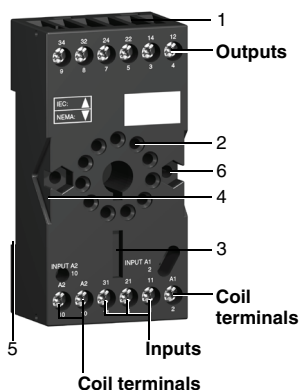
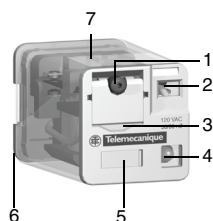
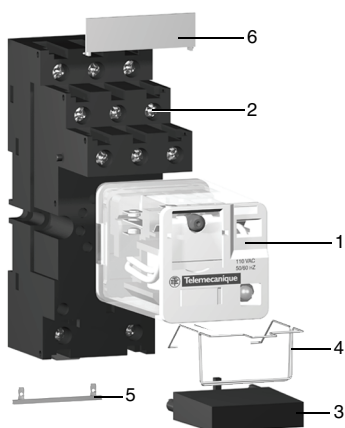




Product Description

The RUM universal relay range consists of:

1. 10 A relays with DPDT and 3PDT contacts, with cylindrical or flat pins, and 3 A "low level" relays with 3PDT contacts, with cylindrical pins. All these relays have the same dimensions.
2. Sockets with mixed or separate contact terminals.
3. Protection modules (diode, RC circuit, or varistor) or 1 timer module. All these modules are common to all sockets.
4. A metal hold-down clip for all sockets.
5. A 2-pole bus jumper that can be used on sockets with separate contact terminals to simplify cabling when creating a jumper between the coil terminals.
6. Clip-in markers for the sockets.

Relay Description

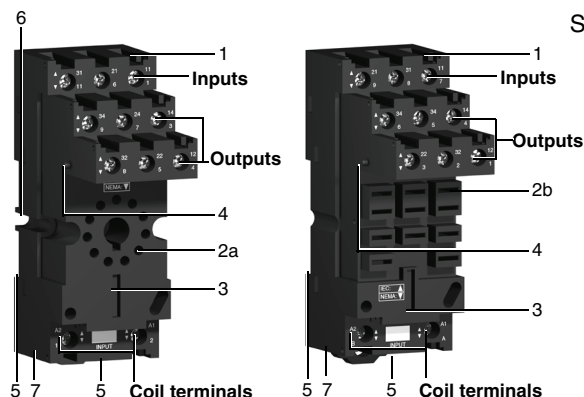
1. Spring return push button for testing the contacts (green: DC, red: AC).
2. Mechanical "relay status" indicator.
3. Optional removable lock-down door and push button, enabling forced maintaining of the contacts for test or maintenance purposes. During operation, this lock-down door must always be in the closed position.
4. Bipolar LED (depending on version) indicating the relay status.
5. Removable marker for relay identification.
6. Eight or eleven cylindrical or flat pins.
7. Area by which the product can be easily gripped.

Socket Description

Sockets with mixed contact terminals

1. Box lug connectors.
2. Eight or eleven female contacts for the relay cylindrical pins.
3. Location for protection modules or the timer module.
4. Locking component for metal hold-down clip.
5. Locating slot for DIN rail mounting.
6. Two mounting holes for panel mounting.

NOTE: The inputs are mixed with the relay coil terminals, with the outputs being located on the opposite side of the socket.



Sockets with separate contact terminals

1. Box lug connectors.
2. a. Eight or eleven female contacts for the relay cylindrical pins.
b. Eleven female contacts for the relay flat pins.
3. Location for protection modules or the timer module.
4. Locking component for metal hold-down clip.
5. Locating slot for mounting on DIN rail.
6. Two mounting holes for panel mounting.
7. Location for bus jumpers (see mounting on sockets on page 28).

NOTE: The inputs and outputs are separated from the relay coil terminals.

