

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	14562090		
Frame	: 213/5TC	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	: 74.7 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0753 kgm ²		
Design	: B				
Output [HP]	2	2	2	2	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	6.78/3.39	3.91	3.80	3.78	
L. R. Amperes [A]	46.8/23.4	23.5	24.7	27.2	
LRC [A]	6.9x(Code L)	6.0x(Code J)	6.5x(Code K)	7.2x(Code L)	
No load current [A]	4.60/2.30	2.30	2.42	2.54	
Rated speed [RPM]	875	715	720	725	
Slip [%]	2.78	4.67	4.00	3.33	
Rated torque [kgfm]	1.66	2.03	2.02	2.00	
Locked rotor torque [%]	220	170	210	240	
Breakdown torque [%]	290	210	250	280	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	70s (cold) 39s (hot)	70s (cold) 39s (hot)	70s (cold) 39s (hot)	70s (cold) 39s (hot)	
Noise level ²	52.0 dB(A)	48.0 dB(A)	48.0 dB(A)	48.0 dB(A)	
Efficiency (%)	25%				
	50%	82.5	81.5	81.5	
	75%	84.0	82.0	82.5	
	100%	85.5	82.0	82.5	
Power Factor	25%				
	50%	0.45	0.52	0.49	
	75%	0.55	0.62	0.59	
	100%	0.65	0.71	0.69	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	19.1	24.8	24.0	24.0
	P2 (0,5;1,0)	18.2	23.9	23.0	23.0
	P3 (0,25;1,0)	17.9	23.7	22.9	22.9
	P4 (0,9;0,5)	9.5	12.6	12.1	12.1
	P5 (0,5;0,5)	7.8	10.5	10.0	10.0
	P6 (0,5;0,25)	5.8	7.9	7.6	7.6
	P7 (0,25;0,25)	4.5	6.2	5.9	5.9
Bearing type	: Drive end : 6308 ZZ Non drive end : 6207 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction	: 66 kgf		
Lubrication interval	: - -	Max. compression	: 141 kgf		
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.		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 7.49A SF 1.15 SFA 8.62A

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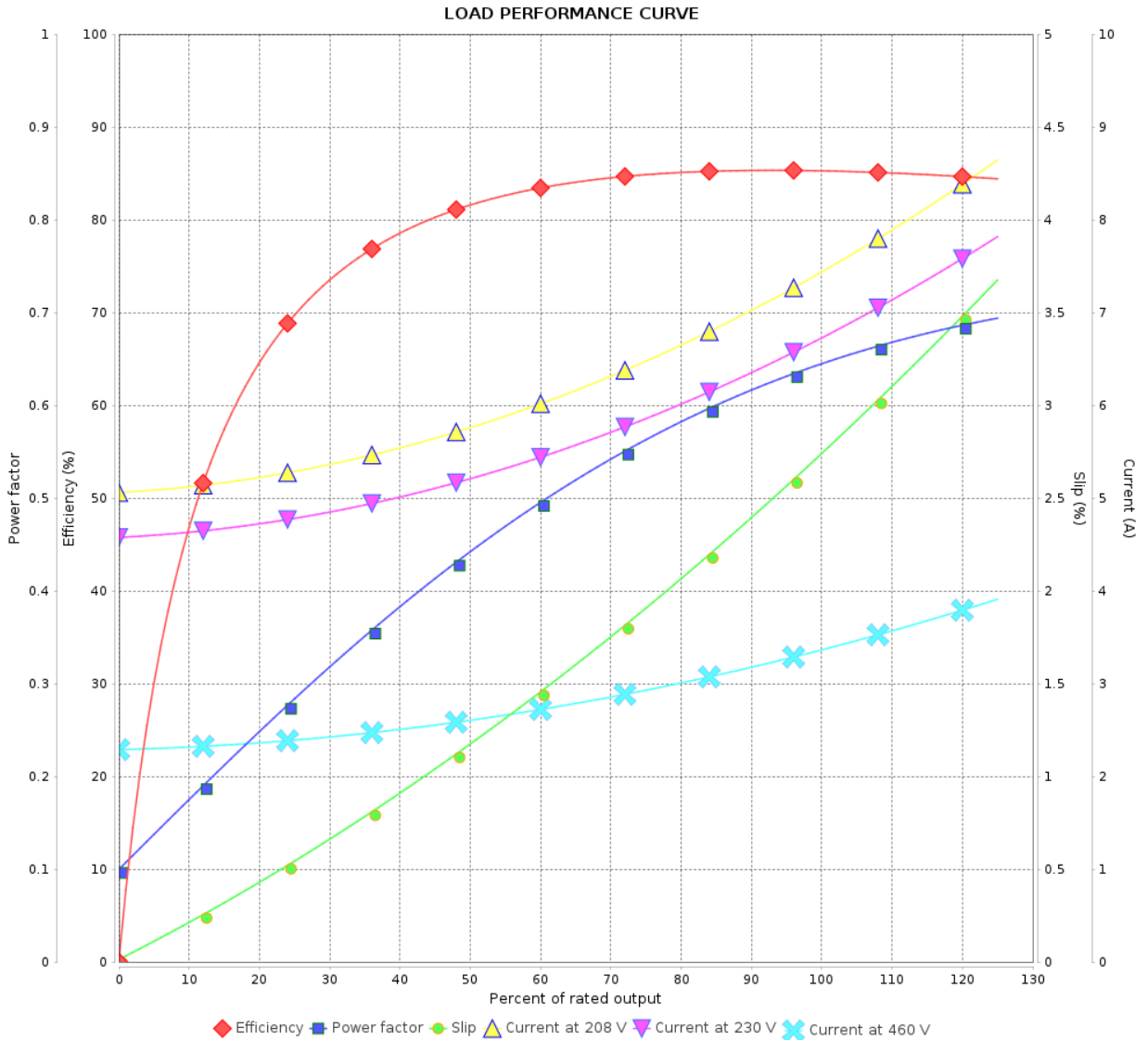
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Performance : 230/460 V 60 Hz 8P

