

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14484696

Frame : 284JM	Cooling method : IC01 - ODP
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 : 147 kg
Protection degree : IP23	Moment of inertia (J) : 0.0669 kgm ²
Design : B	

Output [HP]	30	25	25	25
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	70.0/35.0	35.0	34.0	33.6
L. R. Amperes [A]	441/221	217	228	232
LRC [A]	6.3x(Code G)	6.2x(Code G)	6.7x(Code H)	6.9x(Code H)
No load current [A]	25.0/12.5	11.7	13.5	15.3
Rated speed [RPM]	3545	2940	2950	2955
Slip [%]	1.53	2.00	1.67	1.50
Rated torque [kgfm]	6.14	6.17	6.15	6.15
Locked rotor torque [%]	180	170	190	200
Breakdown torque [%]	260	240	260	270
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	12s (cold) 7s (hot)	12s (cold) 7s (hot)	16s (cold) 9s (hot)
Noise level ²	73.0 dB(A)			
Efficiency (%)	25%			
	50%	90.2	89.7	89.8
	75%	91.7	90.7	90.8
	100%	91.7	92.4	92.4
Power Factor	25%			
	50%	0.73	0.75	0.66
	75%	0.82	0.83	0.77
	100%	0.86	0.87	0.83

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6311 Z C3	6211 Z C3	Max. traction
Sealing :	Without	Without	Max. compression
	Bearing Seal	Bearing Seal	
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	18 g	11 g	
Lubricant type :	Mobil Polyrex EM		

Notes

USABLE @208V 77.4A SF 1.15 SFA 89.0A

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.

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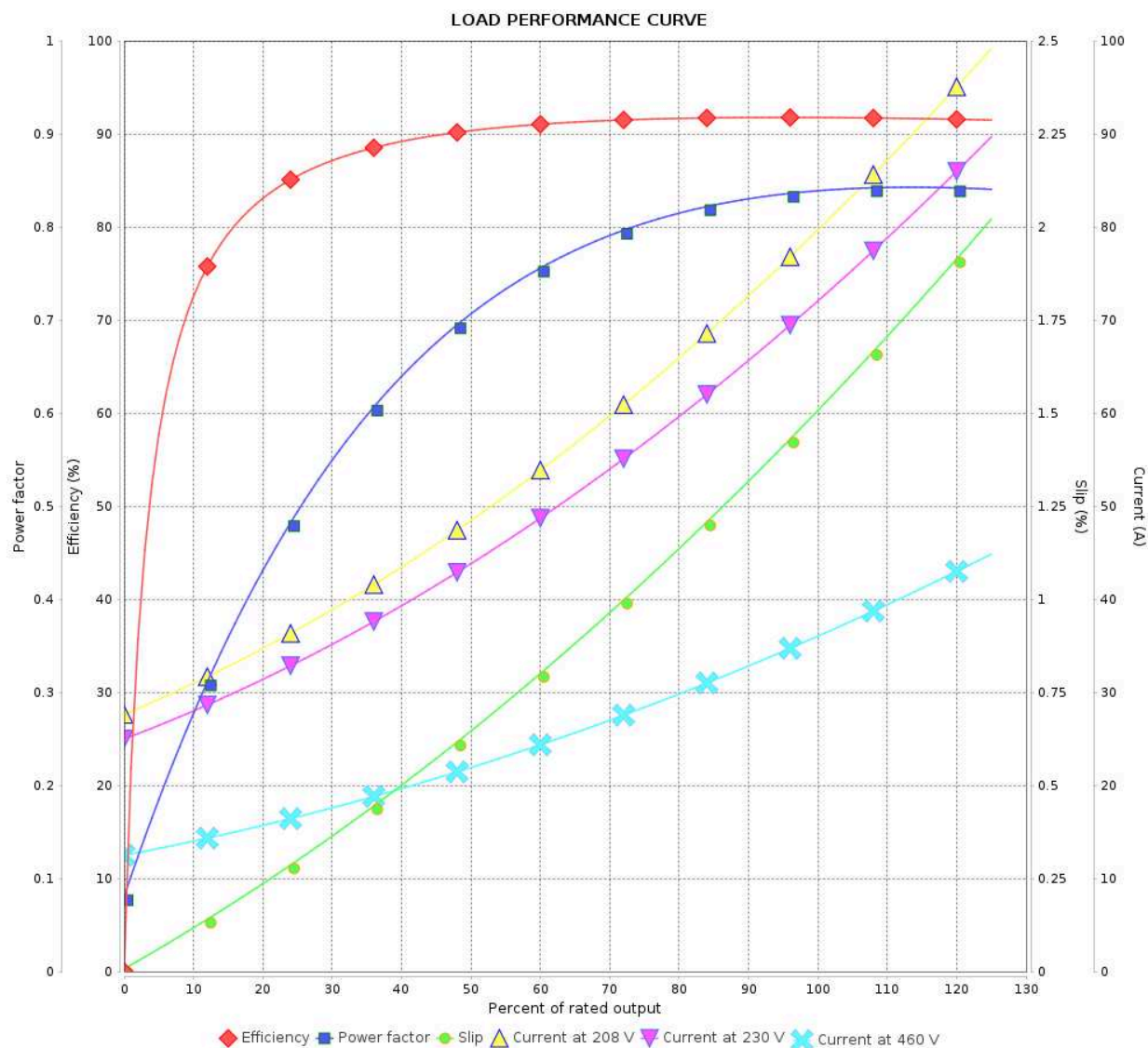
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14484696



