

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14477125			
Frame : 182/4TC Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 62.9 kg Moment of inertia (J) : 0.0156 kgm ²			
Output [HP]	5	5	5	5	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	13.1/6.57	7.83	7.54	7.45	
L. R. Amperes [A]	93.3/46.6	47.8	51.3	53.6	
LRC [A]	7.1x(Code J)	6.1x(Code G)	6.8x(Code J)	7.2x(Code J)	
No load current [A]	6.20/3.10	3.10	3.40	3.80	
Rated speed [RPM]	1750	1435	1440	1445	
Slip [%]	2.78	4.33	4.00	3.67	
Rated torque [kgfm]	2.07	2.53	2.52	2.51	
Locked rotor torque [%]	229	210	229	250	
Breakdown torque [%]	300	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	43s (cold) 24s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	34s (cold) 19s (hot)	
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%				
	50%	86.5	86.0	86.5	
	75%	88.5	86.5	87.0	
	100%	89.5	86.5	87.5	
Power Factor	25%				
	50%	0.59	0.67	0.63	
	75%	0.71	0.77	0.74	
	100%	0.79	0.83	0.81	
Bearing type : <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS Sealing : Oil Seal Lip Seal Lubrication interval : - - Lubricant amount : - - Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 121 kgf Max. compression : 184 kgf			
Notes USABLE @208V 14.5A SF 1.15 SFA 16.7A					
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	15/01/2024			1 / 6	

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	15/01/2024		2 / 6	

LOAD PERFORMANCE CURVE

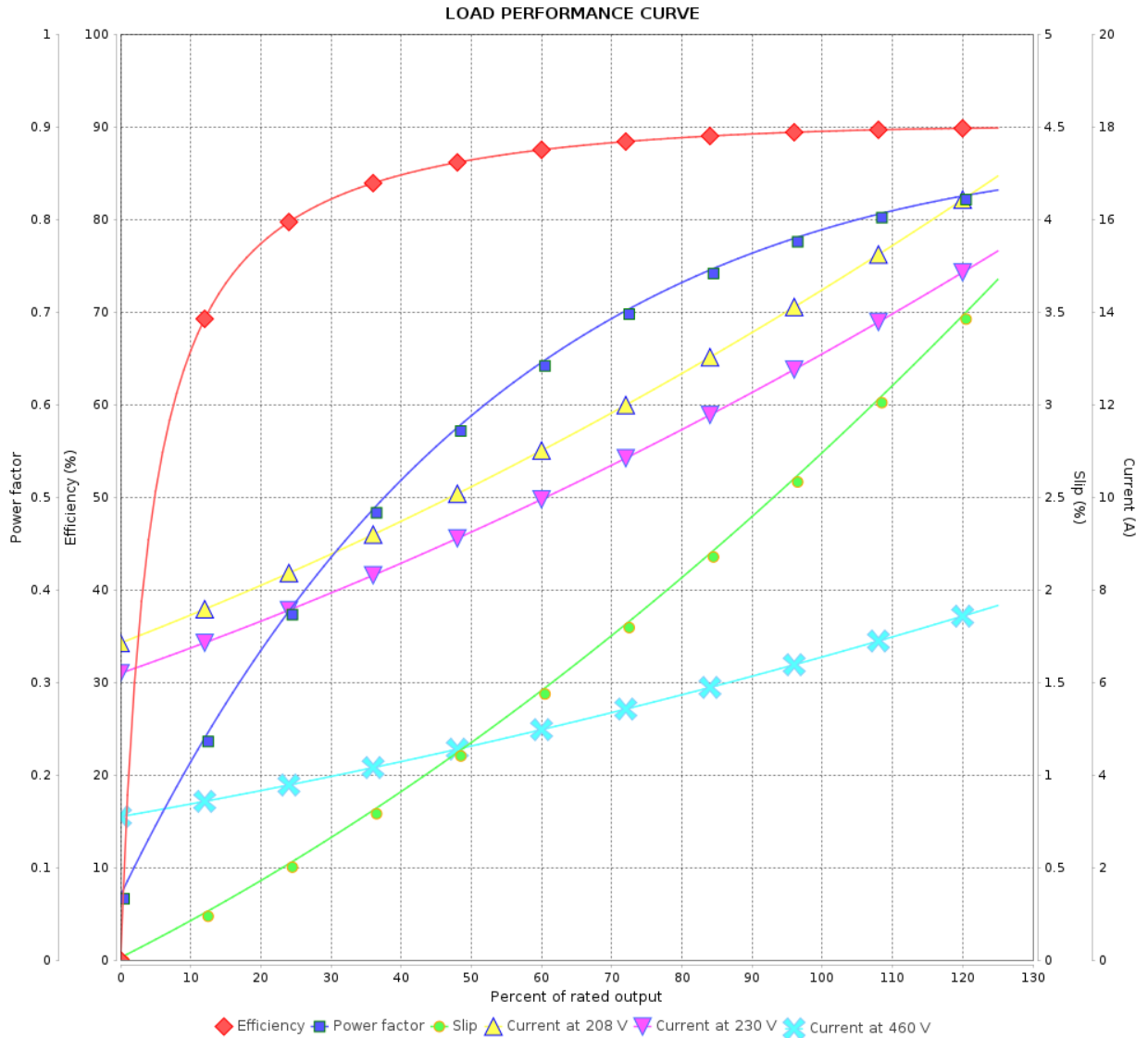
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14477125



