

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase  
Product code : 11715187

Frame	: L182/4T	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>	: 51.4 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0206 kgm <sup>2</sup>
Design	: A		

Output [HP]	5	5	5	5
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	12.9/6.46	7.66	7.46	7.22
L. R. Amperes [A]	103/51.7	49.0	53.0	54.9
LRC [A]	8.0x(Code K)	6.4x(Code H)	7.1x(Code J)	7.6x(Code J)
No load current [A]	7.26/3.63	3.52	3.63	3.85
Rated speed [RPM]	1755	1445	1450	1455
Slip [%]	2.50	3.67	3.33	3.00
Rated torque [kgfm]	2.07	2.51	2.50	2.49
Locked rotor torque [%]	260	210	240	270
Breakdown torque [%]	310	240	270	300
Service factor	1.25	1.25	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	36s (cold) 20s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level <sup>2</sup>	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%			
	50%	88.5	88.5	88.5
	75%	90.2	89.5	89.5
	100%	91.0	89.5	89.5
Power Factor	25%			
	50%	0.61	0.68	0.64
	75%	0.73	0.77	0.75
	100%	0.79	0.82	0.80

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	9.4	11.2	11.2	10.4
	P2 (0,5;1,0)	7.9	9.4	9.4	8.7
	P3 (0,25;1,0)	7.7	9.2	9.2	8.5
	P4 (0,9;0,5)	5.0	6.0	6.0	5.5
	P5 (0,5;0,5)	3.6	4.2	4.2	3.9
	P6 (0,5;0,25)	2.6	3.0	3.0	2.8
	P7 (0,25;0,25)	1.9	2.3	2.3	2.1

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6207 ZZ	6206 ZZ	Max. traction	: 131 kgf
Sealing	: V'Ring	V'Ring	Max. compression	: 182 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
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.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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## Three Phase Induction Motor - Squirrel Cage



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

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# LOAD PERFORMANCE CURVE

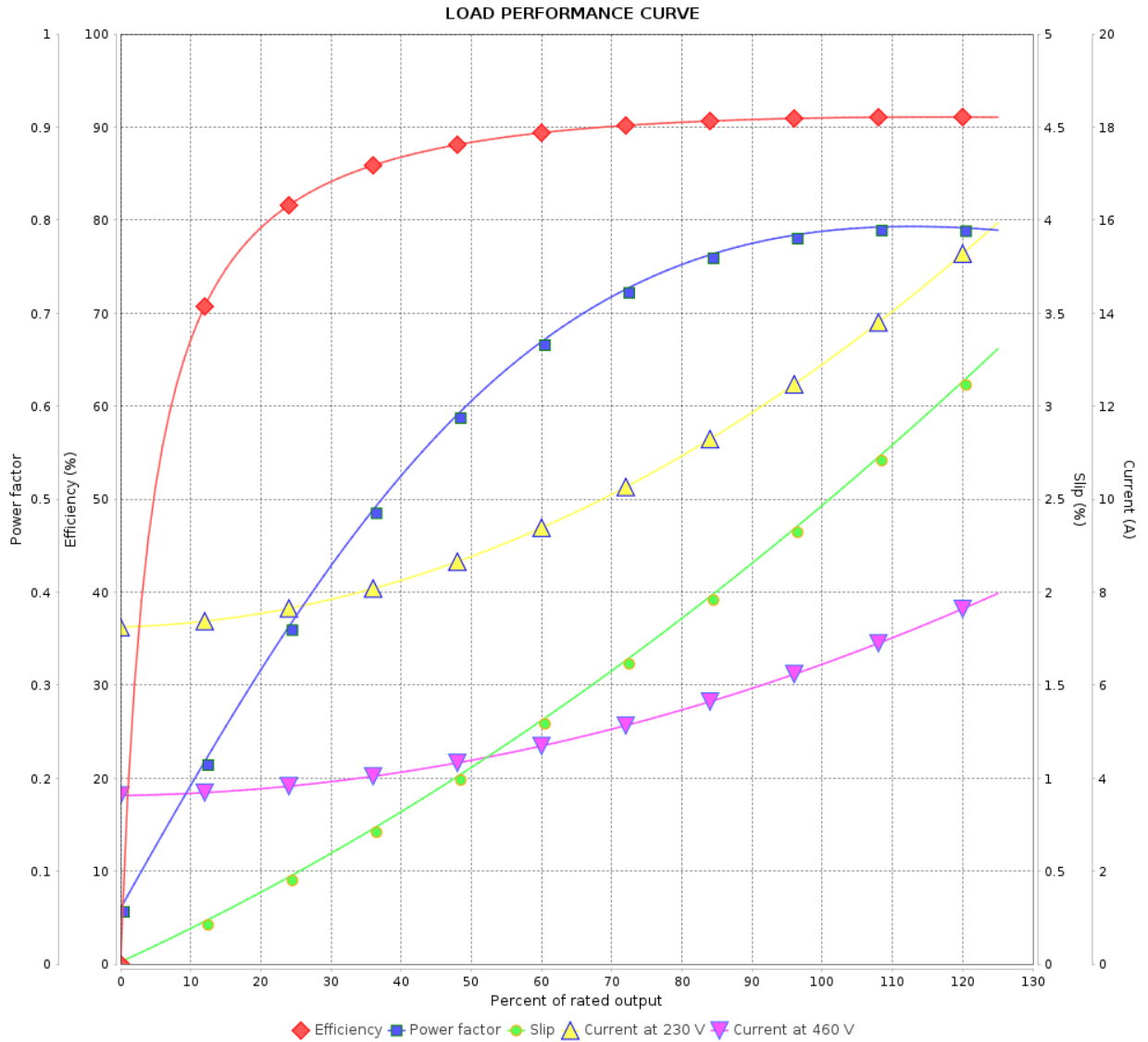
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase

Product code : 11715187



Performance : 230/460 V 60 Hz 4P

Rated current : 12.9/6.46 A  
 LRC : 8.0  
 Rated torque : 2.07 kgfm  
 Locked rotor torque : 260 %  
 Breakdown torque : 310 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : A

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# LOAD PERFORMANCE CURVE

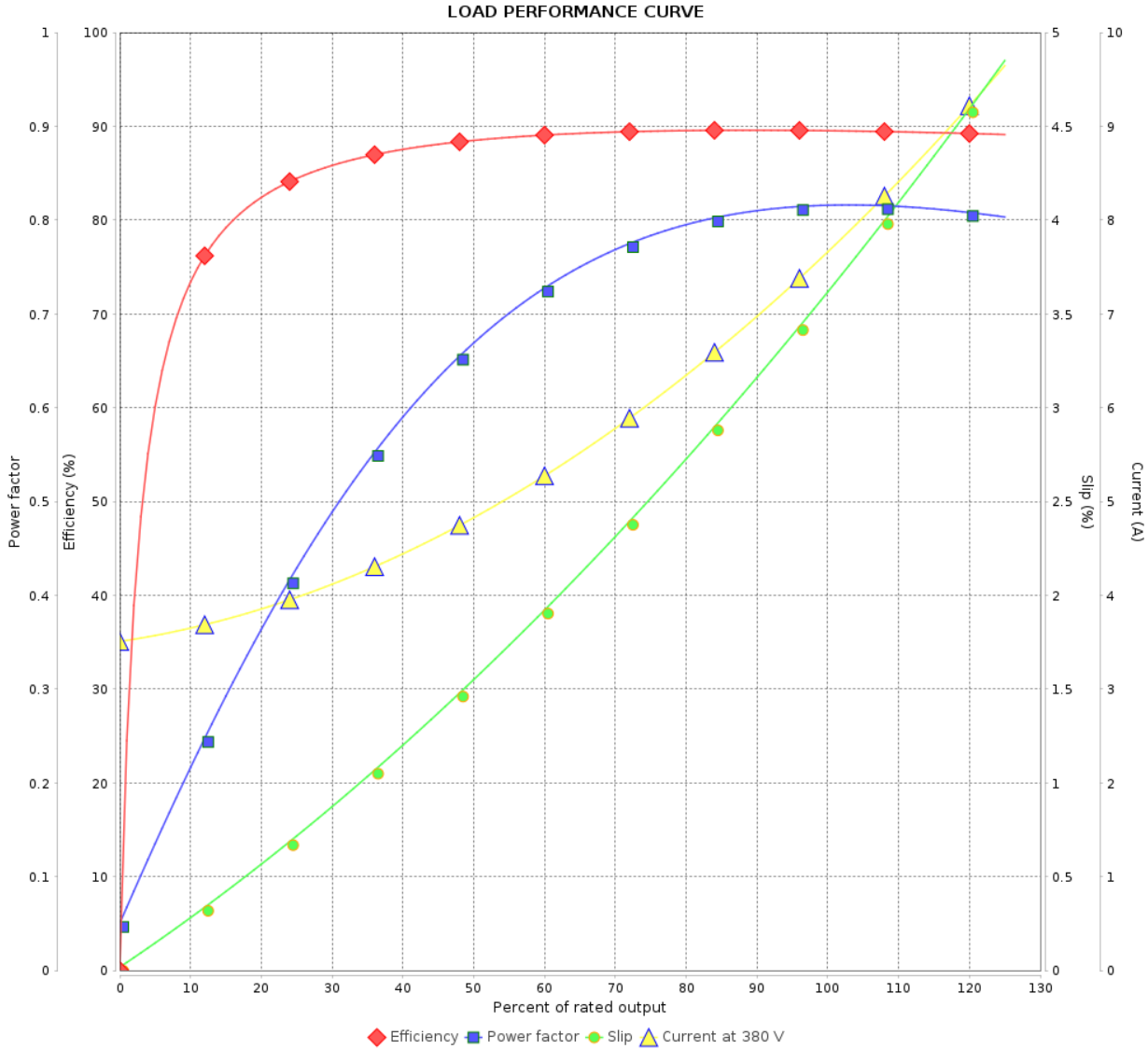
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase

Product code : 11715187



Performance : 380 V 50 Hz 4P IE3

Rated current : 7.66 A  
 LRC : 6.4  
 Rated torque : 2.51 kgfm  
 Locked rotor torque : 210 %  
 Breakdown torque : 240 %  
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : A

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# LOAD PERFORMANCE CURVE

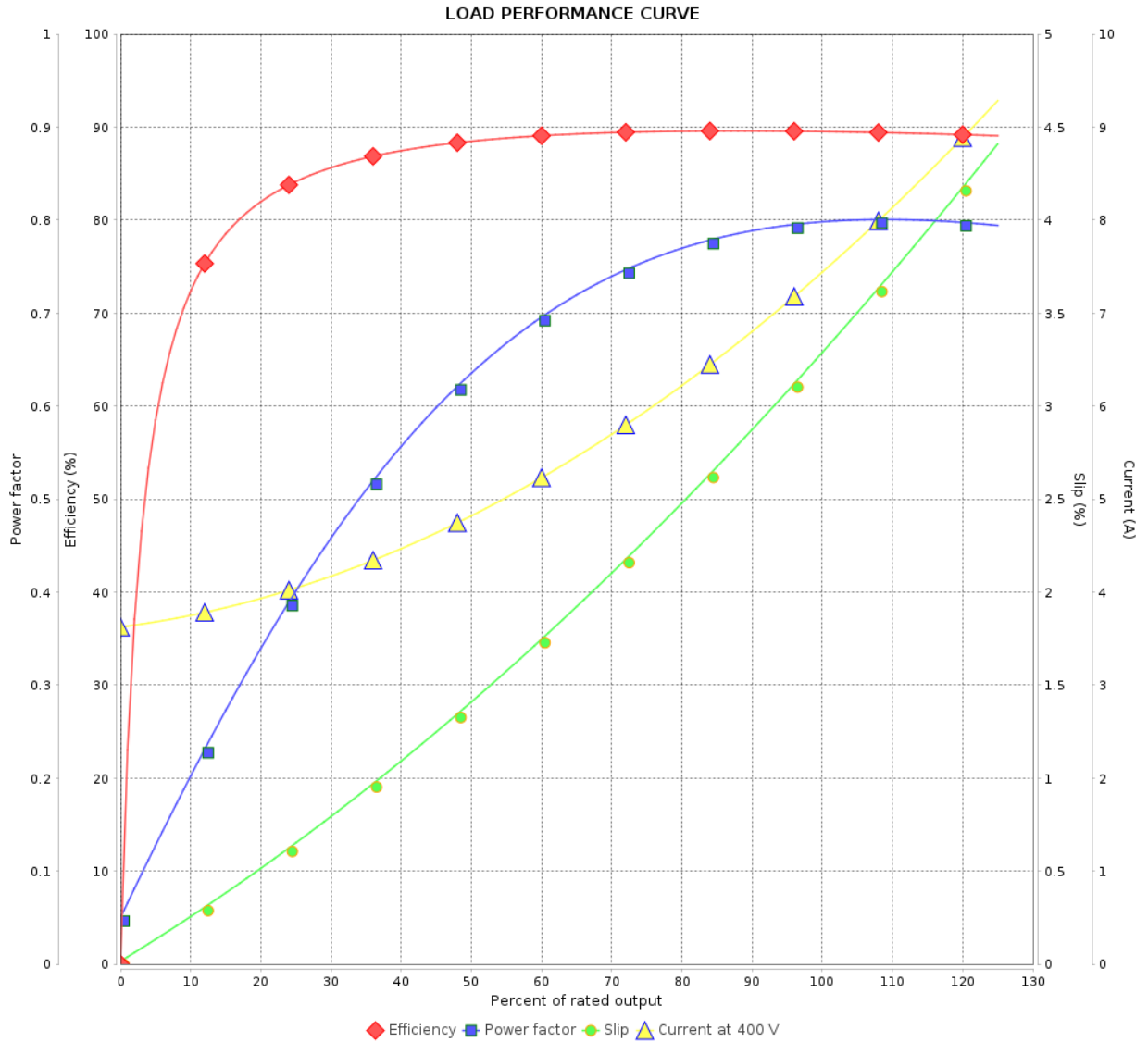
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Super Premium Efficiency Three-Phase

