

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer	:		
Product line	: Standard Efficiency Three-Phase	Product code :	12894800
Frame	: 56C	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>2</sup>	: 12.3 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0036 kgm <sup>2</sup>
Design	: A		
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]	3.32/1.66	3.68/1.84	3.49/1.85
L. R. Amperes [A]	25.6/12.8	23.2/11.6	23.0/12.2
LRC [A]	7.7x(Code M)	6.3x(Code J)	6.6x(Code K)
No load current [A]	2.40/1.20	2.35/1.18	2.57/1.36
Rated speed [RPM]	1760	1445	1450
Slip [%]	2.22	3.67	3.33
Rated torque [kgfm]	0.412	0.502	0.501
Locked rotor torque [%]	270	200	229
Breakdown torque [%]	300	260	290
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	72.4	70.9
	50%	74.0	72.3
	75%	78.5	77.0
	100%	80.0	78.1
Power Factor	25%	0.26	0.28
	50%	0.48	0.51
	75%	0.62	0.65
	100%	0.71	0.75
Bearing type	: Drive end : 6204 ZZ	Non drive end : 6202 ZZ	Foundation loads Max. traction : 40 kgf Max. compression : 53 kgf
Sealing	: V'Ring	Without Bearing Seal	
Lubrication interval	: -	-	
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 3.67A SF 1.00 SFA 3.67A			
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			
Checked by			
Date	13/05/2022		
		Page	Revision
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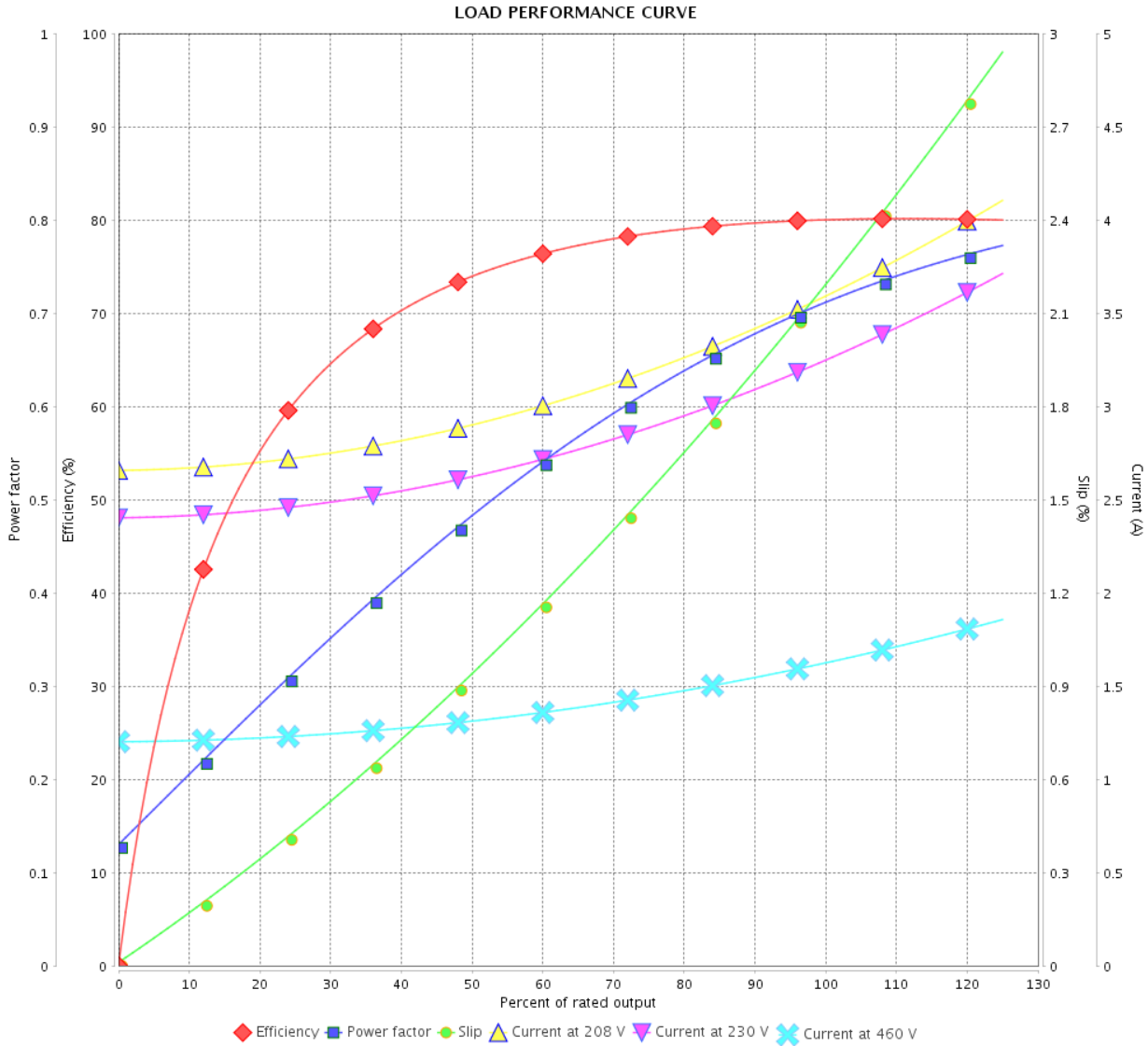
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 12894800



