

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : MULTIMOUNTING	Product code : 11692824				
Frame : 63 Insulation class : F Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : N	Cooling method : IC411 - TEFC Mounting : B14T Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>2</sup> : 5.9 kg Moment of inertia (J) : 0.0002 kgm <sup>2</sup>				
Output [kW]	0.25	0.25	0.25	0.25	
Poles	2	2	2	2	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	1.20/0.696	1.21/0.694	1.22/0.706	0.607	
L. R. Amperes [A]	5.05/2.92	5.31/3.05	5.62/3.25	3.28	
LRC [A]	4.2	4.4	4.6	5.4	
No load current [A]	0.777/0.450	0.870/0.500	0.968/0.560	0.450	
Rated speed [RPM]	2750	2780	2800	3415	
Slip [%]	8.33	7.33	6.67	5.14	
Rated torque [kgfm]	0.089	0.088	0.087	0.071	
Locked rotor torque [%]	200	220	240	280	
Breakdown torque [%]	200	220	240	290	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	
Noise level <sup>2</sup>	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%				
	50%	60.3	58.0	55.9	
	75%	64.1	63.0	61.7	
	100%	65.0	65.0	64.8	
Power Factor	25%				
	50%	0.63	0.57	0.53	
	75%	0.76	0.70	0.66	
	100%	0.84	0.80	0.76	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	68.0	68.0	68.6	59.5
	P2 (0,5;1,0)	66.2	66.2	66.8	57.8
	P3 (0,25;1,0)	61.2	61.2	61.7	53.4
	P4 (0,9;0,5)	37.9	37.9	38.3	33.1
	P5 (0,5;0,5)	26.9	26.9	27.2	23.5
	P6 (0,5;0,25)	21.2	21.2	21.4	18.6
	P7 (0,25;0,25)	14.4	14.4	14.5	12.6
Bearing type	: Drive end : 6201 ZZ	Non drive end : 6201 ZZ	Foundation loads		
Sealing	: Lip Seal	Lip Seal	Max. traction	: 5 kgf	
Lubrication interval	: -	-	Max. compression	: 11 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. (4) At 100% of full load.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	17/04/2023			1 / 18	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	17/04/2023		2 / 18	

# TORQUE AND CURRENT VS SPEED CURVE

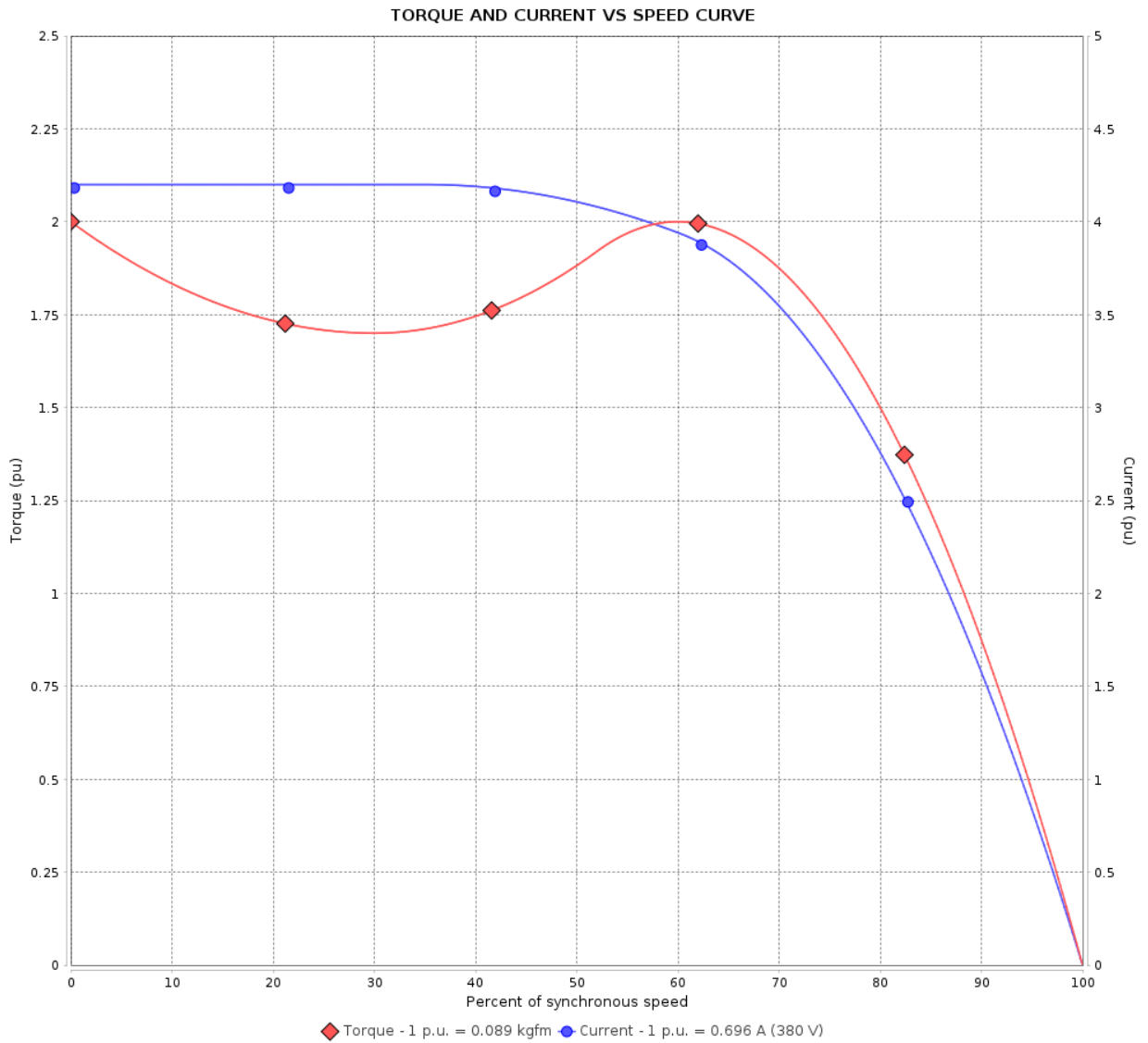
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 220/380 V 50 Hz 2P

Rated current	: 1.20/0.696 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 4.2	Duty cycle	: S1
Rated torque	: 0.089 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 2750 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 18	Revision
Checked by				
Date	17/04/2023			

# TORQUE AND CURRENT VS SPEED CURVE

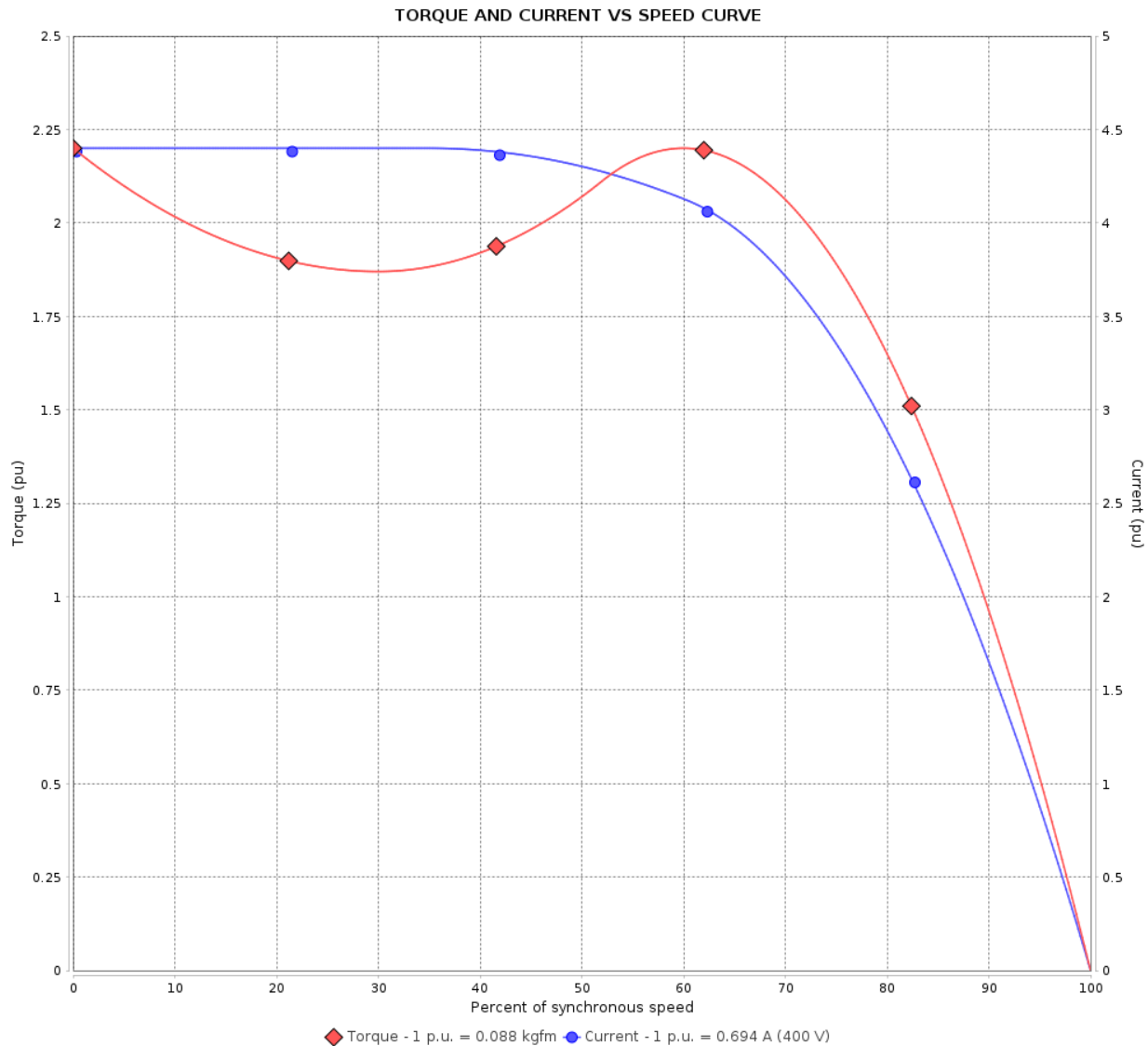
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 230/400 V 50 Hz 2P

