

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: Premium Efficiency Three-Phase	Product code :	13989586
Frame	: W56C	Cooling method	: IC01 - ODP	
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>2</sup>	: 8.8 kg	
		Moment of inertia (J)	: 0.0019 kgm <sup>2</sup>	
Output [HP]	0.5	0.5	0.5	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	208-230/460	190-220/380	415	
Rated current [A]	1.75-1.58/0.789	1.86-1.60/0.928	0.892	
L. R. Amperes [A]	11.2-10.1/5.05	8.91-7.69/4.45	4.91	
LRC [A]	6.4x(Code K)	4.8x(Code G)	5.5x(Code H)	
No load current [A]	0.919-1.07/0.533	1.05-0.907/0.525	0.608	
Rated speed [RPM]	1735	1400	1420	
Slip [%]	3.61	6.67	5.33	
Rated torque [kgfm]	0.209	0.259	0.256	
Locked rotor torque [%]	250	180	220	
Breakdown torque [%]	320	210	260	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	41s (cold) 23s (hot)	46s (cold) 26s (hot)	39s (cold) 22s (hot)	
Noise level <sup>2</sup>	50.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%			
	50%	70.0	72.0	69.0
	75%	75.5	73.0	73.0
	100%	78.5	73.0	74.0
Power Factor	25%			
	50%	0.53	0.62	0.55
	75%	0.66	0.75	0.69
	100%	0.75	0.83	0.78
Bearing type	: <u>Drive end</u> 6203 ZZ <u>Non drive end</u> 6202 ZZ	Foundation loads		
Sealing	: Without Bearing Seal Without Bearing Seal	Max. traction	: 17 kgf	
		Max. compression	: 25 kgf	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V SF 1.00				
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
Performed by			Page 1 / 4	Revision
Checked by				
Date	11/05/2022			

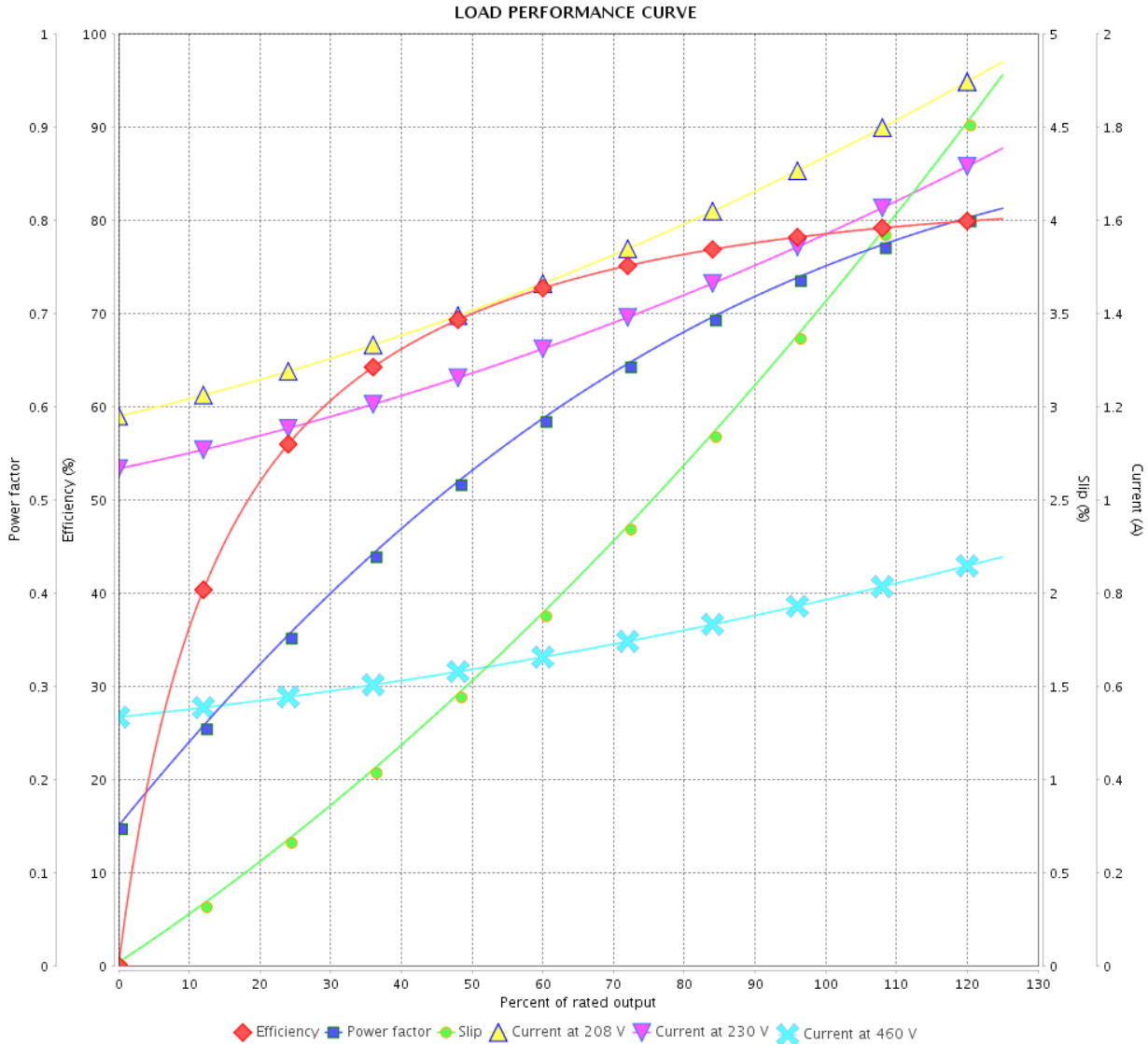
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13989586



Performance : 208-230/460 V 60 Hz 4P

Rated current : 1.75-1.58/0.789 A  
 LRC : 6.4  
 Rated torque : 0.209 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 320 %  
 Rated speed : 1735 rpm

Moment of inertia (J) : 0.0019 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K

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

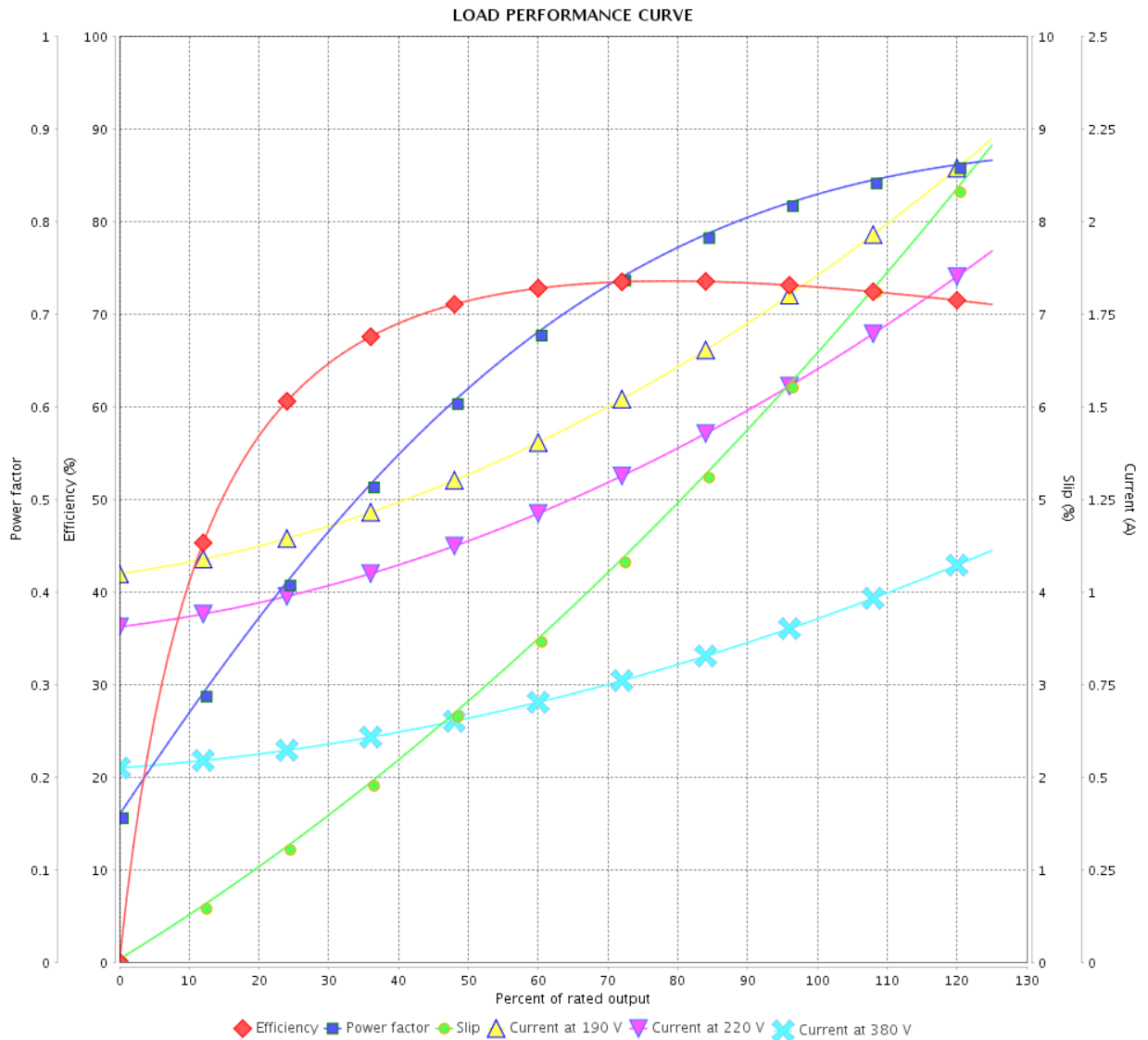
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13989586



