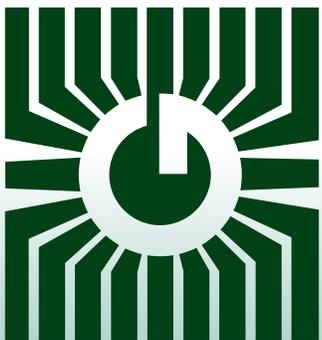


# GREYSTONE ENERGY SYSTEMS INC



## MINI-CURRENT SWITCH CS Series



### Precision power control/sensing

#### FEATURES:

- Solid Core
- Go/No Go or Field Adjustable Models
- Up to 100 amps input current (CS-GnG-100)
- Up to 75 amps input current (CS-610-75)
- Small, Compact Design

*Peace of mind  
through reliable  
current switches*

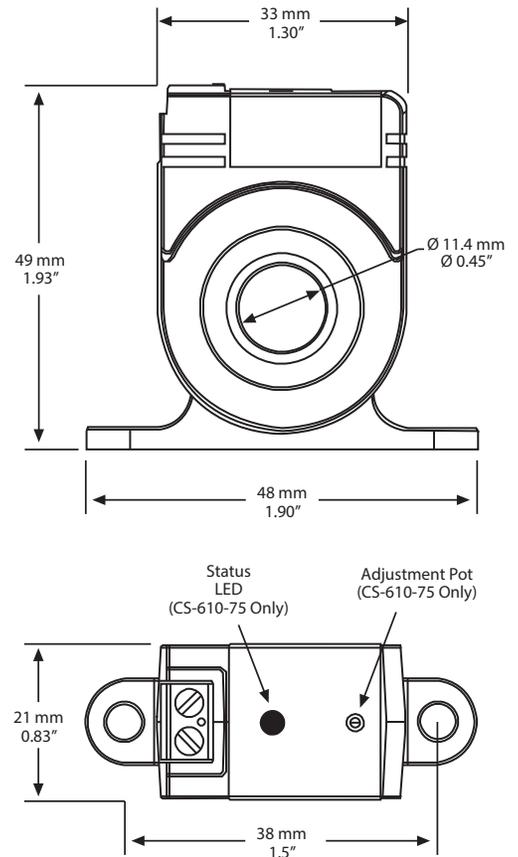
## DESCRIPTION:

The CS Series mini current switches monitor line current for electrical loads such as pumps, conveyors, lighting, heaters or fans and closes the output contacts when the trip point is exceeded. The CS-GnG-100 has a factory set trip point of 0.5 Amps to provide Go/No Go status operation. The CS-610-75 has a trip setpoint that is adjustable between 0.75 to 75 Amps by rotating the adjustment pot.

The sensor requires no external power as it is totally powered by induction from the AC line being monitored. The switch output is normally open and when the input current exceeds the trip setpoint the switch closes to provide an on/off digital signal to the controller

## SPECIFICATION:

Current Setpoint:.....	Fixed at 0.5 Amps (CS-GnG-100) 0.75 to 75 Amps (CS-610-75)
Maximum Input Current:.....	100 Amps continuous (CS-GnG-100) 75 Amps continuous (CS-610-75)
Sensor Power:.....	Self-powered
Output Type:.....	Solid-state mosfet
Output Switch Action:.....	Normally open
Output Switch Ratings:.....	30 Vac/dc, 500 mA Max.
Indication:.....	Status LED (CS-610-75 Only)
Von @ 24 Vdc at 500mA:.....	< 50 mV
Frequency:.....	50/60 Hz
Response Time:.....	200 mS Typical
Insulation Class:.....	600 Vac, insulated conductors
Operating Temperature:.....	-15 to 60 °C (5 to 140 °F)
Operating Humidity:.....	5 to 90% RH non-condensing
Terminal Block:.....	14 to 22 AWG
Dimensions:.....	48 x 49 x 21 mm (1.9 x 1.93 x 0.83 in)
Sensor Aperture:.....	11.4 mm (0.45 in)
Enclosure Material:.....	ABS/PC, UL94 V-0
Agency Approvals:.....	cULus Listed



