

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 12706702			
Frame	: 180M	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B3L(E)		
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 177 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.2001 kgm ²		
Design	: N				
Output [HP]	25	25	25		
Poles	4	4	4		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	36.1	34.7	61.2/30.6		
L. R. Amperes [A]	264	285	520/260		
LRC [A]	7.3	8.2	8.5		
No load current [A]	14.0	16.5	28.0/14.0		
Rated speed [RPM]	1470	1475	1777		
Slip [%]	2.00	1.67	1.28		
Rated torque [kgfm]	12.3	12.3	10.2		
Locked rotor torque [%]	250	300	320		
Breakdown torque [%]	270	330	360		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	21s (cold) 12s (hot)	21s (cold) 12s (hot)	34s (cold) 19s (hot)		
Noise level ²	61.0 dB(A)	61.0 dB(A)	63.0 dB(A)		
Efficiency (%)	25%				
	50%	92.3	91.8	91.0	
	75%	92.6	92.8	92.4	
	100%	92.6	92.7	93.6	
Power Factor	25%				
	50%	0.68	0.61	0.62	
	75%	0.79	0.73	0.75	
	100%	0.84	0.80	0.81	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	7.6	7.5	6.5	
	P2 (0,5;1,0)	5.9	5.8	5.0	
	P3 (0,25;1,0)	5.3	5.2	4.5	
	P4 (0,9;0,5)	4.4	4.3	3.7	
	P5 (0,5;0,5)	2.8	2.8	2.4	
	P6 (0,5;0,25)	2.1	2.0	1.8	
	P7 (0,25;0,25)	1.4	1.3	1.2	
Bearing type	: Drive end : 6311 C3	Non drive end : 6211 C3	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction : 438 kgf		
Lubrication interval	: 20000 h	20000 h	Max. compression : 615 kgf		
Lubricant amount	: 18 g	11 g			
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

