

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	13885601				
Frame	: 447/9TS	Cooling method	: IC411 - TEFC				
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	: 1169 kg				
Protection degree	: IP55	Moment of inertia (J)	: 2.12 kgm ²				
Design	: B						
Output [HP]	250	200	200	200	250	250	250
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	269	265	252	245	330	312	300
L. R. Amperes [A]	1802	1511	1638	1740	1749	1810	1920
LRC [A]	6.7x(Code G)	5.7x(Code E)	6.5x(Code G)	7.1x(Code G)	5.3x(Code E)	5.8x(Code F)	6.4x(Code F)
No load current [A]	62.0	60.0	65.0	70.0	61.0	65.0	70.0
Rated speed [RPM]	3573	2973	2977	2979	2962	2967	2970
Slip [%]	0.75	0.90	0.77	0.70	1.27	1.10	1.00
Rated torque [kgfm]	50.8	48.8	48.8	48.7	61.3	61.2	61.1
Locked rotor torque [%]	200	190	210	220	150	160	180
Breakdown torque [%]	240	240	270	300	190	220	229
Service factor	1.15	1.15	1.15	1.15	1.00	1.00	1.00
Temperature rise	80 K	105 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	32s (cold) 18s (hot)	48s (cold) 27s (hot)	45s (cold) 25s (hot)	41s (cold) 23s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	81.0 dB(A)						
Efficiency (%)	25%						
	50%	95.4	95.0	95.1	95.1	95.4	95.4
	75%	95.8	95.6	95.6	95.6	95.0	95.4
	100%	95.8	95.6	95.6	95.6	94.5	95.0
Power Factor	25%						
	50%	0.84	0.84	0.82	0.80	0.87	0.85
	75%	0.89	0.89	0.88	0.87	0.90	0.89
	100%	0.90	0.90	0.90	0.89	0.90	0.90
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	4.8	4.8	4.8	4.8	4.8	4.8
	P2 (0,5;1,0)	3.6	3.6	3.6	3.6	3.6	3.6
	P3 (0,25;1,0)	3.0	3.0	3.0	3.0	3.0	3.0
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.7	1.7	1.7	1.7	1.7	1.7
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7	0.7	0.7
Bearing type	: Drive end 6314 C3	: Non drive end 6314 C3	Foundation loads				
Sealing	: WSeal	: WSeal	Max. traction : 644 kgf				
Lubrication interval	: 4000 h	: 4000 h	Max. compression : 1813 kgf				
Lubricant amount	: 27 g	: 27 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.				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	15/01/2024					1 / 9	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	15/01/2024		2 / 9	

