

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12675381
Frame	: 143/5TC	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 17.7 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
Design	: B		
Output [HP]	1	1	1
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.16/1.58	3.74/1.87	3.41/1.81
L. R. Amperes [A]	18.3/9.16	16.5/8.23	16.7/8.87
LRC [A]	5.8x(Code J)	4.4x(Code F)	4.9x(Code G)
No load current [A]	2.03/1.01	2.00/1.00	2.02/1.07
Rated speed [RPM]	1145	915	930
Slip [%]	4.58	8.50	7.00
Rated torque [kgfm]	0.634	0.793	0.780
Locked rotor torque [%]	229	170	200
Breakdown torque [%]	280	200	229
Service factor		1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	55s (cold) 31s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	50.0 dB(A)	47.0 dB(A)	47.0 dB(A)
Efficiency (%)	25%	79.5	80.4
	50%	80.0	79.4
	75%	82.5	80.4
	100%	82.5	78.6
Power Factor	25%	0.28	0.31
	50%	0.50	0.54
	75%	0.63	0.68
	100%	0.72	0.76
Bearing type	: <u>Drive end</u> 6205 ZZ	<u>Non drive end</u> 6203 ZZ	Foundation loads
Sealing	: V'Ring	Without Bearing Seal	Max. traction : 42 kgf
Lubrication interval	: -	-	Max. compression : 60 kgf
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 3.49A SF 1.00 SFA 3.49A			
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
Date	13/05/2022		Revision
			1 / 4

# LOAD PERFORMANCE CURVE

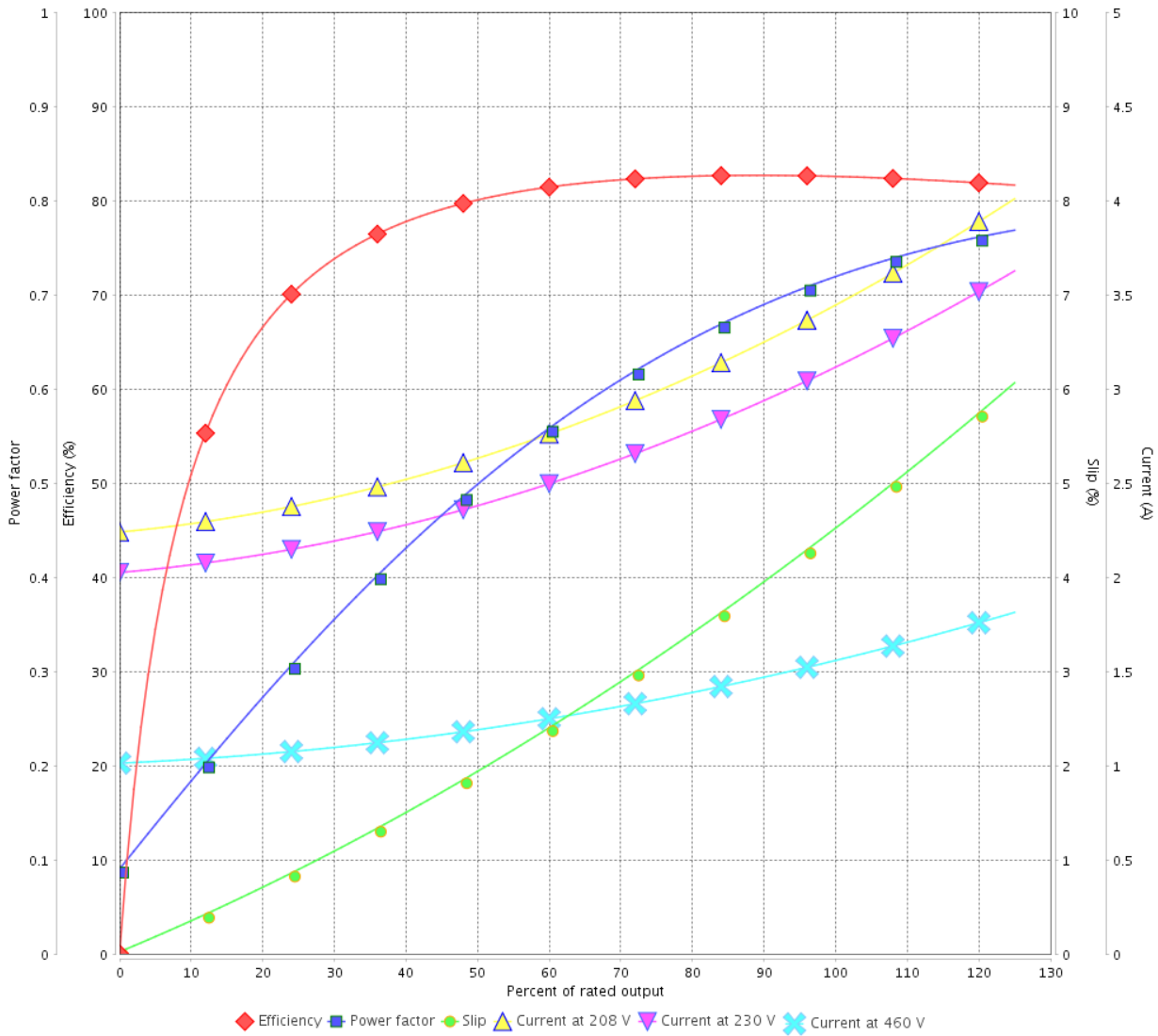
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12675381

