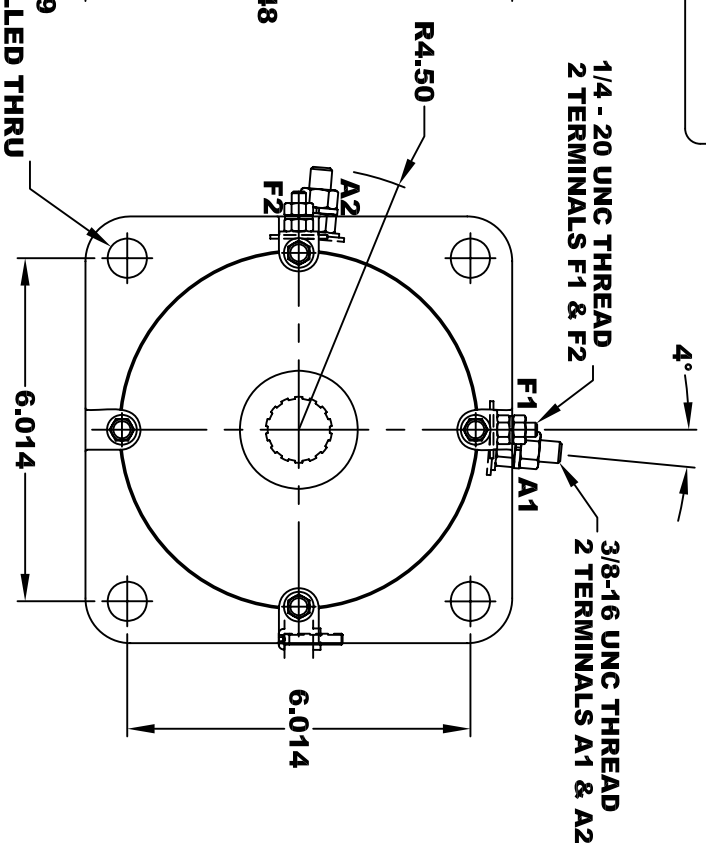
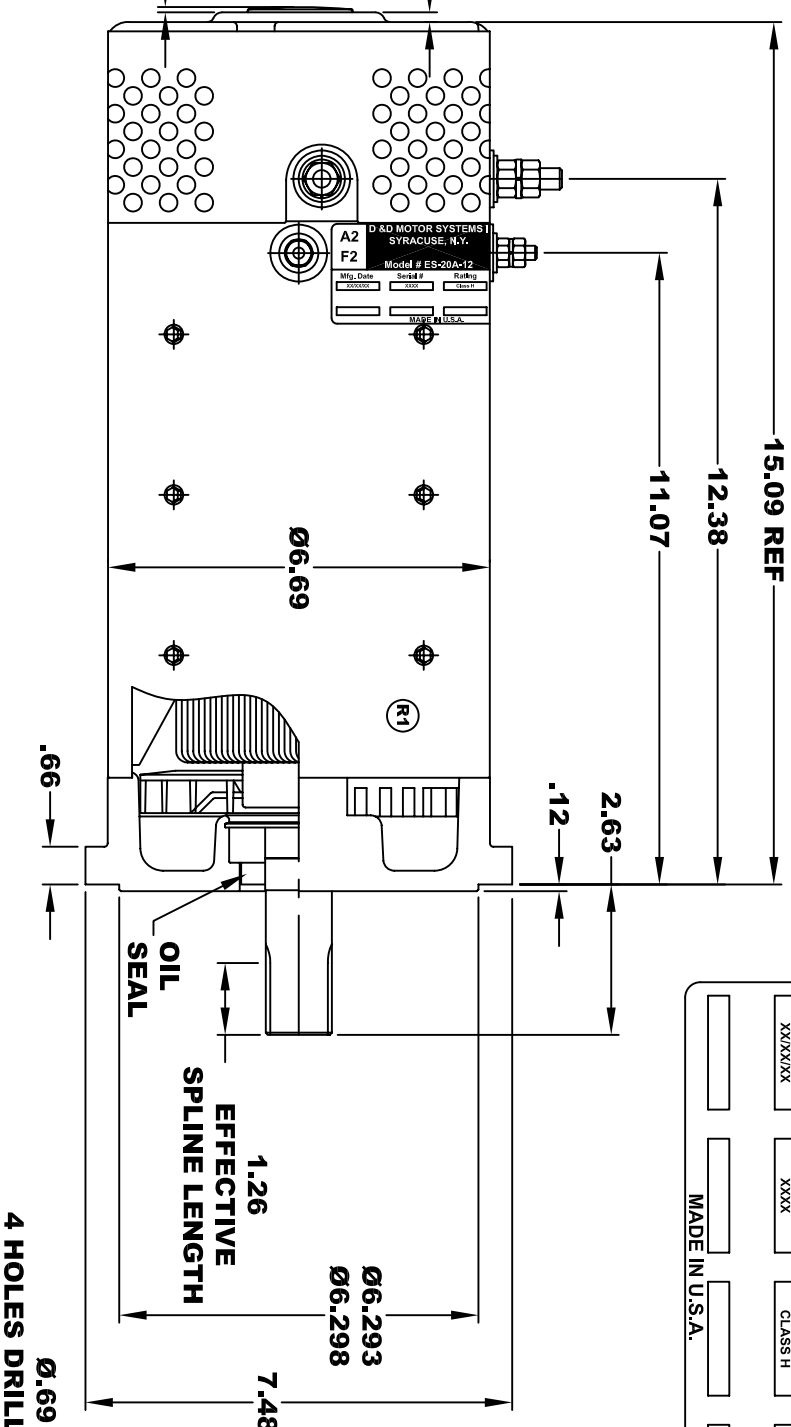
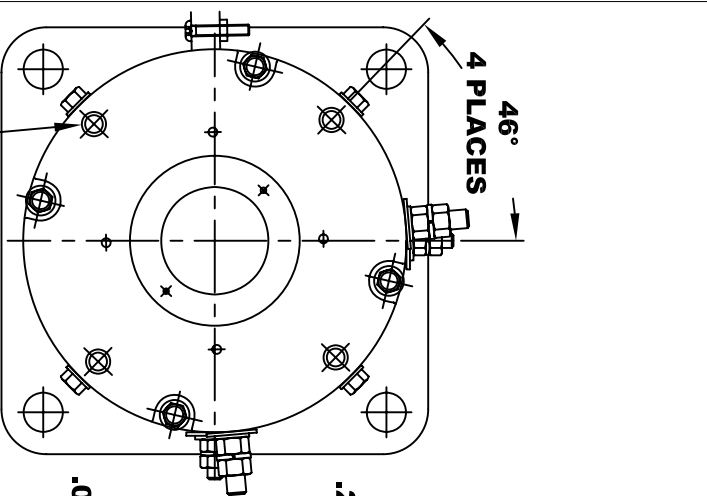
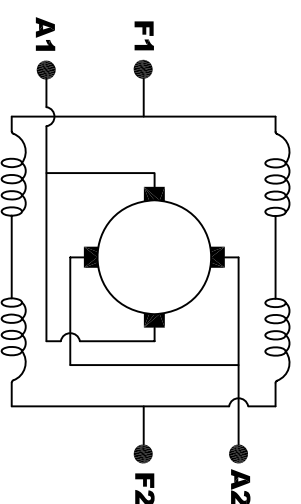


