

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12705357

Frame	: 132S	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	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 73.0 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0528 kgm <sup>2</sup>
Design	: N		

Output [HP]	7.5	7.5	7.5
Poles	4	4	4
Frequency [Hz]	50	50	60
Rated voltage [V]	380	415	230/460
Rated current [A]	10.6	10.2	18.1/9.07
L. R. Amperes [A]	102	97.4	189/94.3
LRC [A]	9.6	9.6	10.4
No load current [A]	4.00	4.70	8.00/4.00
Rated speed [RPM]	1460	1465	1770
Slip [%]	2.67	2.33	1.67
Rated torque [kgfm]	3.73	3.72	3.08
Locked rotor torque [%]	210	260	260
Breakdown torque [%]	290	360	390
Service factor	1.00	1.00	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	25s (cold) 14s (hot)	30s (cold) 17s (hot)
Noise level <sup>2</sup>	56.0 dB(A)	56.0 dB(A)	58.0 dB(A)
Efficiency (%)	25%		
	50%	90.4	89.6
	75%	90.7	90.7
	100%	90.3	90.8
Power Factor	25%		
	50%	0.71	0.64
	75%	0.82	0.76
	100%	0.87	0.83

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

Losses (%)	P1 (0,9;1,0)	10.3	9.7	8.7
	P2 (0,5;1,0)	8.2	7.7	6.9
	P3 (0,25;1,0)	7.7	7.3	6.5
	P4 (0,9;0,5)	5.7	5.4	4.8
	P5 (0,5;0,5)	3.7	3.5	3.1
	P6 (0,5;0,25)	2.7	2.5	2.3
	P7 (0,25;0,25)	1.8	1.7	1.5

	Drive end	Non drive end	Foundation loads
Bearing type	: 6308 ZZ	6207 ZZ	Max. traction : 185 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 258 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.
- (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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Date	24/10/2024			

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## Three Phase Induction Motor - Squirrel Cage



Customer :

Notes

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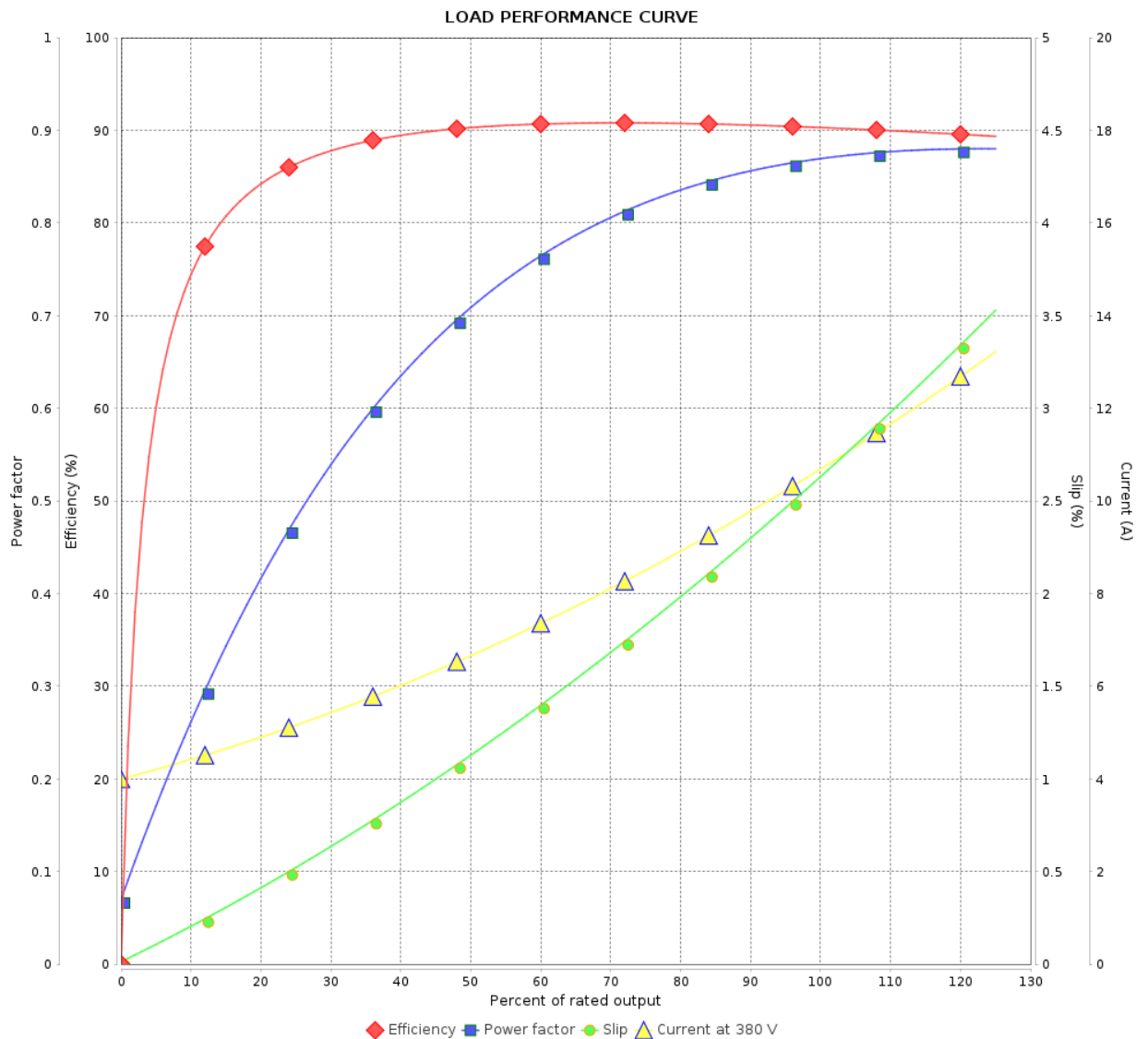
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase      Product code : 12705357



