

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11529716

Frame	: 364/5TS	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	: 387 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.5023 kgm ²
Design	: B		

Output [HP]	75	60	60	60	75	75	75
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	164/81.9	80.8	78.5	75.7	100	94.8	91.4
L. R. Amperes [A]	1097/549	525	557	598	520	559	594
LRC [A]	6.7x(Code G)	6.5x(Code G)	7.1x(Code H)	7.9x(Code J)	5.2x(Code E)	5.9x(Code F)	6.5x(Code G)
No load current [A]	40.0/20.0	19.0	20.0	21.5	19.0	20.0	21.5
Rated speed [RPM]	3555	2955	2960	2965	2930	2945	2950
Slip [%]	1.25	1.50	1.33	1.17	2.33	1.83	1.67
Rated torque [kgfm]	15.3	14.7	14.7	14.7	18.6	18.5	18.5
Locked rotor torque [%]	200	210	229	250	160	175	190
Breakdown torque [%]	250	260	390	310	200	220	240
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	18s (cold) 10s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	37s (cold) 21s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%						
	50%	92.4	91.2	91.5	91.8	92.4	93.0
	75%	93.6	92.5	93.0	93.1	93.0	93.6
	100%	93.6	94.0	94.0	94.0	92.4	93.0
Power Factor	25%						
	50%	0.83	0.75	0.72	0.70	0.86	0.83
	75%	0.88	0.85	0.83	0.82	0.89	0.88
	100%	0.90	0.90	0.88	0.88	0.90	0.90

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	6.4	6.4	6.4	6.4	6.4	6.4
	P2 (0,5;1,0)	4.8	4.8	4.8	4.8	4.8	4.8
	P3 (0,25;1,0)	4.5	4.5	4.5	4.5	4.5	4.5
	P4 (0,9;0,5)	3.2	3.2	3.2	3.2	3.2	3.2
	P5 (0,5;0,5)	1.8	1.8	1.8	1.8	1.8	1.8
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6

Bearing type	: 6314 C3	6314 C3	Foundation loads			
	Sealing	: WSeal		WSeal	Max. traction	: 304 kgf
	Lubrication interval	: 4000 h		4000 h	Max. compression	: 690 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	13/01/2024		1 / 9	

DATA SHEET

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Notes
USABLE @208V 181A SF 1.10 SFA 199A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 9	

