

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 11746365

Frame : 404/5T	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 : 562 kg
Protection degree : IP55	Moment of inertia (J) : 1.11 kgm ²
Design : B	

Output [HP]	100	75	75	75
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	226/113	103	100	98.7
L. R. Amperes [A]	1627/814	773	840	898
LRC [A]	7.2x(Code H)	7.5x(Code H)	8.4x(Code J)	9.1x(Code K)
No load current [A]	78.0/39.0	39.0	42.0	45.0
Rated speed [RPM]	1780	1480	1485	1485
Slip [%]	1.11	1.33	1.00	1.00
Rated torque [kgfm]	40.8	36.8	36.7	36.7
Locked rotor torque [%]	270	270	300	320
Breakdown torque [%]	280	310	360	370
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	75.0 dB(A)	70.0 dB(A)	70.0 dB(A)	70.0 dB(A)
Efficiency (%)	25%			
	50%	94.5	94.0	93.6
	75%	95.0	94.5	94.5
	100%	95.4	94.5	94.5
Power Factor	25%			
	50%	0.72	0.69	0.65
	75%	0.82	0.80	0.77
	100%	0.87	0.86	0.84

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	NU-217 C3	6314 C3	Max. traction : 1058 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 1611 kgf
Lubrication interval :	6536 h	9789 h	
Lubricant amount :	21 g	27 g	
Lubricant type :	Mobil Polyrex EM		

Notes
USABLE @208V 250A SF 1.00 SFA 250A

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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Performed by				
Checked by				
Date	29/10/2024			

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Customer :

Thermal protection

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

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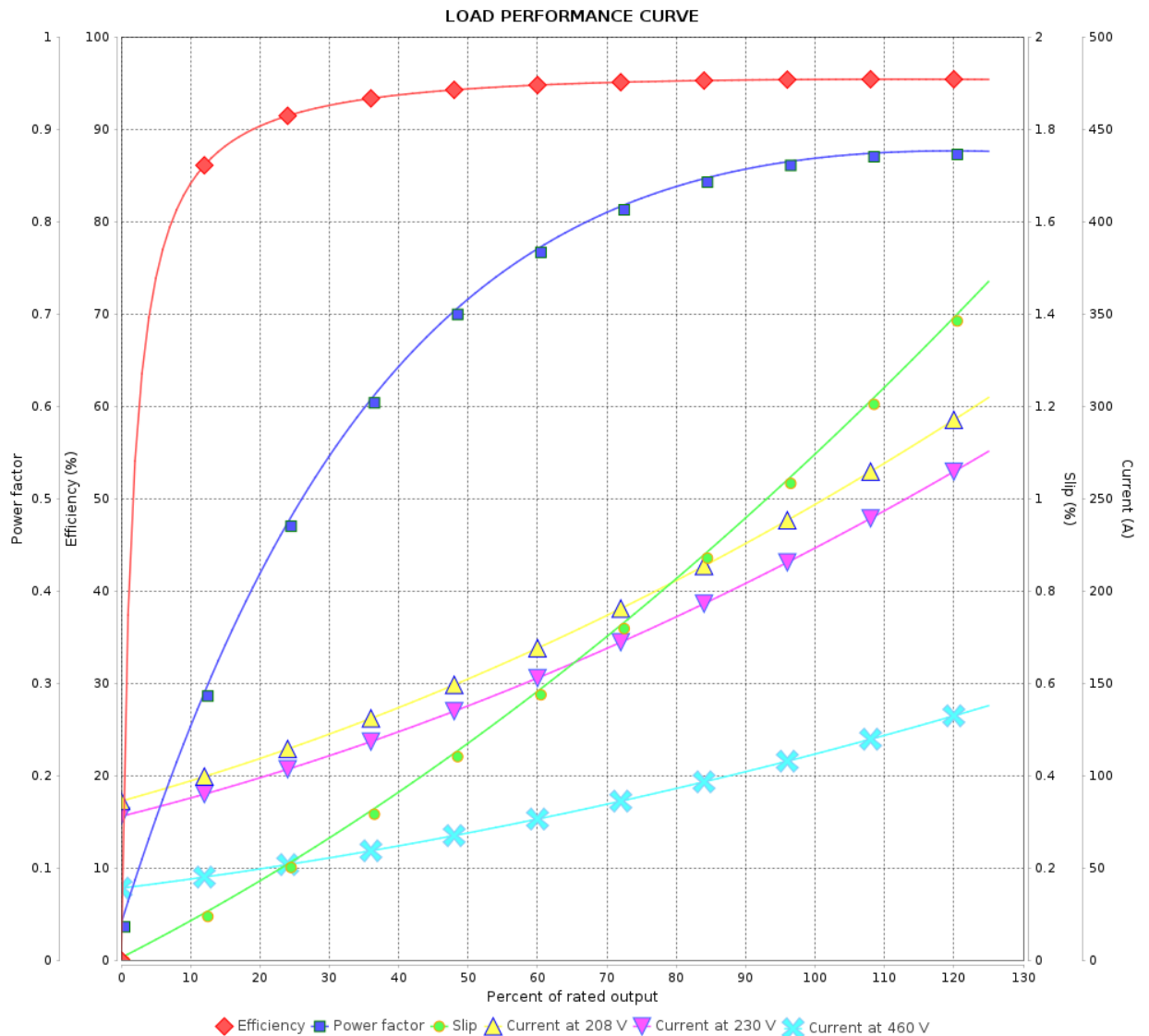
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11746365



