

# VT04 and VT02 Visual IR Thermometers

## Technical Data

### Detect issues instantly!

Fluke Visual IR Thermometers combine the convenience of a spot thermometer with the visual advantage of an infrared camera creating a brand new tool category.

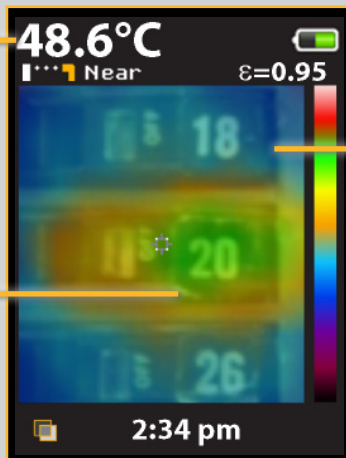
- Detect issues instantly with built-in digital camera
- No training required
- True pocket size design
- Breakthrough affordability

### Designed to see it all

Every Fluke Visual IR Thermometer has a built-in digital camera with a thermal heat map overlay to instantly identify the exact location of the problem.



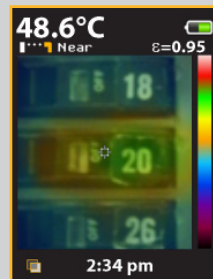
**Centerpoint temperature (°C/°F)**



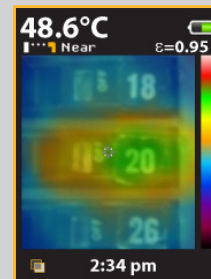
**Digital image for context**

Clearly see that breaker 20 is overloaded and communicate your findings.

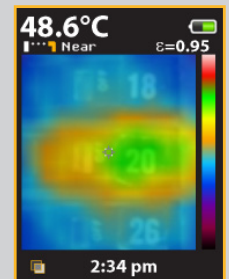
**Thermal heat map overlay**



25 % heat map



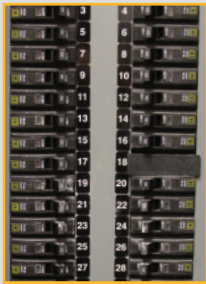
50 % heat map



75 % heat map

## See the difference

See how a traditional IR thermometer and an entry level infrared camera make it challenging to communicate the issue on breaker 20.



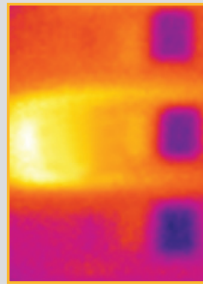
### Visual inspection

No issues are obvious to the naked eye.



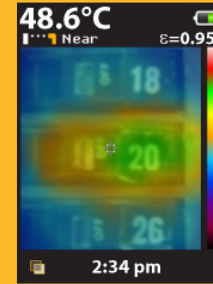
### Traditional IR thermometer

Optimized for single point measurements.



### Entry level infrared camera

Challenging to see the exact location.



### Visual IR Thermometer

Digital image with heat map overlay detects the exact location of the issue.

## Key features of a Visual IR Thermometer

### Breakthrough affordability

Half the cost of infrared cameras that require training and software

### Built-in digital camera

Every Fluke Visual IR thermometer has a built-in digital camera

### Exclusive thermal heat map blending overlay

Blend digital and thermal images to instantly show the exact location of the issue. Blend between 0 %, 25 %, 50 %, 75 %, and full thermal with one button

### No training required

Fully automatic with built-in intelligence

### True pocket size design

Forty percent smaller than entry-level infrared cameras

### SmartView® reporting software

Store up to 10,000 images per Gb on included SD card and make professional reports on included professional software