## ORDER INFORMATION:

<b>CS-GnG-100</b>	Go/No Go
<b>CS-610-75</b>	Adjustable



**GREYSTONE**  
ENERGY SYSTEMS INC

Greystone Energy Systems Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.*

*We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

# GREYSTONE

## ENERGY SYSTEMS INC

## CURRENT SWITCH CS Series

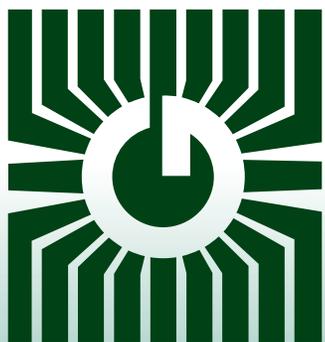


### Precision power control/sensing

#### FEATURES:

- Solid Core
- Go/No Go or Field adjustable models
- Adjustable setpoint (CS-610-200) potentiometer
- Up to 200 amps input current
- Self-powered
- Add-on Command relay option

*Piece of mind  
through reliable  
current switches*



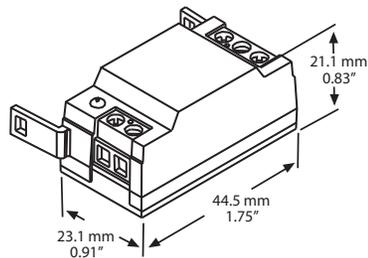
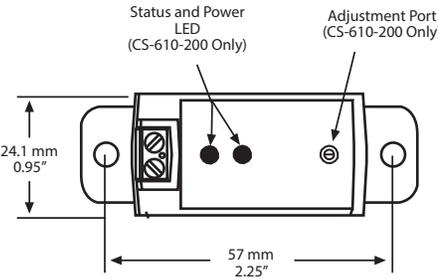
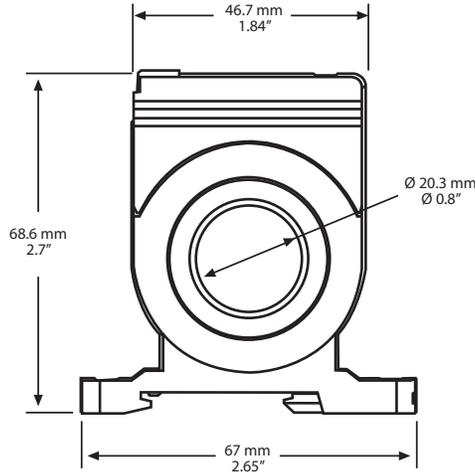
**DESCRIPTION:**

The CS series current switch monitors line current for electrical loads such as pumps, conveyors, lighting, heating or fan and closes the output contacts when the trip point is exceeded. The CS-GnG-200 has a factory set trip point of 0.75 Amps to provide Go/No Go status operation. The CS-610-75 has trip setpoint est adjustable that is adjustable between 1 to 200 Amps by rotating the adjustment potentiometer.

The sensor requires no external power as it is totally powered by induction of the AC line being monitored. The switch output is normally open and when the input current exceeds the trip setpoint, the switch closes to provide an on/off digital signal to the controller.

