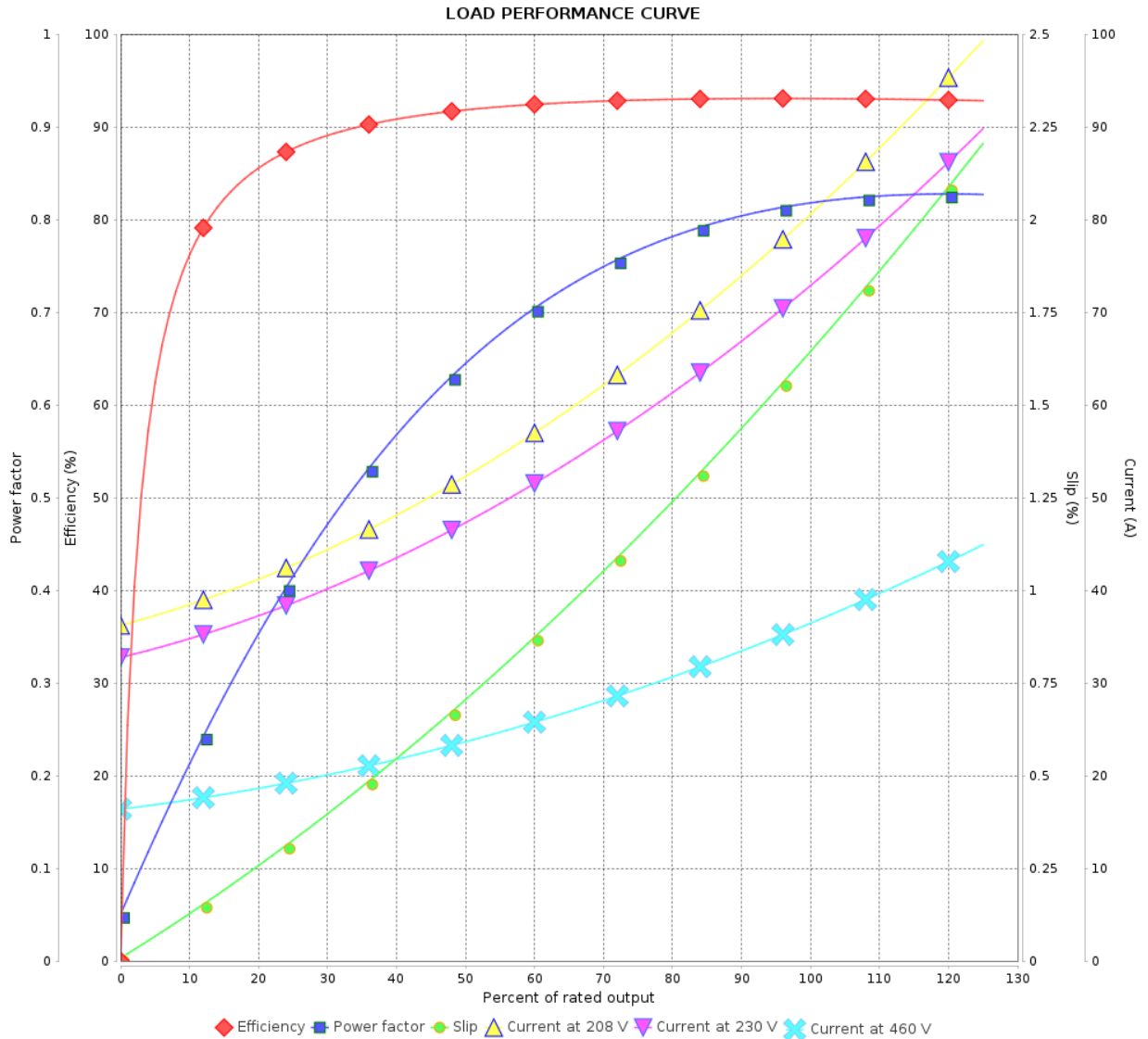
## Three Phase Induction Motor - Squirrel Cage



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 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

