

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: Multimounting IE3 Three-Phase	Product code :	13984021	
		Catalog # :	00236ET3WAL90LFF-W22	
Frame	: 90S/L	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: B35L(E)	
Duty cycle	: 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 ³	: 48.3 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.0617 sq.ft.lb	
Design	: N			
Output [HP]	3	3	3	
Poles	2	2	2	
Frequency [Hz]	50	50	60	
Rated voltage [V]	220/380	240/415	460	
Rated current [A]	7.81/4.52	7.56/4.37	3.85	
L. R. Amperes [A]	55.4/32.1	60.5/35.0	35.0	
LRC [A]	7.1	8.0	9.1	
No load current [A]	2.85/1.65	3.54/2.05	1.70	
Rated speed [RPM]	2840	2875	3480	
Slip [%]	5.33	4.17	3.33	
Rated torque [ft.lb]	5.55	5.48	4.53	
Locked rotor torque [%]	300	380	430	
Breakdown torque [%]	310	380	459	
Service factor	1.00	1.00	1.25	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	21s (cold) 12s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	
Noise level ²	62.0 dB(A)	62.0 dB(A)	68.0 dB(A)	
Efficiency (%)	25%			
	50%	86.5	84.0	
	75%	86.4	85.5	
	100%	85.9	86.5	
Power Factor	25%			
	50%	0.70	0.64	
	75%	0.81	0.76	
	100%	0.86	0.83	
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6204 ZZ	Foundation loads		
Sealing	: V'Ring V'Ring	Max. traction	: 154 lb	
Lubrication interval	: - -	Max. compression	: 203 lb	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes				
<p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(1) Looking the motor from the shaft end.</p> <p>(2) Measured at 1m and with tolerance of +3dB(A).</p> <p>(3) Approximate weight subject to changes after manufacturing process.</p> <p>(4) At 100% of full load.</p>		<p>These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.</p>		
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Date	13/04/2020		1 / 13	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

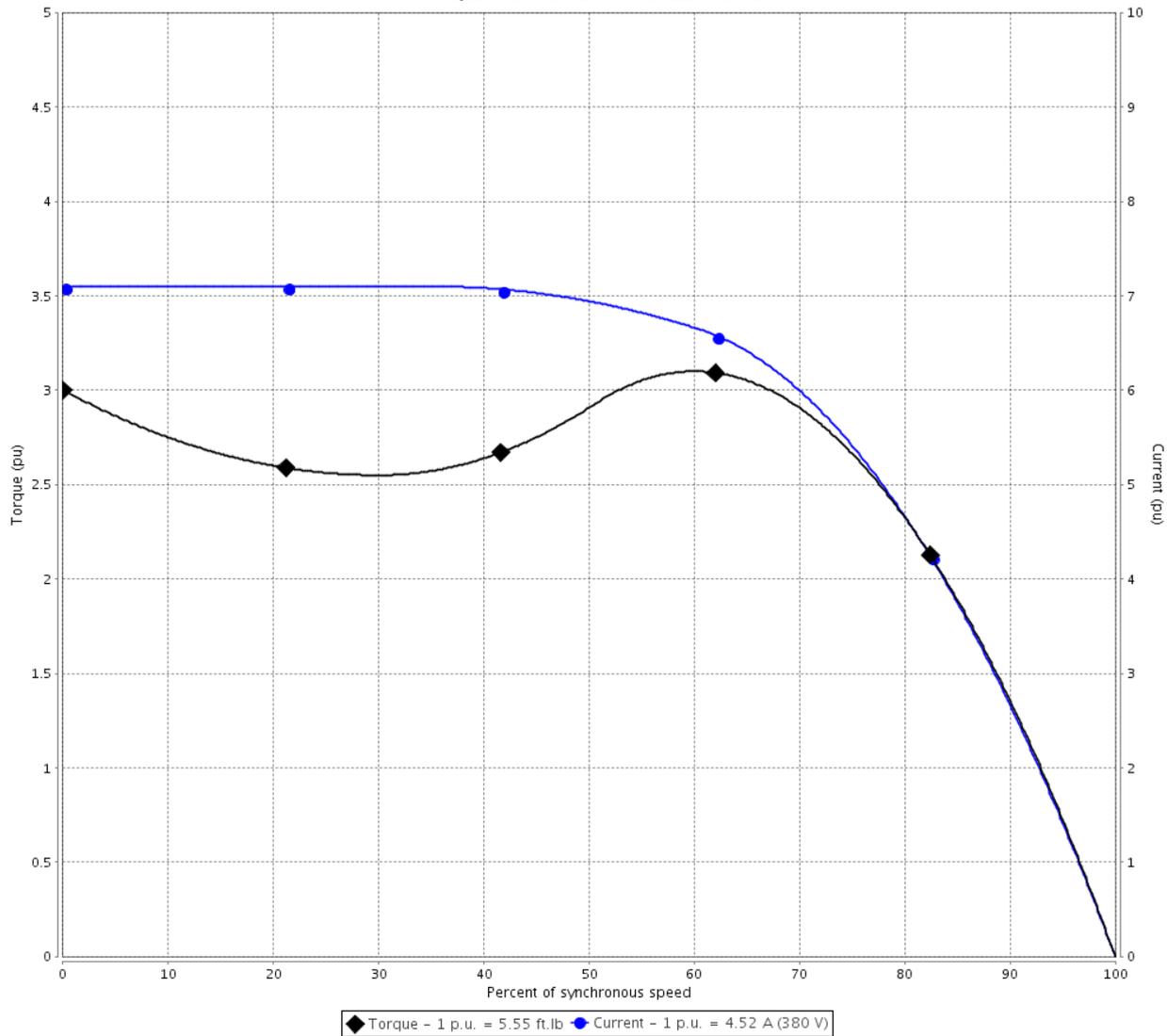
Product code :

13984021

Catalog # :

00236ET3WAL90LFF-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/380 V 50 Hz 2P

Rated current : 7.81/4.52 A
 LRC : 7.1
 Rated torque : 5.55 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 310 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0617 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Locked rotor time : 21s (cold) 12s (hot)

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Date	13/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

