

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code :	14876139
Frame	: 182/4T	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	: 56.5 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0178 kgm ²		
Design	: B				
Output [HP]	1.5	1.5	1.5	1.5	1.5
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	4.64/2.32	2.68	2.62	2.64	2.64
L. R. Amperes [A]	30.6/15.3	13.9	14.4	15.6	15.6
LRC [A]	6.6x(Code K)	5.2x(Code H)	5.5x(Code J)	5.9x(Code K)	5.9x(Code K)
No load current [A]	2.80/1.40	1.40	1.50	1.60	1.60
Rated speed [RPM]	1165	950	960	960	960
Slip [%]	2.92	5.00	4.00	4.00	4.00
Rated torque [kgfm]	0.934	1.13	1.13	1.13	1.13
Locked rotor torque [%]	229	190	220	250	250
Breakdown torque [%]	330	240	250	290	290
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	63s (cold) 35s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%				
	50%	84.5	85.5	84.5	84.0
	75%	86.5	86.5	86.5	85.5
	100%	87.5	85.5	86.5	86.5
Power Factor	25%				
	50%	0.47	0.52	0.48	0.45
	75%	0.59	0.63	0.60	0.57
	100%	0.68	0.73	0.70	0.67
Bearing type	: <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS	Foundation loads			
Sealing	: Oil Seal Lip Seal	Max. traction : 40 kgf			
Lubrication interval	: - -	Max. compression : 97 kgf			
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes					
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. (4) At 100% of full load.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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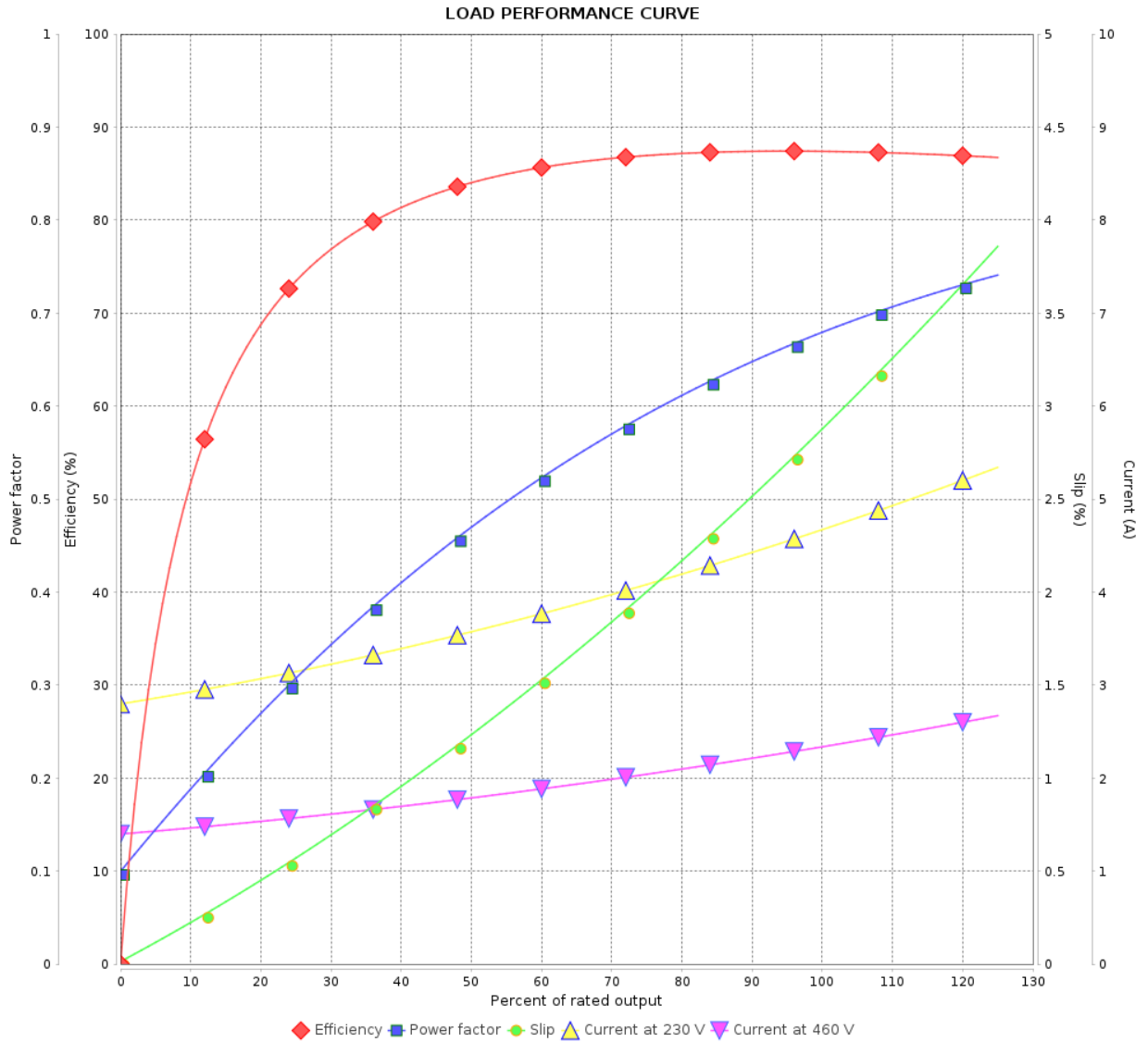
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Customer :