Performance : 380 V 50 Hz 4P

Rated current	: 10.6 A	Moment of inertia (J)	: 0.0528 kgm <sup>2</sup>
LRC	: 9.6	Duty cycle	: S1
Rated torque	: 3.73 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: N

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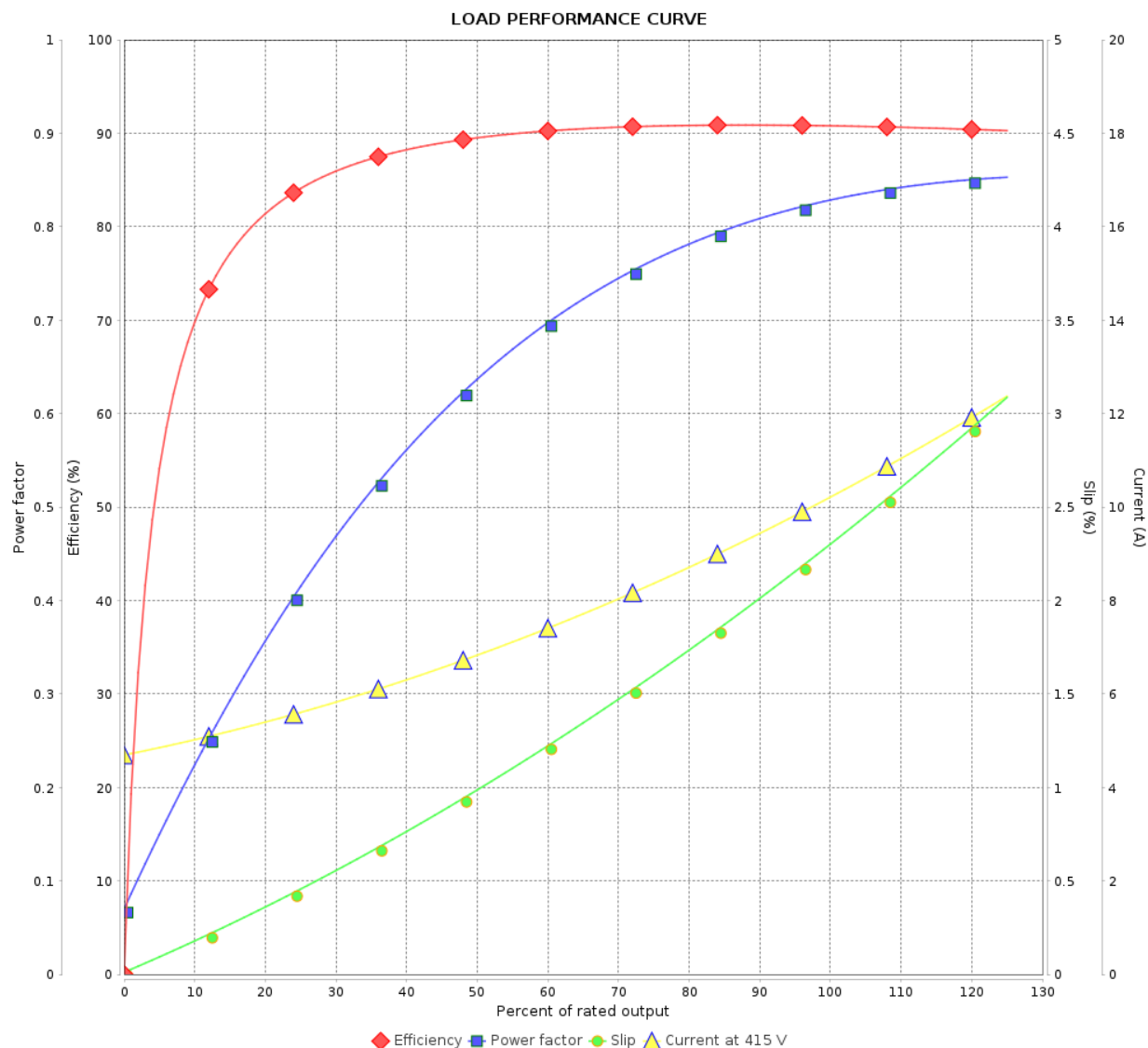
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12705357



