

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: Multimounting High Efficiency Three-Phase	Product code :	13981165		
		Catalog # :	.1812EP3EAL71-W22		
Frame	: 71	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B3L(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 ²	: 9.3 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0008 kgm ²		
Design	: N				
Output [HP]	0.25	0.25	0.25	0.25	0.25
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]	1.54/0.772	0.787	0.824	0.881	0.881
L. R. Amperes [A]	5.40/2.70	2.75	2.88	3.08	3.08
LRC [A]	3.5	3.5	3.5	3.5	3.5
No load current [A]	1.40/0.700	0.650	0.725	0.800	0.800
Rated speed [RPM]	1100	880	890	900	900
Slip [%]	8.33	12.00	11.00	10.00	10.00
Rated torque [kgfm]	0.165	0.206	0.204	0.202	0.202
Locked rotor torque [%]	280	210	240	260	260
Breakdown torque [%]	280	220	240	260	260
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	47.0 dB(A)	43.0 dB(A)	43.0 dB(A)	43.0 dB(A)	43.0 dB(A)
Efficiency (%)	25%	46.1	51.0	47.5	44.1
	50%	49.0	53.0	50.0	47.0
	75%	57.0	59.0	56.5	54.0
	100%	61.0	61.0	59.5	58.0
Power Factor	25%	0.18	0.21	0.20	0.18
	50%	0.31	0.37	0.35	0.32
	75%	0.40	0.47	0.44	0.41
	100%	0.48	0.57	0.53	0.49
Bearing type	: Drive end : 6202 ZZ	Non drive end : 6202 ZZ	Foundation loads		
Sealing	: Oil Seal	Oil Seal	Max. traction : 14 kgf		
Lubrication interval	: -	-	Max. compression : 23 kgf		
Lubricant amount	: -	-			
Lubricant type	: Mobil Polyrex EM				
Notes					
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	26/01/2022			1 / 21	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

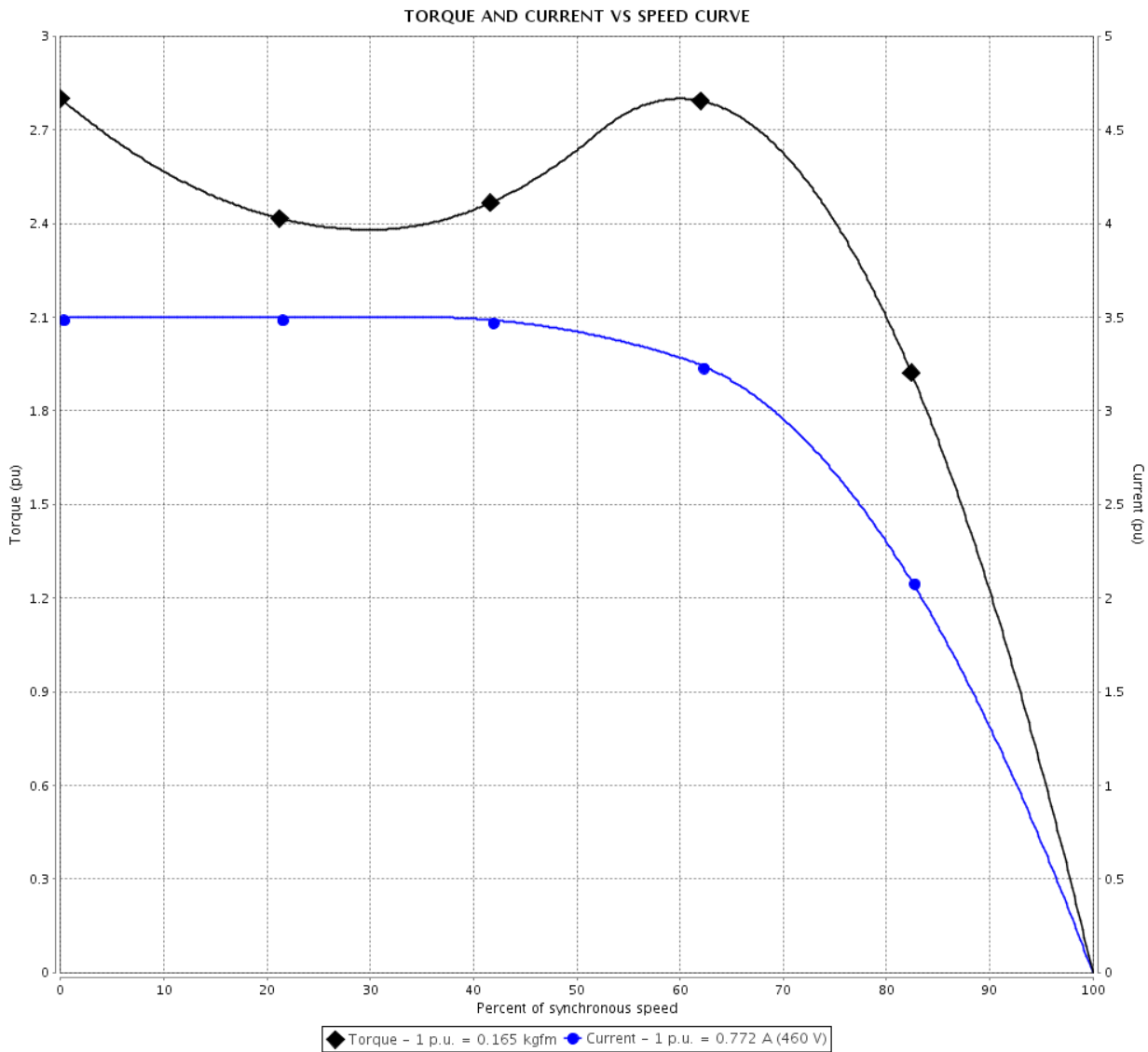


Customer :

Product line : Multimounting High Efficiency
Three-Phase

Product code : 13981165

Catalog # : .1812EP3EAL71-W22



Performance : 230/460 V 60 Hz 6P

Rated current : 1.54/0.772 A
LRC : 3.5
Rated torque : 0.165 kgfm
Locked rotor torque : 280 %
Breakdown torque : 280 %
Rated speed : 1100 rpm

Moment of inertia (J) : 0.0008 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : N

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 21	Revision
Checked by				
Date	26/01/2022			

TORQUE AND CURRENT VS SPEED CURVE



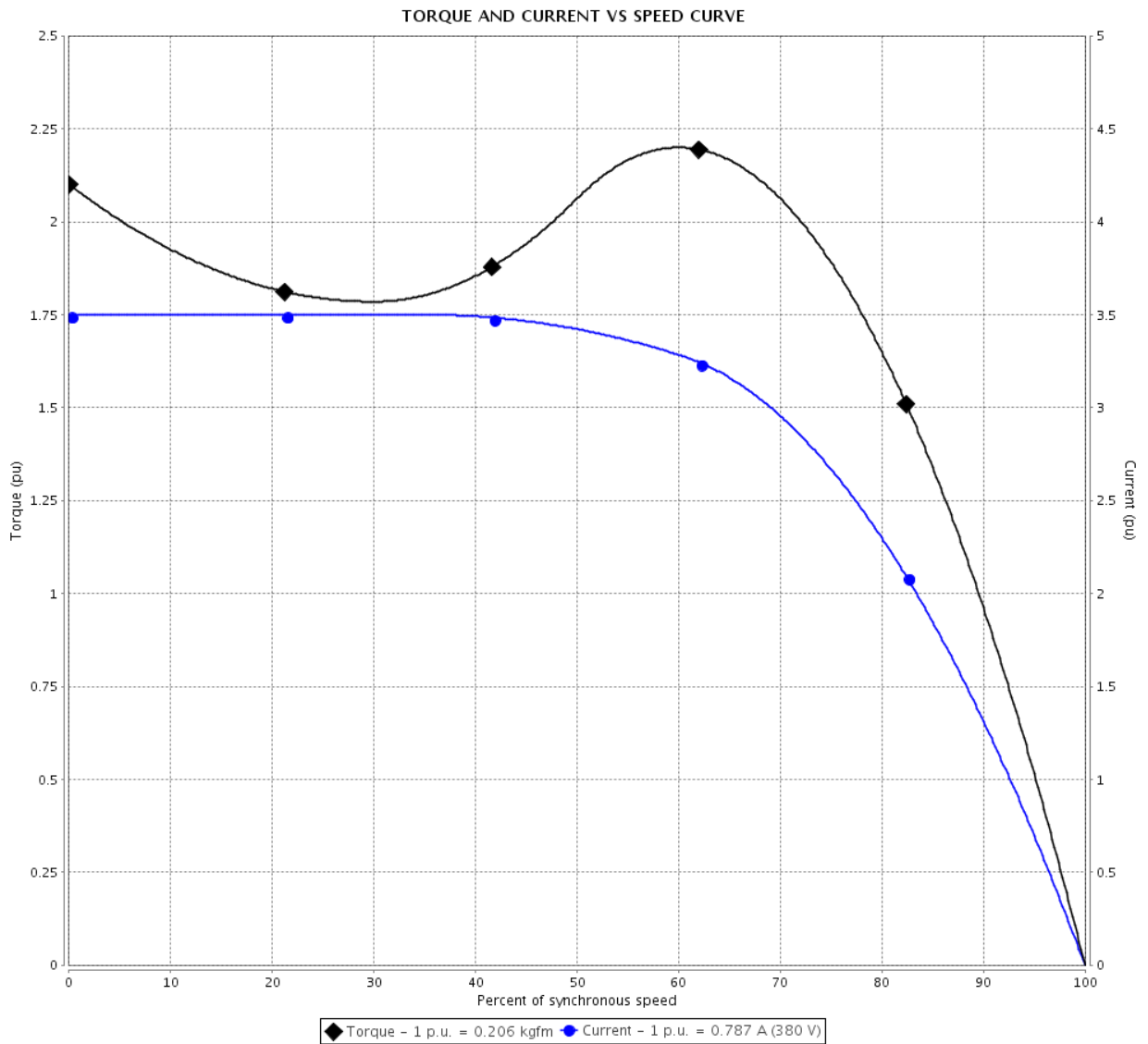
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Multimounting High Efficiency Three-Phase