**SPECIFICATION:**

Current Setpoint:.....	Fixed at 0.75 Amps (CS-GnG-200) 1 to 200 Amps (CS-610-200)
Maximum Input Current:.....	200 Amps continuous
Sensor Power:.....	Self-powered
Output Type:.....	Solid-state mosfet
Output Switch Action:.....	Normally open
Outout Switch Ratings:.....	30 Vac/dc, 500 mA Max.
Indication:.....	Power and Status LED (CS-610-200 Only)
Von @ 24 Vdc to 500mA:.....	< 50 mV
Frequency:.....	50/60 Hz
Response Time:.....	200 mS Typical
Insulation Class:.....	600 Vac, insulated conductors
Operating Temperature:.....	-15 to 60 °C (5 to 140 °F) - (CS-GnG-200) -15 to 50 °C (5 à 122 °F) - (CS-610-200)
Operating Humidity:.....	5 to 90% RT non-condensing
Terminal Bolck:.....	14 to 22 AWG
Dimensions:.....	68.6 x 67 x 24.9 mm (2.7 x 2.65 x 0.95 in)
Sensor Aperture:.....	0.8 in (20.3 mm)
Enclosure Material:.....	ABS/PC, UL94 V-0
Agency Approvals:.....	cULus listed



**ORDER INFORMATION:**

<b>CS-GnG-200</b>	Go/No Go
<b>CS-610-200</b>	Adjustable

**ACCESSORIES: CSR Series Command Relay**

(See CSR brochure for complete specifications)  
(Order separately)

<b>CSR-112</b>	12 Vdc
<b>CSR-124</b>	24 Vac/dc



Greystone Energy Systems Inc.  
150 English Drive, Moncton  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.*

*We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*

# GREYSTONE ENERGY SYSTEMS INC

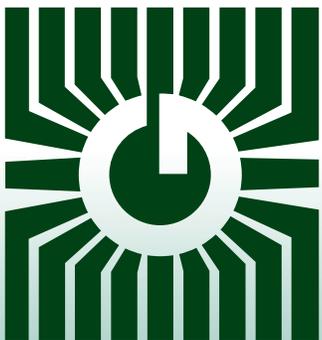
## SPLIT-CORE CURRENT SWITCH SC Series



### Precision power control/sensing

#### FEATURES:

- Split-Core
- Go/No Go or field adjustable models
- Setpoint adjustment potentiometer (SC-610-200)
- Up to 200 amps input current
- Self-powered
- Add-on Command relay option



*Peace of mind  
through reliable  
current switches*

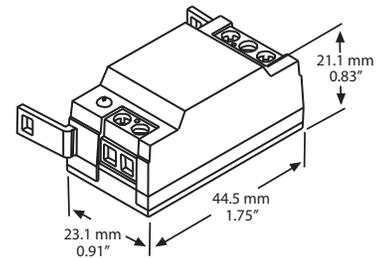
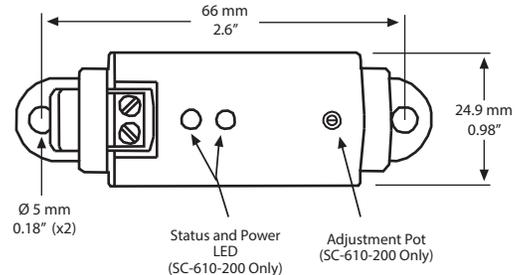
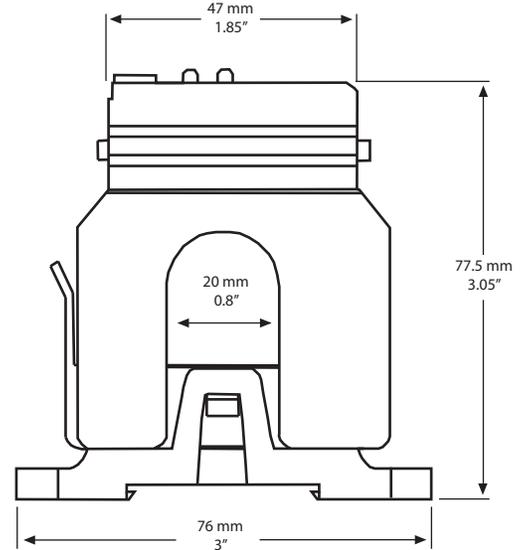
**DESCRIPTION:**

The SC Series current switch monitors line current for electrical loads such as pumps, conveyors, lighting, heaters or fans and closes the output contacts when the trip point is exceeded. The SC-GnG-200 has a factory set trip point of 2 Amps to provide Go/No Go status operation. The SC-610-200 has a trip setpoint that is adjustable between 2 to 200 Amps by rotating the adjustment potentiometer.

