

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 11341152
Frame	: 324TS	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: F-1	
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 282 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.2063 kgm <sup>2</sup>	
Design	: B			
Output [HP]	40	40	40	40
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	92.4/46.2	55.8	53.3	51.0
L. R. Amperes [A]	610/305	279	304	316
LRC [A]	6.6x(Code G)	5.0x(Code E)	5.7x(Code F)	6.2x(Code G)
No load current [A]	26.0/13.0	12.0	13.0	14.0
Rated speed [RPM]	3560	2940	2950	2955
Slip [%]	1.11	2.00	1.67	1.50
Rated torque [kgfm]	8.15	9.87	9.84	9.82
Locked rotor torque [%]	250	200	210	240
Breakdown torque [%]	260	200	229	250
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	54s (cold) 30s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level <sup>2</sup>	81.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	92.4
	75%	93.6	92.4	93.0
	100%	93.6	91.7	93.0
Power Factor	25%			
	50%	0.79	0.84	0.81
	75%	0.85	0.88	0.87
	100%	0.87	0.89	0.88
Bearing type	: <u>Drive end</u> 6312 2RS C3	<u>Non drive end</u> 6212 2RS C3	Foundation loads	
Sealing	: Oil Seal	Lip Seal	Max. traction	: 168 kgf
Lubrication interval	: -	-	Max. compression	: 450 kgf
Lubricant amount	: -	-		
Lubricant type	: POLYREA ESTER OIL (WT/ ENS)			
Notes USABLE @208V 101A SF 1.15 SFA 116A				
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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Customer : \_\_\_\_\_

### Thermal protection

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

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# LOAD PERFORMANCE CURVE

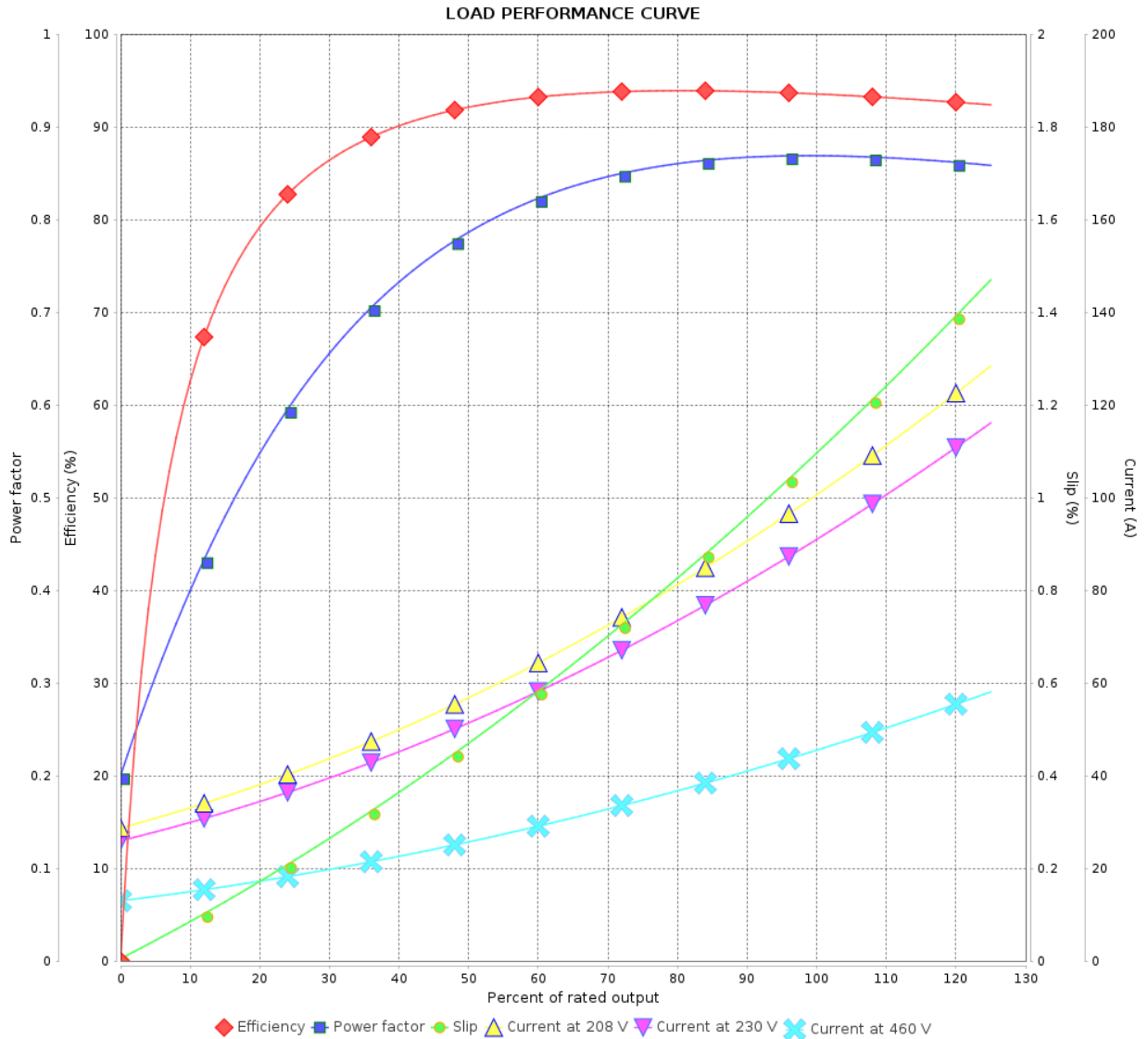
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

