

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12700710			
Catalog # :	04018ET3E324T-W22G			
Frame	: 324/6T			
Insulation class	: F			
Duty cycle	: Cont.(S1)			
Ambient temperature	: -20°C to +40°C			
Altitude	: 1000 m.a.s.l.			
Protection degree	: IP55			
Design	: B			
Cooling method	: IC411 - TEFC			
Mounting	: F-1			
Rotation ¹	: Both (CW and CCW)			
Starting method	: Direct On Line			
Approx. weight ²	: 573 lb			
Moment of inertia (J)	: 9.16 sq.ft.lb			
Output [HP]	40			
Poles	4			
Frequency [Hz]	60			
Rated voltage [V]	230/460			
Rated current [A]	94.2/47.1			
L. R. Amperes [A]	575/287			
LRC [A]	6.1x(Code G)			
No load current [A]	34.0/17.0			
Rated speed [RPM]	1770			
Slip [%]	1.67			
Rated torque [ft.lb]	119			
Locked rotor torque [%]	229			
Breakdown torque [%]	240			
Service factor	1.25			
Temperature rise	80 K			
Locked rotor time	36s (cold) 20s (hot)			
Noise level ²	66.0 dB(A)			
Efficiency (%)	25%	0.000		
	50%	93.6		
	75%	94.1		
	100%	94.1		
Power Factor	25%	0.00		
	50%	0.72		
	75%	0.80		
	100%	0.85		
Bearing type	: <u>Drive end</u> 6312 C3 <u>Non drive end</u> 6212 C3			
Sealing	: V'Ring V'Ring			
Lubrication interval	: 20000 h 20000 h			
Lubricant amount	: 21 g 13 g			
Lubricant type	: Mobil Polyrex EM			
Foundation loads	Max. traction : 707 lb			
	Max. compression : 1280 lb			
Notes				
USABLE @208V 104A SF 1.15 SFA 120A				
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.			
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Performed by				
Checked by			Page	Revision
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



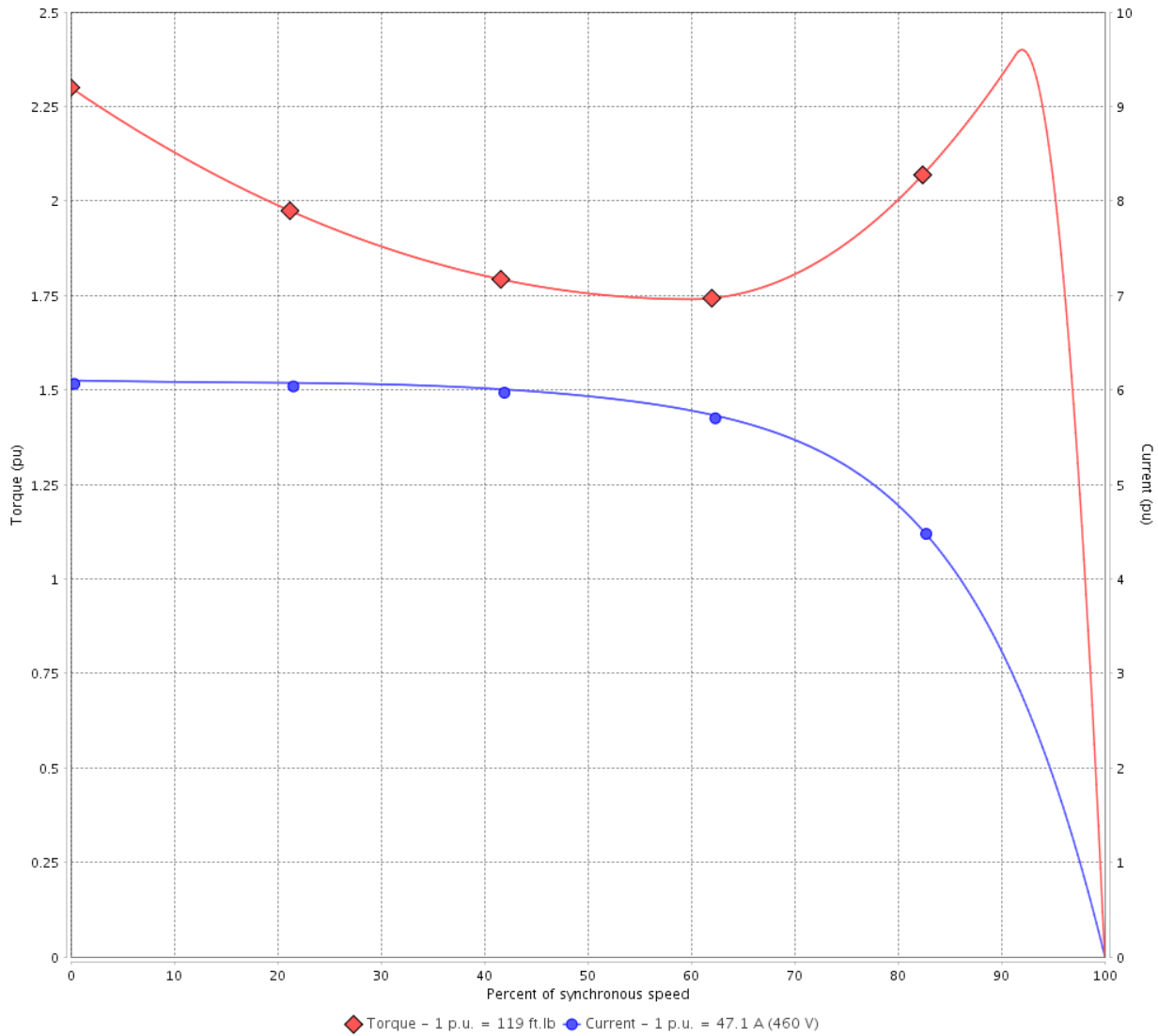
Customer :