The sensor requires no external power as it is totally powered by induction from the AC line being monitored. The switch output is normally open and when the input current exceeds the trip setpoint the switch closes to provide an on/off digital signal to the controller

**SPECIFICATION:**

Current Setpoint:.....	Fixed at 2 Amps (SC-GnG-200) 2 to 200 Amps (SC-610-200)
Maximum Input Current:.....	200 Amps continuous
Sensor Power:.....	Self-powered
Output Type:.....	Solid-state mosfet
Output Switch Action:.....	Normally open
Output Switch Ratings:.....	30 Vac/Vdc, 500 mA Max.
Indication:.....	Power and Status LED (SC-610-200 Only)
Von @ 24 Vdc at 150mA:.....	< 50 mV
Frequency:.....	50/60 Hz
Response Time:.....	200 mS Typical
Insulation Class:.....	600 Vac, insulated conductors
Operating Temperature:.....	-15 to 50 °C (5 to 122 °F)
Operating Humidity:.....	5 to 90% RH non-condensing
Terminal Block:.....	14 to 22 AWG
Dimensions:.....	77.5 x 76 x 24.9 mm (3.05 x 3 x 0.98 in)
Sensor Aperture:.....	20.3 mm (0.8")
Enclosure Material:.....	ABS/PC, UL94 V-0
Agency Approvals:.....	cULus Listed



**ORDER INFORMATION:**

<b>SC-GnG-200</b>	Go/No Go
<b>SC-610-200</b>	Adjustable

**ACCESSORIES: CSR Series Command Relays**

(See CSR brochure for complete specifications)  
(Order Separately)

<b>CSR-112</b>	12 Vac/dc
<b>CSR-124</b>	24 Vac/dc



**GREYSTONE**  
ENERGY SYSTEMS INC

Greystone Energy Systems Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com

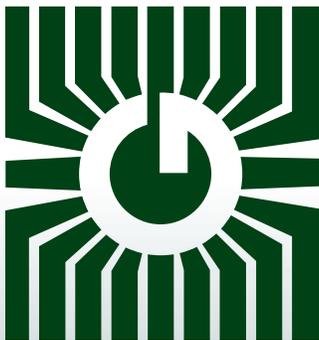


*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.*

*We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

# GREYSTONE ENERGY SYSTEMS INC



## CURRENT SWITCHES HIGH OUTPUT



### Precision power control/sensing

#### FEATURES:

- Solid Core
- Adjustable trip levels
- Up to 200 amps input current
- High current output

*Peace of mind  
through reliable  
current switches*

# AC CURRENT SWITCHES CS-325

## ADJUSTABLE CURRENT-OPERATED SOLID-STATE RELAYS FOR SWITCHING AC CIRCUITS



### FEATURES:

- Self-powered and no insertion loss
- True digital switching and no leakage
- Small compact size
- Jumper-selectable ranges
- Easy field adjustment
- Input / Output isolation via current transformer
- Solid-state reliability
- Solid, reliable mounting method

### DESCRIPTION:

The CS-325 series of AC current switches are solid-state switches that activate a contact closure whenever the monitored primary circuit current exceeds a pre-set level. Models are available to switch various load types as indicated in the Product Ordering Chart. All models include a multi-turn adjustment to set the trip threshold to the desired value. They monitor up to 200 Amps and feature jumper selectable ranges. All models are CSA certified or UL approved and CE compliant.

