

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: W22 Tru-Metric IE3 Three-Phase	Product code :	13092302	
Frame	: 90L	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: B34L(E)	
Duty cycle	: 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>	: 25.5 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>	
Design	: N			
Output [HP]	2	2	2	
Poles	4	4	4	
Frequency [Hz]	50	50	60	
Rated voltage [V]	380	415	230/460	
Rated current [A]	3.22	3.17	5.66/2.83	
L. R. Amperes [A]	20.9	23.8	47.0/23.5	
LRC [A]	6.5	7.5	8.3	
No load current [A]	1.55	1.85	3.10/1.55	
Rated speed [RPM]	1435	1450	1755	
Slip [%]	4.33	3.33	2.50	
Rated torque [kgfm]	1.01	1.00	0.827	
Locked rotor torque [%]	229	280	300	
Breakdown torque [%]	250	300	350	
Service factor	1.00	1.00	1.25	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	
Noise level <sup>2</sup>	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%			
	50%	85.0	82.5	
	75%	85.3	85.5	
	100%	85.3	86.5	
Power Factor	25%			
	50%	0.63	0.55	
	75%	0.75	0.68	
	100%	0.83	0.77	
Losses at normative operating points (speed;torque), in percentage of rated output power				
Losses (%)	P1 (0,9;1,0)	16.1	15.8	14.6
	P2 (0,5;1,0)	13.3	13.0	12.0
	P3 (0,25;1,0)	13.4	13.1	12.1
	P4 (0,9;0,5)	9.4	9.2	8.5
	P5 (0,5;0,5)	6.6	6.4	5.9
	P6 (0,5;0,25)	5.2	5.0	4.7
	P7 (0,25;0,25)	3.8	3.7	3.4
Bearing type	: Drive end 6205 ZZ	Non drive end 6204 ZZ	Foundation loads	
Sealing	: V'Ring	V'Ring	Max. traction : 69 kgf	
Lubrication interval	: -	-	Max. compression : 95 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	25/10/2024		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	25/10/2024		2 / 5	

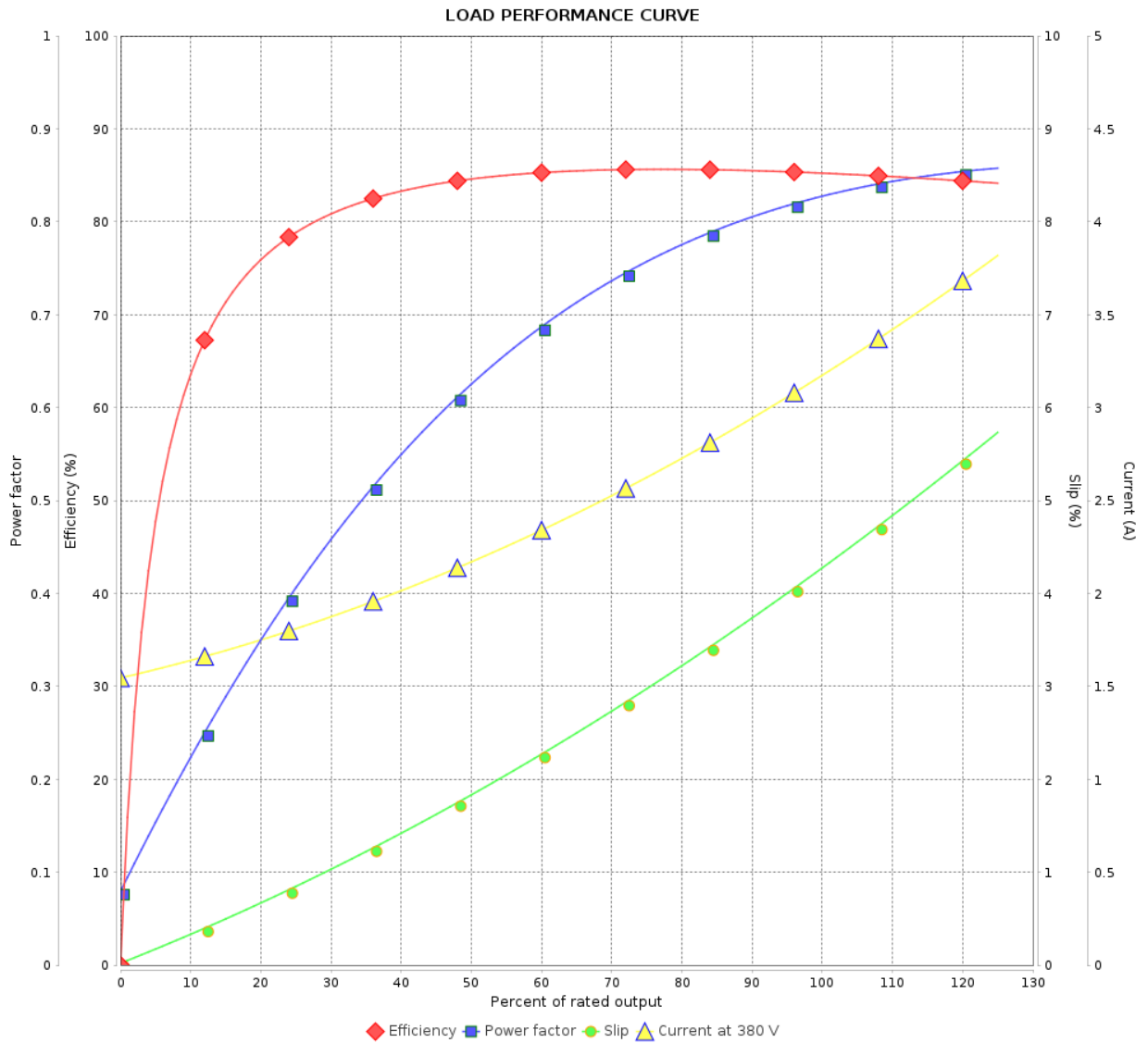
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13092302



Performance : 380 V 50 Hz 4P

Rated current : 3.22 A  
 LRC : 6.5  
 Rated torque : 1.01 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 250 %  
 Rated speed : 1435 rpm

Moment of inertia (J) : 0.0066 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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

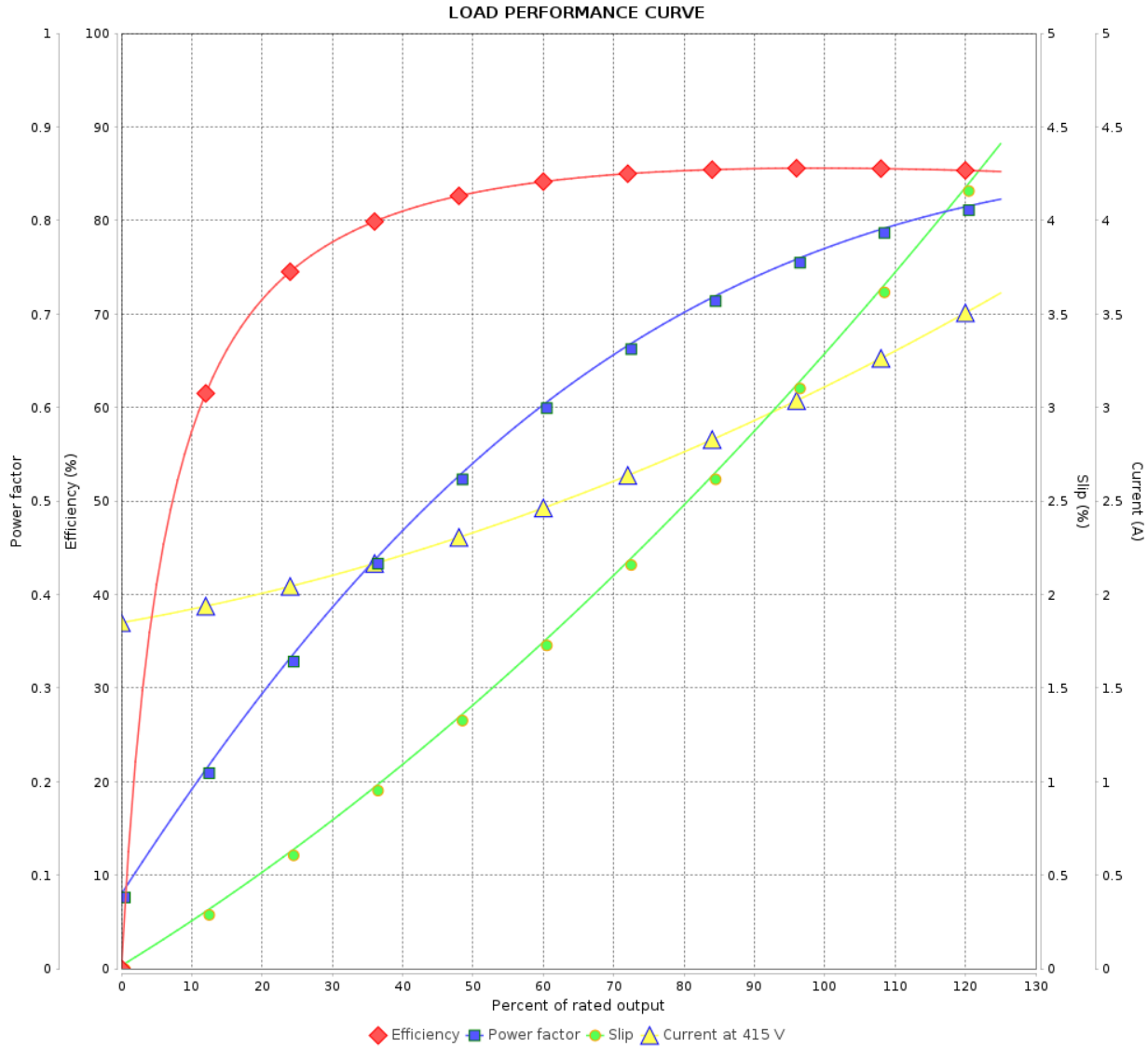
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13092302