LOAD PERFORMANCE CURVE

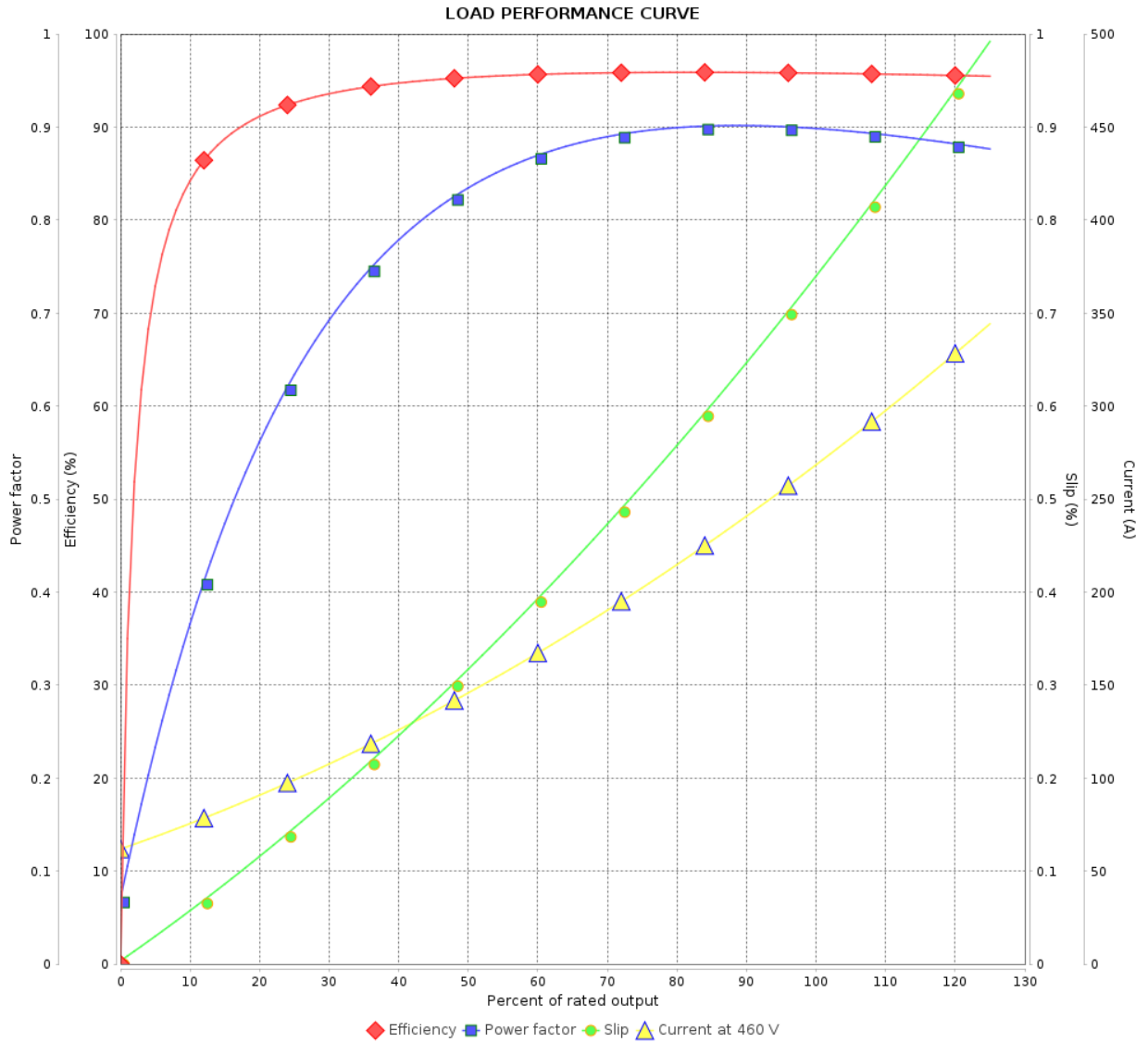
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 460 V 60 Hz 2P

