

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W22 NEMA Premium Efficiency Three-Phase	Product code :	12744764	
Frame	: 284/6TC	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	: 195 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.3448 kgm ²		
Design	: B				
Output [HP]	15	15	15	15	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	39.2/19.6	23.6	22.7	22.1	
L. R. Amperes [A]	216/108	101	109	113	
LRC [A]	5.5x(Code G)	4.3x(Code D)	4.8x(Code F)	5.1x(Code F)	
No load current [A]	19.6/9.80	9.70	10.5	11.1	
Rated speed [RPM]	880	720	725	730	
Slip [%]	2.22	4.00	3.33	2.67	
Rated torque [kgfm]	12.4	15.1	15.0	14.9	
Locked rotor torque [%]	200	150	170	190	
Breakdown torque [%]	229	180	200	220	
Service factor	1.25	1.00	1.00	1.15	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	45s (cold) 25s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	54.0 dB(A)	52.0 dB(A)	52.0 dB(A)	52.0 dB(A)	
Efficiency (%)	25%				
	50%	85.5	88.0	88.0	
	75%	90.0	88.5	88.5	
	100%	90.2	88.6	88.6	
Power Factor	25%				
	50%	0.62	0.68	0.64	
	75%	0.72	0.76	0.74	
	100%	0.78	0.80	0.79	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	10.3	10.3	10.3	10.3
	P2 (0,5;1,0)	8.2	8.2	8.2	8.2
	P3 (0,25;1,0)	7.6	7.6	7.6	7.6
	P4 (0,9;0,5)	5.5	5.5	5.5	5.5
	P5 (0,5;0,5)	3.7	3.7	3.7	3.7
	P6 (0,5;0,25)	2.7	2.7	2.7	2.7
	P7 (0,25;0,25)	1.8	1.8	1.8	1.8
Bearing type	: Drive end : 6311 C3 Non drive end : 6211 C3	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 372 kgf		
Lubrication interval	: 20000 h 20000 h	Max. compression	: 566 kgf		
Lubricant amount	: 18 g 11 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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Notes
USABLE @208V 42.9A SF 1.15 SFA 49.3A

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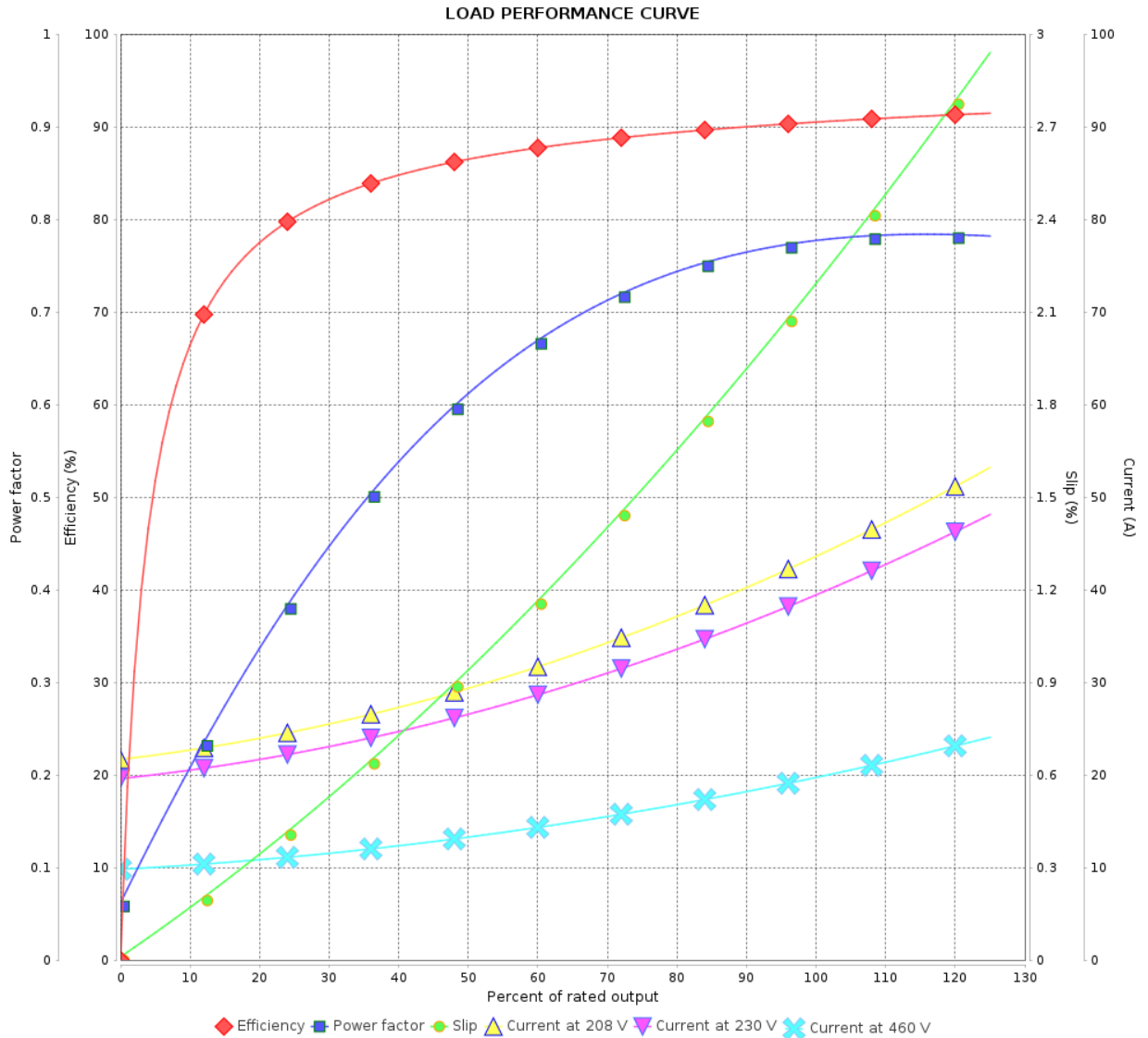
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12744764



