

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase		Product code :	11941734
Frame	: 284TC	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(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>2</sup>	: 185 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.2153 kgm <sup>2</sup>		
Design	: B				
Output [HP]	25	25	25	25	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	29.5	35.9	34.3	33.2	
L. R. Amperes [A]	183	190	189	196	
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)	
No load current [A]	11.0	11.0	11.7	12.4	
Rated speed [RPM]	1770	1455	1460	1465	
Slip [%]	1.67	3.00	2.67	2.33	
Rated torque [kgfm]	10.3	12.5	12.4	12.4	
Locked rotor torque [%]	240	180	200	220	
Breakdown torque [%]	270	210	240	260	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	43s (cold) 24s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	
Noise level <sup>2</sup>	63.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	
Efficiency (%)	25%				
	50%	92.4	92.4	92.4	92.4
	75%	93.0	91.7	92.4	92.4
	100%	93.6	91.0	91.7	92.4
Power Factor	25%				
	50%	0.70	0.76	0.73	0.70
	75%	0.80	0.84	0.82	0.80
	100%	0.84	0.86	0.85	0.84
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2
	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
Bearing type	: Drive end : 6311 C3	Non drive end : 6211 C3	Foundation loads		
Sealing	: Taconite	Taconite	Max. traction	: 368 kgf	
	Labyrinth	Labyrinth	Max. compression	: 553 kgf	
Lubrication interval	: 20000 h	20000 h			
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).			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 : \_\_\_\_\_

Notes

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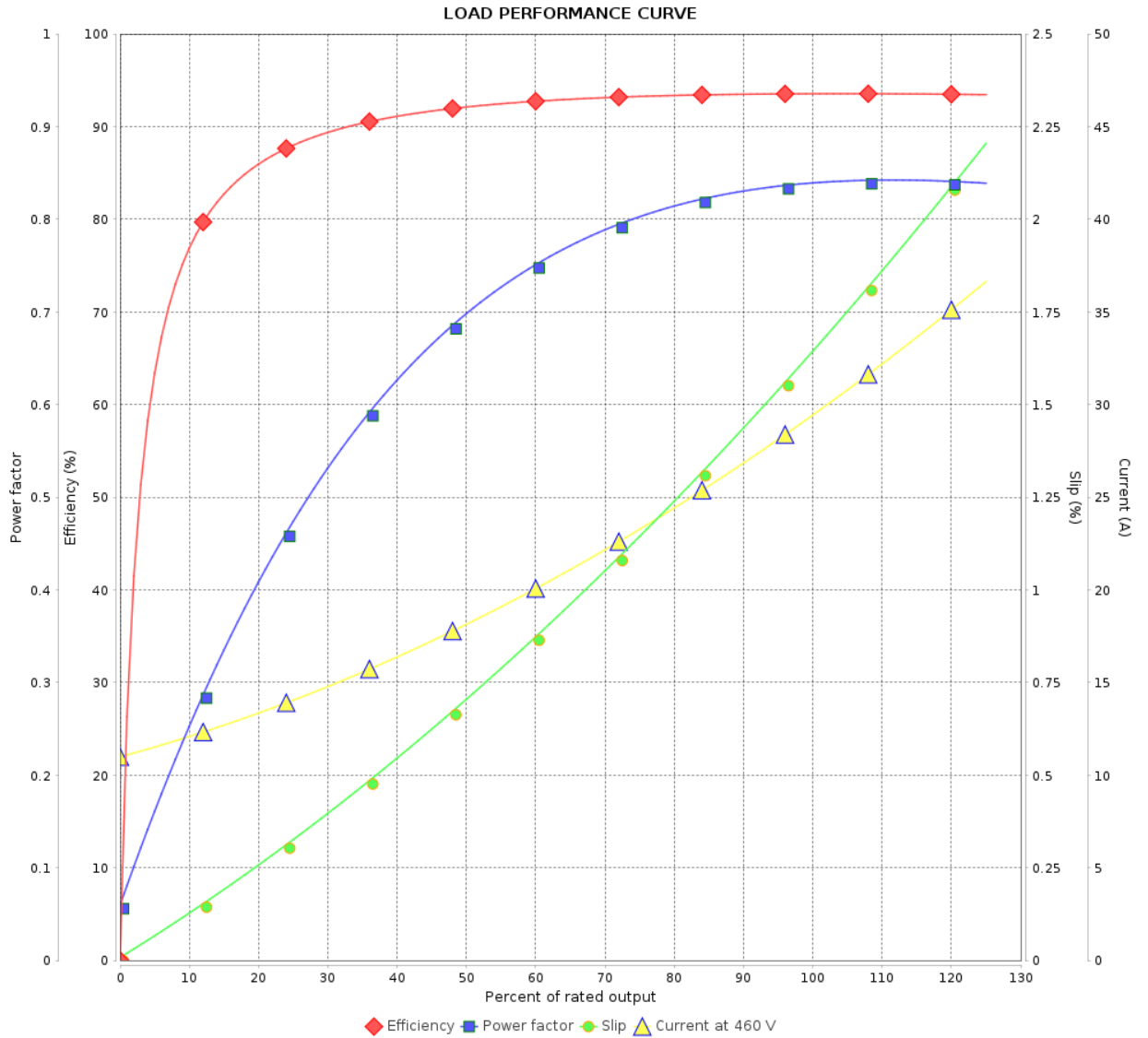
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## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11941734



