

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium Efficiency Three-Phase Product code : 11833190

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	: 144 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.0795 kgm ²
Design	: B		

Output [HP]	30	25	25	25	30	30	30
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]	70.0/35.0	35.0	34.0	33.6	42.4	40.9	40.2
L. R. Amperes [A]	441/221	231	238	225	225	237	261
LRC [A]	6.3x(Code G)	6.6x(Code G)	7.0x(Code H)	6.7x(Code H)	5.3x(Code E)	5.8x(Code F)	6.5x(Code G)
No load current [A]	25.8/12.9	12.0	13.0	14.0	11.5	12.5	14.0
Rated speed [RPM]	3550	2945	2950	2955	2925	2935	2945
Slip [%]	1.39	1.83	1.67	1.50	2.50	2.17	1.83
Rated torque [kgfm]	6.13	6.16	6.15	6.14	7.44	7.42	7.39
Locked rotor torque [%]	180	170	190	200	160	180	200
Breakdown torque [%]	260	240	260	270	180	200	220
Service factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)
Noise level ²	72.0 dB(A)						
Efficiency (%)	25%						
	50%	90.2	89.7	89.8	89.8	90.8	91.0
	75%	91.7	90.7	90.8	90.8	90.8	91.0
	100%	91.7	92.4	92.4	92.4	89.5	90.7
Power Factor	25%						
	50%	0.73	0.75	0.70	0.66	0.80	0.71
	75%	0.82	0.83	0.80	0.77	0.86	0.83
	100%	0.86	0.87	0.85	0.83	0.88	0.84

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6311 Z C3	: 6211 Z C3	Max. traction : 160 kgf
Sealing	: Without	: Without	Max. compression : 304 kgf
	Bearing Seal	Bearing Seal	
Lubrication interval	: 20000 h	: 20000 h	
Lubricant amount	: 18 g	: 11 g	
Lubricant type	: Mobil Polyrex EM		

