



ED SERIES

AC & DC OUTPUT PLUGGABLE SOLID STATE RELAYS

INSTALLATION INSTRUCTIONS

Please read all installation instructions before using ED Series SSRs.

- Select mounting type. DIN rail mountable (DRSED) and PCB mountable (PCBSED) sockets are sold separately.
- Mounting an ED Series SSR using a DIN rail mountable socket
 - Insert ED Series SSR into DRSED socket observing terminals orientation (fig. 1).
 - Secure ED SSR using latching mechanism on socket until you hear a clicking sound.
 - Install the ED Series SSR / socket on the DIN rail as shown in fig.1
 - Wire the socket DRSED to the input/output side (fig. 5). AWG #24 minimum, 2 x AWG #14 (stranded/solid) maximum (0.2-2.1 mm²), choose wire gauge according to load current. Maximum recommended terminal screw torque 5.3-8.85 lb-in (0.60-1.2 Nm) on input/output terminations.
 - To retrieve the ED Series SSR from socket, first unlock latching mechanism, as shown in fig.1, then gently pull the SSR.
 - Release DRSED socket from DIN rail using a screwdriver. See fig.1.
 - If multiple units are installed be sure to follow derating curve.
- Mounting an ED Series SSR using a PCB mountable socket:
 - Before mounting the ED Series SSR into the PCBSED socket, first solder PCBSED socket onto PC board.
 - When soldering the relay terminals, use a soldering iron of 30 to 60 W, and quickly complete soldering (within approximately 3 seconds). Use a non-corrosive resin flux.
 - Insert ED Series SSR into PCBSED socket observing terminals' orientation (fig. 2).
 - Secure ED SSR using latching mechanism on socket until you hear a clicking sound.
 - To retrieve the ED Series SSR from socket, first unlock latching mechanism, as shown in fig.2, then gently pull the SSR.

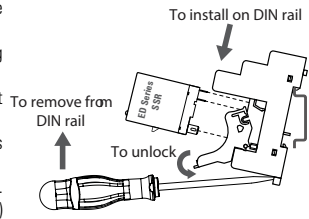


fig. 1 DRSED Socket Mounting/Dismounting

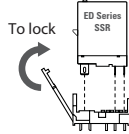


fig. 2 PCBSED Socket Mounting

ORDERING OPTIONS

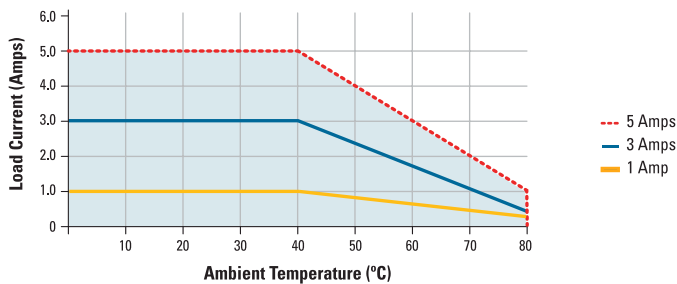
Series	ED	24	C	5	R
Output Voltage	06: 1-48 VDC (5 Amps only) 10: 1-80 VDC (5 Amps only) 1-100 VDC (10 Amps only) 24: 24-280 VAC				
Control Voltage	B: 90-140 VAC C: 18-32 VDC D: 3-15 VDC * E: 18-36 VAC F: 48-72 VDC * 5-15 VDC range for ED06D5, ED10D5 & ED10D10				
Rated Load Current	1: 1 Amp (not available with B, E & F suffixes) 3: 3 Amps (not available with B & E suffixes) 5: 5 Amps 10: 10 Amps (not available with B, E & F suffixes)				
Switching Mode	Blank: Zero Voltage Turn-On (AC Output only) R: Random Turn-On (AC Output only)				

