

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14407759
Frame	: 284TC	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	: 203 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.1914 kgm ²	
Design	: B			
Output [HP]	25	25	25	25
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	59.0/29.5	35.9	34.3	33.2
L. R. Amperes [A]	366/183	190	189	196
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)
No load current [A]	22.0/11.0	11.0	11.7	12.4
Rated speed [RPM]	1770	1455	1460	1465
Slip [%]	1.67	3.00	2.67	2.33
Rated torque [kgfm]	10.3	12.5	12.4	12.4
Locked rotor torque [%]	240	180	200	220
Breakdown torque [%]	270	210	240	260
Service factor	1.15	1.00	1.00	1.00
Temperature rise	105 K	105 K	105 K	105 K
Locked rotor time	36s (cold) 20s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	68.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	92.4
	75%	93.0	91.7	92.4
	100%	93.6	91.0	92.4
Power Factor	25%			
	50%	0.70	0.76	0.73
	75%	0.80	0.84	0.82
	100%	0.84	0.86	0.85
Bearing type	: <u>Drive end</u> 6311 C3 <u>Non drive end</u> 6211 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 359 kgf	
Lubrication interval	: 20000 h 20000 h	Max. compression	: 562 kgf	
Lubricant amount	: 18 g 11 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 64.5A SF 1.15 SFA 74.2A				
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.		
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Thermal protection

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

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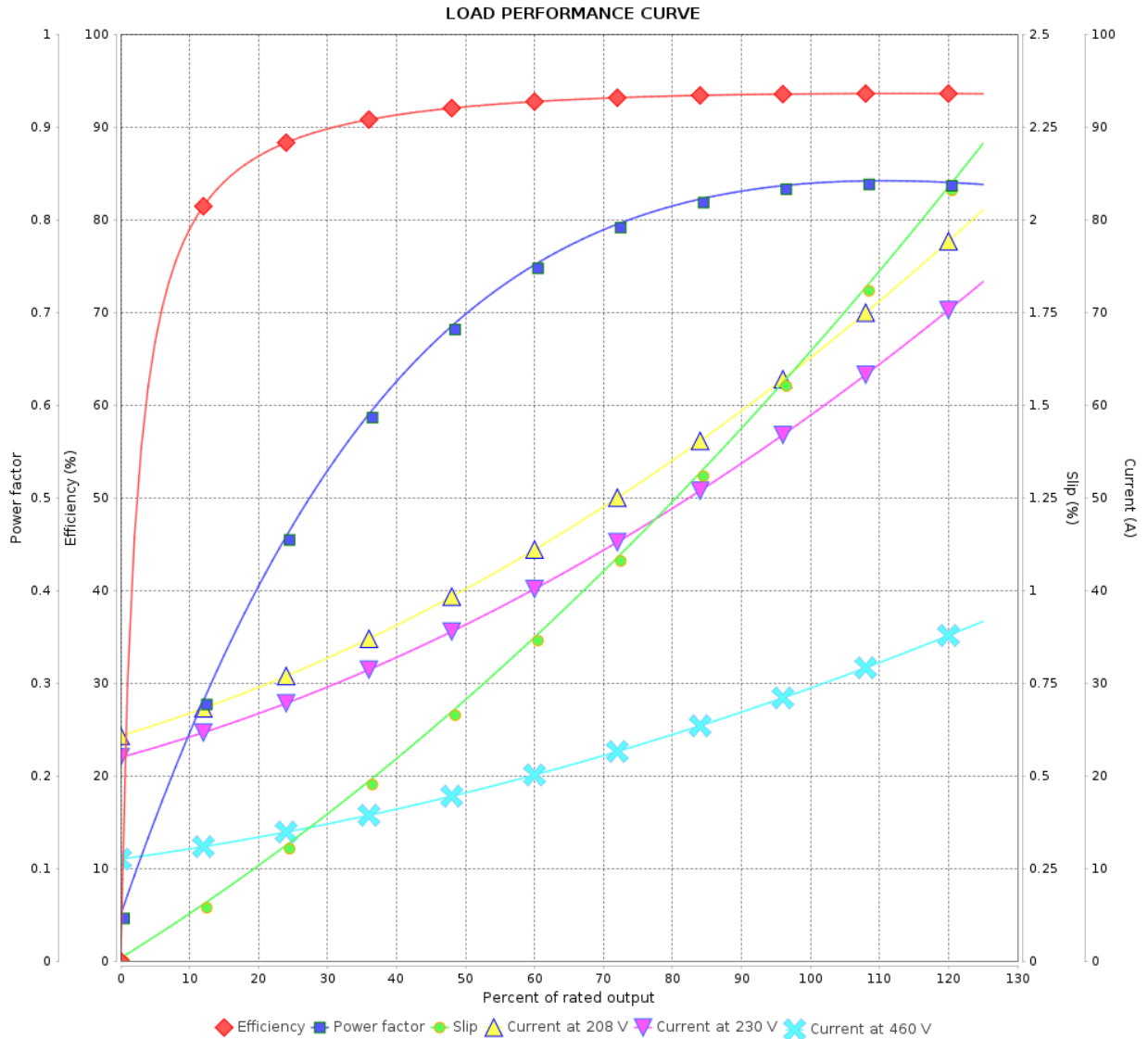
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Product line : W21 Explosion Proof NEMA Premium
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Performance : 230/460 V 60 Hz 4P