Notes

USABLE @208V 76.7A SF 1.15 SFA 88.2A

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

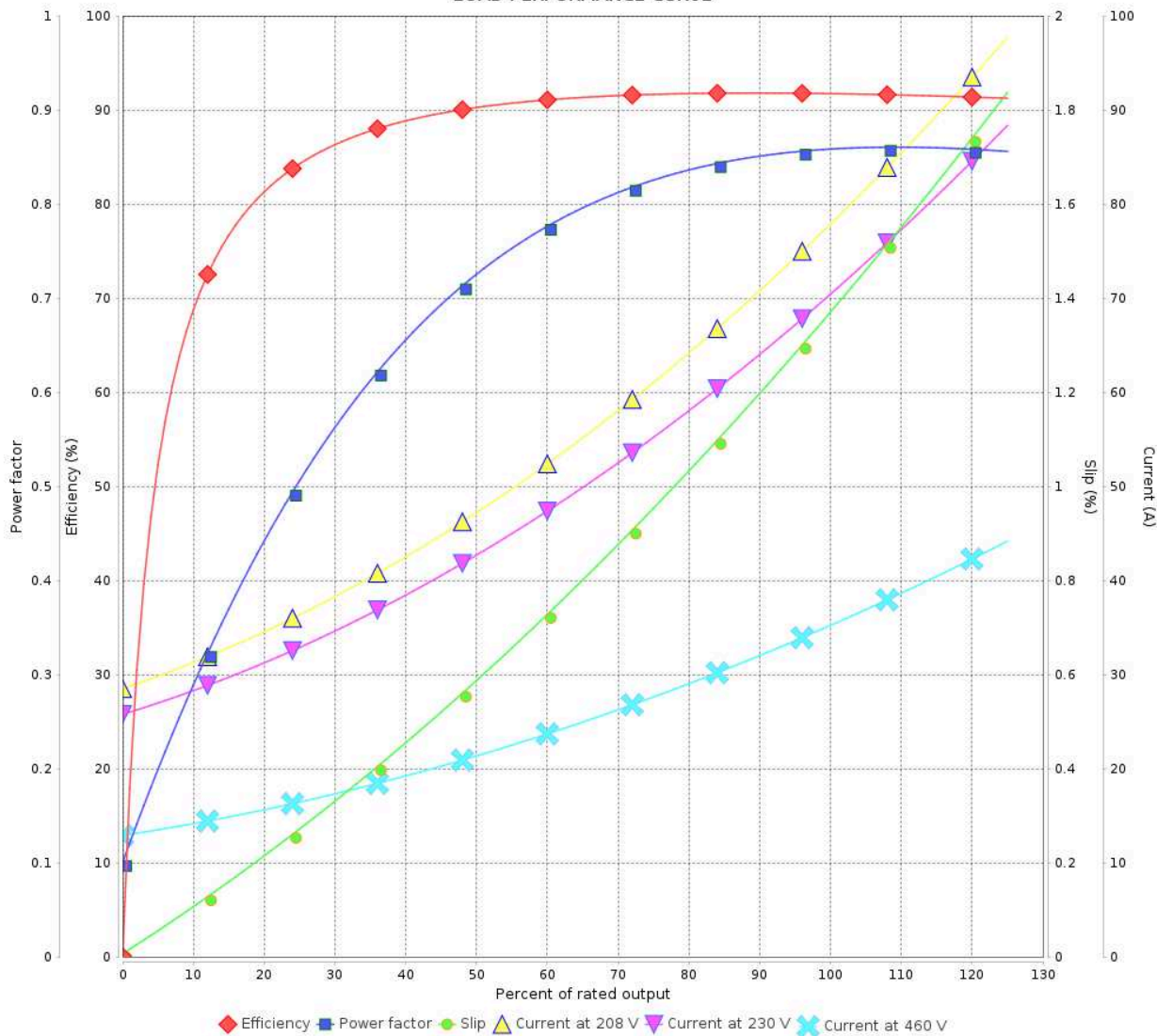


Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190

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Performance : 230/460 V 60 Hz 2P

Rated current : 70.0/35.0 A
LRC : 6.3
Rated torque : 6.13 kgfm
Locked rotor torque : 180 %
Breakdown torque : 260 %
Rated speed : 3550 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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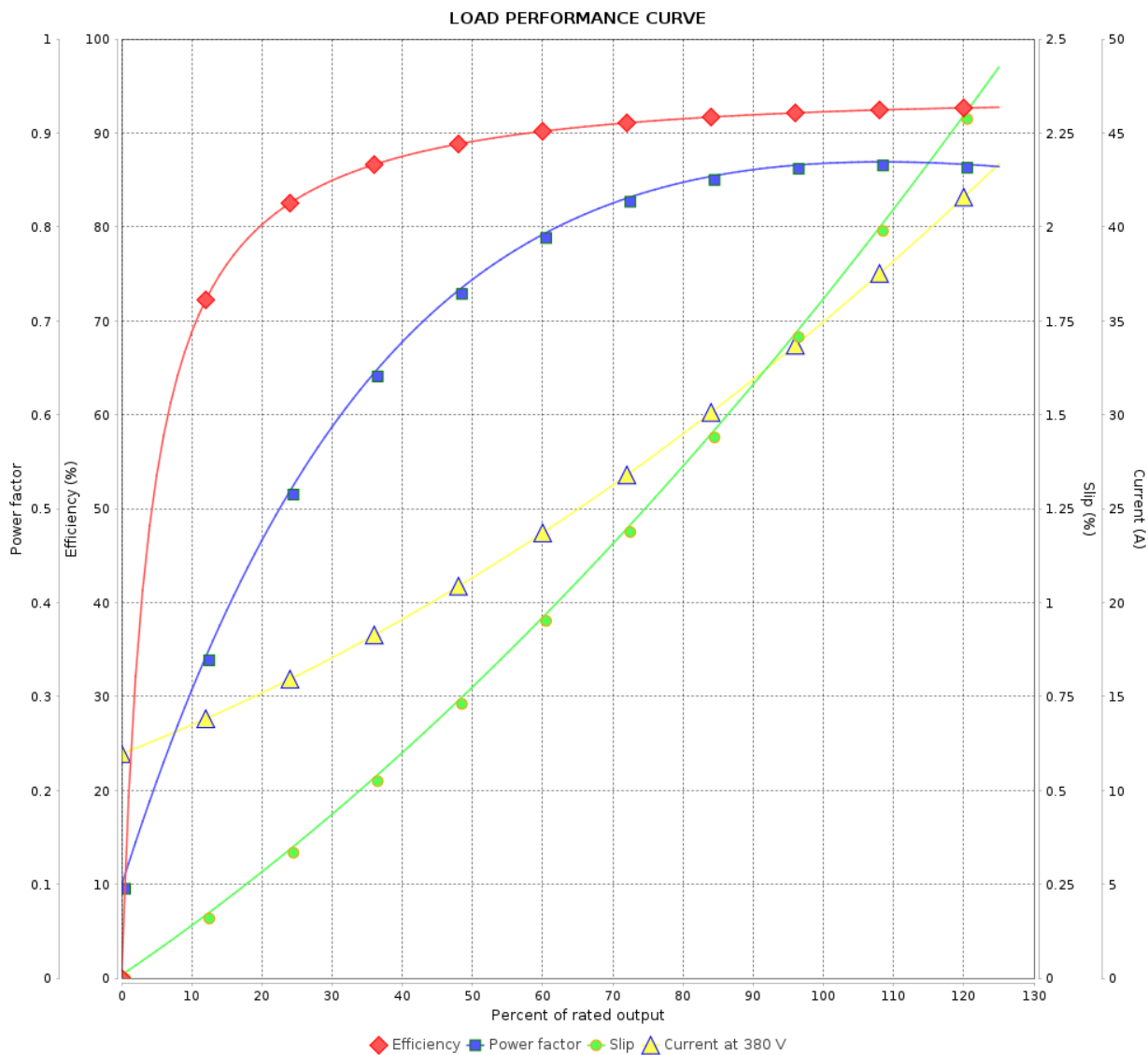
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190



