

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 11609629			
Frame : 132M	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 ¹ : Both (CW and CCW)	
		Starting method : Direct On Line	Approx. weight ³ : 80.9 kg	Moment of inertia (J) : 0.0642 kgm ²	
Output [HP]	10	10	10		
Poles	4	4	4		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	14.5	14.0	25.4/12.7		
L. R. Amperes [A]	123	140	267/133		
LRC [A]	8.5	10.0	10.5		
No load current [A]	6.20	7.20	12.6/6.30		
Rated speed [RPM]	1460	1470	1770		
Slip [%]	2.67	2.00	1.67		
Rated torque [kgfm]	4.97	4.94	4.10		
Locked rotor torque [%]	220	280	270		
Breakdown torque [%]	300	370	420		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	23s (cold) 13s (hot)	21s (cold) 12s (hot)	27s (cold) 15s (hot)		
Noise level ²	56.0 dB(A)	56.0 dB(A)	58.0 dB(A)		
Efficiency (%)	25%	91.0	90.0	89.4	
	50%	91.0	90.5	90.2	
	75%	91.5	91.4	91.0	
	100%	91.2	91.7	91.7	
Power Factor	25%	0.43	0.37	0.38	
	50%	0.70	0.64	0.65	
	75%	0.81	0.76	0.76	
	100%	0.86	0.81	0.81	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	9.4	8.8	8.8	
	P2 (0,5;1,0)	7.4	7.0	7.0	
	P3 (0,25;1,0)	6.8	6.3	6.3	
	P4 (0,9;0,5)	5.6	5.2	5.2	
	P5 (0,5;0,5)	3.7	3.5	3.5	
	P6 (0,5;0,25)	2.8	2.7	2.7	
	P7 (0,25;0,25)	1.9	1.8	1.8	
Bearing type : 6308 ZZ	Drive end	Non drive end	Foundation loads		
Sealing : V'Ring		6207 ZZ	Max. traction : 278 kgf		
Lubrication interval : -		V'Ring	Max. compression : 359 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 /	

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 /	

LOAD PERFORMANCE CURVE

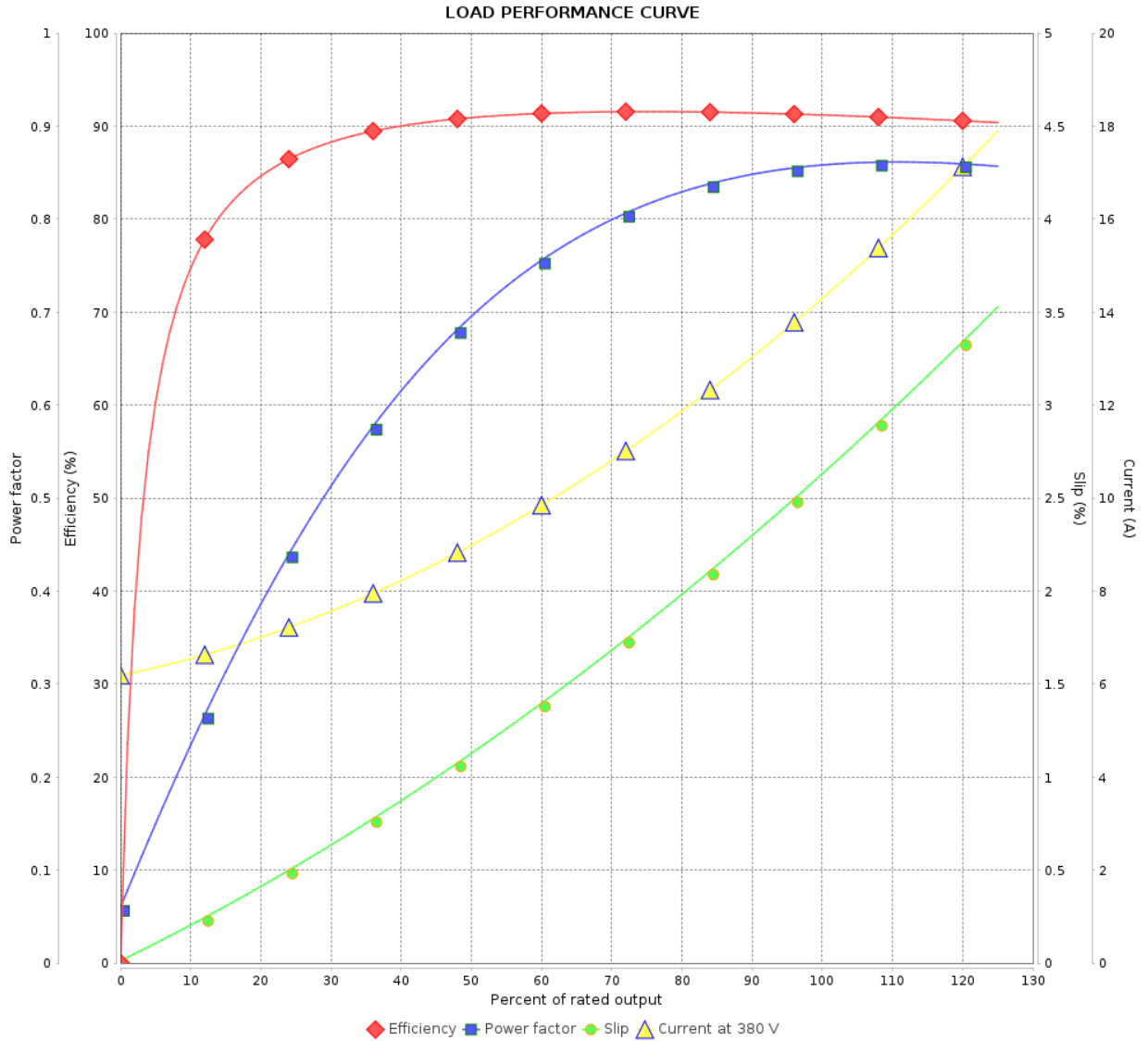
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11609629