Product line : W21 Explosion Proof NEMA Premium
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Performance : 230/460 V 60 Hz 6P

Rated current : 4.64/2.32 A
LRC : 6.6
Rated torque : 0.934 kgfm
Locked rotor torque : 229 %
Breakdown torque : 330 %
Rated speed : 1165 rpm

Moment of inertia (J) : 0.0178 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

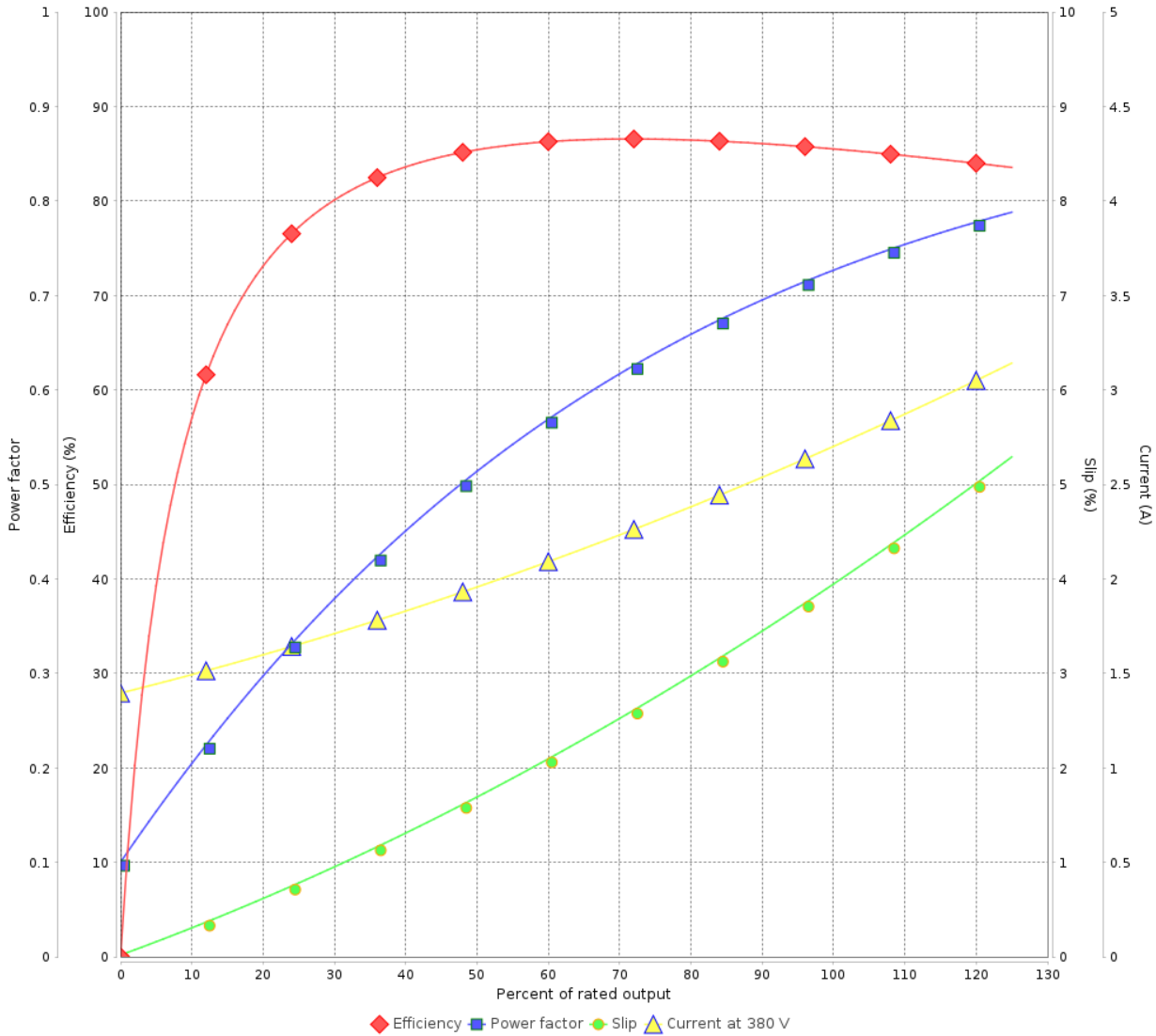


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Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A
LRC : 5.2
Rated torque : 1.13 kgfm
Locked rotor torque : 190 %
Breakdown torque : 240 %
Rated speed : 950 rpm