LOAD PERFORMANCE CURVE

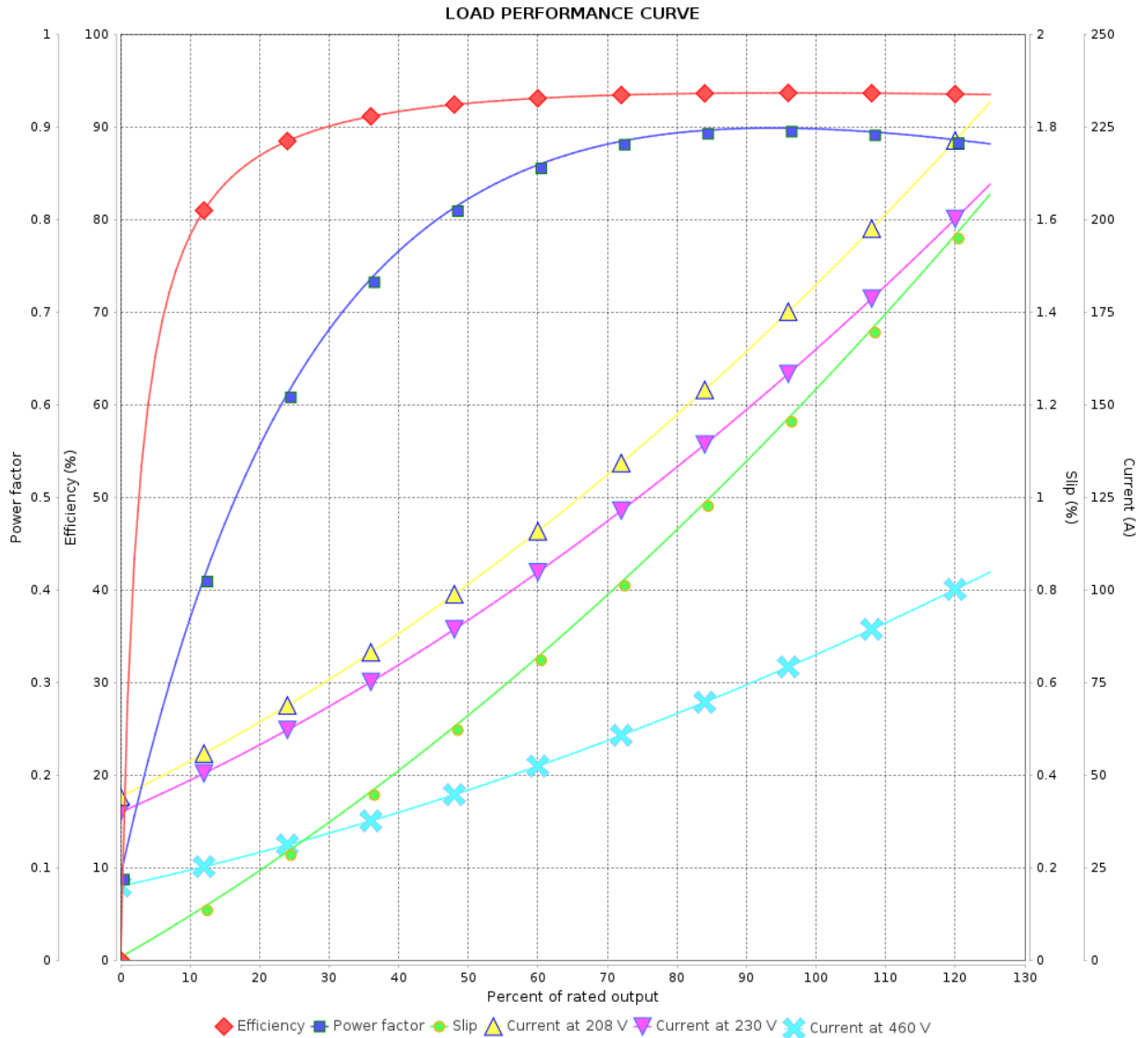
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 230/460 V 60 Hz 2P

Rated current : 164/81.9 A
 LRC : 6.7
 Rated torque : 15.3 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3555 rpm

Moment of inertia (J) : 0.5023 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	Revision
Checked by				
Date				

