



Bus module, AS-Interface, 24 V DC, 4DI, 4DO, addressable 0-31, easyLink



Part no. **EASY205-ASI**  
 Catalog No. **221598**

EL-Nummer  
 (Norway) **4520913**

## Delivery program

|                |  |  |   |
|----------------|--|--|---|
| Product range  |  |  | Control relay easyRelay<br>Multi-function-display MFD-Titan   |
| Subrange       |  |  | Bus modules   |
| Accessories    |  |  | Bus modules   |
| Basic function |  |  | Expansions  |
| Description    |  |  | Can be used through easyLink<br>Slave<br>4 inputs<br>4 outputs<br>4 parameter bits<br>Addresses available: 0 - 31 |
| Bus protocol   |  |  | AS-Interface  |
| For use with   |  |  | easy700<br>easy800<br>EC4P<br>MFD-CP8..<br>ES4P   |

## Technical data

### General

|                        |  |    |  |
|------------------------|--|----|--|
| Standards              |  |    | EN 55011, EN 55022, IEC/EN 61000-4, IEC 62026  |
| Dimensions (W x H x D) |  | mm | 35.5 x 90 x 58 (2 PE)  |
| Weight                 |  | kg | 0.07   |
| Mounting               |  |    | Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories) |

### Terminal capacities

|                        |  |                 |                       |
|------------------------|--|-----------------|-----------------------|
| Solid                  |  | mm <sup>2</sup> | 0.2/4 (AWG 22 - 12)   |
| Flexible with ferrule  |  | mm <sup>2</sup> | 0.2/2.5 (AWG 22 - 12) |
| Standard screwdriver   |  | mm              | 0.8 x 3.5             |
| Max. tightening torque |  | Nm              | 0.6                   |

### Climatic environmental conditions

|   |  |     |   |
|---|--|-----|---|
| Operating ambient temperature                         |  | °C  | -25 to 55, cold as per IEC 60068-2-1, heat as per IEC 60068-2-2 |
| Condensation  |  |     | Take appropriate measures to prevent condensation               |
| Storage   |  | °C  | - 40 - 70   |
| Relative humidity, non-condensing (IEC/EN 60068-2-30) |  | %   | 5 - 95  |
| Air pressure (operation)                              |  | hPa | 795 - 1080  |

### Ambient conditions, mechanical

|  |             |         |                        |
|--|-------------|---------|------------------------|
| Protection type (IEC/EN 60529, EN50178, VBG 4)                             |             |         | IP20                   |
| Vibrations (IEC/EN 60068-2-6)  |             | Hz      |                        |
| Constant amplitude 0.15 mm   |             | Hz      | 10 - 57                |
| Constant acceleration 2 g  |             | Hz      | 57 - 150               |
| Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms |             | Impacts | 18                     |
| Drop to IEC/EN 60068-2-31  | Drop height | mm      | 50                     |
| Free fall, packaged (IEC/EN 60068-2-32)                                    |             | m       | 1                      |
| Mounting position  |             |         | Vertical or horizontal |

### Electromagnetic compatibility (EMC)

|  |  |    |      |
|--|--|----|------|
| Overvoltage category/pollution degree                    |  |    | II/2 |
| Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD) |  | kV |      |
| Air discharge  |  | kV | 8    |

|   |     |    |                                    |
|---|-----|----|------------------------------------|
| Contact discharge   |     | kV | 6                                  |
| Electromagnetic fields (IEC/EN 61000-4-3, RFI)                | V/m |    | 10                                 |
| Radio interference suppression                                |     |    | EN 55011 Class B, EN 55022 Class B |
| Burst Impulse (IEC/EN 61000-4-4, Level 3)                     |     |    |                                    |
| SmartWire-DT cables   |     | kV | 2                                  |
| Immunity to line-conducted interference to (IEC/EN 61000-4-6) |     | V  | 10                                 |

### Insulation resistance

|   |  |  |                                      |
|---|--|--|--------------------------------------|
| Clearance in air and creepage distances |  |  | EN 50178, UL 508, CSA C22.2, No. 142 |
| Insulation resistance                   |  |  | EN 50178                             |

