

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W40 NEMA Premium Efficiency Three-Phase		Product code : 16241843			
Frame : 324TSC	Insulation class : F	Duty cycle : Cont.(S1)	Ambient temperature : -20°C to +40°C	Altitude : 1000 m.a.s.l.	
Protection degree : IP23	Design : B	Cooling method : IC01 - ODP	Mounting : F-1	Rotation ¹ : Both (CW and CCW)	
		Starting method : Direct On Line	Approx. weight ³ : 196 kg	Moment of inertia (J) : 0.1272 kgm ²	
Output [HP]	50	40	40	40	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	119/59.5	57.5	56.6	56.6	
L. R. Amperes [A]	749/375	368	374	385	
LRC [A]	6.3x(Code G)	6.4x(Code G)	6.6x(Code H)	6.8x(Code H)	
No load current [A]	39.0/19.5	18.0	21.5	25.0	
Rated speed [RPM]	3555	2955	2960	2965	
Slip [%]	1.25	1.50	1.33	1.17	
Rated torque [kgfm]	10.2	9.82	9.81	9.79	
Locked rotor torque [%]	200	200	229	240	
Breakdown torque [%]	220	220	240	260	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	19s (cold) 11s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)	
Noise level ²	75.0 dB(A)				
Efficiency (%)	25%				
	50%	91.7	90.0	90.0	
	75%	93.0	91.6	91.7	
	100%	93.0	93.3	93.3	
Power Factor	25%				
	50%	0.72	0.73	0.67	
	75%	0.81	0.82	0.77	
	100%	0.84	0.85	0.82	
Bearing type	Drive end : 6312 Z C3	Non drive end : 6211 Z C3	Foundation loads		
Sealing	Without	Without	Max. traction		
	Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	19658 h	20000 h			
Lubricant amount	21 g	11 g			
Lubricant type	Mobil Polyrex EM				
Notes USABLE @208V 130A SF 1.15 SFA 149A					
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	22/10/2023			1 / 5	

LOAD PERFORMANCE CURVE

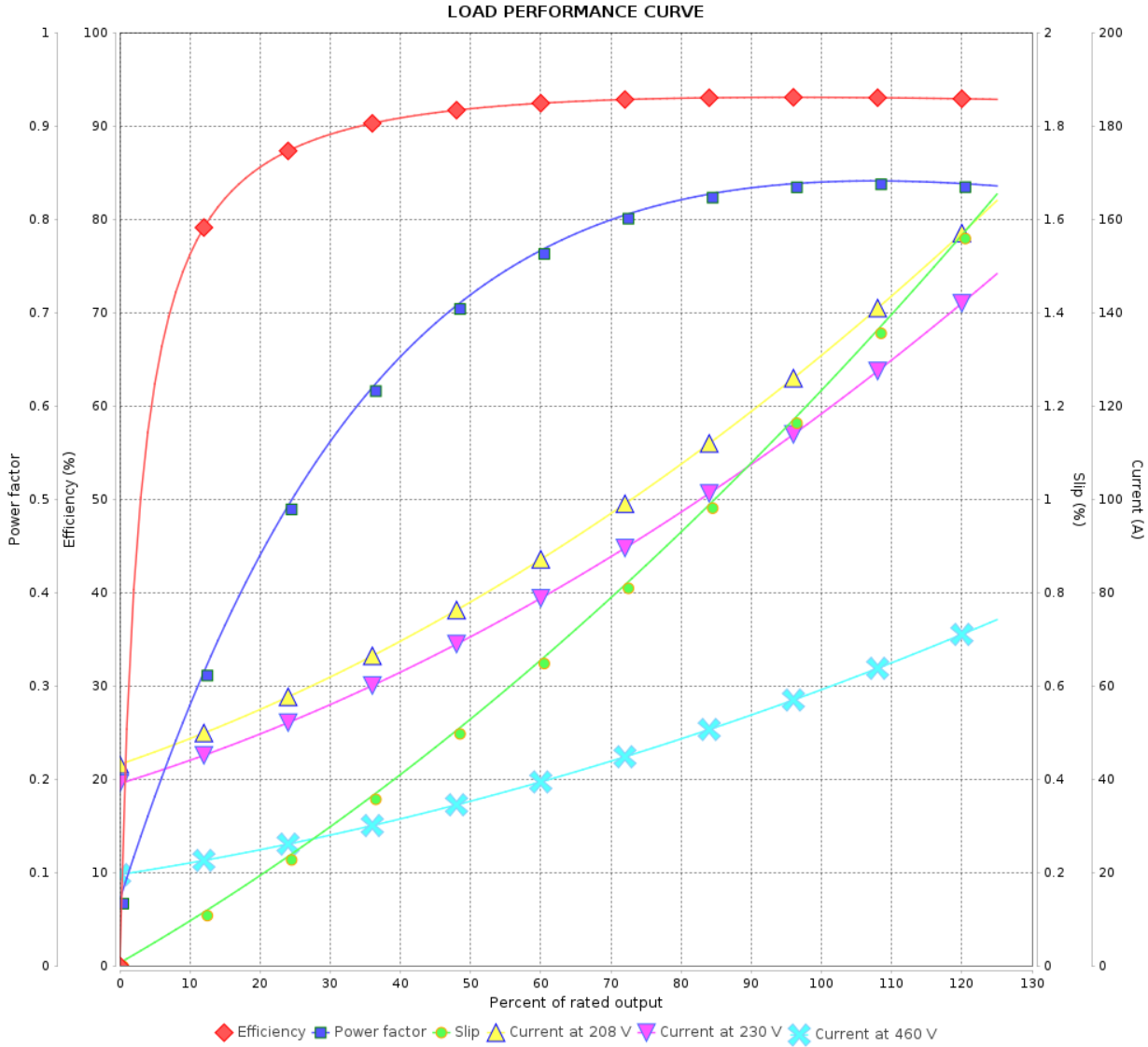
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16241843



