



# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



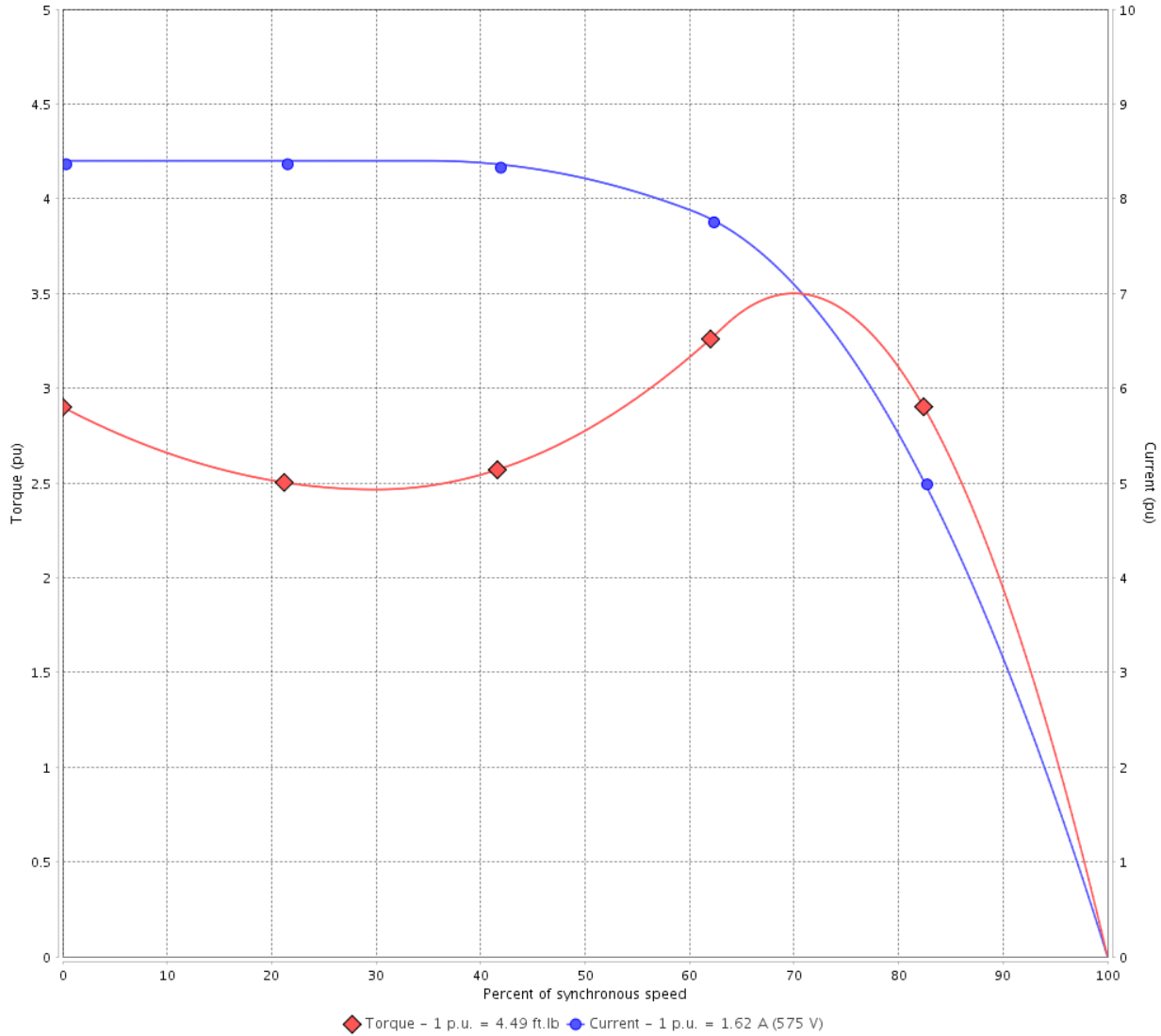
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11594953

Catalog # : 00158ST3HIE145TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1431 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

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

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Checked by				
Date	01/06/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

