

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 12751144
Frame	: 182/4T	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	: 32.3 kg	
Design	: B	Moment of inertia (J)	: 0.0077 kgm ²	
Output [HP]	7.5	7.5	7.5	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	17.3/8.67	21.4/10.7	19.2/10.2	
L. R. Amperes [A]	128/64.2	120/59.9	121/64.3	
LRC [A]	7.4x(Code H)	5.6x(Code F)	6.3x(Code G)	
No load current [A]	6.43/3.22	6.33/3.17	6.59/3.49	
Rated speed [RPM]	3500	2865	2880	
Slip [%]	2.78	4.50	4.00	
Rated torque [kgfm]	1.56	1.90	1.89	
Locked rotor torque [%]	180	150	170	
Breakdown torque [%]	290	210	240	
Service factor	1.15	1.00	1.00	
Temperature rise	80 K	105 K	105 K	
Locked rotor time	18s (cold) 10s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	65.0 dB(A)	63.0 dB(A)	63.0 dB(A)	
Efficiency (%)	25%	88.3	91.3	90.6
	50%	88.5	88.9	88.8
	75%	88.5	87.4	87.9
	100%	88.5	84.7	85.7
Power Factor	25%	0.49	0.55	0.51
	50%	0.76	0.82	0.79
	75%	0.85	0.89	0.87
	100%	0.90	0.92	0.91
Bearing type	: Drive end 6206 ZZ Non drive end 6205 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 79 kgf	
		Max. compression	: 111 kgf	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 19.2A SF 1.00 SFA 19.2A				
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	13/05/2022			

LOAD PERFORMANCE CURVE

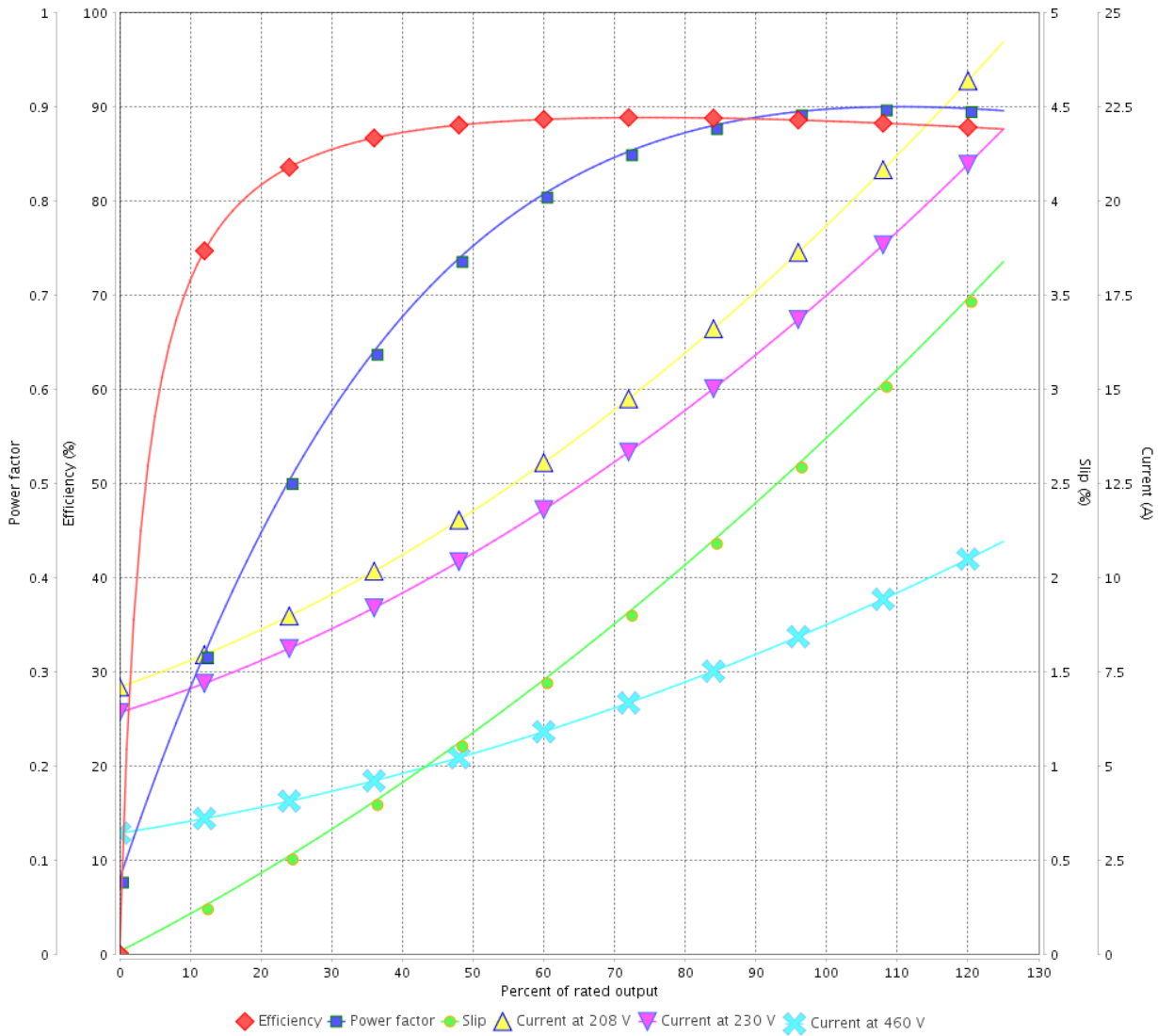
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Performance : 230/460 V 60 Hz 2P

