

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12176656

Frame	: 445/7T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(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	: 1001 kg
Protection degree	: IP56	Moment of inertia (J)	: 5.29 kgm ²
Design	: B		

Output [HP]	150	125	125	125	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	185	183	177	175	
L. R. Amperes [A]	1110	1025	1097	1138	
LRC [A]	6.0x(Code G)	5.6x(Code F)	6.2x(Code G)	6.5x(Code H)	
No load current [A]	75.0	78.9	83.3	86.8	
Rated speed [RPM]	890	740	740	740	
Slip [%]	1.11	1.33	1.33	1.33	
Rated torque [kgfm]	122	123	123	123	
Locked rotor torque [%]	190	170	200	220	
Breakdown torque [%]	210	200	229	250	
Service factor	1.15	1.15	1.15	1.15	
Temperature rise	80 K	105 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	
Noise level ²	63.0 dB(A)				
Efficiency (%)	25%	94.4	94.9	94.0	93.5
	50%	94.5	94.5	94.1	93.6
	75%	94.5	94.1	94.1	94.1
	100%	94.5	93.6	94.1	94.1
Power Factor	25%	0.40	0.40	0.37	0.34
	50%	0.64	0.65	0.61	0.57
	75%	0.74	0.75	0.72	0.69
	100%	0.79	0.80	0.78	0.76

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

Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.8	4.8	4.8	4.8
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6319 C3	6316 C3	Max. traction : 2180 kgf
Sealing	: Inpro/Seal	Inpro/Seal	Max. compression : 3181 kgf
Lubrication interval	: 17000 h	20000 h	
Lubricant amount	: 45 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.

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

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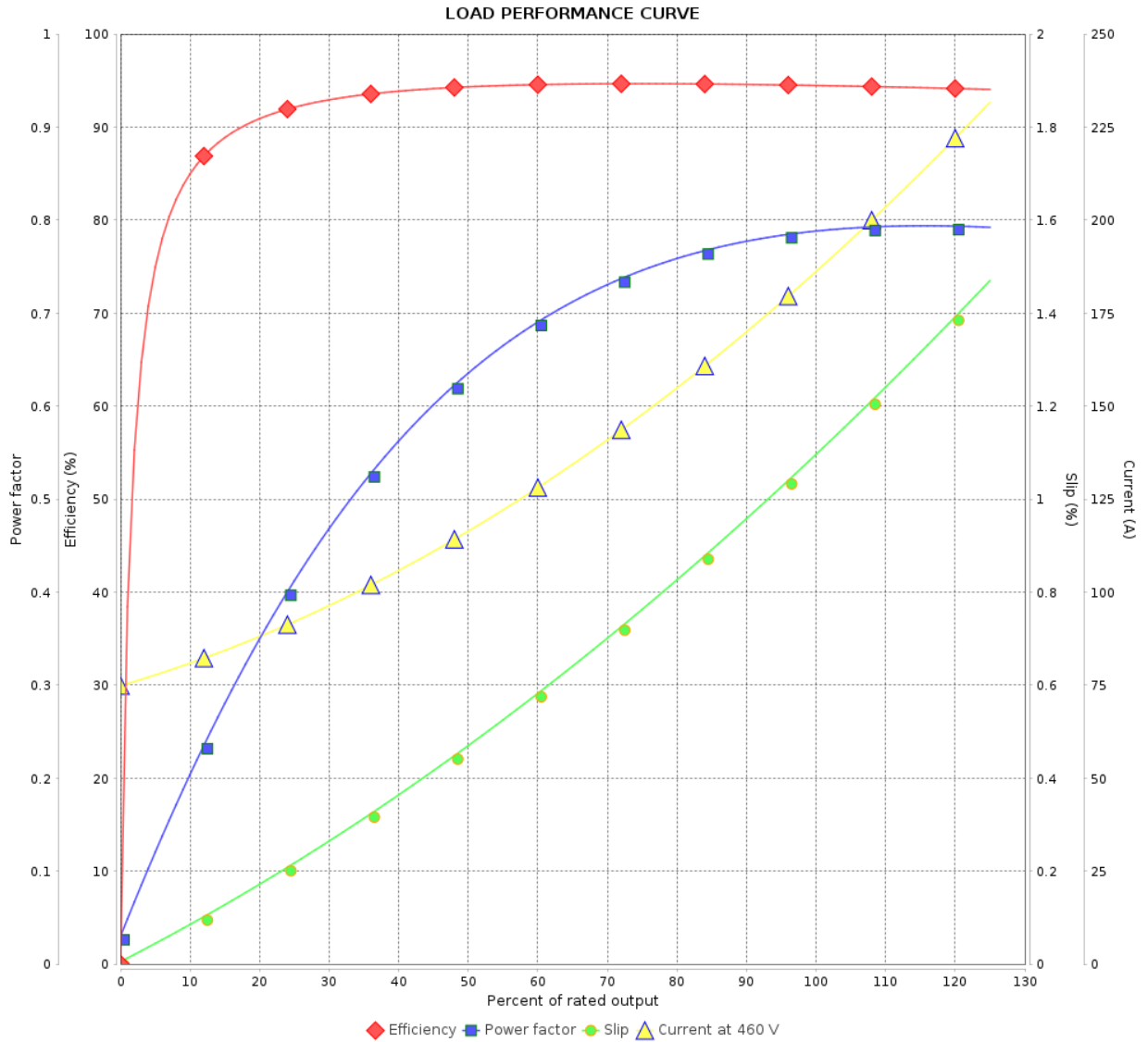
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12176656



