

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase Product code : 14168114

Frame : 444/5HP	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : W-6
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 : 860 kg
Protection degree : IP55	Moment of inertia (J) : 2.81 kgm ²
Design : B	

Output [HP]	150	125	125	125	150	150	150
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	340/170	169	160	156	205	194	189
L. R. Amperes [A]	2244/1122	1183	1104	1170	1189	1125	1191
LRC [A]	6.6x(Code G)	7.0x(Code G)	6.9x(Code G)	7.5x(Code H)	5.8x(Code F)	5.8x(Code F)	6.3x(Code G)
No load current [A]	116/58.0	58.0	61.2	64.0	58.0	61.2	64.0
Rated speed [RPM]	1784	1484	1486	1487	1475	1480	1482
Slip [%]	0.89	1.07	0.93	0.87	1.67	1.33	1.20
Rated torque [kgfm]	61.0	61.1	61.0	61.0	73.8	73.6	73.5
Locked rotor torque [%]	200	190	220	229	160	180	190
Breakdown torque [%]	250	240	260	290	200	220	240
Service factor	1.15	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	48s (cold) 27s (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	73.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)
Efficiency (%)	25%						
	50%	95.4	95.1	95.1	94.8	95.4	95.4
	75%	95.8	95.5	95.5	95.5	95.4	95.4
	100%	95.8	95.3	95.3	95.5	95.0	95.4
Power Factor	25%						
	50%	0.74	0.73	0.70	0.68	0.79	0.76
	75%	0.82	0.83	0.81	0.79	0.85	0.83
	100%	0.85	0.85	0.85	0.84	0.86	0.86

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

Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5	4.5	4.5
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5
	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 :	Drive end : 6319 C3	Non drive end : 6316 C3	Foundation loads Max. traction Max. compression
Sealing :	Viton Lip Seal	Viton Seal	
Lubrication interval :	4000 h	5000 h	
Lubricant amount :	45 g	34 g	
Lubricant type :	Mobil Polyrex EM		

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	27/10/2024		1 / 9	

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Customer : _____

Notes
USABLE @208V 376A SF 1.00 SFA 376A

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	27/10/2024		2 / 9	

LOAD PERFORMANCE CURVE

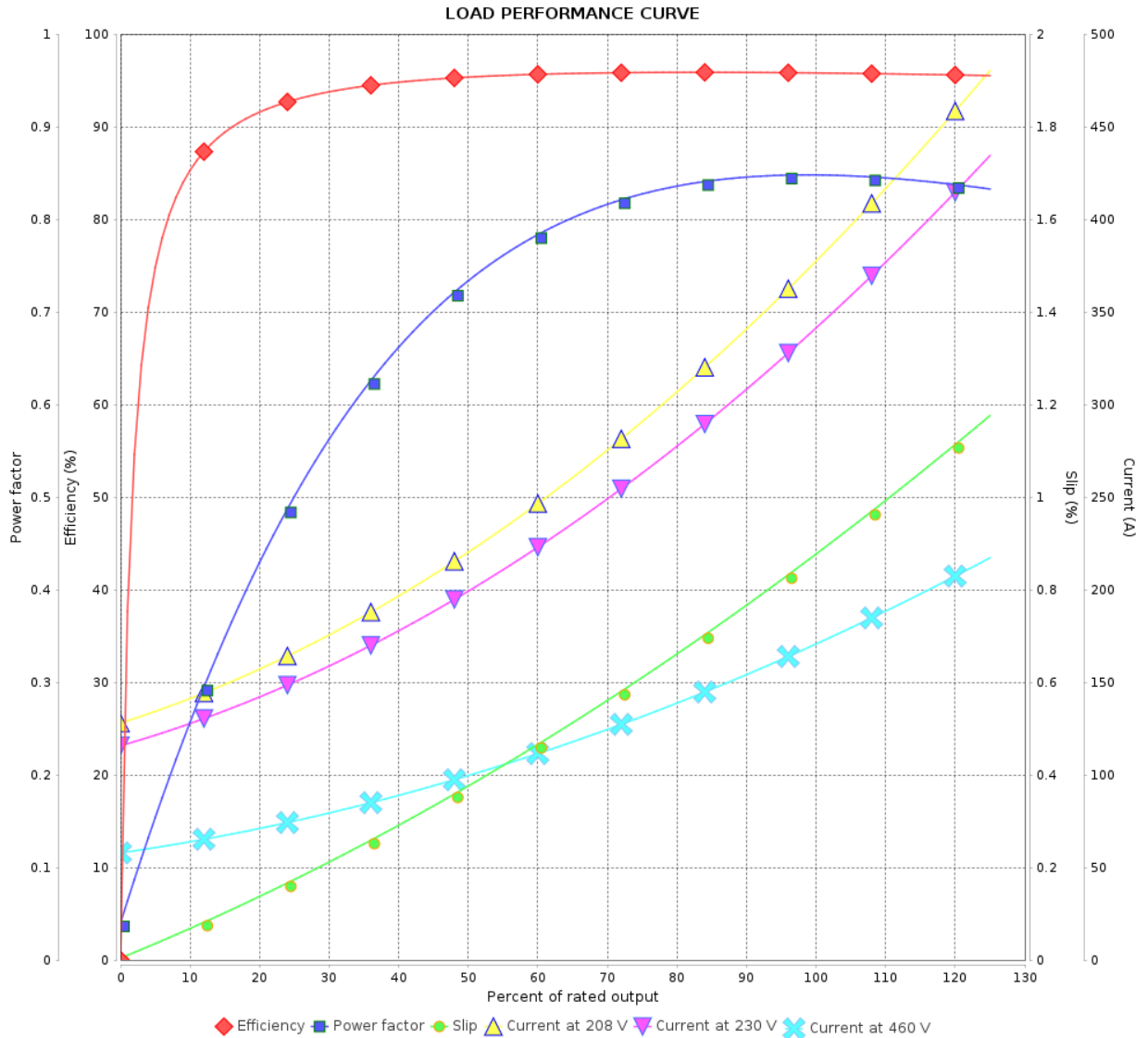
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 14168114



