

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: Rolled Steel Three-Phase	Product code :	13484365	
		Catalog # :	00336ET3E56CFL-S	
Frame	: 56C	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	: 21.7 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0070 kgm ²	
Design	: B			
Output [HP]	3	3	3	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	7.02/3.51	8.50/4.25	7.62/4.04	
L. R. Amperes [A]	66.7/33.3	62.9/31.5	63.3/33.5	
LRC [A]	9.5x(Code K)	7.4x(Code H)	8.3x(Code J)	
No load current [A]	2.56/1.28	2.52/1.26	2.57/1.36	
Rated speed [RPM]	3500	2870	2885	
Slip [%]	2.78	4.33	3.83	
Rated torque [kgfm]	0.622	0.759	0.755	
Locked rotor torque [%]	300	229	270	
Breakdown torque [%]	380	280	310	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	18s (cold) 10s (hot)	16s (cold) 9s (hot)	16s (cold) 9s (hot)	
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)	
Efficiency (%)	25%	83.6	87.4	
	50%	84.0	86.6	
	75%	86.5	86.8	
	100%	86.5	85.5	
Power Factor	25%	0.51	0.53	
	50%	0.78	0.80	
	75%	0.87	0.89	
	100%	0.91	0.92	
Bearing type	: <u>Drive end</u> 6204 ZZ <u>Non drive end</u> 6202 ZZ	Foundation loads		
Sealing	: V'Ring V'Ring	Max. traction	: 64 kgf	
Lubrication interval	: - -	Max. compression	: 86 kgf	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 7.76A SF 1.00 SFA 7.76A				
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	21/08/2020		1 / 13	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

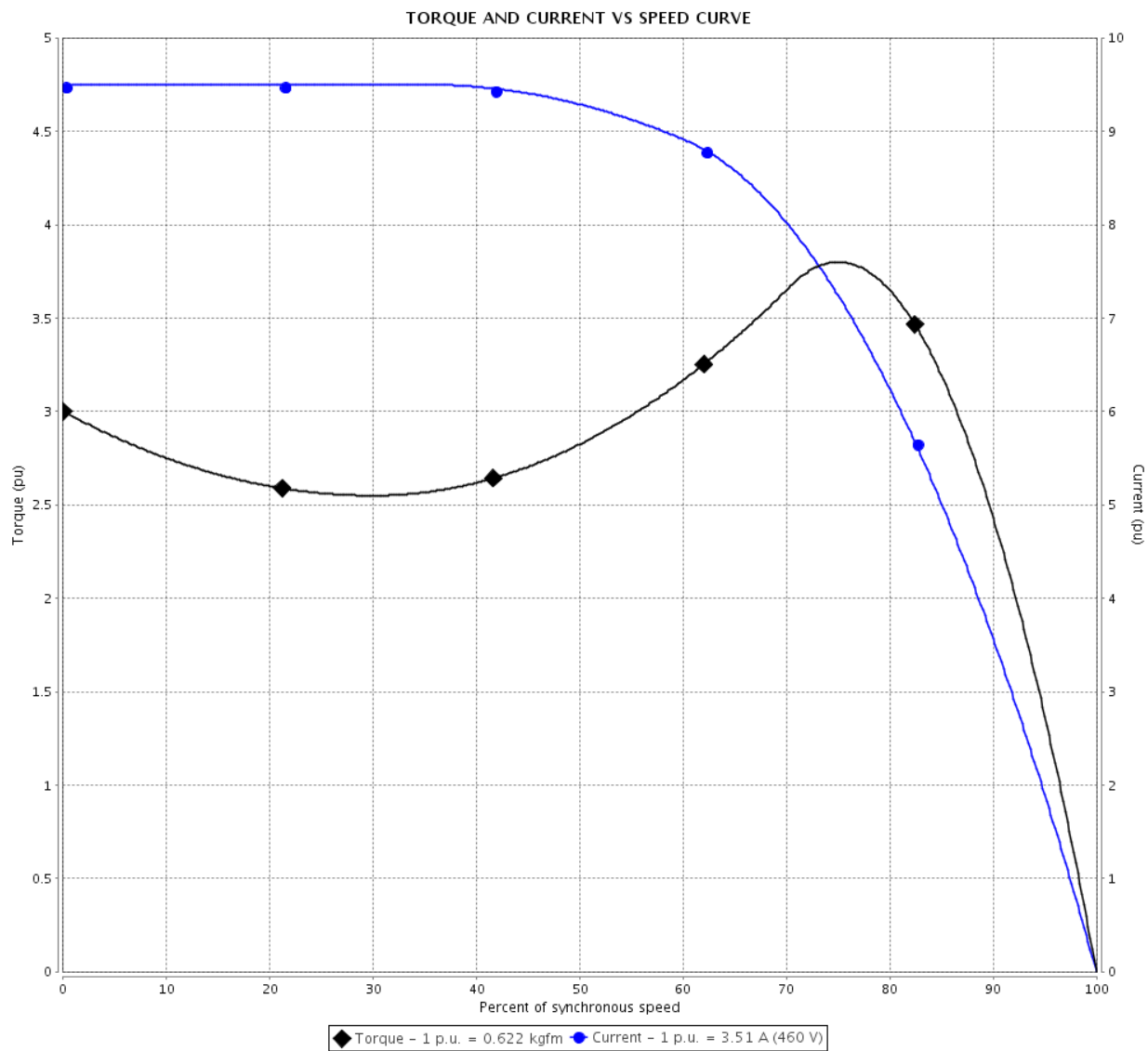
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
 LRC : 9.5
 Rated torque : 0.622 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 380 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 18s (cold) 10s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 13	Revision
Checked by				
Date	21/08/2020			

TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

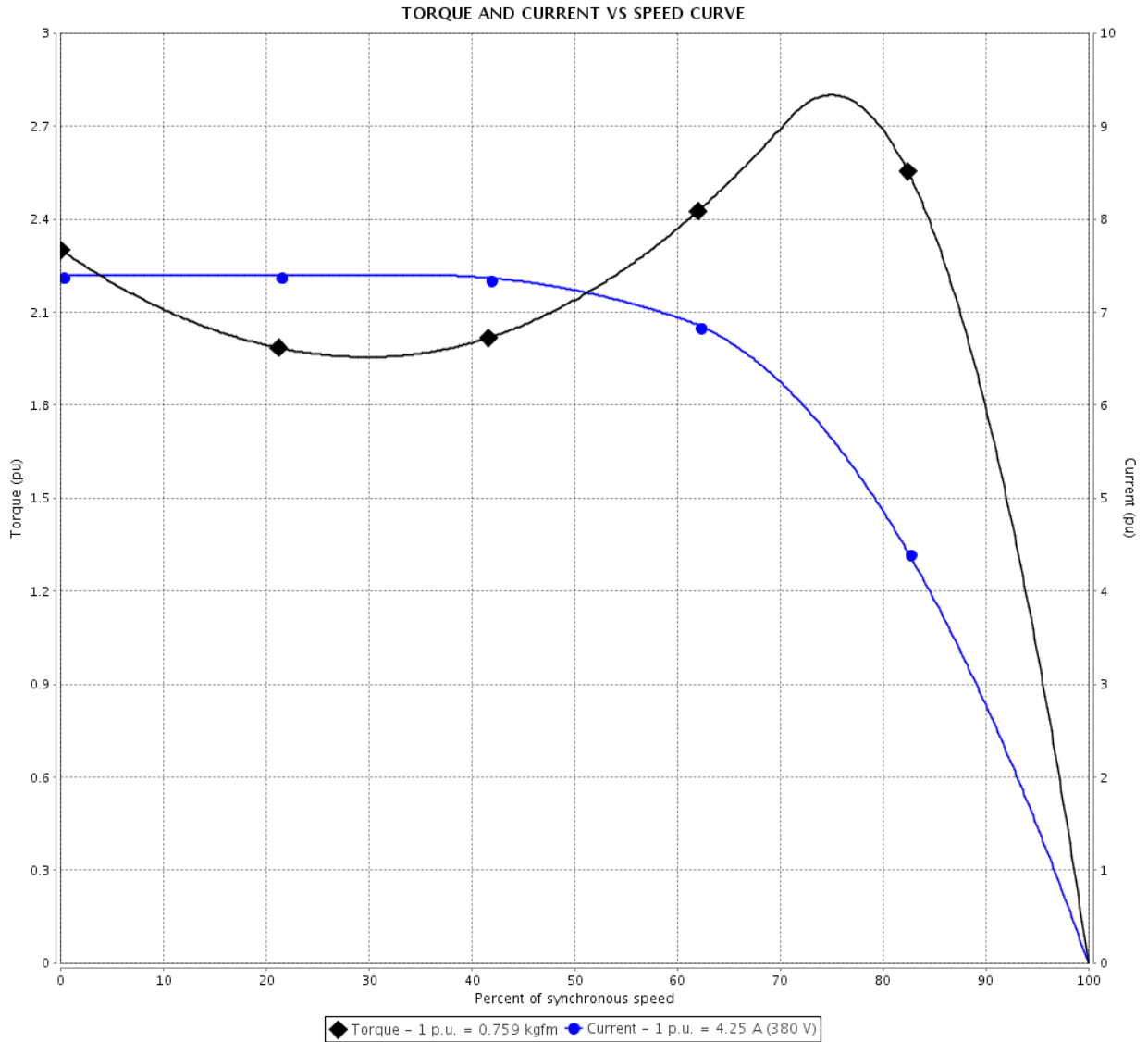
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current : 8.50/4.25 A
 LRC : 7.4
 Rated torque : 0.759 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 16s (cold) 9s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 13	Revision
Checked by				
Date	21/08/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Three-Phase

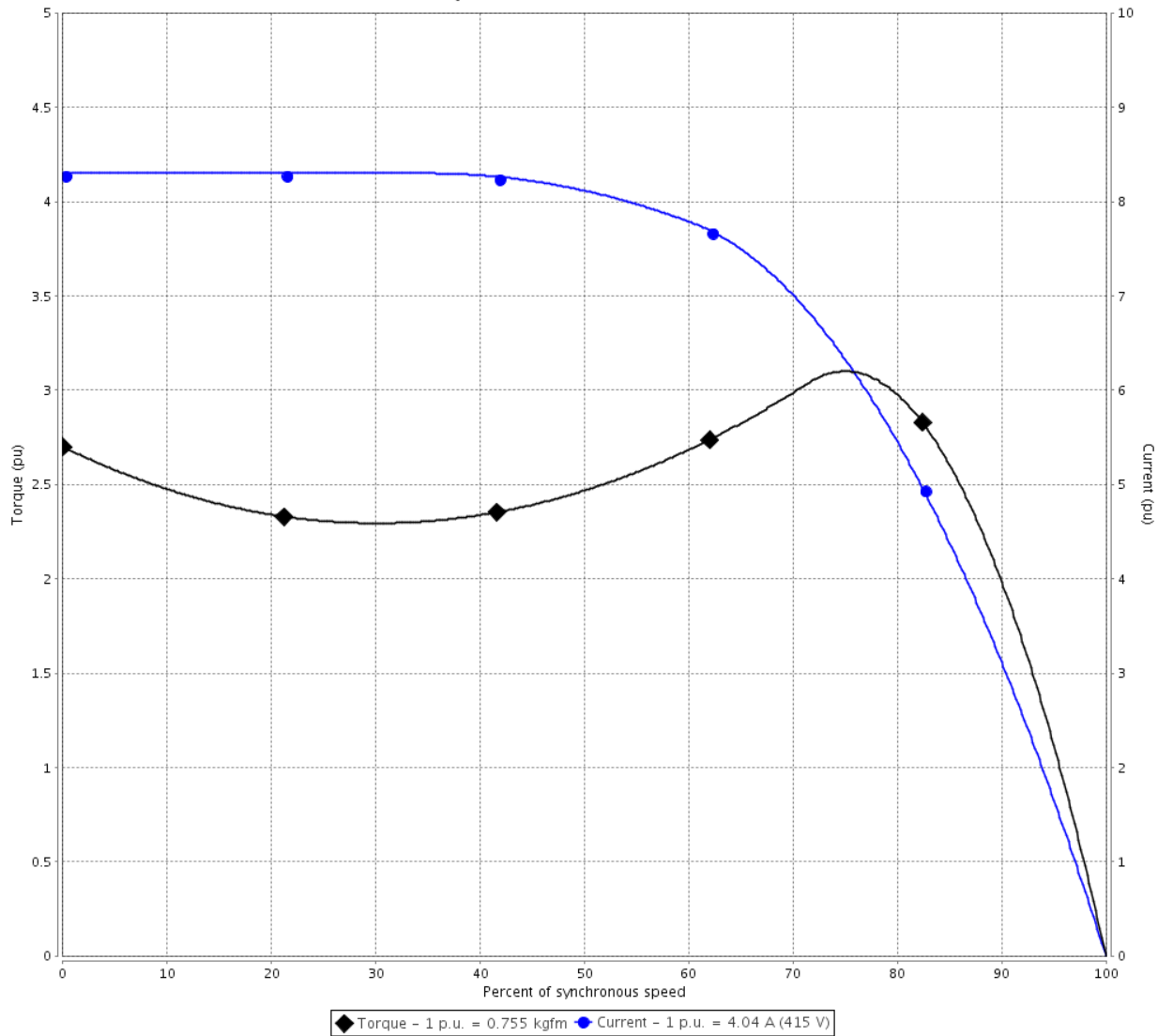
Product code :

