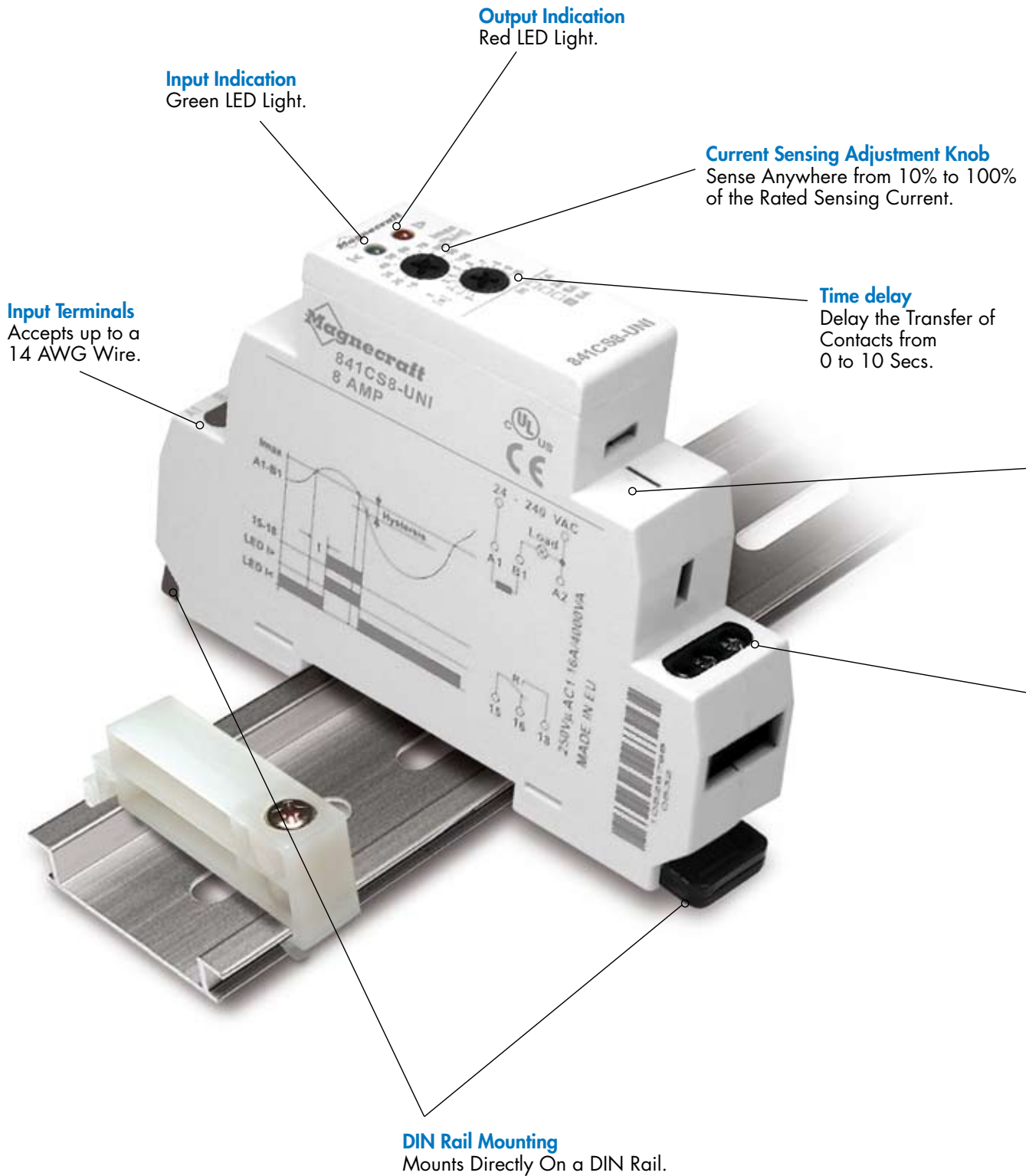


# Advantages of the 841 Current Sensing Relay



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.

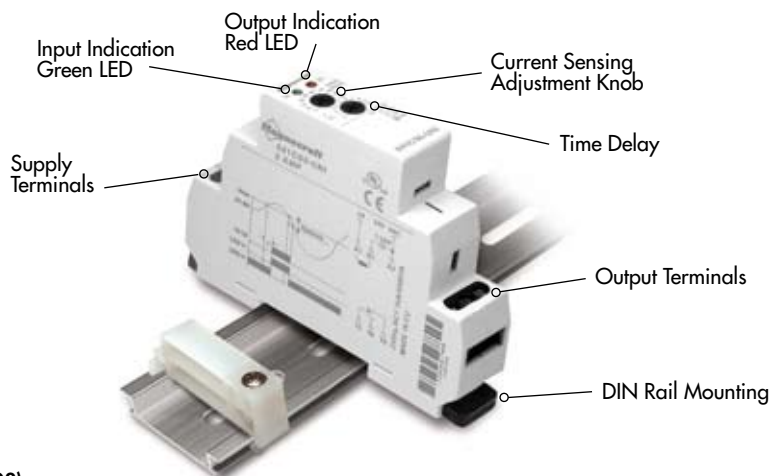
- The variable trip point feature allows the user to accurately sense over/under loads.
- Offers a “one stop solution” for your power management system.
- Two LED status indicators; indicate status at a glance.
- The Green LED is on when power is applied to the input terminals. The Red LED blinks during time-out, and is ON when the output is generated.
- 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

