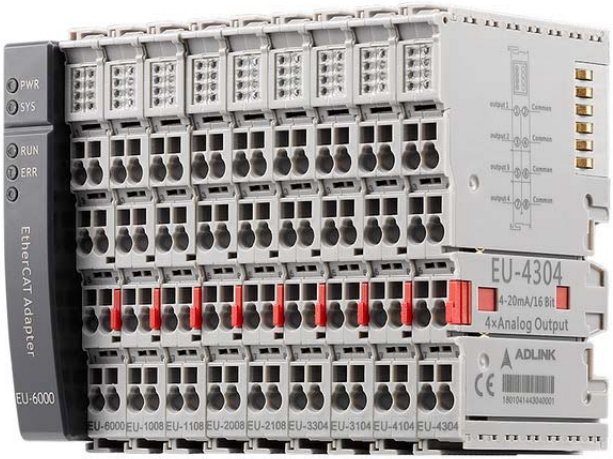
EU Series

EtherCAT Slave Unit

User's Manual



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Leading **EDGE COMPUTING**

Revision History

Revision	Release Date	Description of Change(s)
1.0	2019-10-03	Initial release
1.1	2021-01-21	Add 16-ch models; correct errors in EU-1008/1108 detailed specifications; add EU-6000 pinout diagram

Preface

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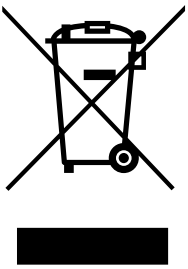

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Take note of the following conventions used throughout this manual to make sure that users perform certain tasks and instructions properly.

Additional information, aids, and tips that help users perform tasks.

Information to prevent ***minor*** physical injury, component damage, data loss, and/or program corruption when trying to complete a task.

Information to prevent ***serious*** physical injury, component damage, data loss, and/or program corruption when trying to complete a specific task.

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1 Introduction

ADLINK's complete EtherCAT solution, with every element from hardware to middleware to software tailored for dedicated EtherCAT functionality, includes Talos master controllers, EU & EPS slave systems, and remote monitoring and control providers. Additionally, ADLINK's Softmotion one-stop control kernel delivers flexible and easy-to-use intelligent platforms for driving next-generation modern Smart Factories.

ADLINK's EU slave system brings powerful flexibility to EtherCAT environments. State-of-the-art modular construction allows the EtherCAT slave to be configured to fulfill the needs of both small local applications and expansive distributed platforms.

The EU system incorporates and controls nearly any type of I/O devices. Uniquely designed for full operability in conditions from 0°C to 55°C, the EU slave system is also fully compliant with the EN 61131-2 standard for shock and vibration and EN 61000-6 for heavy industrial EMC protection, as well as CE emissions certification.

1.1 Features

- Compliance with EtherCAT standard
- Optimization with ADLINK EtherCAT master (250μs cycle time)
- Comprehensive slave modules including digital I/O, analog I/O, coupler, power supply, and terminal shield.
- Compliance with industrial IEC standard
- Excellent scalability powered by modularized and slice-type design
- Compact Size

The EU slave system is fully compatible with not only ADLINK's EtherCAT master controllers, but also 3rd party EtherCAT master controllers by importing the ESI file for EU series modules to your master controller. See “Compatibility with 3rd party EtherCAT master controllers” on page 15.

1.2 Specifications

1.2.1 EU-6000 Bus Coupler Module

EU-6000	
Module Type	Bus Coupler
Power	
Power Input	24VDC (18-36V)
Power Output	5VDC / 670mA
General	
Dimensions	100mm x 69mm x 63mm
Field Bus Connectivity	EtherCAT
Bus Interface	2x RJ45
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95% non-condensing
Ingress Rating	IP20
Certification	CE
Data Transmission	100Mbps
EtherCAT Connectivity	CAT5/ CAT5e cable
Max. Number of Modules Supported	32
Communication Disconnection DO Behavior	Reset DO to default state (Note: Restore output option of PCIe-833x master controller not supported.)

Table 1-1: EU-6000 Specifications

NOTE:

The EU-6000 Bus Coupler supports a maximum of 32 modules and has a maximum current output of 670mA. If the total current drawn by connected modules exceeds 670mA, then an EU-0012 Power Module must be installed in the terminal block at a location such that the current draw from the EU-6000 does not exceed 670mA.

NOTE:

To assist you in module selection, a power consumption calculation tool is provided. Download it from the “EU Utility” link on the EU Series product page on the ADLINK website at www.adlinktech.com/Products/Motion_Control/EtherCAT Solution/EU_Series and run the executable file *EU utility.exe*.

1.2.2 EU-1008/16 & EU-1108/16 Digital Input Modules

	EU-1008	EU-1108	EU-1016	EU-1116
Module Type	Digital Input			
Power				
DC Input	5VDC (±10%)			
Power Consumption	25mA			
Input				
Channels	8		16	
Input Type	Source	Sink	Source	Sink
Input voltage	0VDC (±3V)	24VDC (±20%)	0VDC (±3V)	24VDC (±20%)
Logic0 Voltage	15 to 30V	-3 to 3V	15 to 30V	-3 to 3V
Logic1 Voltage	-3 to 3V	15 to 30V	-3 to 3V	15 to 30V
Input Current	3mA			
Isolation Protection	500VDC			
General				
Dimensions	100 x 68 x 12 mm		100 x 69.65 x 12 mm	
Operating Temp.	0°C to 55°C			
Storage Temp.	-25°C to 85°C			
Humidity	95%, non-condensing			
Certification	CE			

Table 1-2: EU-1008/16 & EU-1108/16 Specifications

1.2.3 EU-2008/16 & EU-2108/16 Digital Output Modules

	EU-2008	EU-2108	EU-2016	EU-2116
Module Type	Digital Output			
Power				
DC Input	5VDC (±10%)			
Power Consumption	66mA			
Input				
Channels	8		16	
Output Type	Source	Sink	Source	Sink
Output Voltage	24VDC (±20%)	0VDC (±3V)	24VDC (±20%)	0VDC (±3V)
Output Current	500mA/Ch			
Isolation Protection	500VDC			
General				
Dimensions	100 x 68 x 12 mm		100 x 69.65 x 12 mm	
Operating Temp.	0°C to 55°C			
Storage Temp.	-25°C to 85°C			
Humidity	95%, non-condensing			
Certification	CE			

Table 1-3: EU-2008/16 & EU-2108/16 Specifications

1.2.4 EU-3104 & EU-3304 Analog Input Modules

	EU-3104	EU-3304
Module Type	Analog Input	
Power Supply		
DC Input	5VDC (±10 %)	
Power Consumption	210mA	260mA
Input		
Channels	4	
Input Voltage/Current	0-10V	4-20mA
Input Impedance	>500kΩ	100Ω
Resolution	16-bit	
Measurement Error	0.02%	
Isolation Protection	500VDC	
General		
Dimensions	100mm x 68mm x 12mm	
Operating Temp.	0°C to 55°C	
Storage Temp.	-25°C to +85°C	
Humidity	95%, non-condensing	
Certification	CE	

Table 1-4: EU-3104 & EU-3304 Specifications

1.2.5 EU-4104 & EU-4304 Analog Output Modules

	EU-4104	EU-4304
Module Type	Analog Output	
Power Supply		
DC Input	5VDC (±10%)	
Power Consumption	230mA	280mA
Output		
Channels	4	
Output Voltage/Current	0-10V	4-20mA
Resolution	16-bit	
Measurement Error	0.02%	
Isolation Protection	500VDC	
General		
Dimensions	100mm x 68mm x 12mm	
Operating Temp.	0°C to 55°C	
Storage Temp.	-25°C to +85°C	
Humidity	95%, non-condensing	
Certification	CE	

Table 1-5: EU-4104 & EU-4304 Specifications

1.2.6 EU-0012 & EU-0200 Power and Terminal Modules

	EU-0012	EU-0200
Module Type	Power	Terminal
Power Supply		
DC Input	24VDC (±5%)	N/A
Output		
Output Voltage	5V ±5%	N/A
Output Current	1000mA	N/A
General		
Dimensions	100mm x 68mm x 12mm	99.2mm×27.5mm×2.2mm
Operating Temp.	0°C to 55°C	
Storage Temp.	-25°C to +85°C	
Humidity	95%, non-condensing	
Certification	CE	

Table 1-6: EU-0012 & EU-0200 Specifications

NOTE:

The EU-0012 Power Module is used to provide additional power if the total current draw of the terminal block exceeds the 670mA available from the EU-6000 Bus Coupler. The EU-0012 has a maximum current output of 1000mA. If the total current drawn by connected modules to the right of the EU-0012 exceeds 1000mA, then an additional EU-0012 Power Module must be installed in the terminal block at a location where the current draw from the previous does not exceed 1000mA.

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2 Getting Started

The EU system incorporates one or more couplers with functional modules connected to the right thereof.

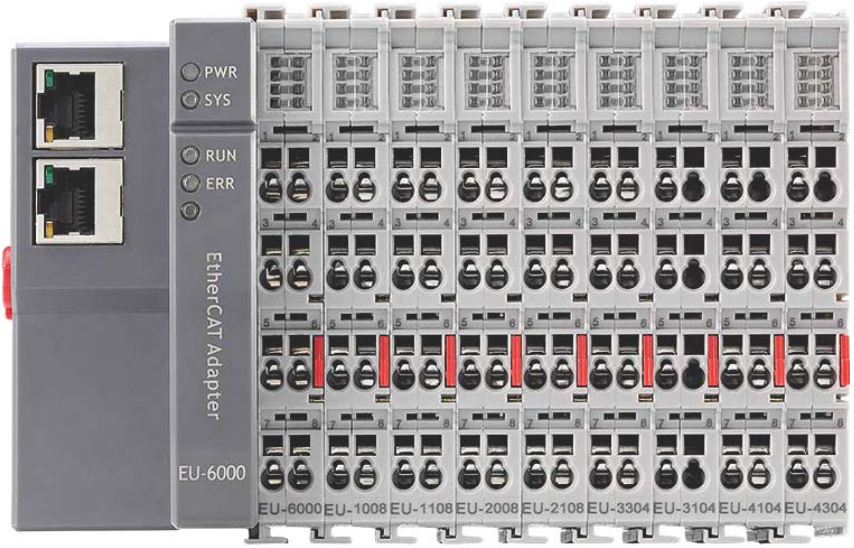


Figure 2-1: Example EU System

NOTE:

Diagrams and illustrated equipment are for reference only. Actual system configuration and specifications may vary.