### SPECIFICATIONS:

<b>Setpoint Range</b>	1-200 Amps	<b>Enclosure Size (H x W x D)</b>	Solid Core - 49 x 87 x 25 mm (1.95 x 3.45 x 1.0")					
	<table border="1"> <tr> <th>Jumper</th> <th>CS-325 Amp-Turns</th> </tr> <tr> <td>Low (none)</td> <td>1-6</td> </tr> <tr> <td>Medium</td> <td>6-40</td> </tr> <tr> <td>High</td> <td>40-200</td> </tr> </table>			Jumper	CS-325 Amp-Turns	Low (none)	1-6	Medium
Jumper	CS-325 Amp-Turns							
Low (none)	1-6							
Medium	6-40							
High	40-200							
<b>Wiring Connections</b>	Solid Core - Barrier strip	<b>Enclosure Material</b>	UL 94V-0 flammability rated ABS Insulation Class 600V					
<b>Hysteresis</b>	< 2% FS max.	<b>Certification</b>	CSA or UL (see below table), CE					
<b>Operating Temperature</b>	0 to 40°C (32 to 104°F)	<b>Power Supply</b>	None - Self-powered					
<b>Response Time</b>	< 200 mS	<b>AC Conductors Hole</b>	Solid Core - 20mm (0.8") diameter					

### CURRENT SWITCH: PRODUCT ORDERING INFORMATION

Model	Output Type	Switch V Max	I Max	Von@24Vdc @ 150 mA	Leakage Current	Power LED	Status LED	Auto Range	Input I Min	Input I Max	Approval
CS-325*	Triac	250Vac	1 Amp	n/a	<5 mA	No	No	No	1.25A	200A	cCSAus
CS-325-NS*	Triac	250Vac	1 Amp	n/a	<1 mA	No	No	No	1.25A	200A	cCSAus

\* The CS-325 with the snubber circuit is best used to switch high-current inductive loads such as small fan motors. The CS-325-NS is best used to switch resistive or low-current inductive loads such as relays or lights.

# AC CURRENT SWITCH

## CS-425-HC Series



## CURRENT-OPERATED SOLID-STATE RELAYS FOR SWITCHING AC CIRCUITS WITH TIME DELAY

### FEATURES:

- Self-powered and no insertion loss
- True digital switching and no leakage
- Small compact size
- 0, 5, 10, or 15 minutes time delay models
- Input / Output isolation via current transformer
- Solid-state reliability
- Solid, reliable mounting method

### APPLICATIONS:

Direct control of AC loads, such as dryer booster fans, in response to the current of a monitored AC circuit

### DESCRIPTION:

The CS-425-HC products are solid-state current switches with N.O. triac outputs to control high-current line-voltage AC loads. All models have a factory set trip level of approximately 1 Amp and require no field adjustment for easy installation. Internal circuits are powered by induction from the line being monitored and all models are cULu certified.

### SPECIFICATIONS:

<b>Maximum Core Current</b>	50 Amps	<b>Turn on time</b>	<200 mS
		<b>Turn off time</b>	0, 5, 10 or 15 minutes (factory set)
<b>Operating Temperature</b>	0 to 40°C (32 to 104°F)	<b>Operating Humidity</b>	0 - 95% RH non-condensing
<b>Trip Set-Point</b>	Approximately 1 Amps	<b>Material</b>	UL 94V-0 flammability rated ABS Insulation Class 600V
<b>Enclosure Size (H x W x D)</b>	49 x 87 x 25 mm (1.95" x 3.45" x 1")	<b>Mounting Holes</b>	2 x 5 mm holes spaced 76 mm on base (2 x 0.19" holes spaced 3" on base)
<b>AC Conductor Hole</b>	20 mm (0.8") Diameter	<b>Switch Type</b>	Solid-state triac
<b>Switch Rating</b>	120 Vac @ 2.5 Amps Max.	<b>Off-state Leakage</b>	<1 mA

