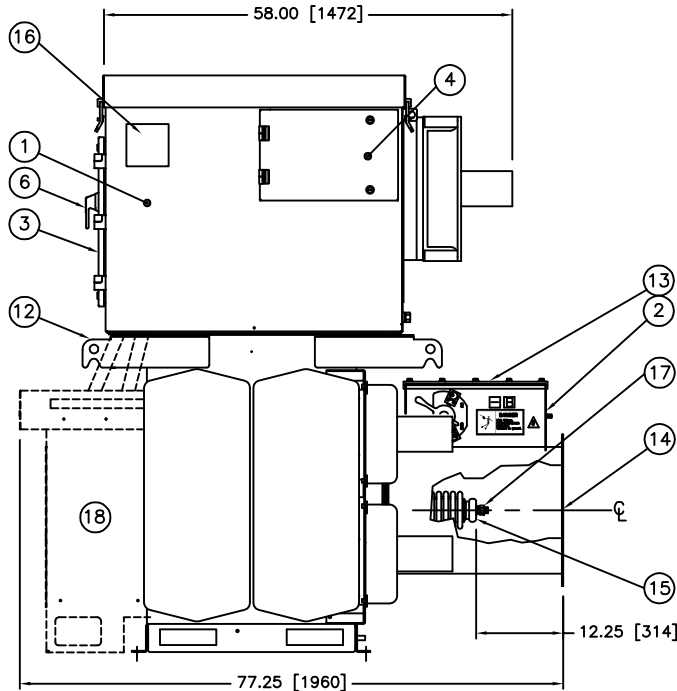
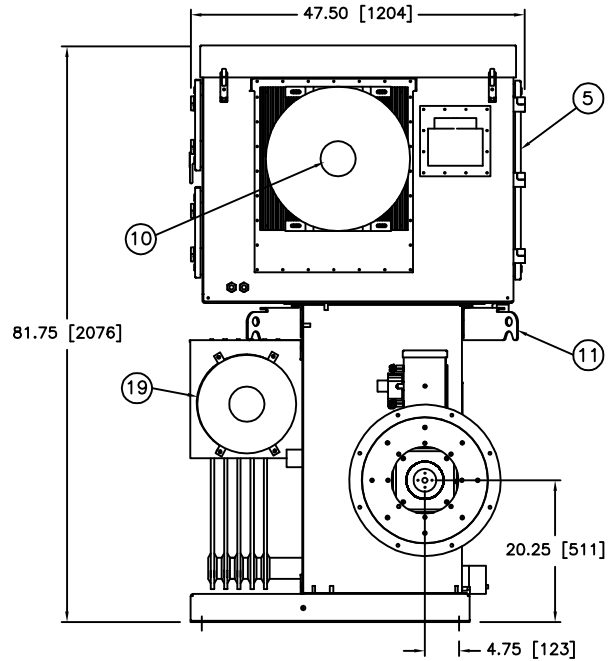




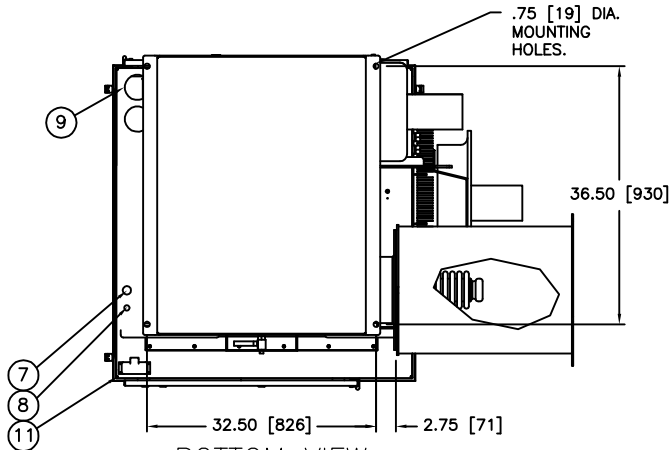
**HF ESP, POWERPLUS SERIES  
105 & 120 kW UNIT WITH GROUND SWITCH**



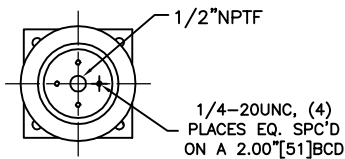
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



HV OUTPUT  
CORONA RING DETAIL

NOTES:

