

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 11950119
Frame	: 444/5TS	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	: 929 kg	
Protection degree	: IP55	Moment of inertia (J)	: 1.31 kgm ²	
Design	: B			
Output [HP]	125	100	100	100
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	268/134	134	128	125
L. R. Amperes [A]	1769/884	831	870	925
LRC [A]	6.6x(Code G)	6.2x(Code F)	6.8x(Code G)	7.4x(Code H)
No load current [A]	65.0/32.5	32.1	34.1	35.5
Rated speed [RPM]	3575	2975	2975	2980
Slip [%]	0.69	0.83	0.83	0.67
Rated torque [kgfm]	25.4	24.4	24.4	24.4
Locked rotor torque [%]	200	190	210	229
Breakdown torque [%]	250	229	260	290
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)	54s (cold) 30s (hot)
Noise level ²	86.0 dB(A)	83.0 dB(A)	83.0 dB(A)	83.0 dB(A)
Efficiency (%)	25%			
	50%	93.0	93.6	93.6
	75%	94.5	94.5	94.5
	100%	95.0	94.5	95.0
Power Factor	25%			
	50%	0.83	0.83	0.81
	75%	0.88	0.88	0.87
	100%	0.89	0.90	0.89
Bearing type	: <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 153 kgf	
Lubrication interval	: 3604 h 3604 h	Max. compression	: 1082 kgf	
Lubricant amount	: 27 g 27 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 303A SF 1.00 SFA 303A				
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
Performed by			Page 1 / 6	Revision
Checked by				
Date	13/01/2024			

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 6	

LOAD PERFORMANCE CURVE

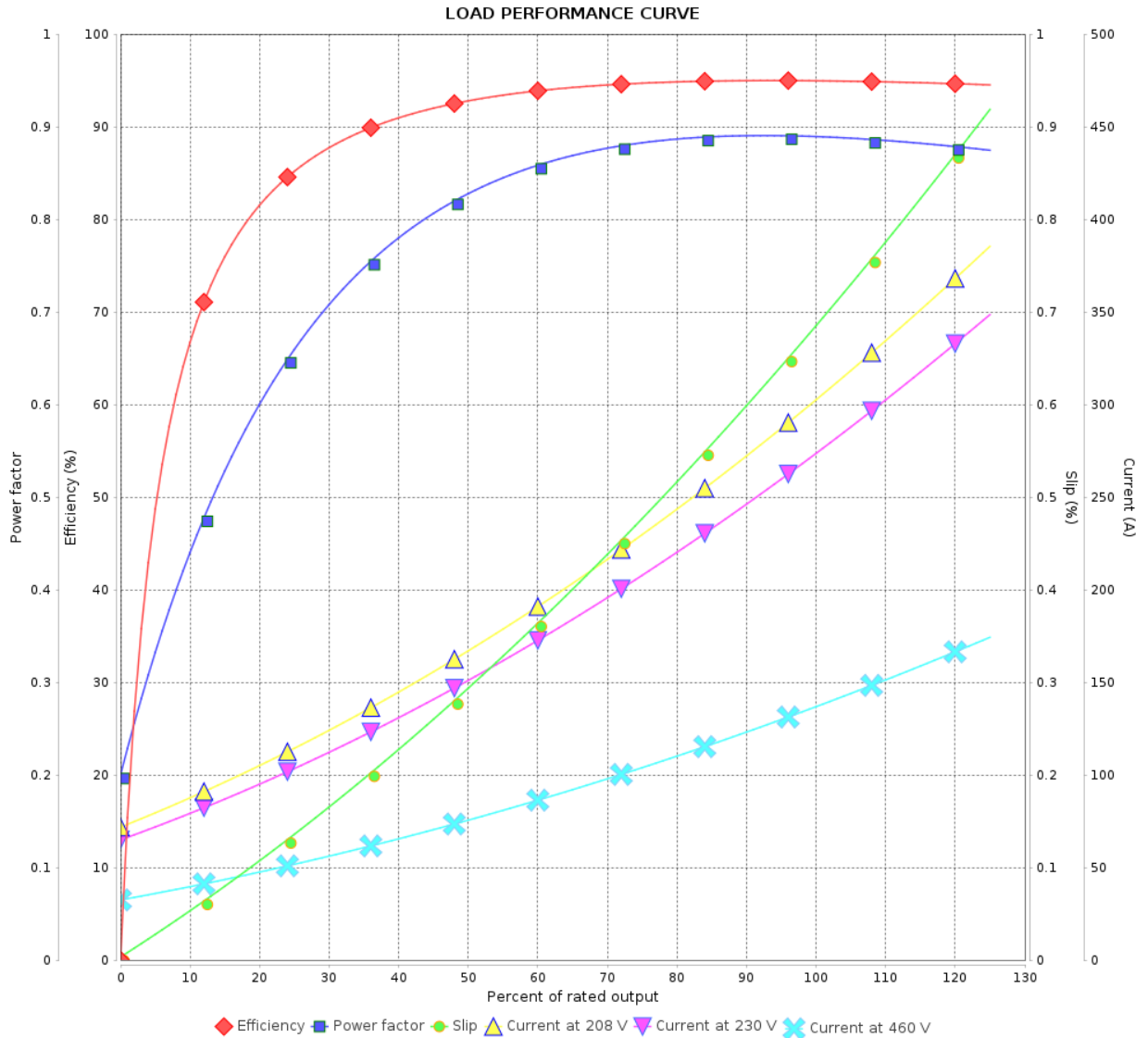
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 11950119



