

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 15825712

Frame	: 284T	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(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>	: 158 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.1563 kgm <sup>2</sup>
Design	: B		

Output [HP]	25	20	20	20
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	59.0/29.5	29.5	28.7	28.0
L. R. Amperes [A]	372/186	171	192	199
LRC [A]	6.3x(Code G)	5.8x(Code G)	6.7x(Code H)	7.1x(Code J)
No load current [A]	20.8/10.4	10.3	11.0	11.6
Rated speed [RPM]	1770	1470	1475	1475
Slip [%]	1.67	2.00	1.67	1.67
Rated torque [kgfm]	10.3	9.87	9.84	9.84
Locked rotor torque [%]	229	220	240	270
Breakdown torque [%]	270	250	290	300
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	59s (cold) 33s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)
Noise level <sup>2</sup>	64.0 dB(A)			
Efficiency (%)	25%			
	50%	93.0	91.7	91.7
	75%	93.6	92.1	92.1
	100%	93.6	92.1	92.1
Power Factor	25%			
	50%	0.69	0.69	0.65
	75%	0.80	0.79	0.77
	100%	0.84	0.84	0.82

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6311 Z C3	6211 Z C3	
Sealing	: Without	Without	Max. compression
	Bearing Seal	Bearing Seal	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 18 g	11 g	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V 65.2A SF 1.15 SFA 75.0A

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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# LOAD PERFORMANCE CURVE

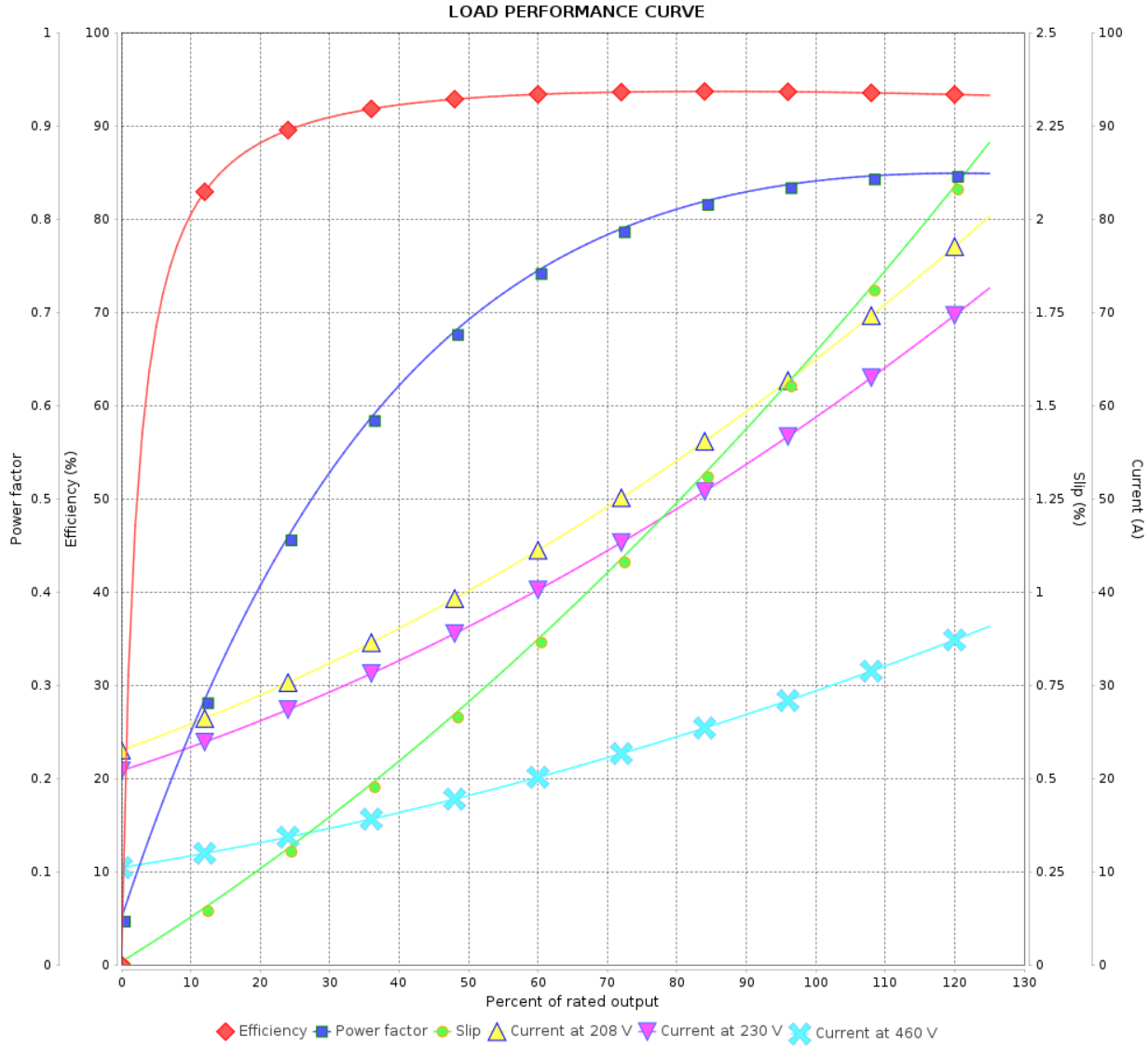
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15825712



