

### OCA500 One Channel Analog Isolator

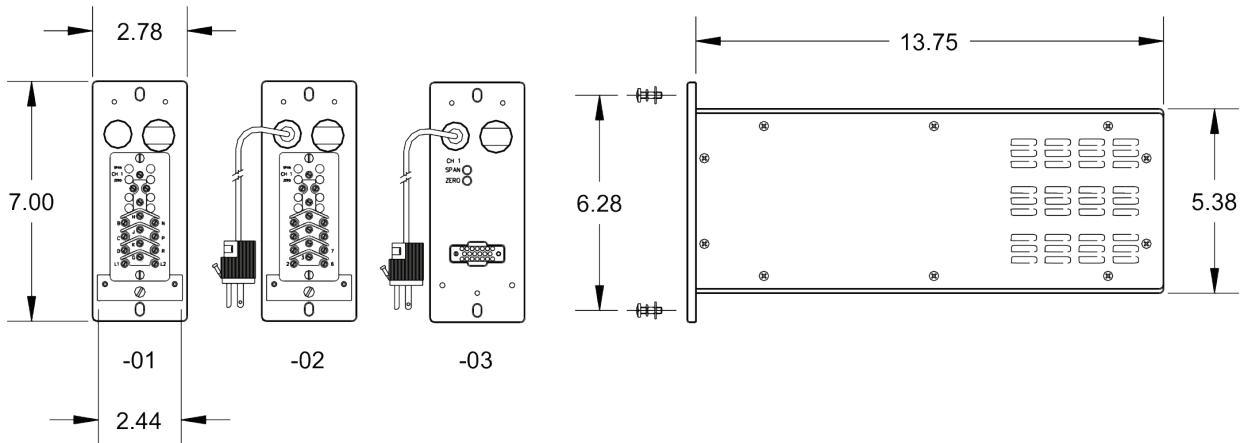
The OCA500 One Channel Analog Isolator replaces the obsolete Foxboro 66B Current Repeater, 66E Current Source, and 66G Voltage to Current Converter modules.

The OCA500 isolates Class 1E circuits from non-Class 1E Circuits. This single-channel input, single-channel output, rack mounted, analog isolation device is simple to install, calibrate, and operate.

The OCA500 offers a variety of input and output ranges for different requirements, and has capabilities for current or voltage input and output signals.



OCA500



### SPECIFICATIONS

Accuracy:	±0.1% of Output full scale, repeatable to 0.05% of span
Linearity:	Better than 0.05% of full scale
Dielectric Withstand:	3000 Vdc and 1000 Vac (RMS) from input to output
	1000 Vac and 1000 Vdc (RMS) from input to case
Credible Live Fault:	480 Vac, 140 Vdc at 20 A
Surge Withstand:	No damage when the waveform of IEEE-472-1974 is applied to any port
Ambient Temperature:	35 °F to 122 °F (2 °C to 50 °C) (normal operation)
	122 °F to 135 °F (50 °C to 57 °C) (abnormal operation for 170 hours)
	-40 °F to 185 °F (-40 °C to 85 °C) (storage)
Relative Humidity:	0% RH to 95% RH, non-condensing
Pressure:	Atmospheric
Radiation Limits:	104 rad TID gamma
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Radiation Limits:	104 rad TID gamma

# NUSI 500 Series

## One Channel Analog Isolator

### HOW TO ORDER

The model number and configuration typically should be specified as follows:

Example: **OCA500-08-08-08-01**

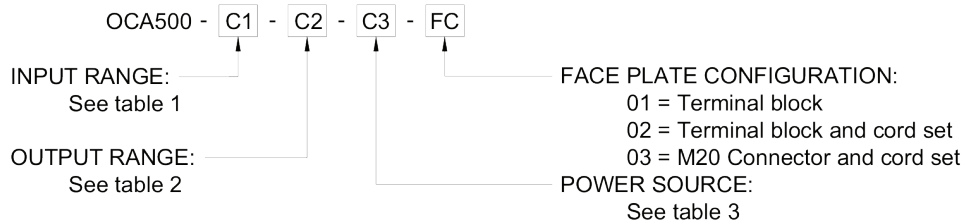


Table 1 – Input Range			Table 2 – Output Range		
Code	Input Range	Impedance $\Omega$	Code	Output Range	Impedance $\Omega$
00	Not Loaded		00	Not Loaded	
01	0 to 100 mVdc	100 M	01	0 to 100 mVdc	32.9
02	0 to 51 mVdc	100 M	02	0 to 51 mVdc	17.3
03	0 to 1 Vdc	100 M	03	0 to 1 Vdc	299
04	0 to 5 Vdc	100 M	04	0 to 5 Vdc	825
05	1 to 5 Vdc	5.2 M	05	1 to 5 Vdc	825
06	0 to 10 Vdc	400 k	06	0 to 10 Vdc	1000
07	4 to 20 mA dc	249	07	4 to 20 mA dc	1050 *
08	10 to 50 mA dc	100	08	10 to 50 mA dc	600 *
09	0 to 1 mA dc	50	09	0 to 180 mA dc	59.3
10	0 to 132 Vac	3.4 M	10	0 to 3.5 Vac	825
11	0 to 20 mA dc	249	11	0 to 20 mA dc	1050 *
12	0 to 50 mA dc	100	12	0 to 50 mA dc	600 *
13	50 to 10 mA dc	100	13	1 to 5 Vdc	249
14	Variable	1 M	14	10 to 44.29 mA dc	660 *
15	0 to 8 Vdc	428 k	15	N/A	
16	-10 to 10 Vdc	3.7 M	16	0 to 1 mA dc	30 k *
17	-2 to 15 Vdc	2.4 M	17	4 to 22.49 mA dc	1050 *
18	5 to 1 Vdc	100 M	18	10 to 56.22 mA dc	550 *
19	3.6 to 11.6 Vdc	477 k	Table 3 – Power Source		
20	2 to 10 Vdc	427 k			
21	-2 to 2 Vdc	3.5 M			
22	-20 to 20 mA dc	249			
23	N/A				
24	1 to 2 Vdc	3.2 M	<b>Code</b>	<b>Power</b>	
25	0 to 4 Vdc	100 M	00	Not Loaded	
26	10 to 32.4 mA dc	200	01	$\pm 15 \pm 1$ Vdc	
27	4 to 10 mA dc	475	02	$28 \pm 2$ Vdc	
28	0 to 10 V (Hi-Z)	1013	03	$5 \pm 0.25$ Vdc	
29	0 to 120 Vdc	2.5 M	04	$12 \pm 1$ Vdc	
30	Group 1 Selectable	Varies	05	$15 \pm 1$ Vdc	
31	2, 4 or 10 Vdc	Varies	06	$24 \pm 2$ Vdc	
32	0 to 2 Vdc	100 M	07	$48 \pm 2$ Vdc	
33	0 to 3.45 Vdc	100 M	08	85 to 132 Vac, 125 Vdc	
34	1.08 to 5.4 Vdc	5.2 M			

\* These are not output impedances; these are the output drive capabilities of the current output models.

#### CONTACT INFORMATION:

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