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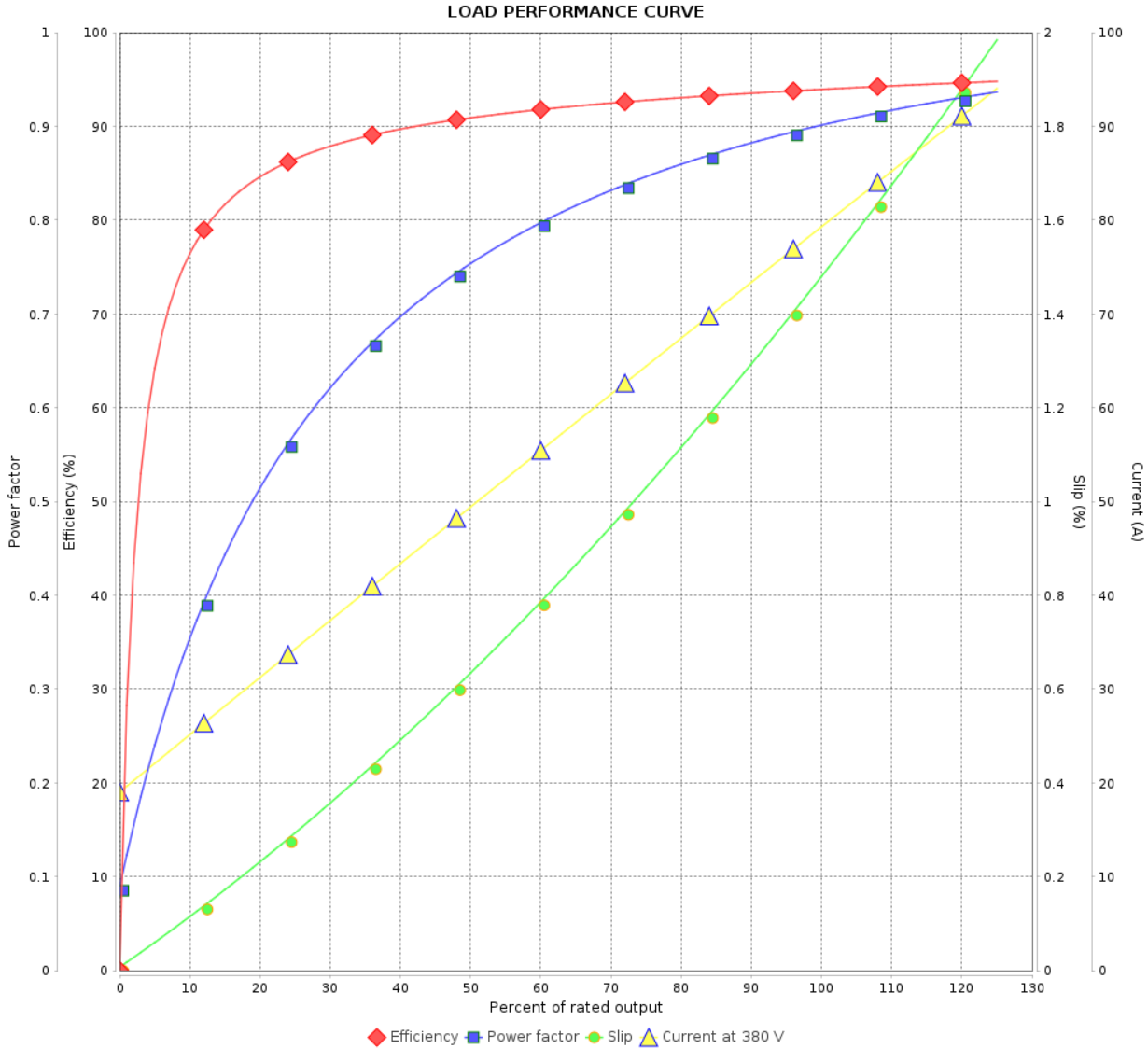
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 380 V 50 Hz 2P IE3

Rated current : 80.8 A
 LRC : 6.5
 Rated torque : 14.7 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.5023 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 4 / 9	Revision
Checked by				
Date	13/01/2024			