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 94.2/47.1 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 119 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



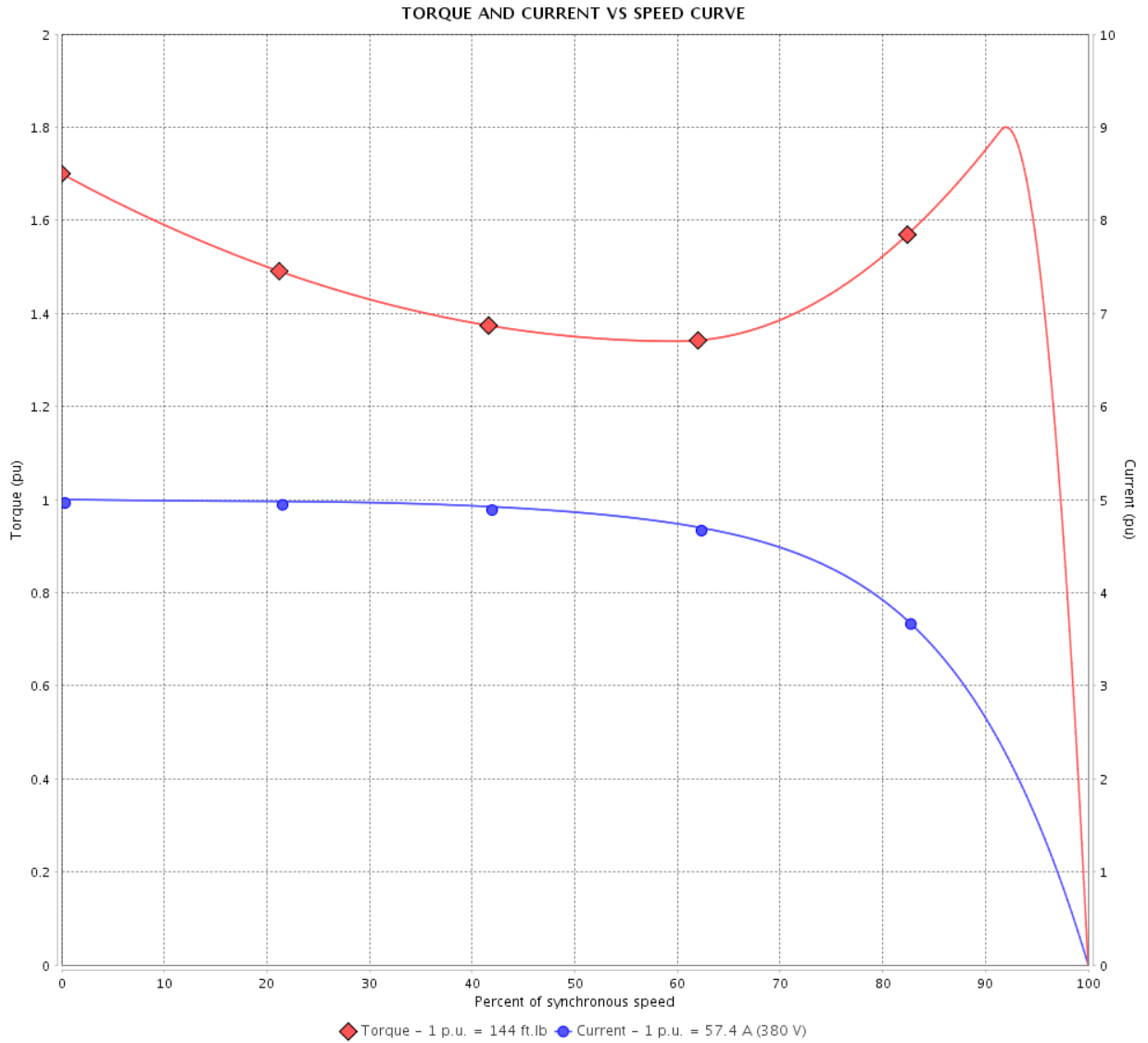
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700710

Catalog # : 04018ET3E324T-W22G



Performance : 380 V 50 Hz 4P

Rated current	: 57.4 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 144 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 180 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

