

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 NEMA Premium Efficiency Three-Phase	Product code :	14503747		
		Catalog # :	03012OT3E326T-W40G		
Frame	: 324/6T	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 ²	: 516 lb		
Protection degree	: IP23	Moment of inertia (J)	: 9.56 sq.ft.lb		
Design	: B				
Output [HP]	30	25	25	25	25
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	72.0/36.0	36.5	35.5	34.6	34.6
L. R. Amperes [A]	454/227	223	238	235	235
LRC [A]	6.3x(Code G)	6.1x(Code G)	6.7x(Code H)	6.8x(Code H)	6.8x(Code H)
No load current [A]	29.6/14.8	14.6	15.8	16.8	16.8
Rated speed [RPM]	1182	980	980	980	980
Slip [%]	1.50	2.00	2.00	2.00	2.00
Rated torque [ft.lb]	133	134	134	134	134
Locked rotor torque [%]	200	160	180	200	200
Breakdown torque [%]	240	229	260	280	280
Service factor	1.25	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)
Noise level ²	62.0 dB(A)				
Efficiency (%)	25%	91.7	91.2	91.2	91.4
	50%	92.4	91.4	91.4	91.6
	75%	93.0	91.8	91.8	91.8
	100%	93.6	91.8	91.8	91.8
Power Factor	25%	0.44	0.44	0.40	0.38
	50%	0.70	0.70	0.66	0.63
	75%	0.79	0.80	0.77	0.75
	100%	0.82	0.84	0.82	0.81
Bearing type	: <u>Drive end</u> 6312 Z C3	<u>Non drive end</u> 6211 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction		
	Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 21 g	11 g			
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 79.6A SF 1.15 SFA 91.6A					
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	Date
Performed by					
Checked by				Page	Revision
Date	14/04/2022			1 / 21	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



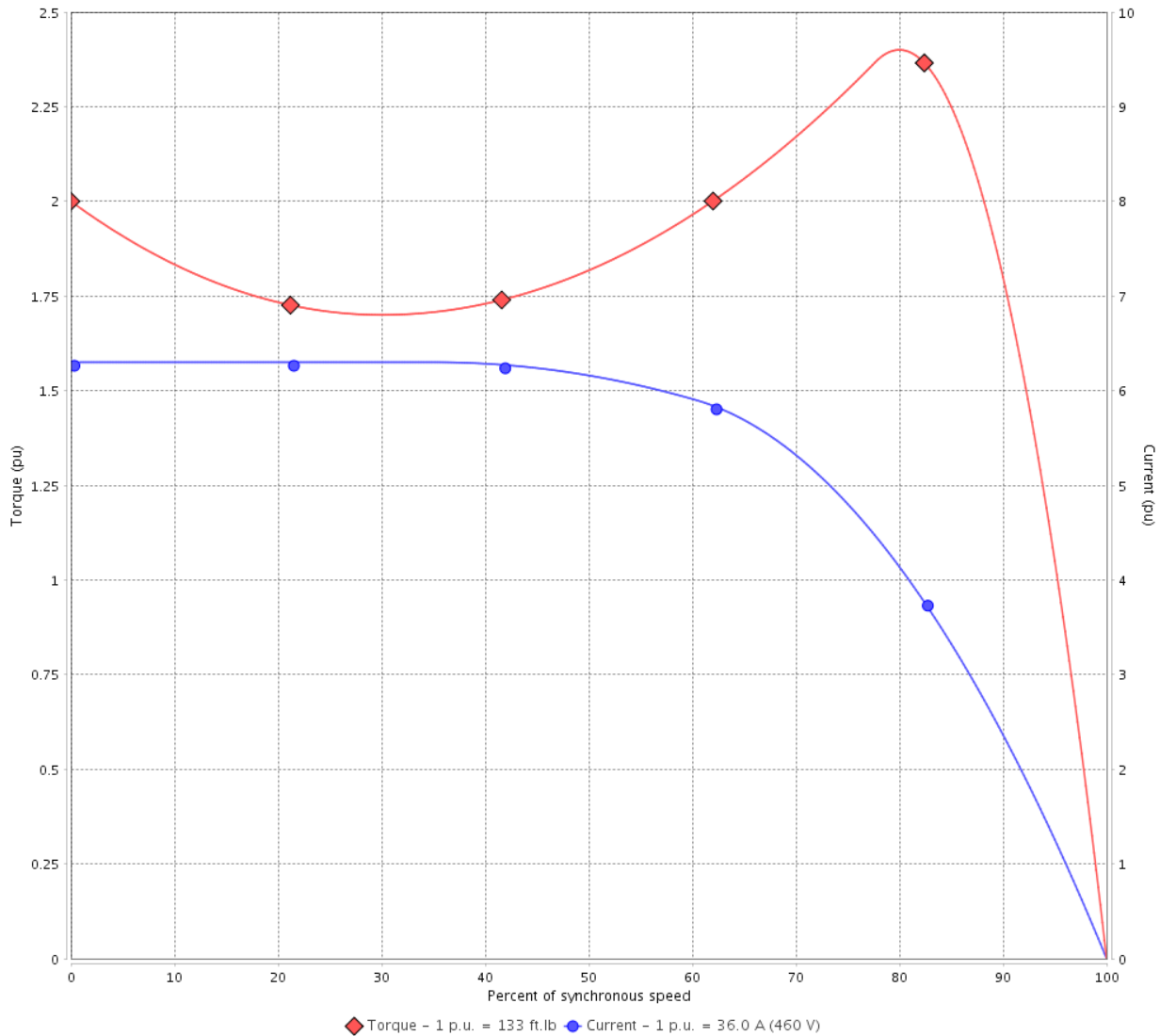
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14503747

Catalog # : 030120T3E326T-W40G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
LRC : 6.3
Rated torque : 133 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	14/04/2022			
			2 / 21	

TORQUE AND CURRENT VS SPEED CURVE



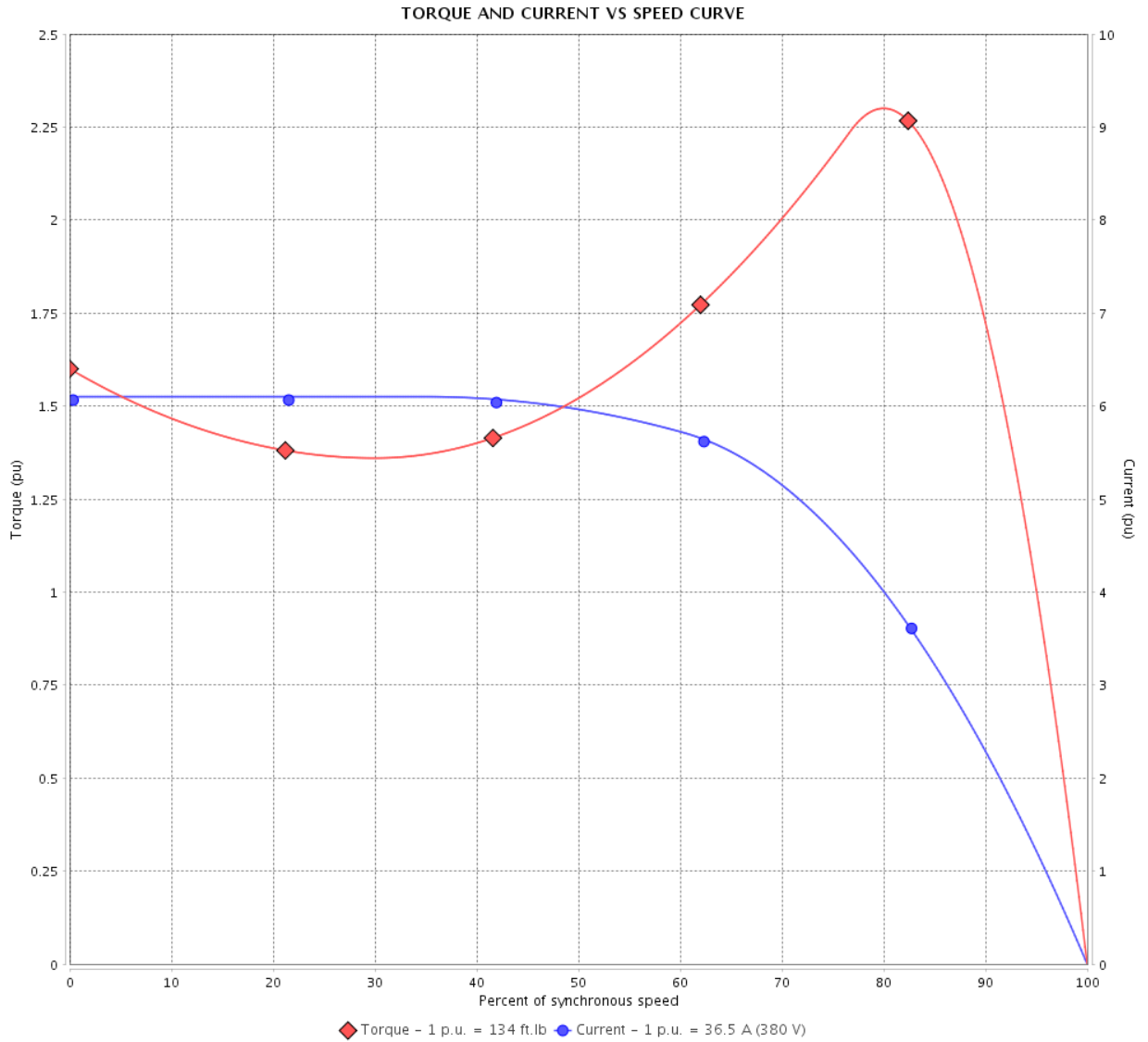
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14503747