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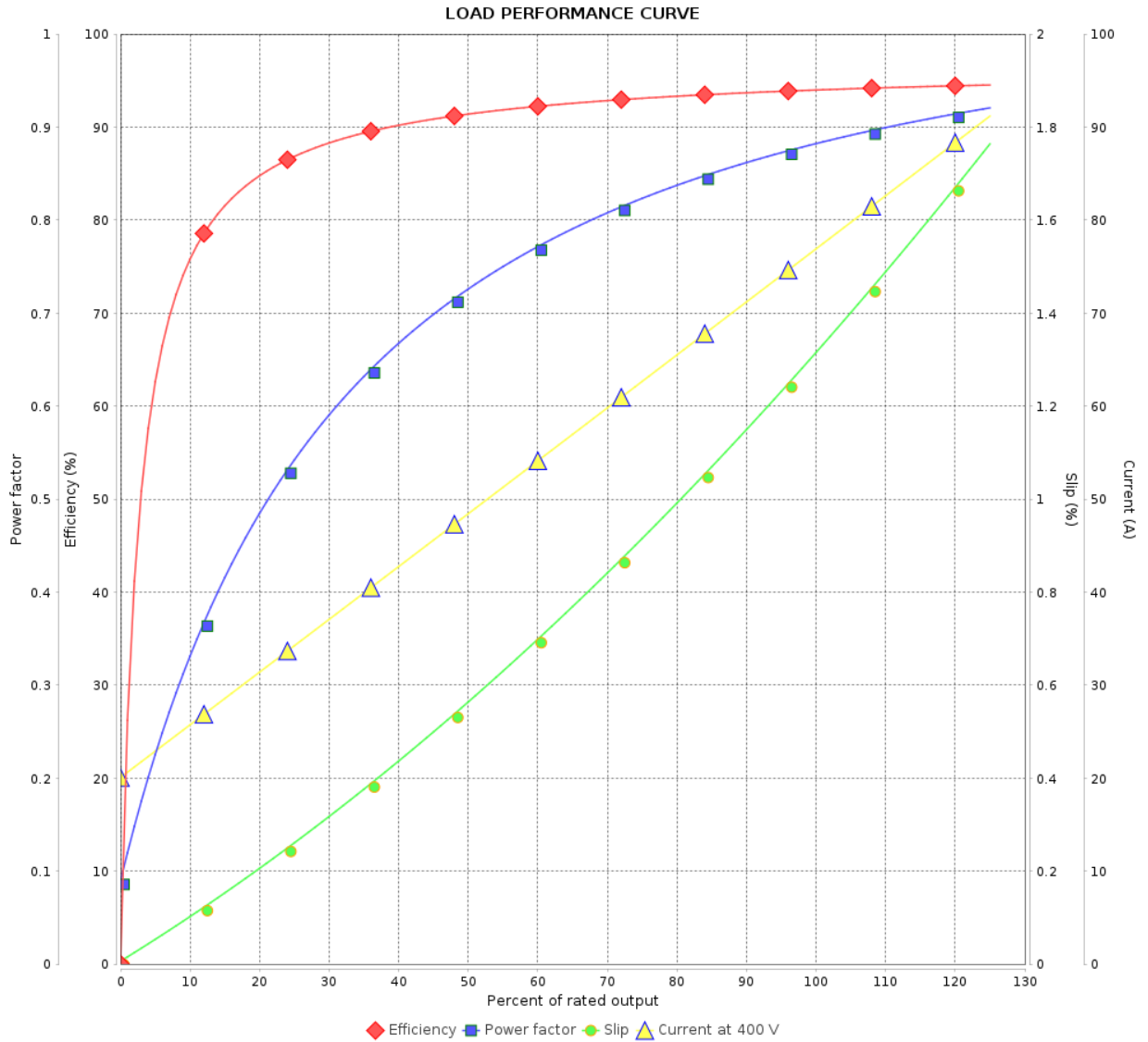
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 400 V 50 Hz 2P IE3

Rated current : 78.5 A
 LRC : 7.1
 Rated torque : 14.7 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 390 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.5023 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				