Performance : 415 V 50 Hz 4P

Rated current	: 10.2 A	Moment of inertia (J)	: 0.0528 kgm <sup>2</sup>
LRC	: 9.6	Duty cycle	: S1
Rated torque	: 3.72 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: N

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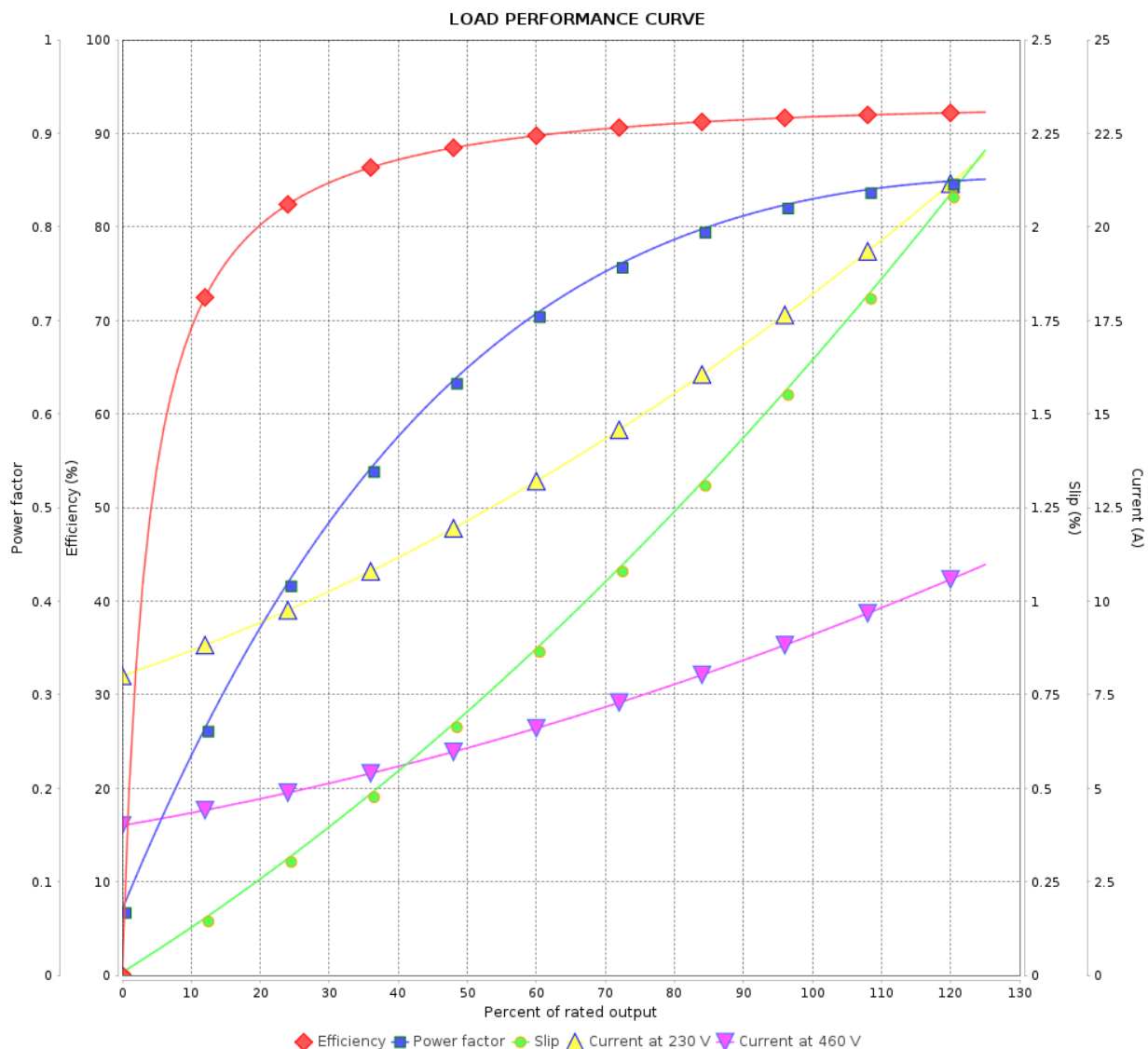
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12705357



Performance : 230/460 V 60 Hz 4P

Rated current : 18.1/9.07 A  
LRC : 10.4  
Rated torque : 3.08 kgfm  
Locked rotor torque : 260 %  
Breakdown torque : 390 %  
Rated speed : 1770 rpm

Moment of inertia (J) : 0.0528 kgm<sup>2</sup>  
Duty cycle : S1  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : N

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