

# Intrinsically-Safe Switch

## Model ISS-102CCI-M-MC



### Features:

- MSHA evaluated (Mine Safety and Health Administration)
- LEDs indicate output relay status
- Compact design
- Finger-safe terminals
- DIN rail or surface mountable
- Direct or inverted logic for pump-up or pump-down operations
- Selectable debounce time delay
- 5-year warranty
- Made in USA

SymCom's ISS-102CCI-M-MC (Multi-function Controller) is an intrinsically-safe switch for interfacing between hazardous and non-hazardous areas. It is user-configurable as a single or dual-channel switch, or pump-up/pump-down controller, and latching or non-latching relays. The intrinsically-safe inputs are compatible with normally open (N.O.) or normally closed (N.C.) switches, as well as resistive probes.

The unit's input logic can be either direct or inverted. Input debounce time delay is selectable to either 0.5 or 2 seconds. For pumping applications, differential/latching logic can be selected. Green LEDs illuminate on the ISS-102CCI-M-MC when the associated output relay is energized.

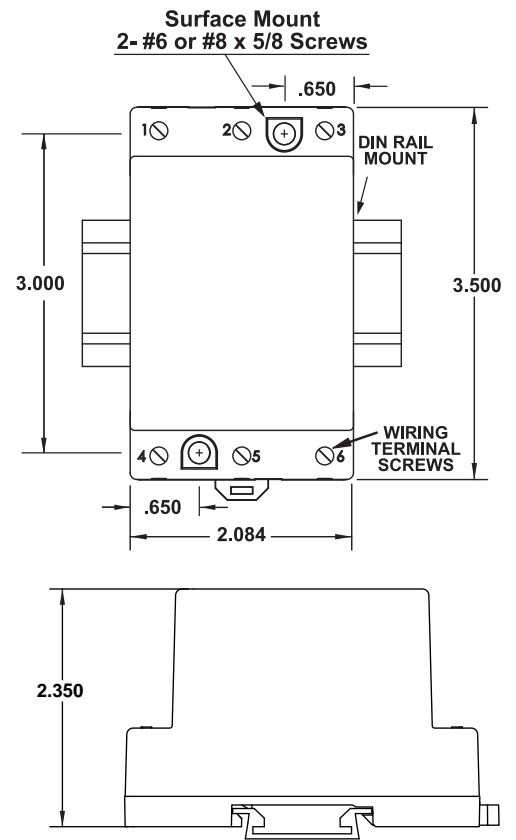
The unit has a 4.7k - 100k $\Omega$  sensitivity adjustment that allows the user to define the input impedance at which the relays will change state. One of the two Form C relays is isolated and the other operates off of the units' incoming 120VAC power.



# Specifications

Functional Characteristics	
Entity Parameters	$V_{oc} = 16.8V$ $C_a = 0.39\mu F$ $I_{sc} = 1.2mA$ $P_o = \frac{V_{oc} * I_{sc}}{4}$ $L_a = 100mH$
Hazardous Locations	Class I, Division 1 & II, Groups A, B, C & D Class II, Division I & II, Groups E, F & G Class III locations
Adjustments/Settings	Sensitivity (for resistive probes) 4.7k - 100k $\Omega$ Mode Selection Differential/Latching; 1-channel or 2-channel switch Input Logic Direct or inverted Debounce Time Delay 0.5 or 2 seconds
Input Characteristics	
Supply Voltage	120VAC nominal
Frequency	50/60 Hz
Output Characteristics	
Relay Output Rating:	
2 Relays:	
1 Form C & 1 Form C (isolated)	
Pilot Duty	180VA @ 120VAC, C150
General Purpose	5 Amps @ 120VAC
Depluggable Connector (included)	Phoenix Contact - Series MSTB plugs (or equivalent)
LEDs (green)	Output Relay Status Indicators
General Characteristics	
Operating Temperature	-20° to 55° C (-4° to 131° F)
Maximum Input Power	2 W
Terminal Torque	6 in.-lbs.
Wire Gauge	12-20 AWG Solid or stranded
Standards Passed	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity (RFI)	IEC 61000-4-3, Level 3, 10V/m
Fast Transients	IEC 61000-4-4, Level 3, 4 kV input power terminals, 2kV input/output terminals
Safety Marks	
MSHA Evaluated	File #18-ISA070001-0
Dimensions	3.5"H x 2.1"W x 3.2"D (D w/ out connector - 2.5")
Weight	9 oz.
Mounting Method	DIN Rail or Surface Mount (#6 or #8 screws)

# Enclosure Dimensions



## How to order:

Part Number: ISS-102CCI-M-MC

