

ME1302 Liquid-Cooled PMAC Motor



KEY FEATURES

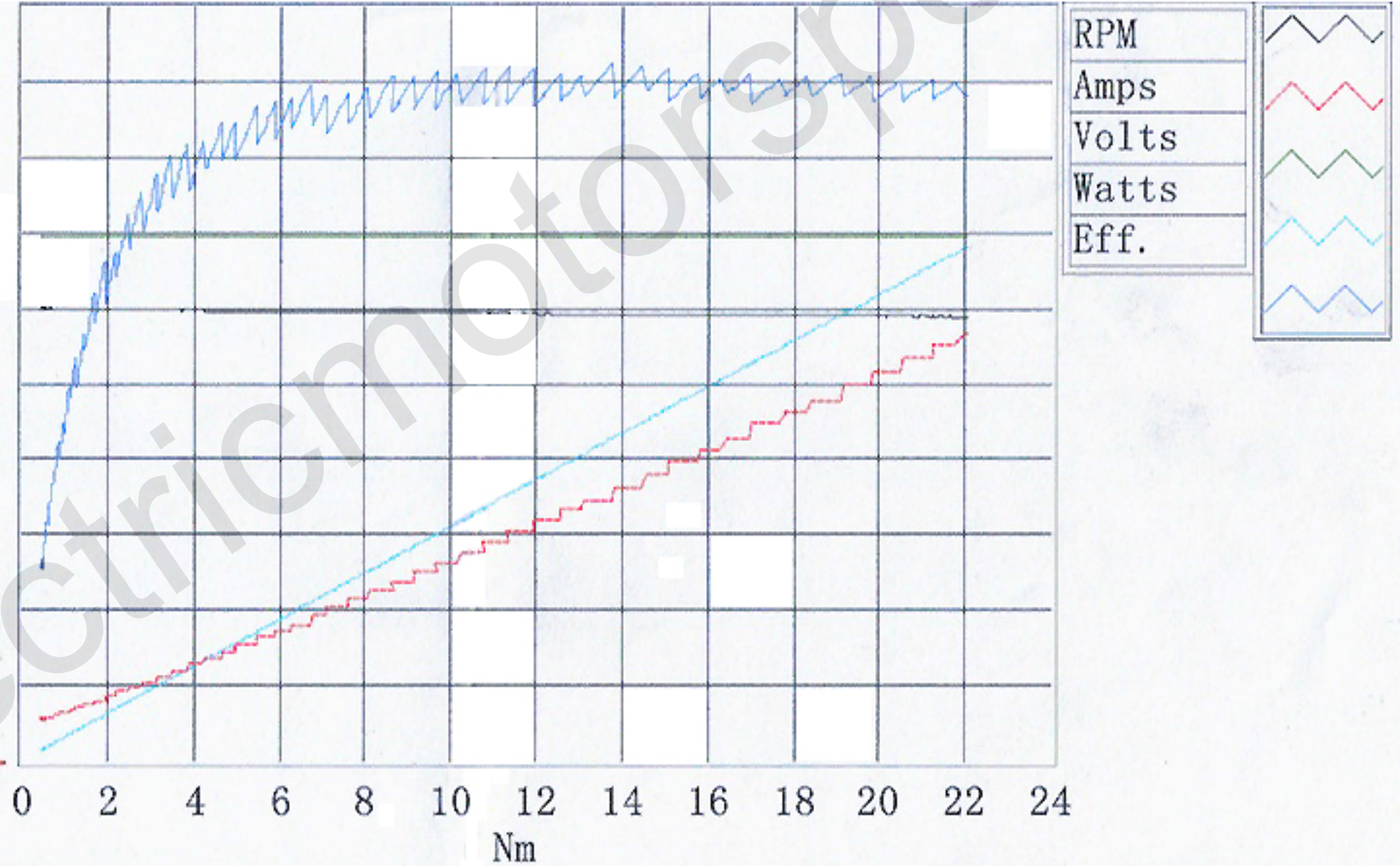
- Axial Flux Permanent Magnet Synchronous Motor
- Liquid-cooled For High Power Continuous Operation
- High Power Density
- High Torque