Performance : 230/460 V 60 Hz 8P

Rated current : 39.2/19.6 A
 LRC : 5.5
 Rated torque : 12.4 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 880 rpm

Moment of inertia (J) : 0.3448 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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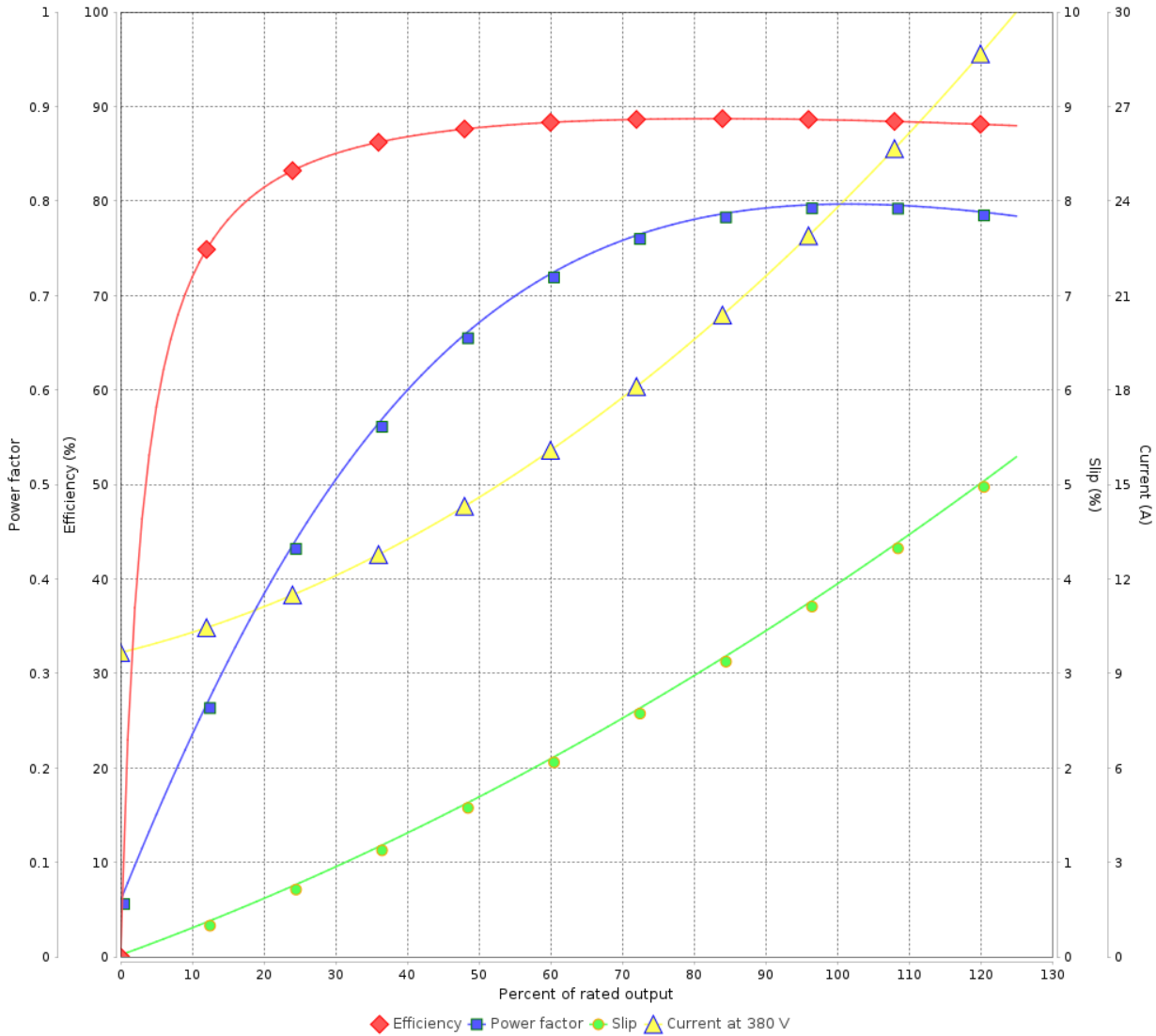
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12744764

