

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code :	14407580
Frame	: 326TC	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	: 318 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.3861 kgm ²		
Design	: B				
Output [HP]	50	40	40	40	40
Poles	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	121/60.7	60.1	58.6	58.7	58.7
L. R. Amperes [A]	886/443	415	445	470	470
LRC [A]	7.3x(Code H)	6.9x(Code H)	7.6x(Code J)	8.0x(Code K)	8.0x(Code K)
No load current [A]	50.0/25.0	24.0	26.0	28.0	28.0
Rated speed [RPM]	1775	1475	1480	1480	1480
Slip [%]	1.39	1.67	1.33	1.33	1.33
Rated torque [kgfm]	20.4	19.7	19.6	19.6	19.6
Locked rotor torque [%]	260	240	260	280	280
Breakdown torque [%]	280	260	290	310	310
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	28s (cold) 16s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	71.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)
Efficiency (%)	25%				
	50%	93.6	93.0	93.0	92.4
	75%	94.5	93.6	93.6	93.6
	100%	94.5	93.6	93.6	93.6
Power Factor	25%				
	50%	0.65	0.65	0.60	0.57
	75%	0.76	0.76	0.73	0.69
	100%	0.81	0.81	0.79	0.76
Bearing type	: <u>Drive end</u> 6312 C3	<u>Non drive end</u> 6212 C3	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction	: 607 kgf	
Lubrication interval	: 20000 h	20000 h	Max. compression	: 924 kgf	
Lubricant amount	: 21 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 134A SF 1.00 SFA 134A					
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	

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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

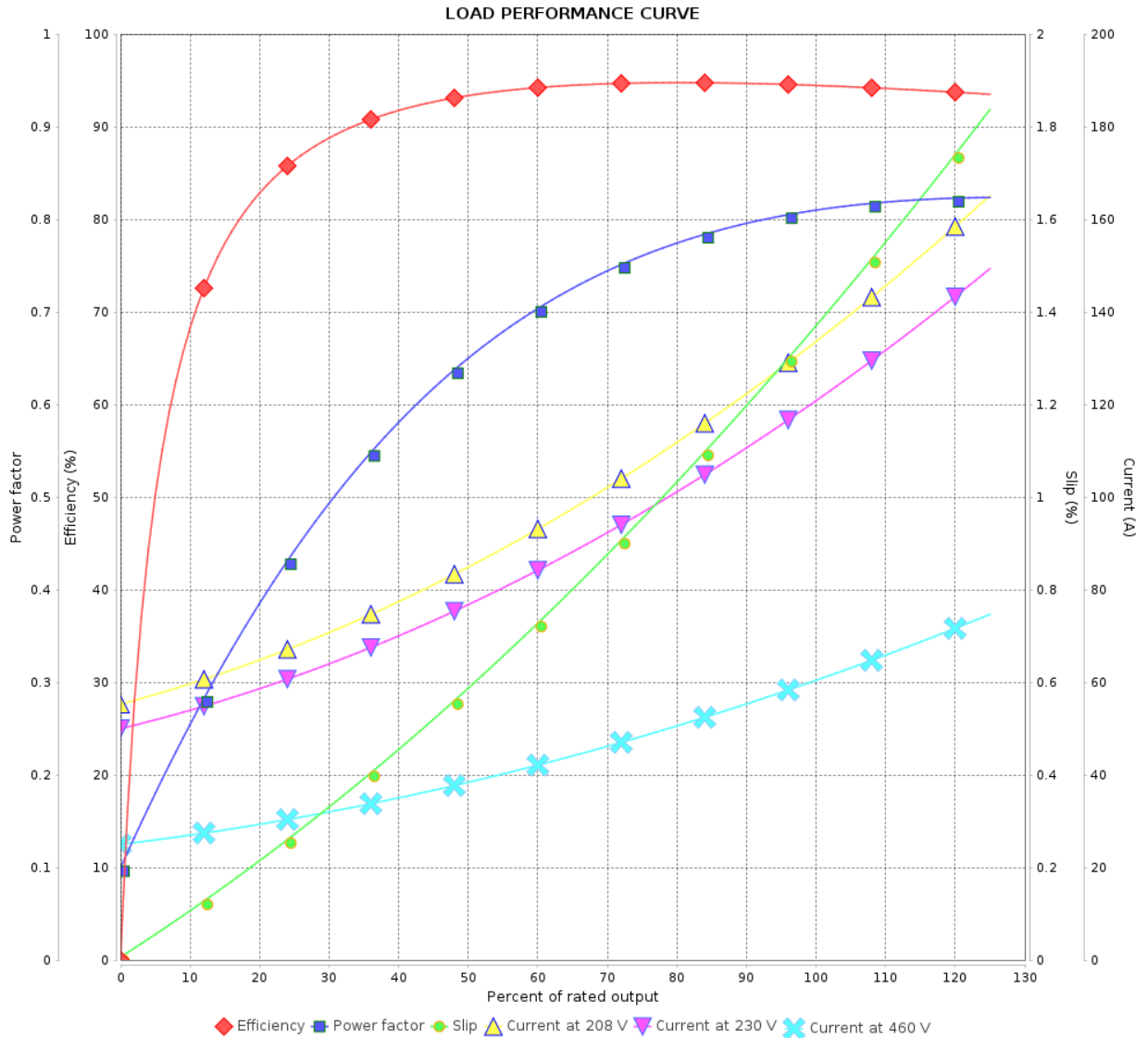
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407580