Rated current	: 1.21/0.694 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 4.4	Duty cycle	: S1
Rated torque	: 0.088 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2780 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 18	Revision
Checked by				
Date	17/04/2023			

# TORQUE AND CURRENT VS SPEED CURVE

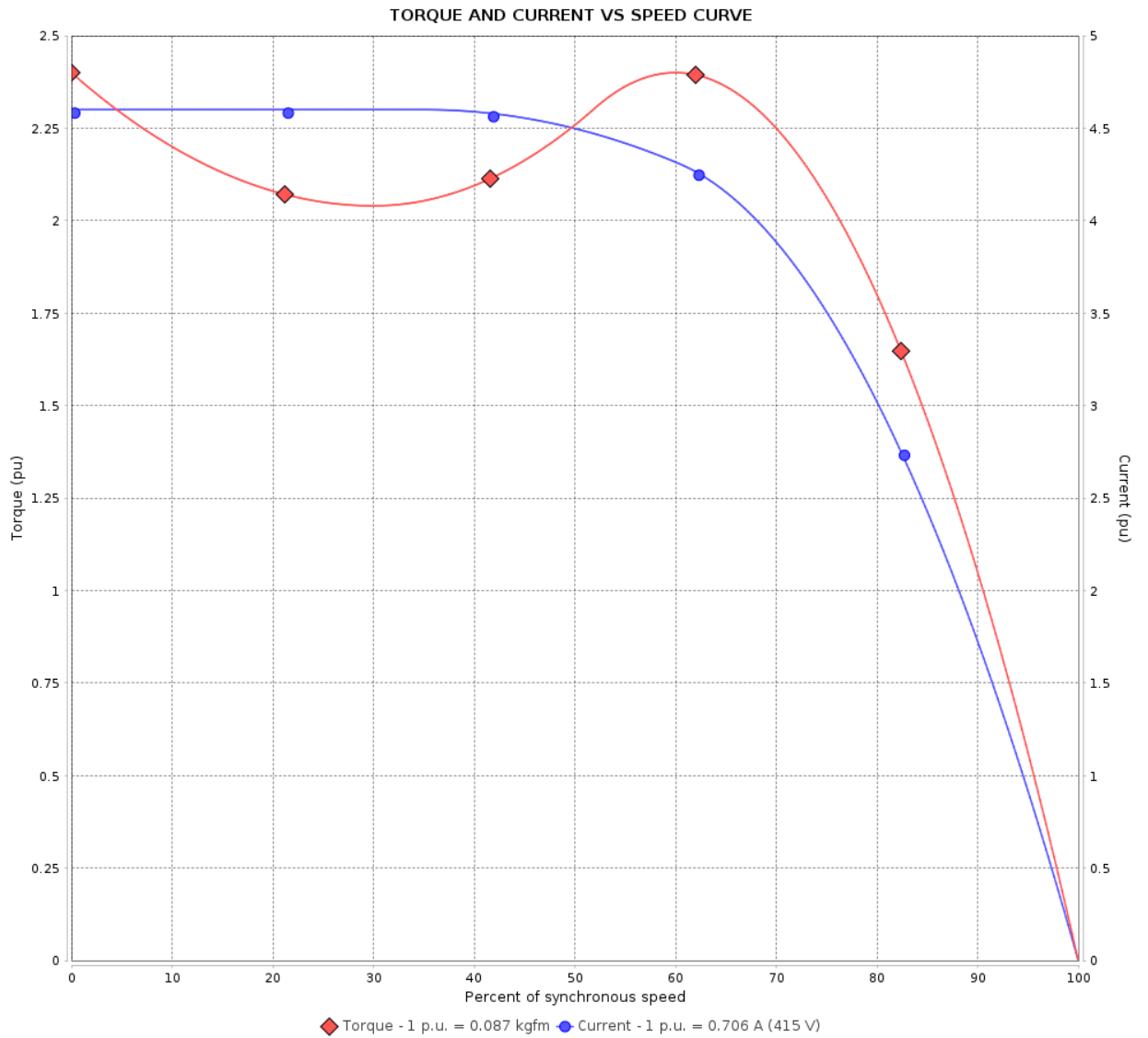
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 240/415 V 50 Hz 2P

Rated current	: 1.22/0.706 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 4.6	Duty cycle	: S1
Rated torque	: 0.087 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 2800 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 18	Revision
Checked by				
Date	17/04/2023			

# TORQUE AND CURRENT VS SPEED CURVE

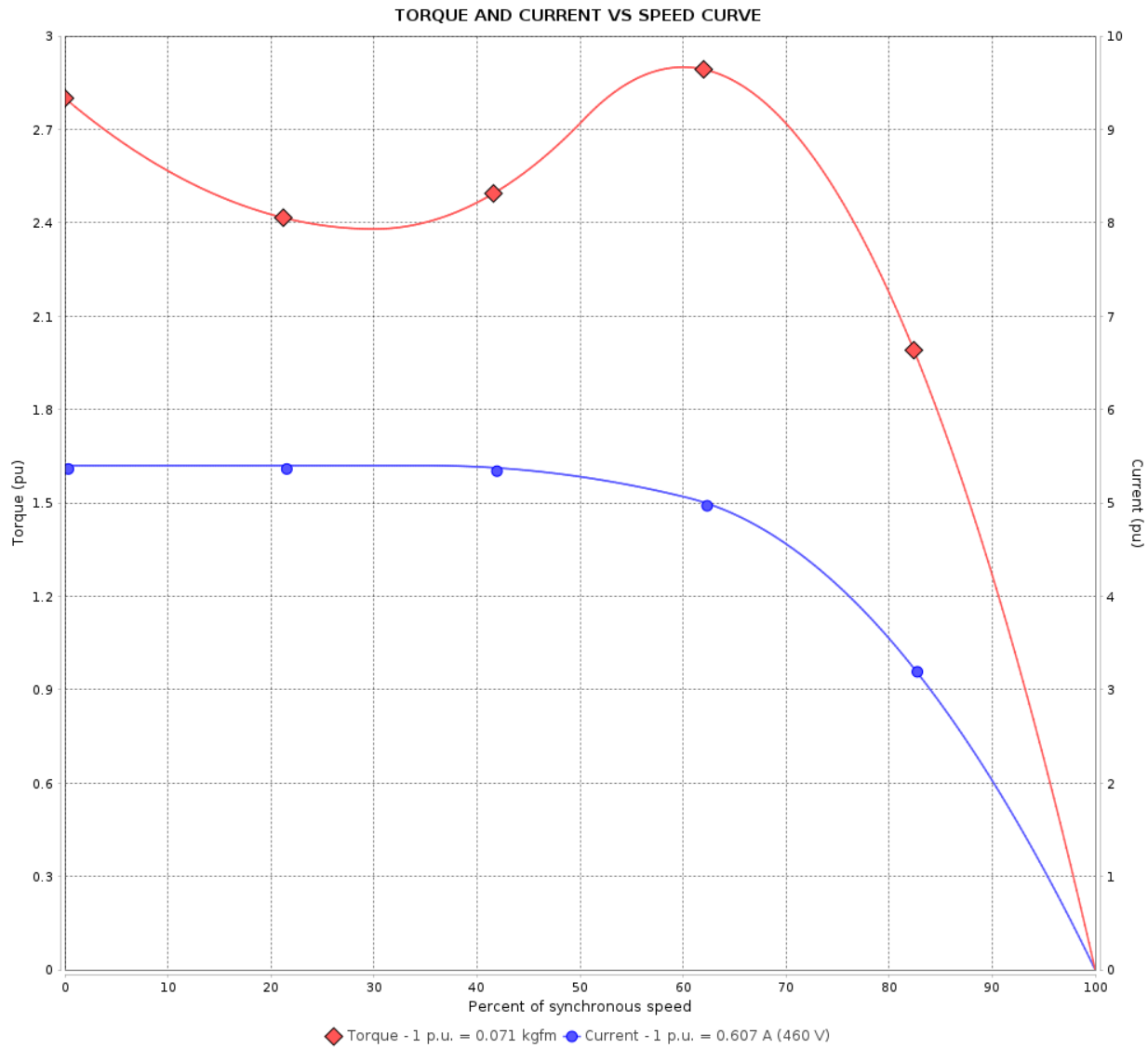
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 460 V 60 Hz 2P

