

DATA SHEET

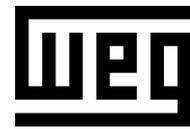
Three Phase Induction Motor - Squirrel Cage



Customer						
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code : 11723868		
				Catalog # : 00118ET3E143T-W22		
Frame		: 143/5T		Cooling method : IC411 - TEFC		
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 : 20.2 kg		
Protection degree		: IP55		Moment of inertia (J) : 0.0049 kgm ²		
Design		: B				
Output [HP]		1	1	1	1	
Poles		4	4	4	4	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		230/460	380	400	415	
Rated current [A]		2.94/1.47	1.71	1.65	1.63	
L. R. Amperes [A]		25.3/12.6	10.9	11.5	12.1	
LRC [A]		8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	
No load current [A]		1.88/0.940	0.930	1.00	1.08	
Rated speed [RPM]		1760	1450	1455	1455	
Slip [%]		2.22	3.33	3.00	3.00	
Rated torque [kgfm]		0.412	0.501	0.499	0.499	
Locked rotor torque [%]		290	220	240	260	
Breakdown torque [%]		350	250	290	310	
Service factor		1.25	1.25	1.25	1.25	
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²		51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	78.4	79.6	78.4	78.4	
	50%	80.0	80.0	80.0	80.0	
	75%	84.0	82.5	82.5	82.5	
	100%	85.5	82.5	84.0	84.0	
Power Factor	25%	0.31	0.36	0.33	0.31	
	50%	0.55	0.62	0.58	0.55	
	75%	0.68	0.74	0.71	0.69	
	100%	0.75	0.81	0.78	0.76	
Bearing type		Drive end : 6205 ZZ	Non drive end : 6204 ZZ	Foundation loads		
Sealing		: V'Ring	: V'Ring	Max. traction : 34 kgf		
Lubrication interval		: -	: -	Max. compression : 54 kgf		
Lubricant amount		: -	: -			
Lubricant type		: Mobil Polyrex EM				
Notes						
USABLE @208V 3.07A SF 1.15 SFA 3.54A						
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	22/03/2021				1 / 21	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



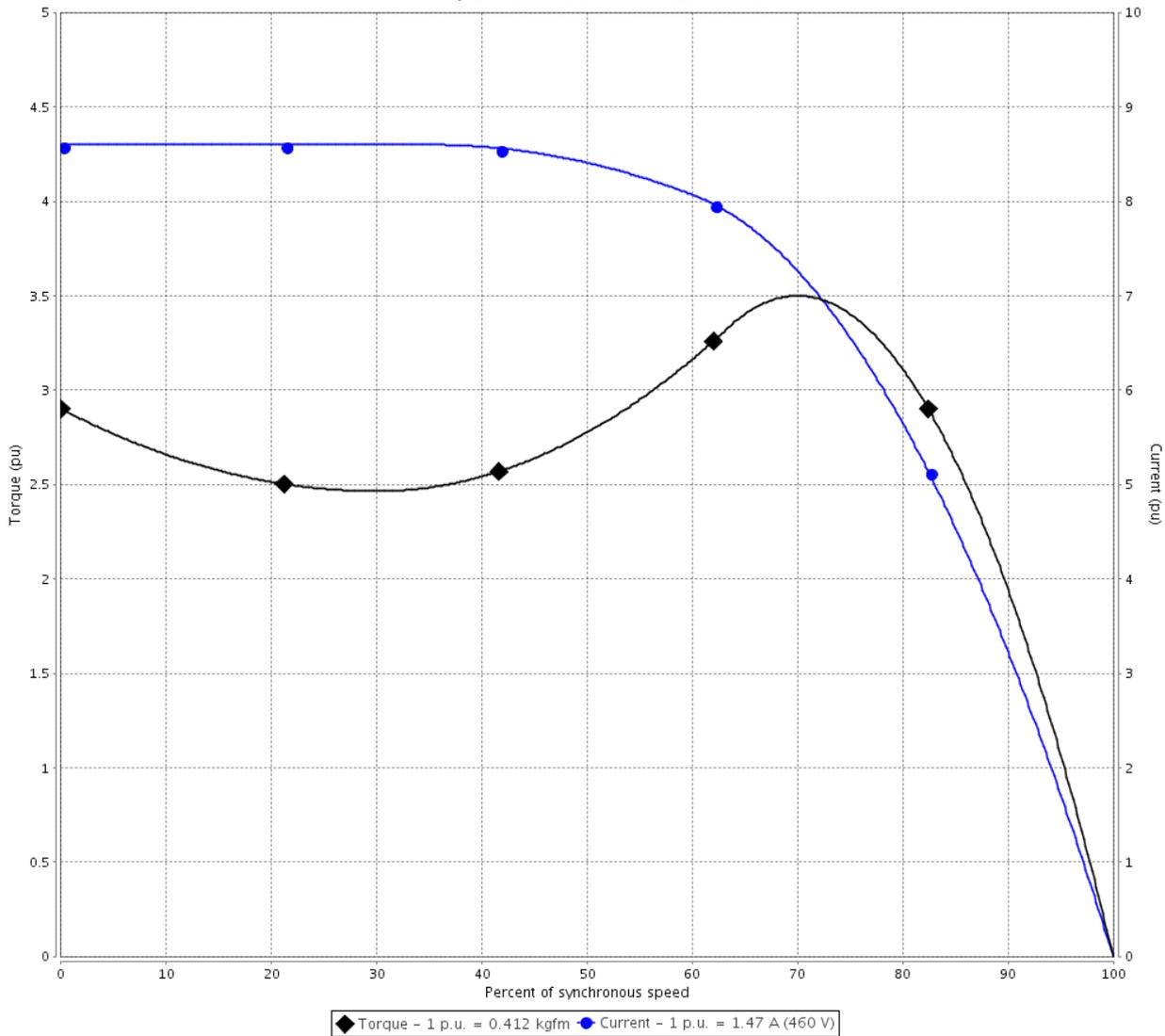
Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
LRC : 8.6
Rated torque : 0.412 kgfm
Locked rotor torque : 290 %
Breakdown torque : 350 %
Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 21	Revision
Checked by				
Date	22/03/2021			

TORQUE AND CURRENT VS SPEED CURVE



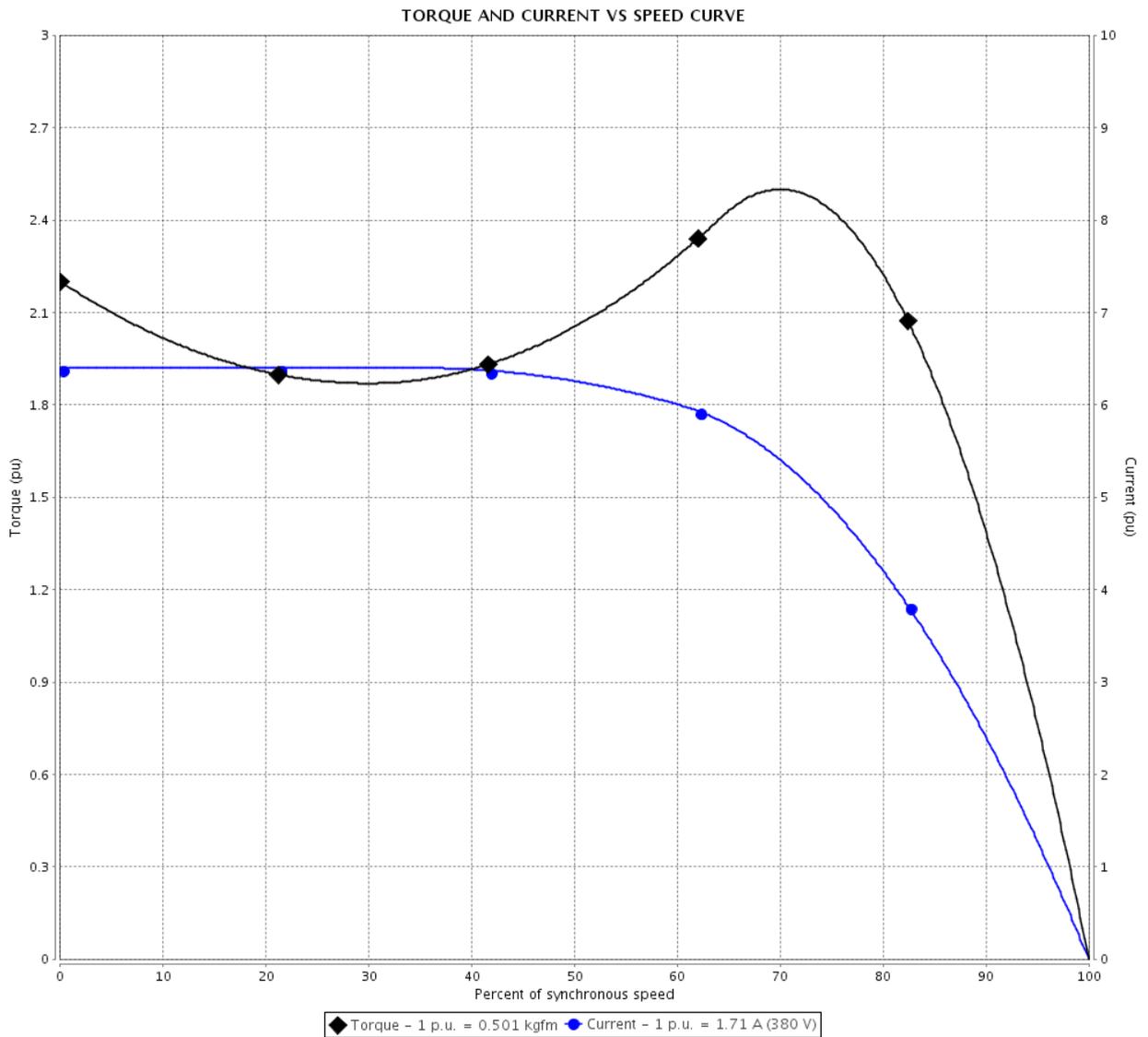
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 1.71 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.501 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 21	Revision
Checked by				
Date	22/03/2021			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