Catalog # : 03012OT3E326T-W40G



Performance : 380 V 50 Hz 6P IE3

Rated current	: 36.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 21	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



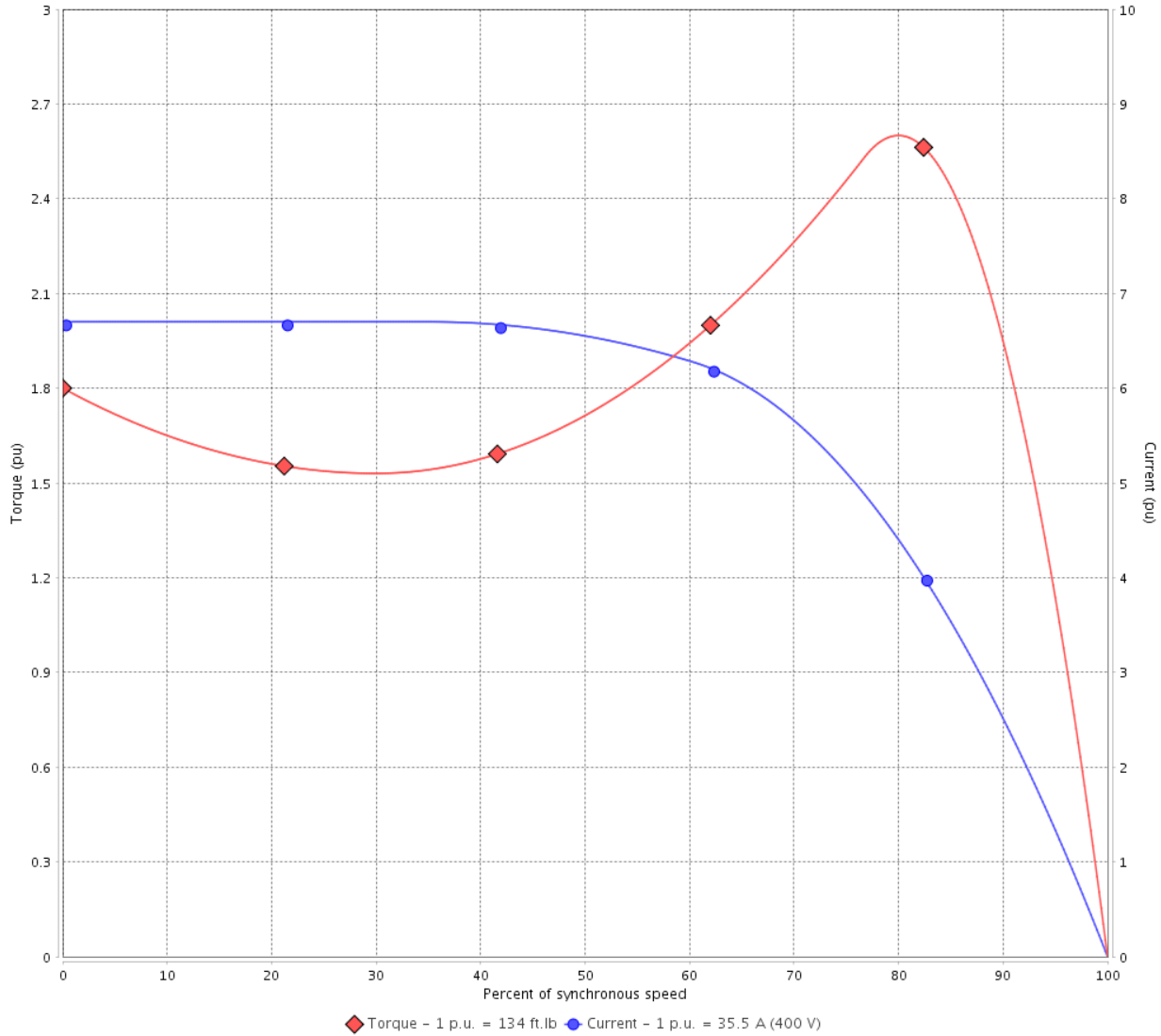
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14503747

Catalog # : 030120T3E326T-W40G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 21	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



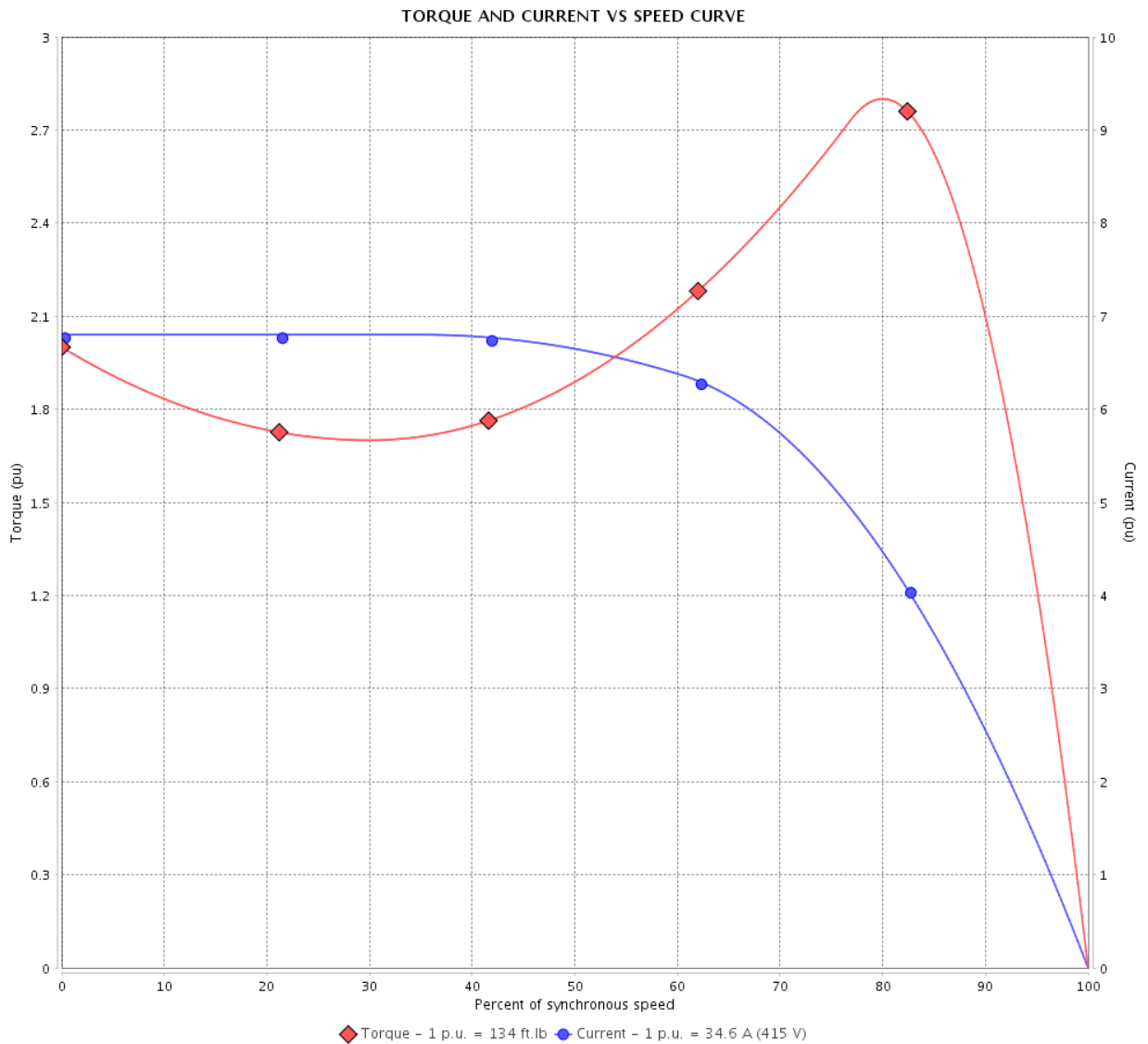
Three Phase Induction Motor - Squirrel Cage

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Three-Phase

Product code : 14503747

Catalog # : 03012OT3E326T-W40G



Performance : 415 V 50 Hz 6P IE3

Rated current	: 34.6 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 21	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

