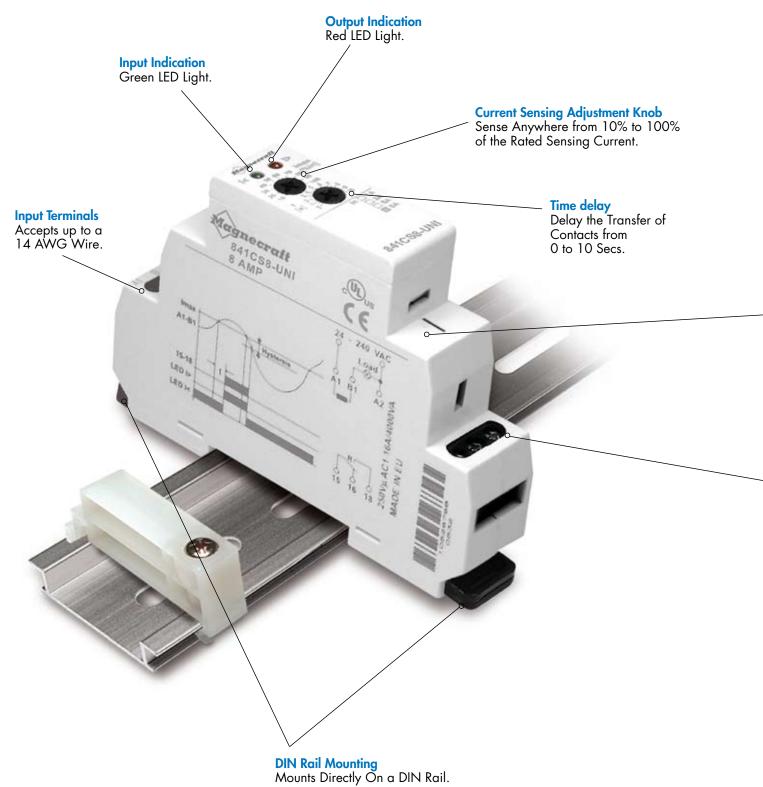
# Advantages of the 841 Current Sensing Relay



5/10



The 841 Current Sensor Series is a complete current sensing solution in one modular package which mounts directly to a DIN rail. This product allows the user to monitor the current of one circuit (1 to 8 amps) and switch another circuit in case of an over current or under current condition. The built in time delay feature allows the user to accurately switch the output anytime between 0 to 10 seconds after the preset current monitoring condition is violated. Also, the 841 has the capability to extend the sensing range up to 600 A through the use of current transformers.

## Solid State Circuitry Used for Sensing and Timing Control.

**Output Terminals** Accepts up to a 14 AWG wire.

- The variable trip point feature allows the user to accurately sense over/under loads.
- Offers a "one stop solution" for your power management system.
- Two LED status indicators; indicate status at a glance.
- The Green LED is on when power is applied to the input terminals. The Red LED blinks during time-out, and is ON when the output is generized.
- Color and appearance designed for high visibility in all environments.
- The wide input voltage range of 24 to 240 AC enables the device to work with all popular AC voltages.
- Only 17.5 mm wide making it ideal for tight spaces.
- Engineering availability allows for customized relay solutions.



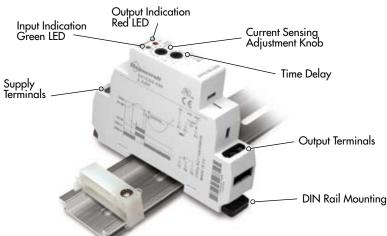
**Optional Panel Adapter** (16-788C1) See Section 3 p.18

