

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: ODP High Efficiency Three-Phase	Product code :	13659279	
Frame	: 254TC	Cooling method	: IC01 - ODP		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(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	: 94.3 kg		
Protection degree	: IP23	Moment of inertia (J)	: 0.0338 kgm ²		
Design	: B				
Output [HP]	20	20	20	20	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	48.6/24.3	30.3	29.4	28.7	
L. R. Amperes [A]	282/141	127	135	144	
LRC [A]	5.8x(Code G)	4.2x(Code D)	4.6x(Code E)	5.0x(Code F)	
No load current [A]	16.4/8.20	8.63	10.4	12.1	
Rated speed [RPM]	3525	2890	2905	2920	
Slip [%]	2.08	3.67	3.17	2.67	
Rated torque [kgfm]	4.12	5.02	5.00	4.97	
Locked rotor torque [%]	160	130	140	160	
Breakdown torque [%]	250	200	210	229	
Service factor	1.15	1.00	1.15	1.15	
Temperature rise	105 K	105 K	105 K	105 K	
Locked rotor time	18s (cold) 10s (hot)	18s (cold) 10s (hot)	16s (cold) 9s (hot)	16s (cold) 9s (hot)	
Noise level ²	66.0 dB(A)				
Efficiency (%)	25%				
	50%	89.5	86.5	87.5	
	75%	90.2	87.5	87.5	
	100%	90.2	86.5	87.5	
Power Factor	25%				
	50%	0.74	0.77	0.66	
	75%	0.83	0.85	0.78	
	100%	0.86	0.87	0.83	
Bearing type	: Drive end 6309 Z C3	Non drive end 6209 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction	: 132 kgf	
	Bearing Seal	Bearing Seal	Max. compression	: 227 kgf	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 13 g	9 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 53.7A SF 1.15 SFA 61.8A					
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					
Date	21/01/2025			Page	Revision
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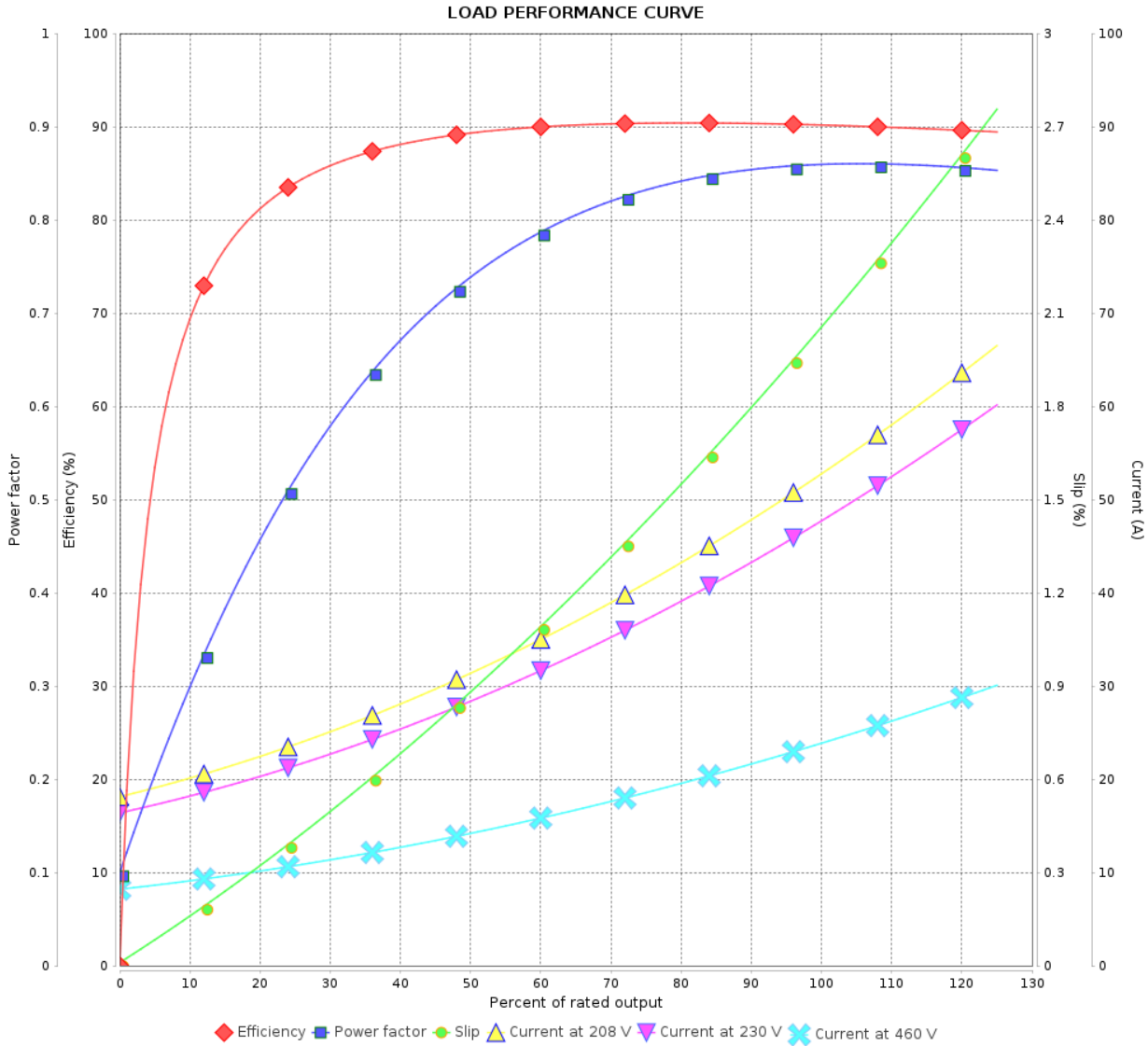
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13659279