Performance : 230/460 V 60 Hz 4P

Rated current : 121/60.7 A
 LRC : 7.3
 Rated torque : 20.4 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 280 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.3861 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		3 / 6		
Date		15/01/2024		

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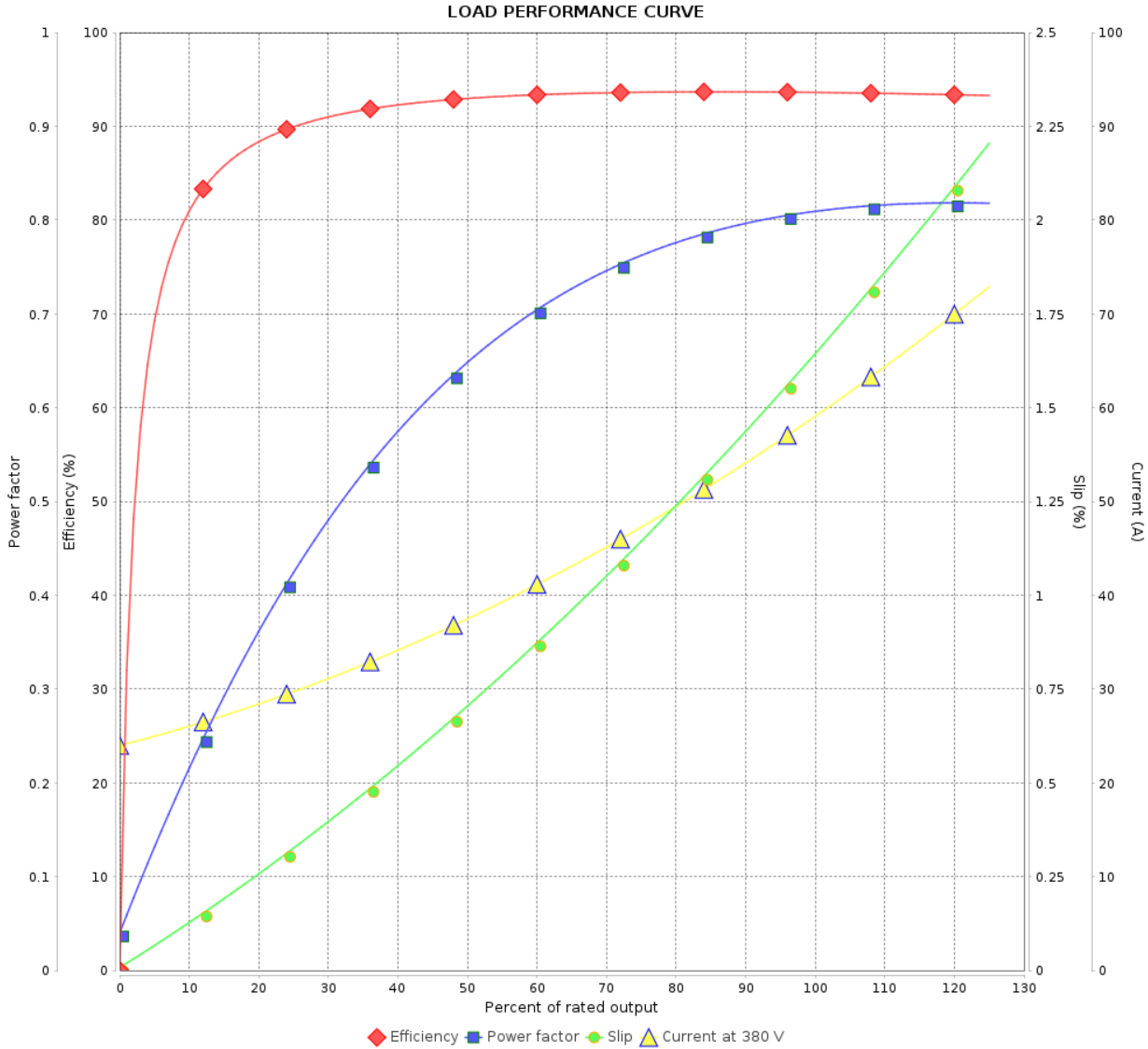
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407580