CAUTION:

EU modules are NOT hot-swappable, The system must be powered down before module removal or installation.

2.1 Package Contents

Before unpacking, check the shipping carton for any damage. If the shipping carton and/or contents are damaged, inform your dealer immediately. Retain the shipping carton and packing materials for inspection. Obtain authorization from your dealer before returning any product to ADLINK.

Please ensure that the EU module is included in the package.

If any items are missing or damaged, contact the dealer from whom you purchased the product. Save the shipping materials and carton in case you want to ship or store the product in the future.

Do not install or apply power to equipment that is damaged or missing components. Retain the shipping carton and packing materials for inspection. Please contact your ADLINK dealer/ vendor immediately for assistance and obtain authorization before returning any product.

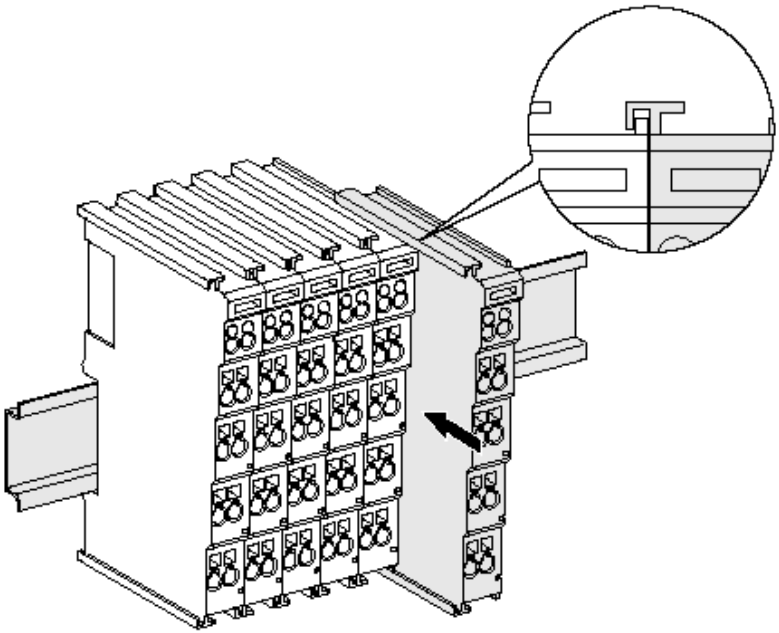
Internal thermal status is monitored by onboard thermal sensors and reported to the Host automatically to ensure prompt action in the event of temperature overages.

2.2 Hardware Installation and Mounting

Assembly

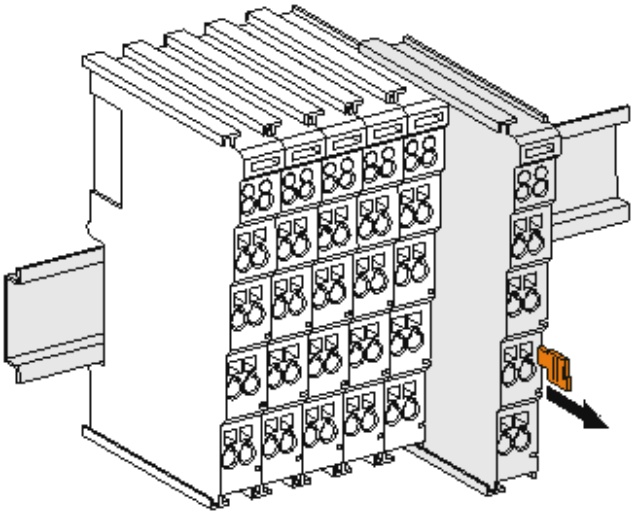
1. Mount the bus coupler to the mounting rail (not shown) by applying rearward pressure until firmly seated.
2. Mount additional modules, to the right, by engaging the module's groove runner (along the module's top left edge) with the previously mounted terminal's tongue runner (along the top right edge). Slide the module rearward until the rail is contacted and an audible click is heard.

If correctly mounted, no significant gap should be visible between housings.



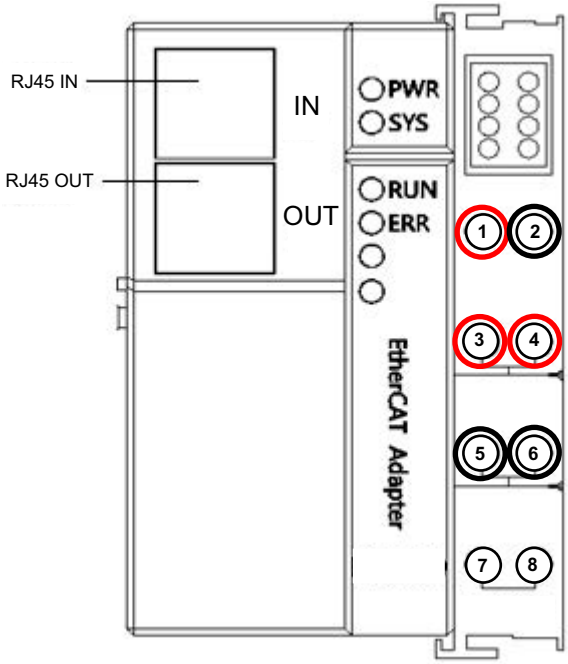
Disassembly

1. Pull the orange tab outward approximately 1 cm. The module will be released from the mounting rail lock and can be pulled out of the bus terminal block easily without using excessive force.
2. To remove a module, grasp it at both top and bottom groove runners and pull outwards until it is free of the terminal block.



2.3 Powering Up the System

The EU Series requires a 24VDC supply to the bus coupler, with the supply positive connected to pins 1/3/4 and the negative to pins 2/5/6 (see “EU-6000 I/O & Pin Assignment” on page 17).



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3 EU Series Modules

The EU Series provides software-configurable trigger bus bridges, allowing the user to set the status of each trigger bus line, while offering remarkable flexibility and expandability to address diverse application requirements.

Module	Description
EU-6000	EtherCAT bus coupler
EU-1008	8-ch, sourcing, digital input
EU-1016	16-ch, sourcing, digital input
EU-1108	8-ch, sinking, digital input
EU-1116	16-ch, sinking, digital input
EU-2008	8-ch, sourcing, digital output
EU-2016	16-ch, sourcing, digital output
EU-2108	8-ch, sinking, digital output
EU-2116	16-ch, sinking, digital output
EU-3104	4-ch, 0-10V, 16-bit analog input
EU-3304	4-ch, 4-20mA, 16-bit analog input
EU-4104	4-ch, 0-10V, 16-bit, analog output
EU-4304	4-ch, 4-20mA, 16-bit, analog output
EU-0012	Power module
EU-0200	Terminal module

Table 3-1: EU Series Peripheral Modules

Compatibility with 3rd party EtherCAT master controllers

To use EU Series modules with a non-ADLINK EtherCAT master controller, please download the PCIe-833x SDK from the PCIe-8338 product page at www.adlinktech.com/Products/Motion_Control/EtherCATSolution/PCIe-8338. Install it on a Windows platform and navigate to the path: *C:\Program Files (x86)\ADLINK\PCIe-833x\EtherCAT\EtherCAT*. The ESI file for EU Series modules is *ADLINK_EU-6000_v1.0.xml*.

3.1 EU-6000 Bus Coupler Module

The EU-6000 EtherCAT bus coupler module supports not only EtherCAT transmission but also EU peripheral module control and measurement. The EU-6000 delivers DC power to the entire installed EU slave system, fully operable in environments from 0°C to 55°C.

EU-6000	
Module Type	Bus Coupler
Power	
Power Input	24VDC (18-36V)
Power Output	5VDC / 670mA
General	
Dimensions	100mm x 69mm x 63mm
Field Bus Connectivity	EtherCAT
Bus Interface	2x RJ45
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95% non-condensing
Ingress Rating	IP20
Certification	CE
Data Transmission	100Mbps
EtherCAT connectivity	CAT5/ CAT5e cable
Max. Number of Modules Supported	32
Communication Disconnection DO Behavior	Reset DO to default state (Note: Restore output option of PCIe-833x master controller not supported.)

Table 3-2: EU-6000 Specifications

NOTE:

The EU-6000 Bus Coupler supports a maximum of 32 modules and has a maximum current output of 670mA. If the total current drawn by connected modules exceeds 670mA, then an EU-0012 Power Module must be installed in the terminal block at a location such that the current draw from the EU-6000 does not exceed 670mA.

