

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563

Frame	: 160M	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	: 115 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0419 kgm ²
Design	: N		

Output [HP]	15	15	15
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	380	415
Rated current [A]	36.6/18.3	21.1	20.2
L. R. Amperes [A]	347/174	168	192
LRC [A]	9.5	8.0	9.5
No load current [A]	16.0/8.00	7.80	9.10
Rated speed [RPM]	3560	2945	2956
Slip [%]	1.11	1.83	1.47
Rated torque [kgfm]	3	3	3
Locked rotor torque [%]	330	240	300
Breakdown torque [%]	420	320	380
Service factor	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	16s (cold) 9s (hot)	12s (cold) 7s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%		
	50%	89.5	89.5
	75%	91.0	91.0
	100%	91.0	91.2
Power Factor	25%		
	50%	0.67	0.65
	75%	0.77	0.77
	100%	0.83	0.83

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

Losses (%)	P1 (0,9;1,0)	10.2	8.7	9.1
	P2 (0,5;1,0)	8.3	7.0	7.3
	P3 (0,25;1,0)	8.2	7.0	7.3
	P4 (0,9;0,5)	5.9	5.0	5.3
	P5 (0,5;0,5)	3.9	3.3	3.4
	P6 (0,5;0,25)	2.9	2.5	2.6
	P7 (0,25;0,25)	2.0	1.7	1.8

	Drive end	Non drive end	Foundation loads
Bearing type	: 6309 C3	6209 C3	Max. traction : 162 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 277 kgf
Lubrication interval	: 19000 h	20000 h	
Lubricant amount	: 13 g	9 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 : _____

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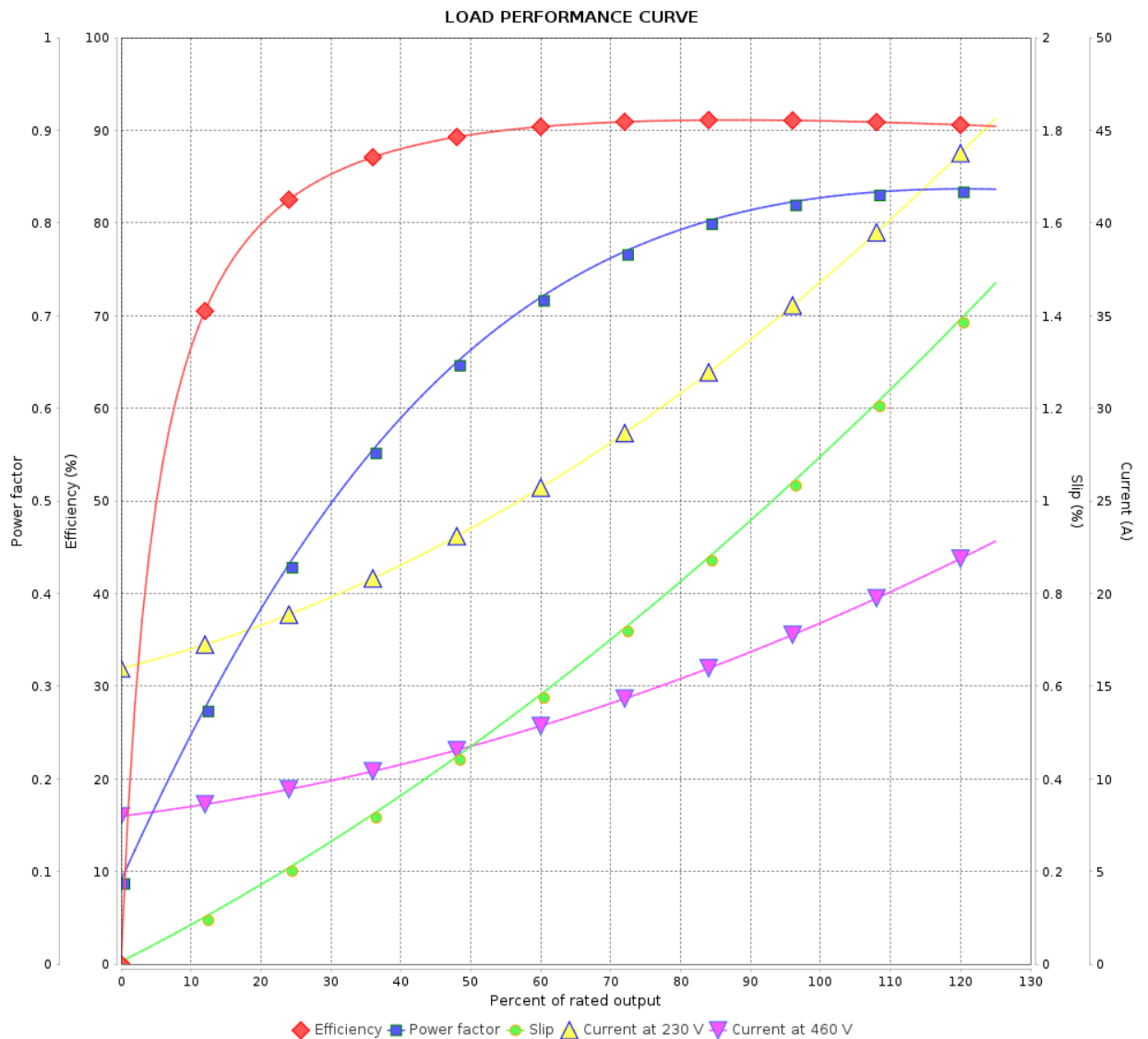
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Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563