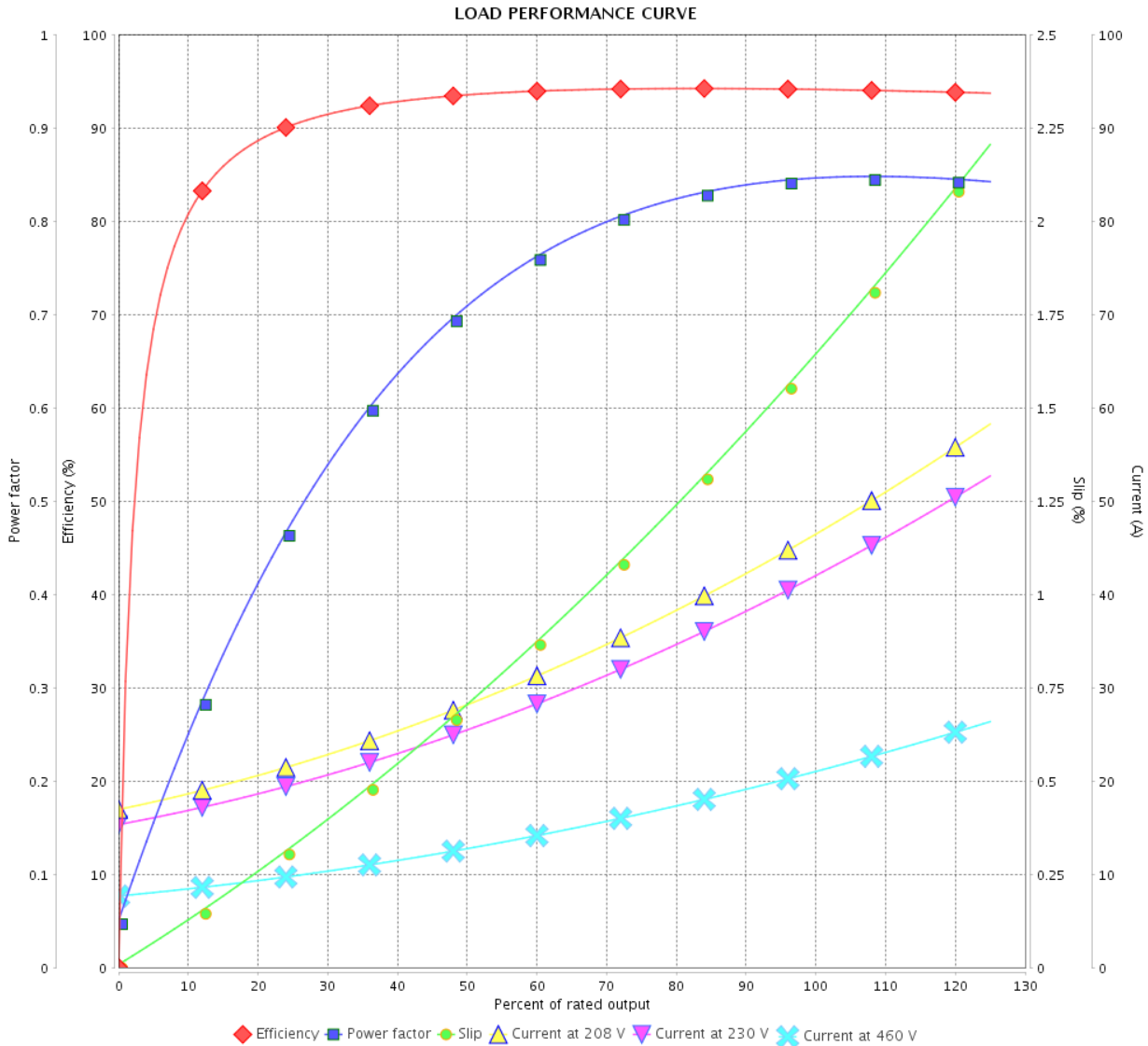


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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LOAD PERFORMANCE CURVE