Rated current : 269 A
 LRC : 6.7
 Rated torque : 50.8 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 3573 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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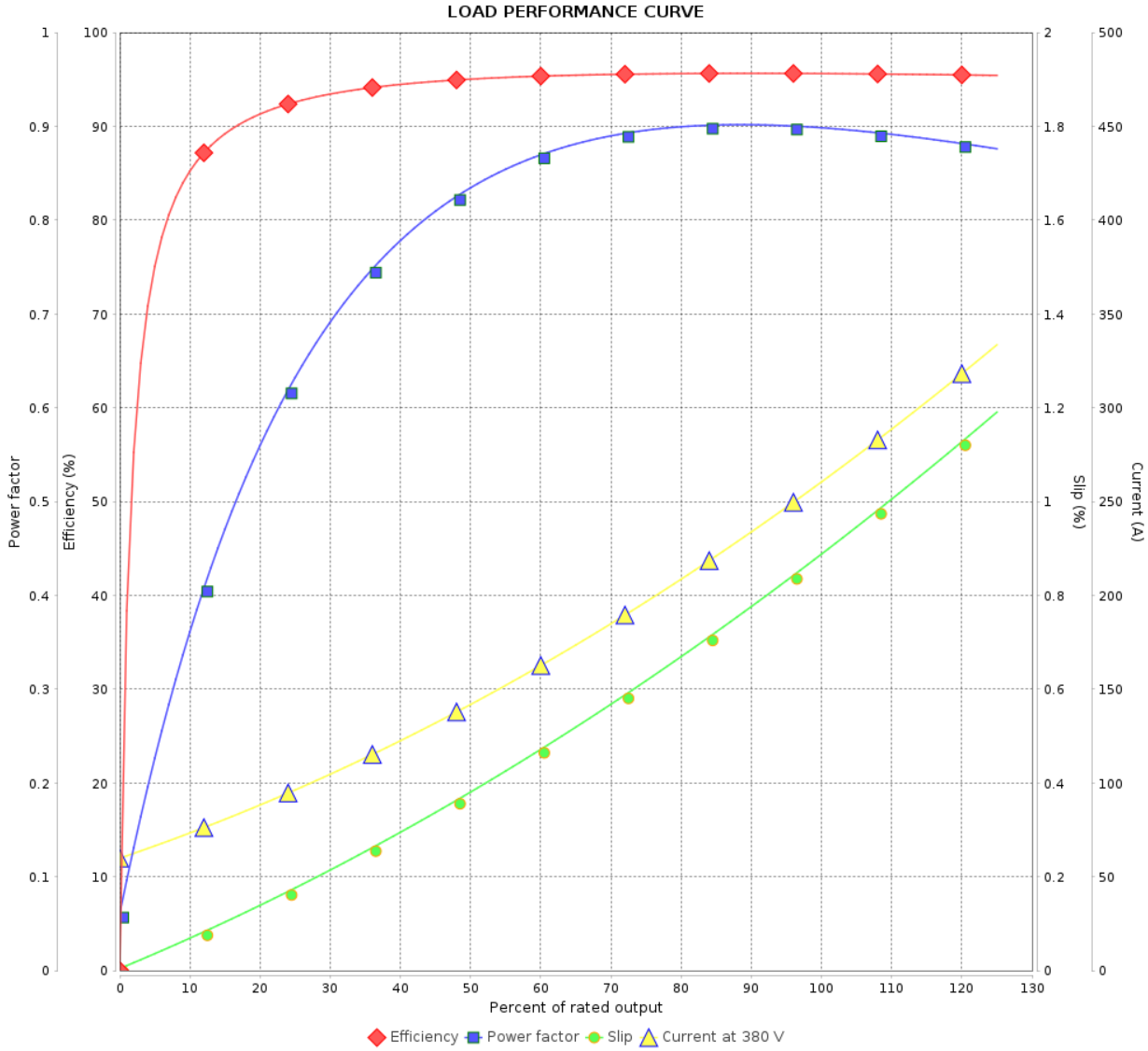
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 380 V 50 Hz 2P IE3

Rated current : 265 A
 LRC : 5.7
 Rated torque : 48.8 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2973 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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