Performance : 230/460 V 60 Hz 2P

Rated current : 70.0/35.0 A
LRC : 6.3
Rated torque : 6.14 kgfm
Locked rotor torque : 180 %
Breakdown torque : 260 %
Rated speed : 3545 rpm

Moment of inertia (J) : 0.0669 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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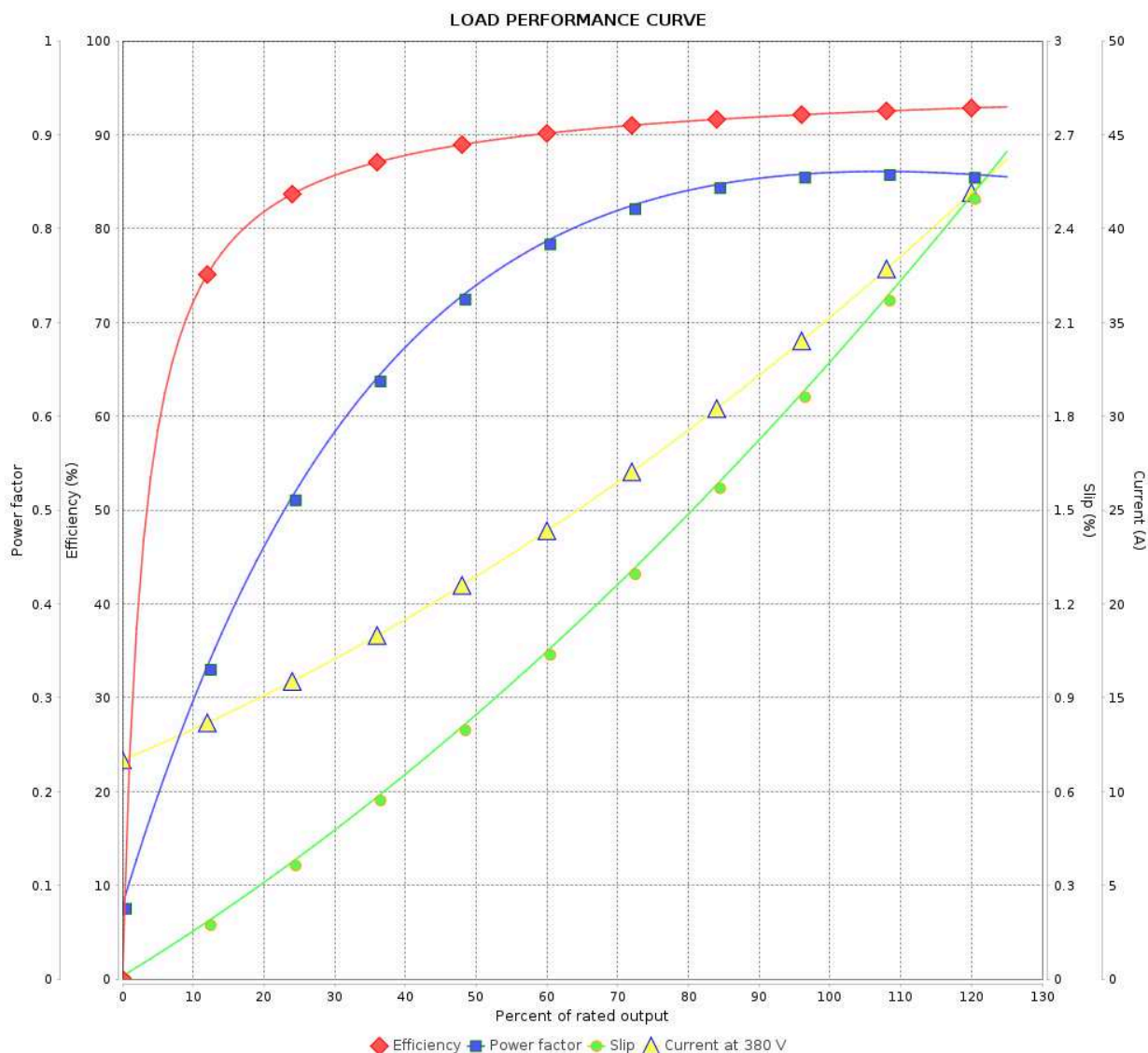
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14484696



