

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22		Product code : 16575817		Catalog # : 00318ET3E182T-W22G	
Frame : 182/4T		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 ³ : 42.3 kg			
Protection degree : IP55		Moment of inertia (J) : 0.0143 kgm ²			
Design : B					
Output [HP]	3	3	3	3	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	7.82/3.91	4.60	4.48	4.43	
L. R. Amperes [A]	63.3/31.7	29.0	31.4	33.2	
LRC [A]	8.1x(Code K)	6.3x(Code H)	7.0x(Code J)	7.5x(Code J)	
No load current [A]	4.00/2.00	2.00	2.15	2.25	
Rated speed [RPM]	1760	1445	1450	1455	
Slip [%]	2.22	3.67	3.33	3.00	
Rated torque [kgfm]	1.24	1.51	1.50	1.50	
Locked rotor torque [%]	229	180	210	240	
Breakdown torque [%]	340	260	290	320	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	41s (cold) 23s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%	86.4	87.2	87.3	87.3
	50%	87.5	87.5	87.5	87.5
	75%	88.5	87.5	87.5	87.5
	100%	89.5	87.5	87.5	87.5
Power Factor	25%	0.36	0.42	0.39	0.36
	50%	0.61	0.68	0.64	0.61
	75%	0.73	0.79	0.76	0.73
	100%	0.79	0.83	0.81	0.79
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	11.0	11.0	11.0	11.0
	P2 (0,5;1,0)	8.6	8.6	8.6	8.6
	P3 (0,25;1,0)	8.3	8.3	8.3	8.3
	P4 (0,9;0,5)	6.1	6.1	6.1	6.1
	P5 (0,5;0,5)	3.9	3.9	3.9	3.9
	P6 (0,5;0,25)	2.8	2.8	2.8	2.8
	P7 (0,25;0,25)	2.0	2.0	2.0	2.0
Bearing type : Drive end : 6207 ZZ Non drive end : 6206 ZZ		Foundation loads			
Sealing : V'Ring V'Ring		Max. traction : 79 kgf			
Lubrication interval : - -		Max. compression : 121 kgf			
Lubricant amount : - -					
Lubricant type : Mobil Polyrex EM					
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.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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Three Phase Induction Motor - Squirrel Cage



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Notes
USABLE @208V 8.65A SF 1.15 SFA 9.95A

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

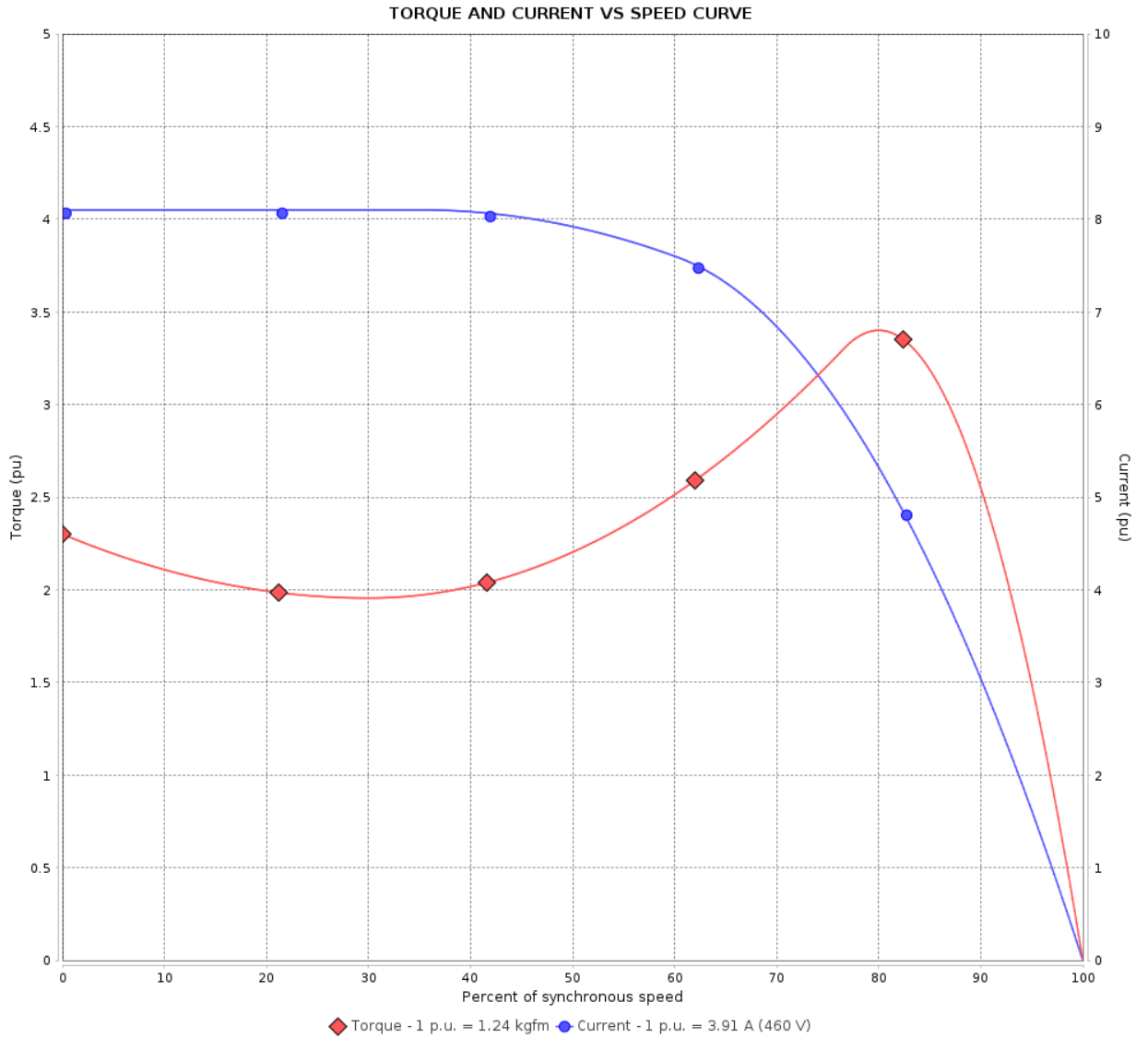
Product line : W22

Product code :

16575817

Catalog # :

00318ET3E182T-W22G



Performance : 230/460 V 60 Hz 4P

Rated current : 7.82/3.91 A
 LRC : 8.1
 Rated torque : 1.24 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 340 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Locked rotor time : 41s (cold) 23s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



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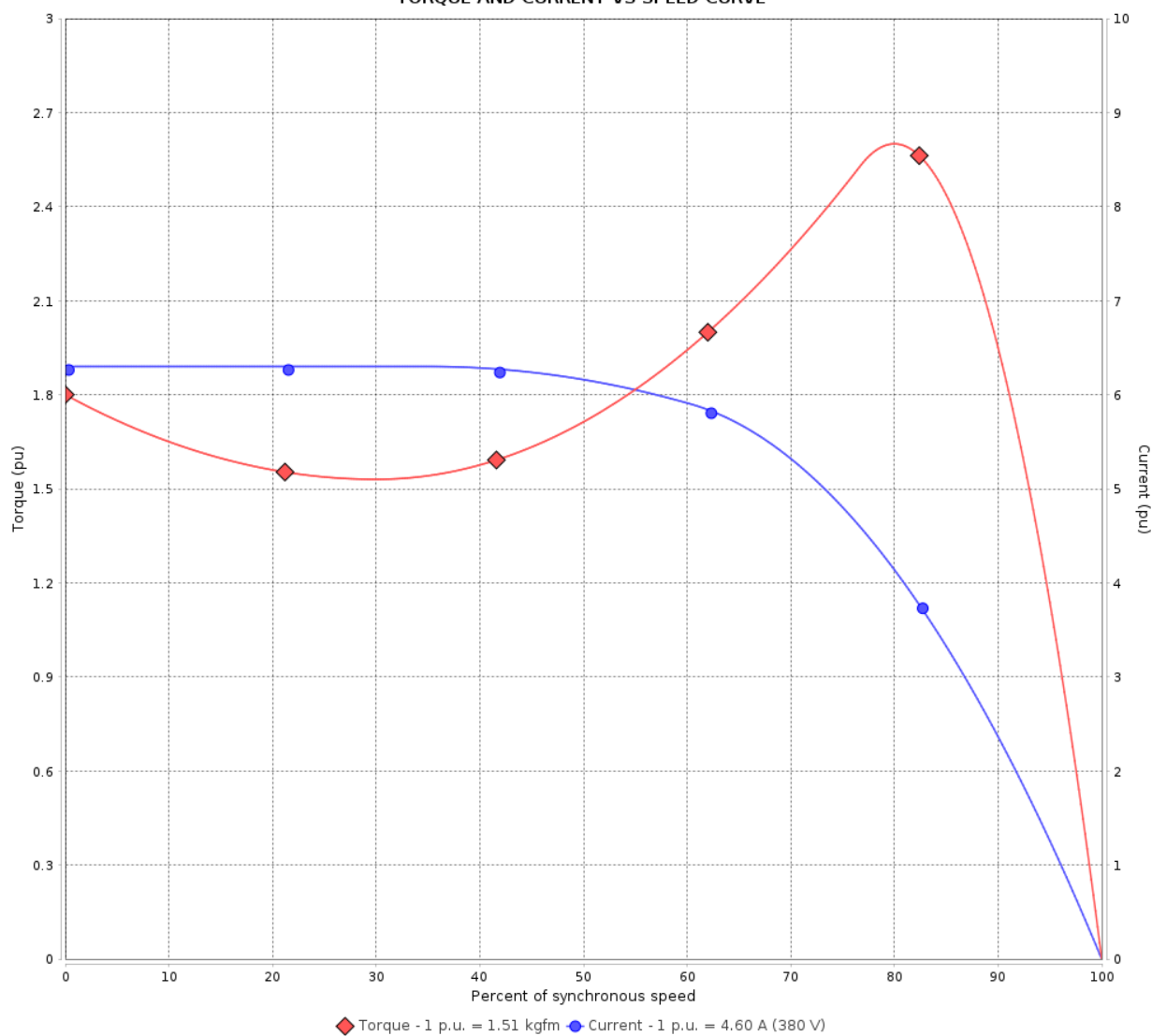
Product code :