Performance : 460 V 60 Hz 4P

Rated current : 29.5 A  
 LRC : 6.2  
 Rated torque : 10.3 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 270 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.2153 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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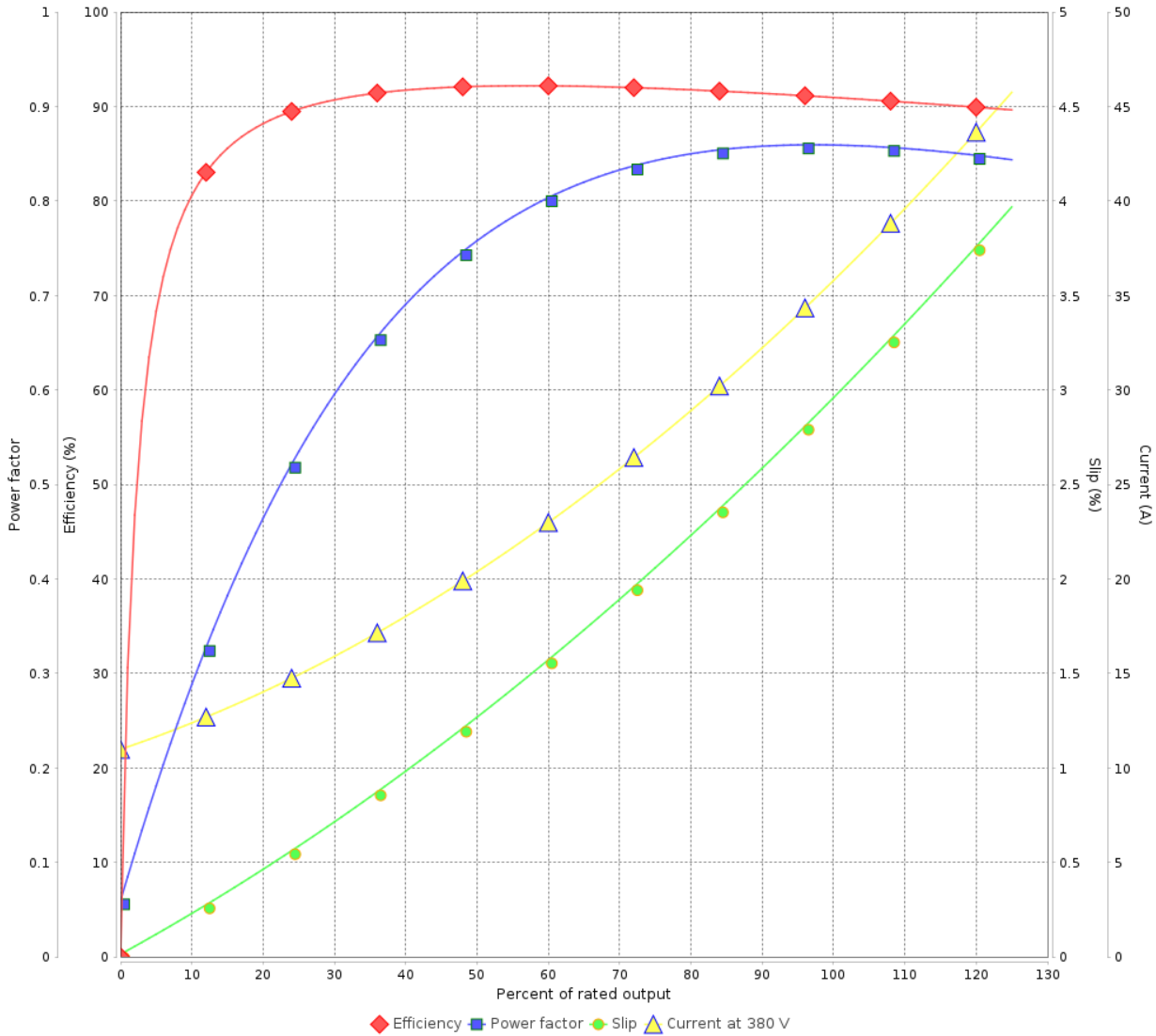
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE1

