

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 12639654			
Frame : 80	Insulation class : F	Duty cycle : S1	Ambient temperature : -20°C to +40°C	Altitude : 1000 m.a.s.l.	
Protection degree : IP55	Design : N	Cooling method : IC411 - TEFC	Mounting : B3L(E)	Rotation <sup>1</sup> : Both (CW and CCW)	
Starting method : Direct On Line	Approx. weight <sup>2</sup> : 15.0 kg	Moment of inertia (J) : 0.0015 kgm <sup>2</sup>			
Output [HP]	1.5	1.5	1.5		
Poles	2	2	2		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	2.42	2.38	4.16/2.08		
L. R. Amperes [A]	17.9	19.0	38.7/19.3		
LRC [A]	7.4	8.0	9.3		
No load current [A]	1.15	1.50	2.40/1.20		
Rated speed [RPM]	2820	2855	3465		
Slip [%]	6.00	4.83	3.75		
Rated torque [kgfm]	0.386	0.381	0.314		
Locked rotor torque [%]	340	409	480		
Breakdown torque [%]	330	400	470		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	52s (cold) 29s (hot)	48s (cold) 27s (hot)	48s (cold) 27s (hot)		
Noise level <sup>2</sup>	59.0 dB(A)	59.0 dB(A)	62.0 dB(A)		
Efficiency (%)	25%				
	50%	82.0	80.0	78.5	
	75%	83.7	83.0	81.5	
	100%	83.1	83.4	84.0	
Power Factor	25%				
	50%	0.66	0.56	0.60	
	75%	0.77	0.68	0.71	
	100%	0.83	0.77	0.79	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	18.6	18.2	17.4	
	P2 (0,5;1,0)	13.1	12.9	12.3	
	P3 (0,25;1,0)	11.7	11.5	11.0	
	P4 (0,9;0,5)	12.5	12.2	11.7	
	P5 (0,5;0,5)	7.1	6.9	6.6	
	P6 (0,5;0,25)	5.7	5.6	5.3	
	P7 (0,25;0,25)	3.5	3.4	3.3	
Bearing type	Drive end : 6204 ZZ	Non drive end : 6203 ZZ	Foundation loads		
Sealing	: V'Ring	: V'Ring	Max. traction	: 39 kgf	
Lubrication interval	: -	: -	Max. compression	: 54 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. (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	14/01/2024			1 / 5	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/01/2024		2 / 5	