Performance : 380 V 50 Hz 2P IE3

Rated current : 35.0 A
LRC : 6.6
Rated torque : 6.16 kgfm
Locked rotor torque : 170 %
Breakdown torque : 240 %
Rated speed : 2945 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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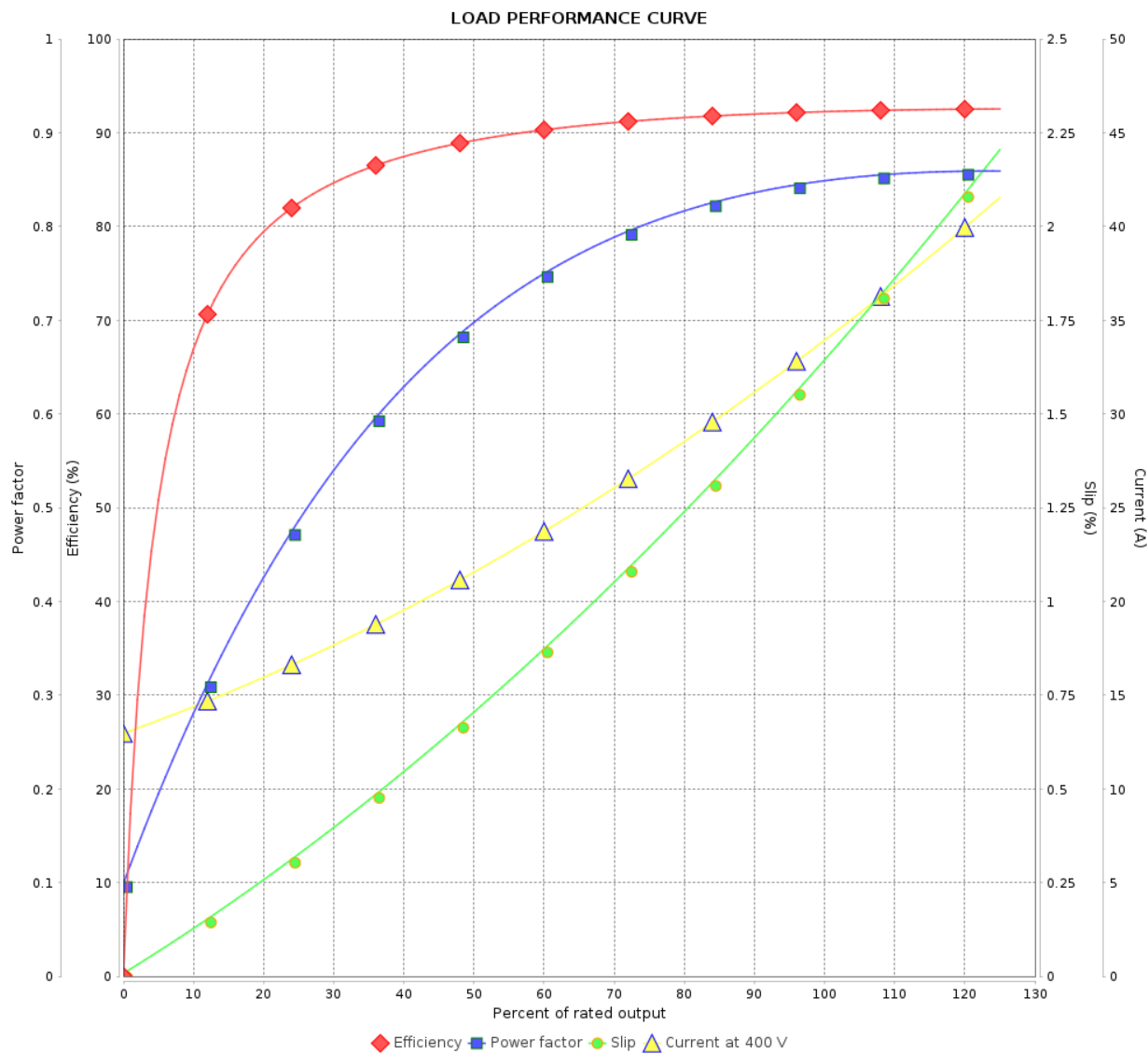
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190



