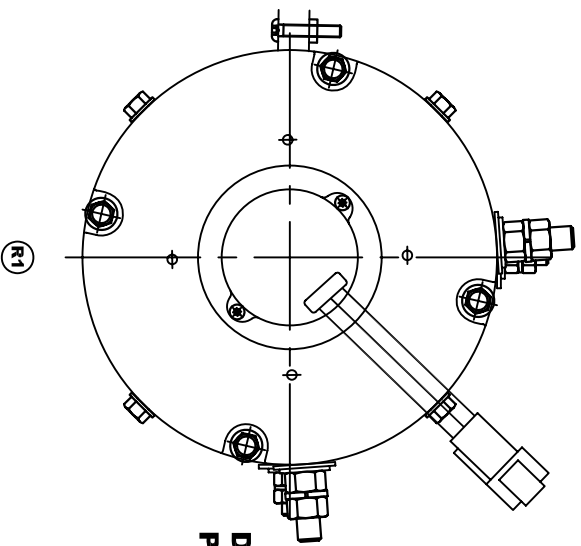
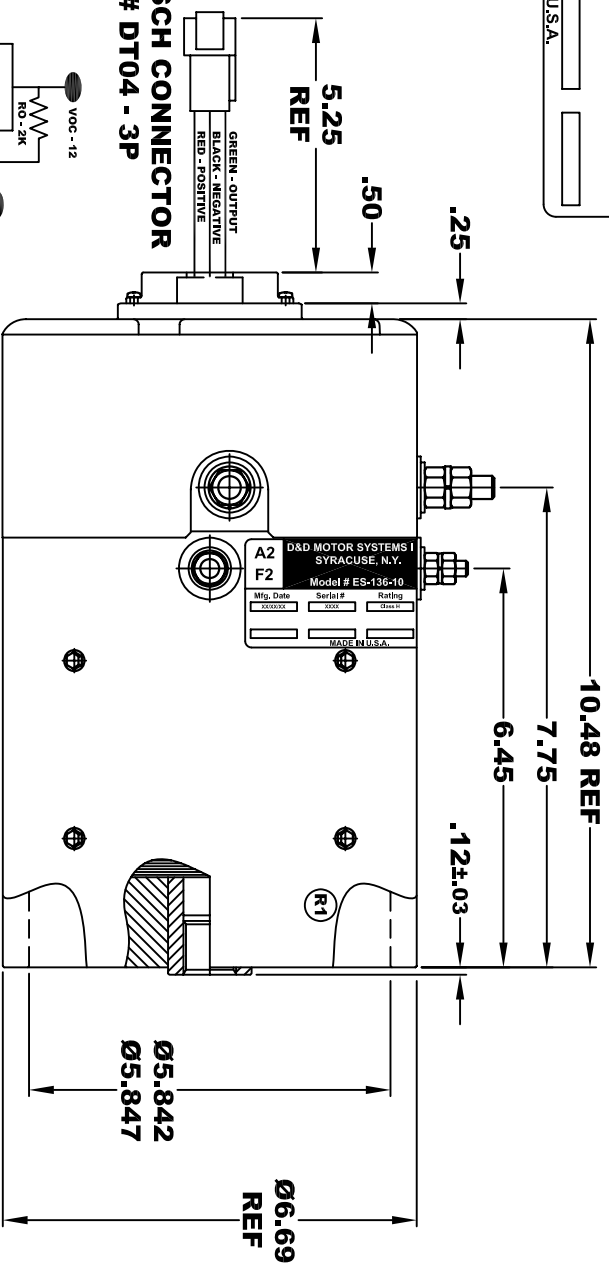
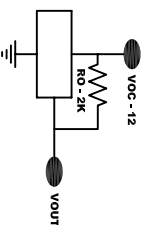


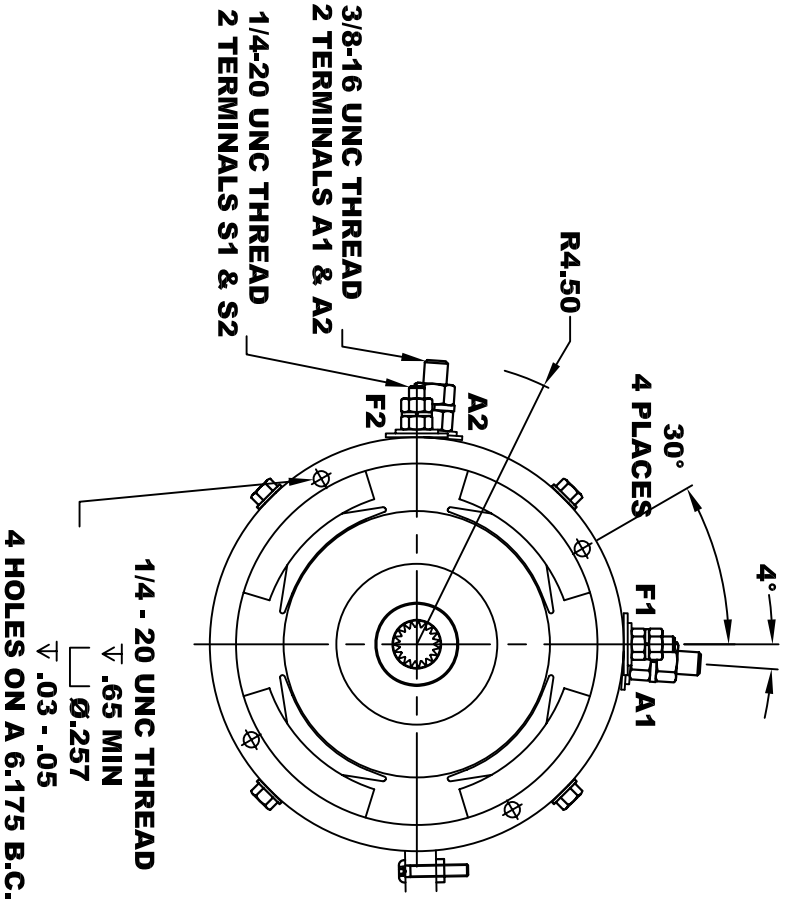
<b>D&amp;D MOTOR SYSTEMS INC.</b>			
<b>SYRACUSE N.Y.</b>			
<b>A2</b>	<b>Model # ES-136-10</b>		<b>A1</b>
<b>F2</b>			<b>F1</b>
Mfg. Date	Serial #	Rating	Voltage
XXXXXX	XXXX	Class H	XX
MADE IN U.S.A.			