Rated current	: 0.607 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: S1
Rated torque	: 0.071 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3415 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 18	Revision
Checked by				
Date	17/04/2023			

# LOAD PERFORMANCE CURVE

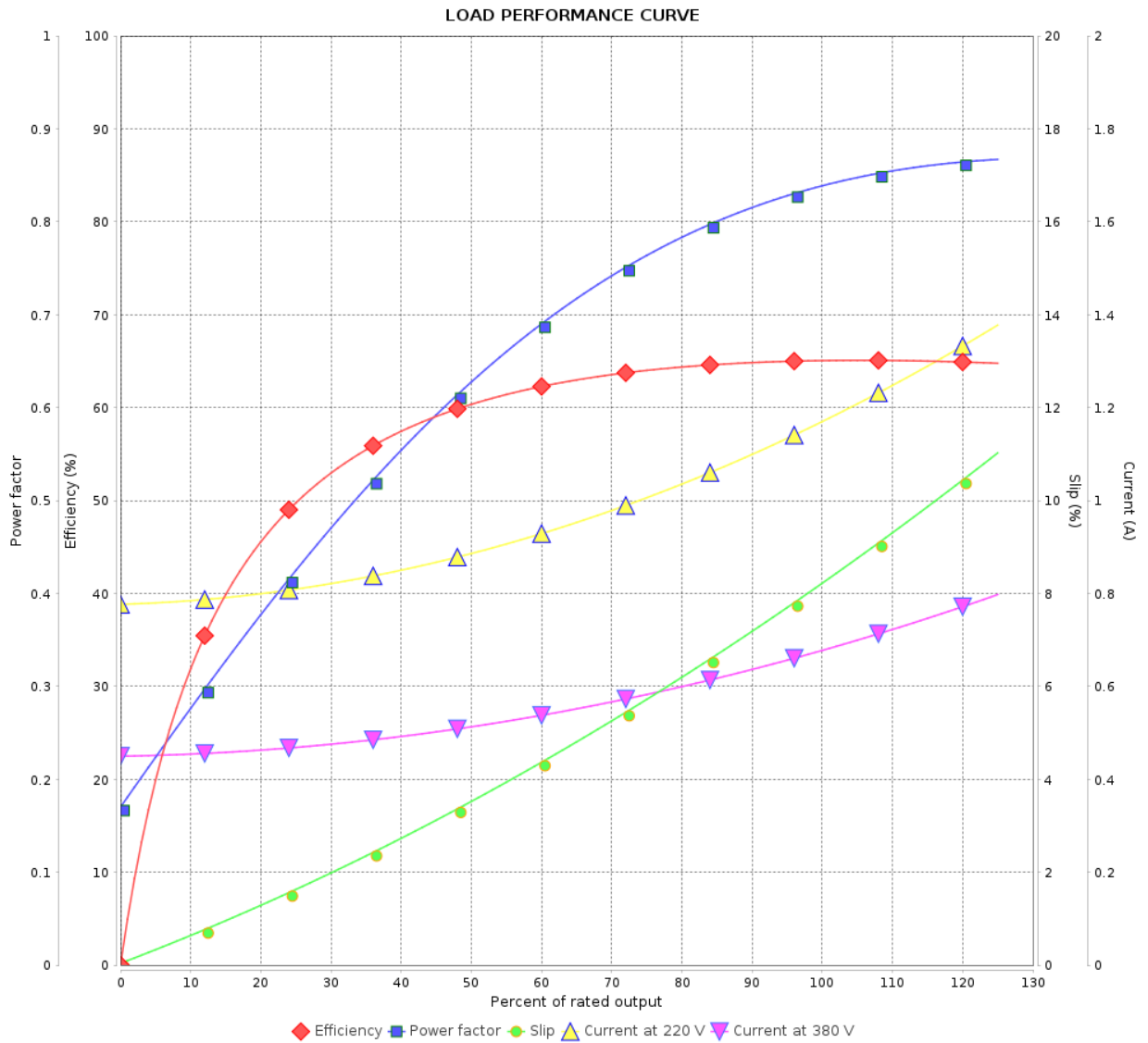
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 220/380 V 50 Hz 2P

Rated current : 1.20/0.696 A  
 LRC : 4.2  
 Rated torque : 0.089 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 200 %  
 Rated speed : 2750 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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				
Date				

# LOAD PERFORMANCE CURVE

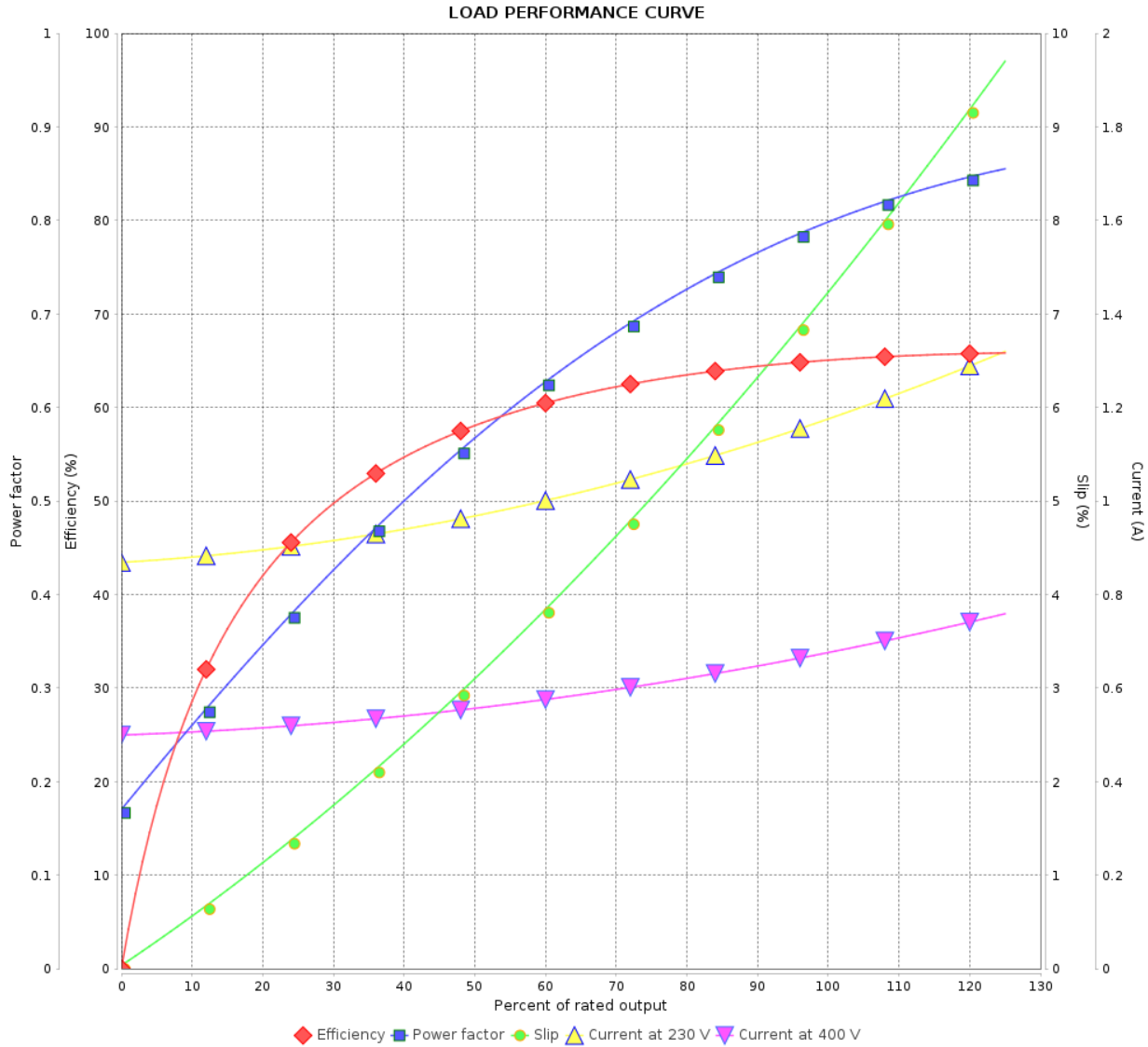
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 230/400 V 50 Hz 2P

