

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11567531

Frame	: 280S/M	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B3L(E)
Duty cycle	: 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	: 747 kg
Protection degree	: IP55	Moment of inertia (J)	: 2.55 kgm ²
Design	: N		

Output [HP]	125	125	125	
Poles	4	4	4	
Frequency [Hz]	50	50	60	
Rated voltage [V]	380	415	460	
Rated current [A]	167	156	141	
L. R. Amperes [A]	1169	1248	1142	
LRC [A]	7.0	8.0	8.1	
No load current [A]	45.5	51.5	46.0	
Rated speed [RPM]	1483	1487	1787	
Slip [%]	1.13	0.87	0.72	
Rated torque [kgfm]	61.2	61.0	50.8	
Locked rotor torque [%]	180	229	240	
Breakdown torque [%]	200	229	260	
Service factor	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	59s (cold) 33s (hot)	52s (cold) 29s (hot)	66s (cold) 37s (hot)	
Noise level ²	69.0 dB(A)	69.0 dB(A)	73.0 dB(A)	
Efficiency (%)	25%	94.9	94.5	93.1
	50%	95.1	94.9	93.6
	75%	95.3	95.5	95.0
	100%	95.4	95.8	95.4
Power Factor	25%	0.54	0.49	0.48
	50%	0.77	0.72	0.71
	75%	0.83	0.81	0.80
	100%	0.86	0.84	0.84

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

Losses (%)	P1 (0,9;1,0)	4.5	4.1	4.5
	P2 (0,5;1,0)	3.1	2.8	3.1
	P3 (0,25;1,0)	2.6	2.4	2.6
	P4 (0,9;0,5)	2.6	2.4	2.6
	P5 (0,5;0,5)	1.4	1.3	1.4
	P6 (0,5;0,25)	1.0	0.9	1.0
	P7 (0,25;0,25)	0.6	0.5	0.6

	Drive end	Non drive end	Foundation loads
Bearing type	: 6316 C3	6316 C3	Max. traction : 781 kgf
Sealing	: WSeal	WSeal	Max. compression : 1528 kgf
Lubrication interval	: 10000 h	10000 h	
Lubricant amount	: 34 g	34 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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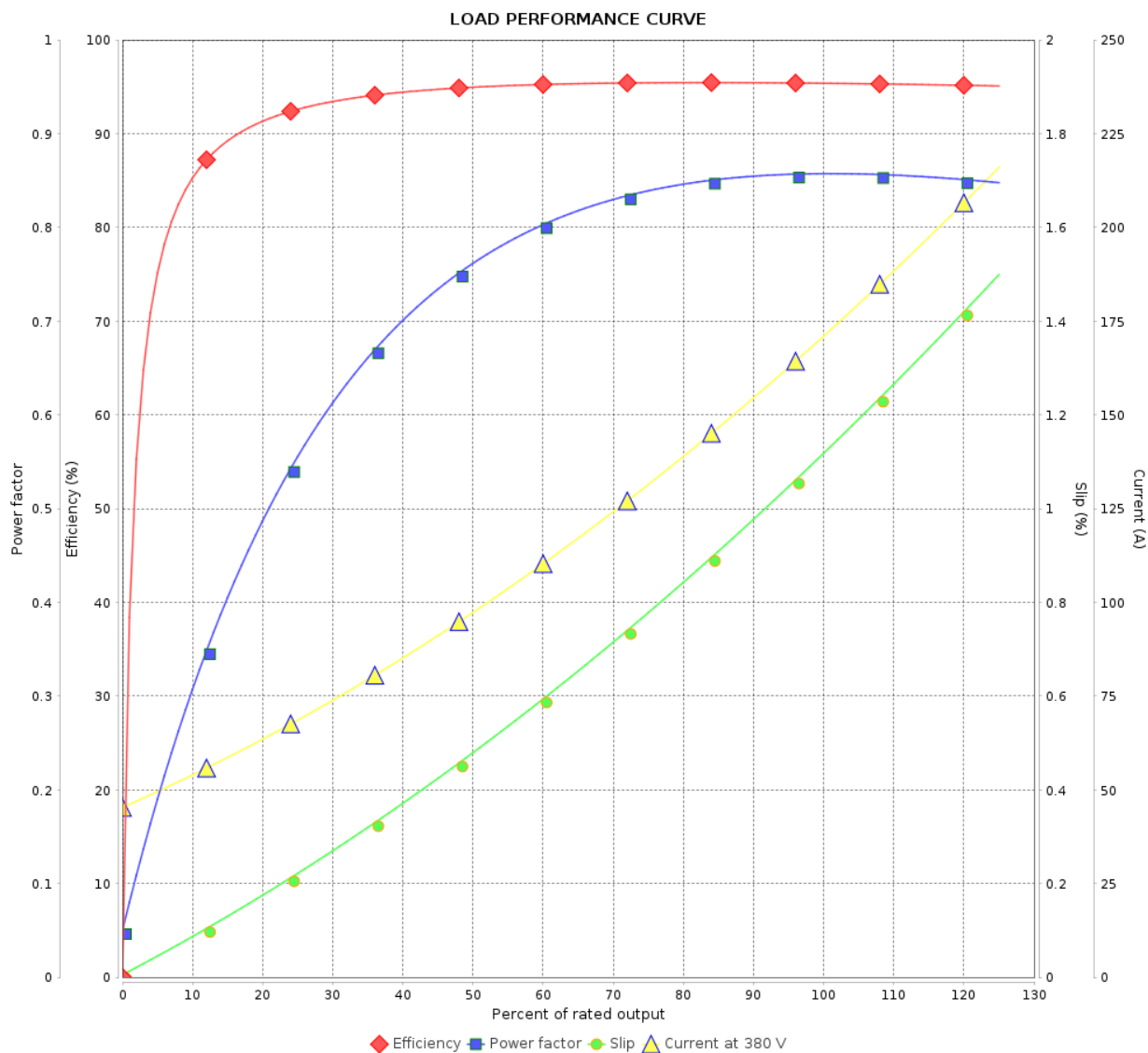
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11567531



