

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase		Product code : 11523675	
Frame : 143/5JM		Cooling method : IC411 - TEFC			
Insulation class : F		Mounting : F-1			
Duty cycle : Cont.(S1)		Rotation <sup>1</sup> : Both (CW and CCW)			
Ambient temperature : -20°C to +40°C		Starting method : Direct On Line			
Altitude : 1000 m.a.s.l.		Approx. weight <sup>2</sup> : 25.3 kg			
Protection degree : IP55		Moment of inertia (J) : 0.0060 kgm <sup>2</sup>			
Design : B					
Output [HP]	1.5	1.5	1.5	1.5	1.5
Poles	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	4.04/2.02	2.42	2.33	2.30	2.30
L. R. Amperes [A]	33.9/17.0	15.5	16.3	17.0	17.0
LRC [A]	8.4x(Code L)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)	7.4x(Code K)
No load current [A]	2.20/1.10	1.10	1.20	1.30	1.30
Rated speed [RPM]	1755	1440	1445	1450	1450
Slip [%]	2.50	4.00	3.67	3.33	3.33
Rated torque [kgfm]	0.620	0.756	0.751	0.751	0.751
Locked rotor torque [%]	290	220	250	280	280
Breakdown torque [%]	350	250	290	320	320
Service factor	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level <sup>2</sup>	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%				
	50%	82.5	82.5	82.5	81.0
	75%	85.5	84.0	84.0	84.0
	100%	86.5	84.1	84.1	84.1
Power Factor	25%				
	50%	0.60	0.67	0.63	0.60
	75%	0.70	0.76	0.74	0.70
	100%	0.79	0.82	0.81	0.79
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	14.6	14.6	14.6	14.6
	P2 (0,5;1,0)	12.1	12.1	12.1	12.1
	P3 (0,25;1,0)	12.2	12.2	12.2	12.2
	P4 (0,9;0,5)	8.2	8.2	8.2	8.2
	P5 (0,5;0,5)	5.7	5.7	5.7	5.7
	P6 (0,5;0,25)	4.3	4.3	4.3	4.3
	P7 (0,25;0,25)	3.2	3.2	3.2	3.2
		<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6206 ZZ	6204 ZZ		Max. traction	: 56 kgf
Sealing	: V'Ring	V'Ring		Max. compression	: 81 kgf
Lubrication interval	: -	-			
Lubricant amount	: -	-			
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.		
Rev.	Changes Summary		Performed	Checked	Date
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## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Notes  
USABLE @208V 4.36A SF 1.15 SFA 5.01A

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Checked by			Page	Revision
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# LOAD PERFORMANCE CURVE