Performance : 190-220/380 V 50 Hz 4P

Rated current : 1.86-1.60/0.928 A  
 LRC : 4.8  
 Rated torque : 0.259 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 1400 rpm

Moment of inertia (J) : 0.0019 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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

# LOAD PERFORMANCE CURVE

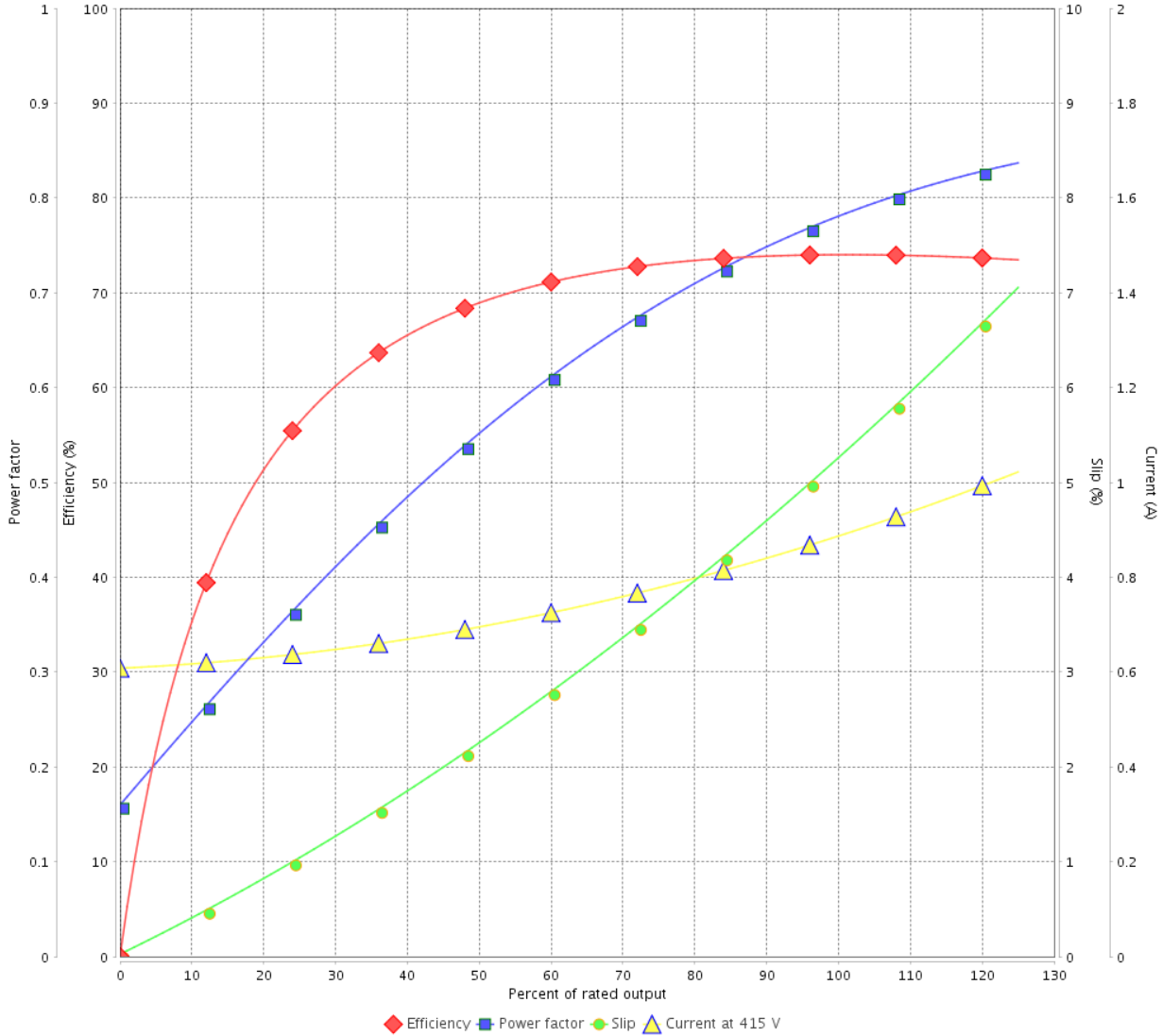
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13989586

