

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: Multimounting IE3 Three-Phase	Product code :	13971582		
Frame	: 80	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 ²	: 12.6 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0015 kgm ²		
Design	: N				
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]	1.10	1.30	2.20/1.10		
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	41s (cold) 23s (hot)	37s (cold) 21s (hot)	39s (cold) 22s (hot)		
Noise level ²	59.0 dB(A)	59.0 dB(A)	62.0 dB(A)		
Efficiency (%)	25%	82.0	79.2	76.1	
	50%	82.0	80.0	78.5	
	75%	83.7	83.0	81.5	
	100%	83.1	83.4	84.0	
Power Factor	25%	0.41	0.33	0.36	
	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)	18.4	18.0	17.3	
	P2 (0,5;1,0)	13.4	13.1	12.5	
	P3 (0,25;1,0)	12.4	12.1	11.6	
	P4 (0,9;0,5)	11.6	11.4	10.9	
	P5 (0,5;0,5)	6.5	6.4	6.1	
	P6 (0,5;0,25)	5.0	4.9	4.7	
	P7 (0,25;0,25)	3.1	3.0	2.9	
Bearing type	: Drive end : 6204 ZZ	Non drive end : 6203 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 40 kgf	
Lubrication interval	: -	-	Max. compression	: 53 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.		
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Customer : _____

Notes

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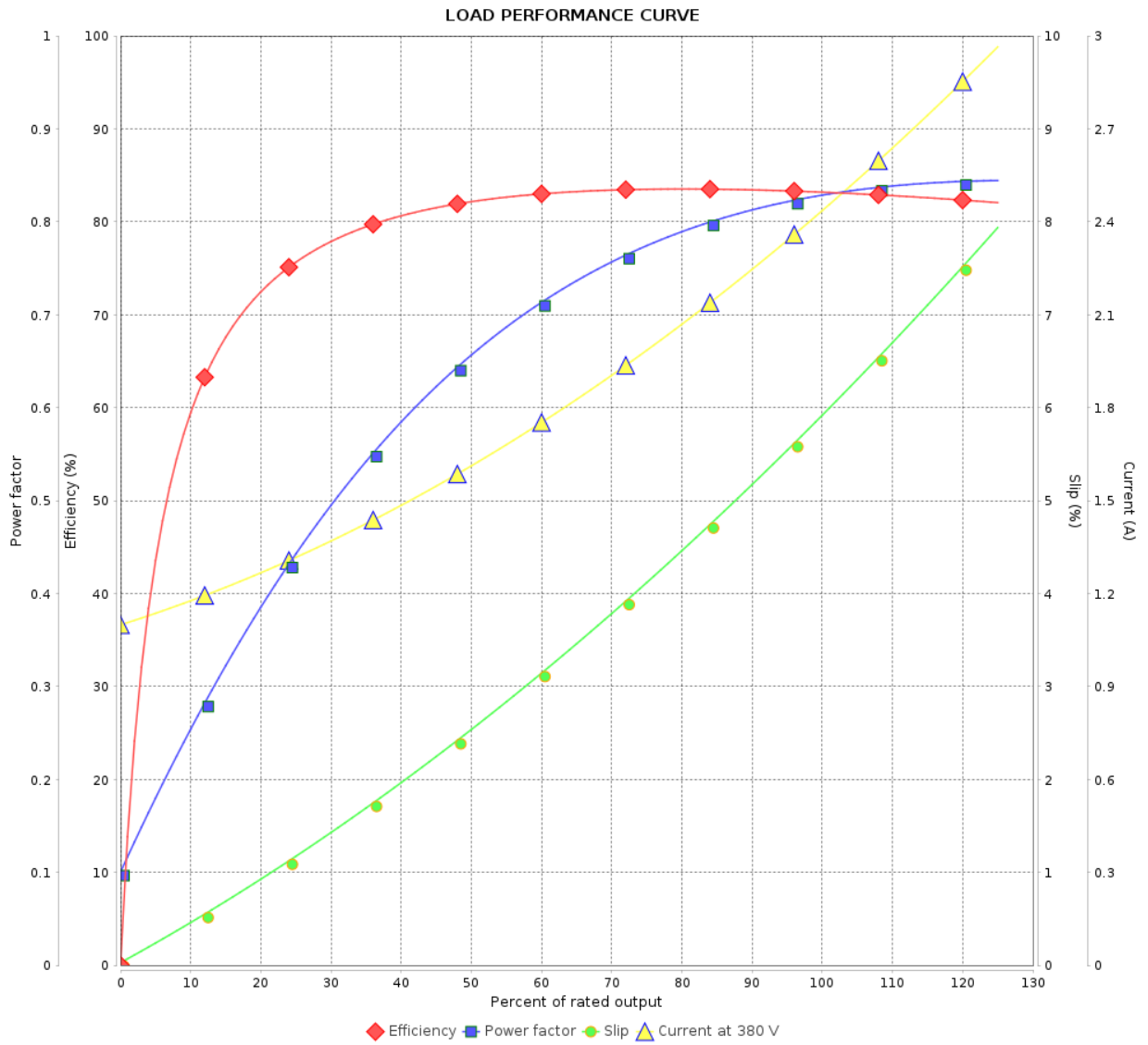
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Multimounting IE3 Three-Phase