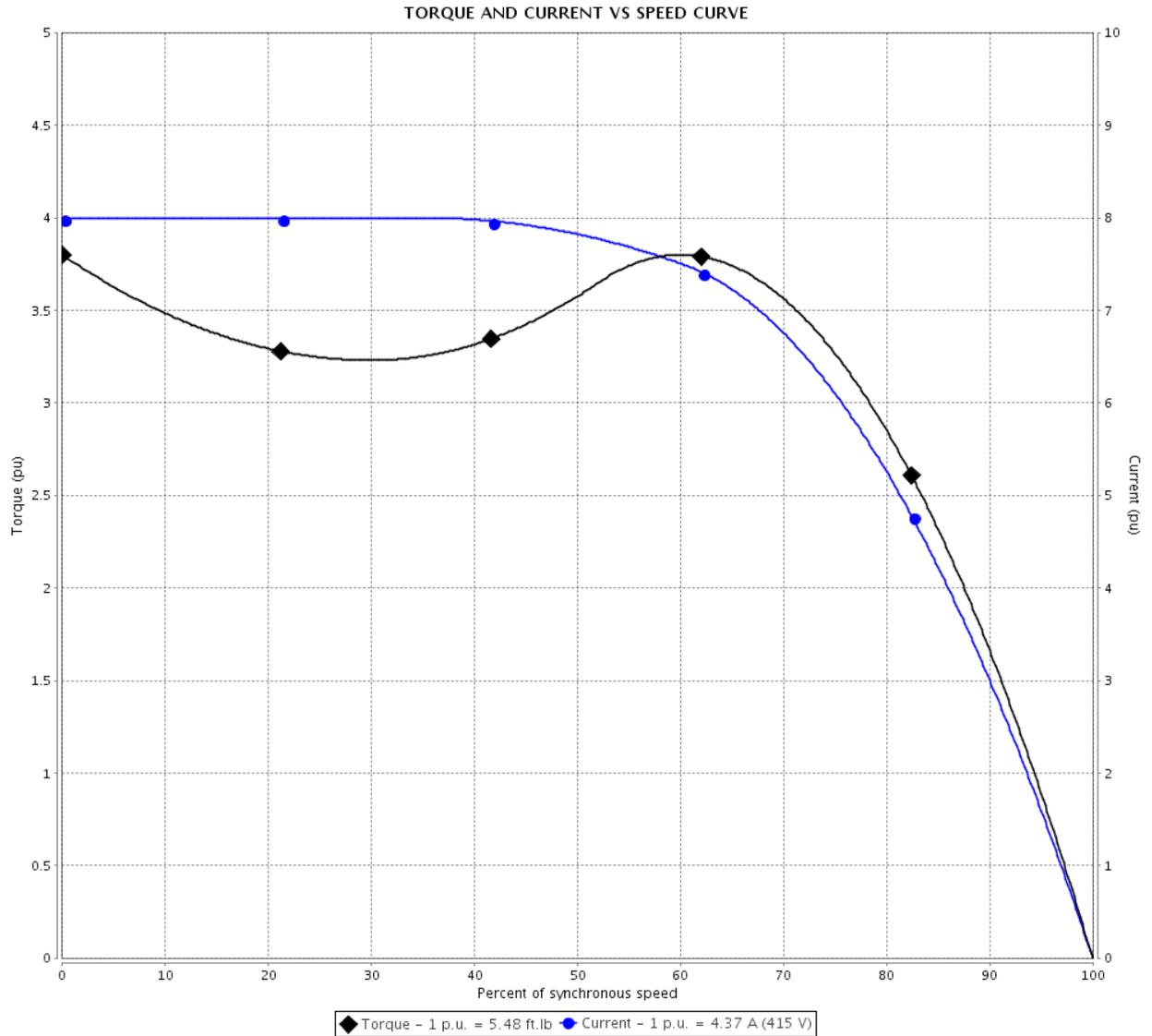
Product line : Multimounting IE3 Three-Phase

Product code :

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Catalog # :

00236ET3WAL90LFF-W22



Performance : 240/415 V 50 Hz 2P

Rated current : 7.56/4.37 A
 LRC : 8.0
 Rated torque : 5.48 ft.lb
 Locked rotor torque : 380 %
 Breakdown torque : 380 %
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.0617 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



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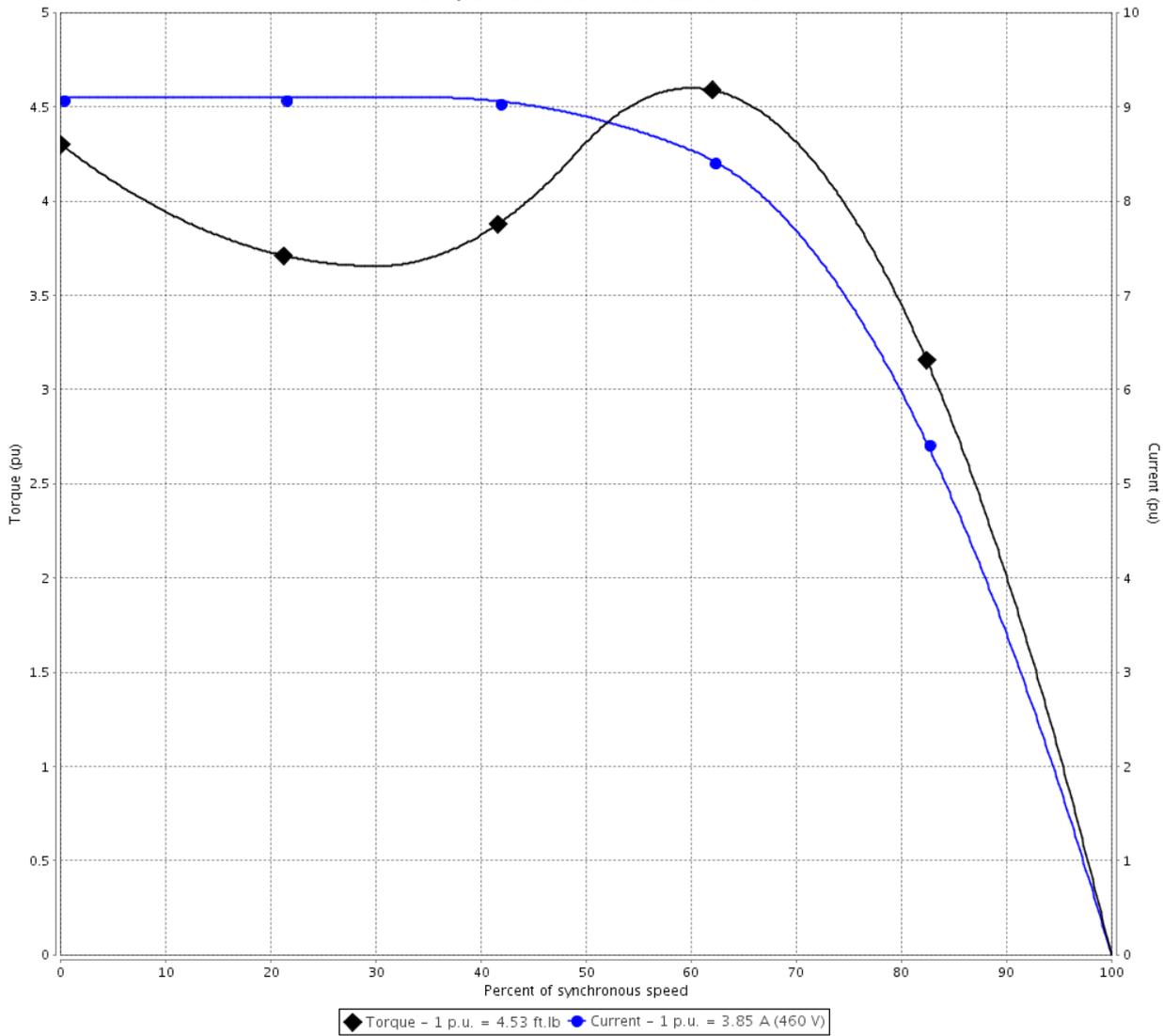
Product code :

13984021

Catalog # :

00236ET3WAL90LFF-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

Rated current	: 3.85 A	Moment of inertia (J)	: 0.0617 sq.ft.lb
LRC	: 9.1	Duty cycle	: S1
Rated torque	: 4.53 ft.lb	Insulation class	: F
Locked rotor torque	: 430 %	Service factor	: 1.25
Breakdown torque	: 459 %	Temperature rise	: 80 K
Rated speed	: 3480 rpm	Design	: N

