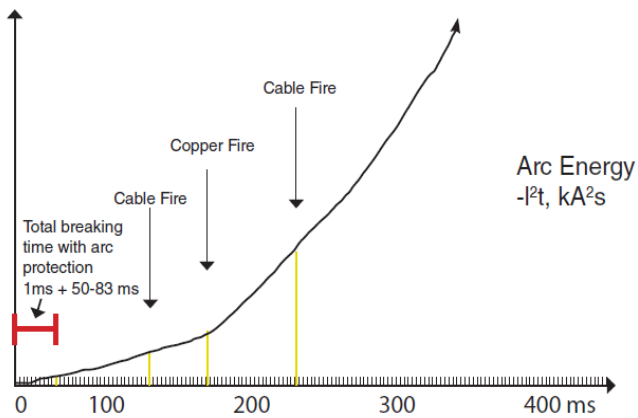




# GARD

*Unparalleled Protection*



## ARC-I-TEC

The i-Gard ARC-I-TEC reduces incident energy. Optical sensors detect and de-energize the arc flash hazard or arcing event resulting in a safer electrical system, protecting personnel and equipment from damages and tragic occurrences.

Arc flash is the result of a rapid release of energy due to an arcing fault between a phase to phase, phase to neutral, and phase to ground, causing severe damage to equipment and personnel. Commonly known as a discharge of electricity between two or more conductors that results in large quantities of pressure, heat and light. The energy produced by an arcing event is proportional to the voltage, current and duration of the event.



Initiates trip signal in 1ms, lowering the incident energy, the PPE requirement and equipment damage, keeping your employees safer.

Immune to false trips with current and light required and optical sensors calibrated to lux intensity and wavelength. These sensors will not trip due to camera flash or sunlight.

Built-in test function provides continual and automatic testing of the optical sensors to ensure they are functional and available when you need them most.

Four independent arc detection contacts providing selective isolation and coordination- no need to trip main breaker.

FEATURES	BENEFITS
Fastest Arc Detection Technology	Decreases incident energy without sacrificing coordination
Combines Monitoring for Abnormal Current to Avoid Nuisance Tripping	Can be light only, or light and current
Continuous Monitoring for Hazardous Arcing Events	Always keeps you informed of an upcoming hazard
4 Distinct Outputs	Increases selectivity
BIT: Built-in Test for Monitoring Integrity of Point Sensors	Always know your system is being monitored

PROTECTION TYPE	CLEARING TIME (SECONDS)	INCIDENT ENERGY (CAL/CM <sup>2</sup> )
51 Overcurrent	2.00	211
50 Instantaneous	0.450	47
I-Gard ARC-I-TEC	0.084	9

- Assumes breaker clearing time of 5 cycles
- 480V and 65kA bolted fault current, 18 inches



### Major Causes of Arc Flash:

- Physical contact- foreign objects falling on bus bars
- Moisture
- Impurities- dust build-up, condensed particulates
- Normal wear and tear
- Loose connection-in-line arcing failure
- Insulation breakdown/failure

### Hazards Associated with Arc Flash:

- Intense Heat (Thermal Energy)
- Blast Pressure Waves
- High Intensity Sound
- Shrapnel
- Toxic Vapors