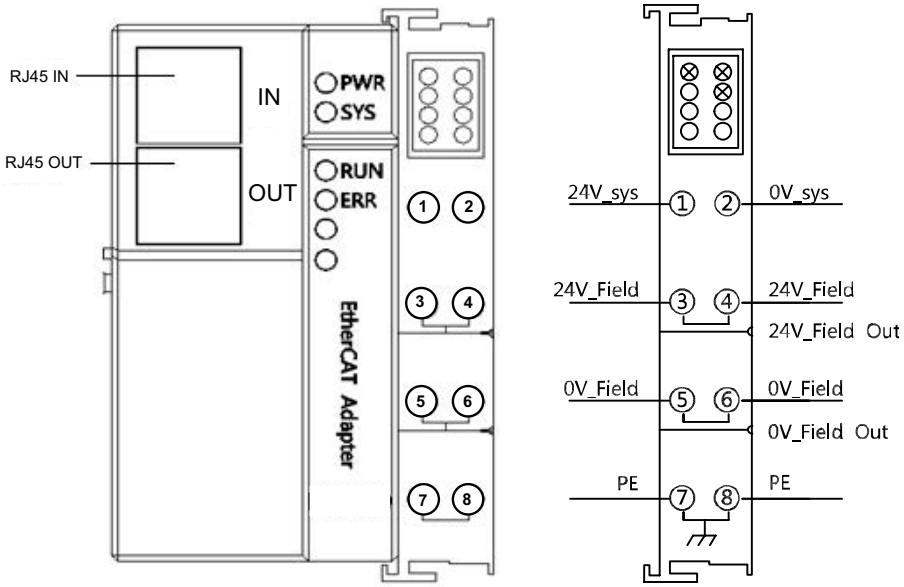

Figure 3-1: EU-6000 I/O & Pin Assignment

3.1.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.1.2 LED Indicators

LED	Function	Color	Action	Description
PWR	System Power Status	Green	Lit	Power on
			Unlit	Power off/level less than 2.5V
SYS	System Status	Green	Flashing (1Hz)	Normal
			Flashing (5Hz)	Slave lost
			Unlit	Slave not running
			Single Flash	Slave ID allocation fail
			Double Flash	Slave allocation fail
RUN	Operating Status	Green	Unlit	Slave is in initialization state
			Flashing (slow)	Pre-operation state
			Single Flash	Safe operation state
			Lit	Operation state
			Flashing (fast)	Boot state
ERR	System Error	Red	Lit	EtherCAT communication error
			Unlit	Normal

Table 3-3: EU-6000 LED Indicators

3.2 EU-1008 Source Digital Input Module

The EU-1008 8-channel source type digital input module operates from 0°C to 55°C and provides high isolation protection.

EU-1008	
Module Type	Digital Input Module
Power	
DC Input	5VDC (±10%)
Power Consumption	25mA
Input	
Channels	8
Input Type	Source
Input voltage	0VDC (±3V)
Logic0 Voltage	15 to 30V
Logic1 Voltage	-3 to 3V
Input Current	3mA
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-4: EU-1008 Specification

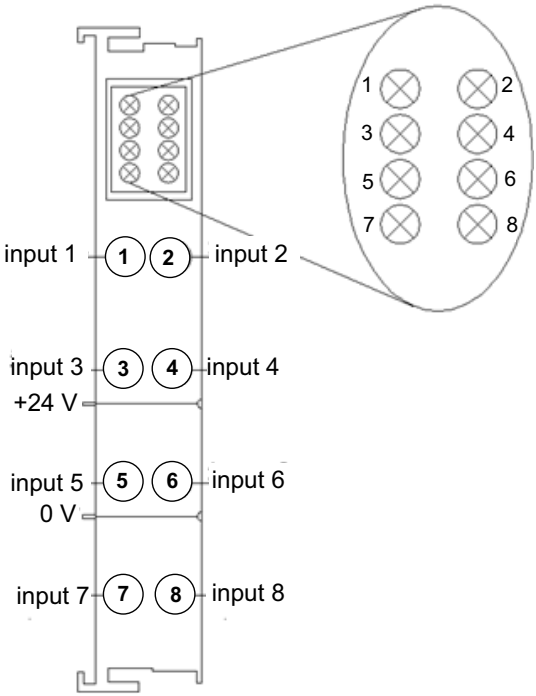

Figure 3-2: EU-1008 Pin Assignment

3.2.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.2.2 Signal Connection

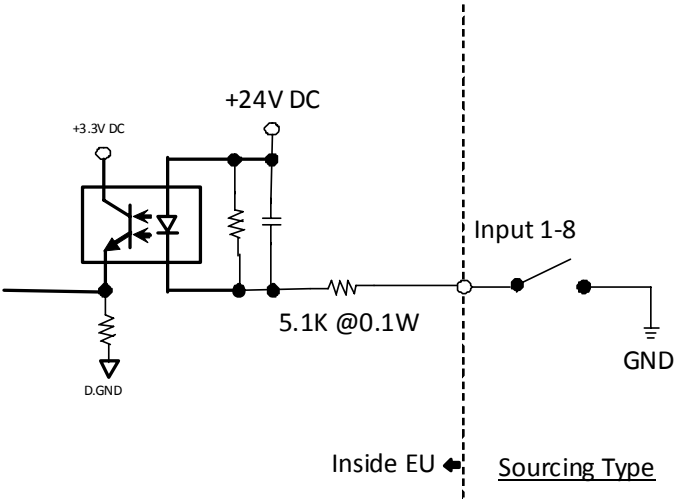

Figure 3-3: EU-1008 Signal Connection

3.2.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active

Table 3-5: EU-1008 LED Indicators

3.3 EU-1016 Source Digital Input Module

The EU-1016 16-channel source type digital input module operates from 0°C to 55°C and provides high isolation protection.

EU-1016	
Module Type	Digital Input Module
Power	
DC Input	5VDC (±10%)
Power Consumption	25mA
Input	
Channels	16
Input Type	Source
Input voltage	0VDC (±3V)
Logic0 Voltage	15 to 30V
Logic1 Voltage	-3 to 3V
Input Current	3mA
Isolation Protection	500VDC
General	
Dimensions	100mm x 69.65mm x 12 mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-6: EU-1016 Specification

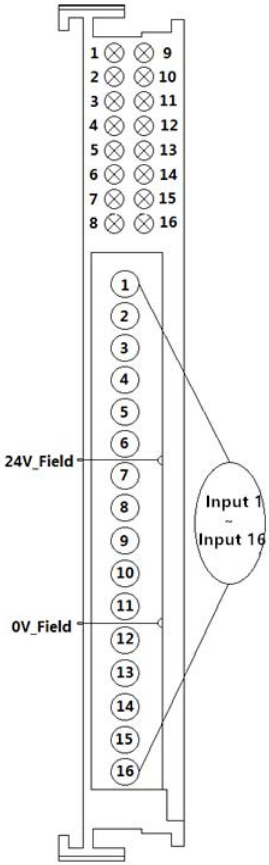

Figure 3-4: EU-1016 Pin Assignment

3.3.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.3.2 Signal Connection

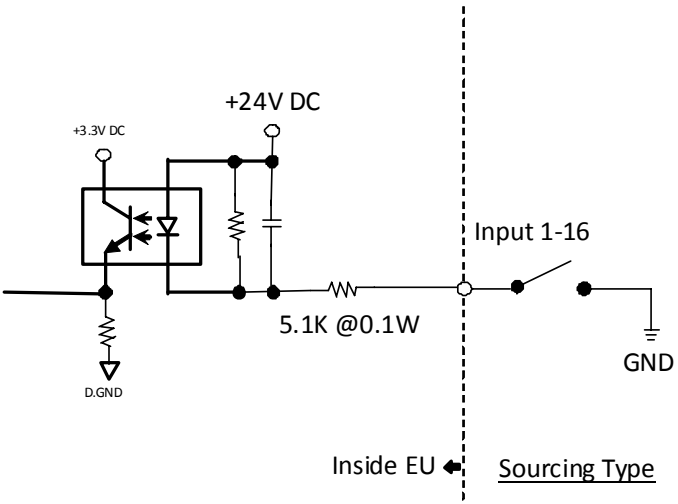

Figure 3-5: EU-1016 Signal Connection

3.3.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active
Channel 9	Lit	Channel active
Channel 10	Lit	Channel active
Channel 11	Lit	Channel active
Channel 12	Lit	Channel active
Channel 13	Lit	Channel active
Channel 14	Lit	Channel active
Channel 15	Lit	Channel active
Channel 16	Lit	Channel active

Table 3-7: EU-1016 LED Indicators

3.4 EU-1108 Sink Digital Input Module

The EU-1108 8-channel sink type digital input module operates from 0°C to 55°C and provides high isolation protection.

EU-1108	
Module Type	Digital Input Module
Power	
DC Input	5VDC (±10%)
Power Consumption	25mA
Input	
Channels	8
Input Type	Sink
Input voltage	24VDC (±20%)
Logic0 Voltage	-3 to 3V
Logic1 Voltage	15 to 30V
Input Current	3mA
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-8: EU-1108 Specification

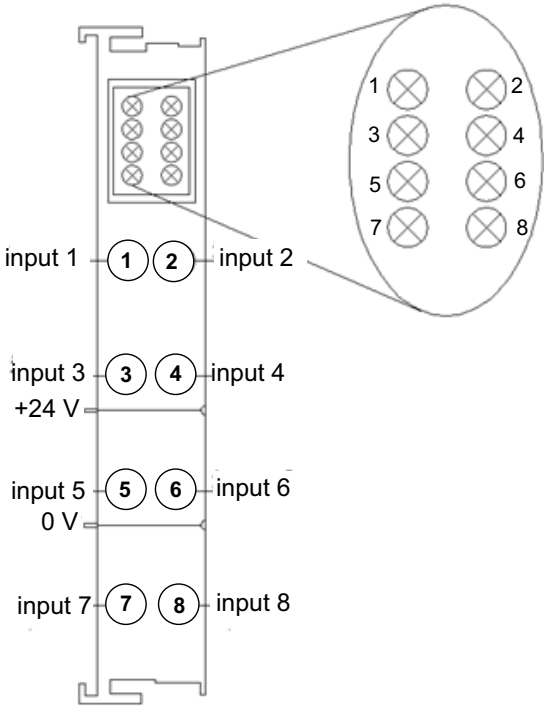

Figure 3-6: EU-1108 Pin Assignment

3.4.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.4.2 Signal Connection

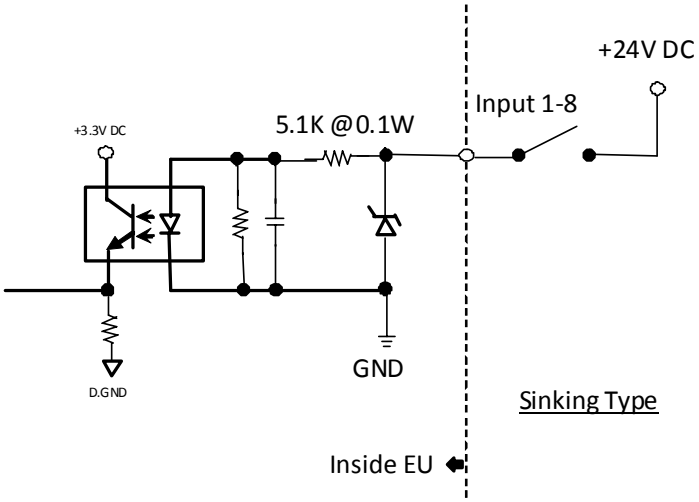

Figure 3-7: EU-1108 Signal Connection

3.4.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active

Table 3-9: EU-1108 LED Indicators

3.5 EU-1116 Sink Digital Input Module

The EU-1116 16-channel sink type digital input module operates from 0°C to 55°C and provides high isolation protection.