Performance : 380 V 50 Hz 2P IE3

Rated current : 35.0 A
LRC : 6.2
Rated torque : 6.17 kgfm
Locked rotor torque : 170 %
Breakdown torque : 240 %
Rated speed : 2940 rpm

Moment of inertia (J) : 0.0669 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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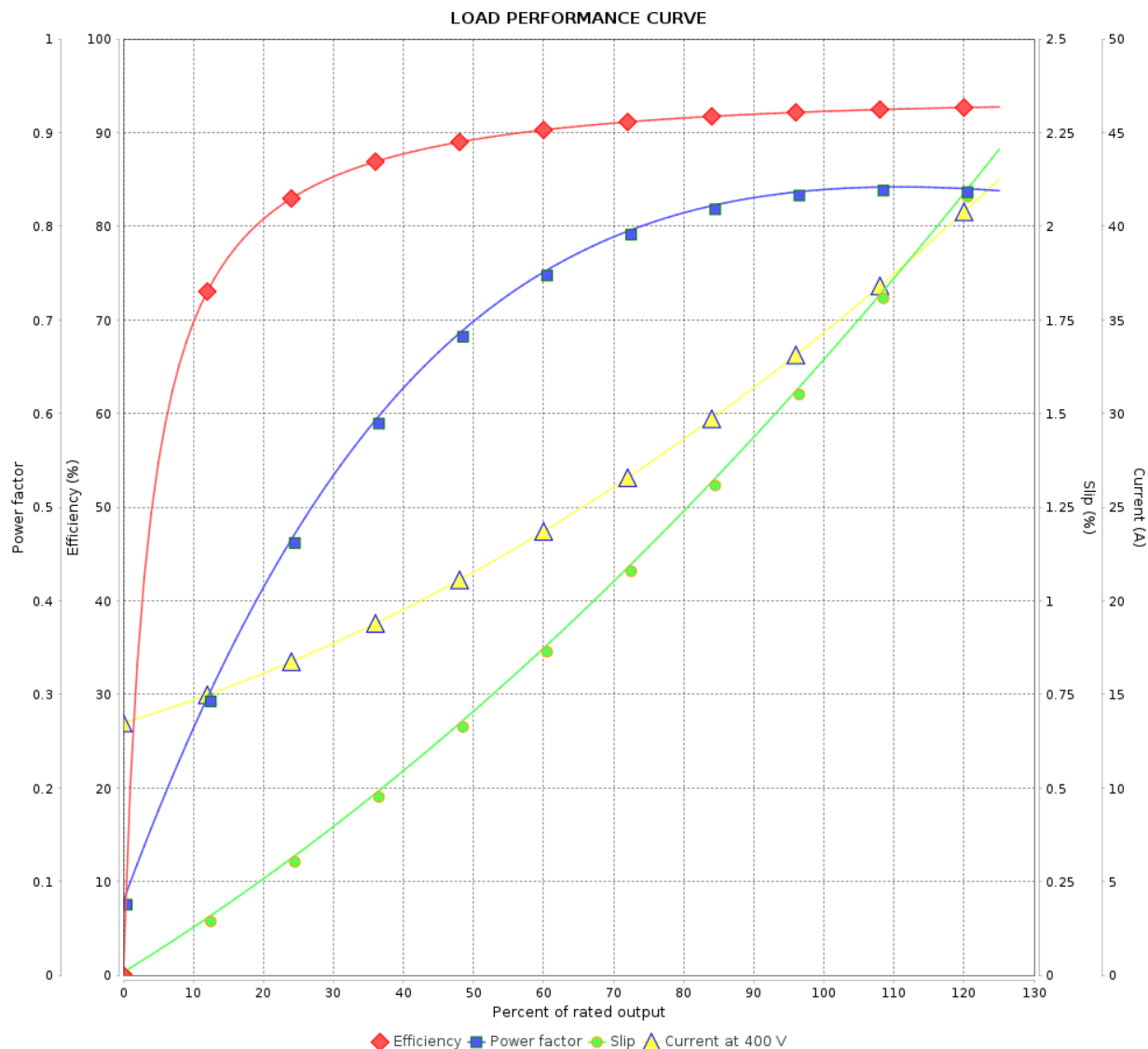
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14484696



Performance : 400 V 50 Hz 2P IE3

Rated current : 34.0 A
LRC : 6.7
Rated torque : 6.15 kgfm
Locked rotor torque : 190 %
Breakdown torque : 260 %
Rated speed : 2950 rpm

