

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12109400

Frame	: 364/5T	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	: 401 kg
Protection degree	: IP56	Moment of inertia (J)	: 1.22 kgm ²
Design	: B		

Output [HP]	40	30	30	30	40	40	40
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	46.5	43.0	41.1	40.0	57.8	55.1	53.4
L. R. Amperes [A]	298	275	296	308	283	303	320
LRC [A]	6.4x(Code G)	6.4x(Code G)	7.2x(Code H)	7.7x(Code J)	4.9x(Code E)	5.5x(Code F)	6.0x(Code G)
No load current [A]	16.5	16.0	17.0	17.8	16.0	17.0	17.8
Rated speed [RPM]	1183	985	987	988	975	980	982
Slip [%]	1.42	1.50	1.30	1.20	2.50	2.00	1.80
Rated torque [kgfm]	24.5	22.1	22.1	22.0	29.8	29.6	29.6
Locked rotor torque [%]	200	210	240	270	160	180	200
Breakdown torque [%]	240	250	280	310	190	210	229
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	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	92.4	92.3	91.9	93.0	93.0
	75%	93.6	92.8	93.1	93.0	92.4	93.0
	100%	94.1	92.5	93.0	93.2	91.7	93.0
Power Factor	25%						
	50%	0.73	0.68	0.66	0.63	0.78	0.73
	75%	0.82	0.80	0.79	0.76	0.84	0.82
	100%	0.86	0.84	0.83	0.82	0.86	0.84

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

Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1
	P2 (0,5;1,0)	5.0	5.0	5.0	5.0	5.0	5.0
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8

Bearing type	: 6314 C3	Non drive end	6314 C3	Foundation loads	
Sealing	: Inpro/Seal	Inpro/Seal		Max. traction	: 563 kgf
Lubrication interval	: 17000 h	17000 h		Max. compression	: 964 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				
Date	22/10/2024		Page 1 / 9	Revision

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Three Phase Induction Motor - Squirrel Cage



Customer :

Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 2 / 9		Revision
Checked by					
Date	22/10/2024				

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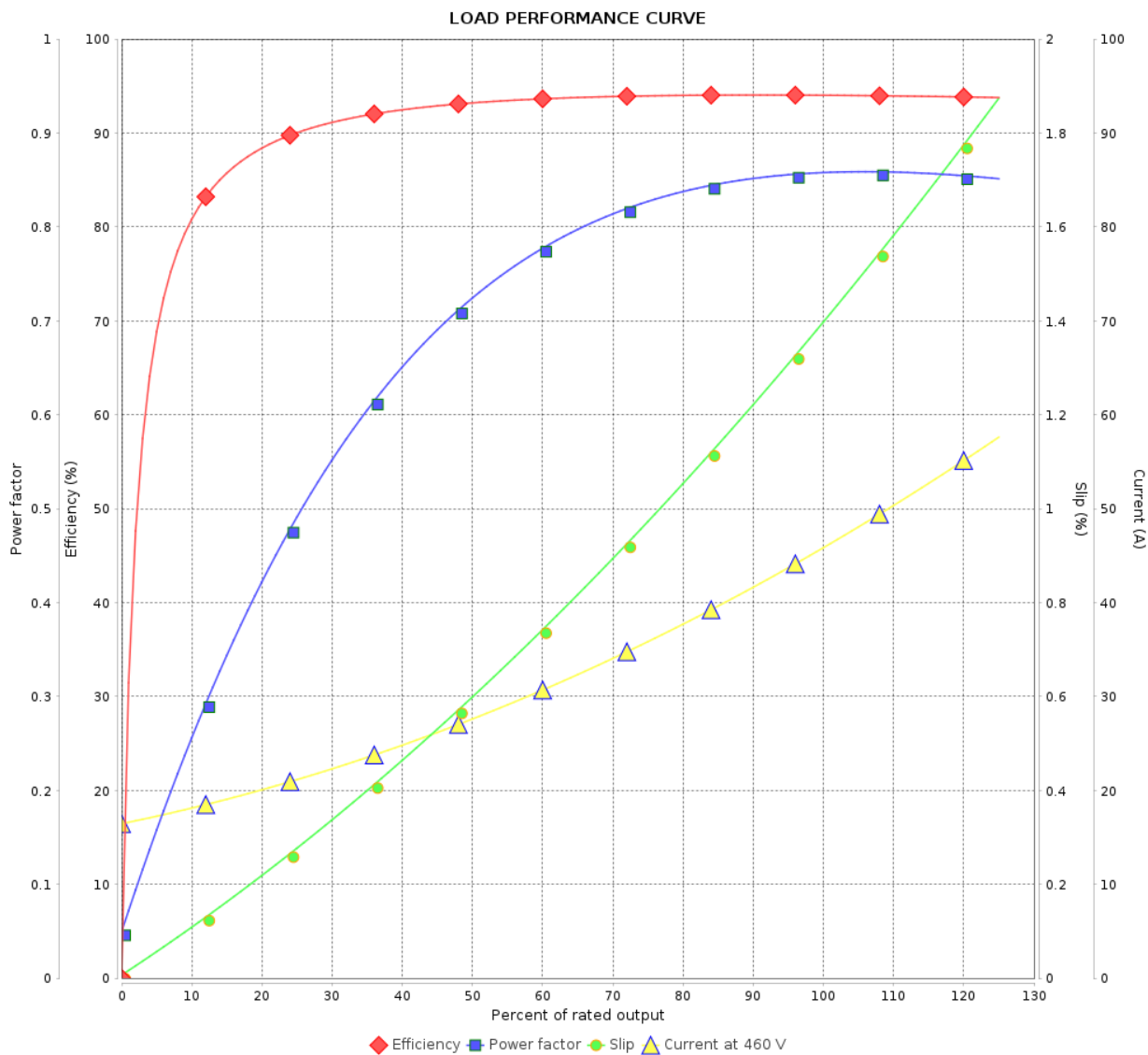
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12109400