Moment of inertia (J) : 0.0178 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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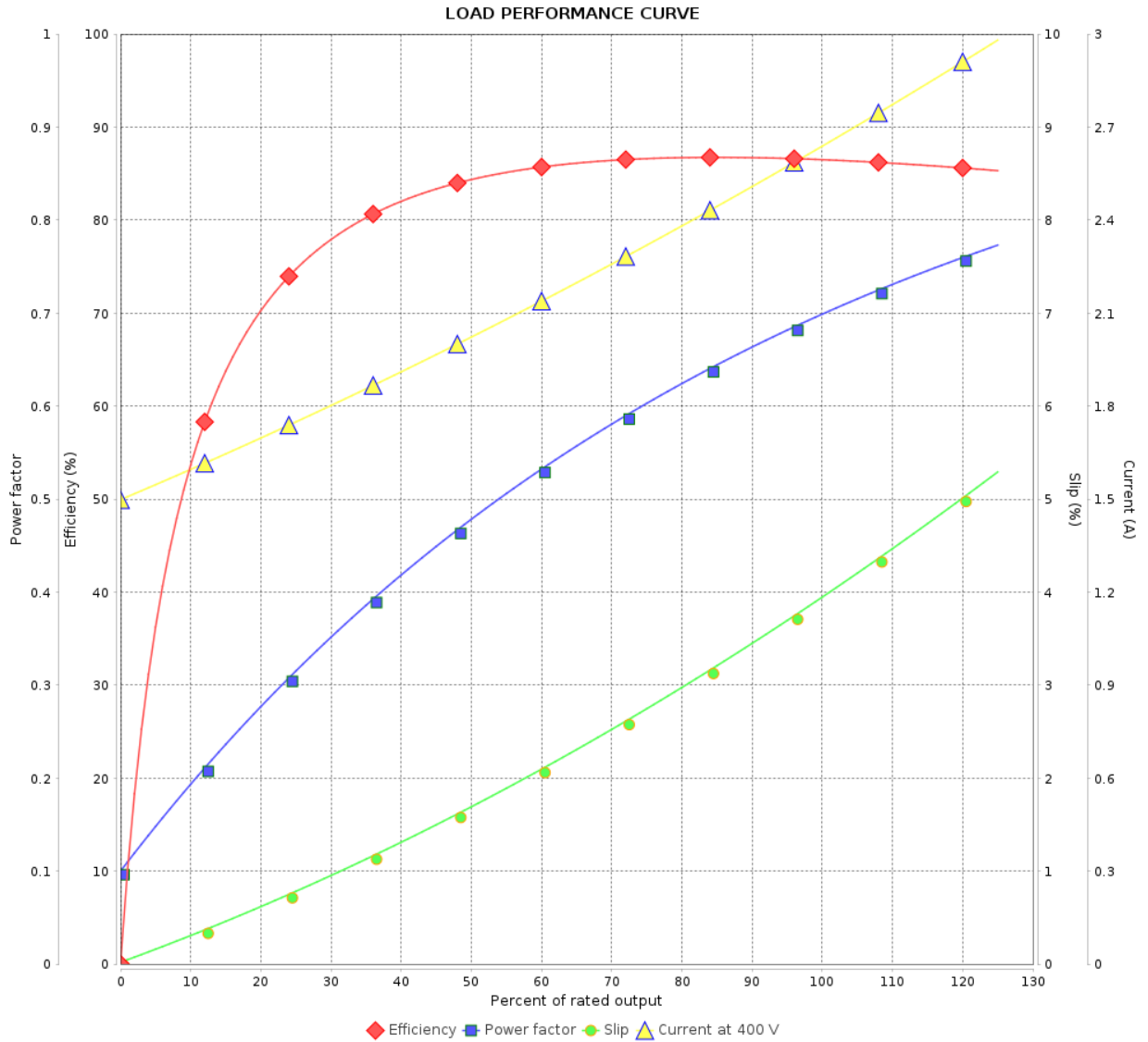
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Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A
 LRC : 5.5
 Rated torque : 1.13 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.0178 