Performance : 230/460 V 60 Hz 2P

Rated current : 36.6/18.3 A
LRC : 9.5
Rated torque : 3 kgfm
Locked rotor torque : 330 %
Breakdown torque : 420 %
Rated speed : 3560 rpm

Moment of inertia (J) : 0.0419 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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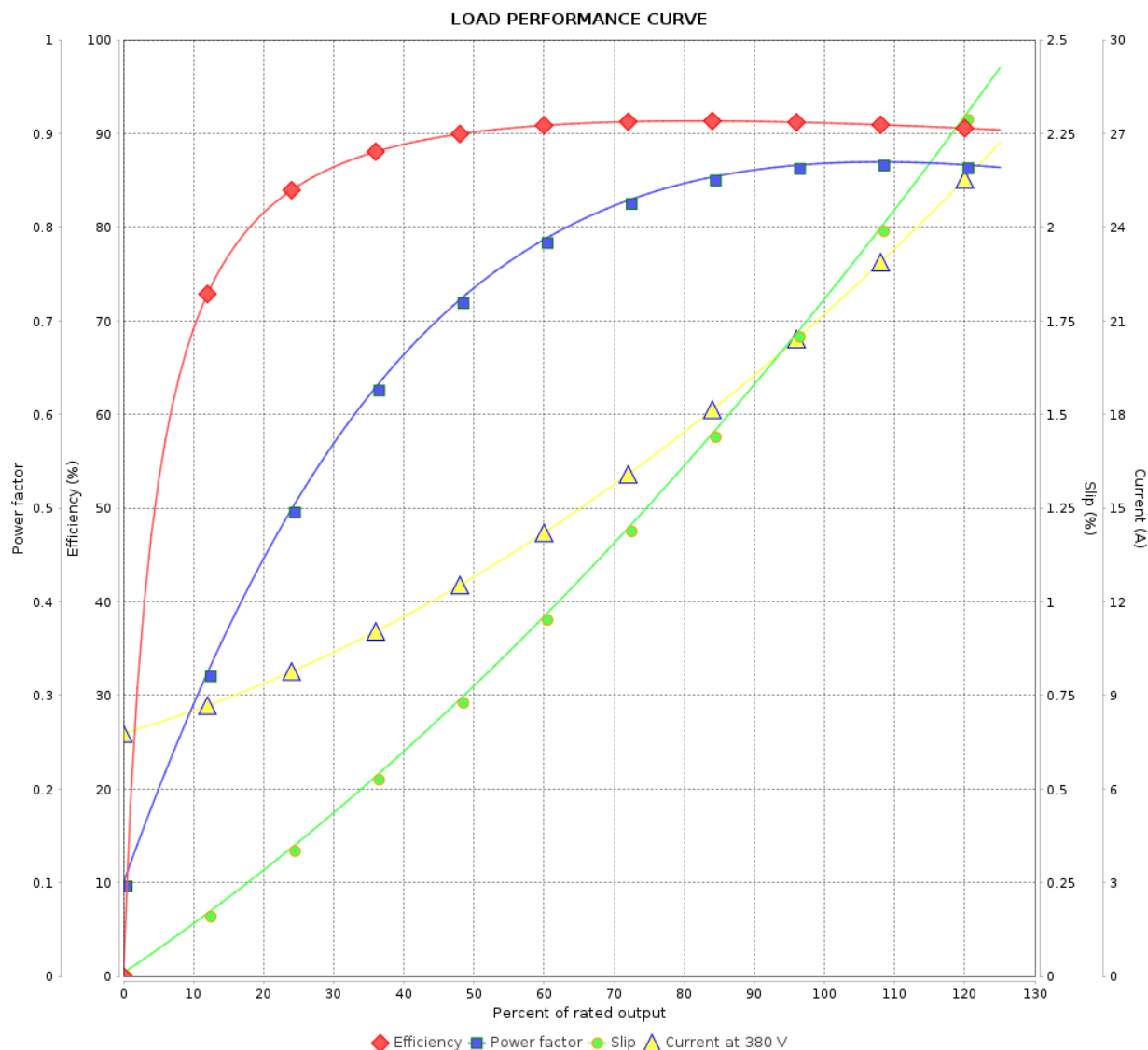
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563