Performance : 230/460 V 60 Hz 4P

Rated current : 340/170 A
LRC : 6.6
Rated torque : 61.0 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 1784 rpm

Moment of inertia (J) : 2.81 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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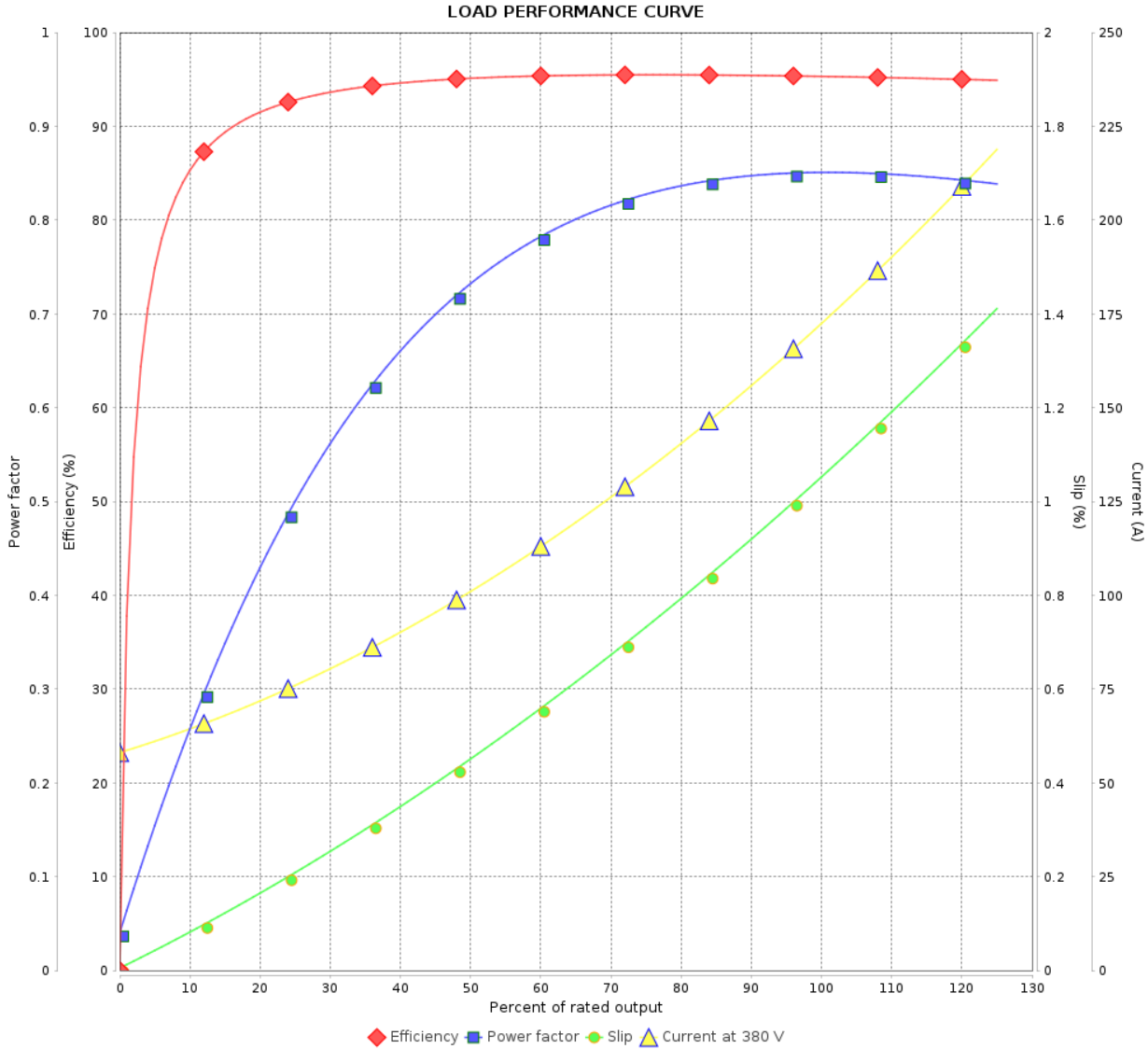
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 14168114



