

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12645345

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	: 123 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1004 kgm ²
Design	: N		

Output [HP]	15	15	15
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	380	415
Rated current [A]	36.4/18.2	21.5	20.7
L. R. Amperes [A]	309/155	161	176
LRC [A]	8.5	7.5	8.5
No load current [A]	18.2/9.08	9.00	10.2
Rated speed [RPM]	1780	1470	1476
Slip [%]	1.11	2.00	1.60
Rated torque [kgfm]	6	7	7
Locked rotor torque [%]	300	220	270
Breakdown torque [%]	330	250	310
Service factor	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	28s (cold) 16s (hot)	25s (cold) 14s (hot)	19s (cold) 11s (hot)
Noise level ²	64.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%		
	50%	89.5	91.0
	75%	91.7	91.4
	100%	92.4	91.4
Power Factor	25%		
	50%	0.63	0.69
	75%	0.75	0.79
	100%	0.82	0.85

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

Losses (%)	P1 (0,9;1,0)	7.9	9.0	9.0
	P2 (0,5;1,0)	6.4	7.3	7.3
	P3 (0,25;1,0)	6.0	6.9	6.9
	P4 (0,9;0,5)	4.6	5.2	5.2
	P5 (0,5;0,5)	3.1	3.5	3.5
	P6 (0,5;0,25)	2.3	2.6	2.6
	P7 (0,25;0,25)	1.6	1.9	1.9

	Drive end	Non drive end	Foundation loads
Bearing type	: 6309 C3	6209 C3	Max. traction : 298 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 421 kgf
Lubrication interval	: 20000 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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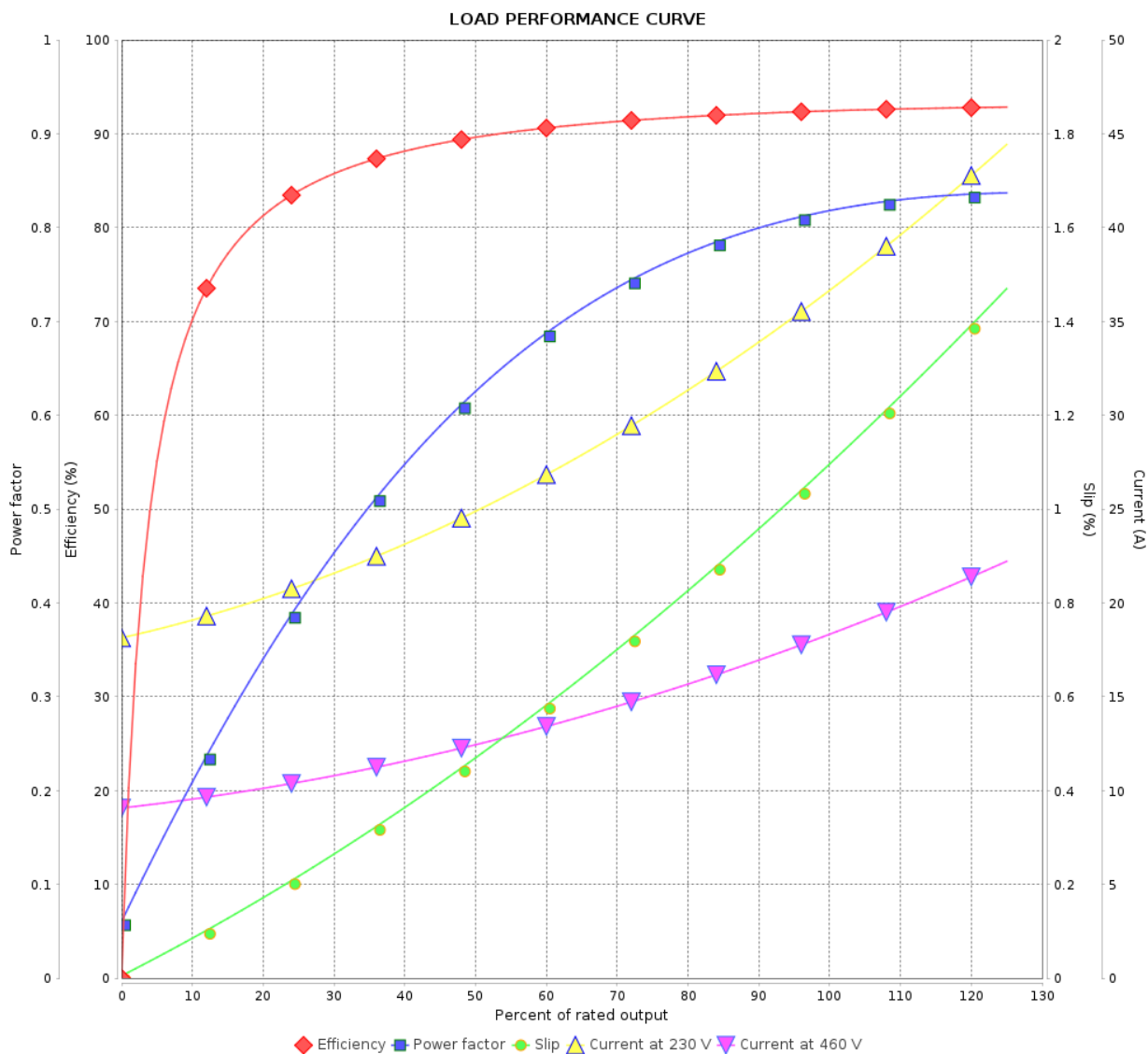
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Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12645345



