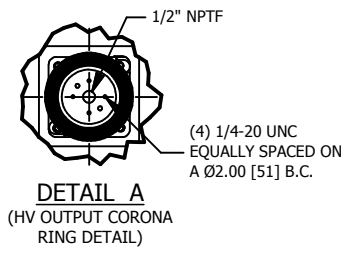
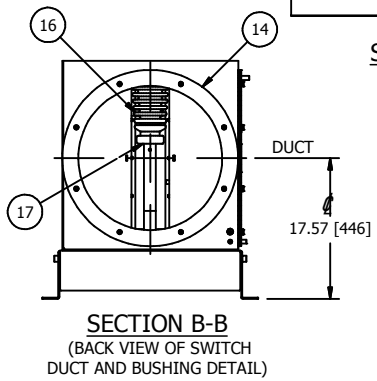
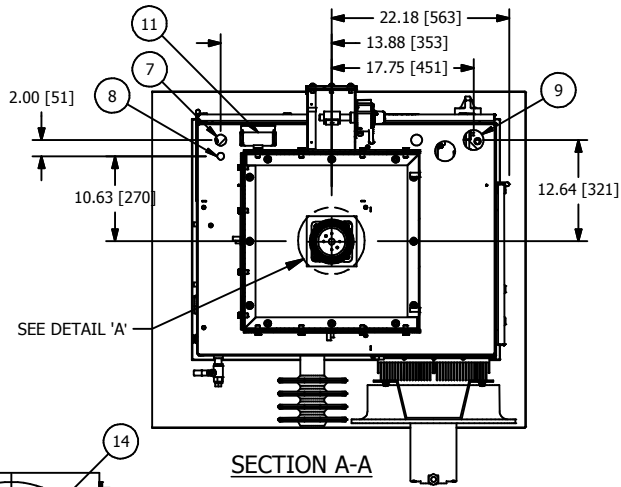
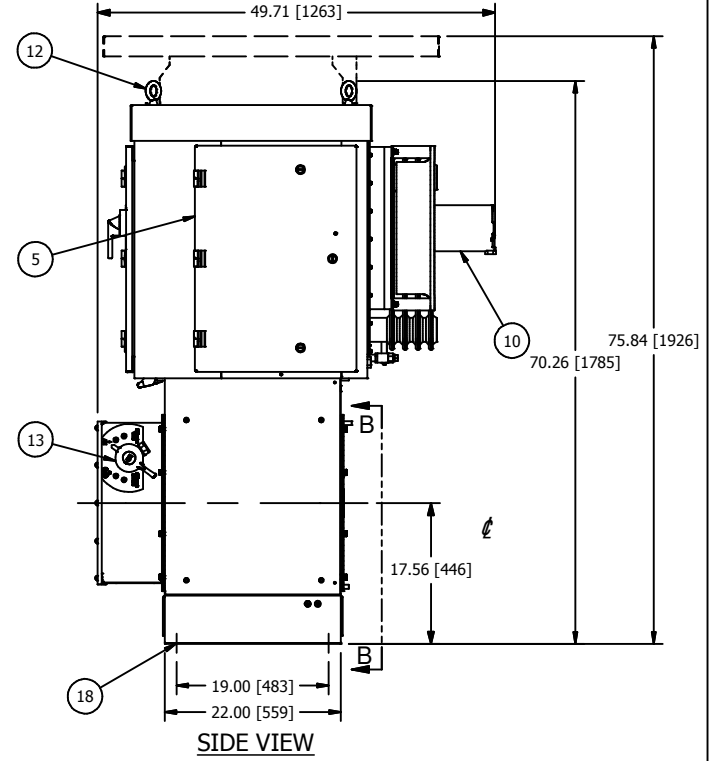
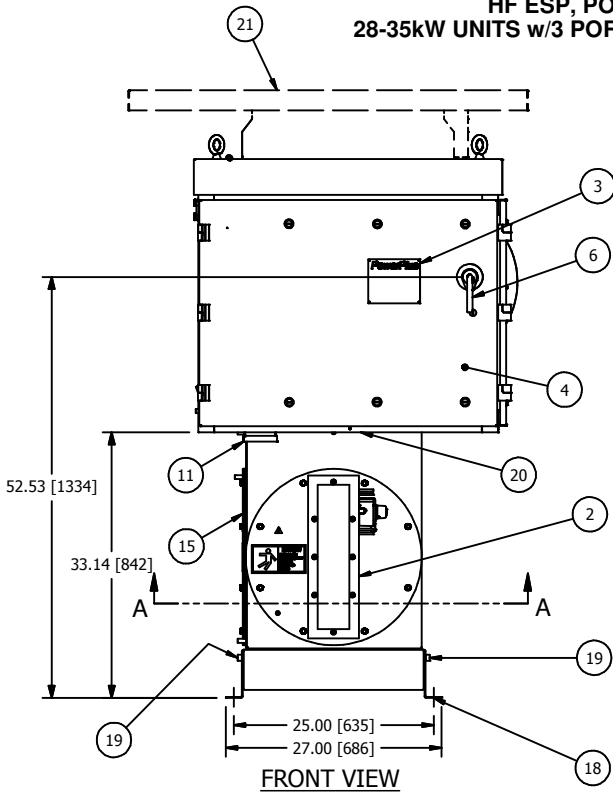