13484365

Catalog # :

00336ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 7.62/4.04 A
 LRC : 8.3
 Rated torque : 0.755 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 16s (cold) 9s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 13	Revision
Checked by				
Date	21/08/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

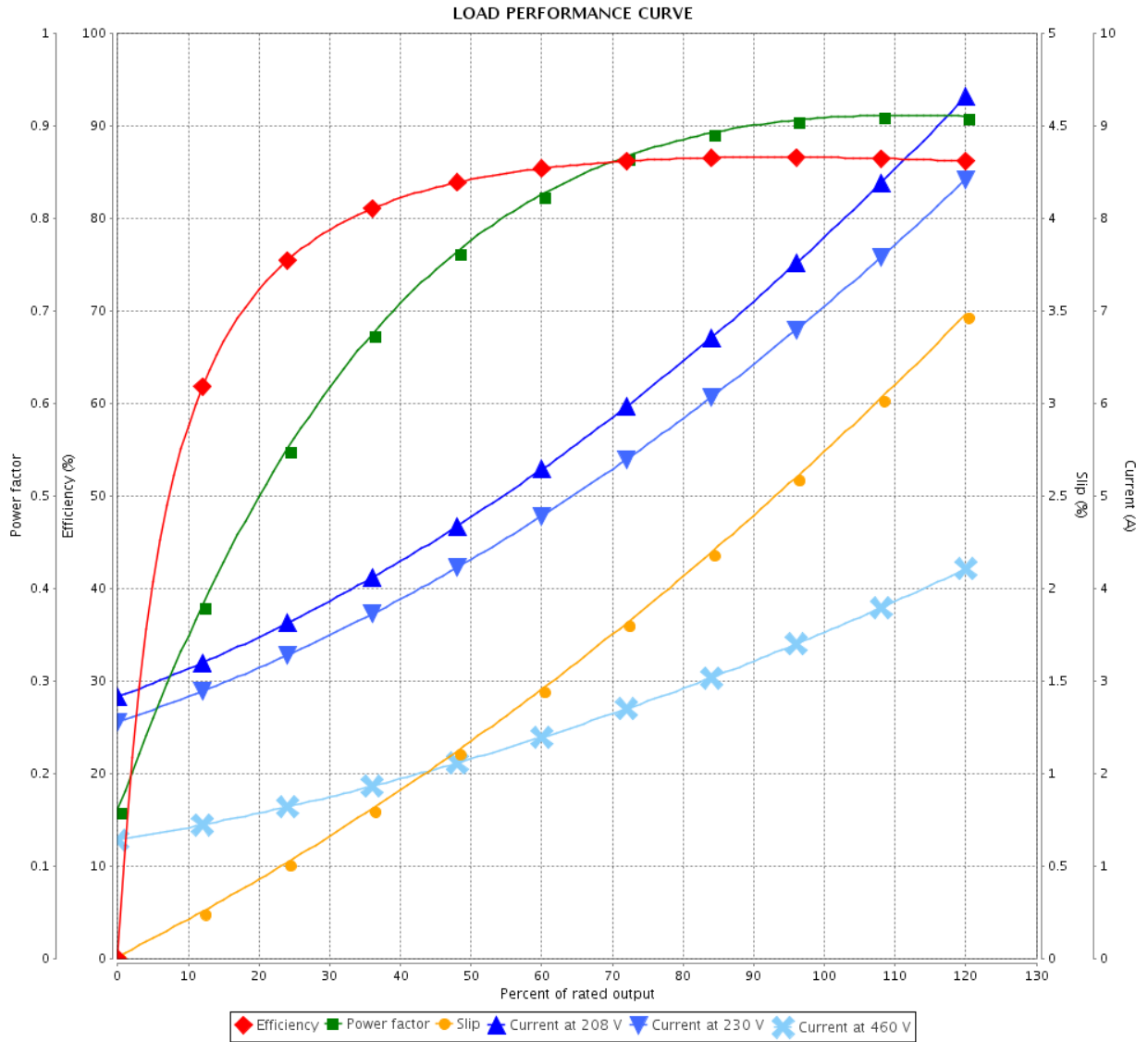
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
 LRC : 9.5
 Rated torque : 0.622 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 380 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 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 :

