



**High Speed Counter**  
HE500OCS033 / HE500OCS063  
HE500RCS063

*MINI OCS/RCS*

**High Speed Counter Inputs  
Sourcing Pulse Outputs**

This product also has a detailed supplement (SUP0265) available.

**1 SPECIFICATIONS**

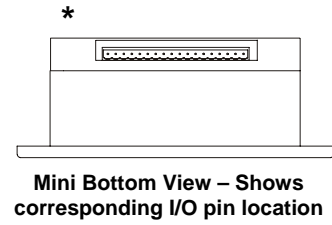
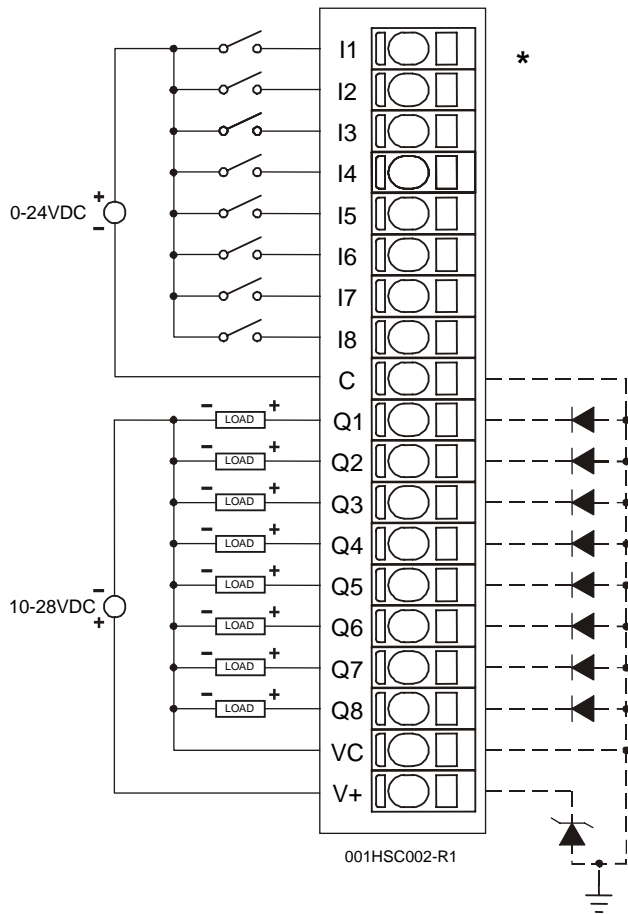
INPUT						
Inputs per Module	8				Commons per Module	1
Programmable Input Voltage Ranges	Zero Crossing	TTL / 5 VDC	12 VDC	24 VDC	Input Type	Positive Logic
	ON Voltage Level	+ 0.1	+ 2	+ 8	Peak Voltage	35 VDC Max.
OFF Voltage Level	- 0.1	+ 0.8	+ 4	+ 8	Input Impedance	10K Ohms
					Input Filter	500KHz, 50KHz, 5KHz

OUTPUT			
Outputs per Module	8	Maximum Inrush Current	650mA per channel
Commons per Module	1	Minimum Load	None
Operating Voltage	10 - 28VDC	OFF to ON Response	10µs.
Output Type	Sourcing / 10K Pull-Down Positive Logic	ON to OFF Response	10µs.
Peak Voltage	28VDC Max.	Output Characteristics	Current Sourcing
Maximum Load Current Per Output	0.5A Max.	Output Protection	Short Circuit

General Specifications			
Required Power (Steady State)	4.8W (200mA @ 24VDC)	Operating Temperature	0° to 50° Celsius
Required Power (Inrush)	900mA @ 24VDC for 1 ms.	Terminal Type	Spring Clamp, Removable
Relative Humidity	5 to 95% Non-condensing	Weight	9.5 oz. (270 g)
CE	See Compliance Table at <a href="http://www.heapg.com/Support/compliance.htm">http://www.heapg.com/Support/compliance.htm</a>		
UL	Operating Temperature Code T4A; See Compliance Table at <a href="http://www.heapg.com/Support/compliance.htm">http://www.heapg.com/Support/compliance.htm</a>		