Moment of inertia (J) : 0.0669 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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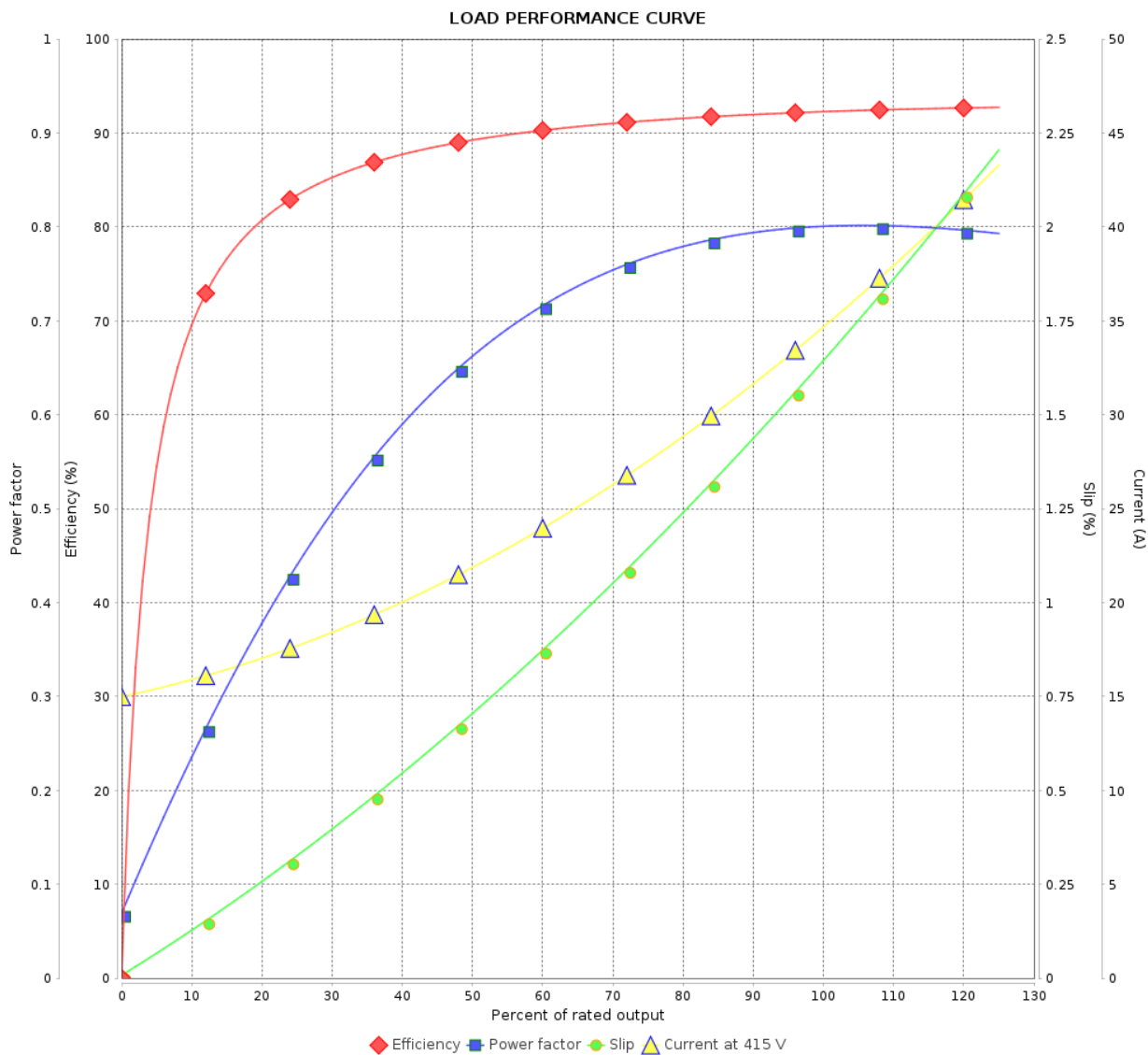
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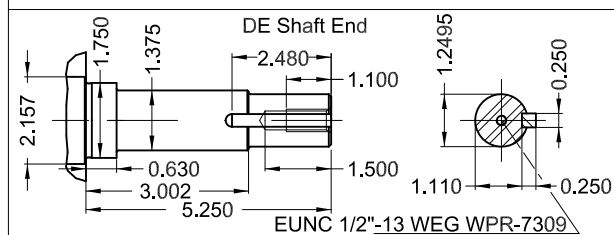
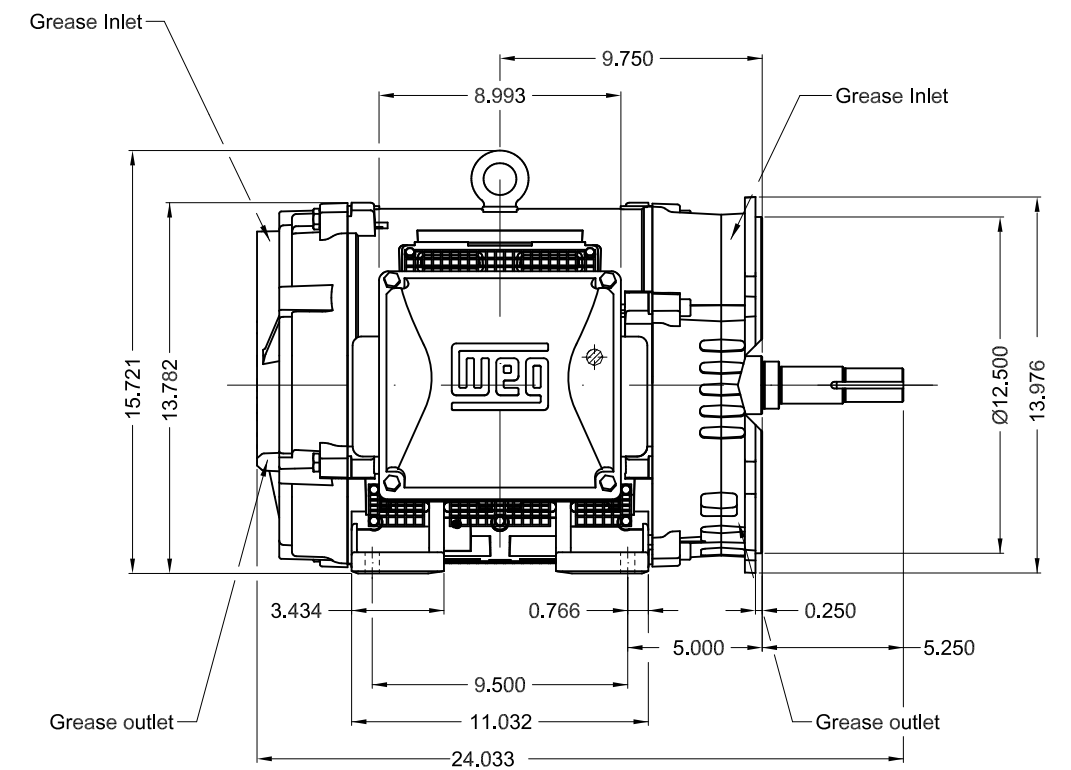