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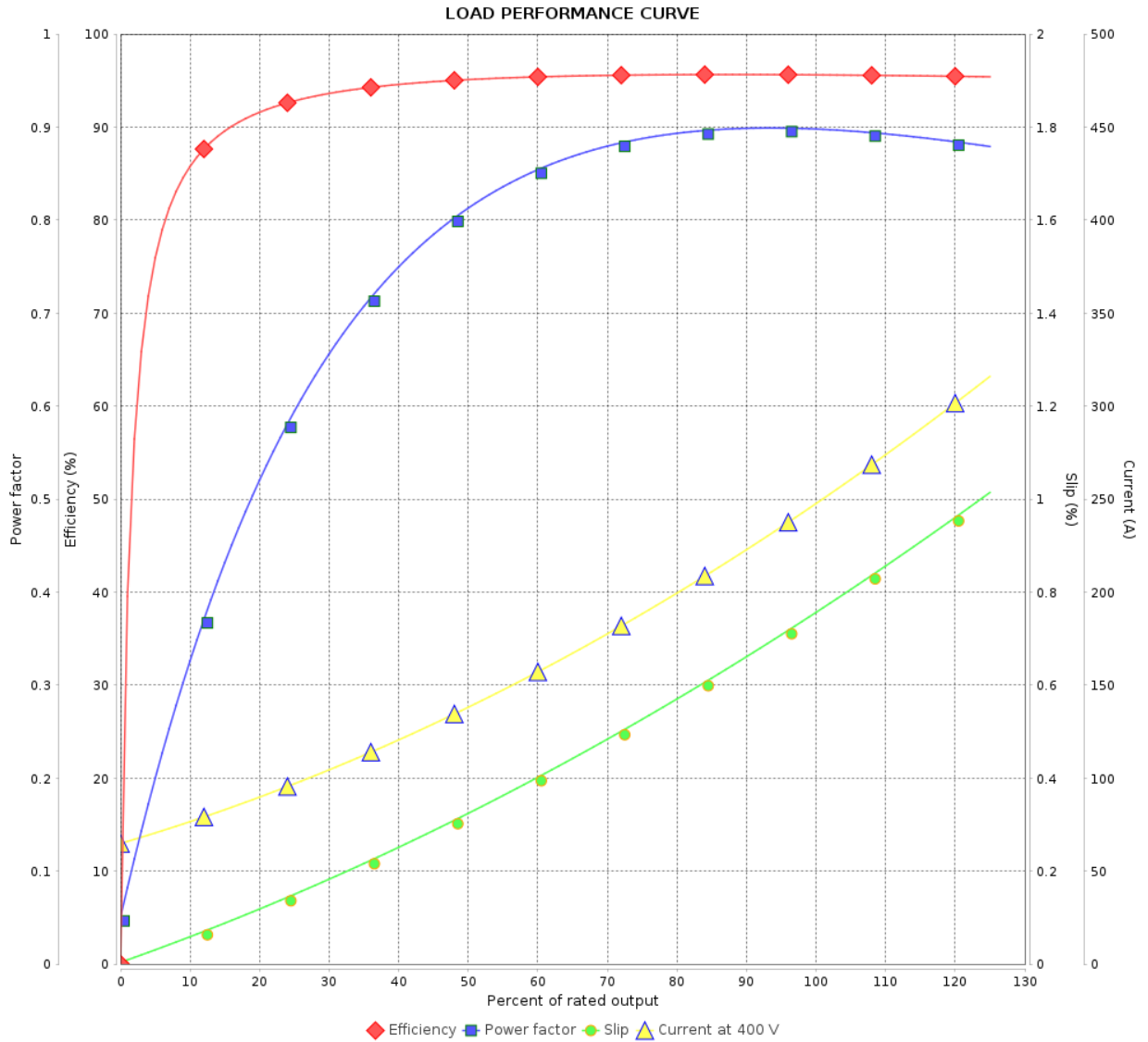
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 400 V 50 Hz 2P IE3

Rated current : 252 A
 LRC : 6.5
 Rated torque : 48.8 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 270 %
 Rated speed : 2977 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 9		
Date		15/01/2024		