Performance : 380 V 50 Hz 4P

Rated current : 14.5 A
 LRC : 8.5
 Rated torque : 4.97 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0642 kgm²
 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				
			3 /	

LOAD PERFORMANCE CURVE

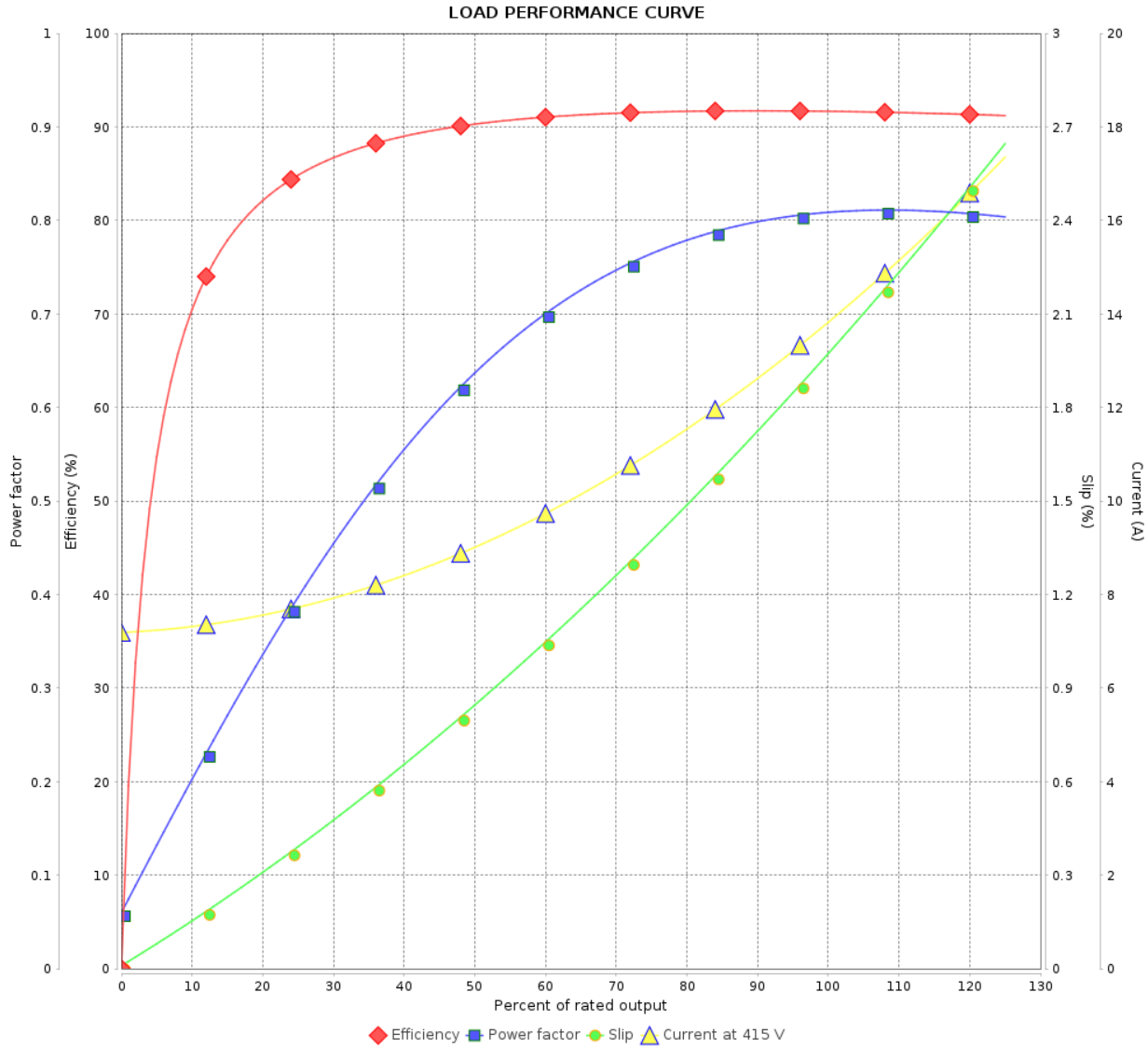
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11609629