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Performance : 380 V 50 Hz 8P IE3

Rated current	: 23.6 A	Moment of inertia (J)	: 0.3448 kgm ²
LRC	: 4.3	Duty cycle	: Cont.(S1)
Rated torque	: 15.1 kgfm	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.00
Breakdown torque	: 180 %	Temperature rise	: 105 K
Rated speed	: 720 rpm	Design	: B

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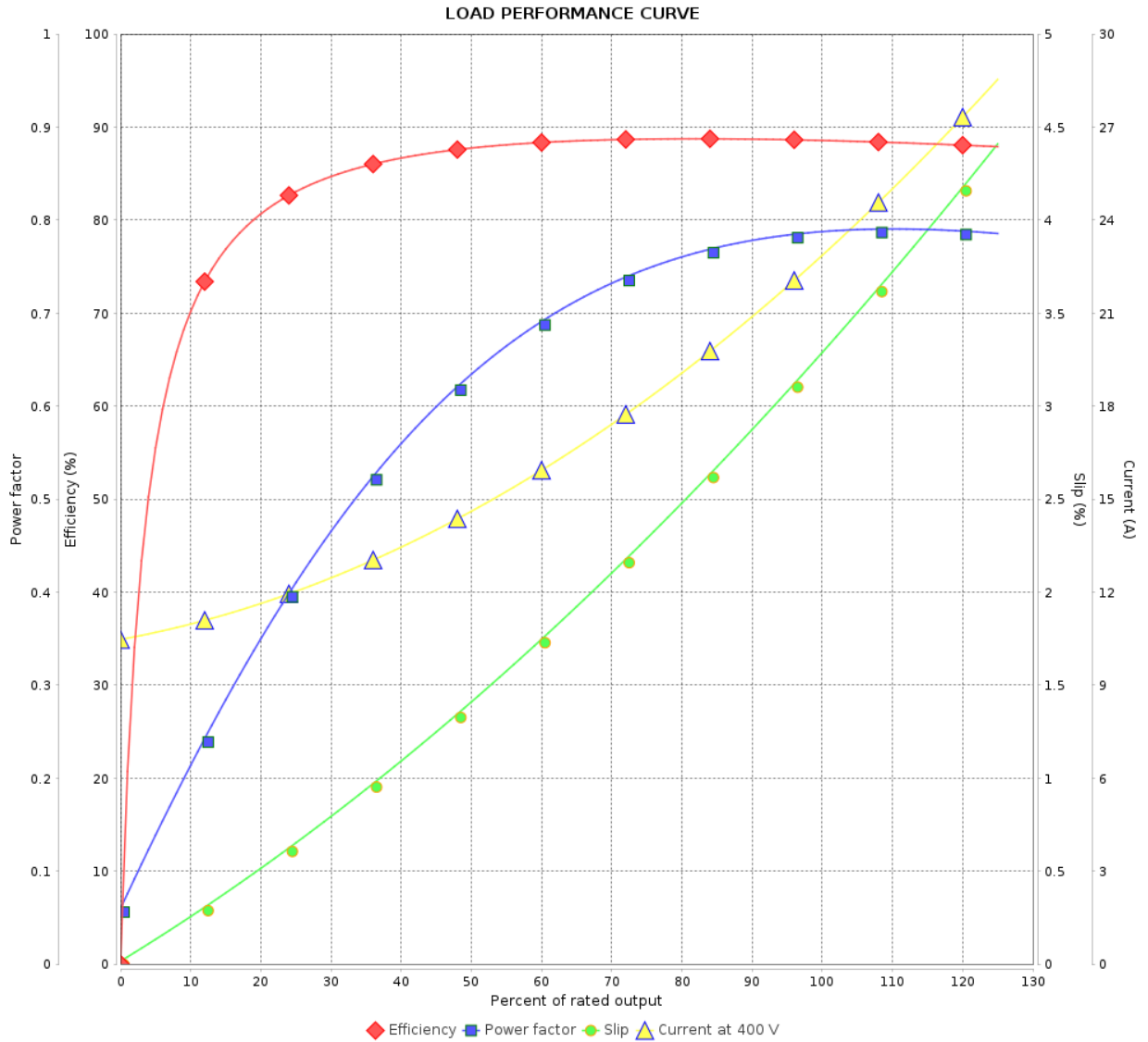
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12744764



