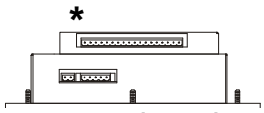
Relay Output Module

HE800DQM202
4 Amp Maximum

1 SPECIFICATIONS

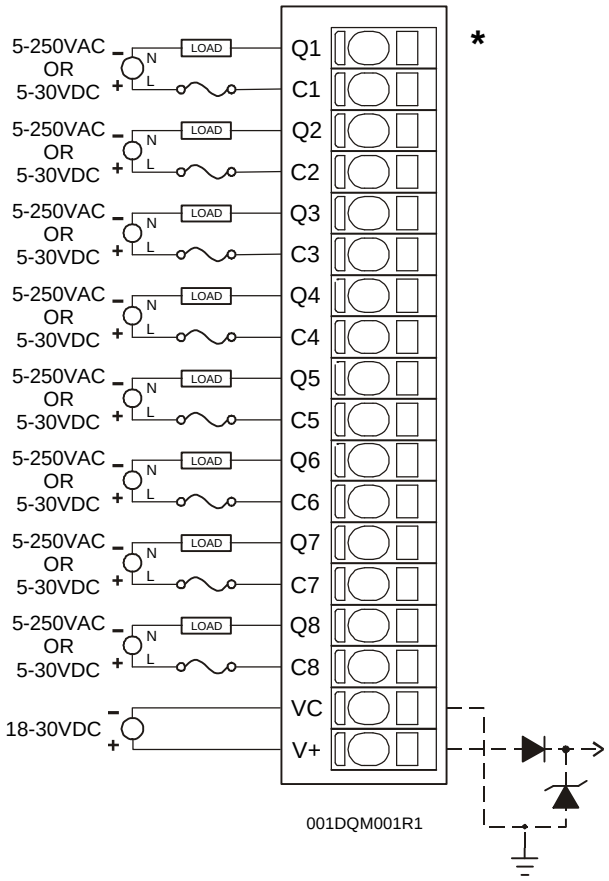
Outputs per Module	1 N.O. Relay	Maximum Inrush Current	10A per channel
Commons per Module	1	OFF to ON Response	10ms Max.
Output Points Consumed	8	ON to OFF Response	5ms. Max.
Isolation (Channel to Channel) (Channel to Common)	500VDC	Terminal Type	Spring Clamp, Removable
Operating Voltage	18-32VDC		
Output Type	NO	Relative Humidity	5 to 95% Non-condensing
Required Power (Steady State)	0.13W (5.5mA @ 24VDC)	Operating Temperature	0° to 60° Celsius
Required Power (Inrush)	Negligible	CE	Refer to MAN0005
ON Voltage Level	0.15V	UL	Operating Temperature Code T4A; Also refer to SUP0259
Maximum Load Voltage	250 VAC, 30VDC Max.	Status Indicator	8 LEDs
Maximum Load Current (resistive) per channel	4A Max. (Subject to Derating)	Weight	10.5 oz. (298 g)
Maximum Leakage Current	5µA		

2 WIRING



OCS Bottom View – Shows Corresponding I/O Pin

Pin	Signal	
Q1	Output 1	N.O. Contact
C1	Output 1	Common
Q2	Output 2	N.O. Contact
C2	Output 2	Common
Q3	Output 3	N.O. Contact
C3	Output 3	Common
Q4	Output 4	N.O. Contact
C4	Output 4	Common
Q5	Output 5	N.O. Contact
C5	Output 5	Common
Q6	Output 6	N.O. Contact
C6	Output 6	Common
Q7	Output 7	N.O. Contact
C7	Output 7	Common
Q8	Output 8	N.O. Contact
C8	Output 8	Common
VC	Relay Coil Voltage Common	
V+	Relay Coil Voltage +	

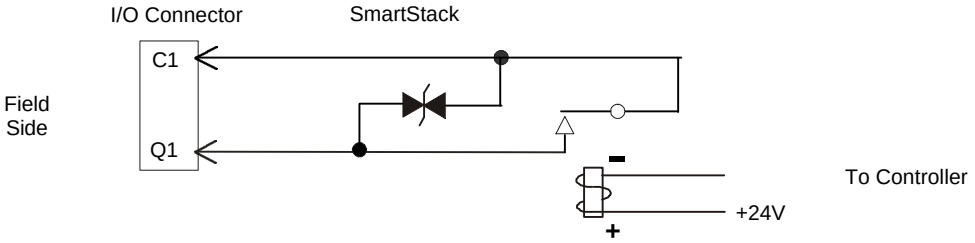


Warning: To protect the module and associated wiring from load faults, use external fuse **(4 A)** as shown. **This warning affects DQM202, Revisions D or higher.**

Warning: Connecting high voltage to any I/O pin may cause high voltage to appear at other I/O pins.

Warning: Wiring the line side of the AC source to loads connected to outputs 1 through 8 and the neutral side of the AC source to the output common(s) would create a Negative Logic condition, which may be considered an unsafe practice.

3 INTERNAL CIRCUIT SCHEMATIC



Specification for transient voltage suppressors (transorbs) used on output circuitry is 400VDC, bi-directional 1500 watts.

Electro-mechanical relays comply with IEC1131-2.

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: Previous versions of this product provided internal fuses on the output circuits (relay contacts). Due to CE Low Voltage Directive (LVD) marking requirements, these fuses have been removed and replaced with solid wire. Therefore, it is now the responsibility of the user of this equipment to ensure that adequate fusing is installed *externally* on each relay output circuit.

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.

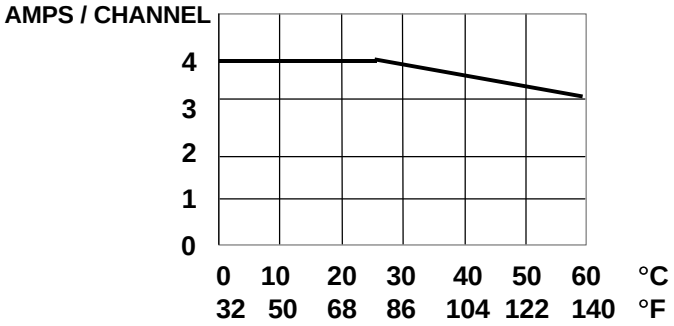
When found on a product, the following symbols specify:

Warning: Consult user documentation.

Warning: Electrical Shock Hazard.

6 OUTPUT CHARACTERISTICS

Derating Output Chart



Typical Relay Life			
Voltage and Load Type	Load Current 1 Amp	2 Amp	4 Amp
30VDC Resistive	800K	500K	200K
30VDC Inductive	500K	250K	100K
250VAC Resistive	800K	500K	200K
250VAC Inductive	500K	250K	100K

7 TECHNICAL ASSISTANCE

Please contact the following locations for technical support.

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

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

NOTES