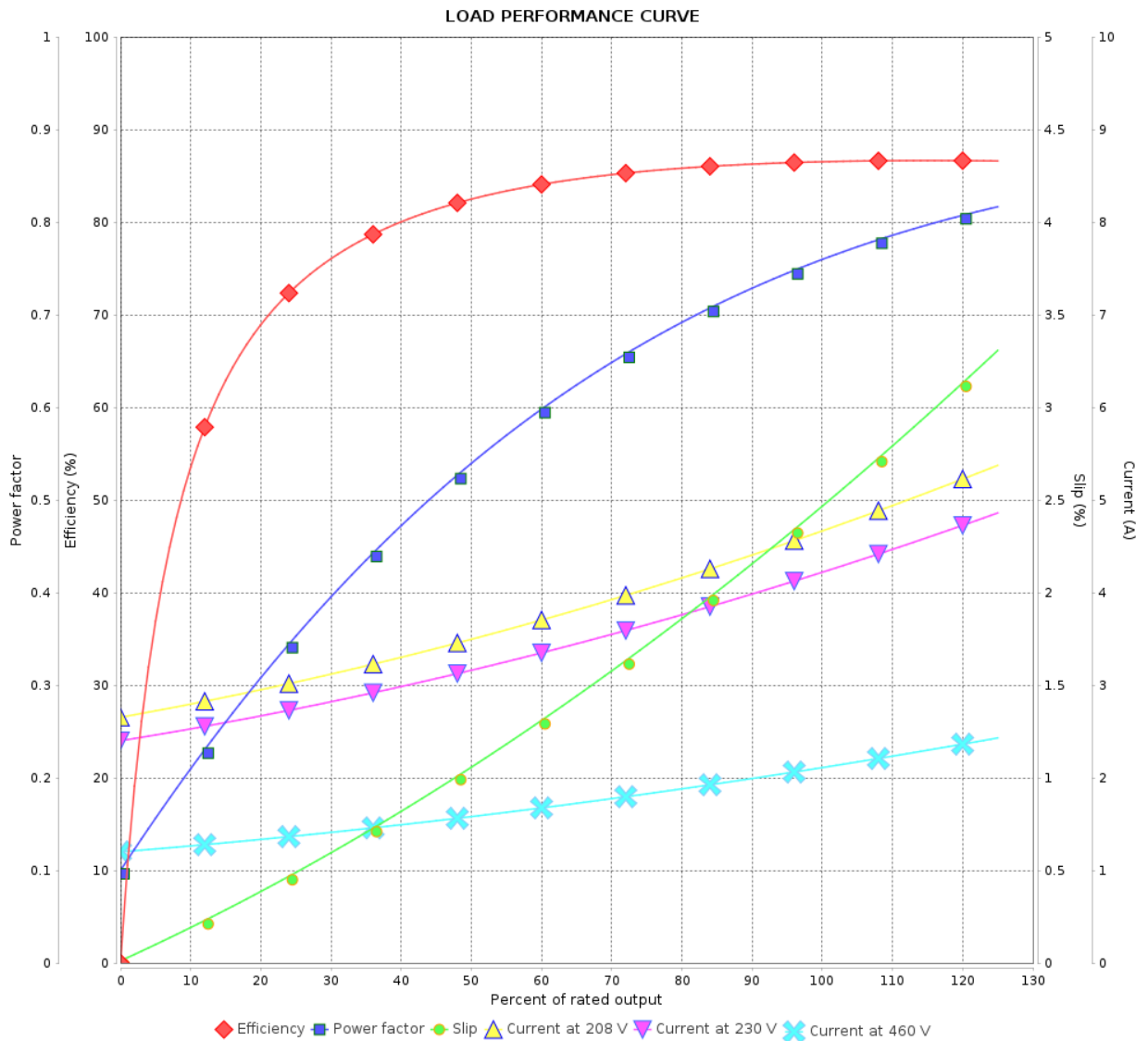
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase

Product code : 11523675



Performance : 230/460 V 60 Hz 4P

Rated current : 4.04/2.02 A  
 LRC : 8.4  
 Rated torque : 0.620 kgfm  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.0060 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