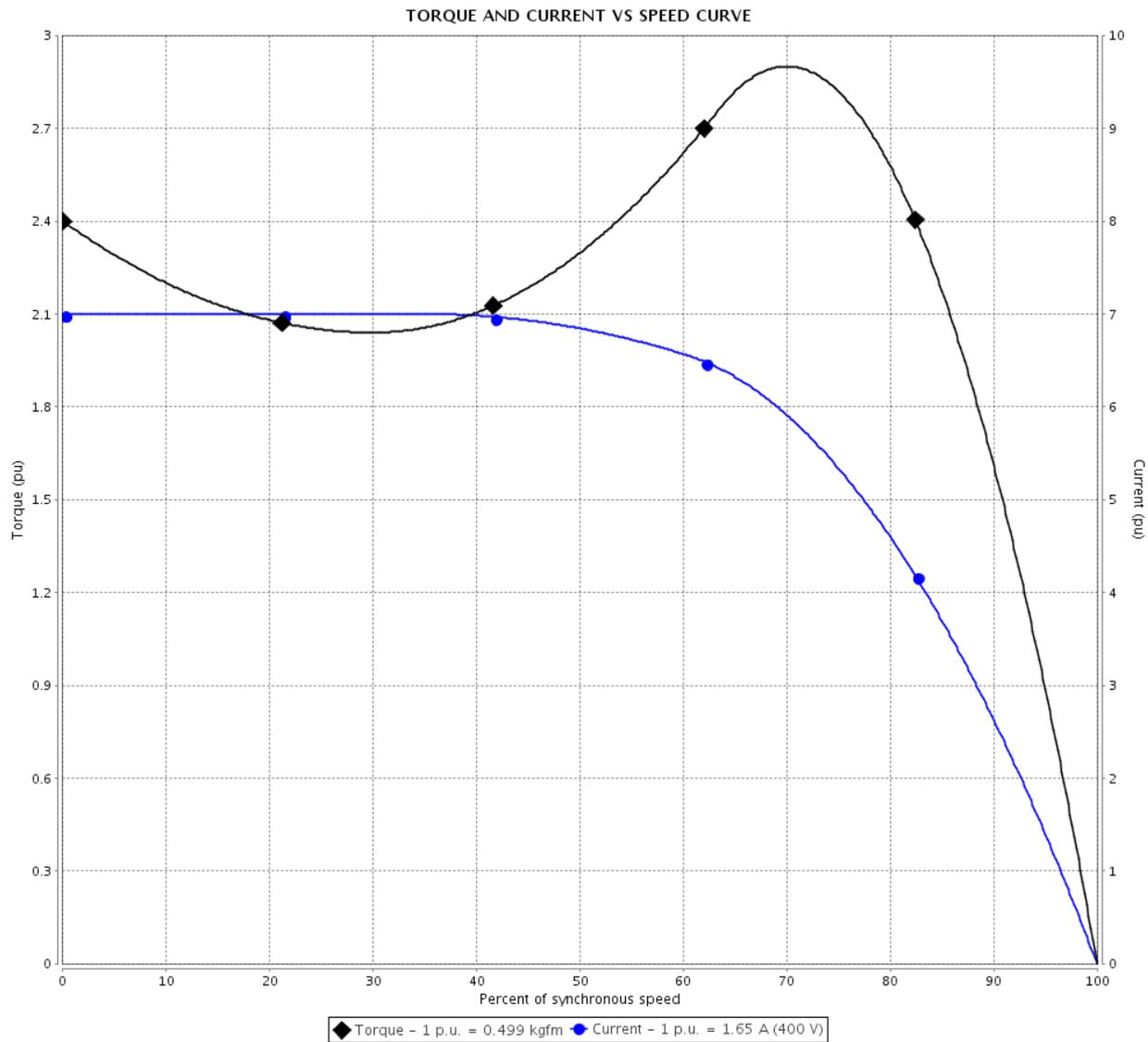


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 400 V 50 Hz 4P IE3

Rated current	: 1.65 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 21	Revision
Checked by				
Date	22/03/2021			

TORQUE AND CURRENT VS SPEED CURVE



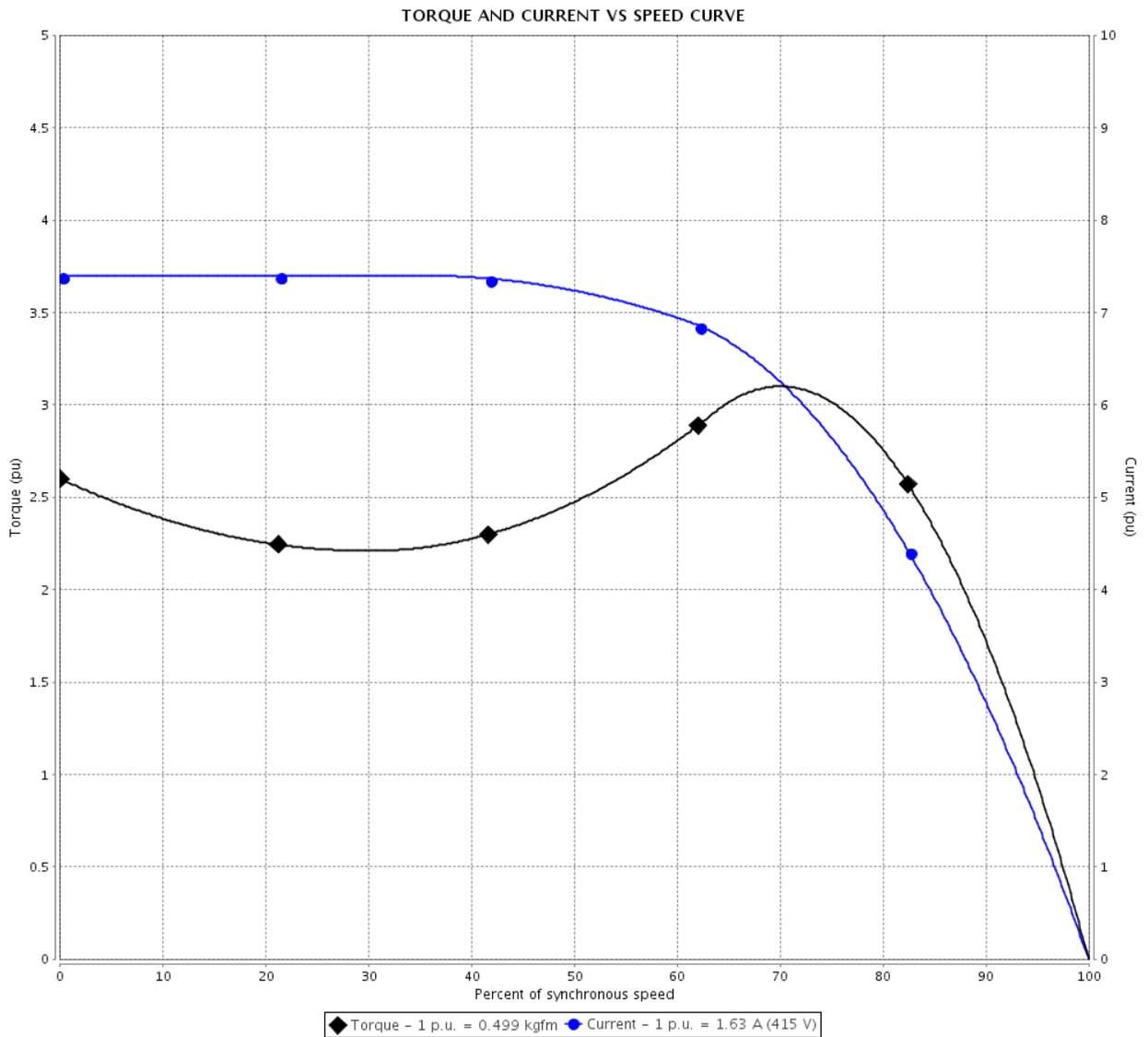
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 1.63 A
LRC : 7.4
Rated torque : 0.499 kgfm
Locked rotor torque : 260 %
Breakdown torque : 310 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 21	Revision
Checked by				
Date	22/03/2021			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