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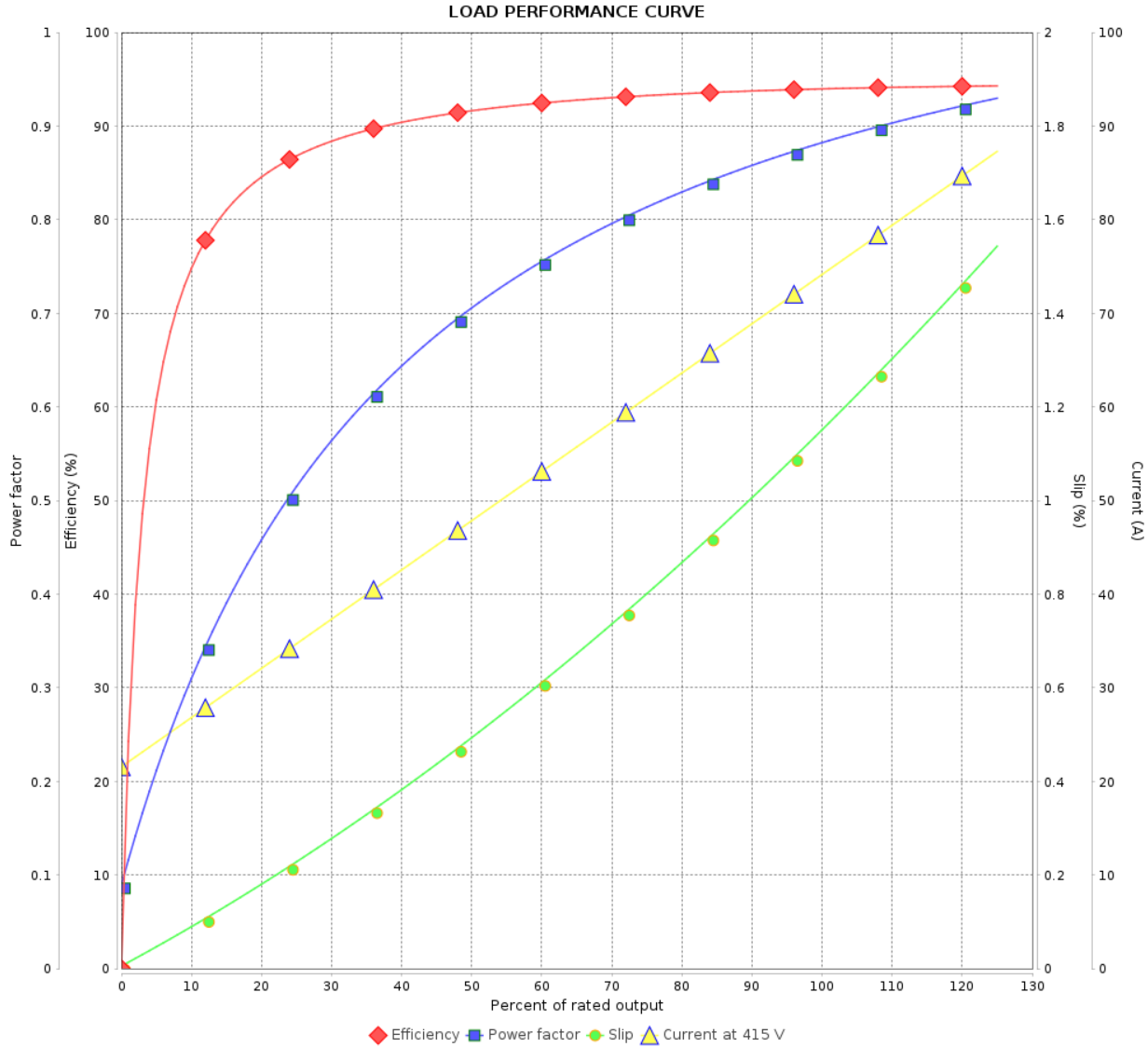
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 415 V 50 Hz 2P IE3

Rated current : 75.7 A
 LRC : 7.9
 Rated torque : 14.7 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 310 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.5023 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				