Rated current	: 35.9 A	Moment of inertia (J)	: 0.2153 kgm <sup>2</sup>
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 12.5 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 1455 rpm	Design	: B

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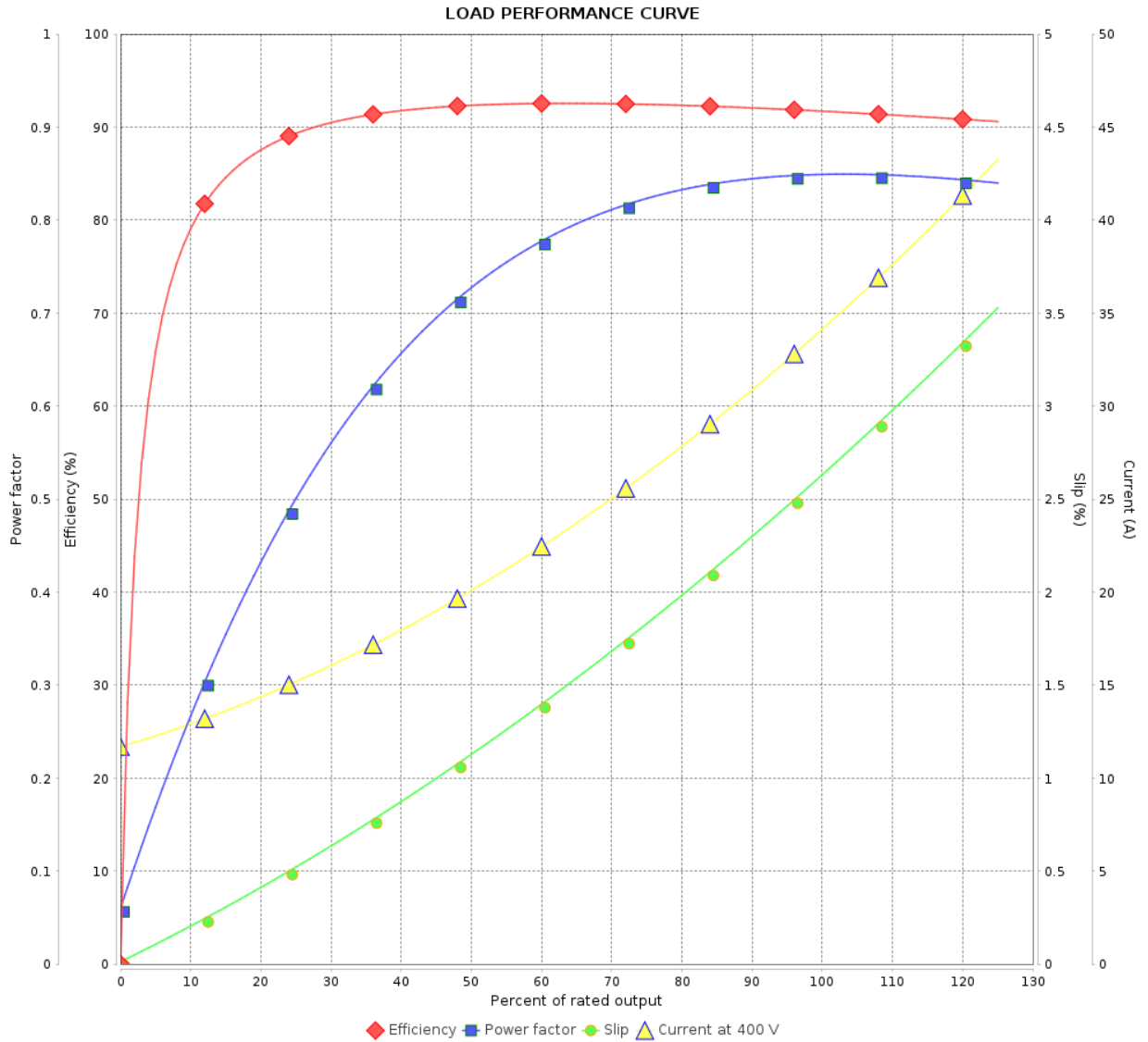
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11941734



