

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	14893856		
Frame	: 143/5TD	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 ²	: 24.4 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0049 kgm ²		
Design	: B				
Output [HP]	1	1	1	1	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	2.94/1.47	1.71	1.65	1.63	
L. R. Amperes [A]	25.3/12.6	10.9	11.5	12.1	
LRC [A]	8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	
No load current [A]	1.88/0.940	0.930	1.00	1.08	
Rated speed [RPM]	1760	1450	1455	1455	
Slip [%]	2.22	3.33	3.00	3.00	
Rated torque [kgfm]	0.412	0.501	0.499	0.499	
Locked rotor torque [%]	290	220	240	260	
Breakdown torque [%]	350	250	290	310	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%				
	50%	80.0	80.0	80.0	
	75%	84.0	82.5	82.5	
	100%	85.5	82.5	84.0	
Power Factor	25%				
	50%	0.55	0.62	0.58	
	75%	0.68	0.74	0.71	
	100%	0.75	0.81	0.78	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	15.9	15.9	15.9	15.9
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.5	12.5	12.5	12.5
	P4 (0,9;0,5)	10.1	10.1	10.1	10.1
	P5 (0,5;0,5)	7.0	7.0	7.0	7.0
	P6 (0,5;0,25)	5.8	5.8	5.8	5.8
	P7 (0,25;0,25)	4.3	4.3	4.3	4.3
Bearing type	: Drive end : 6205 ZZ	Non drive end : 6204 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 32 kgf	
Lubrication interval	: -	-	Max. compression	: 56 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 3.07A SF 1.15 SFA 3.54A

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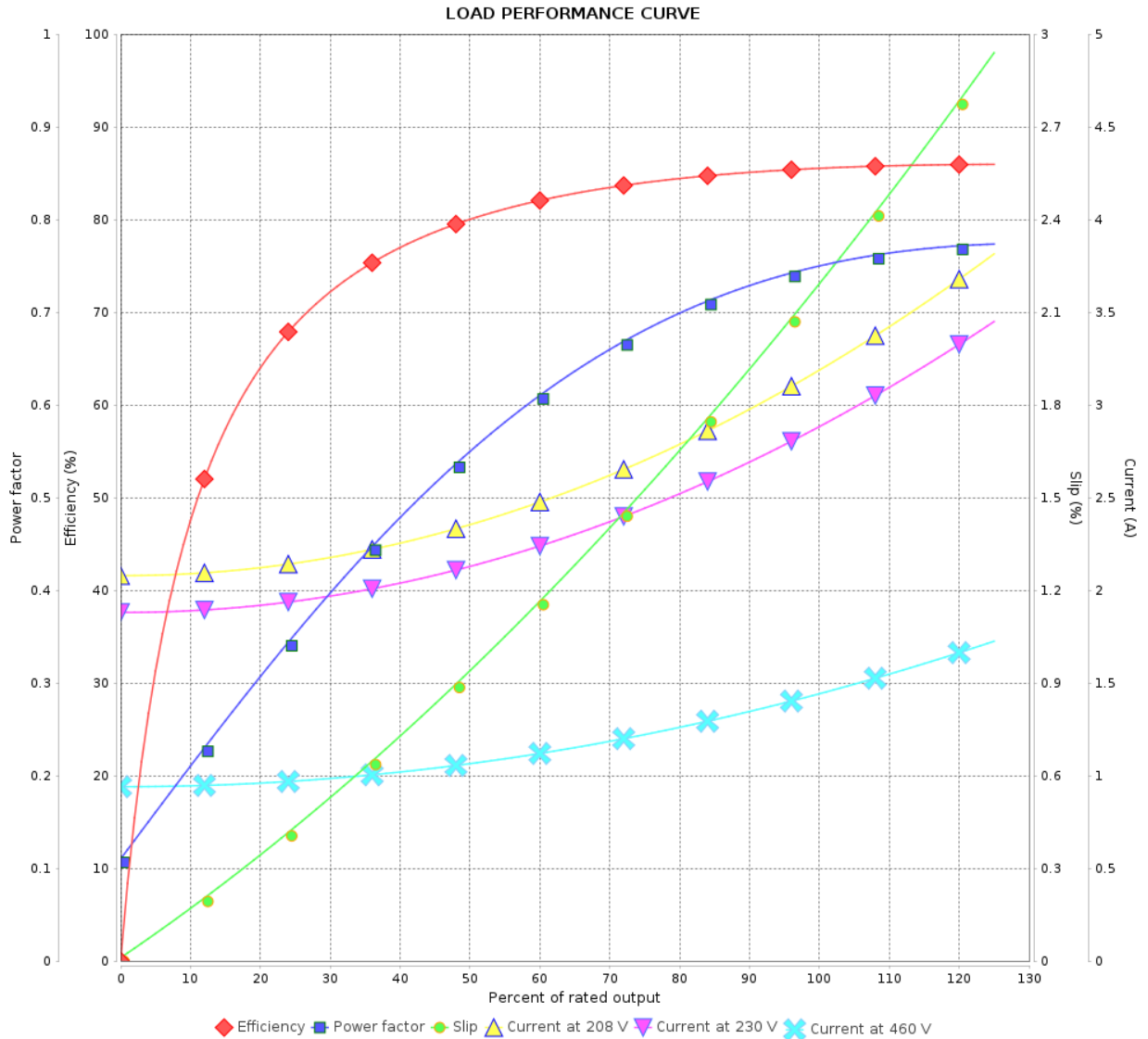
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14893856