Performance : 230/460 V 60 Hz 4P

Rated current : 59.0/29.5 A  
 LRC : 6.3  
 Rated torque : 10.3 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

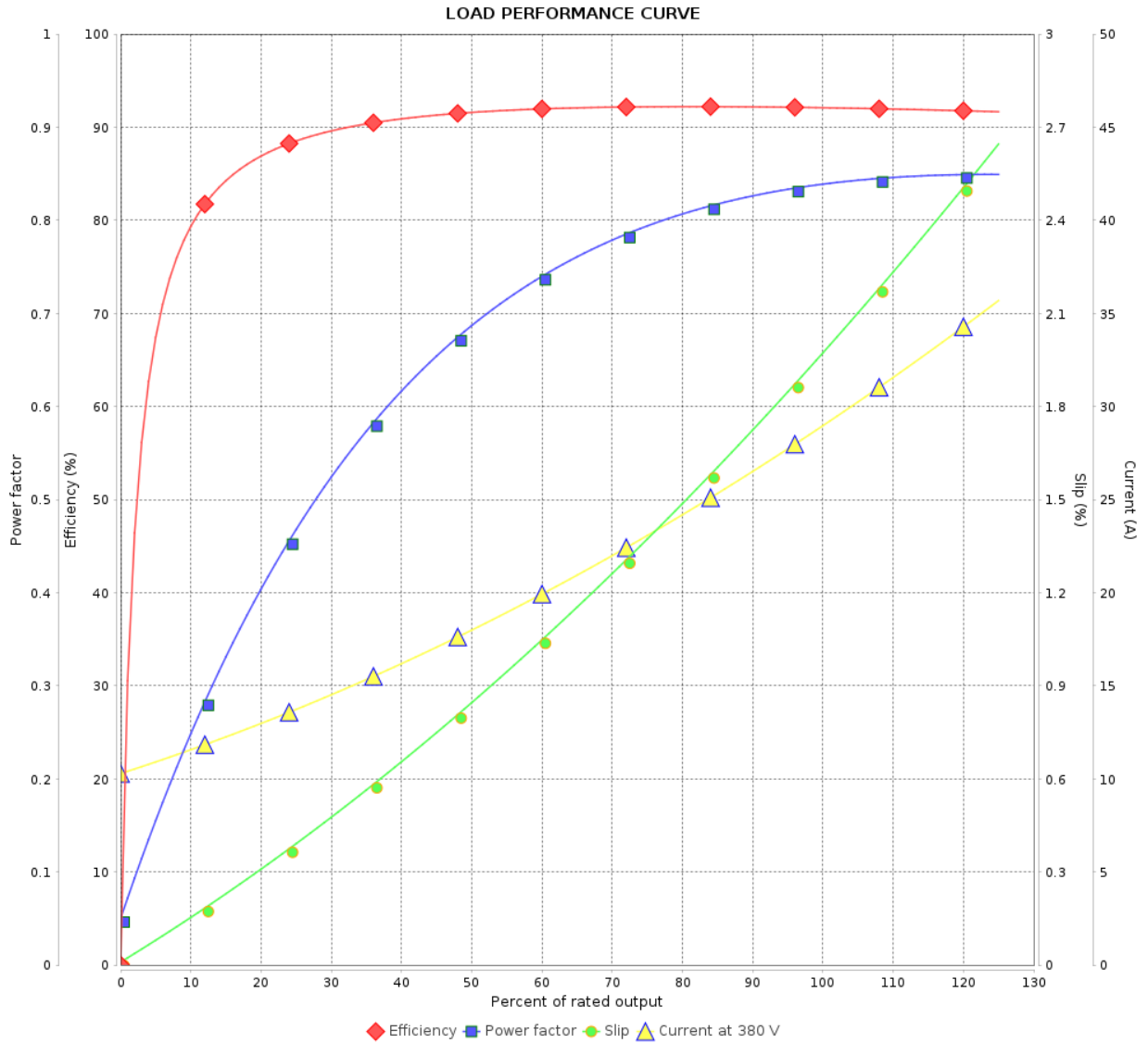
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15825712