Performance : 230/460 V 60 Hz 2P

Rated current : 268/134 A
LRC : 6.6
Rated torque : 25.4 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 3575 rpm

Moment of inertia (J) : 1.31 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

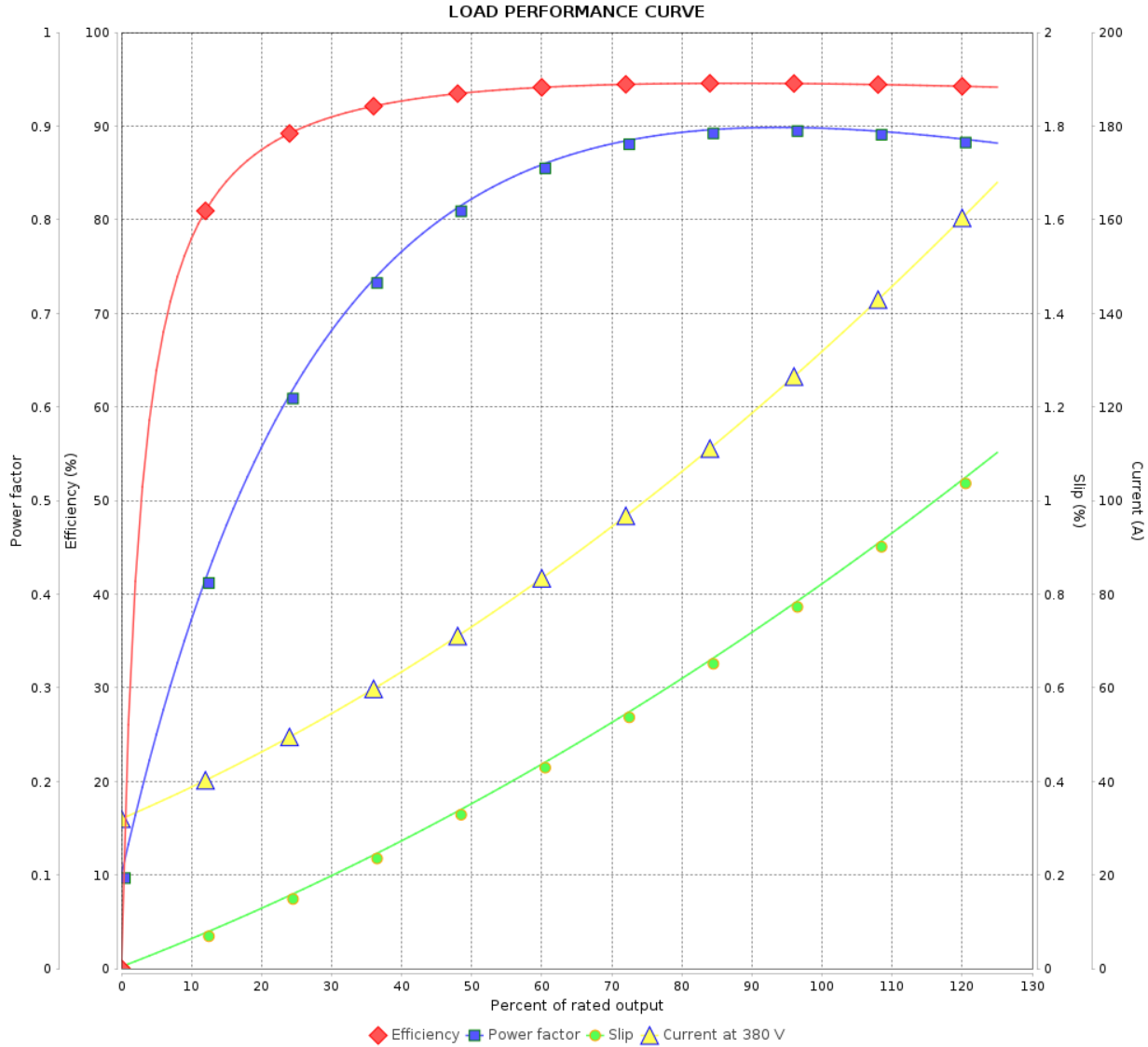
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 11950119



