

# OCS-I/O - HE959DQM602

## 8 Relay Outputs

### 1 TECHNICAL SPECIFICATIONS

#### 1.1 General Specifications

Required Power (Steady State)	<320mA @ 5V
Relay Outputs	8
Relative Humidity	5-95% non-condensing
Port Connectors	Phoenix Contact 2201780
Port Wiring - Digital I/O (Analog Inputs and Digital I/O)	16-24 AWG/0.2-1.4mm <sup>2</sup>
Operating Air Temperature	-40°C (-40°F) to 50°C* (122°F) <b>*Note:</b> Can operate at 60C if derated to 1A per relay.
Storage Temperature	-40°C (-40°F) to 85°C (185°F)
Weight	130g (4.6 oz.)
Dimensions	76.5mm x 124.5mm x 19mm 3" x 4.9" x 0.75"
Certifications (UL/CE)	North America: <a href="https://hornerautomation.com/certifications/">https://hornerautomation.com/certifications/</a> Europe: <a href="https://www.hornerautomation.eu/support/certifications-2/">https://www.hornerautomation.eu/support/certifications-2/</a>



#### 1.2 Digital Outputs - Relay

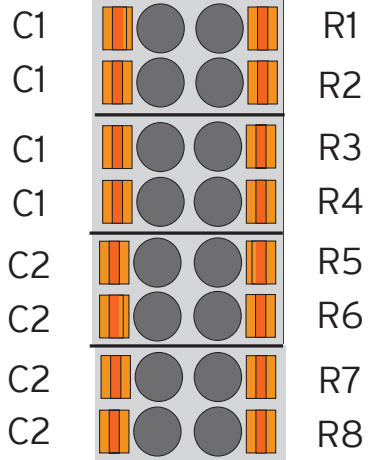
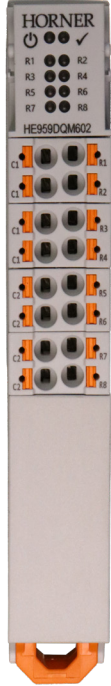
Outputs per Module	8
Commons per Module	2
Operating Voltage	30VDC MAX/250VAC MAX
Output Type	Relay
Maximum Load Current per Output	2A
Maximum Load Current per Common	5A
OFF to ON Response	Maximum 10ms
ON to OFF Response	Maximum 10ms
Life of Relays	10 million+ cycles, 200k @ rated load
Output Protection	None- external protection required.
Type	1 per output

Cscape Configuration - See MAN1174 for the HE959CNX116.

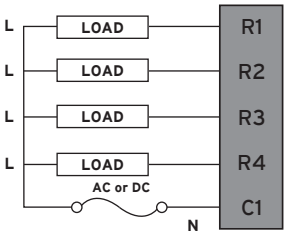
## 2 WIRING

Wiring used for main wiring should be 300V 105C rating or higher.

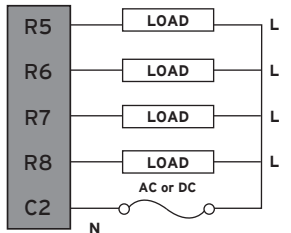
Relay outputs should be connected to the same voltage levels (e.g. all connected to 240Vac supply sources or all connect to 24V supply sources).



### Relay Outputs



8 OUTPUTS			
SIGNAL	DESCRIPTION	SIGNAL	DESCRIPTION
R1	Relay 1	R5	Relay 5
R2	Relay 2	R6	Relay 6
R3	Relay 3	R7	Relay 7
R4	Relay 4	R8	Relay 8
C1	Common	C2	Common
C1	Common	C2	Common



## 2 DIAGNOSTIC LED INDICATORS

Status	OK LED
OFF	Power Up
ON	IO Module Running Normally
BLINK (1Hz)	On of the following errors: a. Communication between IO Base and IO Module (IO ERROR) b. No Configuration c. OCS idle mode

## 3 SAFETY

### 3.1 - WARNINGS



WARNING - If the equipment is used in a manner not specified by Horner APG, the protection provided by the equipment may be impaired.

WARNING - EXPLOSION HAZARD - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous

AVERTISSEMENT - RISQUE D'EXPLOSION -Ne débranchez pas l'équipement tant que l'alimentation n'a pas été coupée ou que la zone n'est pas dangereuse.

WARNING - EXPLOSION HAZARD - Substitution of any component may impair suitability for Class I, Division 2

AVERTISSEMENT - RISQUE D'EXPLOSION -Le remplacement de tout composant peut nuire à la compatibilité avec la classe I, division 2

WARNING - POSSIBLE EQUIPMENT DAMAGE - Remove power from the I/O Base and any peripheral equipment connected to this local system before adding or replacing this or any module.

AVERTISSEMENT - DOMMAGES POSSIBLES À L'ÉQUIPEMENT - Coupez l'alimentation de la base d'E / S et de tout équipement périphérique connecté à ce système local avant d'ajouter ou de remplacer ce module ou tout autre module.



WARNING - Inputs and Outputs should be connected to the same voltage levels (all connect to 24V supply sources)

WARNING - Digital Outputs are non-isolated and considered hazardous live.

### 3.2 - SAFETY

- All applicable codes and standards should be followed in the installation of this product.
- Shielded, twisted-pair wiring should be used for best performance.
- Shields should be grounded at one end only, preferably at the end providing the best noise shunting.
- Use the following wire type or equivalent: Belden 8441.

## 4 PART NUMBER

HE959DQM602

## 5 TECHNICAL SUPPORT

For assistance and manual updates, contact Technical Support at the following locations:

**North America**  
(317) 916-4274  
www.hornerautomation.com  
techspt@heapg.com

**Europe**  
(+) 353-21-4321-266  
www.hornerautomation.eu  
technical.support@horner-apg.com