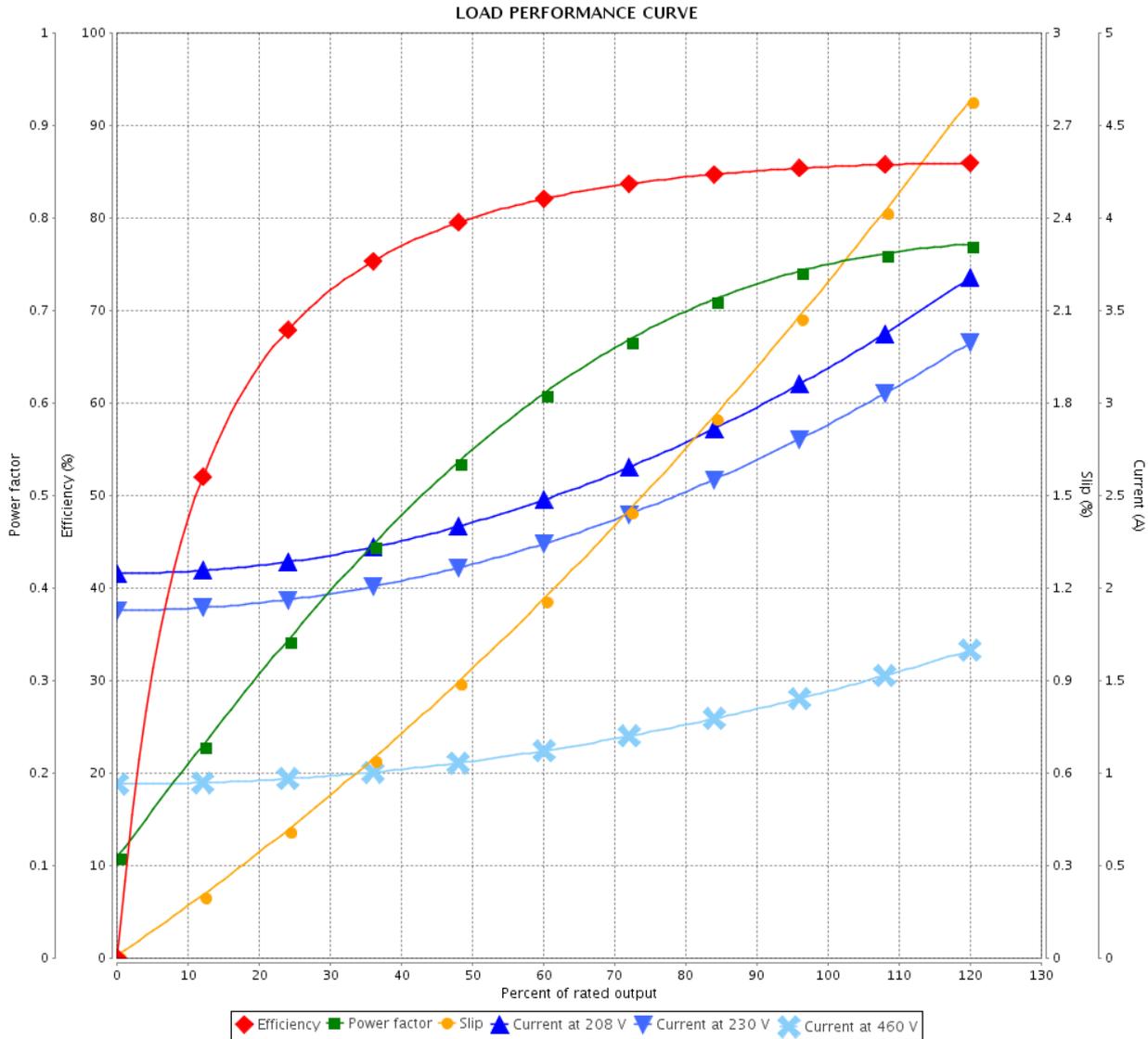


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 0.412 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 350 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
 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	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

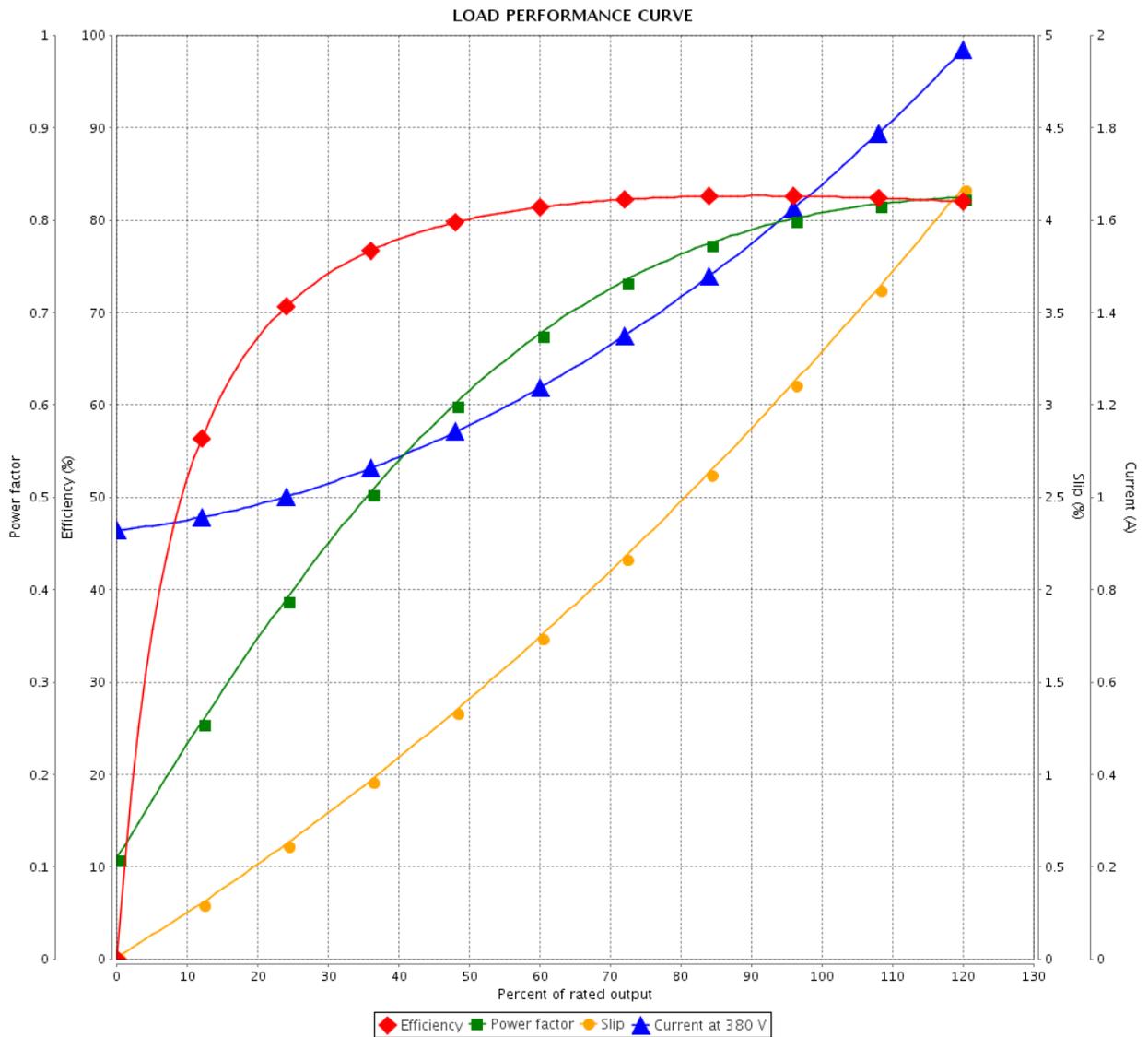


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 380 V 50 Hz 4P IE3

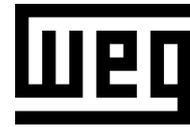
Rated current : 1.71 A
 LRC : 6.4
 Rated torque : 0.501 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0049 kgm²
 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		Revision
Checked by		7 / 21		
Date		22/03/2021		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