Performance : 400 V 50 Hz 2P IE3

Rated current : 34.0 A
LRC : 7.0
Rated torque : 6.15 kgfm
Locked rotor torque : 190 %
Breakdown torque : 260 %
Rated speed : 2950 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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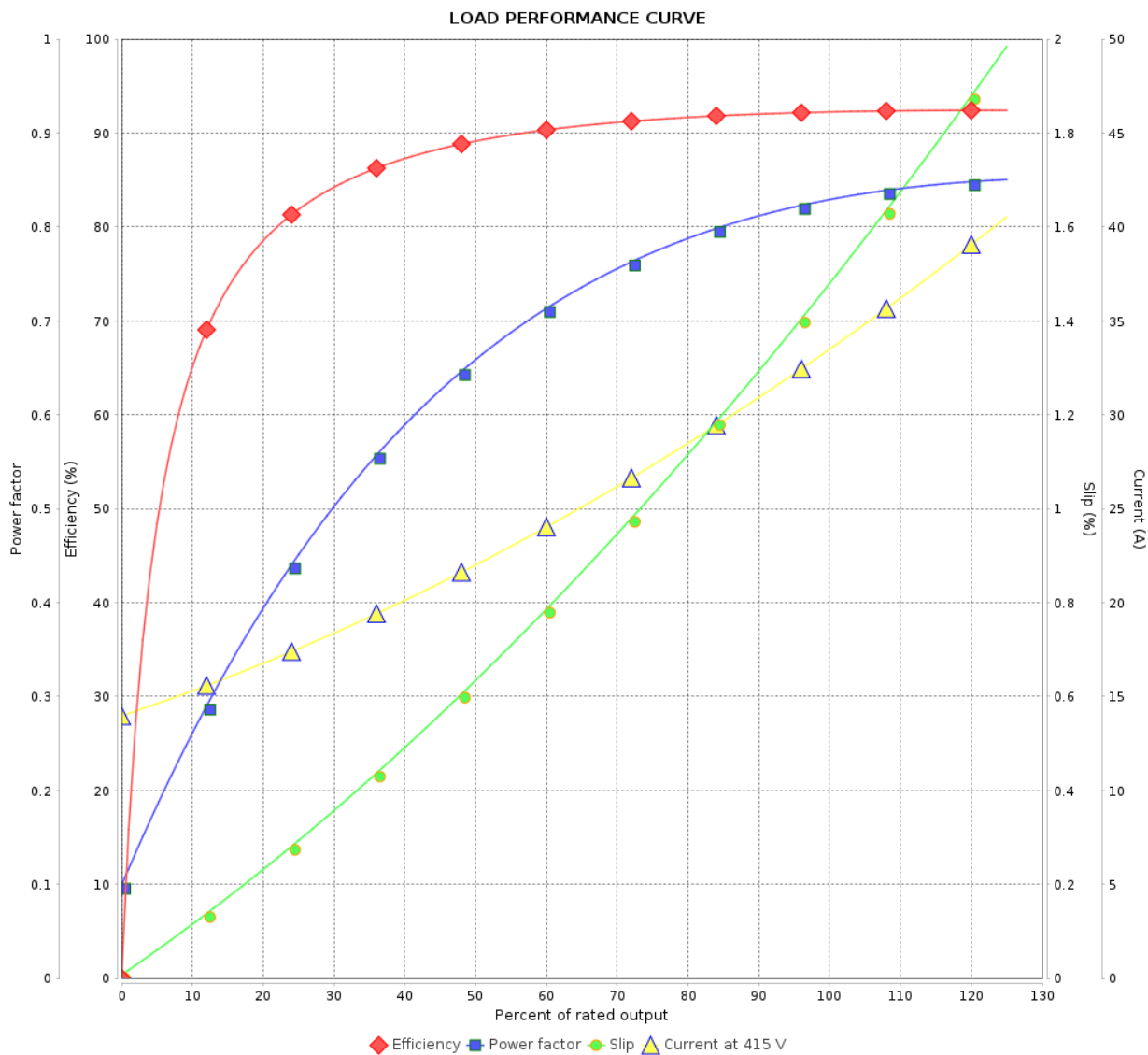
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190