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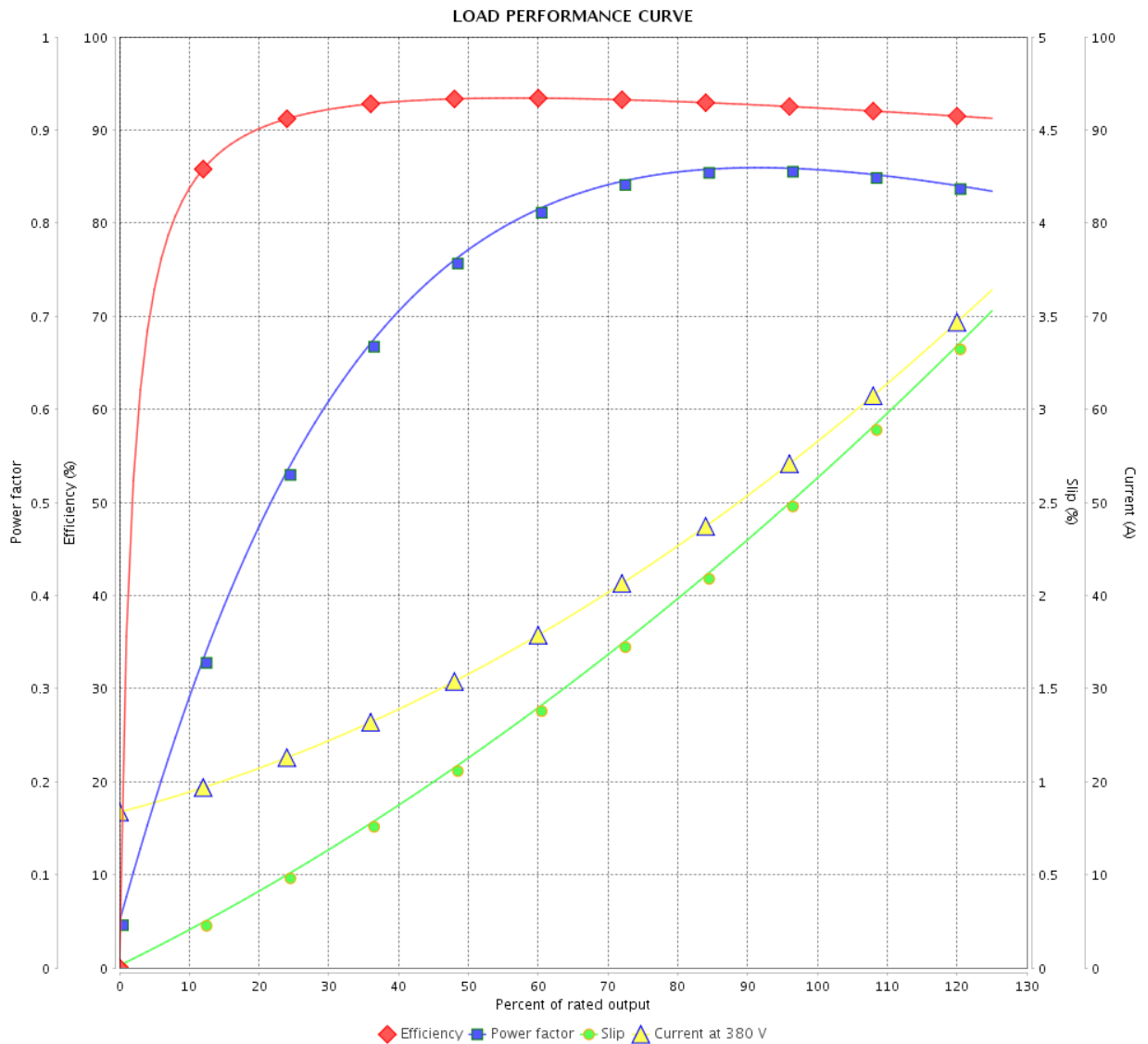


