

# 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 Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>2</sup> : 553 kg Moment of inertia (J) : 1.11 kgm <sup>2</sup>			
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 <sup>2</sup>	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	
Bearing type : <u>Drive end</u> NU-217 C3 <u>Non drive end</u> 6314 C3 Sealing : Oil Seal Lip Seal Lubrication interval : 6536 h 9789 h Lubricant amount : 21 g 27 g Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 1058 kgf Max. compression : 1611 kgf			
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.			
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	16/01/2024			1 / 6	

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Customer : \_\_\_\_\_

### Thermal protection

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	16/01/2024		2 / 6	

# LOAD PERFORMANCE CURVE

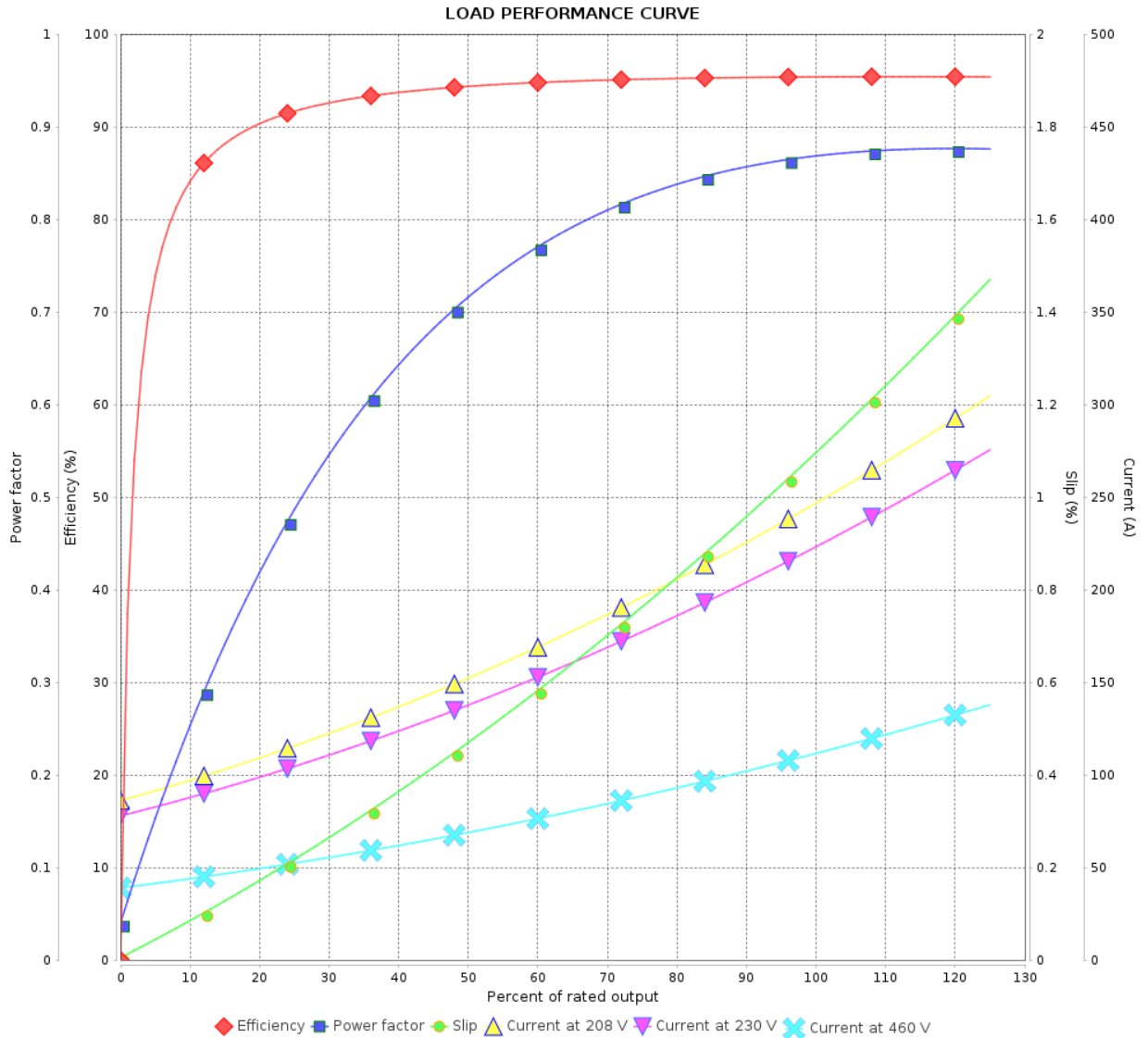
## Three Phase Induction Motor - Squirrel Cage