Performance : 380 V 50 Hz 4P IE3

Rated current : 169 A
LRC : 7.0
Rated torque : 61.1 kgfm
Locked rotor torque : 190 %
Breakdown torque : 240 %
Rated speed : 1484 rpm

Moment of inertia (J) : 2.81 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	27/10/2024			

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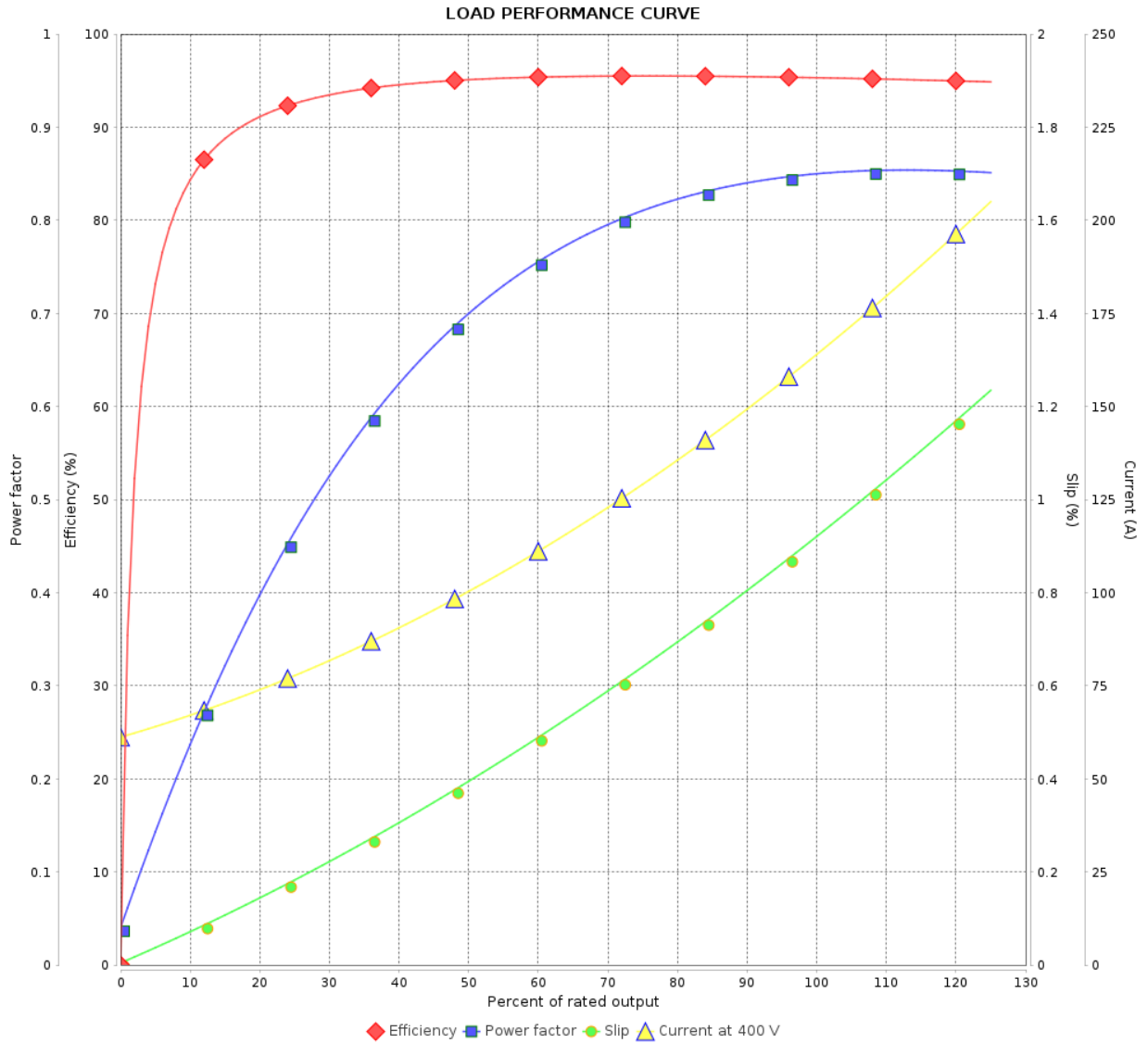
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 14168114



