SmartBlock Relay & SSR

High Current Socketed Output Modules

HE569DQM212 (7A Form C), HE569DQM204 (1A AC SSR), HE569DQM205 (2A DC SSR)

1 Specifications

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General		**All Versions**		
Outputs (Commons)		8 (8)		
LED indication		ON indication per Relay Output		
DC Input Power		<200mA @ 24Vdc (17-30Vdc)		
Load Terminal Type		Removable Spring-Clamp (2 x 12posn)		
Storage Temp.		-40° to +80° Celsius		
Operating Temp.		-20° to +60° Celsius		
Relative Humidity		5 to 95% Non-condensing		
Dimensions HxWxD		5" x 4.31" x 2.5" (127x110x63mm)		
Weight		340g (12oz.)		
CE (UL) Compliance		CE (all components UL recognized)		
Contact Ratings		**DQM212**		
Contact Configuration		Normally Open & Normally Closed		
AC Voltage, max.		400Vac		
AC current, max.		7A* per Load, 50A max/board		
DC Voltage, max		220Vdc		
DC current, max		7A* @ 30Vdc	220mA @ 110Vdc	80mA@ 220Vdc
*at 20°C. For each 10°C ambient rise, derate max. current by 12.5%				
Minimum Output		5V @ 5mA		
Response Time		8mS OFF>ON, 6mS ON>OFF		
Life		30 million cycles mechanical 70,000 cycles minimum at rated load		
Contact Ratings		**DQM204**	**DQM205**	
Contact Configuration		Normally Open		
Voltage, max.		275Vac	35Vdc	
Rated Current		1A @ 240Vac	2A @ 24Vdc	
Minimum Output		12Vac @ 50mA	1.5Vdc @ 1mA	
Off-state leakage current		1mA	0.01mA	
On-state voltage drop		1.1Vac	0.3Vdc	
Response Time	OFF>ON	10mS	0.05mS	
	ON>OFF	10mS	0.25mS	

2 Output Wiring

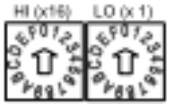
Model	Top Connector Terminal Number (left to right)											
	1	2	3	4	5	6	7	8	9	10	11	12
DQM212	1C	NO	NC	2C	NO	NC	3C	NO	NC	4C	NO	NC
DQM204	1C	NO		2C	NO		3C	NO		4C	NO	
DQM205	1C	NO		2C	NO		3C	NO		4C	NO	
Model	**Bottom Connector Terminal Number (left to right)**											
	1	2	3	4	5	6	7	8	9	10	11	12
DQM212	5C	NO	NC	6C	NO	NC	7C	NO	NC	8C	NO	NC
DQM204	5C	NO		6C	NO		7C	NO		8C	NO	
DQM205	5C	NO		6C	NO		7C	NO		8C	NO	

C = Common NO=Normally Open NC=Normally Closed <Empty>=No Connect

2.1 CsCAN Network Wiring

Color		Signal	Description
■	Red	V+	DC Power In
□	White	CAN_H	CAN Data High
		SHIELD	Shield Ground
■	Blue	CAN_L	CAN Data Low
■	Black	V-	CAN Ground

2.2 CsCAN Network ID



The CsCAN Network ID is set using two 16-position rotary switches labeled HI 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:

ID (decimal) = HI x 16 + LO

3.0 Software Configuration

The DQM modules are 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 output has an ON status LED physically located next to the relay on the DQM module. 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: (Module Status)	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: (Network Status)	Solid Red	Network Ack or Dup ID test failed
	Blinking Red	Network ID test failed
	Blinking Green	Module is in Life Expectancy default state
	Solid Green	Network is running normally

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:

Warning: Electrical Shock Hazard.

Warning: Consult user documentation.

5 Technical Support

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