

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 16572113			
Frame	: 200L	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B35L(E)		
Duty cycle	: S1	Rotation <sup>1</sup>	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: VFD		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 258 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.3468 kgm <sup>2</sup>		
Design	: N				
Output [HP]	40	40	40		
Poles	4	4	4		
Frequency [Hz]	60	50	50		
Rated voltage [V]	208-230/460	380	415		
Rated current [A]	109-98.8/49.4	58.0	55.7		
L. R. Amperes [A]	1005-909/454	423	457		
LRC [A]	9.2	7.3	8.2		
No load current [A]	44.0-51.0/25.5	24.5	27.0		
Rated speed [RPM]	1785	1480	1485		
Slip [%]	0.83	1.33	1.00		
Rated torque [kgfm]	16.3	19.6	19.5		
Locked rotor torque [%]	340	250	310		
Breakdown torque [%]	350	280	310		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	23s (cold) 13s (hot)	19s (cold) 11s (hot)	16s (cold) 9s (hot)		
Noise level <sup>2</sup>	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)		
Efficiency (%)	25%	0.000	0.000	0.000	
	50%	92.6	93.4	92.8	
	75%	93.7	93.7	93.3	
	100%	94.1	93.6	93.6	
Power Factor	25%	0.00	0.00	0.00	
	50%	0.63	0.69	0.60	
	75%	0.75	0.79	0.72	
	100%	0.81	0.84	0.80	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	6.0	6.6	6.6	
	P2 (0,5;1,0)	4.7	5.1	5.1	
	P3 (0,25;1,0)	4.3	4.6	4.6	
	P4 (0,9;0,5)	3.5	3.9	3.9	
	P5 (0,5;0,5)	2.3	2.5	2.5	
	P6 (0,5;0,25)	1.8	1.9	1.9	
	P7 (0,25;0,25)	1.2	1.3	1.3	
Bearing type	: Drive end : 6312 C3	Non drive end : 6212 C3	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 633 kgf	
Lubrication interval	: 20000 h	20000 h	Max. compression	: 891 kgf	
Lubricant amount	: 21 g	13 g			
Lubricant type	: Mobil Polyrex EM				
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 : \_\_\_\_\_

Notes

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# LOAD PERFORMANCE CURVE

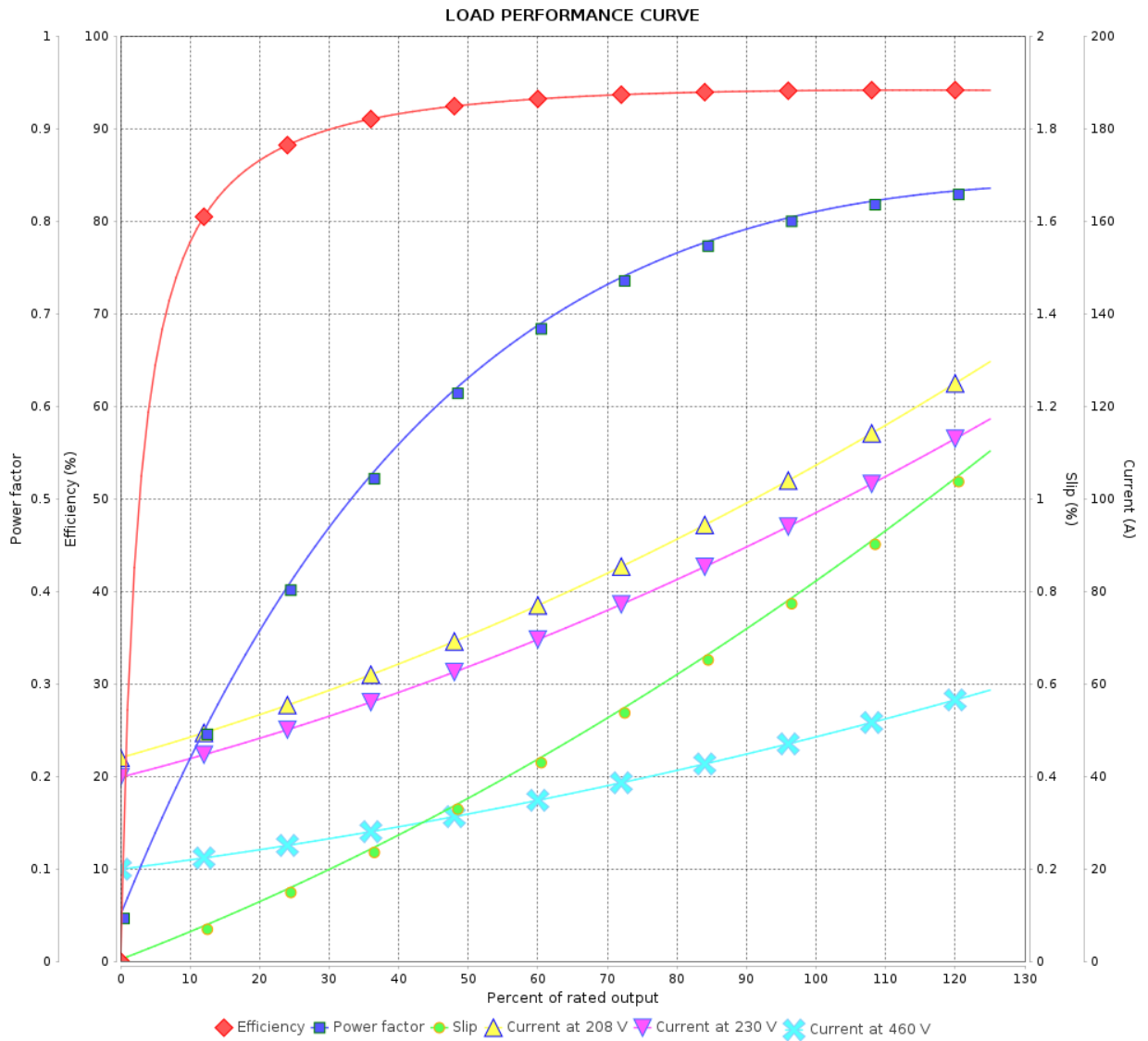
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