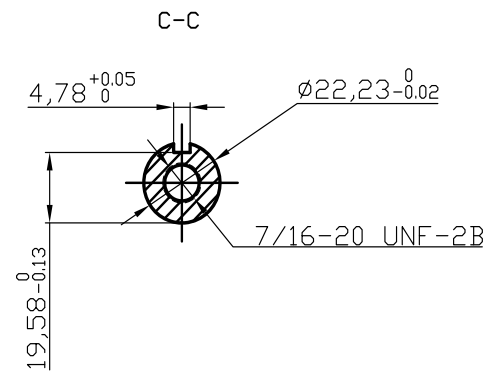
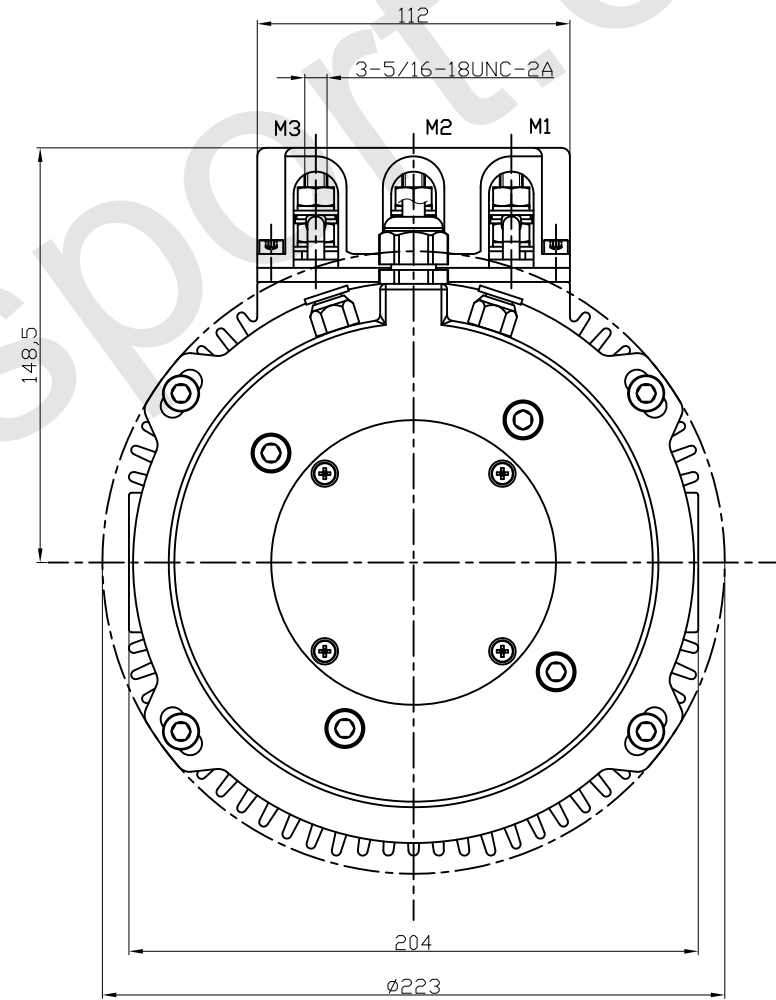
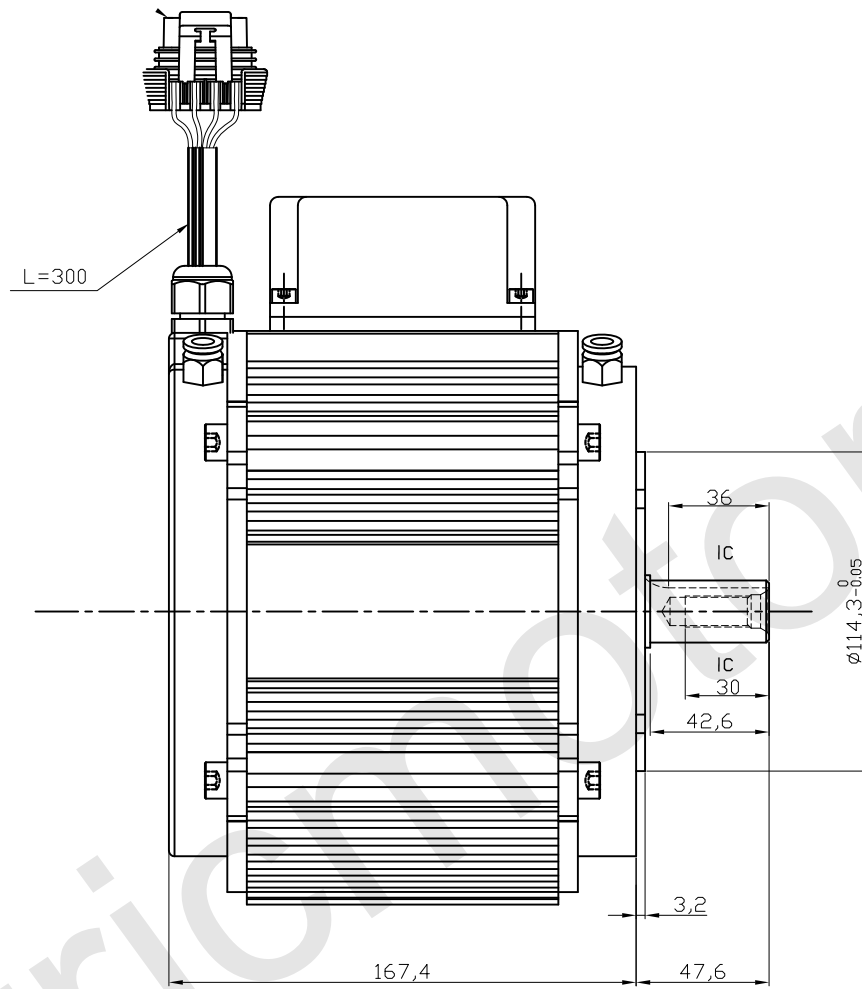
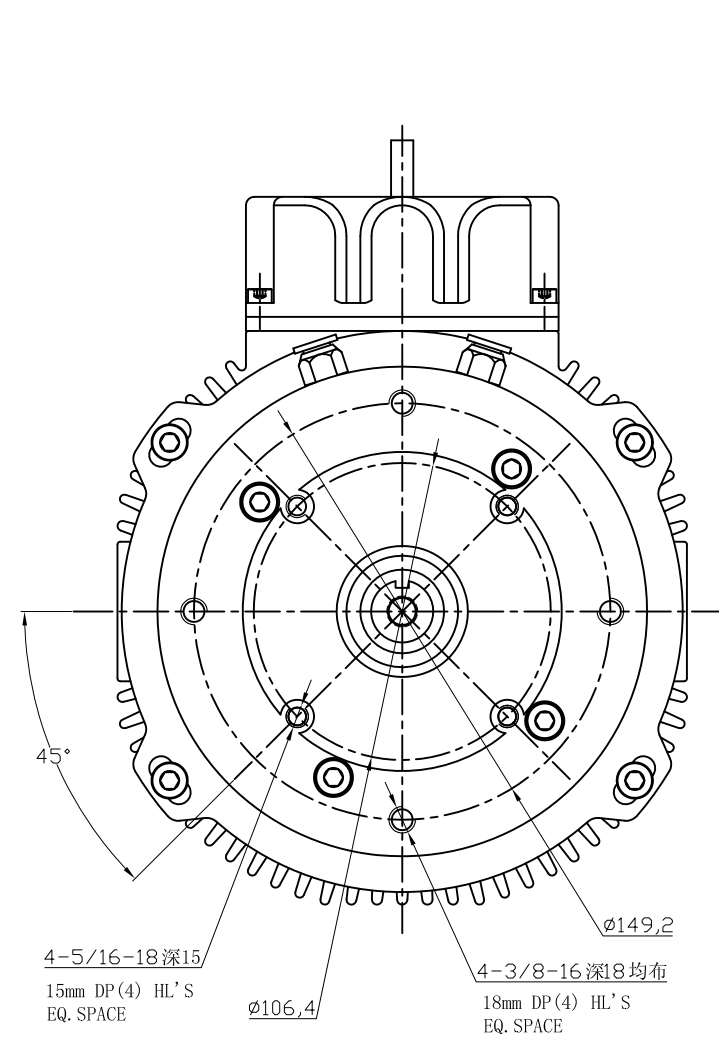
Specifications