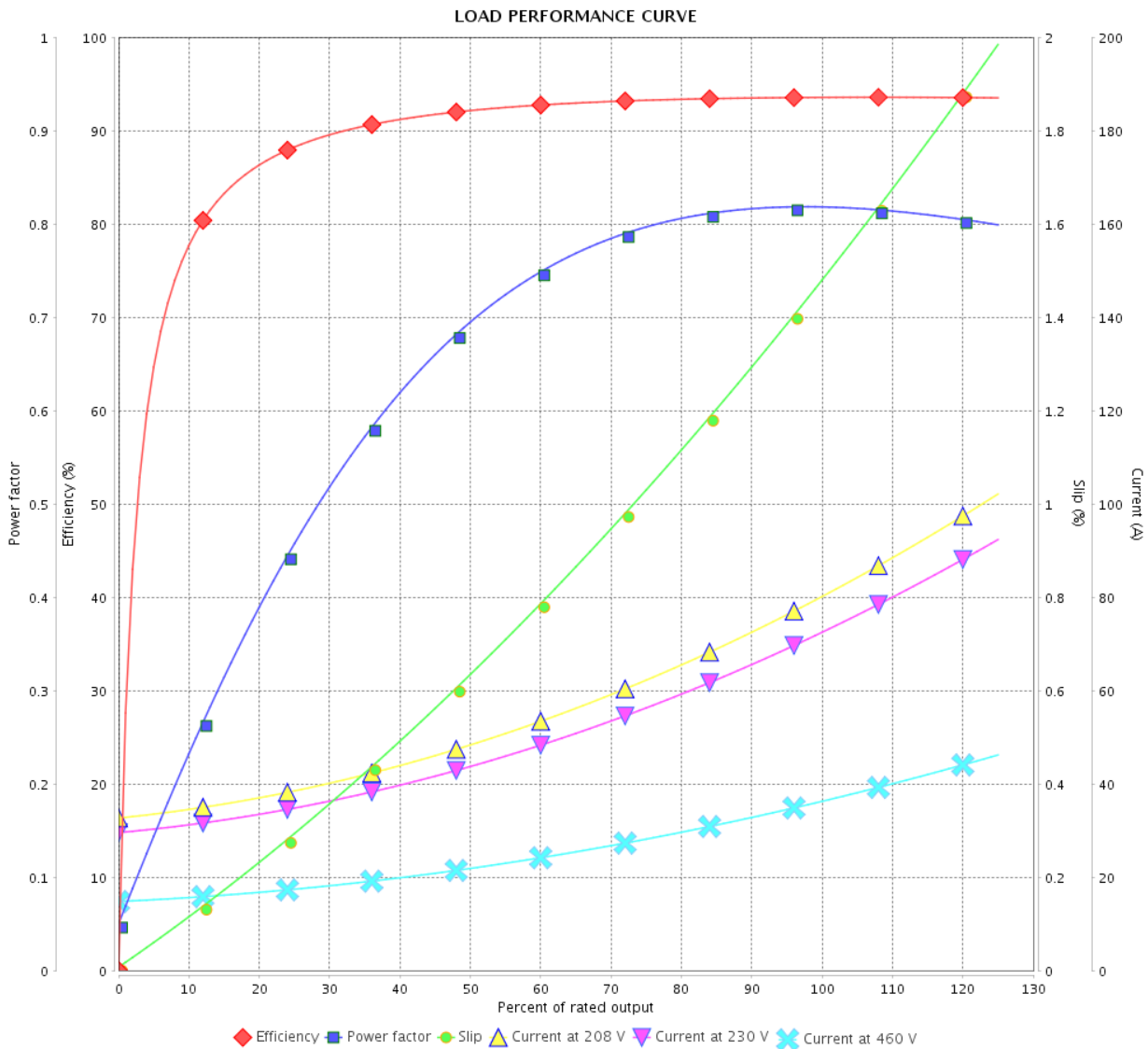


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Product line : W40 NEMA Premium Efficiency
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Product code : 14503747

Catalog # : 030120T3E326T-W40G



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
 LRC : 6.3
 Rated torque : 133 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 21	Revision
Checked by				
Date	14/04/2022			

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Three Phase Induction Motor - Squirrel Cage

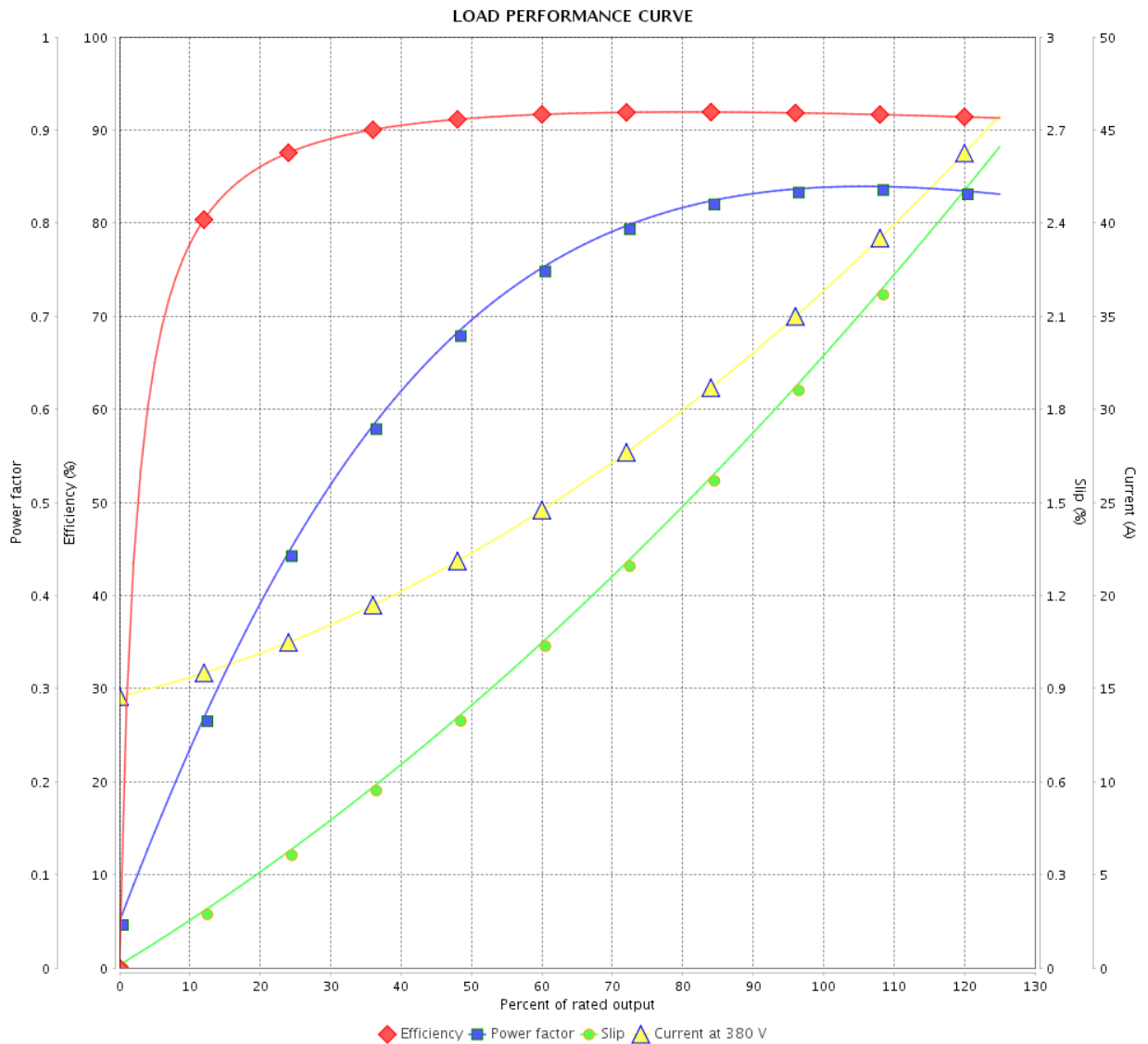


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Performance : 380 V 50 Hz 6P IE3

Rated current : 36.5 A
 LRC : 6.1
 Rated torque : 134 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 229 %
 Rated speed : 980 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 / 21		
Date		14/04/2022		

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Three Phase Induction Motor - Squirrel Cage