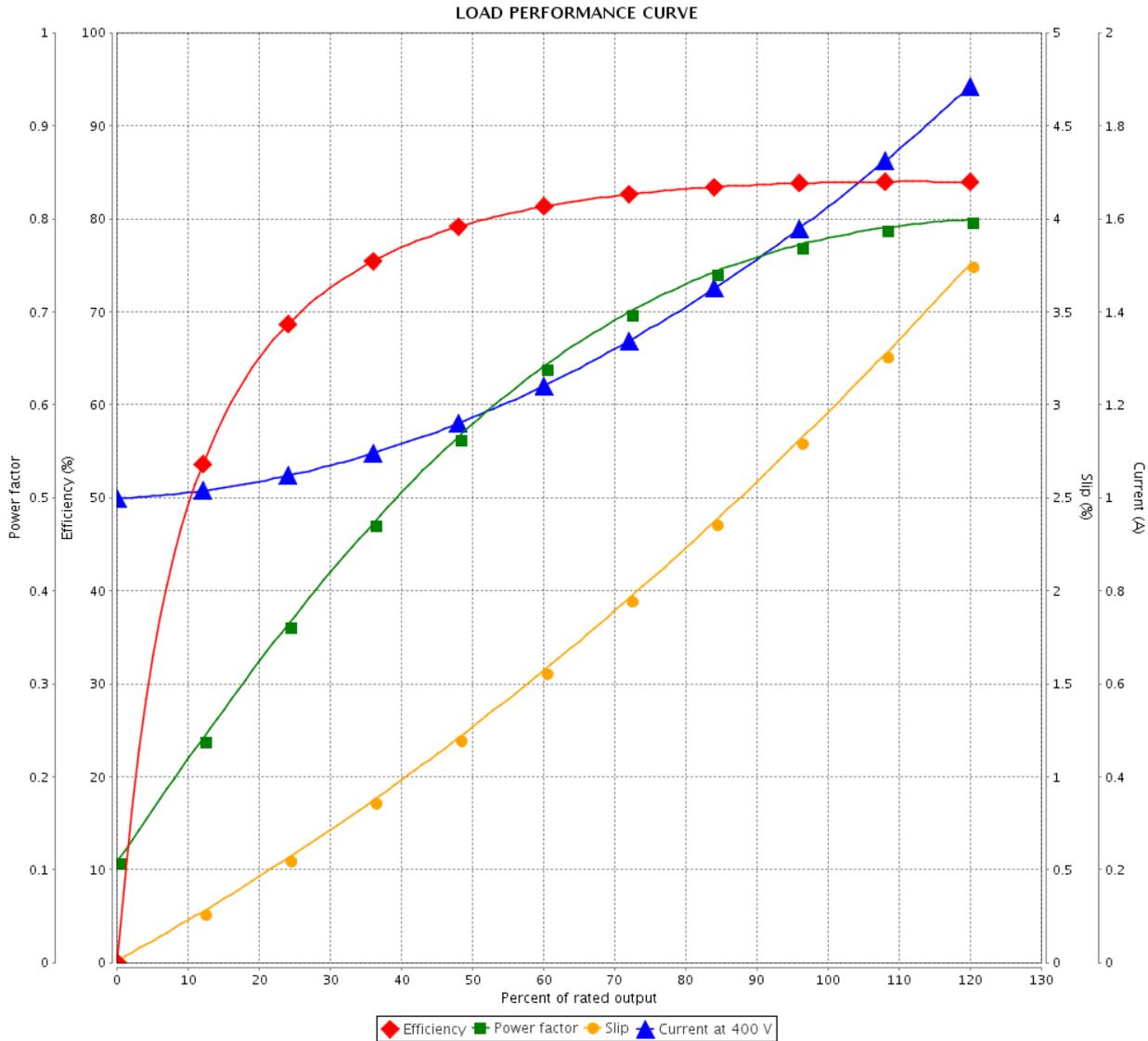


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A
 LRC : 7.0
 Rated torque : 0.499 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
 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 8 / 21	Revision
Checked by				
Date	22/03/2021			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

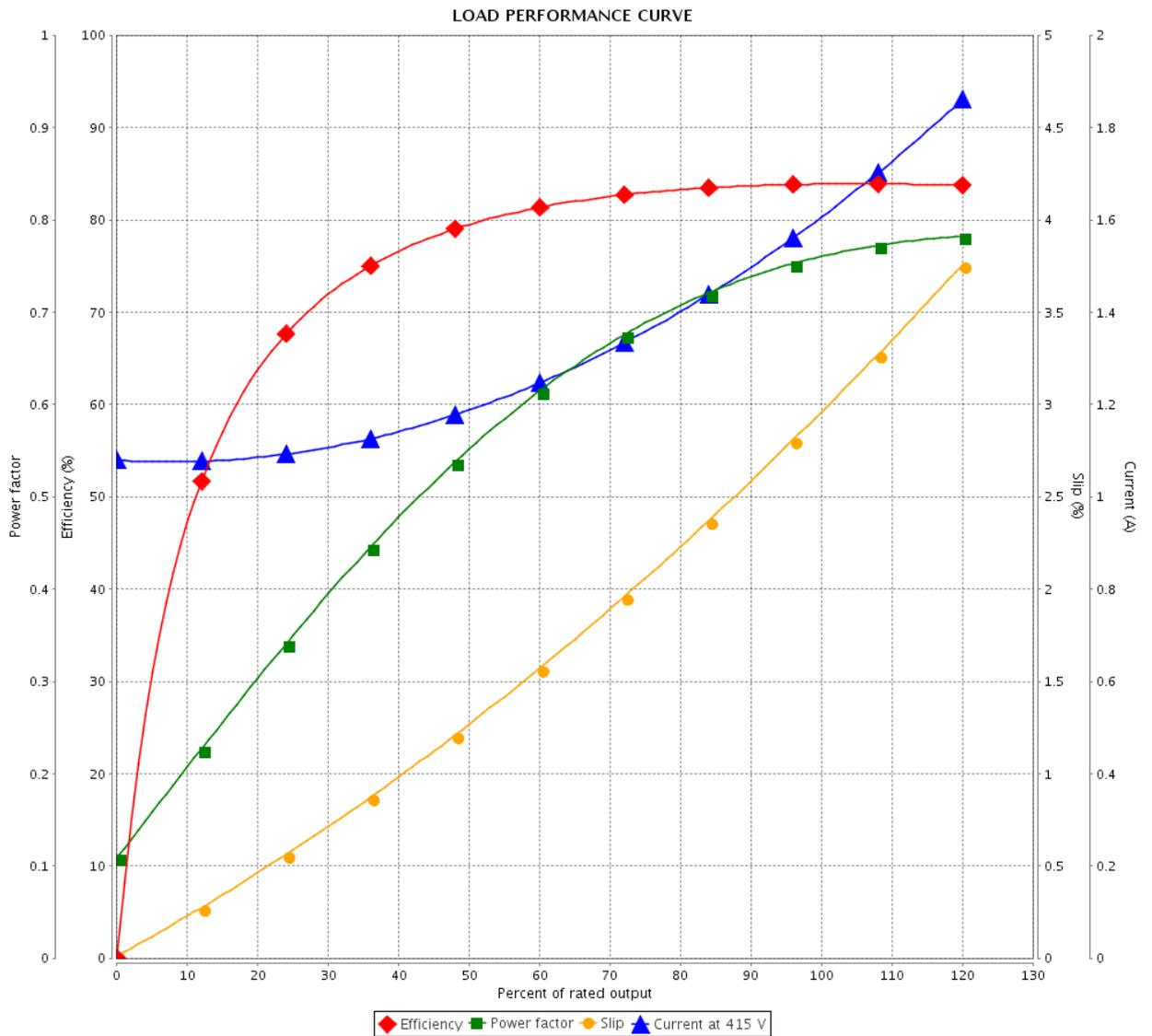


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 415 V 50 Hz 4P IE3

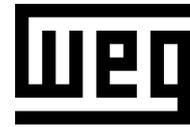
Rated current : 1.63 A
 LRC : 7.4
 Rated torque : 0.499 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
 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		Revision
Checked by		9 / 21		
Date	22/03/2021			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
LRC : 8.6
Rated torque : 0.412 kgfm
Locked rotor torque : 290 %
Breakdown torque : 350 %
Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