EU-1116	
Module Type	Digital Input Module
Power	
DC Input	5VDC (±10%)
Power Consumption	25mA
Input	
Channels	16
Input Type	Sink
Input voltage	24VDC (±20%)
Logic0 Voltage	-3 to 3V
Logic1 Voltage	15 to 30V
Input Current	3mA
Isolation Protection	500VDC
General	
Dimensions	100mm x 69.65mm x 12 mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-10: EU-1116 Specification

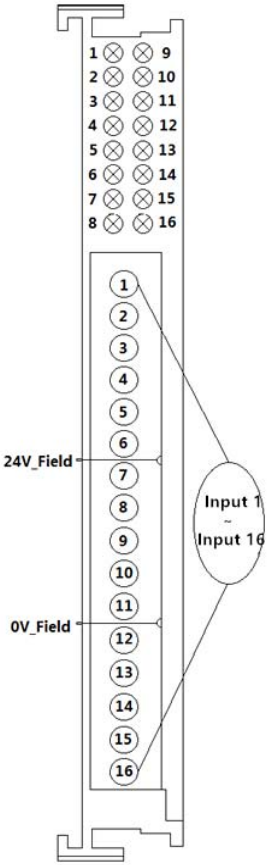

Figure 3-8: EU-1116 Pin Assignment

3.5.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.5.2 Signal Connection

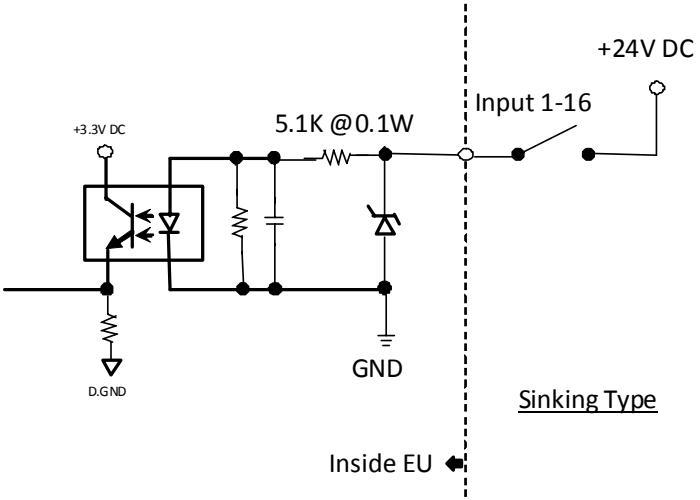

Figure 3-9: EU-1116 Signal Connection

3.5.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active
Channel 9	Lit	Channel active
Channel 10	Lit	Channel active
Channel 11	Lit	Channel active
Channel 12	Lit	Channel active
Channel 13	Lit	Channel active
Channel 14	Lit	Channel active
Channel 15	Lit	Channel active
Channel 16	Lit	Channel active

Table 3-11: EU-1116 LED Indicators

3.6 EU-2008 Source Digital Output Module

The EU-2008 8-channel source type digital output module operates from 0°C to 55°C and provides high isolation protection.

EU-2008	
Module Type	Digital Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	66mA
Output	
Channels	8
Output Type	Source
Output Voltage	24VDC (±20%)
Output Current	500mA/Ch
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-12: EU-2008 Specification

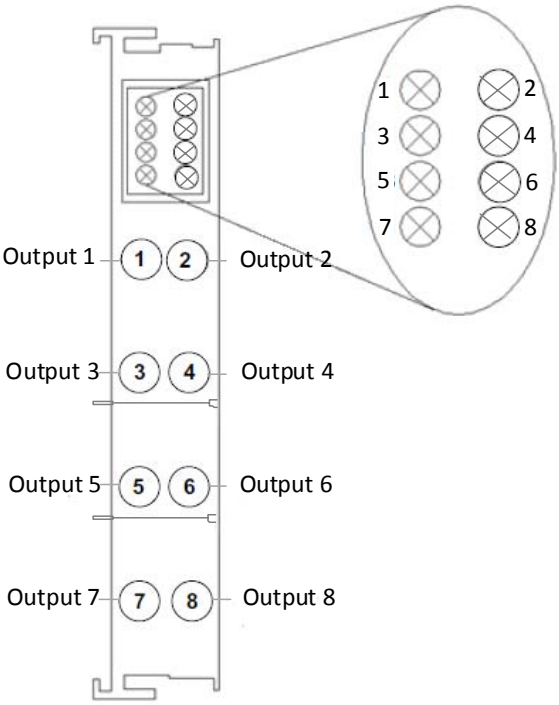

Figure 3-10: EU-2008 Pin Assignment

3.6.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.6.2 Signal Connection

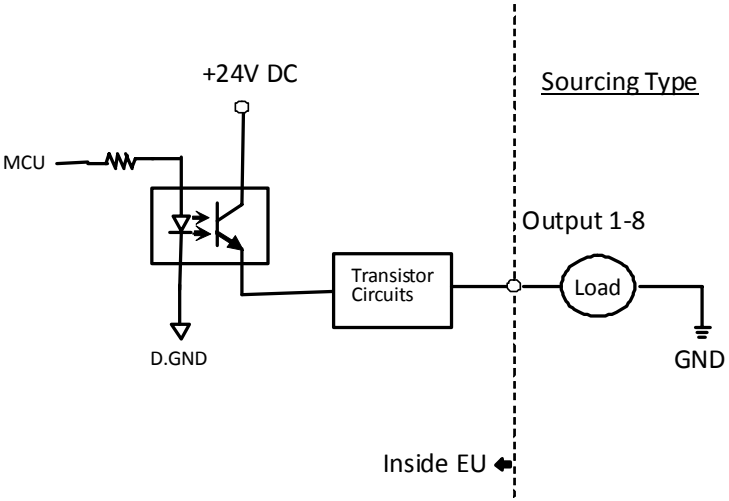

Figure 3-11: EU-2008 Signal Connection

3.6.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active

Table 3-13: EU-2008 LED Indicators

3.7 EU-2016 Source Digital Output Module

The EU-2016 16-channel source type digital output module operates from 0°C to 55°C and provides high isolation protection.

EU-2016	
Module Type	Digital Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	66mA
Output	
Channels	16
Output Type	Source
Output Voltage	24VDC (±20%)
Output Current	500mA/Ch
Isolation Protection	500VDC
General	
Dimensions	100mm x 69.65mm x 12 mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-14: EU-2016 Specification

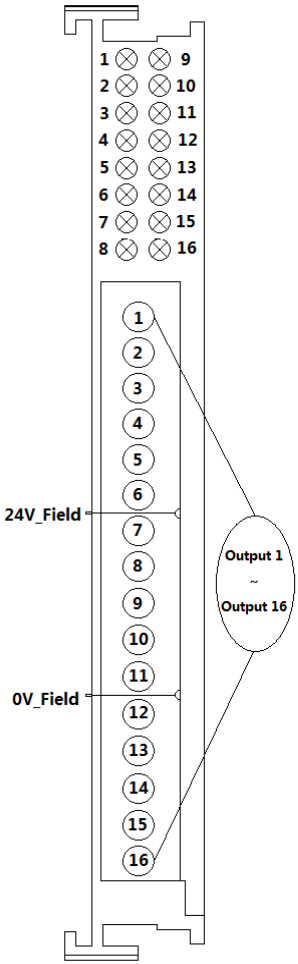

Figure 3-12: EU-2016 Pin Assignment

3.7.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.7.2 Signal Connection

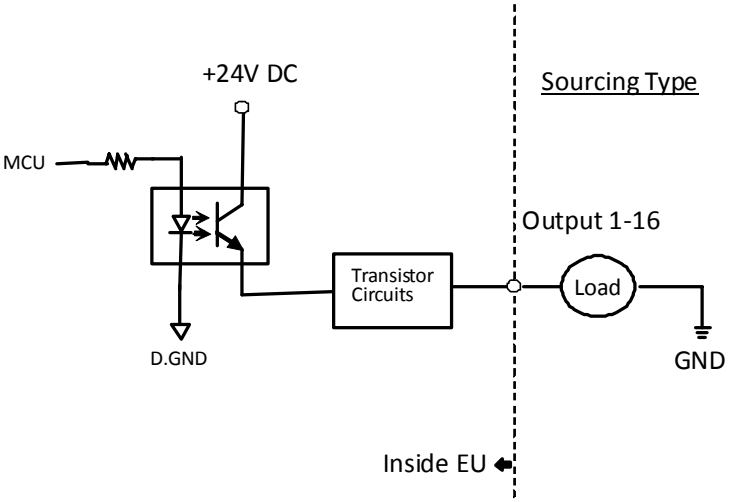

Figure 3-13: EU-2016 Signal Connection

3.7.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active
Channel 9	Lit	Channel active
Channel 10	Lit	Channel active
Channel 11	Lit	Channel active
Channel 12	Lit	Channel active
Channel 13	Lit	Channel active
Channel 14	Lit	Channel active
Channel 15	Lit	Channel active
Channel 16	Lit	Channel active

Table 3-15: EU-2016 LED Indicators

3.8 EU-2108 Sink Digital Output Module

The EU-2108 8-channel sink type digital output module operates from 0°C to 55°C and provides high isolation protection.

