

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line : IE3 Three-Phase	Product code : 12867349			
Frame : 71 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 : B3T Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 11.1 kg Moment of inertia (J) : 0.0005 kgm ²			
Output [kW]	0.550			
Poles	2			
Frequency [Hz]	50			
Rated voltage [V]	220/380			
Rated current [A]	2.11/1.22			
L. R. Amperes [A]	11.6/6.71			
LRC [A]	5.5			
No load current [A]	0.950/0.550			
Rated speed [RPM]	2805			
Slip [%]	6.50			
Rated torque [kgfm]	0.191			
Locked rotor torque [%]	220			
Breakdown torque [%]	229			
Service factor	1.00			
Temperature rise	80 K			
Locked rotor time	27s (cold) 15s (hot)			
Noise level ²	56.0 dB(A)			
Efficiency (%)	25%			
	50%			
	75%			
	100%			
Power Factor	25%			
	50%			
	75%			
	100%			
Losses at normative operating points (speed;torque), in percentage of rated output power				
Losses (%)	P1 (0,9;1,0)			
	P2 (0,5;1,0)			
	P3 (0,25;1,0)			
	P4 (0,9;0,5)			
	P5 (0,5;0,5)			
	P6 (0,5;0,25)			
	P7 (0,25;0,25)			
Bearing type : Drive end 6202 ZZ Non drive end 6202 ZZ Sealing : V'Ring V'Ring Lubrication interval : - - Lubricant amount : - - Lubricant type : Mobil Polyrex EM	Foundation loads Max. traction : 12 kgf Max. compression : 23 kgf			
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	08/08/2022		1 / 19	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	08/08/2022		2 / 19	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 3 / 19
Checked by				
Date	08/08/2022			
			Revision	

TORQUE AND CURRENT VS SPEED CURVE

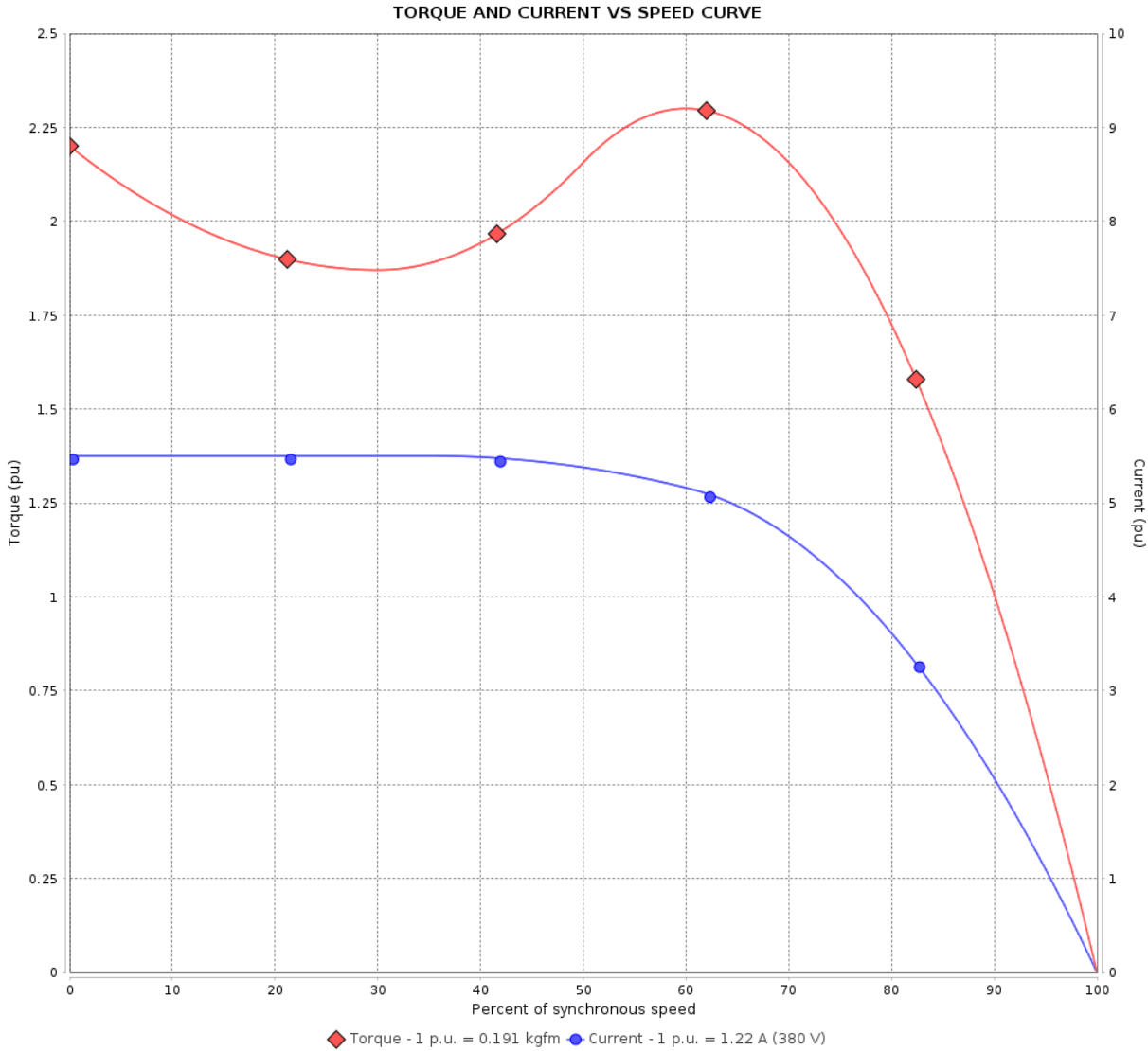
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 220/380 V 50 Hz 2P

Rated current	: 2.11/1.22 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 5.5	Duty cycle	: S1
Rated torque	: 0.191 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2805 rpm	Design	: N

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 19	Revision
Checked by				
Date	08/08/2022			

TORQUE AND CURRENT VS SPEED CURVE

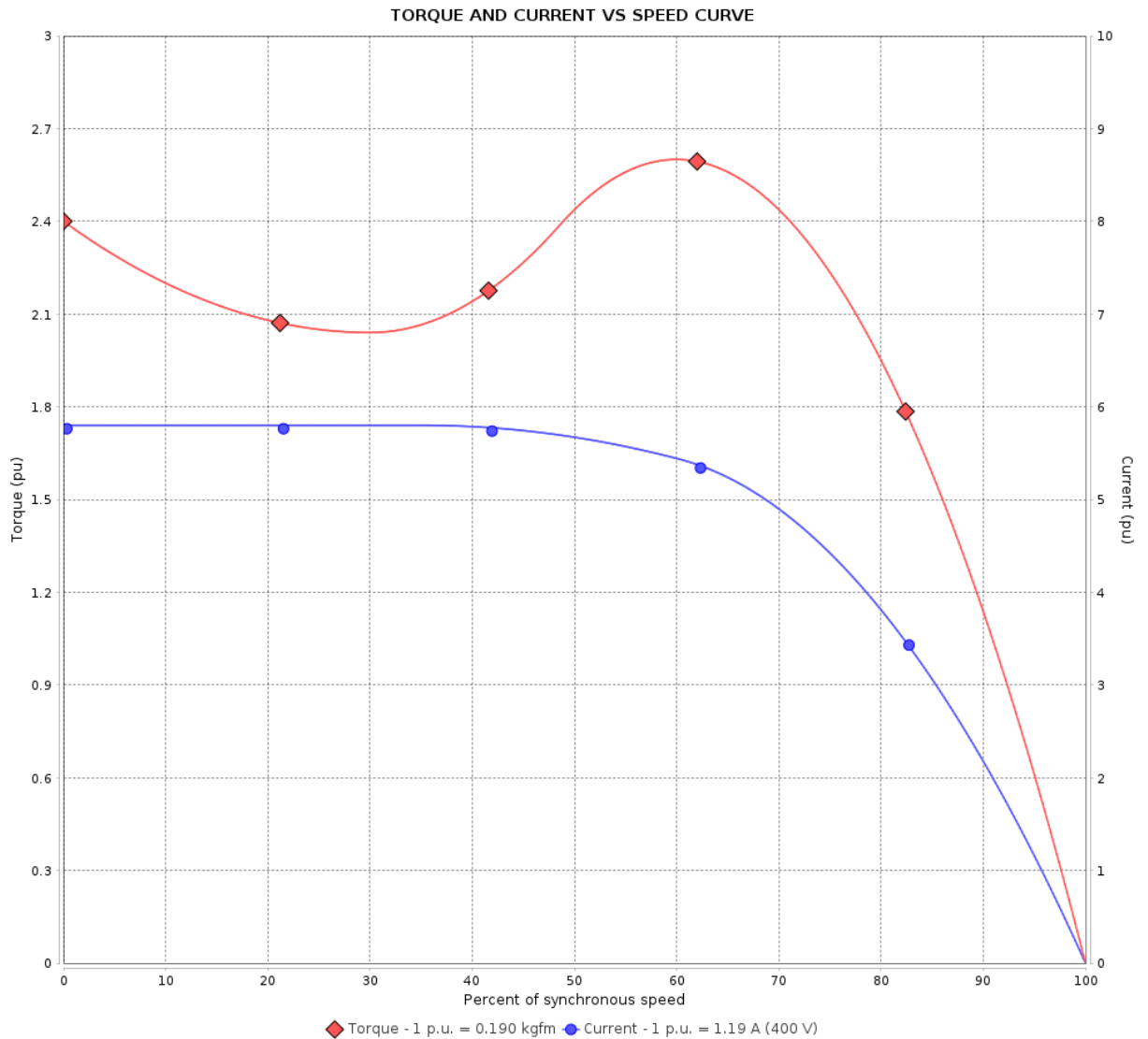
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 230/400 V 50 Hz 2P