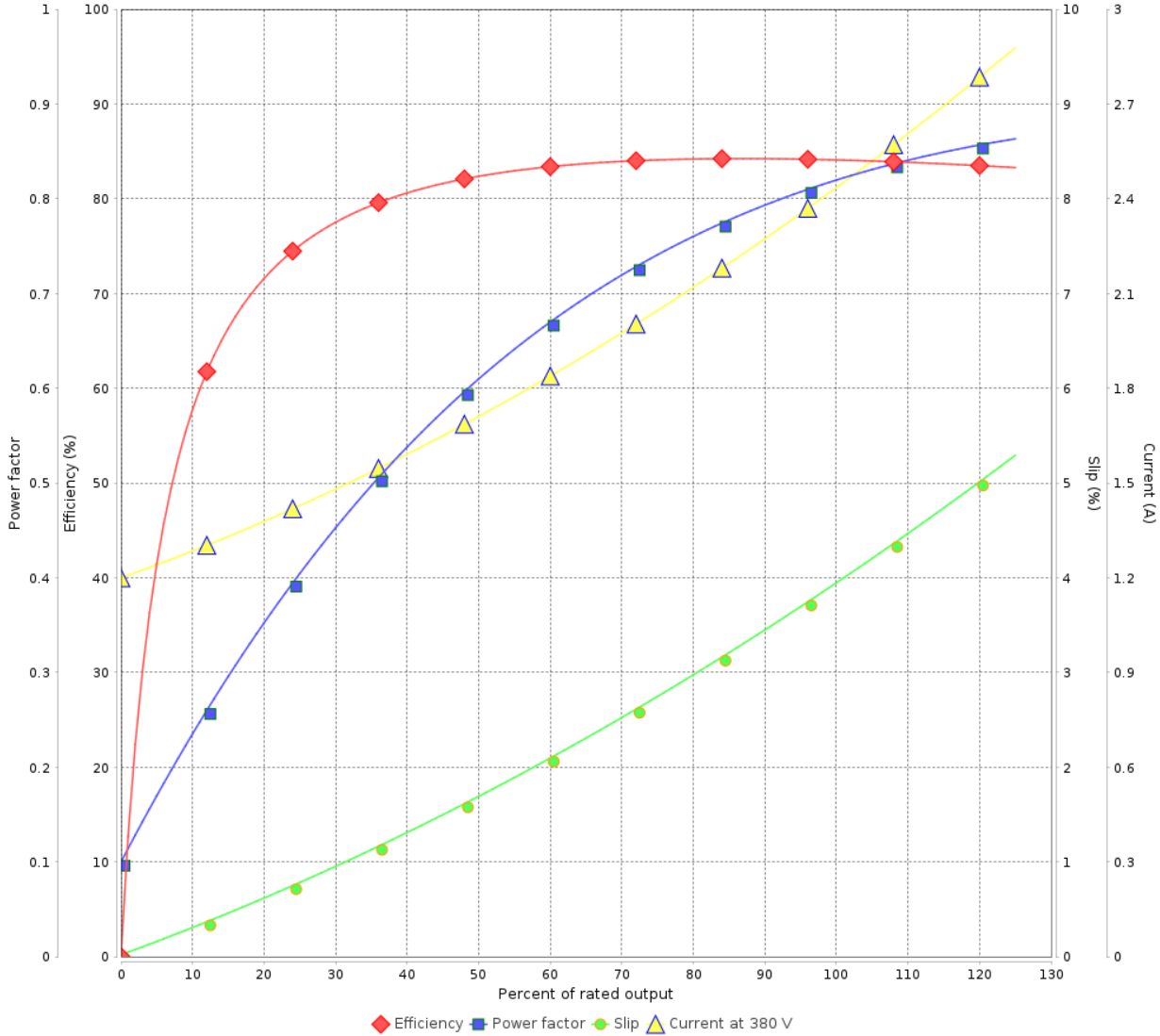
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase  
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LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current	: 2.42 A	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.756 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: B