Performance : 460 V 60 Hz 6P

Rated current : 46.5 A
LRC : 6.4
Rated torque : 24.5 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1183 rpm

Moment of inertia (J) : 1.22 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 3 / 9	Revision
Checked by					
Date	22/10/2024				

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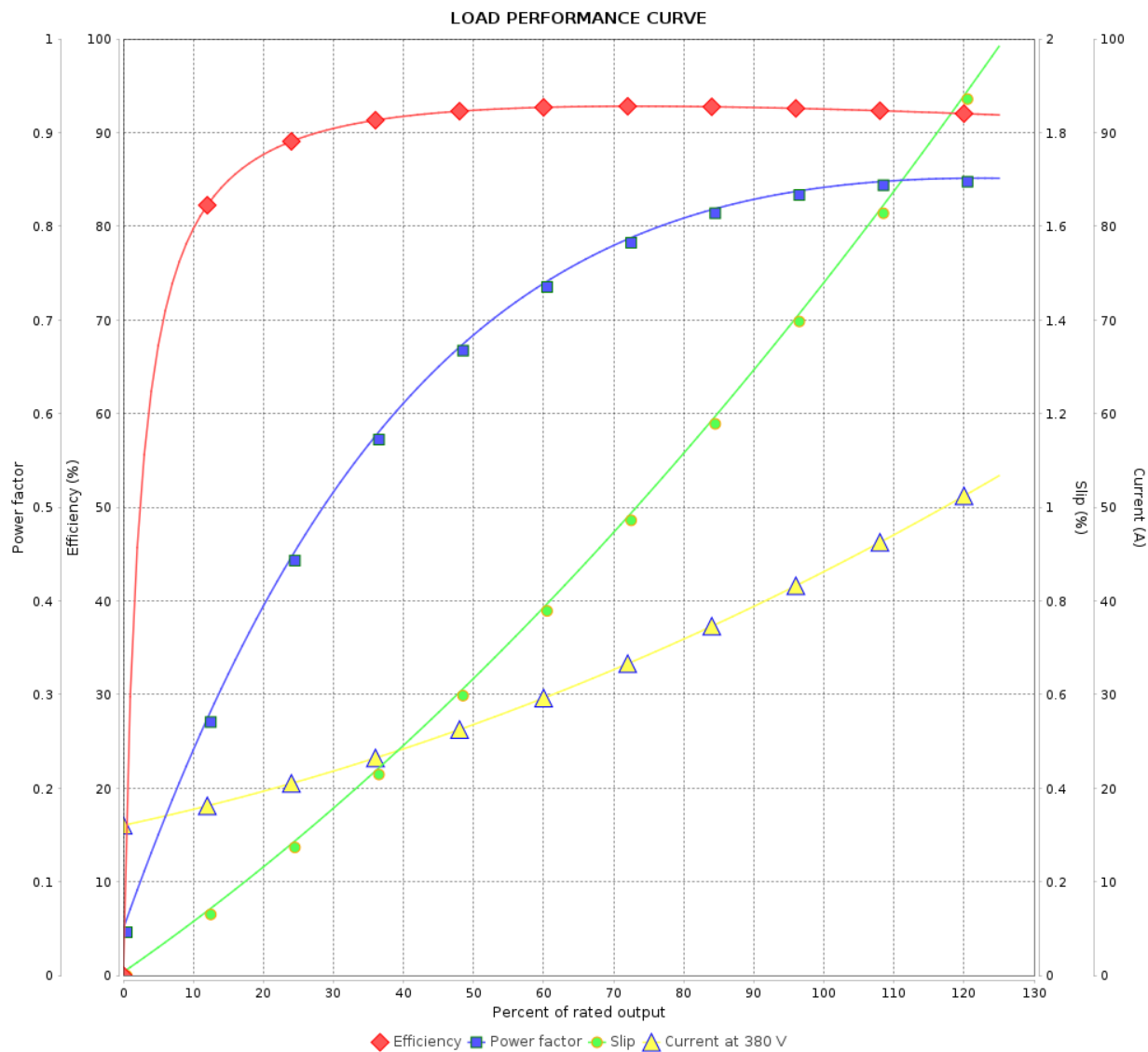
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12109400