Performance : 400 V 50 Hz 4P IE3

Rated current : 160 A
LRC : 6.9
Rated torque : 61.0 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1486 rpm

Moment of inertia (J) : 2.81 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				

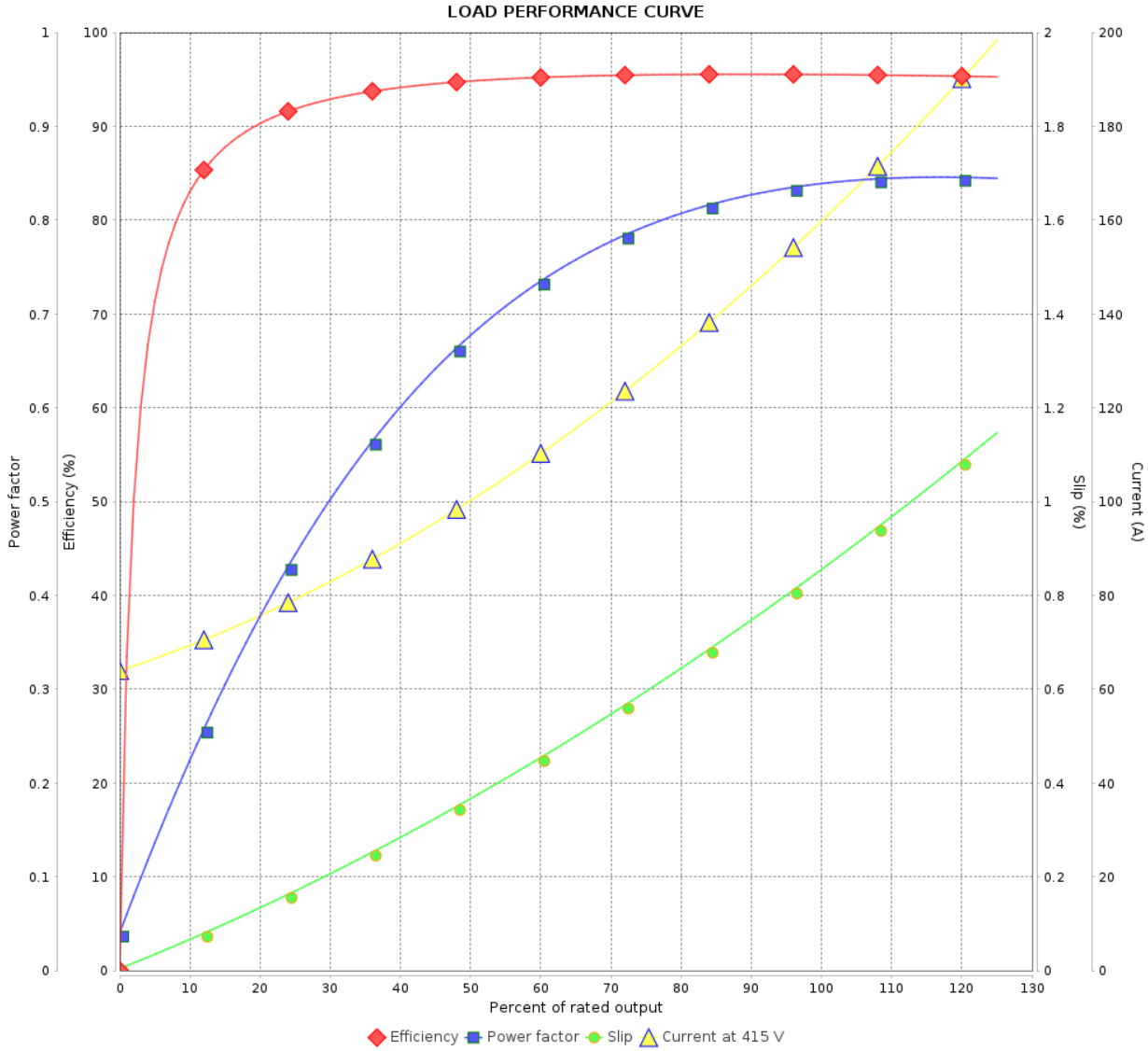
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium Product code : 14168114
 Efficiency Three-Phase