Performance : 230/460 V 60 Hz 4P

Rated current : 13.1/6.57 A
 LRC : 7.1
 Rated torque : 2.07 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.0156 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

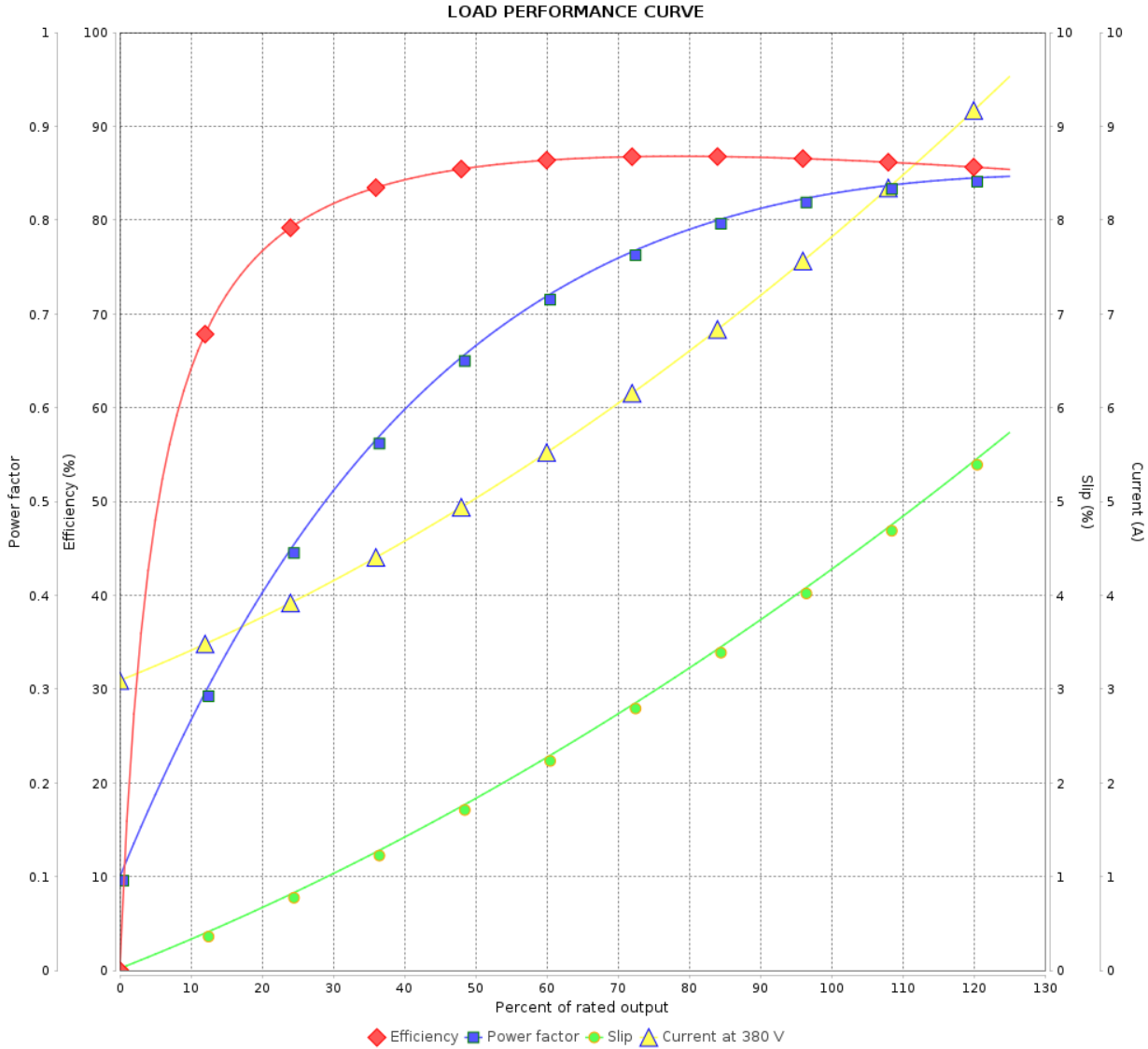
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14477125