Rated current : 6.78/3.39 A
 LRC : 6.9
 Rated torque : 1.66 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 875 rpm

Moment of inertia (J) : 0.0753 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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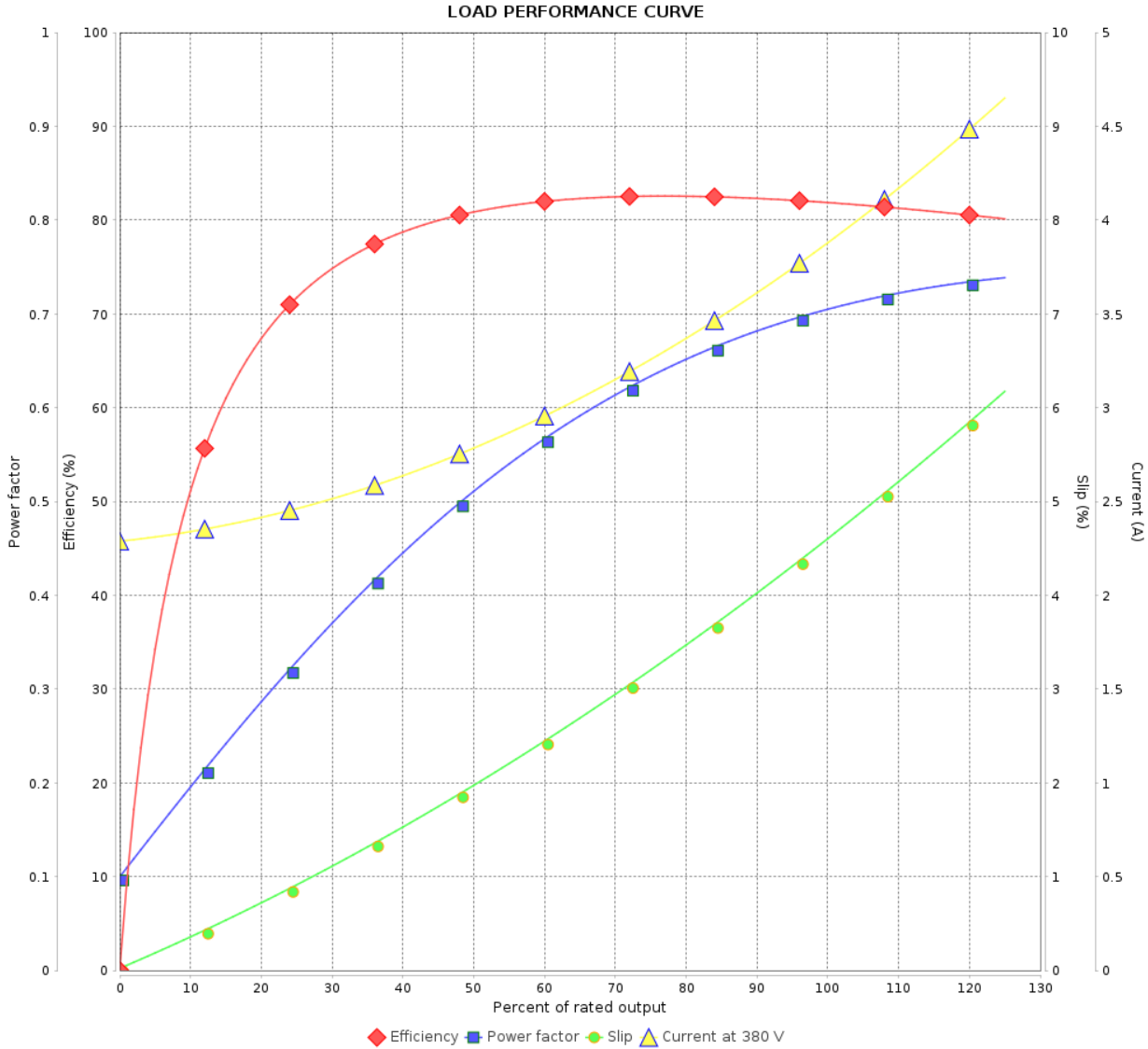
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