Rated current	: 2.07/1.19 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 5.8	Duty cycle	: S1
Rated torque	: 0.190 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2825 rpm	Design	: N

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 19	Revision
Checked by				
Date	08/08/2022			

TORQUE AND CURRENT VS SPEED CURVE

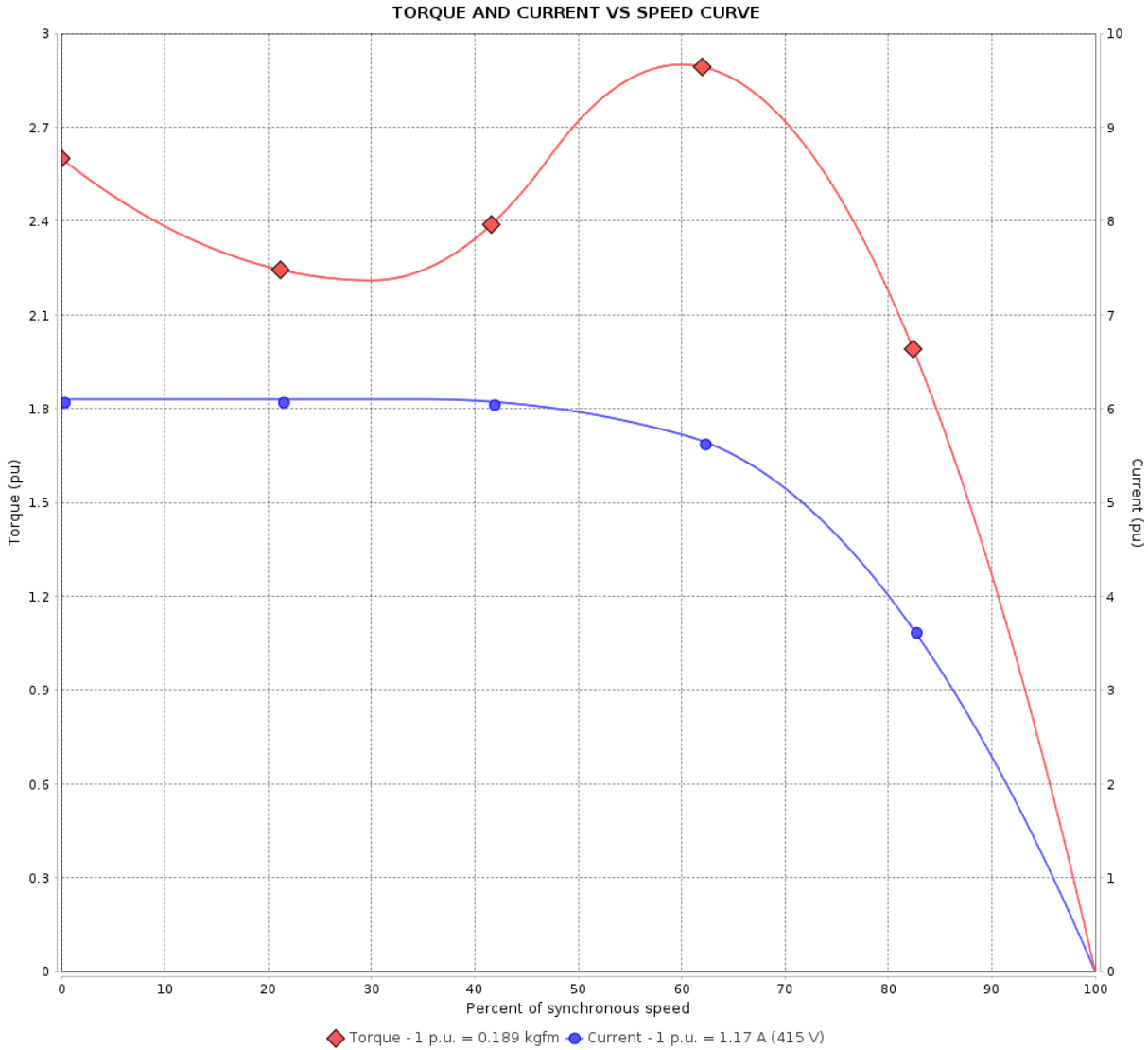
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 240/415 V 50 Hz 2P

Rated current	: 2.02/1.17 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 6.1	Duty cycle	: S1
Rated torque	: 0.189 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2840 rpm	Design	: N

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		6 / 19		
Date	08/08/2022			

TORQUE AND CURRENT VS SPEED CURVE

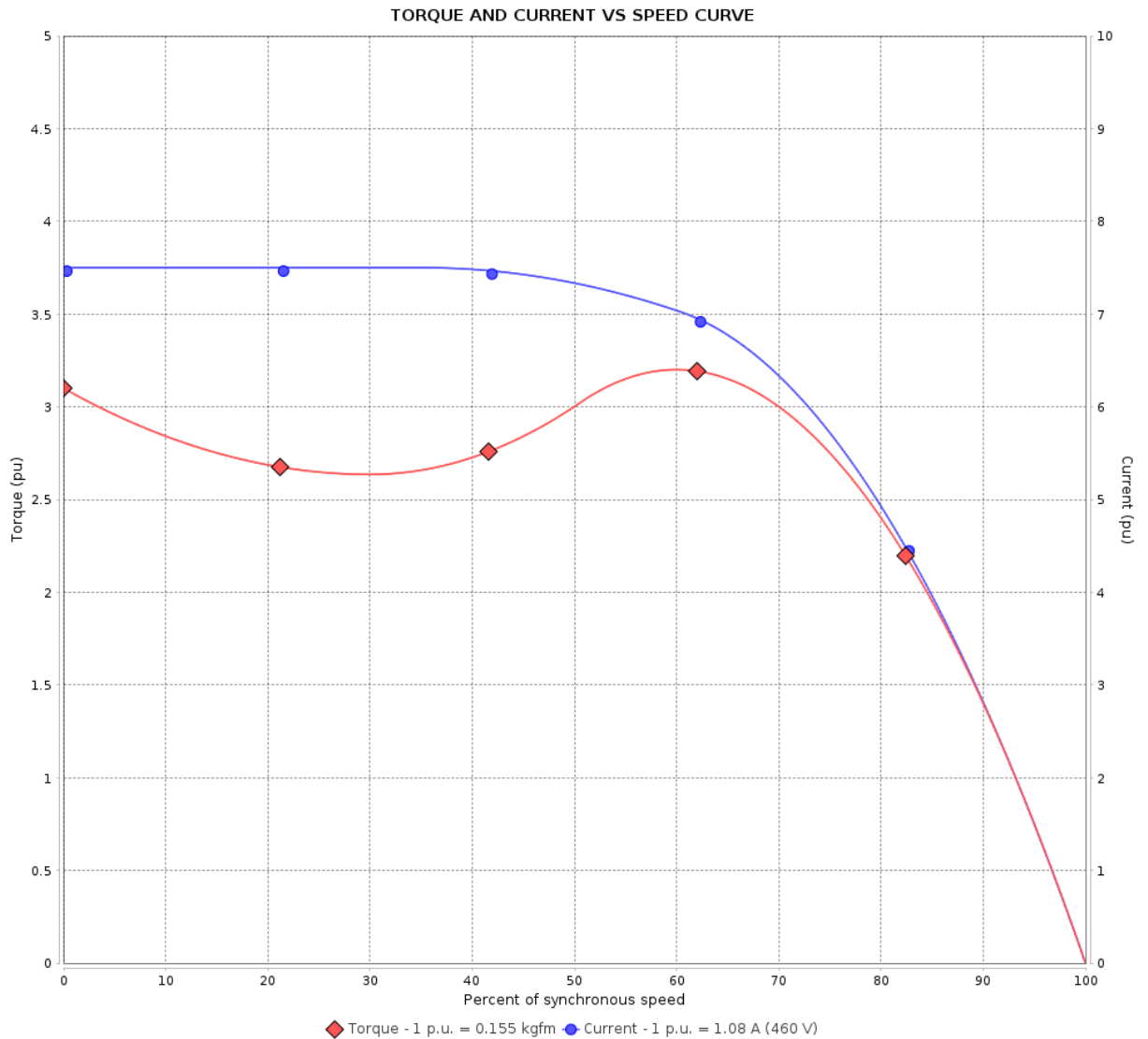
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 460 V 60 Hz 2P