Performance : 380 V 50 Hz 4P IE2

Rated current : 7.83 A
LRC : 6.1
Rated torque : 2.53 kgfm
Locked rotor torque : 210 %
Breakdown torque : 229 %
Rated speed : 1435 rpm

Moment of inertia (J) : 0.0156 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

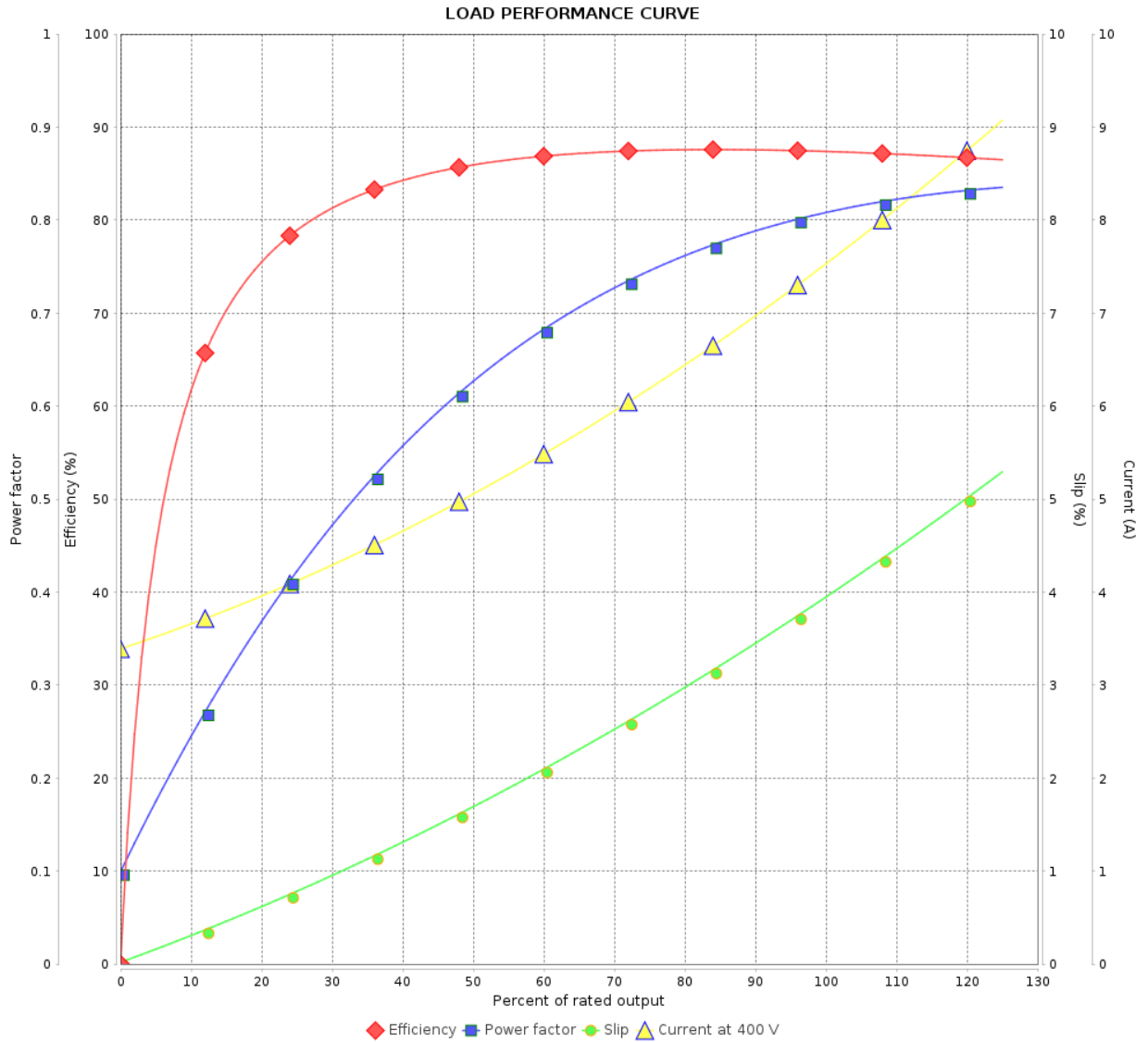
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 14477125