Rated current : 1.21/0.694 A  
 LRC : 4.4  
 Rated torque : 0.088 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 220 %  
 Rated speed : 2780 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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 / 18	Revision
Checked by				
Date	17/04/2023			



# LOAD PERFORMANCE CURVE

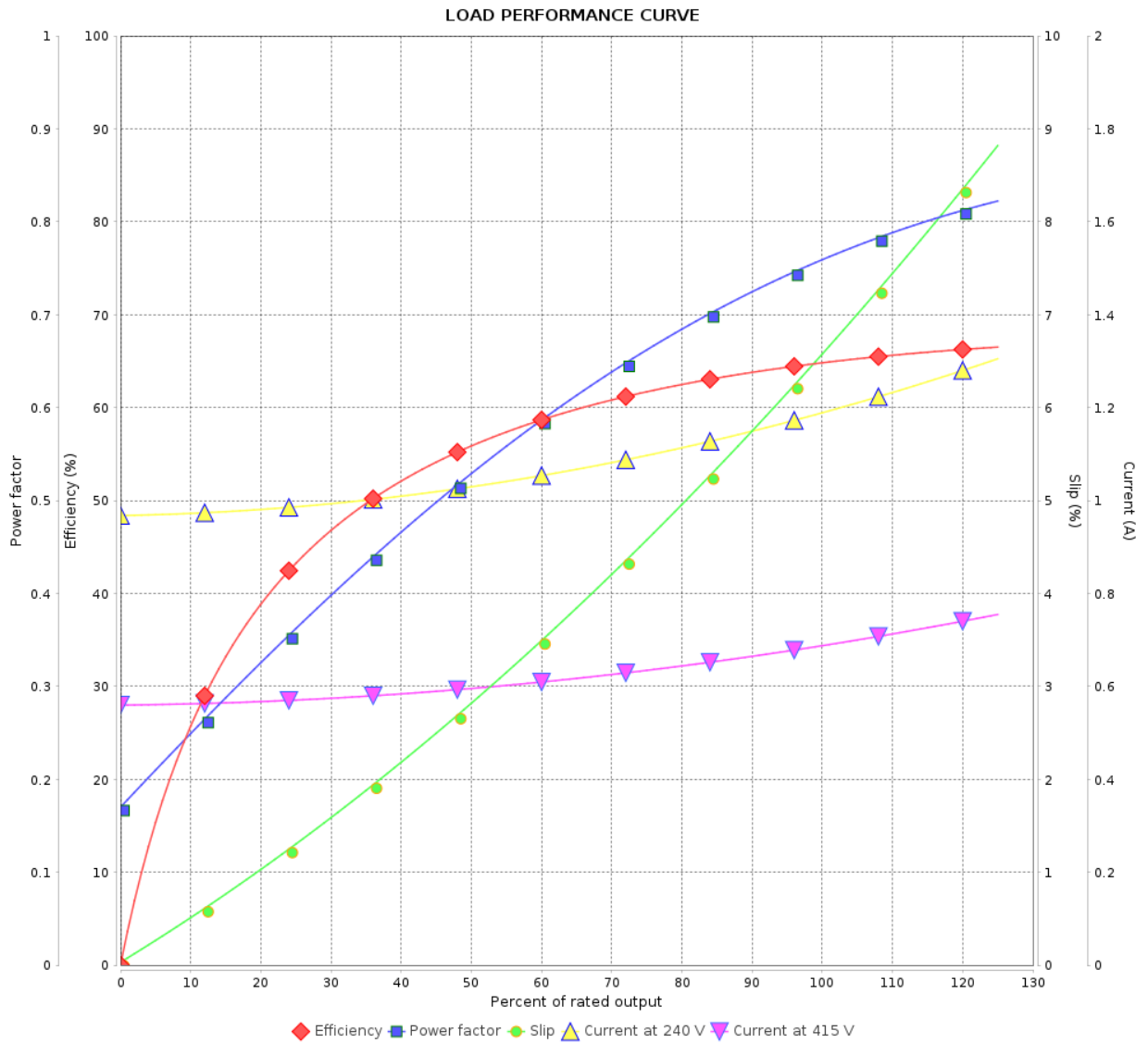
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 240/415 V 50 Hz 2P

Rated current : 1.22/0.706 A  
 LRC : 4.6  
 Rated torque : 0.087 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 2800 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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				
Date				

# LOAD PERFORMANCE CURVE

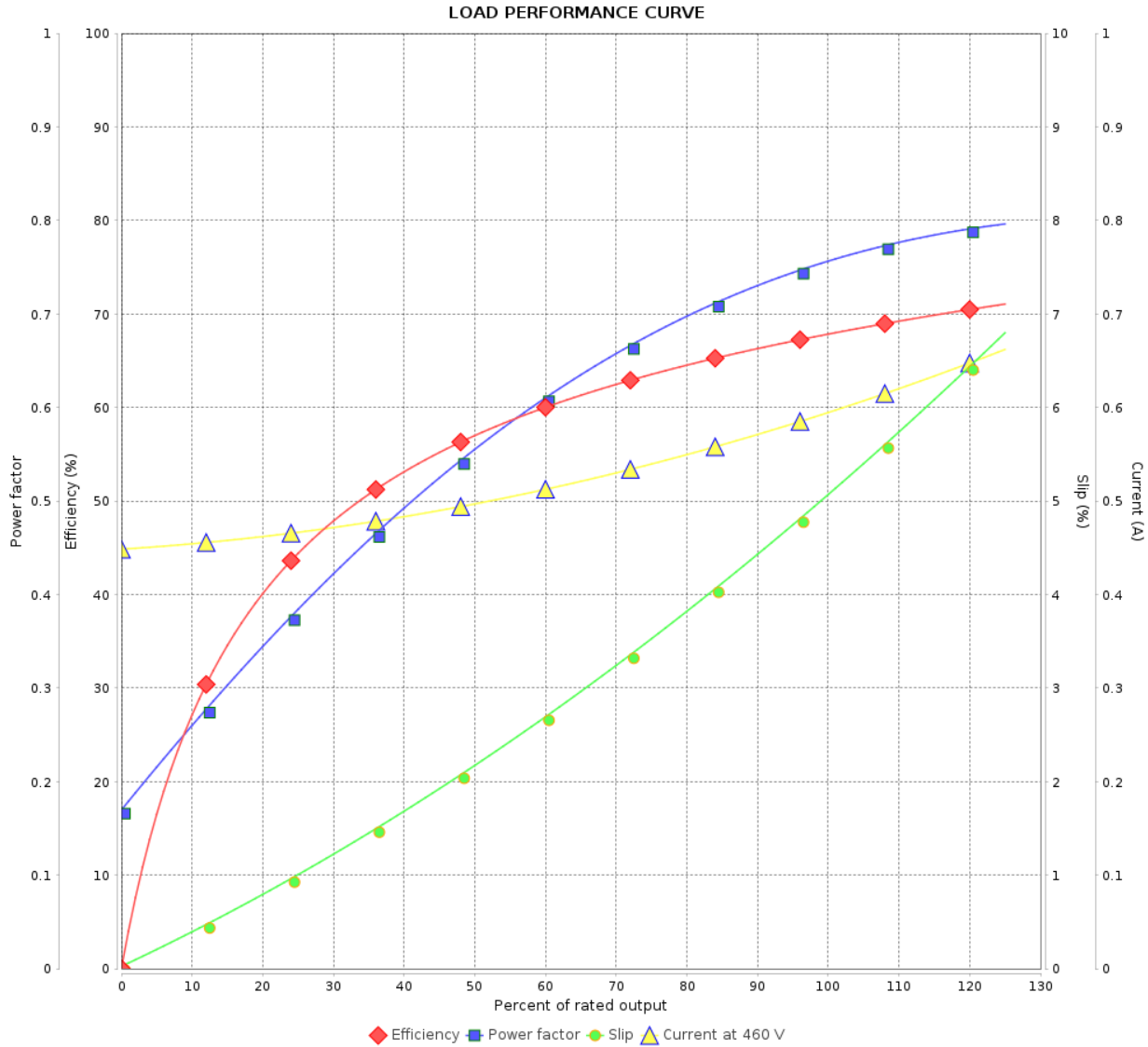
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 460 V 60 Hz 2P