Performance : 230/460 V 60 Hz 2P

Rated current : 119/59.5 A
 LRC : 6.3
 Rated torque : 10.2 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 3555 rpm

Moment of inertia (J) : 0.1272 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 5	Revision
Checked by				
Date	22/10/2023			

LOAD PERFORMANCE CURVE

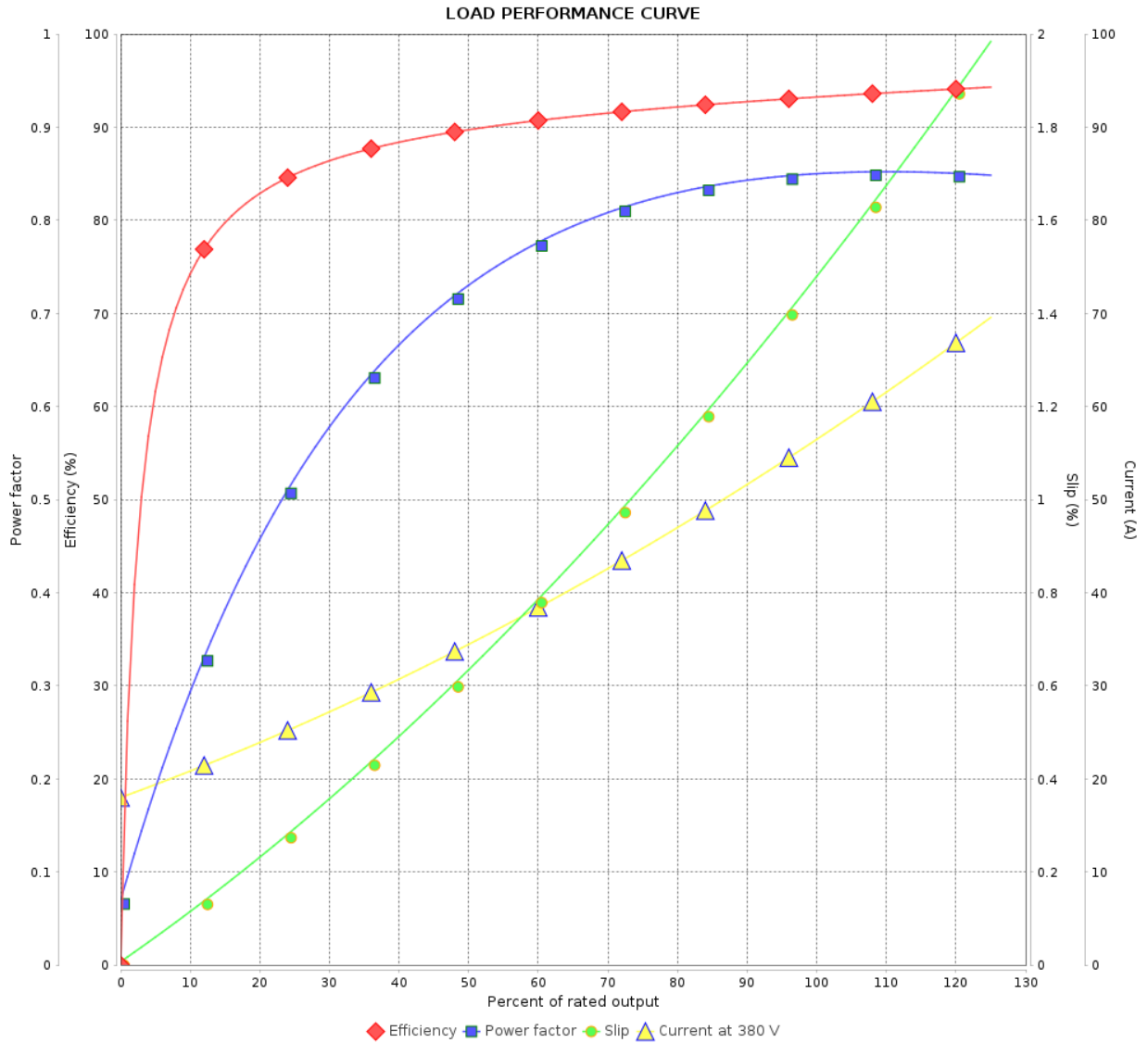
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16241843