ED 24 C 5 R

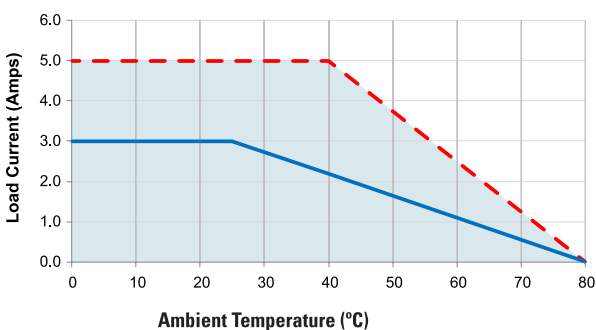
Required for valid part number
 For options only and not required for valid part number

DERATING CURVES (A)

ED24xxx (B)

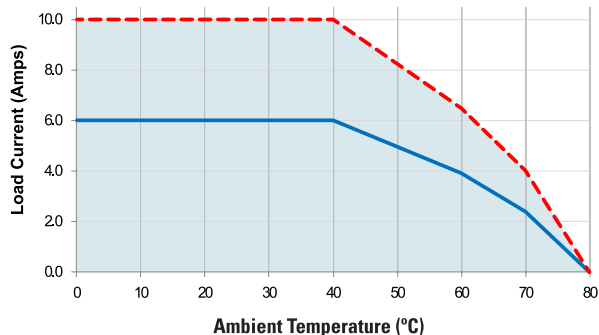


EDxxx5 (C)



- Single unit, distance to adjacent components ≥ 16 mm
- Multiple units, no minimum spacing between components

ED10x10 (C)





WIRING DIAGRAM (D, E)

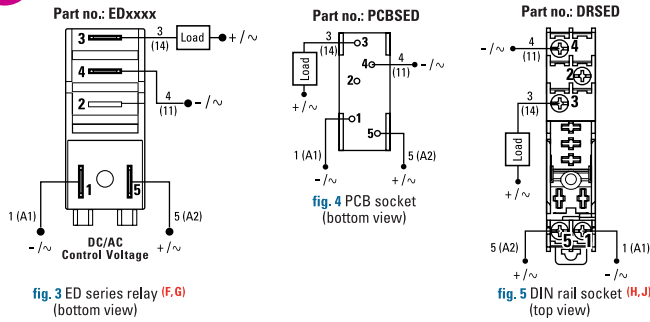


fig. 3 ED series relay (F, G)
(bottom view)

fig. 4 PCB socket
(bottom view)

fig. 5 DIN rail socket (H, J)
(top view)



GENERAL NOTES

- (A) UL ratings are for relays only. 100% Duty Cycle.
- (B) Curve based on a minimum spacing between parts of 17 mm for ED24x5 and 13 mm for ED24x3. Maximum current @ 0 mm spacing is 2.7 A for ED24x5 and 2.3 A for ED24x3 @ 40°C. Derating Value: ED24x5 = 0.135 A per mm, ED24x3 = 0.054 A per mm.
- (C) Curve based on a minimum spacing between parts of 16 mm. Maximum current @ 0 mm spacing is 3 A for EDxxx5 and 6 A for ED10x10. Derating Values: EDxxx5 = 0.125 A per mm, ED10x10 = 0.25 A per mm.
- (D) DC inductive loads must be diode suppressed.
- (E) No grounding required.
- (F) For sockets intended for AC input control voltage, the AC line can be wired to either DRSED socket terminal 1 (A1-) or terminal 5 (A2+). Proper polarity must be observed for DC input control voltage sockets being terminal 5 (A2+) positive with respect to terminal 1 (A1-).
- (G) For AC loads, the AC line can be wired to either DRSED socket terminal 4 (11) or terminal 3 (14). The AC load may also be wired on either the line or neutral side of the SSR. For DC loads, the proper polarity must be observed for the power supply, load and DRSED socket with terminal 3 (14) being positive with respect to terminal 4 (11).
- (H) Minimum wire strip length 0.197 in (5 mm), maximum 0.256 in (6.5 mm).
- (J) Input / Output terminals screw M3 Combo Drive.

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