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Performance : 400 V 50 Hz 4P IE3

Rated current : 7.46 A  
 LRC : 7.1  
 Rated torque : 2.50 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 270 %  
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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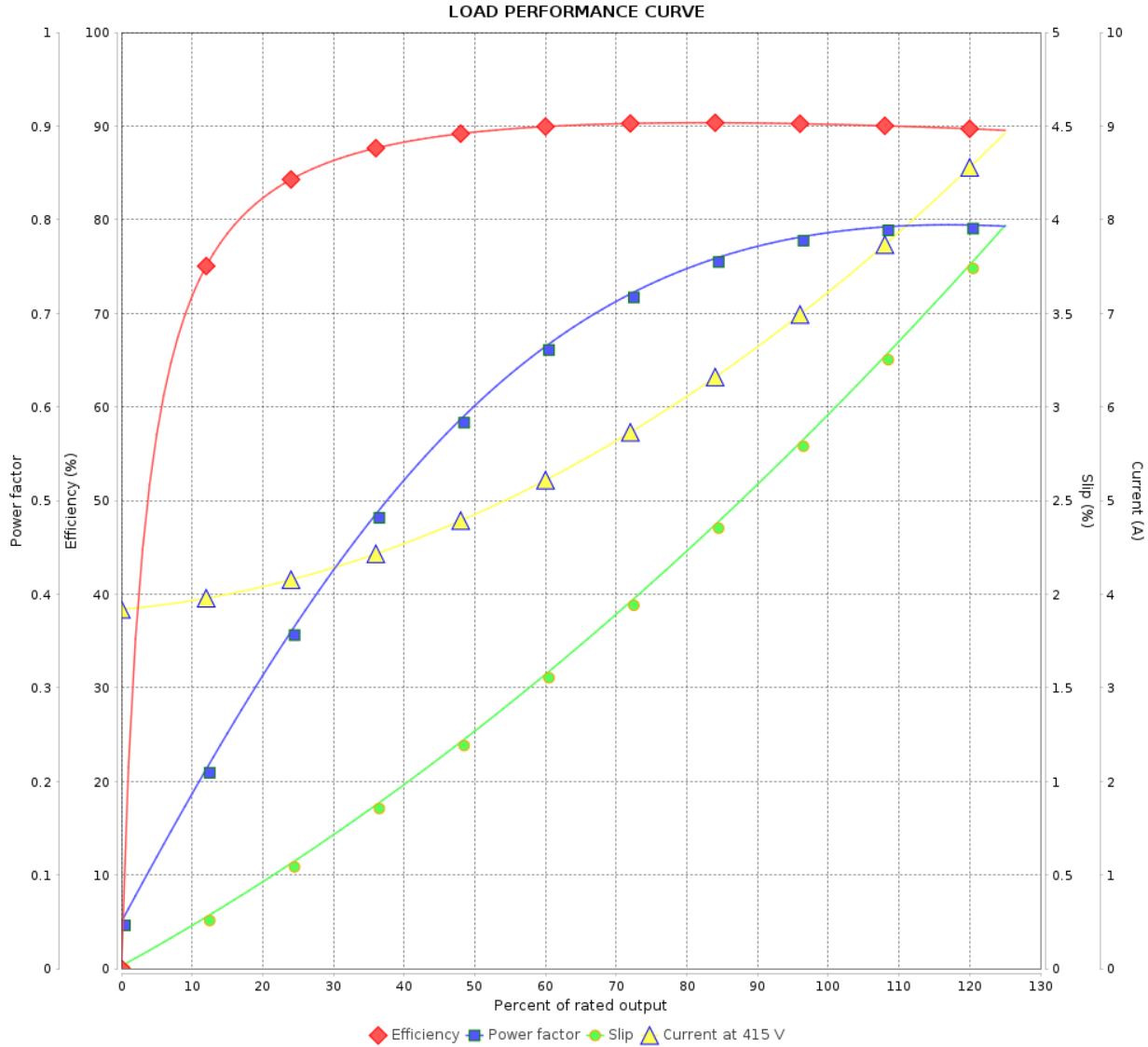
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Super Premium Efficiency Three-Phase

Product code : 11715187



Performance : 415 V 50 Hz 4P IE3

Rated current : 7.22 A  
 LRC : 7.6  
 Rated torque : 2.49 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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