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# LOAD PERFORMANCE CURVE

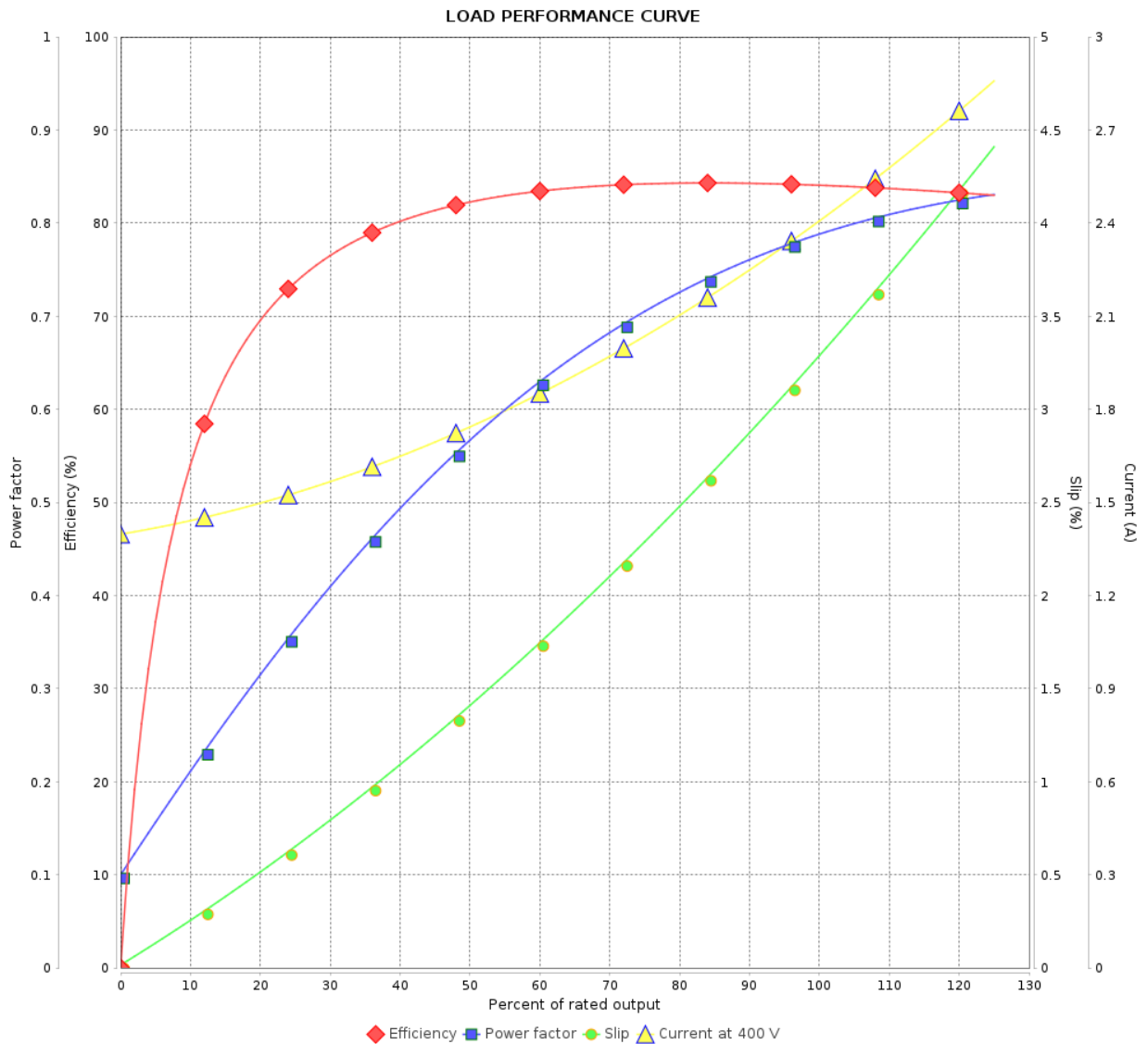
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase

Product code : 11523675



Performance : 400 V 50 Hz 4P IE3

Rated current : 2.33 A  
LRC : 7.0  
Rated torque : 0.751 kgfm  
Locked rotor torque : 250 %  
Breakdown torque : 290 %  
Rated speed : 1445 rpm

Moment of inertia (J) : 0.0060 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