Rated current : 59.0/29.5 A
 LRC : 6.2
 Rated torque : 10.3 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.1914 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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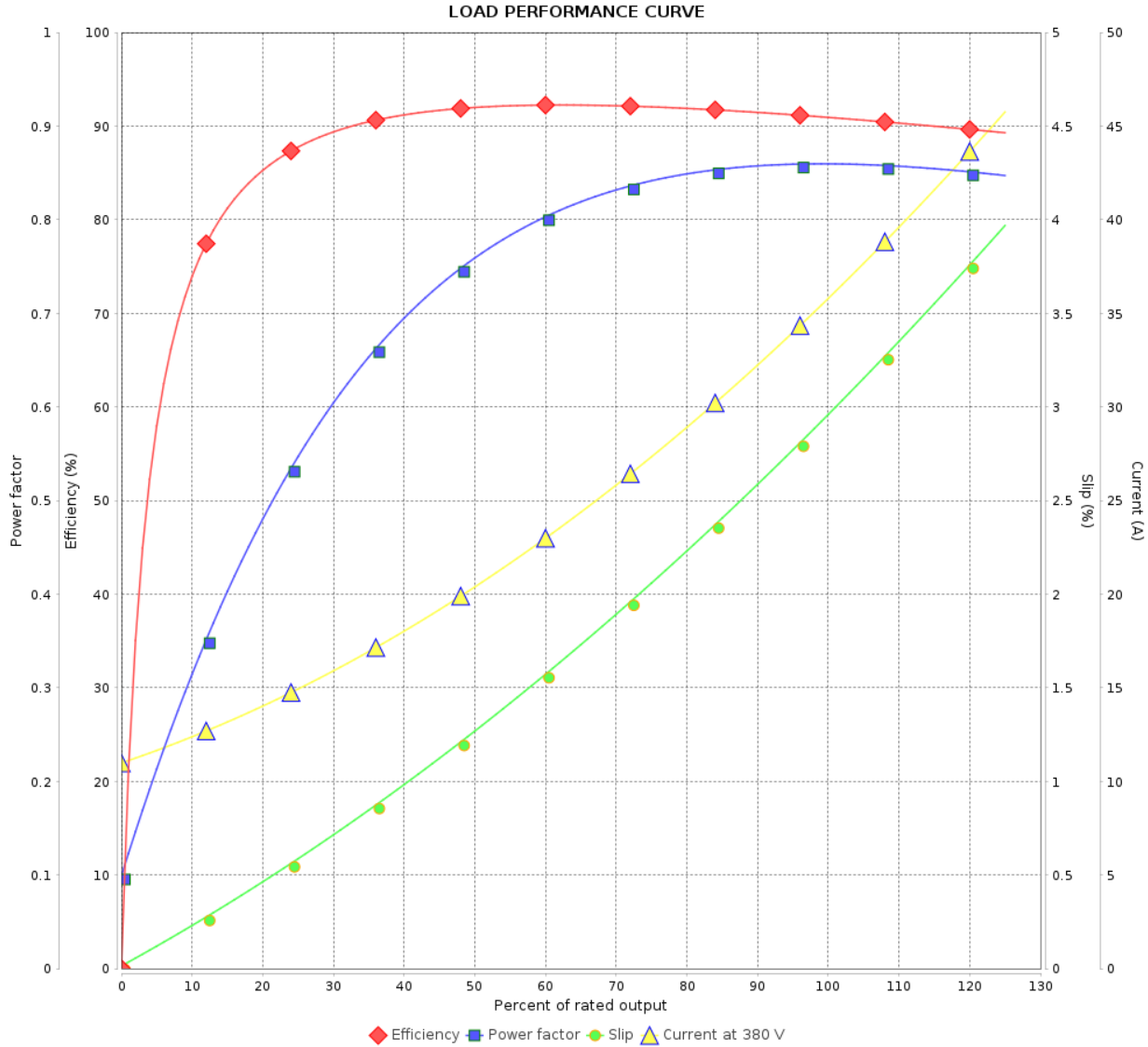
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium
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Performance : 380 V 50 Hz 4P IE1