### Hot and cold spot trackers

Automatically identifies hottest and coldest spots within field of view

## The Fluke VT04 adds powerful features that include:

### Powerful resolution with PyroBlend™ Plus optics

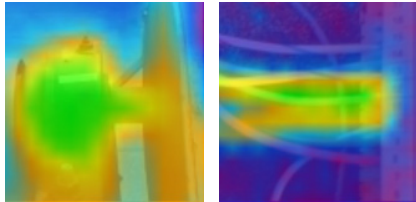
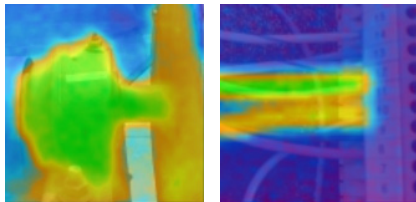
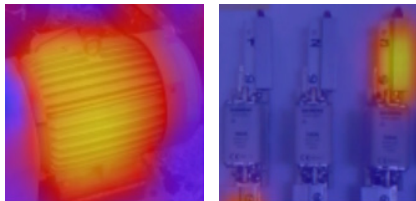
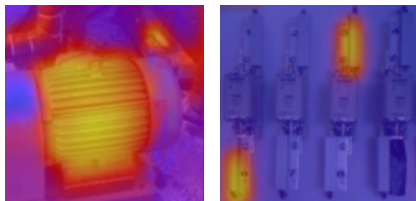
- Best-in-class field of view for tight spaces: 28° x 28°
- Four times sharper images: VT04 compared to VT02

### Alarm and time lapse features

- **Hi/Lo temperature alarm**—Screen flashes if user-selected temperature is exceeded
- **Time lapse image capture**—automatically capture images
- **Auto-monitor™ alarm**—automatically capture images after a user-selected temperature alarm has been triggered

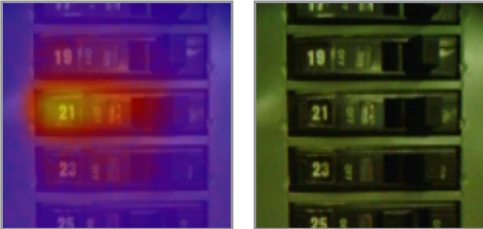


## Specifications

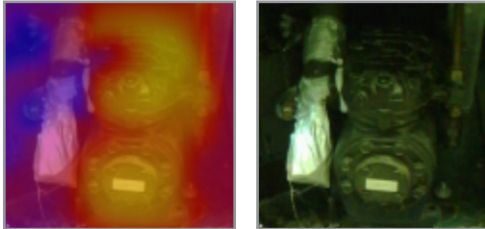
Key features	VT02	VT04
Built-in digital camera	Yes	
Thermal heat map overlay	Yes, five blending modes	
Image optics system	PyroBlend™ optic 	PyroBlend™ Plus optic *4x sharper image than VT02 
Field of view	20° x 20° 	28° x 28° 
Hi-Lo temperature alarms	—	Yes
Time lapse image capture	—	Yes
Auto-monitor alarm	—	Yes
Battery type	Four (4) AA batteries	Li-Ion rechargeable
Training	No training required	
Ergonomics	Slim pocket-sized design	
Hot and cold markers	Yes	
<b>General features</b>		
Battery life	Eight (8) hours	
Temperature measurement range	-10 °C to +250 °C (14 °F to 482 °F)	
Temperature measurement accuracy	+/- 2 °C or +/- 2 %	
Temperature measurement	Yes, centerpoint	
Storage medium (micro SD card)	Stores up to 10,000 images per Gb (Four (4) Gb card included)	
Infrared spectral band	6.5 µm to 14 µm	
Level and span	Auto	
Focus mechanism	Focus free, no training required with built-in intelligence	
Focus options—exclusive user selectable NEAR/FAR options	NEAR > 23 cm (9 in); FAR < 23 cm (9 in)	
Dimensions	21 cm x 7.5 cm x 5.5 (8.3 in x 3 in x 2.2 in); < 300 g. (10.5 oz.)	
File format	.is2 format saved to SD card. User can create professional reports or export images in Smartview (BMP, DIB, GIF, SPE, FIF, SPEG, JPG, PNG, TIF and TIFF)	
Safety and compliance	CFR47: 2009 Class A. Part 15 subpart B; CE: EN 61326:2006; IEC/EN 61010-1:2010	
Warranty	Two (2) years	