Product code : 13981165

Catalog # : .1812EP3EAL71-W22



Performance : 380 V 50 Hz 6P IE2

Rated current	: 0.787 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 3.5	Duty cycle	: S1
Rated torque	: 0.206 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: N

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 21	Revision
Checked by				
Date	26/01/2022			

TORQUE AND CURRENT VS SPEED CURVE

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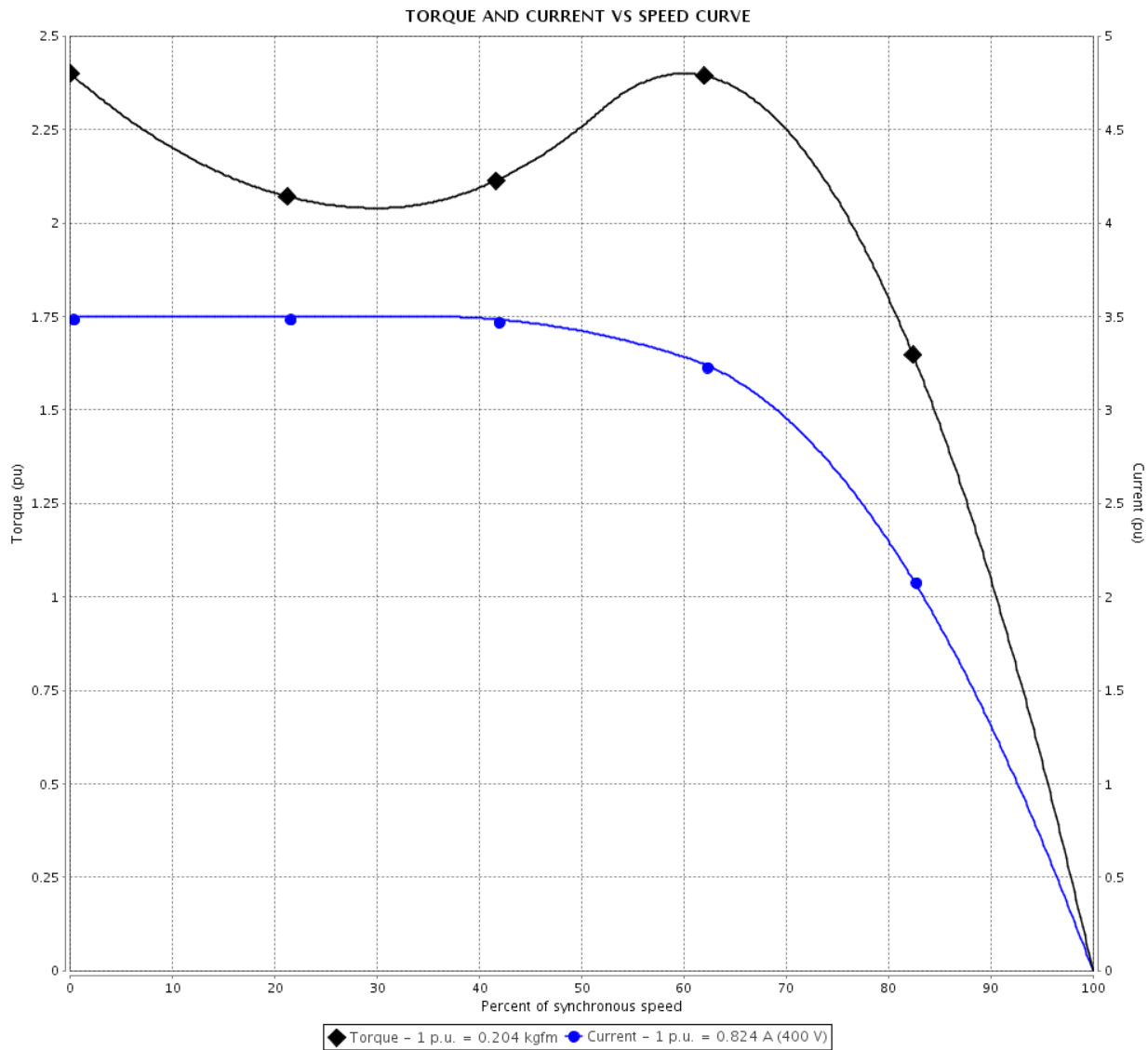


Customer :

Product line : Multimounting High Efficiency Three-Phase

Product code : 13981165

Catalog # : .1812EP3EAL71-W22



Performance : 400 V 50 Hz 6P IE2

Rated current	: 0.824 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 3.5	Duty cycle	: S1
Rated torque	: 0.204 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: N

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 21	Revision
Checked by				
Date	26/01/2022			

TORQUE AND CURRENT VS SPEED CURVE



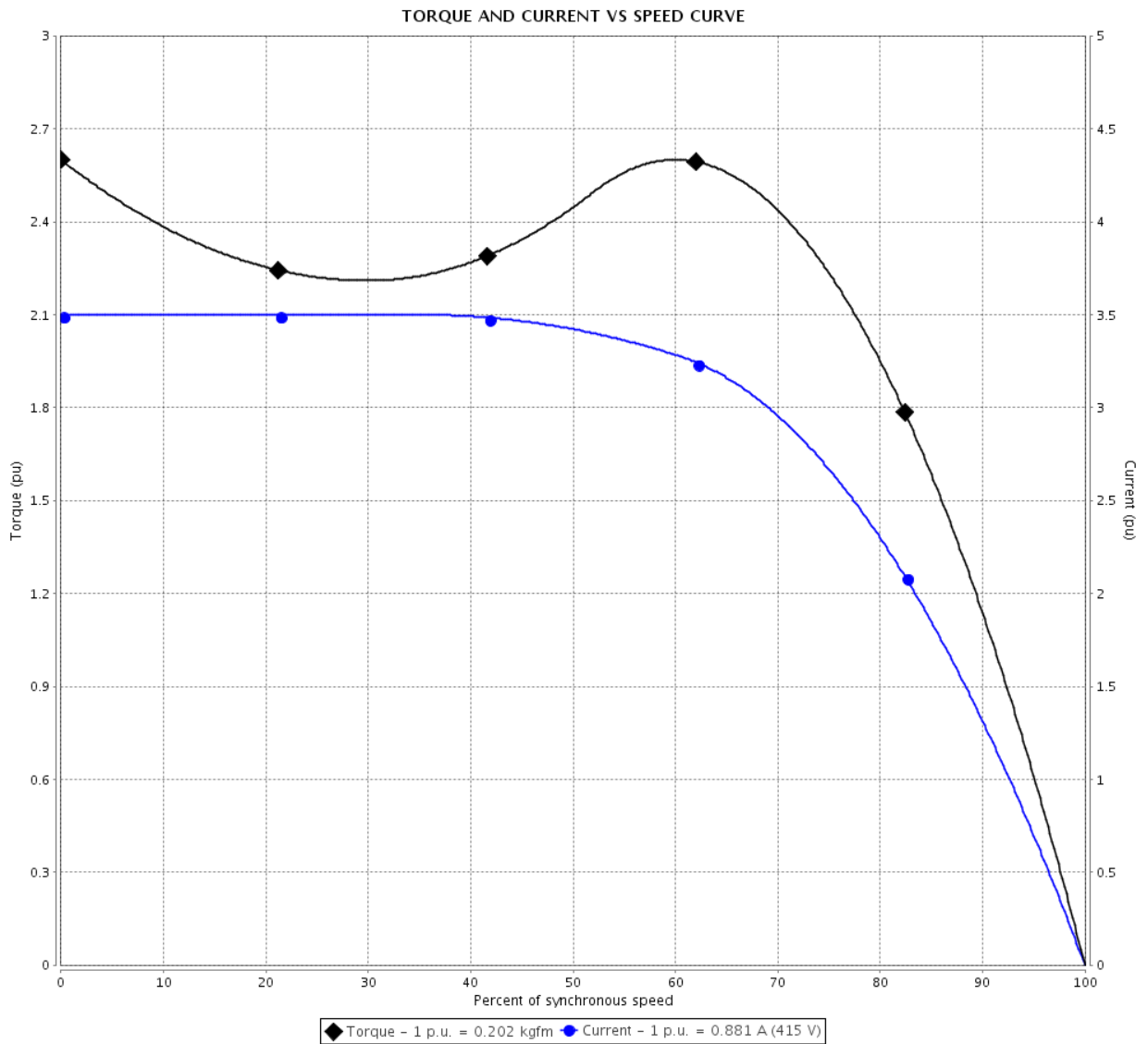
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Performance : 415 V 50 Hz 6P IE2