Performance : 400 V 50 Hz 4P IE2

Rated current : 34.3 A  
 LRC : 5.5  
 Rated torque : 12.4 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.2153 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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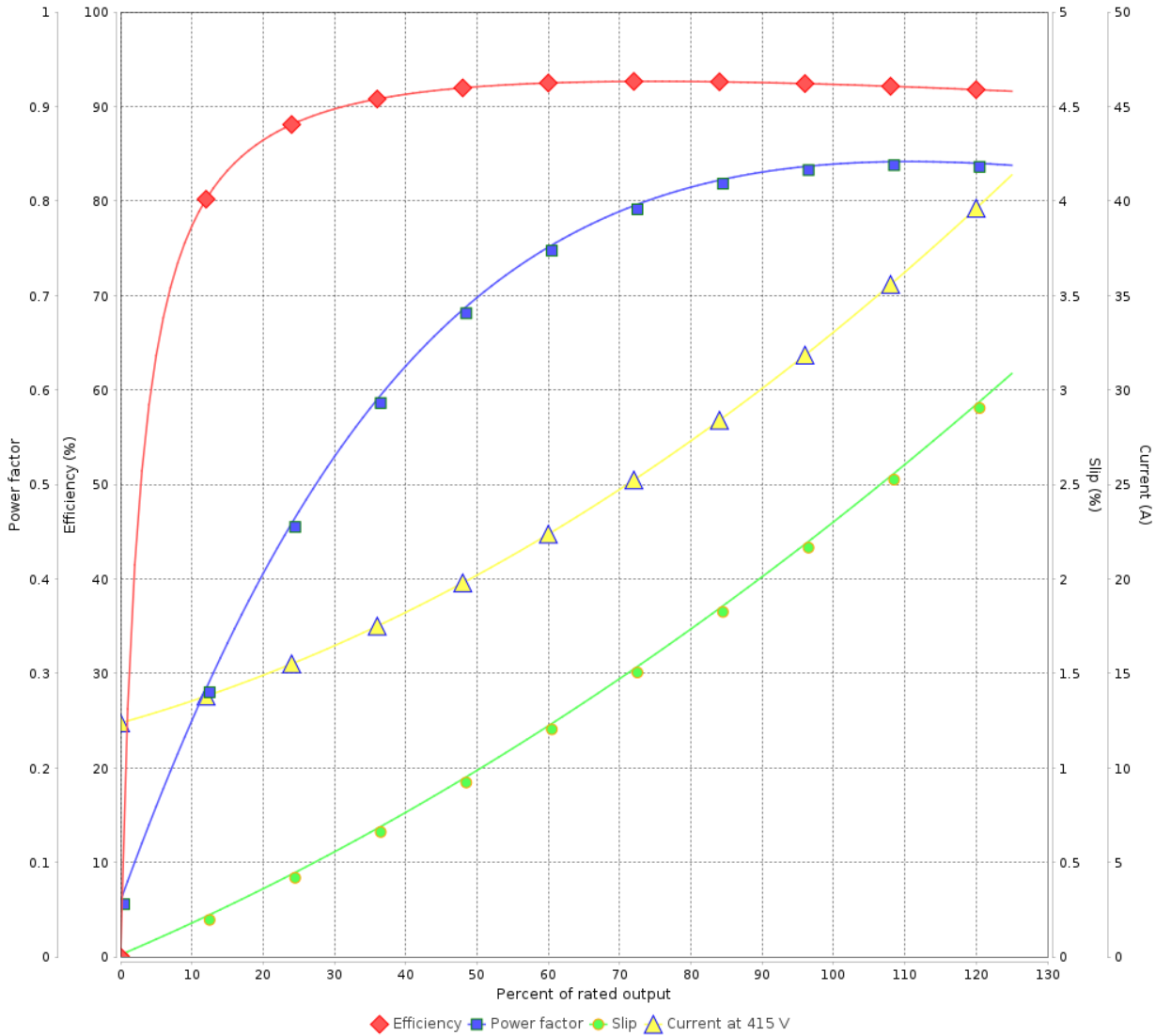
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 4P IE2

Rated current	: 33.2 A	Moment of inertia (J)	: 0.2153 kgm <sup>2</sup>
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 12.4 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1465 rpm	Design	: B

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