# LOAD PERFORMANCE CURVE

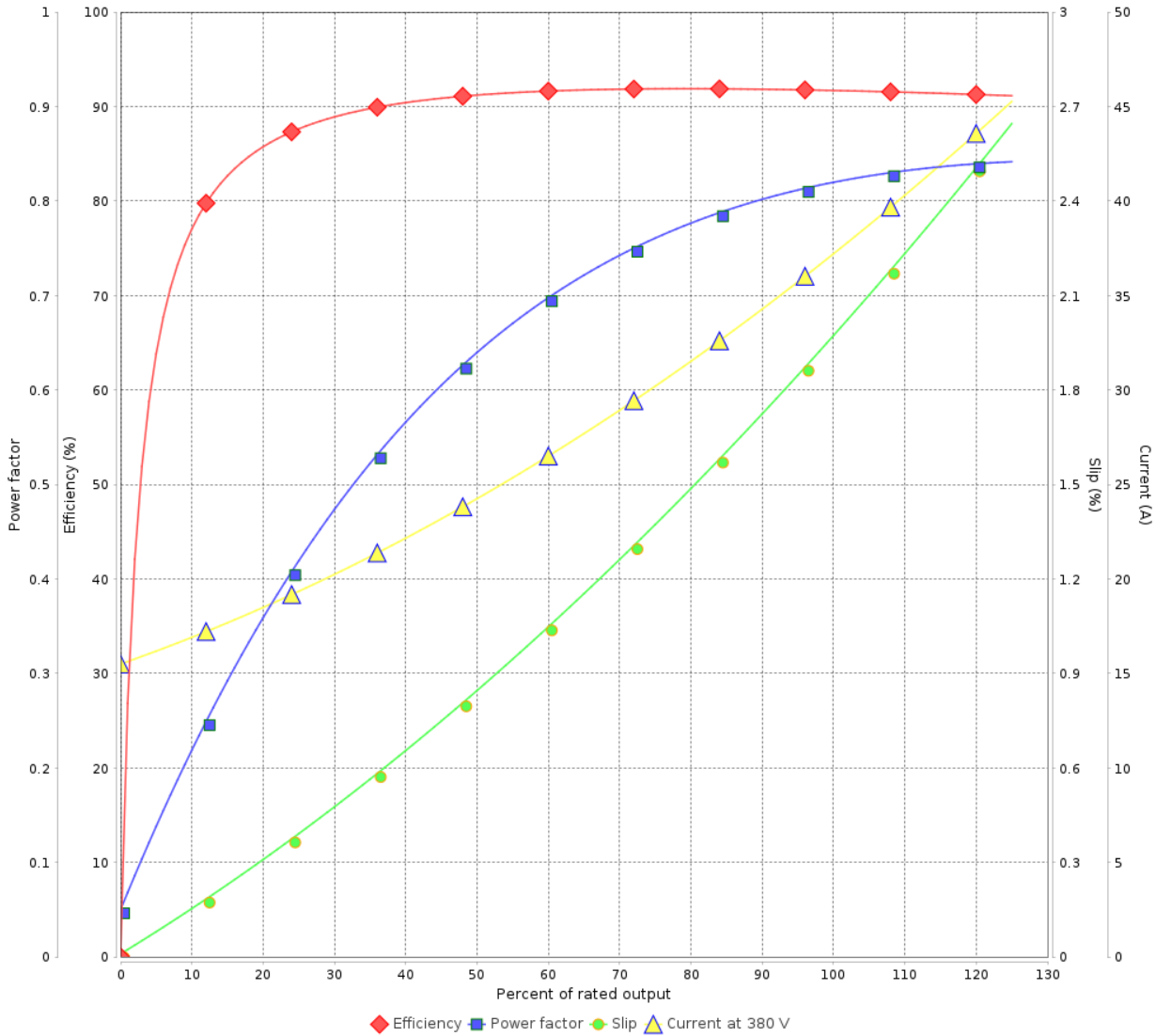
Three Phase Induction Motor - Squirrel Cage



Customer :

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

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current	: 37.4 A	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.5 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 9	Revision
Checked by				
Date	21/10/2024			