16575817

Catalog # :

00318ET3E182T-W22G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current	: 4.60 A	Moment of inertia (J)	: 0.0143 kgm ²
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 1.51 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

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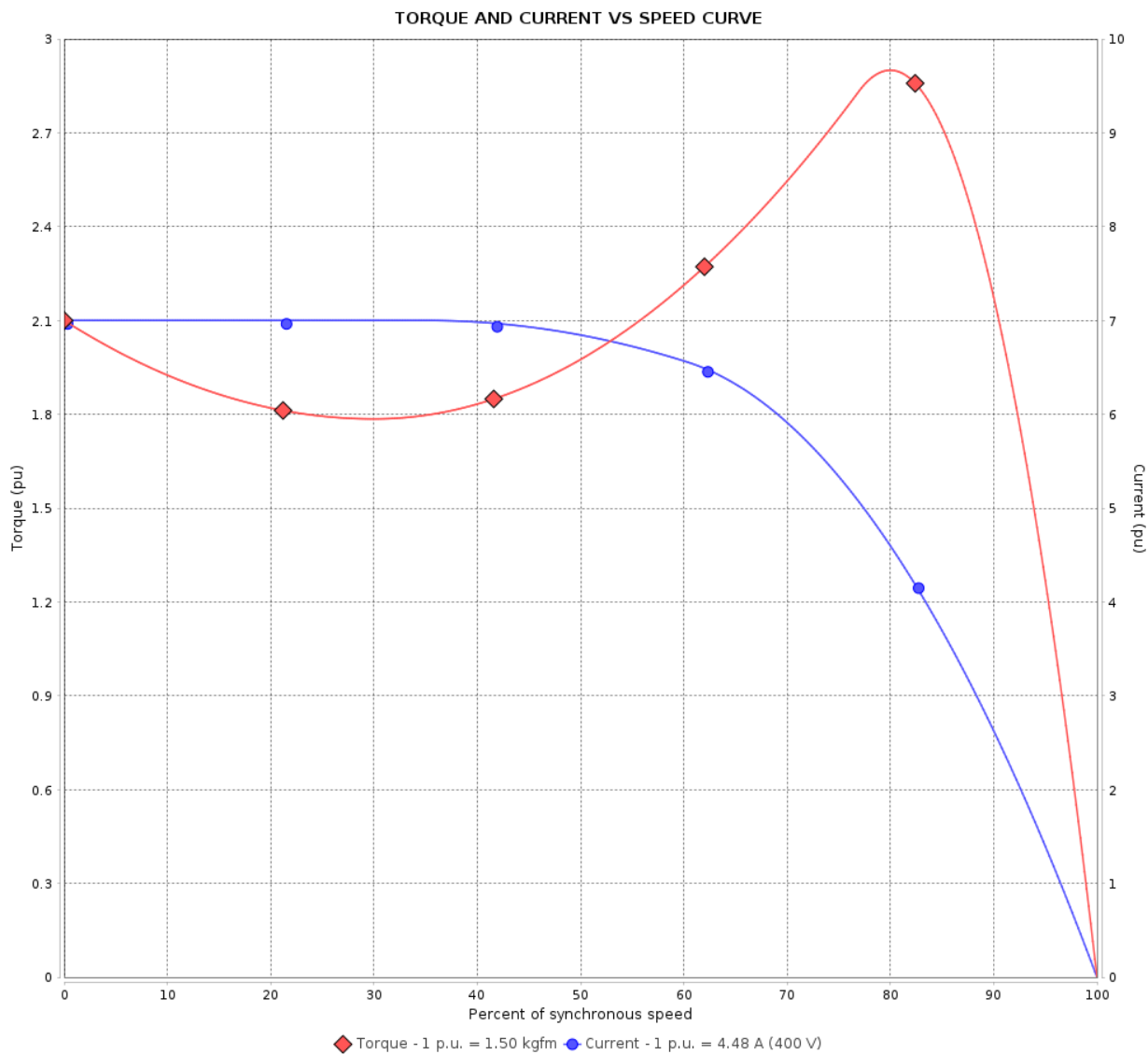
Product line : W22

Product code :

16575817

Catalog # :

00318ET3E182T-W22G



Performance : 400 V 50 Hz 4P IE3

Rated current : 4.48 A
 LRC : 7.0
 Rated torque : 1.50 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 290 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0143 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)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

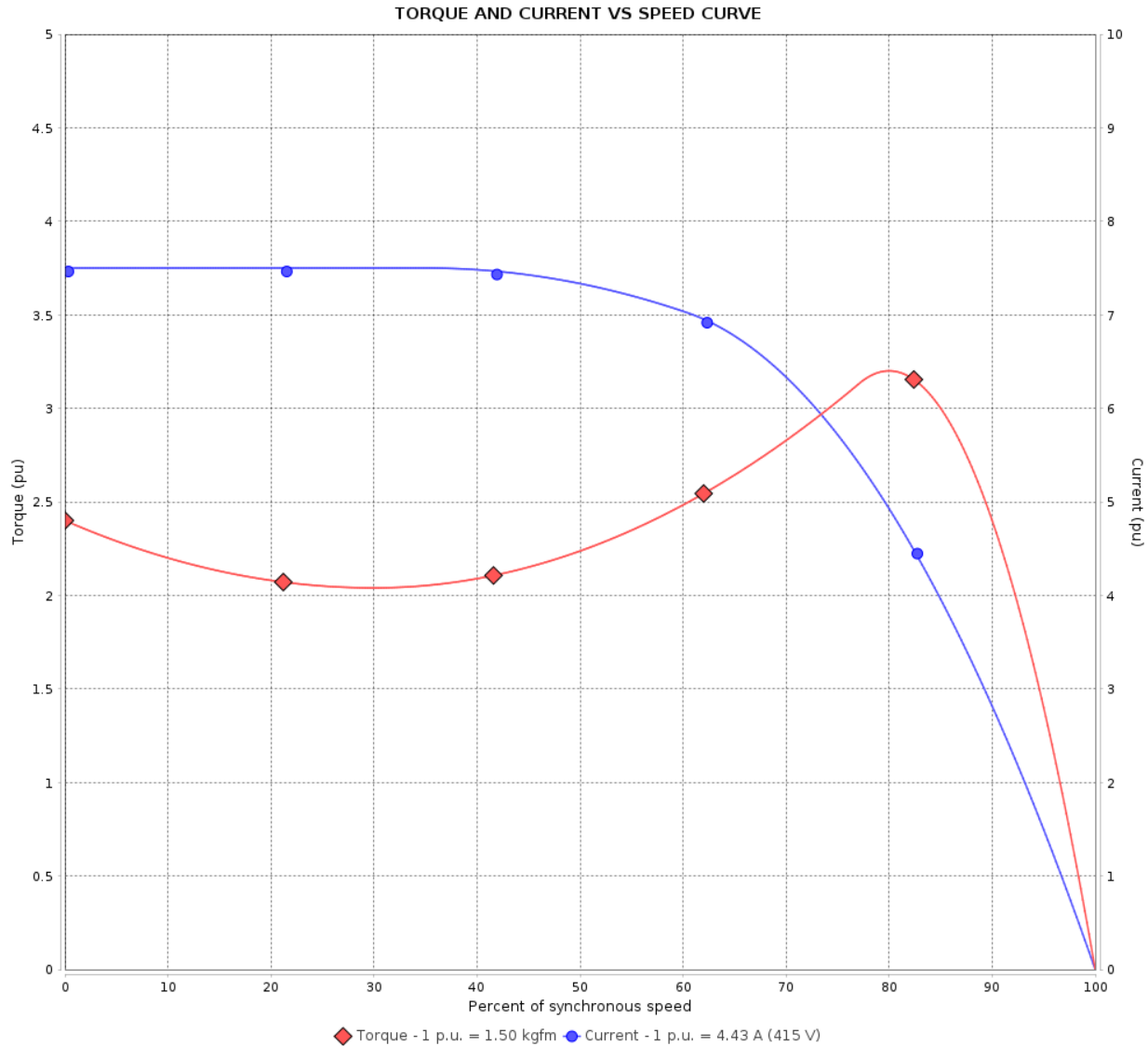
Product line : W22

Product code :