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

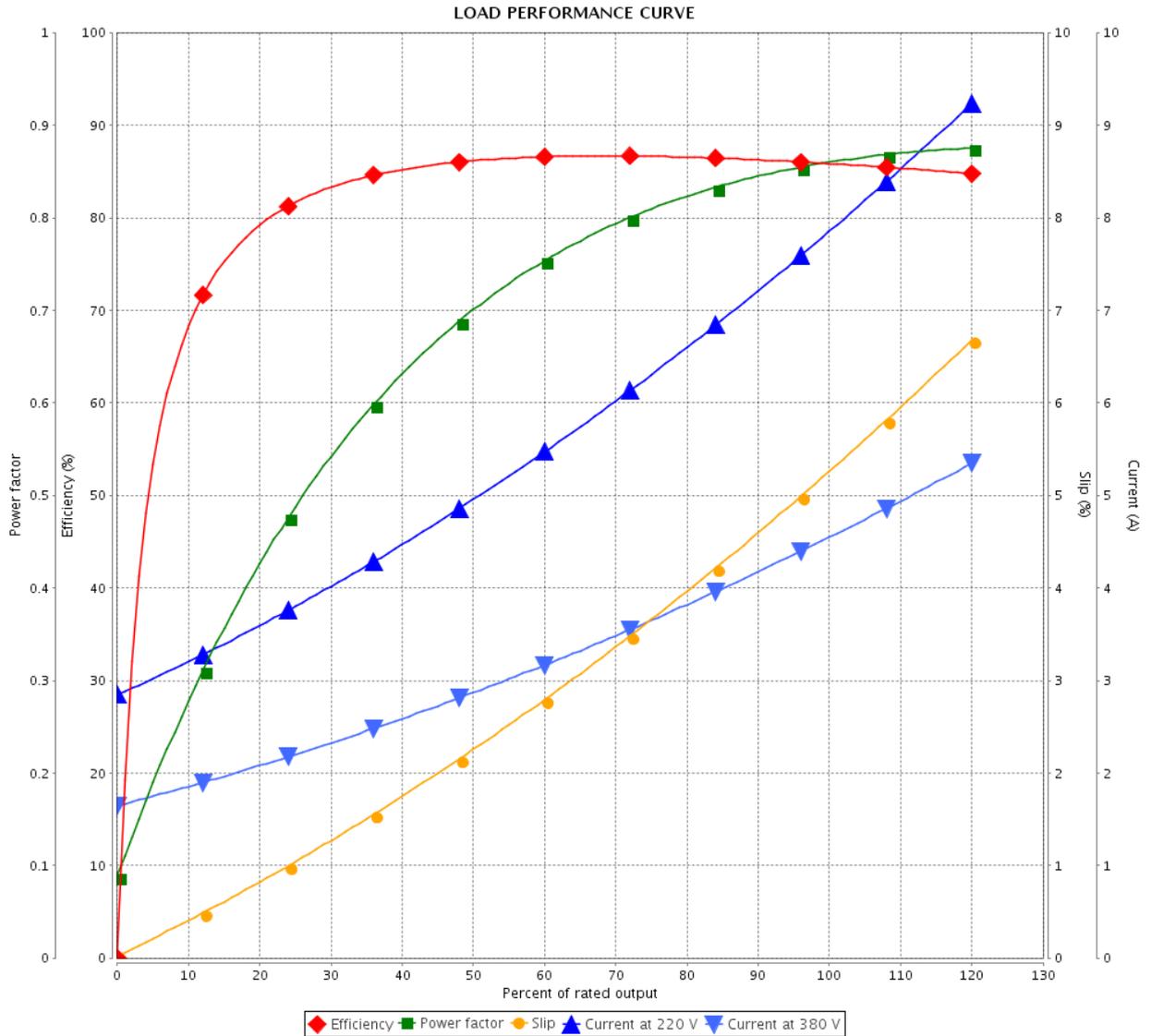
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 Locked rotor torque : 300 %
 Breakdown torque : 310 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0617 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
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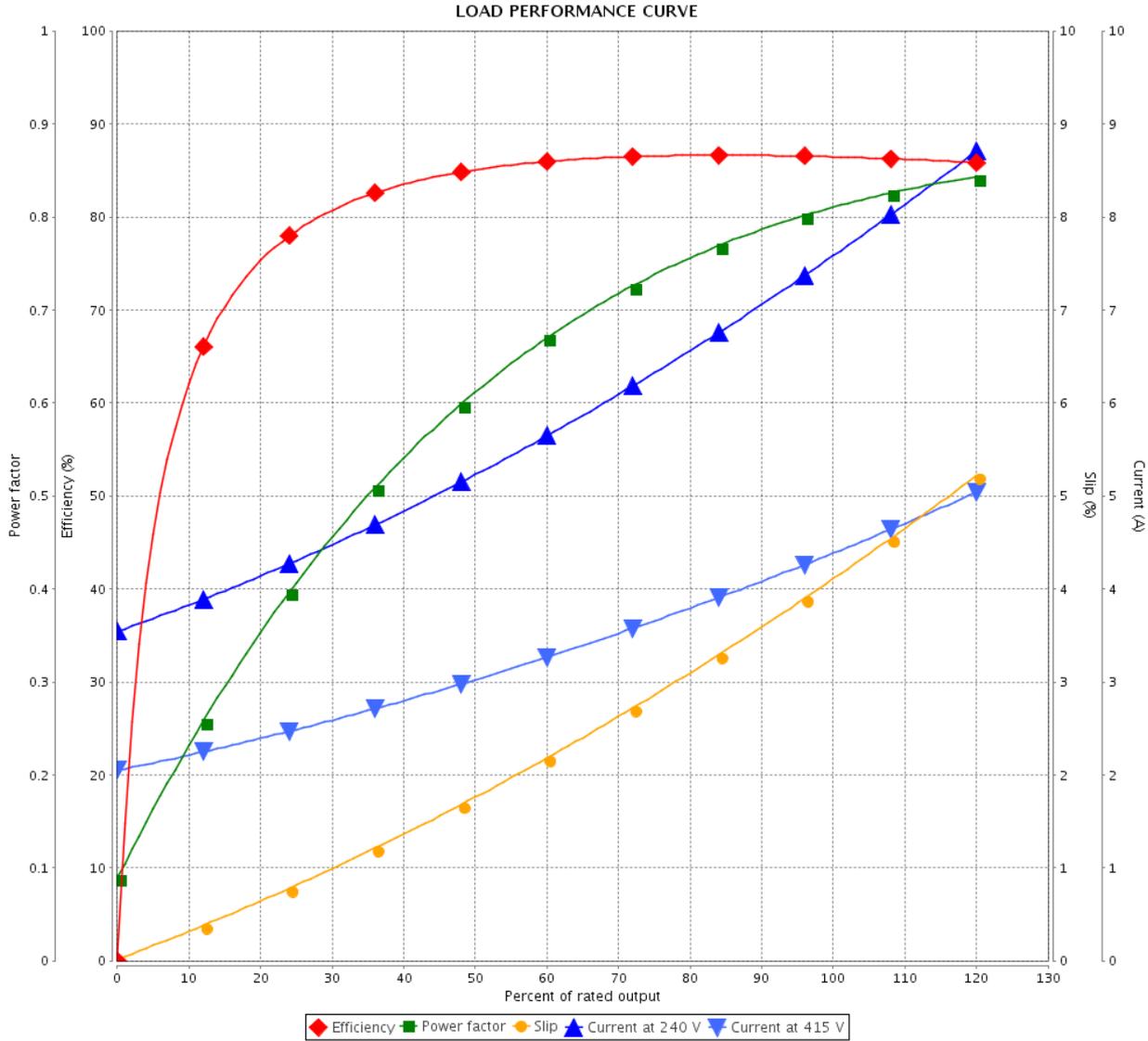
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 Rated speed : 2875 rpm