Performance : 230/460 V 60 Hz 4P

Rated current : 3.32/1.66 A  
 LRC : 7.7  
 Rated torque : 0.412 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : A

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
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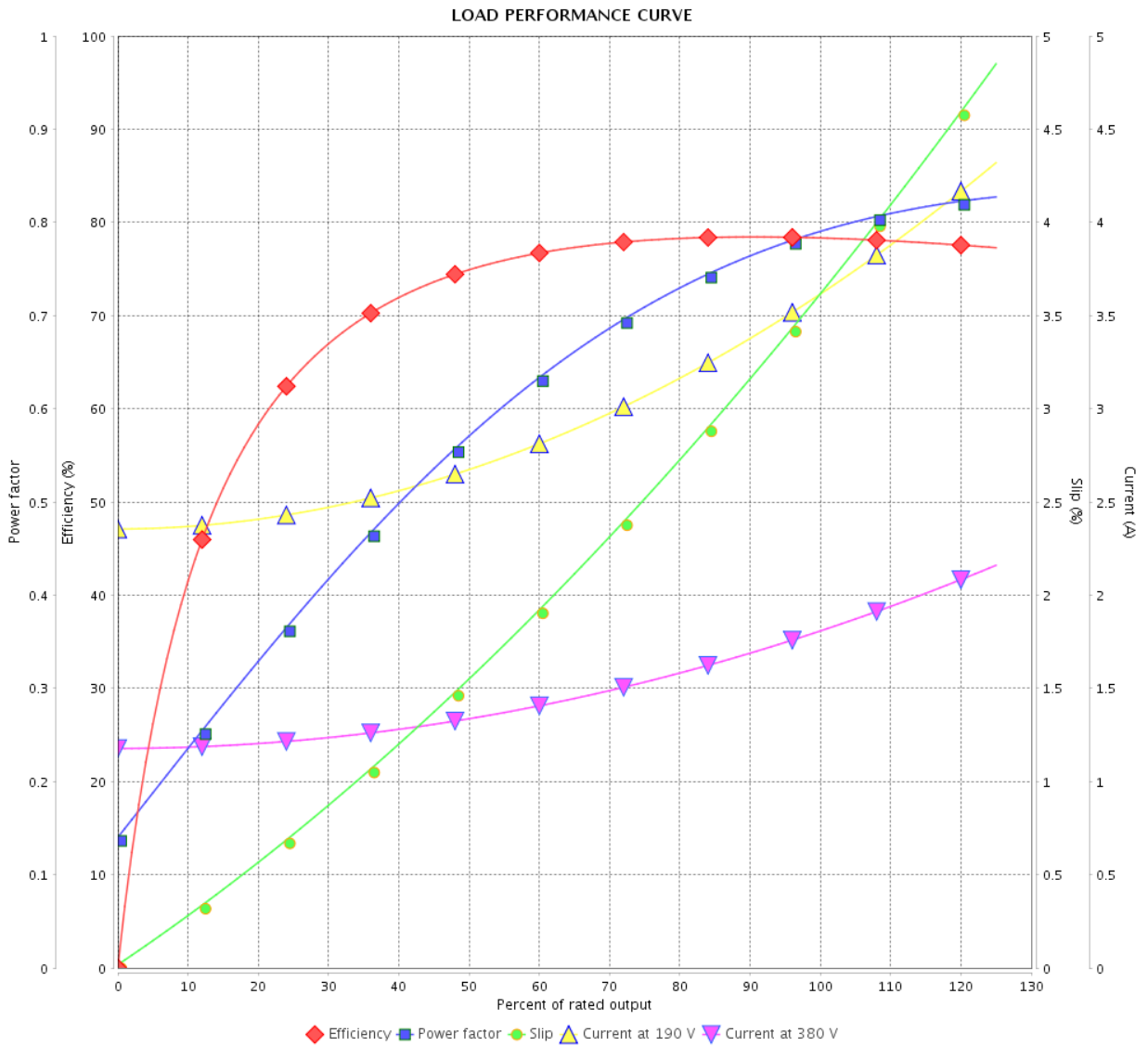
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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