## 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 Hz
		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		mA	100	100	100	100
Indication	LED	Blinks = Timing On = Energized	Red	Red	Red	Red
Input Characteristics						
Voltage Range		V	24...240 AC	24...240 AC	24...240 AC	24...240 AC
Maximum consumption	LED	VA	1.5	1.5	1.5	1.5
Indication			Green	Green	Green	Green
Sensing Characteristics						
Sensing Range		A	0.1...1	0.2...2	0.5...5	0.8...8
Timing Characteristics						
Time Scales			1	1	1	1
Time Ranges Available		sec	0...10	0...10	0...10	0...10
Tolerance	Mechanical Setting	%	5	5	5	5
Repeatability	Constant Voltage and Temperature	%	1	1	1	1
Operate Time	Maximum	ms	25	25	25	25
Release Time	Maximum	ms	20	20	20	20
Performance Characteristics						
Electrical Life	Operations @ Rated Current (Resistive)		100,000	100,000	100,000	100,000
Mechanical 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
	Between Open Contacts	V	1000 AC	1000 AC	1000 AC	1000 AC
Terminal Wire Capacity		AWG (mm <sup>2</sup> )	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						
Product certifications	Standard version		UL, CE	UL, CE	UL, CE	UL, CE
Ambient air temperature around the device	Storage	°C	-30...+70	-30...+70	-30...+70	-30...+70
	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



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

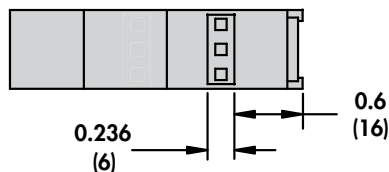
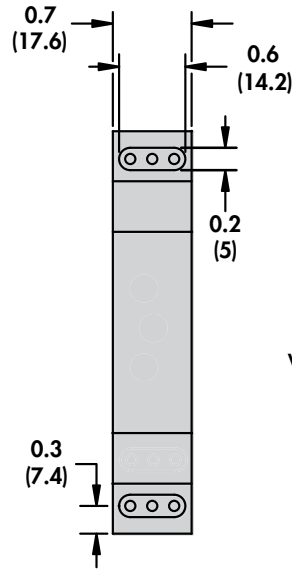
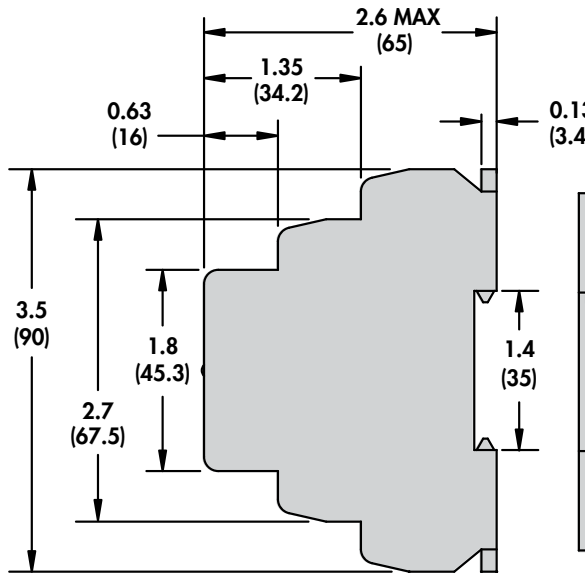
**Standard Part Numbers**

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

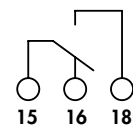
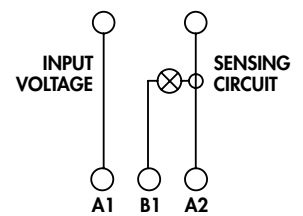
Part Number	Input Voltage	Timing Range	Sensing Current Range	Contact Configuration	Rated Load Current
<b>841CS1-UNI</b>	24...240 VAC	0.1s...10s	0.1...1A	SPDT	15 Amps
<b>841CS2-UNI</b>	24...240 VAC	0.1s...10s	0.2...2A	SPDT	15 Amps
<b>841CS5-UNI</b>	24...240 VAC	0.1s...10s	0.5...5A	SPDT	15 Amps
<b>841CS8-UNI</b>	24...240 VAC	0.1s...10s	0.8...8A	SPDT	15 Amps

**Part Number Builder**

Series	Relay Style	Sensing Current	-	Input Voltage
841 = SPDT	CS = Current Sensor	1 = 0.1...1 Amp		UNI = 24...240 VAC
		2 = 0.2...2 Amp		
		5 = 0.5...5 Amp		
		8 = 0.8...8 Amp		



**WIRING DIAGRAM**



15 - COMMON  
16 - NORMALLY CLOSED  
18 - NORMALLY OPEN