Performance : 415 V 50 Hz 4P

Rated current	: 3.17 A	Moment of inertia (J)	: 0.0066 kgm <sup>2</sup>
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 1.00 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: N

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		4 / 5		
Date	25/10/2024			

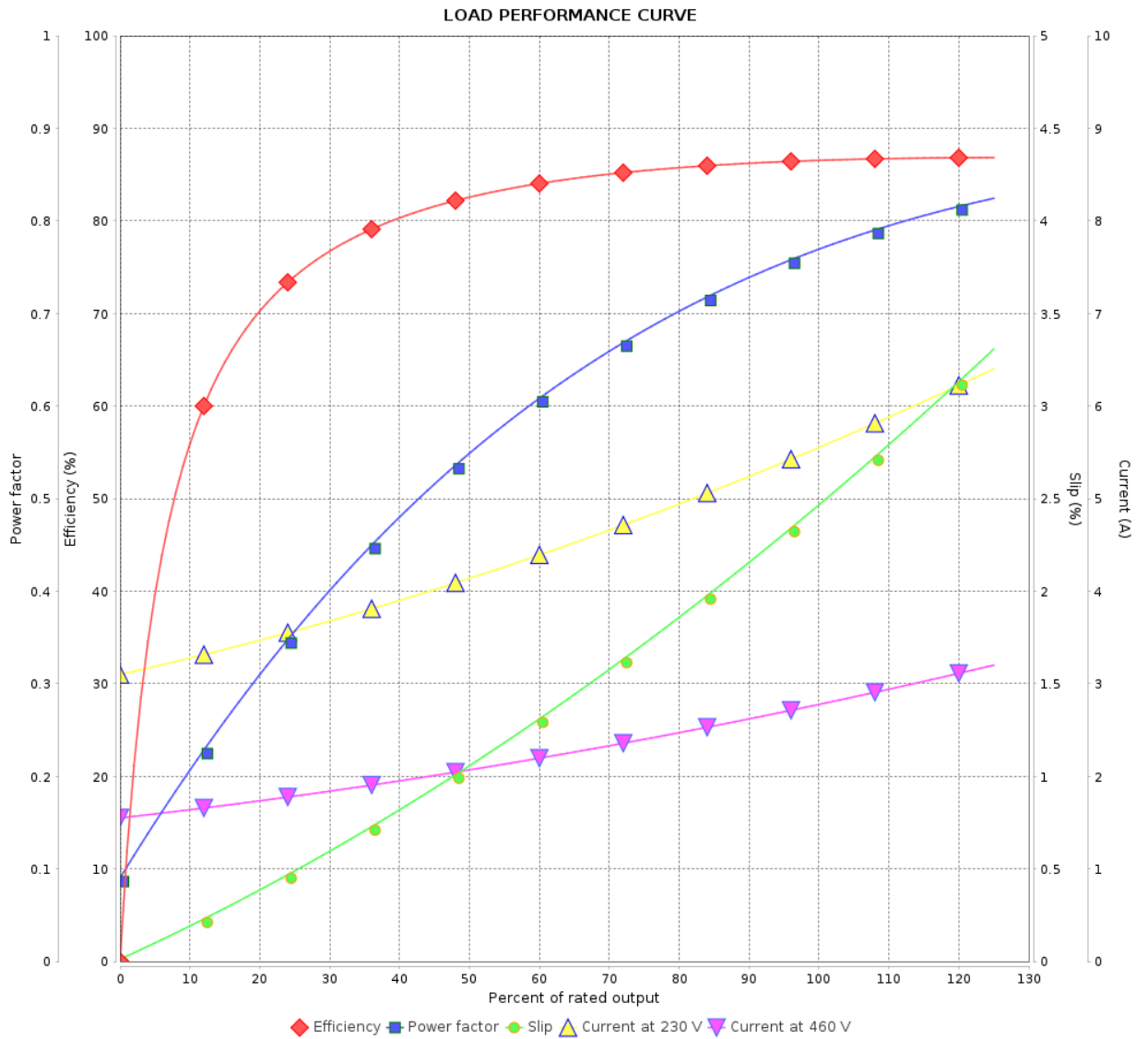
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase      Product code : 13092302



Performance : 230/460 V 60 Hz 4P

Rated current : 5.66/2.83 A  
 LRC : 8.3  
 Rated torque : 0.827 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.0066 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				
Date				