**Key applications**

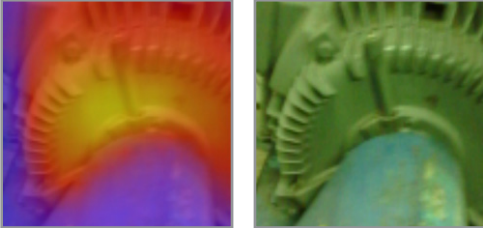
**Overloaded breakers**



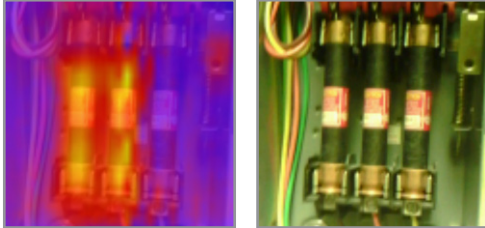
**Evaluate compressor heat expansion valves**



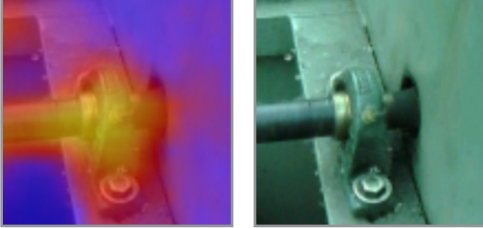
**Overheating motor**



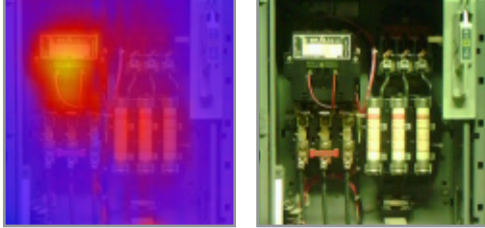
**Unbalanced three phase supply**



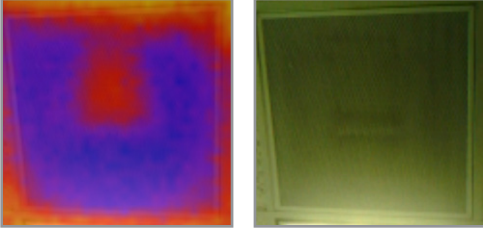
**Overheating bearings**



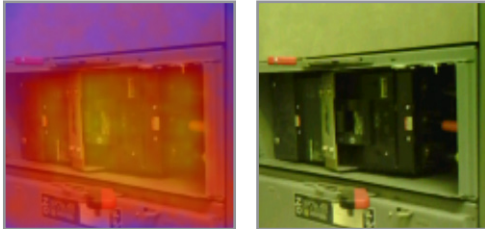
**Combination starter**



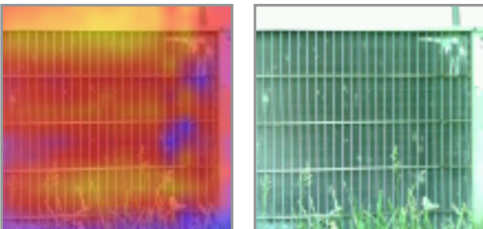
**Faulty air damper**



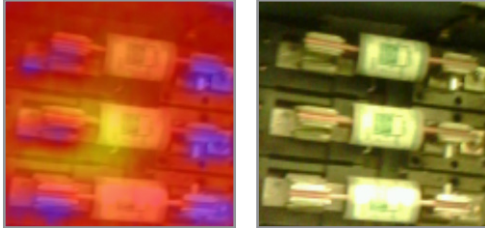
**Normal operating temperature on mission critical breaker**



