



## Mixed DC I/O Module

HE500OCS031 / HE500OCS061  
HE500RCS061

*Mini OCS/RCS*

12/24 Vdc In, Positive/Negative Logic  
24Vdc Out, Positive Logic

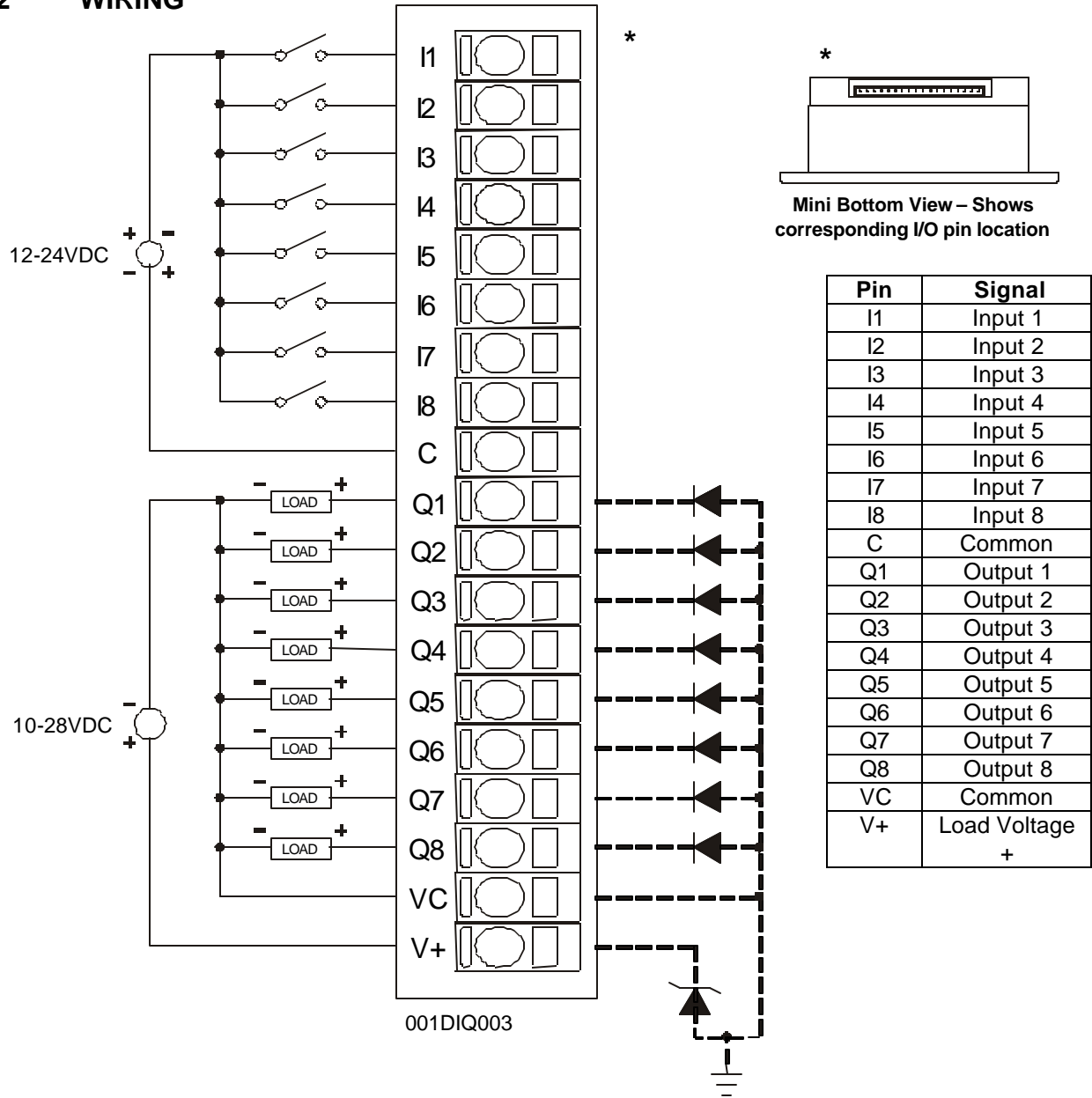
### 1 SPECIFICATIONS

INPUT			
Inputs per Module	8	Input Characteristics	Bidirectional
Commons per Module	1	Input Impedance	10K Ohms
Input Voltage Range	12-24VDC	Minimum ON Current	1mA
Peak Voltage	35VDC Max.	Maximum OFF Current	200µA
Isolation (Channel to Bus)	500VDC	OFF to ON Response	1ms.
ON Voltage Level	9VDC	ON to OFF Response	1ms.
OFF Voltage Level	3VDC	Status Indicator	8 LEDs