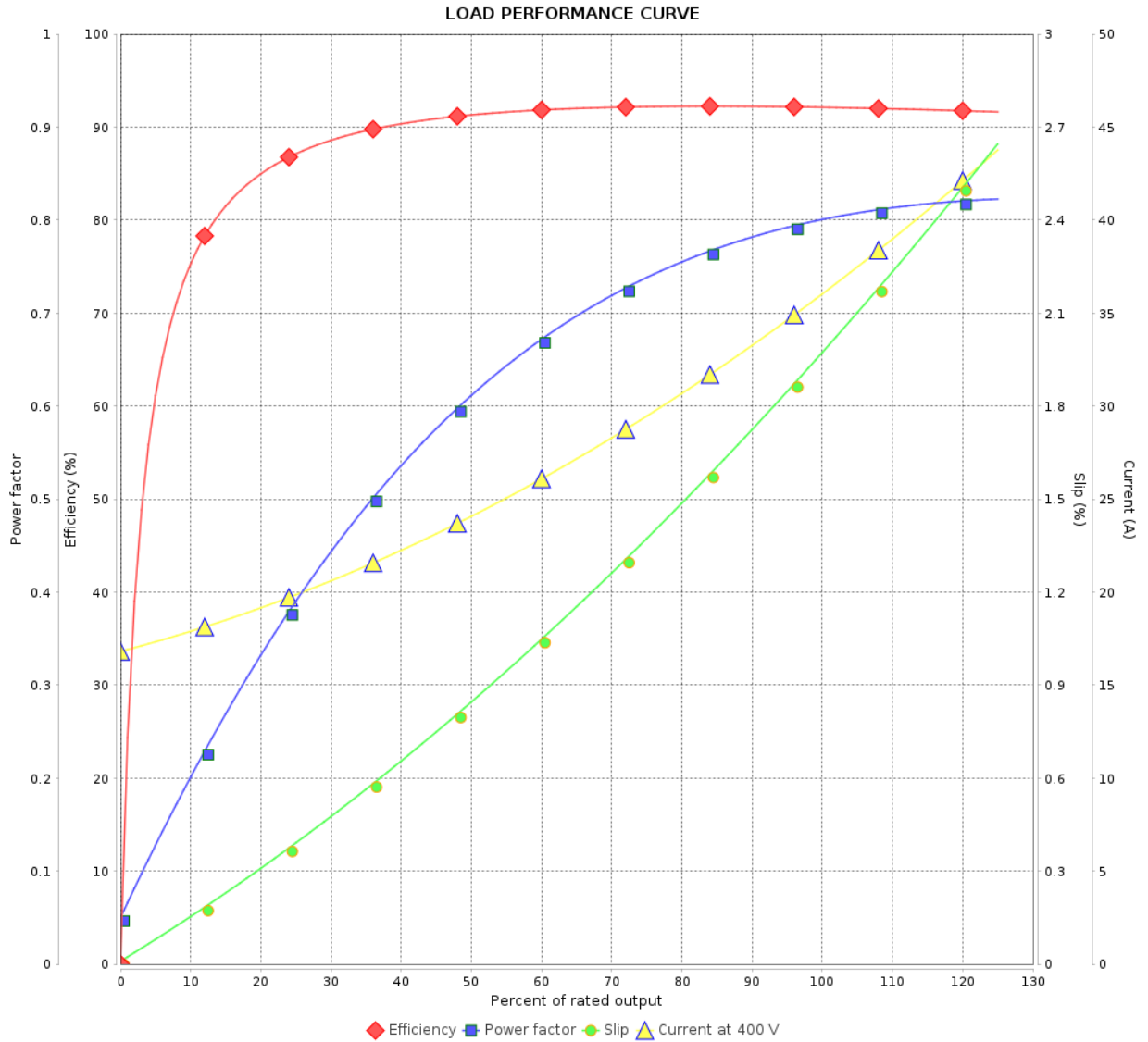
# LOAD PERFORMANCE CURVE

## 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	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 18.5 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 9	Revision
Checked by				
Date	21/10/2024			