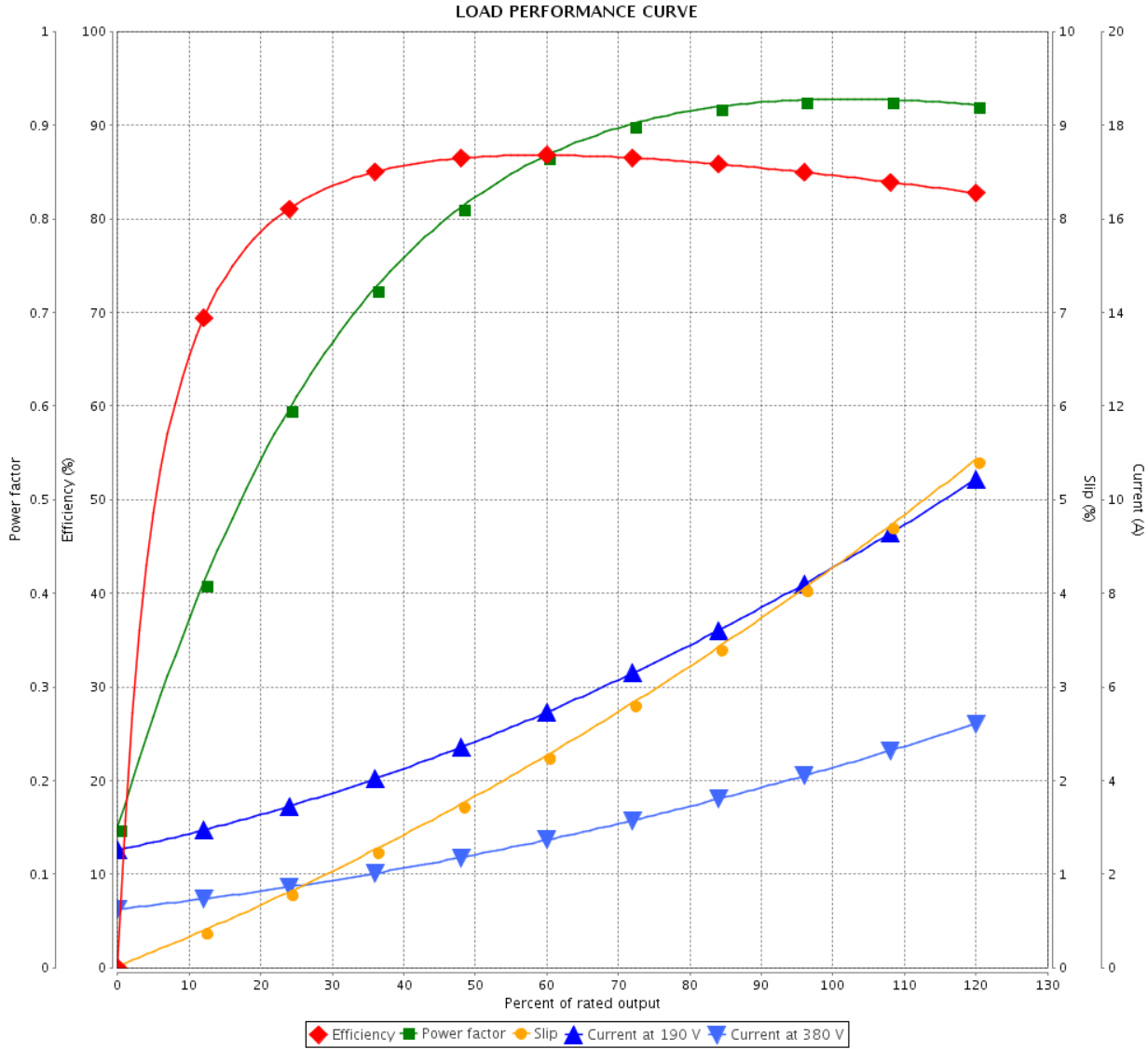
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current : 8.50/4.25 A
 LRC : 7.4
 Rated torque : 0.759 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 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 : _____

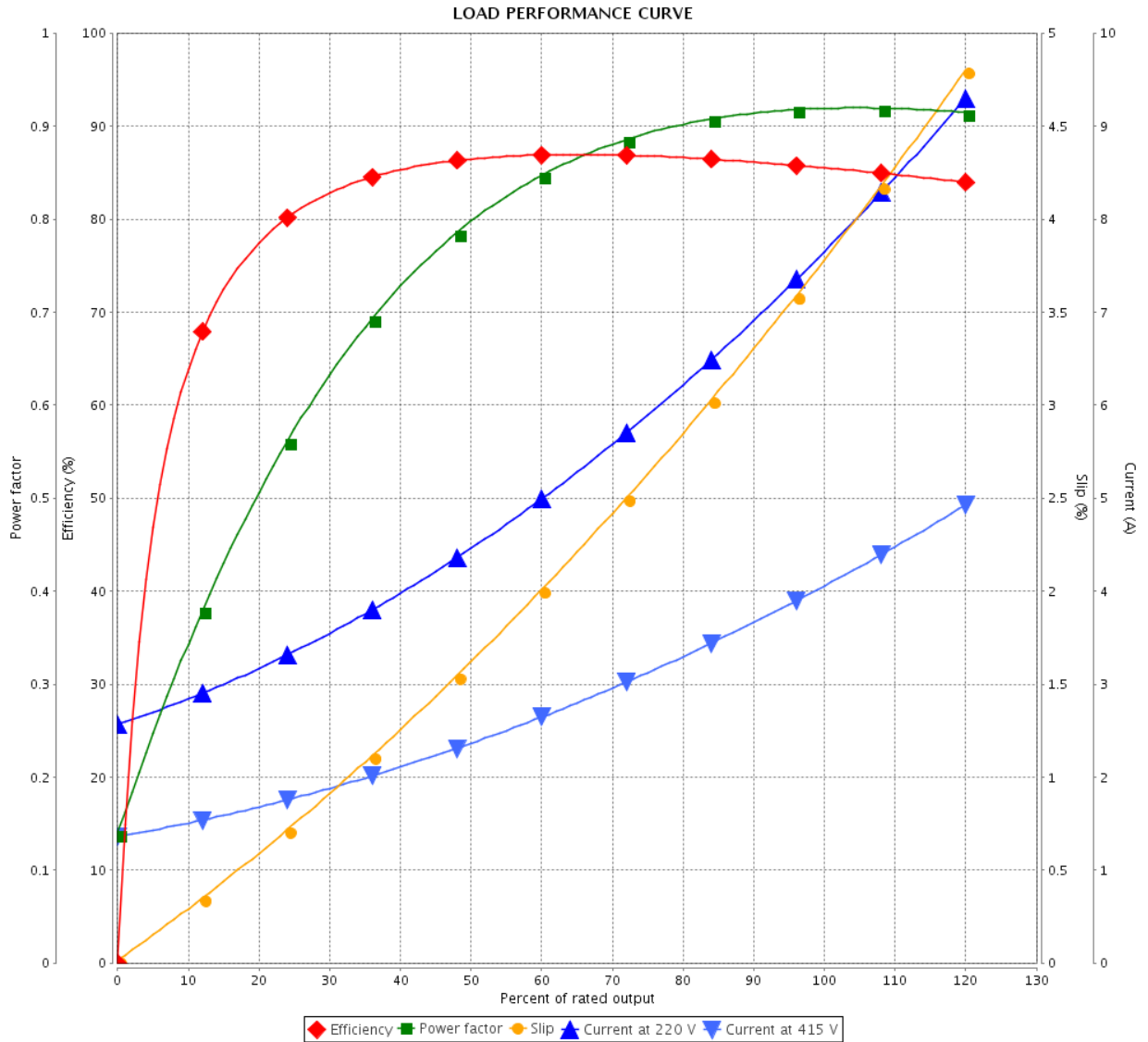
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 7.62/4.04 A
 LRC : 8.3
 Rated torque : 0.755 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