Performance : 380 V 50 Hz 4P

Rated current : 167 A
LRC : 7.0
Rated torque : 61.2 kgfm
Locked rotor torque : 180 %
Breakdown torque : 200 %
Rated speed : 1483 rpm

Moment of inertia (J) : 2.55 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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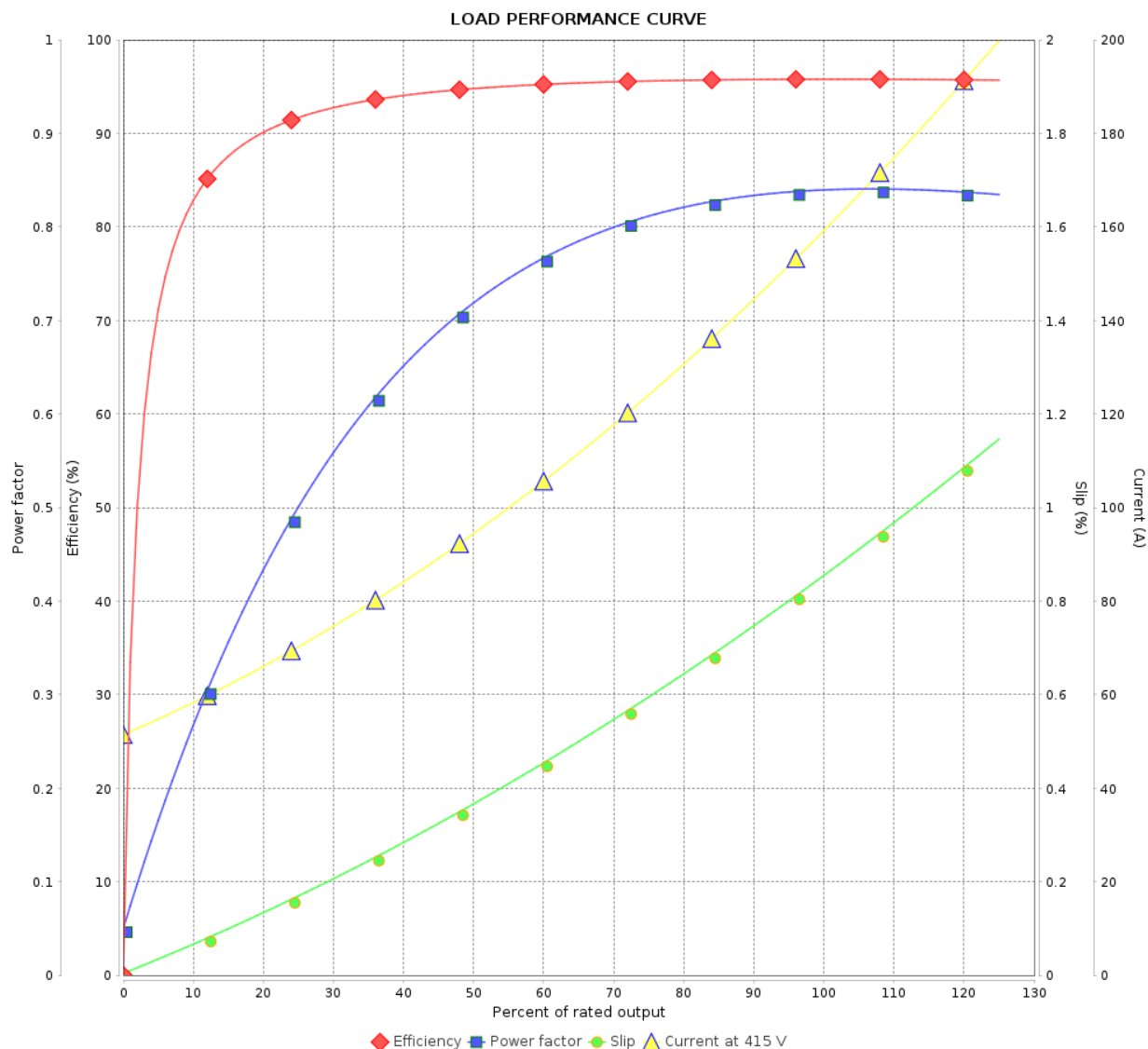
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11567531



