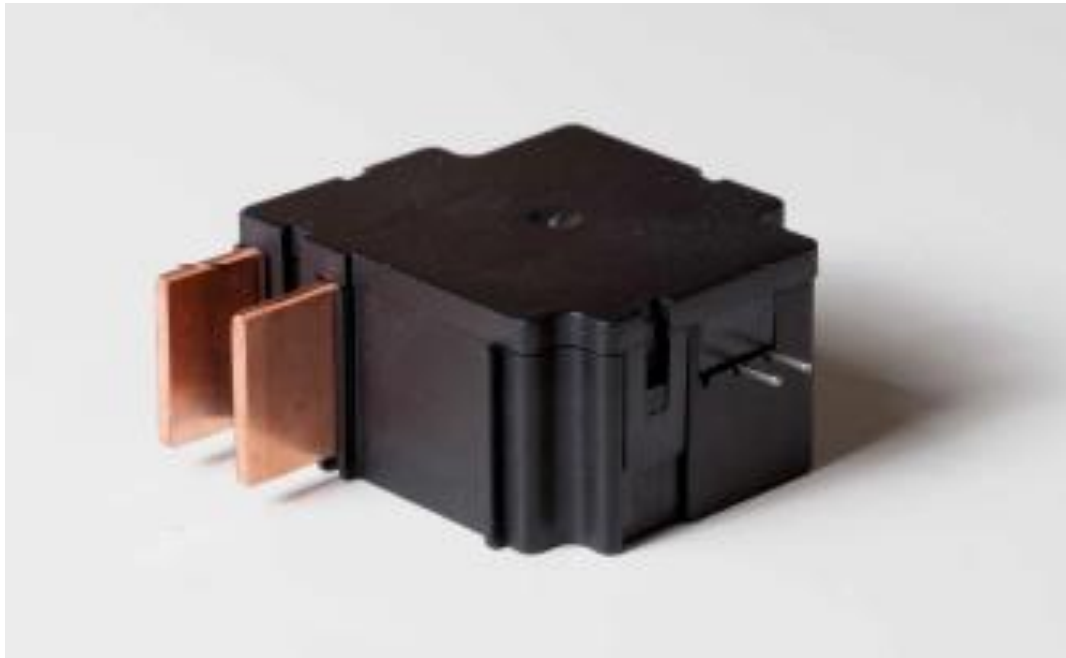


# REL100S Load Switch for Smart Meters

Technical Data Sheet



- Fully UC3 Rated at 100A / 276V
- 4KV Dielectric Strength
- RoHS Compliant
- Low self heating
- Long electrical Lifetime reliability
- Fully Customisable



# REL100S Load Switch for Smart Meters

Technical Data Sheet



## Product Overview

- **IEC 62052-31/IEC 62055-31 UC3:**
  - Meets FULL UC3 Short circuit and Electrical Endurance test requirements at 100A/276V
- **Design security:**
  - A unique Patent Protected Design
- **Minimized inventory and cost**
  - Manufactured in India

## Key Features

- **Reduced Heat Rise:**
  - Superior low-heating performance
- **Long lifetime reliability:**
  - Industry leading 'contact settling' time
- **Allows Optimisation of the Meter Power Supply:**
  - Fast Operation



# REL100S Load Switch for Smart Meters

## Technical Data Sheet



### Performance Data

IEC 62052-31 Capability	UC3 at 100A/276V
Rated UC3 Load	100A
Nominal Voltage	230V
Frequency	50Hz
Contact Materials	AgSn02
Contact Form	Normally Closed
Electrical Endurance	5000 Cycles (Resistive PF1), then 5000 Cycles (Inductive PF0.5) 100 Amps, 276 Volts
Pulse width Requirement	Min. 20ms

### Insulation Information

AC Dielectric Strength	
Coil to Contact on new switch	4KV
New switch – open contacts	2KV
After UC3 electrical Endurance	1KV
DC Impulse Dielectric	
Coil to Contact on new switch	8KV
New switch – open contacts	4KV
After UC3 electrical Endurance	2KV
Distance Between terminals	8.75mm