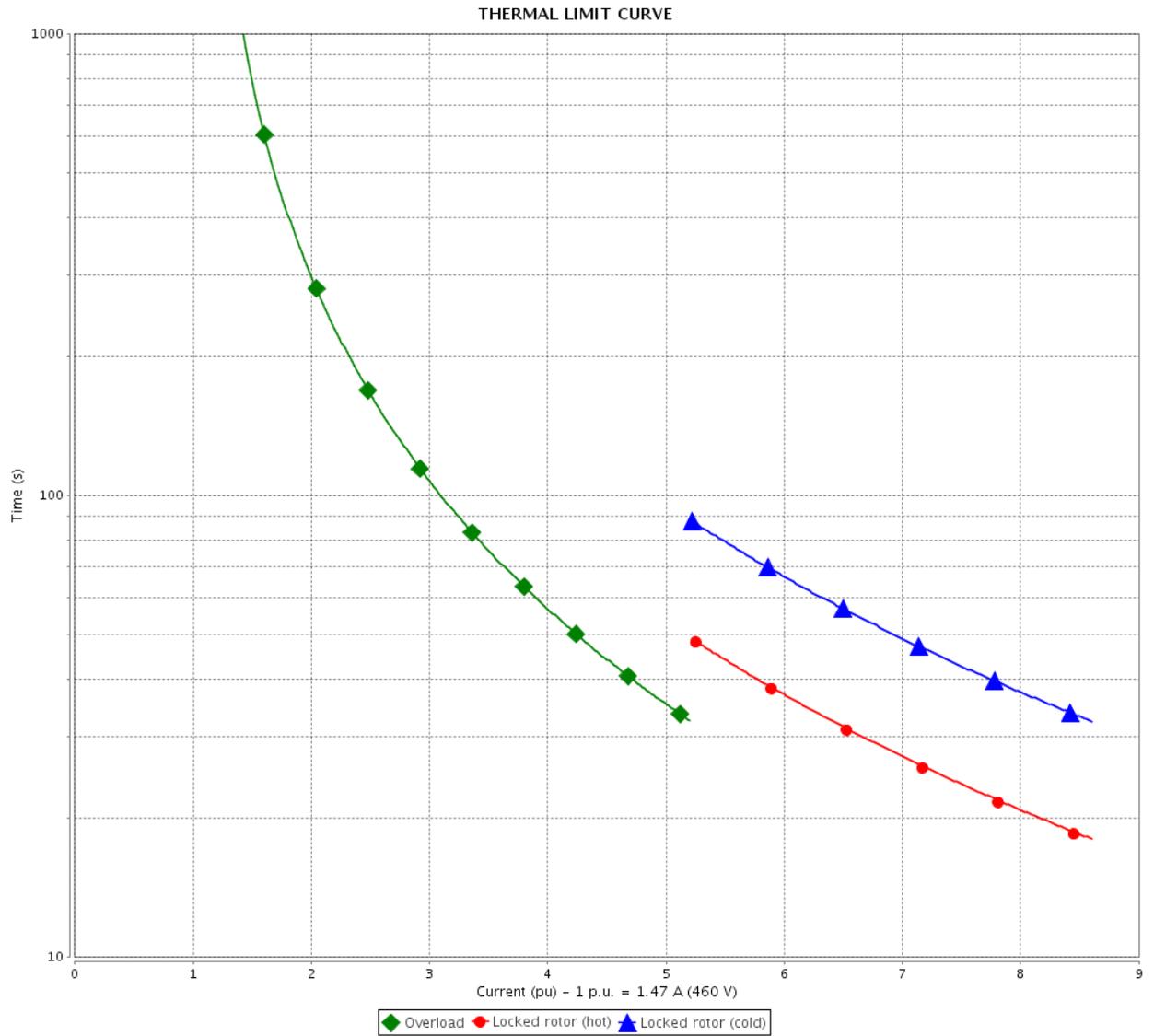
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		10 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



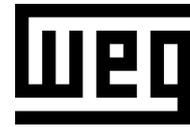
Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 21		
Date		22/03/2021		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

Performance : 380 V 50 Hz 4P IE3

Rated current	: 1.71 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.501 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

Heating constant

Cooling constant

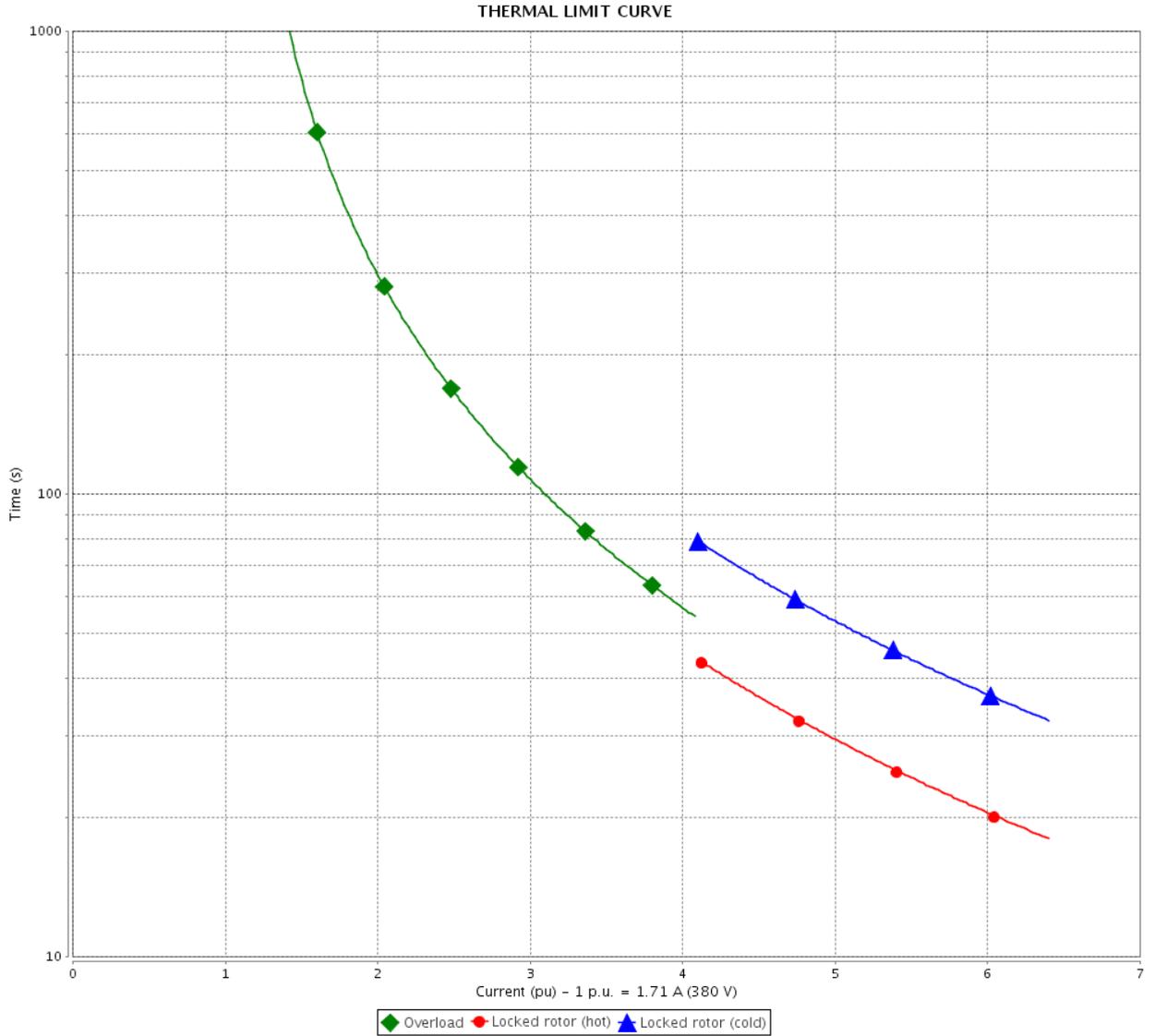
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		12 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



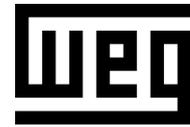
Customer : _____



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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

Performance : 400 V 50 Hz 4P IE3

Rated current	: 1.65 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

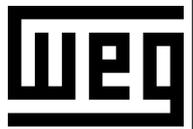
Heating constant

Cooling constant

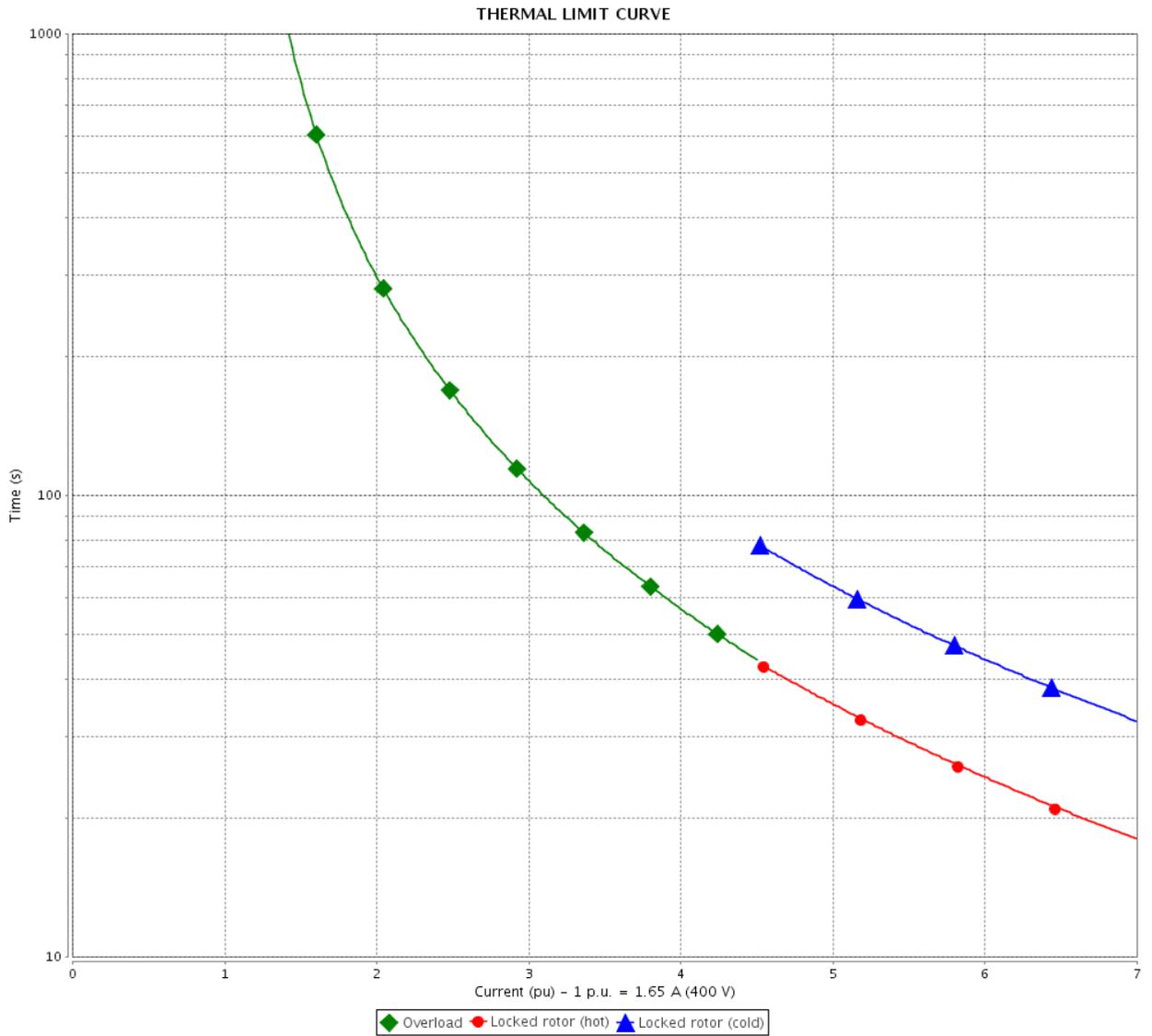
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		14 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