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 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
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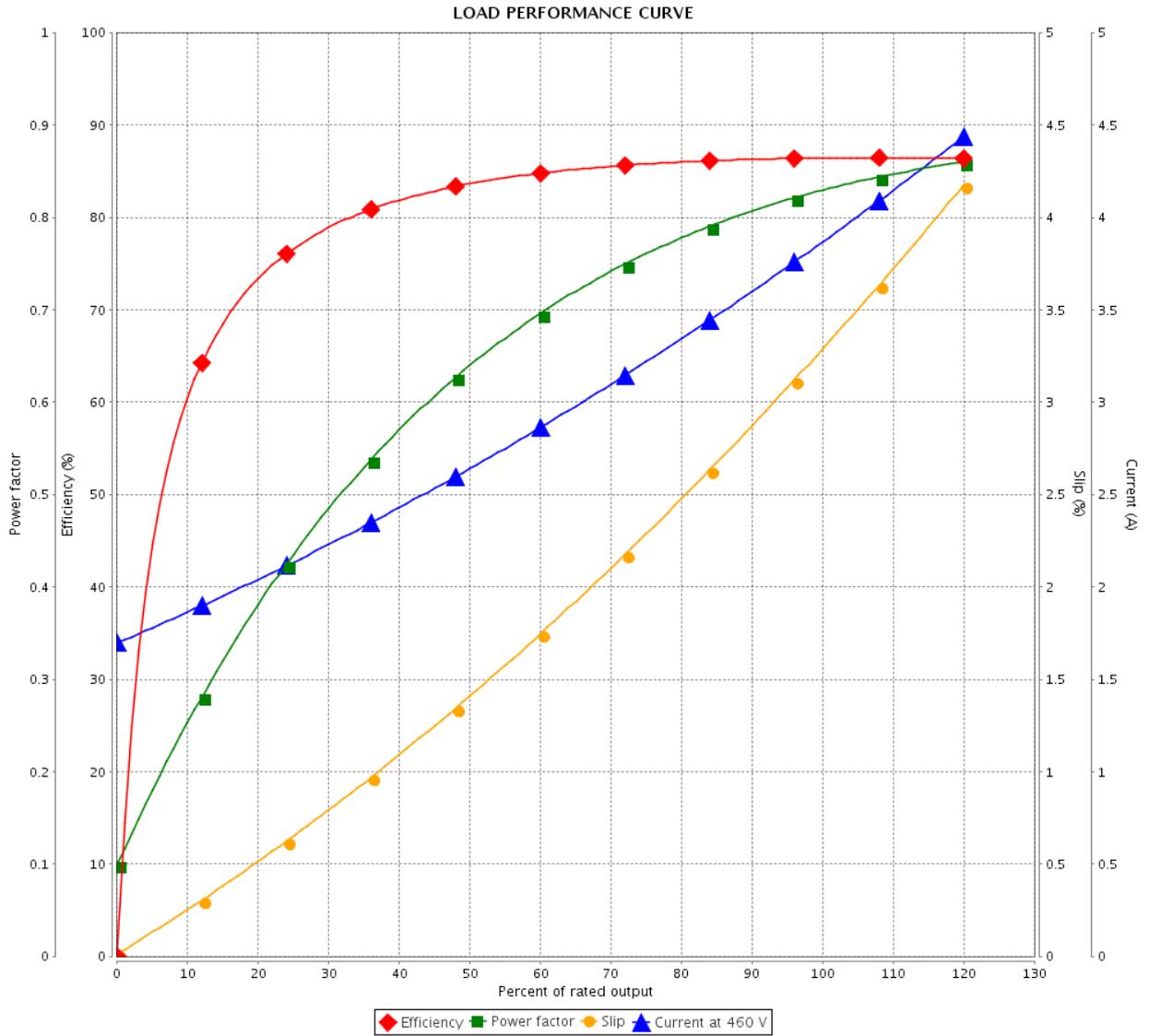
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Performance : 460 V 60 Hz 2P

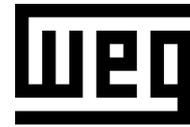
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 Duty cycle : S1
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 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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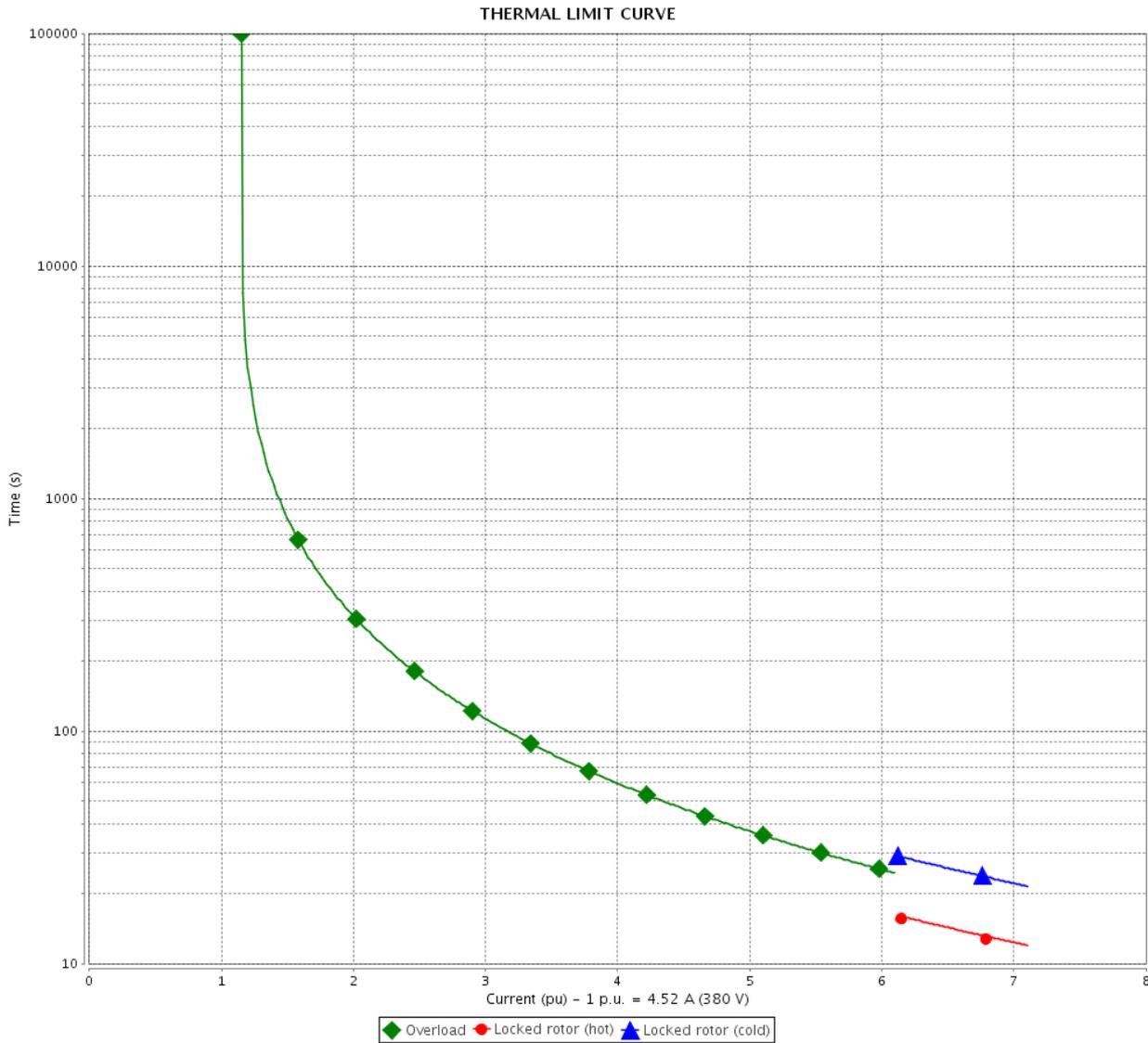
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Catalog # :