Performance : 380 V 50 Hz 2P IE2

Rated current	: 134 A	Moment of inertia (J)	: 1.31 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 24.4 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2975 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

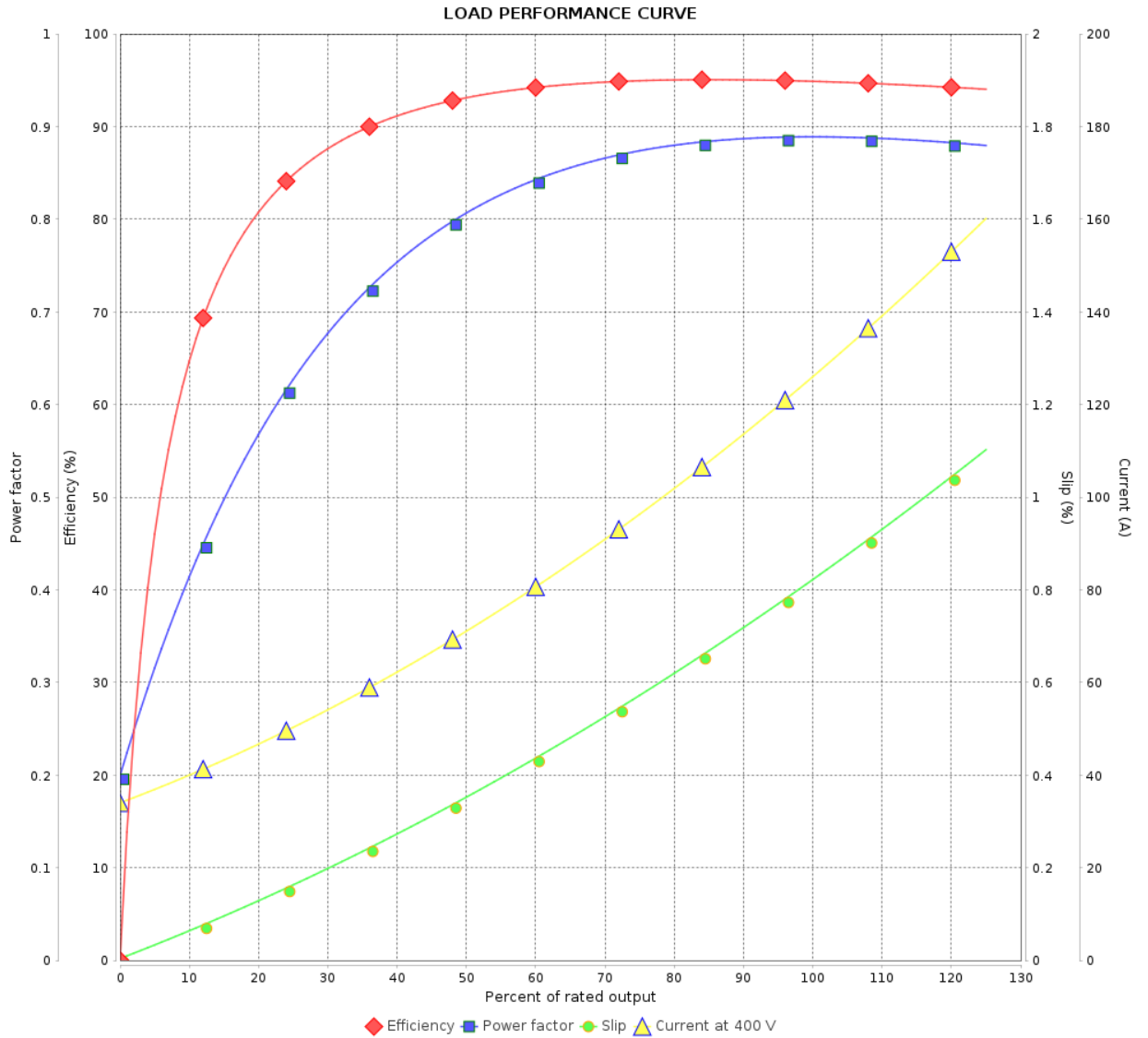
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase

Product code : 11950119



Performance : 400 V 50 Hz 2P IE3

Rated current : 128 A
 LRC : 6.8
 Rated torque : 24.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 2975 rpm

Moment of inertia (J) : 1.31 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

LOAD PERFORMANCE CURVE

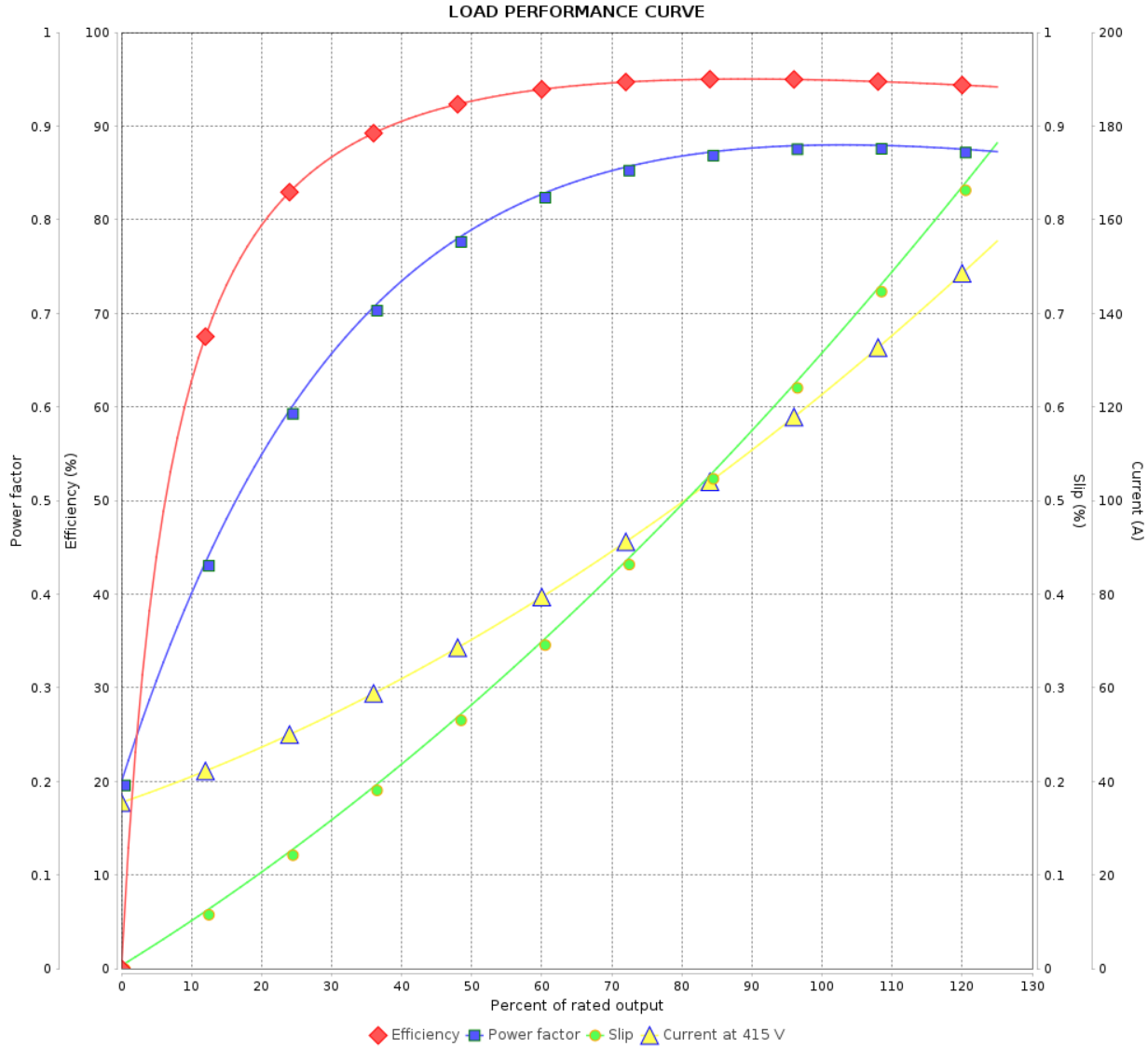
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 11950119



Performance : 415 V 50 Hz 2P IE3

Rated current	: 125 A	Moment of inertia (J)	: 1.31 kgm ²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 24.4 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2980 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		6 / 6		
Date	13/01/2024			