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

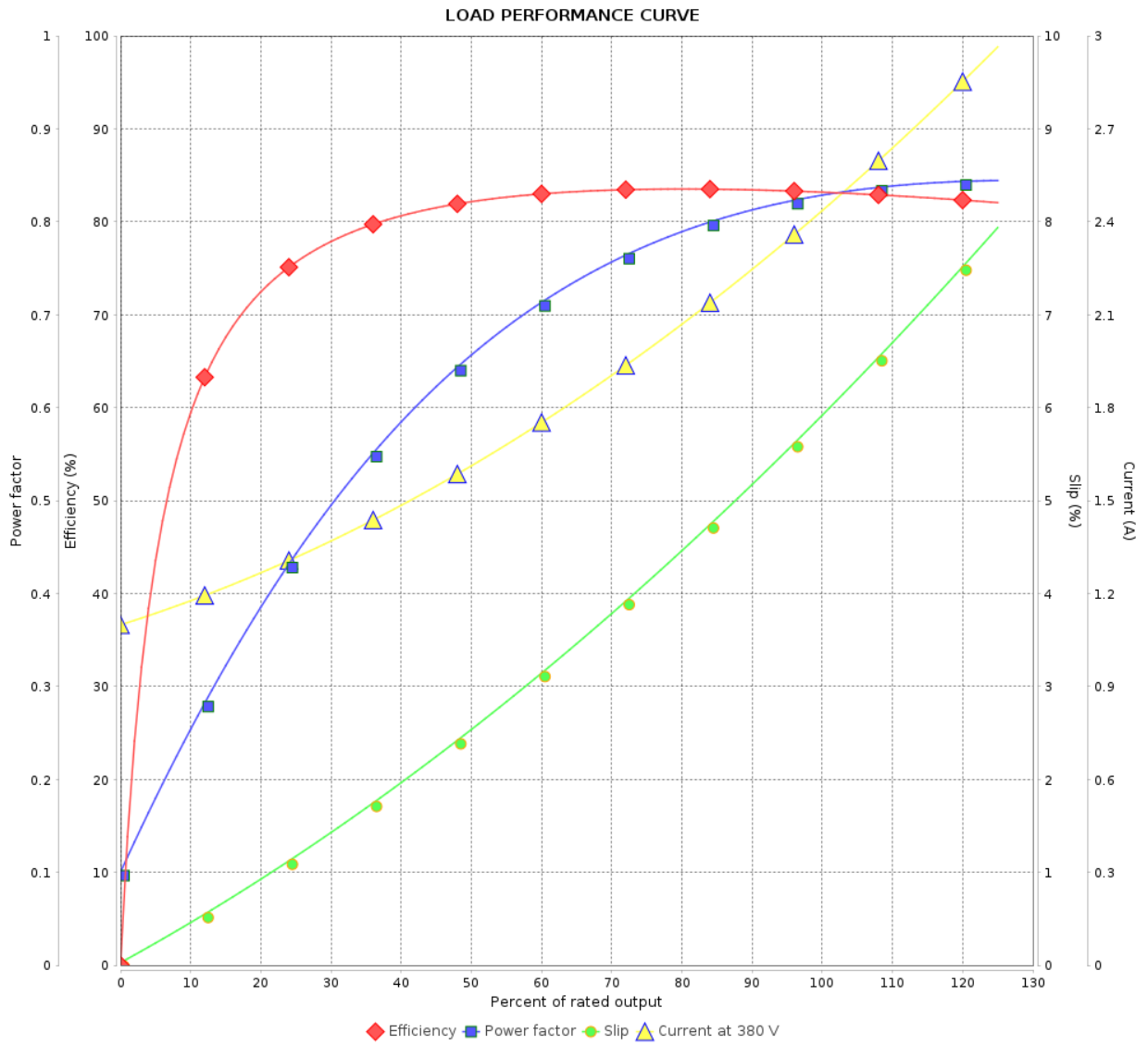


Customer : \_\_\_\_\_

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12639654



Performance : 380 V 50 Hz 2P

Rated current : 2.42 A  
 LRC : 7.4  
 Rated torque : 0.386 kgfm  
 Locked rotor torque : 340 %  
 Breakdown torque : 330 %  
 Rated speed : 2820 rpm

Moment of inertia (J) : 0.0015 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 5	Revision
Checked by				
Date	14/01/2024			