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Catalog # :

00318ET3E182T-W22G



Performance : 415 V 50 Hz 4P IE3

Rated current	: 4.43 A	Moment of inertia (J)	: 0.0143 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

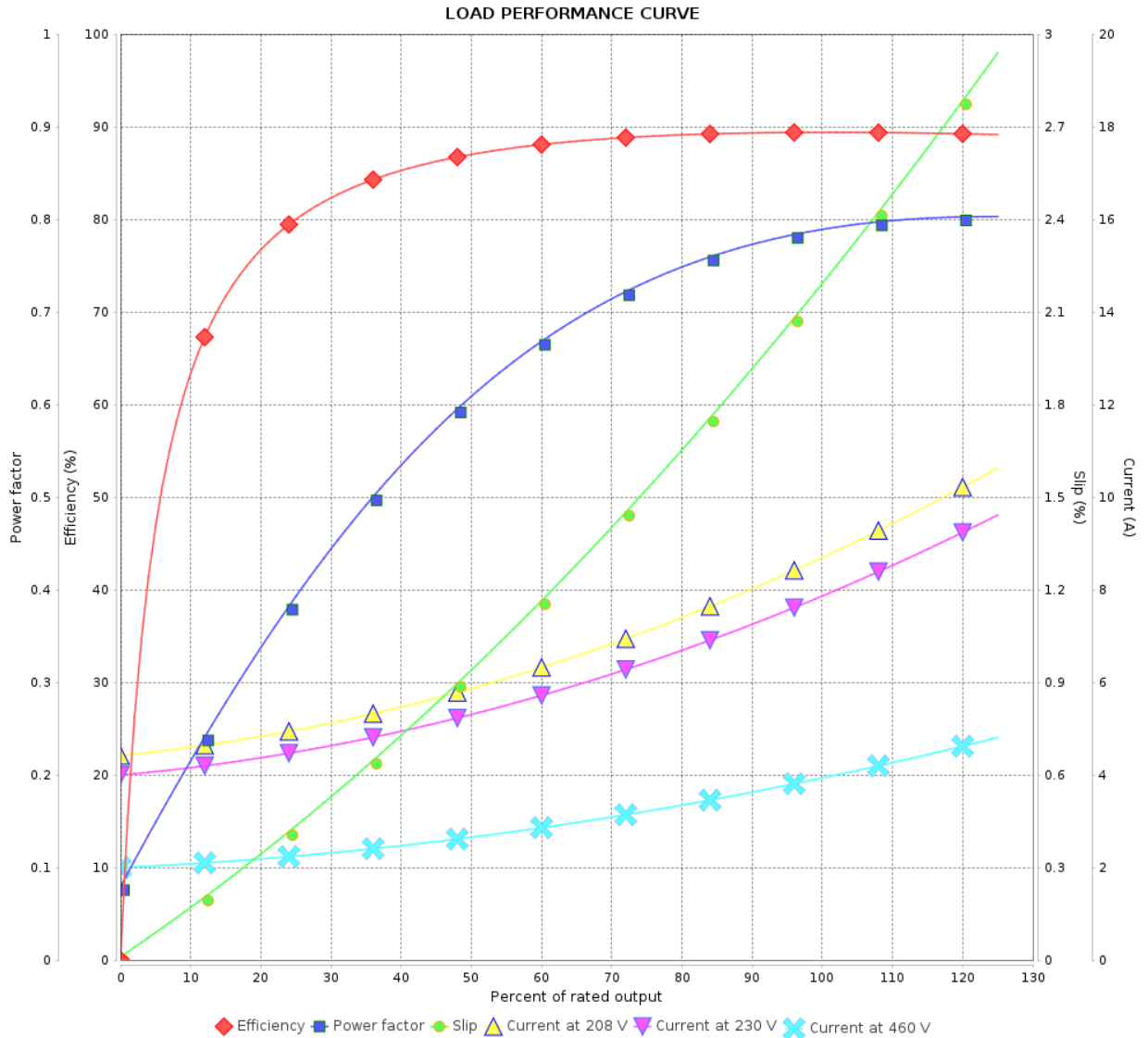
Product line : W22

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Performance : 230/460 V 60 Hz 4P

Rated current : 7.82/3.91 A
 LRC : 8.1
 Rated torque : 1.24 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 340 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage



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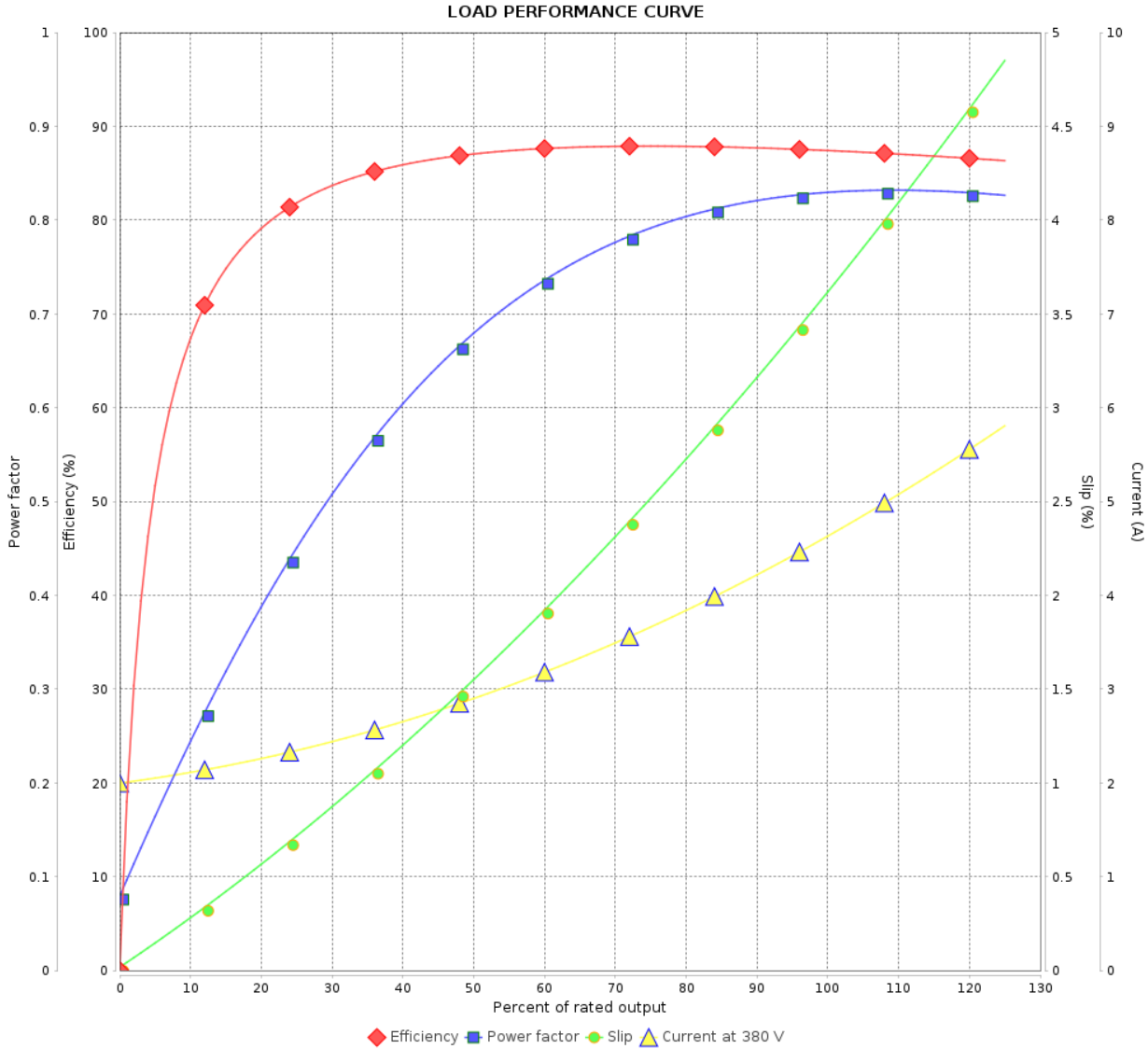
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Performance : 380 V 50 Hz 4P IE3