Performance : 460 V 60 Hz 8P

Rated current : 185 A
 LRC : 6.0
 Rated torque : 122 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 210 %
 Rated speed : 890 rpm

Moment of inertia (J) : 5.29 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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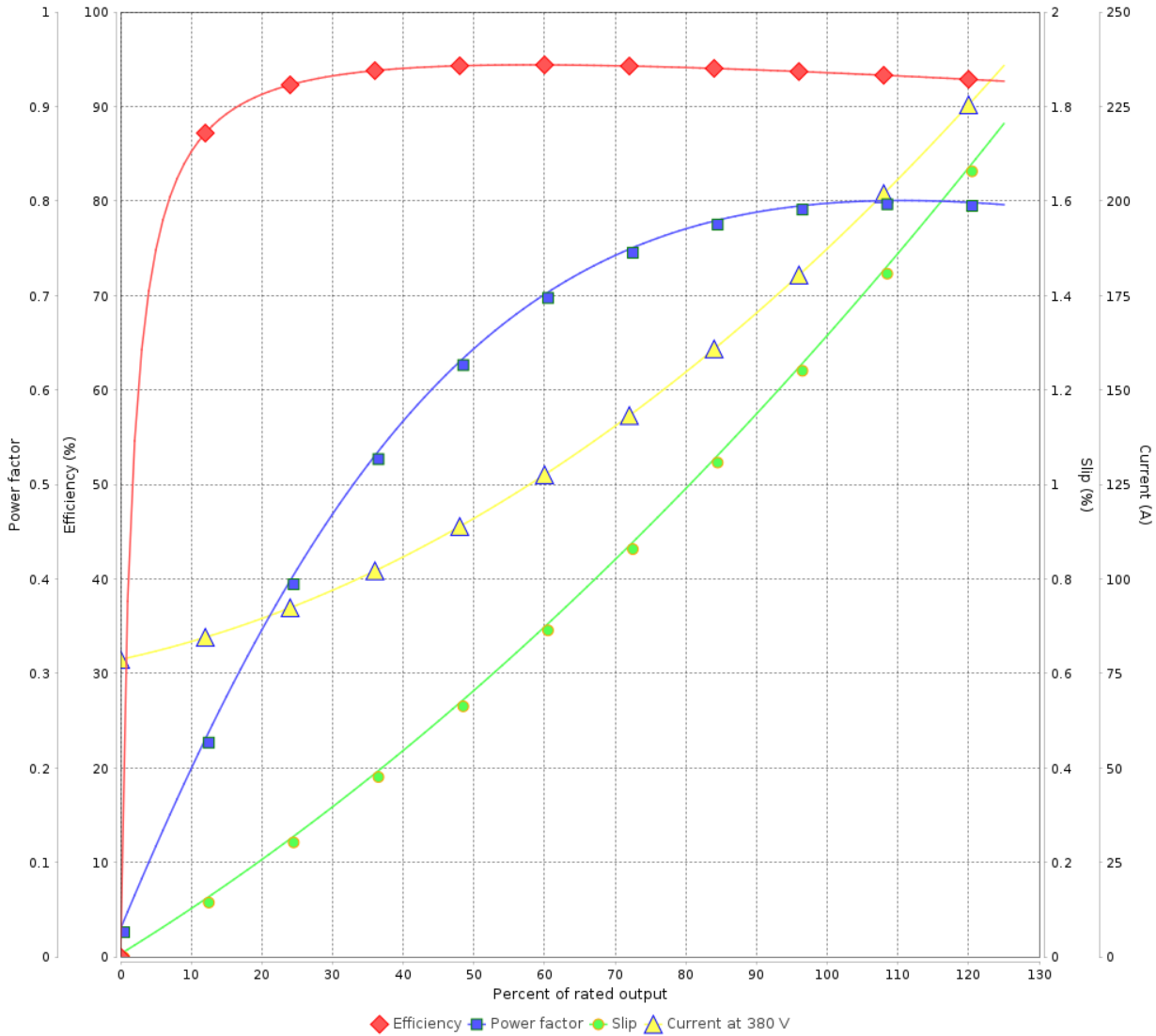
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12176656