Performance : 230/460 V 60 Hz 2P

Rated current : 48.6/24.3 A
 LRC : 5.8
 Rated torque : 4.12 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 250 %
 Rated speed : 3525 rpm

Moment of inertia (J) : 0.0338 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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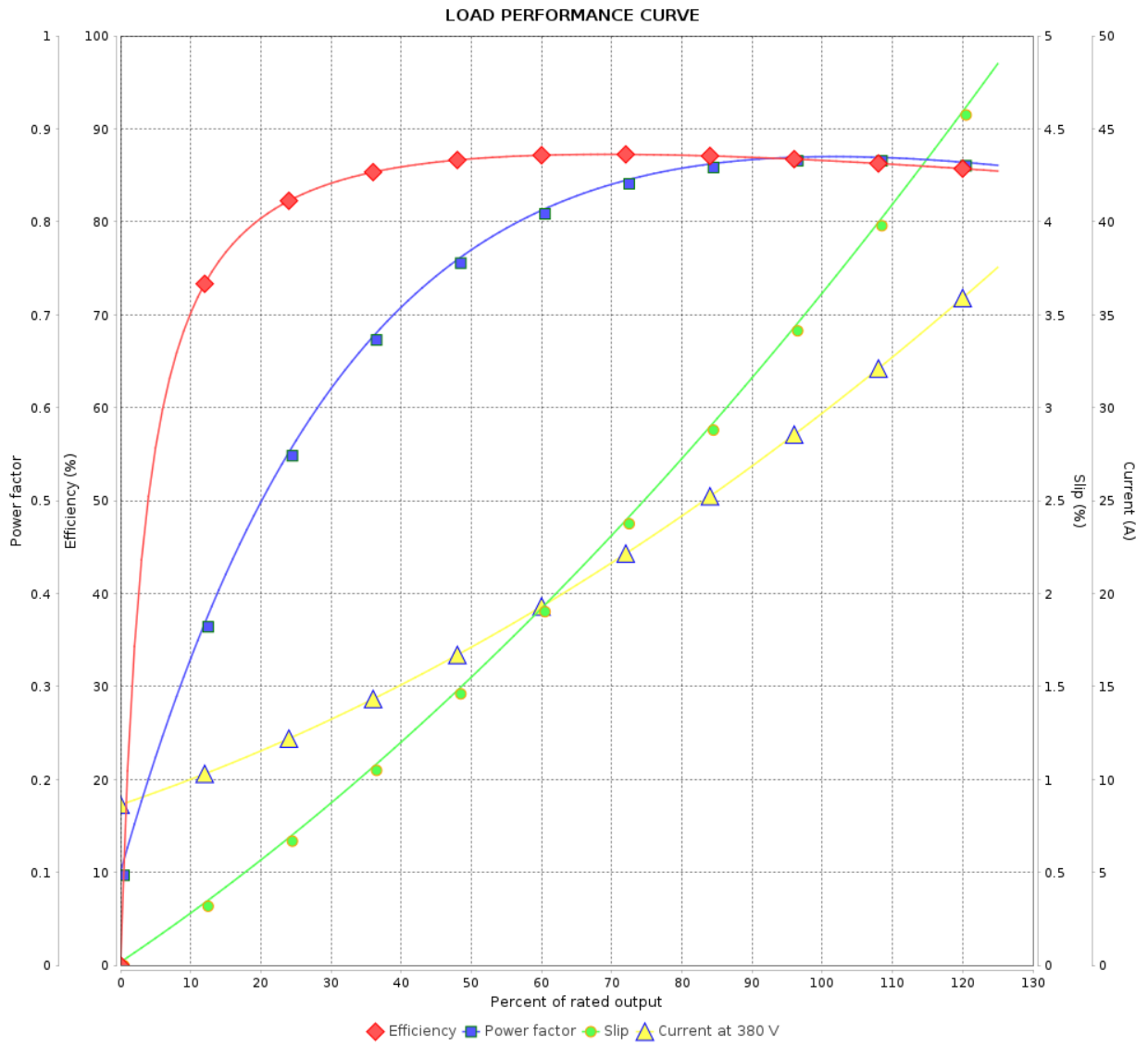
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13659279