EU-2108	
Module Type	Digital Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	66mA
Output	
Channels	8
Output Type	Sink
Output Voltage	0VDC (±3V)
Output Current	500mA/Ch
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-16: EU-2108 Specification

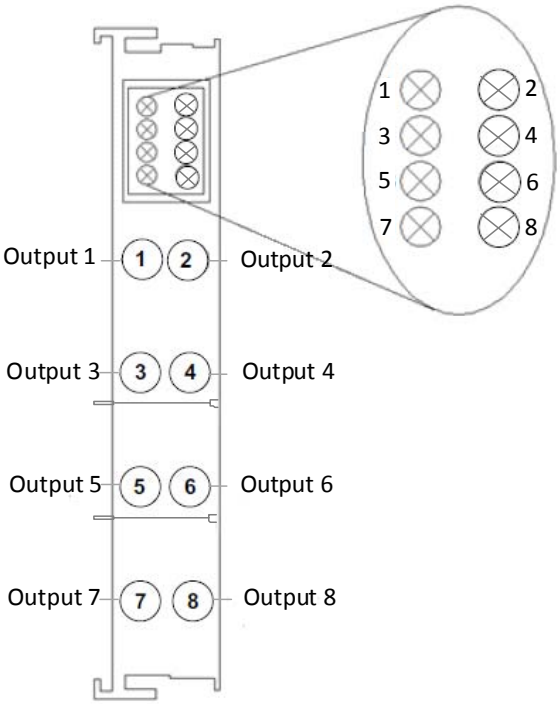

Figure 3-14: EU-2108 Pin Assignment

3.8.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.8.2 Signal Connection

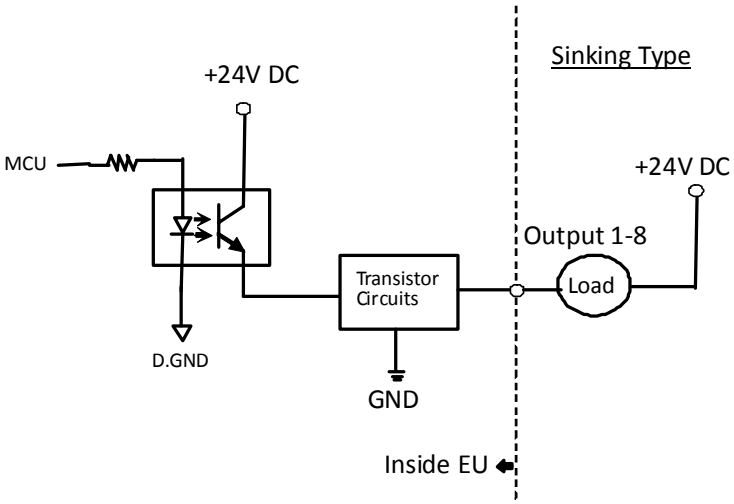

Figure 3-15: EU-2108 Signal Connection

3.8.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active

Table 3-17: EU-2108 LED Indicators

3.9 EU-2116 Sink Digital Output Module

The EU-2116 16-channel sink type digital output module operates from 0°C to 55°C and provides high isolation protection.

EU-2116	
Module Type	Digital Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	66mA
Output	
Channels	16
Output Type	Sink
Output Voltage	0VDC (±3V)
Output Current	500mA/Ch
Isolation Protection	500VDC
General	
Dimensions	100mm x 69.65mm x 12 mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to 85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-18: EU-2116 Specification

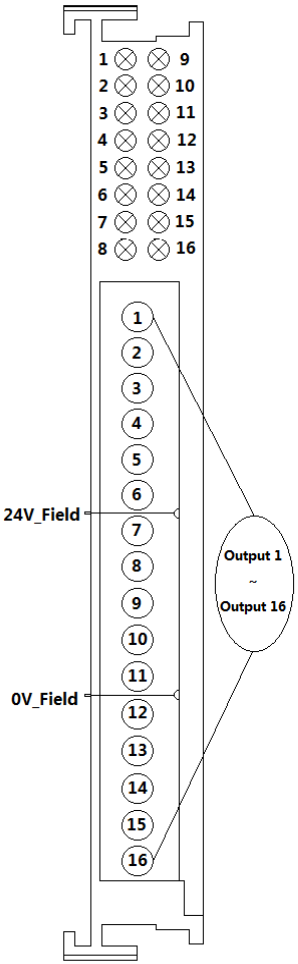

Figure 3-16: EU-2116 Pin Assignment

3.9.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.9.2 Signal Connection

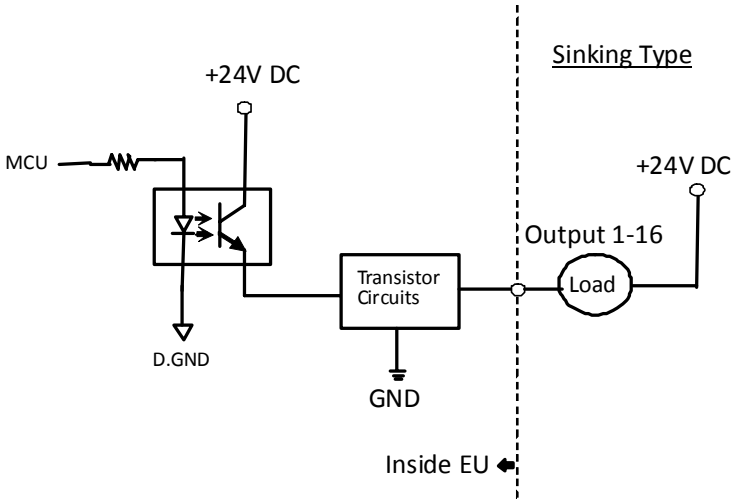

Figure 3-17: EU-2116 Signal Connection

3.9.3 LED Indicators

LED	Action	Status
Channel 1	Lit	Channel active
Channel 2	Lit	Channel active
Channel 3	Lit	Channel active
Channel 4	Lit	Channel active
Channel 5	Lit	Channel active
Channel 6	Lit	Channel active
Channel 7	Lit	Channel active
Channel 8	Lit	Channel active
Channel 9	Lit	Channel active
Channel 10	Lit	Channel active
Channel 11	Lit	Channel active
Channel 12	Lit	Channel active
Channel 13	Lit	Channel active
Channel 14	Lit	Channel active
Channel 15	Lit	Channel active
Channel 16	Lit	Channel active

Table 3-19: EU-2116 LED Indicators

3.10 EU-3104 Analog Input Module

The EU-3104 4 channel 0V to 10V @ 16-bit, analog input module operates from 0°C to 55°C and provides high isolation protection.

EU-3104	
Module Type	Analog Input
Power Supply	
DC Input	5VDC (±10 %)
Power Consumption	210mA
Input	
Channels	4
Input Voltage	0V to 10V
Input Impedance	>500kΩ
Resolution	16-bit
Measurement Error	0.02%
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Data Mapping	0-65535, 0V to 10V
Certification	CE

Table 3-20: EU-3104 Specification

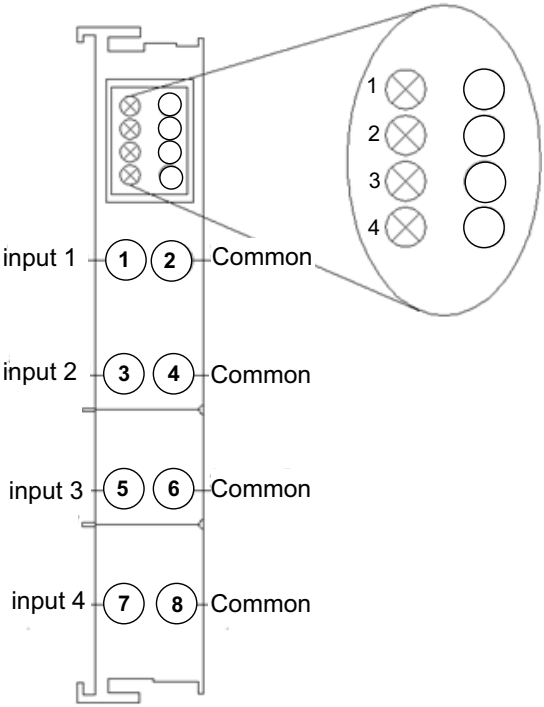

Figure 3-18: EU-3104 Pin Assignment

3.10.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.10.2 Signal Connection

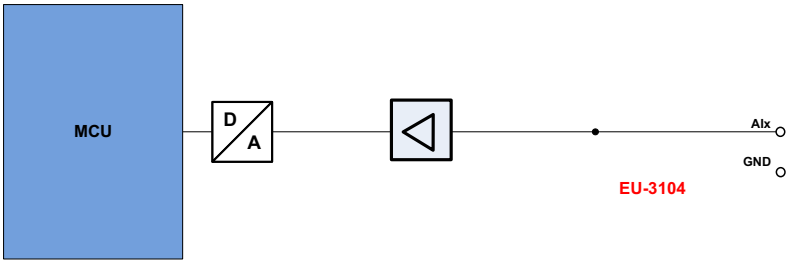

Figure 3-19: EU-3104 Signal Connection

3.10.3 LED Indicators

Channel	Action	Status
1	Flashing	Detected voltage is lower than 10V
	Lit	Detected voltage exceeds 10V
	Unlit	No voltage is detected
2	Flashing	Detected voltage is lower than 10V
	Lit	Detected voltage exceeds 10V
	Unlit	No voltage is detected
3	Flashing	Detected voltage is lower than 10V
	Lit	Detected voltage exceeds 10V
	Unlit	No voltage is detected
4	Flashing	Detected voltage is lower than 10V
	Lit	Detected voltage exceeds 10V
	Unlit	No voltage is detected

Table 3-21: EU-3104 LED Indicators

3.11 EU-3304 Analog Input Module

The EU-3304 4 channel 4-20mA @ 16-bit, analog input module operates from 0°C to 55°C and provides high isolation protection.