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Performance : 208-230/460 V 60 Hz 4P

Rated current : 109-98.8/49.4 A  
 LRC : 9.2  
 Rated torque : 16.3 kgfm  
 Locked rotor torque : 340 %  
 Breakdown torque : 350 %  
 Rated speed : 1785 rpm

Moment of inertia (J) : 0.3468 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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# LOAD PERFORMANCE CURVE

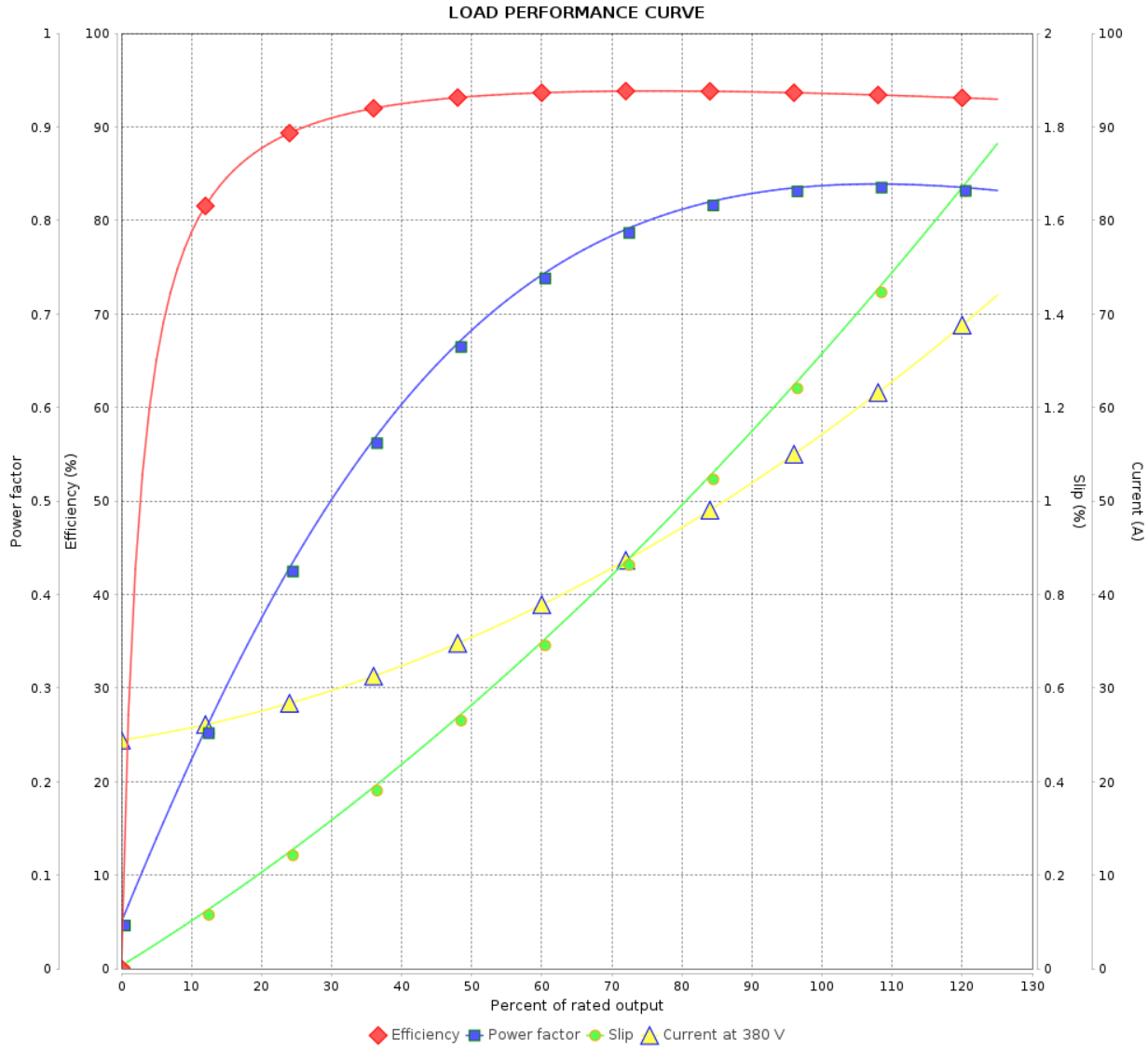
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