Rated current	: 0.881 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 3.5	Duty cycle	: S1
Rated torque	: 0.202 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 900 rpm	Design	: N

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 21	Revision
Checked by				
Date	26/01/2022			

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Three Phase Induction Motor - Squirrel Cage

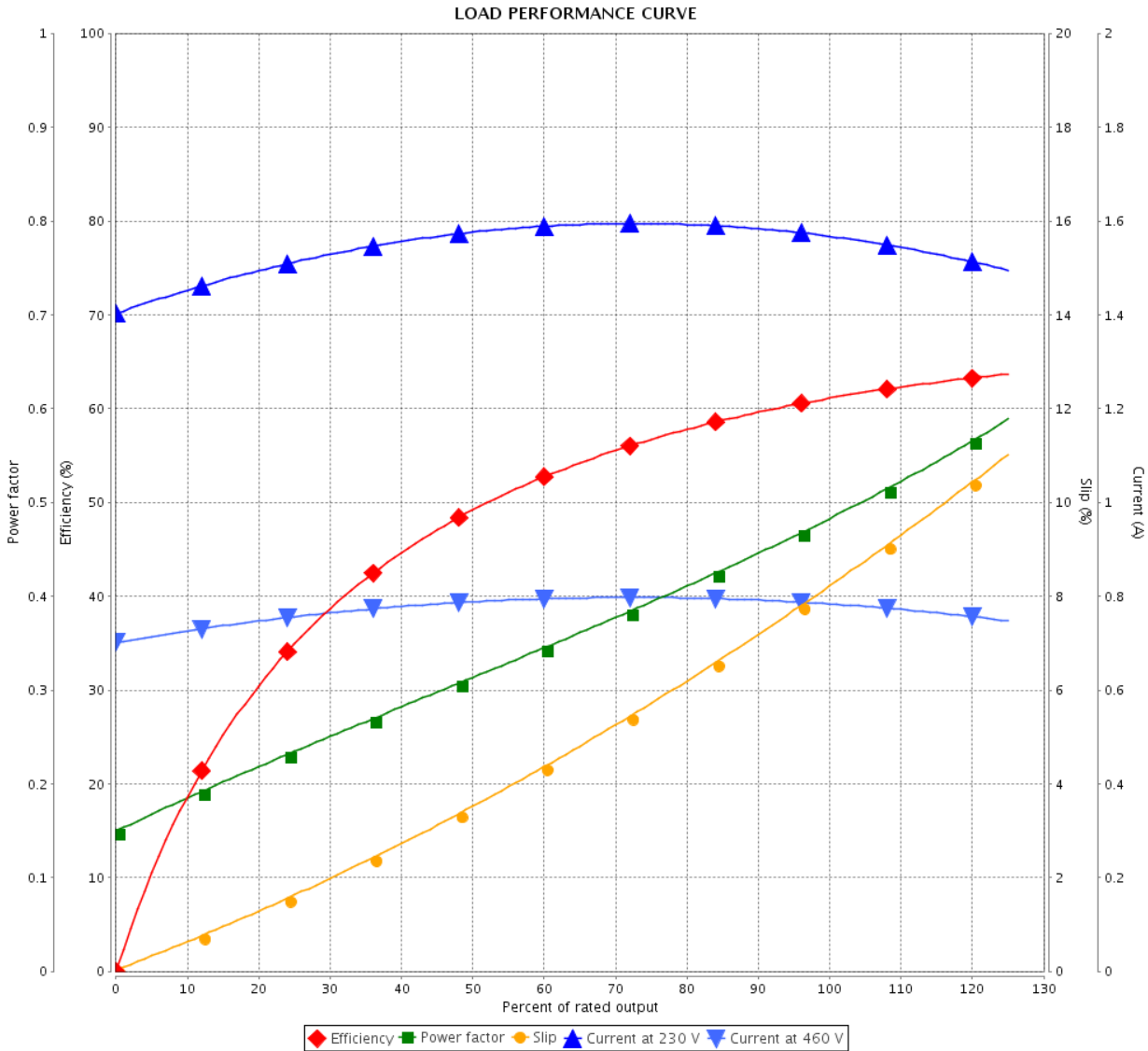


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Performance : 230/460 V 60 Hz 6P

Rated current : 1.54/0.772 A
 LRC : 3.5
 Rated torque : 0.165 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 280 %
 Rated speed : 1100 rpm

Moment of inertia (J) : 0.0008 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 21	Revision
Checked by				
Date	26/01/2022			

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Three Phase Induction Motor - Squirrel Cage

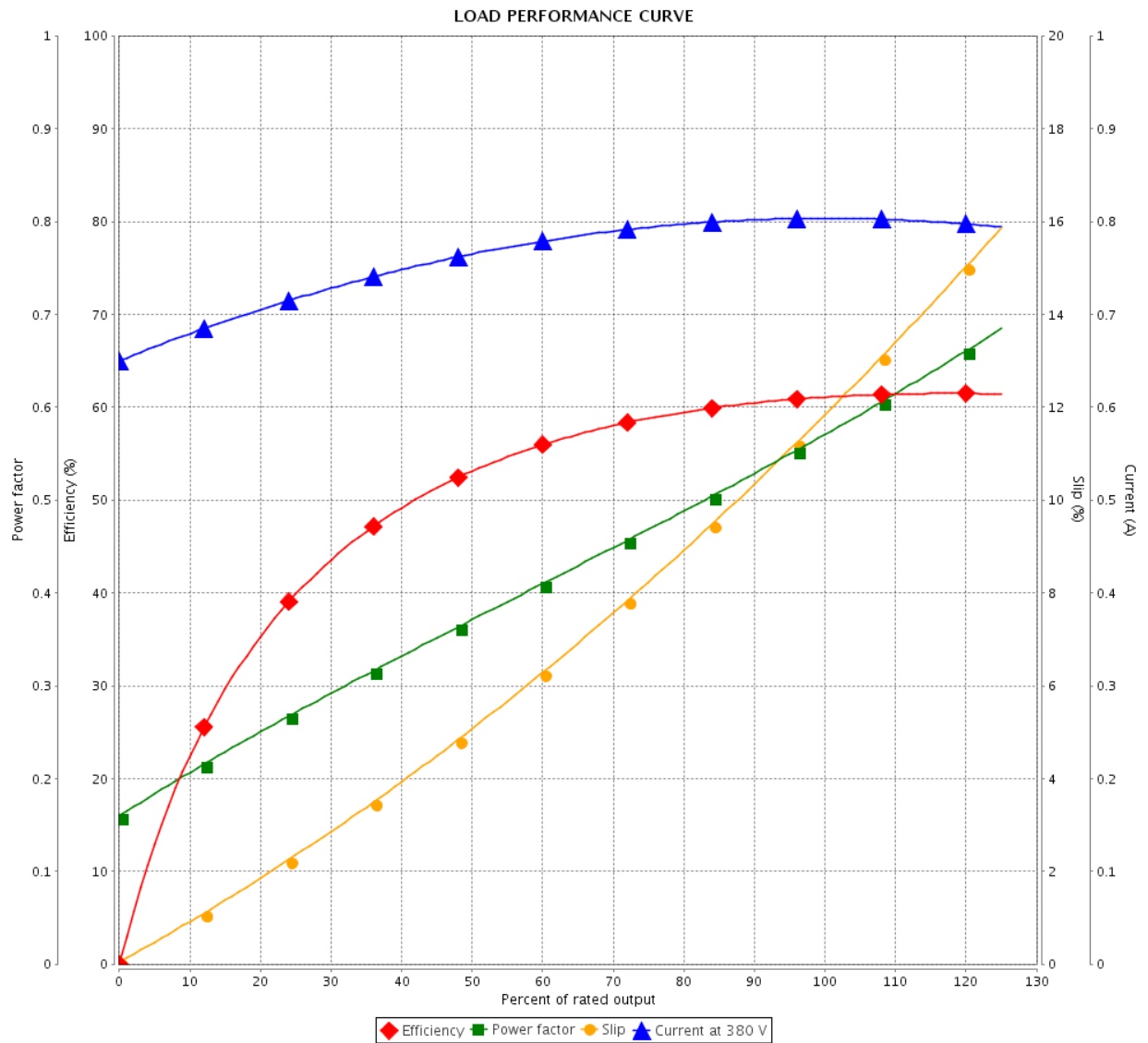


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 Breakdown torque : 220 %
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Moment of inertia (J) : 0.0008 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 / 21		
Date		26/01/2022		