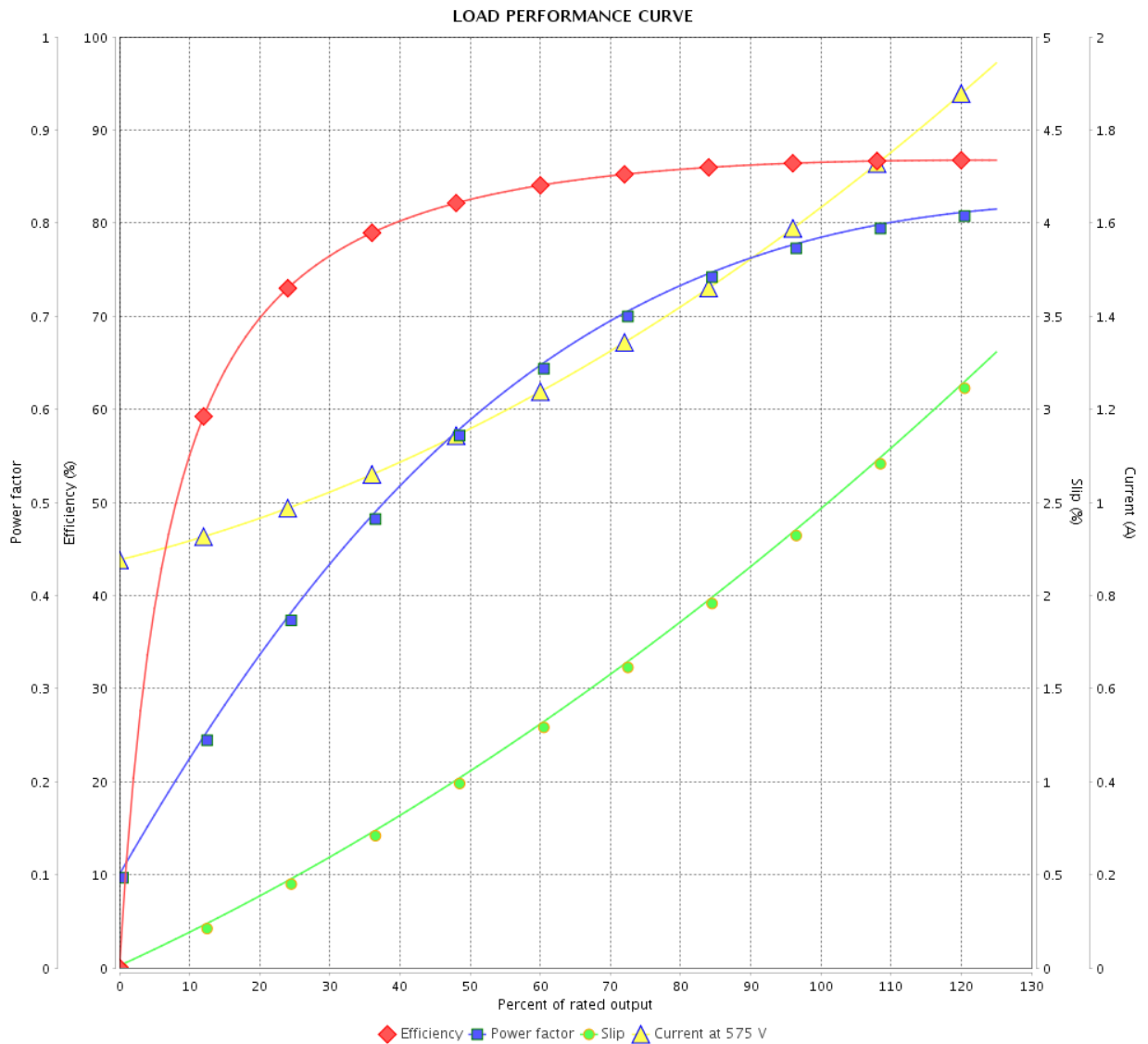


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# THERMAL LIMIT CURVE



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Breakdown torque : 350 %	Temperature rise : 80 K
Rated speed : 1755 rpm	Design : B