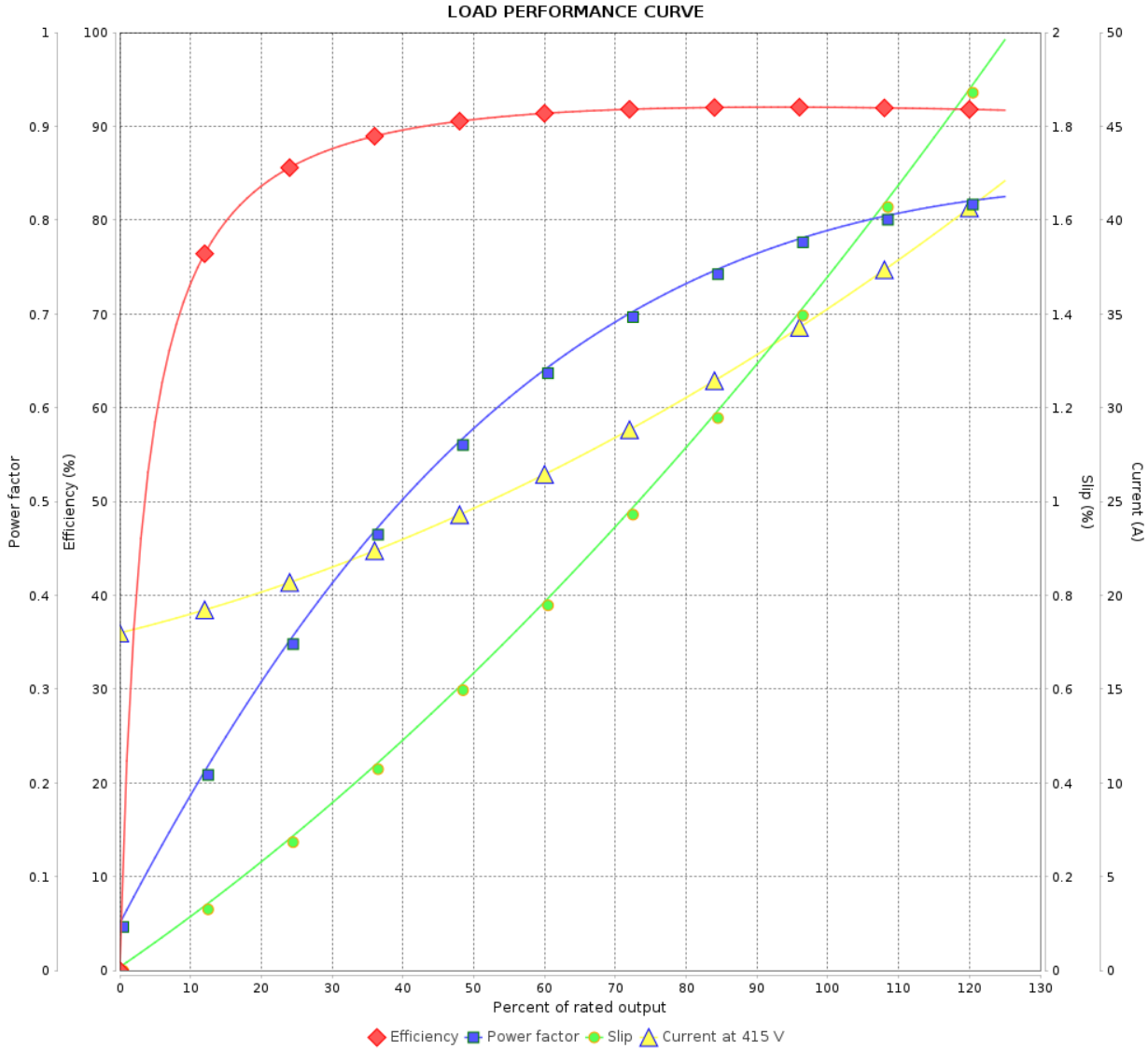
# LOAD PERFORMANCE CURVE

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	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 18.4 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