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 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		16/01/2024		

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

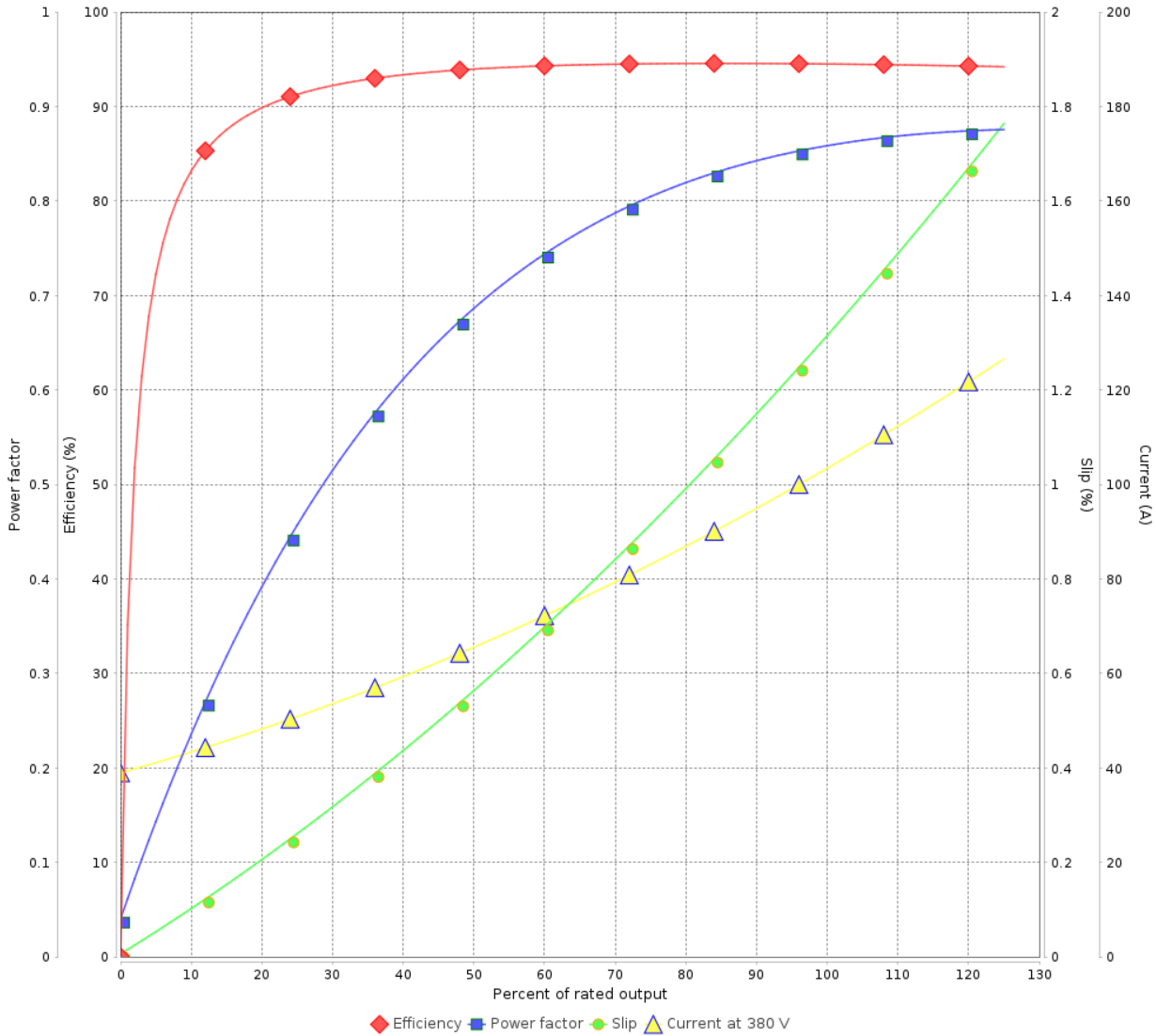


Customer :