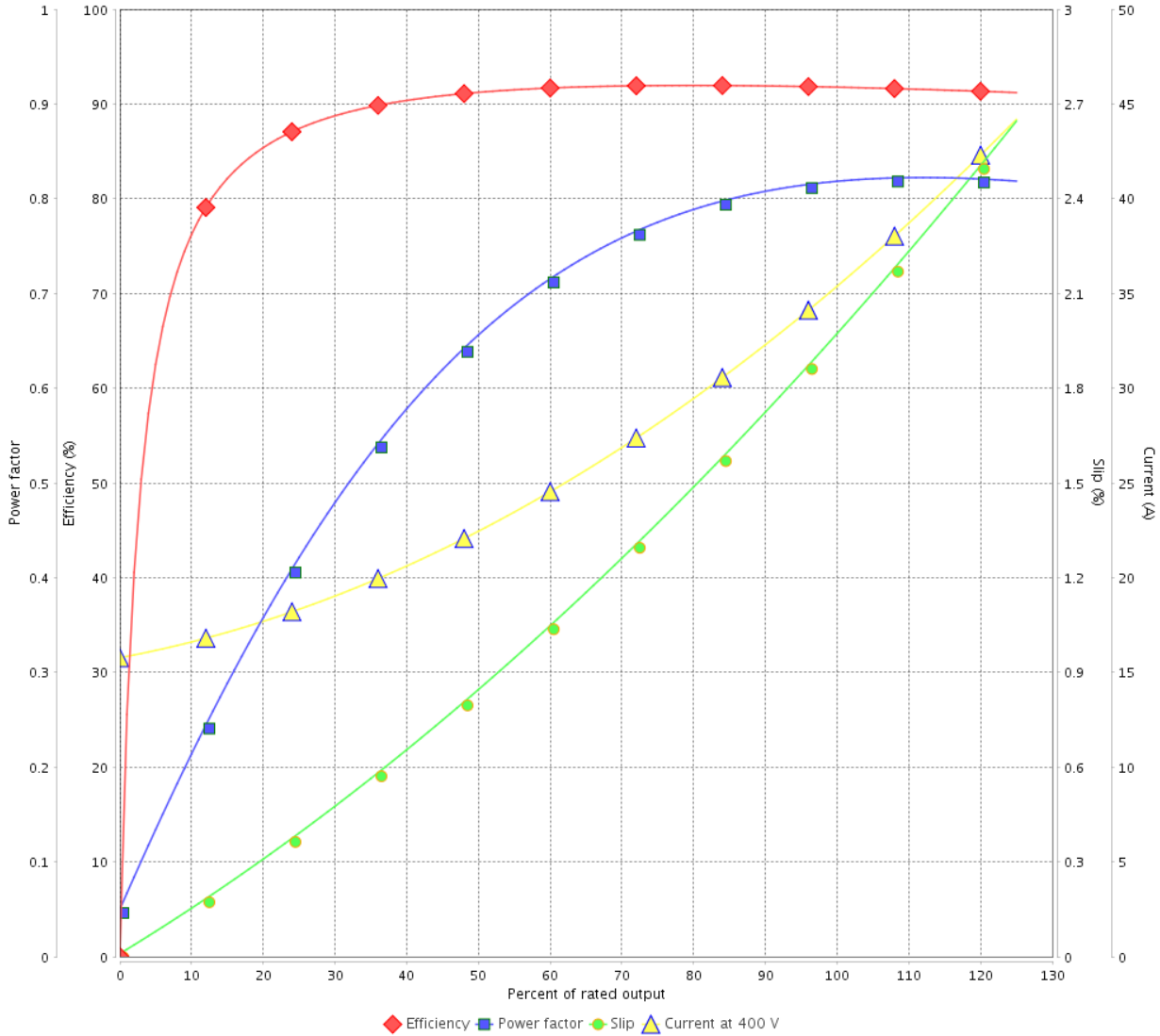
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LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current : 35.5 A
LRC : 6.7
Rated torque : 134 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 260 %
Rated speed : 980 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		8 / 21		
Date		14/04/2022		

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Three Phase Induction Motor - Squirrel Cage

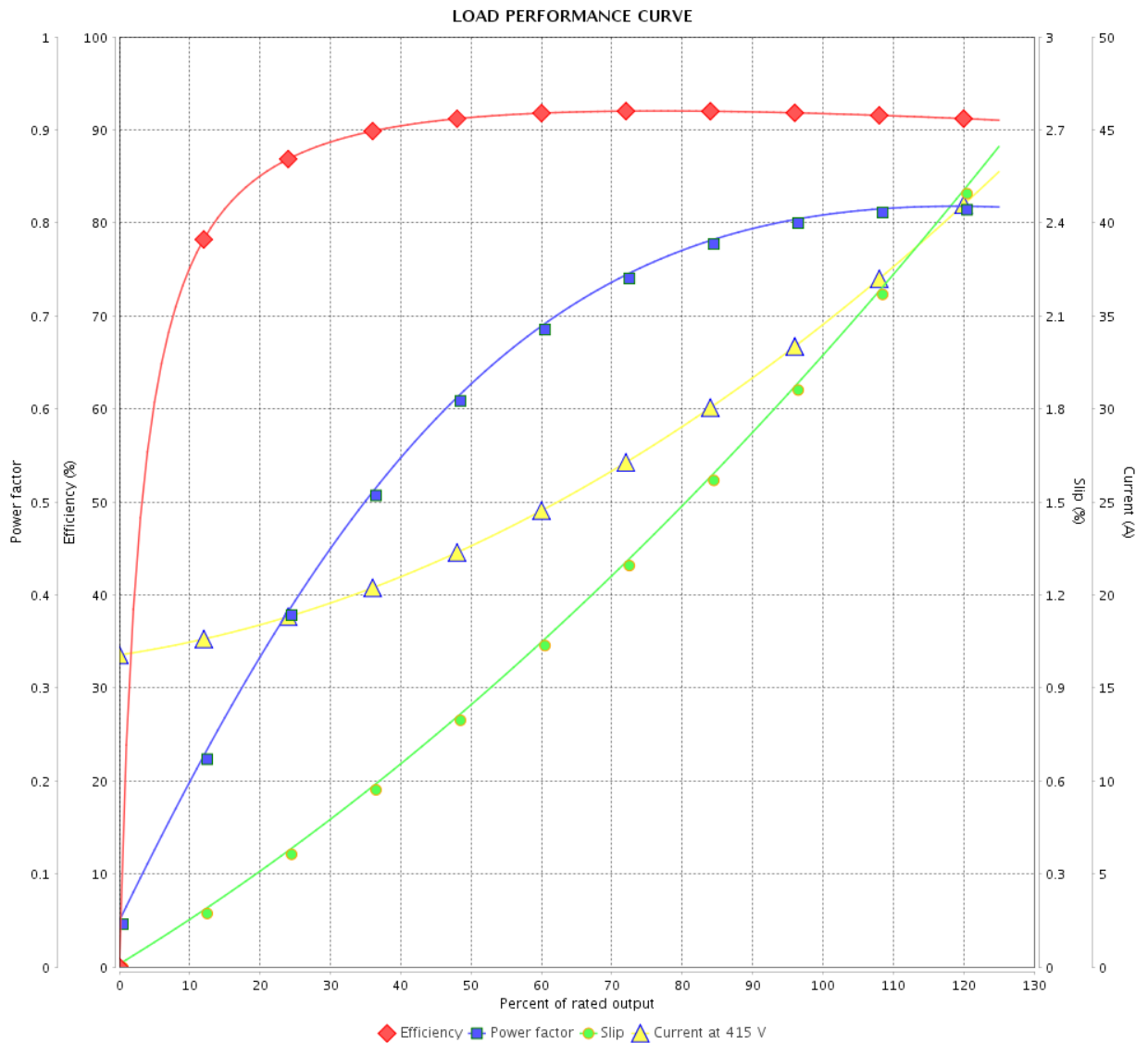


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Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14503747

Catalog # : 030120T3E326T-W40G



Performance : 415 V 50 Hz 6P IE3

Rated current : 34.6 A
 LRC : 6.8
 Rated torque : 134 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 980 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
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THERMAL LIMIT CURVE



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Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