Performance : 415 V 50 Hz 4P IE3

Rated current : 156 A	Moment of inertia (J) : 2.81 kgm ²
LRC : 7.5	Duty cycle : Cont.(S1)
Rated torque : 61.0 kgfm	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.00
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 1487 rpm	Design : B

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

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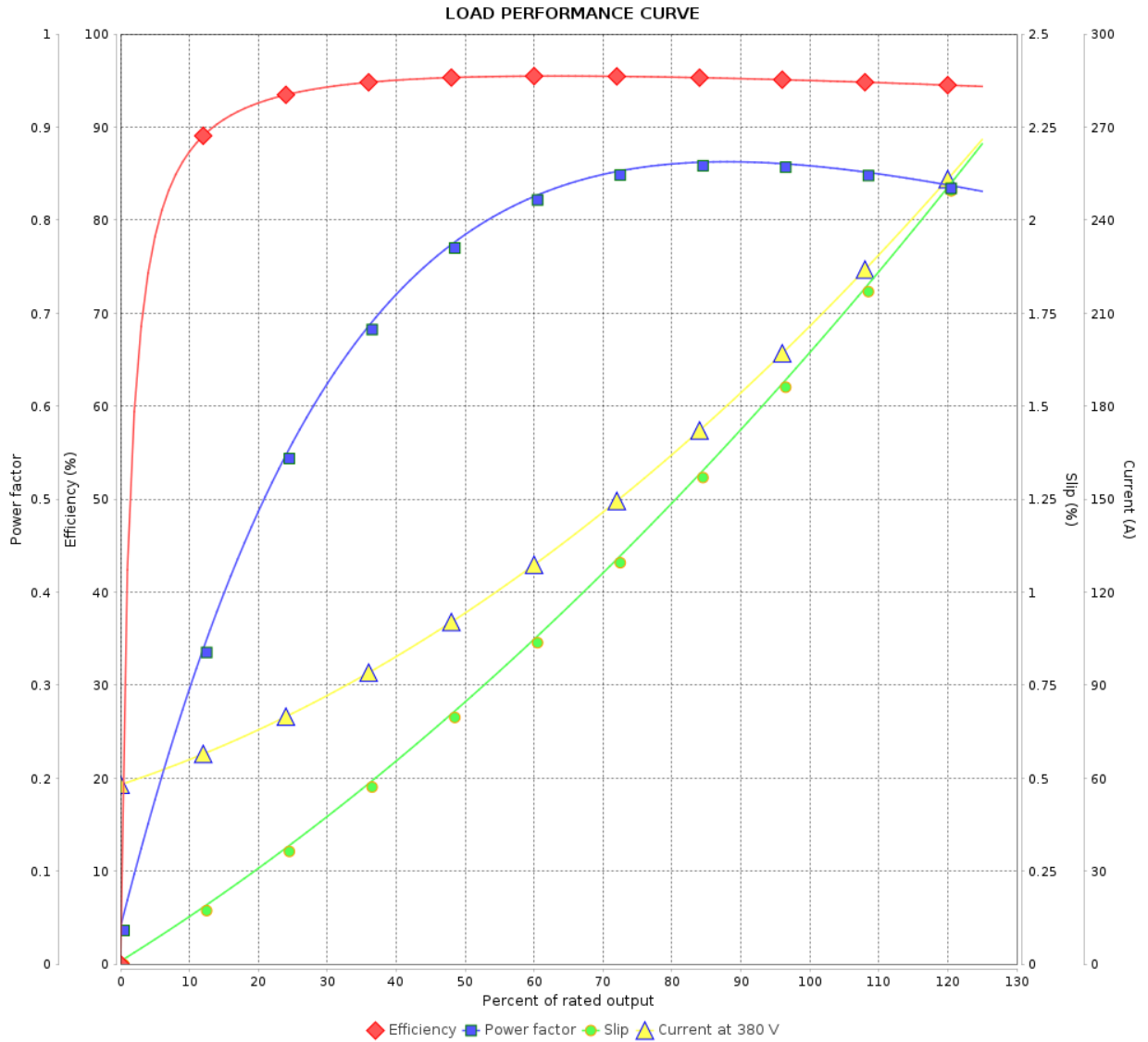
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 14168114



