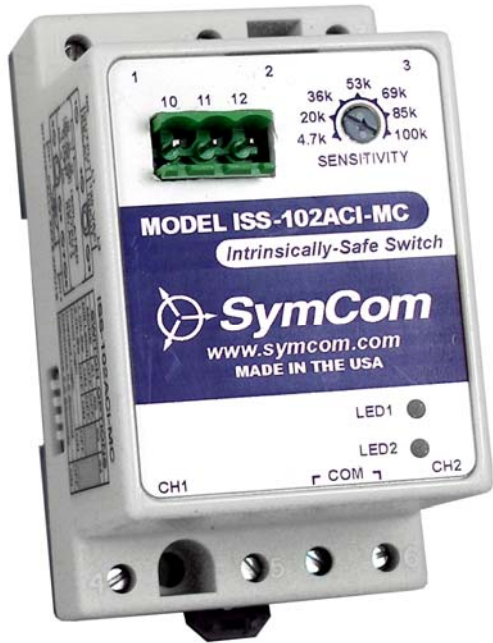# Intrinsically-Safe Multi-function Controller
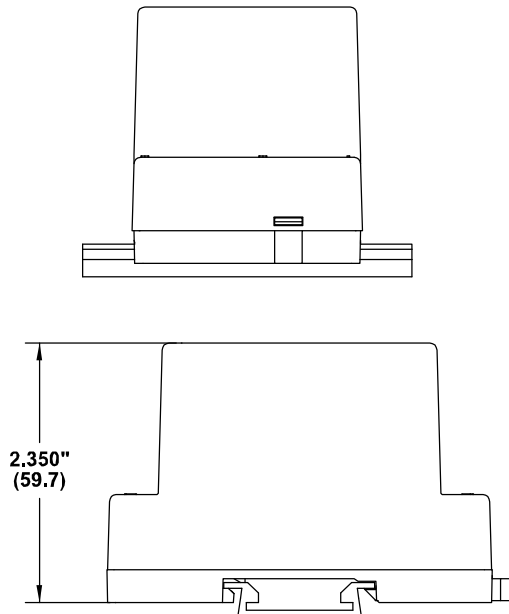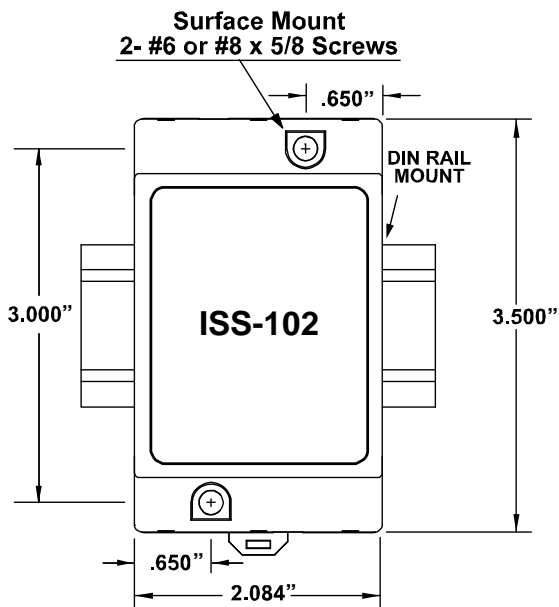
SymCom's **ISS-102ACI-MC** (Multi-function Controller) is user-configurable as a single or dual-channel switch, or pump-up/pump-down controller.

The intrinsically-safe inputs are compatible with normally open (N.O.) or normally closed (N.C.) switches, as well as resistive probes. Input logic can be either direct or inverted. Input debouncing is selectable to either 0.5 or 2 seconds. For pumping applications, differential/latching logic can be selected.

Green LEDs illuminate on the ISS-102ACI-MC when the associated output relay is energized.

Surface Mount
2- #6 or #8 x 5/8 Screws

DIN RAIL MOUNT

.650"

ISS-102

3.000"

3.500"

.650"

2.084"

2.350"
(59.7)

Functional Specifications:	
Entity Parameters:	$V_{oc} = 16.8V$ $\quad\quad$ $C_a = 0.39\mu F$ $I_{sc} = 1.2mA$ $\quad\quad$ $P_o = \dfrac{V_{oc} * I_{sc}}{4}$ $L_a = 100mH$
Hazardous Locations	Class I, Division I & 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:	5 Amps @ 120VAC General Purpose
1 - Form A & 1 - Form C (isolated)	Pilot Duty 180VA @ 120VAC, C150
Depluggable Connector (included)	Phoenix Contact - Series MSTB plugs (or equivalent)
LEDs (green)	Output Relay Status Indicators
General Characteristics:	
Operating Temperature:	-20 to 55° C
Terminals:	
Wire Size	12-20 AWG
Torque	6 in.-lbs. (max.)
Standards Passed:	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air
Radio Frequency Immunity (RFI)	IEC 61000-4-2, Level 3, 10V/m
Fast Transients	IEC 61000-4-4, Level 3, 4 kV power terminals, 2kV input/output terminals
Safety Marks:	
UL	UL913 (File #E233355)
Dimensions:	3.5"L x 2.1"W x 3.2"D (D w/out connector – 2.5")
Weight:	9 oz.
Mounting Methods:	35 mm DIN rail or Surface Mount (#6 or #8 screws)

How to order:

Part Number: ISS-102ACI-MC