

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943461

Frame : 364/5TC	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 : 447 kg
Protection degree : IP55	Moment of inertia (J) : 0.9798 kgm ²
Design : B	

Output [HP]	75	75	75	75
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	87.2	106	102	98.7
L. R. Amperes [A]	558	541	571	602
LRC [A]	6.4x(Code G)	5.1x(Code E)	5.6x(Code F)	6.1x(Code G)
No load current [A]	33.0	33.0	35.0	38.0
Rated speed [RPM]	1780	1475	1475	1480
Slip [%]	1.11	1.67	1.67	1.33
Rated torque [kgfm]	30.5	36.9	36.8	36.8
Locked rotor torque [%]	240	170	200	210
Breakdown torque [%]	260	200	220	240
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	105 K
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	67.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%			
	50%	94.5	94.5	94.1
	75%	95.0	94.1	94.5
	100%	95.4	93.6	94.5
Power Factor	25%			
	50%	0.68	0.75	0.67
	75%	0.78	0.82	0.78
	100%	0.83	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.7	3.7	3.7	3.7
	P3 (0,25;1,0)	3.4	3.4	3.4	3.4
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6314 C3	6314 C3	Max. traction : 768 kgf
Sealing :	Taconite	Taconite	Max. compression : 1215 kgf
	Labyrinth	Labyrinth	
Lubrication interval :	12000 h	12000 h	
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.

(2) Measured at 1m and with tolerance of +3dB(A).

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Notes

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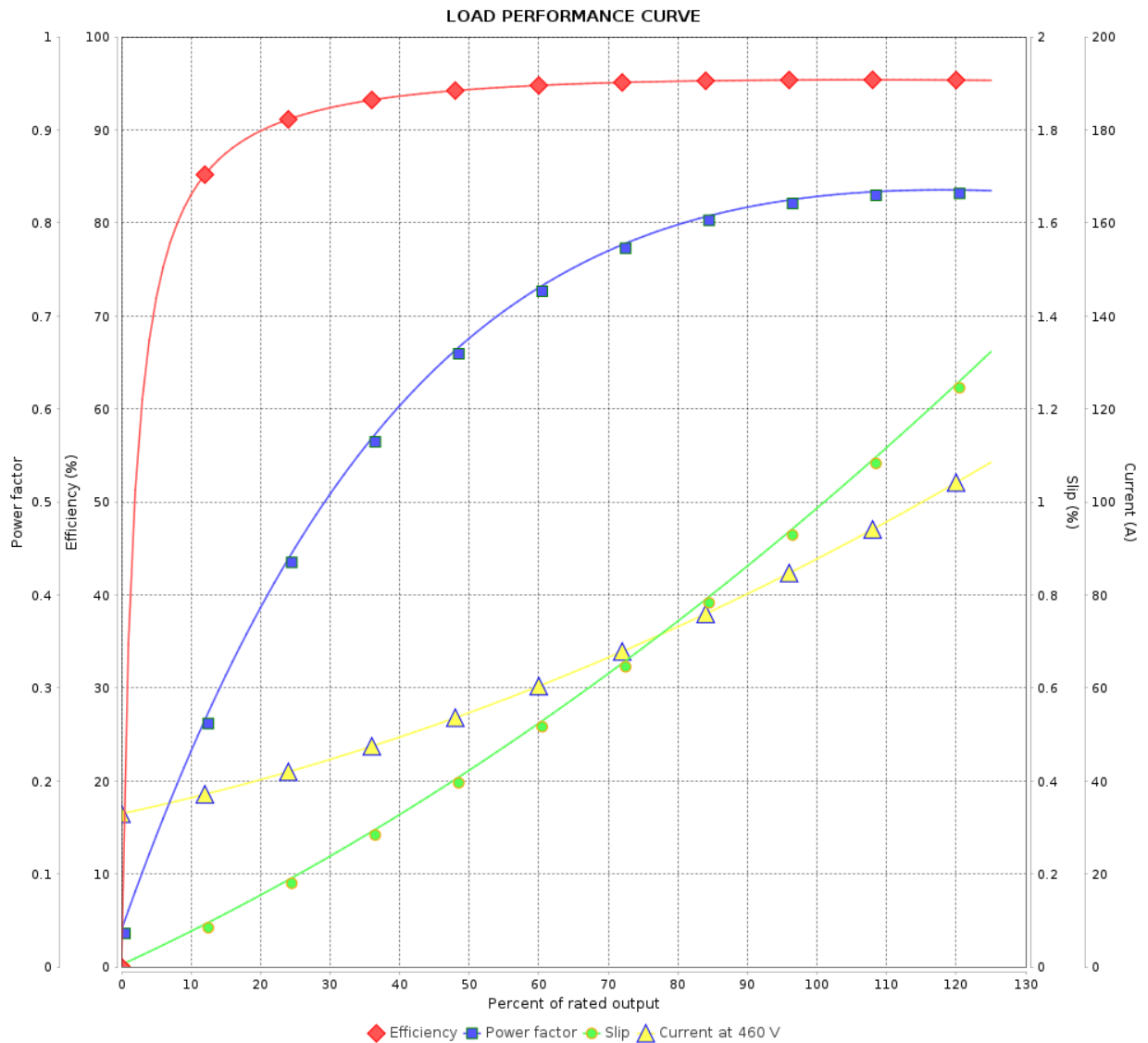
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