Performance : 230/460 V 60 Hz 4P

Rated current : 36.4/18.2 A
LRC : 8.5
Rated torque : 6 kgfm
Locked rotor torque : 300 %
Breakdown torque : 330 %
Rated speed : 1780 rpm

Moment of inertia (J) : 0.1004 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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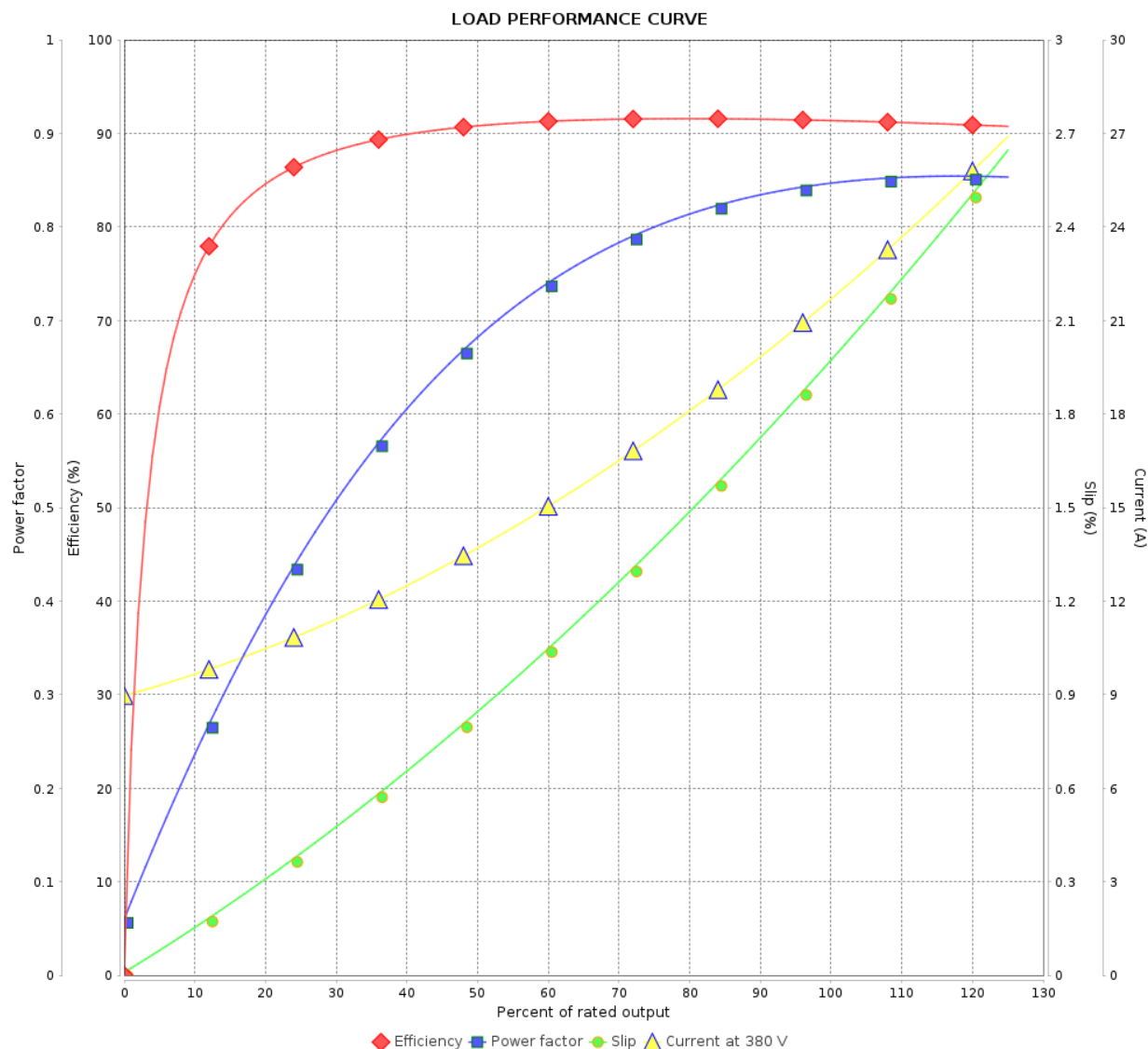
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12645345