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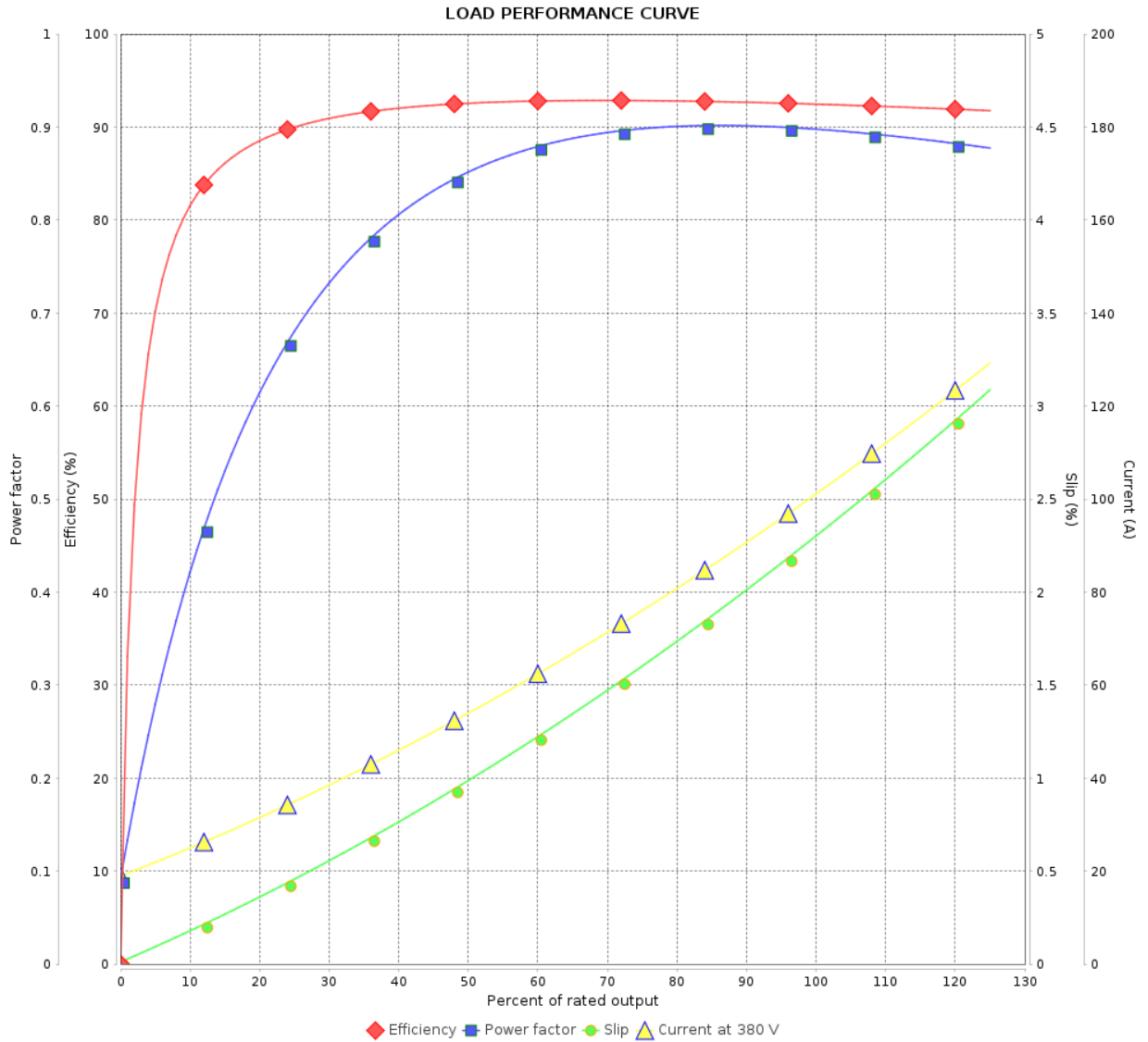
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 380 V 50 Hz 2P IE1

Rated current : 100 A
 LRC : 5.2
 Rated torque : 18.6 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.5023 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		7 / 9		
Date		13/01/2024		