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Performance : 460 V 60 Hz 4P

Rated current : 87.2 A
LRC : 6.4
Rated torque : 30.5 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1780 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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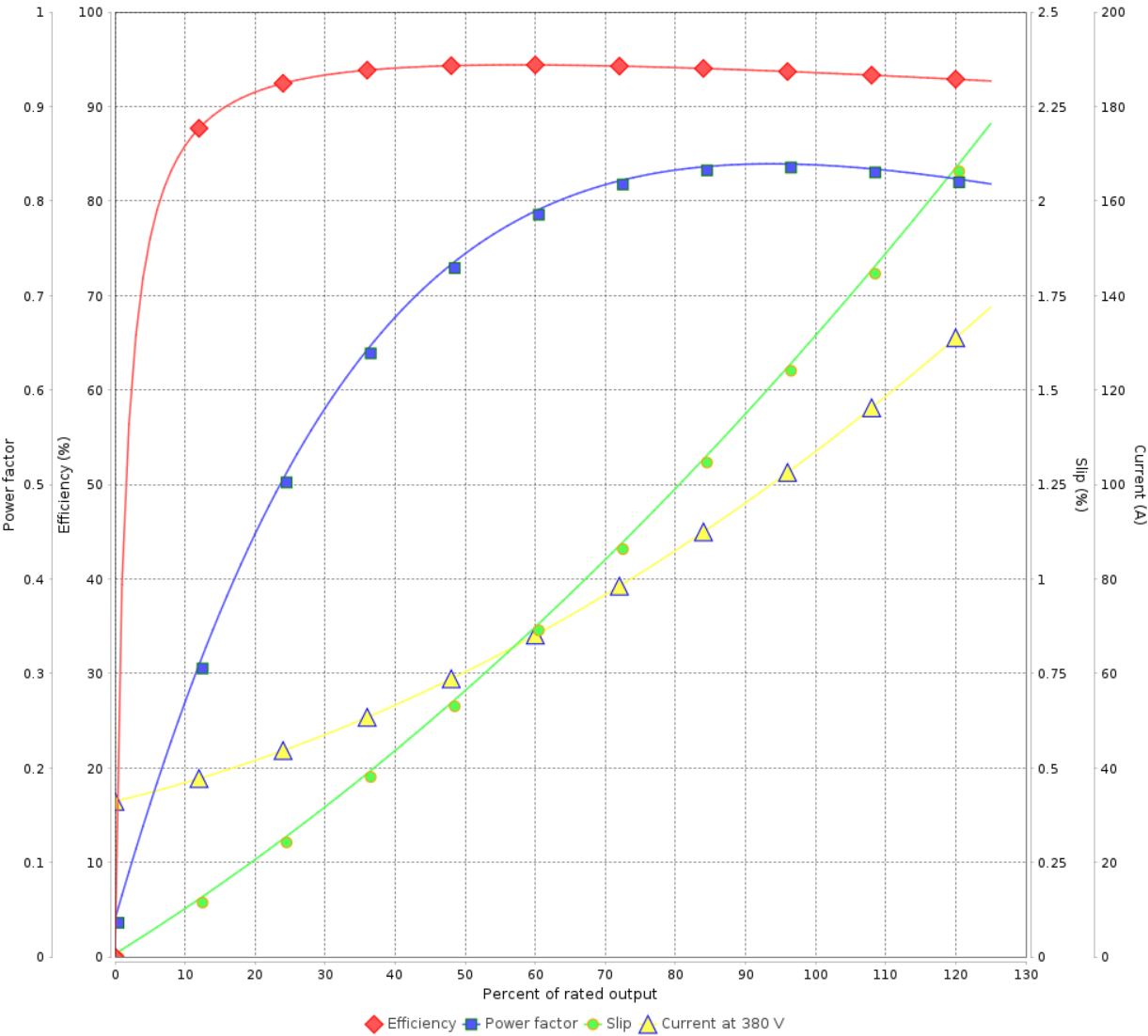
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Performance : 380 V 50 Hz 4P IE2			
Rated current	: 106 A	Moment of inertia (J)	: 0.9798 kgm ²
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 36.9 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 1475 rpm	Design	: B