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

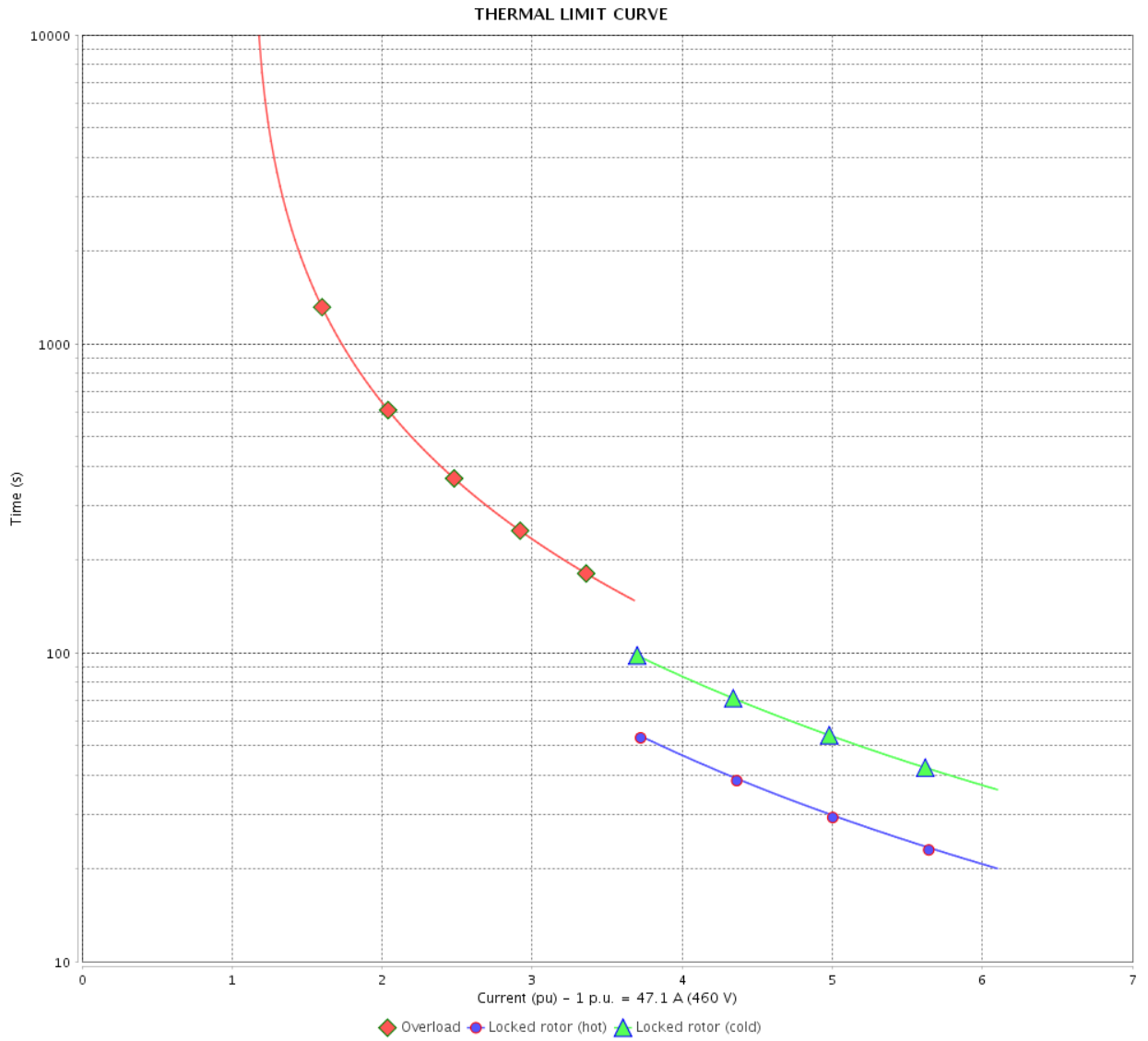
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THERMAL LIMIT CURVE

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Customer : _____



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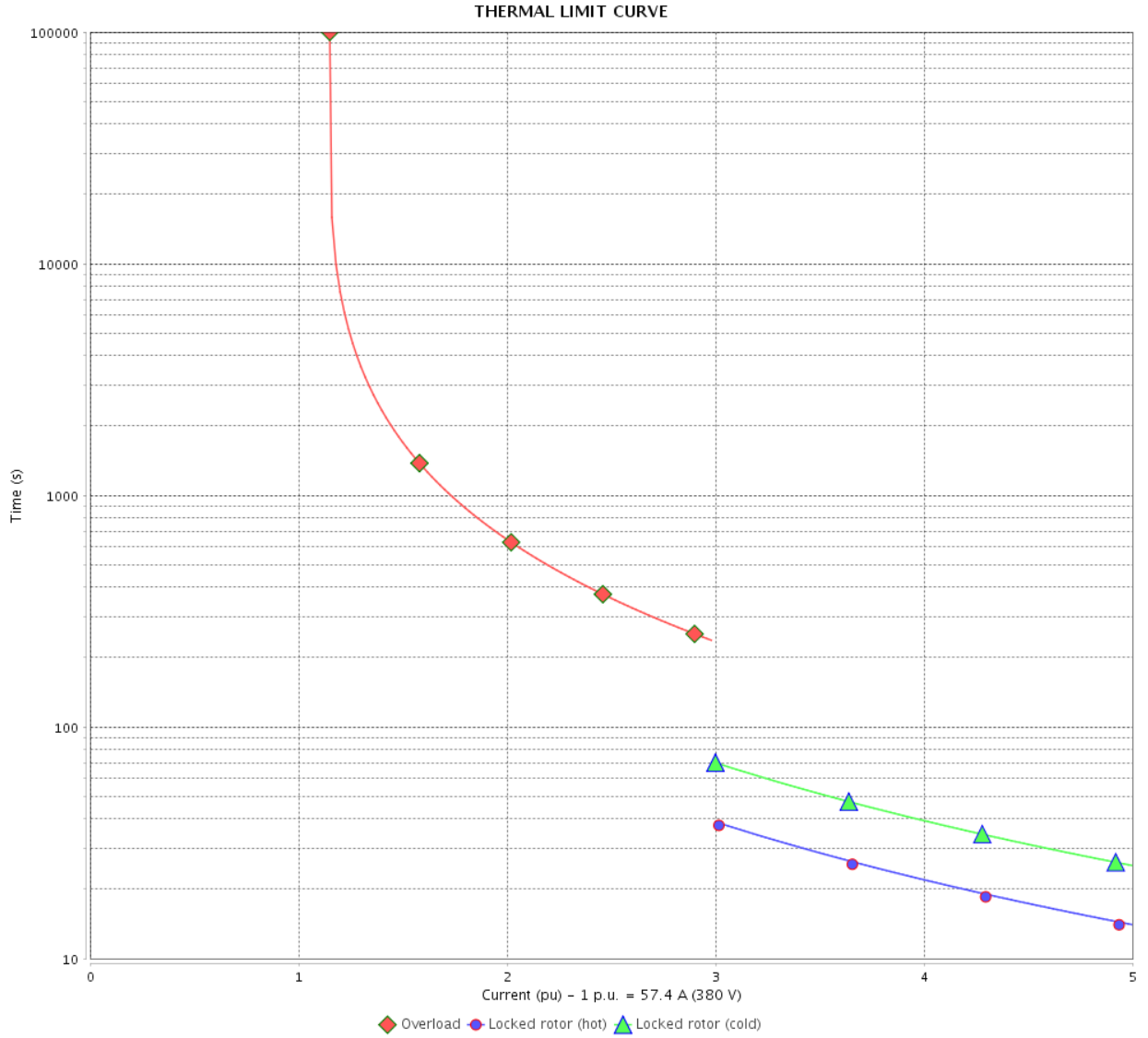
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VFD OPERATION CURVE

