

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code :	14390090
Frame	: 284T	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	: 201 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.1914 kgm ²		
Design	: B				
Output [HP]	25	25	25	25	25
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]	59.0/29.5	35.9	34.3	33.2	33.2
L. R. Amperes [A]	366/183	190	189	196	196
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)	5.9x(Code G)
No load current [A]	22.0/11.0	11.0	11.7	12.4	12.4
Rated speed [RPM]	1770	1455	1460	1465	1465
Slip [%]	1.67	3.00	2.67	2.33	2.33
Rated torque [kgfm]	10.3	12.5	12.4	12.4	12.4
Locked rotor torque [%]	240	180	200	220	220
Breakdown torque [%]	270	210	240	260	260
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	105 K	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)	25s (cold) 14s (hot)
Noise level ²	68.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%	91.7	92.9	92.8	92.2
	50%	92.4	92.4	92.4	92.4
	75%	93.0	91.7	92.4	92.4
	100%	93.6	91.0	91.7	92.4
Power Factor	25%	0.45	0.52	0.48	0.45
	50%	0.70	0.76	0.73	0.70
	75%	0.80	0.84	0.82	0.80
	100%	0.84	0.86	0.85	0.84
Bearing type	: <u>Drive end</u> 6311 C3 <u>Non drive end</u> 6211 C3	Foundation loads			