Performance : 415 V 50 Hz 2P IE3

Rated current : 33.6 A
LRC : 6.7
Rated torque : 6.14 kgfm
Locked rotor torque : 200 %
Breakdown torque : 270 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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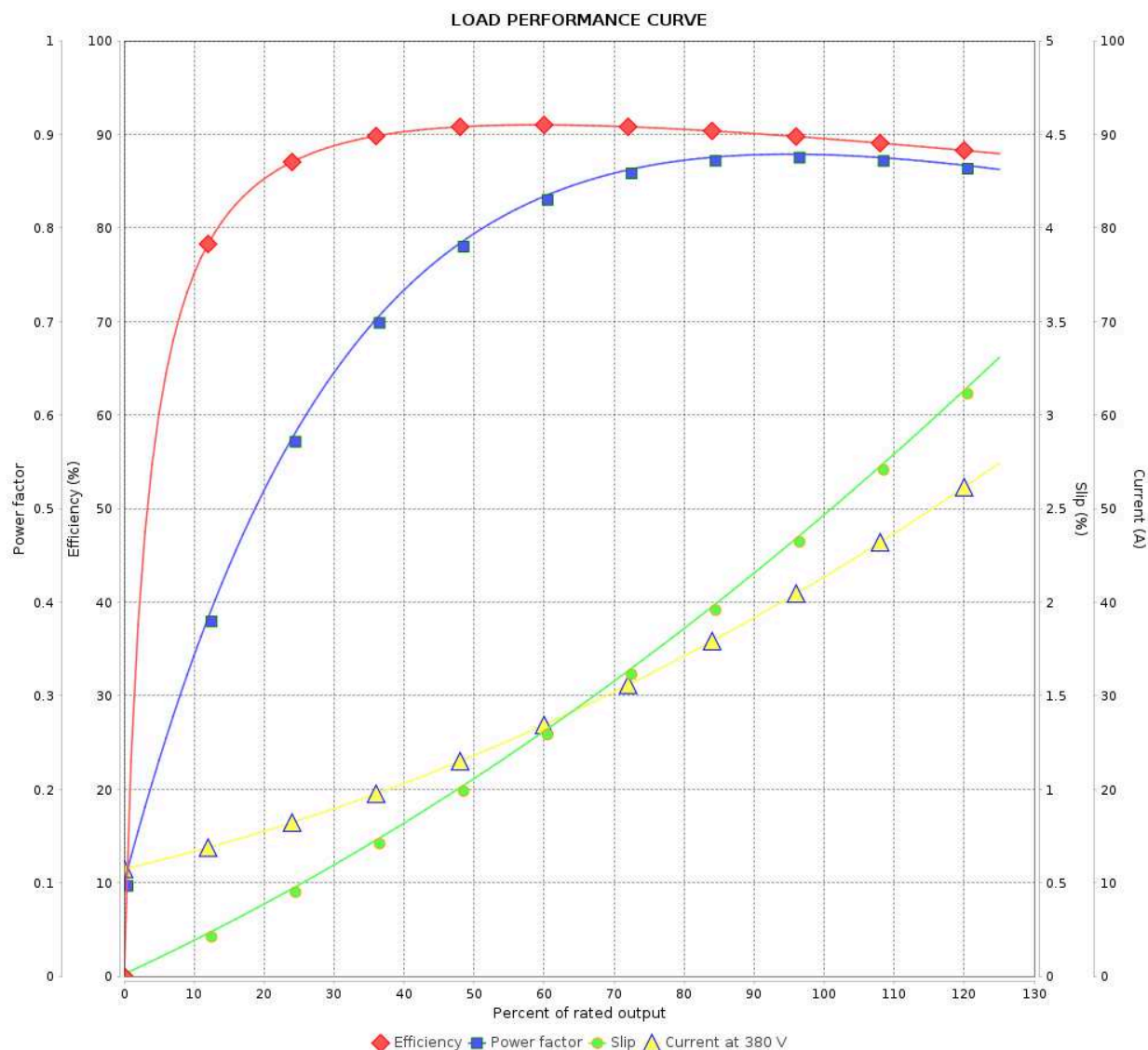
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190