Rated current	: 1.08 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 0.155 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 3450 rpm	Design	: N

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 7 / 19	Revision
Checked by				
Date	08/08/2022			

LOAD PERFORMANCE CURVE

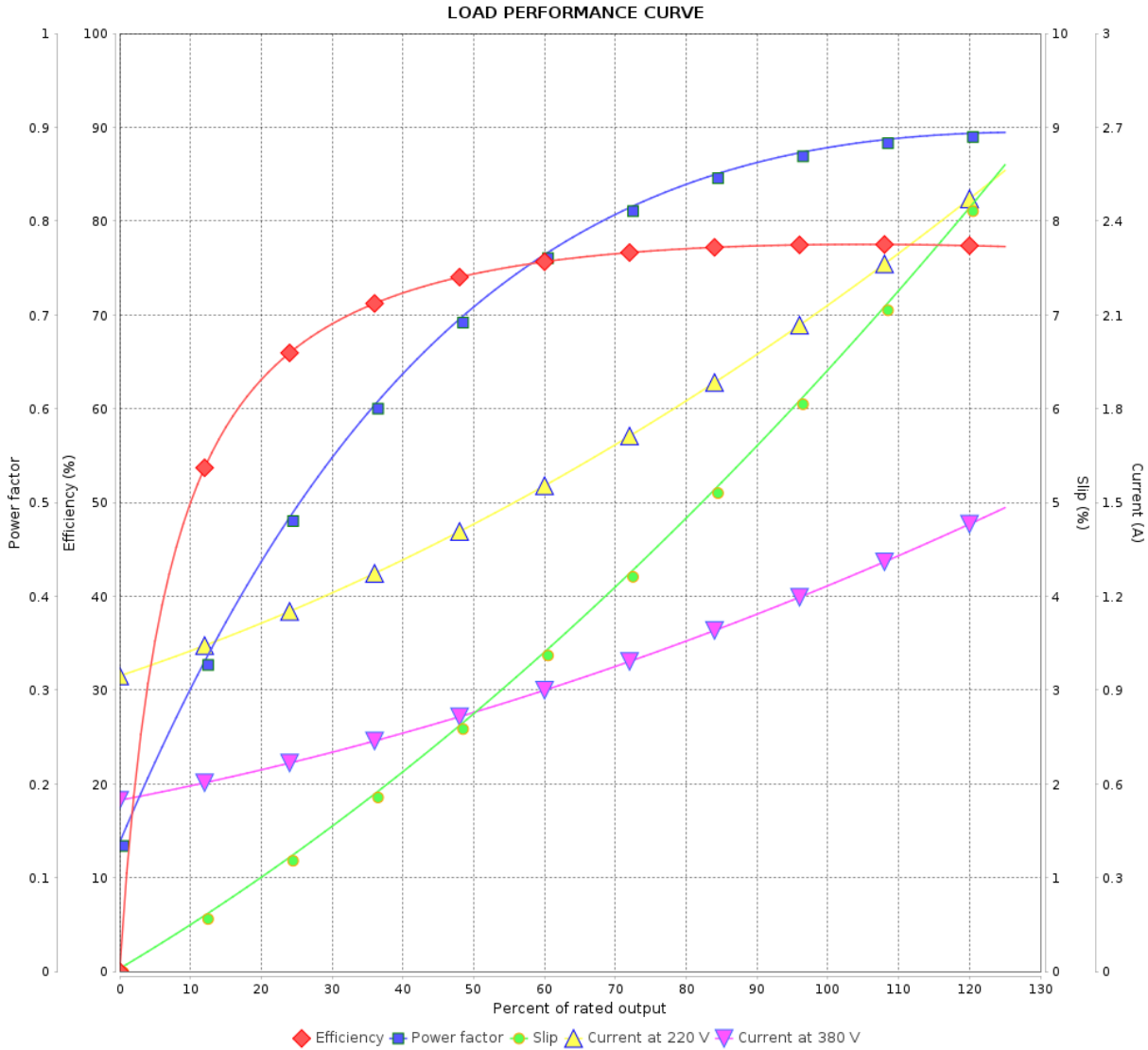
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 220/380 V 50 Hz 2P

Rated current : 2.11/1.22 A
 LRC : 5.5
 Rated torque : 0.191 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 229 %
 Rated speed : 2805 rpm

Moment of inertia (J) : 0.0005 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				
Date				

LOAD PERFORMANCE CURVE

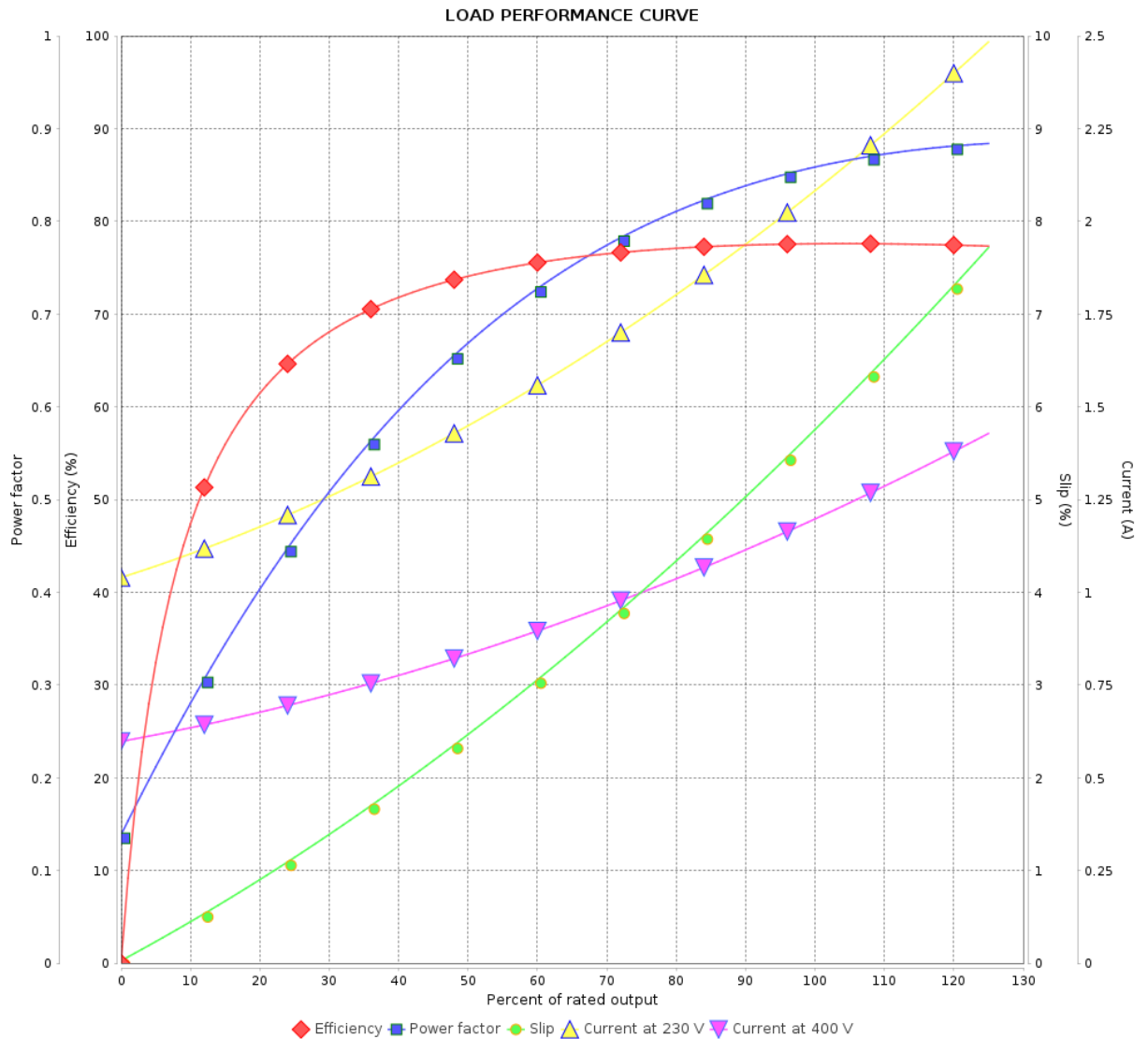
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 230/400 V 50 Hz 2P