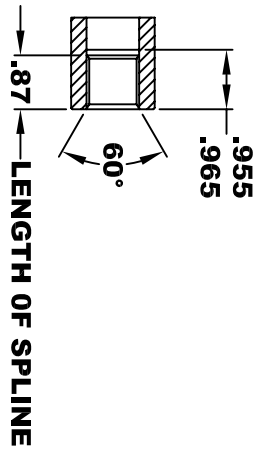
**DEUTSCH CONNECTOR  
PART # DT04 - 3P**



**TORQUE SPECIFICATION FOR  
POWER CABLE SECURING TOP NUTS**  
**3/8-16 UNC (A1 / A2) - 140 IN / LBS MAX**  
**1/4-20 UNC (F1 / F2) - 50 IN / LBS MAX**



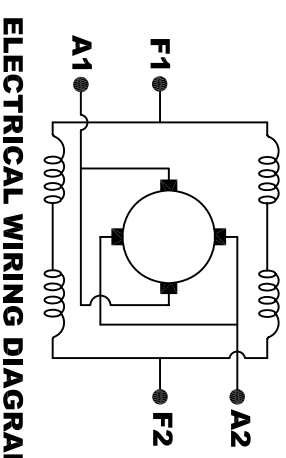
**SPEED SENSOR ELECTRICAL SPECIFICATION:**  
 -4.5V TO 24V OPERATING VOLTAGE  
 -20°C TO 85°C OPERATING TEMPERATURE  
 -CURRENT SINKING UP TO 25mA  
 -AN EXTERNAL OUTPUT PULL UP RESISTOR IS REQUIRED  
 -SENSOR IS DESIGNED TO OPERATE WITH 4 N/S POLEPAIRS  
 -THE OPERATIONAL DISTANCE BETWEEN THE MAGNET  
 AND THE HOUSING, INCLUDING ANY RUNOUT  
 SHOULD NOT EXCEED .030 INCHES



**INTERNAL INVOLUTE SPLINE SPECIFICATION  
CLASS 5 FILLET ROOT SIDE FIT (PER A.N.S.I. B92.1)**

NO. OF TEETH \_\_\_\_\_ 19  
 SPLINE PITCH \_\_\_\_\_ 24 / 48  
 PRESSURE ANGLE \_\_\_\_\_ 45°  
 BASE Ø \_\_\_\_\_ .5597 REF  
 PITCH Ø \_\_\_\_\_ .7916 REF  
 MAJOR Ø \_\_\_\_\_ .850 - .859  
 FORM Ø \_\_\_\_\_ .835  
 MINOR Ø \_\_\_\_\_ .767 - .772  
 CIRCULAR SPACE WIDTH \_\_\_\_\_ .0764  
 EFFECTIVE SPACE WIDTH \_\_\_\_\_ .0738  
 MAX. DIMENSION BETWEEN  
 TWO PINS \_\_\_\_\_ .6714  
 PIN Ø \_\_\_\_\_ .0800  
 SPLINE HARDNESS TO BE R/C 26-34

**MOTOR WEIGHT 55 LBS  
CLASS "H" INSULATION  
PERFORMANCE SPEC: 10**



**ELECTRICAL WIRING DIAGRAM**

THIS PRINT IS THE PROPERTY OF D&D MOTOR SYSTEMS INC.  
 DO NOT SCALE  
 WORK TO DIMENSIONS  
 TOLERANCES UNLESS OTHERWISE SPECIFIED ARE AS FOLLOWS  
 .XX \_\_\_\_\_ .01  
 .XXX \_\_\_\_\_ .005  
 .XX ROUGH CASTING \_\_\_\_\_ .03  
 HOLES \_\_\_\_\_ -.001 / +.006  
 ANGLES \_\_\_\_\_ 0°30"

**MOTOR WIRING CONNECTIONS:**  
**CW ROTATION DRIVE END**  
 CONNECT A1 & F1 TO ONE BATTERY TERMINAL  
 CONNECT A2 & F2 TO OTHER BATTERY TERMINAL  
**CCW ROTATION DRIVE END**  
 SWITCH F1 & F2 CONNECTIONS

**D & D MOTOR SYSTEMS INC**  
**MOTOR OUTLINE**

SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.	REV
B	9-21-07		ES-136-10	R1
SCALE	STF	DRAWN BY	MJG	REV DATE
				5-29-13