### Power supply

|   |       |    |             |
|---|-------|----|-------------|
| Rated operational voltage                   | $U_e$ | V  | 26.5 - 31.6 |
| Total power consumption of the AS-Interface |       | mA | $\leq 30$   |
| Heat dissipation at 24 V DC                 |       | W  | 1           |

### Protection against polarity reversal

|                            |  |  |               |
|----------------------------|--|--|---------------|
| AS-Interface interface     |  |  | Yes           |
| AS-Interface profile cable |  |  | 7F (hex)      |
| Slave address              |  |  | 0 31          |
| Addressing unit interface  |  |  | 3.5 mm socket |

### LEDs

|             |  |  |                |
|-------------|--|--|----------------|
| Supply      |  |  | Power: green   |
| LED display |  |  | Com Error: red |

### Logic links

|                                     |  |  |  |
|-------------------------------------|--|--|--|
| EASY600 contact/coil ↔ AS-Interface |  |  | S1 → input 0<br>S1 → input 1<br>S3 → input 2<br>S4 → input 3<br>R1 ← output 0<br>R2 ← output 1<br>R3 ← output 2<br>R4 ← output 3<br>R5 ← PARAMETER OUTPUT 0<br>R6 ← PARAMETER OUTPUT 1<br>R7 ← PARAMETER OUTPUT 2<br>R8 ← PARAMETER OUTPUT 3 |
|-------------------------------------|--|--|--|

### Network

|              |  |  |              |
|--------------|--|--|--------------|
| Bus protocol |  |  | AS-Interface |
|--------------|--|--|--------------|

## Design verification as per IEC/EN 61439

|  |            |    |  |
|--|------------|----|--|
| Technical data for design verification   |            |    |  |
| Rated operational current for specified heat dissipation   | $I_n$      | A  | 0  |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 0  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 1  |
| Heat dissipation capacity  | $P_{diss}$ | W  | 0  |
| Operating ambient temperature min.   |            | °C | -25  |
| Operating ambient temperature max.   |            | °C | 55   |
| IEC/EN 61439 design verification   |            |    |  |
| 10.2 Strength of materials and parts   |            |    |  |
| 10.2.2 Corrosion resistance  |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.2.3.1 Verification of thermal stability of enclosures   |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat   |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.2.4 Resistance to ultra-violet (UV) radiation   |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.2.5 Lifting   |            |    |  |
|  |            |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact   |            |    |  |
|  |            |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions  |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.3 Degree of protection of ASSEMBLIES  |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.4 Clearances and creepage distances   |            |    |  |
|  |            |    | Meets the product standard's requirements.                         |
| 10.5 Protection against electric shock   |            |    |  |
|  |            |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.6 Incorporation of switching devices and components   |            |    |  |
|  |            |    | Does not apply, since the entire switchgear needs to be evaluated. |

|  |  |  |
|--|--|--|
| 10.7 Internal electrical circuits and connections        |  | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors                 |  | Is the panel builder's responsibility.   |
| 10.9 Insulation properties                               |  |  |
| 10.9.2 Power-frequency electric strength                 |  | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage                         |  | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material |  | Is the panel builder's responsibility.   |
| 10.10 Temperature rise                                   |  | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating                               |  | Is the panel builder's responsibility.   |
| 10.12 Electromagnetic compatibility                      |  | Is the panel builder's responsibility.   |
| 10.13 Mechanical function                                |  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