Performance : 380 V 50 Hz 2P IE3

Rated current : 57.5 A
 LRC : 6.4
 Rated torque : 9.82 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.1272 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 5		
Date		22/10/2023		

LOAD PERFORMANCE CURVE

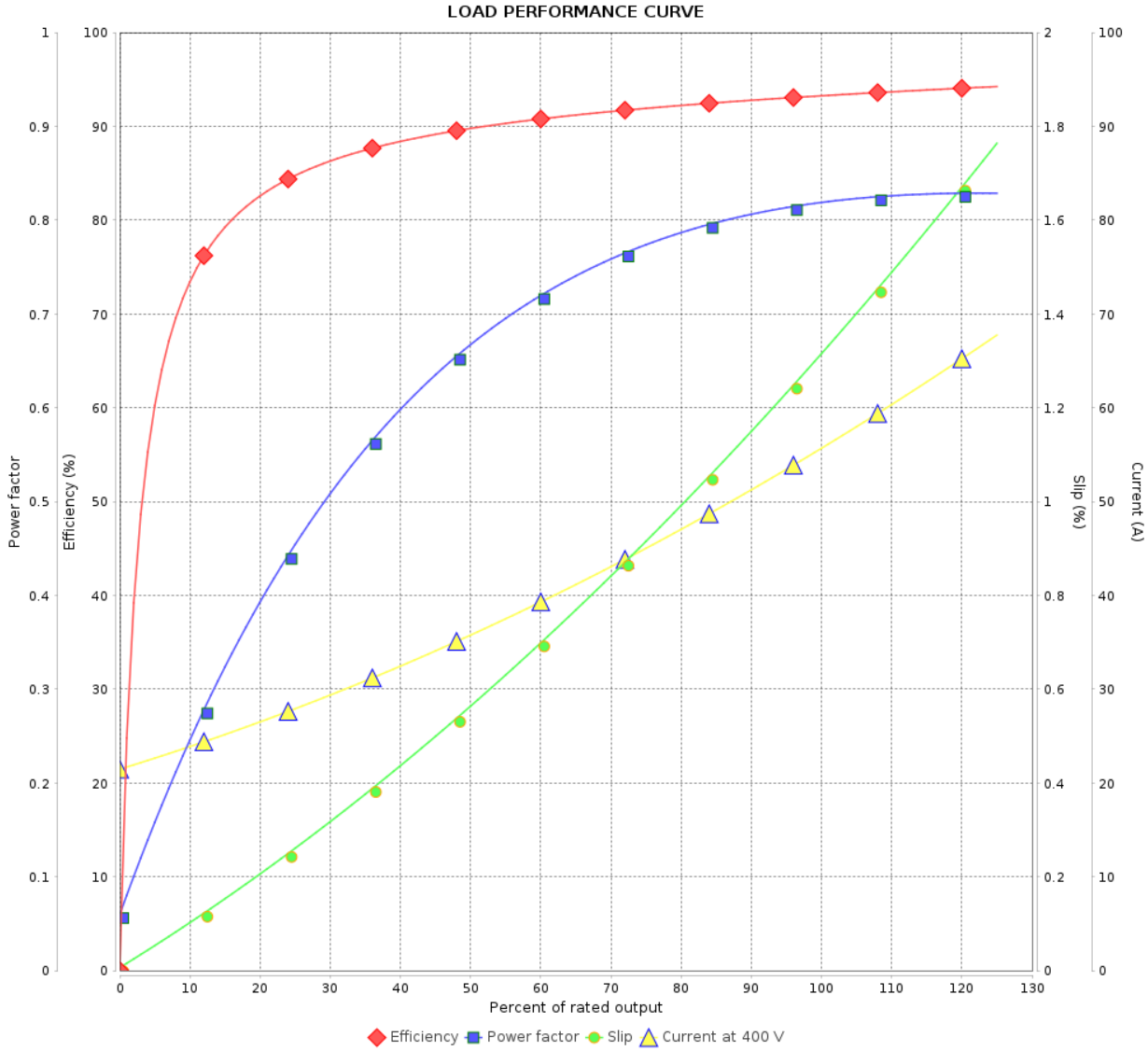
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16241843