Rated current : 4.60 A
 LRC : 6.3
 Rated torque : 1.51 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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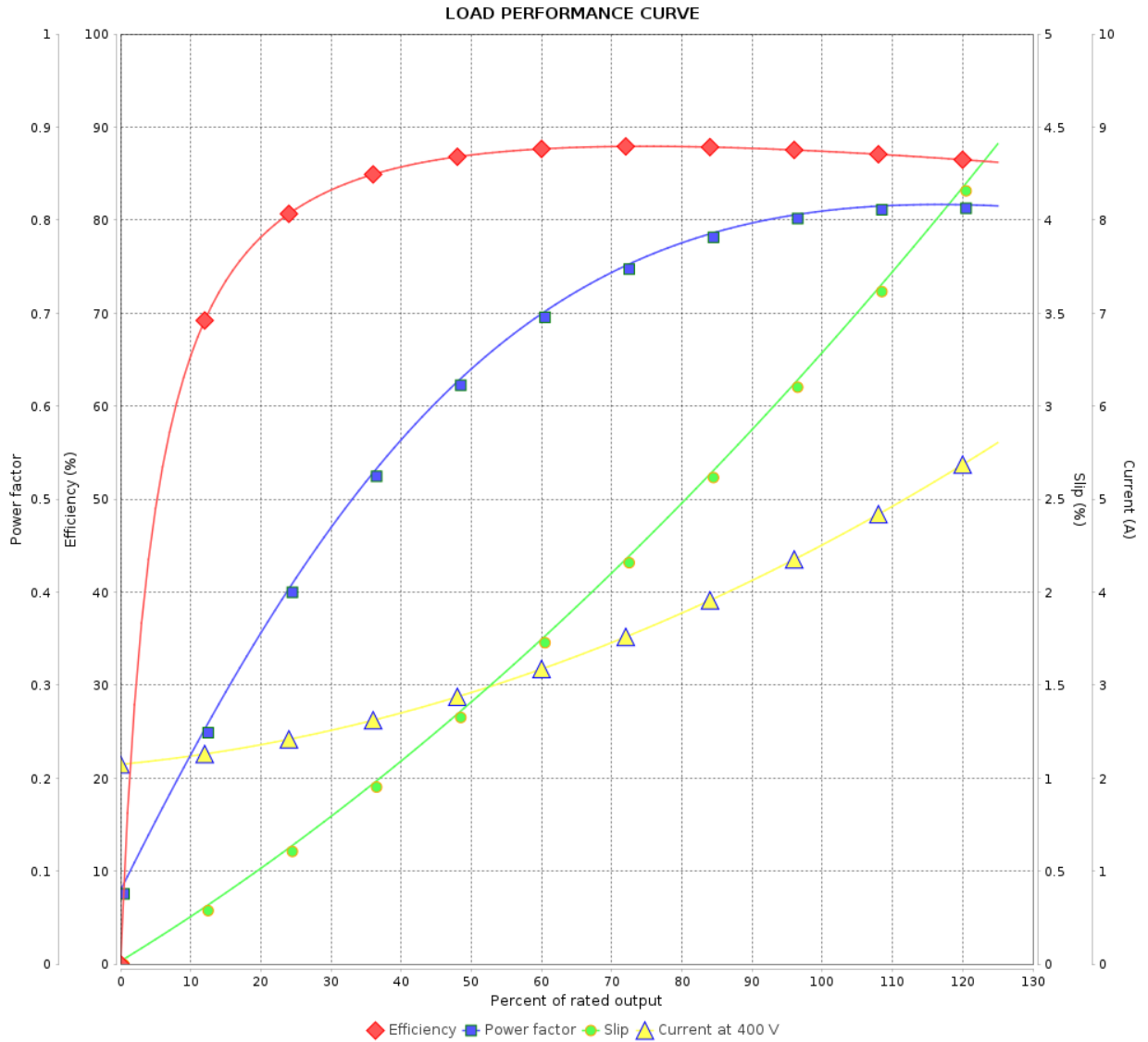
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 Locked rotor torque : 210 %
 Breakdown torque : 290 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
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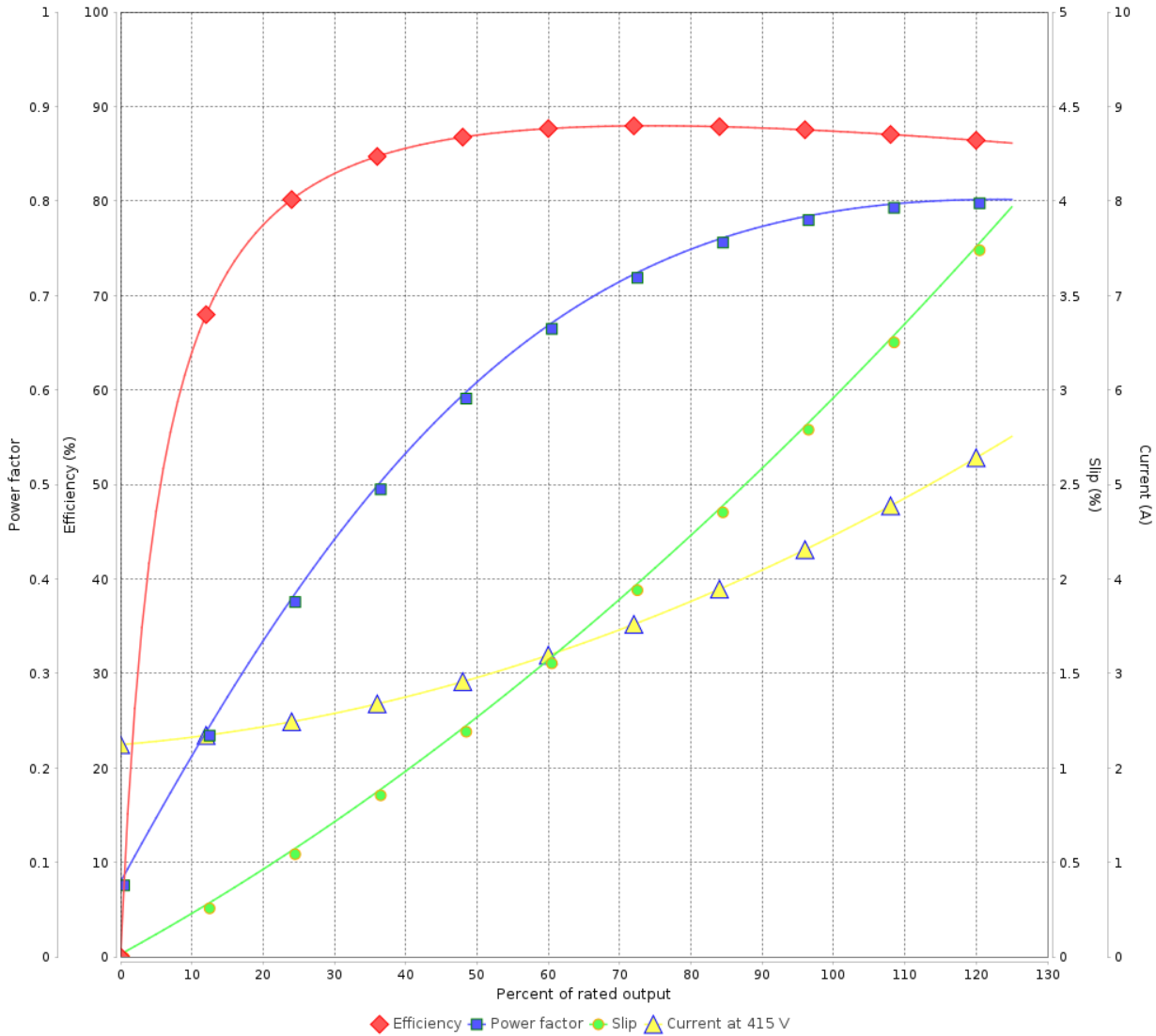
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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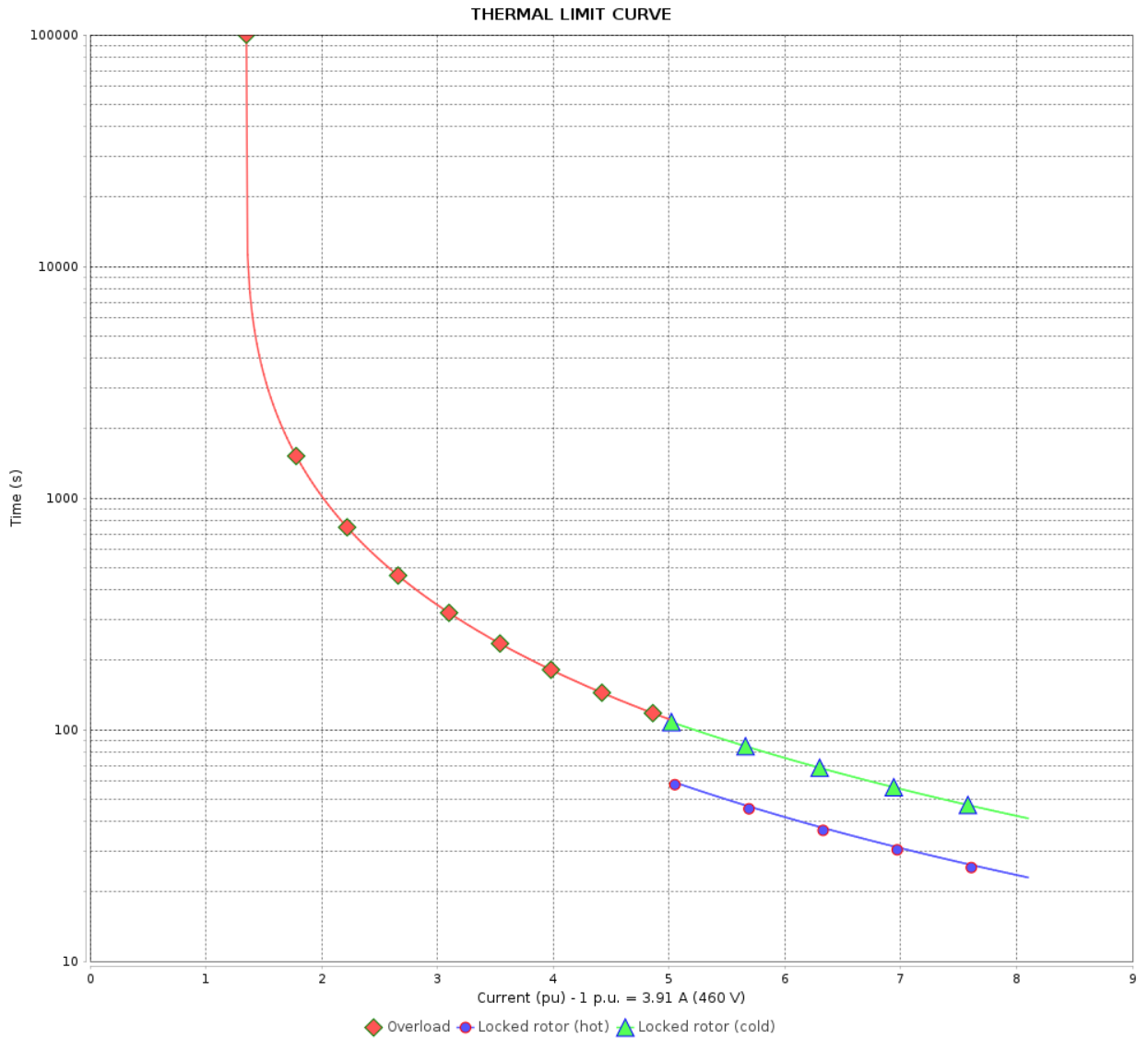
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 Design : B