Rated current : 0.607 A  
 LRC : 5.4  
 Rated torque : 0.071 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 290 %  
 Rated speed : 3415 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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 10 / 18	Revision
Checked by				
Date	17/04/2023			

# THERMAL LIMIT CURVE

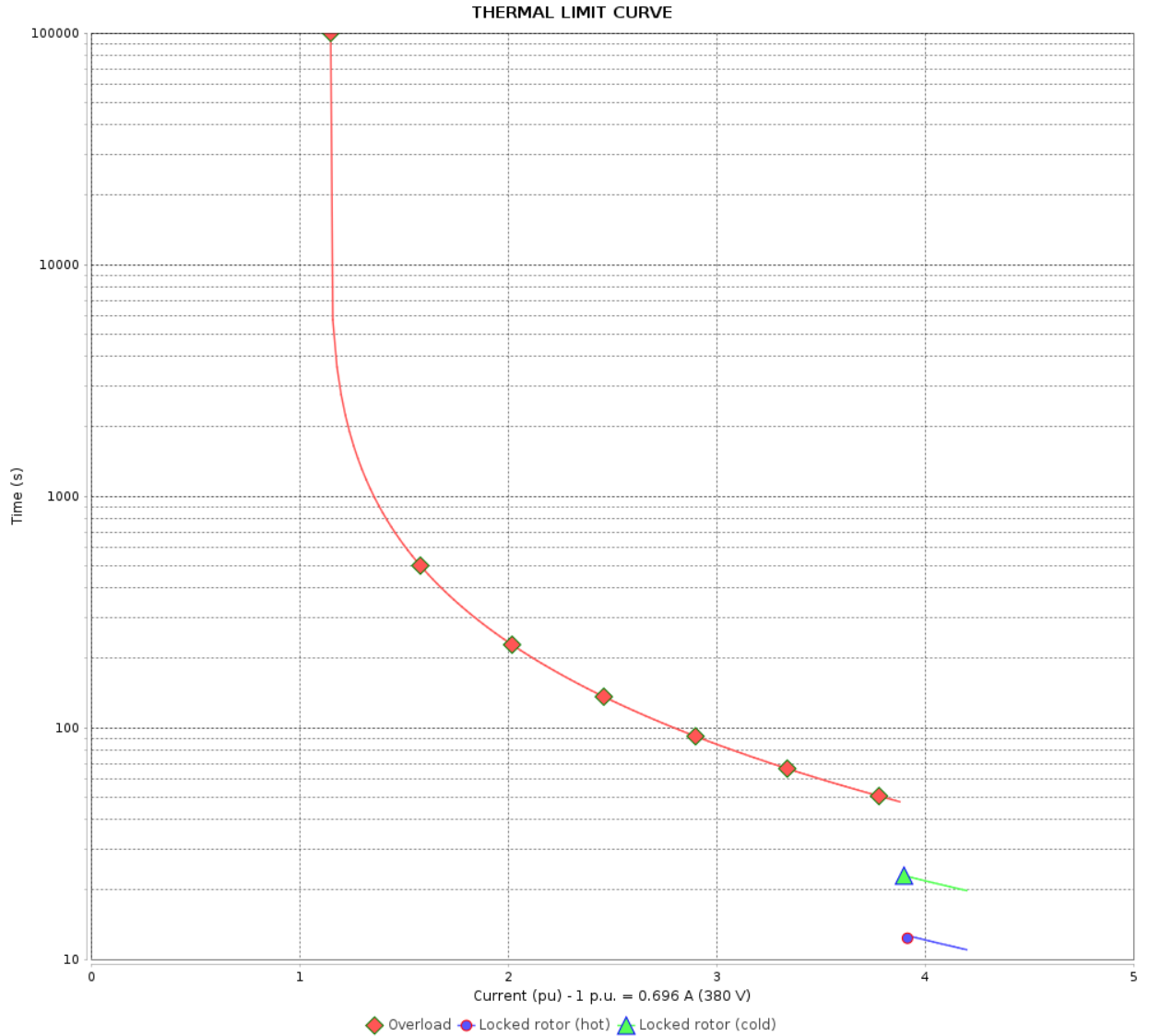
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 220/380 V 50 Hz 2P

Rated current	: 1.20/0.696 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 4.2	Duty cycle	: S1
Rated torque	: 0.089 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 2750 rpm	Design	: N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 11 / 18	Revision
Checked by				
Date	17/04/2023			

# THERMAL LIMIT CURVE

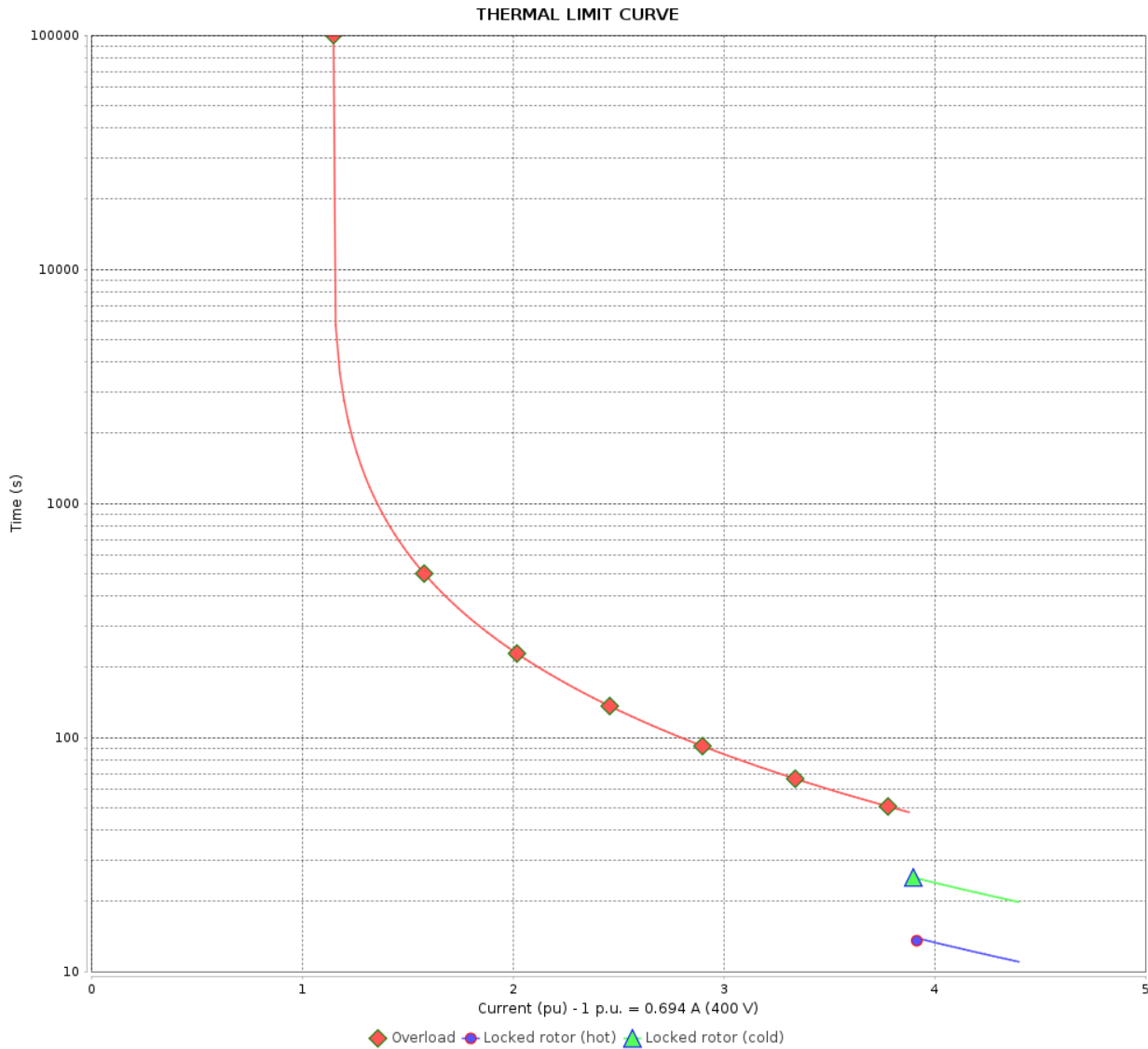
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 230/400 V 50 Hz 2P