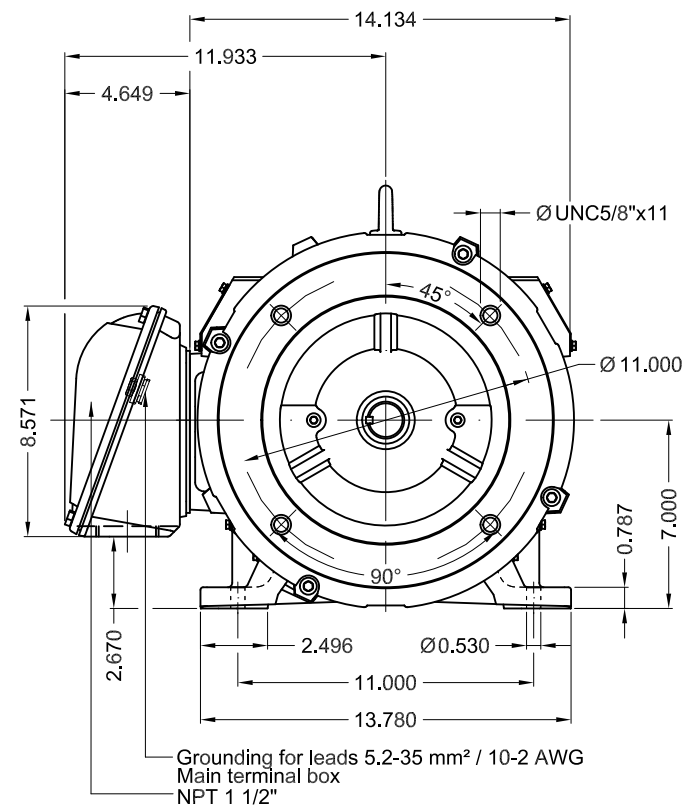


Performance : 415 V 50 Hz 2P IE3

Rated current : 33.6 A
LRC : 6.9
Rated torque : 6.15 kgfm
Locked rotor torque : 200 %
Breakdown torque : 270 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.0669 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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30 HP 02 Poles 60 Hz										A
								1:7		
						HYBRISUSER			00	
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE NEMA PREMIUM EFF FRAME 284JM IP23 ODP				PREVIEW WDD 00			
CHECKED										
RELEASED										
REL. DATE		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				