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

Product code : 11746365

LOAD PERFORMANCE CURVE



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 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	16/01/2024			

# LOAD PERFORMANCE CURVE

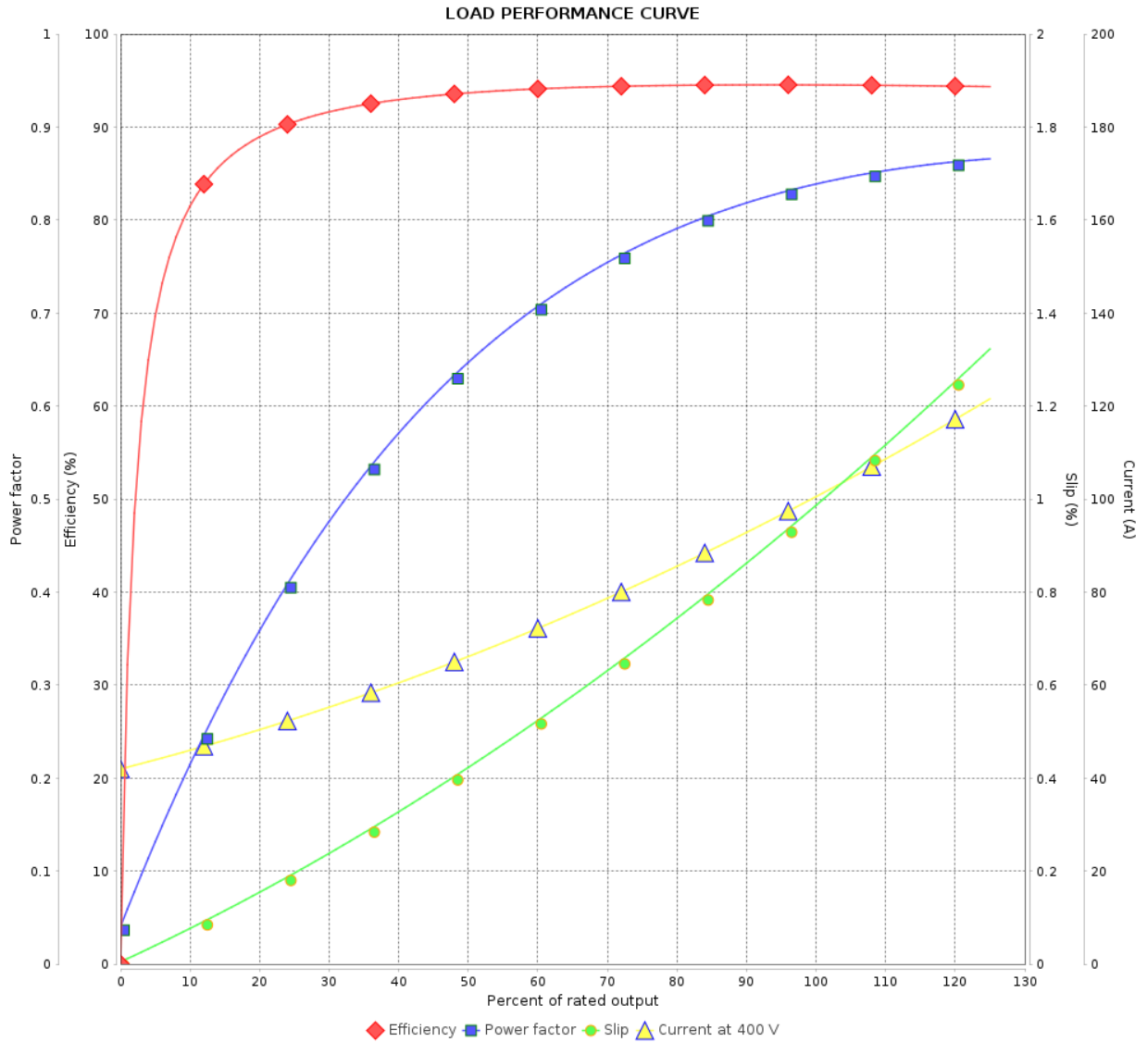
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