Rated current : 1.21/0.694 A  
 LRC : 4.4  
 Rated torque : 0.088 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 220 %  
 Rated speed : 2780 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 18	Revision
Checked by				
Date	17/04/2023			

# THERMAL LIMIT CURVE

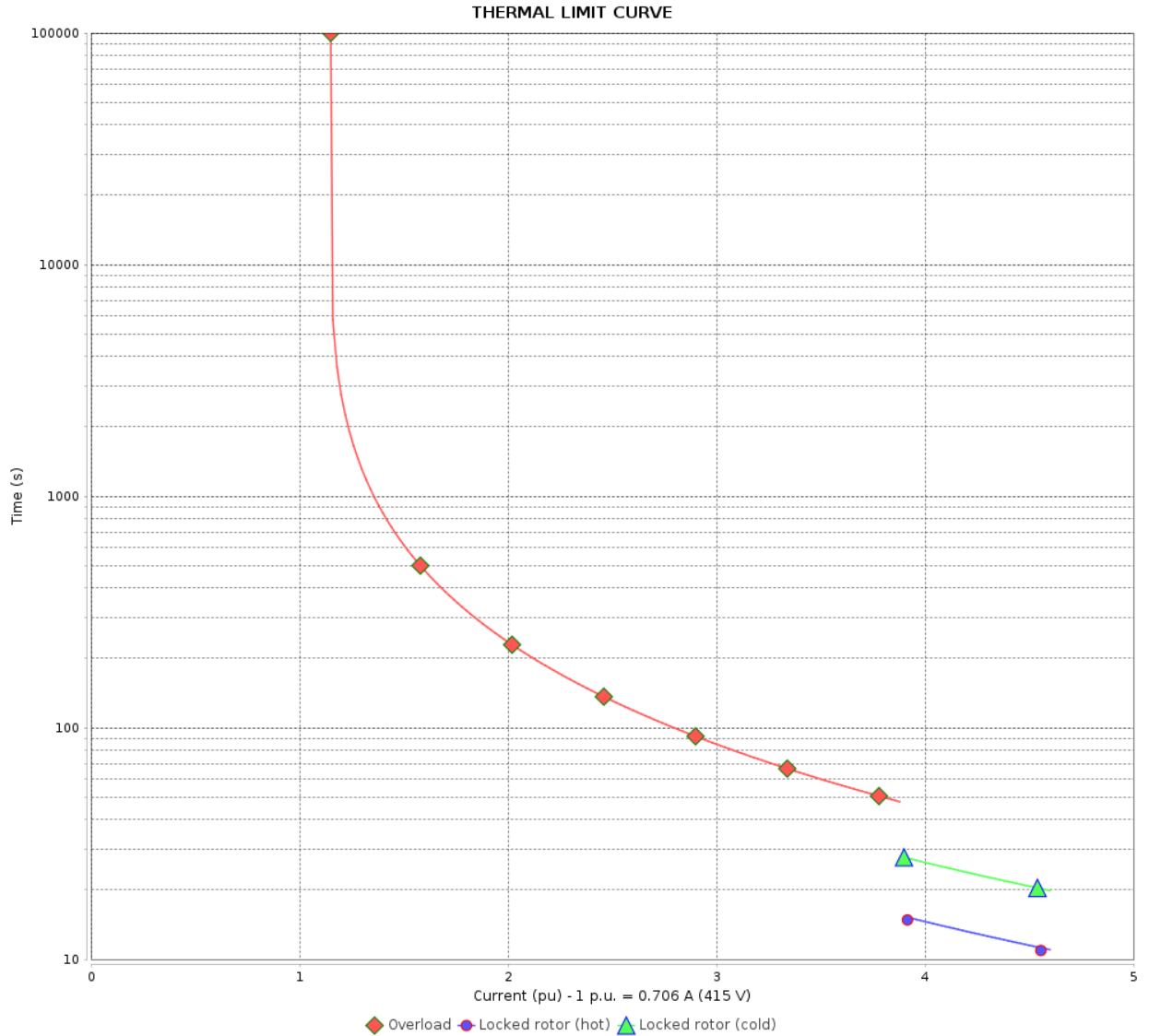
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 240/415 V 50 Hz 2P

Rated current : 1.22/0.706 A  
 LRC : 4.6  
 Rated torque : 0.087 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 2800 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
		Page	Revision	
		13 / 18		

# THERMAL LIMIT CURVE

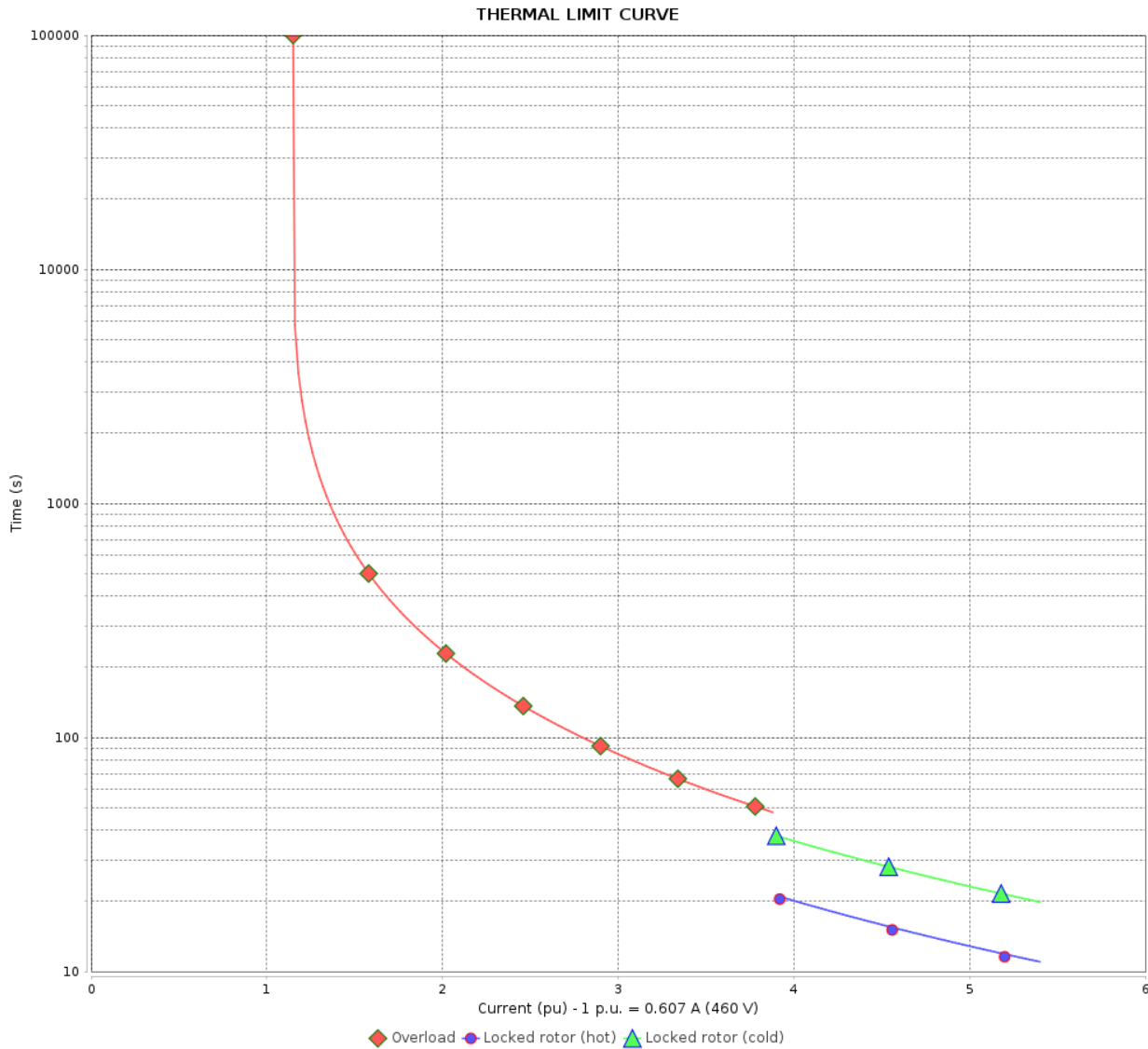
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 460 V 60 Hz 2P