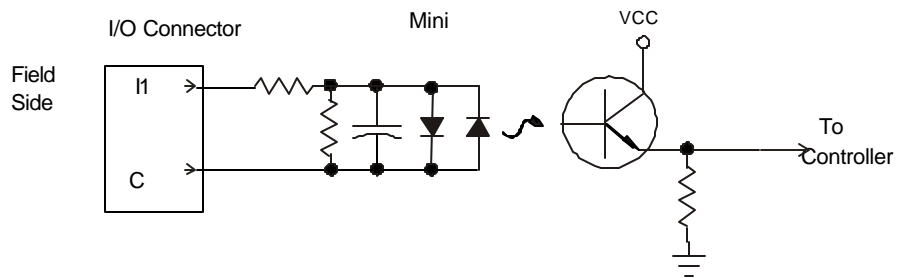
OUTPUT			
Outputs per Module	8	Maximum Inrush Current	650mA per channel
Commons per Module	1	Minimum Load	None
Operating Voltage	10 - 28VDC	OFF to ON Response	1ms.
Output Type	Sourcing / 10K Pull-Down	ON to OFF Response	1ms.
Peak Voltage	28VDC Max.	Output Characteristics	Current Sourcing
Maximum Load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

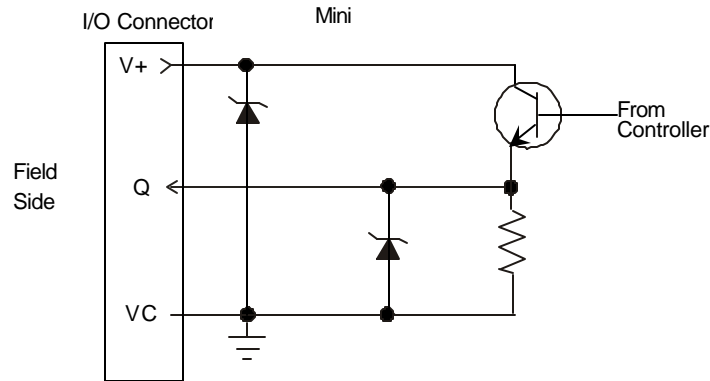
General Specifications			
Required Power (Steady State)	4.8W (200mA max @ 24VDC)	Terminal Type	Spring Clamp, Removable
Required Power (Inrush)	900mA @ 24VDC for 1mS.	Weight	9 oz. (256 g)
Relative Humidity	5 to 95% Non-condensing		
Operating Temperature	0° to 50° Celsius		
CE	See Compliance Table at <a href="http://www.heapg.com/Support/compliance.htm">http://www.heapg.com/Support/compliance.htm</a>		
UL			

**2 WIRING**



**3 INTERNAL CIRCUIT SCHEMATIC**





Specification for transient voltage suppressors (transorbs) used on output circuitry is 33VDC, 600 watts.

## 4 CONFIGURATION

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

Selecting the **I/O Map** tab provides information about the I/O registers. The I/O Map is not edited by the user.

The **Module Setup** is used in applications where it is necessary to change the default states of the outputs when the controller (e.g., OCS100) enters idle/stop mode. The default turns the outputs OFF when the controller enters idle/stop mode. By selecting the Module Setup tab, each output can be set to either turn ON, turn OFF or to hold the last state. Generally, most applications use the default settings.

**Warning:** The default turns the outputs OFF when the controller enters idle/stop mode. To avoid injury of personnel or damages to equipment, exercise extreme caution when changing the default setting using the **Module Setup** tab.

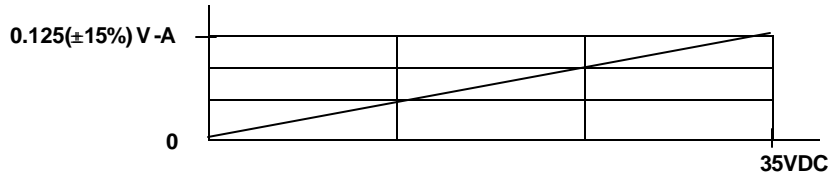
## 5 INSTALLATION / SAFETY

- 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.

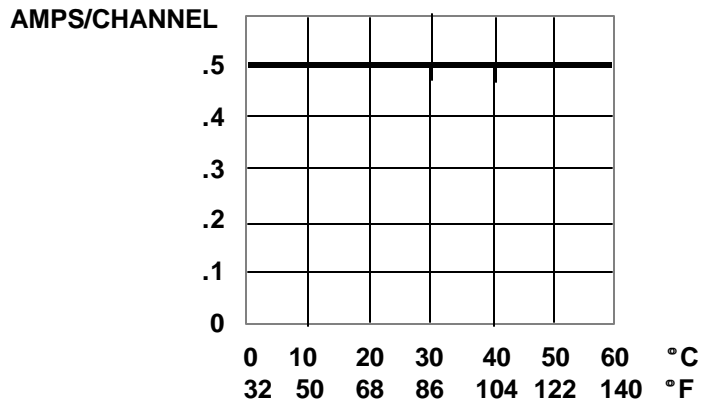
## 6 INPUT CHARACTERISTICS

Digital Input Chart



## 7 OUTPUT CHARACTERISTICS

Derating Chart



## 8 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)