Rated current : 17.3/8.67 A
 LRC : 7.4
 Rated torque : 1.56 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 290 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0077 kgm²
 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 2 / 4	Revision
Checked by				
Date	13/05/2022			

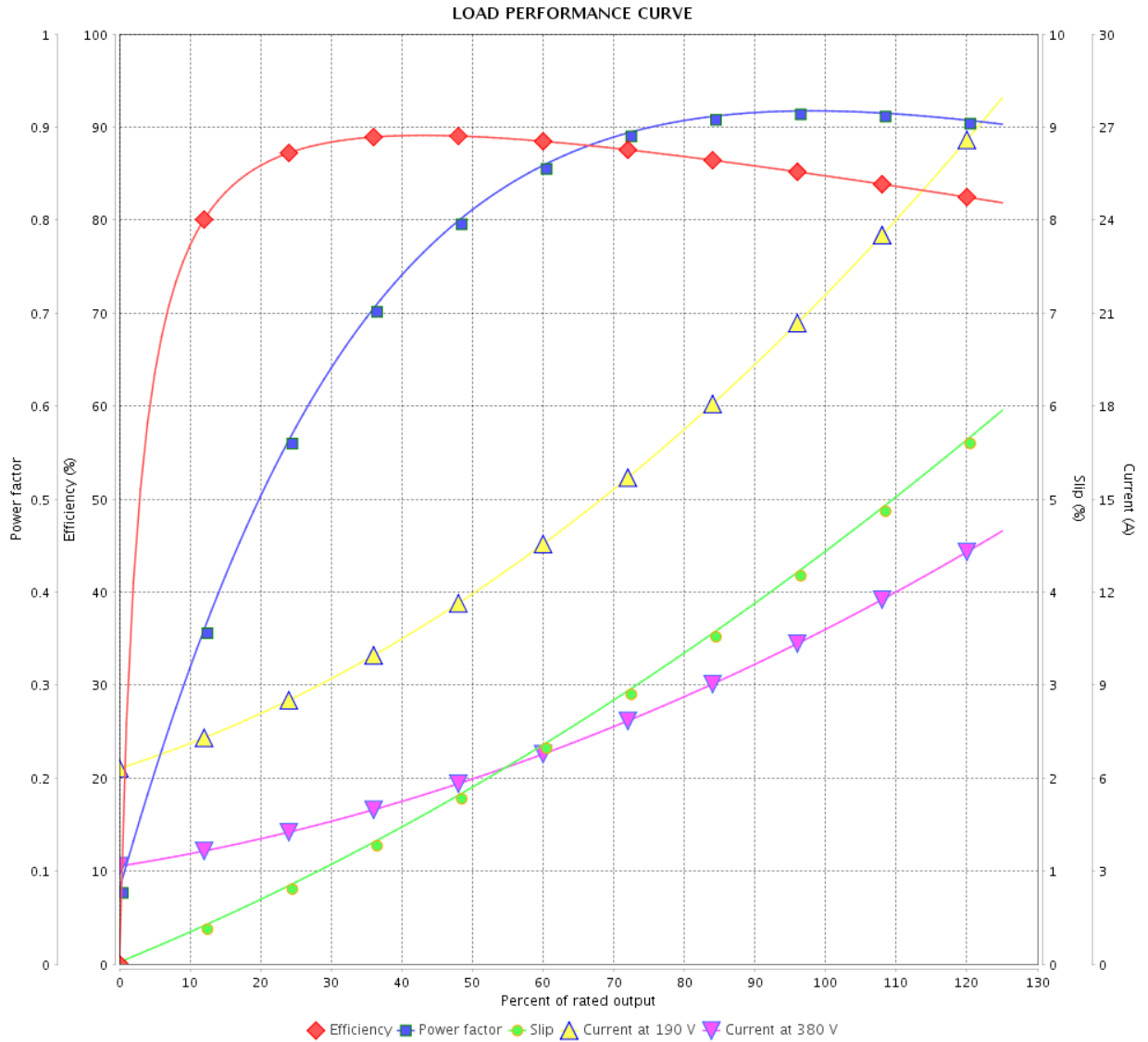
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 190/380 V 50 Hz 2P