Performance : 380 V 50 Hz 6P IE3

Rated current : 43.0 A
LRC : 6.4
Rated torque : 22.1 kgfm
Locked rotor torque : 210 %
Breakdown torque : 250 %
Rated speed : 985 rpm

Moment of inertia (J) : 1.22 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				4 / 9	
Date					

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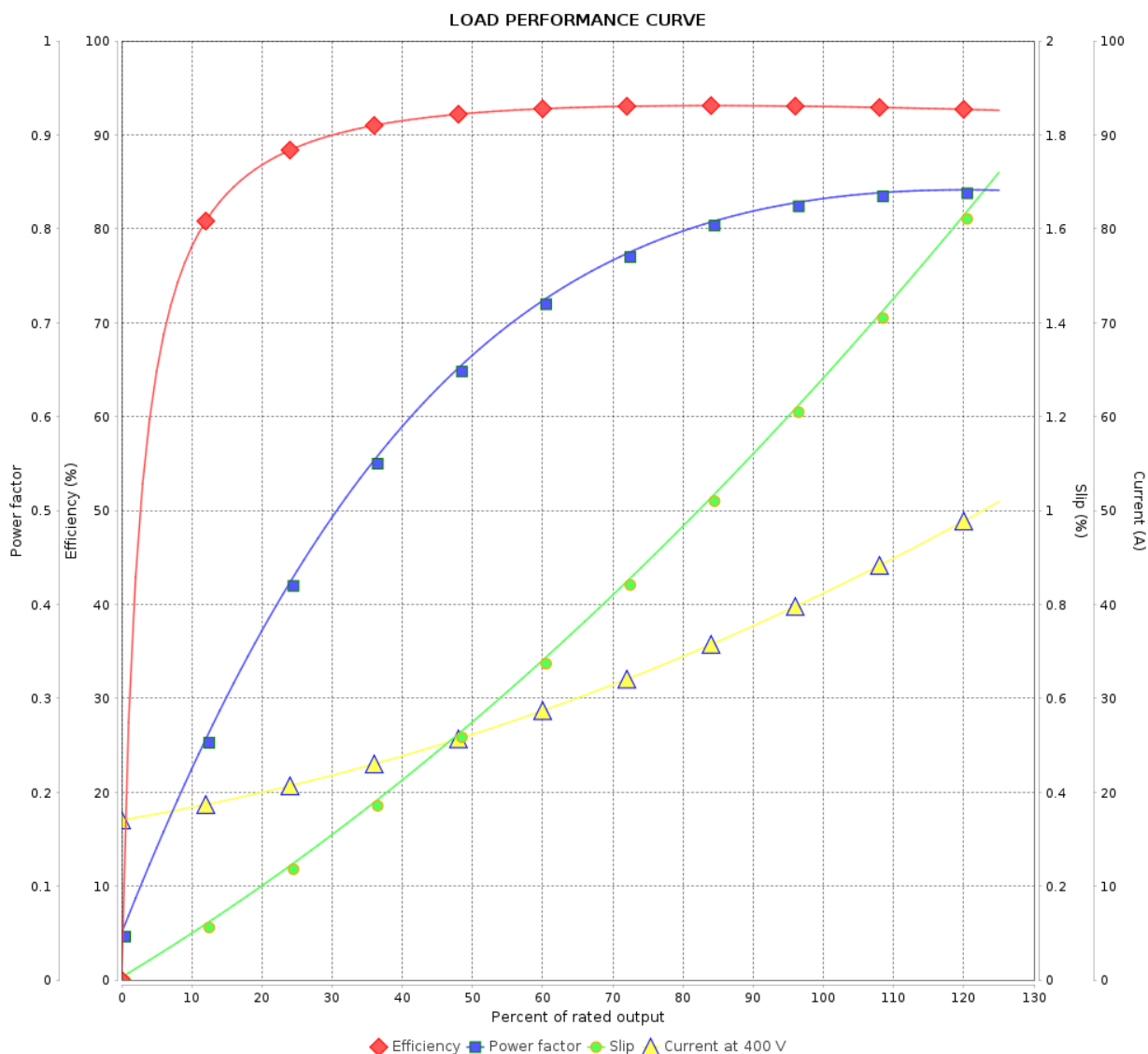
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12109400



