

Electrical Safety

Warning Labels on Electrical Equipment.

The image shows a rectangular warning label with an orange header and a white body. The header contains a black triangle with a white exclamation mark and the word "WARNING" in large, bold, black letters. Below the header, the text "Arc Flash and Shock Hazard" and "Appropriate PPE Required" is centered. The main body of the label is divided into sections. The first section contains the number "5.6" in large font, followed by "Cal/cm2 @ 18\" (Incident Energy)". To the right of this, the "Nominal System Voltage" is listed as "480V", followed by the "Arc Flash Boundary" as "51.9\"", the "Limited Approach Boundary" as "42\"", and the "Restricted Approach Boundary" as "12\". Below these boundaries, the "AF PPE" (Arc-Rated) is listed as "Shirt, Pants, or Coverall, Face Shield, Balaclava" with a note that the rating must be greater than or equal to the listed incident energy. The "Shock PPE" is listed as "Class 00 or Higher Voltage Gloves, Voltage Rated Tools". The "Other PPE" is listed as "Hard Hat, Safety Glasses, In Canal Hearing Protection, Leather Gloves, Leather Footwear". The bottom section of the label contains the "Equipment Name: PNL-HV-2", "Lockout Device: MDP-3 7", "Date: 1-1-15", "PH/FX: 888-502-3026", and the website "Arc-Flash-Training.com". At the bottom left of the label is a logo for "ELECTRICAL DIAGNOSTIC SURVEYS".

Annotations pointing to the label:

- Hazard Identification (points to the warning symbol)
- ANSI Approved Heading and Symbols (points to the "WARNING" text)
- Nominal System Voltage (points to "480V")
- Arc Flash and Shock Boundaries (points to the boundary values)
- PPE Selection (points to the PPE requirements)
- Equipment Identification and LOTO (points to the equipment name and lockout device)

Above is an example of the labels you will find on MCC's, Disconnects etc. As you can see, we can learn a lot about the hazards associated with electrical equipment:

- Nominal Voltage
- Arc Flash Boundary
- Limited Approach Boundary
- Restricted Approach Boundary
- PPE Selection

The warning labels are to ensure that hazards are brought to the attention off all persons; Respect Electrical equipment and the hazards that it involves. Seek out your electrician if you are unsure.