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 0.412 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 350 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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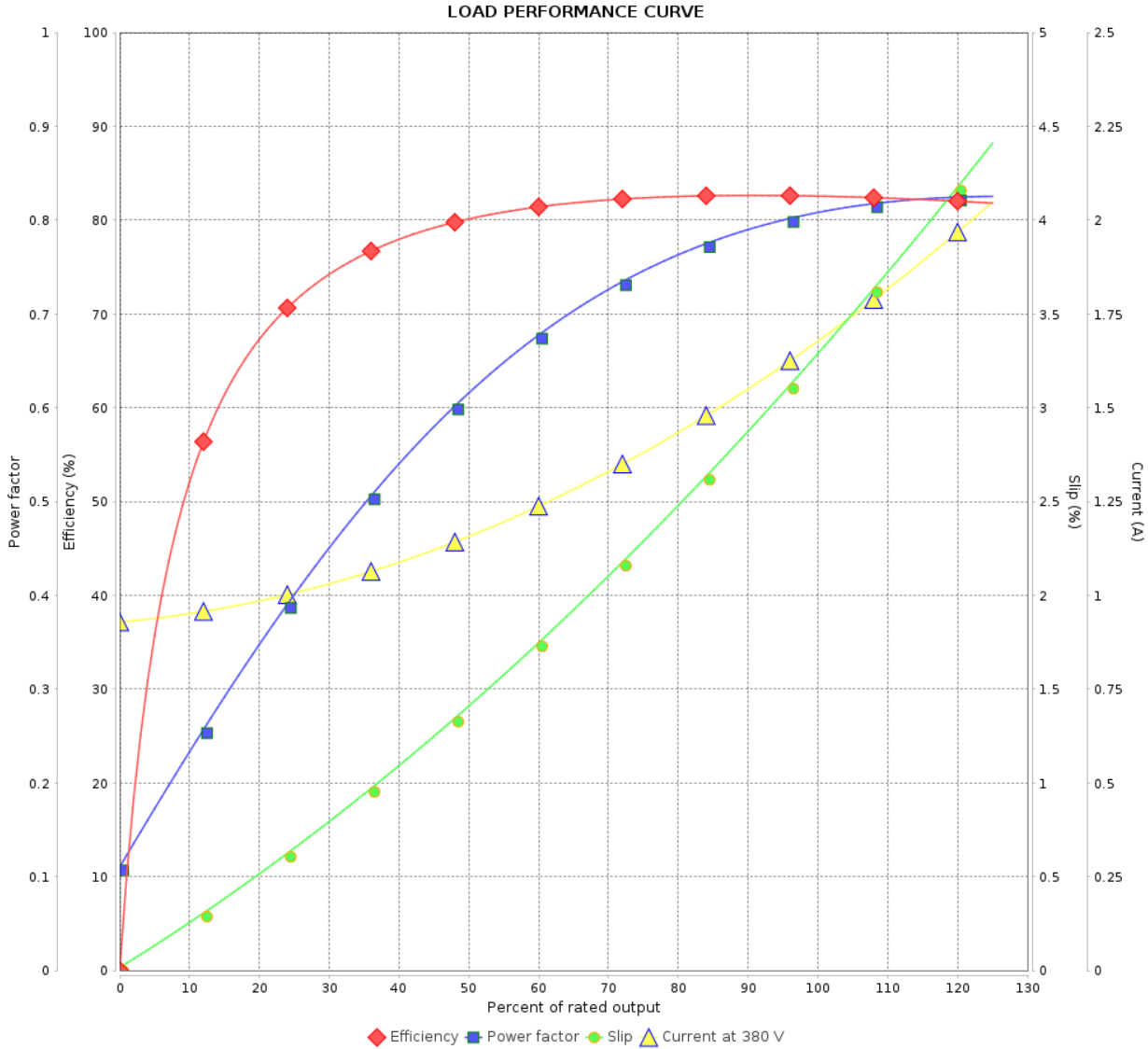
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14893856



