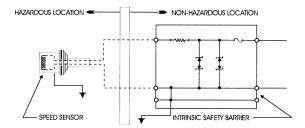
# 3042 SERIES I.S. CONTROL DRAWING 621081

## For Single Channel Barriers



### HAZARDOUS LOCATIONS

Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III: Sensor Models 3042H20 and M3042H20

Class I Groups A, B, C and D: Sensor Models 3042A and M3042A

### ENTITY PARAMETERS

Vmax = 24V, Imax = 35mA, Li = 26mH, Ci = OuF

Any barrier (see General Notes) with entity parameters connected in accordance with barrier manufacturers instructions of:

V max ≥ Voc	$Ca \ge Ci + cable capacitance$
I max ≥ lsc	La $\geq$ Li + cable inductance

#### SYSTEM PARAMETERS

Any barrier (see General Notes) having one of the following specified parameters:

Vmax	Rmin	Vmax	Rmin	Vmax	Rmin
30	707	20	421	10	136
25	580	15	278	5	1

### **GENERAL NOTES**

- 1. For jurisdictions requiring Certification to the applicable Canadian Standards the barrier must be CSA Certified and System must be installed in accordance with the Canadian Electrical Code Part 1.
- For jurisdictions requiring Certification to the applicable Occupational Safety and Health Administration (OSHA) standards the barrier must be CSA NRTL or equivalent and system must be installed in accordance with the National Electrical Code (NEC) article 504 or ANSI/NFPA 70.

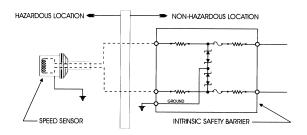
### SENSOR GROUNDING

Models 3042A and M3042A: Sensor housing to be connected to intrinsically safe system ground during installation.

Models 3042H20 and M3042H20: Green wire to be connected to intrinsically safe system ground

Exia = Intrinsically Safe, Securite Intrinseque

### For Dual Channel Barriers



### HAZARDOUS LOCATIONS

Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III: Sensor Models 3042H20 and M3042H20

Class I Groups A, B, C and D: Sensor Models 3042A and M3042A

### ENTITY PARAMETERS

Vmax = 24V, Imax = 35mA, Li = 26mH, Ci = OuF

Any barrier (see General Notes) with entity parameters connected in accordance with barrier manufacturers instructions of:

V max ≥ Voc I max ≥ Isc

 $Ca \ge Ci + cable capacitance$  $La \ge Li + cable inductance$ 

### SYSTEM PARAMETERS

Any barrier (see General Notes) having one of the following specified parameters per channel:

Vmax	Rmin	1	Vmax	Rmin	1	Vmax	Rmin
30	1414		20	842		10	272
25	1160		15	556		5	2

### **GENERAL NOTES**

- 1. For jurisdictions requiring Certification to the applicable Canadian Standards the barrier must be CSA Certified and System must be installed in accordance with the Canadian Electrical Code Part 1.
- For jurisdictions requiring Certification to the applicable Occupational Safety and Health Administration (OSHA) standards the barrier must be CSA NRTL or equivalent and system must be installed in accordance with the National Electrical Code (NEC) article 504 or ANSI/NFPA 70.

### SENSOR GROUNDING

Models 3042A and M3042A: Sensor housing to be connected to intrinsically safe system ground during installation.

Models 3042H20 and M3042H20: Green wire to be connected to intrinsically safe system ground

Exia = Intrinsically Safe, Securite Intrinseque