Performance : 230/460 V 60 Hz 4P

Rated current : 226/113 A
LRC : 7.2
Rated torque : 40.8 kgfm
Locked rotor torque : 270 %
Breakdown torque : 280 %
Rated speed : 1780 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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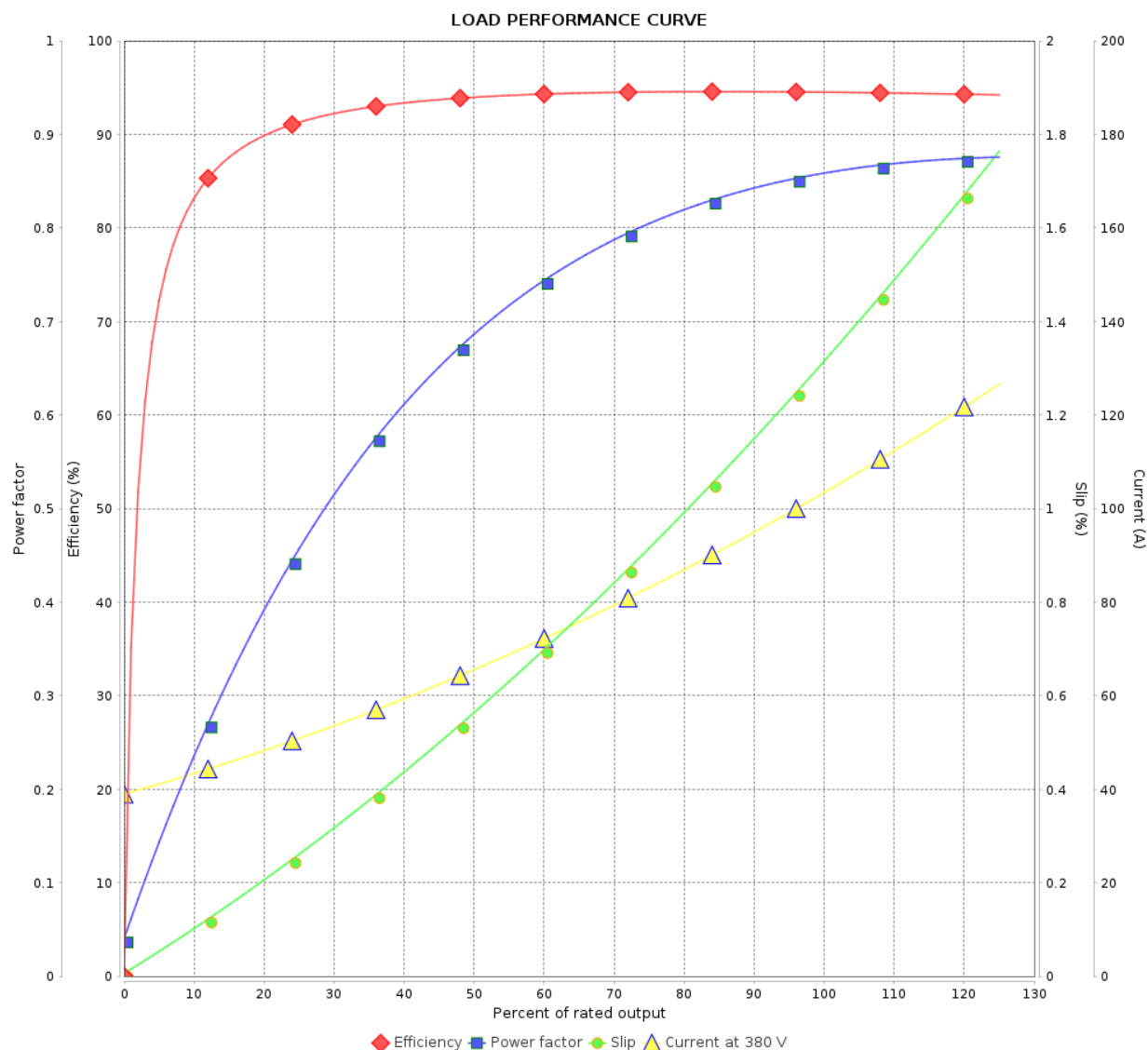
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 11746365