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

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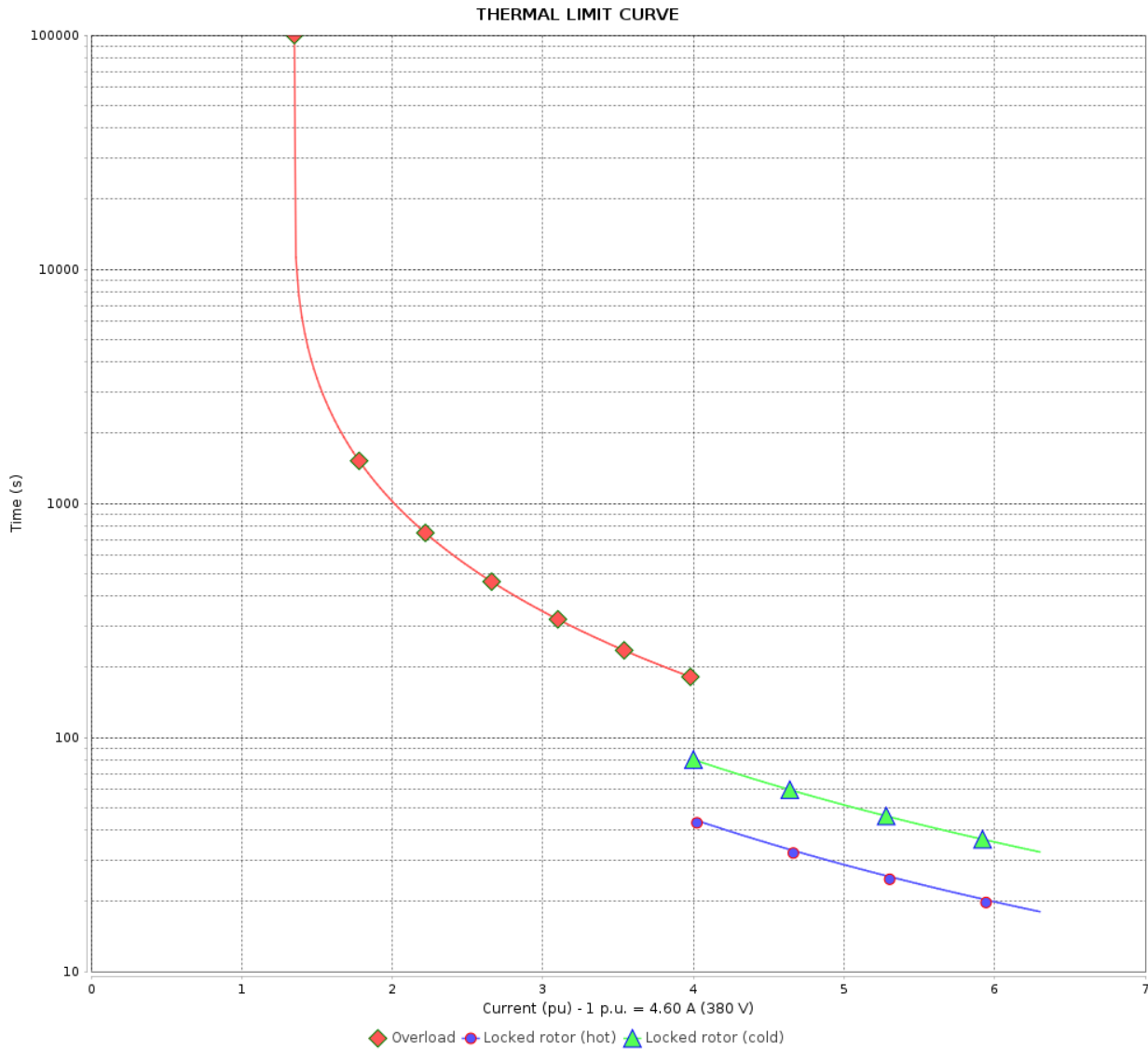
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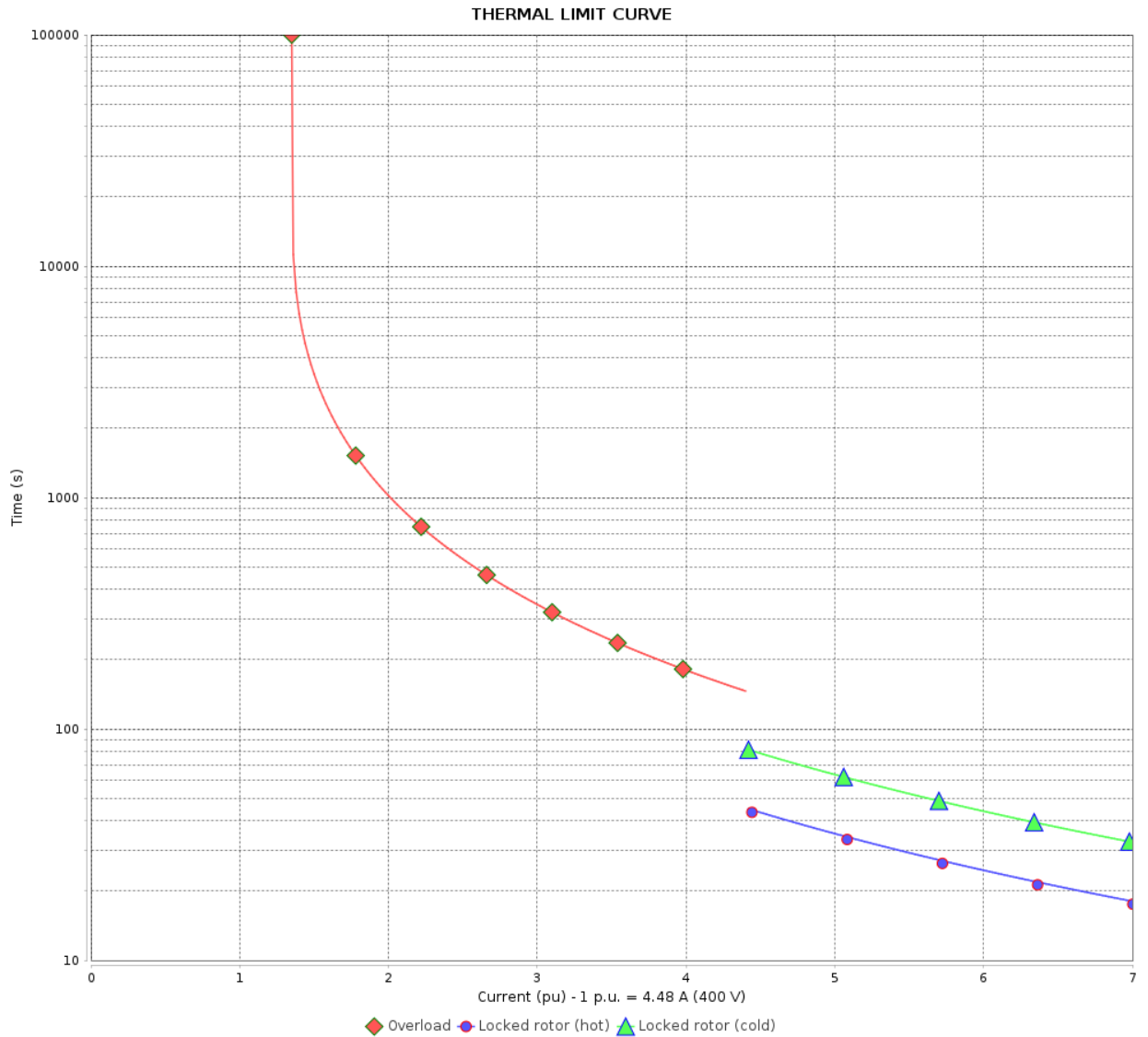
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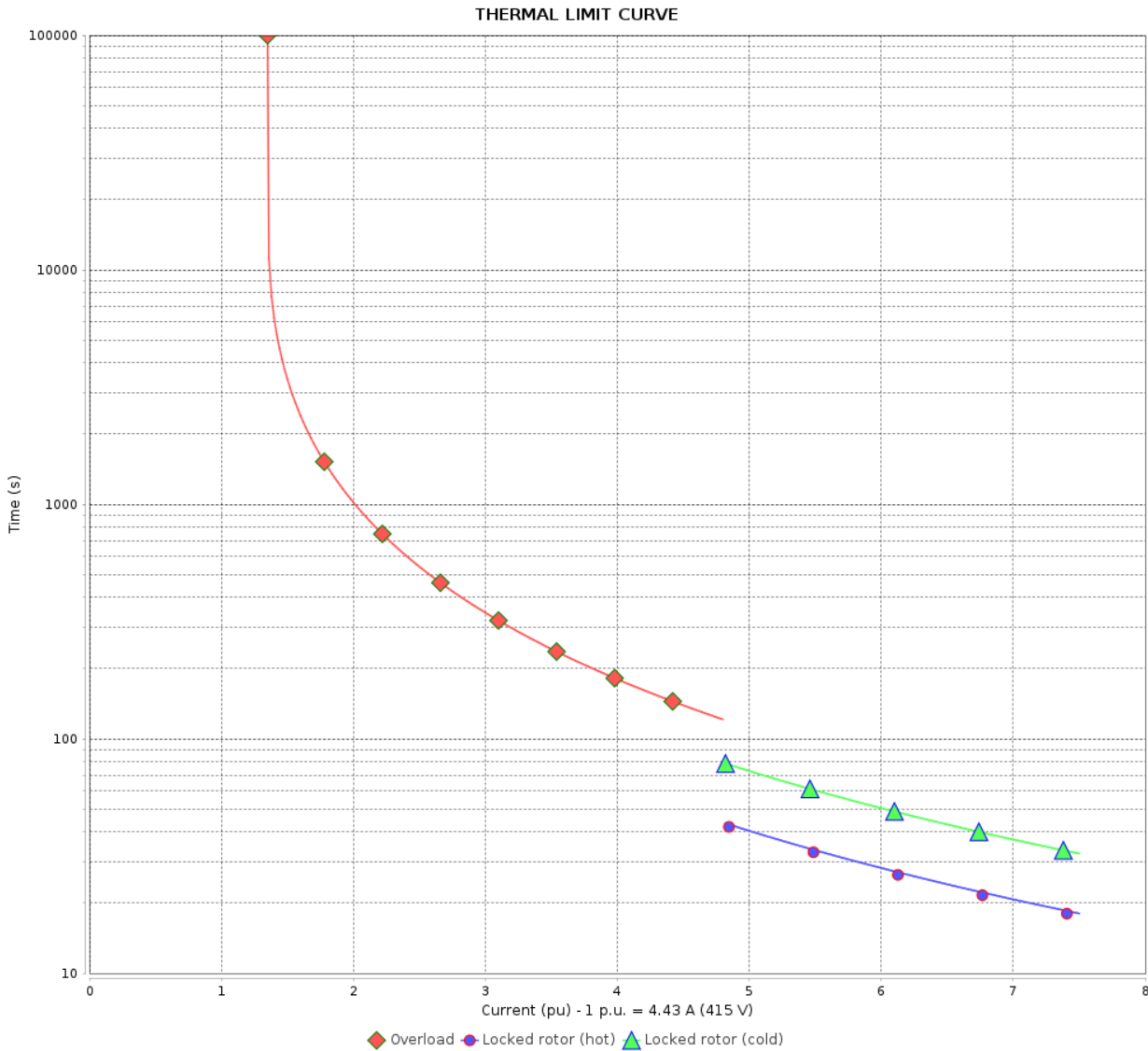
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 Design : B