Performance : 380 V 50 Hz 2P

Rated current : 21.1 A
LRC : 8.0
Rated torque : 3 kgfm
Locked rotor torque : 240 %
Breakdown torque : 320 %
Rated speed : 2945 rpm

Moment of inertia (J) : 0.0419 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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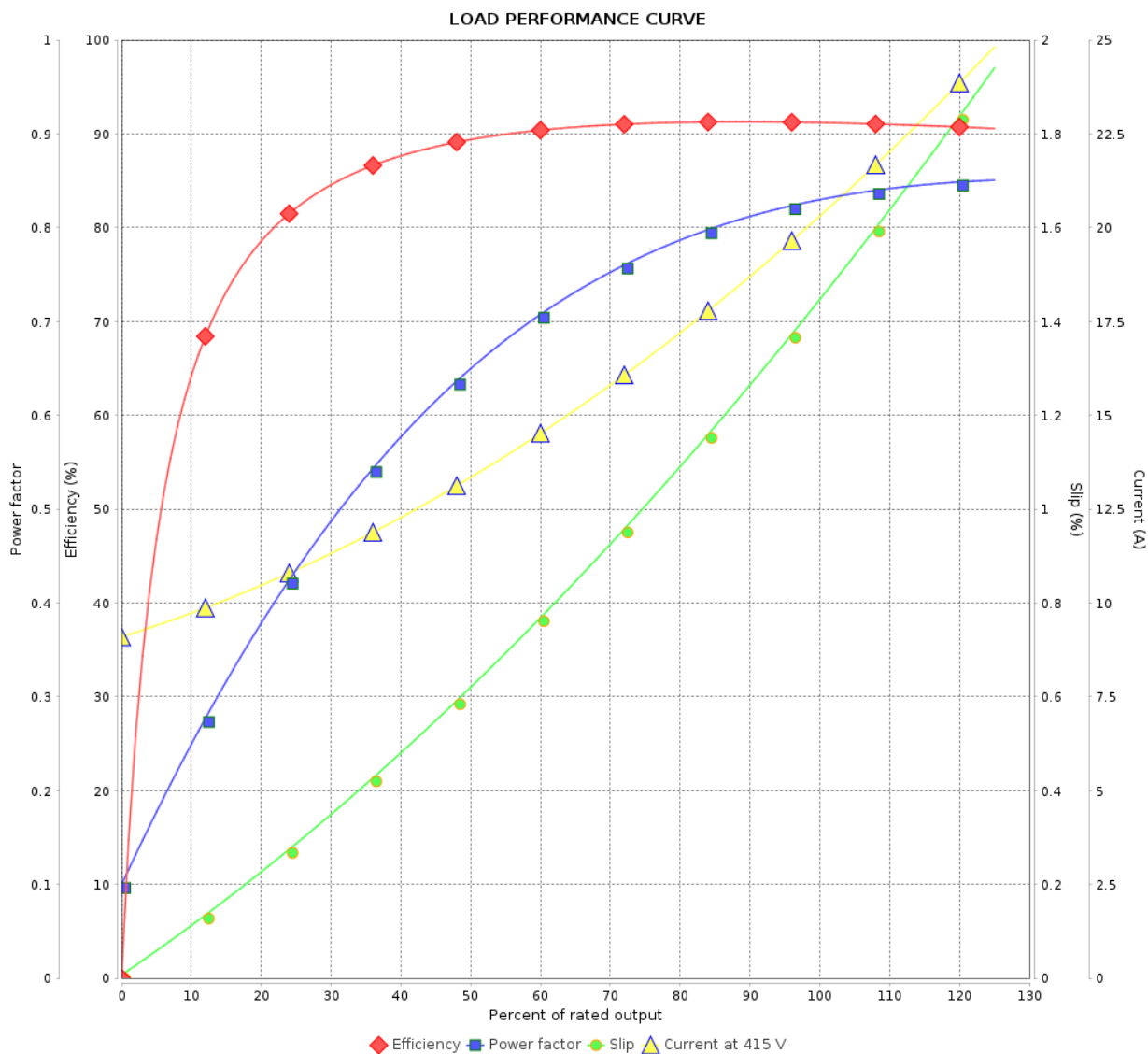
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563



Performance : 415 V 50 Hz 2P

Rated current : 20.2 A
LRC : 9.5
Rated torque : 3 kgfm
Locked rotor torque : 300 %
Breakdown torque : 380 %
Rated speed : 2956 rpm

Moment of inertia (J) : 0.0419 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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