**Abnormal heat patterns in an AC condenser**

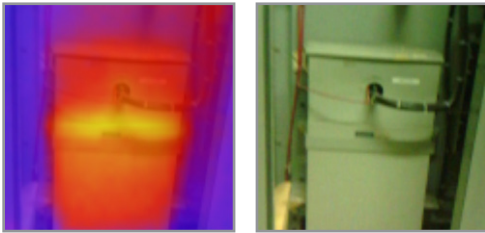


**Detect issues with switchgears**

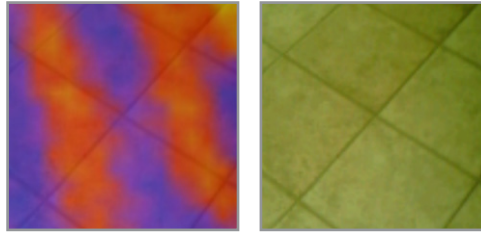




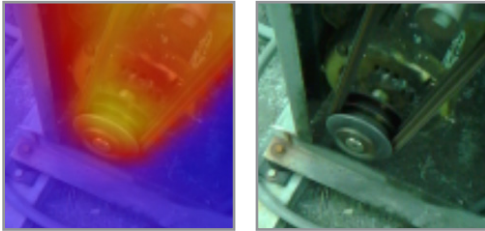
**Monitor power factor correction capacitors**



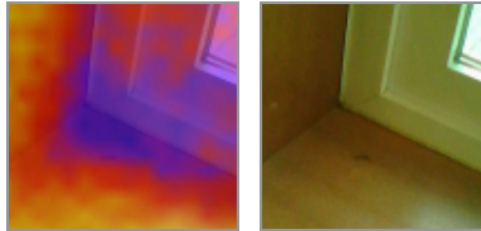
**Ensure hydronic and radiant flooring is functional**



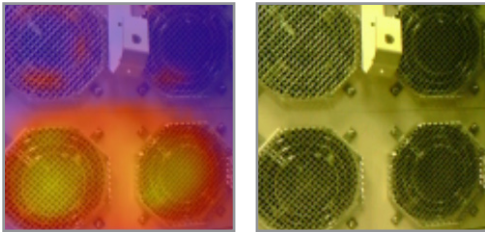
**Overheating pulley and belts**



**Identify potential heat loss from doors and windows**



**Check fans for high-powered equipment**



**Your Results Matter™**

**Ordering information**

- FLK-VT04** VT04 Visual IR Thermometer
- FLK-VT02** VT02 Visual IR Thermometer

**Included with product**

Hard Case, hand strap, mini SD card and adapter, SmartView® software on CD, Lithium Ion batteries and Micro USB Charger/Power Supply (including mains adapters) (VT04) or 4 AA batteries (VT02), printed Quick Start Guide in English, Spanish, German, French and Simplified Chinese, others on CD. Users' manual on CD (21 languages).

**Optional**

- FLK-VT04-CHARGER** Extra charger for VT04
- FLK-VT-HOLSTER** Holster for VT02 and VT04
- C90** C90 Soft Case

**Save money with Fluke kits:**

- FLK-VT04-MAINT-KIT** Includes a VT04 Visual IR Thermometer and a 1587 Insulation Multimeter
- FLK-VT04-HVAC-KIT** Includes a VT04 Visual IR Thermometer, 902 True-RMS HVAC Clamp Meter and a 116 Digital Multimeter.
- FLK-VT04-ELEC-KIT** Includes a VT04 Visual IR Thermometer, a 117 Electricians MultiMeter and a 376 AC/DC True-RMS Clamp Meter

**Fluke Corporation**  
PO Box 9090, Everett, WA 98206 U.S.A.

**Fluke Europe B.V.**  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

**For more information call:**  
In the U.S.A. (800) 443-5853 or  
Fax (425) 446-5116  
In Europe/M-East/Africa +31 (0) 40 2675 200 or  
Fax +31 (0) 40 2675 222  
In Canada (800)-36-FLUKE or  
Fax (905) 890-6866  
From other countries +1 (425) 446-5500 or  
Fax +1 (425) 446-5116  
Web access: <http://www.fluke.com>

©2013 Fluke Corporation.  
Specifications subject to change without notice.  
Printed in U.S.A. 8/2013 6000547B\_EN

**Modification of this document is not permitted  
without written permission from Fluke Corporation.**