Performance : 400 V 50 Hz 4P IE2

Rated current : 7.54 A
LRC : 6.8
Rated torque : 2.52 kgfm
Locked rotor torque : 229 %
Breakdown torque : 260 %
Rated speed : 1440 rpm

Moment of inertia (J) : 0.0156 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				
			5 / 6	

LOAD PERFORMANCE CURVE

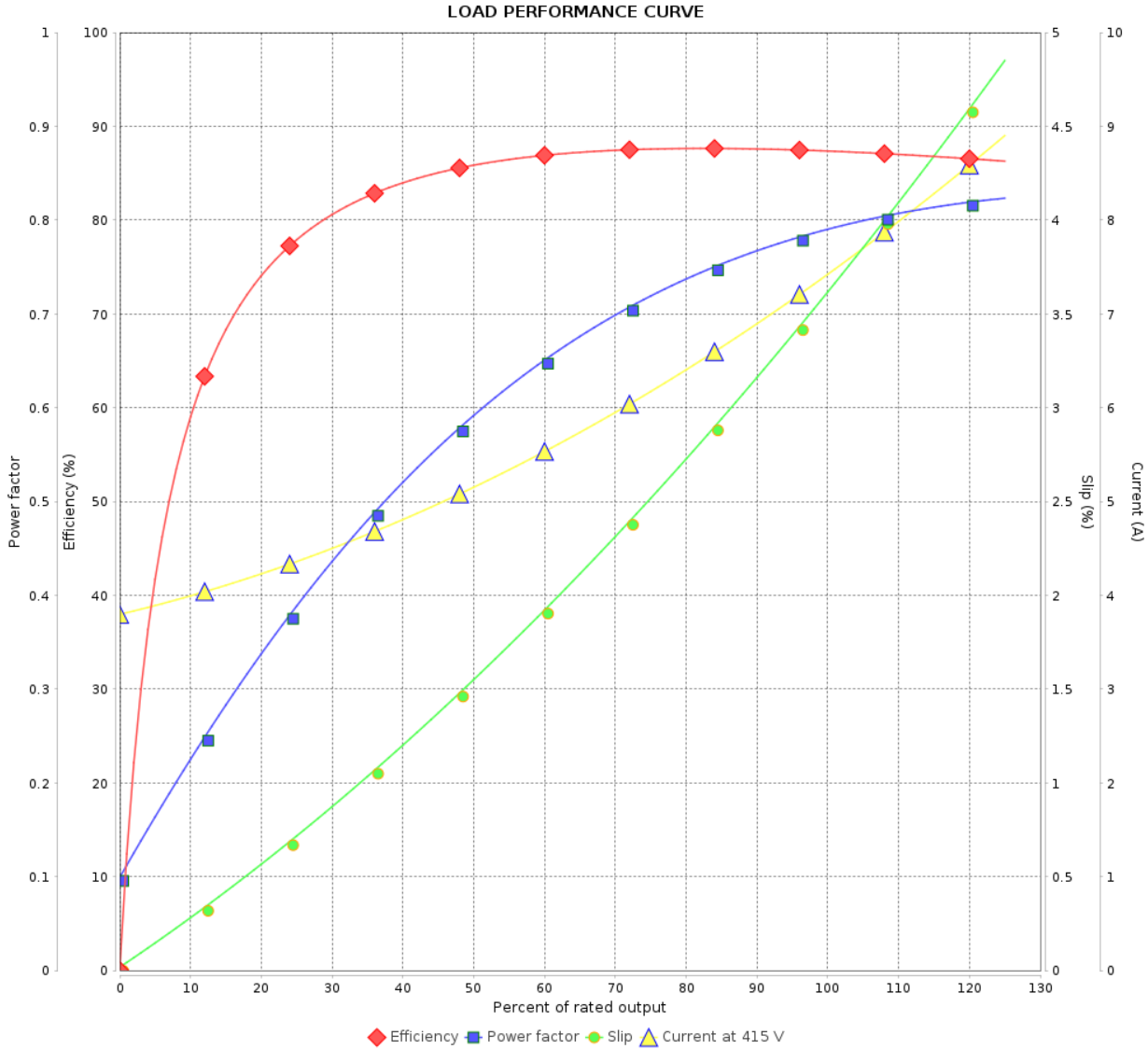
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14477125



Performance : 415 V 50 Hz 4P IE2

Rated current : 7.45 A
LRC : 7.2
Rated torque : 2.51 kgfm
Locked rotor torque : 250 %
Breakdown torque : 290 %
Rated speed : 1445 rpm

Moment of inertia (J) : 0.0156 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				