Performance : 380 V 50 Hz 4P IE3

Rated current : 1.71 A
 LRC : 6.4
 Rated torque : 0.501 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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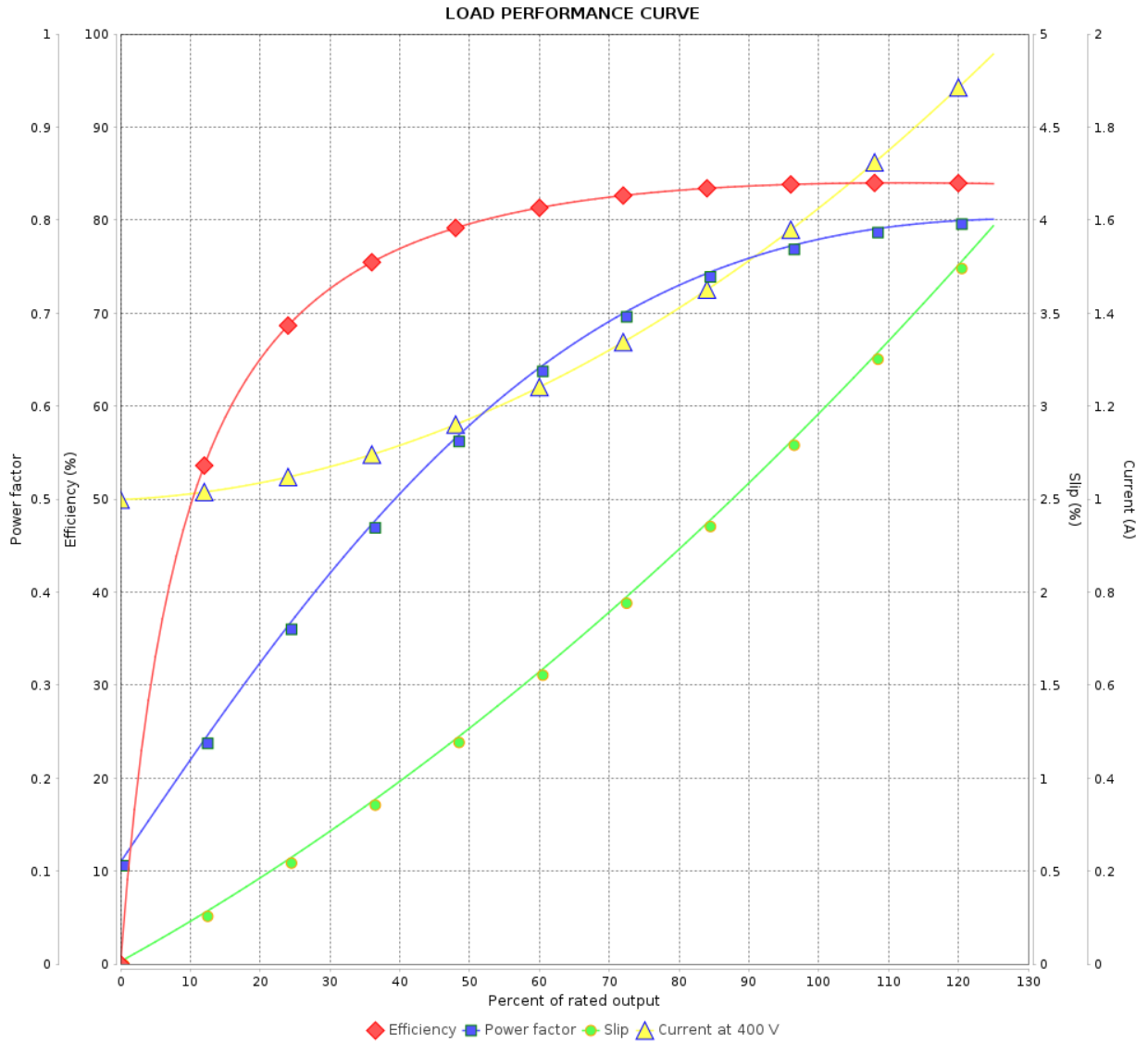
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14893856



Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A
 LRC : 7.0
 Rated torque : 0.499 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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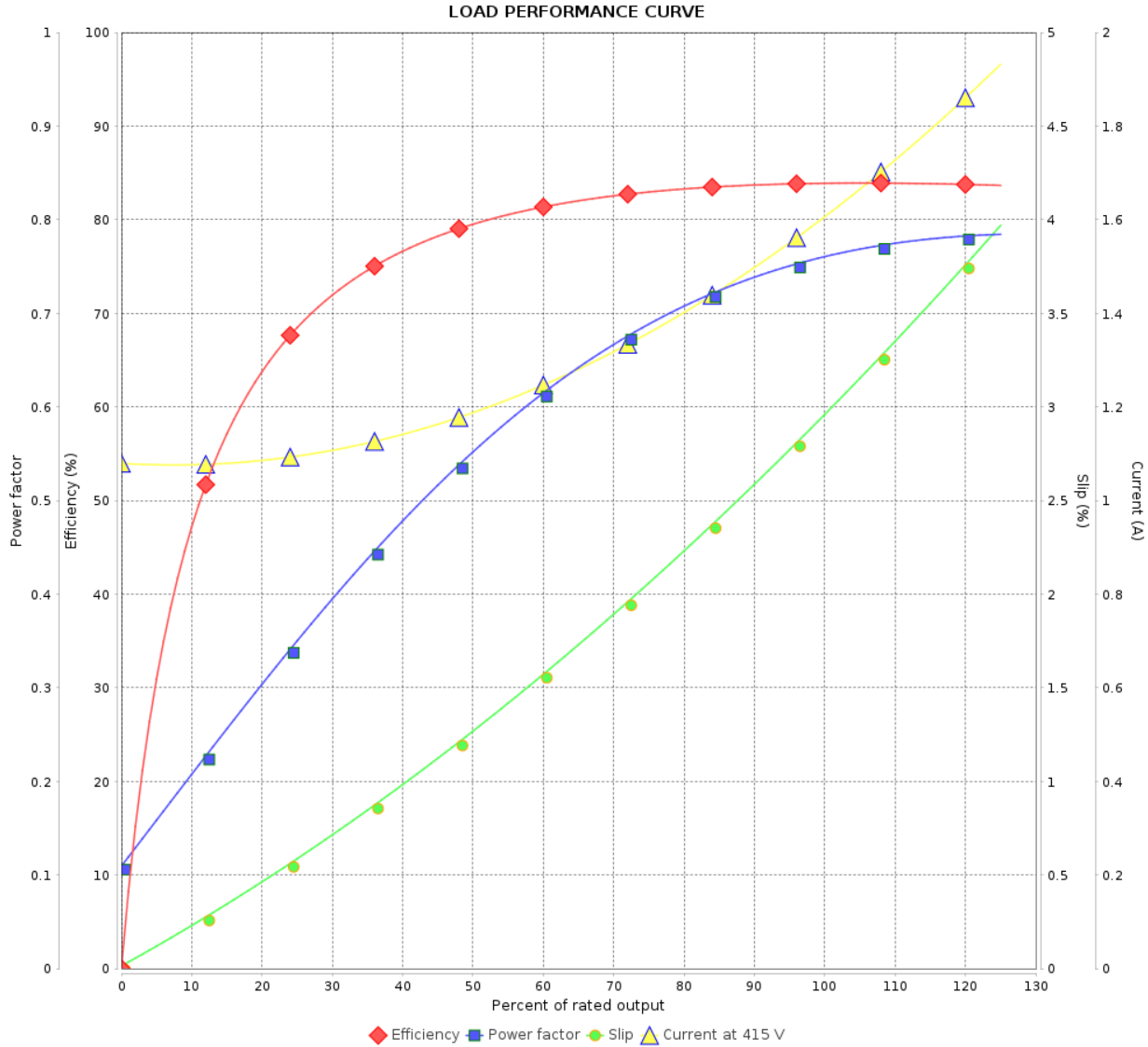
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14893856



Performance : 415 V 50 Hz 4P IE3

Rated current : 1.63 A
 LRC : 7.4
 Rated torque : 0.499 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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