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Performance : 380 V 50 Hz 4P

Rated current : 58.0 A  
 LRC : 7.3  
 Rated torque : 19.6 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.3468 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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# LOAD PERFORMANCE CURVE

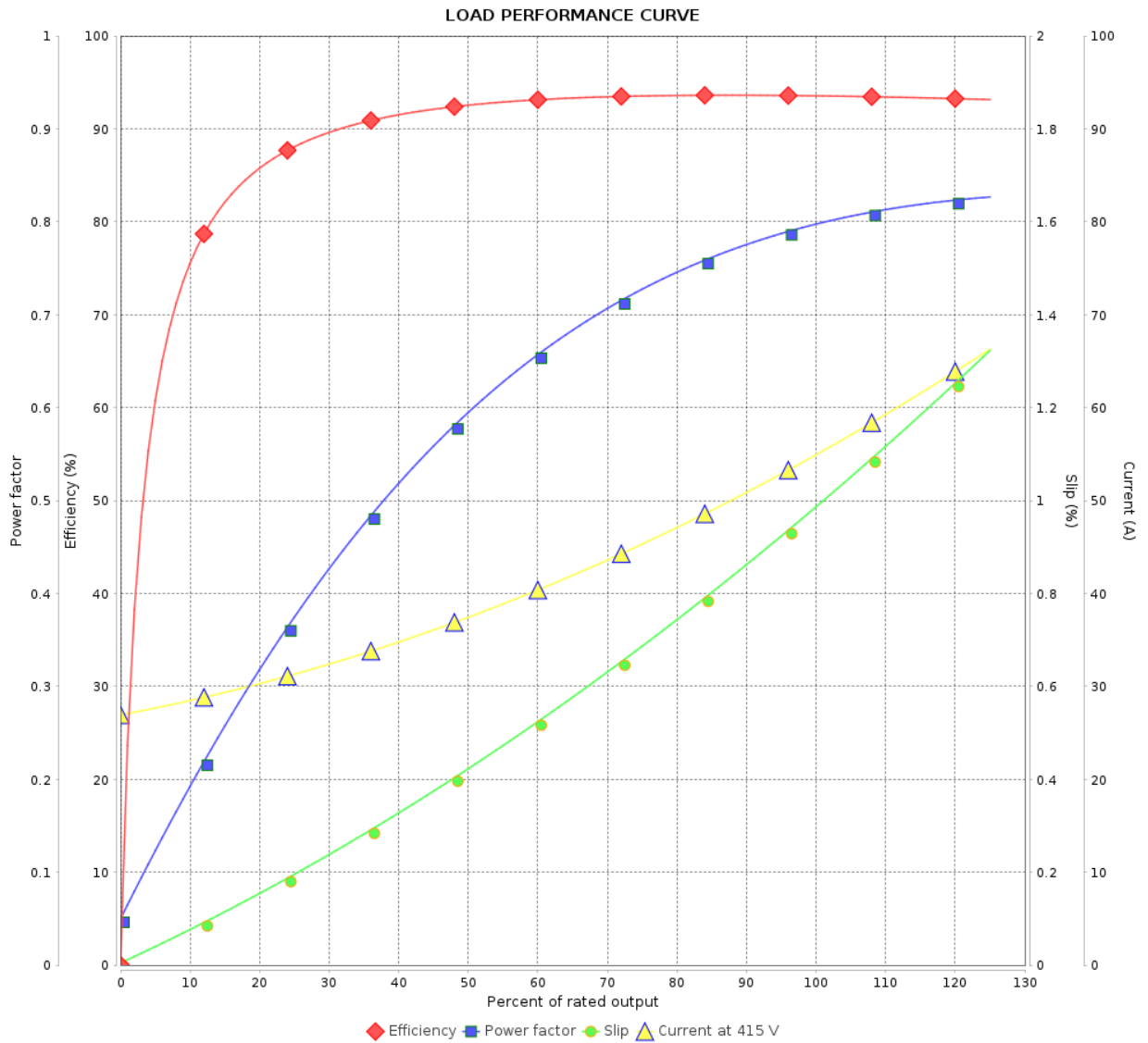
Three Phase Induction Motor - Squirrel Cage



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

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Performance : 415 V 50 Hz 4P

Rated current : 55.7 A  
 LRC : 8.2  
 Rated torque : 19.5 kgfm  
 Locked rotor torque : 310 %  
 Breakdown torque : 310 %  
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.3468 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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