



AIR CONDITIONING  
COPPER THEFT SOLUTION

## Air Conditioning Theft Device

### ENGINEER AND ARCHITECT SPECIFICATIONS

**DETECTS THEFT BY MONITORING VULNERABLE CONNECTIONS COMPROMISED THROUGH VANDALISM.**

- MONITORS SUPPLIED AND APPLIED VOLTAGE
- MONITORS REFRIGERANT PRESSURE
- FULLY SUPERVISED AND TAMPER PROOF
- DURABLE DESIGN NEMA 4 ENCLOSURE
- TWO (2) WIRE OR WIRELESS OPERATION
- 208/230/460/480 VOLT OPERATION
- SINGLE AND THREE PHASE, 50/60 HZ.
- LINKS TO AND SUPPORTED BY ALL
- BURGLAR ALARM SYSTEMS, EMS OR DDC
- MODEL CW-3
- US PATENT 7,834,772
- UL LISTED 15M6 US



#### Introduction

CopperWatcher targets the connections thieves' compromise to steal an air conditioner with unsurpassed reliability. Typically the first thing a thief does before stealing the unit is shut down the high voltage power at the disconnect located next to the A/C.

CopperWatcher supervises power at the A/C disconnect and sounds the *existing alarm systems loud siren* when it is shut off drawing attention to the would-be thieves. CopperWatcher is intelligent enough to tell the difference between a purposeful shut down and a local power outage, and will not send a "false alarm" to the security panel. Saving a possible fine with the local authorities and the nuisance the audible alarm will cause.

#### Description

The CopperWatcher enclosure is constructed of durable Lexan material that is smooth finish grey in color with a weather and UV resistant informational/warning label attached. The enclosure can be mounted in any position requiring a 3/4" mounting hole in the air conditioning safety disconnect switch. 1/2" knock out is located at the bottom of the enclosure for device and alarm wire access. The CopperWatcher provides a normally closed loop with alarm connection points located within the enclosure. High voltage connections are made within the enclosure and air conditioning safety disconnect. The pressure sensor attaches to the liquid refrigerant service gauge port.

The CopperWatcher monitors supplied and applied voltage as well as refrigerant pressure. If the applied voltage is lost, a sensor opens and the supervised signal is disrupted, activating the installed alarm system. If the supplied voltage is lost, the CopperWatcher automatically switches to "fail safe" mode and will not open the supervised signal. "Fail safe" mode will not cause a false alarm at the installed alarm system. The pressure sensor monitors refrigerant pressure and will open the supervised signal to the installed alarm system during a pressure loss situation. In the event of pressure loss, the installed alarm system is activated.

The existing siren must be located close to the installed CopperWatcher unit.

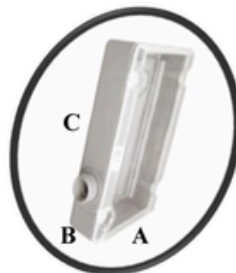
The CopperWatcher is compatible with all alarm systems that are capable of monitoring a closed loop, supervised, or non-supervised loop.

## Construction

<b>Base/Cover</b>	Lexan, impact-resistant, Nonflammable
<b>Seal</b>	Polyurethane
<b>Base/Cover color</b>	light gray
<b>Flammability rating</b>	UL94 V5-0
<b>Temp. Rating</b>	
<b>Max/Min long term</b>	140 deg F/-30 deg F (60 deg C/ -34.4 deg C)
<b>Connection</b>	½" knockouts and ¼" male NPT

<b>Dimensions</b>	AxBxC in. (cm)
	A 4.28 x B 2.0 x C 7.0
	(A 10.87 x B5.08 x C5.08 cm)

<b>Electrical</b>	Coil voltage input: 208-480 Vac 50-60Hz Drop Out= 30-70 Vac Pull in=177 Vac
-------------------	--



A1-A2: Alarm contacts open during a theft attempt  
P1-P2-P3: Contacts for installing pressure sensor

T1-T2-T3 Trouble loss of line voltage SPDT pilot duty auxiliary contacts 4amp @ 30Vac/Dc

9-10-11 Aux contacts loss of load voltage SPDT pilot duty auxiliary contacts 4amp @ 30Vac/Dc

## **Pressure sensor**

### **Features**

- Low Pressure SPST opens on fall
- ¼" female SAE Connection
- Snap Acting stainless steel hermetically sealed sensor (SHP, SLP & SFC)
- Small size and lightweight for direct mounting
- Excellent set point repeatability/stability
- Pressure range 5 PSI opens 20 PSI Automatically close
- Burst pressure: 5000 PSI
- life @ Rated load :1000,000 Cycles
- Rated voltage 50/60 HZ, 24/120/240 volts



### **Install kit includes:**

- 4 Pig tails max amperage 60
- 4 Wire nuts
- 1 Vertical "T" fitting
- 1 Horizontal "T" fitting
- 1 ½" PVC black grommet

## **Contact information:**

**CopperWatcher**

**PO Box 210604**

**Bedford TX 76095**

**Phone: 817-684-1216**

[www.copperwatcher.com](http://www.copperwatcher.com)

[www.copperwatcherstore.com](http://www.copperwatcherstore.com)

**Questions: [info@copperwatcher.com](mailto:info@copperwatcher.com)**