Heating constant

Cooling constant

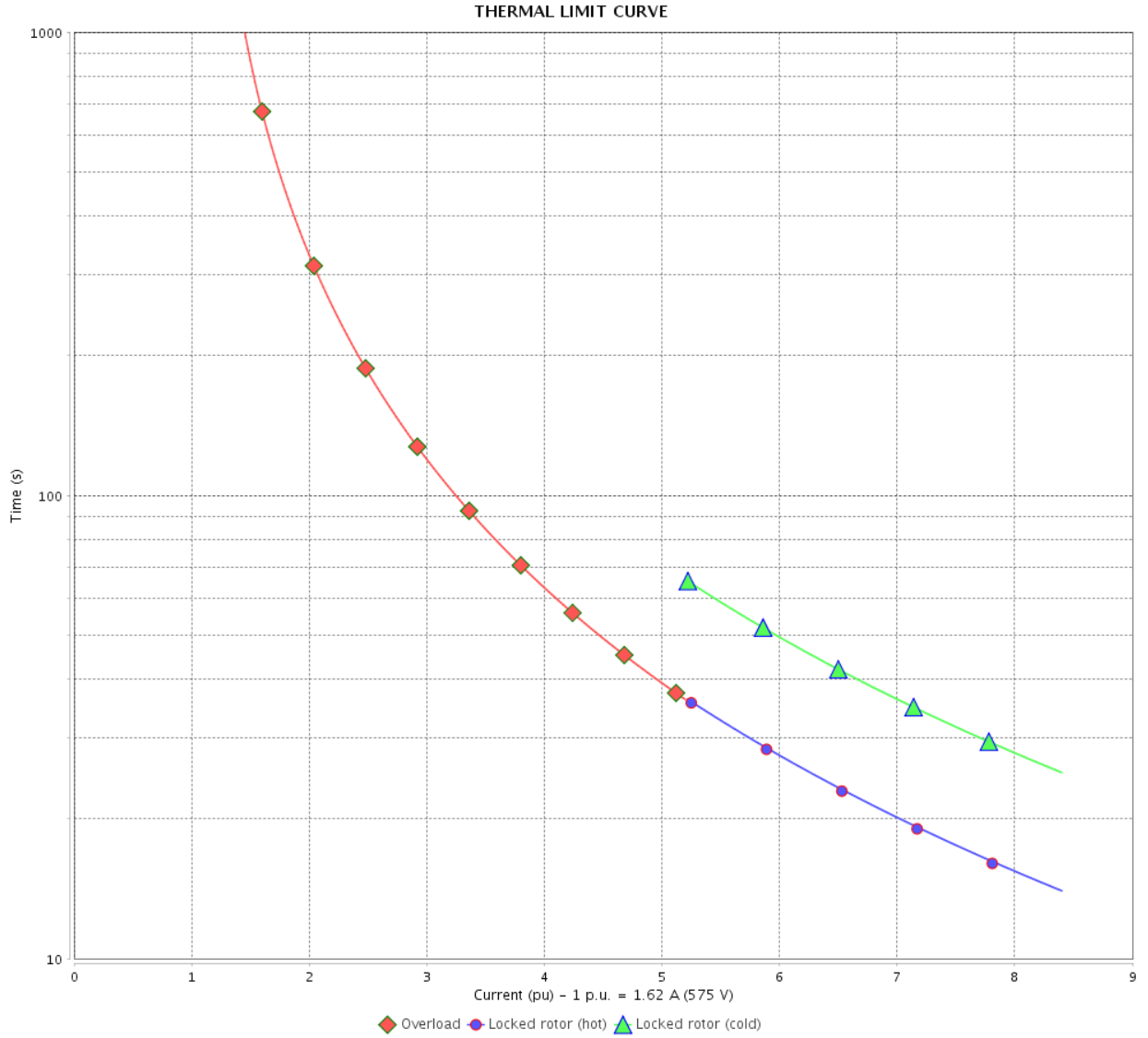
Rev.	Changes Summary	Performed	Checked	Date
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Date	01/06/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