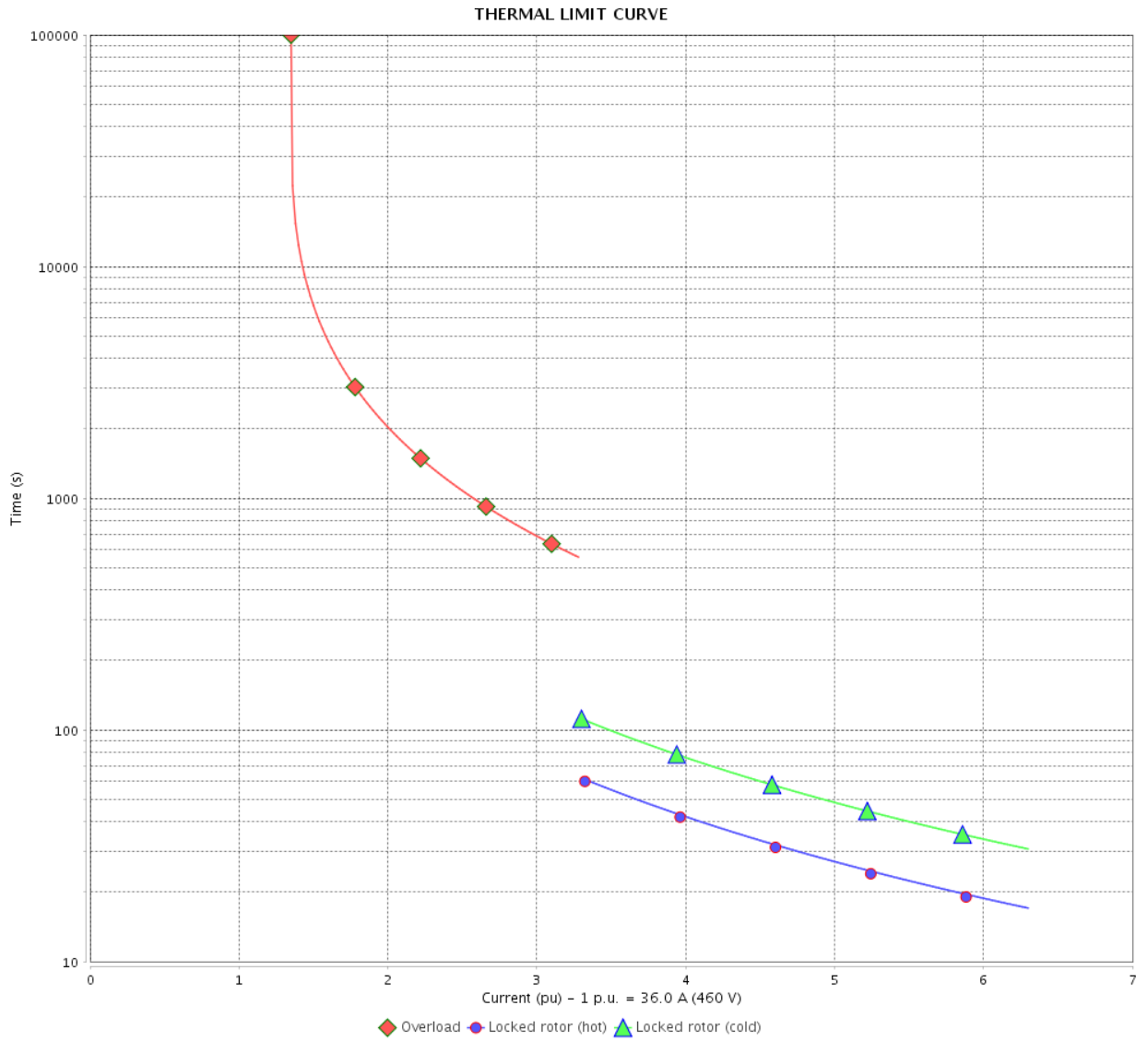
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Performed by				
Checked by			Page	Revision
Date	14/04/2022		10 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 21		
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LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

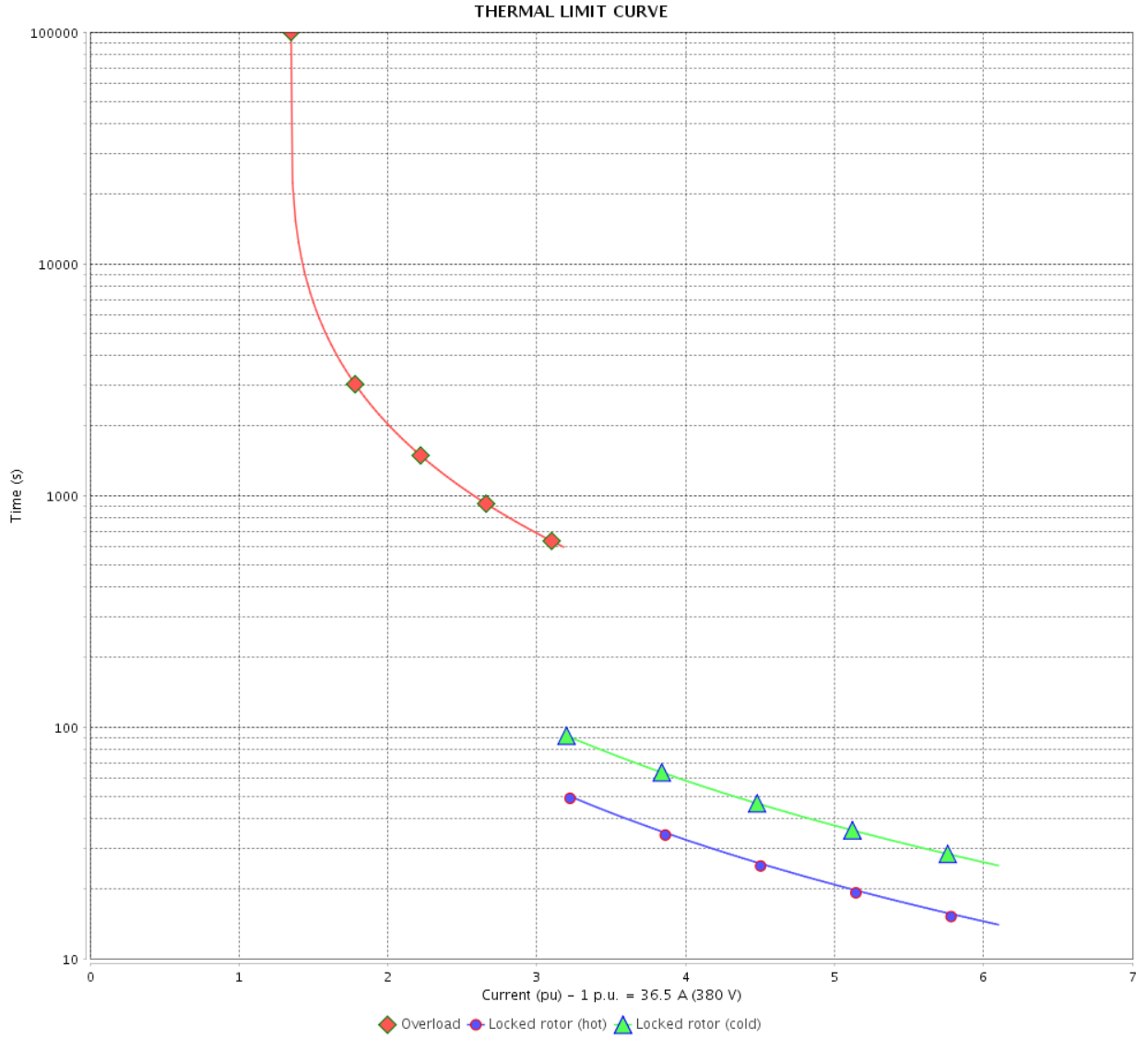
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Performed by				
Checked by			Page	Revision
Date	14/04/2022		12 / 21	

THERMAL LIMIT CURVE

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Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 21		
Date		14/04/2022		

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Catalog # : 03012OT3E326T-W40G

Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

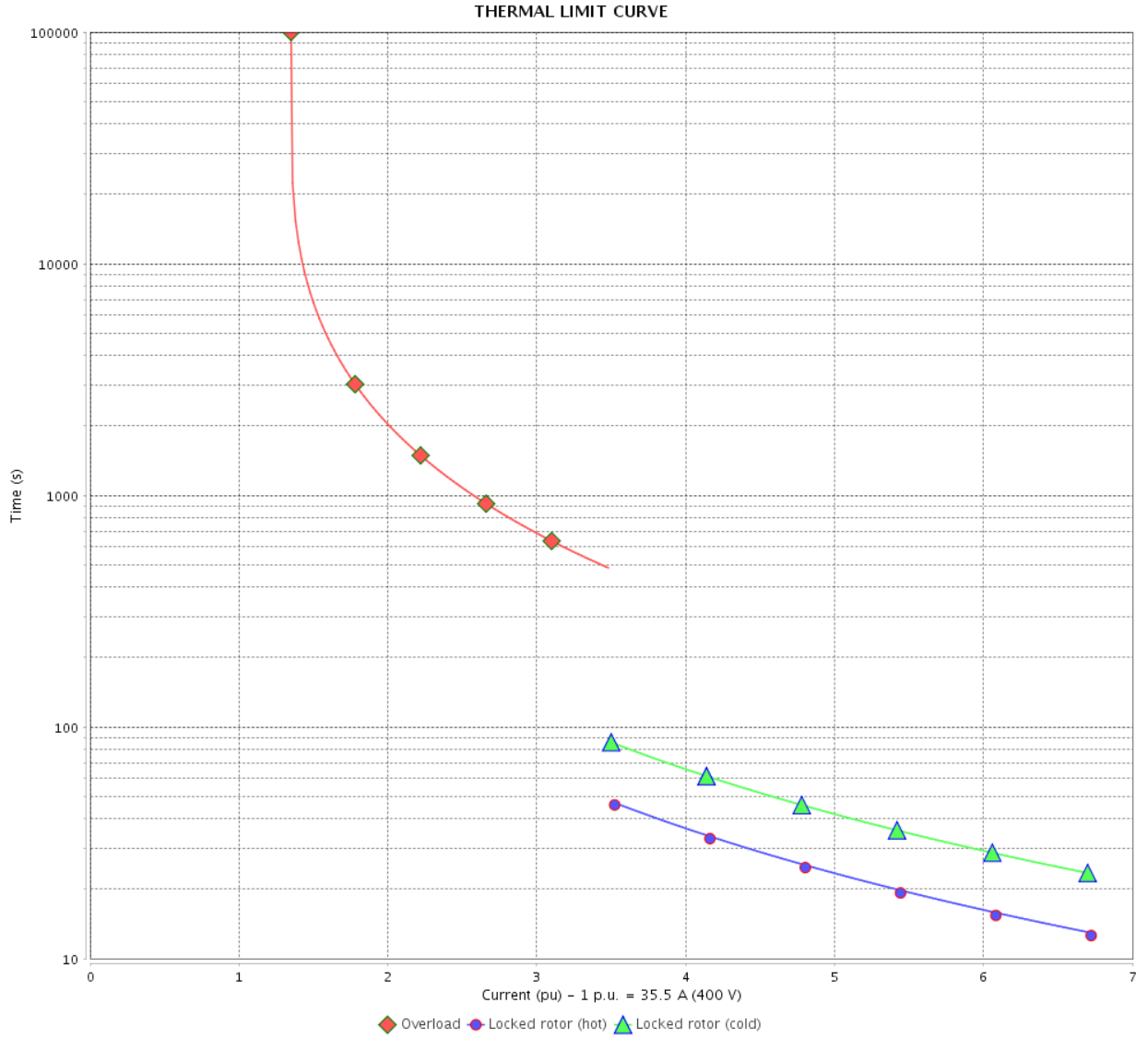
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Performed by				
Checked by			Page	Revision
Date	14/04/2022		14 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		15 / 21		
Date		14/04/2022		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14503747