Performance : 400 V 50 Hz 2P IE3

Rated current : 56.6 A
 LRC : 6.6
 Rated torque : 9.81 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.1272 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

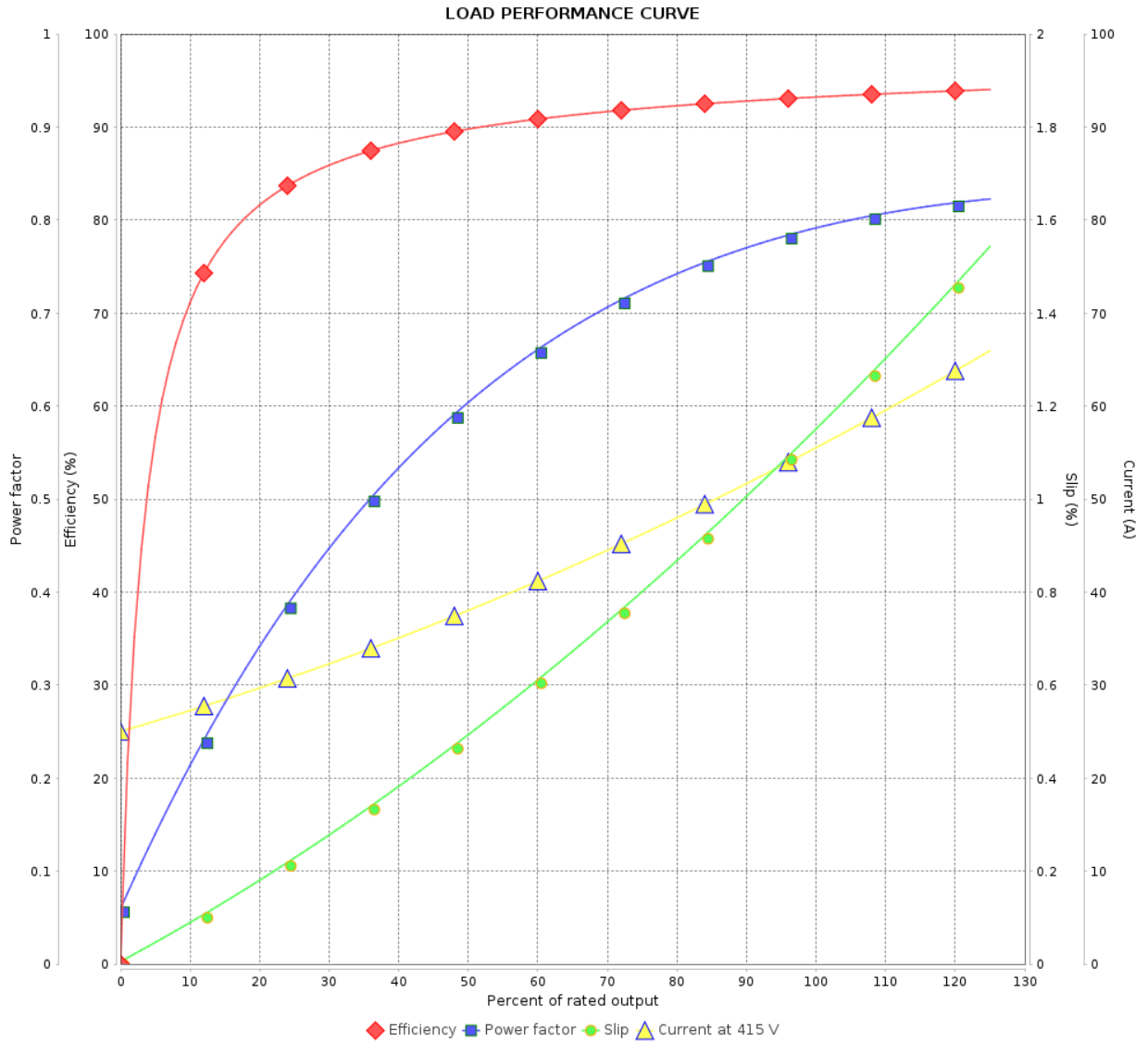
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 16241843



Performance : 415 V 50 Hz 2P IE3

Rated current : 56.6 A
 LRC : 6.8
 Rated torque : 9.79 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.1272 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date	
Performed by					
Checked by					
Date					22/10/2023
		Page	Revision		
		5 / 5			