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 3.16/1.58 A  
 LRC : 5.8  
 Rated torque : 0.634 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 280 %  
 Rated speed : 1145 rpm

Moment of inertia (J) : 0.0067 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

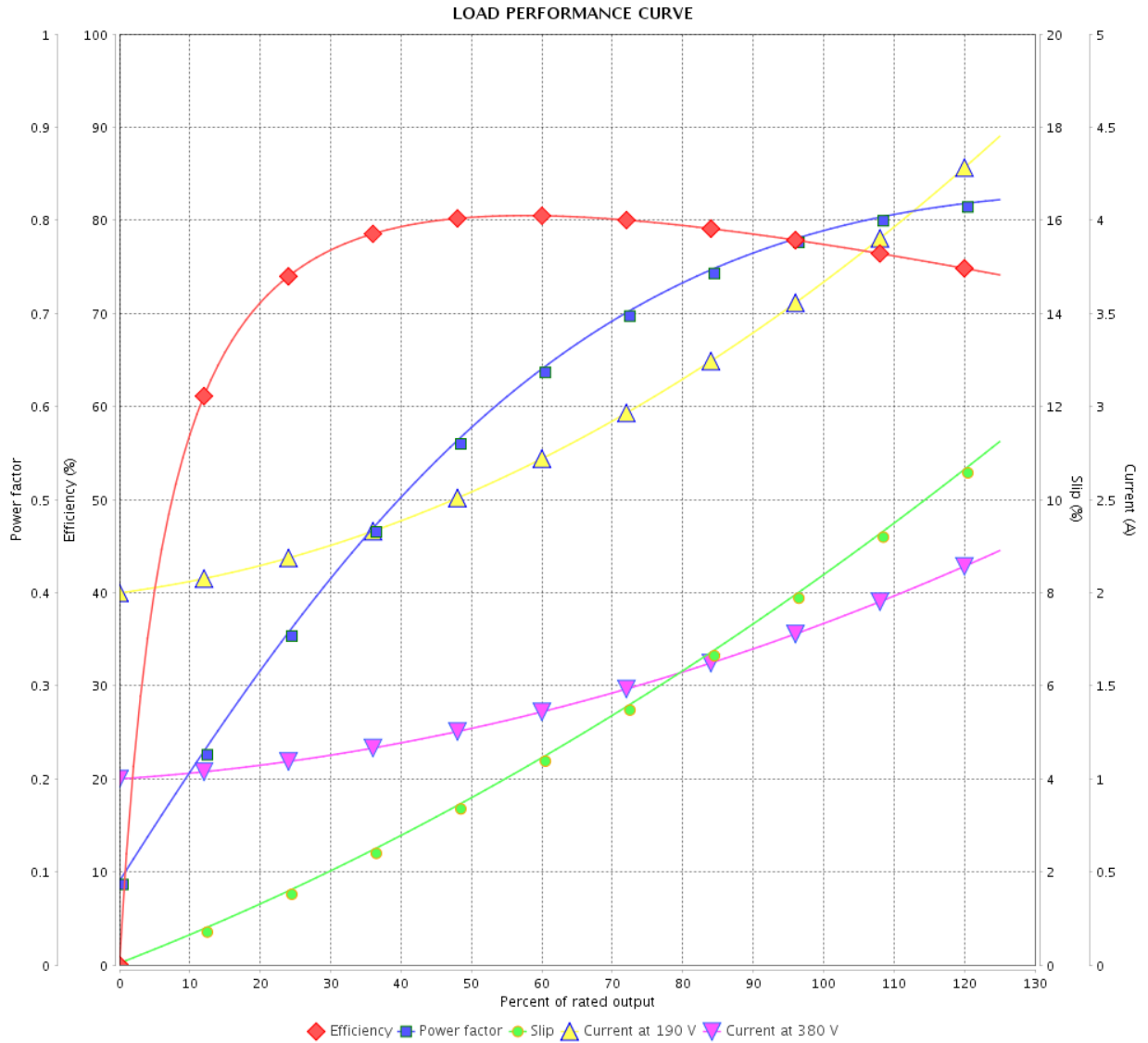
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12675381



