# Plug-In Relays





## Heavy Duty High Power and Micro Plug-In Relays

General purpose relays fit many vehicles and applications. Typical applications include: lighting, starting, horn, heating and cooling.

Standard ISO terminal footprint for Form A, Form C and Form 2A. Relays are available sealed and unsealed (unsealed 40 & 70A relays are supplied with snap-in brackets.)

Datasheet, wiring diagram, and additional information: littelfuse.com/Plugin-Relays

#### Part Numbering System

# Specifications

- Pull-in voltage: 7.8V maximum at 12V DC, 15.6 V at 24V DC
- Release voltage: 1.2 V minimum at 12V DC, 2.4 V at 24V DC
- Temperature range: -40°C to 85°C
- Operational life: Electrical to 100,000 cycles.
   Mechanical to 10,000,000 cycles
- Contact Material: Silver alloy
- Dielectric strength: 500 V rms between coil and contact
- Insulation resistance: 100 MΩ minimum (500V DC)
- Relays are rated based on a steady state resistive load. De-rate according to the type of load.

Motor load: Inrush can be 5 to 10 x steady state current. Solenoid load: Inrush can be 10 to  $20 \times \text{steady}$  state current. Incandescent lamp load: Inrush can be 10 to  $15 \times \text{steady}$  state current.

• Available with PCB terminals, contact Littelfuse for details.

### Heavy Duty Relays • 40A at 12V DC

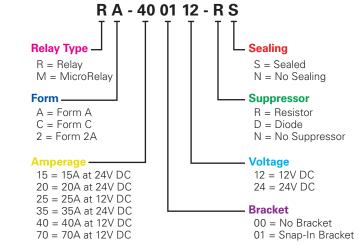
- Contact rating (Resistive load) at 20°C:
  - 12V DC: Normally Open 40A, Normally Closed 30A 24V DC: Normally Open 20A, Normally Closed 15A
- Contact arrangement: Available as Form A (SPST), Form C (SPDT) and Form 2A (SPST, 2 terminals)
- Vibration resistance: 10-40Hz double amplitude 1.5mm

#### High Power Relays • 70A at 12V DC

- Contact rating (Resistive load) at 20°C:
   12\(\text{PC: Negree all to Change 70.0.}\)
  - 12V DC: Normally Open 70A, Normally Closed 60A 24V DC: Normally Open 35A, Normally Closed 30A
- Contact arrangement: Available as Form A (SPST) and Form C (SPDT)
- Vibration resistance: 10-40Hz double amplitude 1.5m

#### Micro Relays • 25A at 12V DC

- Contact rating (Resistive load) at 20°C: 12V DC: Normally Open 25A, Normally Closed 20A
   Contact arrangement: Available as Form A (SPST), and Form C (SPDT).
- Vibration resistance: 10-40Hz double amplitude 1.27mm



#### Relay Part Numbers

Relay Part Numbers										
	PART NUMBERS BULK BOXED		VOLTAGE	AMPS	RELAY TYPE	FORM		BRACKET	SUPPRESSOR TYPE	SEALED
	R2-400112-RN	_	12	40	Relay	2	SPST	•	Resistor	
	RA-200024-DS	-	24	20	Relay	А	SPST		Diode	•
	RA-400012-DS	-	12	40	Relay	Α	SPST		Diode	•
	RA-400112-DN	RA-400112-DN-BX	12	40	Relay	А	SPST	•	Diode	
	RA-400112-NN	RA-400112-NN-BX	12	40	Relay	Α	SPST	•	None	
	RA-400112-RN	RA-400112-RN-BX	12	40	Relay	А	SPST	•	Resistor	
	RA-700112-RN	RA-700112-RN-BX	12	70	Relay	А	SPST	•	Resistor	
	RA-700112-DN	RA-700112-DN-BX	12	70	Relay	А	SPST	•	Diode	
	RA-700112-NN	RA-700112-NN-BX	12	70	Relay	А	SPST	•	None	
	RC-200024-DS	-	24	20	Relay	С	SPDT		Diode	•
	RC-200124-DN	RC-200124-DN-BX	24	20	Relay	С	SPDT	•	Diode	
	RC-200124-NN	RC-200124-NN-BX	24	20	Relay	С	SPDT	•	None	
	RC-200124-RN	RC-200124-RN-BX	24	20	Relay	С	SPDT	•	Resistor	
	RC-400012-DS	RC-400012-DS-BX	12	40	Relay	С	SPDT		Diode	•
	RC-400112-DN	RC-400112-DN-BX	12	40	Relay	С	SPDT	•	Diode	
	RC-400112-NN	RC-400112-NN-BX	12	40	Relay	С	SPDT	•	None	
	RC-400112-RN	RC-400112-RN-BX	12	40	Relay	С	SPDT	•	Resistor	
	RC-700112-DN	RC-700112-DN-BX	12	70	Relay	С	SPDT	•	Diode	
	RC-700112-NN	RC-700112-NN-BX	12	70	Relay	С	SPDT	•	None	
	RC-700112-RN	RC-700112-RN-BX	12	70	Relay	С	SPDT	•	Resistor	
	MC-250012-DN	-	12	25	Micro	С	SPDT		Diode	
	MC-250012-NN	-	12	25	Micro	С	SPDT		None	
	MC-250012-RN	_	12	25	Micro	С	SPDT		Resistor	