Rated current : 2.07/1.19 A
 LRC : 5.8
 Rated torque : 0.190 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.0005 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 9 / 19	Revision
Checked by				
Date	08/08/2022			

LOAD PERFORMANCE CURVE

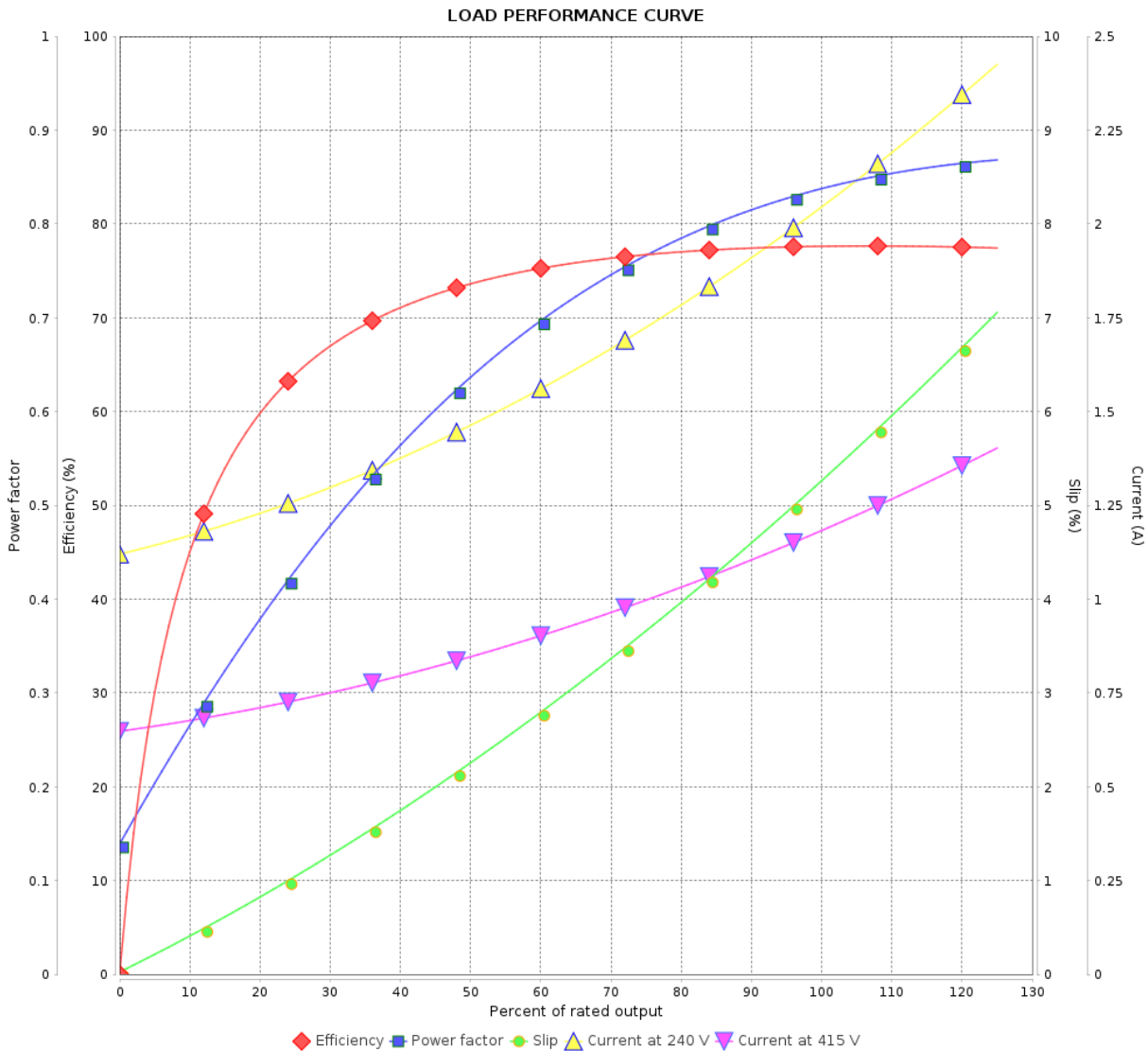
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 240/415 V 50 Hz 2P

Rated current : 2.02/1.17 A
 LRC : 6.1
 Rated torque : 0.189 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 290 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0005 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				
Date				

LOAD PERFORMANCE CURVE

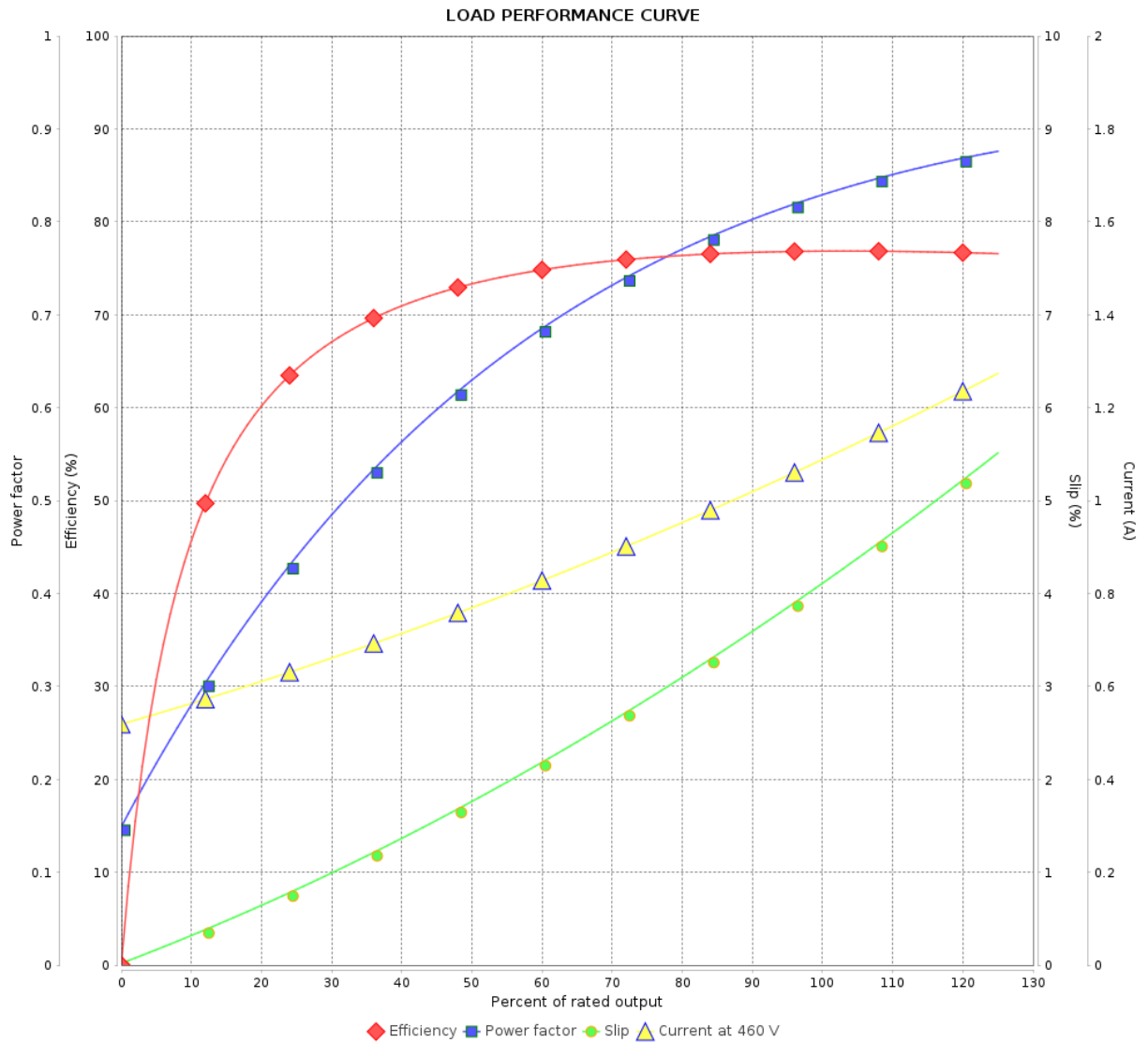
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 460 V 60 Hz 2P