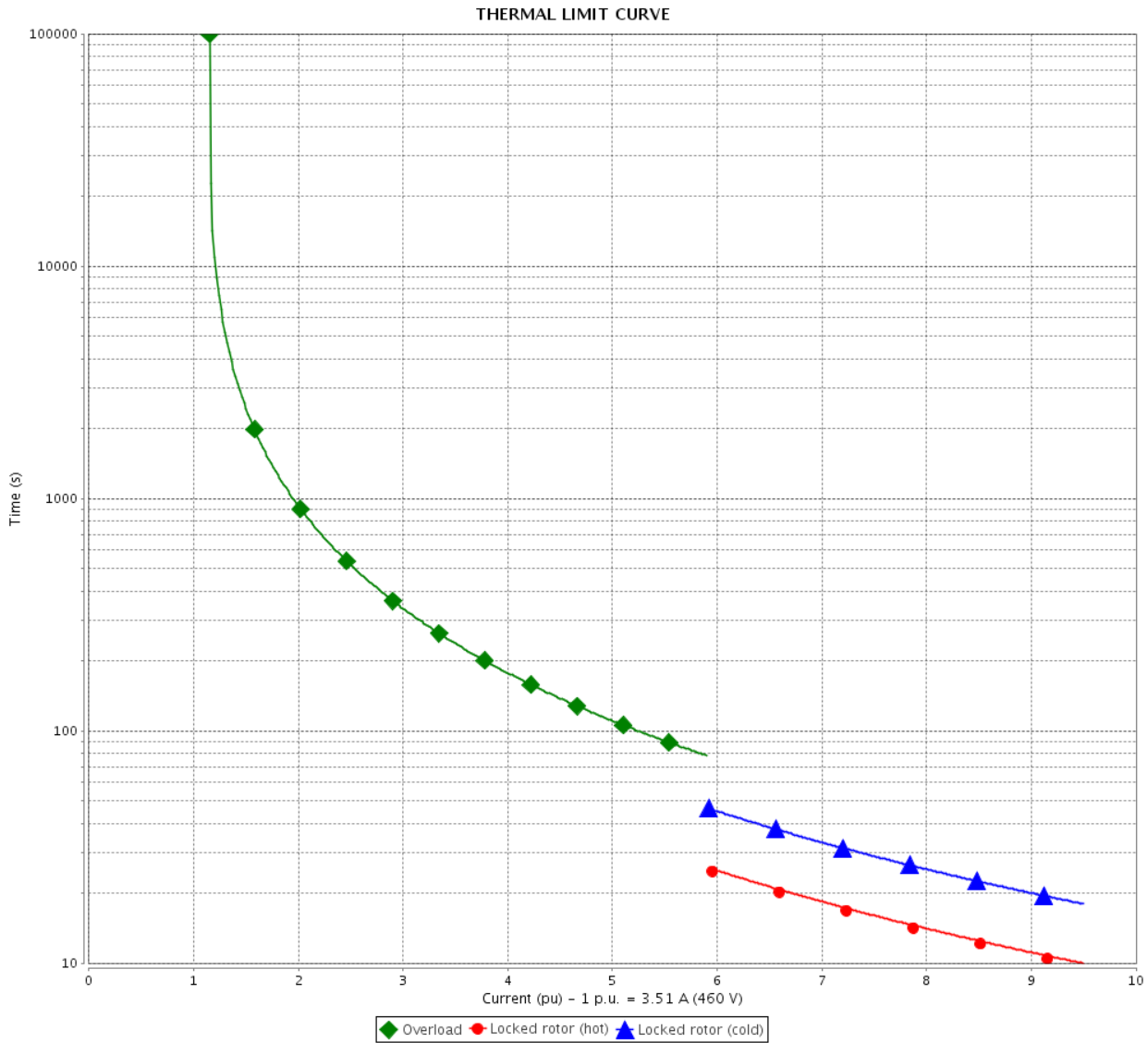
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
 LRC : 9.5
 Rated torque : 0.622 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 380 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