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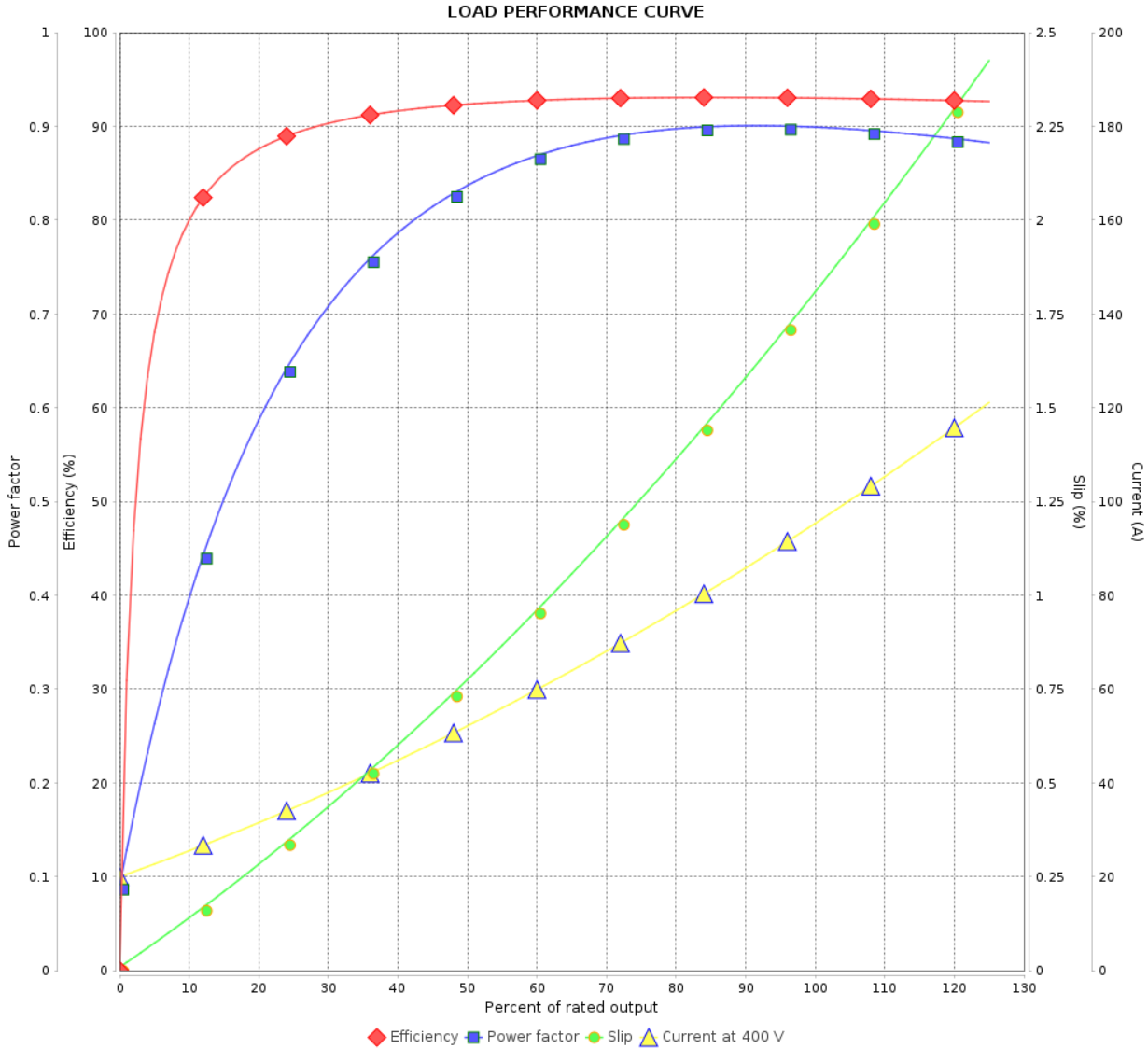
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 400 V 50 Hz 2P IE1

Rated current : 94.8 A
 LRC : 5.9
 Rated torque : 18.5 kgfm
 Locked rotor torque : 175 %
 Breakdown torque : 220 %
 Rated speed : 2945 rpm

Moment of inertia (J) : 0.5023 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 8 / 9	Revision
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