## Technical data ETIM 7.0

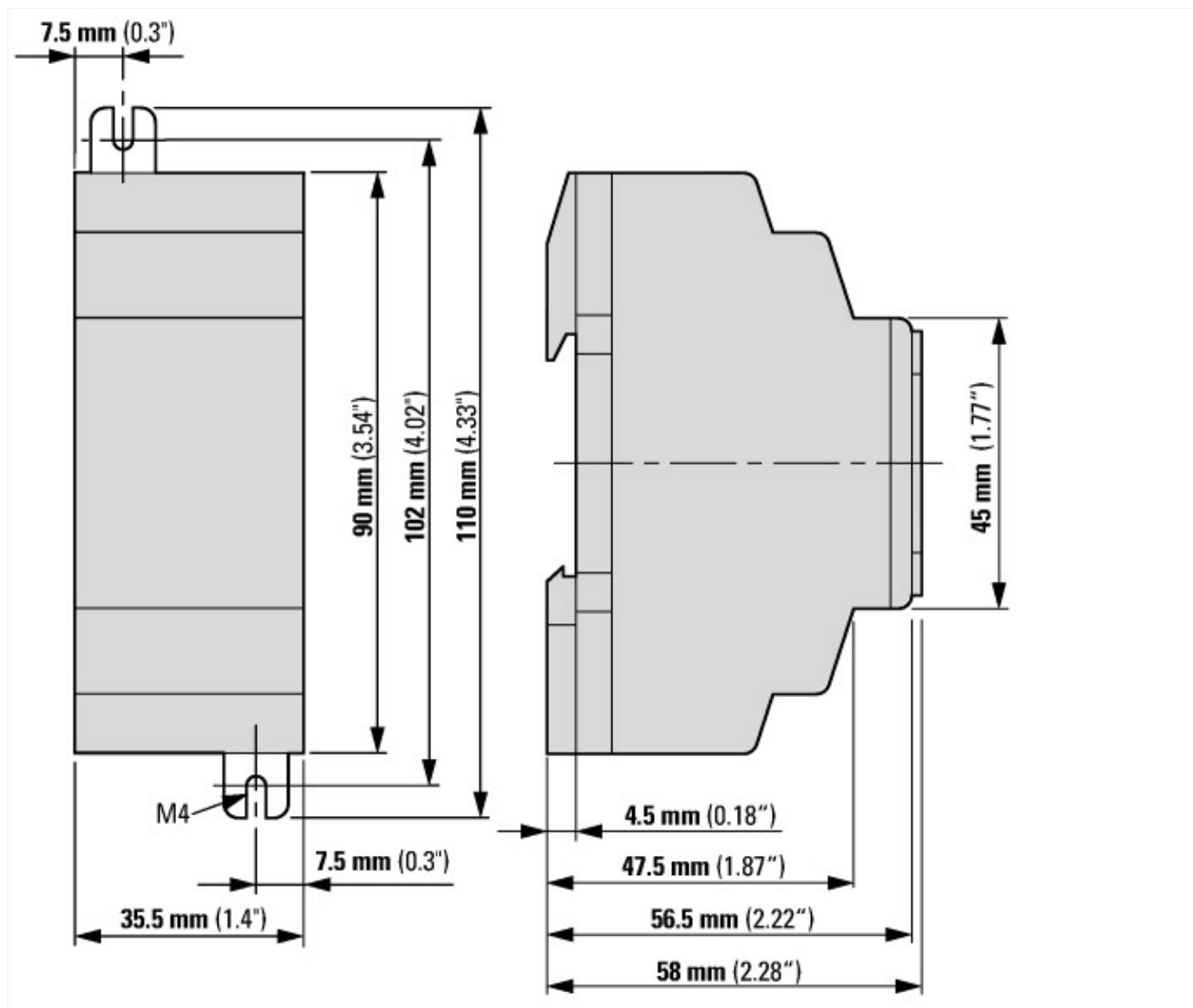
|  |   |             |
|--|---|-------------|
| PLC's (EG000024) / Logic module (EC001417)   |   |             |
| Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / Logic module (ecl@ss10.0.1-27-24-22-16 [AKE539014]) |   |             |
| Supply voltage AC 50 Hz  | V | 0 - 0       |
| Supply voltage AC 60 Hz  | V | 0 - 0       |
| Supply voltage DC  | V | 20.4 - 28.8 |
| Voltage type of supply voltage   |   | DC          |
| Switching current  | A | 0           |
| Number of analogue inputs  |   | 0           |
| Number of analogue outputs   |   | 0           |
| Number of digital inputs   |   | 0           |
| Number of digital outputs  |   | 0           |
| With relay output  |   | No          |
| Number of HW-interfaces industrial Ethernet  |   | 0           |
| Number of interfaces PROFINET  |   | 0           |
| Number of HW-interfaces RS-232   |   | 0           |
| Number of HW-interfaces RS-422   |   | 0           |
| Number of HW-interfaces RS-485   |   | 0           |
| Number of HW-interfaces serial TTY   |   | 0           |
| Number of HW-interfaces USB  |   | 0           |
| Number of HW-interfaces parallel   |   | 0           |
| Number of HW-interfaces Wireless   |   | 0           |
| Number of HW-interfaces other  |   | 2           |
| With optical interface   |   | No          |
| Supporting protocol for TCP/IP   |   | No          |
| Supporting protocol for PROFIBUS   |   | No          |
| Supporting protocol for CAN  |   | No          |
| Supporting protocol for INTERBUS   |   | No          |
| Supporting protocol for ASI  |   | Yes         |
| Supporting protocol for KNX  |   | No          |
| Supporting protocol for MODBUS   |   | No          |
| Supporting protocol for Data-Highway   |   | No          |
| Supporting protocol for DeviceNet  |   | No          |
| Supporting protocol for SUCONET  |   | No          |
| Supporting protocol for LON  |   | No          |
| Supporting protocol for PROFINET IO  |   | No          |
| Supporting protocol for PROFINET CBA   |   | No          |
| Supporting protocol for SERCOS   |   | No          |
| Supporting protocol for Foundation Fieldbus  |   | No          |
| Supporting protocol for EtherNet/IP  |   | No          |
| Supporting protocol for AS-Interface Safety at Work  |   | No          |
| Supporting protocol for DeviceNet Safety   |   | No          |
| Supporting protocol for INTERBUS-Safety  |   | No          |