Rated current : 21.4/10.7 A
 LRC : 5.6
 Rated torque : 1.90 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 210 %
 Rated speed : 2865 rpm

Moment of inertia (J) : 0.0077 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 4		
Date		13/05/2022		

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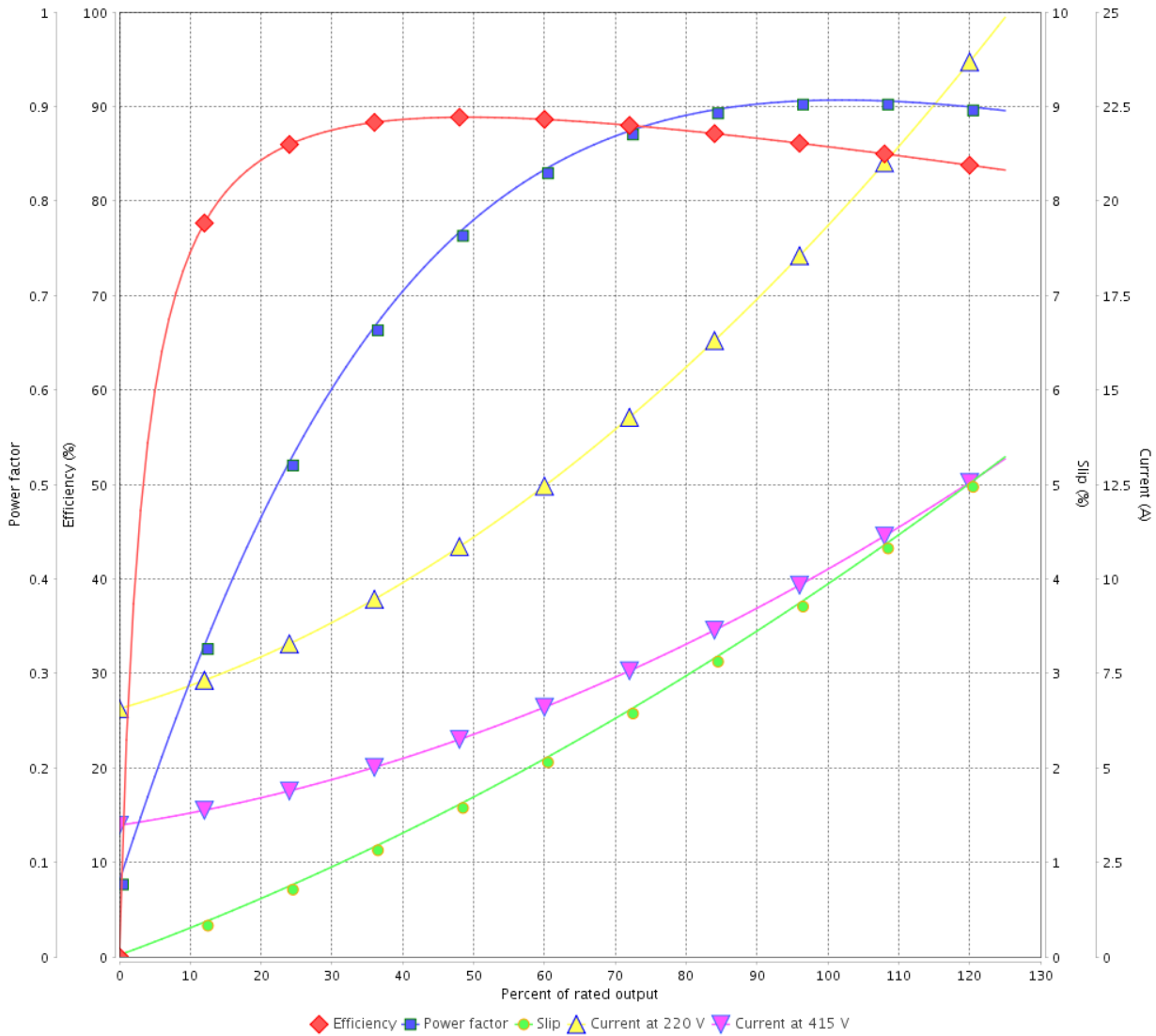
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 220/415 V 50 Hz 2P