Rated current : 1.08 A
 LRC : 7.5
 Rated torque : 0.155 kgfm
 Locked rotor torque : 310 %
 Breakdown torque : 320 %
 Rated speed : 3450 rpm

Moment of inertia (J) : 0.0005 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		11 / 19		
Date		08/08/2022		

THERMAL LIMIT CURVE

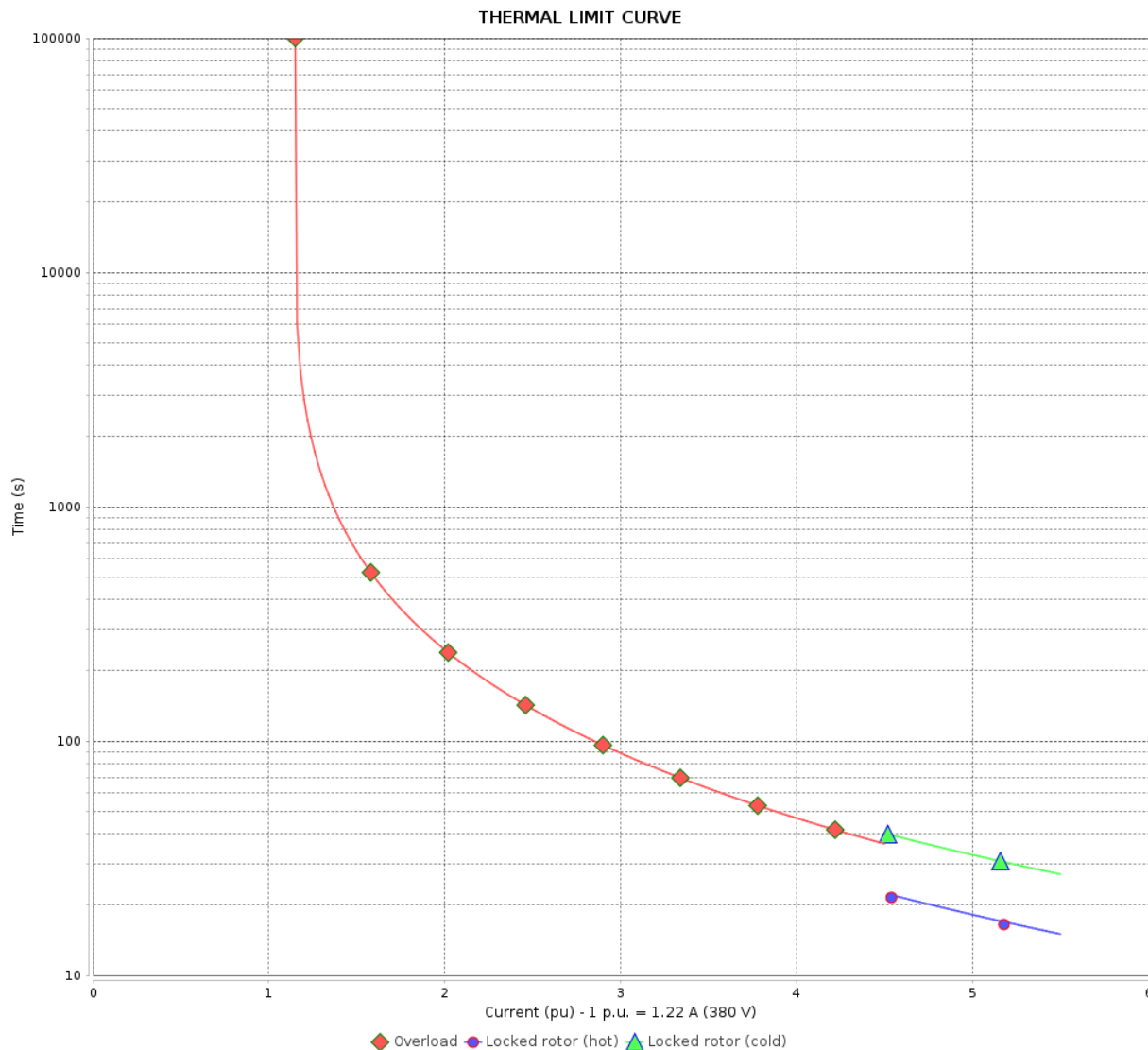
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 220/380 V 50 Hz 2P

Rated current : 2.11/1.22 A
 LRC : 5.5
 Rated torque : 0.191 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 229 %
 Rated speed : 2805 rpm

Moment of inertia (J) : 0.0005 kgm²
 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 / 19	Revision
Checked by				
Date	08/08/2022			

THERMAL LIMIT CURVE

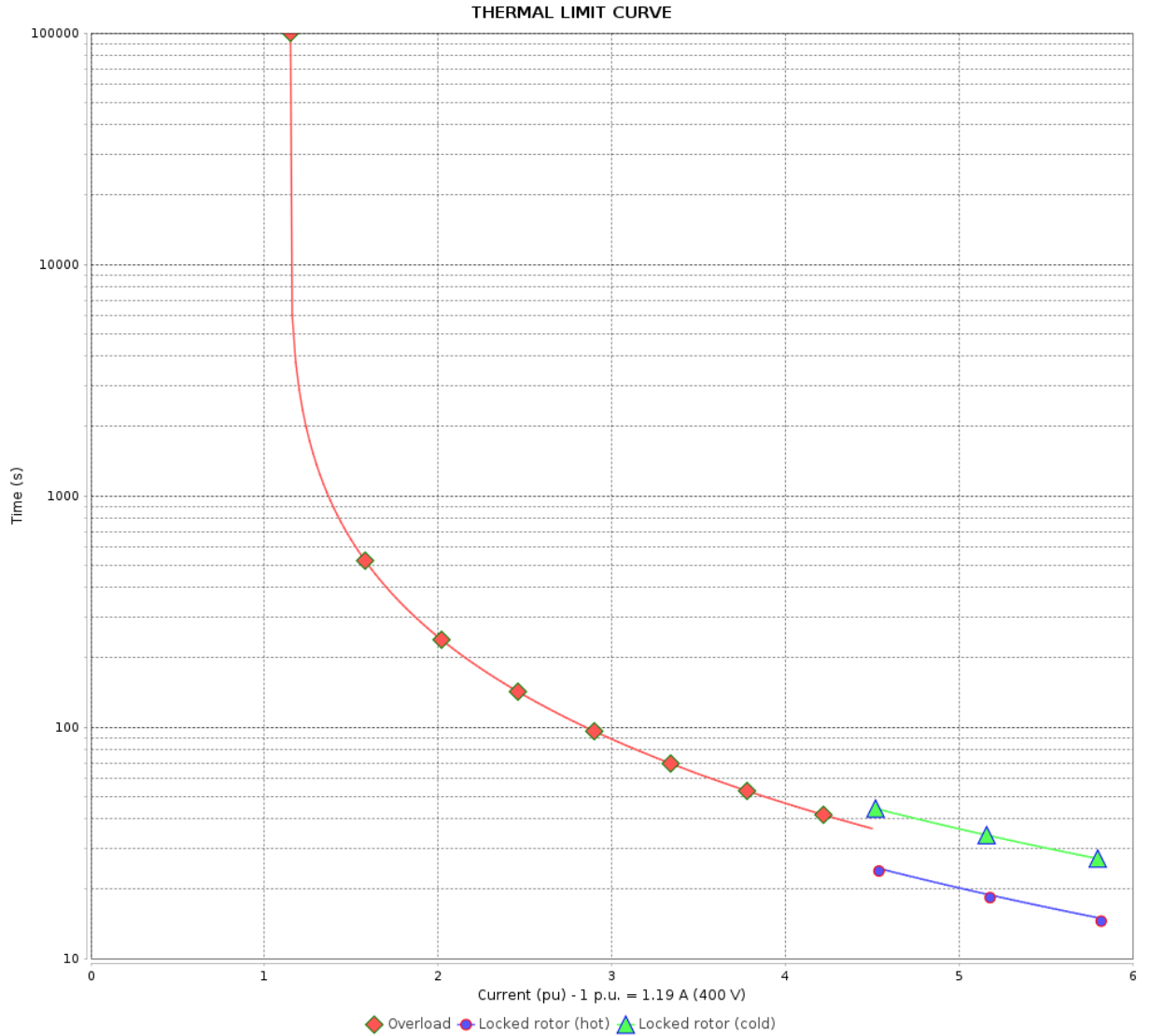
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 230/400 V 50 Hz 2P

