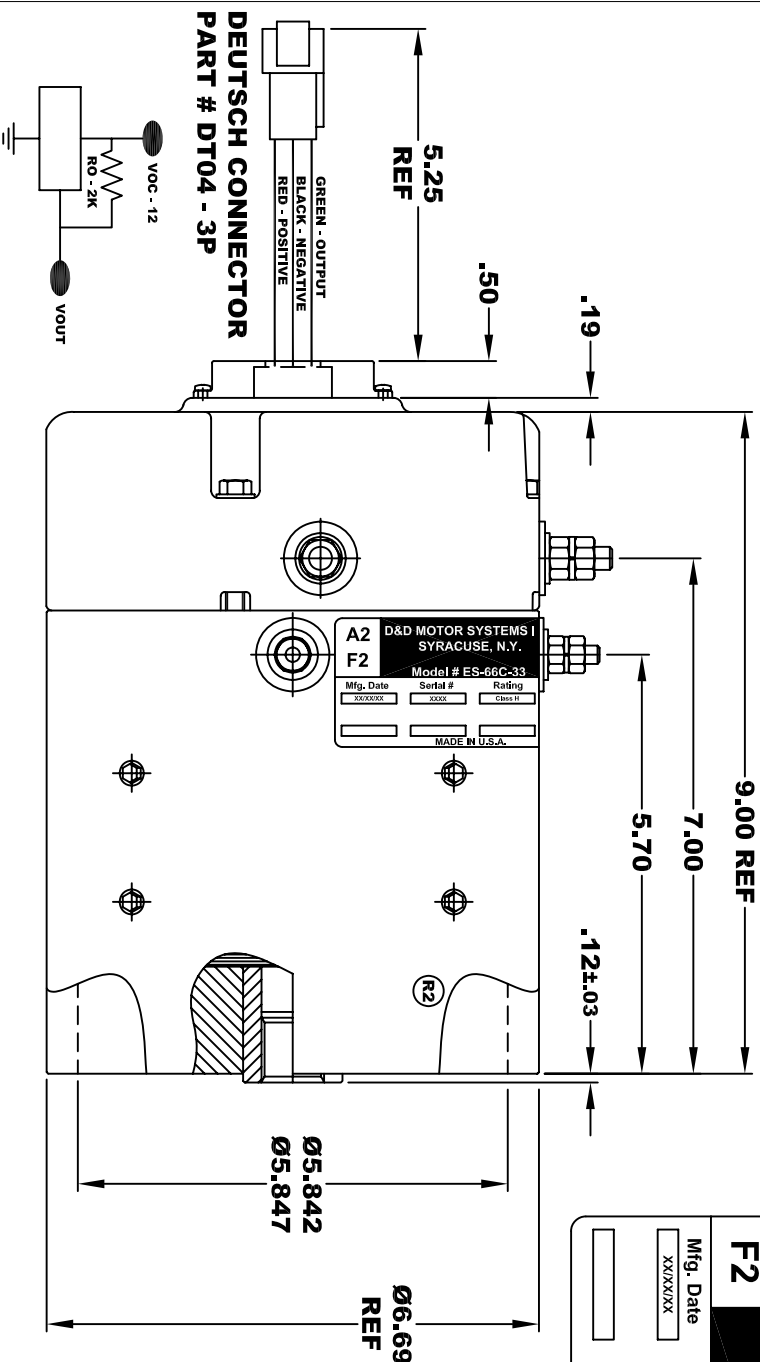


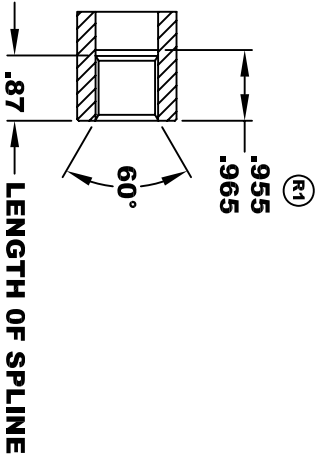
| | | | |
|-----------------------------------|-----------|--------------------------|-----------|
| D&D MOTOR SYSTEMS INC. | | | |
| SYRACUSE N.Y. | | | |
| A2 | F2 | Model # ES-66C-33 | A1 |
| Mfg. Date | Serial # | Rating | Voltage |
| XX/XX/XX | XXXX | CLASS-H | 36 / 48 |
| MADE IN U.S.A. | | | |



