



## Wireless Metering Switch (Load Controller)

ZBMLCSR Models 4040C-NO and 4040C-NC

### Applications

Use the ZBMLCSR to wirelessly monitor and control higher voltage (up to 240VAC) and/or high current (up to 40A) electrical loads through IoT/ Home Automation gateways/hubs using the Zigbee protocol.

As well as allowing remote and local on/off control of the appliance, the device enables efficiency and cost savings by measuring energy consumption plus various other electrical parameters of:

- Electric water heaters
- Pool Pumps
- Booster pumps
- Electric vehicle chargers

Once connected in a home automation network, the device affords a convenient means to set use patterns based on schedules, energy consumption, electric and/or water utility rates and events, occupancy state of the home, and many more.



Conforms to ANSI/UL STD 916  
Certified to CSA STD C22.2 #14

### Features and Benefits

- Controlled via ZigBee, a wireless RF protocol that has rapidly become the standard for energy management. Joins appliances to smart ecosystems.
- Measures the energy consumed by electrical loads, allowing total energy management by the consumer, and/or an electric utility.
- Ideal to remotely control and monitor heavy loads such as water heaters, pool pumps, pool heaters, electric vehicle chargers, HVAC, etc.
- For fail-safe operation choose 4040C-NC for loads that need to stay energized like water heaters, or 4040C-NO for loads such as pool pumps, that must turn off in case of failure.
- Small size and convenient connectivity means easy retrofit-ability and low installation cost.
- Safety tested to UL916 and CSA 22.2 standards.
- Outdoor/indoor NEMA 4X enclosure means the device is ready to be installed stand-alone.

### Electrical Specifications

Operating Voltage	95-270 VAC
Max. Load Current	Model 4040C-NO: 40 Amps Model 4040C-NC: 30 Amps
Operating Power	All relays energized: < 2.5 Watts. Standby: < 0.5 Watts.
Surge Protection	MOV rated for 300V
Connections	Loose 10 AWG wires (neutral 18 AWG wire)
Switch Contactor	Model 4040C-NO: Normally Open; Model 4040C-NC: Normally Closed

### Mechanical Specifications

Size	4.5" L X 3.5" W X 2.25" H
Weight	10.7 oz.

### Environmental Specifications

Temperature	-25—50 °C (-13—122 °F)
Humidity	5—80 %RH Condensing



OTHER SPECIFICATIONS	
Indicators	Status LED (Blue): Multi-function to indicate network join status, binding mode, fault conditions.  Load LED (Green): Indicates power to load is flowing. LED not lit indicates power to load is not flowing.
Local Control	Multifunction pushbutton. Toggles relay between On and Off. Used for joining network, permit joining, opt-in, opt-out, price update and binding.
Metering Accuracy	Supplied with 1-2% accuracy within 5W-7200W. Metering circuitry supports IEC61036/60687 and IEC62053-22/-23. Contact Smartenit for calibration to better than 0.5% accuracy.

ZIGBEE INFORMATION				
Edition	ZB3.0 Profile 0x0104			
Manufacturer ID	0x1075 Compacta International, Ltd.			
Model String	Model 4040C-NO: ZBMLCSR Model 4040C-NC: ZBMLC30NC-1			
Device ID	0x0002 (On/Off Output)			
ZigBee Device Details				
End Point	Cluster ID	Cluster Name	Client/ Server	Cluster Description
1	0x0000	Basic	Server	Attributes for determining basic information and setting and enabling device
1	0x0003	Identify	Server	Attributes and commands for putting a device into Identification mode
1	0x0006	On/Off	Server	Attributes and commands for switching device.
1	0x0019	OTA Upgrade	Client	Provides a standard way to upgrade devices in the network via OTA messages.
1	0x0702	Metering	Server	Provides mechanism to retrieve electric power usage