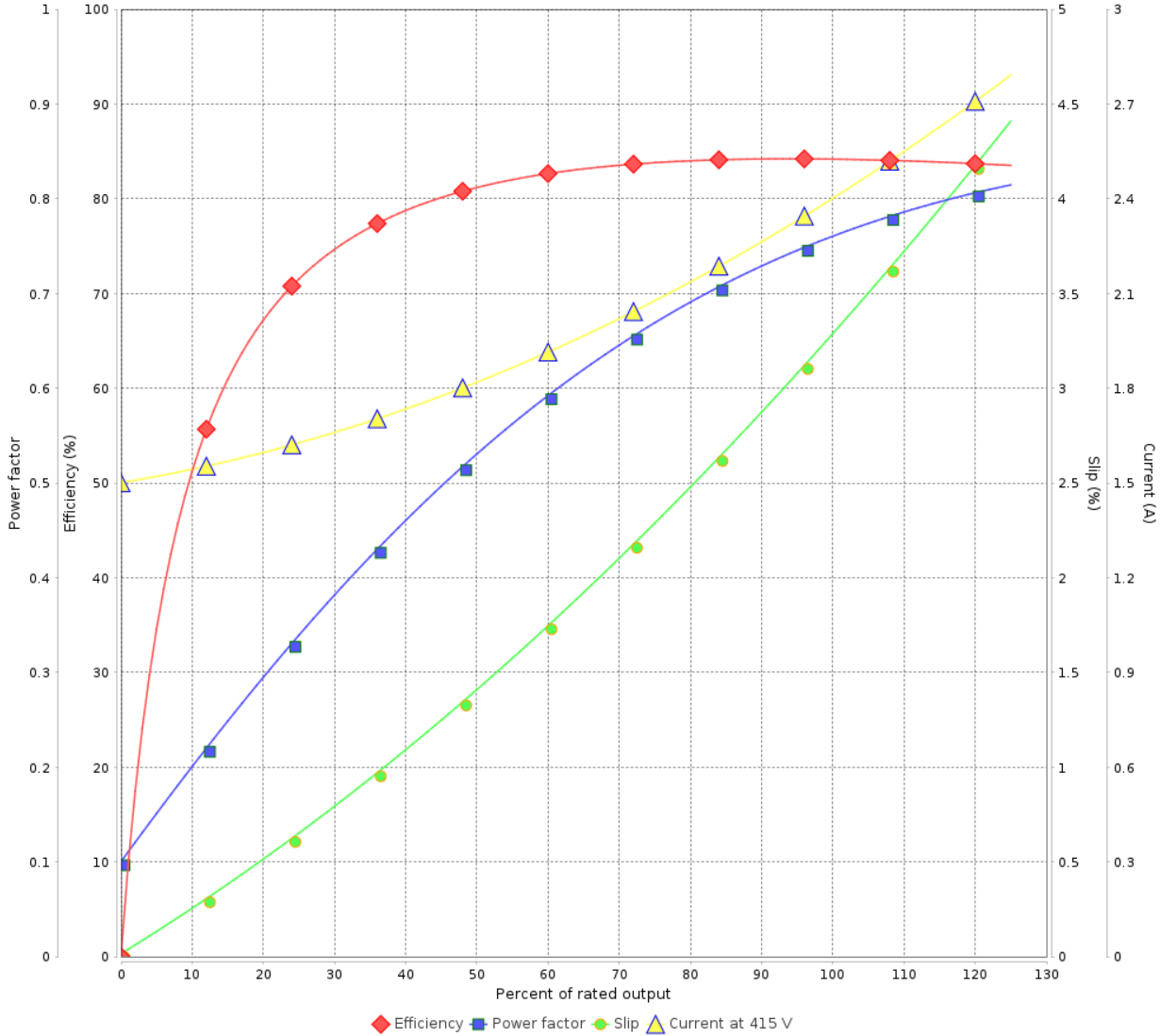
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
 NEMA Premium Efficiency Three-Phase  
 Product code : 11523675