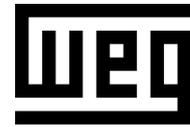
Customer : _____



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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

Performance : 415 V 50 Hz 4P IE3

Rated current	: 1.63 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Heating constant

Cooling constant

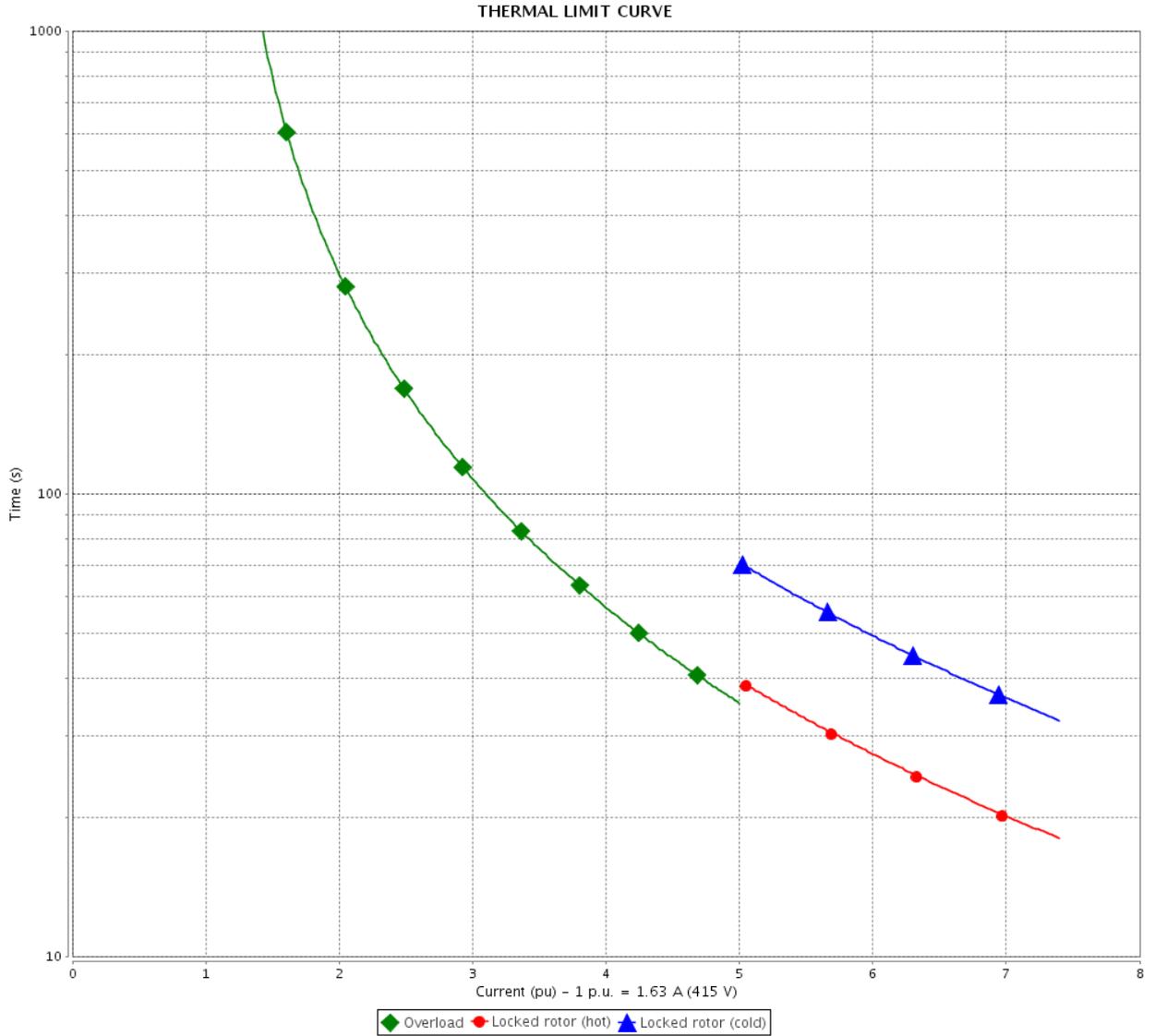
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		16 / 21	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

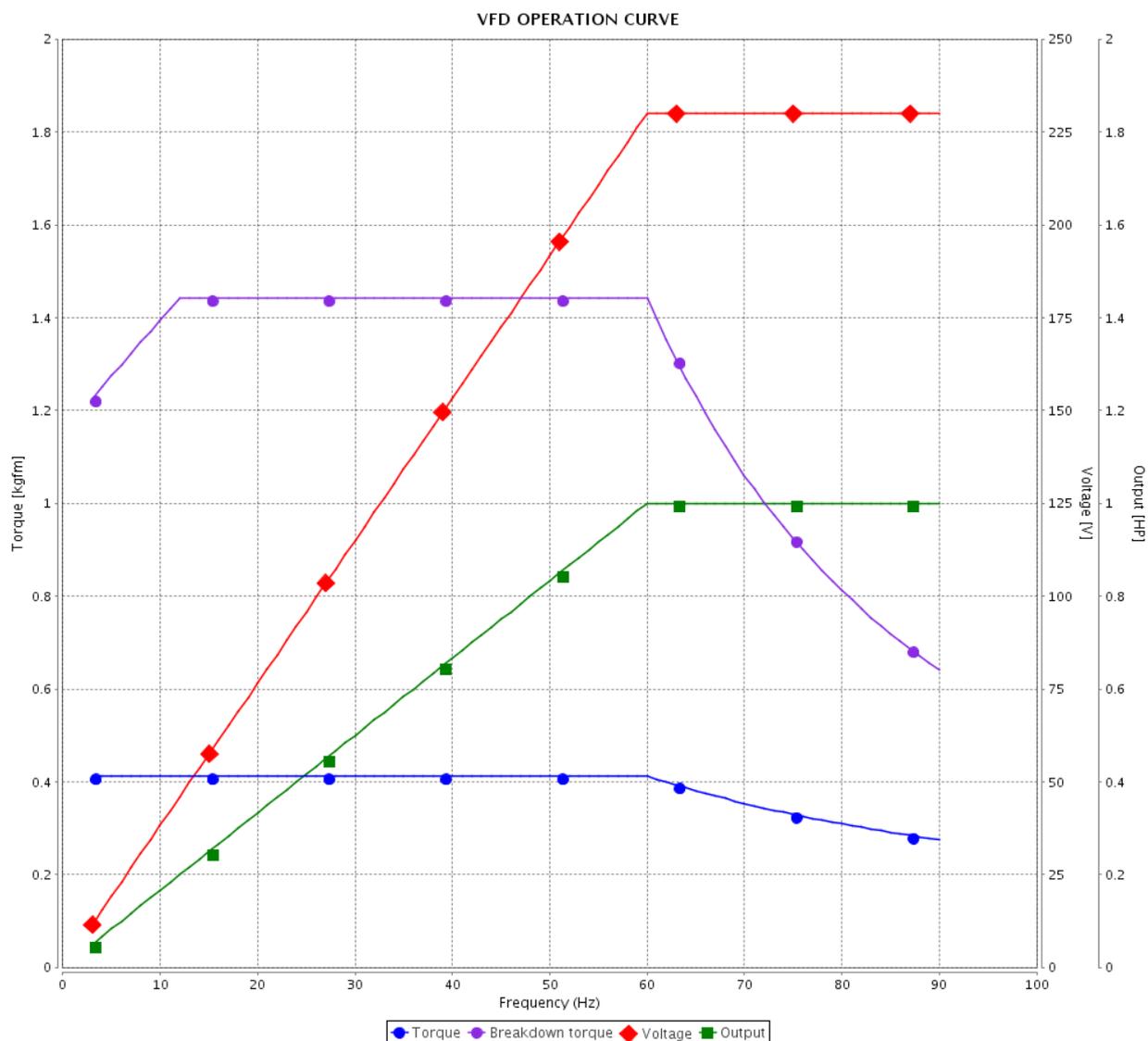


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 0.412 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 350 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
 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	Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