00236ET3WAL90LFF-W22



Performance : 220/380 V 50 Hz 2P

Rated current : 7.81/4.52 A
 LRC : 7.1
 Rated torque : 5.55 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 310 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0617 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

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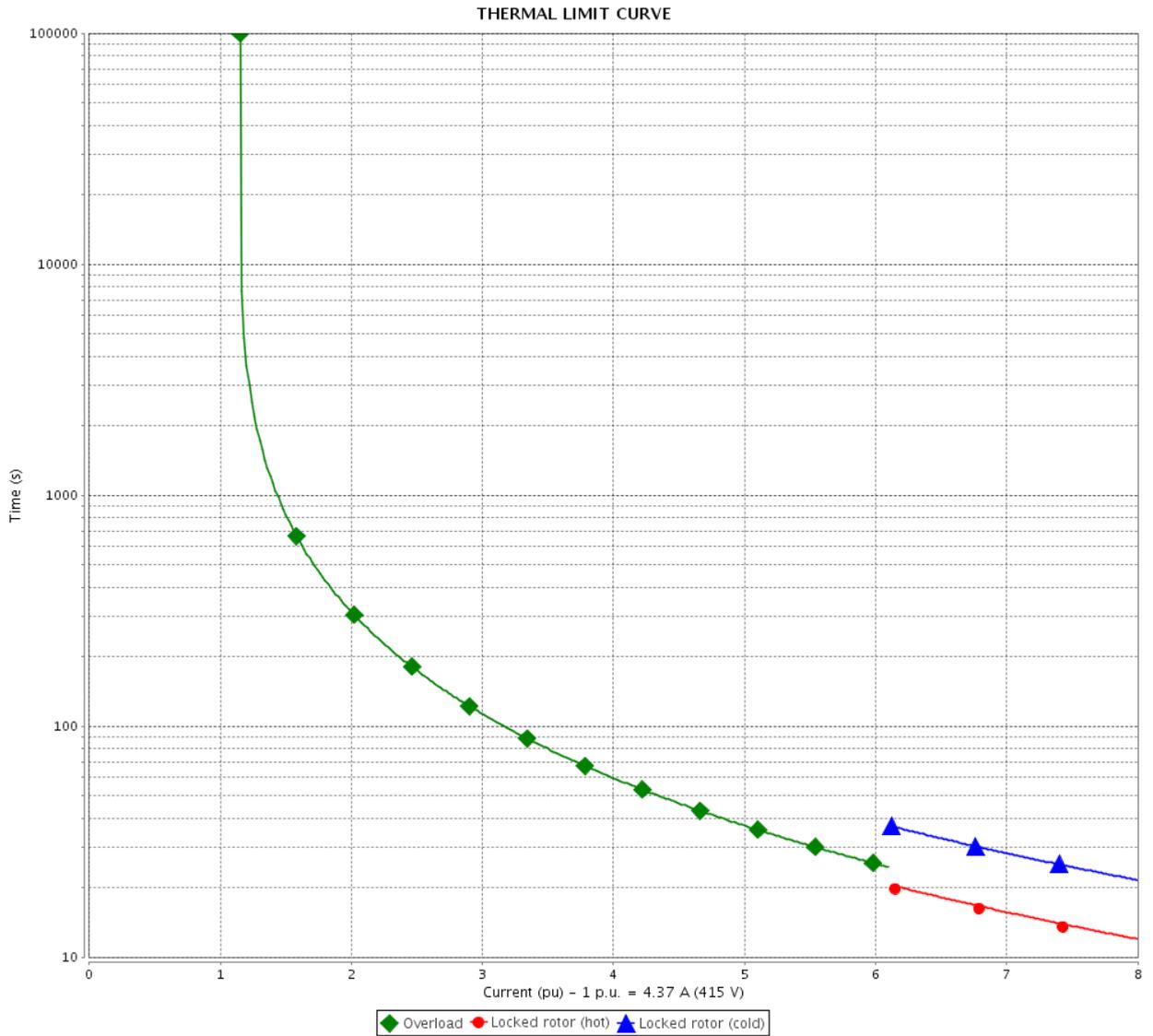
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 Duty cycle : S1
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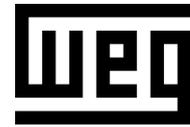
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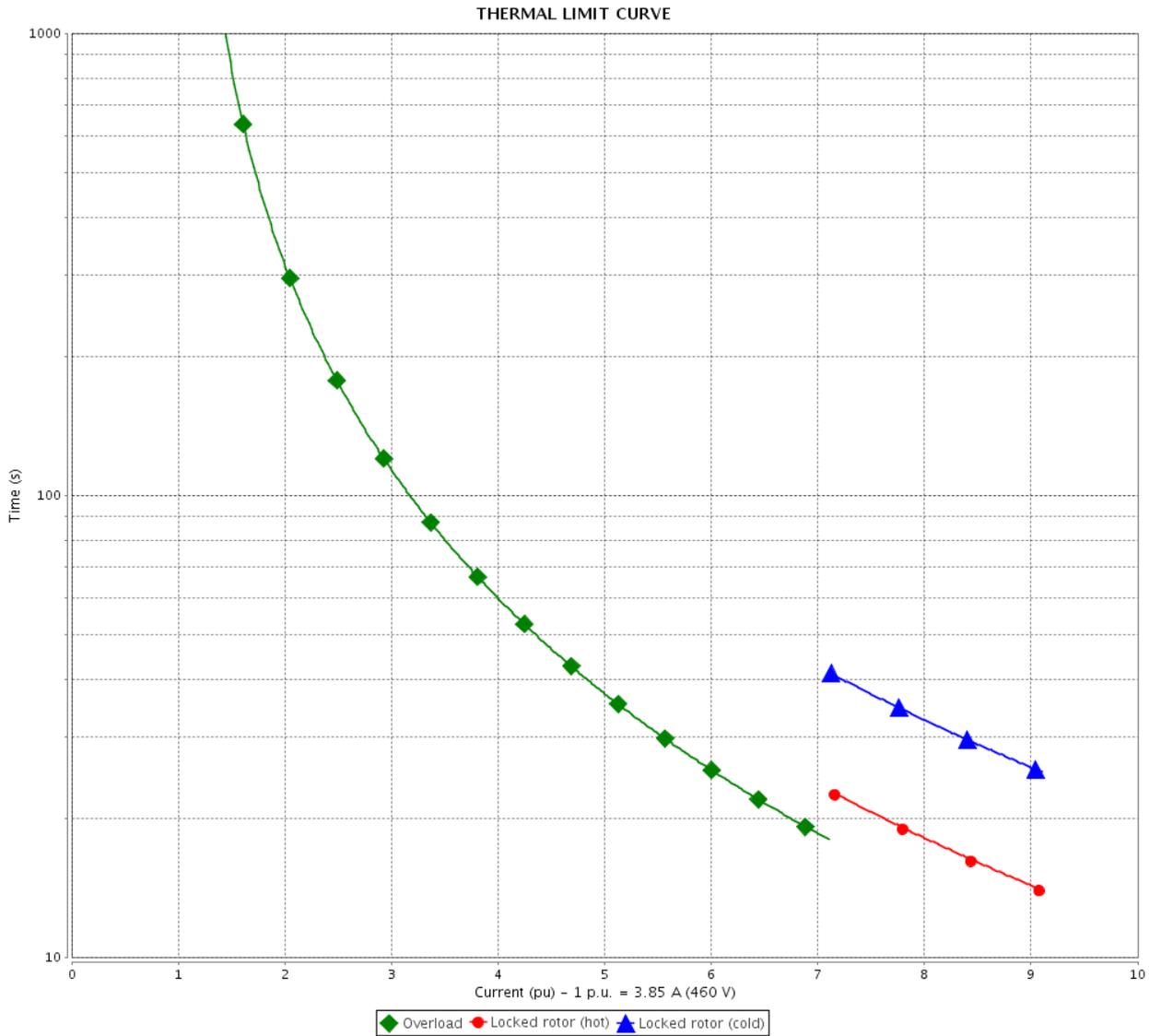
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Cooling constant