Performance : 380 V 50 Hz 4P IE3

Rated current : 60.1 A
 LRC : 6.9
 Rated torque : 19.7 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.3861 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				

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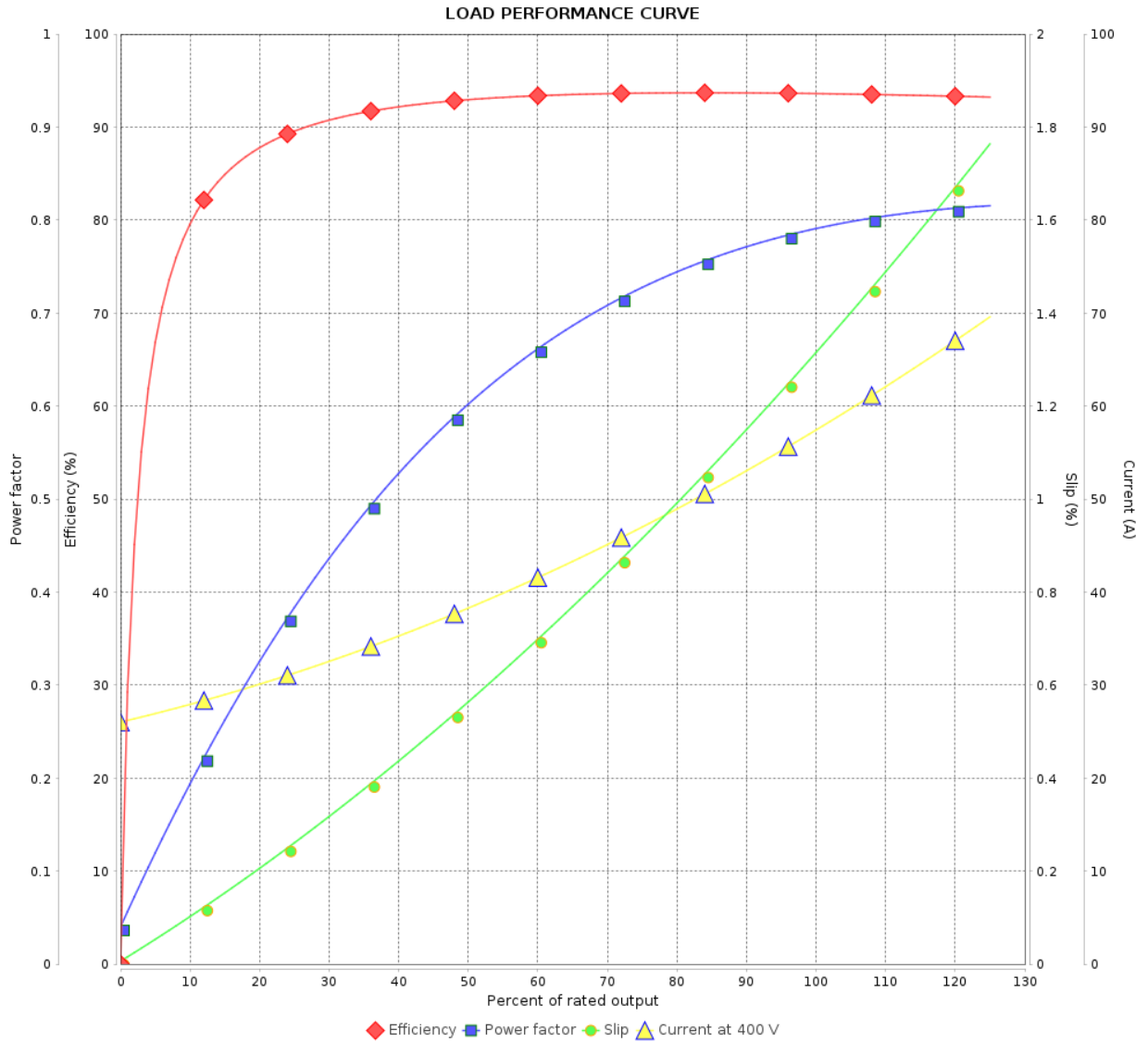
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407580