Product code : 13971582



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 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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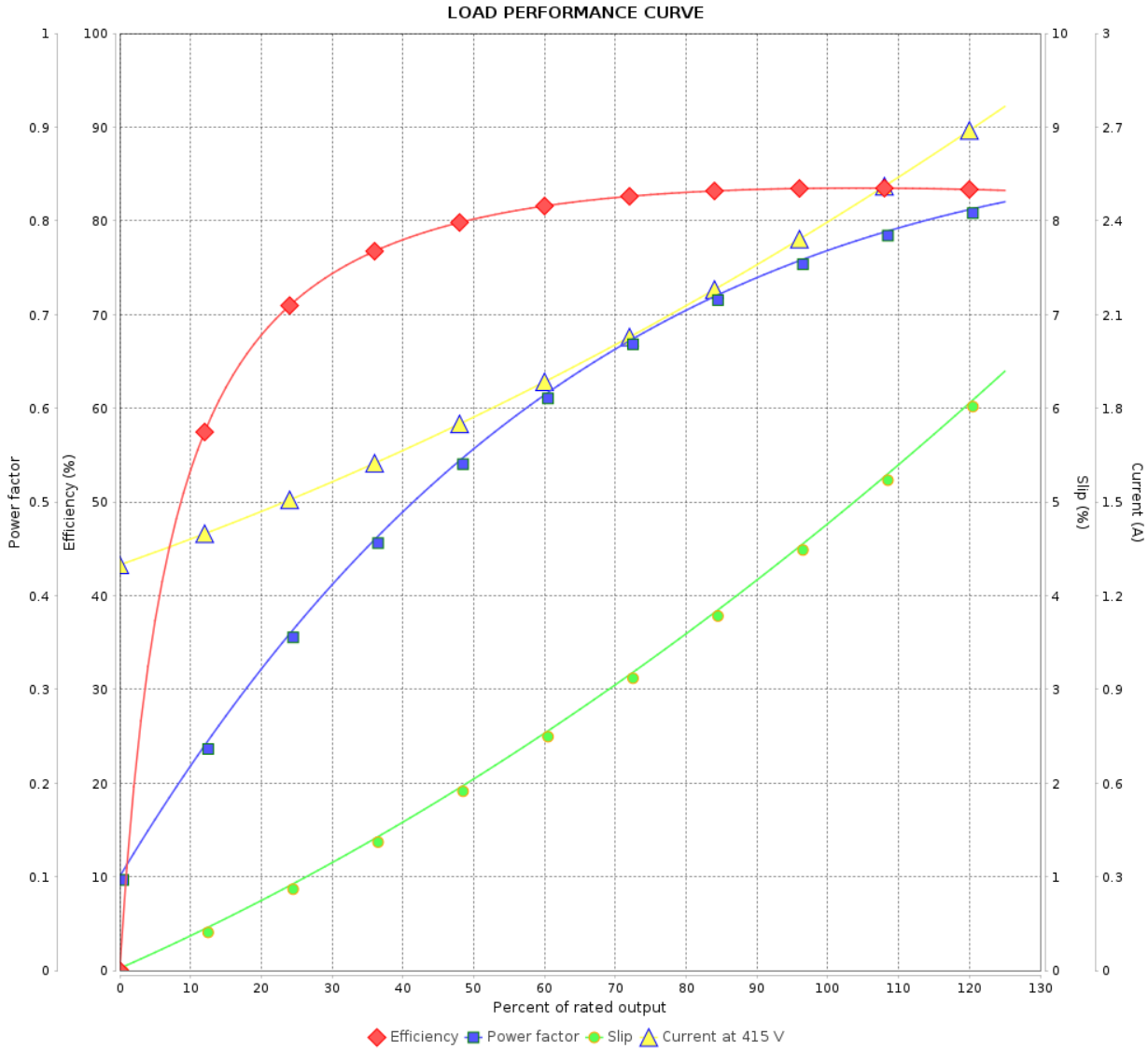
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13971582