Heating constant

Cooling constant

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VFD OPERATION CURVE

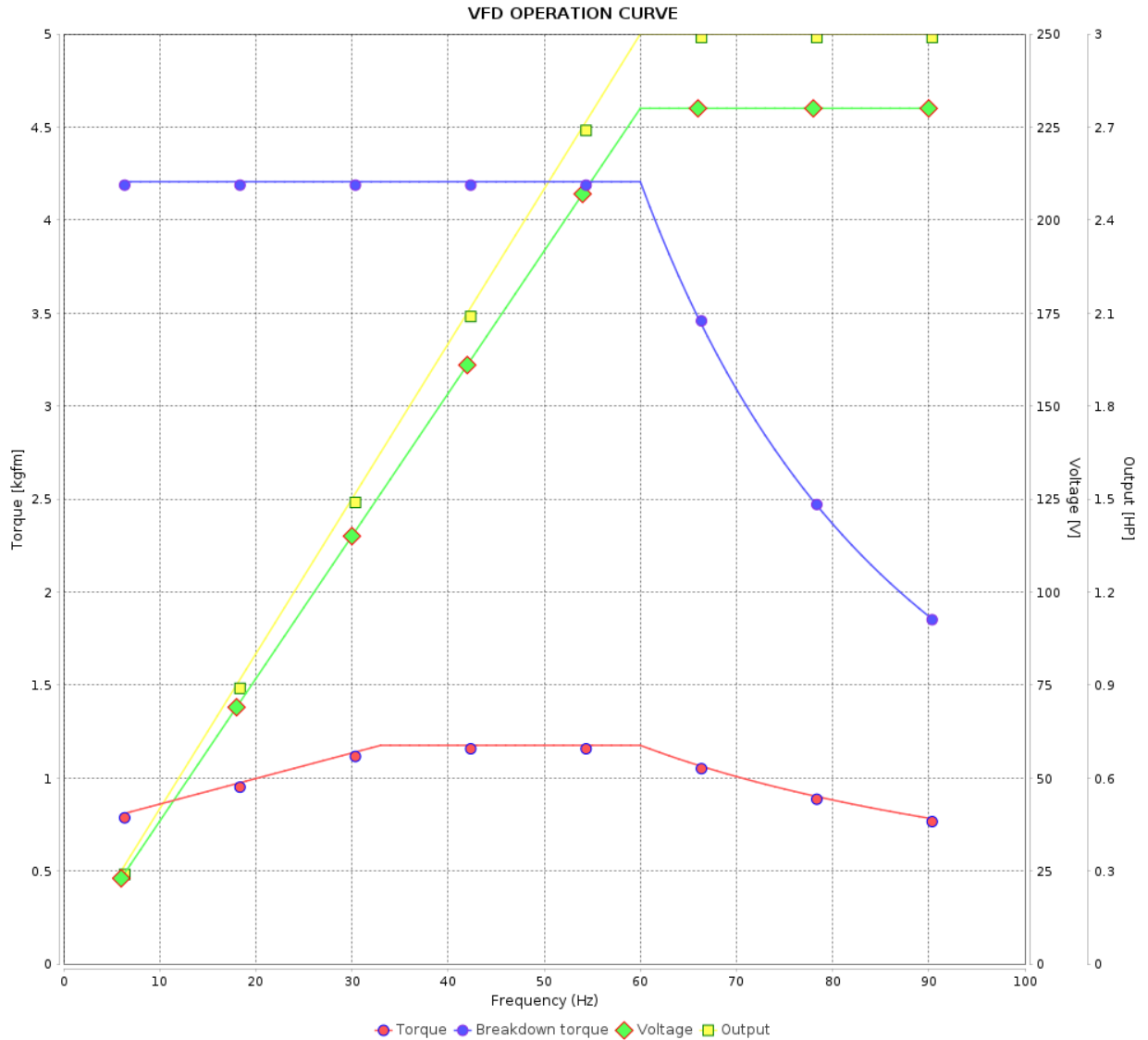
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Customer :