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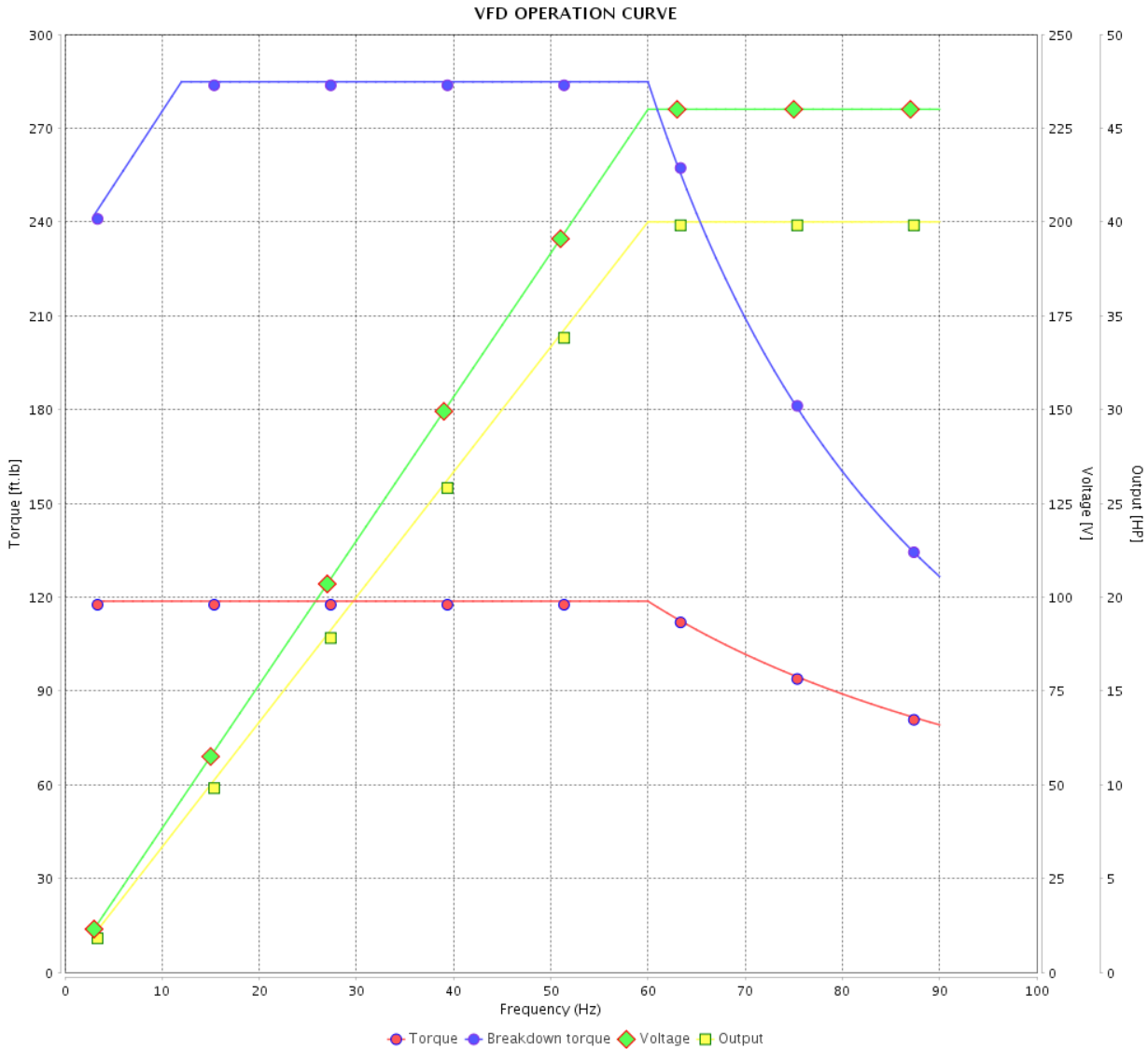


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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