Performance : 380 V 50 Hz 4P IE3

Rated current : 29.5 A  
 LRC : 5.8  
 Rated torque : 9.87 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

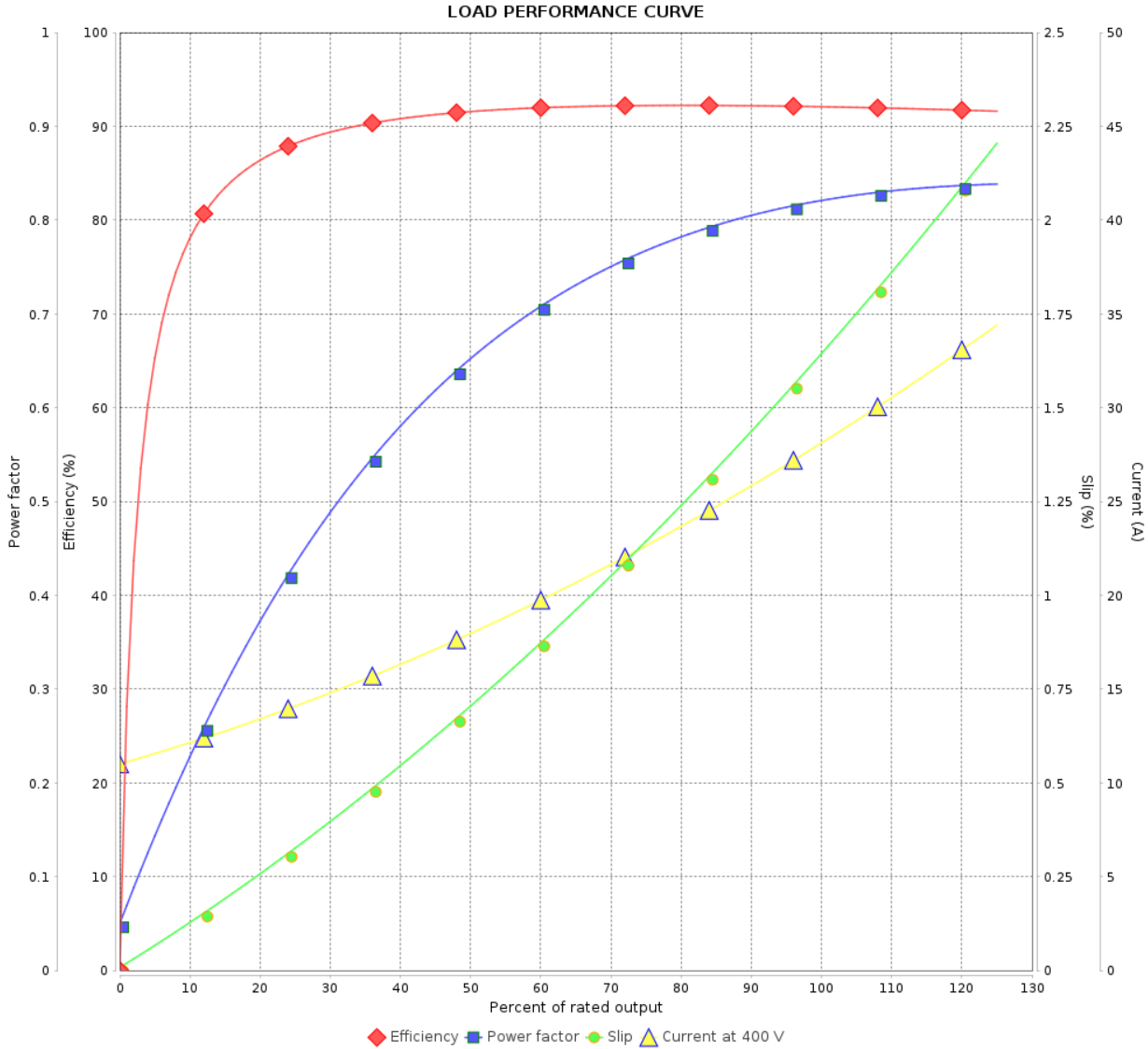
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15825712