Catalog # : 03012OT3E326T-W40G

Performance : 415 V 50 Hz 6P IE3

Rated current	: 34.6 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

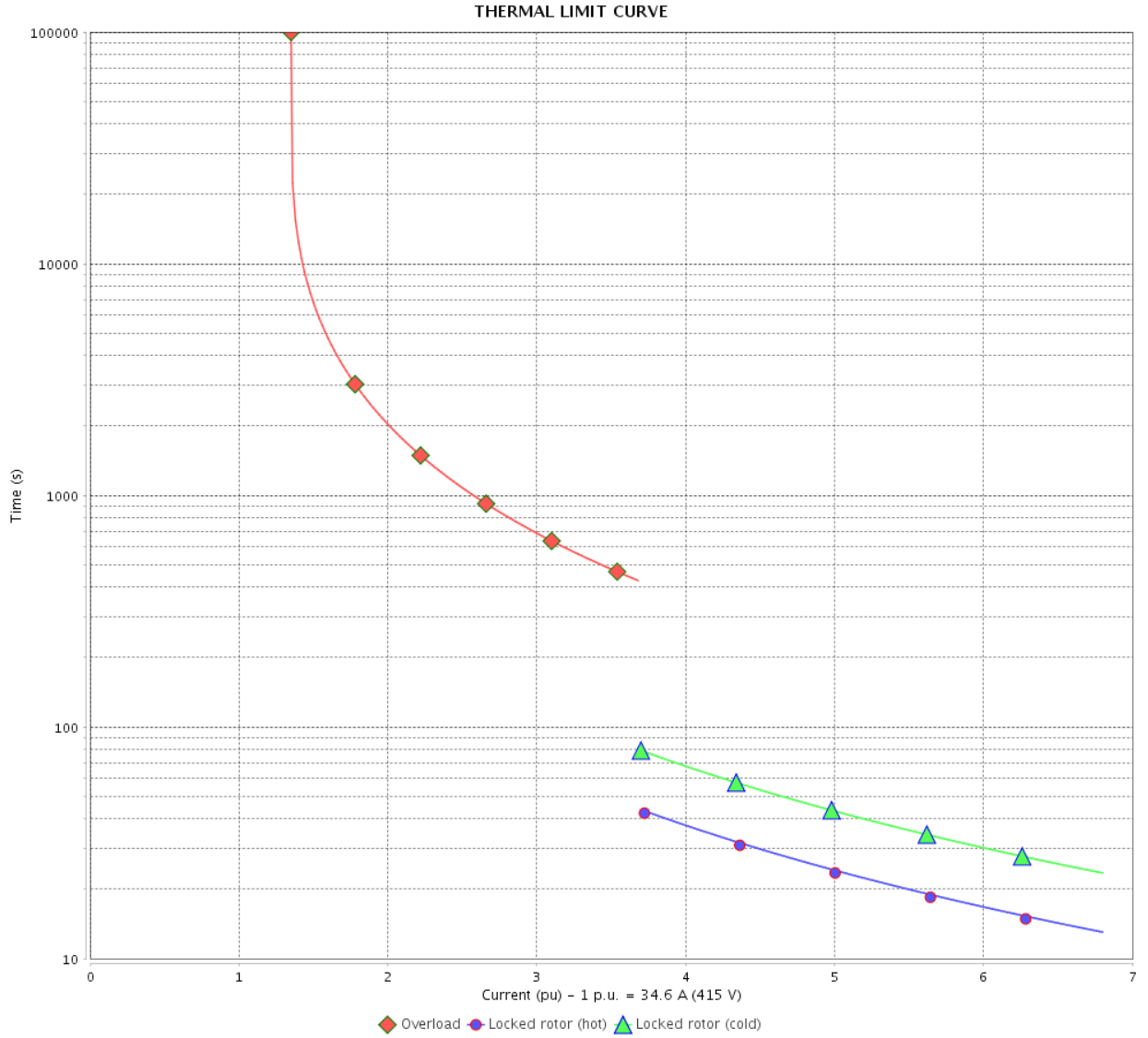
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		16 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		17 / 21		
Date		14/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



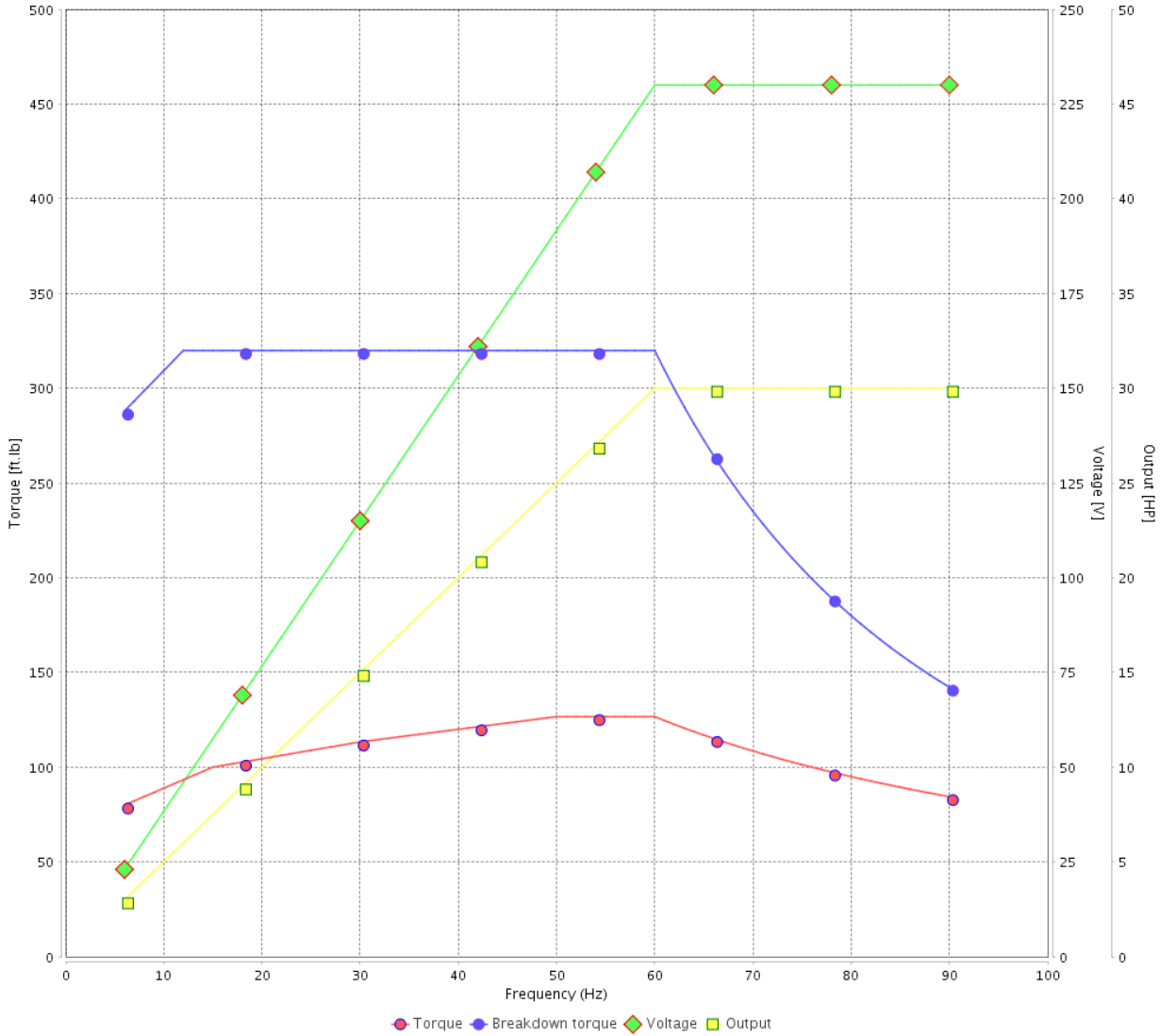
Customer :