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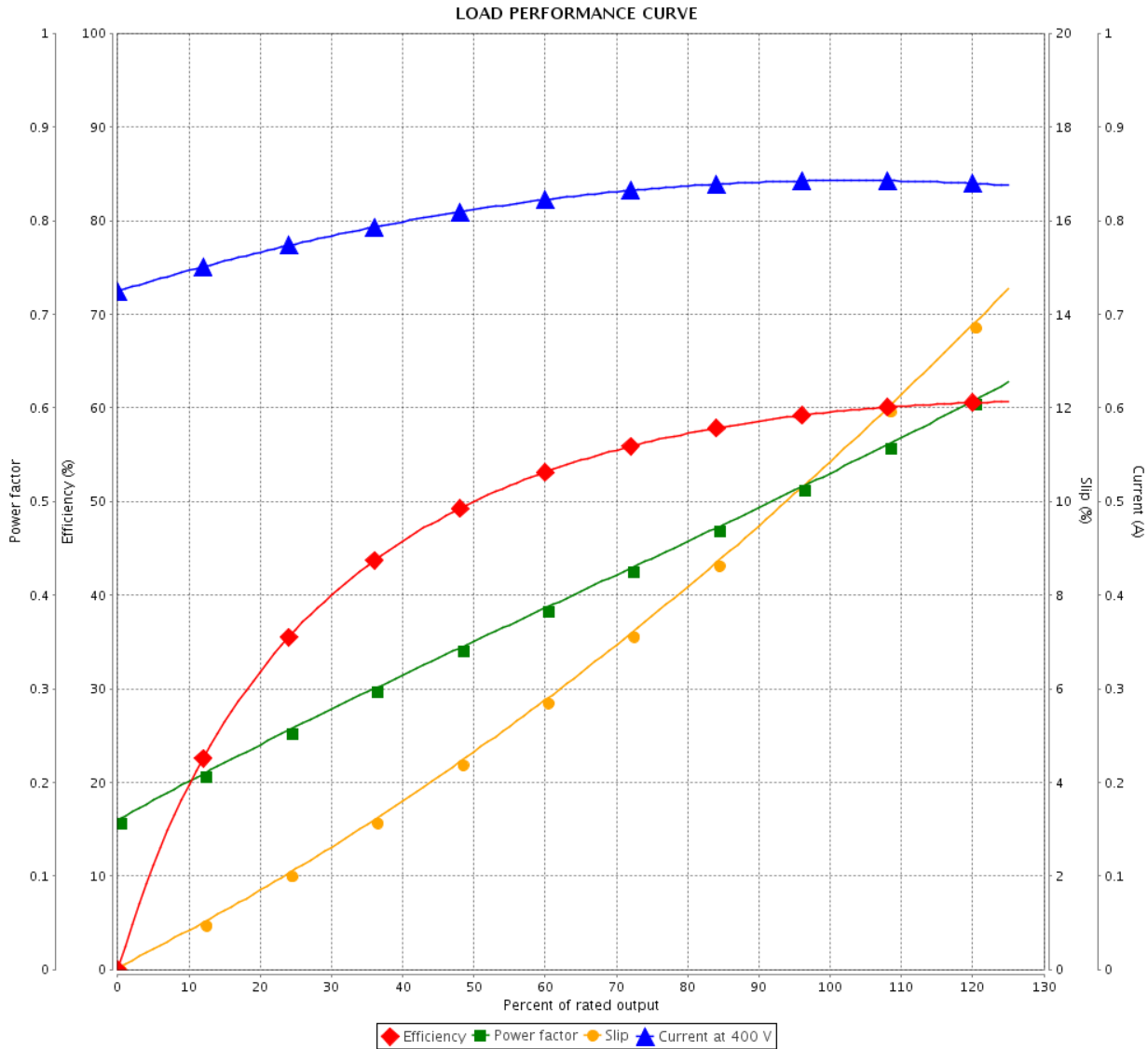


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Performance : 400 V 50 Hz 6P IE2

Rated current : 0.824 A
 LRC : 3.5
 Rated torque : 0.204 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 240 %
 Rated speed : 890 rpm

Moment of inertia (J) : 0.0008 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 21	Revision
Checked by				
Date	26/01/2022			

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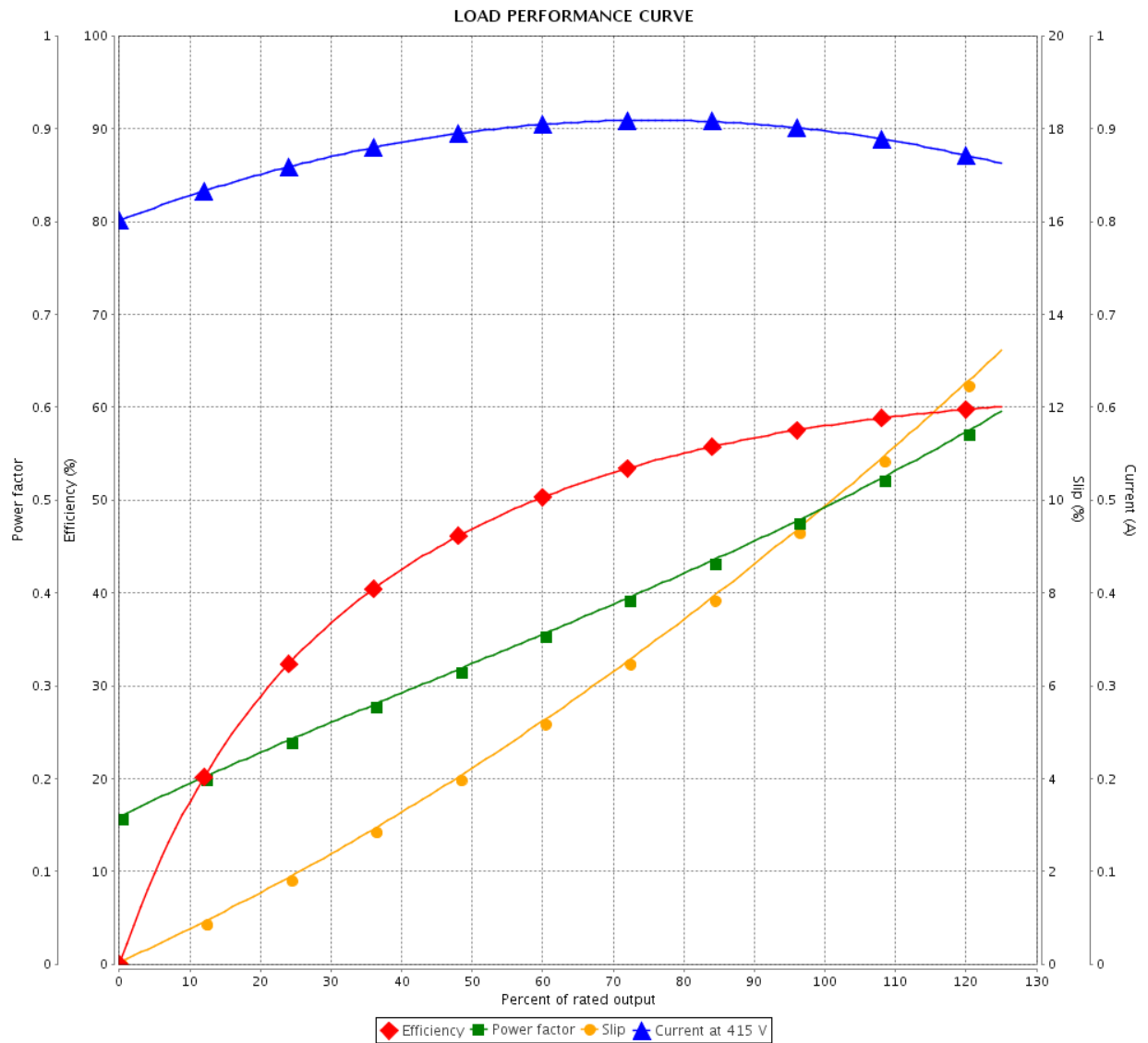