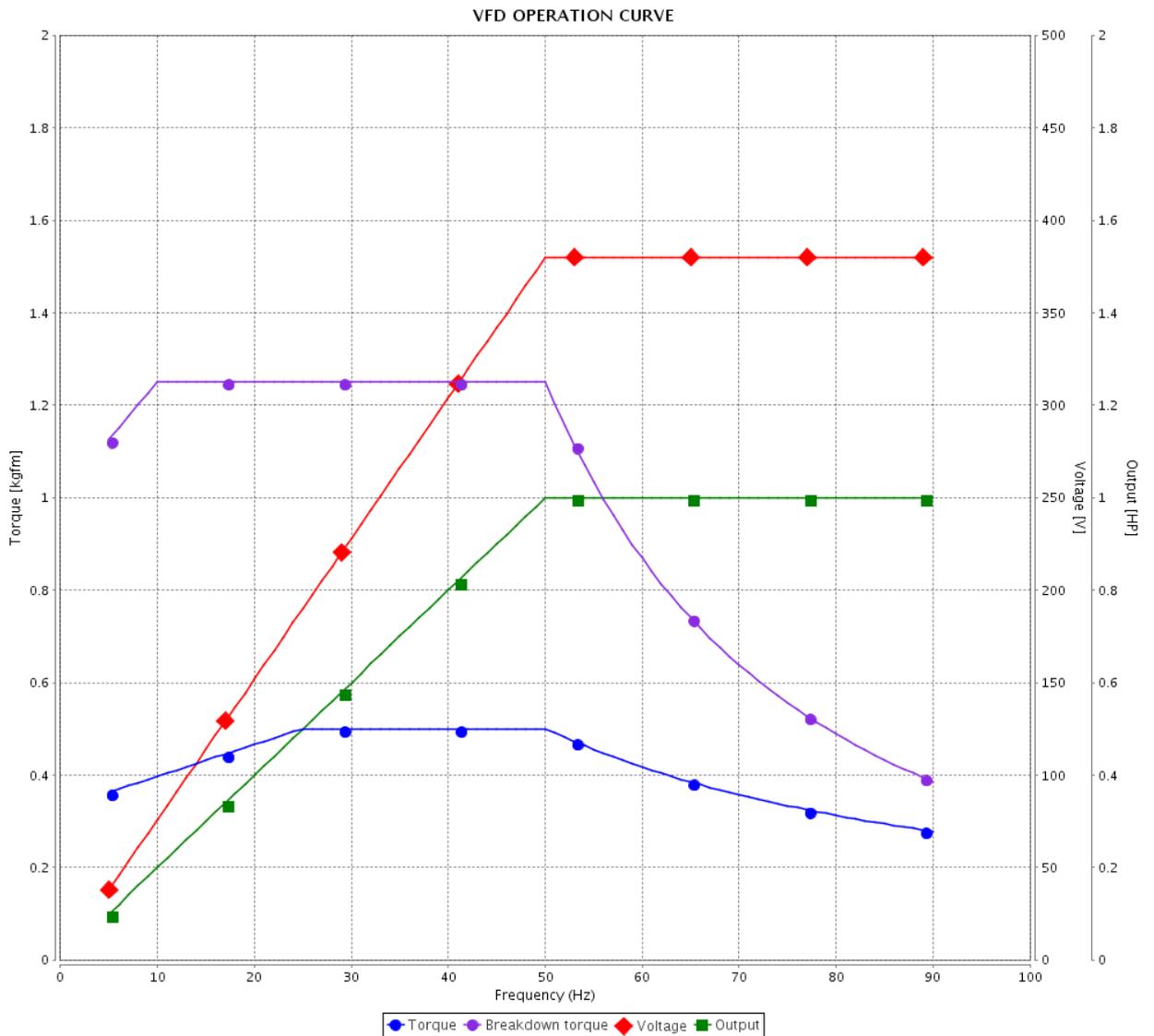


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 1.71 A
 LRC : 6.4
 Rated torque : 0.501 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0049 kgm²
 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		Revision
Checked by		19 / 21		
Date		22/03/2021		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

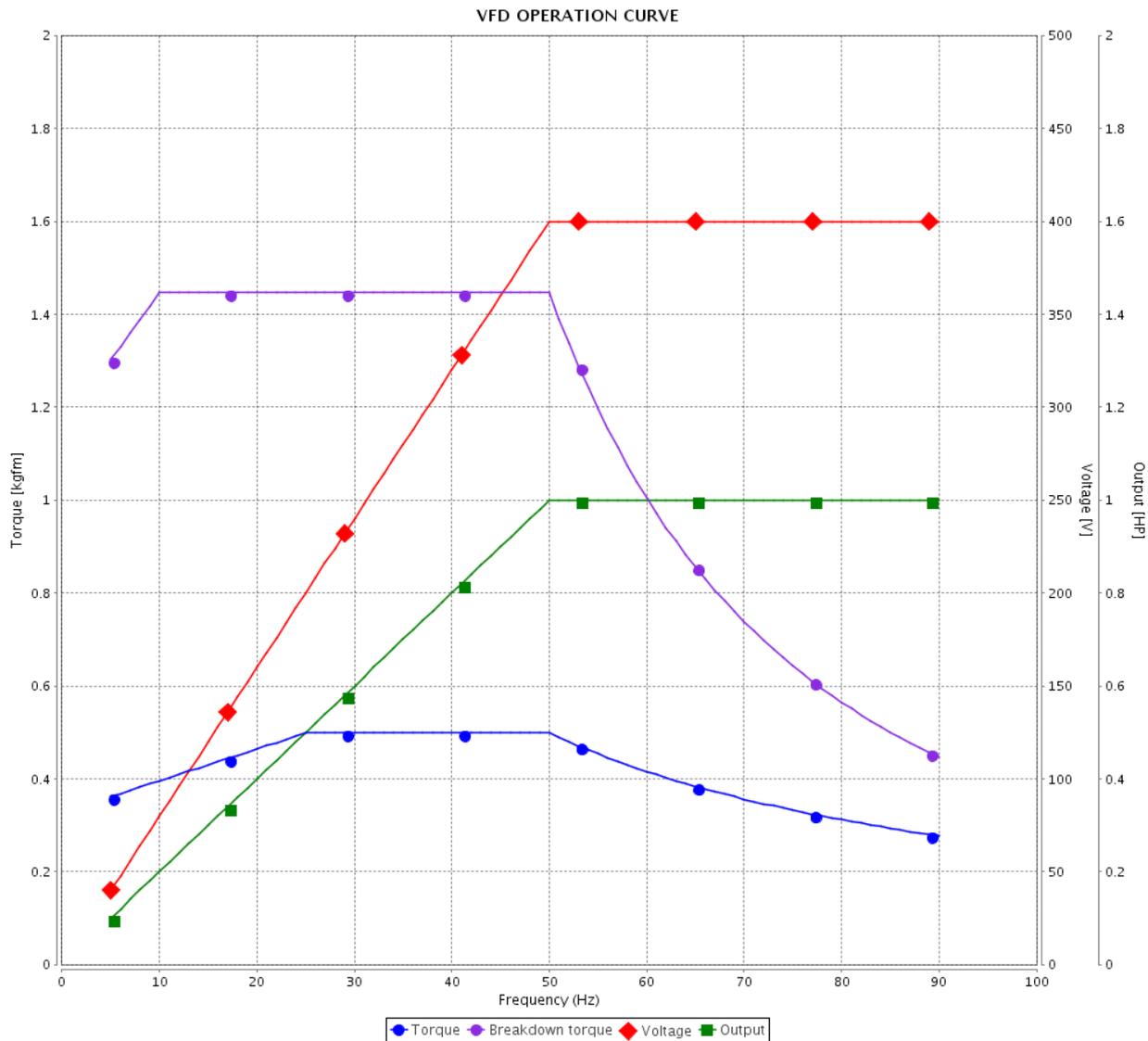


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22



Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A
 LRC : 7.0
 Rated torque : 0.499 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
 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 20 / 21	Revision
Checked by				
Date	22/03/2021			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