Performance : 400 V 50 Hz 8P IE3

Rated current : 22.7 A
 LRC : 4.8
 Rated torque : 15.0 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 200 %
 Rated speed : 725 rpm

Moment of inertia (J) : 0.3448 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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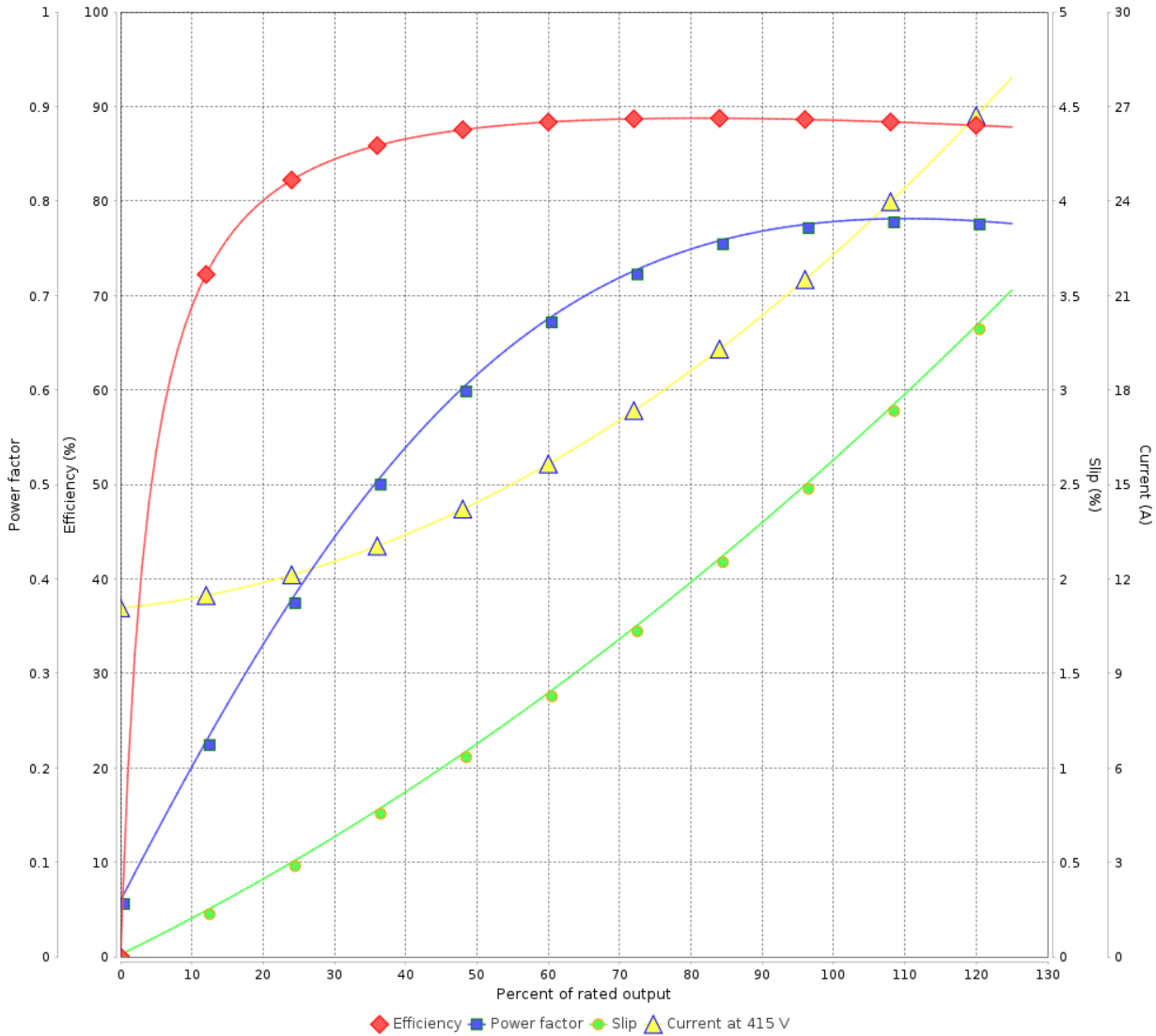
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12744764

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Performance : 415 V 50 Hz 8P IE3

Rated current	: 22.1 A	Moment of inertia (J)	: 0.3448 kgm ²
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 14.9 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 730 rpm	Design	: B

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