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Performance : 230/460 V 60 Hz 4P

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 Breakdown torque : 340 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

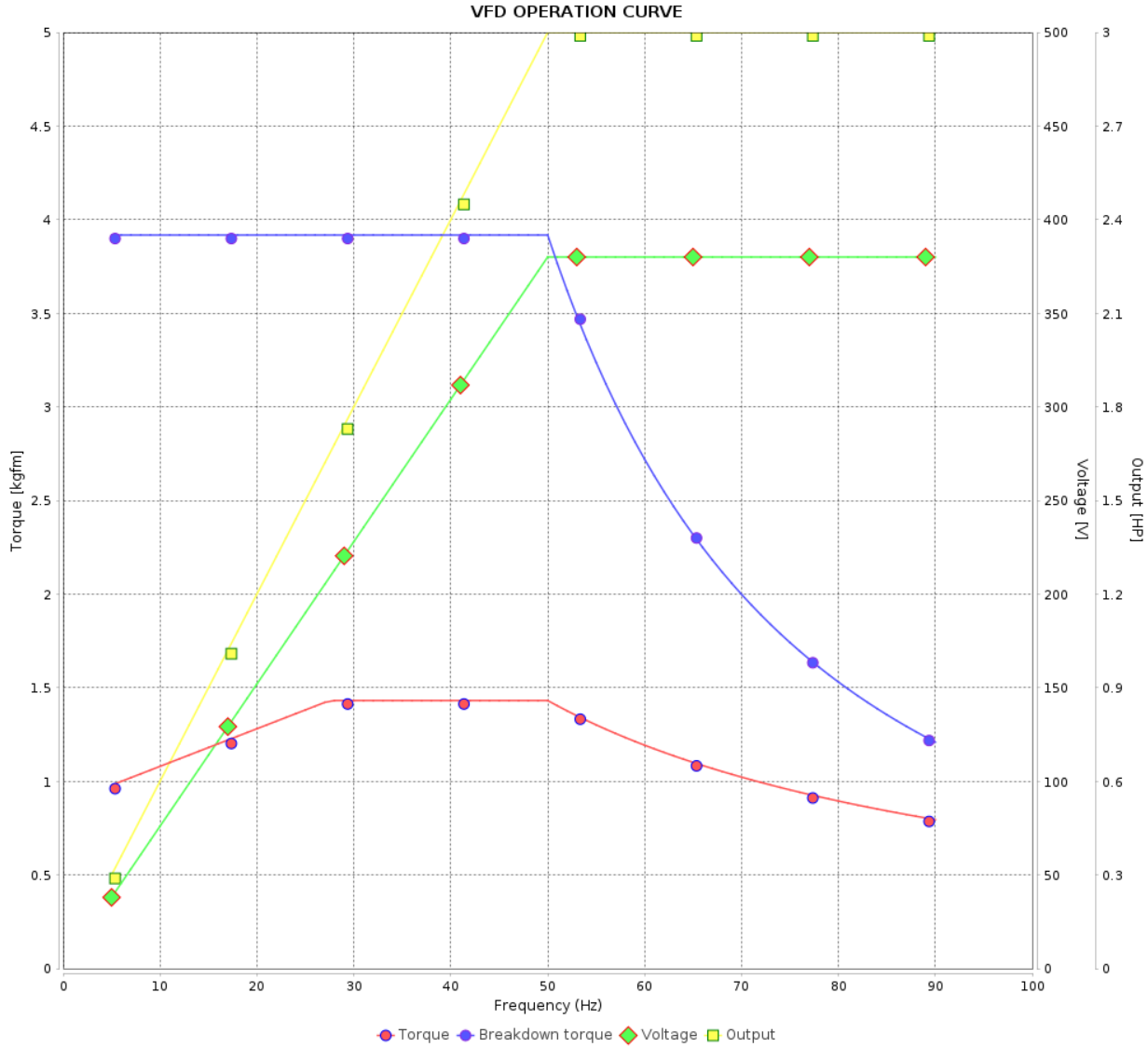
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Catalog # :

00318ET3E182T-W22G



Performance : 380 V 50 Hz 4P IE3

Rated current : 4.60 A
 LRC : 6.3
 Rated torque : 1.51 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

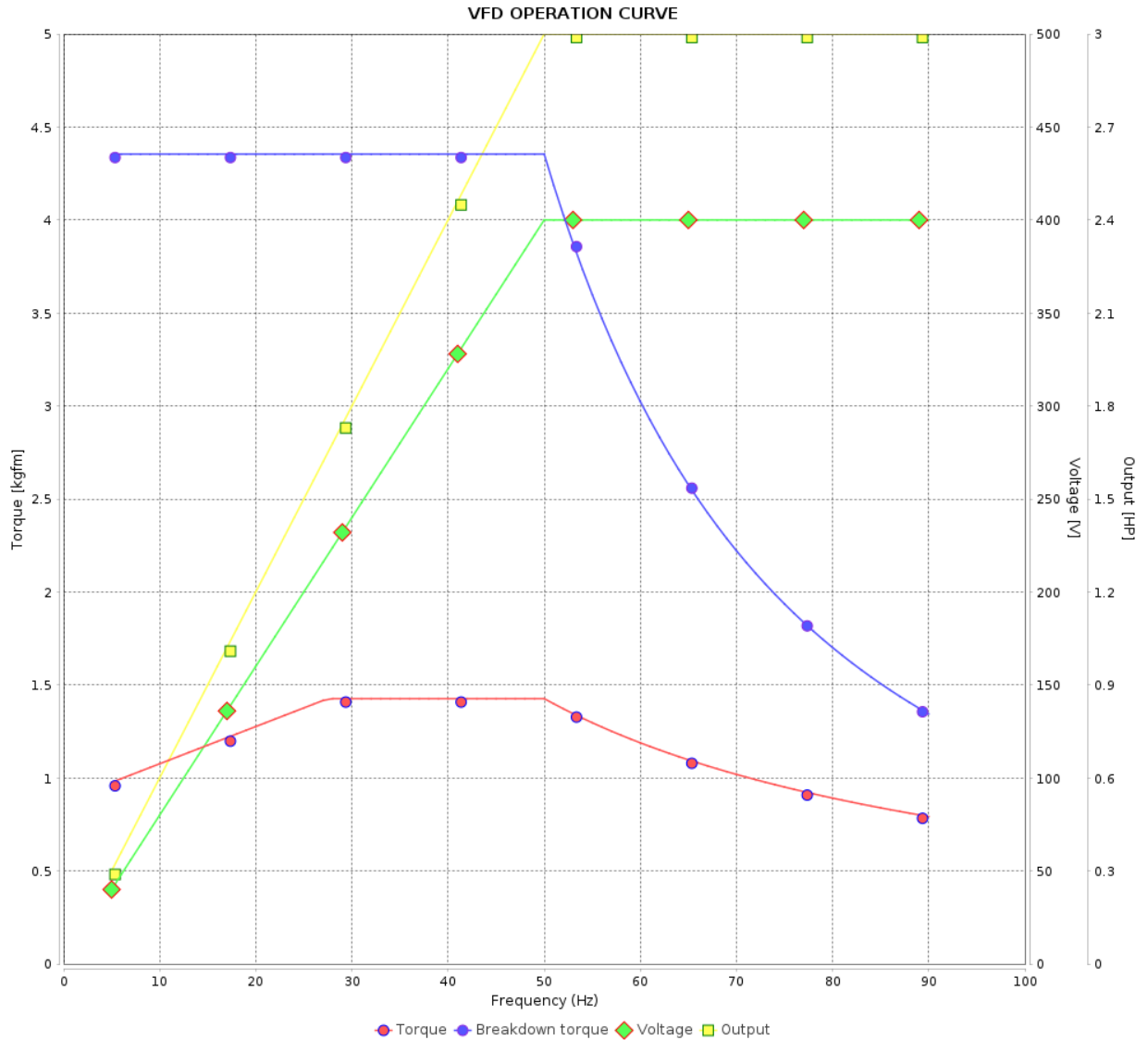
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 Service factor : 1.25
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 Design : B

