



861 Solid State Relay

GENERAL SPECIFICATIONS

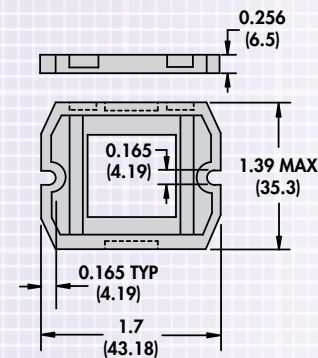
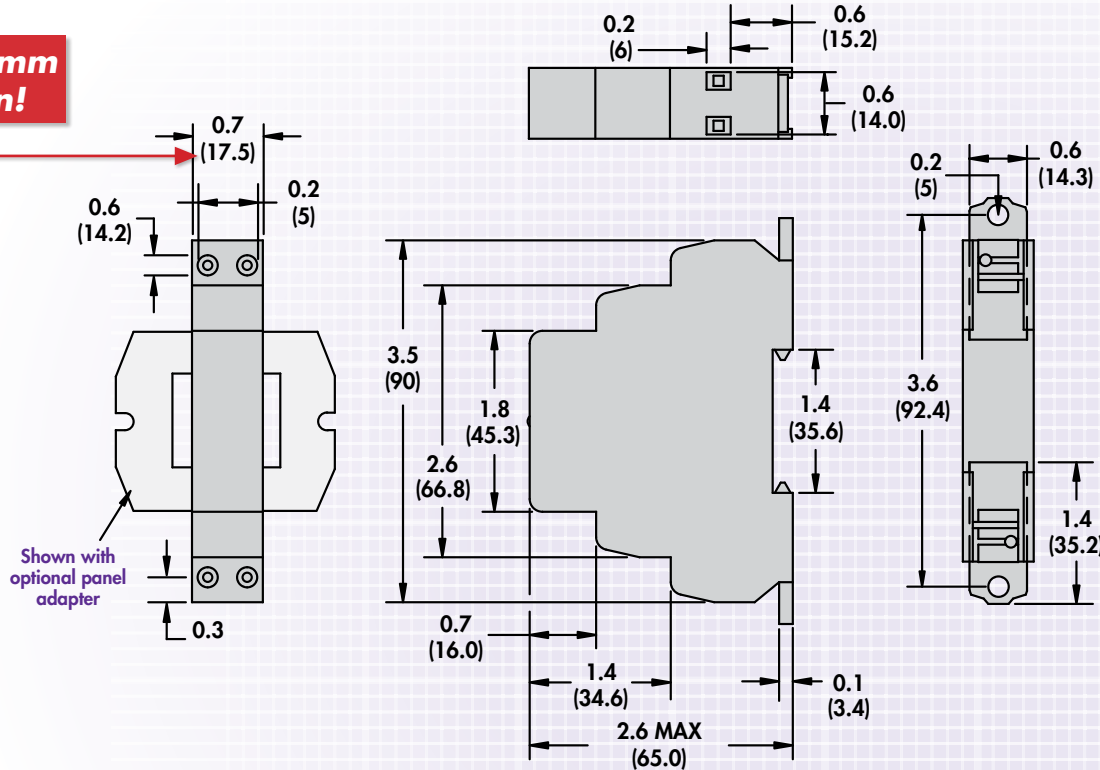


OUTPUT CHARACTERISTICS	UNIT	861SSR210-DC-1	861SSR210-AC-1	861SSRA208-DC-1	861SSRA208-AC-1	861SSR115-DD	861SSR208-DD
Number and type of Contacts		SPST-NO	SPST-NO	SPST-NO	SPST-NO	SPST-NO	SPST-NO
Switching Device		SCR (2)	SCR (2)	Alternistor Triac	Alternistor Triac	MOSFET	MOSFET
Current rating	A	10	10	8	8	15	8
Switching voltage	V	24....280 AC	24....280 AC	24....280 AC	24....280 AC	3....50 DC	3....150 DC
Switching Type		Zero Cross	Zero Cross	Zero Cross	Zero Cross	DC Switching	DC Switching
Maximum zero turn-on voltage (V _{pk})	V	35	35	35	35	N/A	N/A
Maximum Rate of Rise Off State Voltage (dv/dt)	V/us	500	500	475	350	N/A	N/A
Incandescent Lamp Ampere Rating (rms)	A	8	8	5	5	N/A	N/A
Motor Load Rating (rms)	A	4.5	4.5	3	3	N/A	N/A
Min. Load current to maintain on	mA	50	50	150	150	20	20
Non-Repetitive Surge Current (1 cycle)	A	500	500	200	200	50	35
Max. RMS overload current (1 second)	A	24	24	24	24	24	17
Max. Off state leakage current (rms)	mA	10	10	10	10	10	10
Typical On State Voltage Drop (rms)	V	1.25 AC	1.25 AC	1.25 AC	1.25 AC	1.25 DC	1.25 DC
Max. On State Voltage Drop (rms)	V	1.6 AC	1.6 AC	1.6 AC	1.6 AC	1.6 DC	1.6 DC
Maximum I ² T for Fusing (A ²)		1250	1250	250	250	N/A	N/A
INPUT CHARACTERISTICS							
Voltage Range	V	3....32 DC	90....280 AC, 80....140 DC	3....32 DC	90....280 AC, 80....140 DC	3.5....32 DC	3.5....32 DC
Must Release Voltage	V	1 DC	10 AC	1 DC	10 AC	1 DC	1 DC
Nominal Input Impedance	Ω	Current Regulator	16....25K	Current Regulator	16....25K	Current Regulator	Current Regulator
Typical Input Current @ 5VDC or 240VAC	mA	16	12	12	12	12	12
Reverse Polarity Protection		Yes	N/A	Yes	N/A	Yes	Yes
PERFORMANCE CHARACTERISTICS							
Operating (response) time (On/Off)	ms	8.3/8.3	40/80	8.3/8.3	40/80	5/5	5/5
Rated insulation voltage (input to output)	V	2500 AC	2500 AC	2500 AC	2500 AC	2500 AC	2500 AC
Dielectric strength (terminals to chassis)	V	2500 AC	2500 AC	2500 AC	2500 AC	2500 AC	2500 AC
ENVIRONMENT							
Product certifications (standard version)		UL, CSA, CE	UL, CSA, CE	UL, CSA, CE	UL, CSA, CE	UL, CSA, CE	UL, CSA, CE
Ambient air temperature (storage)	°C	-40...+100	-40...+100	-40...+100	-40...+100	-40...+100	-40...+100
around the device (operation)	°C	-30...+80	-30...+80	-30...+80	-30...+80	-30...+80	-30...+80
Degree of protection		IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
MISCELLANEOUS CHARACTERISTICS							
Thermal Resistance (Junction to Case)	°C/W	0.66	0.66	2	2	1.4	0.5
Integral Heat sink	°C/W	4	4	4	4	4	4
Weight	g (oz)	127 (4.1)	127 (4.1)	127 (4.1)	127 (4.1)	127 (4.1)	127 (4.1)
LED	input	Green	Green	Green	Green	Green	Green
Terminal Wire Capacity	AWG (mm ²)	14 (2.1)	14 (2.1)	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)	7.1 (0.8)	7.1 (0.8)

DIMENSIONS

Dimensions shown in inches and (millimeters)

**17.5mm
thin!**



**Optional Panel
Adapter
(16-788C1)**

AN INDUSTRY FIRST!

- Slim line
- No moving parts
- and **NO DIRECT COMPETITION**

WIRING DIAGRAM

