## SmartBlock Relay

High Current Relay Output Modules
HE569DQM209 (8pt)
Isolated Form C Relays, 20A/pt

1
Specifications

| Specifications |  |  |  |
| :---: | :---: | :---: | :---: |
| Outputs |  | DQM209 |  |
| Outputs (Commons) |  | 8 (8) |  |
| Contact Ratings |  |  |  |
| Voltage | Load Type | NO Contact | NC Contact |
| 277VAC | Tungsten* | 5.4A | - |
| 277VAC | Ballast | 10A | 3A |
| 240VAC | Motor | 2HP | $1 / 2 \mathrm{HP}$ |
| 240VAC | Resistive* | 20A | 10A |
| 240VAC | General Purpose | 20A | 10A |
| 240VAC | LRA/FLA | 53A/20A | 20A/8A |
| 240VAC | Pilot Duty | 470VA | 275VA |
| 125 VAC | Motor | 1HP | $1 / 4 \mathrm{HP}$ |
| 120VAC | LRA/FLA | 98A/22A | - |
| 120 VAC | Tungsten* | 8.3A | - |
| 120VAC | Pilot Duty | 470VA | - |
| 28VDC | Resistive* | 20A | 10A |
| *6,000 operations |  |  |  |
| Minimum Output |  | 1A @ 5VDC or 1A @ 12VAC |  |
| Response Time |  | $15 \mathrm{mS} \mathrm{OFF}>$ ON, $15 \mathrm{mS} \mathrm{ON>OFF}$ |  |
| Life |  | 10 million cycles mechanical 100,000 cycles minimum at rated load |  |
| General |  | DQM209 |  |
| LED indication |  | ON indication per Relay Output |  |
| DC (CsCAN) InputPower |  | <50mA @ 10-30Vdc |  |
| AC Input Power |  | 0.26A @ 100-240Vac |  |
| Load Terminal Type |  | $1 / 4$ " Spade Male |  |
| Load Terminals / Relay |  | Common, Normally Open, Normally Closed |  |
| Storage Temp. |  | $-40^{\circ}$ to $80^{\circ}$ Celsius |  |
| Operating Temp. |  | $-20^{\circ}$ to $70^{\circ}$ Celsius |  |
| Relative Humidity |  | 5 to 95\% Non-condensing |  |
| Dimensions HxWxD |  | 5" $\times 8.5$ " $\times 2.5$ " (127x216x63mm) |  |
| Weight |  | 567 g (11b. 4oz.) |  |
| CE (UL) Compliance |  | CE (all components UL recognized) |  |

2
Wiring - AC Input Power \& Relay Loads


## AC Power Input <br> G=Earth Ground <br> $\mathrm{N}=$ Neutral

L=Line
Relay Loads
COM= Common $\mathrm{NO}=$ Normally Open NC=Normally Closed

2.1 CsCAN Network Wiring

| Color |  | Signal | Description |
| :---: | :---: | :---: | :---: |
| $\square$ | Red | V+ | DC Power In |
| $\square$ | White | CAN_H | CAN Data High |
|  |  | SHIELD | Shield Ground |
| $\square$ | Blue | CAN_L | CAN Data Low |
| $\square$ | Black | V- | CAN Ground |

### 2.2 CsCAN Network ID



The CsCAN Network ID is set using two 16-position rotary switches labeled H and LO. Addresses 01-FD hex (1-253 decimal) are legal in CsCAN. To convert the readings in hex on the rotary switches to the eqivalent decimal value, use the following equation:

### 3.0 Software Configuration

The DQM209 is configured in Cscape as a 16pt SmartStix Output module. Sixteen bits of output reference data (e.g. \%Q) are assigned to the unit. The first eight bits control the relay outputs, and the last eight bits are unused.

### 3.1 LED Status Indication

Each relay output has an ON status LED physically located next to the relay on the DQM209 There is also a PWR LED (lit when DC power is applied), and CsCAN status LEDs labeled MS (module status) and NS (network status). Those LEDs are described below.

| Diagnostic LED | State | Meaning |
| :--- | :--- | :---: |
| MS: (indicates fault status of <br> Module ) | Solid Red | RAM or ROM test failed |
|  | Blinking Red | I/O test failed |
|  | Blinking Green | Module is in power-up state |
|  | Solid Green | Module is running normally |
| NS: (indicates fault status of <br> Network) | Solid Red | Network Ack or Dup ID test failed |
|  | Blinking Red | Network ID test failed |
|  | Blinking Green | Module is in Life Expectancy default |
| state |  |  |

4 Installation / safety

Warning: Remove DC and AC power from the relay module and any peripheral equipment connected to this local system before adding or replacing this or any module.
a. All applicable codes and standards should be followed in the installation of this product.

When found on the product, the following symbols specify:
4 Warning: Electrical


5 Technical Support

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