EU-3304	
Module Type	Analog Input
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	260mA
Input	
Channels	4
Input Current	4mA to 20mA
Input Impedance	100Ω
Resolution	16-bit
Measurement Error	0.02%
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Data Mapping	0-65535, 4mA to 20mA
Certification	CE

Table 3-22: EU-3304 Specification

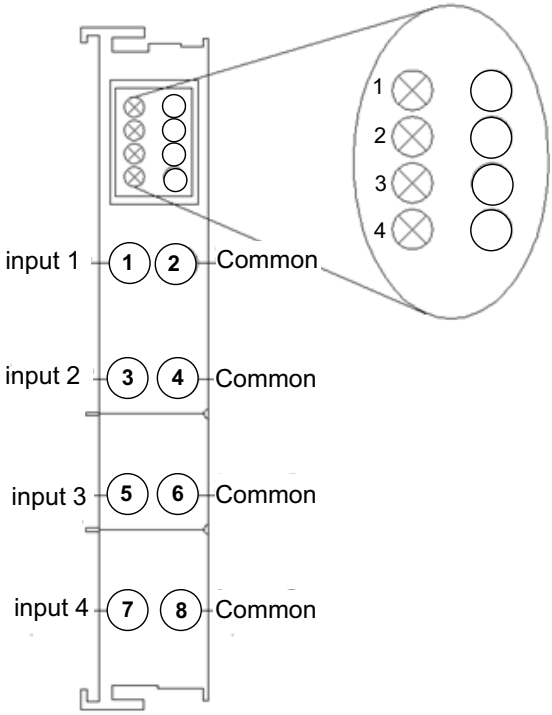

Figure 3-20: EU-3304 Pin Assignment

3.11.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.11.2 Signal Connection

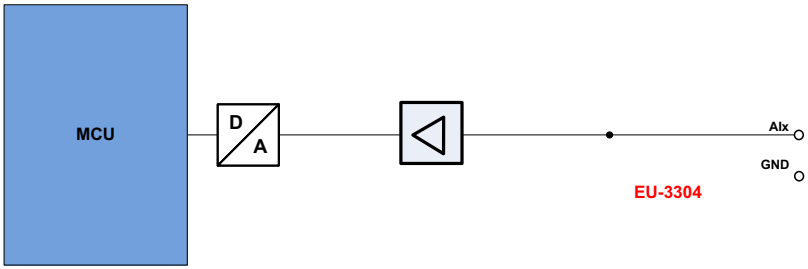

Figure 3-21: EU-3304 Signal Connection

3.11.3 LED Indicators

Channel	Action	Status
1	Flashing	Detected current is between 4 and 20mA
	Lit	Detected current exceeds 20mA
	Unlit	No input current
2	Flashing	Detected current is between 4 and 20mA
	Lit	Detected current exceeds 20mA
	Unlit	No input current
3	Flashing	Detected current is between 4 and 20mA
	Lit	Detected current exceeds 20mA
	Unlit	No input current
4	Flashing	Detected current is between 4 and 20mA
	Lit	Detected current exceeds 20mA
	Unlit	No input current

Table 3-23: EU-3304 LED Indicators

3.12 EU-4104 Analog Output Module

The EU-4104 is a 4 channel voltage output module. The resolution of each channel is 0V to 10V over a 16-bit range.

EU-4104	
Module Type	Analog Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	230mA
Output	
Channels	4
Output Voltage	0V to 10V
Resolution	16-bit
Measurement Error	0.02%
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Data Mapping	0-65535, 0V to 10V
Certification	CE

Table 3-24: EU-4104 Specification

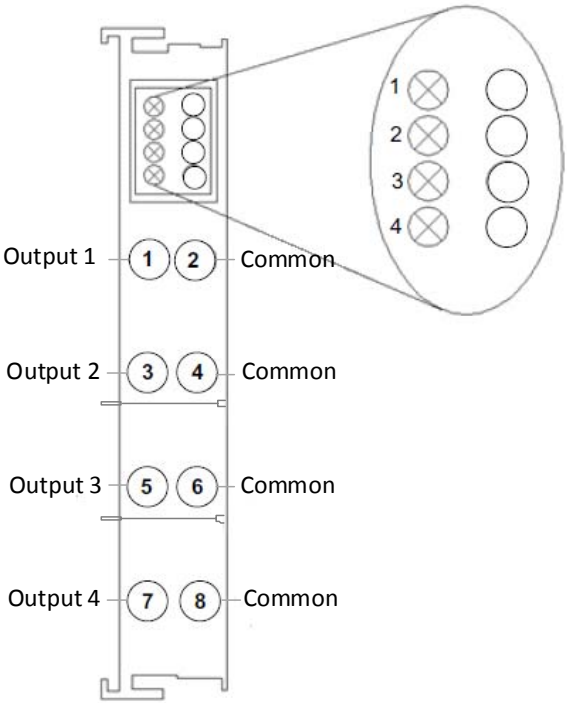

Figure 3-22: EU-4104 Pin Assignment

3.12.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.12.2 Signal Connection

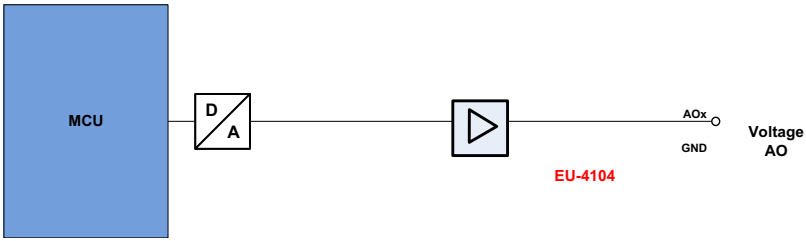

Figure 3-23: EU-4104 Signal Connection

3.12.3 LED Indicators

Channel	Action	Status
1	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
2	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
3	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
4	Flashing	Output active
	Lit	Out of command range
	Unlit	No output

Table 3-25: EU-4104 LED Indicators

3.13 EU-4304 Analog Output Module

The EU-4304 is a 4 channel current output module. The resolution of each channel is 4mA to 20mA over a 16-bit range.

EU-4304	
Module Type	Analog Output
Power Supply	
DC Input	5VDC (±10%)
Power Consumption	280mA
Output	
Channels	4
Output Current	4mA to 20mA
Resolution	16-bit
Measurement Error	0.02%
Isolation Protection	500VDC
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Data Mapping	0-65535, 4mA to 20mA
Certification	CE

Table 3-26: EU-4304 Specification

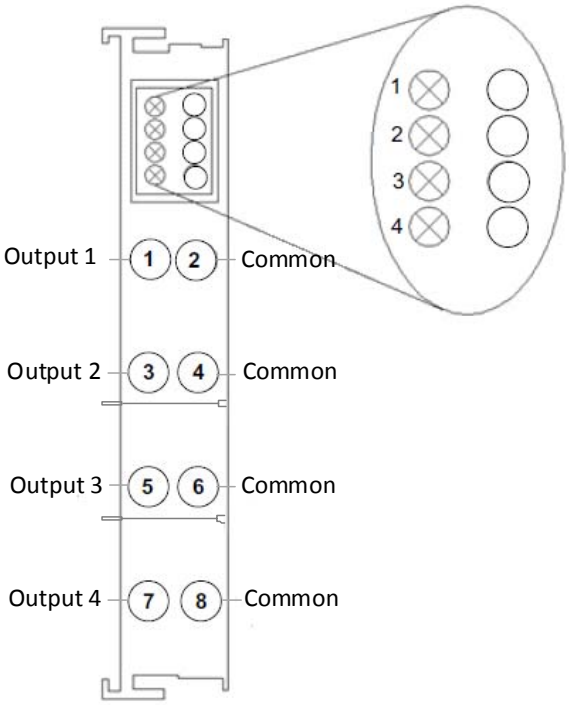

Figure 3-24: EU-4304 Pin Assignment

3.13.1 Wiring

- **Wiring:** CAGE CLAMP® spring-loaded technology
- **Connection Cross-section:** solid or strand wire 0.08 to 2.5 square-millimeter AWG 18-24
- **Stripping Length:** 8-9mm

3.13.2 Signal Connection

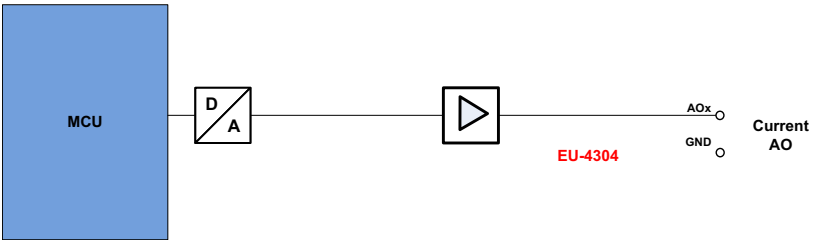

Figure 3-25: EU-4304 Signal Connection

3.13.3 LED Indicators

Channel	Action	Status
1	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
2	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
3	Flashing	Output active
	Lit	Out of command range
	Unlit	No output
4	Flashing	Output active
	Lit	Out of command range
	Unlit	No output

Table 3-27: EU-4304 LED Indicators

3.14 EU-0012 Power Module

The EU-0012 provides connected terminals with 1A extra current, allowing the EU system to support additional modules.

EU-0012	
Module Type	Power
Power Supply	
DC Input	24VDC (18-36VDC)
Output	
Output Voltage	5V ±5%
Output Current	1000mA
General	
Dimensions	100mm x 68mm x 12mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-28: EU-0012 Specification

NOTE:

The EU-0012 Power Module is used to provide additional power if the total current draw of the terminal block exceeds the 670mA available from the EU-6000 Bus Coupler. The EU-0012 has a maximum current output of 1000mA. If the total current drawn by connected modules to the right of the EU-0012 exceeds 1000mA, then an additional EU-0012 Power Module must be installed in the terminal block at a location where the current draw from the previous does not exceed 1000mA.