Rated current : 19.2/10.2 A
 LRC : 6.3
 Rated torque : 1.89 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 240 %
 Rated speed : 2880 rpm

Moment of inertia (J) : 0.0077 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 4	Revision
Checked by				
Date	13/05/2022			

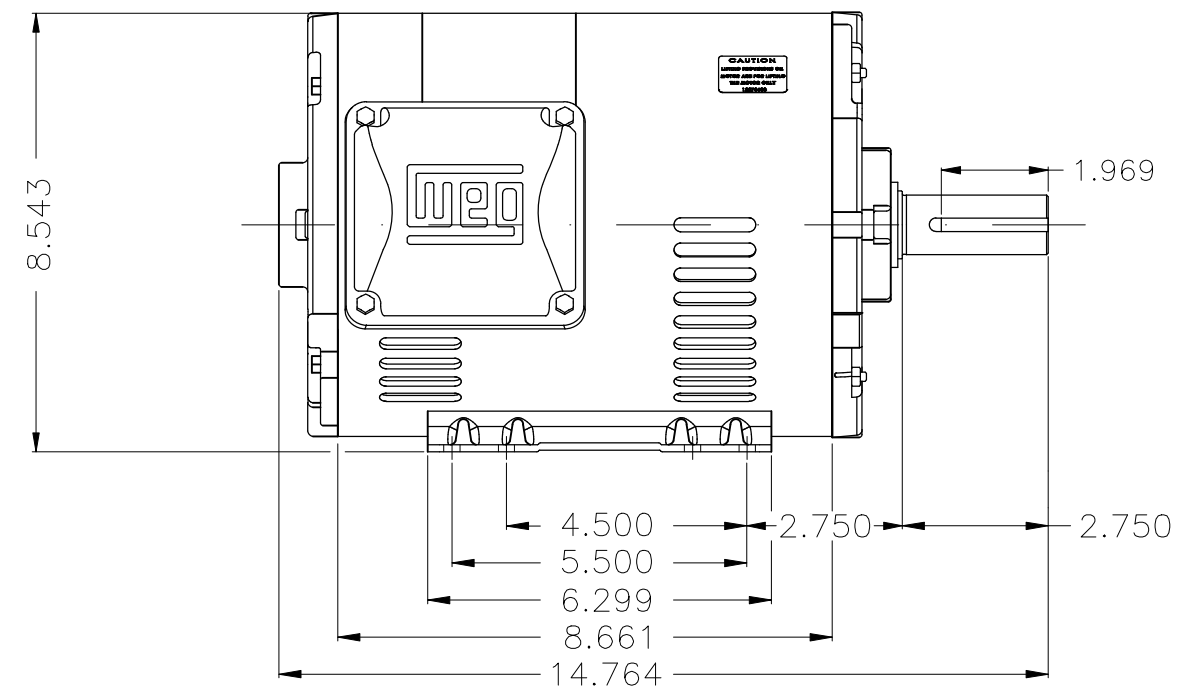
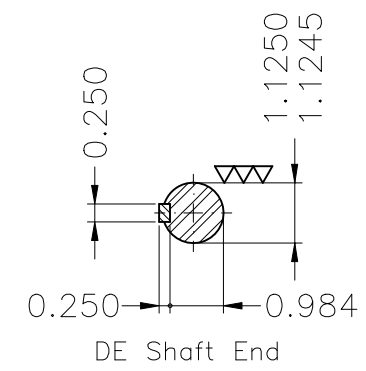