Performance : 400 V 50 Hz 4P IE3

Rated current : 28.7 A  
 LRC : 6.7  
 Rated torque : 9.84 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 290 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

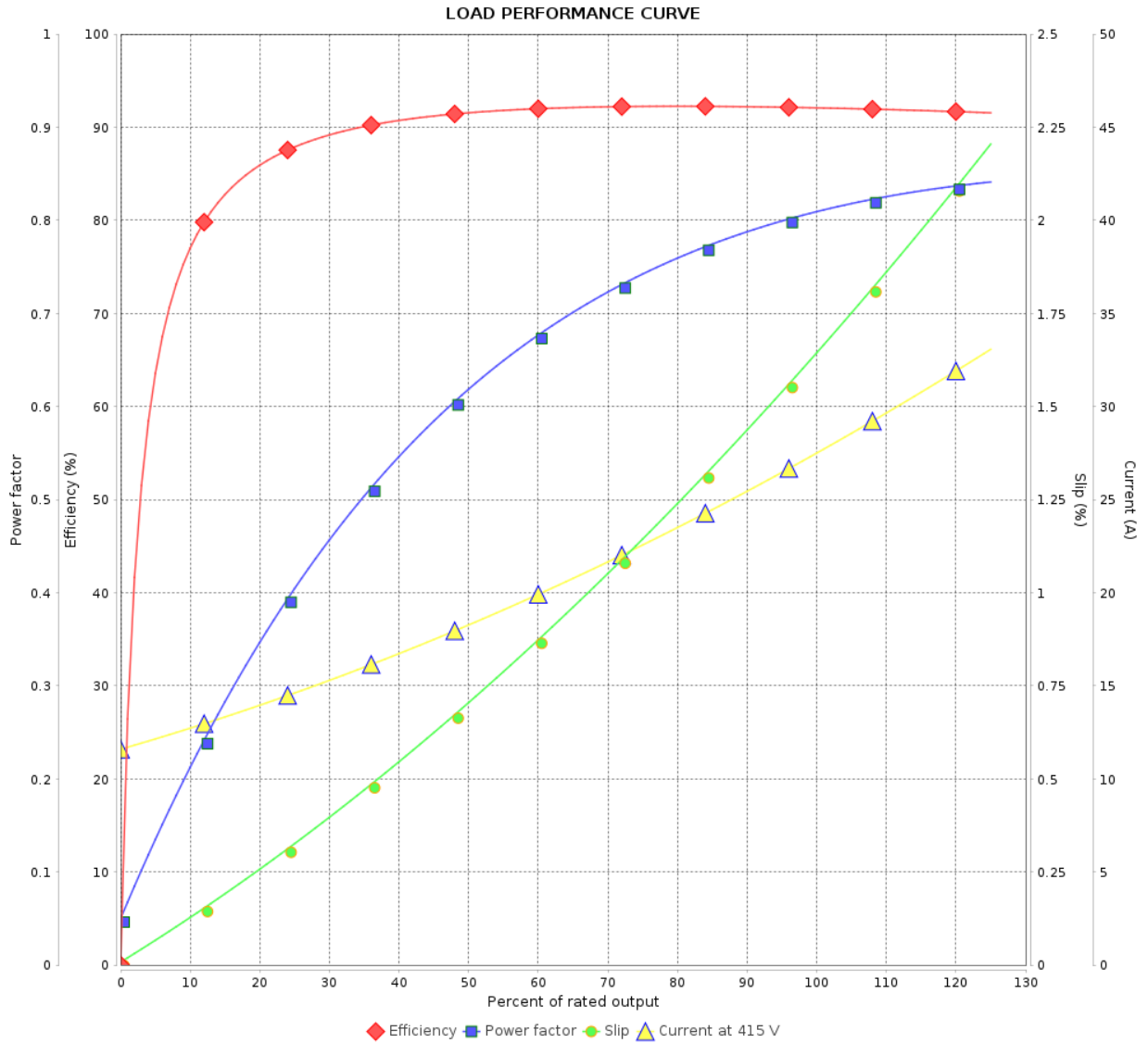
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 15825712



Performance : 415 V 50 Hz 4P IE3

Rated current : 28.0 A  
 LRC : 7.1  
 Rated torque : 9.84 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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