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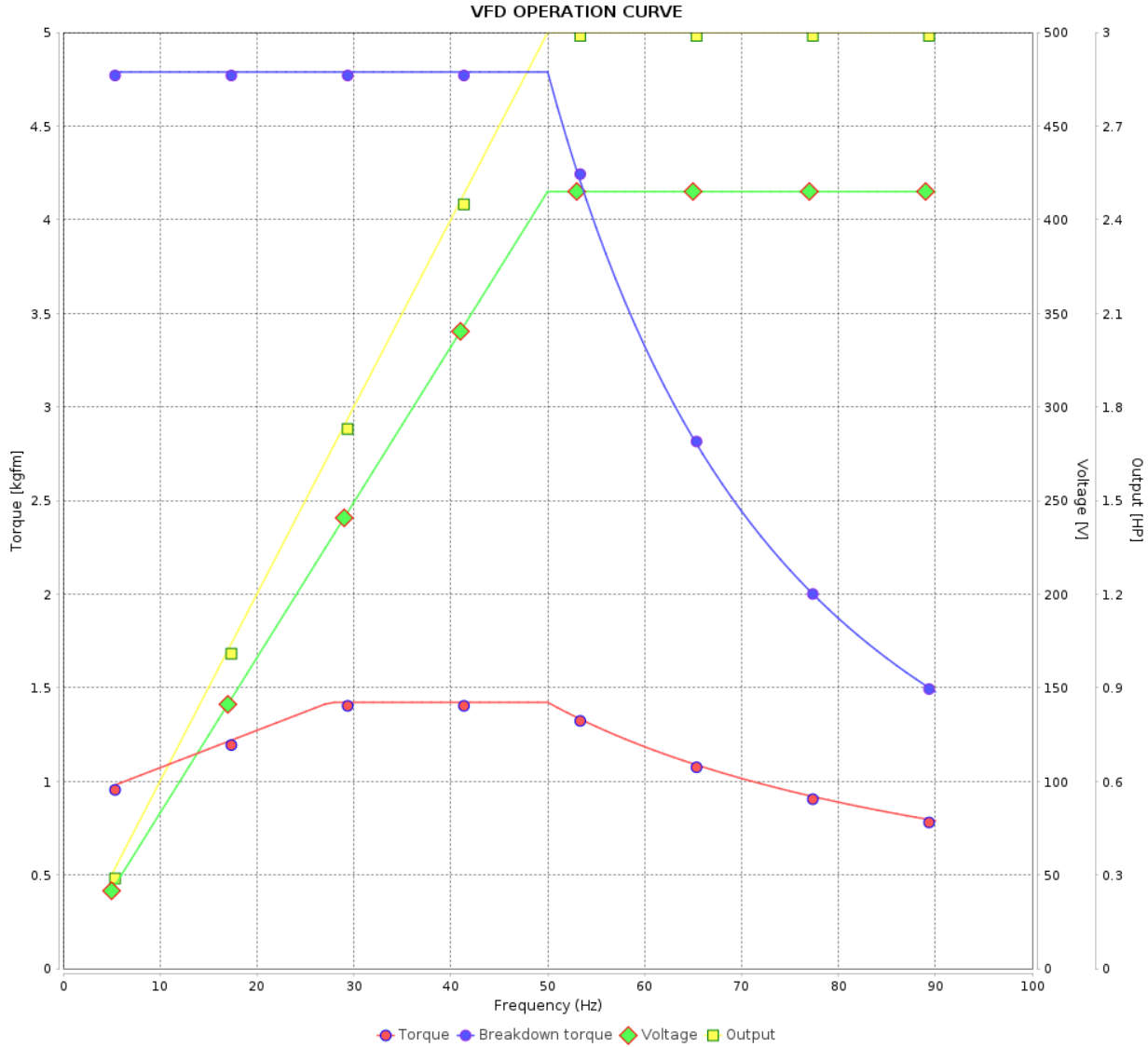
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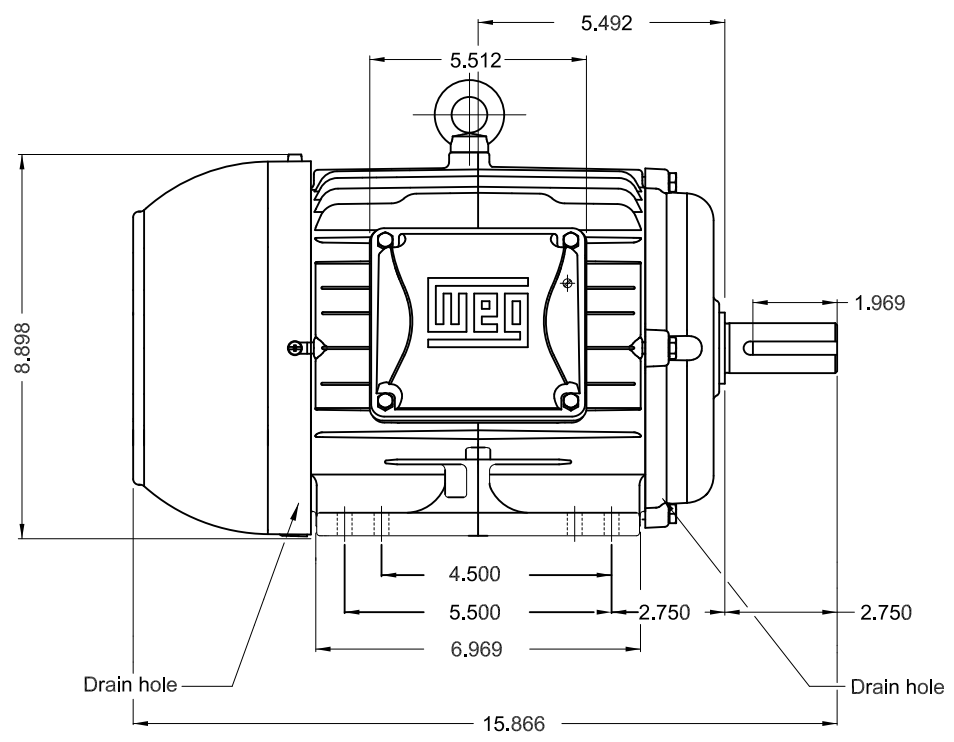
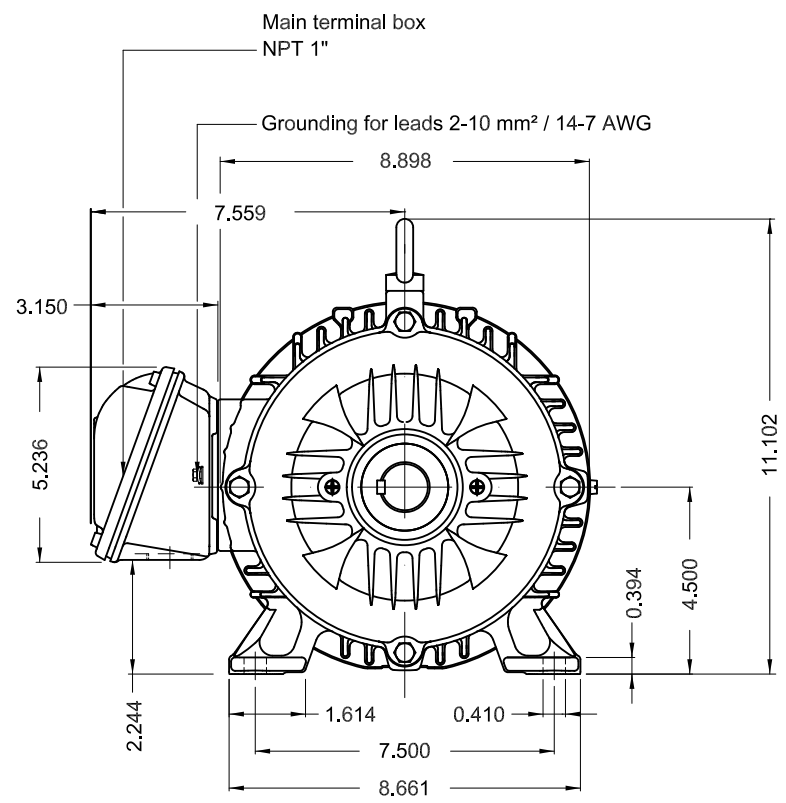
Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

A

B

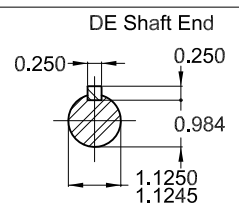
C



D

E

Bearing cap
Internal AEGIS ground ring on the DE
Color RAL 5009
Painting plan 207A
Mounting NEMA F-1
Mounting B3R(D)



3 HP 04 Poles 60 Hz A

						HYBRISUSER								00		
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER						
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.										PREVIEW				
CHECKED		FRAME 182/4T IP55 TEFC										WDD 00				
RELEASED												SHEET 1 / 1				
REL. DATE		WMO	Jaragua do Sul	Product Engineering												





Mod. TE1BFOXON
CC029A

MADE IN BRAZIL
16575817

MODEL 00318ET3E182T-W22G

Inverter Duty Motor
Severe Duty

60Hz: For use on PWM:
VT 1000:1, CT 20:1, 1.00SF

PH3 60Hz Fr. 182/4T 1000m.a.s.l. IP55 TEFC 93lb

V 230/460

A 7.82/3.91

HP 3.0

kW 2.2

SF 1.25

SFA 9.78/4.89

RPM 1760

PF 0.79

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code K

USABLE @208V 8.65A SF 1.15 SFA 9.95

3.0HP 2.2kW 50Hz 380V 4.60A 1445RPM SF 1.25 SFA 5.75 EFF 87.5% (IE3)