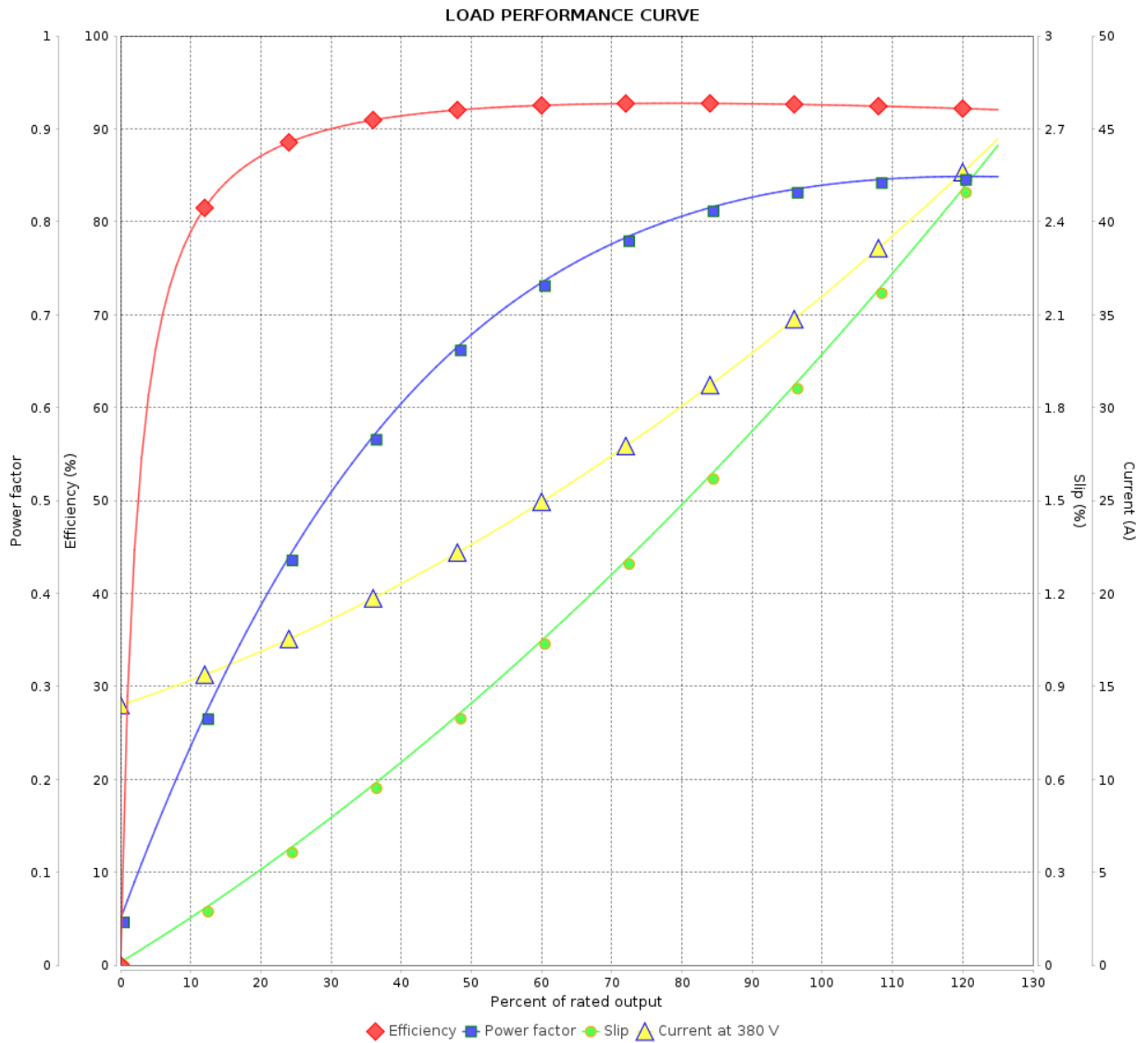


Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12706702



Performance : 380 V 50 Hz 4P

Rated current : 36.1 A
 LRC : 7.3
 Rated torque : 12.3 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 270 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.2001 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 / 5	

LOAD PERFORMANCE CURVE

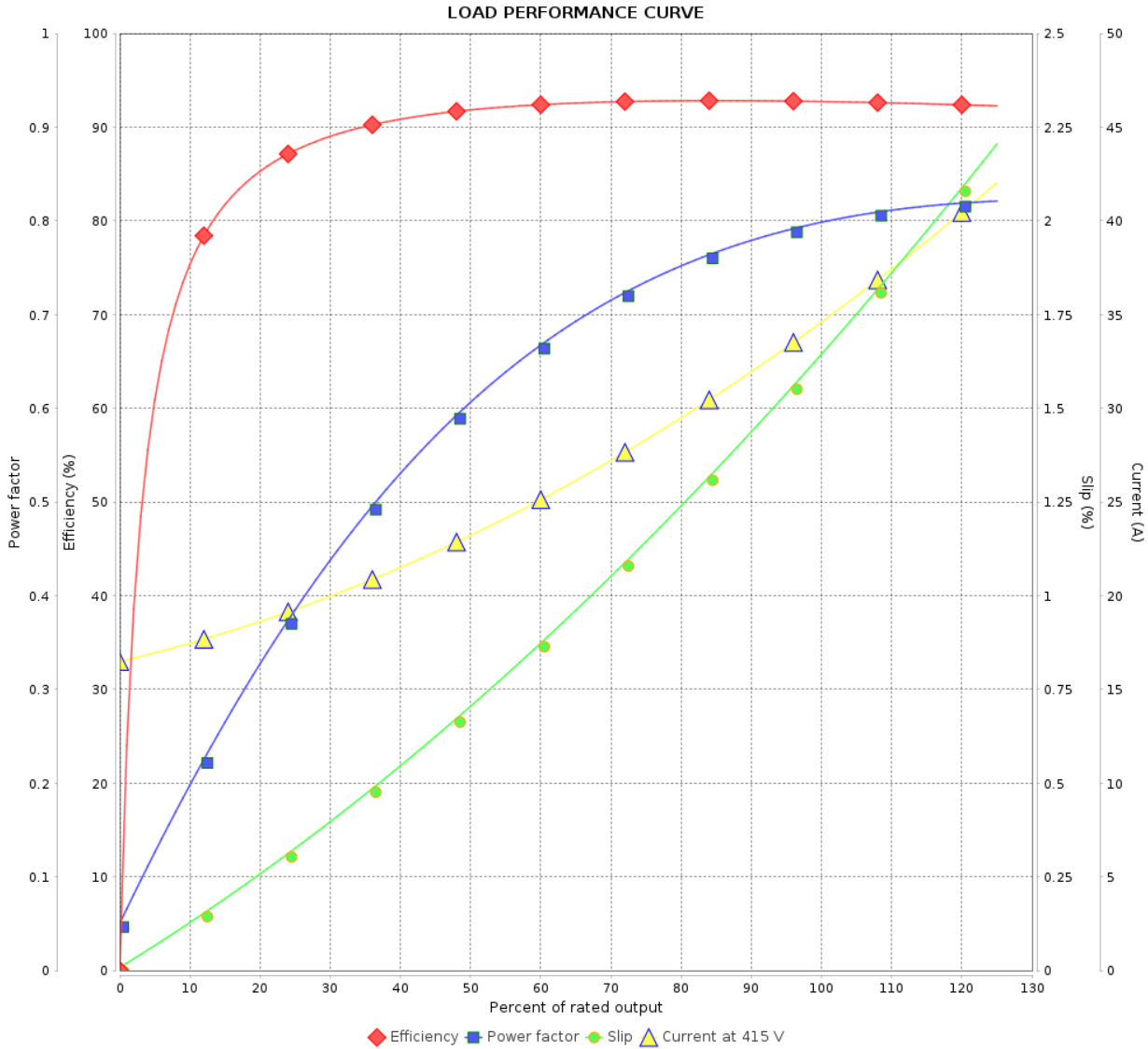
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 12706702