| | | | |
|-----------------------------------|--------------------------|----------|----------------|
| D&D MOTOR SYSTEMS INC. | | | |
| SYRACUSE N.Y. | | | |
| A2 | Model # ES-20A-12 | | A1 |
| F2 | Mfg. Date | Serial # | Rating |
| | XXXXXX | XXXX | CLASS H |
| | | | Voltage |
| | | | 72 |
| | | | MADE IN U.S.A. |

**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



| | |
|---|-----------------|
| EXTERNAL INVOLUTE SPLINE DATA TO DIN5480 | |
| SPLINE DESIGNATION | W30X2X14X9g |
| TYPE OF FIT | SIDE FIT |
| NUMBER OF TEETH | 14 |
| MODULE | 2 |
| PRESSURE ANGLE | 30° |
| MAJOR DIAMETER (h11) | 1.160 - 1.165 |
| MINOR DIAMETER (h14) | .988 - 1.007 |
| MEASURING PIN | .1574 |
| DIMENSION OVER PINS | 1.3620 - 1.3595 |
| TOOTH THICKNESS (9g) | .1157 - .1177 |
| REFERENCE DIAMETER | 1.181 |
| PITCH DIAMETER | 1.102 |
| BASE CIRCLE DIAMETER | .9547 |
| FORM DIAMETER | 1.021 |
| MIN FILLET RADII | .0118 |
| MATING PART No | G1036 |



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

MOTOR WEIGHT: 82 LBS
CLASS "H" INSULATION
PERFORMANCE SPEC: 12

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. | REV |
| B | 6-27-06 | | ES-20A-12 | R1 |
| SCALE | STF | DRAWN BY | MJG | REV DATE |
| | | | | 5-2-13 |