Rated current	: 0.607 A	Moment of inertia (J)	: 0.0002 kgm <sup>2</sup>
LRC	: 5.4	Duty cycle	: S1
Rated torque	: 0.071 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3415 rpm	Design	: N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 18	Revision
Checked by				
Date	17/04/2023			

# VFD OPERATION CURVE

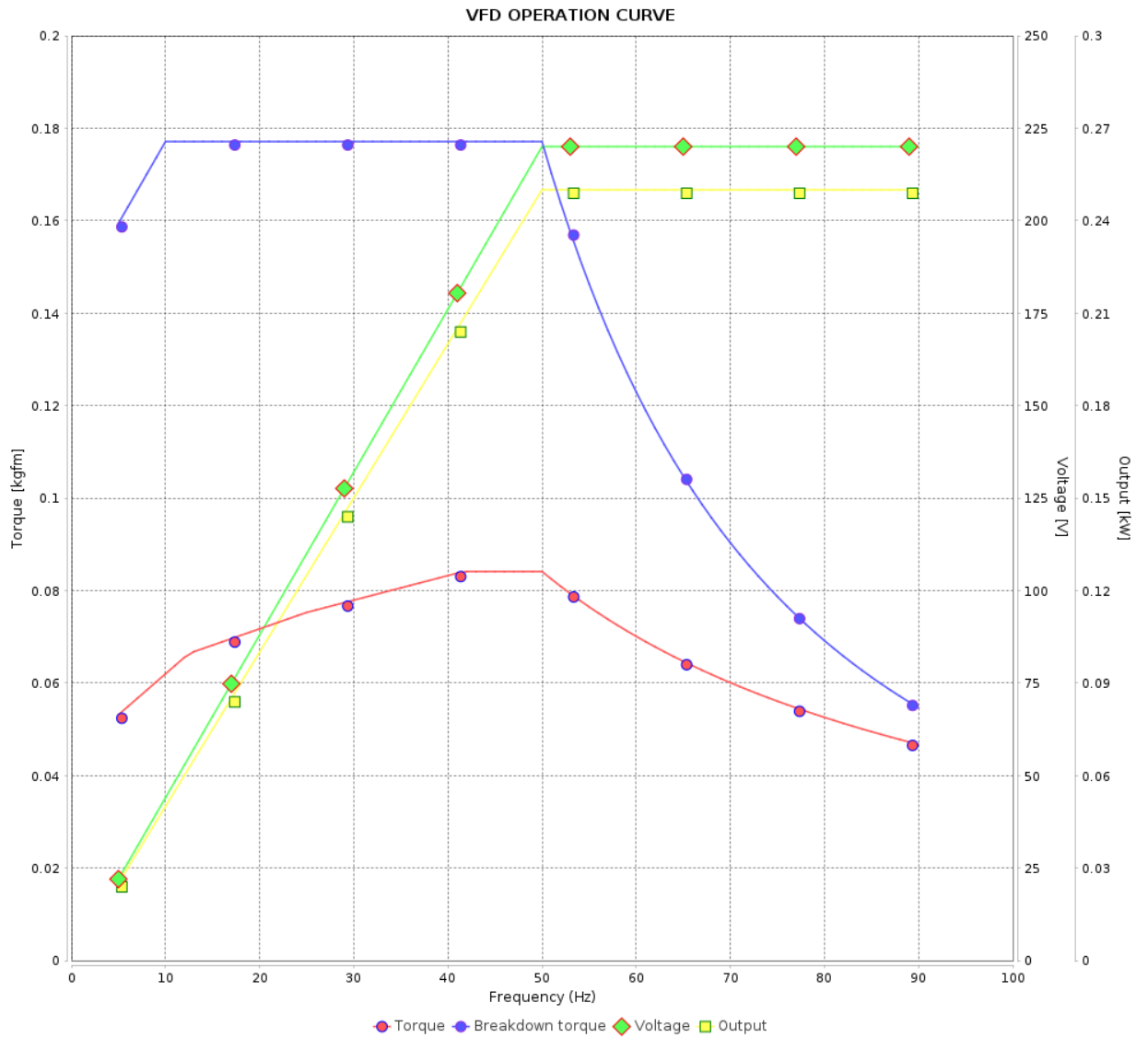
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 220/380 V 50 Hz 2P

Rated current : 1.20/0.696 A  
 LRC : 4.2  
 Rated torque : 0.089 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 200 %  
 Rated speed : 2750 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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				
Date				

# VFD OPERATION CURVE

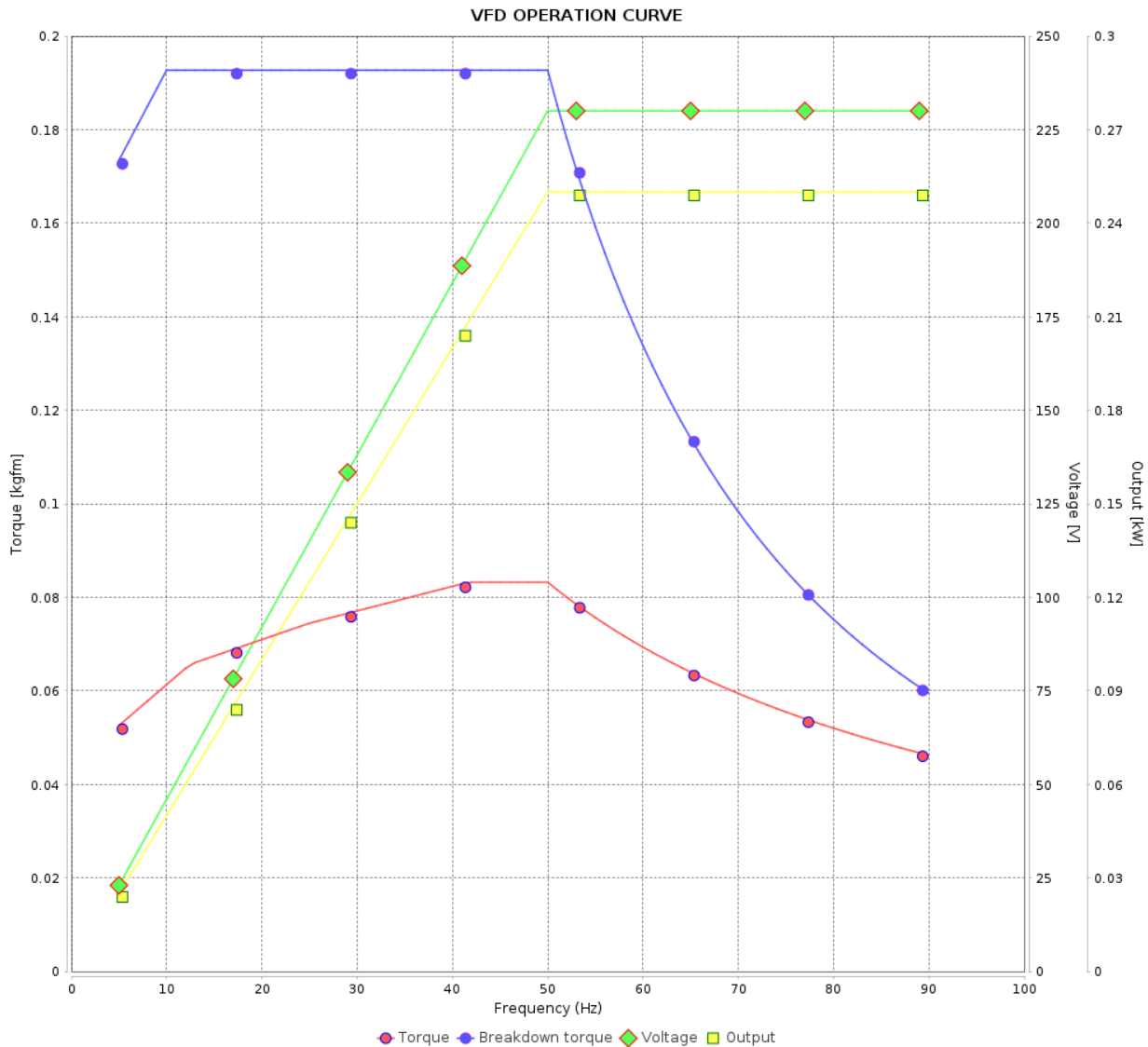
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 230/400 V 50 Hz 2P