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 21		
Date		26/01/2022		

THERMAL LIMIT CURVE

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Heating constant

Cooling constant

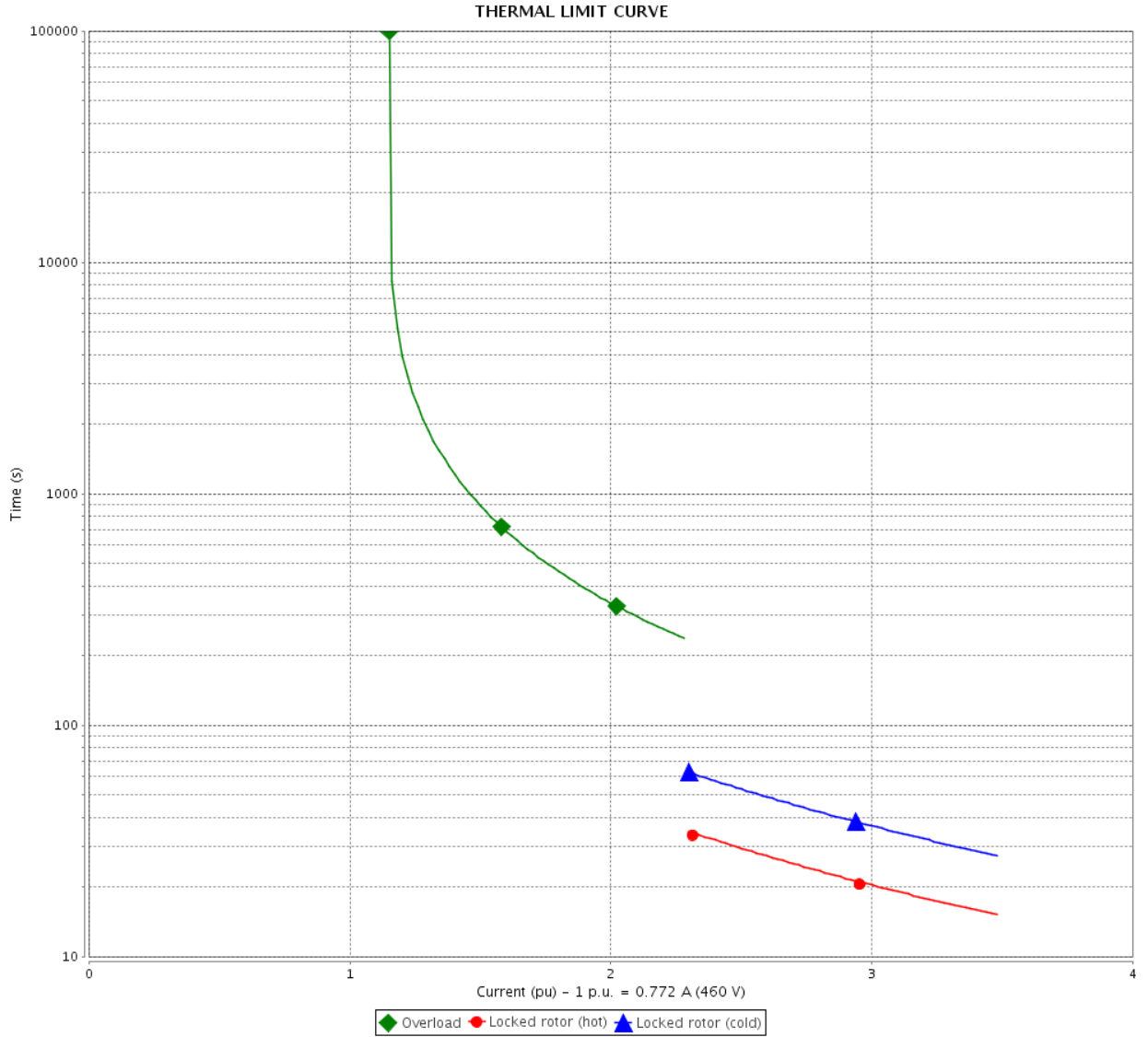
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/01/2022		10 / 21	

THERMAL LIMIT CURVE

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Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 21		
Date		26/01/2022		

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Rated torque	: 0.206 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: N

Heating constant

Cooling constant

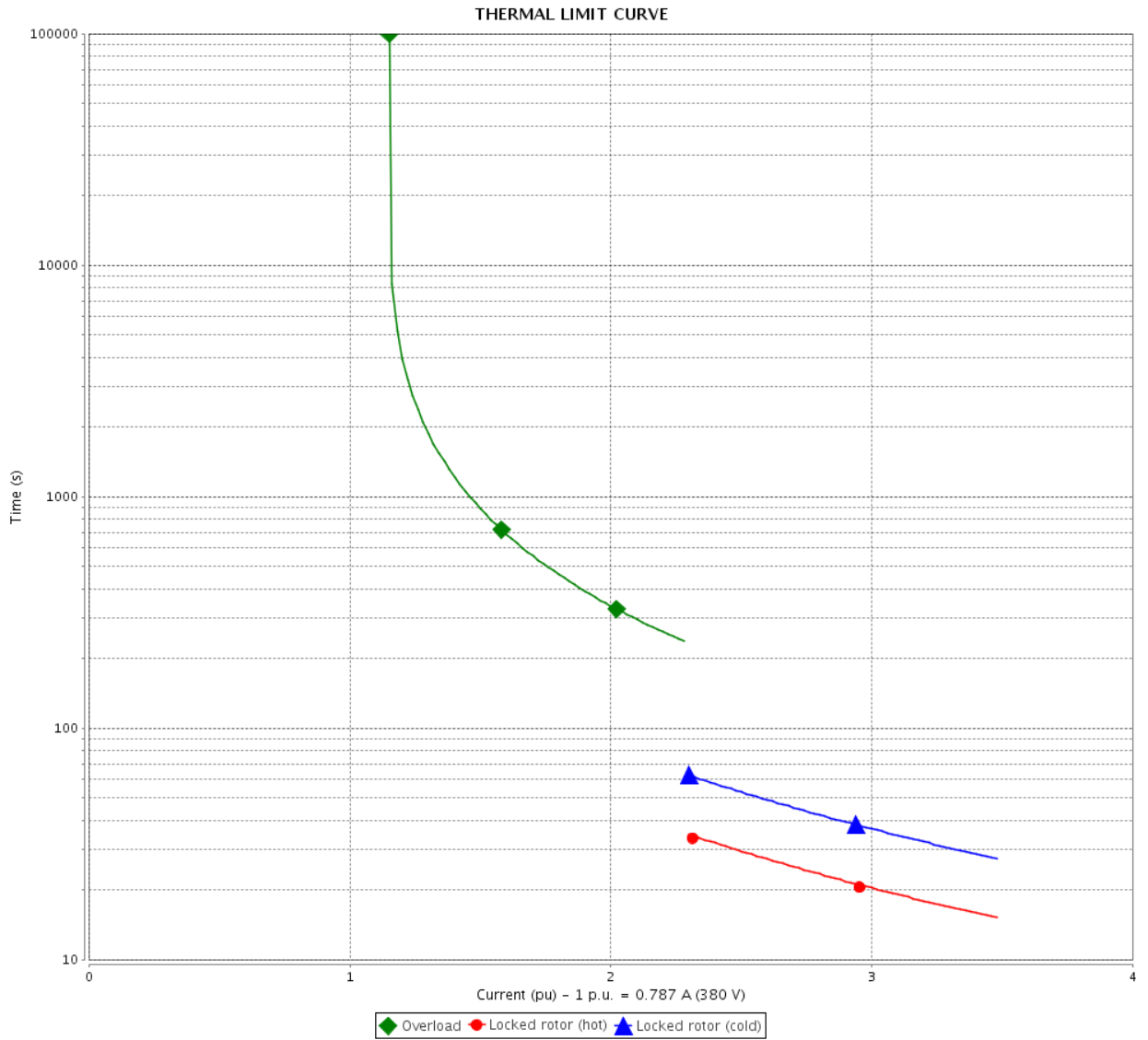
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/01/2022		12 / 21	

THERMAL LIMIT CURVE

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

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LRC	: 3.5	Duty cycle	: S1
Rated torque	: 0.204 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 890 rpm	Design	: N

Heating constant

Cooling constant

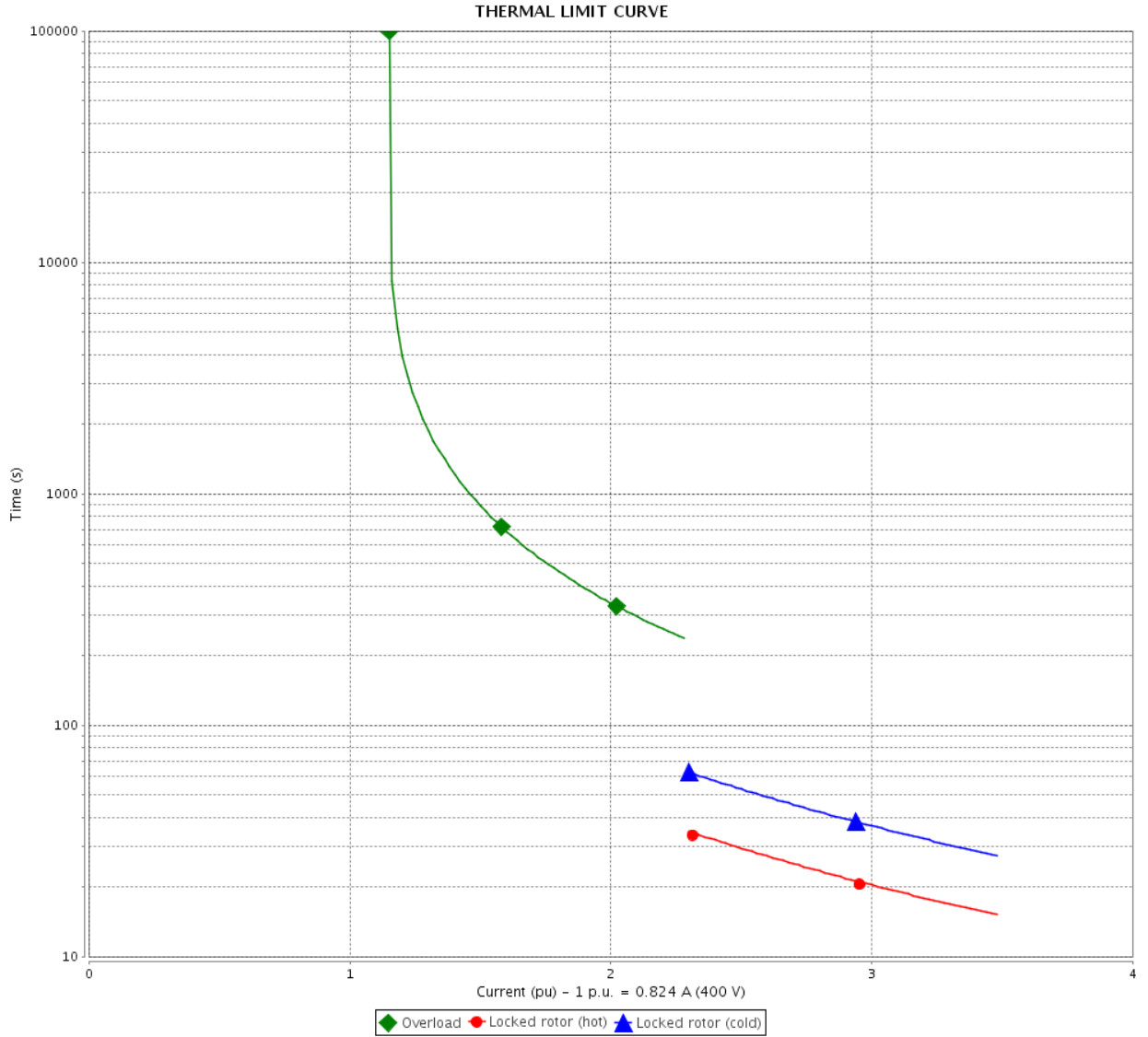
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/01/2022		14 / 21	

