Mixed DC I/O Module

HE800DIQ716
12/24 Vdc In, Positive/Negative Logic
(16 Input Channels)
10-28Vdc Out, Positive Logic
(12 Output Channels)

1 SPECIFICATIONS

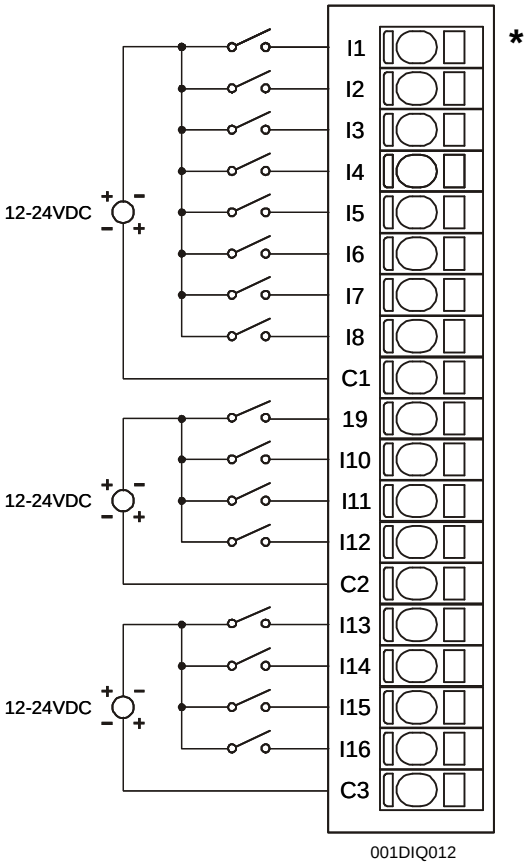
INPUT	DIQ716		DIQ716
Inputs per Module	16	Input Characteristics	Bidirectional
Commons per Module	3	Input Impedance	10K Ohms
Input Voltage Range	12-24VDC	Minimum ON Current	1mA
Peak Voltage	35VDC Max.	Maximum OFF Current	200µA
Isolation (Channel to Channel)	500VDC	OFF to ON Response	1ms.
ON Voltage Level	9VDC /1mA minimum	ON to OFF Response	1ms.
OFF Voltage Level	3VDC		

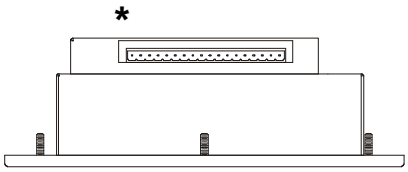
OUTPUT	DIQ716		DIQ716
Outputs per Module	12	Maximum Inrush Current	650mA
Commons per Module	1	Minimum Load	None
Operating Voltage	10 - 28VDC	OFF to ON Response	1ms.
Output Type	Sourcing / 10K Pull-Down	ON to OFF Response	1ms.
Peak Voltage	28VDC Max.	Output Characteristics	Current Sourcing
Maximum Load Current per channel	0.5A Max.	Output Protection	Short Circuit

General Specifications			
Required Power (Steady State)	0.13W (5.5mA @ 24VDC)	CE	Refer to MAN0005
Required Power (Inrush)	Negligible	UL	Operating Temperature Code T4; Also refer to SUP0259
Relative Humidity	5 to 95% Non-condensing	Terminal Type	Spring Clamp, Removable
Operating Temperature	0° to 60° Celsius	Weight	9 oz. (256 g)

2 WIRING

2.1 Input Wiring

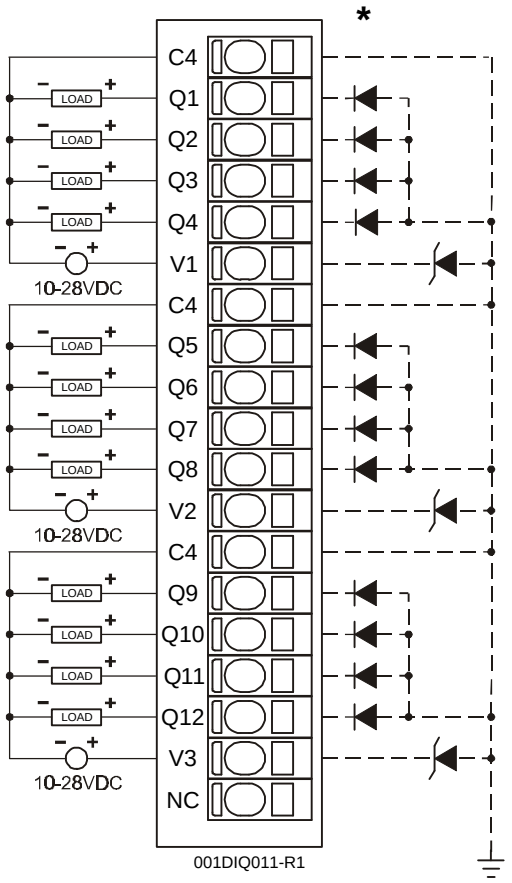


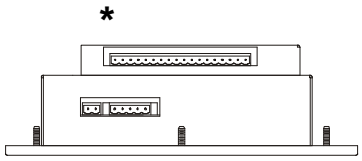


OCS Top View – Shows Corresponding I/O Pin

Pin	Signal
	DIQ716 INPUT
I1	Input 1
I2	Input 2
I3	Input 3
I4	Input 4
I5	Input 5
I6	Input 6
I7	Input 7
I8	Input 8
C1	Common 1 (Isolated)
I9	Input 9
I10	Input 10
I11	Input 11
I12	Input 12
C2	Common 2 (Isolated)
I13	Input 13
I14	Input 14
I15	Input 15
I16	Input 16
C3	Common 3 (Isolated)