General characteristics

Conforming to standards		IEC/EN 61810-1 (iss. 2), UL 508, CSA C22-2 n° 14
Product certifications		cULus File E164862 CCN NLDX, NLDX7; cURus File E164862 CCN NLDX2, NLDX8; CSA pending; CE; RoHS compliant
Ambient air temperature around the device	Storage	-40–185 °F (-40–85 °C)
	Operation	-40–131 °F (-40–55 °C)
Vibration resistance	Conforming to IEC/EN 60068-2-6	4 gn (10–50 Hz)
Degree of protection	Conforming to IEC/EN 60529	IP 40
Shock resistance conforming to IEC/EN 60068-2-27	Opening	10 gn
	Closing	5 gn
Protection category (see page 38)		RT I
Mounting position		Any

Insulation characteristics

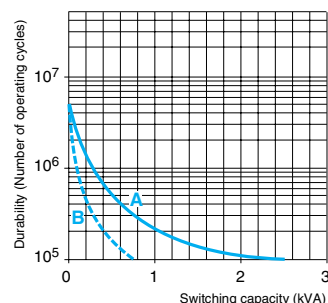
Rated insulation voltage (Ui)		250 V (IEC), 300 V (UL, CSA)
Rated impulse withstand voltage (Uimp)		3.6 kV (1.2/50 µs)
Dielectric strength (rms voltage)	Between coil and contact	2,500 Vac
	Between poles	2,500 Vac
	Between contacts	1,500 Vac

Contact characteristics

Relay type		RUMF2●●●	RUMF3B●●●	RUMC2●●●	RUMC3A●●●
Number and type of contacts (see page 28)		DPDT	3PDT	DPDT	3PDT
Contact materials		AgNi			
Conventional thermal current (Ith)	For ambient temperature ≤ 131 °F (55 °C)	10 A			
	Conforming to IEC in utilization category AC-1	N.O.	10 A		
N.C.		5 A			
Rated operational current	Conforming to UL Resistive @277 Vac, hp @ 120 Vac	16 A, 1/3 hp			
	Maximum operating rate In operating cycles/hour	No load	36,000		
Under load		3,600			
Switching voltage	Maximum	250 Vac/Vdc			
Switching capacity	Minimum	10 mA on 17 V			
	Maximum	2,500 VA			
Utilization coefficient		20%			
Mechanical durability in millions of operating cycles		5			
Electrical durability in millions of operating cycles	Resistive load	0.1			

Electrical durability of contacts

Resistive load AC



A=RUMF●●●●●, RUMC2●●●, RUMC3A●●●, B=RUMC3G●●●

Coil characteristics

Average consumption		AC	2–3 VA								
		DC	1.4 W								
Drop-out voltage threshold		AC	≥ 0.15 Uc								
		DC	≥ 0.1 Uc								
Operating time (response time)	Between coil energization and making of the N.O. contact	AC	20 ms								
		DC	20 ms								
	Between coil de-energization and making of the N.C. contact	AC	20 ms								
		DC	20 ms								
Coil voltage Uc			12 V	24 V	48 V	60 V	110 V	120 V	125 V	220 V	230 V
Relay coil voltage codes			JD	BD	ED	ND	FD	—	GD	MD	—
DC	Average resistance at 68 °F (20 °C) ± 10%		120 Ω	470 Ω	1,800 Ω	2,790 Ω	10,000 Ω	—	10,000 Ω	3,700 Ω	—
	Operating voltage limits	Min.	9.6 V	19.2 V	38.4 V	48 V	88 V	—	100 V	176 V	—
		Max.	13.2 V	26.4 V	52.8 V	66 V	121 V	—	138 V	242 V	—
Relay coil voltage codes			—	B7	E7	—	—	F7	—	—	P7
AC	Average resistance at 68 °F (20 °C) ± 15%		—	72 Ω	290 Ω	—	—	1,700 Ω	—	—	7,200 Ω
	Operating voltage limits	Min.	—	19.2 V	38.4 V	—	—	96 V	—	—	184 V
		Max.	—	26.4 V	52.8 V	—	—	132 V	—	—	253 V

Socket characteristics

Socket type		RUZC2M	RUZC3M	RUZSC2M	RUZSC3M	RUZSF3M
Relay types used		RUMC2●●●●●	RUMC3●●●●●	RUMC2●●●●●	RUMC3●●●●●	RUMF●●●●●
Product certifications		cURus File E172326 CCN SWIV2, SWIV8; CSA (pending); CE; RoHS compliant				
Conventional thermal current (Ith)		12 A				
Degree of protection	Conforming to IEC/EN 60529	IP 20				
Connection	Solid wire without cable end	1 conductor: AWG 20–12 (0.5–2.5 mm ²) 2 conductors: AWG 20–14 (0.5–1.5 mm ²)				
	Flexible wire with cable end	1 conductor: AWG 24–14 (0.2–2.5 mm ²) 2 conductors: AWG 24–16 (0.2–1.5 mm ²)				
	Flexible wire without cable end	1 conductor: AWG 24–14 (0.2–2.5 mm ²) 2 conductors: AWG 24–16 (0.2–1.5 mm ²)				
Maximum tightening torque		5.3 lbf-in (0.6 N•m) (M3 screw)				
Contact terminal arrangement		Mixed			Separate	
Bus jumper Ith: 5 A		No			Yes	