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



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Performance : 415 V 50 Hz 6P IE2

Rated current	: 0.881 A	Moment of inertia (J)	: 0.0008 kgm ²
LRC	: 3.5	Duty cycle	: S1
Rated torque	: 0.202 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 900 rpm	Design	: N

Heating constant

Cooling constant

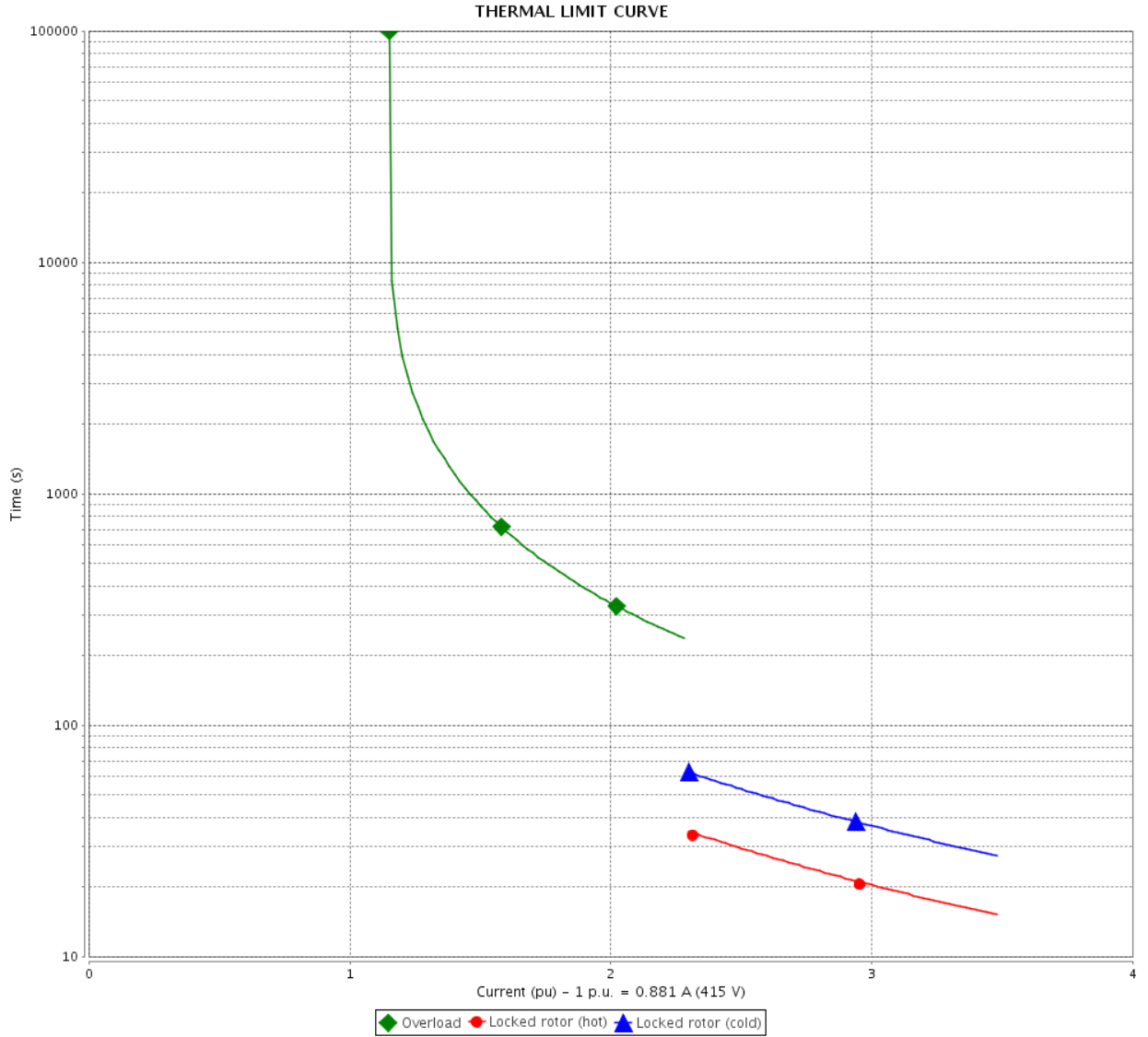
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/01/2022		16 / 21	

THERMAL LIMIT CURVE

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

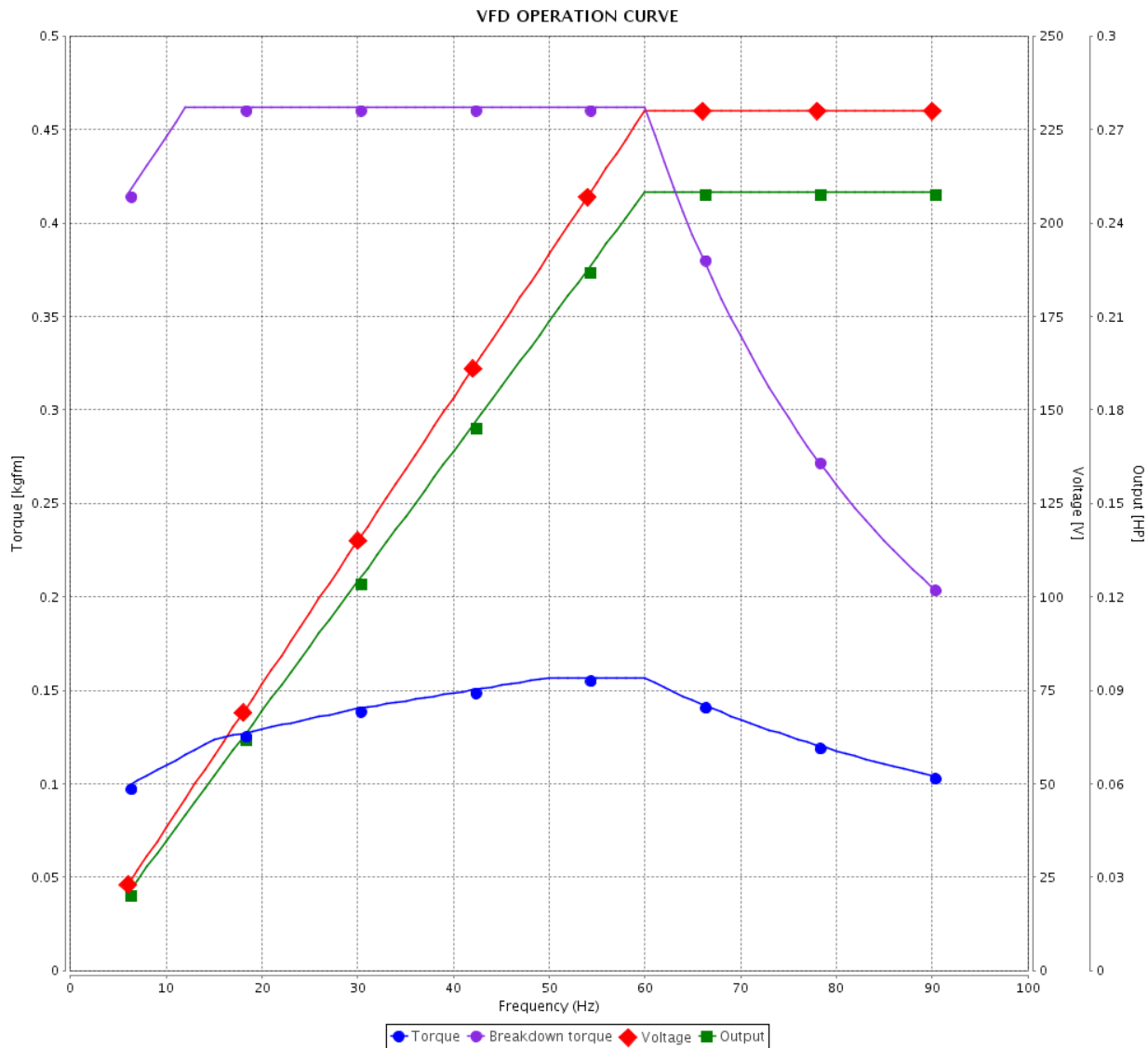


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 Insulation class : F
 Service factor : 1.15
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 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 18 / 21	Revision
Checked by				
Date	26/01/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