Rated current : 2.07/1.19 A
 LRC : 5.8
 Rated torque : 0.190 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.0005 kgm²
 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	Revision
Checked by				
Date	08/08/2022			

THERMAL LIMIT CURVE

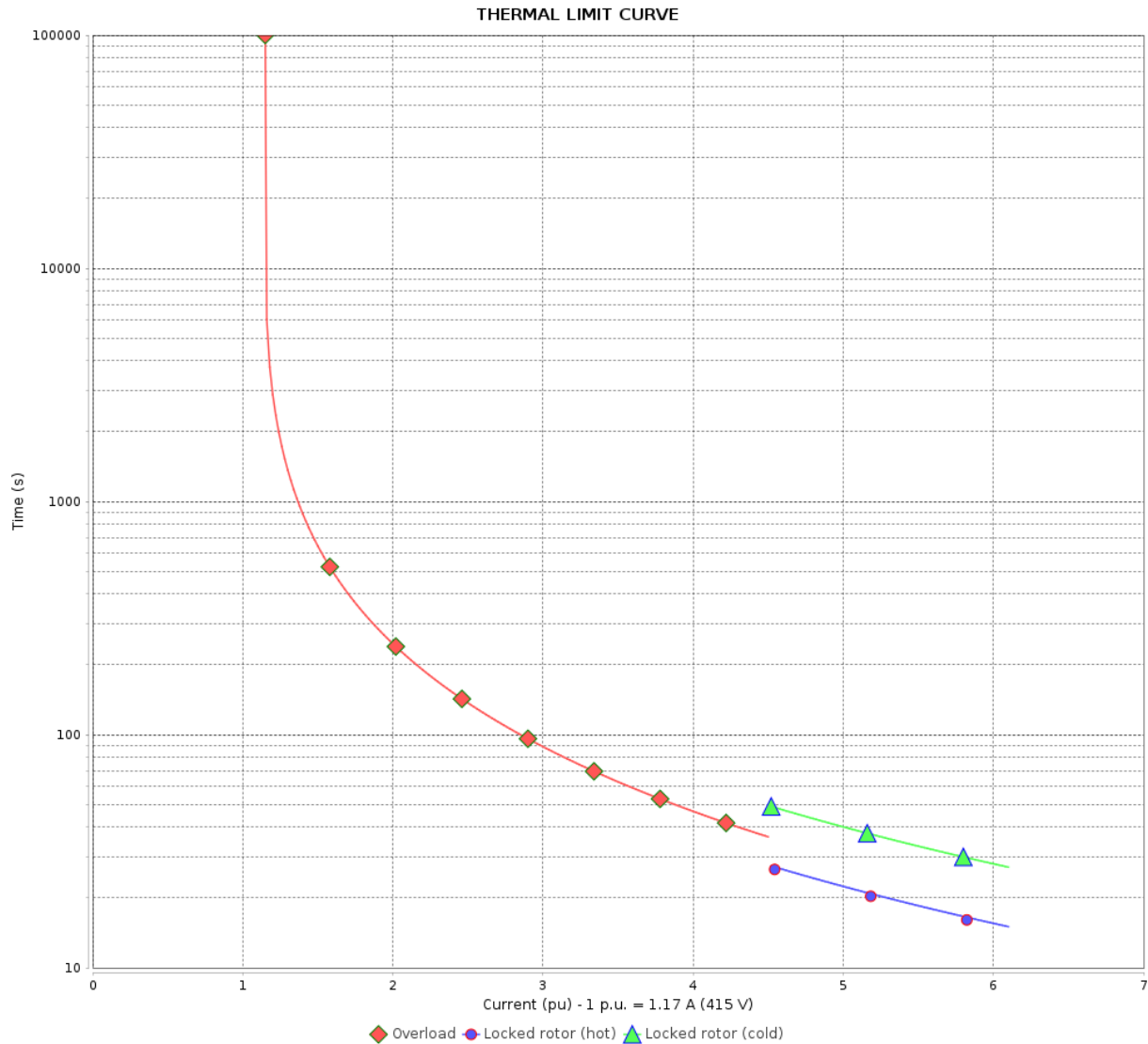
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 240/415 V 50 Hz 2P

Rated current	: 2.02/1.17 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 6.1	Duty cycle	: S1
Rated torque	: 0.189 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2840 rpm	Design	: N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 19	Revision
Checked by				
Date	08/08/2022			

THERMAL LIMIT CURVE

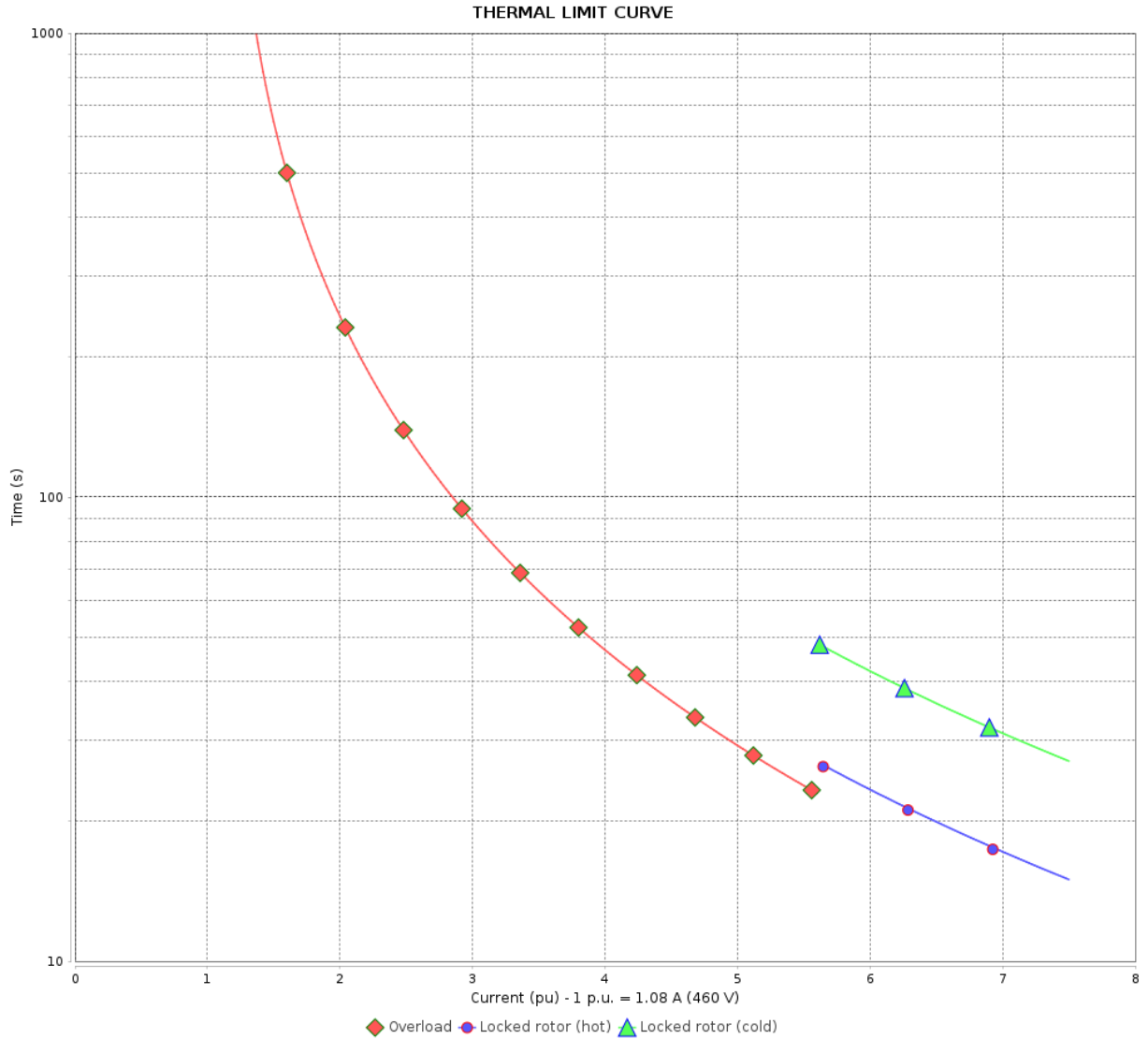
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 460 V 60 Hz 2P