RUMC●AB3F7

Universal relays without lockable test button, with LED

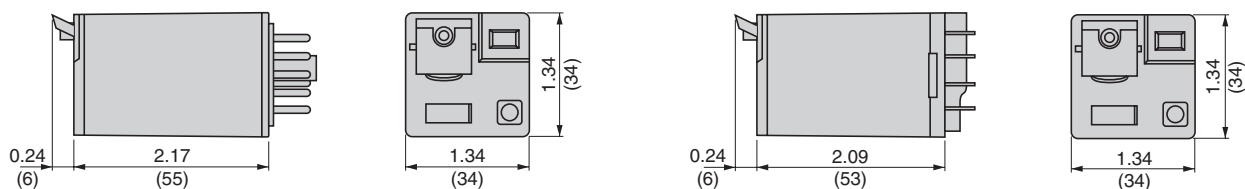
		Number and type of contacts - Thermal current (Ith)					
		DPDT - 10 A			3PDT - 10 A		
Coil Voltage	Catalog Number	Weight			Catalog Number	Weight	
		lb.	kg			lb.	kg
With cylindrical pins (sold in lots of 10)							
12 Vdc	RUMC2AB3JD	0.186	0.084		RUMC3AB3JD	0.194	0.088
24 Vdc	RUMC2AB3BD	0.186	0.084		RUMC3AB3BD	0.194	0.088
48 Vdc	RUMC2AB3ED	0.186	0.084		RUMC3AB3ED	0.194	0.088
60 Vdc	—	—	—		RUMC3AB3ND	0.194	0.088
110 Vdc	RUMC2AB3FD	0.186	0.084		RUMC3AB3FD	0.194	0.088
125 Vdc	—	—	—		RUMC3AB3GD	0.194	0.088
24 Vac	RUMC2AB3B7	0.186	0.084		RUMC3AB3B7	0.194	0.088
48 Vac	RUMC2AB3E7	0.186	0.084		RUMC3AB3E7	0.194	0.088
120 Vac	RUMC2AB3F7	0.186	0.084		RUMC3AB3F7	0.194	0.088
230 Vac	RUMC2AB3P7	0.186	0.084		RUMC3AB3P7	0.194	0.088
With flat pins (sold in lots of 10)							
12 Vdc	RUMF2AB3JD	0.177	0.08		RUMF3AB3JD	0.186	0.084
24 Vdc	RUMF2AB3BD	0.177	0.08		RUMF3AB3BD	0.186	0.084
48 Vdc	RUMF2AB3ED	0.177	0.08		RUMF3AB3ED	0.186	0.084
110 Vdc	RUMF2AB3FD	0.177	0.08		RUMF3AB3FD	0.186	0.084
125 Vdc	—	—	—		RUMF3AB3GD	0.186	0.084
24 Vac	RUMF2AB3B7	0.177	0.08		RUMF3AB3B7	0.186	0.084
48 Vac	RUMF2AB3E7	0.177	0.08		RUMF3AB3E7	0.186	0.084
120 Vac	RUMF2AB3F7	0.177	0.08		RUMF3AB3F7	0.186	0.084
230 Vac	RUMF2AB3P7	0.177	0.08		RUMF3AB3P7	0.186	0.084

See page 26 for sockets and accessories.