Rated current : 1.21/0.694 A  
 LRC : 4.4  
 Rated torque : 0.088 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 220 %  
 Rated speed : 2780 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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				
Date				



# VFD OPERATION CURVE

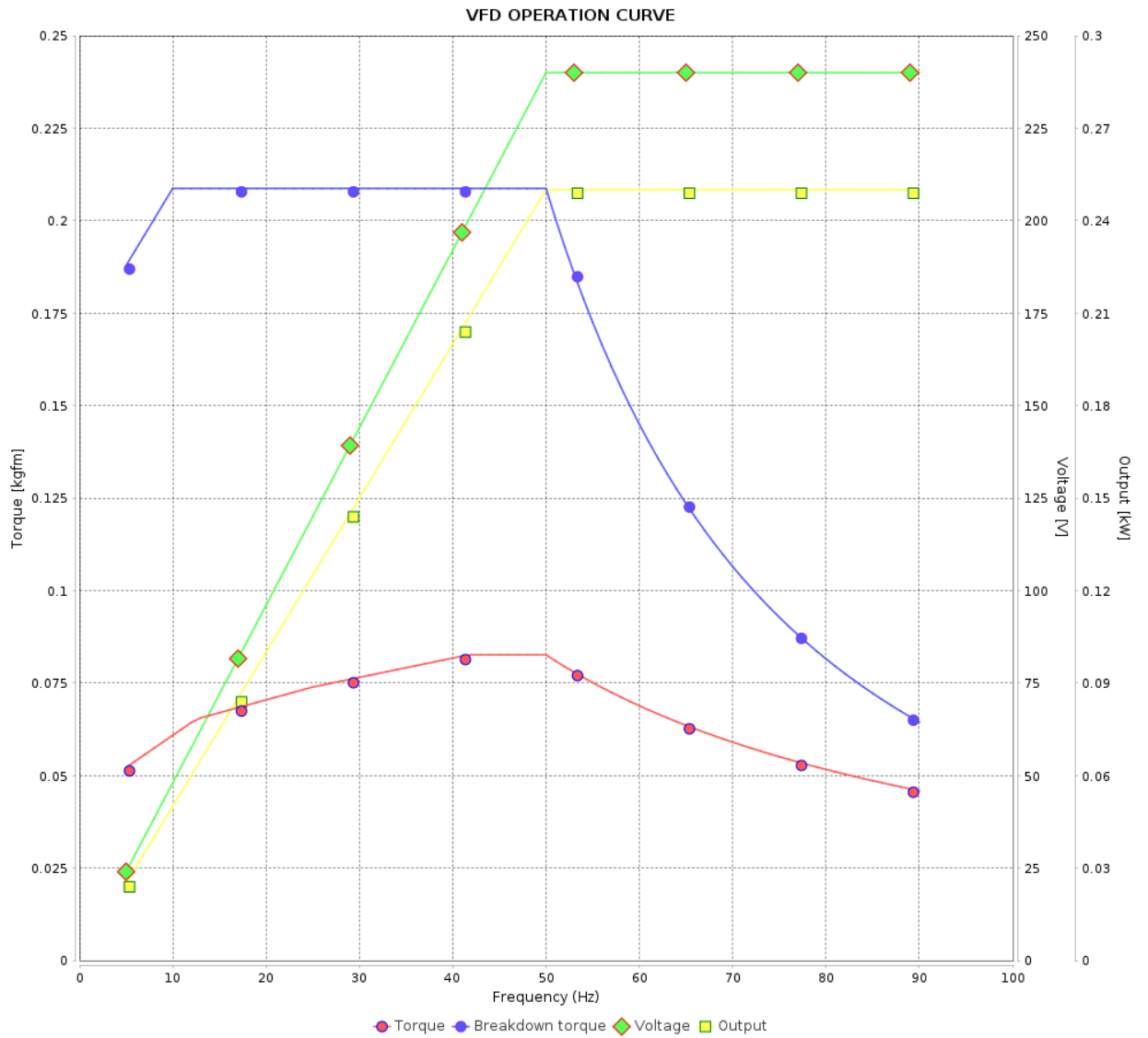
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 240/415 V 50 Hz 2P

Rated current : 1.22/0.706 A  
 LRC : 4.6  
 Rated torque : 0.087 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 2800 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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 17 / 18	Revision
Checked by				
Date	17/04/2023			

# VFD OPERATION CURVE

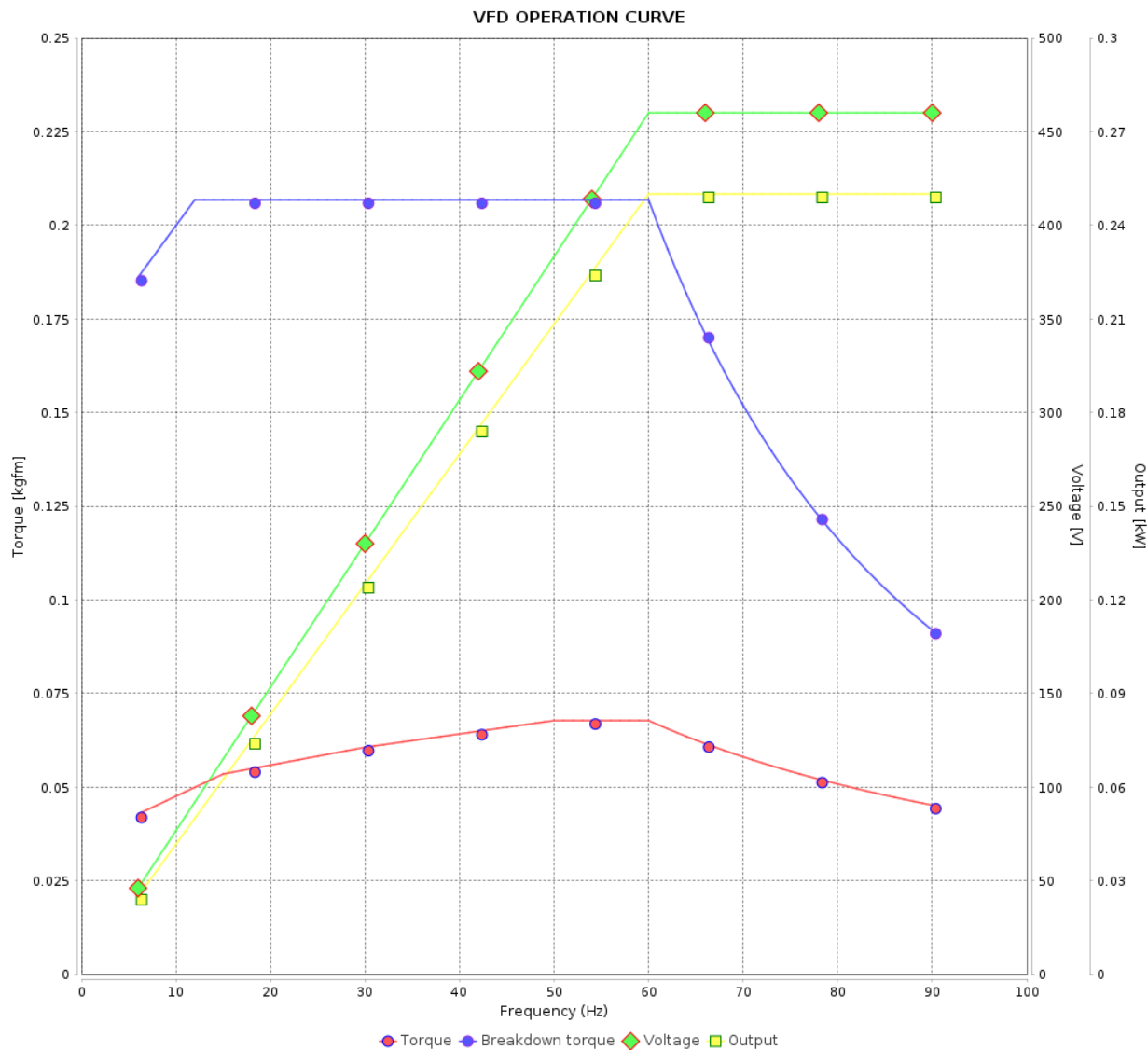
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : MULTIMOUNTING

Product code : 11692824



Performance : 460 V 60 Hz 2P

Rated current : 0.607 A  
 LRC : 5.4  
 Rated torque : 0.071 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 290 %  
 Rated speed : 3415 rpm

Moment of inertia (J) : 0.0002 kgm<sup>2</sup>  
 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 18 / 18	Revision
Checked by				
Date	17/04/2023			