Rated current : 35.9 A
LRC : 5.3
Rated torque : 12.5 kgfm
Locked rotor torque : 180 %
Breakdown torque : 210 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.1914 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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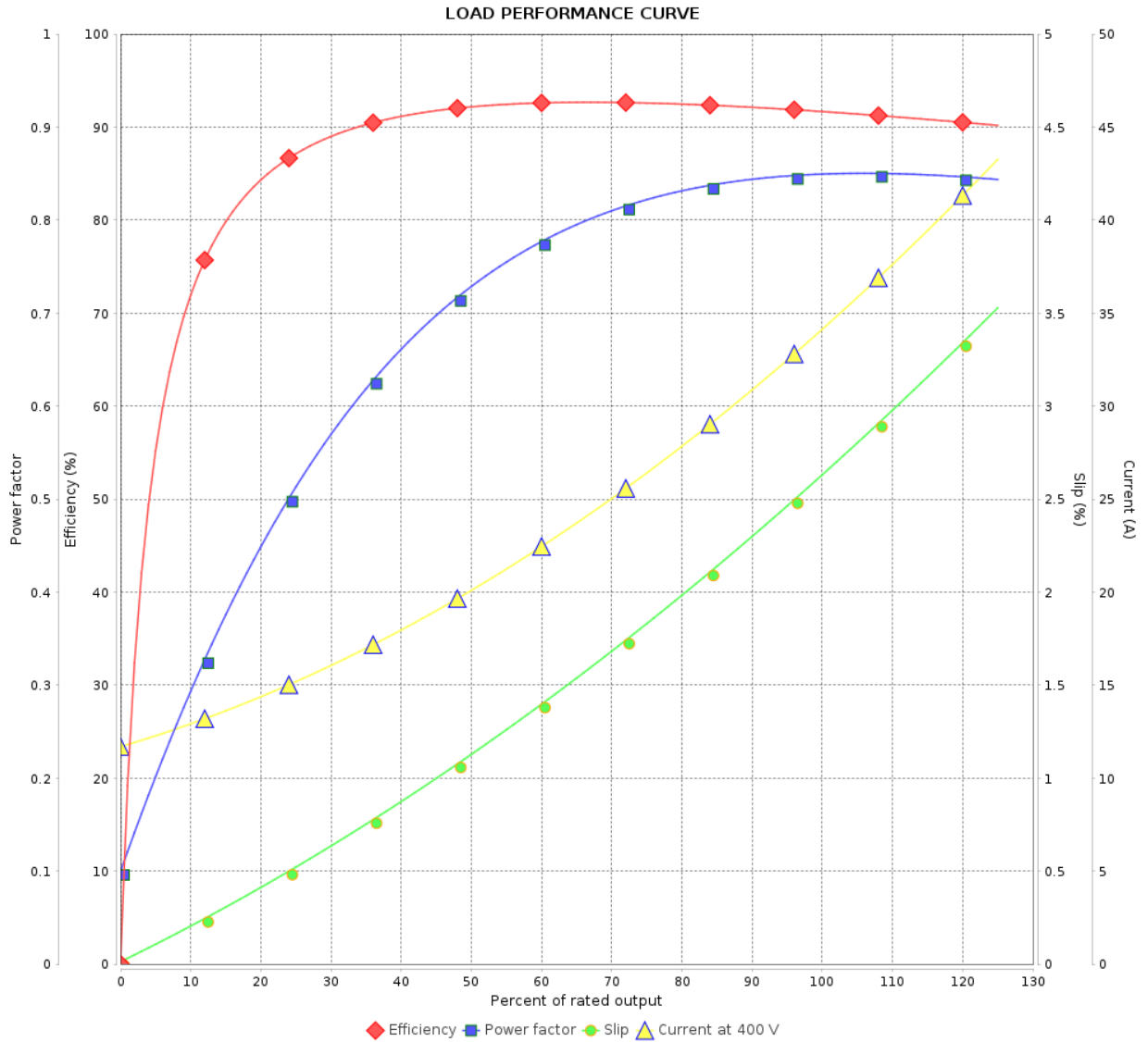
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium
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Product code : 14407759