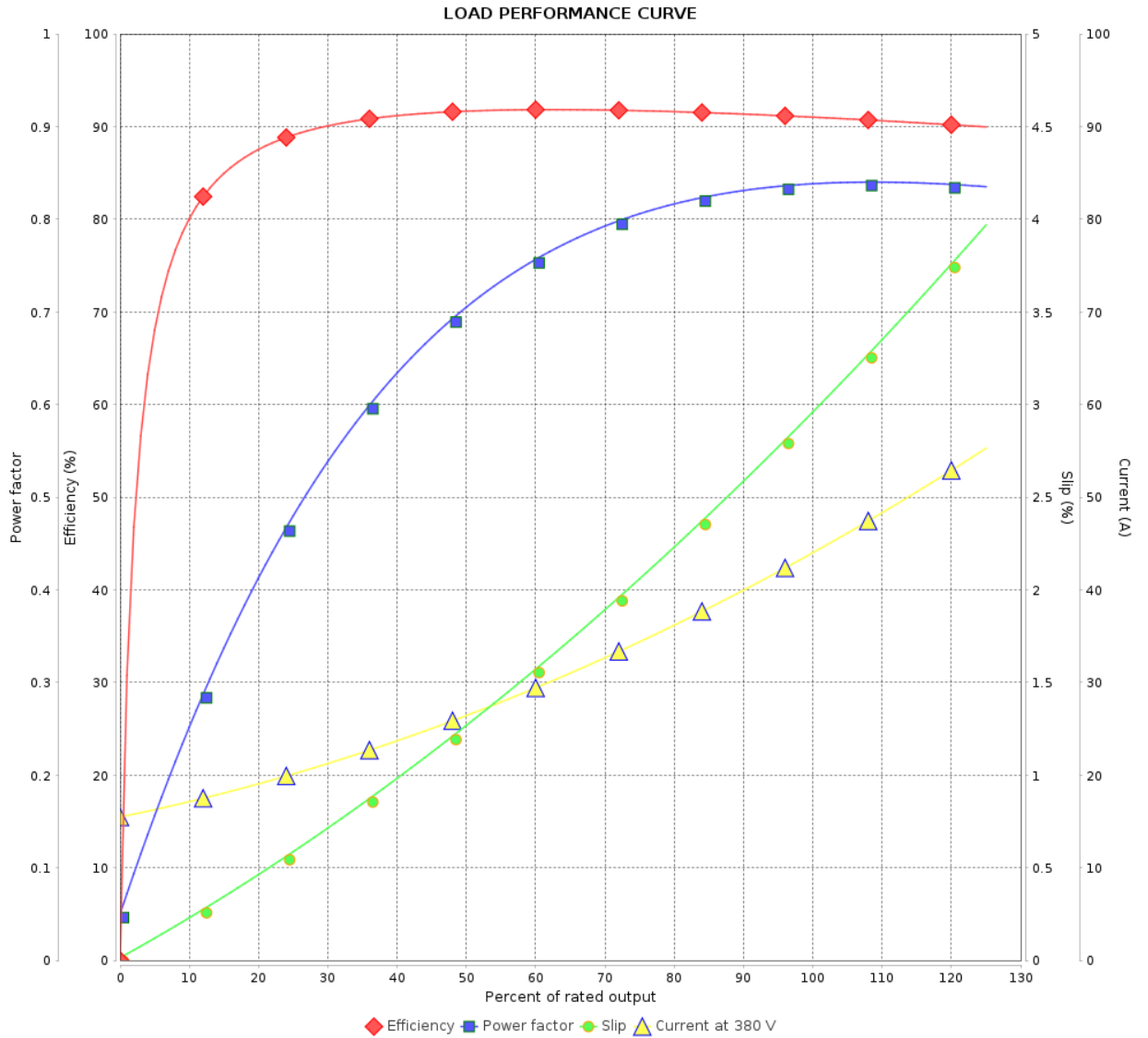
# LOAD PERFORMANCE CURVE

## 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	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 22.4 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 7 / 9	Revision
Checked by				
Date	21/10/2024			