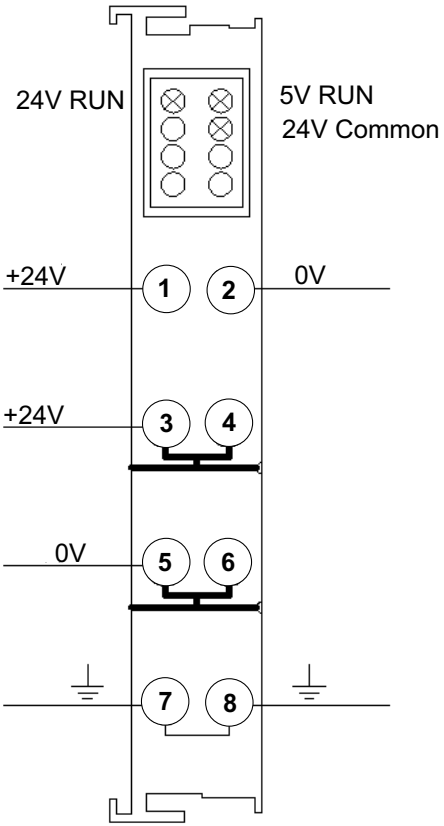

Figure 3-26: EU-0012 Pin Assignment

3.15 EU-0200 Terminal Module

The EU-0200 covers and protects EU terminals.

EU-0200	
Module Type	Terminal
Dimensions	99.2mm×27.5mm×2.2mm
Operating Temp.	0°C to 55°C
Storage Temp.	-25°C to +85°C
Humidity	95%, non-condensing
Certification	CE

Table 3-29: EU-0200 Specification

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Appendix A - Object Dictionaries

A.1 EU6000

Name	EU6000
Type	Bus Coupler

A.1.1 Input/Output Area

Object 0xF050

Index	0xF050
Sub-Index	0x00 to 0x20
Name	Detected Module Ident List
Object Code	ARRAY
Data Type	UNSIGNED8
PDO Mapping	No

Index	Sub	Type	RW	Name	Description
0xF050	00	U8	R	Number of Entries	Numbers of following sub-indexes Default value = 0x00
	01	U32	R	Module Ident 1	The index represents module ident of the module detected on position 1 Default Value = depend
	02	U32	R	Module Ident 2	The index represents module ident of the module detected on position 2 Default Value = depend
	03	U32	R	Module Ident 3	The index represents module ident of the module detected on position 3 Default Value = depend
	04	U32	R	Module Ident 4	The index represents module ident of the module detected on position 4 Default Value = depend
	05	U32	R	Module Ident 5	The index represents module ident of the module detected on position 5 Default Value = depend

Index	Sub	Type	RW	Name	Description
	06	U32	R	Module Ident 6	The index represents module ident of the module detected on position 6 Default Value = depend
	07	U32	R	Module Ident 7	The index represents module ident of the module detected on position 7 Default Value = depend
	08	U32	R	Module Ident 8	The index represents module ident of the module detected on position 8 Default Value = depend
	09	U32	R	Module Ident 9	The index represents module ident of the module detected on position 9 Default Value = depend
	0A	U32	R	Module Ident 10	The index represents module ident of the module detected on position 10 Default Value = depend
	0B	U32	R	Module Ident 11	The index represents module ident of the module detected on position 11 Default Value = depend
	0C	U32	R	Module Ident 12	The index represents module ident of the module detected on position 12 Default Value = depend
	0D	U32	R	Module Ident 13	The index represents module ident of the module detected on position 13 Default Value = depend
	0E	U32	R	Module Ident 14	The index represents module ident of the module detected on position 14 Default Value = depend
	0F	U32	R	Module Ident 15	The index represents module ident of the module detected on position 15 Default Value = depend
	10	U32	R	Module Ident 16	The index represents module ident of the module detected on position 16 Default Value = depend
	11	U32	R	Module Ident 17	The index represents module ident of the module detected on position 17 Default Value = depend

Index	Sub	Type	RW	Name	Description
	12	U32	R	Module Ident 18	The index represents module ident of the module detected on position 18 Default Value = depend
	13	U32	R	Module Ident 19	The index represents module ident of the module detected on position 19 Default Value = depend
	14	U32	R	Module Ident 20	The index represents module ident of the module detected on position 20 Default Value = depend
	15	U32	R	Module Ident 21	The index represents module ident of the module detected on position 21 Default Value = depend
	16	U32	R	Module Ident 22	The index represents module ident of the module detected on position 22 Default Value = depend
	17	U32	R	Module Ident 23	The index represents module ident of the module detected on position 23 Default Value = depend
	18	U32	R	Module Ident 24	The index represents module ident of the module detected on position 24 Default Value = depend
	19	U32	R	Module Ident 25	The index represents module ident of the module detected on position 25 Default Value = depend
	1A	U32	R	Module Ident 26	The index represents module ident of the module detected on position 26 Default Value = depend
	1B	U32	R	Module Ident 27	The index represents module ident of the module detected on position 27 Default Value = depend
	1C	U32	R	Module Ident 28	The index represents module ident of the module detected on position 28 Default Value = depend
	1D	U32	R	Module Ident 29	The index represents module ident of the module detected on position 29 Default Value = depend

Index	Sub	Type	RW	Name	Description
	1E	U32	R	Module Ident 30	The index represents module ident of the module detected on position 30 Default Value = depend
	1F	U32	R	Module Ident 31	The index represents module ident of the module detected on position 31 Default Value = depend
	20	U32	R	Module Ident 32	The index represents module ident of the module detected on position 32 Default Value = depend

A.1.2 Table of Module Ident

Module and Sub-Index	Type String	Name String	Vendor ID	Module Ident
EU1008	DI8	EU1008	0x144A	0x6
EU1108	DI8	EU1108	0x144A	0x9
EU1016	DI16	EU1016	0x144A	0x10
EU1116	DI16	EU1116	0x144A	0xF
EU2008	DO8	EU2008	0x144A	0xb
EU2108	DO8	EU2108	0x144A	0xc
EU2016	DO16	EU2016	0x144A	0x11
EU2116	DO16	EU2116	0x144A	0x12
EU3104	AI4	EU3104	0x144A	0x31
EU3304	AI4	EU3304	0x144A	0x29
EU4104	AO4	EU4104	0x144A	0x32
EU4304	AO4	EU4304	0x144A	0x35

A.2 EU1008/EU1016

Name	EU1008/EU1016
Type	Digital Input, 8/16 Channels, Source

A.2.1 Input/Output Area

Object 0x6000

Index	0x6000 (DependOnSlot)
Sub-Index	0x1 to 0x8/0x16
Name	Channel 1 to 8/16
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6000	01	BOOL	R	Value of Channel 1	Status of the DI module Channel 1 Default Value = depend
	02	BOOL	R	Value of Channel 2	Status of the DI module Channel 2 Default Value = depend
	03	BOOL	R	Value of Channel 3	Status of the DI module Channel 3 Default Value = depend
	04	BOOL	R	Value of Channel 4	Status of the DI module Channel 4 Default Value = depend
	05	BOOL	R	Value of Channel 5	Status of the DI module Channel 5 Default Value = depend
	06	BOOL	R	Value of Channel 6	Status of the DI module Channel 6 Default Value = depend
	07	BOOL	R	Value of Channel 7	Status of the DI module Channel 7 Default Value = depend
	08	BOOL	R	Value of Channel 8	Status of the DI module Channel 8 Default Value = depend

*EU1016 Only

Index	Sub	Type	RW	Name	Description
0x6000	09	BOOL	R	Value of Channel 9	Status of the DI module Channel 9 Default Value = depend
	10	BOOL	R	Value of Channel 10	Status of the DI module Channel 10 Default Value = depend
	11	BOOL	R	Value of Channel 11	Status of the DI module Channel 11 Default Value = depend
	12	BOOL	R	Value of Channel 12	Status of the DI module Channel 12 Default Value = depend
	13	BOOL	R	Value of Channel 13	Status of the DI module Channel 13 Default Value = depend
	14	BOOL	R	Value of Channel 14	Status of the DI module Channel 14 Default Value = depend
	15	BOOL	R	Value of Channel 15	Status of the DI module Channel 15 Default Value = depend
	16	BOOL	R	Value of Channel 16	Status of the DI module Channel 16 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

A.3 EU1108/EU1116

Name	EU1108/EU1116
Type	Digital Input, 8/16 Channels, Sink

A.3.1 Input/Output Area

Object 0x6000

Index	0x6000 (DependOnSlot)
Sub-Index	0x1 to 0x8/0x16
Name	Channel 1 to 8/16
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6000	01	BOOL	R	Value of Channel 1	Status of the DI module Channel 1 Default Value = depend
	02	BOOL	R	Value of Channel 2	Status of the DI module Channel 2 Default Value = depend
	03	BOOL	R	Value of Channel 3	Status of the DI module Channel 3 Default Value = depend
	04	BOOL	R	Value of Channel 4	Status of the DI module Channel 4 Default Value = depend
	05	BOOL	R	Value of Channel 5	Status of the DI module Channel 5 Default Value = depend
	06	BOOL	R	Value of Channel 6	Status of the DI module Channel 6 Default Value = depend
	07	BOOL	R	Value of Channel 7	Status of the DI module Channel 7 Default Value = depend
	08	BOOL	R	Value of Channel 8	Status of the DI module Channel 8 Default Value = depend

*EU1116 Only

Index	Sub	Type	RW	Name	Description
0x6000	09	BOOL	R	Value of Channel 9	Status of the DI module Channel 9 Default Value = depend
	10	BOOL	R	Value of Channel 10	Status of the DI module Channel 10 Default Value = depend
	11	BOOL	R	Value of Channel 11	Status of the DI module Channel 11 Default Value = depend
	12	BOOL	R	Value of Channel 12	Status of the DI module Channel 12 Default Value = depend
	13	BOOL	R	Value of Channel 13	Status of the DI module Channel 13 Default Value = depend
	14	BOOL	R	Value of Channel 14	Status of the DI module Channel 14 Default Value = depend
	15	BOOL	R	Value of Channel 15	Status of the DI module Channel 15 Default Value = depend
	16	BOOL	R	Value of Channel 16	Status of the DI module Channel 16 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