Performance : 190/380 V 50 Hz 6P

Rated current : 3.74/1.87 A  
 LRC : 4.4  
 Rated torque : 0.793 kgfm  
 Locked rotor torque : 170 %  
 Breakdown torque : 200 %  
 Rated speed : 915 rpm

Moment of inertia (J) : 0.0067 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 4	Revision
Checked by				
Date	13/05/2022			

# LOAD PERFORMANCE CURVE

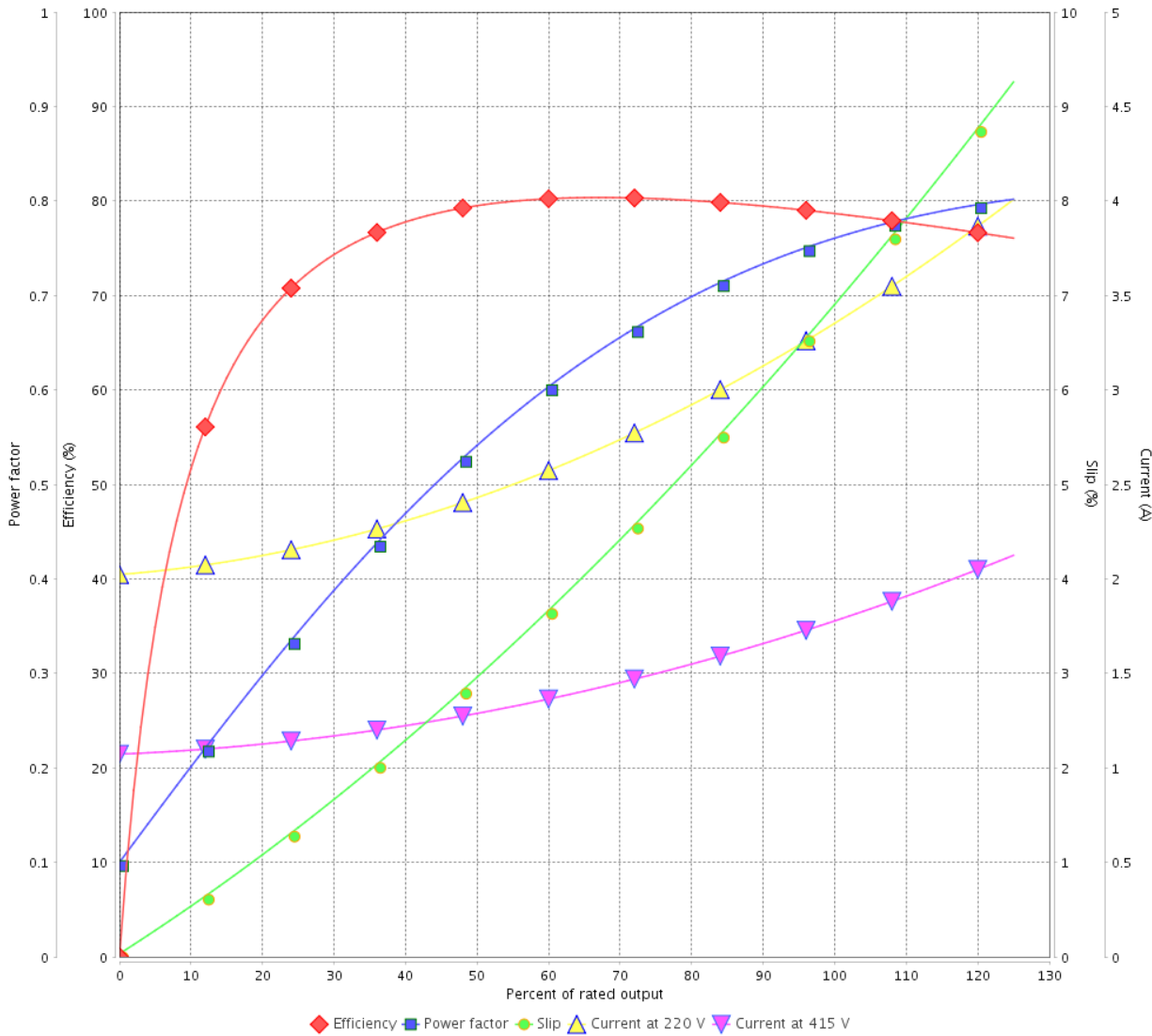
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12675381

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 6P

Rated current	: 3.41/1.81 A	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
LRC	: 4.9	Duty cycle	: Cont.(S1)
Rated torque	: 0.780 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 930 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			4 / 4	
Date	13/05/2022			