Performance : 400 V 50 Hz 4P IE2

Rated current : 34.3 A
 LRC : 5.5
 Rated torque : 12.4 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.1914 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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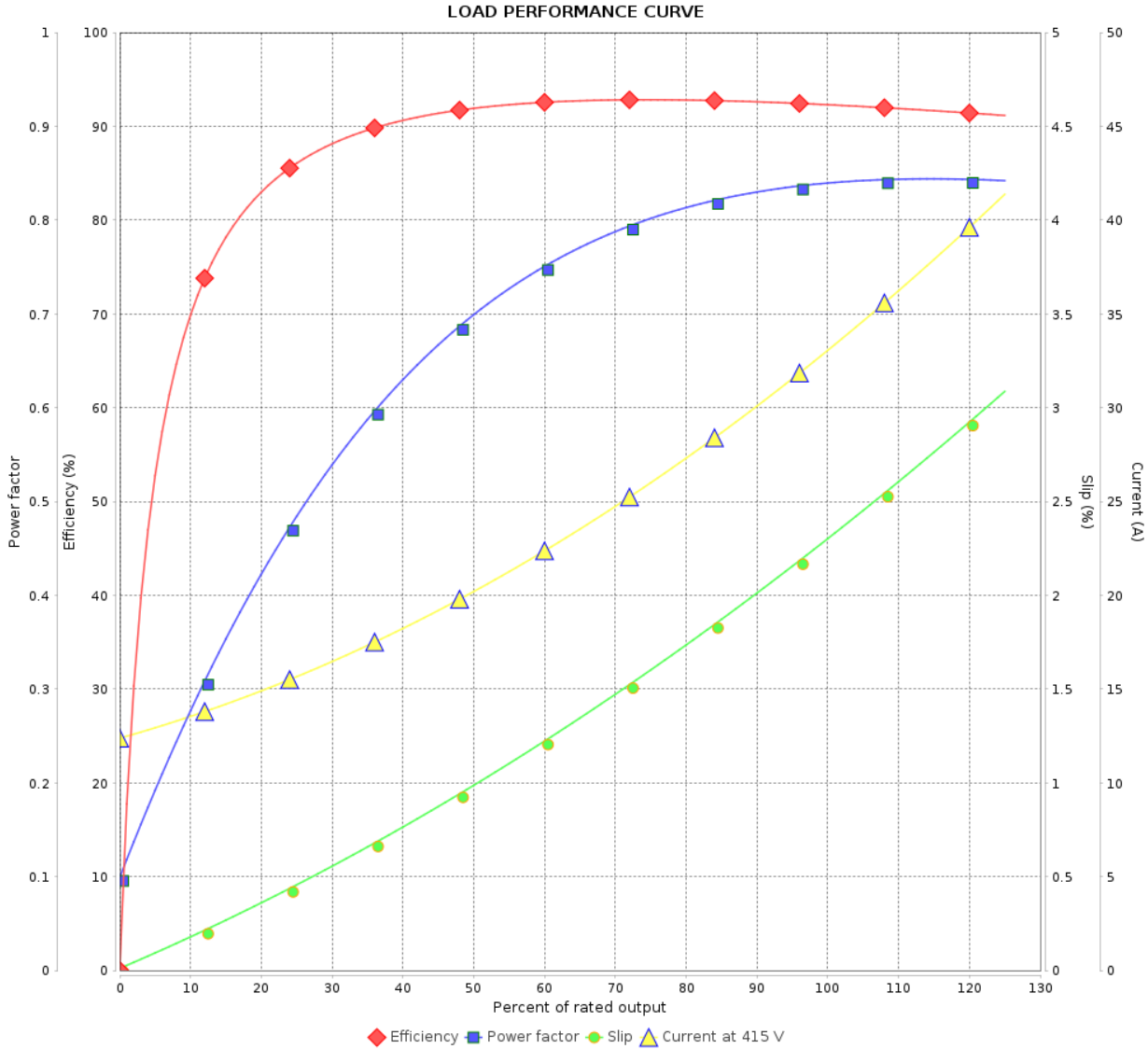
Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 4P IE2

Rated current : 33.2 A
LRC : 5.9
Rated torque : 12.4 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.1914 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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