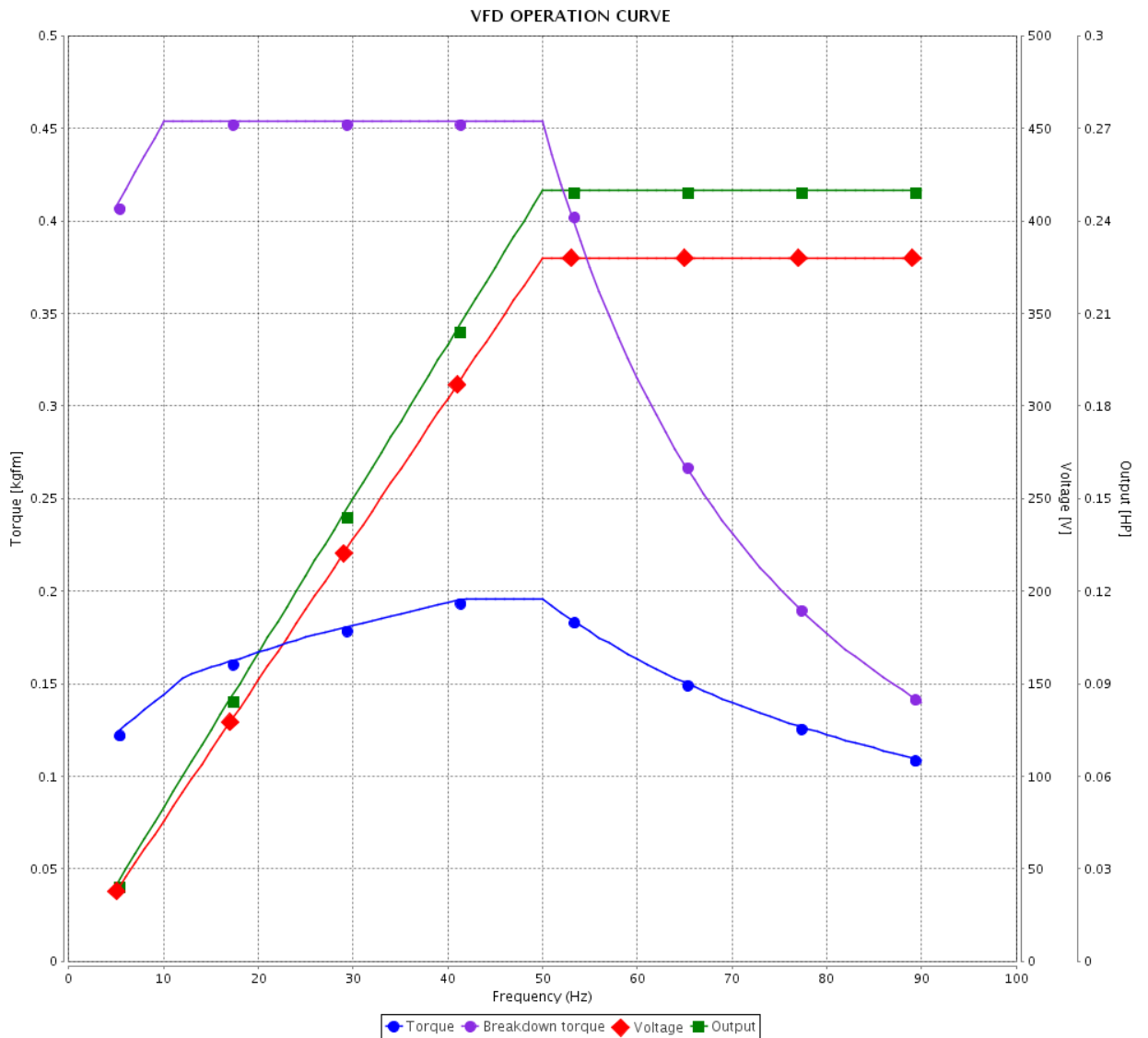


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 Locked rotor torque : 210 %
 Breakdown torque : 220 %
 Rated speed : 880 rpm

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 Duty cycle : 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		26/01/2022		

VFD OPERATION CURVE

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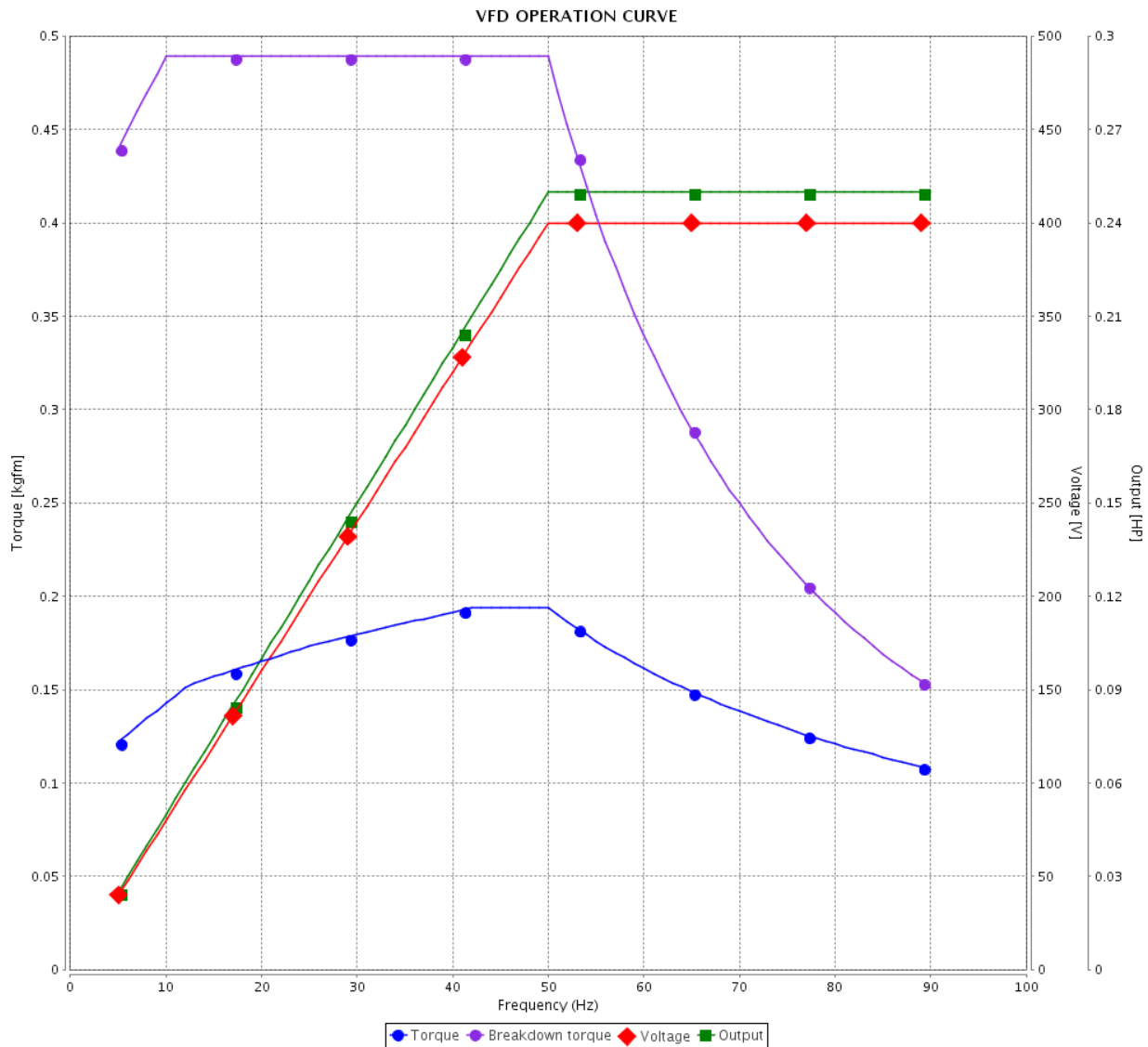