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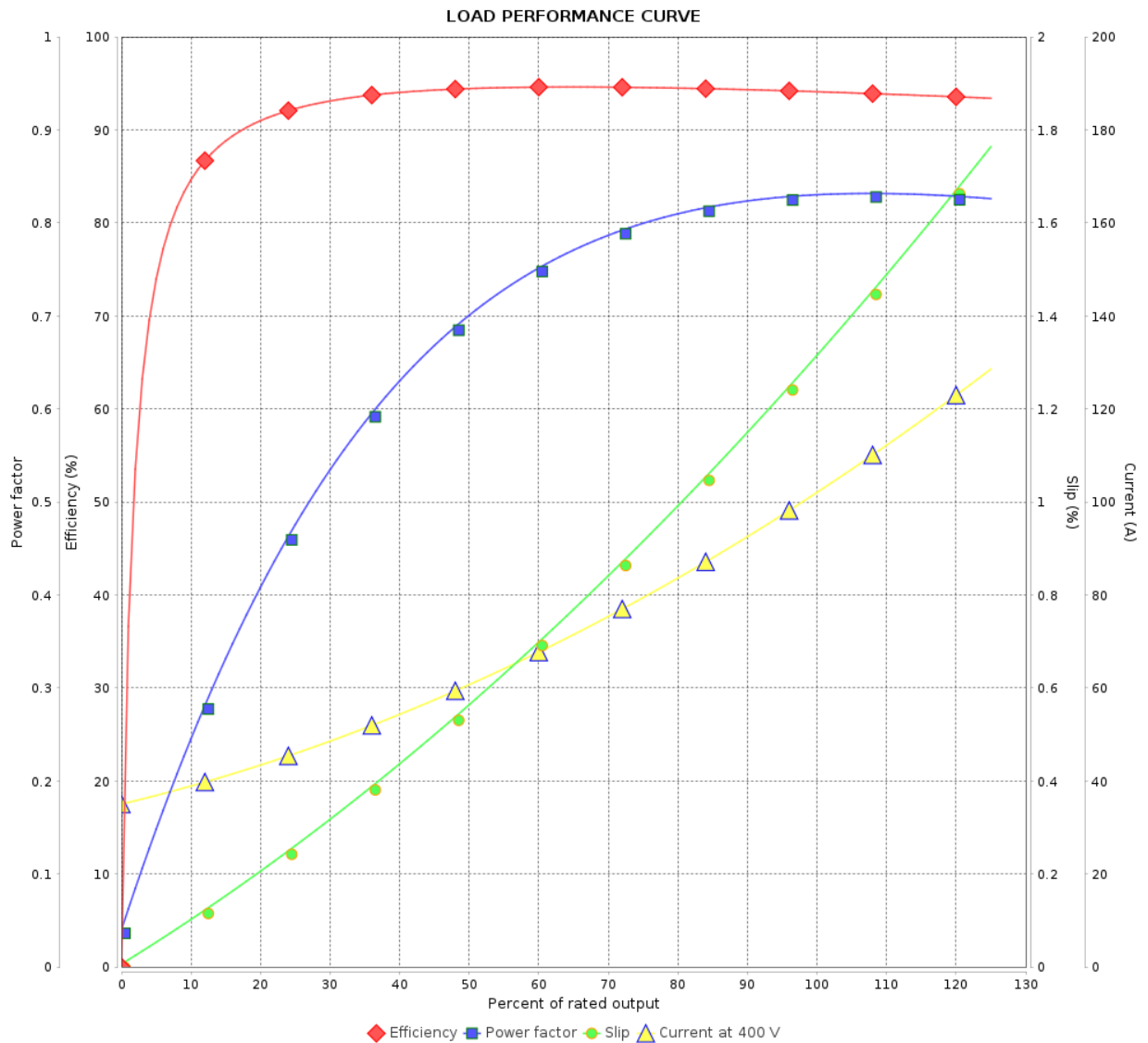
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11943461