LOAD PERFORMANCE CURVE

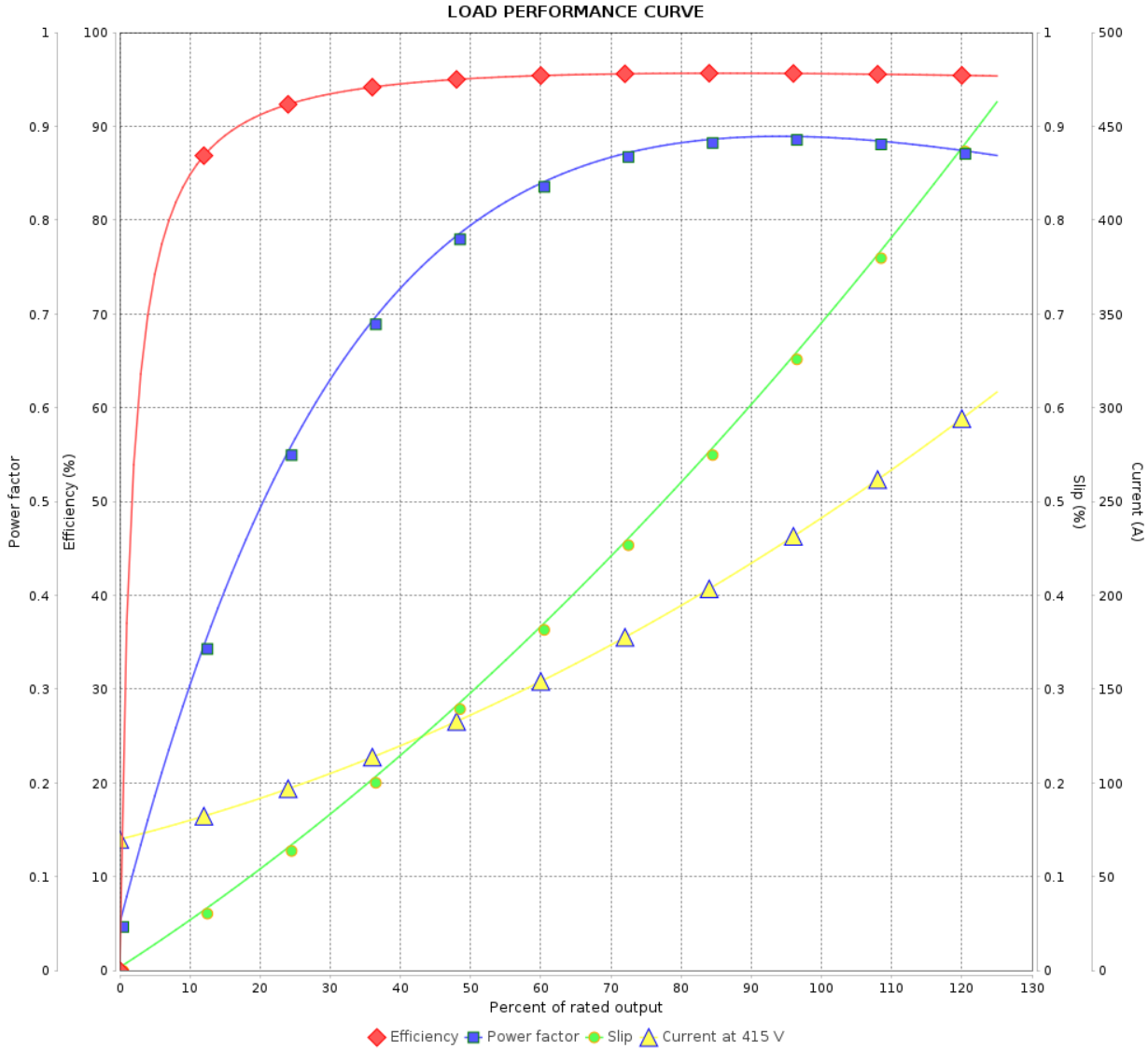
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 415 V 50 Hz 2P IE3

Rated current : 245 A
 LRC : 7.1
 Rated torque : 48.7 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 2979 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 9	Revision
Checked by				
Date	15/01/2024			