# LOAD PERFORMANCE CURVE

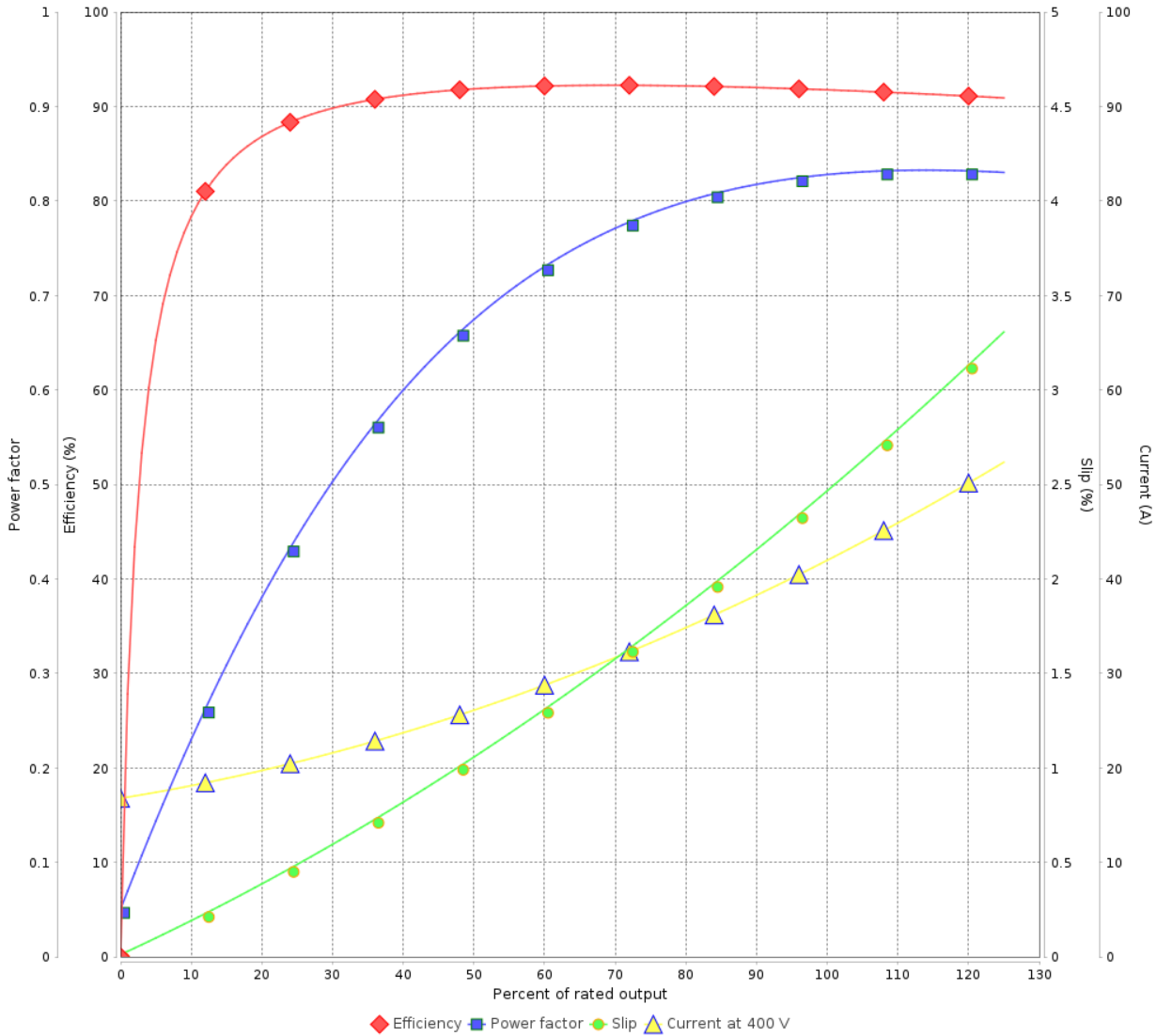
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE2

Rated current	: 41.7 A	Moment of inertia (J)	: 0.5561 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 975 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 9	Revision
Checked by				
Date	21/10/2024			