Performance : 400 V 50 Hz 6P IE3

Rated current : 41.1 A
LRC : 7.2
Rated torque : 22.1 kgfm
Locked rotor torque : 240 %
Breakdown torque : 280 %
Rated speed : 987 rpm

Moment of inertia (J) : 1.22 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 5 / 9 Revision		
Checked by				
Date	22/10/2024			

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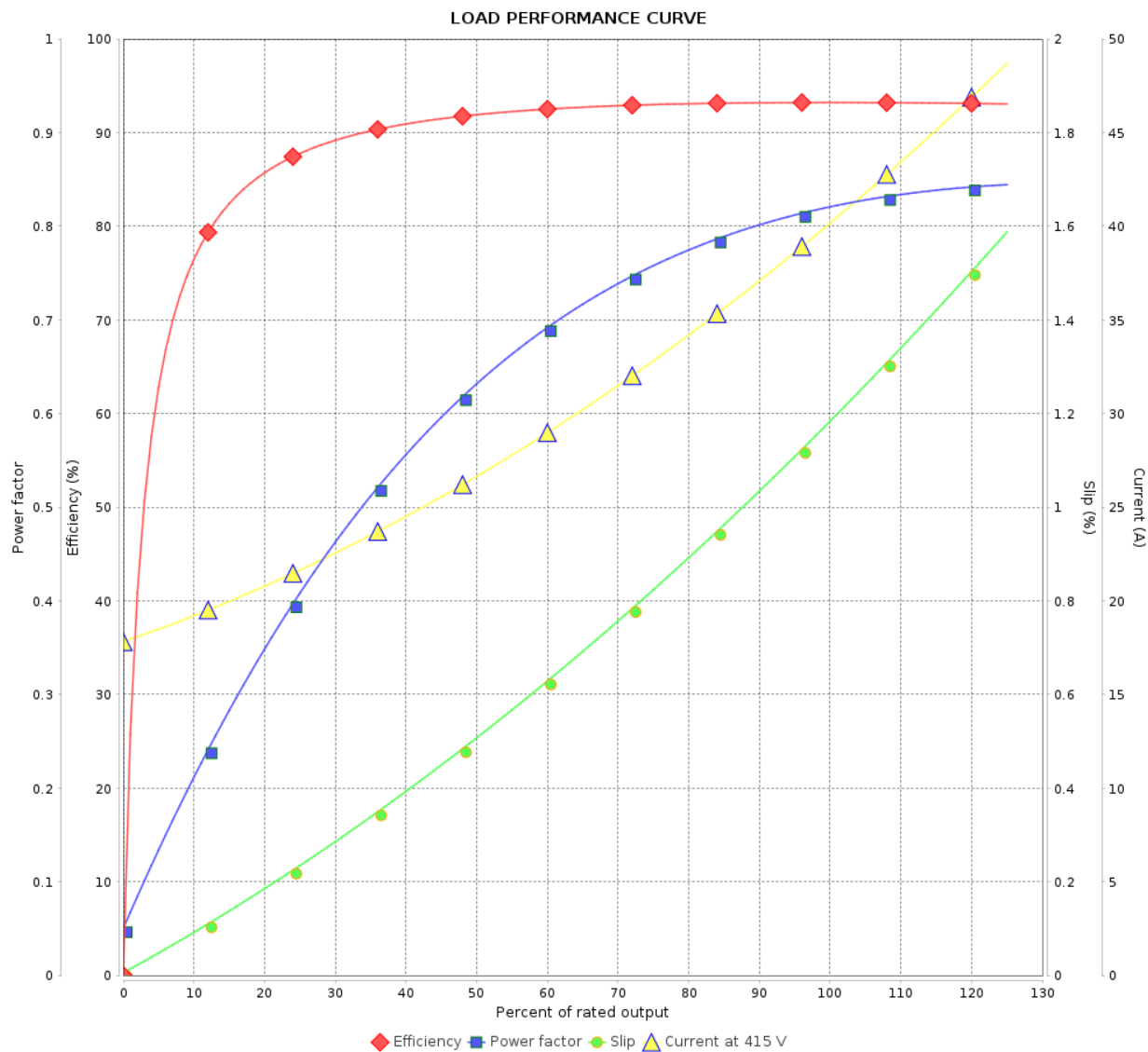
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12109400



Performance : 415 V 50 Hz 6P IE3

Rated current : 40.0 A
LRC : 7.7
Rated torque : 22.0 kgfm
Locked rotor torque : 270 %
Breakdown torque : 310 %
Rated speed : 988 rpm

Moment of inertia (J) : 1.22 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				6 / 9	
Date					