Performance : 415 V 50 Hz 4P

Rated current	: 156 A	Moment of inertia (J)	: 2.55 kgm ²
LRC	: 8.0	Duty cycle	: S1
Rated torque	: 61.0 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: N

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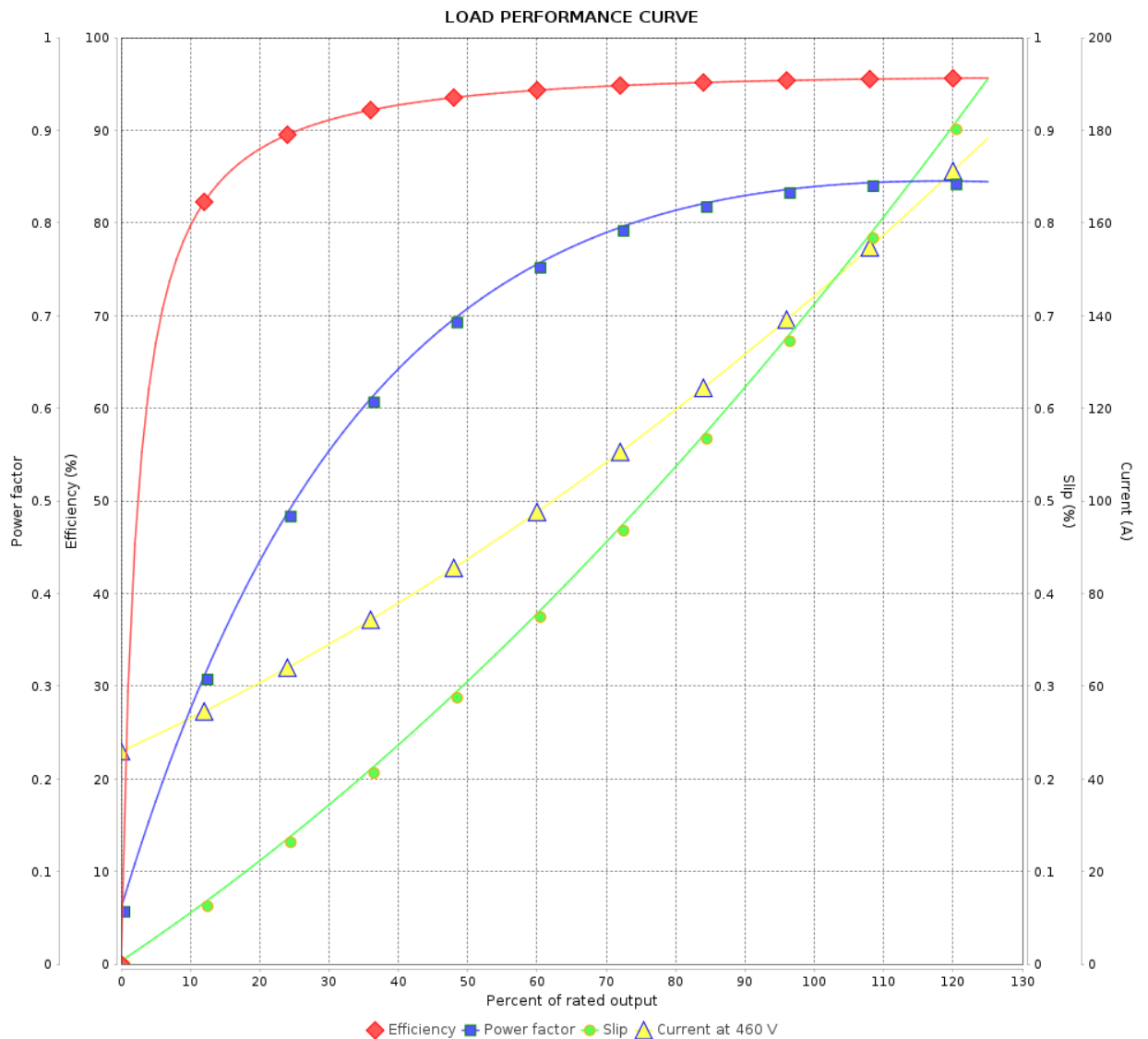
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11567531



Performance : 460 V 60 Hz 4P

Rated current : 141 A
LRC : 8.1
Rated torque : 50.8 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1787 rpm

Moment of inertia (J) : 2.55 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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