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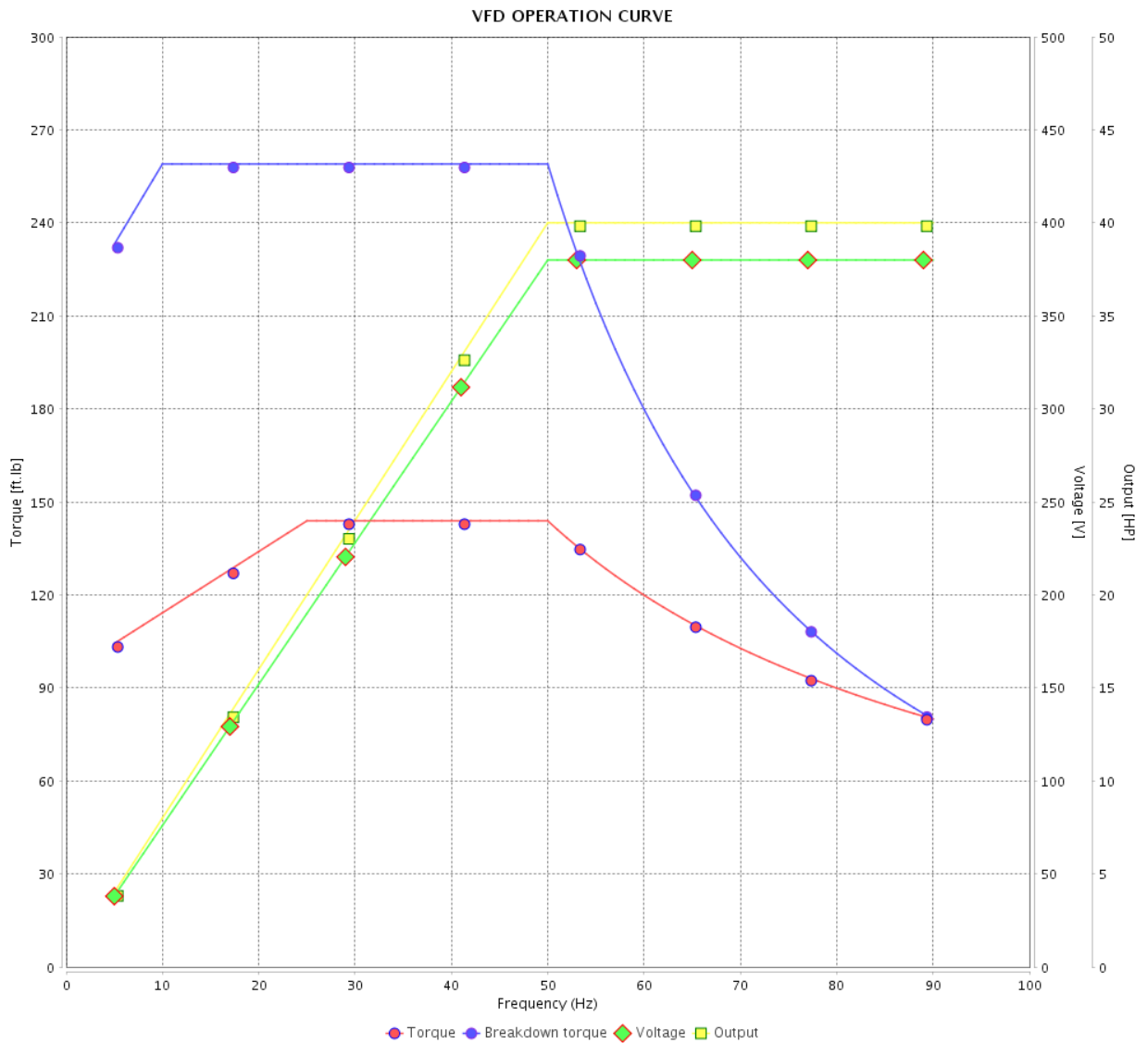