Product line : Standard Efficiency Three-Phase      Product code : 12894800



Performance : 190/380 V 50 Hz 4P

Rated current : 3.68/1.84 A  
 LRC : 6.3  
 Rated torque : 0.502 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 260 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 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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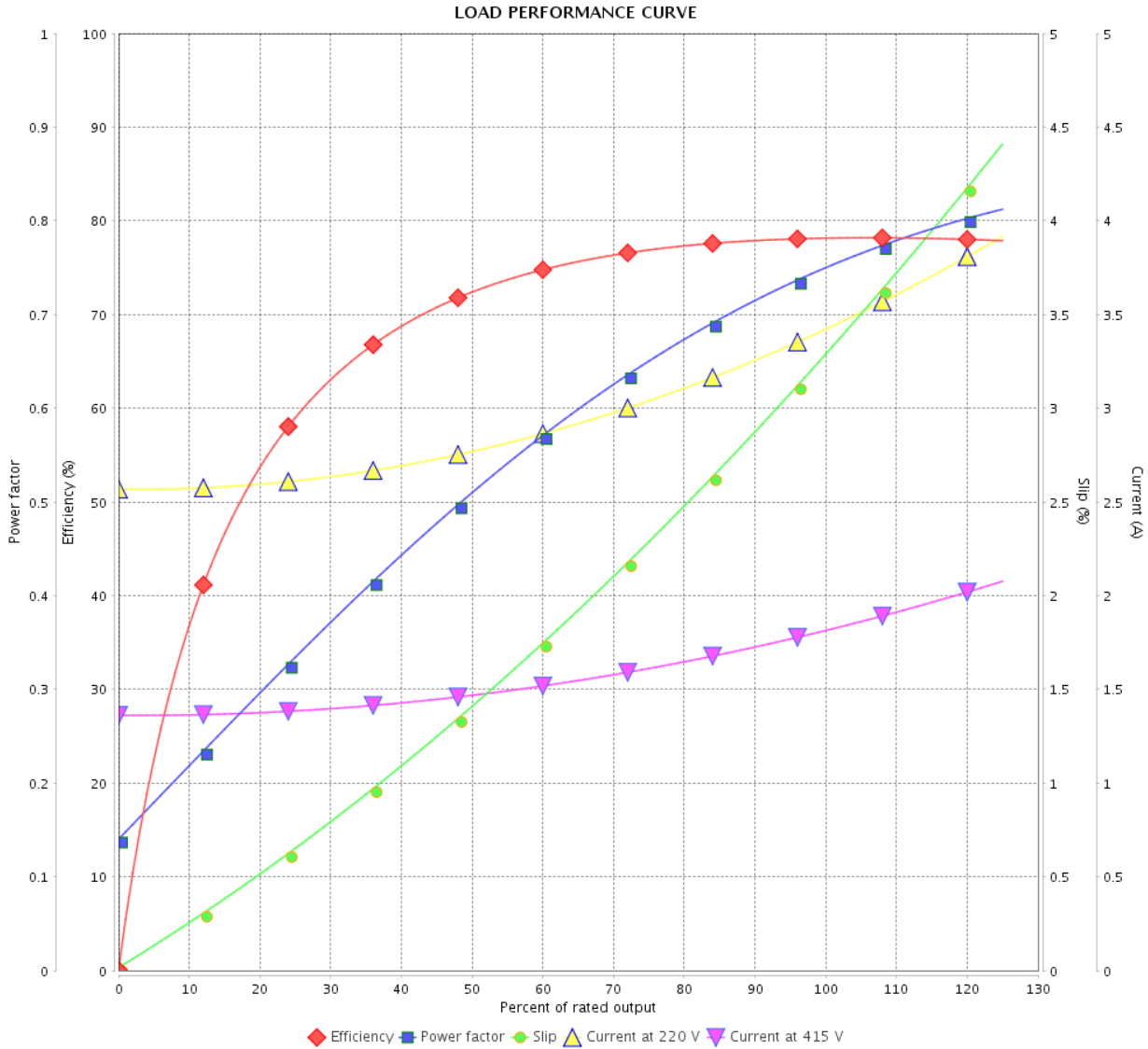
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 12894800



