

OCS-I/O - HE959DIQ512

4 Digital Inputs, 4 Relay Outputs

1 TECHNICAL SPECIFICATIONS

1.1 General Specifications

Required Power (Steady State)	<230mA @ 5V <16mA @ 24V
Digital Inputs	4
Relay Outputs	4
Relative Humidity	5-95% non-condensing
Port Connectors	Phoenix Contact 2201780
Port Wiring	16-24 AWG / 0.2-1.5mm ²
Operating Air Temp	-40°C (-40°F) to 60°C (140°F)
Storage Temp	-40°C (-40°F) to 85°C (185°F)
Weight	110g (3.87 oz.)
Dimensions	76.5mm x 124.5mm x 19mm 3" x 4.9" x 0.75"
Certifications (UL/CE)	North America: https://hornerautomation.com/certifications/ Europe: https://www.hornerautomation.eu/support/certifications-2/



1.2 Digital Inputs

Inputs per Module	4
Commons per Module	4
Input Voltage Range	12 to 24VDC
Absolute Max Voltage	32VDC
Input Impedance	10kΩ
I/O Indication	Status LED per Input
Logic Polarity	Selectable - common for all four inputs
Connector Tye	Phoenix Contact 2202234

1.3 Digital Outputs - Relay

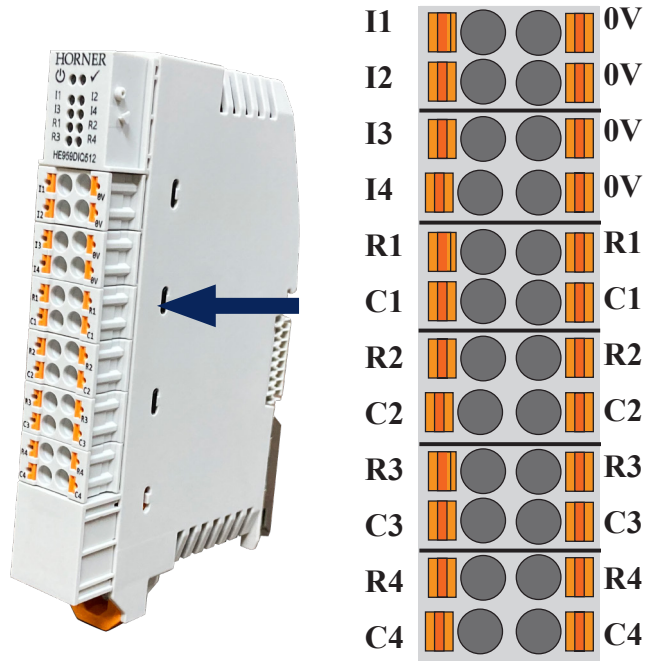
Inputs per Module	4
Commons per Module	4
Max Output Current per Relay	3 A
Max Output Voltage	120VAC
Max. Switched Power	150W
Contact Isolation to Ground	500VDC
Expected Life	100k @ rated load (resistive)
Type	1a

Cscape Configuration - See MAN1175 for the HE959CNX116.

2 WIRING

Wiring Overview

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



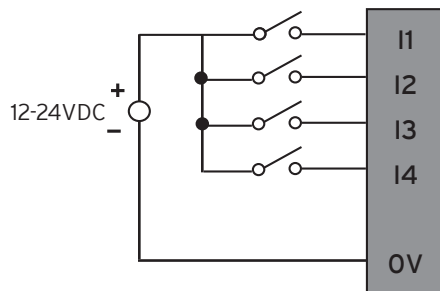
Relay Outputs



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).

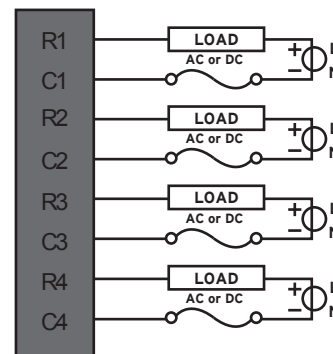
4 RELAY OUTPUTS			
Signal	Description	Signal	Description
I1	Digital Input 1	0V	Common
I2	Digital Input 2	0V	Common
I3	Digital Input 3	0V	Common
I4	Digital Input 4	0V	Common
R1	Relay Output 1	R1	Relay 1
C1	Common 1	C1	Relay Common 1
R2	Relay Output 2	R2	Relay 2
C2	Common 2	C2	Relay Common 2
R3	Relay Output 3	R3	Relay 3
C3	Common 3	C3	Relay Common 3
R4	Relay Output 4	R4	Relay 4
C4	Common 4	C4	Relay Common 4

Digital Inputs Wiring



Digital Inputs should be connected to the same voltage levels (e.g. all connected to 24VDC).

Relay Output Wiring



3 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

4 SAFETY

4.1 - 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.

4.2 - 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.

5 PART NUMBER

HE959DIQ512

6 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