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

VFD OPERATION CURVE

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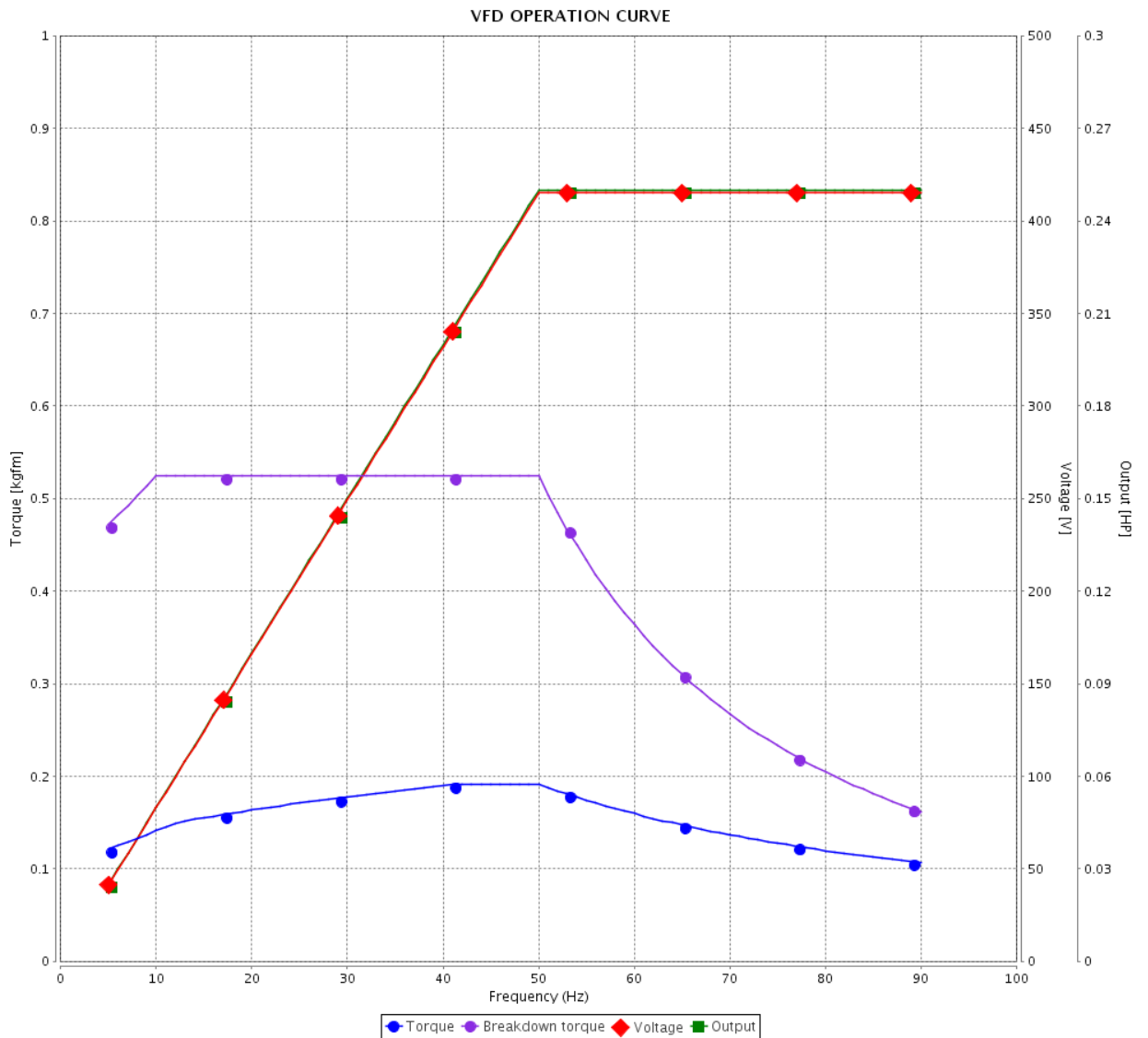


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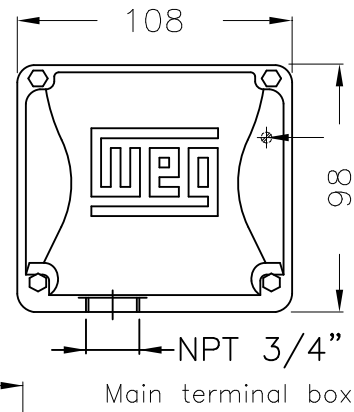
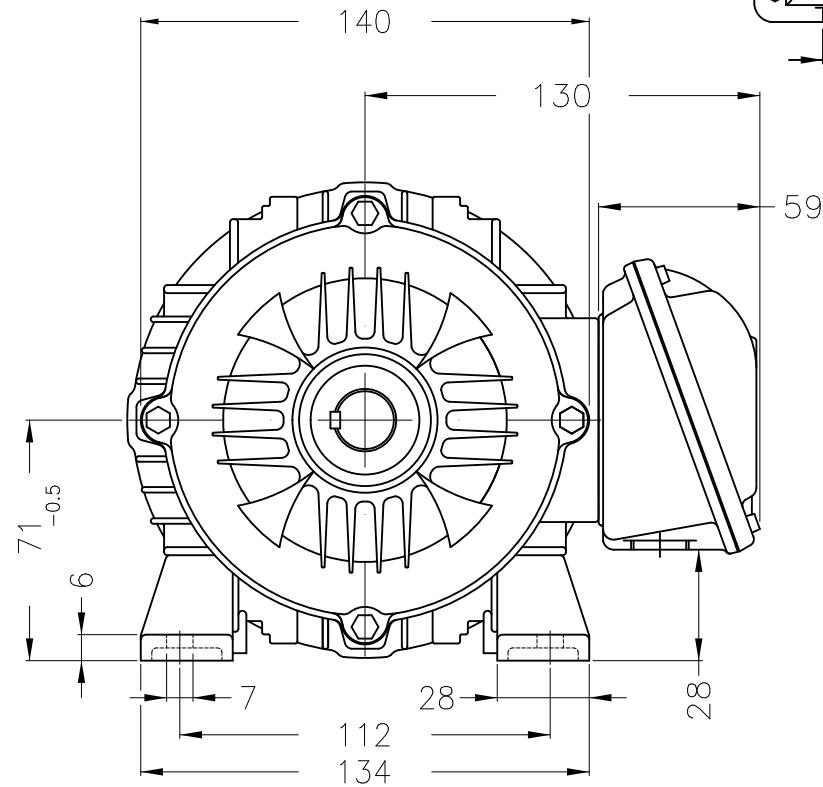
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 21 / 21	Revision
Checked by				
Date	26/01/2022			

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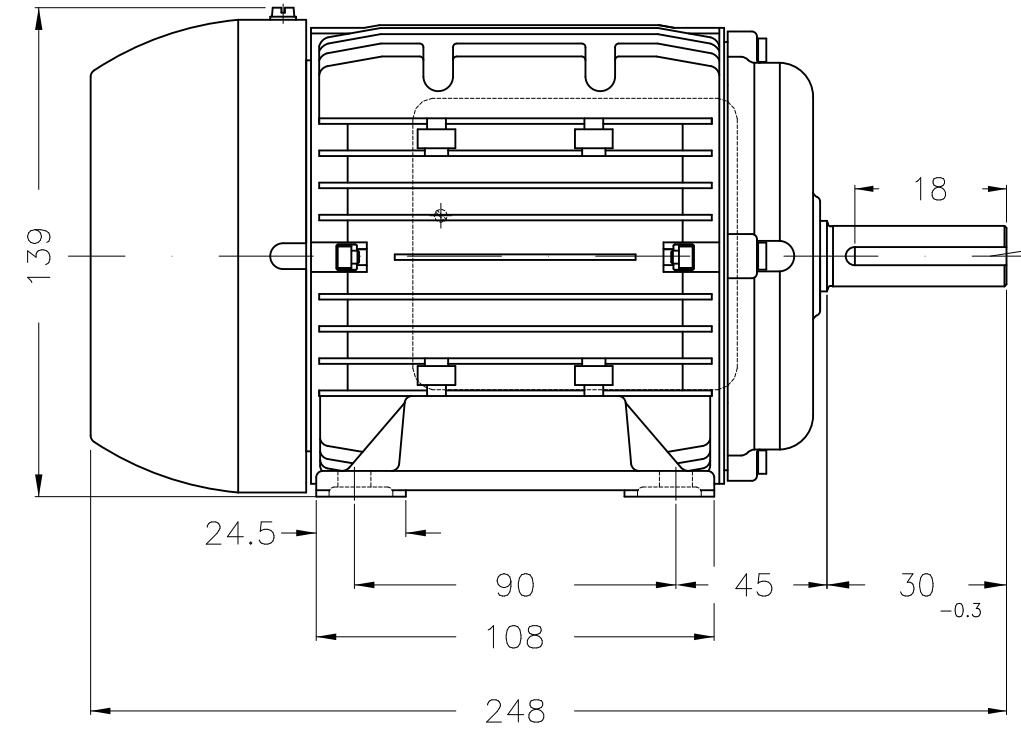
EIXO
 PADRÃO
 OPCIONAL
 ESPECIAL

Dimensões em mm
 Dimensions in mm

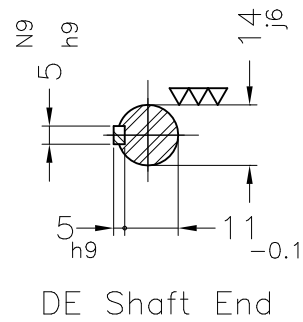
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.



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



Center hole
 DM5 WEG WPR-7339
 (DIN 332)



Color RAL 7022									
Painting plan 207N									
Mounting B3L(E)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PH.MULTI M. H.EFF.MOTOR TRU METRIC							
CHECKED		FRAME 71 IP55 TEFC							
RELEASED		WEG code: 13981165							
REL DT	26.01.2022	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

0.25 HP 06 Poles 60Hz

A



ZME A3