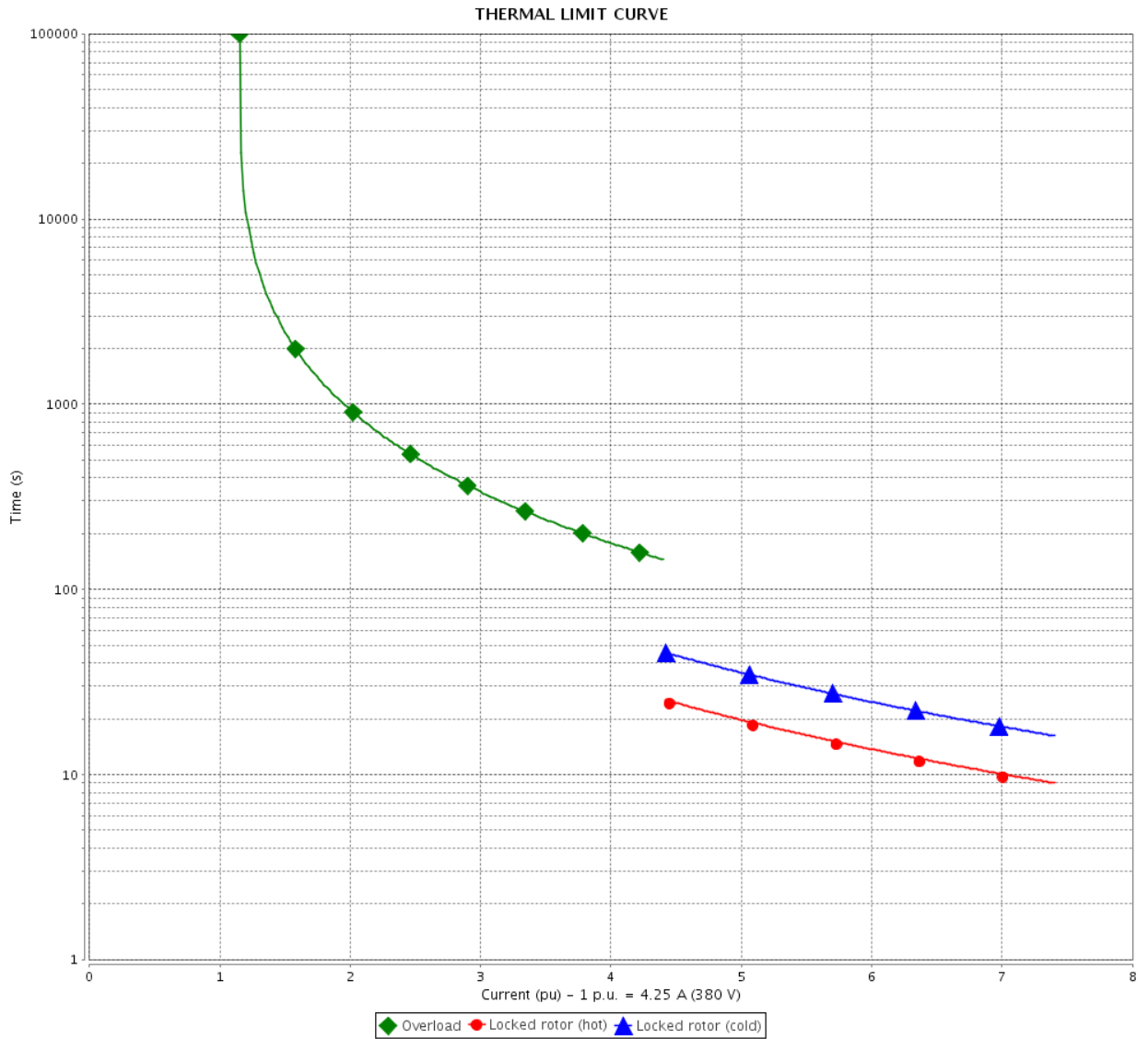
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current : 8.50/4.25 A
 LRC : 7.4
 Rated torque : 0.759 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
		Page	Revision	
		9 / 13		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

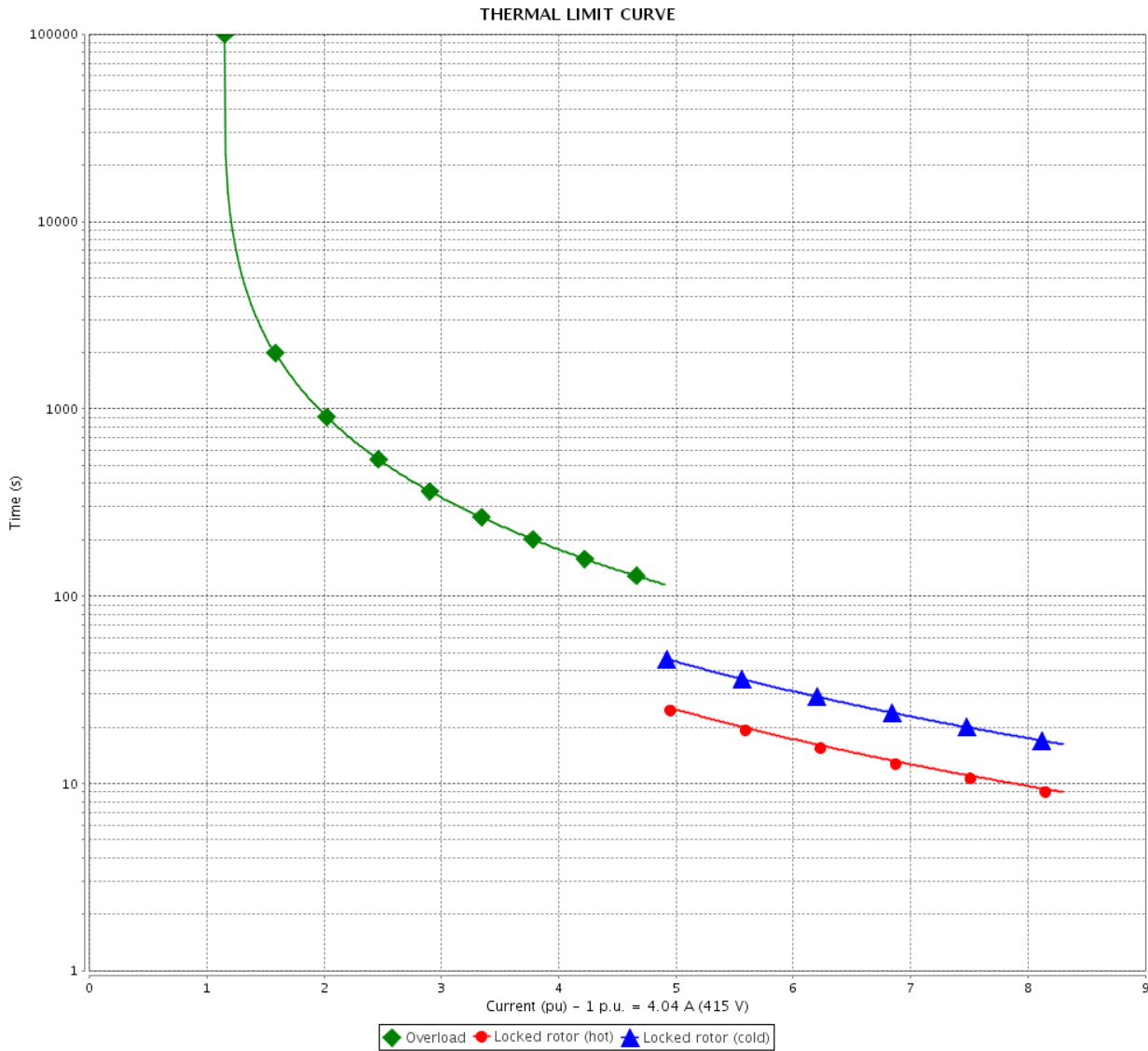
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 7.62/4.04 A
 LRC : 8.3
 Rated torque : 0.755 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 10 / 13	Revision
Checked by				
Date	21/08/2020			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

