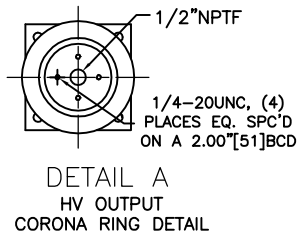
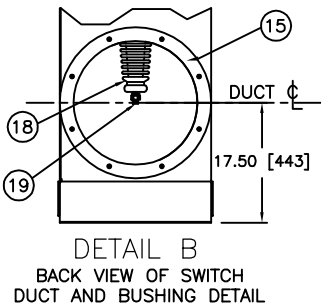
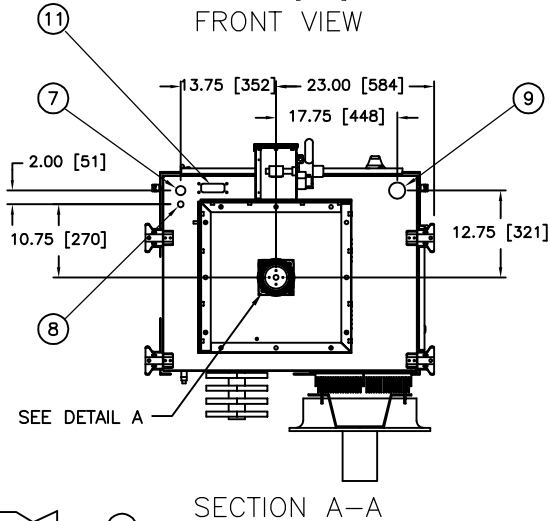
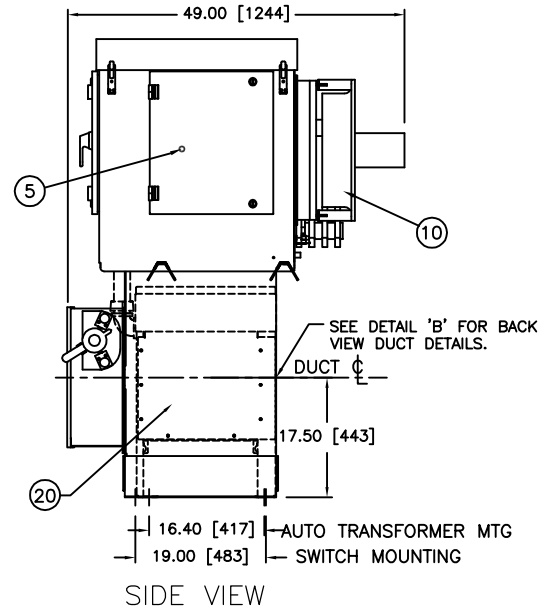
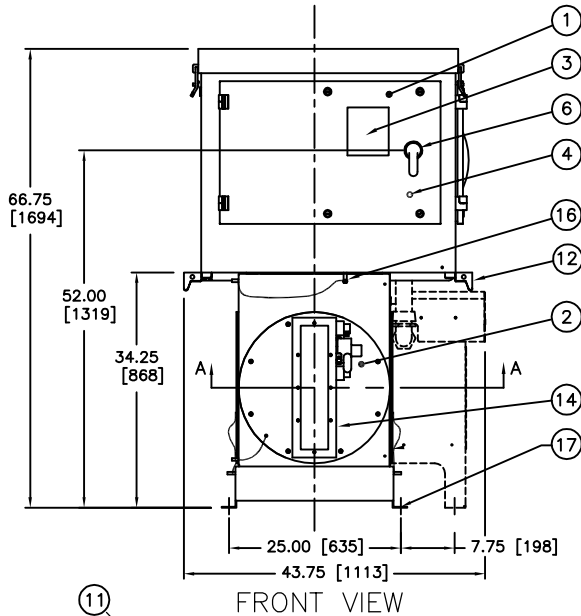




**HF ESP, POWER PLUS SERIES
21 & 28 kW WITH 3 PORT SIDE EXIT GROUND SWITCH**



- ① POWER PLUS UNIT.
- ② 3 PORT SIDE EXIT GROUND SWITCH. SEE ESP-SQ-CONF FOR SWITCH CONFIGURATION OPTIONS.
- ③ RATINGS NAMEPLATE, ALUMINUM, PHOTO ETCHED.
- ④ SWITCH GEAR AND CONTROL SECTION WITH HINGED DOOR. ALLOW 33"[838] OF CLEARANCE FROM THIS FACE FOR DOOR SWING.
- ⑤ POWER ELECTRONICS SECTION WITH HINGED DOOR. ALLOW 19"[483] 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 TRANSDUCER AND COMMUNICATION LINK CONDUIT.
- ⑨ 2"[51] DIA CONDUIT HOLE FOR 3 PH POWER AND GROUND.
- ⑩ COOLING FAN FOR IGBT HEAT SINK ASSEMBLY.
- ⑪ EZ SCOPE PORT WITH RJ45 SOCKET FOR GVC DISPLAY CONNECTION AND BNC CONNECTORS FOR MAKING EXTERNAL kV AND mA MEASUREMENTS.
- ⑫ LIFTING HOOKS (4 PLACES).
- ⑬ N/A
- ⑭ H.V SWITCH MECHANISM WITH VIEWING WINDOW AND INTERLOCK PROVISIONS. FOR INTERLOCK AND BOLT EXTENSION INFO SEE DWG A105811.
- ⑮ SIDE EXIT DUCT MOUNTING PROVISION WITH 22"[558] O.D. COVER PLATE. INCLUDES GASKETS AND 3/8-16 HARDWARE 8 PLACES ON A 20"[508] DIA B.C. WITH 18"[457] DIA DUCT OPENING.
- ⑯ SS GROUND CABLE TO GROUND EACH SECTION, INCLUDING ACCESS COVERS.
- ⑰ .69"[17.5] HOLE BOLT PATTERN PROVIDED FOR SWITCH BOX MOUNTING. 25.00"[635] X 19.00"[482] BOLT PATTERN.
- ⑱ HIGH VOLTAGE SEMI-OUTDOOR BUSHING, SEE DETAIL A.
- ⑲ OPTIONAL METRIC ADAPTER FOR H.V. BUSHING CONNECTION. CONVERTS 1/2 NPT TO M20-1.5. SEE DWG A117570.
- ⑳ OPTIONAL AUTO TRANSFORMER MOUNTED IN A NEMA 3R JUNCTION BOX. NOT SHOWN IN BOTTOM VIEW.

NOTES:

- 1. POWERPLUS AND SWITCH 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 DWG B125481 FOR GROUNDING DETAILS.

APPROX WEIGHT WITH GND SWITCH: 1000LBS, 454KG
 APPROX WEIGHT WITH GND SWITCH AND AUTO TRANS: 1300LBS, 589KG
 DIELECTRIC FLUID VOLUME: 29gal, 110L
 FINISH: ENAMEL, ASA 61, APPROX. RAL 7042
 TANK AND CONTROL ENCLOSURE RATED NEMA 4/IP56
 ALL DIMENSIONS IN INCHES FOLLOWED BY [mm]

DATA SHEET: ESP21-28SQ-C
 REVISION DATE: 09/12/08
 APPROVED BY: HH