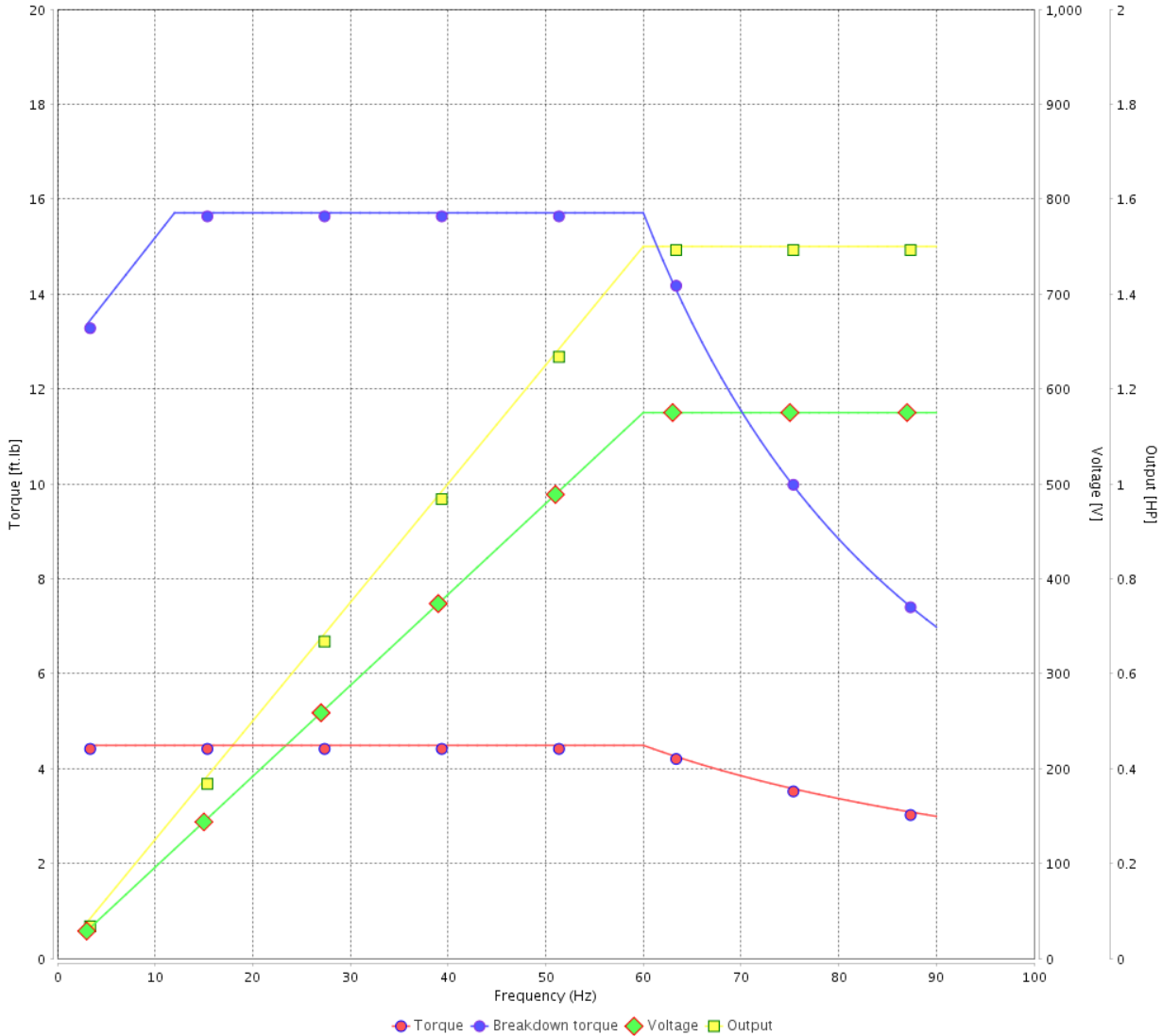
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11594953