Performance : 400 V 50 Hz 4P IE3

Rated current : 58.6 A
 LRC : 7.6
 Rated torque : 19.6 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 290 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.3861 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				
Checked by				
Date				
		Page	Revision	
		5 / 6		

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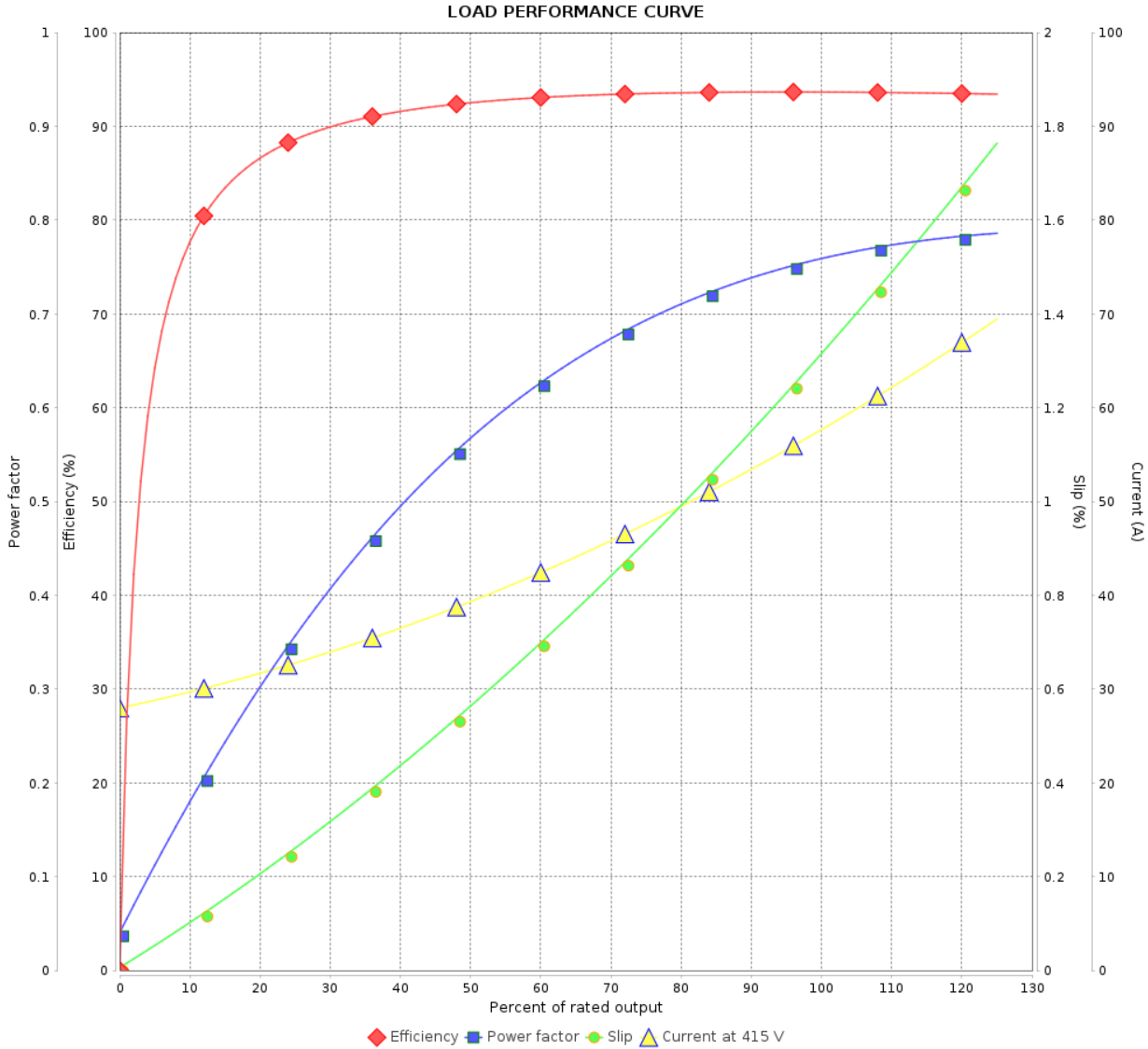
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407580



Performance : 415 V 50 Hz 4P IE3

Rated current : 58.7 A
 LRC : 8.0
 Rated torque : 19.6 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.3861 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 6 / 6	Revision
Checked by				
Date	15/01/2024			