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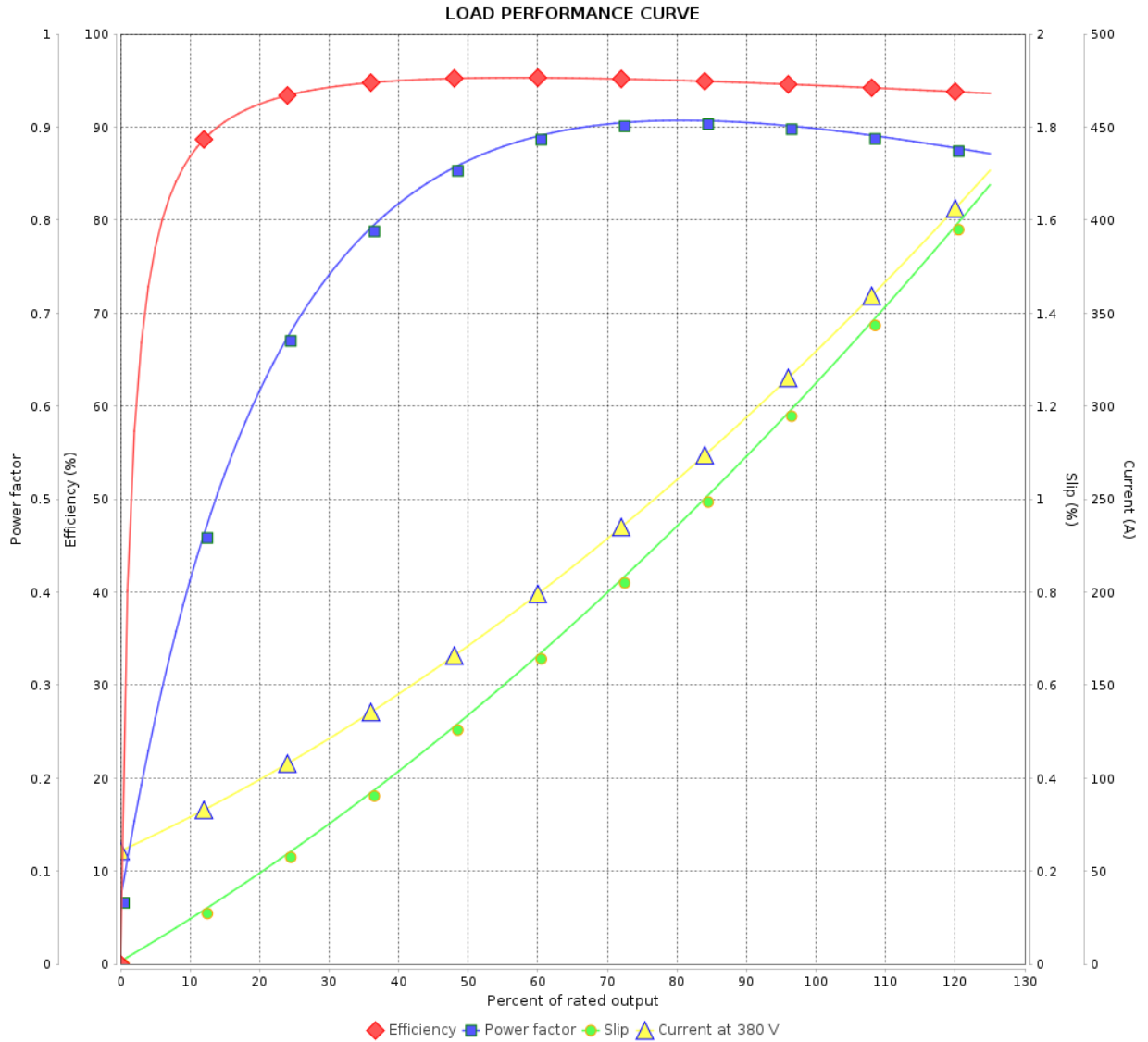
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 380 V 50 Hz 2P IE1

Rated current : 330 A
 LRC : 5.3
 Rated torque : 61.3 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 190 %
 Rated speed : 2962 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