Universal relays

RUMC●●

RUMF●●

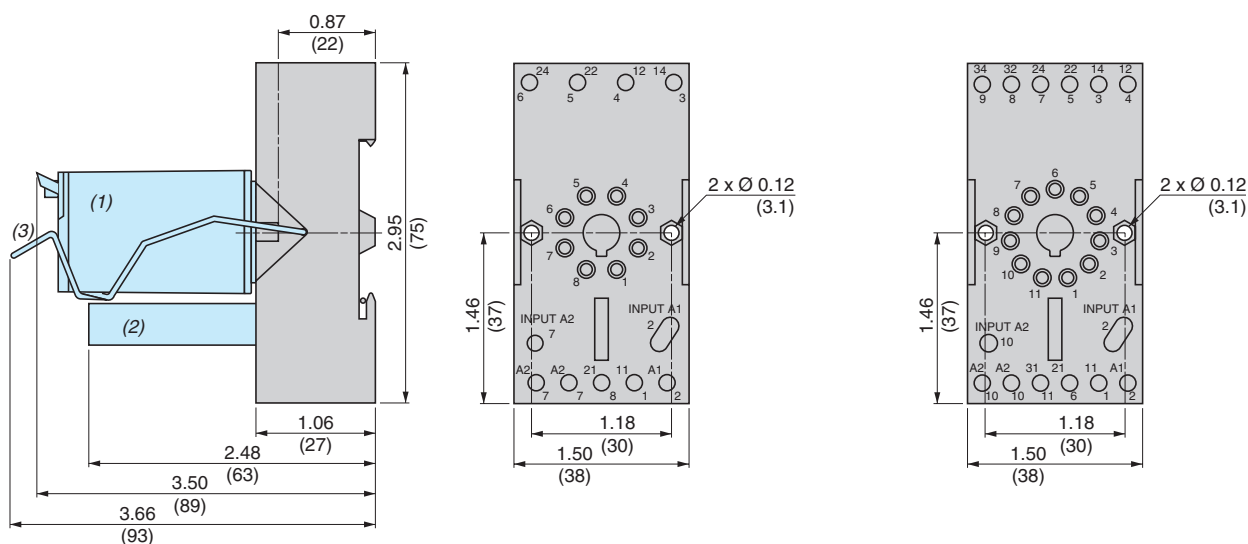


Sockets

Common side view

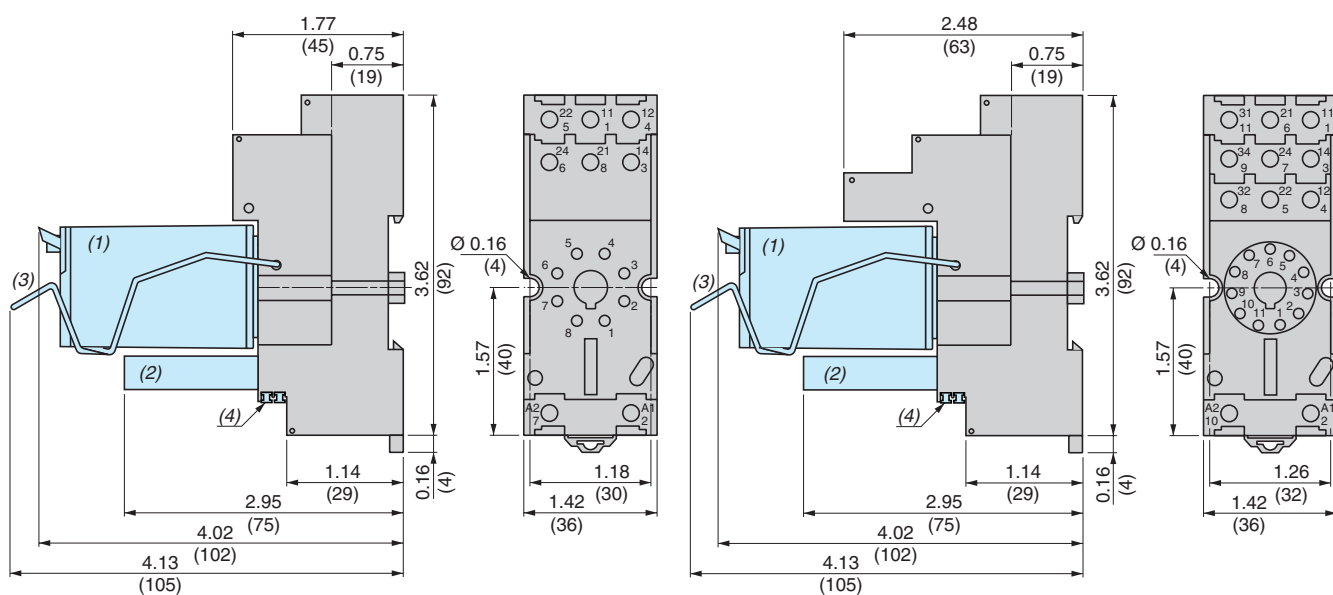
RUZC2M

RUZC3M



RUZSC2M

RUZSC3M



(1) Relay

(2) Protection module

(3) Hold-down clip

(4) 2 bus jumpers

Dimensions = Inches
(mm)