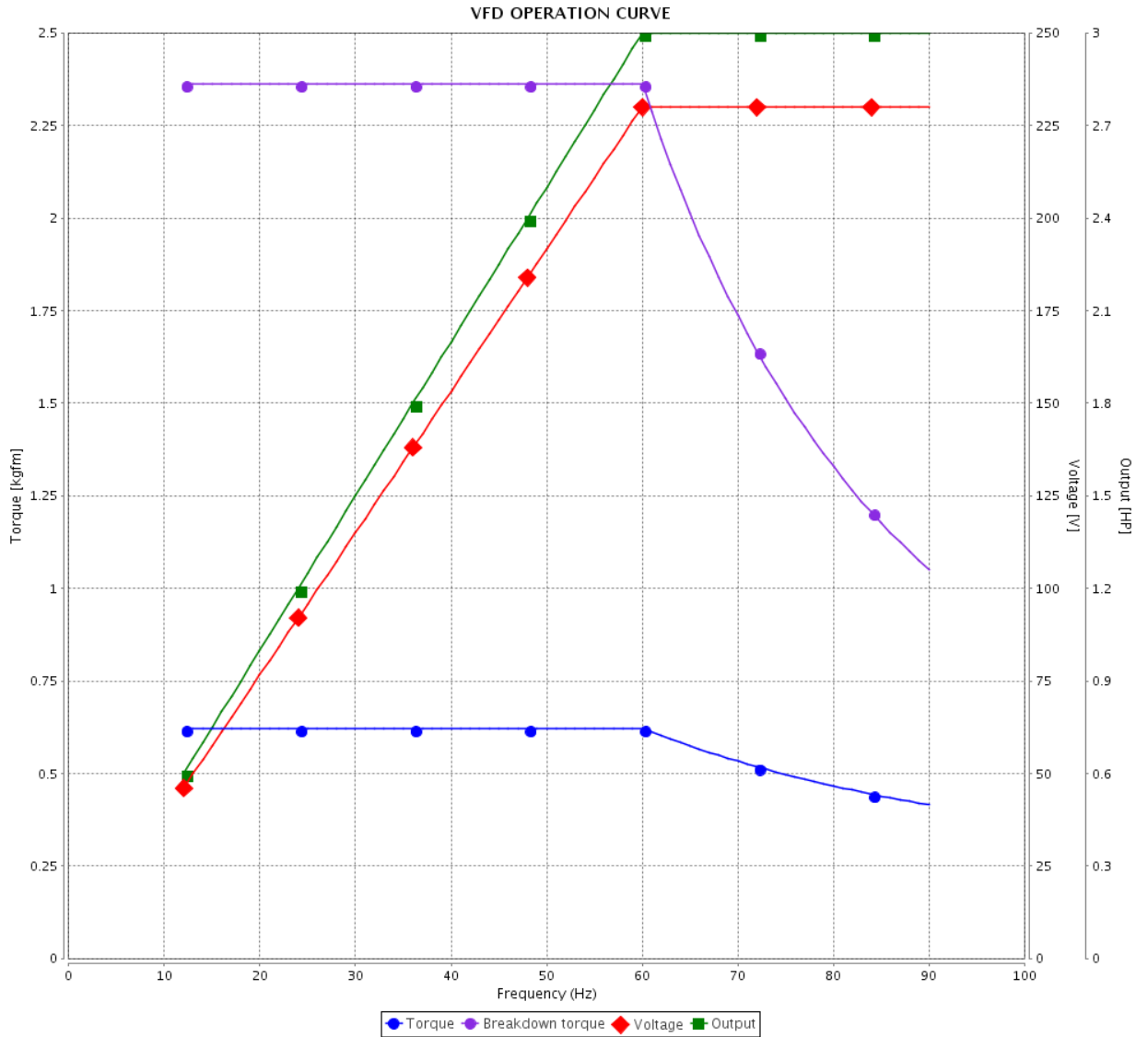
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
 LRC : 9.5
 Rated torque : 0.622 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 380 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	21/08/2020		11 / 13	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