1. POWERPLUS MUST BE MOUNTED ON A LEVEL SURFACE OR SHIMED TO WITHIN 1/8" [3.2] RISE PER 12" [305] RUN.
2. COLD ROOF MAY NEED TO BE REINFORCED TO ACCEPT THE WEIGHT OF THE POWER PLUS UNIT.
3. MAXIMUM ALLOWABLE DUCT INTERNAL TEMPERATURE: 122°F (50°C). MAXIMUM ALLOWABLE DUCT INTERNAL PRESSURE: 1 PSI (2.04"Hg). THE INSTALLER MUST USE AN ENTRANCE BUSHING IN ROOF TO MEET THESE SPECIFICATIONS.
4. POWERPLUS MUST BE GROUNDED TO THE COLD ROOF BY THE END USER. REFER TO DWGB126972 FOR GROUNDING DETAILS.

APPROX WEIGHT WITH GND SWITCH: 2300lbs, 1178kg  
 APPROX WEIGHT WITH GND SWITCH AND AUTO TRANS.: 2800lbs, 1296Kg.  
 DIELECTRIC FLUID VOLUME: 80gal, 303L  
 FINISH: ENAMEL, ASA 61, APPROX. RAL 7042  
 TANK AND CONTROL ENCLOSURE ARE SEALED UNITS RATED NEMA 4/IP56  
 ALL DIMENSIONS IN INCHES FOLLOWED BY [mm].

- ① POWERPLUS UNIT.
- ② GROUND SWITCH
- ③ ACCESS DOOR TO CIRCUIT BREAKER TERMINALS. ALLOW 19" [483] OF CLEARANCE FROM THIS FACE FOR DOOR SWING.
- ④ ACCESS DOOR TO 3 PHASE RECTIFIER ASSEMBLY. ALLOW 19" [483] OF CLEARANCE FROM THIS FACE FOR DOOR SWING.
- ⑤ ACCESS DOOR TO HV TANK AND CONTROL SECTION. ALLOW 33" [838] OF CLEARANCE FROM THIS FACE FOR DOOR SWING.
- ⑥ INPUT CIRCUIT BREAKER SWITCH HANDLE WITH INTERLOCK PROVISION INSIDE. FOR ACCEPTABLE INTERLOCK SEE DWG A105811.
- ⑦ 1" [25.4] DIA CONDUIT HOLE FOR 120V CONTROL WIRING.
- ⑧ 1/2" [12.7] DIA CONDUIT HOLE FOR LOW VOLTAGE COMMUNICATION & OPTIONAL TRANSDUCER CONDUIT.
- ⑨ 2" [51] DIA CONDUIT HOLE FOR 3 PHASE POWER AND GROUND.
- ⑩ COOLING FAN FOR IGBT HEATSINK ASSEMBLY.
- ⑪ EZ SCOPE PORT WITH RJ45 SOCKET FOR KEYPAD DISPLAY CONNECTION AND BNC CONNECTORS FOR MAKING EXTERNAL kV AND mA MEASUREMENTS.
- ⑫ LIFTING HOOKS (4 PLACES).
- ⑬ H.V SWITCH MECHANISM WITH VIEWING WINDOW AND INTERLOCK PROVISIONS. FOR INTERLOCK AND BOLT EXTENSION INFO SEE DWG A105811.
- ⑭ SIDE EXIT 18" DUCT MOUNTING PROVISION. INCLUDES GASKETS AND 3/8-16 HARDWARE 8 PLACES ON A 20" [508] DIA B.C. WITH 18" [457] DIA DUCT OPENING.
- ⑮ HIGH VOLTAGE SEMI-OUTDOOR BUSHING, SEE DETAIL A FOR DETAIL.
- ⑯ RATINGS NAMEPLATE, ALUMINUM PHOTO ETCHED.
- ⑰ OPTIONAL METRIC ADAPTER FOR H.V. BUSHING CONNECTION. CONVERTS 1/2 NPT TO M20-1.5. SEE DWG A117570
- ⑱ OPTIONAL AUTO TRANSFORMER MOUNTED IN A NEMA 3R JUNCTION BOX. NOT SHOWN IN BOTTOM VIEW.
- ⑲ RADIATOR COOLING FAN.

DATA SHEET: ESP105-120RD-D  
 REVISION DATE: 06/05/09  
 APPROVED BY: HH