Performance : 415 V 50 Hz 4P

Rated current	: 14.0 A	Moment of inertia (J)	: 0.0642 kgm ²
LRC	: 10.0	Duty cycle	: S1
Rated torque	: 4.94 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: N

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

LOAD PERFORMANCE CURVE

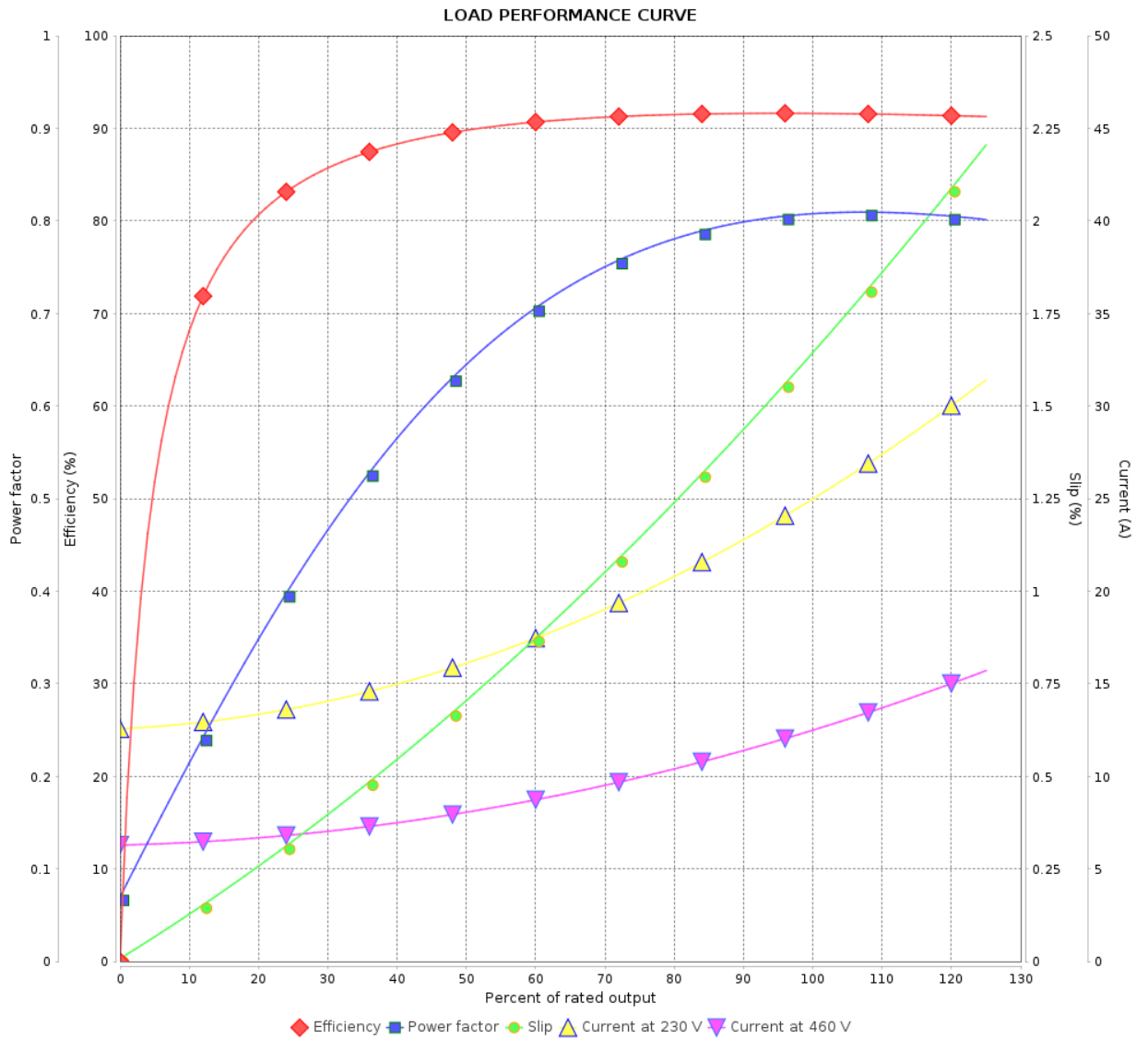
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11609629



Performance : 230/460 V 60 Hz 4P

Rated current : 25.4/12.7 A
 LRC : 10.5
 Rated torque : 4.10 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 420 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.0642 kgm²
 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				
			5 /	