Rated current	: 1.08 A	Moment of inertia (J)	: 0.0005 kgm ²
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 0.155 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 3450 rpm	Design	: N

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 15 / 19	Revision
Checked by				
Date	08/08/2022			

VFD OPERATION CURVE

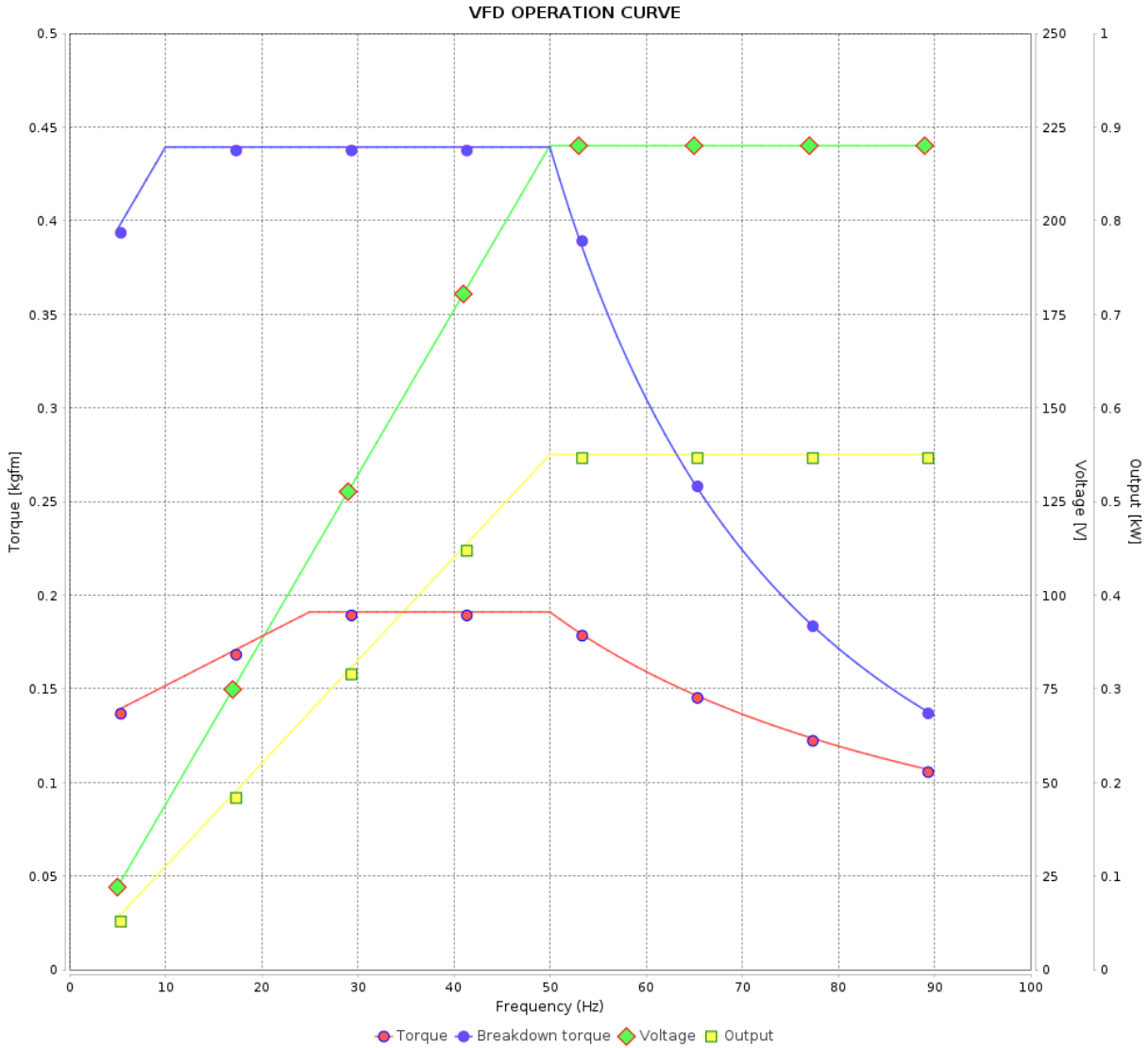
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 220/380 V 50 Hz 2P

Rated current : 2.11/1.22 A
 LRC : 5.5
 Rated torque : 0.191 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 229 %
 Rated speed : 2805 rpm

Moment of inertia (J) : 0.0005 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 16 / 19	Revision
Checked by				
Date	08/08/2022			

VFD OPERATION CURVE

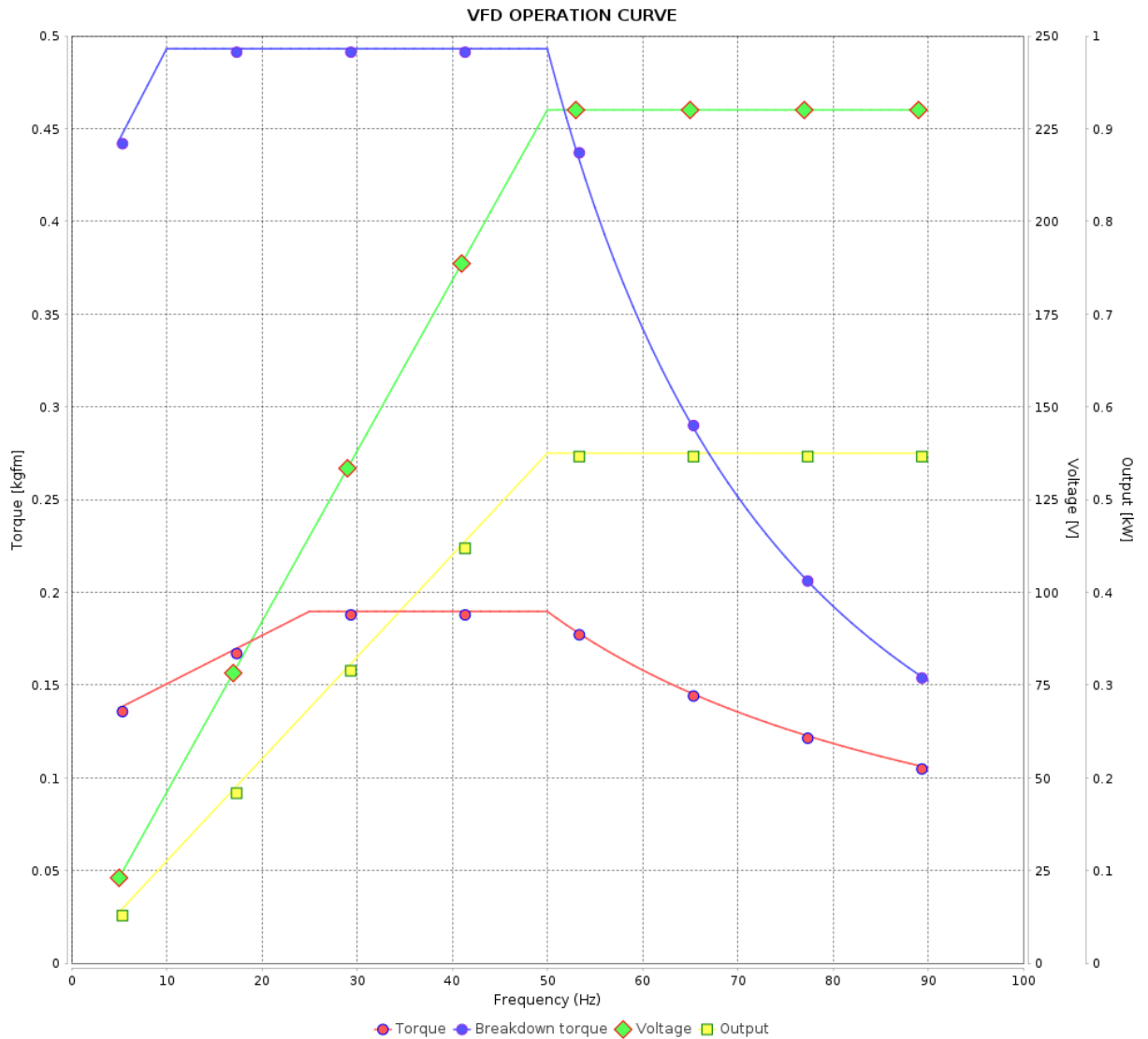
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 230/400 V 50 Hz 2P