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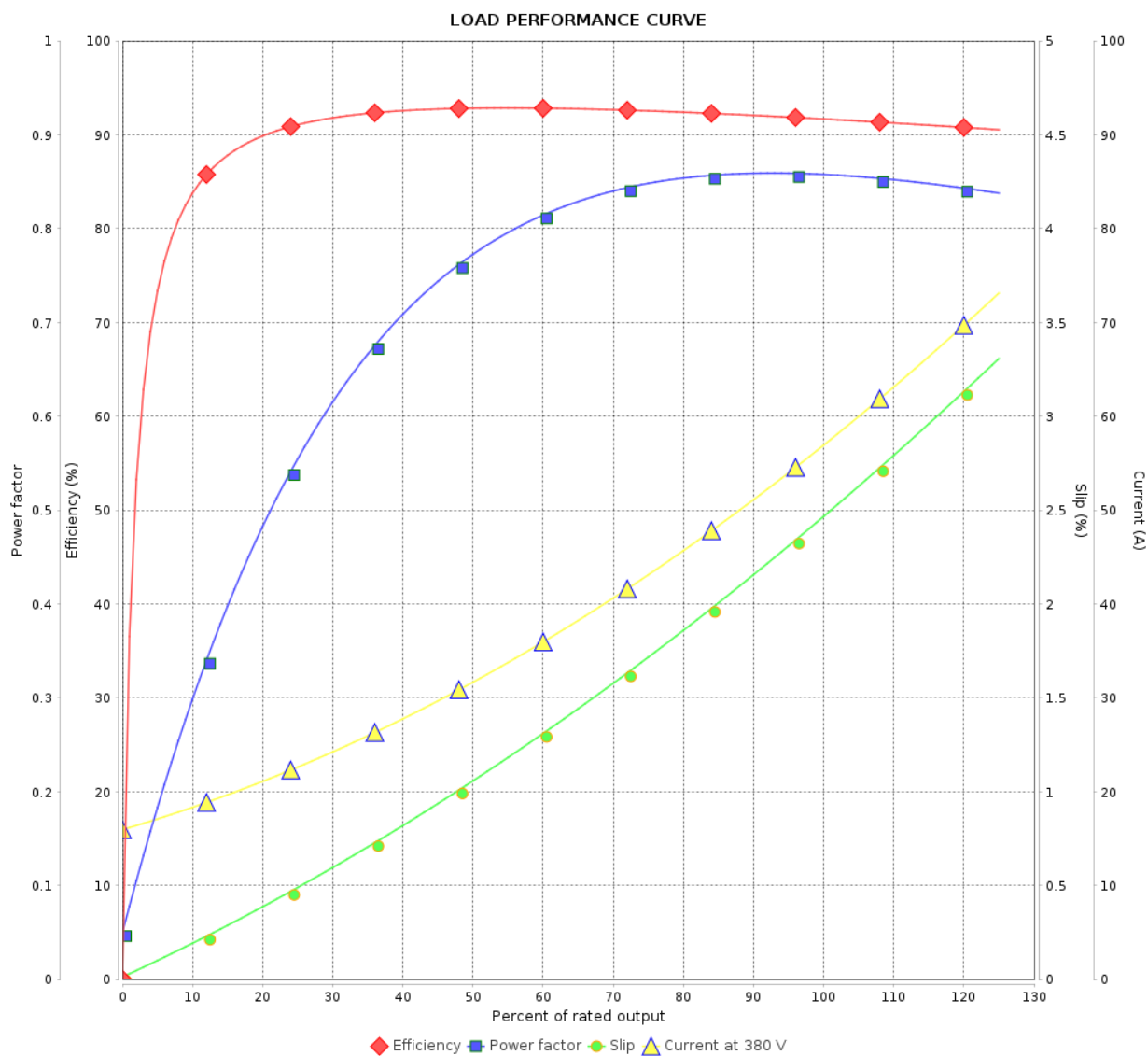
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12109400



Performance : 380 V 50 Hz 6P IE2

Rated current : 57.8 A
LRC : 4.9
Rated torque : 29.8 kgfm
Locked rotor torque : 160 %
Breakdown torque : 190 %
Rated speed : 975 rpm

Moment of inertia (J) : 1.22 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 7 / 9Revision		
Checked by				
Date	22/10/2024			