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Performance : 380 V 50 Hz 8P IE3

Rated current	: 183 A	Moment of inertia (J)	: 5.29 kgm ²
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 123 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 740 rpm	Design	: B

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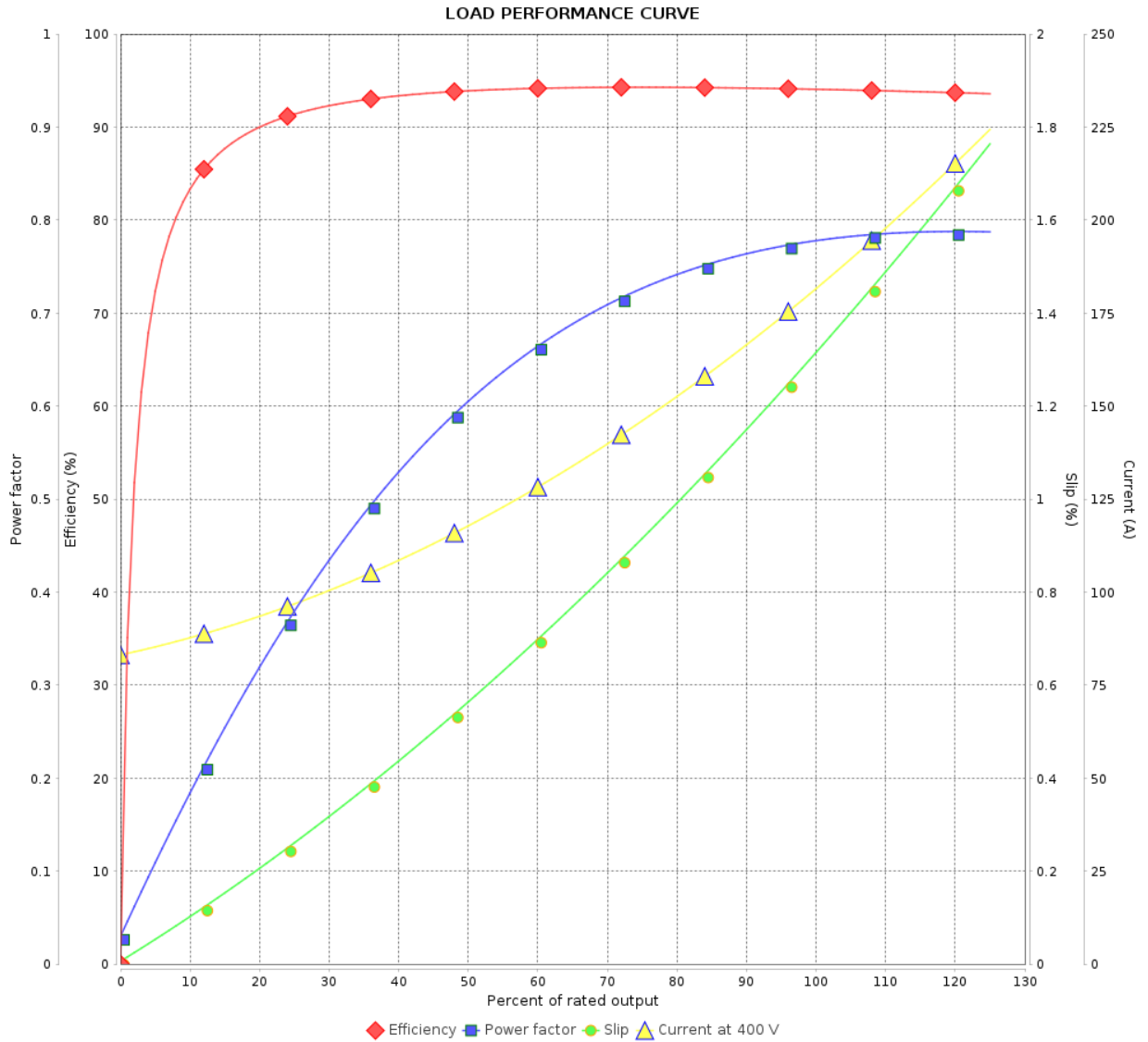
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Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 8P IE3