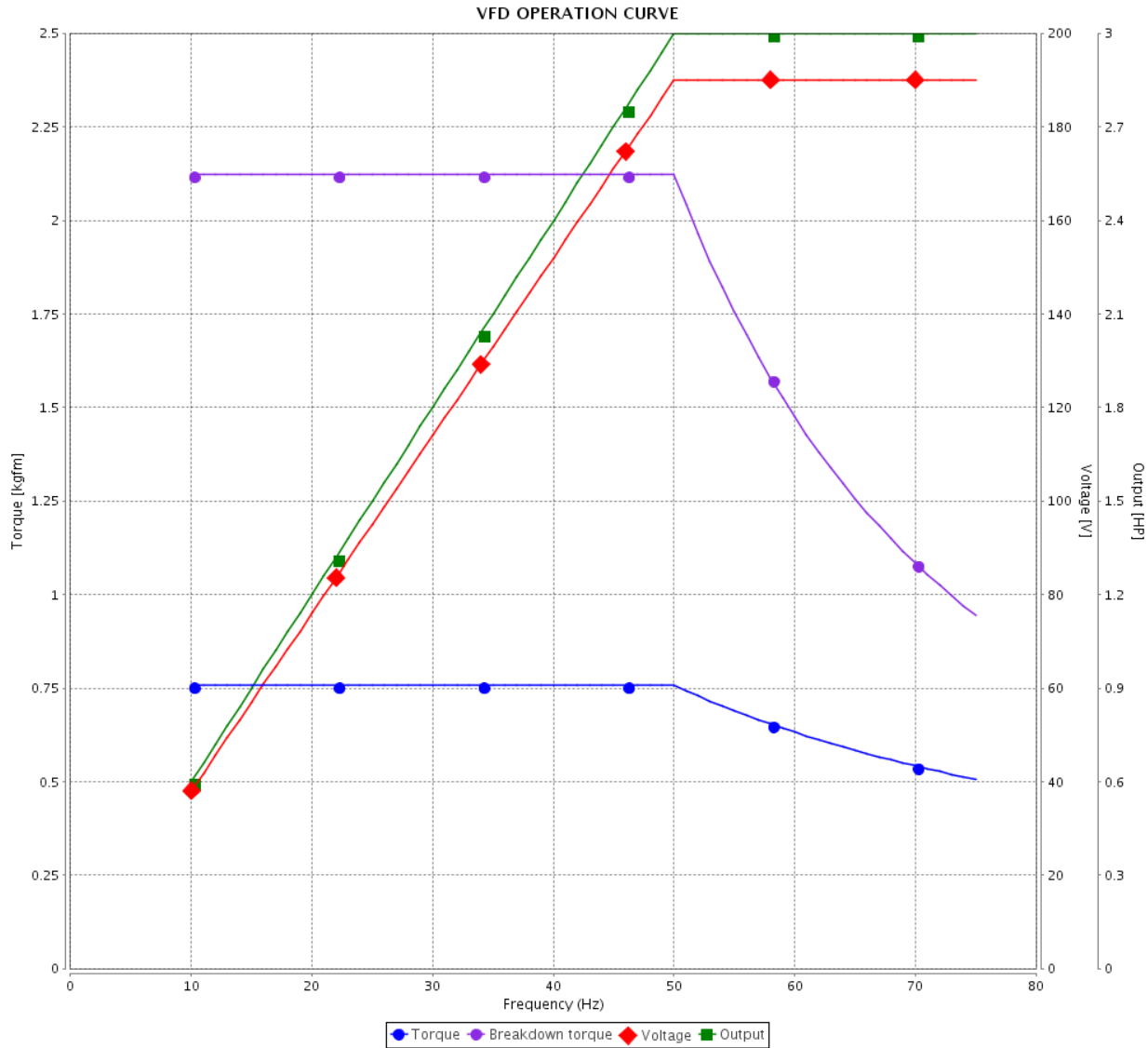
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current : 8.50/4.25 A
 LRC : 7.4
 Rated torque : 0.759 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 13	Revision
Checked by				
Date	21/08/2020			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

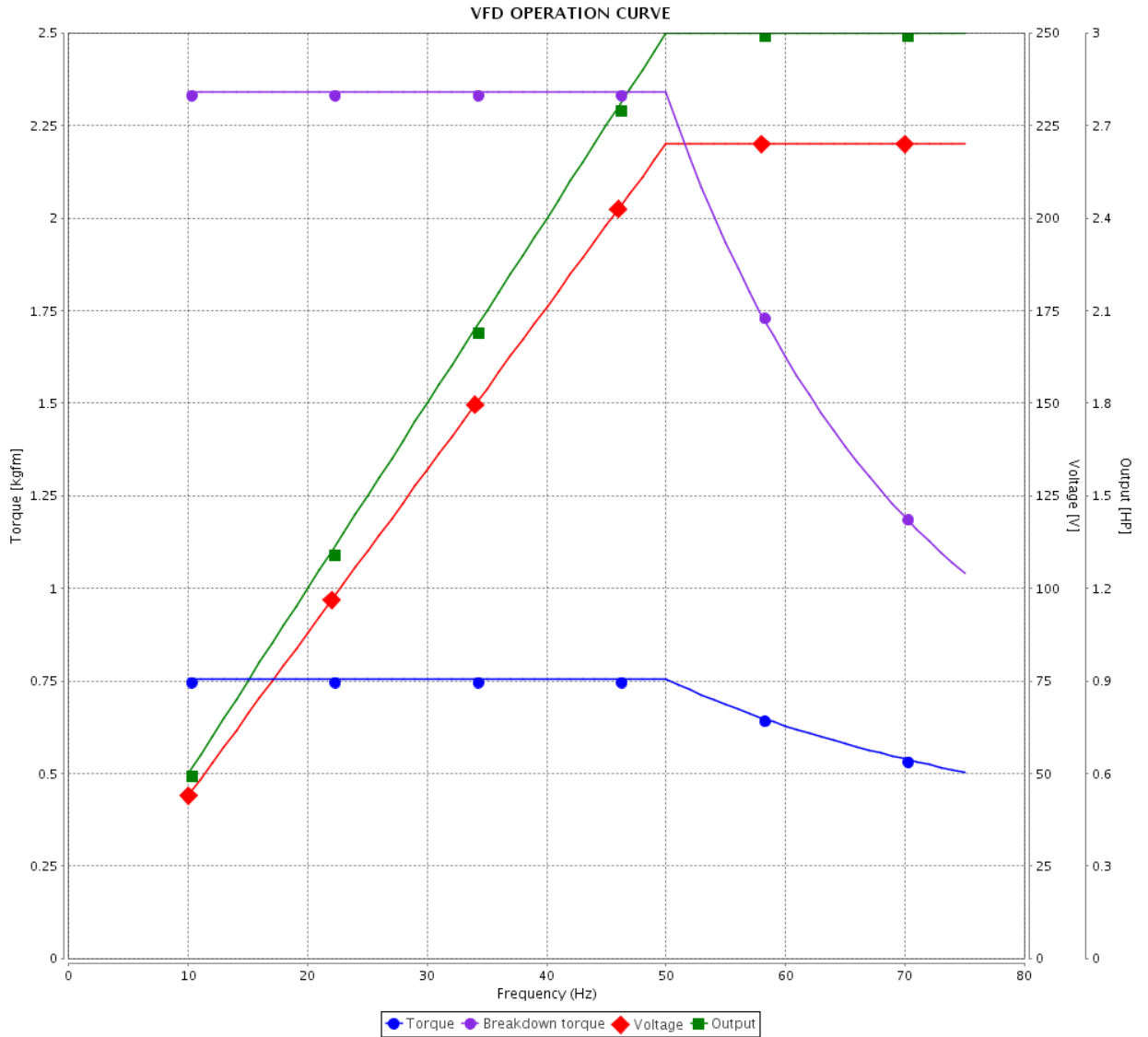
Product line : Rolled Steel Three-Phase

Product code :

13484365

Catalog # :

00336ET3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 7.62/4.04 A
 LRC : 8.3
 Rated torque : 0.755 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0070 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 13		
Date		21/08/2020		