Performance : 400 V 50 Hz 4P IE2

Rated current : 102 A
LRC : 5.6
Rated torque : 36.8 kgfm
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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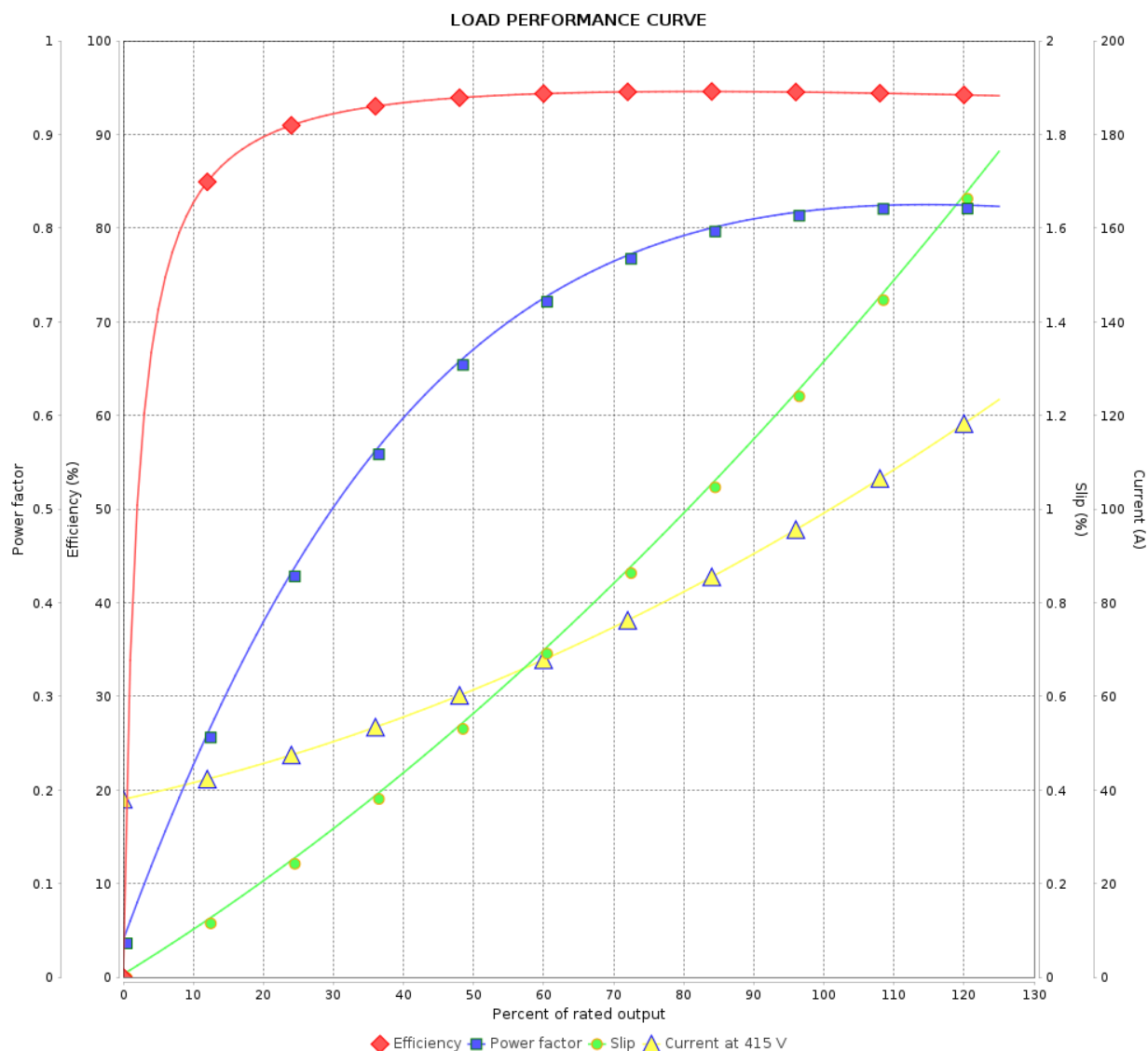
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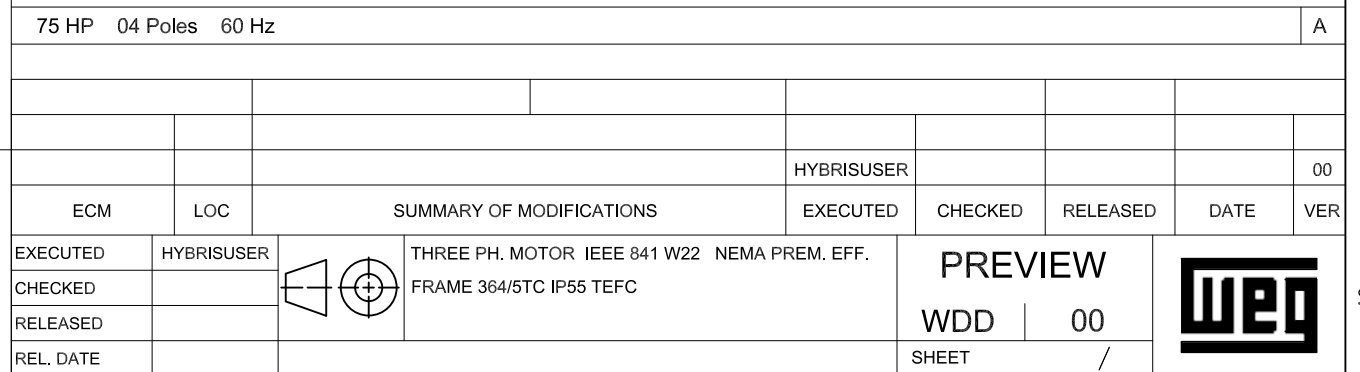