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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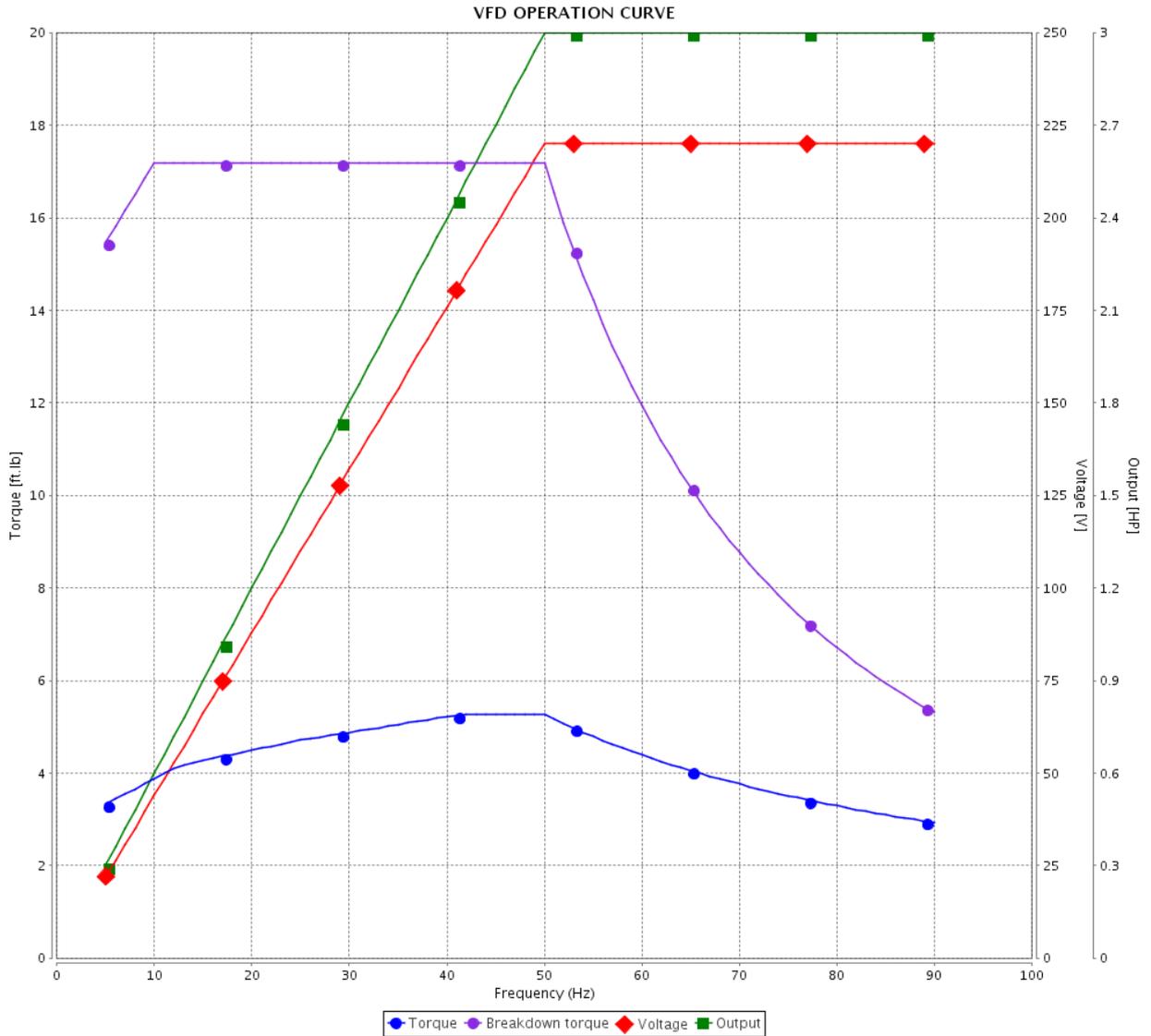
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13984021

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Performance : 220/380 V 50 Hz 2P