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P

Rated current : 0.892 A  
 LRC : 5.5  
 Rated torque : 0.256 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0019 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 4	Revision
Checked by				
Date	11/05/2022			

1 2 3 4 5 6

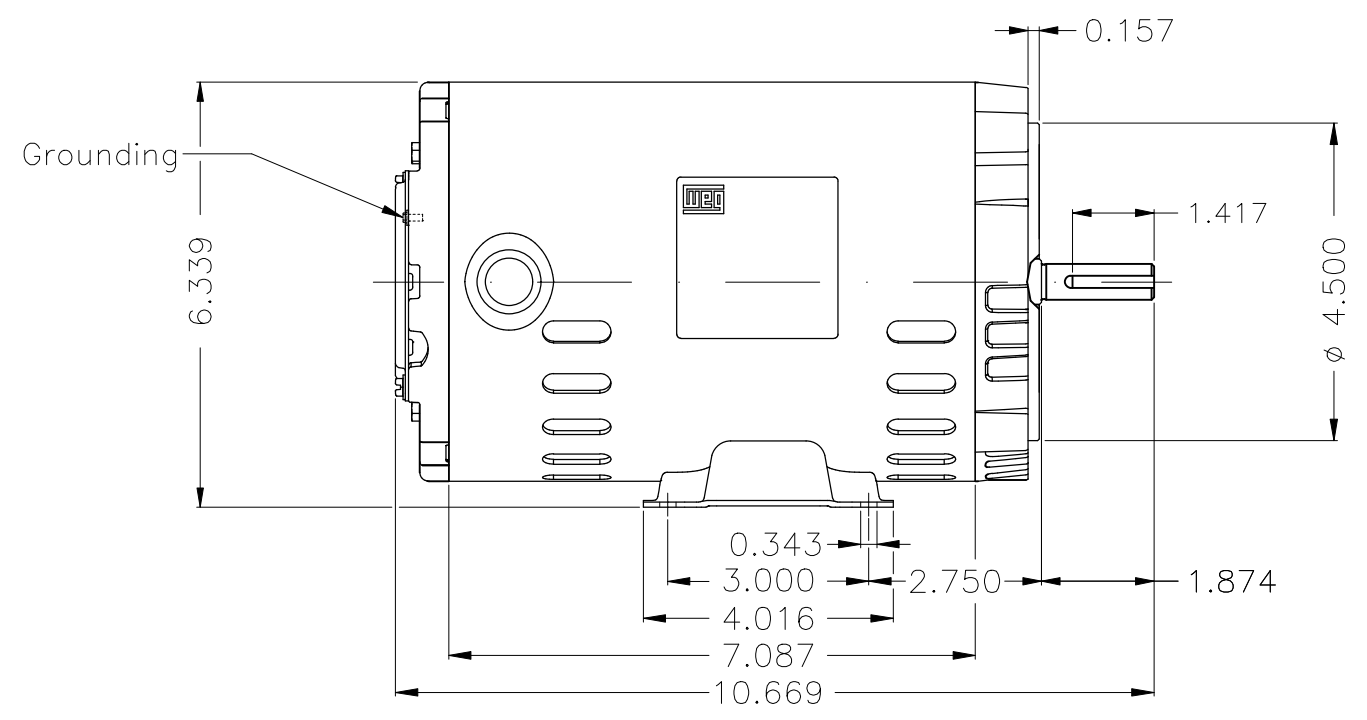