Performance : 380 V 50 Hz 4P IE2

Rated current : 205 A
 LRC : 5.8
 Rated torque : 73.8 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 2.81 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				
Checked by				
Date				
		Page	Revision	
		7 / 9		

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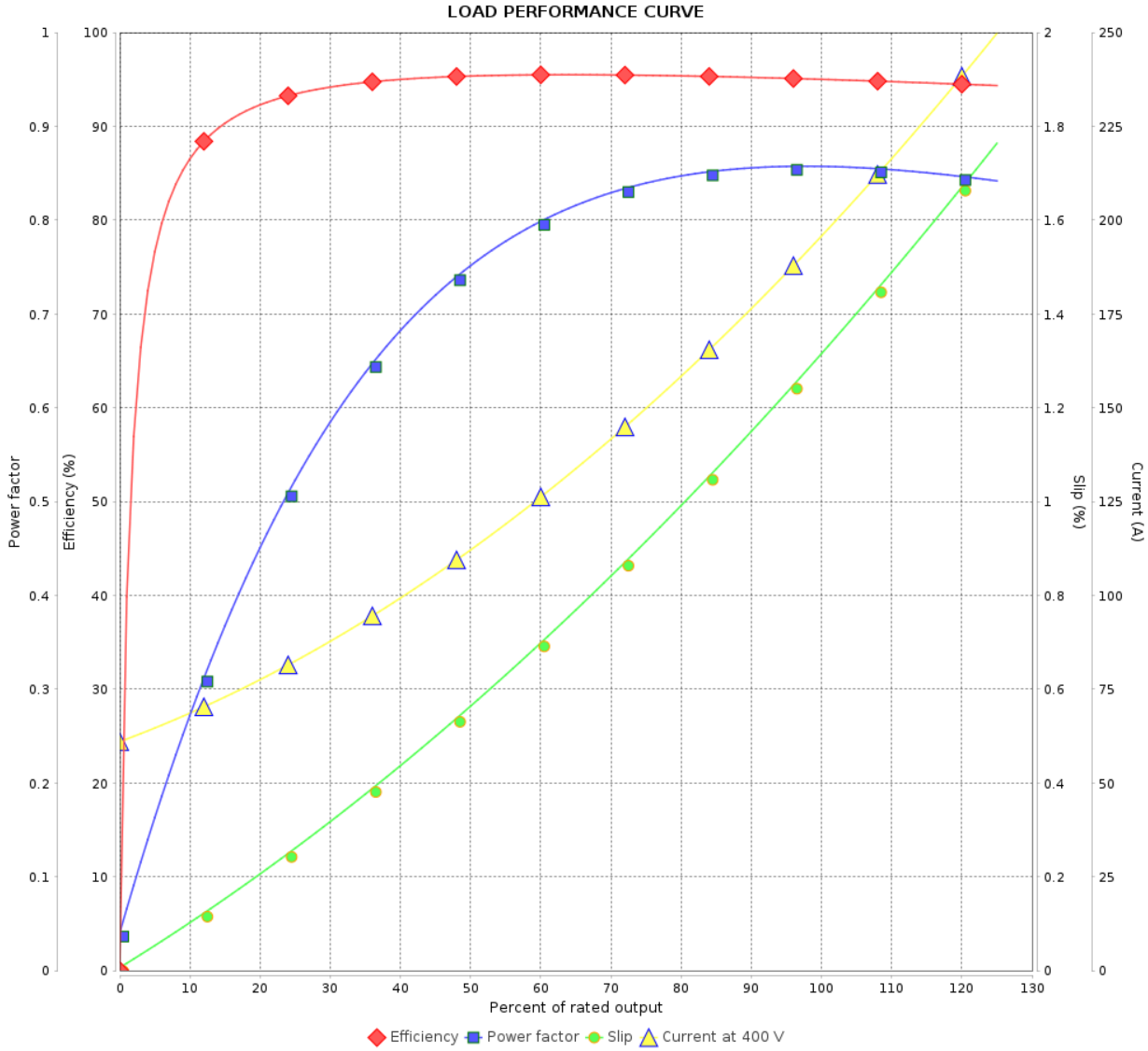
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 14168114