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Performance : 380 V 50 Hz 8P IE3

Rated current : 3.91 A
 LRC : 6.0
 Rated torque : 2.03 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 210 %
 Rated speed : 715 rpm

Moment of inertia (J) : 0.0753 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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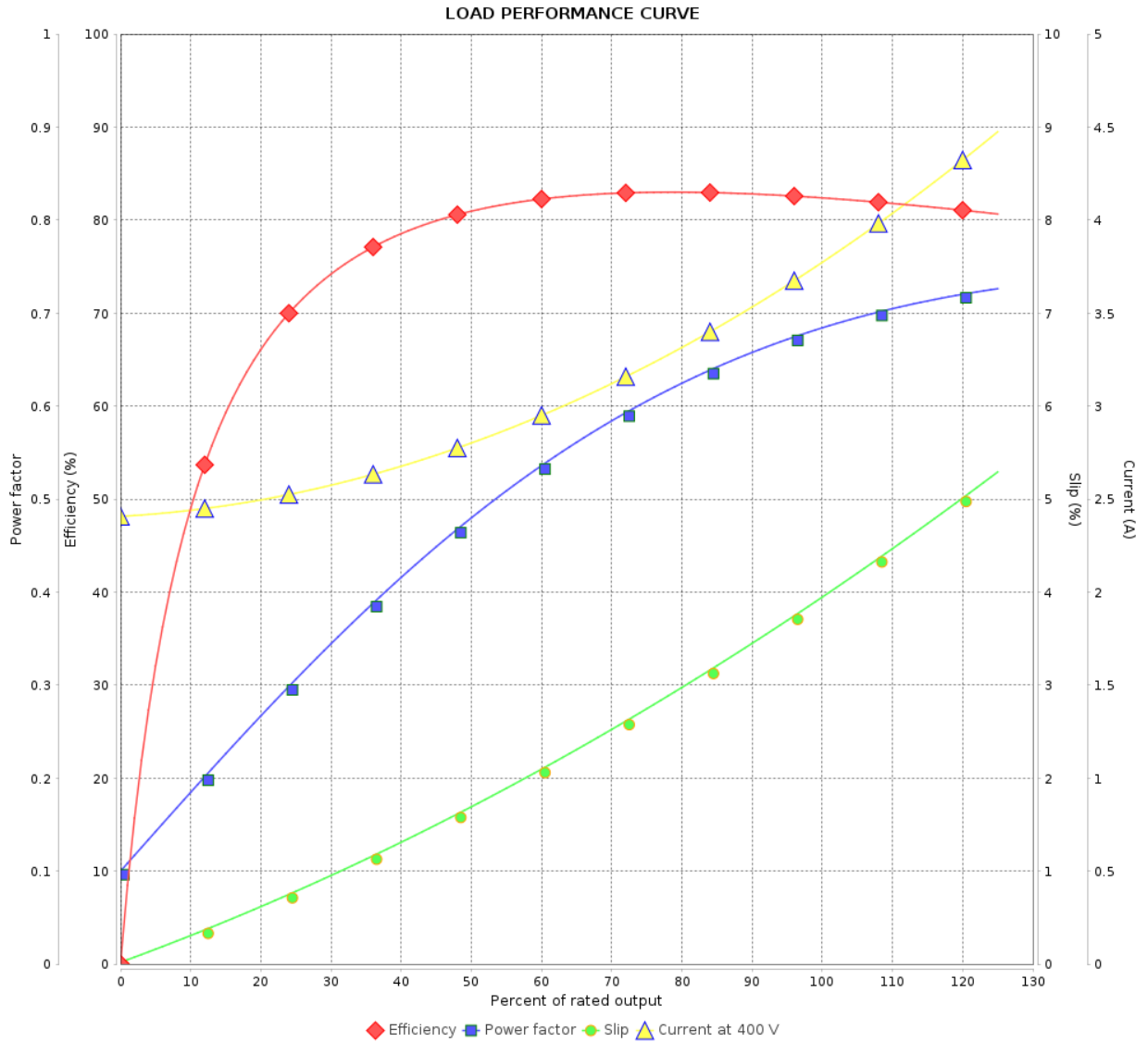
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 8P IE3