# REL100S Load Switch for Smart Meters

Technical Data Sheet

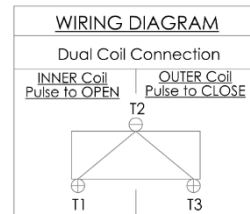
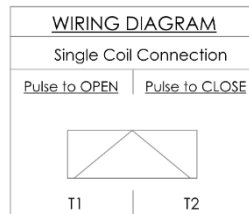
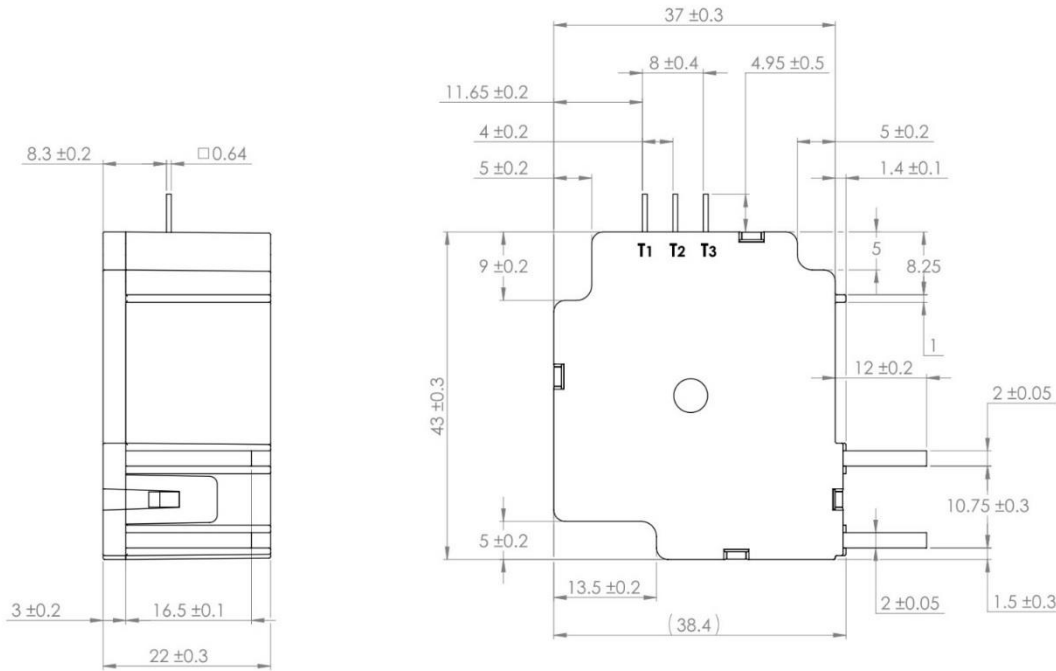


Technical Information	
Switch Circuit Resistance	<250 micro Ohms
Product Weight	52g
Product Dimensions	37mm x 43mm x 22mm
Mechanical Endurance	100K cycles (360 cycles per min.)
Shock test	50g
Vibration Test	10-150Hz, 20m/s <sup>2</sup> acceleration
Accelerated Life Test	85°C, 85%RH, 600 Hours
Flammability Rating	V0
Customisation	Fully customisable for efficient integration into Smart Meters



# REL100S Load Switch for Smart Meters

## Technical Data Sheet



Nominal Voltage (V)	Coil Type		Resistance (+/-10%) (Ohm )
6	Single		11.00
	Twin	Inner	4.50
		Outer	4.50
12	Single		43.00
	Twin	Inner	26.00
		Outer	26.00
24	Single		130.00
	Twin	Inner	80.00
		Outer	80.00

*Minimum Pulse Duration for all REL coils: 0.020 Seconds. The above data is a representative example. Specific parameters will be confirmed for custom applications*