Rated current : 2.07/1.19 A
 LRC : 5.8
 Rated torque : 0.190 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.0005 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				
Date				

VFD OPERATION CURVE

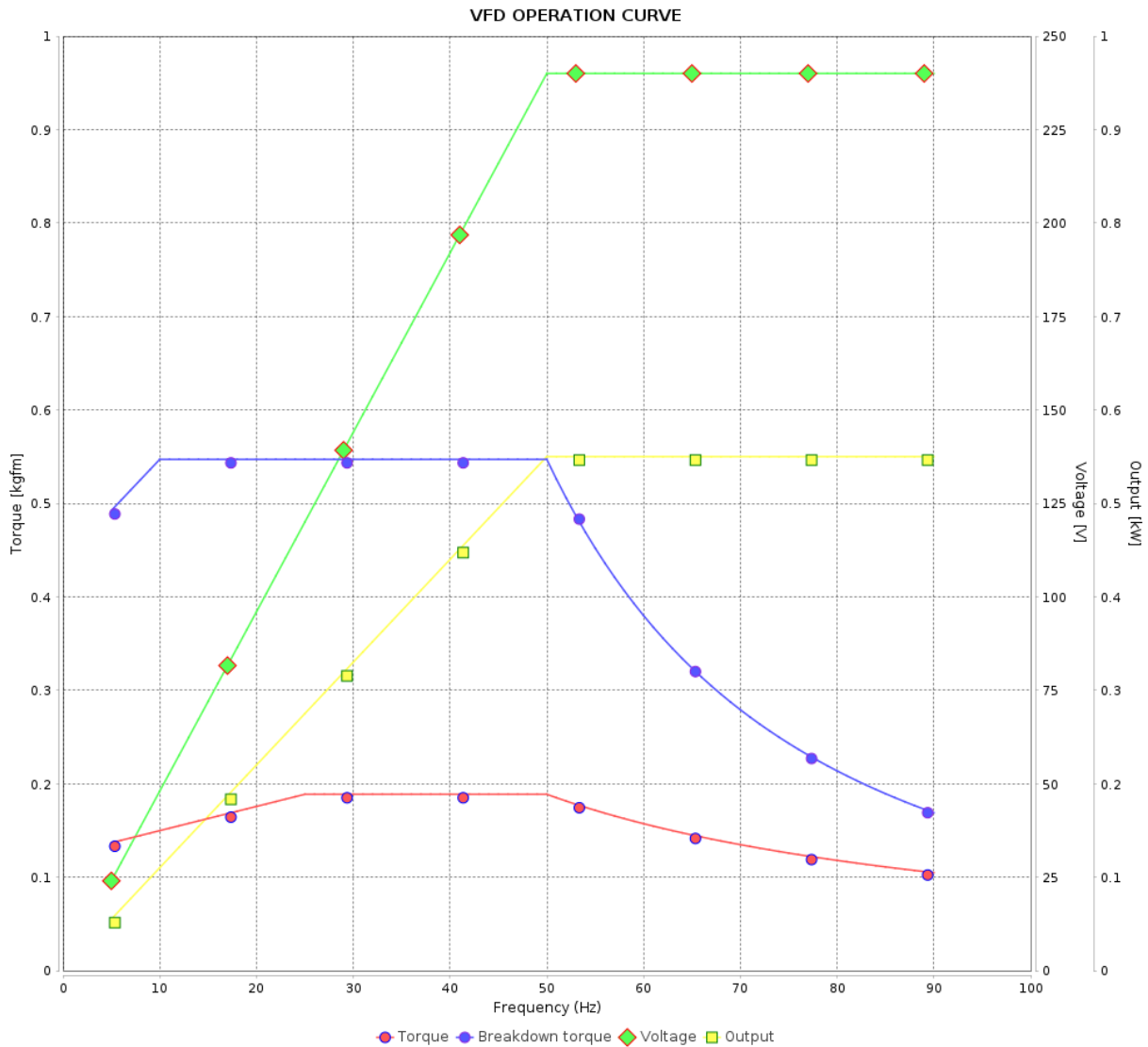
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 240/415 V 50 Hz 2P

Rated current : 2.02/1.17 A
 LRC : 6.1
 Rated torque : 0.189 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 290 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0005 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 18 / 19	Revision
Checked by				
Date	08/08/2022			

VFD OPERATION CURVE

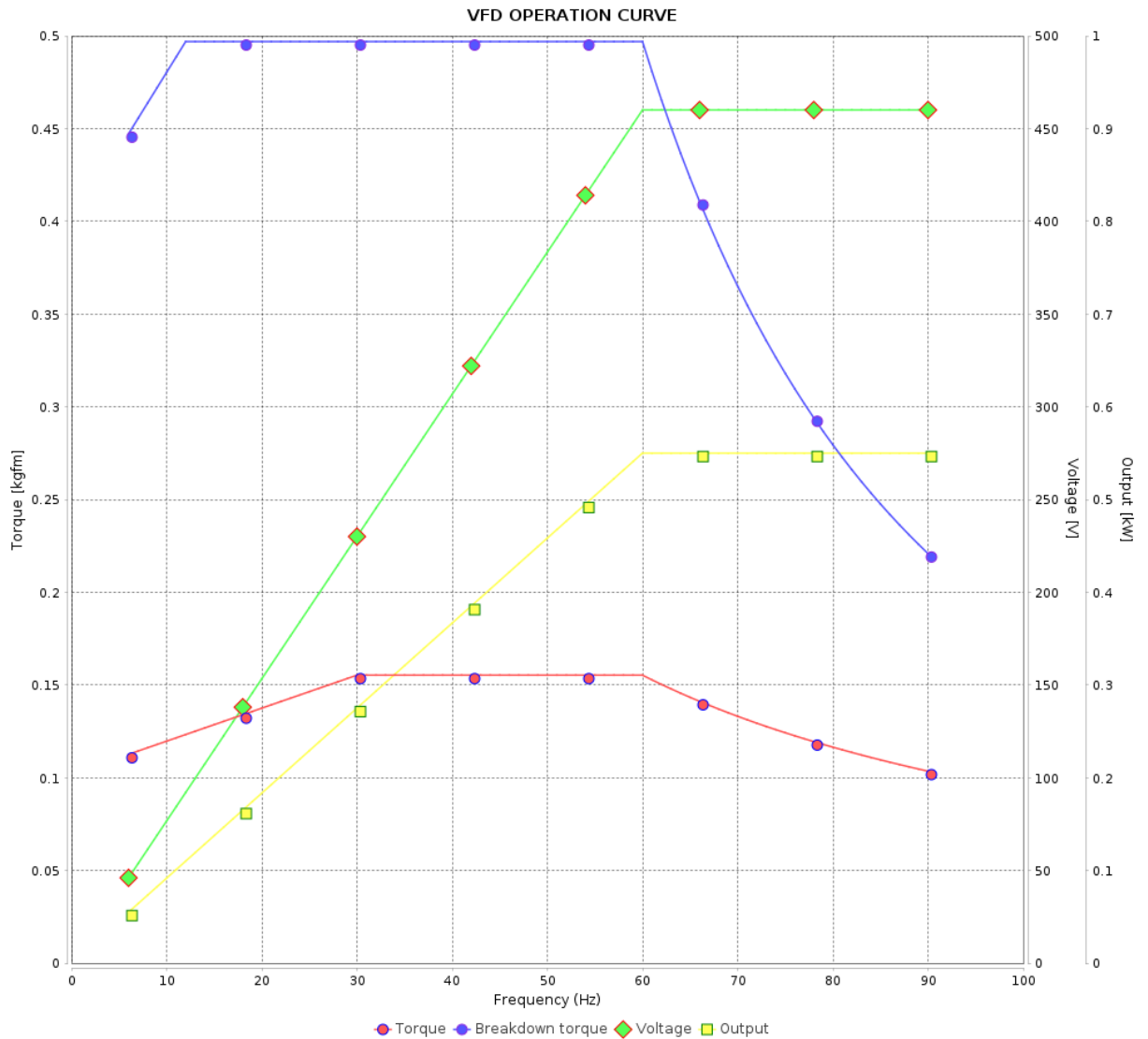
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : IE3 Three-Phase

Product code : 12867349



Performance : 460 V 60 Hz 2P

Rated current : 1.08 A
 LRC : 7.5
 Rated torque : 0.155 kgfm
 Locked rotor torque : 310 %
 Breakdown torque : 320 %
 Rated speed : 3450 rpm

Moment of inertia (J) : 0.0005 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				
Date				