

Volume 14 Issue 8 - August 2025

Director's Message



When performing infrared inspections of electrical distribution systems, many people identify the individual phases of polyphase circuits as A, B, and C; others frequently use 1, 2, and 3.

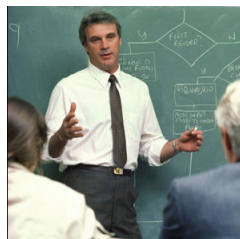
Confusion can arise with alphabetical or numerical labels particularly when switchgear enclosures are inspected from different perspectives, e.g. front versus rear. Further confusion can occur when phase rotation of installed equipment has been modified or changed or, in some cases, mislabelled.

Reference errors can be avoided by using terms that cannot be confused such as Left, Middle, Right or Upper, Middle, Lower. When using such terms, one should always reference from where the image was taken. For outside power lines references such as Street, Center, and Field may be used to identify phases without confusion.

Using the above simple terms can make your reports easier to understand and help to eliminate confusion when repairs are performed.

Become an Infraspection Institute Course Reseller

Proper training is essential to the success and longevity of any infrared inspection program. Whether you are a professional thermographer, distribute infrared or related test equipment, or are involved in professional training, we can help you to increase both sales and profits. An affiliation with Infraspection Institute can also help to increase your company's visibility without compromising your credibility.



With the proliferation of cheaper infrared cameras, competition has become more fierce and profits more scarce. Offering training cannot only expand your services and increase profits, it can help provide a long-term relationship that keeps your clients 'on the farm' and close to you.

Because Infraspection Institute do not sell infrared equipment, our

Upcoming Courses

[Online Distance Learning](#)

[Level I Certified Infrared Thermographer®](#)

- Aug 4 - 8 Colorado Springs
- Aug 4 - 7 Melbourne
- Aug 6 - 7 Melbourne *
- Aug 11 - 14 Rosharon
- Aug 11 - 15 Kuala Lumpur
- Aug 18 - 22 Cheyenne
- Aug 18 - 22 Guatemala City
- Aug 18 - 21 Kuala Lumpur
- Aug 25 - 28 Sydney
- Aug 27 - 28 Sydney *
- Aug 25 - 29 San Jose
- Sep 8 - 12 Albuquerque
- Sep 15 - 18 Rosharon
- Sep 22 - 26 Boise
- Sep 22 - 25 Adelaide
- Sep 24 - 25 Adelaide *
- Sep 22 - 25 Perth
- Sep 24 - 25 Perth *
- Sep 22 - 26 Quezon City
- Sep 22 - 25 Sarawak
- Sep 29 - Oct 3 Trinidad
- Sep 29 - Oct 2 West Windsor
- Oct 6 - 10 San Diego
- Oct 13 - 16 Brisbane
- Oct 13 - 14 Brisbane *
- Oct 20 - 23 West Windsor

courses are presented without marketing hype. Since we are not affiliated with infrared equipment manufacturers, you can rest assured that your clients are not being hijacked by a competitor. Best of all, you have several options to choose from including open enrollment classes, on-site courses, and our convenient web-based Distance Learning courses.

[More Information](#)

Protecting Yourself in the Sun



With the height of Summer, many thermographers focus their attention on the discomfort associated with heat and humidity. Those who spend time outdoors should also be aware of the health hazards associated with unprotected exposure to the

Sun.

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. The amount of damage from UV exposure depends on the strength of the light, the length of exposure, and whether the skin is protected. There are no safe UV rays or safe suntans.

Following a few simple tips can help protect you from the harmful effects of UV radiation.

- Cover up. Wear tightly-woven clothing that blocks out light. Try this test: Place your hand between a single layer of the clothing and a light source. If you can see your hand through the fabric, the garment offers little protection.
- Use sunscreen. A sun protection factor (SPF) of at least 15 blocks 93 percent of UV rays. You want to block both UVA and UVB rays to guard against skin cancer. Be sure to follow application directions on the bottle.
- Wear a hat. A wide brim hat (not a baseball cap) is ideal because it protects the neck, ears, eyes, forehead, nose, and scalp.
- Wear UV-absorbent shades. Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m. If you're unsure about the sun's intensity, take the shadow test: If your shadow is shorter than you, the sun's rays are the day's strongest.

For more information on this topic or on other workplace safety and health issues, visit www.osha.gov.

[More Information](#)

IR Inspection of Capacitors

Capacitors are devices commonly found in AC electrical distribution systems where power factor correction is required. Like any electrical component, capacitors need to be regularly checked for

- Oct 20 - 24 Santa Cruz
- Oct 20 - 23 Rosharon
- Oct 20 - 23 Edmonton
- Oct 27 - 30 Saskatoon

* Flexible Learning

[Level II Certified Infrared Thermographer®](#)

- Aug 4 - 8 San Pedro Sula
- Aug 11 - 15 Quezon City
- Sep 1 - 5 Panama City
- Sep 15 - 18 West Windsor
- Oct 20 -24 Quezon City
- Oct 27 - 30 Melbourne

[Level III Certified Infrared Thermographer®](#)

- Sep 22 - 24 West Windsor
- Nov 10 - 12 Melbourne

[Full 2025 - 2026 Schedule](#)

Upcoming Conferences

Infraspection Institute invite you to see us at the following upcoming conferences. Be sure to stop by and say Hello!

[Vibration Institute](#)

August 6 - 8, 2025
Newport News, VA

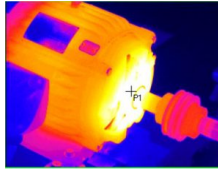
[SMRP Conference](#)

October 6 - 9, 2025
Fort Worth, TX

[IR/INFO Conference](#)

February 1 - 4, 2026

proper operation. Infrared thermography can be used to rapidly inspect capacitors from a safe, remote distance.



Capacitors are wound devices that are electrically connected between potential and ground. Capacitors used for power factor correction are generally encased in painted, rectangular steel canisters and often have two equal sized bushings for electrical connections. In a three-phase circuit, there may be several capacitors connected to each phase.

The most common failures of capacitors are loose/deteriorated bushing connections, open circuits due to internal winding failure, and open supply circuits. When inspecting capacitors, be sure to:

- Visually inspect capacitor bodies. Capacitors should not be misshapen/swollen.
- Thermographically inspect capacitor bodies. Capacitors should be warmer than ambient air temperature and exhibit equal temperatures across all phases.
- Check bushing and wiring connections for hotspots. Any thermal anomalies detected should be investigated and corrected as soon as possible.

Capacitors operating at ambient temperature should be corrected immediately as imbalanced capacitance can be more detrimental than having no capacitors at all.

[More Information](#)

Attend IR/INFO 2026 and Get Discounted Training



In celebration of IR/INFO's 36th anniversary, Infraspersion Institute are pleased to announce several special offers combining the world's most respected infrared training and certification program with the industry's original technical conference.

Several packages are available featuring discounts on Level I, II, and III Infraspersion Institute Certified Infrared Thermographer® training courses and TI Reporter™ software. Discounted group rates are available for four or more persons.

[More Information](#)

Want to Make More Money?



[Become an Infraspersion Institute Master Thermographer®](#)

Orlando, FL

[NETA PowerTest Conference](#)

March 2 - 6, 2026
Nashville, TN

Links of Interest

[IRINFO.ORG](#)

[TI-Reporter.com](#)

[Thermographer Directory](#)

[NORMI.TV](#)

[A-Rent](#)