Performance : 380 V 50 Hz 4P

Rated current : 21.5 A
LRC : 7.5
Rated torque : 7 kgfm
Locked rotor torque : 220 %
Breakdown torque : 250 %
Rated speed : 1470 rpm

Moment of inertia (J) : 0.1004 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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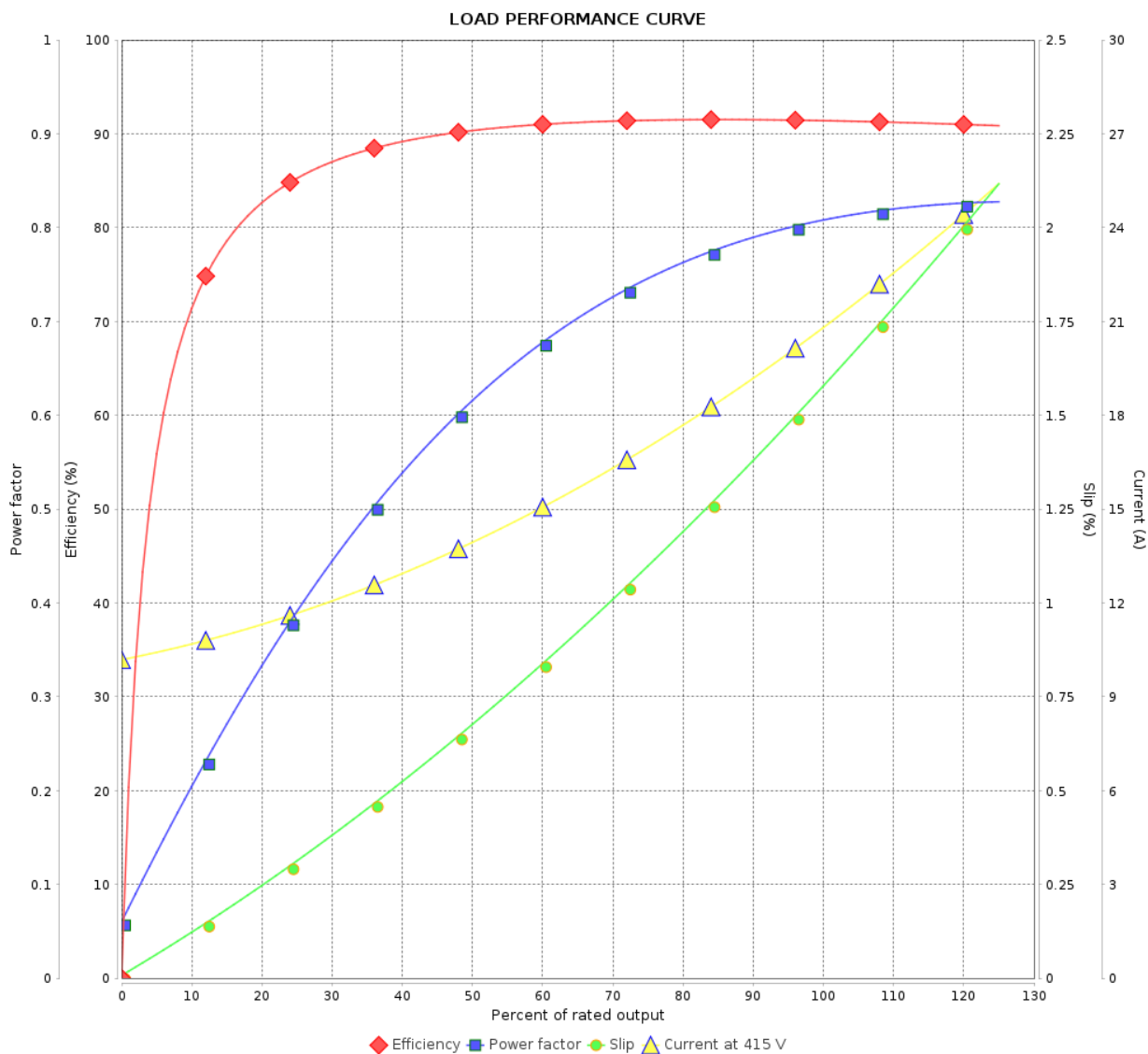
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12645345



Performance : 415 V 50 Hz 4P

Rated current	: 20.7 A	Moment of inertia (J)	: 0.1004 kgm ²
LRC	: 8.5	Duty cycle	: S1
Rated torque	: 7 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1476 rpm	Design	: N

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