Performance : 220/415 V 50 Hz 4P

Rated current : 3.49/1.85 A  
 LRC : 6.6  
 Rated torque : 0.501 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 290 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0036 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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

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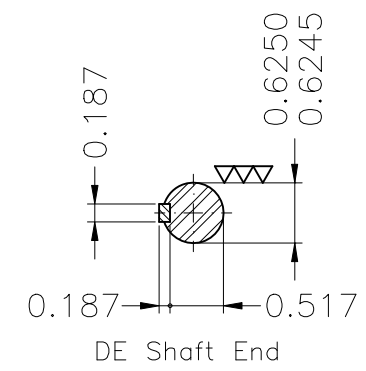
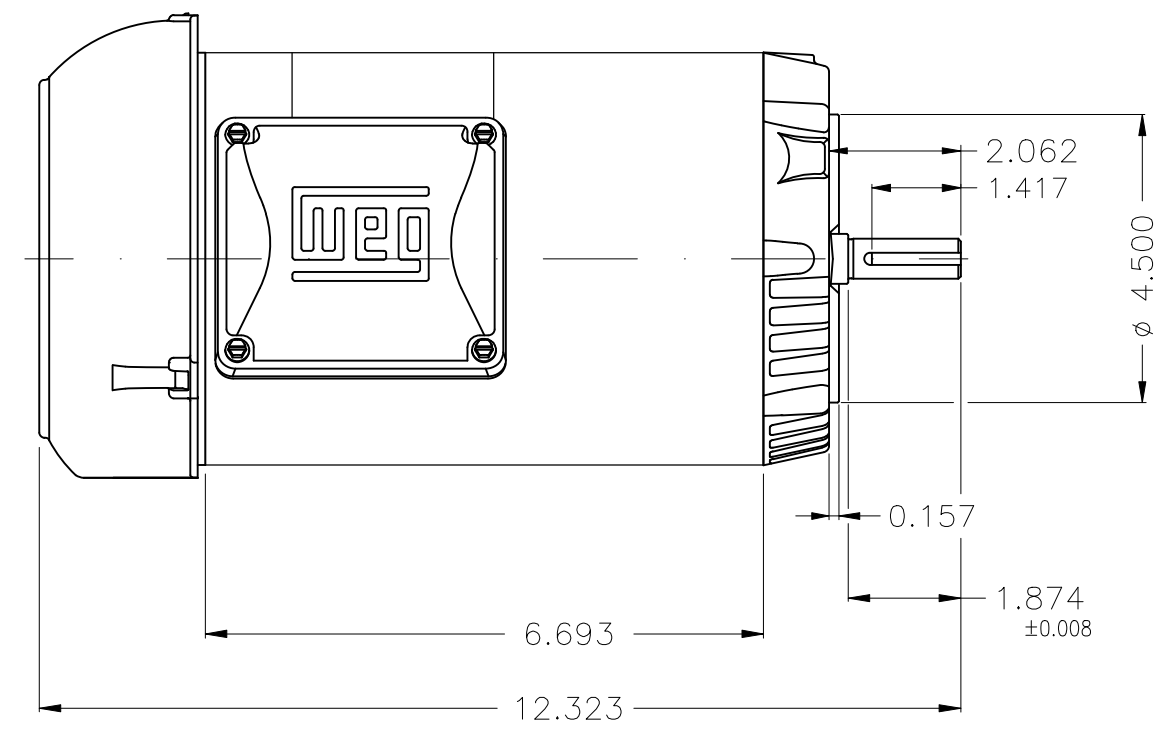
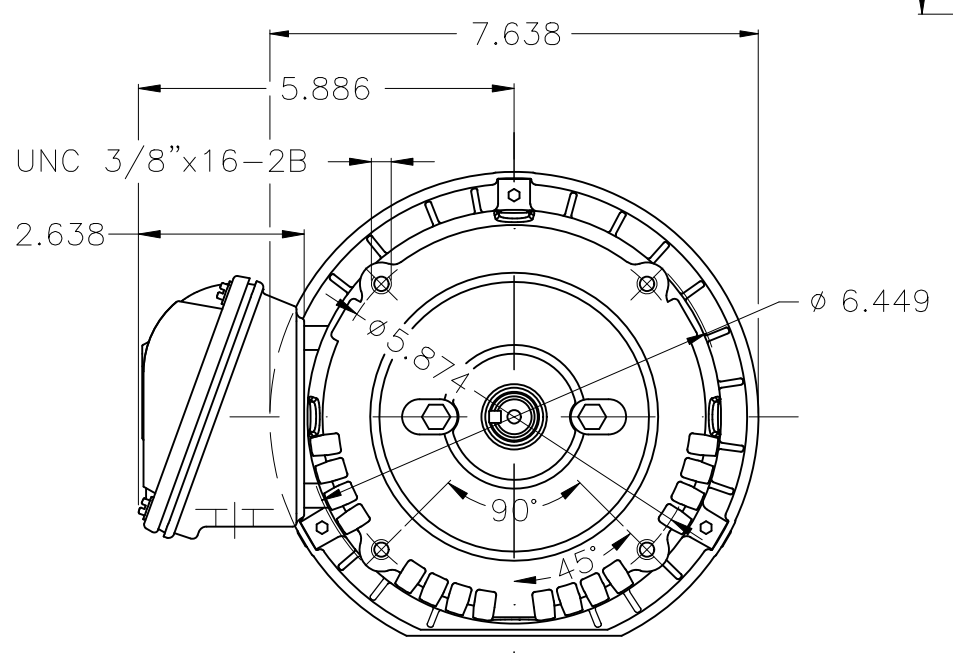
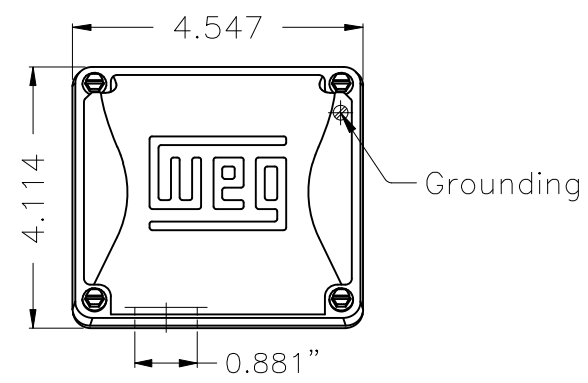
A


B

C

D

E



Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B14R(D)									
					HYBRISUSER	00			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL				PREVIEW			
CHECKED		FRAME 56C IP55 TEFC				WDD	00		
RELEASED						SHEET	1 / 1		
REL. DATE		WMO	Jaragua do Sul	Product Engineering					

1 HP 04 Poles 60 Hz

A