Performance : 380 V 50 Hz 4P IE2

Rated current : 103 A
LRC : 7.5
Rated torque : 36.8 kgfm
Locked rotor torque : 270 %
Breakdown torque : 310 %
Rated speed : 1480 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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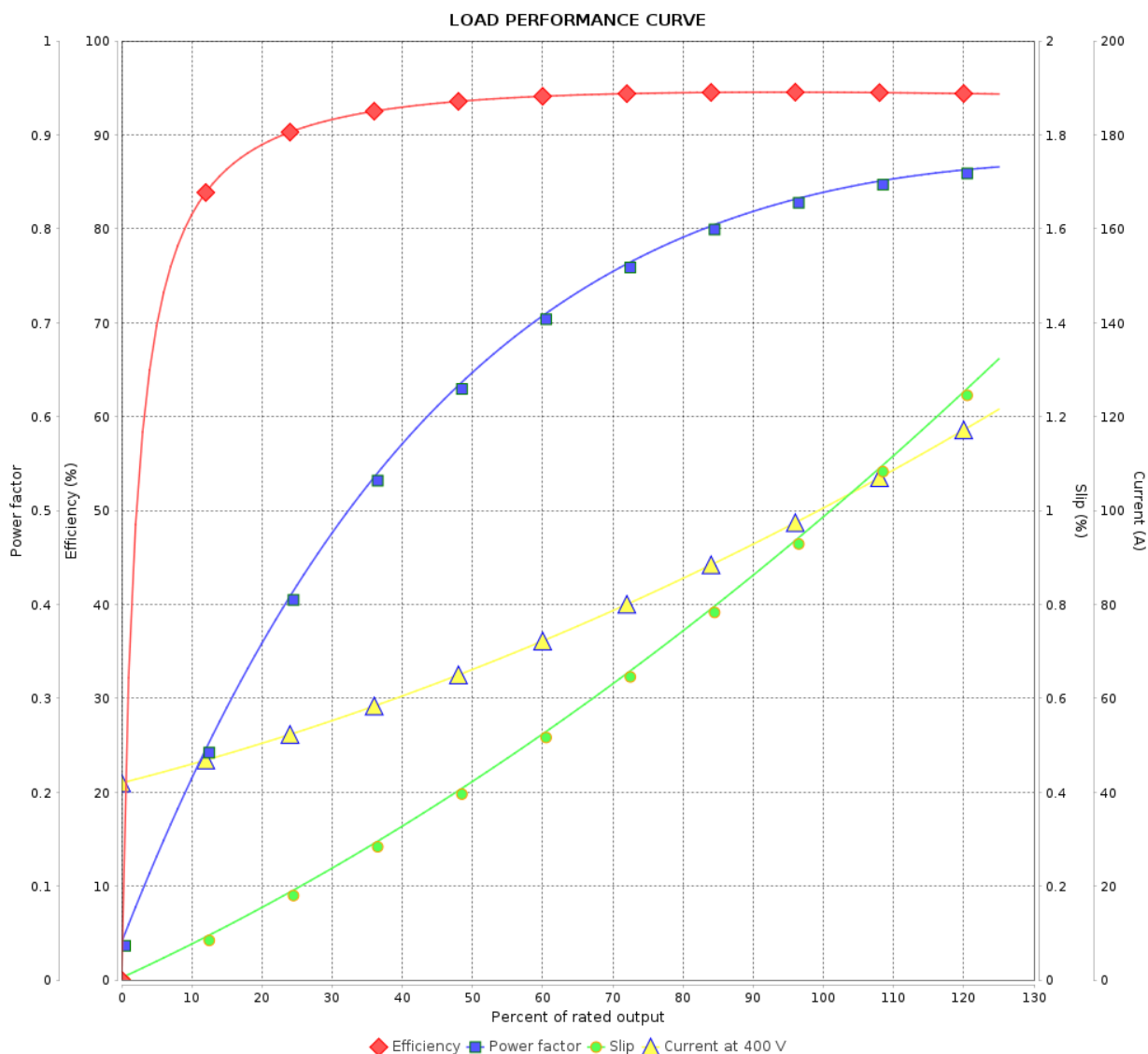
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11746365