	Nominal	Maximum	
Power	15	45	kW
Voltage	48 - 120	120	V
Torque	34	95	Nm
Speed	4500	5000	rpm
Phase Current	220	550	A
Phase to Phase Resistance		0.0013	Ω
Rotor temperature	80	120	$^{\circ}\text{C}$
Power factor ($\cos \varphi$)	0.78		
Maximal efficiency	>91		%
Weight	16		kg
Rotor moment of inertia	0.0045		$\text{kg}\cdot\text{m}^2$
Protection category	IP54		
Cooling Flow	5		l/min
Cooling Liquid Pressure	3	5	psi
Ambient temperature	24	-20 to +50	$^{\circ}\text{C}$
Cooling Medium	50/50 Water/Glycol		

ME1302 039-CW 2018.10.19

Eff.	Watts	Volts	Amps	RPM
1.00	10000	100	200	5000
0.90	9000	90	180	4500
0.80	8000	80	160	4000
0.70	7000	70	140	3500
0.60	6000	60	120	3000
0.50	5000	50	100	2500
0.40	4000	40	80	2000
0.30	3000	30	60	1500
0.20	2000	20	40	1000
0.10	1000	10	20	500
0.00	0	0	0	0





REV.	CHANGES	BY	ECO NO.	DATE	DO NOT SCALE DRAWING THIS DRAWING IS PROPRIETARY PROPERTY OF MOTENERGY INC CORPORATION DISCLOSED IN CONFIDENCE, WHICH MAY NOT BE USED OR DISCLOSED WITHOUT PERMISSION. RETURN PROMPTLY AFTER USE.	DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994	MATERIAL	TITLE	Motenergy, Inc Slinger, WI USA	
-	-	-	-	-	-	-	-	OUTLINE	-	
-	-	-	-	-	-	-	-	DRAWN: lxp	12.09.10	DESIGN VENDOR: -
-	-	-	-	-	-	-	-	APPR:		
-	-	-	-	-	-	-	-	DEPT:		
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-	-	-	-	-	-	-	-	S/N:	CODE:	OJW.T. 302. 078
-	-	-	-	-	-	-	-	MODEL NO:		REV SHEET - 1 OF 1
-	-	-	-	-	-	-	-	SIM TO:		