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Performance : 230/460 V 60 Hz 2P

Rated current : 92.4/46.2 A  
LRC : 6.6  
Rated torque : 8.15 kgfm  
Locked rotor torque : 250 %  
Breakdown torque : 260 %  
Rated speed : 3560 rpm

Moment of inertia (J) : 0.2063 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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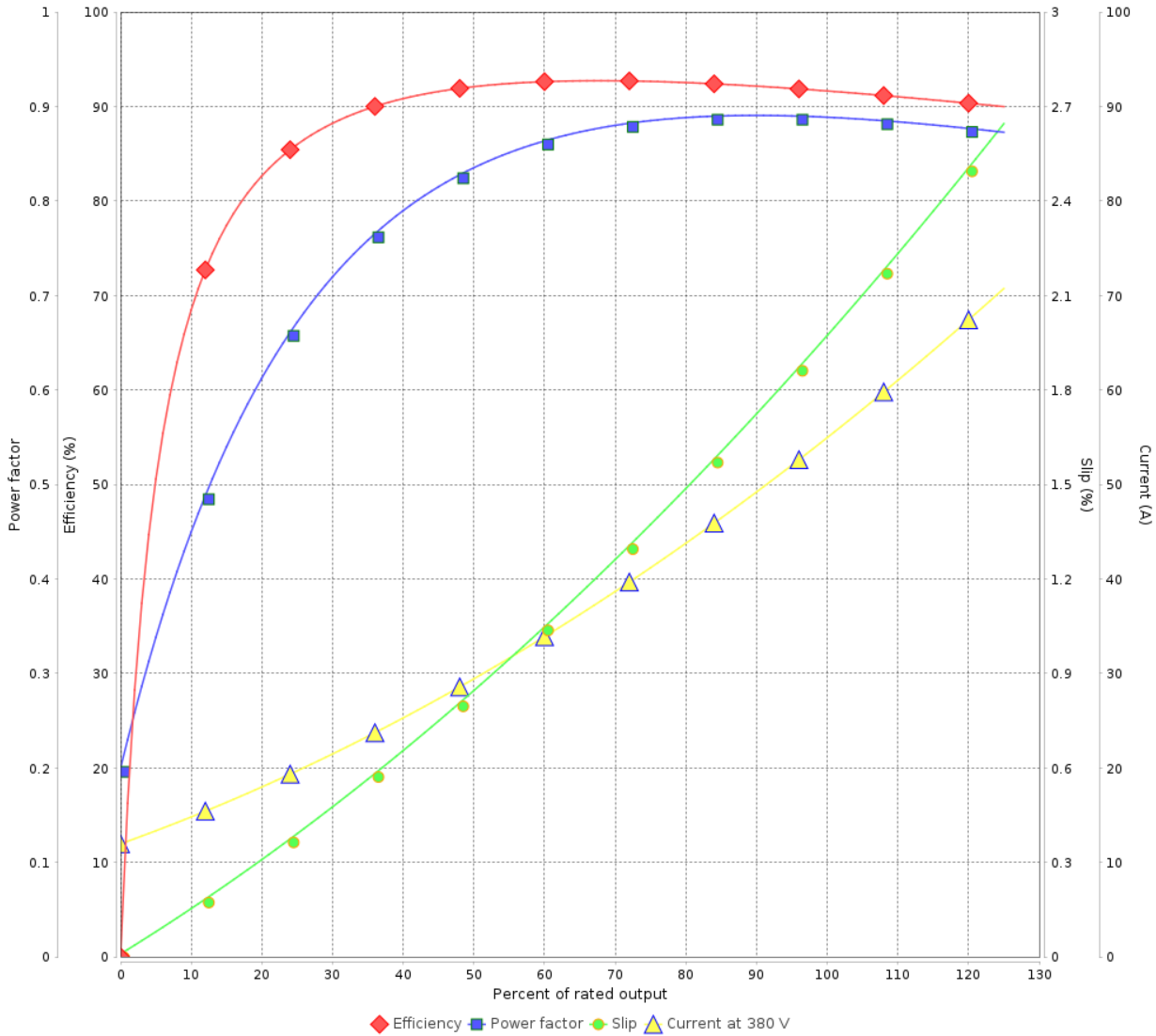


Customer : \_\_\_\_\_

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

Product code : 11341152

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Performance : 380 V 50 Hz 2P IE1

Rated current : 55.8 A  
LRC : 5.0  
Rated torque : 9.87 kgfm  
Locked rotor torque : 200 %  
Breakdown torque : 200 %  
Rated speed : 2940 rpm

Moment of inertia (J) : 0.2063 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

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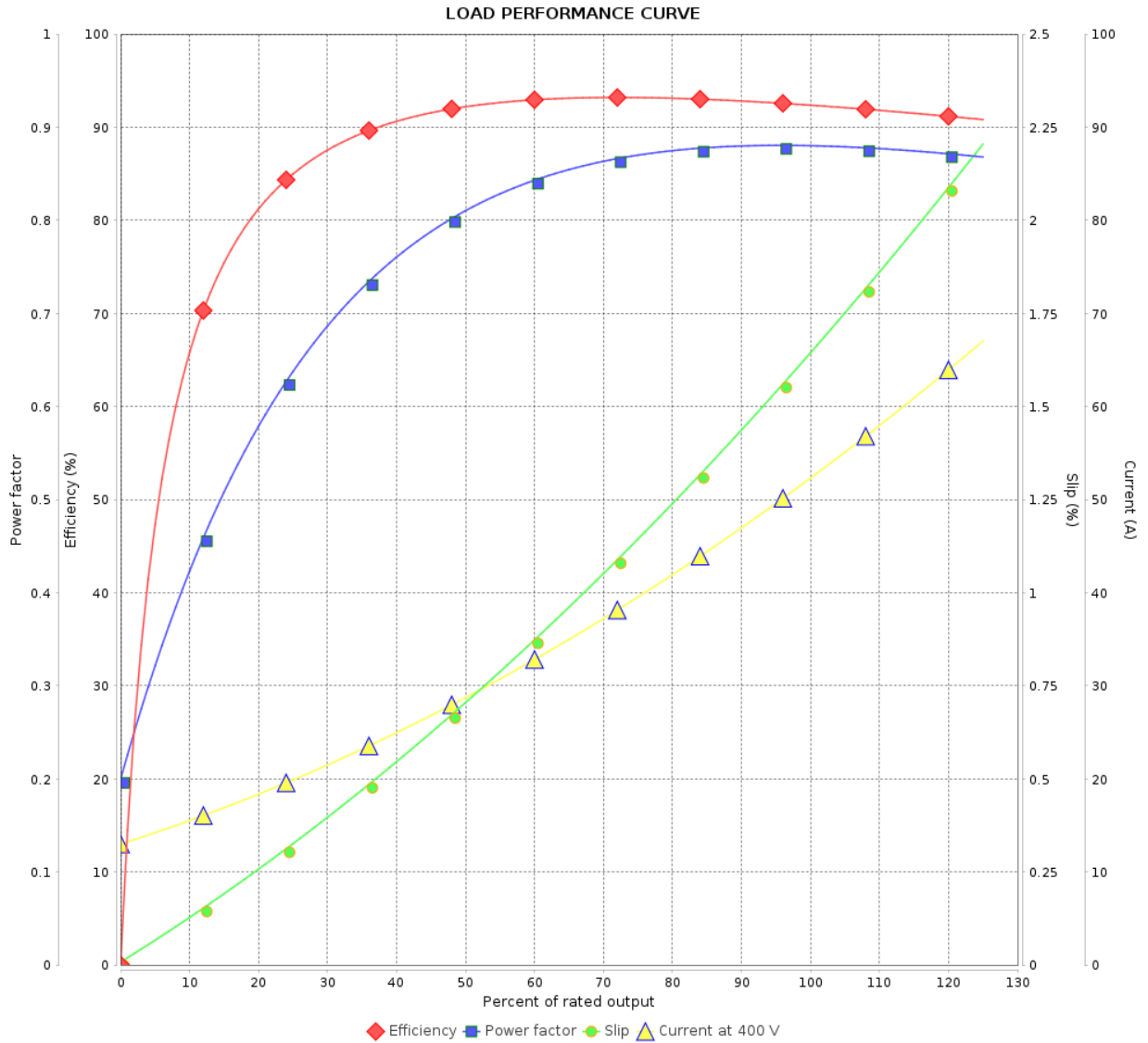
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