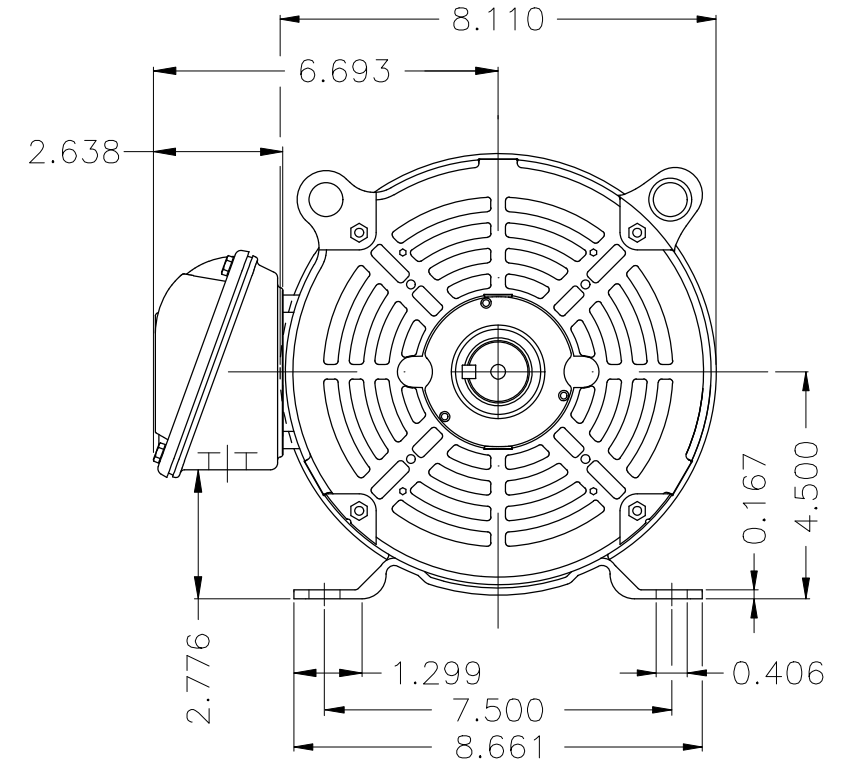
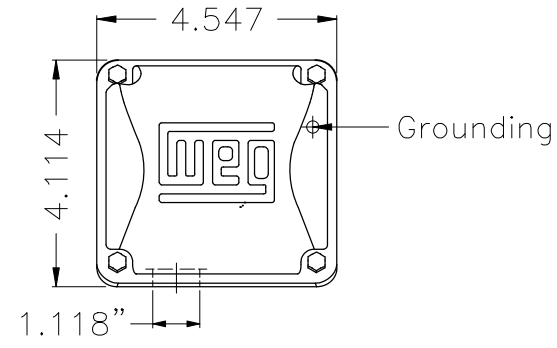
A

B

C

D

E



Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF.					
CHECKED		FRAME 182/4T IP21 ODP					
RELEASED							
REL. DATE	WMO	Jaragua do Sul	Product Engineering				

HYBRISUSER 00

PREVIEW

WDD 00

SHEET 1 / 1

7.5 HP 02 Poles 60 Hz

A