Sealing	: Oil Seal Lip Seal	Max. traction : 360 kgf			
Lubrication interval	: 20000 h 20000 h	Max. compression : 561 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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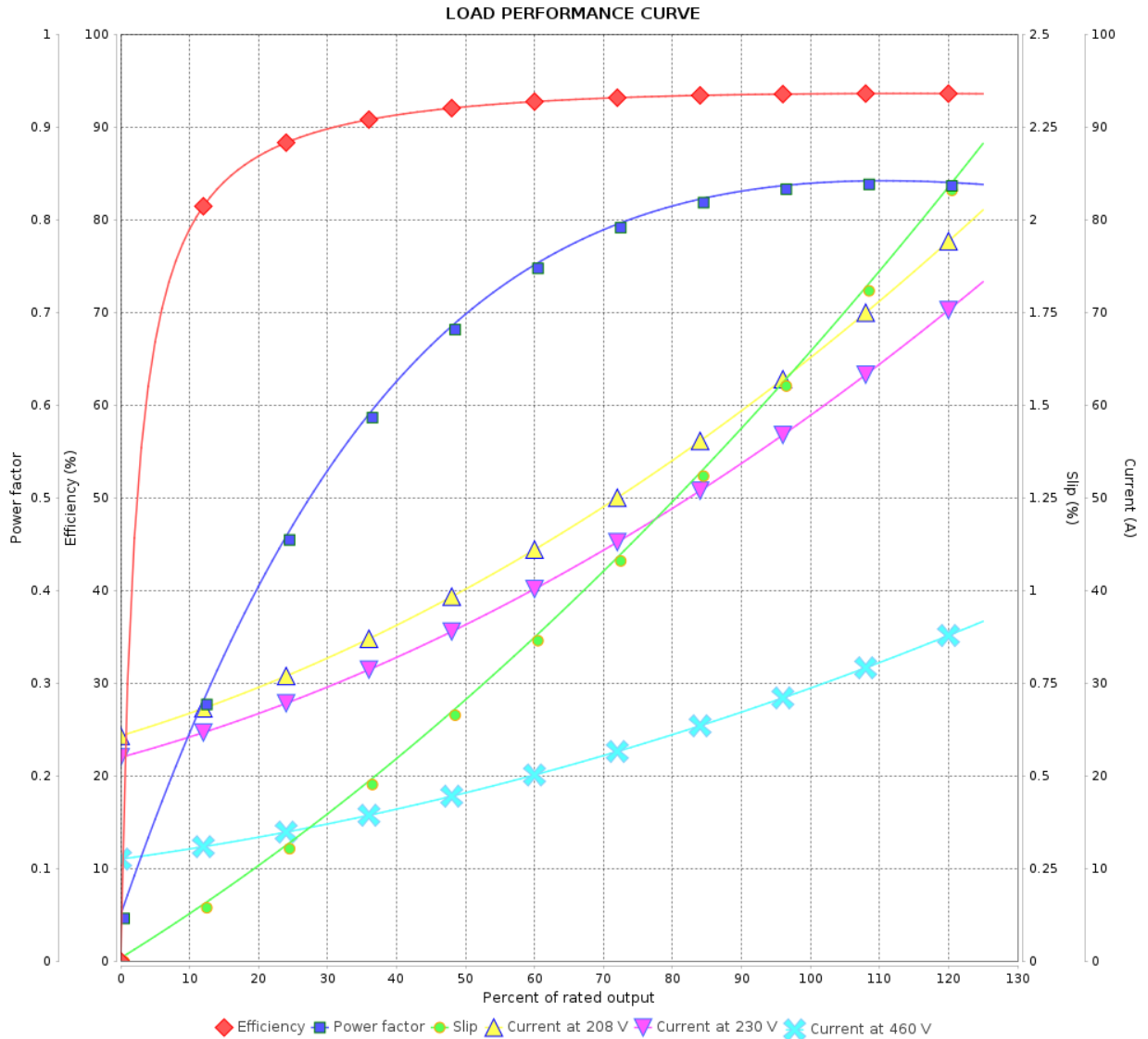
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Product line : W21 Explosion Proof NEMA Premium
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Performance : 230/460 V 60 Hz 4P

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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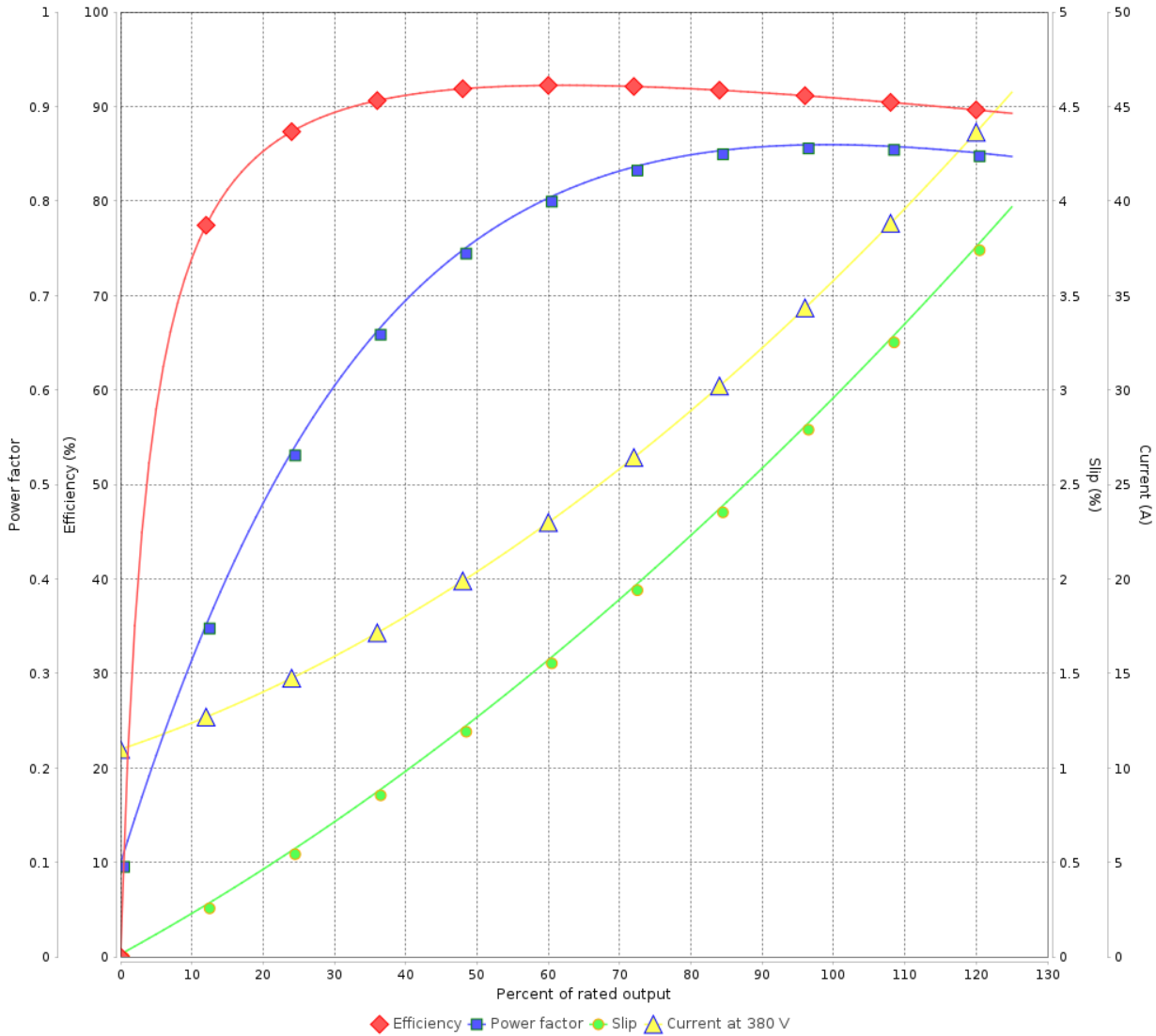


Customer :