www.magnecraft.com 847-441-2540

# 841 Current Sensing Relay/SPDT 15 Amp Rating







## General Specifications (@ 25°C) (UL 508)

| Output Characteristics        |   | Units                             | 841CS1-UNI       | 841CS2-UNI       | 841CS5-UNI       | 841CS8-UNI      |
|-------------------------------|---|-----------------------------------|------------------|------------------|------------------|-----------------|
| Number and type of Contacts   |   |                                   | SPDT             | SPDT             | SPDT             | SPDT            |
| Contact Material              |   |                                   | Silver Alloy     | Silver Alloy     | Silver Alloy     | Silver Alloy    |
| Current rating                | @ 240 VAC, 24 VDC                         | A                                 | 15               | 15               | 15               | 15              |
| Switching voltage             | · ·                                       | V                                 | 240 AC, 50/60 Hz | 240 AC, 50/60 Hz | 240 AC, 50/60 Hz | 240 AC, 50/60 H |
|                               |   | V                                 | 24 DC            | 24 DC            | 24 DC            | 24 DC           |
|                               |   | HP                                | 1/2 @ 120VAC     | 1/2 @ 120VAC     | 1/2 @ 120VAC     | 1/2 @ 120VAC    |
|                               |   | HP                                | 1 @ 240 VAC      | 1 @ 240 VAC      | 1 @ 240 VAC      | 1 @ 240 VAC     |
|                               |   | Pilot Duty                        | B300             | B300             | B300             | B300            |
| Minimum Switching Requirement | ł   | mA                                | 100              | 100              | 100              | 100             |
| ndication                     | LED                                       | Blinks = Timing<br>On = Energized | Red              | Red              | Red              | Red             |
| Input Characteristics         |   | Ŭ                                 |                  |                  |                  |                 |
| Voltage Range                 |   | V                                 | 24240 AC         | 24240 AC         | 24240 AC         | 24240 AC        |
| Maximum consumption           | LED                                       | VA                                | 1.5              | 1.5              | 1.5              | 1.5             |
| Indication                    |   |                                   | Green            | Green            | Green            | Green           |
| Sensing Characteristics       |   |                                   |                  |                  |                  |                 |
| Sensing Range                 |   | A                                 | 0.11             | 0.22             | 0.55             | 0.88            |
| Timing Characteristics        |   |                                   |                  |                  |                  | 1 -             |
| Time Scales                   |   |                                   |                  |                  |                  |                 |
| Time Ranges Available         |   | sec                               | 010              | 010              | 010              | 010             |
| Tolerance                     | Mechanical Setting                        | %                                 | 5                | 5                | 5                | 5               |
| Repeatability                 | Constant Voltage<br>and Temperature       | %                                 | I                |                  | I                |                 |
| Operate Time                  | Maximum                                   | ms                                | 25               | 25               | 25               | 25              |
| Release Time                  | Maximum                                   | ms                                | 20               | 20               | 20               | 20              |
| Performance Characteristics   |   |                                   |                  | 1                |                  |                 |
| Electrical Life               | Operations @ Rated Current<br>(Resistive) |                                   | 100,000          | 100,000          | 100,000          | 100.000         |
| Nechanical Life               | Unpowered                                 |                                   | 10.000.000       | 10.000.000       | 10.000.000       | 10,000,000      |
| Dielectric strength           | Input to Contacts                         | V                                 | 2500 AC          | 2500 AC          | 2500 AC          | 2500 AC         |
| Ŭ.                            | Between Open Contacts                     | V                                 | 1000 AC          | 1000 AC          | 1000 AC          | 1000 AC         |
| Terminal Wire Capacity        | ··· · [· · · · · ···                      | AWG (mm2)                         | 14 (2.1)         | 14 (2.1)         | 14 (2.1)         | 14 (2.1)        |
| Terminal Torque (maximum)     |   | in lb (Nm)                        | 7.1 (0.8)        | 7.1 (0.8)        | 7.1 (0.8)        | 7.1 (0.8)       |
| Environment                   |   | I                                 | 1                | I                | I                | I               |
| Product certifications        | Standard version                          |                                   | UL, CE           | UL, CE           | UL, CE           | UL, CE          |
| Ambient air temperature       | Storage                                   | °C                                | -30+70           | -30+70           | -30+70           | -30+70          |
| around the device             | Operation                                 | °C                                | -20+55           | -20+55           | -20+55           | -20+55          |
| Degree of protection          | -   |                                   | IP 20            | IP 20            | IP 20            | IP 20           |
| Weight                        |   | grams                             | 60               | 60               | 60               | 60              |



#### **Standard Part Numbers**

### **BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

| Part Number | Input Voltage | Timing Range | Sensing Current Range | Contact Configuration | Rated Load Current |
|-------------|---------------|--------------|-----------------------|-----------------------|--------------------|
| 841CS1-UNI  | 24240 VAC     | 0.1s10s      | 0.11A                 | SPDT                  | 15 Amps            |
| 841CS2-UNI  | 24240 VAC     | 0.1s10s      | 0.22A                 | SPDT                  | 15 Amps            |
| 841CS5-UNI  | 24240 VAC     | 0.1s10s      | 0.55A                 | SPDT                  | 15 Amps            |
| 841CS8-UNI  | 24240 VAC     | 0.1s10s      | 0.88A                 | SPDT                  | 15 Amps            |
|             |               |              | I I                   |                       | •                  |

#### Part Number Builder

| Series     | Relay Style         | Sensing Current | - | Input Voltage   |
|------------|---------------------|-----------------|---|-----------------|
| 841 = SPDT | CS = Current Sensor | 1 = 0.11 Amp    |   | UNI = 24240 VAC |
|            |                     | 2 = 0.22 Amp    |   |                 |
|            |                     | 5 = 0.55 Amp    |   |                 |
|            |                     | 8 = 0.88 Amp    |   |                 |