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 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 6		
Date		16/01/2024		

# LOAD PERFORMANCE CURVE

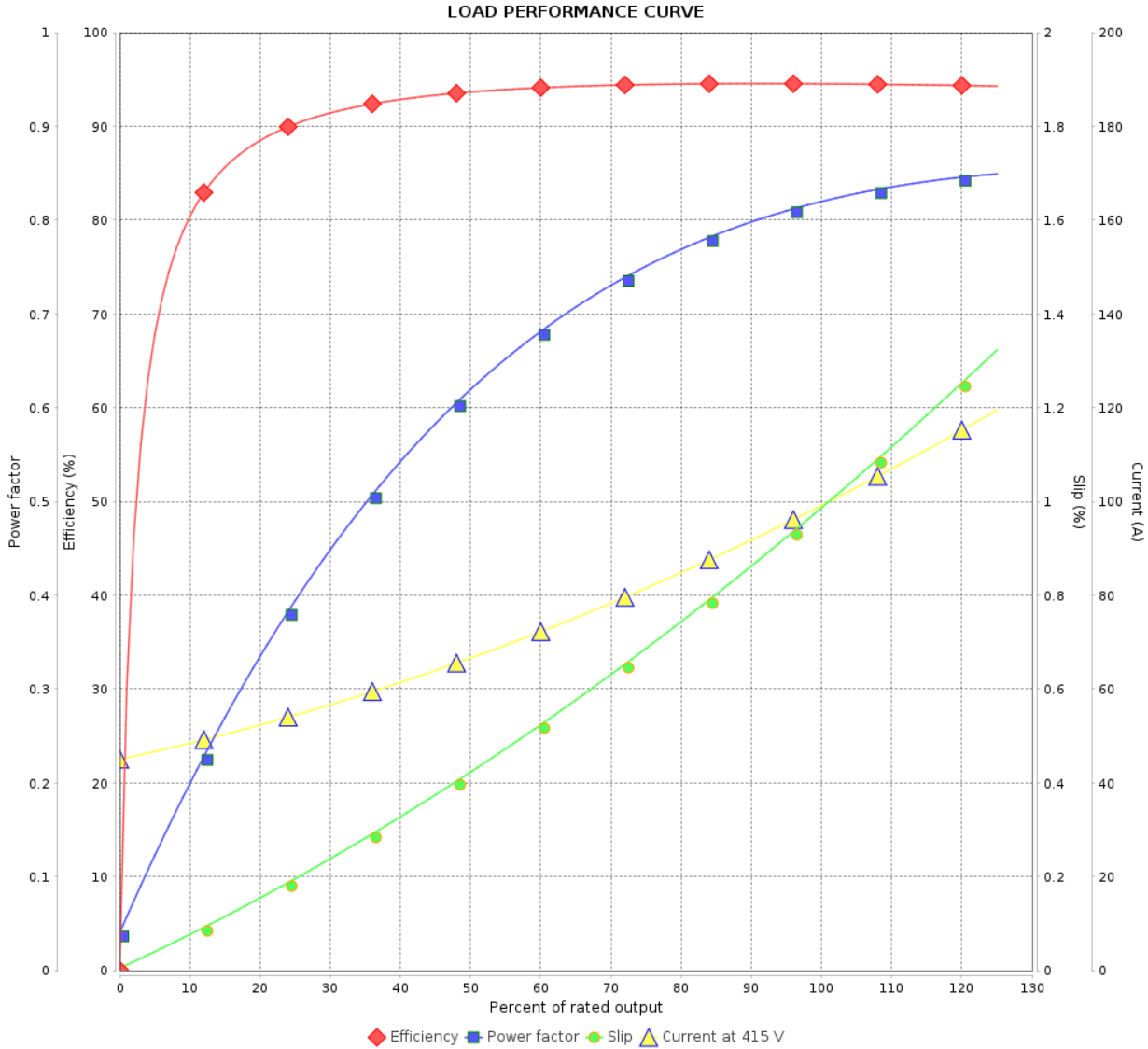
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA 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 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	16/01/2024			