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 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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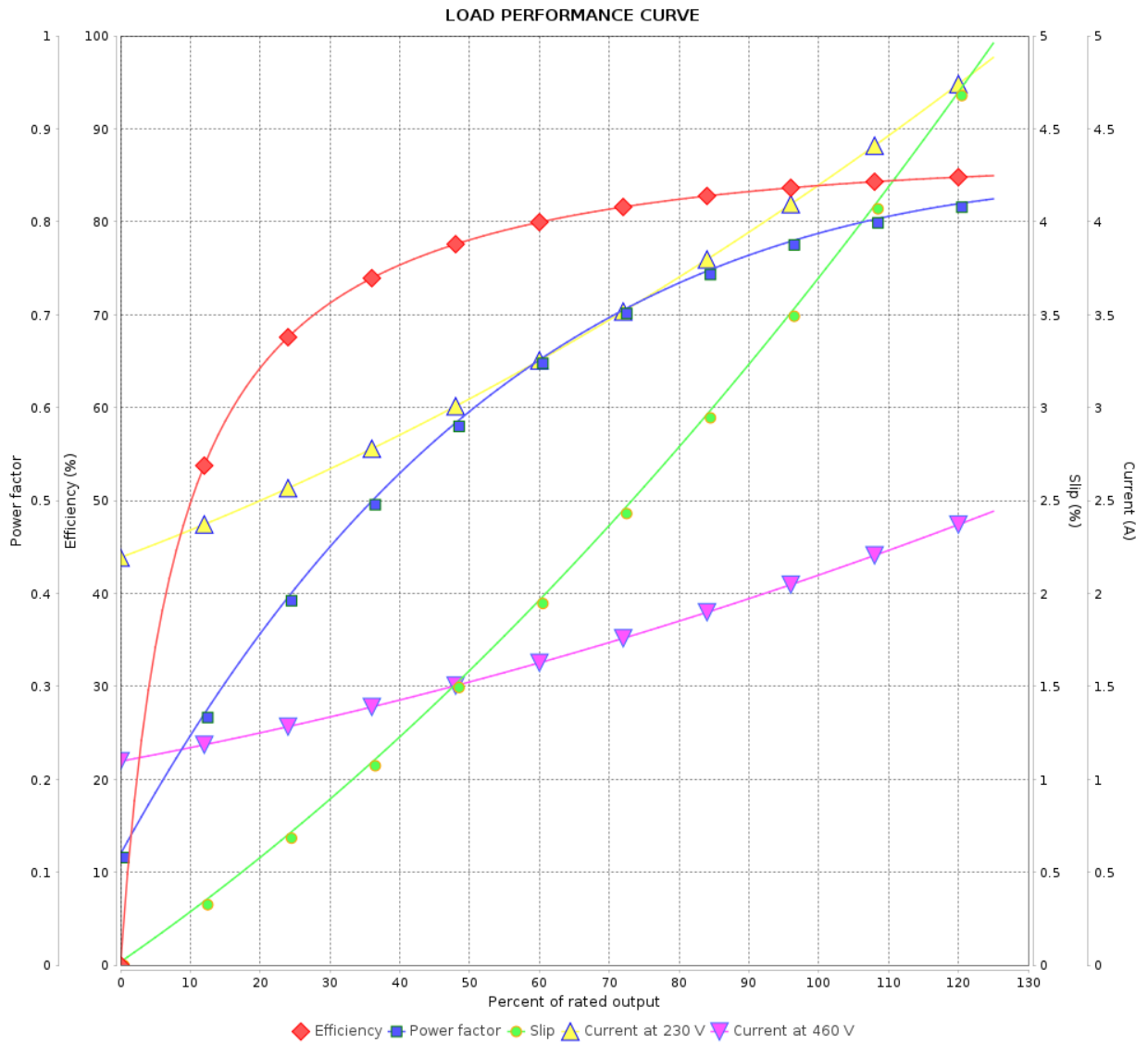
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Multimounting IE3 Three-Phase

Product code : 13971582



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 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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