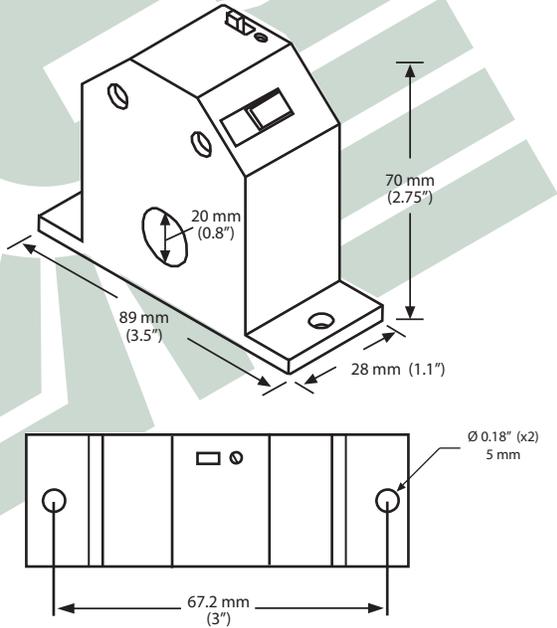
### DRYER BOOSTER FAN OPERATION:

The CS-425-HC series can operate a dryer booster fan directly. These devices sense when a clothes dryer is drawing 1 Amp of current and then closes the output switch to activate the dryer vent booster fan. When the dryer cycle is complete and the current drops below the threshold, the output switch will remain closed for a pre-set delay time to allow heat to be removed from the vent before the switch is opened again. The device output can switch 120 Vac loads up to 2.5 Amps.

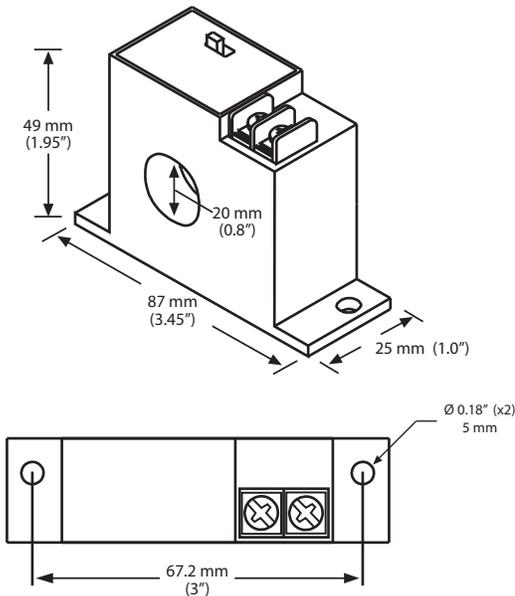
### CURRENT SWITCH: PRODUCT ORDERING INFORMATION

Model	Output Type	Switch V Max.	Switch I Max.	Leakage Current	Input I Min.	Input I† Max.	Time Delay (off)	Approval
CS-425-HC-0	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	none	cULus
CS-425-HC-5	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	5 minutes	cULus
CS-425-HC-10	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	10 minutes	cULus
CS-425-HC-15	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	15 minutes	cULus

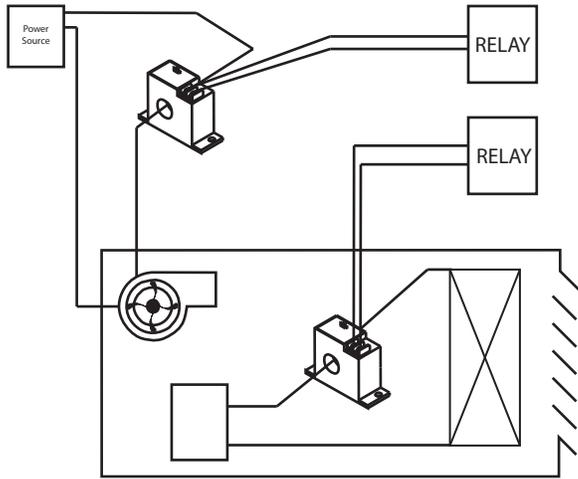
### Solid Core CS-325 Series Current Switch



### Solid Core CS-425 Series Current Switch



### Typical Installation



**GREYSTONE**  
ENERGY SYSTEMS INC

Greystone Energy Systems Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.*

*We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*

**GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM**