

ArcCalc Versus PTW-Arc Flash

How are they different?

ArcCalc calculates the incident energy and arc flash boundary for a single point in a simplified power system. Minimum and maximum arcing short circuit currents are calculated using broad tolerances to provide conservative results with estimated system data.

PTW ArcFlash allows you to build a system model for your entire power system. Once the system model is built, the Arc Flash module calculates the incident energy and flash boundary at every location in the power system.

Features that ArcCalc and PTW Arc Flash Share:

- Both calculate incident energy and flash boundary values.
- Both produce standard and custom labels
- Both produce Energized Work Permits
- Both calculate arcing fault current values
- Both automatically determine the trip times from the protective device settings.
- Both have a large validated library of protective devices.
- Both follow the calculation methods outlined in the latest release of IEEE 1584 and NFPA 70E standards.

ArcCalc Advantages

- Simple calculator-style interface.
- Low cost.
- Intelligent default data for fault sources, transformers, cables and motors.
- Intelligent default data for arcing fault variables including bus gap and working distance.
- Automatically applies tolerances to determine min/max arcing fault currents to provide more conservative results with estimated data.

PTW Arc Flash Advantages

- Works from a full interactive model of the electrical power system.
- Evaluates multiple levels of protective devices including mis-coordination.
- Accumulates energy from multiple parallel fault sources automatically.
- Integrated with protective coordination drawings to help evaluate alternative designs.
- Stores and compares multiple operating scenarios.
- Calculates and reports bus, line-side and load-side fault conditions automatically.