Rated current : 3.80 A
 LRC : 6.5
 Rated torque : 2.02 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 720 rpm

Moment of inertia (J) : 0.0753 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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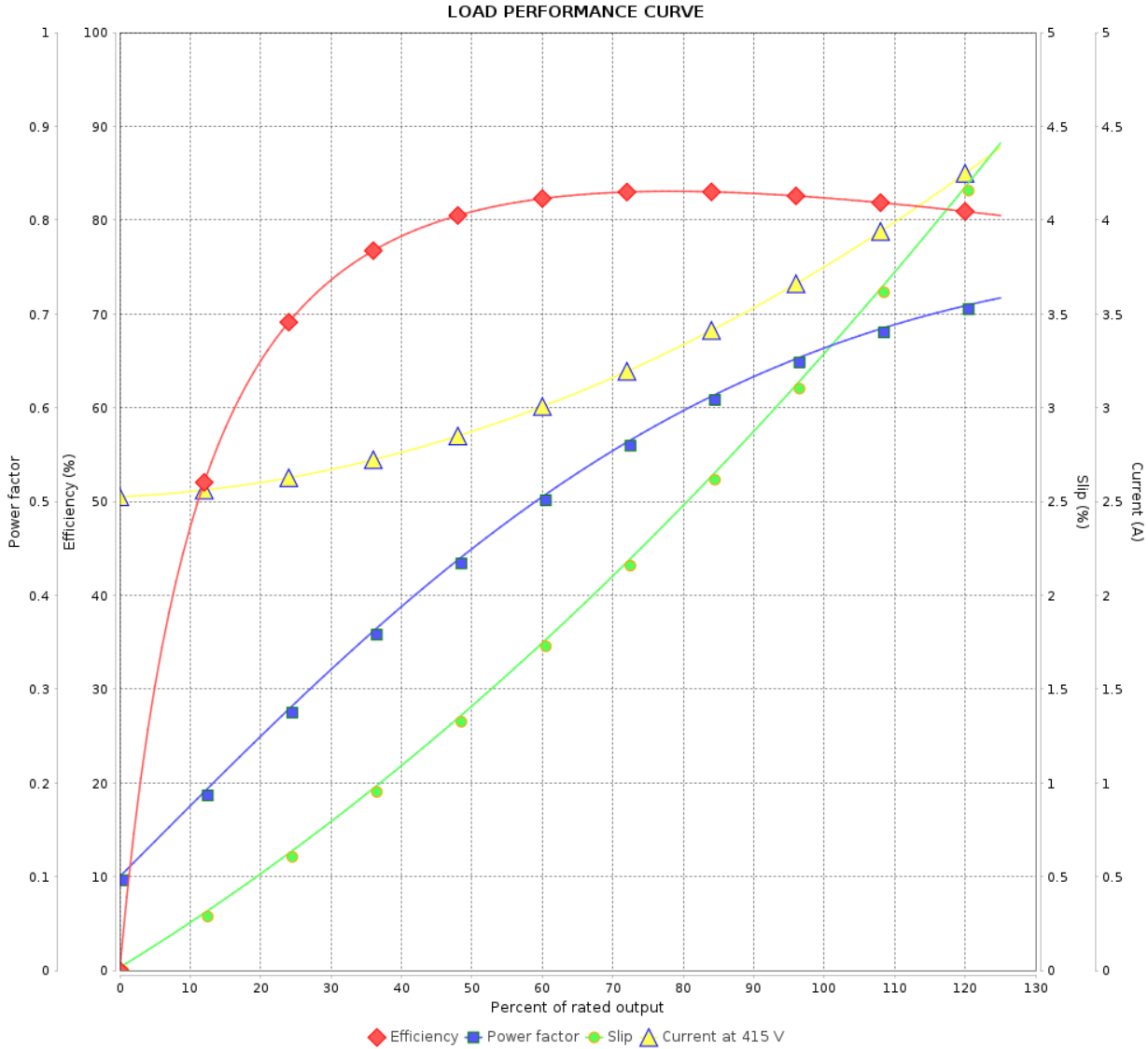
Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 8P IE3

Rated current : 3.78 A
 LRC : 7.2
 Rated torque : 2.00 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 725 rpm

Moment of inertia (J) : 0.0753 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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