Performance : 415 V 50 Hz 4P

Rated current : 34.7 A
 LRC : 8.2
 Rated torque : 12.3 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.2001 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 4 / 5	Revision
Checked by				
Date	14/01/2024			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

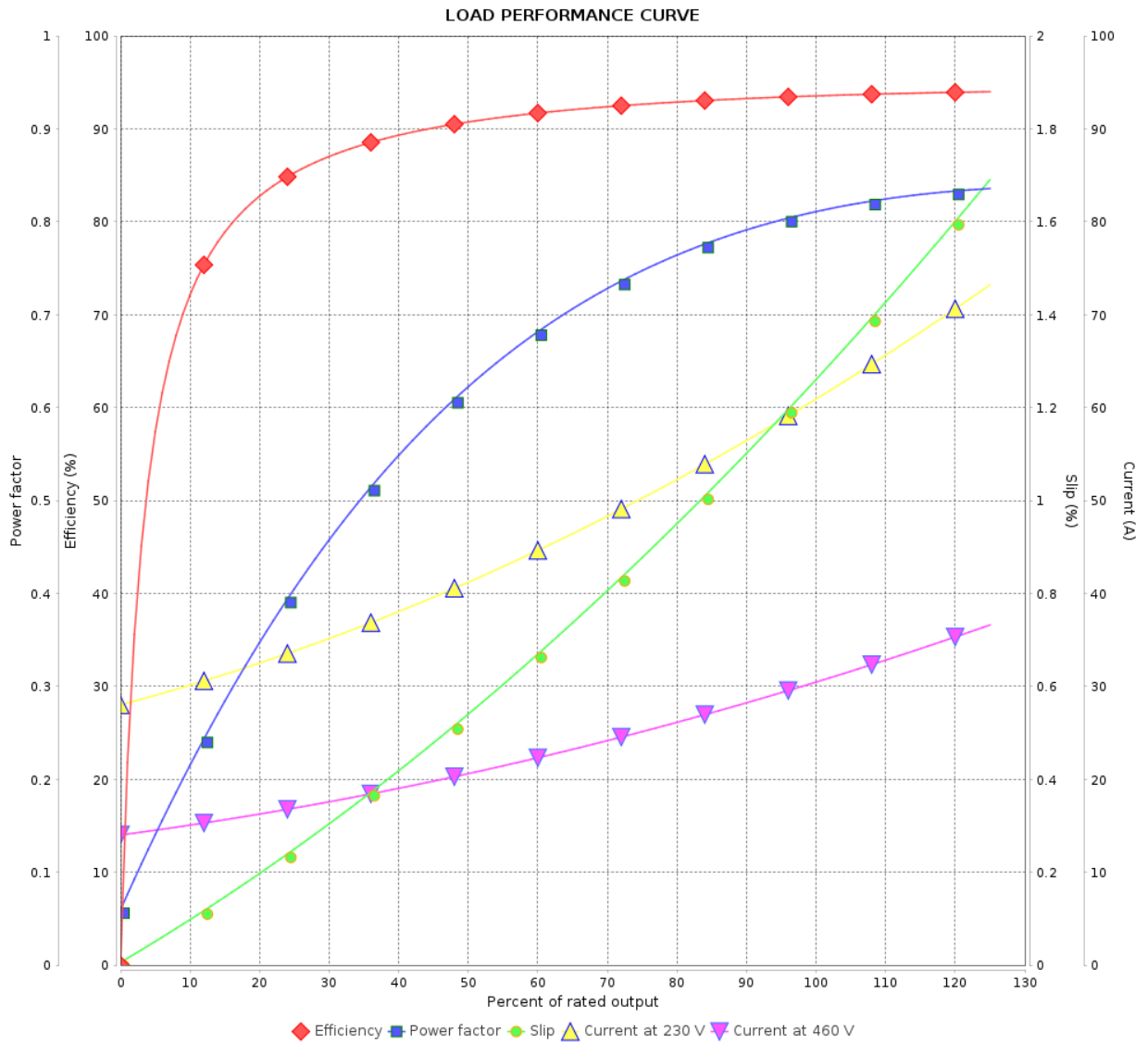


Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12706702



Performance : 230/460 V 60 Hz 4P

Rated current : 61.2/30.6 A
 LRC : 8.5
 Rated torque : 10.2 kgfm
 Locked rotor torque : 320 %
 Breakdown torque : 360 %
 Rated speed : 1777 rpm

Moment of inertia (J) : 0.2001 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				