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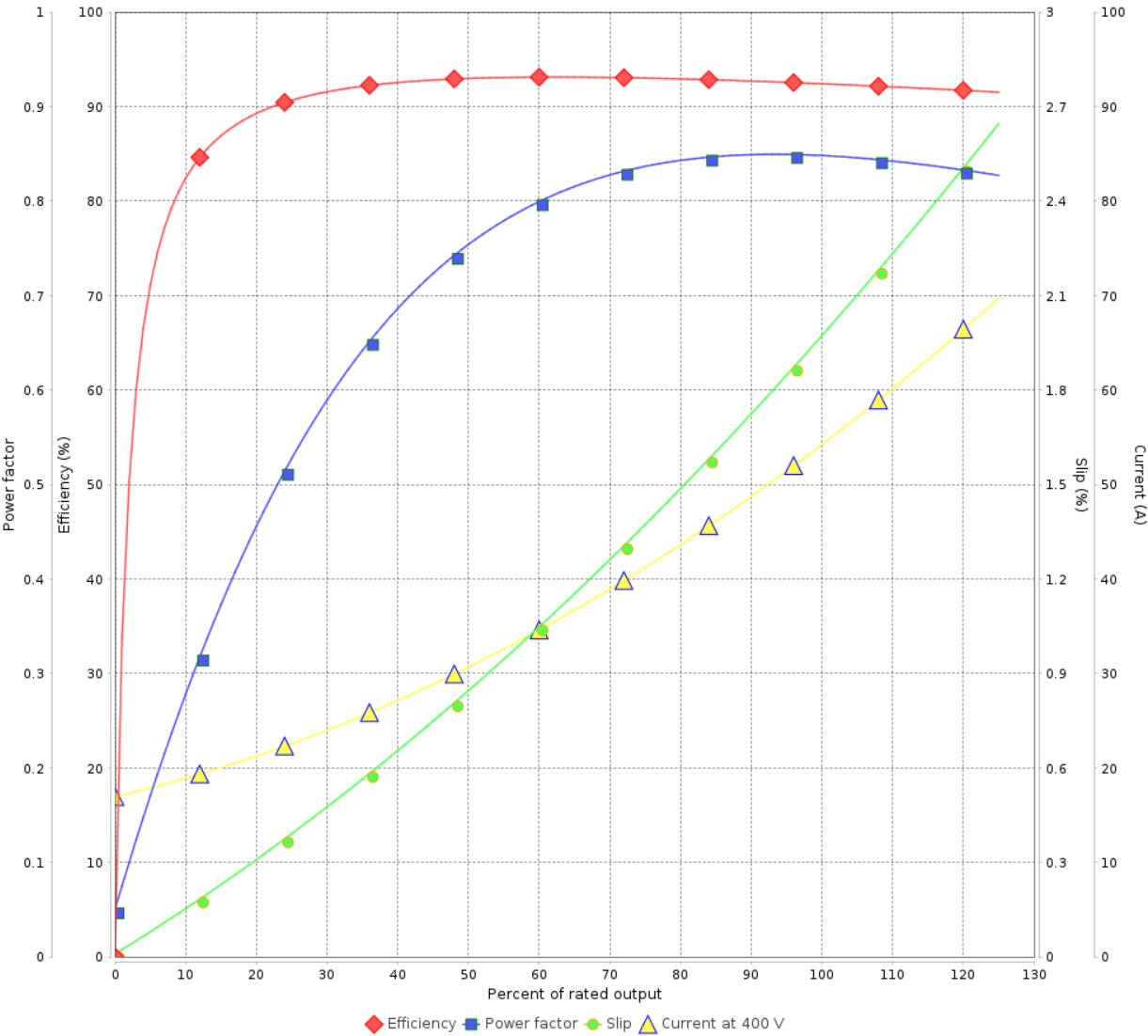
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12109400

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Performance : 400 V 50 Hz 6P IE2			
Rated current	: 55.1 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 29.6 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 8 / 9	Revision
Checked by					
Date	22/10/2024				