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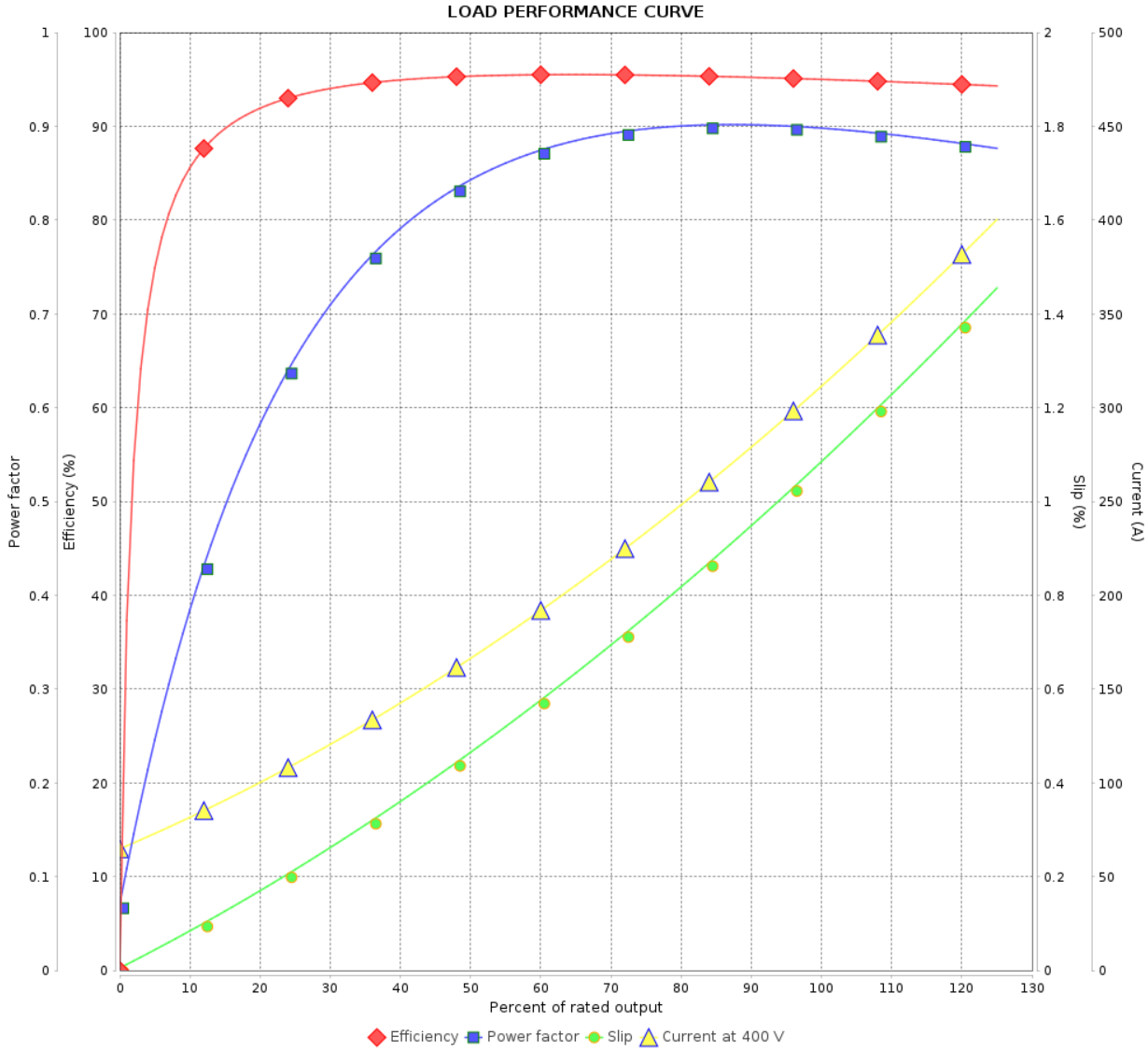
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 400 V 50 Hz 2P IE2

Rated current : 312 A
 LRC : 5.8
 Rated torque : 61.2 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 220 %
 Rated speed : 2967 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