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Performance : 400 V 50 Hz 2P IE2

Rated current : 53.3 A  
LRC : 5.7  
Rated torque : 9.84 kgfm  
Locked rotor torque : 210 %  
Breakdown torque : 229 %  
Rated speed : 2950 rpm

Moment of inertia (J) : 0.2063 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

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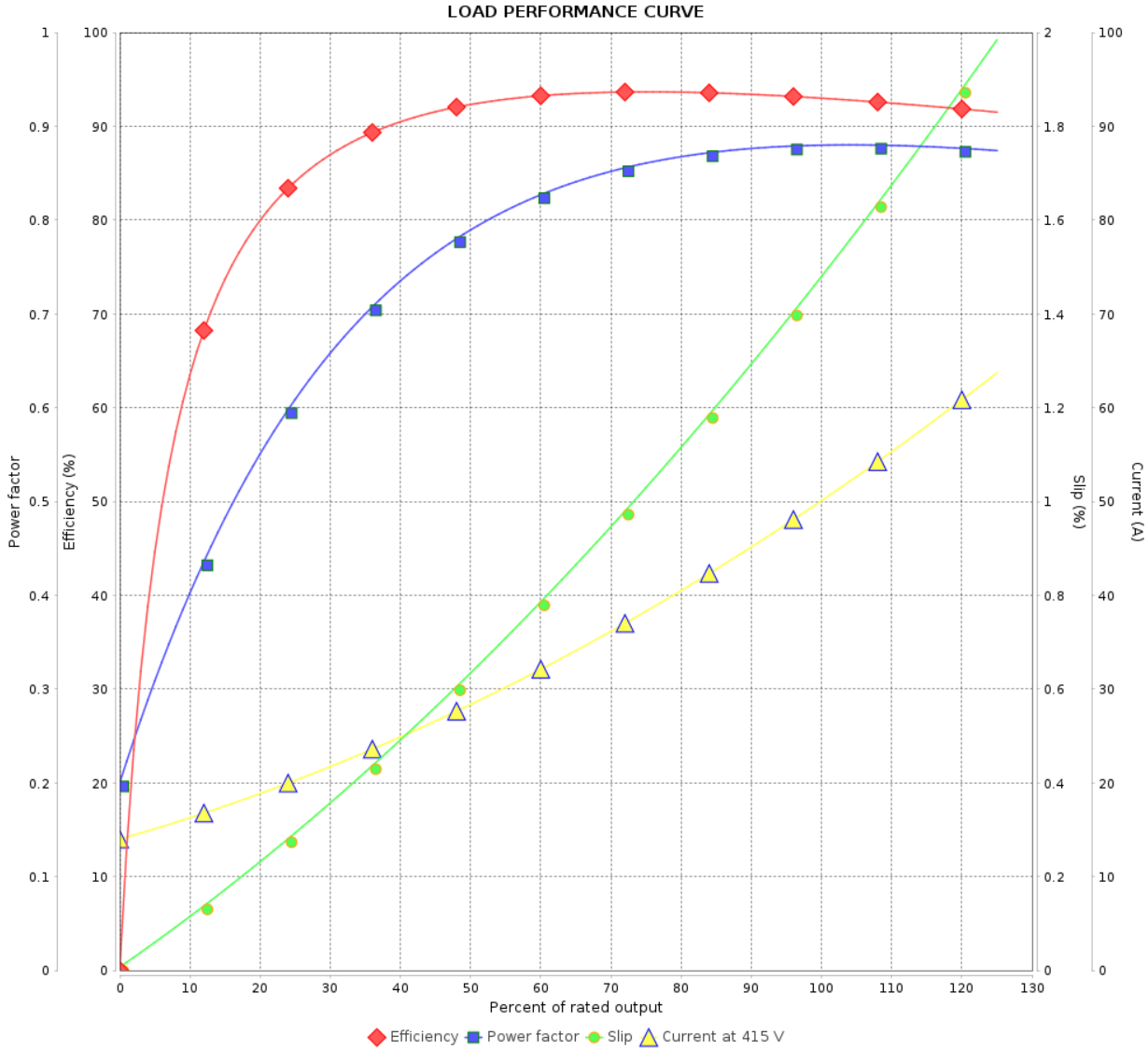
Three Phase Induction Motor - Squirrel Cage



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Efficiency Three-Phase

Product code : 11341152



Performance : 415 V 50 Hz 2P IE2

Rated current : 51.0 A  
LRC : 6.2  
Rated torque : 9.82 kgfm  
Locked rotor torque : 240 %  
Breakdown torque : 250 %  
Rated speed : 2955 rpm

Moment of inertia (J) : 0.2063 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

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