# LOAD PERFORMANCE CURVE

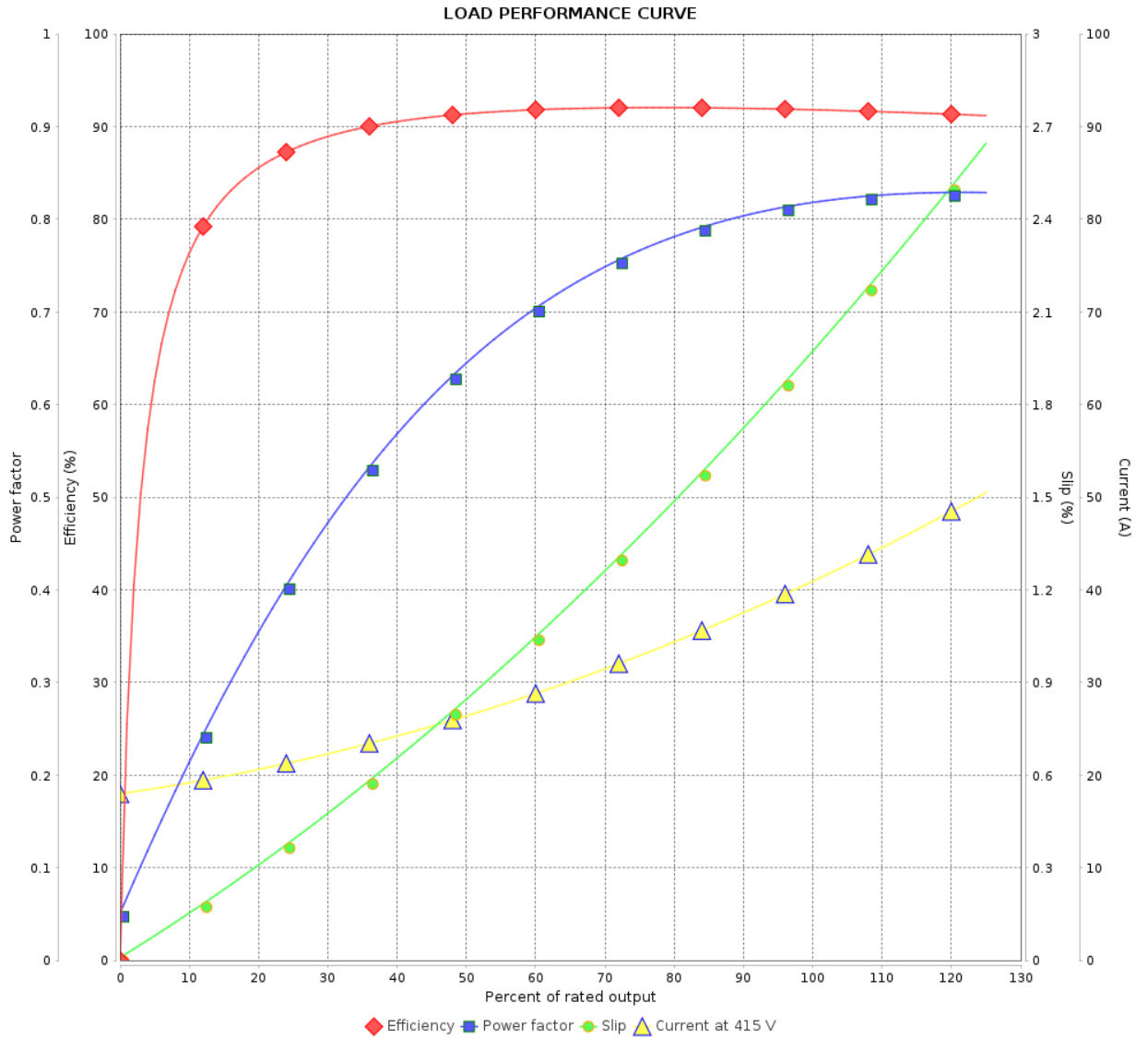
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886

