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

#### Specifications

HORNE

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	½ HP			
240VAC	Resistive*		20A	10A			
240VAC	General Purpose		20A	10A			
240VAC	LRA/FLA		53A/20A	20A/8A			
240VAC	Pilot Duty		470VA	275VA			
125VAC	Motor		1HP	1⁄4 HP			
120VAC	LRA/FLA		98A/22A	-			
120VAC	Tungsten*		8.3A	-			
120VAC	Pilot Duty		470VA	-			
28VDC	Resistive*		20A	10A			
		*6,000 o	perations				
Minimum Output		1A @ 5VDC or 1A @ 12VAC					
Response Time		15mS OFF>ON, 15mS 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) Input Power		<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° to 80° Celsius					
Operating Temp.		-20° to 70° Celsius					
Relative Humidity		5 to 95% Non-condensing					
Dimensions HxWxD		5" x 8.5" x 2.5" (127x216x63mm)					
Weight		567g (1lb. 4oz.)					
Certifications		North America or European website					

## Wiring – AC Input Power & Relay Loads



2

N=Neutral L=Line COM= Common NO=Normally Open

NC=Normally Closed

AC Power Input G=Earth Ground



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 equivalent decimal value, use the following equation:

ID (decimal) = HI x 16 + LO

## 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	
	Solid Red	RAM or ROM test failed	
MS: (indicates fault status of	Blinking Red	I/O test failed	
Module)	Blinking Green	Module is in power-up state	
	Solid Green	Module is running normally	
	Solid Red	Network Ack or Dup ID test failed	
NC: (indicates foult status of	Blinking Red	Network ID test failed	
NS: (Indicates fault status of	Blinking Groop	Module is in Life Expectancy default	
Network)	Billiking Green	state	
	Solid Green	Network is running normally	

#### Installation / safety

4

**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:



# 5 Technical Support

North America: Tel: 317 916-4274 Fax: 317 639-4279 Web: <u>http://www.hornerautomation.com</u> Email: <u>techsppt@heapg.com</u> Europe: Tel: +353-21-4321266 Fax: +353-21-4321826 Web: <u>http://www.hornerautomation.eu</u> Email: <u>tech.support@horner-apg.com</u>

No part of this publication may be reproduced without the prior agreement and written permission of Horner APG, Inc. Information in this document is subject to change without notice.