# LOAD PERFORMANCE CURVE

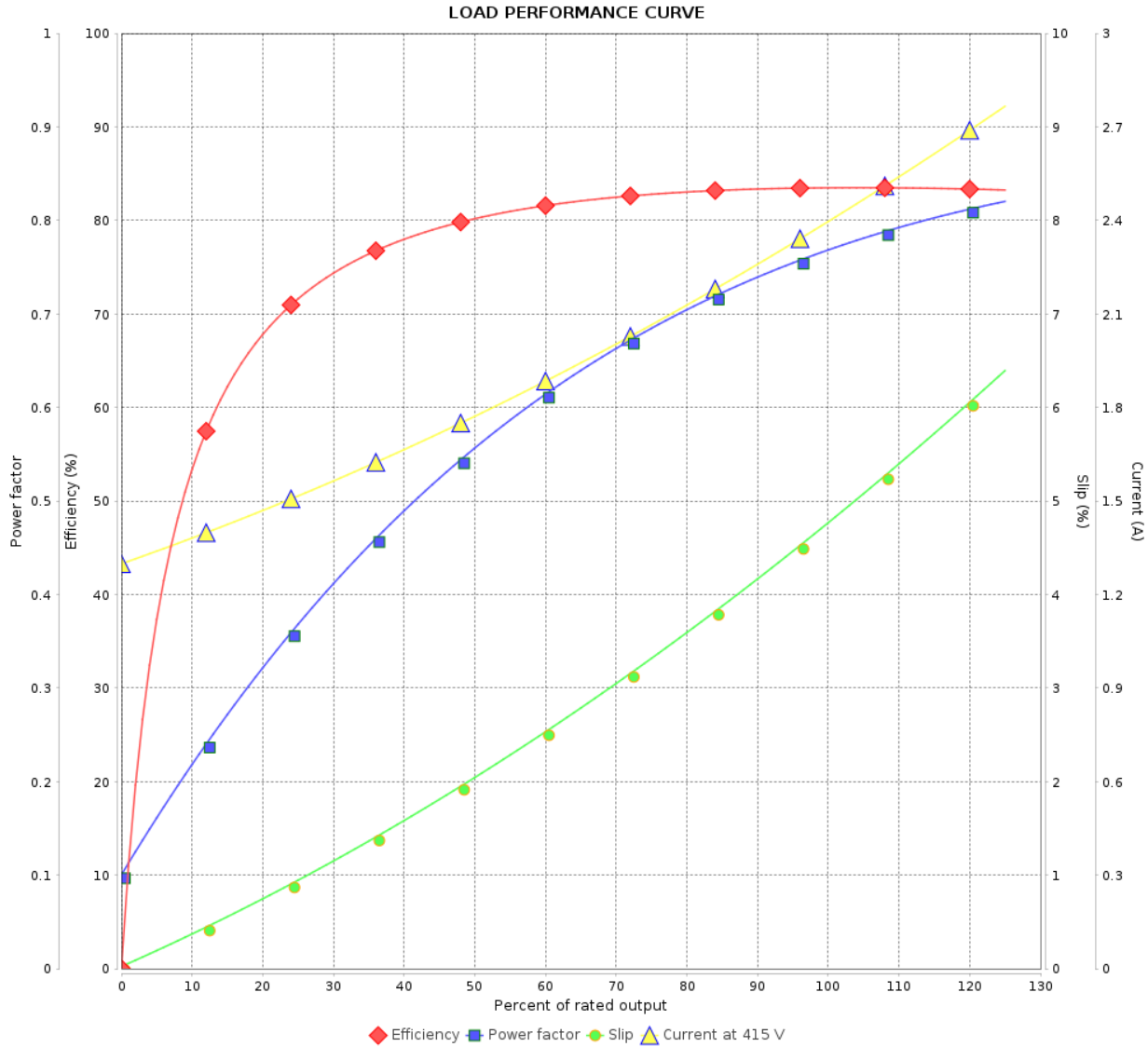
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 12639654



Performance : 415 V 50 Hz 2P

Rated current : 2.38 A  
 LRC : 8.0  
 Rated torque : 0.381 kgfm  
 Locked rotor torque : 409 %  
 Breakdown torque : 400 %  
 Rated speed : 2855 rpm

Moment of inertia (J) : 0.0015 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 5	Revision
Checked by				
Date	14/01/2024			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