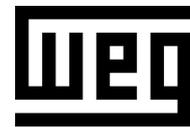
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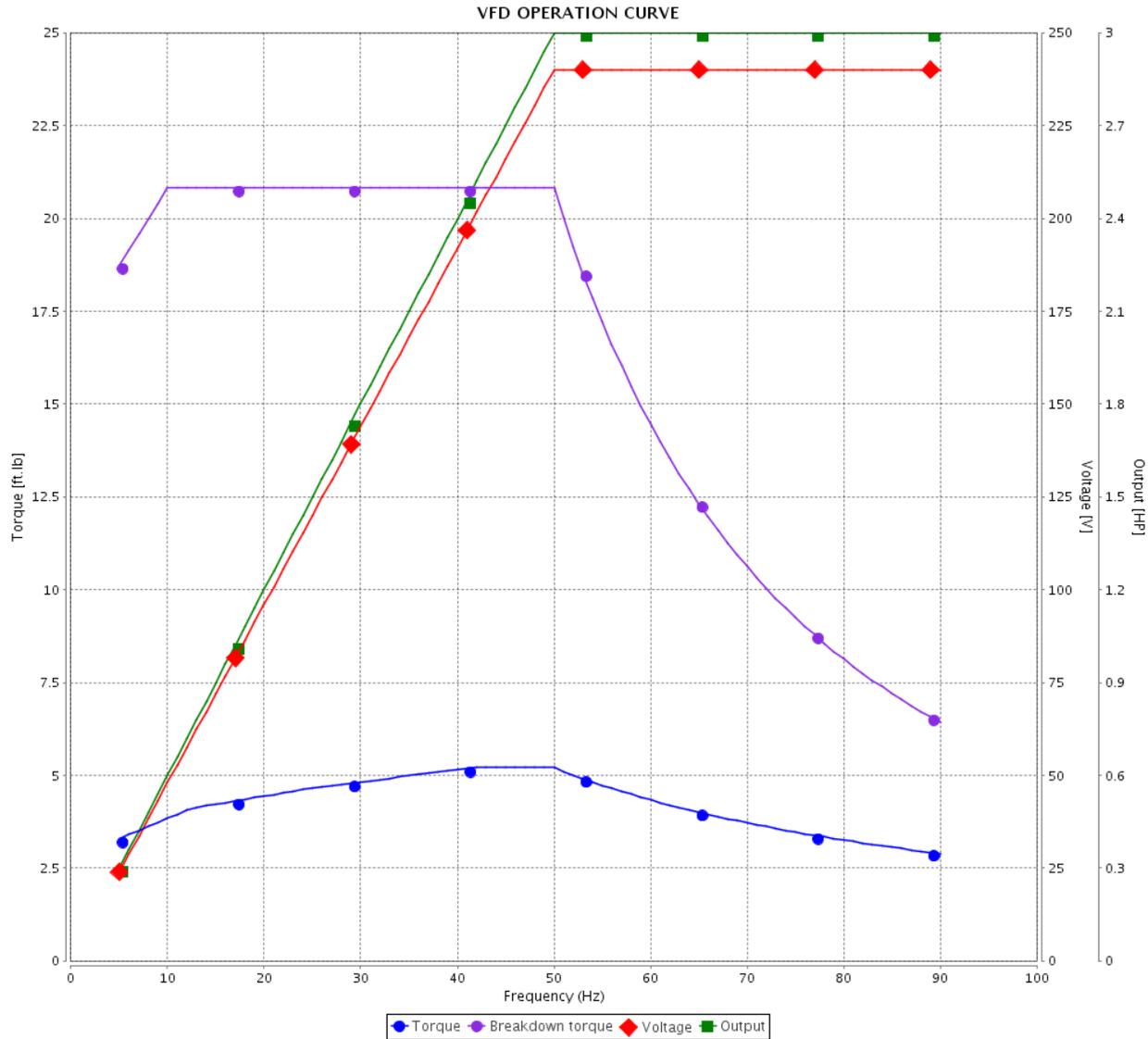
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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

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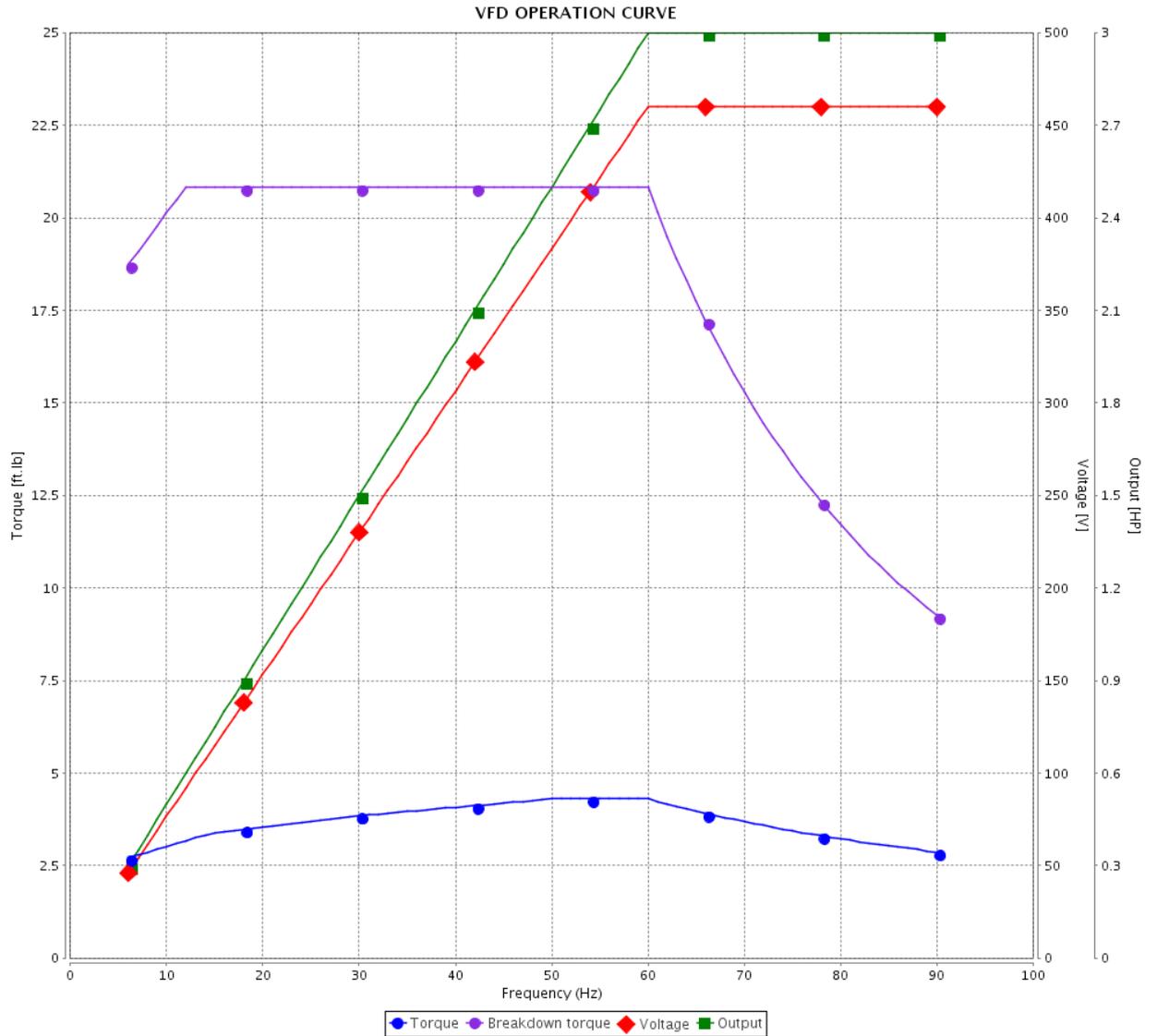