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Catalog # : 030120T3E326T-W40G

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
 LRC : 6.3
 Rated torque : 133 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 18 / 21	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

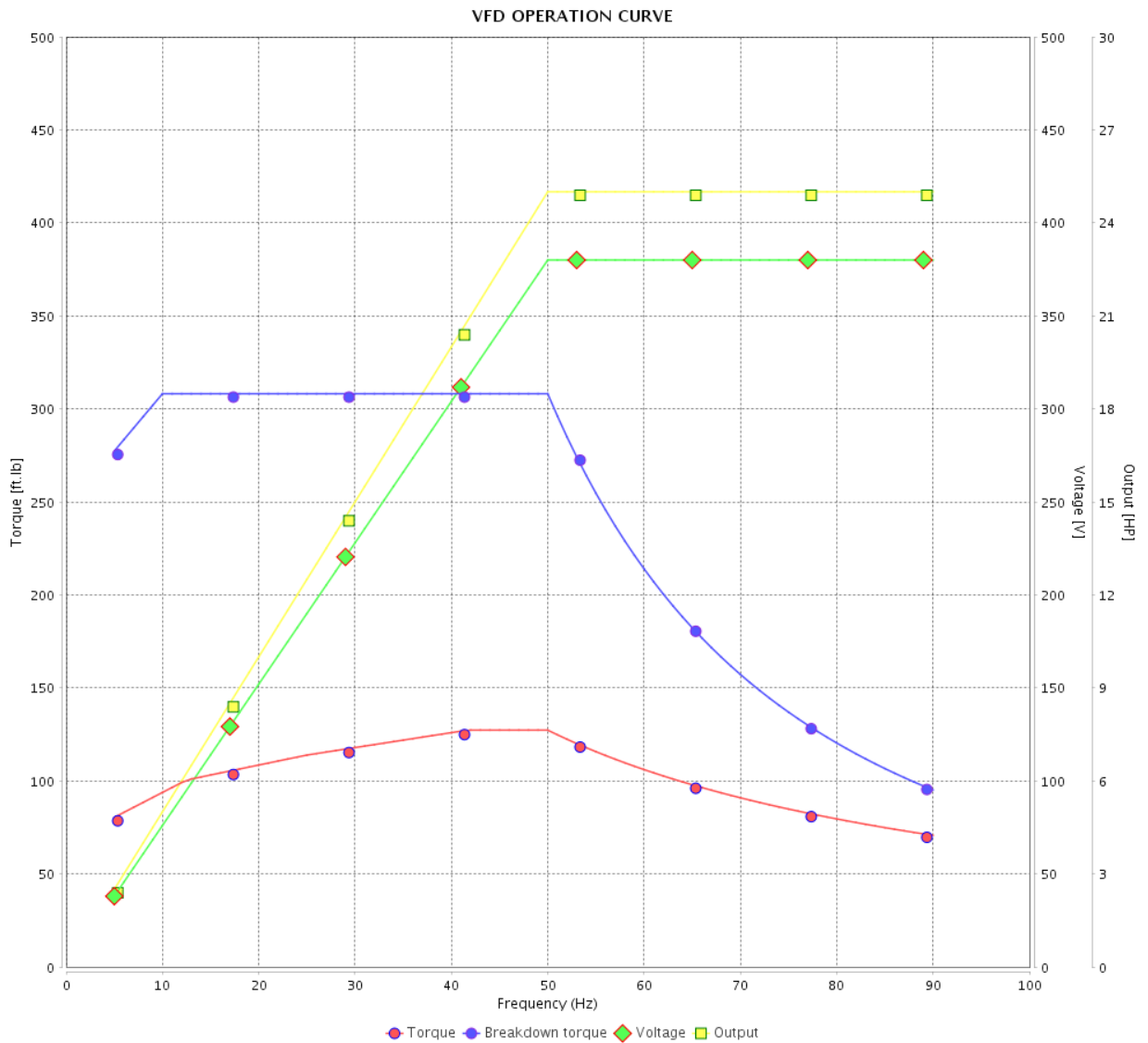


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Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		19 / 21		
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



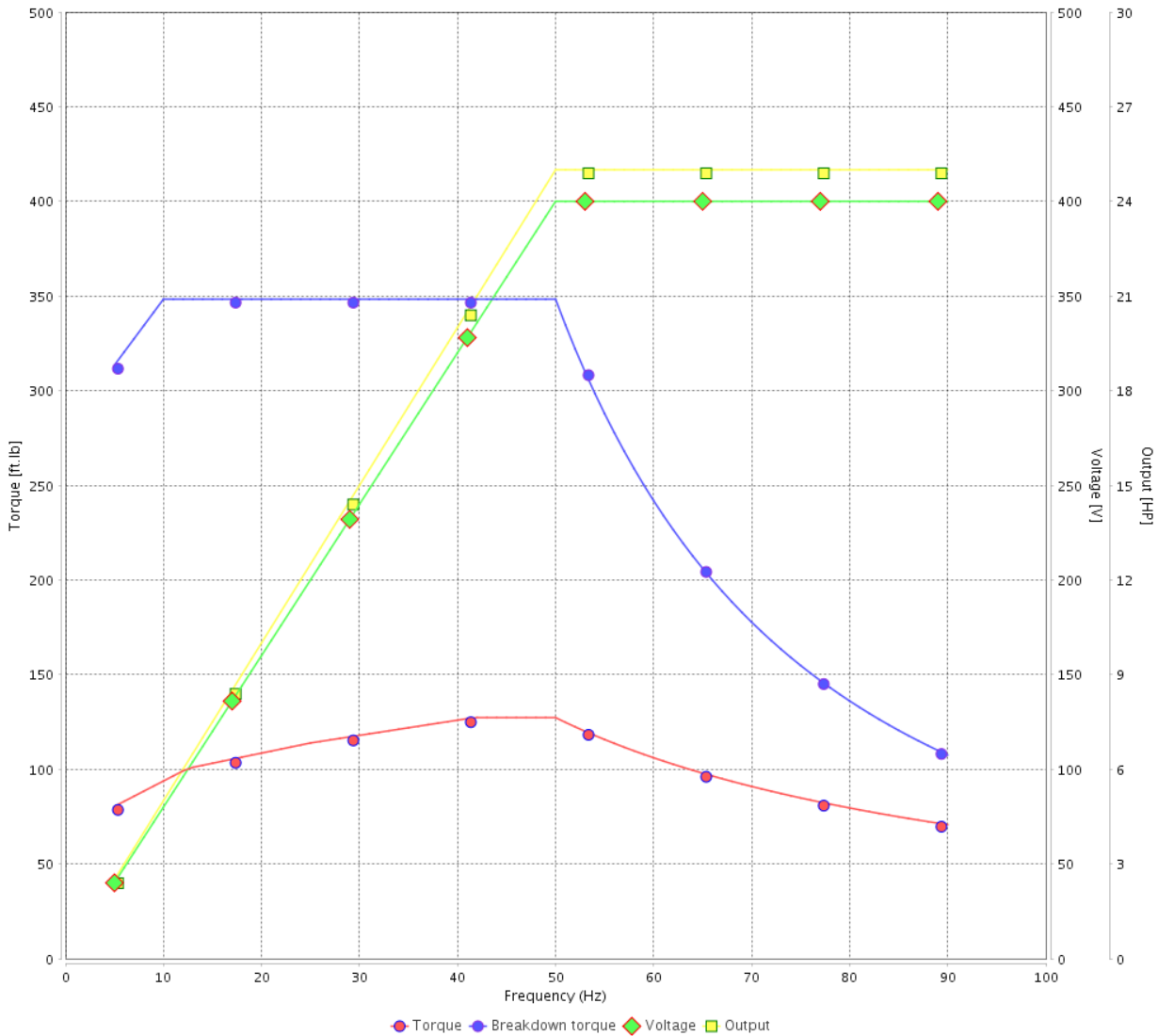
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 6P IE3

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Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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Performed by			Page 20 / 21	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