A.4 EU2008/EU2016

Name	EU2008/EU2016
Type	Digital Output, 8/16 Channels, Source

A.4.1 Input/Output Area

Object 0x7000

Index	0x7000 (DependOnSlot)
Sub-Index	0x1 to 0x8/0x16
Name	Channel 1 to 8/16
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x7000	01	BOOL	RW	Value of Channel 1	Status of the DO module Channel 1 Default Value = 0
	02	BOOL	RW	Value of Channel 2	Status of the DO module Channel 2 Default Value = 0
	03	BOOL	RW	Value of Channel 3	Status of the DO module Channel 3 Default Value = 0
	04	BOOL	RW	Value of Channel 4	Status of the DO module Channel 4 Default Value = 0
	05	BOOL	RW	Value of Channel 5	Status of the DO module Channel 5 Default Value = 0
	06	BOOL	RW	Value of Channel 6	Status of the DO module Channel 6 Default Value = 0
	07	BOOL	RW	Value of Channel 7	Status of the DO module Channel 7 Default Value = 0
	08	BOOL	RW	Value of Channel 8	Status of the DO module Channel 8 Default Value = 0

*EU2016 Only

Index	Sub	Type	RW	Name	Description
0x7000	09	BOOL	RW	Value of Channel 9	Status of the DO module Channel 9 Default Value = depend
	10	BOOL	RW	Value of Channel 10	Status of the DO module Channel 10 Default Value = depend
	11	BOOL	RW	Value of Channel 11	Status of the DO module Channel 11 Default Value = depend
	12	BOOL	RW	Value of Channel 12	Status of the DO module Channel 12 Default Value = depend
	13	BOOL	RW	Value of Channel 13	Status of the DO module Channel 13 Default Value = depend
	14	BOOL	RW	Value of Channel 14	Status of the DO module Channel 14 Default Value = depend
	15	BOOL	RW	Value of Channel 15	Status of the DO module Channel 15 Default Value = depend
	16	BOOL	RW	Value of Channel 16	Status of the DO module Channel 16 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

A.5 EU2108/EU2116

Name	EU2108/EU2116
Type	Digital Output, 8/16 Channels, Sink

A.5.1 Input/Output Area

Object 0x7000

Index	0x7000 (DependOnSlot)
Sub-Index	0x1 to 0x8/0x16
Name	Channel 1 to 8/16
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x7000	01	BOOL	RW	Value of Channel 1	Status of the DO module Channel 1 Default Value = 0
	02	BOOL	RW	Value of Channel 2	Status of the DO module Channel 2 Default Value = 0
	03	BOOL	RW	Value of Channel 3	Status of the DO module Channel 3 Default Value = 0
	04	BOOL	RW	Value of Channel 4	Status of the DO module Channel 4 Default Value = 0
	05	BOOL	RW	Value of Channel 5	Status of the DO module Channel 5 Default Value = 0
	06	BOOL	RW	Value of Channel 6	Status of the DO module Channel 6 Default Value = 0
	07	BOOL	RW	Value of Channel 7	Status of the DO module Channel 7 Default Value = 0
	08	BOOL	RW	Value of Channel 8	Status of the DO module Channel 8 Default Value = 0

*EU2116 Only

Index	Sub	Type	RW	Name	Description
0x7000	09	BOOL	RW	Value of Channel 9	Status of the DO module Channel 9 Default Value = depend
	10	BOOL	RW	Value of Channel 10	Status of the DO module Channel 10 Default Value = depend
	11	BOOL	RW	Value of Channel 11	Status of the DO module Channel 11 Default Value = depend
	12	BOOL	RW	Value of Channel 12	Status of the DO module Channel 12 Default Value = depend
	13	BOOL	RW	Value of Channel 13	Status of the DO module Channel 13 Default Value = depend
	14	BOOL	RW	Value of Channel 14	Status of the DO module Channel 14 Default Value = depend
	15	BOOL	RW	Value of Channel 15	Status of the DO module Channel 15 Default Value = depend
	16	BOOL	RW	Value of Channel 16	Status of the DO module Channel 16 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

A.6 EU3104

Name	EU3104
Type	Analog Input, Voltage (0-10V), 4 Channels, 16 Bit

A.6.1 Input/Output Area

Object 0x6001

Index	0x6001 (DependOnSlot)
Sub-Index	0x1 to 0x4
Name	Channel 1 to 4
Object Code	ARRAY
Data Type	UINT
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6001	01	UINT	R	Value of Channel 1	Status of the AI module Channel 1 Default Value = depend
	02	UINT	R	Value of Channel 2	Status of the AI module Channel 2 Default Value = depend
	03	UINT	R	Value of Channel 3	Status of the AI module Channel 3 Default Value = depend
	04	UINT	R	Value of Channel 4	Status of the AI module Channel 4 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x3
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0
	03	BOOL	R	Input Voltage Overflow Alarm	Channel alarm cause of high voltage source Default value = 0

A.7 EU3304

Name	EU3104
Type	Analog Input, Current (4-20mA) 4 Channels, 16 Bit

A.7.1 Input/Output Area

Object 0x6001

Index	0x6001 (DependOnSlot)
Sub-Index	0x1 to 0x4
Name	Channel 1 to 4
Object Code	ARRAY
Data Type	UINT
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6001	01	UINT	R	Value of Channel 1	Status of the AI module Channel 1 Default Value = depend
	02	UINT	R	Value of Channel 2	Status of the AI module Channel 2 Default Value = depend
	03	UINT	R	Value of Channel 3	Status of the AI module Channel 3 Default Value = depend
	04	UINT	R	Value of Channel 4	Status of the AI module Channel 4 Default Value = depend

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x3
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0
	03	BOOL	R	Input Current Overflow Alarm	Channel alarm cause of high current source Default value = 0

A.8 EU4104

Name	EU4104
Type	Analog Output, Voltage (0-10V), 4 Channels, 16 Bit

A.8.1 Input/Output Area

Object 0x7001

Index	0x7001 (DependOnSlot)
Sub-Index	0x1 to 0x4
Name	Channel 1 to 4
Object Code	ARRAY
Data Type	UINT
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x7000	01	UINT	RW	Value of Channel 1	Status of the AO module Channel 1 Default Value = 0
	02	UINT	RW	Value of Channel 2	Status of the AO module Channel 2 Default Value = 0
	03	UINT	RW	Value of Channel 3	Status of the AO module Channel 3 Default Value = 0
	04	UINT	RW	Value of Channel 4	Status of the AO module Channel 4 Default Value = 0

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

A.9 EU4304

Name	EU4304
Type	Analog Output, Current(4-20mA), 4 Channels, 16 Bit

A.9.1 Input/Output Area

Object 0x7001

Index	0x7001 (DependOnSlot)
Sub-Index	0x1 to 0x4
Name	Channel 1 to 4
Object Code	ARRAY
Data Type	UINT
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x7000	01	UINT	RW	Value of Channel 1	Status of the AO module Channel 1 Default Value = 0
	02	UINT	RW	Value of Channel 2	Status of the AO module Channel 2 Default Value = 0
	03	UINT	RW	Value of Channel 3	Status of the AO module Channel 3 Default Value = 0
	04	UINT	RW	Value of Channel 4	Status of the AO module Channel 4 Default Value = 0

Object 0x6002

Index	0x6002 (DependOnSlot)
Sub-Index	0x1 to 0x2
Name	Module Alarm
Object Code	ARRAY
Data Type	BOOL
PDO Mapping	Yes

Index	Sub	Type	RW	Name	Description
0x6002	01	BOOL	R	Temperature Alarm	Module alarm cause of high temperature Default value = 0
	02	BOOL	R	Voltage Alarm	Module alarm cause of high voltage source Default value = 0

Important Safety Instructions

For user safety, please read and follow all instructions, Warnings, Cautions, and Notes marked in this manual and on the associated device before handling/operating the device, to avoid injury or damage.

S'il vous plaît prêter attention stricte à tous les avertissements et mises en garde figurant sur l'appareil , pour éviter des blessures ou des dommages.

- Read these safety instructions carefully
- Keep the User's Manual for future reference
- Read the Specifications section of this manual for detailed information on the recommended operating environment
- The device can be operated at an ambient temperature of 0ºC to 55ºC
- When installing/mounting or uninstalling/removing device; or when removal of a chassis cover is required for user servicing (See "Getting Started" on page 9.):
  - Turn off power and unplug any power cords/cables
  - Reinstall all chassis covers before restoring power
- To avoid electrical shock and/or damage to device:
  - Keep device away from water or liquid sources
  - Keep device away from high heat or humidity
  - Keep device properly ventilated (do not block or cover ventilation openings)
  - Always use recommended voltage and power source settings
  - Always install and operate device near an easily accessible electrical outlet
  - Secure the power cord (do not place any object on/over the power cord)
  - Only install/attach and operate device on stable surfaces and/or recommended mountings
- If the device will not be used for long periods of time, turn off and unplug from its power source

- Never attempt to repair the device, which should only be serviced by qualified technical personnel using suitable tools
- A Lithium-type battery may be provided for uninterrupted backup or emergency power.

Risk of explosion if battery is replaced with one of an incorrect type; please dispose of used batteries appropriately.
Risque d'explosion si la pile est remplacée par une autre de type incorrect. Veuillez jeter les piles usagées de façon appropriée.

- The device must be serviced by authorized technicians when:
  - The power cord or plug is damaged
  - Liquid has entered the device interior
  - The device has been exposed to high humidity and/or moisture
  - The device is not functioning or does not function according to the User's Manual
  - The device has been dropped and/or damaged and/or shows obvious signs of breakage
- Disconnect the power supply cord before loosening the thumbscrews and always fasten the thumbscrews with a screwdriver before starting the system up
- It is recommended that the device be installed only in a server room or computer room where access is:
  - Restricted to qualified service personnel or users familiar with restrictions applied to the location, reasons therefor, and any precautions required
  - Only afforded by the use of a tool or lock and key, or other means of security, and controlled by the authority responsible for the location

Getting Service

Ask an Expert: http://askanexpert.adlinktech.com

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