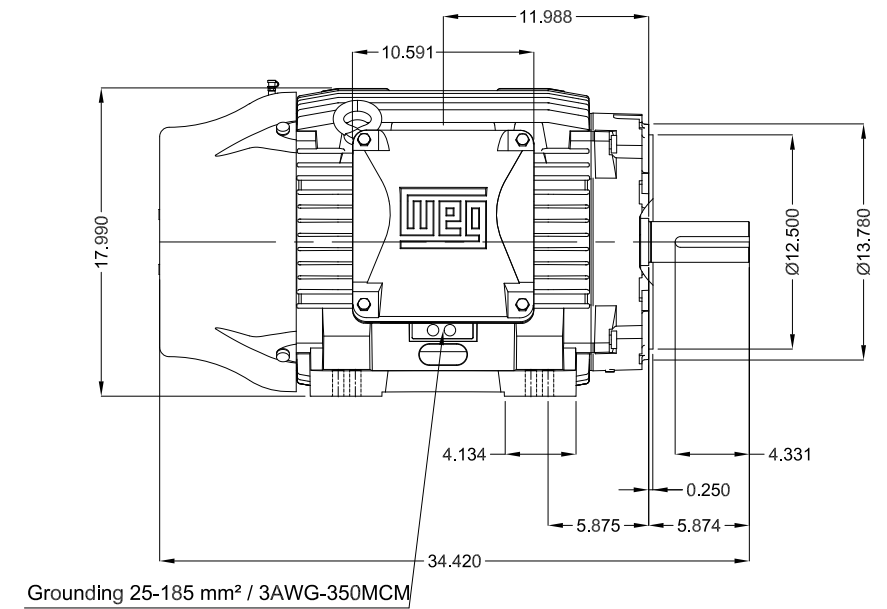


Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
LRC : 6.1
Rated torque : 36.8 kgfm
Locked rotor torque : 210 %
Breakdown torque : 240 %
Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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Dimensions in inches

A3