Catalog # : 00158ST3HIE145TC-W22

VFD OPERATION CURVE

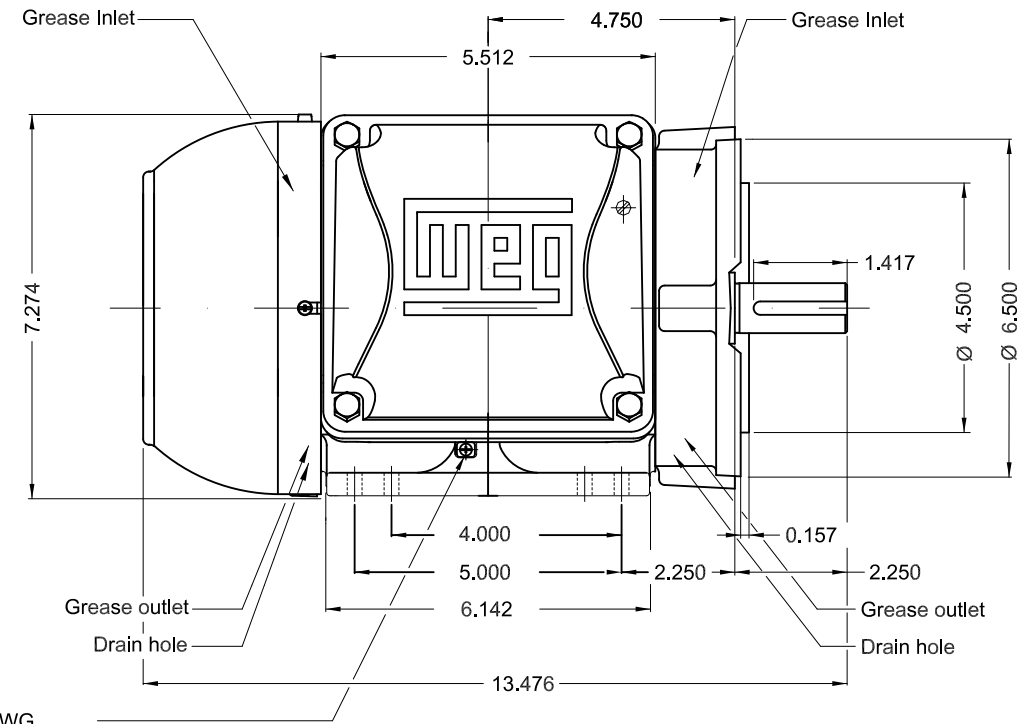
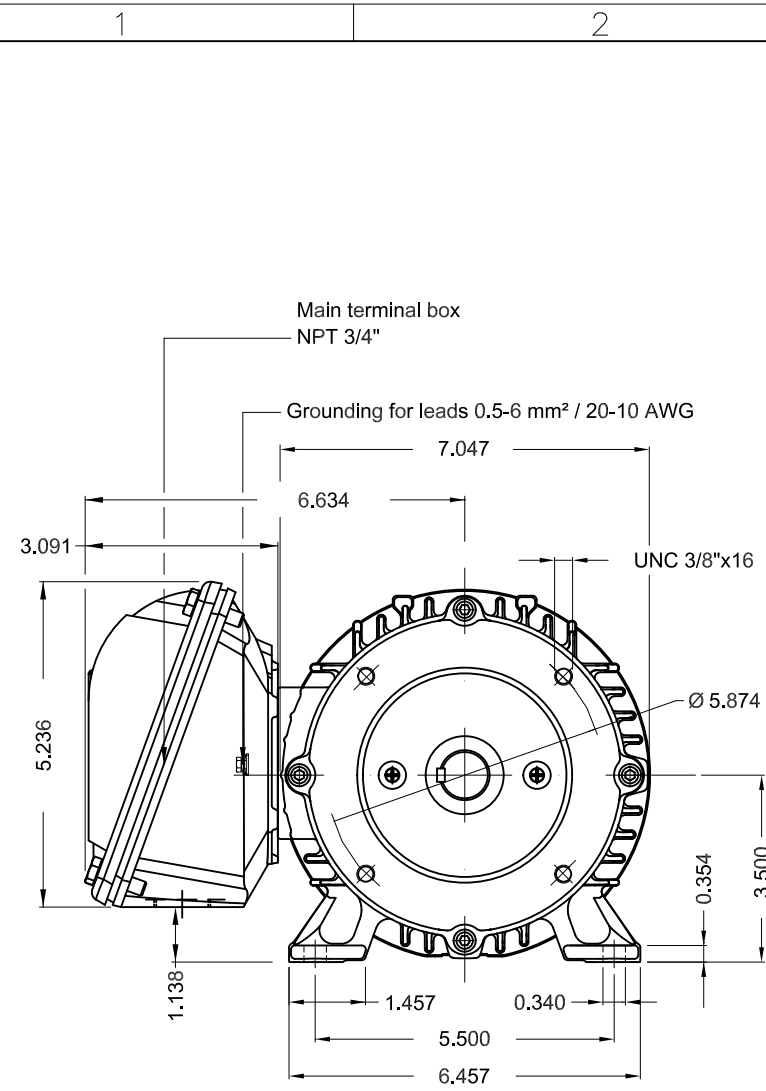


Performance : 575 V 60 Hz 4P

Rated current : 1.62 A  
 LRC : 8.4  
 Rated torque : 4.49 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

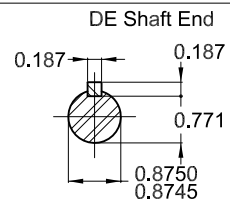
Moment of inertia (J) : 0.1431 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Grounding for leads 0.5-6 mm² / 20-10 AWG

Color RAL 5009  
 Painting plan 202E  
 Mounting B34R(D)



1.5 HP 04 Poles 60 Hz

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 143/5TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

**PREVIEW**  
 WDD



SHEET 1 / 1

MADE IN BRAZIL  
11594953



**NEMA**  
**Premium**

**W22**

IE001504W22CIS

Inverter Duty Motor  
Severe Duty

**IEEE**  
**841-2009**



Class I, Div 2, Gr A, B, C and D - T3  
Class I, Zone 2, IIC - T3  
Class II, Div 2, Gr F and G - T5  
For use on PWM: Gr. A, B, C, D, F and G,  
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 143/5TC 1000m.a.s.l. IP55 TEFC 591b

V 575

A 1.62

HP 1.5

kW 1.1

SF 1.25

SFA 2.03

RPM 1755

PF 0.79

AMB 40°C

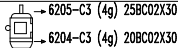
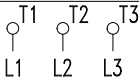
INS cl. F DT80K

NEMA NOM EFF 86.5%

DUTY CONT.

DES B Code L

GUARANT. EFF 84.0%



MOBIL POLYREX EM (20000h)