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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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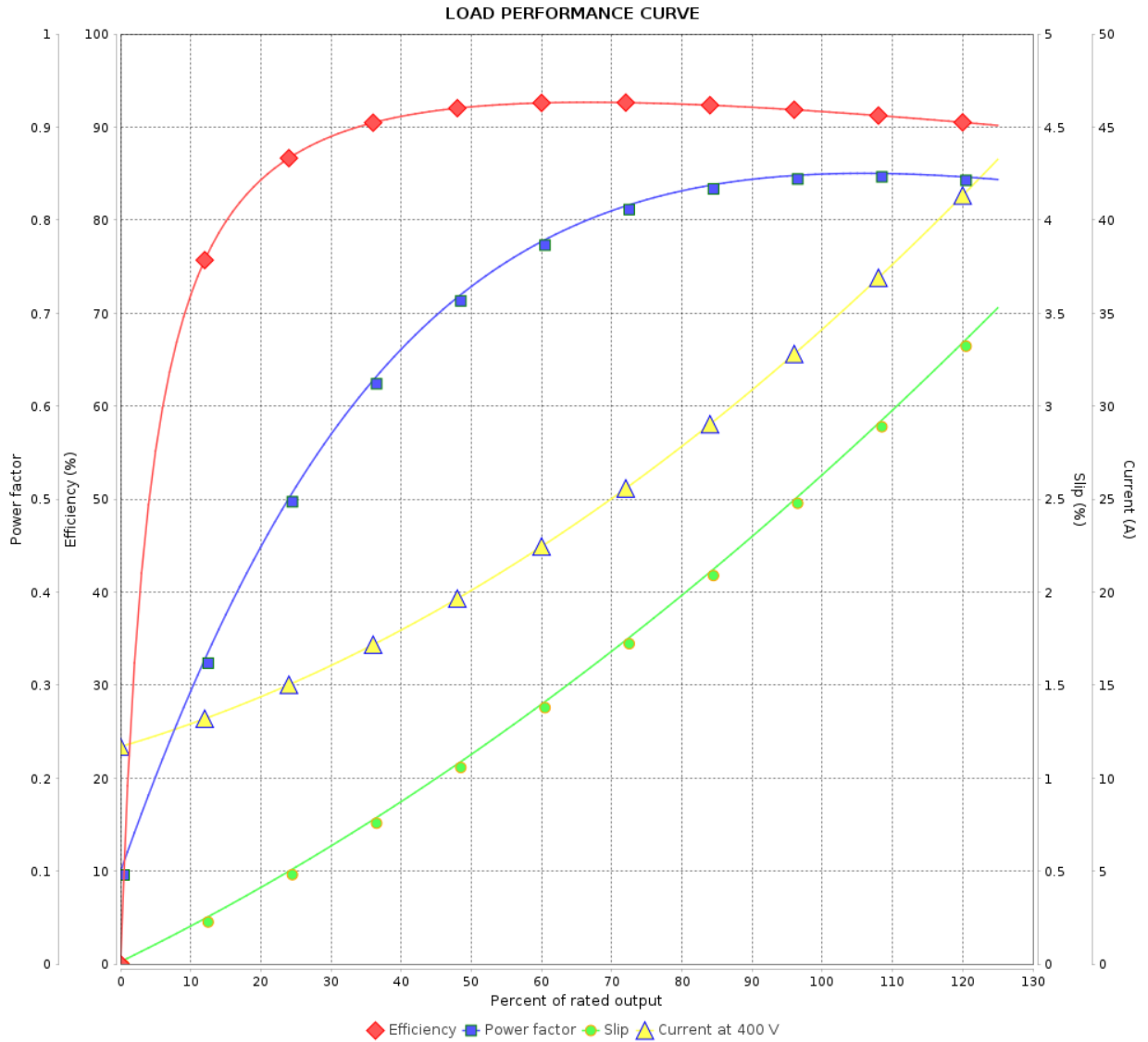
Three Phase Induction Motor - Squirrel Cage



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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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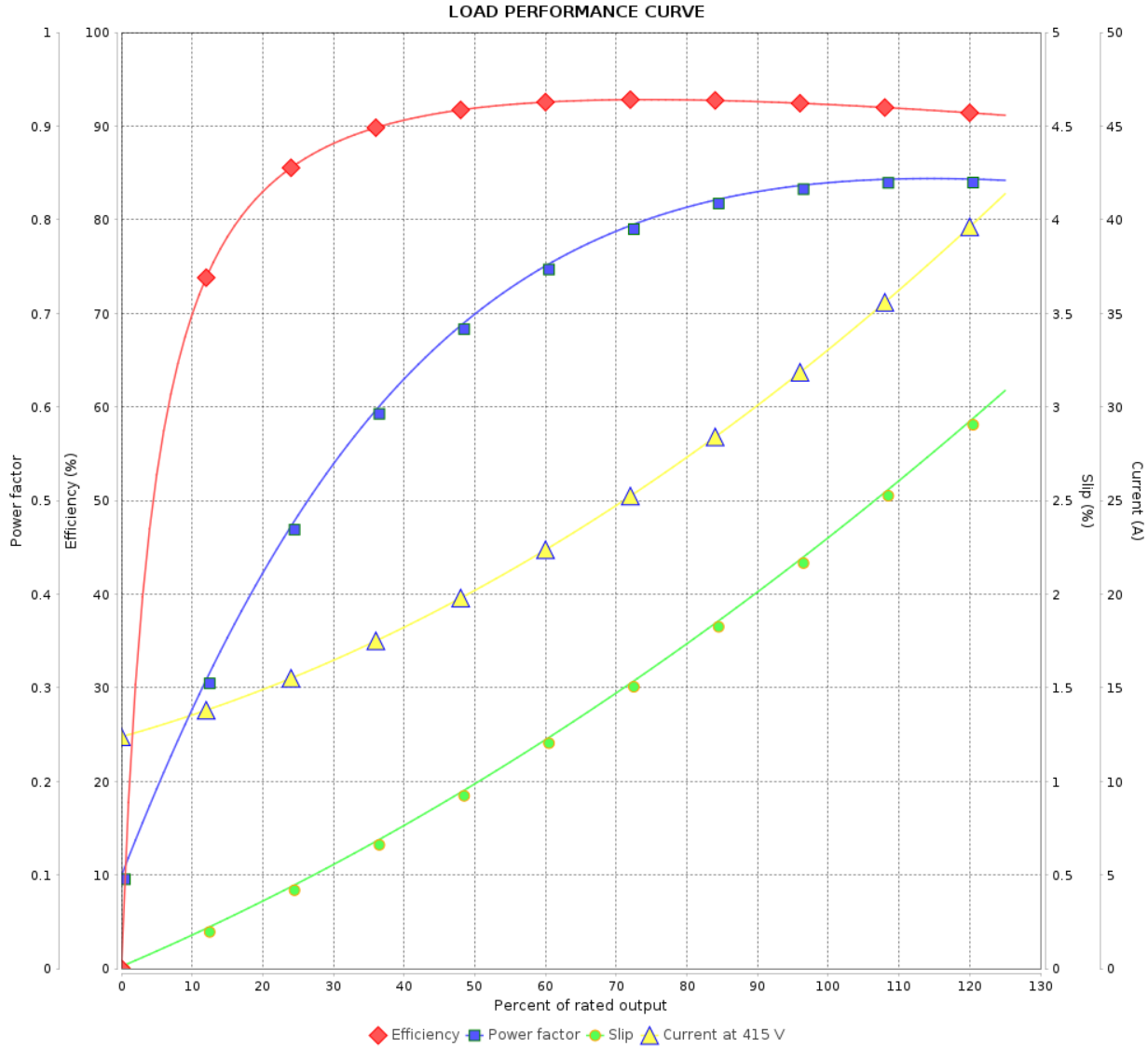
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Performance : 415 V 50 Hz 4P IE2

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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