Rated current : 177 A
 LRC : 6.2
 Rated torque : 123 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 740 rpm

Moment of inertia (J) : 5.29 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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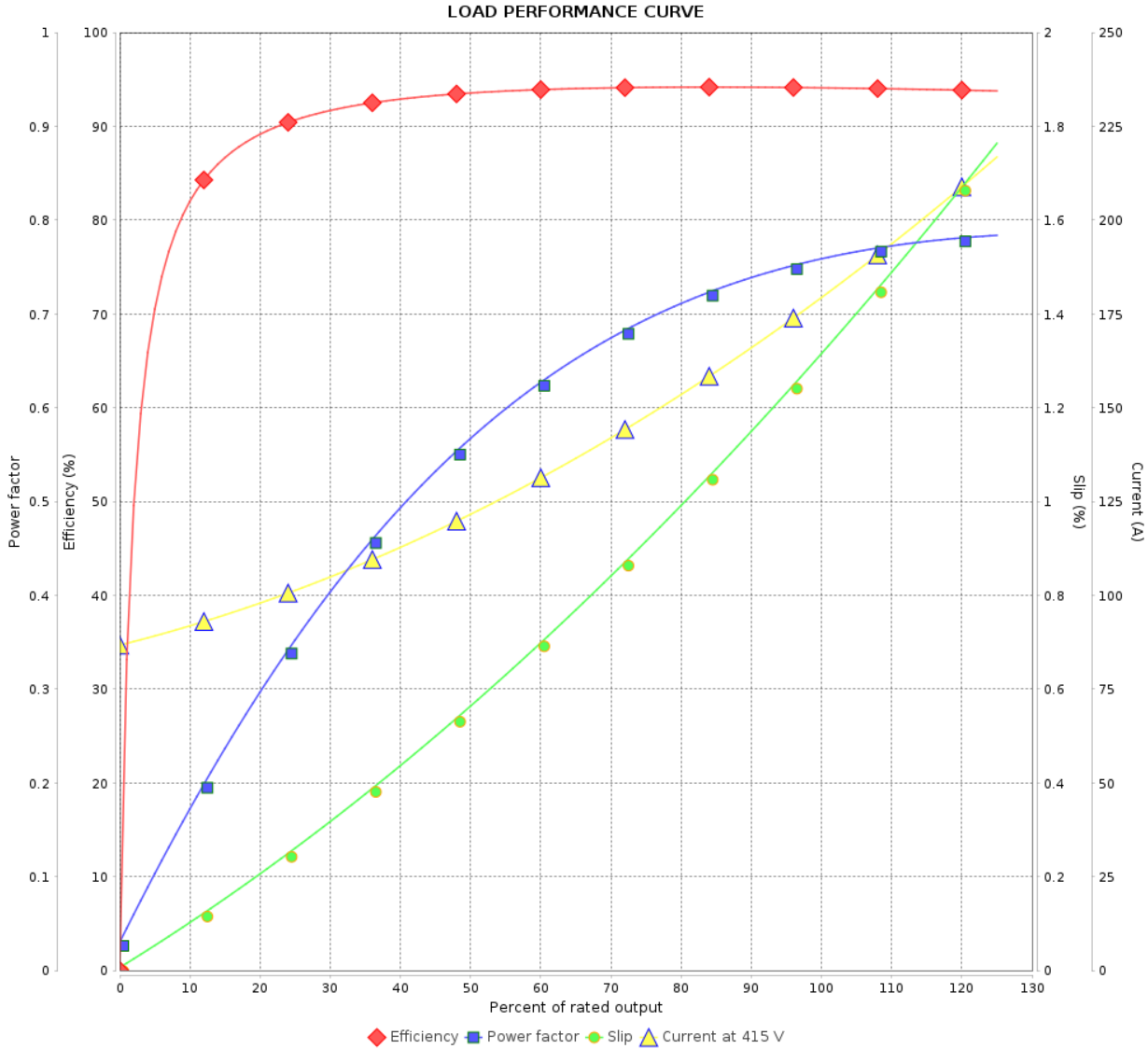
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 415 V 50 Hz 8P IE3

Rated current : 175 A LRC : 6.5 Rated torque : 123 kgfm Locked rotor torque : 220 % Breakdown torque : 250 % Rated speed : 740 rpm	Moment of inertia (J) : 5.29 kgm ² Duty cycle : Cont.(S1) Insulation class : F Service factor : 1.15 Temperature rise : 80 K Design : B
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