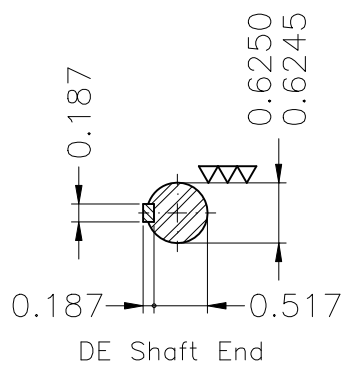
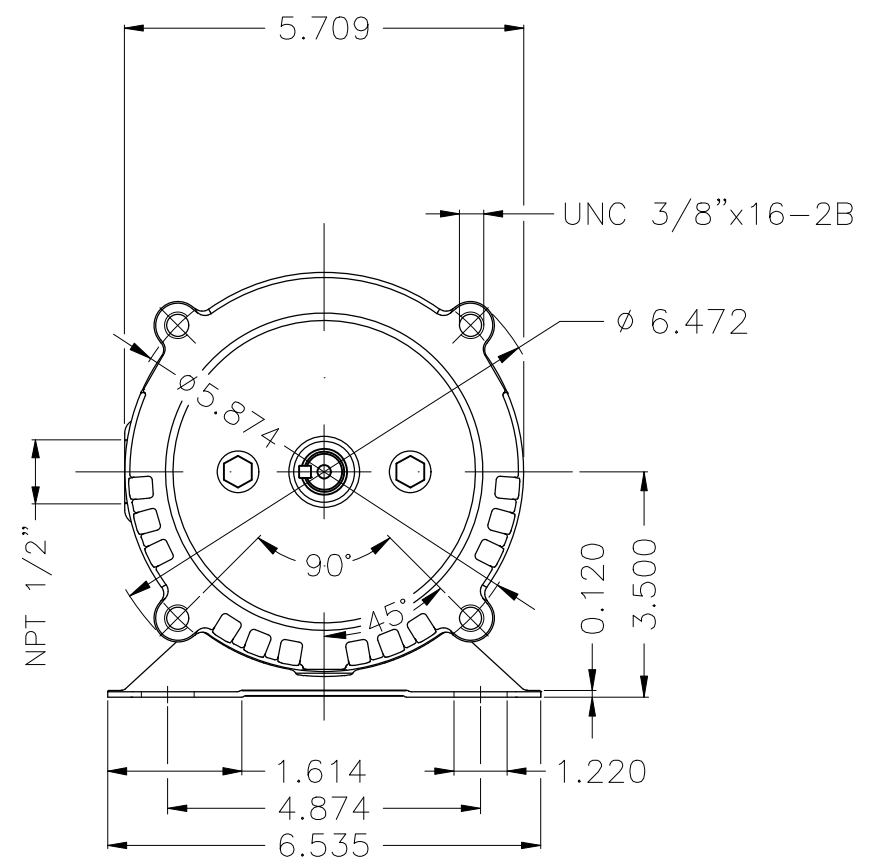
A

B

C

D

E



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.				PREVIEW			
CHECKED		FRAME W56C IP21 ODP				WDD	00		
RELEASED						SHEET	1 / 1		
REL. DATE		WMO	Jaragua do Sul	Product Engineering					

0.5 HP 04 Poles 60 Hz

A