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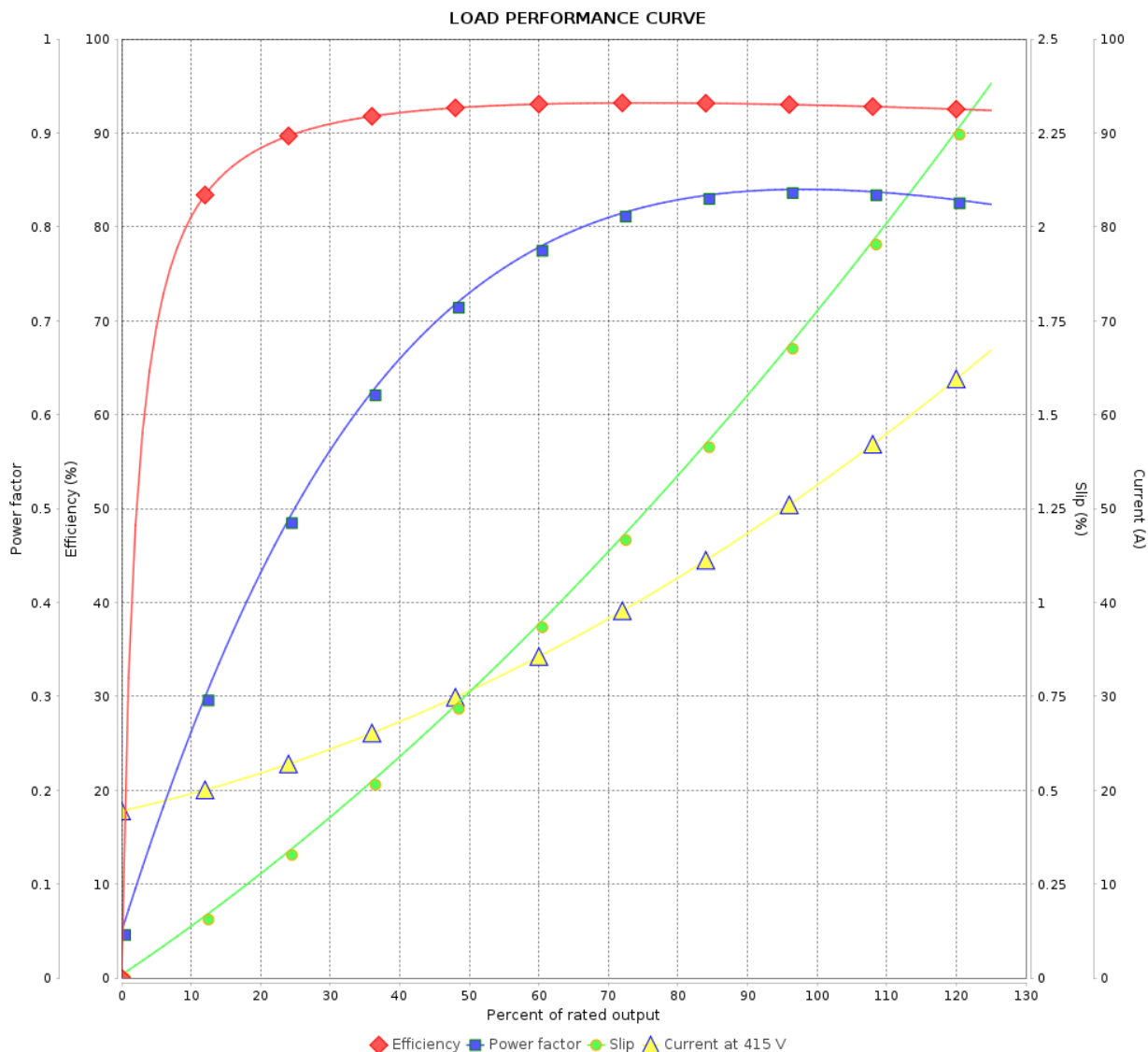
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12109400

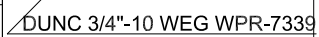
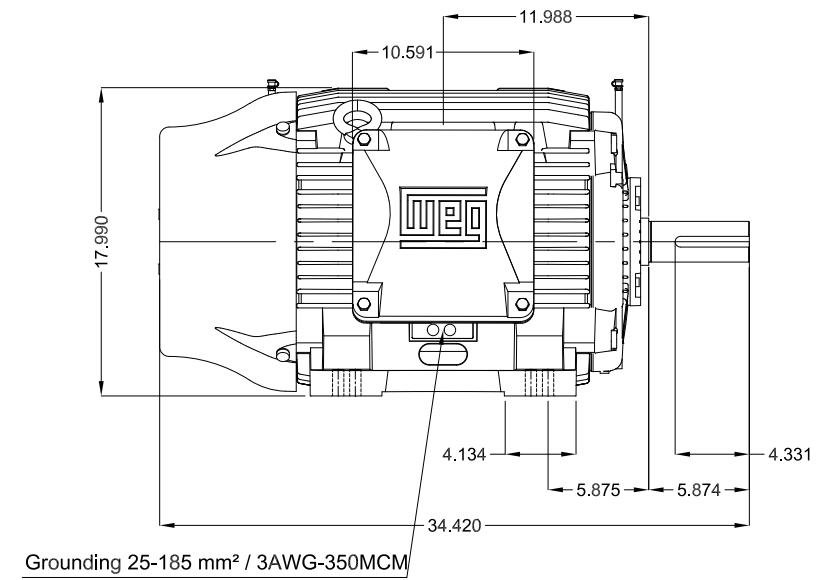


Performance : 415 V 50 Hz 6P IE3

Rated current : 53.4 A
LRC : 6.0
Rated torque : 29.6 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 982 rpm

Moment of inertia (J) : 1.22 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 9 / 9Revision		
Checked by				
Date	22/10/2024			



40 HP 06 Poles 60 Hz								A
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED	HYBRISUSER	 THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF. FRAME 364/5T IP56 TEFC	PREVIEW					
CHECKED			WDD 00					
RELEASED								
REL. DATE			SHEET /					