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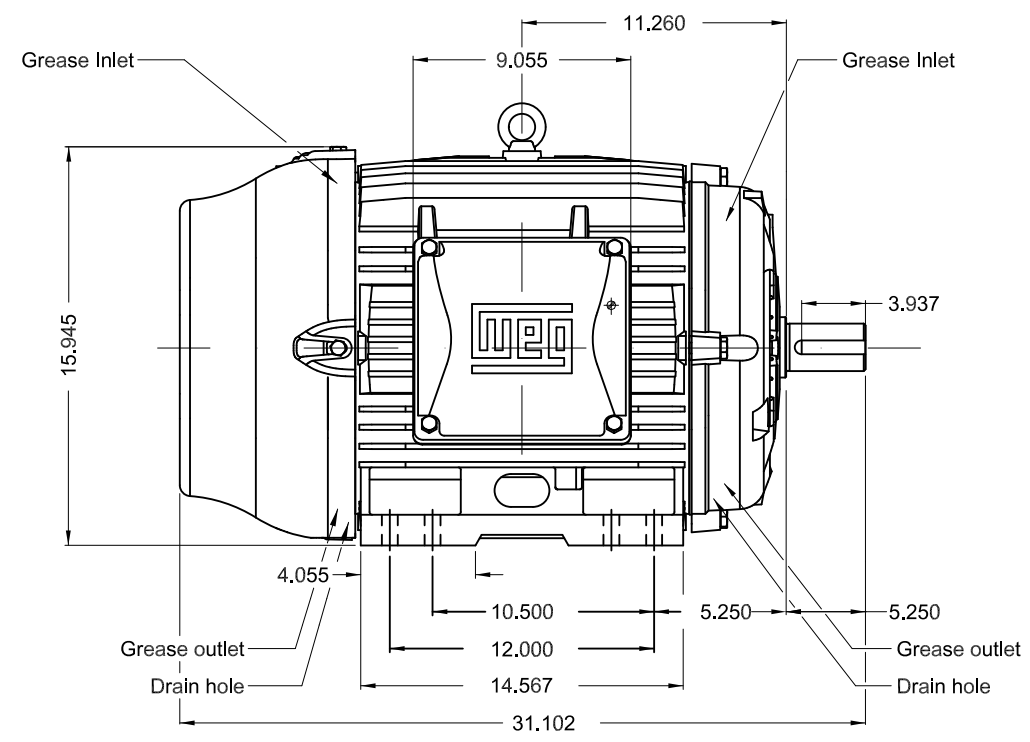
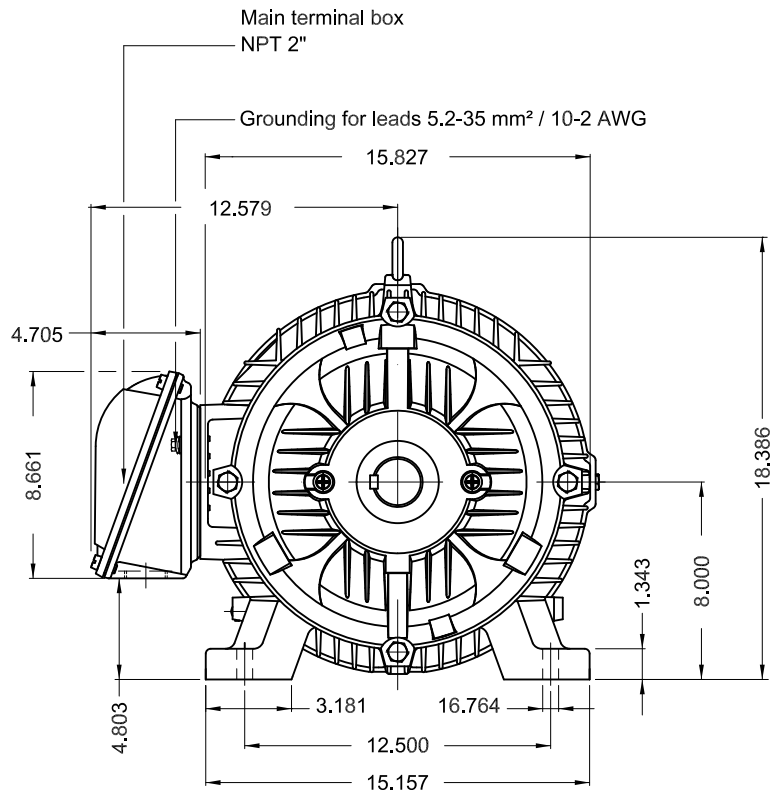
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1 2 3 4 5 6

A

B

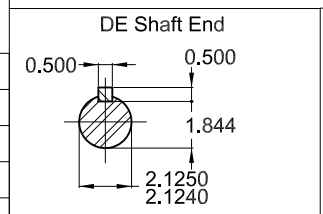
C



D

E

Internal AEGIS ground ring on the DE
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)



40 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 324/6T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
WDD



SHEET 1 / 1

Dimensions in inches XME A3



Mod.TE1BFOXON
CC029A

MODEL 04018ET3E324T-W22G

Inverter Duty Motor
Severe Duty

60Hz: For use on PWM: VT 1000:1,
CT 20:1, 1.00SF

MADE IN BRAZIL
12700710

PH3 60Hz Fr. 324/6T 1000m.a.s.l. IP55 TEFC 573lb

V 230/460 A 94.2/47.1

HP 40 kW 30

SF 1.25 SFA 118/58.9

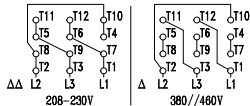
RPM 1775 PF 0.85


AMB 40°C INS cl. F DT80K NEMA NOM EFF 94.1%

DUTY CONT. DES B Code G

USABLE @208V 104A SF 1.15 SFA 120

40HP 30kW 50Hz 380V 57.4A 1460RPM SF 1.00 EFF 92.4% (IE2)



 → 6312-C3 (21g)
→ 6212-C3 (13g)

 MOBIL POLYREX EM (20000h)