Performance : 380 V 50 Hz 2P

Rated current	: 30.3 A	Moment of inertia (J)	: 0.0338 kgm ²
LRC	: 4.2	Duty cycle	: Cont.(S1)
Rated torque	: 5.02 kgfm	Insulation class	: F
Locked rotor torque	: 130 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2890 rpm	Design	: B

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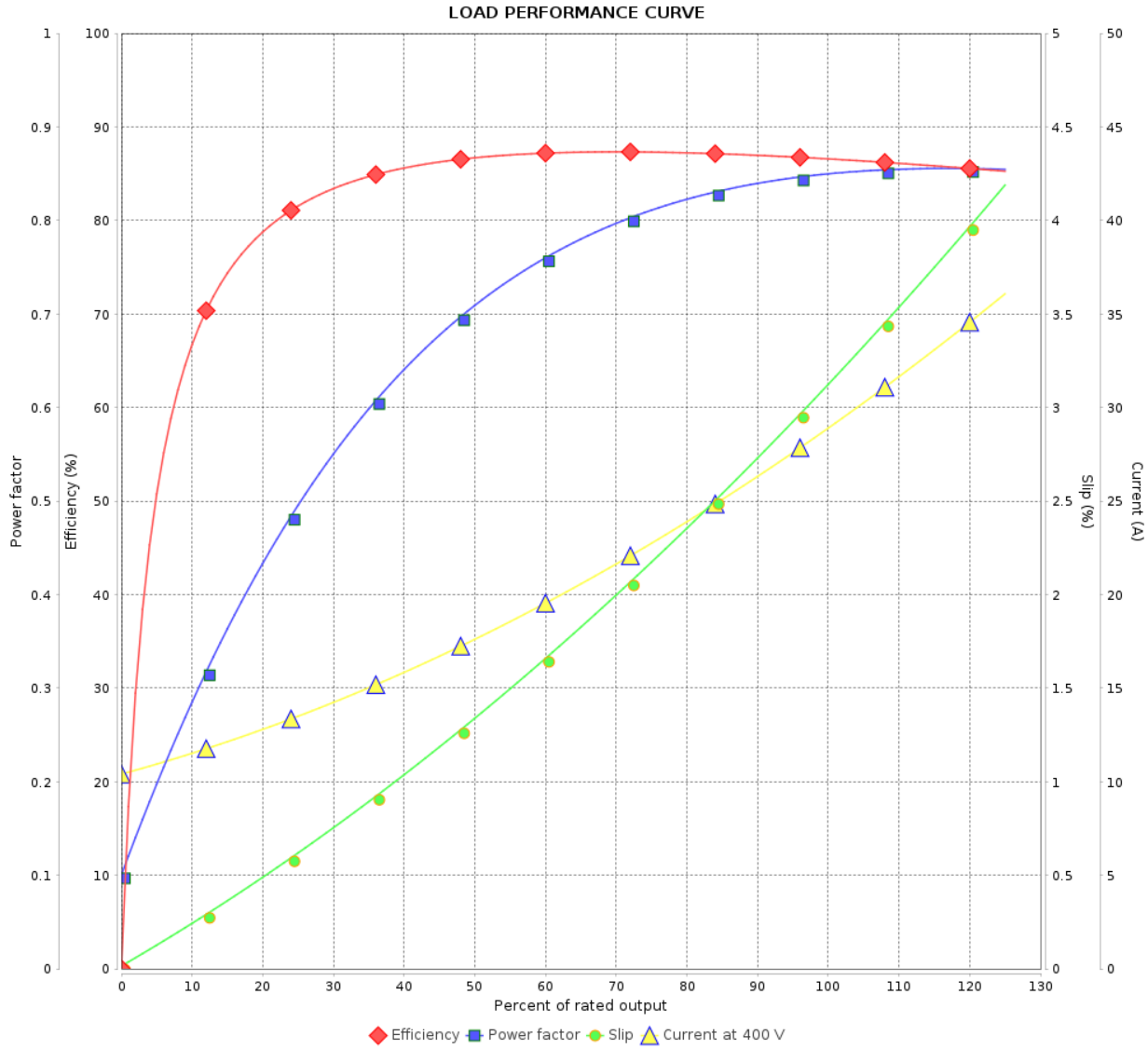
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP High Efficiency Three-Phase Product code : 13659279



Performance : 400 V 50 Hz 2P

Rated current : 29.4 A
 LRC : 4.6
 Rated torque : 5.00 kgfm
 Locked rotor torque : 140 %
 Breakdown torque : 210 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0338 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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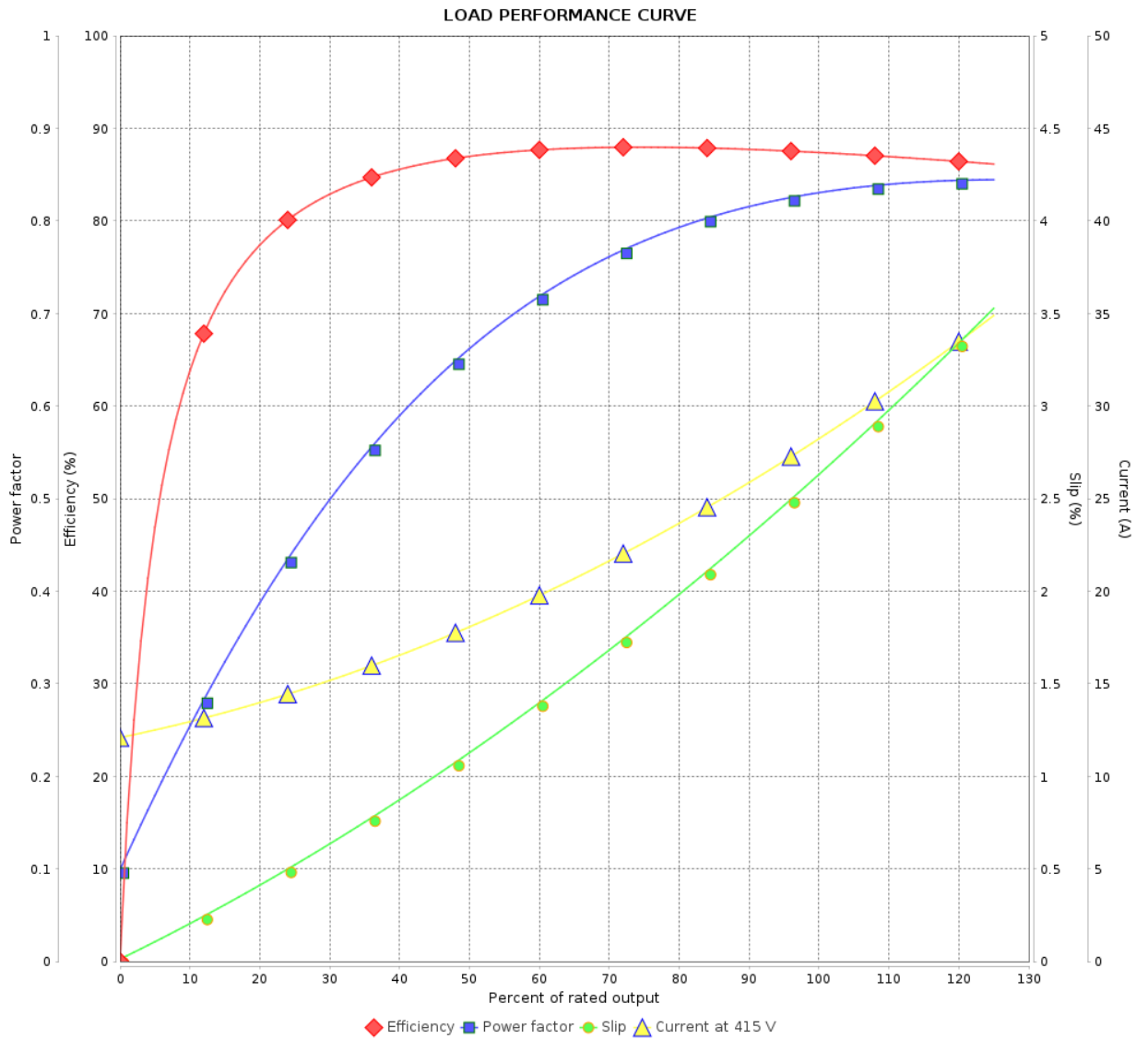
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP High Efficiency Three-Phase Product code : 13659279



Performance : 415 V 50 Hz 2P

Rated current : 28.7 A
 LRC : 5.0
 Rated torque : 4.97 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 229 %
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.0338 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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