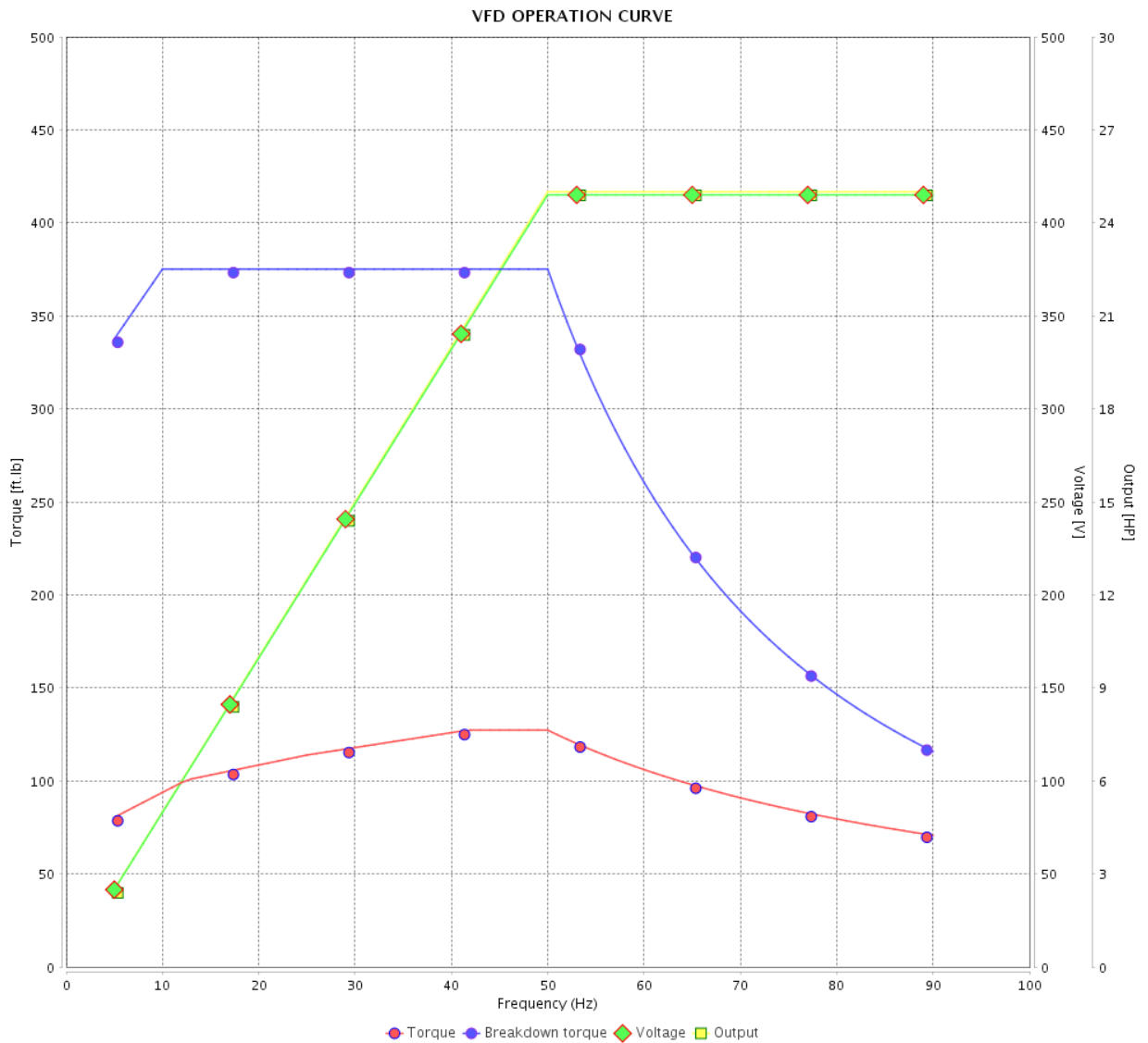


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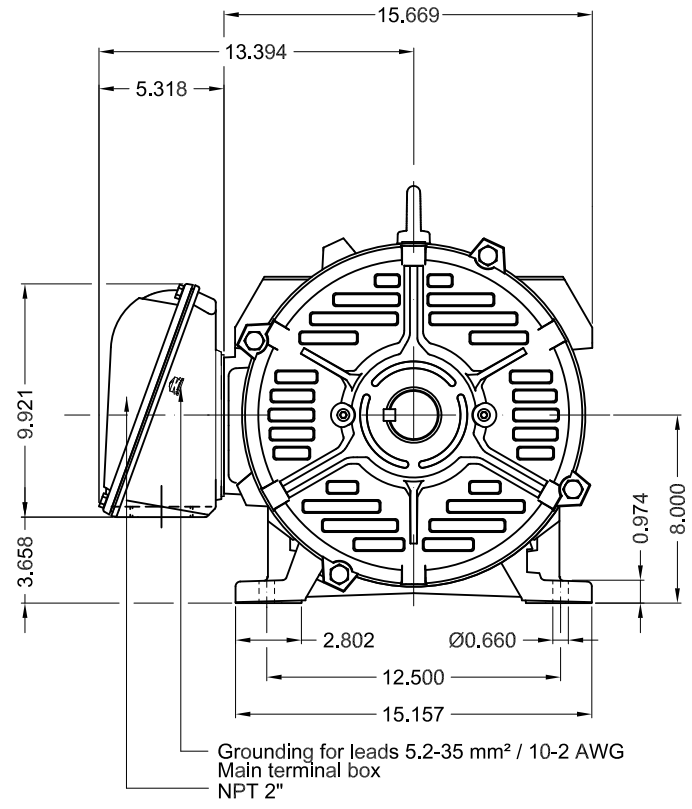


Performance : 415 V 50 Hz 6P IE3

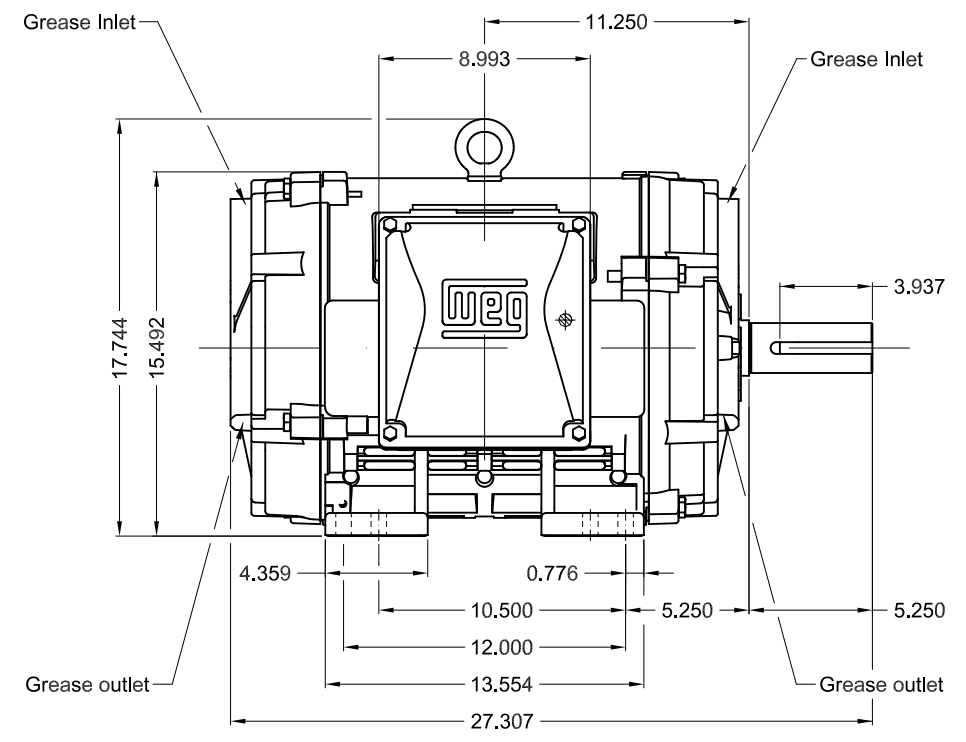
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Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		21 / 21		
Date	14/04/2022			



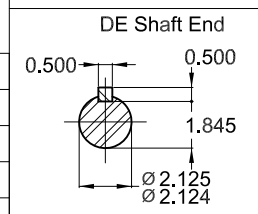
Grounding for leads 5.2-35 mm² / 10-2 AWG
Main terminal box
NPT 2"



30 HP 06 Poles 60 Hz A

1:8

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



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF. FRAME 324/6T IP23 ODP					
CHECKED							
RELEASED							
REL DT.							

PREVIEW
WDD



WMO Jaragua do Sul Product Engineering SHEET 1 / 1

WEG **W40 NEMA**
CC029A Premium
Inverter Duty Motor



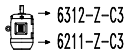
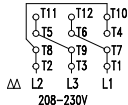
IEC 60034-1
 MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 3:1, 1.0SF

MODEL 030120T3E326T-W40G
 MADE IN BRAZIL
 14503747

PH 3	FR 324/6T	HP(kW) 30.0(22.0)	Hz 60
V 230/460	A 72.0/36.0	RPM 1182	DES B
NEMA NOM EFF 93.6 %	INS. CL. F Δ T 80 K	IP23	
ENCL ODP	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.82	SF 1.25	SFA 90.0/45.0
USABLE @208V 79.6 A	SF 1.15	SFA 91.5	
25HP 18.5kW 50Hz 380V 36.5A 980RPM SF1.00 EFF 91.8% (IE3)	ALT 1000 m.a.s.l.	516 Lbs	



→ 6312-Z-C3
 → 6211-Z-C3

MOBIL POLYREX EM
 21 g 20000 h