Performance : 400 V 50 Hz 4P IE2

Rated current : 194 A
 LRC : 5.8
 Rated torque : 73.6 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 2.81 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			8 / 9	
Date		27/10/2024		

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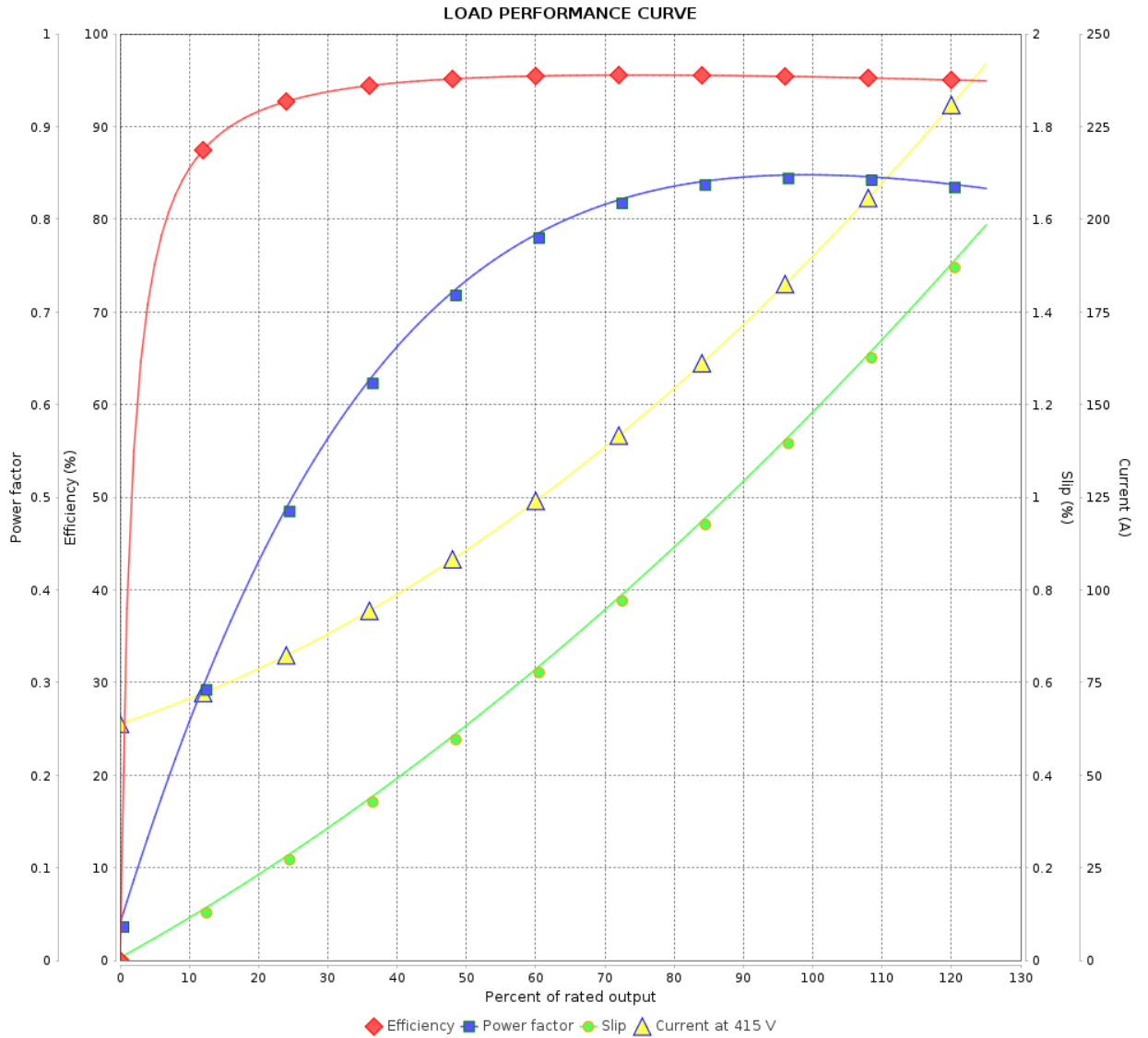
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Efficiency Three-Phase