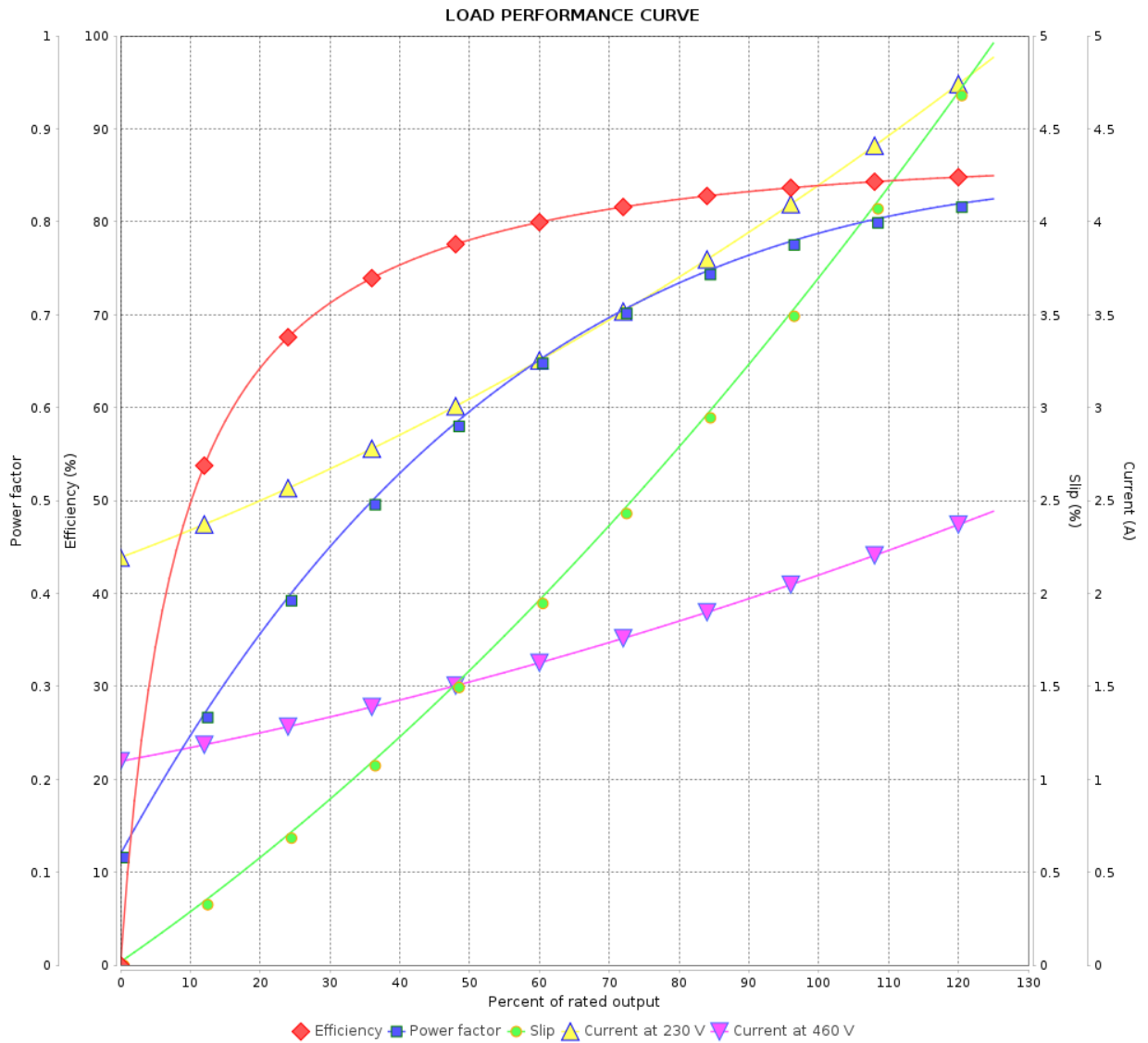


Customer : \_\_\_\_\_

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12639654



Performance : 230/460 V 60 Hz 2P

Rated current : 4.16/2.08 A  
 LRC : 9.3  
 Rated torque : 0.314 kgfm  
 Locked rotor torque : 480 %  
 Breakdown torque : 470 %  
 Rated speed : 3465 rpm

Moment of inertia (J) : 0.0015 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 5		
Date		14/01/2024		