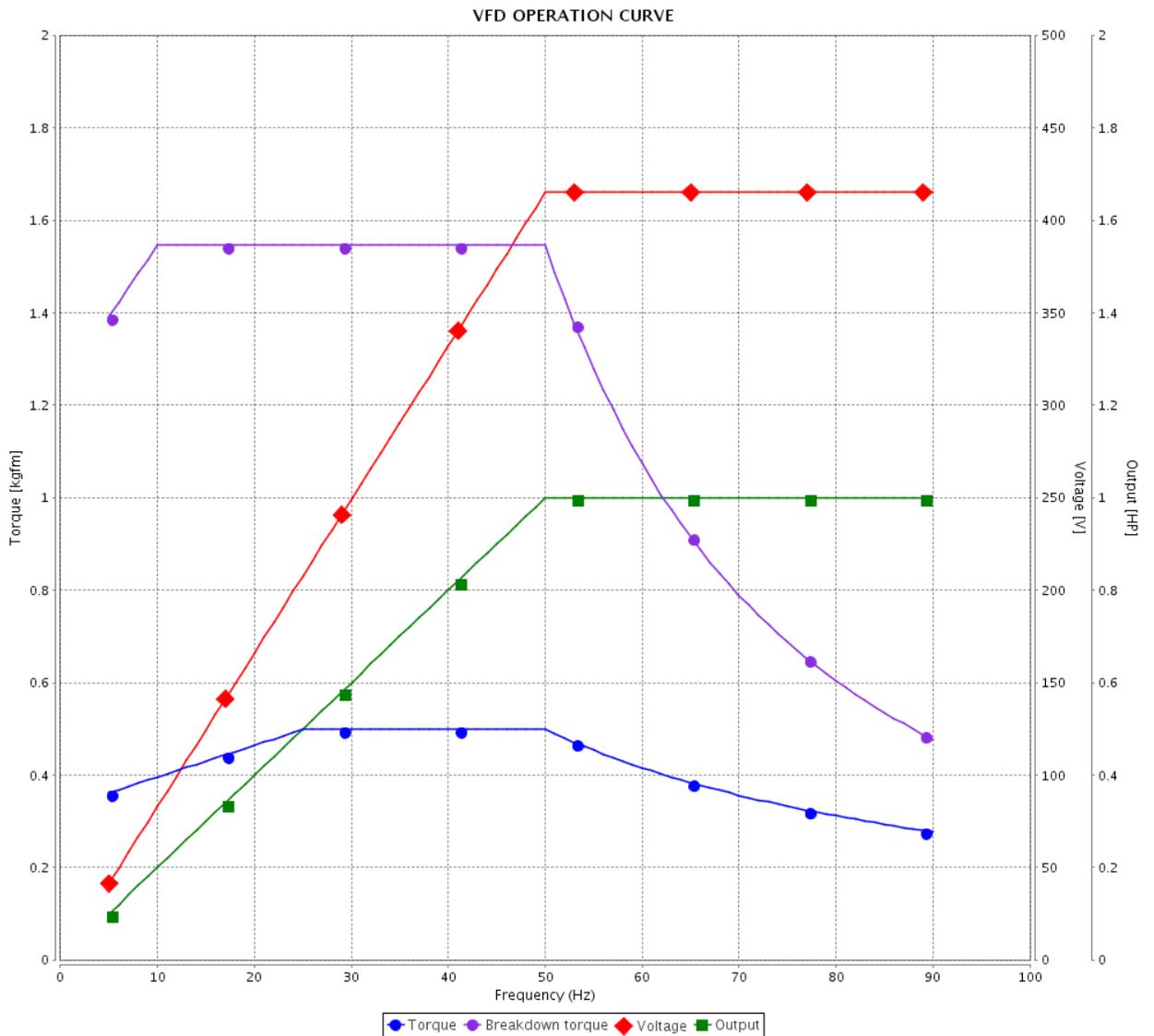


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11723868

Catalog # : 00118ET3E143T-W22

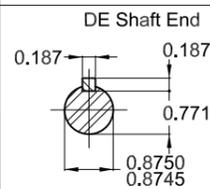
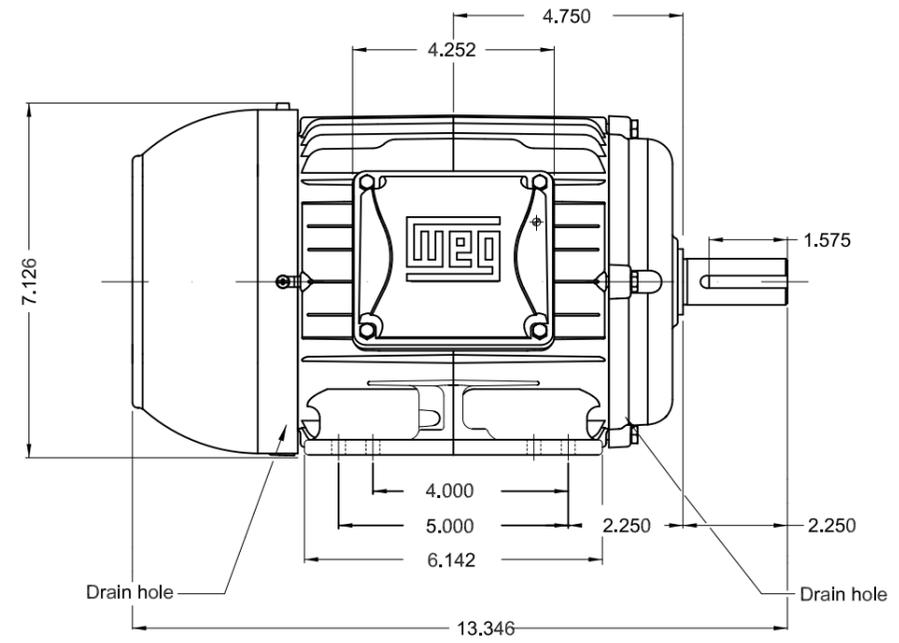
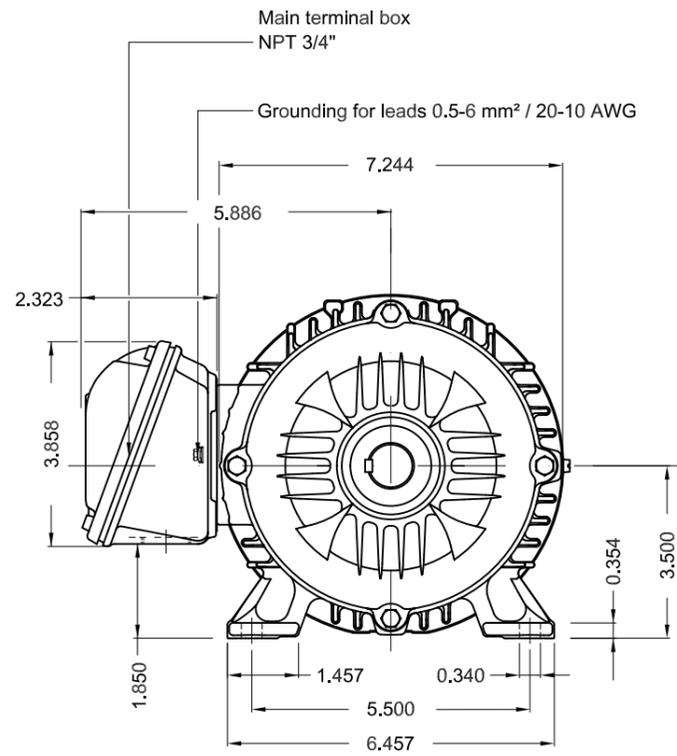


Performance : 415 V 50 Hz 4P IE3

Rated current : 1.63 A
LRC : 7.4
Rated torque : 0.499 kgfm
Locked rotor torque : 260 %
Breakdown torque : 310 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

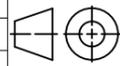
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 21 / 21	Revision
Checked by				
Date	22/03/2021			



Color RAL 5009
 Painting plan 207A
 Mounting B3R(D)

1 HP 04 Poles 60Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 143/5T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
 WDD



Dimensions in inches

XME A3

**W22**

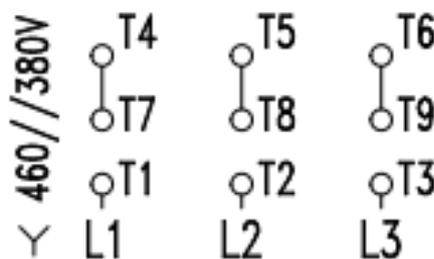
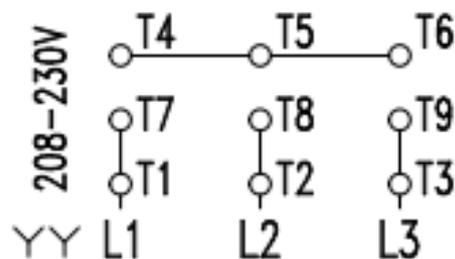
CC029A

® Inverter Duty Motor
Severe Duty

11723868

MADE IN BRAZIL MODEL 00118ET3E143T-W22

PH 3	FR 143/5T	HP(kw) 1.0(0.75)	Hz 60	SF 1.25	PF 0.75
V 230/460	A 2.94/1.47	RPM 1760	INS. CL. F	ΔT 80 K	IP55
NEMA NOM EFF 85.5 %			DES B DUTY CONT.		AMB 40°C
ENCL TEFC		SFA 3.67/1.84	USABLE @208V 3.07 A	SF 1.15	SFA 3.53
1.0HP 0.75kW 50Hz 380V 1.71A 1450RPM SF1.25 EFF 82.5% (IE3)					CODE M



→6205-ZZ

→6204-ZZ

MOBIL POLYREX EM

ALT 1000 m.a.s.l. | 44 Lbs

For 60Hz: 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
 VT1000:1, CT20:1, 1.0SF, T4A

FOR SAFE AREA
MOD.TE1BFOXON