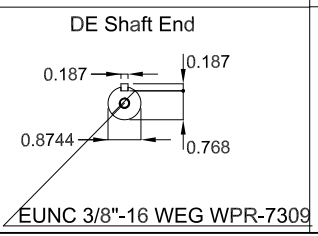
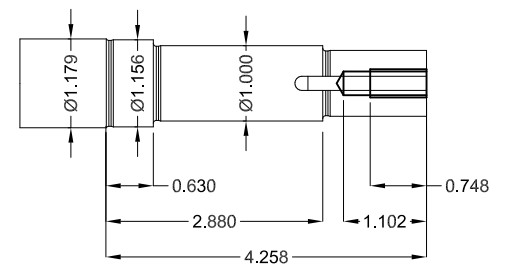
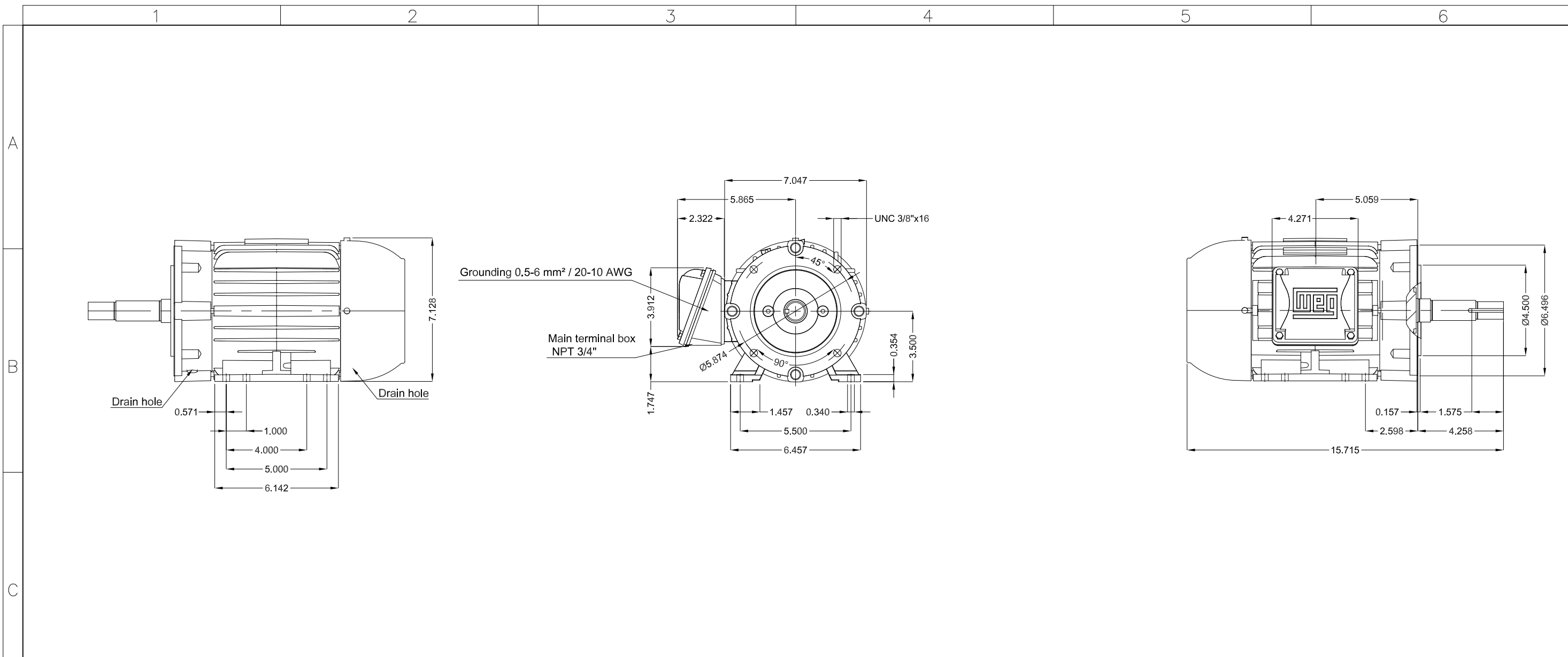
LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current	: 2.30 A	Moment of inertia (J)	: 0.0060 kgm <sup>2</sup>
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.751 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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Color RAL 5009  
 Painting plan 207A  
 Mounting B34R(D)

1.5 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR JM/JP/JET PUMP W22 NEMA PREM. EFF.					
CHECKED		FRAME 143/5JM IP55 TEFC					
RELEASED							
REL. DATE							

HYBRISUSER 00

**PREVIEW**

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