Product code : 14168114

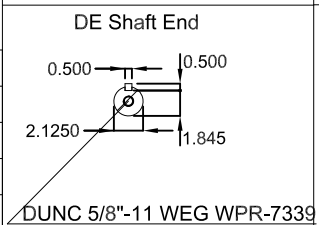
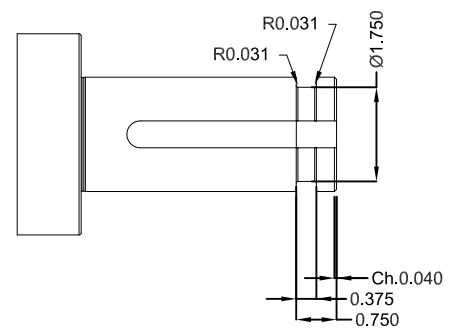
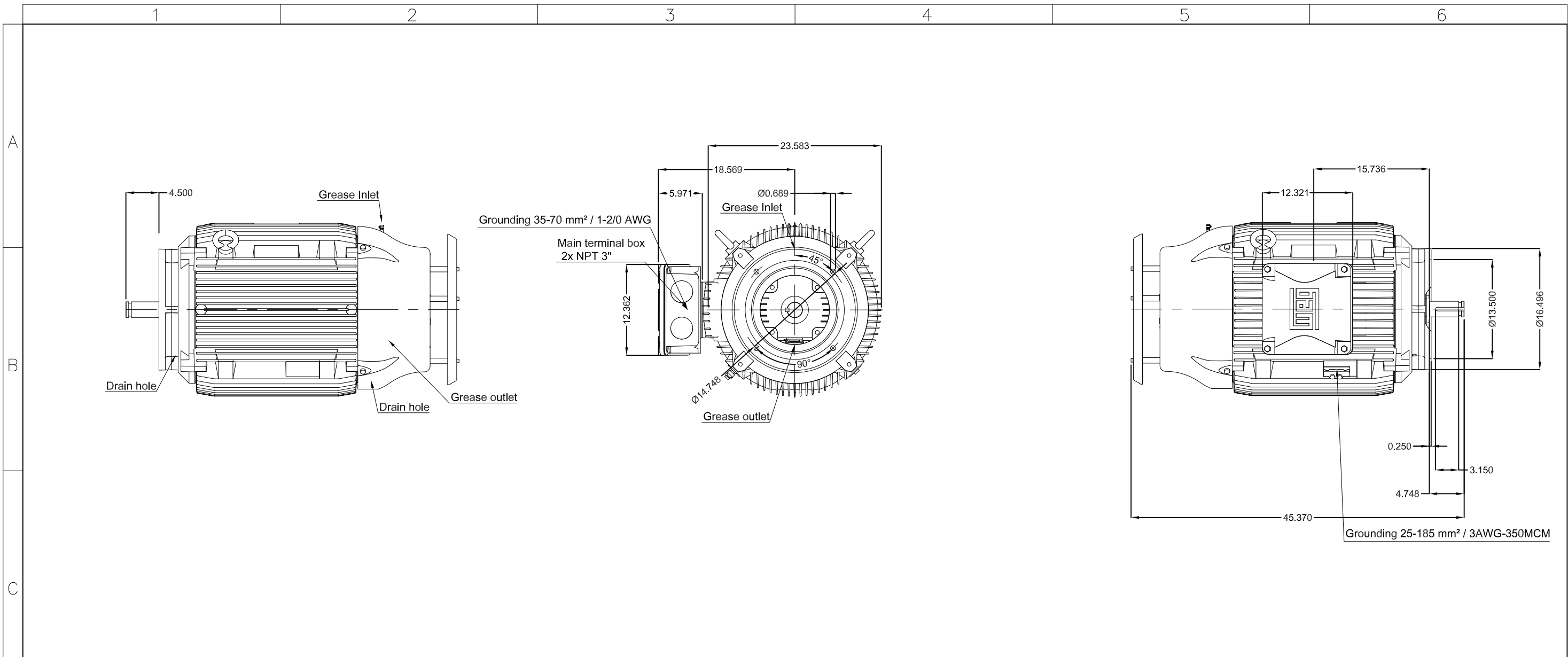


Performance : 415 V 50 Hz 4P IE3

Rated current : 189 A
 LRC : 6.3
 Rated torque : 73.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 1482 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

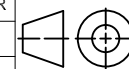
Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 9		
Date		27/10/2024		



Without vertical jackscrews
 Color RAL 5009
 Painting plan 203A
 Mounting NEMA W-6
 Mounting V1

150 HP 04 Poles 60 Hz A

ECM		LOC	SUMMARY OF MODIFICATIONS				HYBRISUSER	00	
EXECUTED	CHECKED	RELEASED	DATE	VER	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER								
CHECKED									
RELEASED									
REL. DATE									



THREE PH. MOTOR W22 P. BASE NEMA PREM. EFF.
 FRAME 444/5HP IP55 TEFC

PREVIEW
 WDD 00
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