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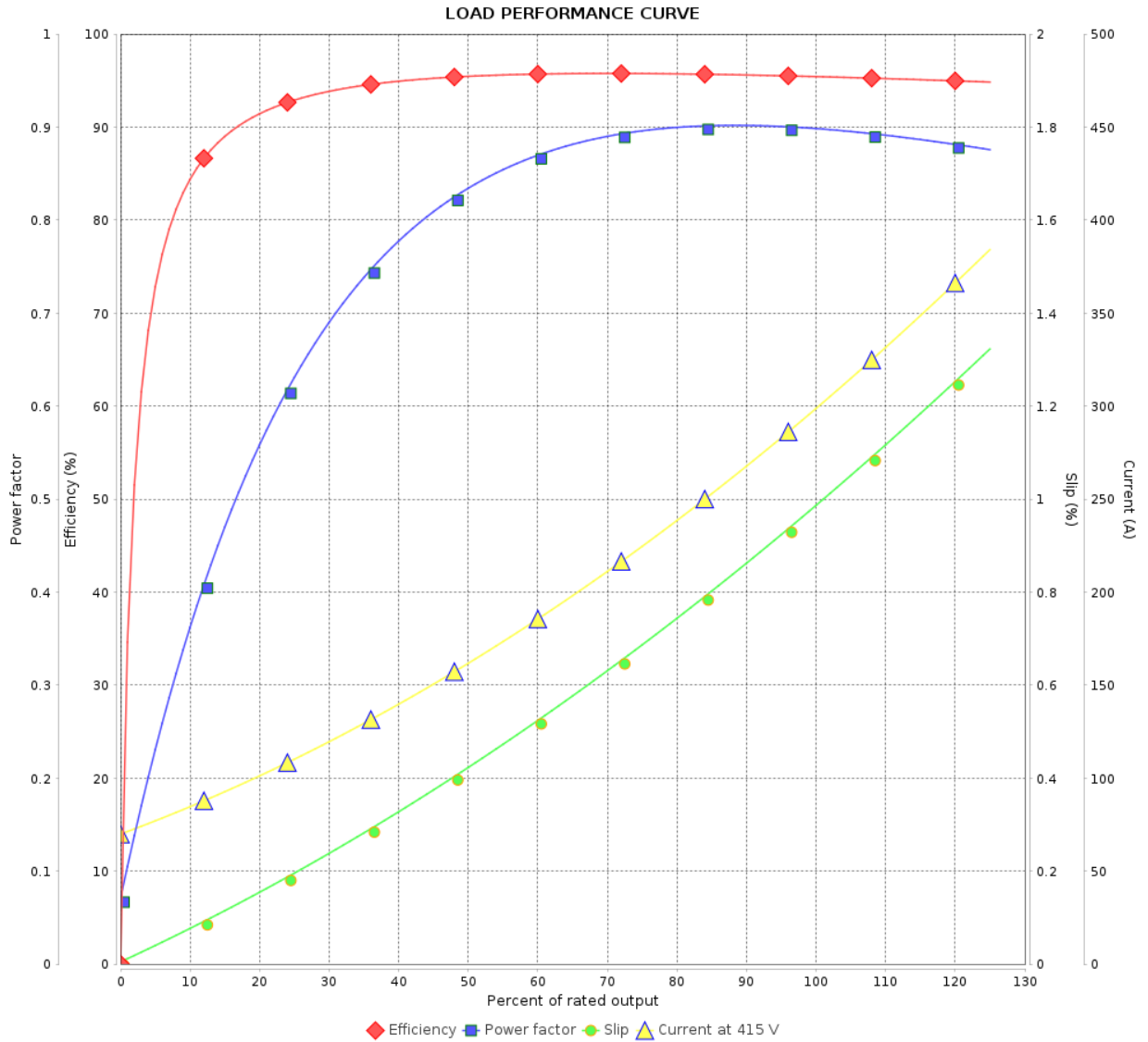
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13885601



Performance : 415 V 50 Hz 2P IE2

Rated current : 300 A
 LRC : 6.4
 Rated torque : 61.1 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 229 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 2.12 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 9		
Date		15/01/2024		