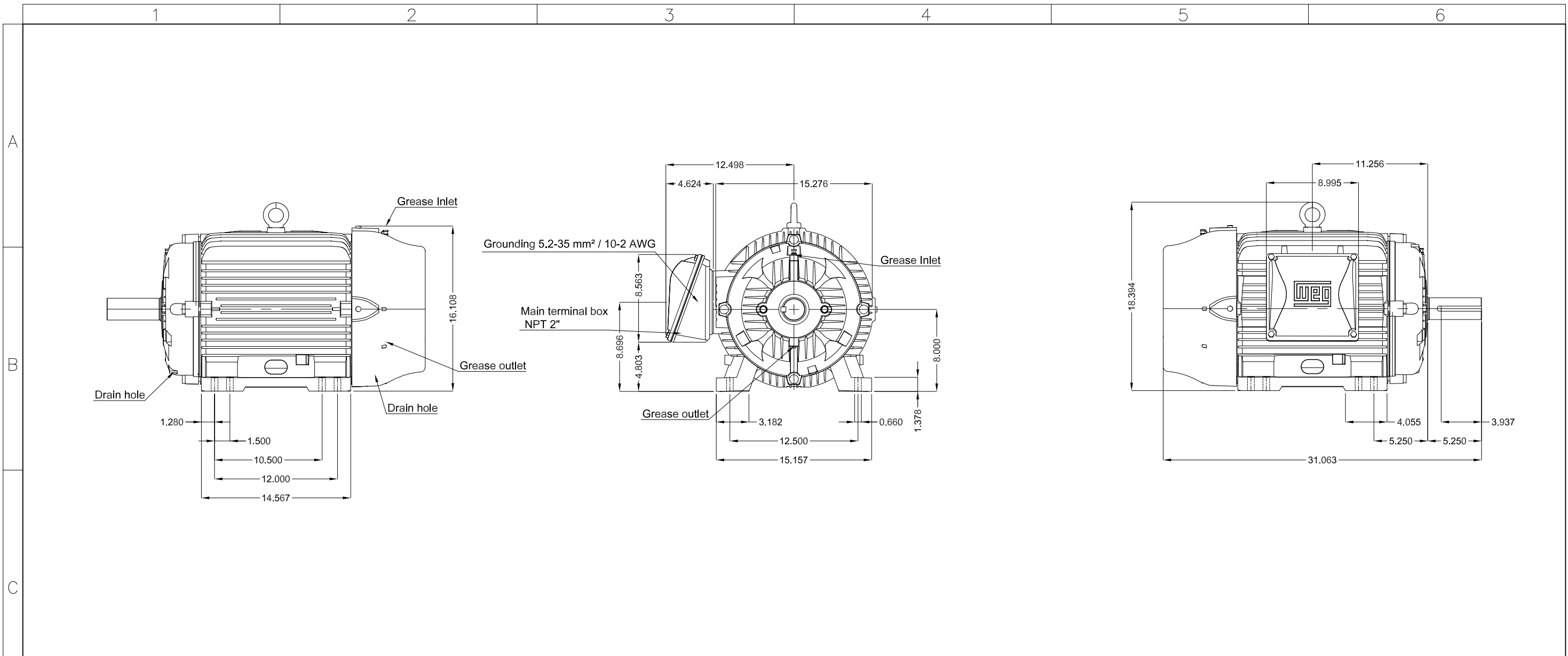


Performance : 415 V 50 Hz 6P IE2

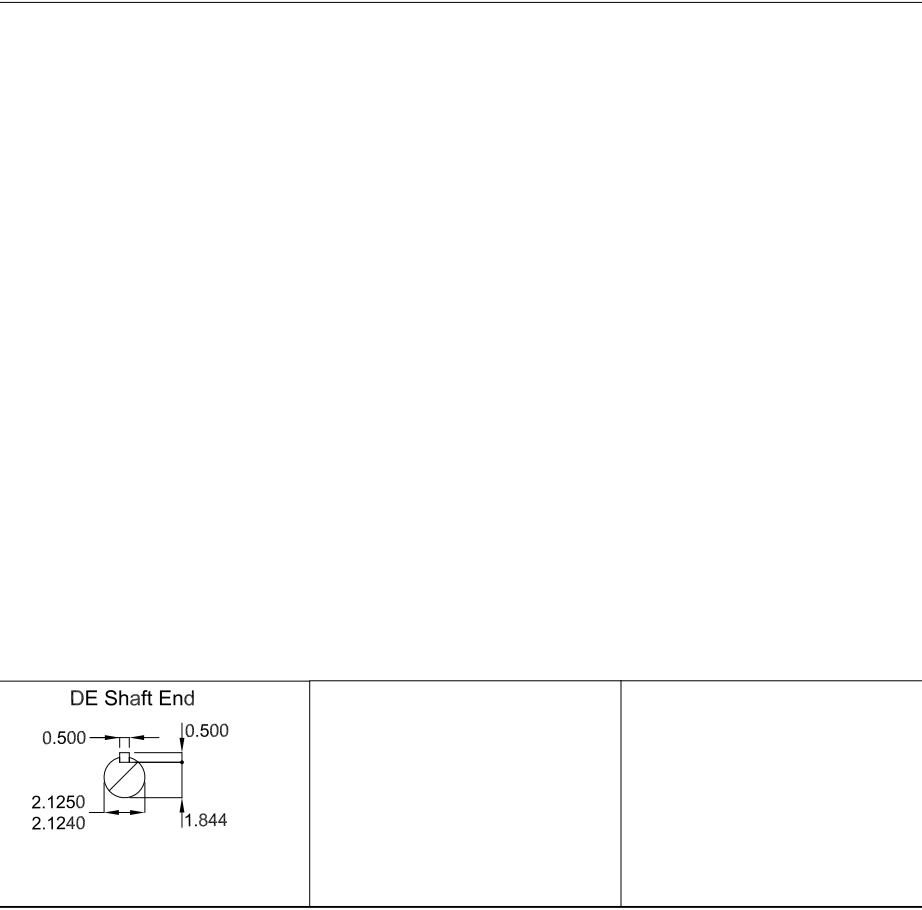
Rated current : 40.7 A  
 LRC : 5.8  
 Rated torque : 22.2 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				



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



30 HP 06 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		WDD 00		
CHECKED		FRAME 324/6T IP55 TEFC					SHEET		/		
RELEASED											
REL. DATE											

Dimensions in inches

A3