**HF ESP, POWERPLUS SERIES  
28-35kW UNITS w/3 PORT SIDE EXIT GROUND SWITCH**



- 1 POWERPLUS UNIT
- 2 3 PORT SIDE EXIT GROUND SWITCH. SEE ESP-SQ-CONF FOR SWITCH CONFIGURATION OPTIONS.
- 3 RATINGS NAMEPLATE, ALUMINUM PHOTO ETCHED.
- 4 SWITCHGEAR AND CONTROL SECTION WITH HINGED DOOR. ALLOW 37" [940] 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 INTERLOCKS SEE DWG C140616.
- 7 1" [25.4] DIA. CONDUIT HOLE FOR 120V CONTROL WIRING.
- 8 1/2" [12.7] DIA. CONDUIT HOLE FOR LOW VOLTAGE COMMUNICATION AND 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 EYES (4 PLACES).
- 13 H.V. SWITCH MECHANISM WITH VIEWING WINDOW AND INTERLOCK PROVISIONS. FOR INTERLOCK AND BOLT EXTENSION INFORMATION SEE DWG A105811.
- 14 SIDE EXIT 18" DUCT MOUNTING PROVISION. INCLUDES GASKETS AND 3/8-16 HARDWARE, (8) PLACES ON A 20" [508] DIA. WITH 18" [457] DIA. DUCT OPENING.
- 15 SIDE EXIT 22" [558] O.D. ACCESS COVER. INCLUDES GASKETS AND 3/8-16 HARDWARE, (8) PLACES ON A 20" [508] DIA. WITH 18" [457] DIA. DUCT OPENING.
- 16 HIGH VOLTAGE SEMI-OUTDOOR BUSHING, SEE DETAIL 'A' FOR DETAILS.
- 17 OPTIONAL METRIC ADAPTER FOR H.V. BUSHING CONNECTION. CONVERTS 1/2" NPT TO M20-1.5. SEE DWG A117570.
- 18 0.69" [17.5] HOLE BOLT PATTERN PROVIDED FOR SWITCH BOX MOUNTING. 25.00" [635] X 19.00" [482] BOLT PATTERN.
- 19 EQUIPMENT SAFETY GROUND TERMINATION, 3/8-16 GROUND BOSS.
- 20 S.S. GROUND CABLE TO GROUND EACH SECTION, INCLUDING ACCESS COVERS.
- 21 OPTIONAL SUN SHIELD MUST BE SHIPPED SEPARATELY AND INSTALLED IN THE FIELD.

**NOTES:**

1. POWERPLUS AND SWITCH MUST BE MOUNTED ON 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.
5. MINIMUM CLEARANCE REQUIRED ABOVE FLOOR TO LIFT AND REMOVE THE T/R RIG IS 87". CLEARANCE DOES NOT INCLUDE RIGGING HEIGHT.

APPROX. WEIGHT WITH GROUND SWITCH: 1125lbs (511kg).  
 DIELECTRIC FLUID VOLUME: 29gal (110L).  
 FINISH: ENAMEL, ASA 61, APPROX. RAL 7042.  
 TANK AND CONTROL ENCLOSURE RATED NEMA 4/IP56.

DATA SHEET: ESP28-35SQ-D  
 REVISION DATE: 10/14/15  
 APPROVED BY: HH

ALL DIMENSIONS IN INCHES [mm]