Performance : 380 V 50 Hz 2P

Rated current : 42.4 A
LRC : 5.3
Rated torque : 7.44 kgfm
Locked rotor torque : 160 %
Breakdown torque : 180 %
Rated speed : 2925 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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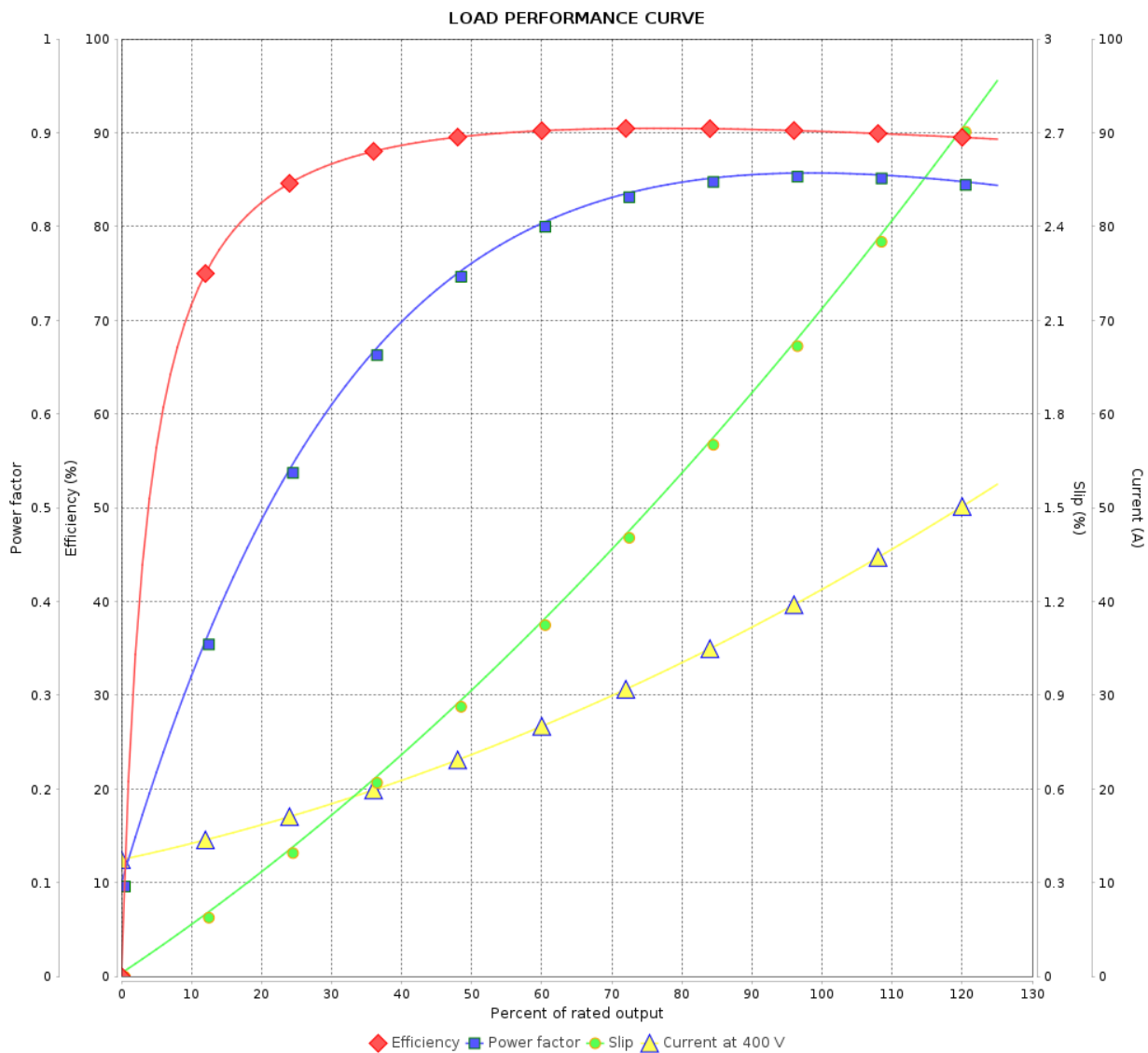
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA
Premium Efficiency Three-Phase