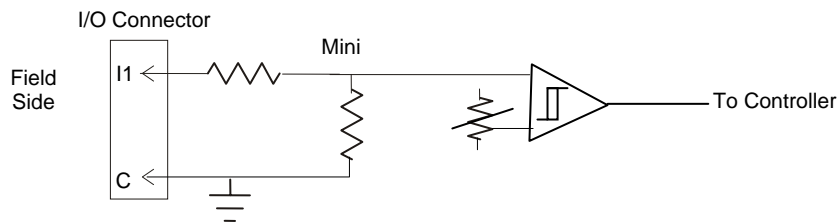
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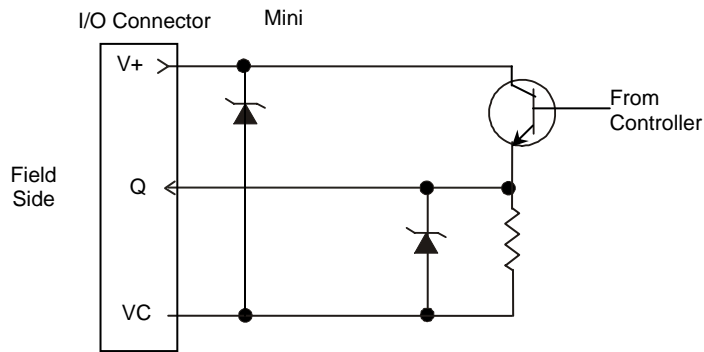
## 2 WIRING



Pin	Signal
I1	Input 1
I2	Input 2
I3	Input 3
I4	Input 4
I5	Input 5
I6	Input 6
I7	Input 7
I8	Input 8
C	Common
Q1	Output 1
Q2	Output 2
Q3	Output 3
Q4	Output 4
Q5	Output 5
Q6	Output 6
Q7	Output 7
Q8	Output 8
VC	Common
V+	Load Voltage +

## 3 INTERNAL CIRCUIT SCHEMATIC





Specification for transient voltage suppressors (transorbs) used on output circuitry is 33VDC, 300 watts.

#### 4 CONFIGURATION AND INPUT/OUTPUT MODES

**Note:** The status of the I/O can be monitored in Cscape Software.

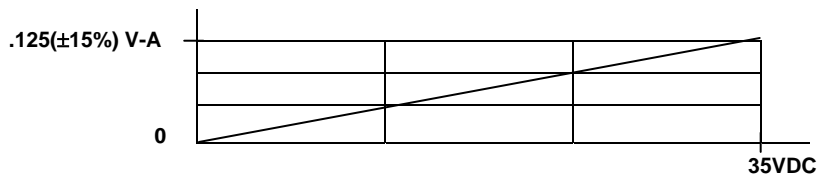
1. Preliminary Configuration procedures that are applicable to **all** Mini OCS Modules are located in the Mini Hardware Manual (MAN0305.)

There are two screen tabs for this model – the **I/O Map** tab and the **Module Setup** tab. The I/O Map is not edited by the user. The I/O Map describes which I/O registers are assigned to a specific Mini OCS model. The I/O Map is determined by the model number.

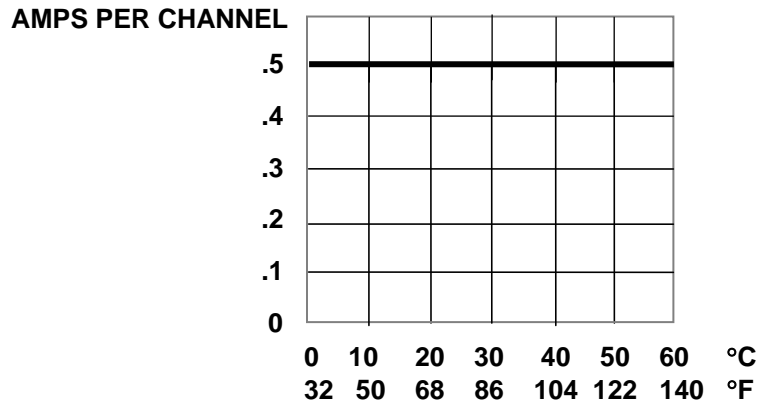
2. Consult the **SmartStack High Speed Counter Supplement** (see front page of this data sheet) to continue the rest of the configuration process after pressing the **Module Setup** tab and selecting an option.

#### 5 INPUT / OUTPUT CHARACTERISTICS

Digital Input Chart



Derating Chart



## 6 INSTALLATION / SAFETY

- a. All applicable codes and standards are to be followed in the installation of this product.
- b. Use the following wire type or equivalent: Belden 8917, 16 AWG or larger.

For detailed installation information, refer to Mini Hardware Manual. A handy checklist is provided that covers panel box layout requirements and minimum clearances.

## 7 TECHNICAL ASSISTANCE

For assistance, contact Technical Support at the following locations. Please visit our website for manual updates.

**North America:**  
(317) 916-4274  
[www.heapg.com](http://www.heapg.com)

**Europe:**  
(+) 353-21-4321-266  
[www.horner-apg.com](http://www.horner-apg.com)