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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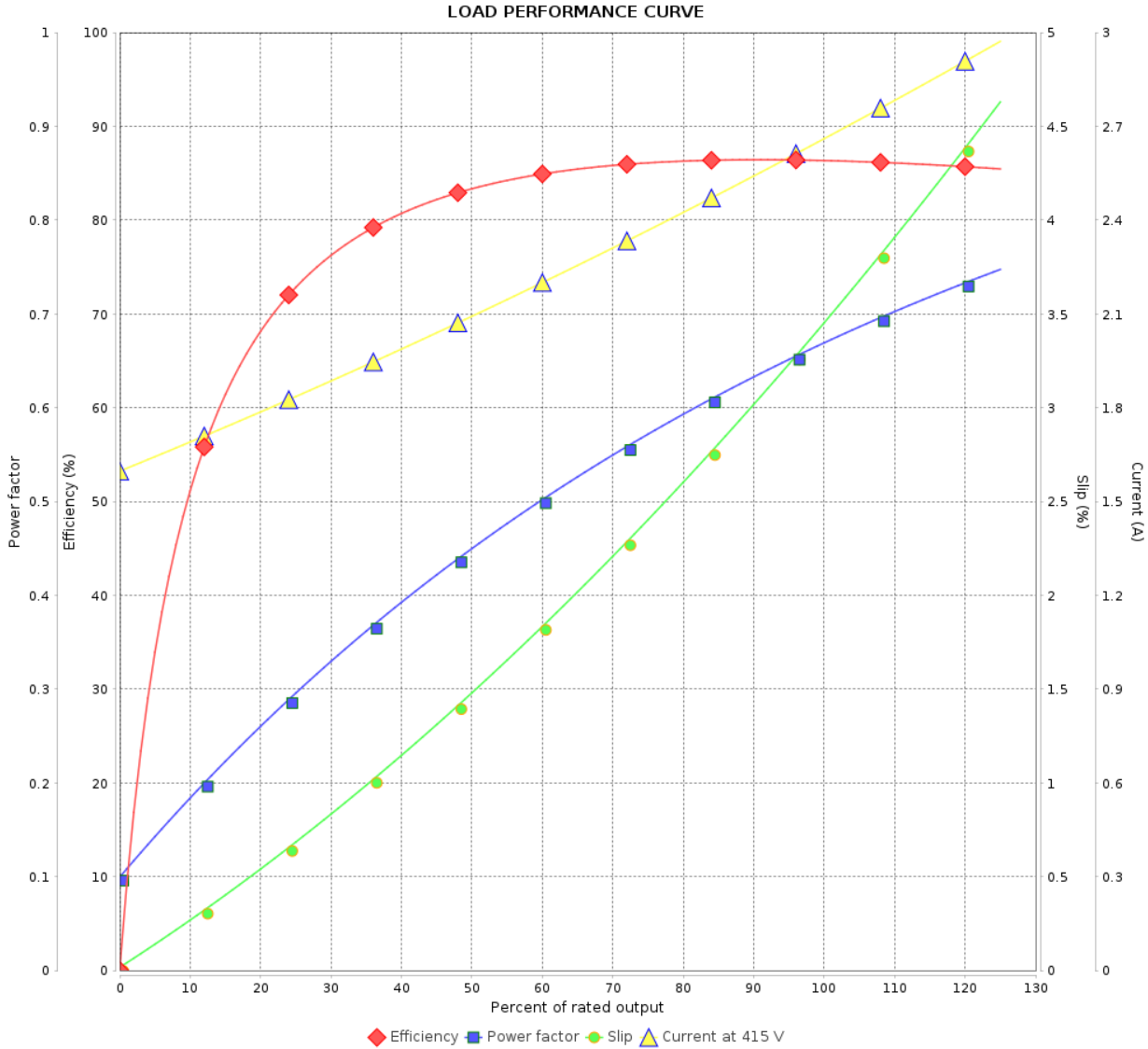
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Performance : 415 V 50 Hz 6P IE4

Rated current : 2.64 A
 LRC : 5.9
 Rated torque : 1.13 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.0178 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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