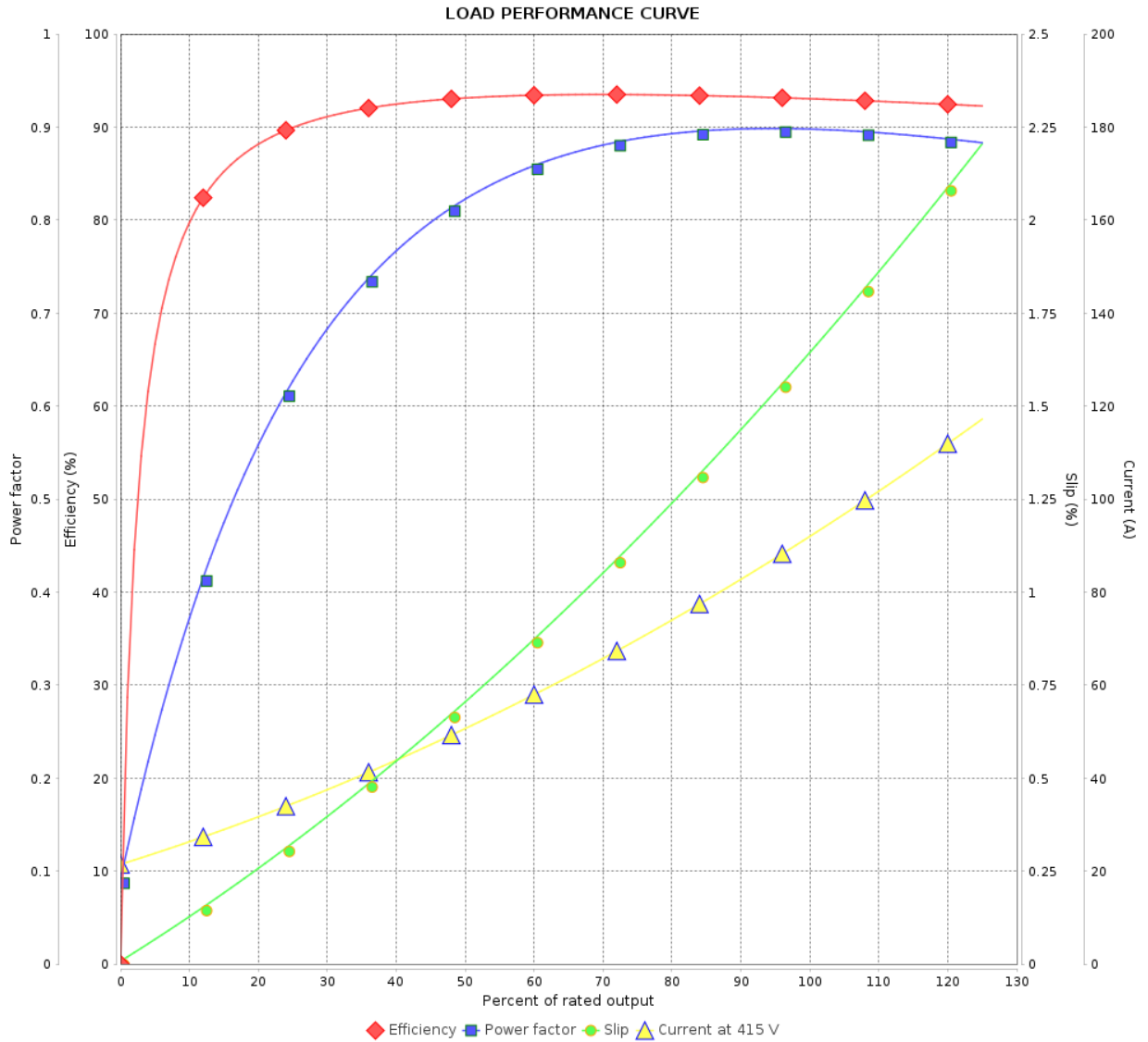
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11529716



Performance : 415 V 50 Hz 2P IE1

Rated current : 91.4 A
 LRC : 6.5
 Rated torque : 18.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.5023 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		13/01/2024		