2.2 Output Wiring

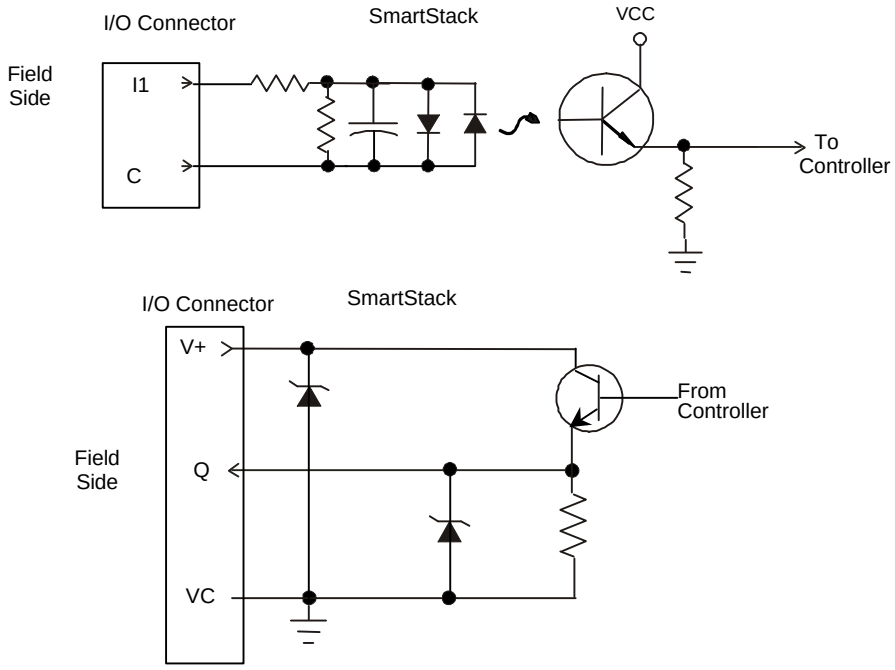




OCS Bottom View – Shows Corresponding I/O Pin

Pin	Signal
	DIQ716 OUTPUT
C4	Common
Q1	Output 1
Q2	Output 2
Q3	Output 3
Q4	Output 4
V1	Load Power 1
C4	Common
Q5	Output 5
Q6	Output 6
Q7	Output 7
Q8	Output 8
V2	Load Power 2
C4	Common
Q9	Output 9
Q10	Output 10
Q11	Output 11
Q12	Output 12
V3	Load Power
NC	No Connection

3 INTERNAL SCHEMATIC DRAWING



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.

Preliminary configuration procedures that are applicable to all SmartStack™ Modules are located in the Control Station Hardware Manual (MAN0227).

Selecting the **I/O Map** tab provides information about the I/O registers, which are assigned to a specific SmartStack™ Module and where the module is located in the point map. The I/O Map is determined by the model number and location within the SmartStack™. 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

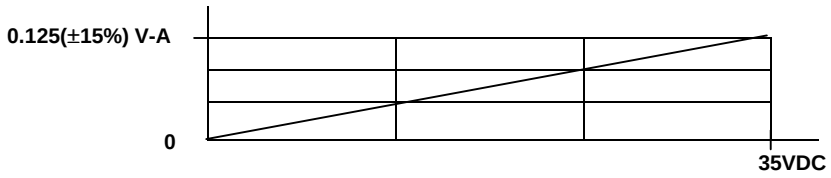
Warning: Remove power from the OCS controller, CAN port, and any peripheral equipment connected to this local system before adding or replacing this or any module.

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.

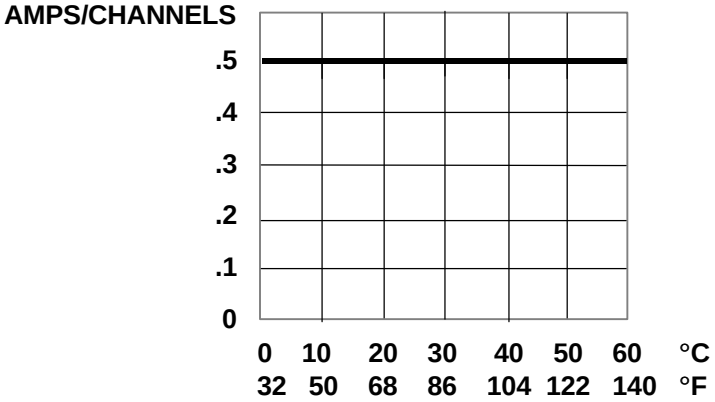
For detailed installation information, refer to Chapter Two in the Control Station Hardware Manual (MAN0227). A handy checklist is provided that covers panel box layout requirements and minimum clearances.

6 INPUT / OUTPUT CHARACTERISTICS

Digital Input Chart



Derating Chart for DIQ716



7 TECHNICAL ASSISTANCE

For assistance, contact Technical Support at the following locations:

North America:
(317) 916-4274 or visit our website at www.heapg.com.

Europe:
(+) 353-21-4321-266