Product code : 11833190



Performance : 400 V 50 Hz 2P IE1

Rated current : 40.9 A
LRC : 5.8
Rated torque : 7.42 kgfm
Locked rotor torque : 180 %
Breakdown torque : 200 %
Rated speed : 2935 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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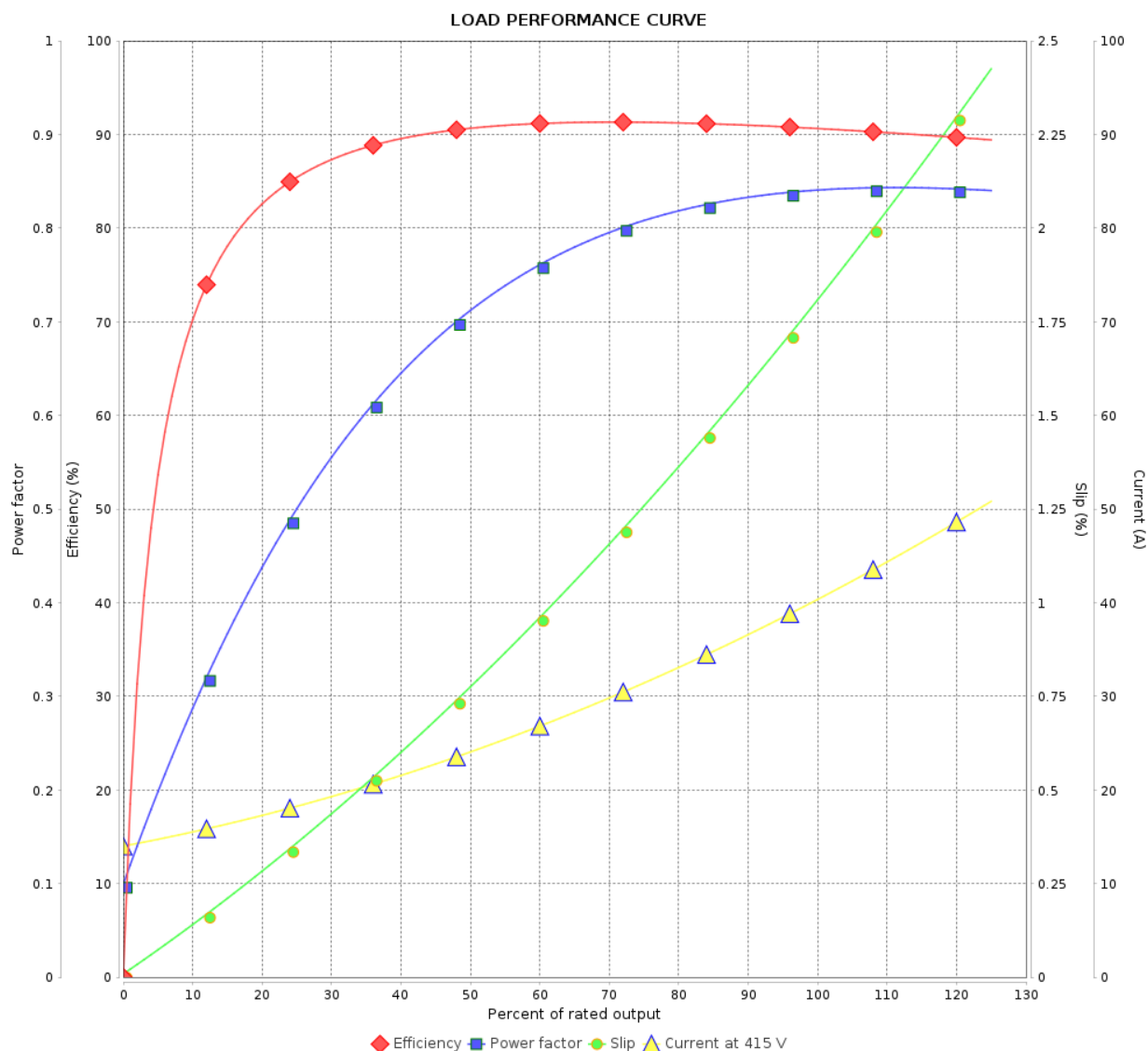
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Product code : 11833190