Performance : 400 V 50 Hz 4P IE2

Rated current : 100 A
LRC : 8.4
Rated torque : 36.7 kgfm
Locked rotor torque : 300 %
Breakdown torque : 360 %
Rated speed : 1485 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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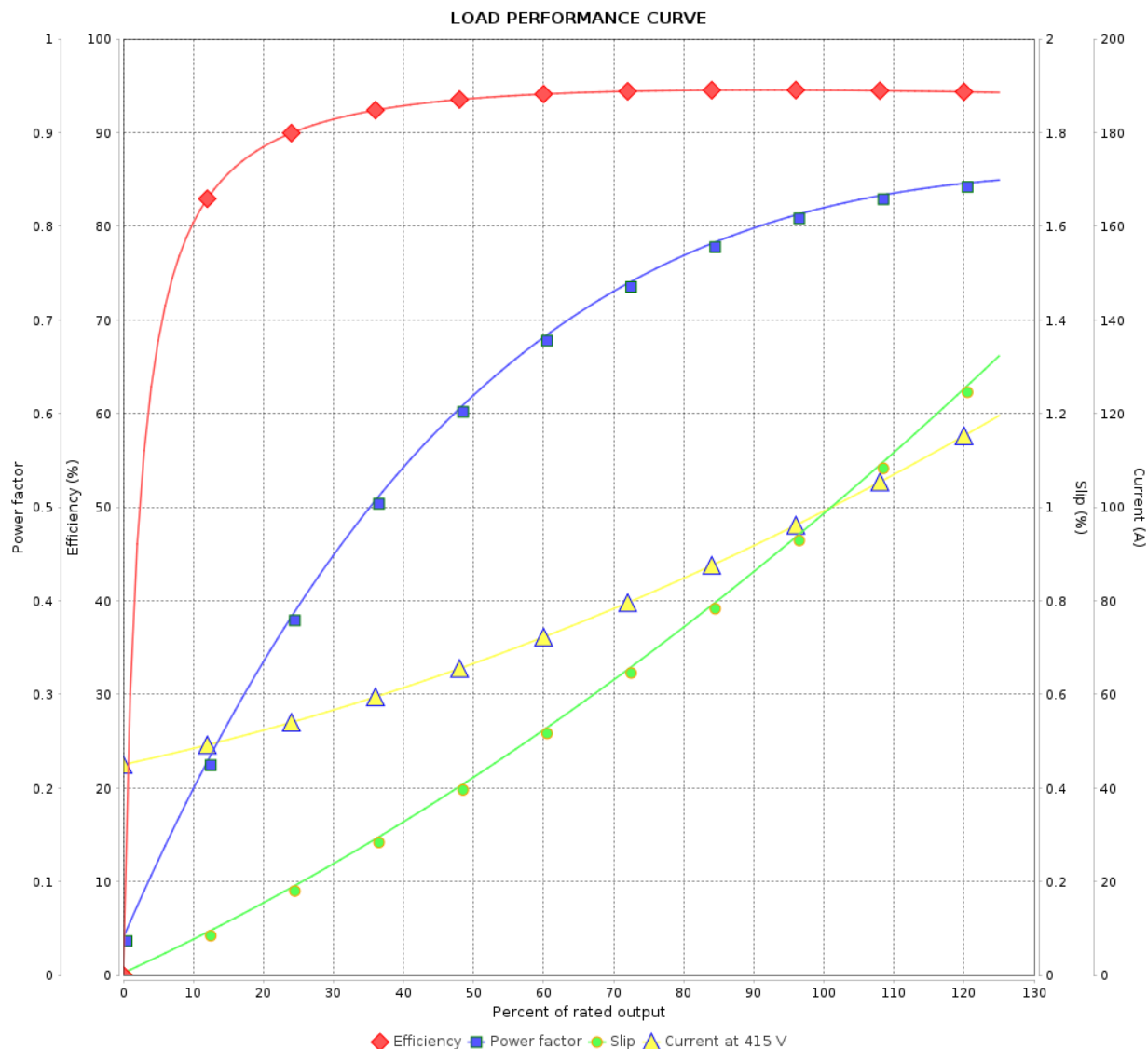
Three Phase Induction Motor - Squirrel Cage



Customer :

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Premium Efficiency Three-Phase

Product code : 11746365



Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
LRC : 9.1
Rated torque : 36.7 kgfm
Locked rotor torque : 320 %
Breakdown torque : 370 %
Rated speed : 1485 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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