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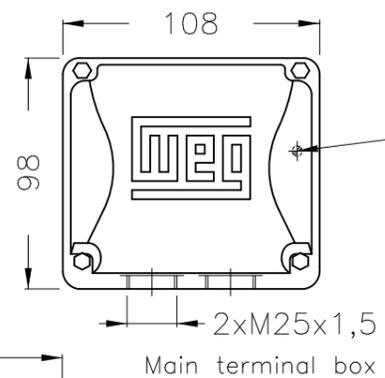
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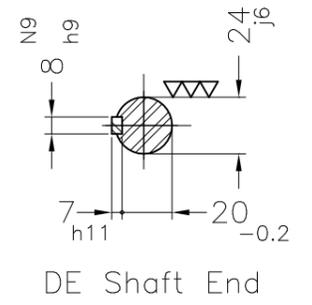
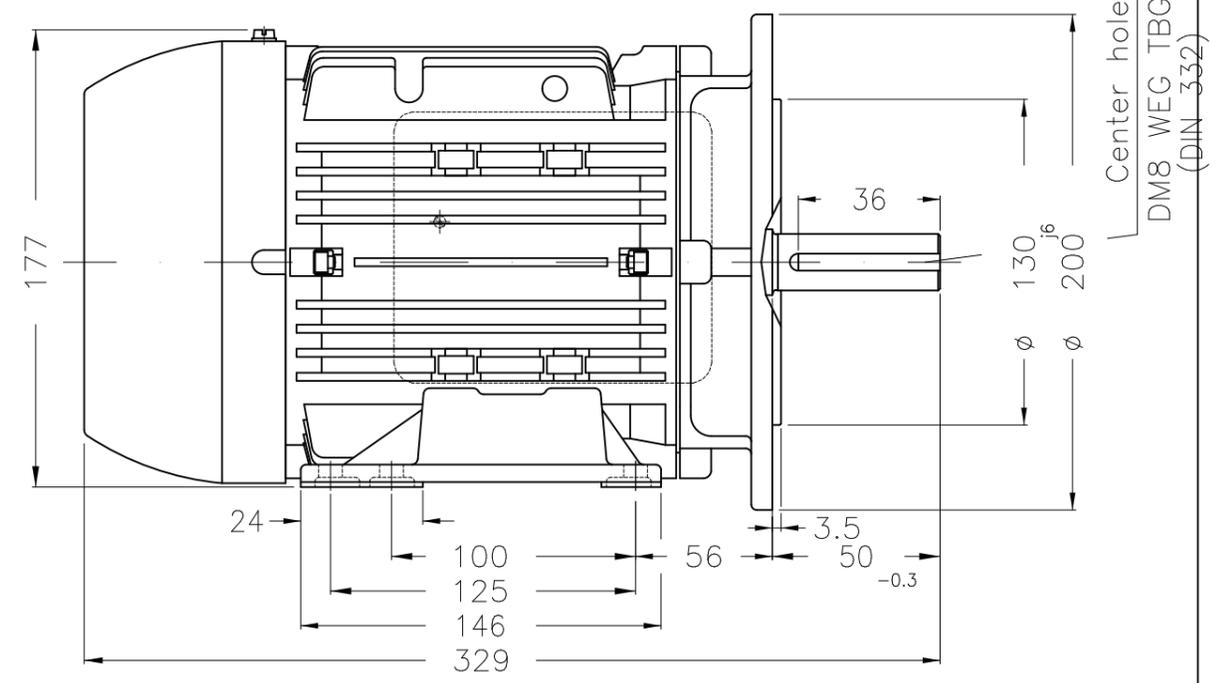
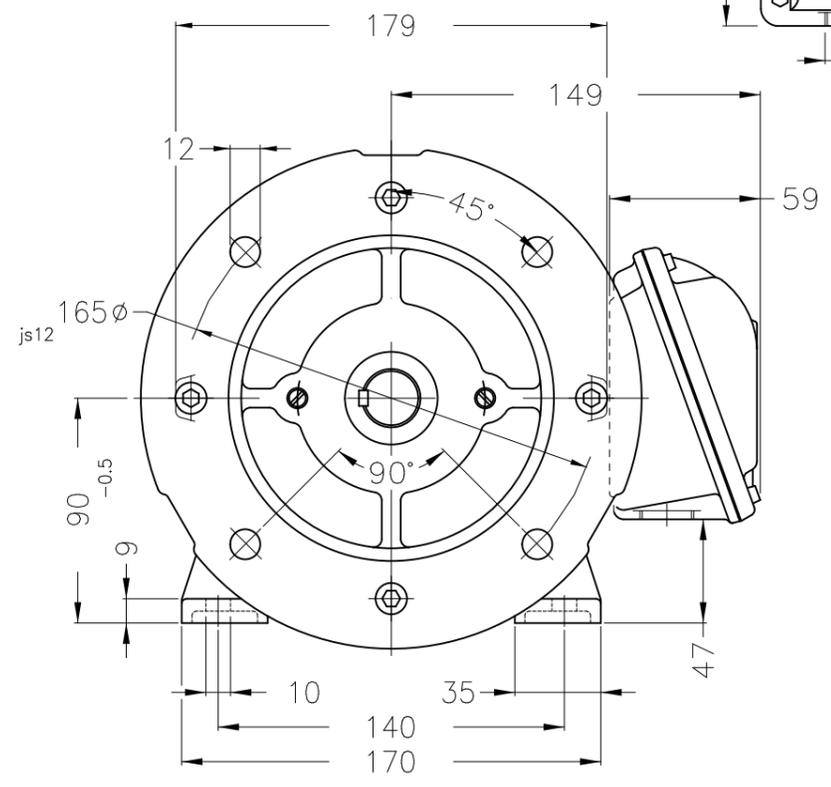
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Dimensões em mm
Dimensions in mm

THIS IS AN UPDATED REVISION, THE
PREVIOUS ONE MUST BE DISREGARDED.



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



DE Shaft End

Connection cables connected in the high voltage
Bearing cap
Color RAL 5009
Painting plan 207A
Mounting B35L(E)

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PHASE MOTOR TRU-METRIC P. EFF AL							
CHECKED		FRAME 90S/L IP55 TEFC							
RELEASED		WEG code: 13984021							
REL DT	13.04.2020	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

3 HP 02 Poles 60Hz

A



ZME A3

MADE IN BRAZIL


W21 CC029A
Severe Duty

IE3-86.5%



MODEL 00236ET3WAL90LFF-W22

IEC 60034-1

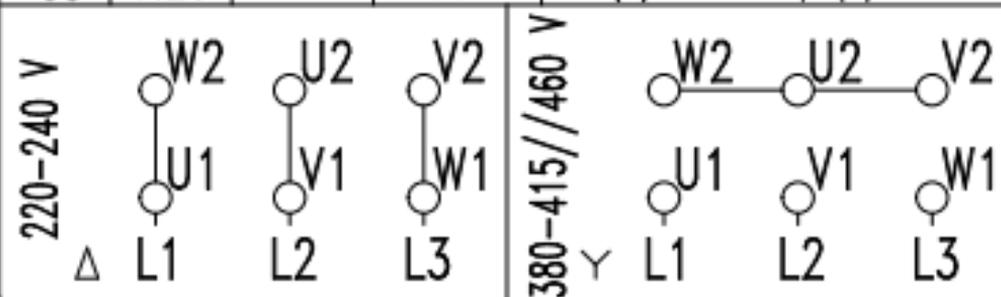
3 ~ AL90S/L

AMB 40°C

INS CL. F ENCL TEFC TYPE ET IP55 DUTY CONT.

kW(HP)	Hz	VOLTS	RPM	AMPS	PF	SFA
2.2(3.0)	50	220/380	2840	7.81/4.52	0.86	-
		240/415	2875	7.56/4.37	0.81	-
	60	/460	3480	- /3.85	0.83	4.81

Hz	SF	CODE	ΔT (k)	ALT 1000 m.a.s.l.
50	1.00	K	80	NEMA EFF 60Hz DES NOM(%) 86.5 3/4(%) 85.5
60	1.25	L	80	



 → 6205-ZZ
 → 6204-ZZ

MOBIL POLYREX EM

48 Lbs

TEMP CODE T3C

Class I, Div. 2, Gr. B, C and D[®]

Class I, Zone 2, IIC

MOD.TE01A0X0\$0000102084



LR 38324



13984021