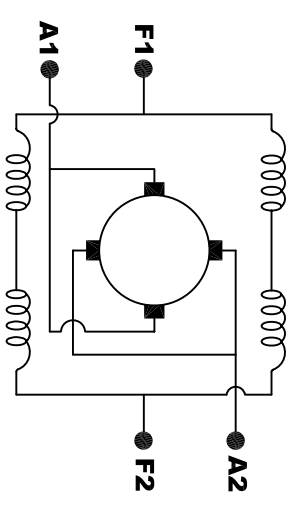
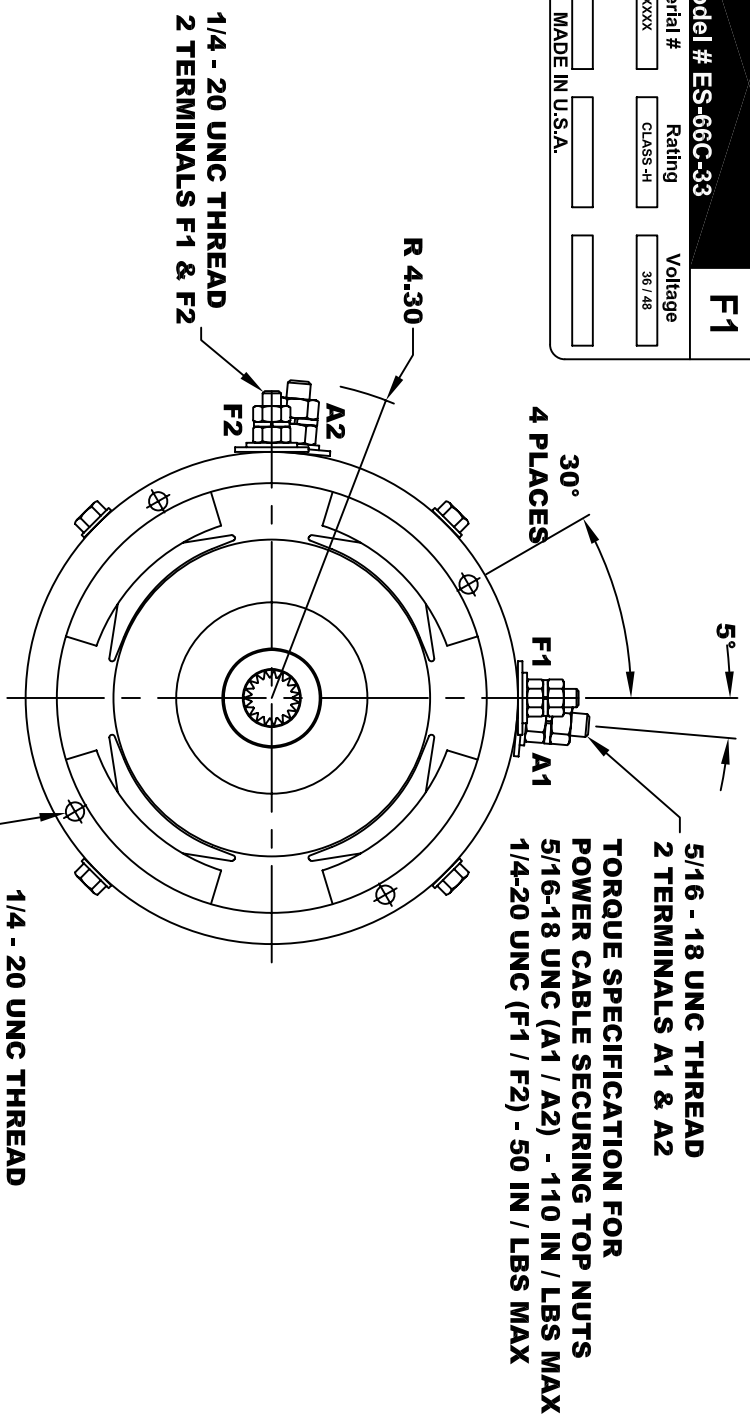
ELECTRICAL SPECIFICATION:
 -4.5V TO 24V OPERATING VOLTAGE
 -20°C TO 85°C OPERATING TEMPERATURE
 -CURRENT SINKING UP TO 25mA
 -AN EXTERNAL OUTPUT PULL UP RESISTOR IS REQUIRED
 -SENSOR IS DESIGNED TO OPERATE WITH 4 N/S POLEPAIRS
 AND THE HOUSING, INCLUDING ANY RUNOUT
 SHOULD NOT EXCEED .030 INCHES

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 46 LBS
CLASS "H" INSULATION
PERFORMANCE SPEC: 33



ELECTRICAL WIRING DIAGRAM

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

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"

| | | | |
|------------------------------------|------------|--------------|--------------------|
| D & D MOTOR SYSTEMS INC | | | |
| MOTOR OUTLINE | | | |
| SIZE | DRAWN DATE | RELEASE DATE | DWG NO. / PART NO. |
| B | 6-30-04 | | ES-66C-33 |
| SCALE | STF | DRAWN BY | MJG |
| | | | REV DATE |
| | | | R2 5-14-13 |