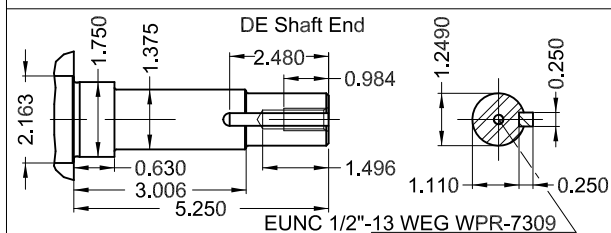
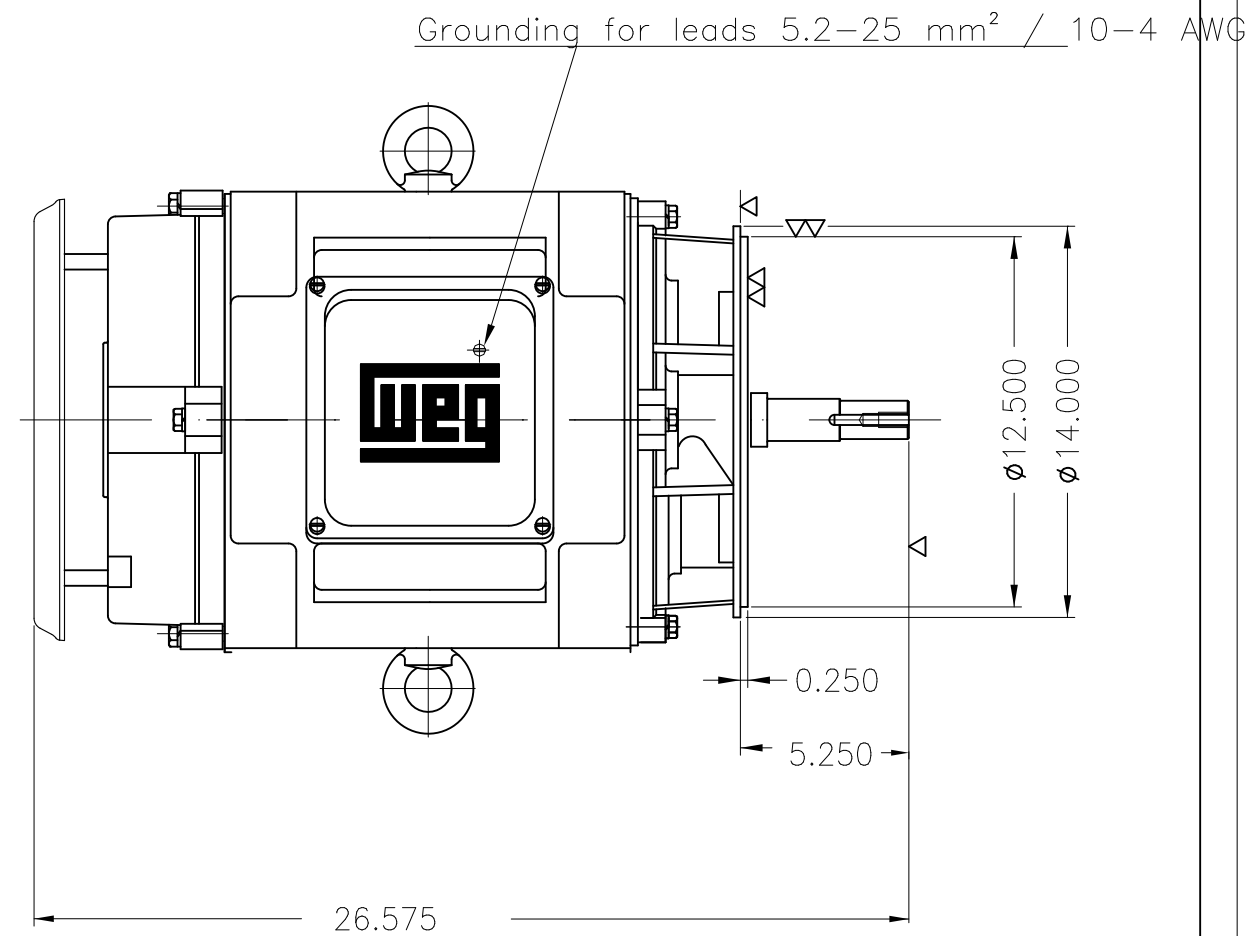
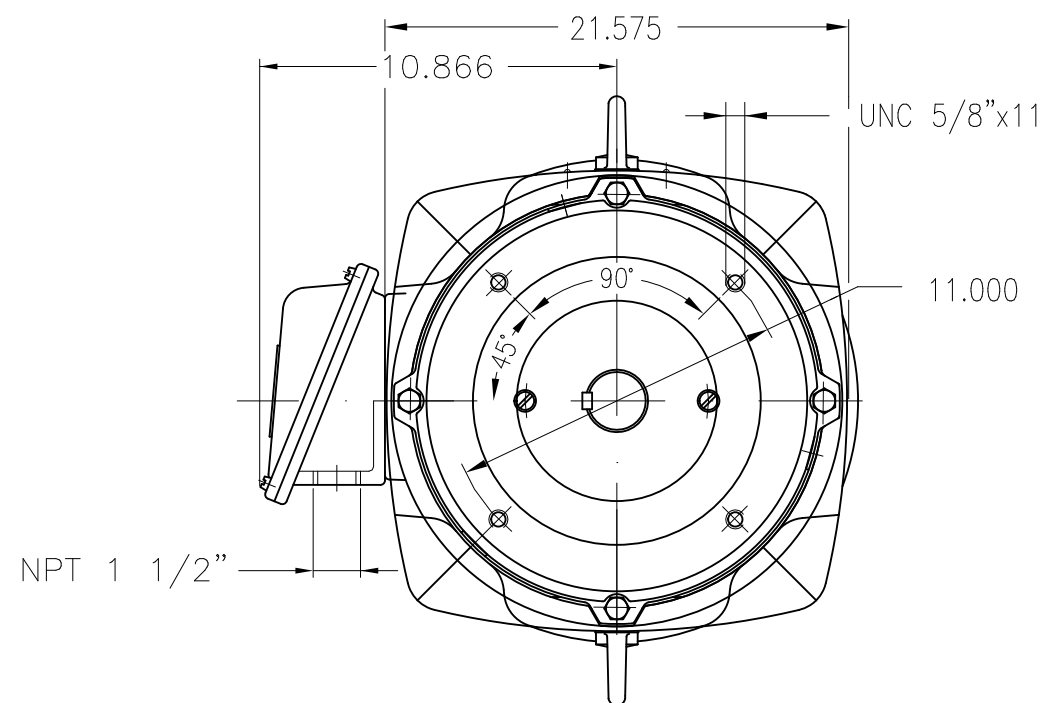


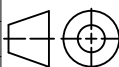
Performance : 415 V 50 Hz 2P IE1

Rated current : 40.2 A
LRC : 6.5
Rated torque : 7.39 kgfm
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 2945 rpm

Moment of inertia (J) : 0.0795 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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