|   |    |      |
|---|----|------|
| Supporting protocol for PROFIsafe         |    | No   |
| Supporting protocol for SafetyBUS p       |    | No   |
| Supporting protocol for other bus systems |    | No   |
| Radio standard Bluetooth                  |    | No   |
| Radio standard WLAN 802.11                |    | No   |
| Radio standard GPRS                       |    | No   |
| Radio standard GSM                        |    | No   |
| Radio standard UMTS                       |    | No   |
| IO link master                            |    | No   |
| Redundancy                                |    | No   |
| With display                              |    | No   |
| Degree of protection (IP)                 |    | IP20 |
| Basic device                              |    | No   |
| Expandable                                |    | Yes  |
| Expansion device                          |    | Yes  |
| With timer                                |    | No   |
| Rail mounting possible                    |    | Yes  |
| Wall mounting/direct mounting             |    | Yes  |
| Front build in possible                   |    | No   |
| Rack-assembly possible                    |    | No   |
| Suitable for safety functions             |    | No   |
| Category according to EN 954-1            |    | None |
| SIL according to IEC 61508                |    | None |
| Performance level acc. EN ISO 13849-1     |    | None |
| Appendant operation agent (Ex ia)         |    | No   |
| Appendant operation agent (Ex ib)         |    | No   |
| Explosion safety category for gas         |    | None |
| Explosion safety category for dust        |    | None |
| Width                                     | mm | 36   |
| Height                                    | mm | 90   |
| Depth                                     | mm | 60   |

## Approvals

|                             |  |   |
|-----------------------------|--|---|
| Product Standards           |  | IEC/EN see Technical Data; UL 508; CSA C22.2 No. 142-M1987; CSA C22.2 No. 213-M1987; CE marking |
| UL File No.                 |  | E135462   |
| UL Category Control No.     |  | NRAQ, NRAQ7   |
| CSA File No.                |  | 012528  |
| CSA Class No.               |  | 2252-01 + 2258-02   |
| North America Certification |  | UL listed, CSA certified  |
| Degree of Protection        |  | IEC: IP20, UL/CSA Type: -   |

## Dimensions



## Additional product information (links)

### Instruction leaflet "AS-Interface connection for easy" IL05013007Z (AWA2528-1858)

Instruction leaflet "AS-Interface connection for easy" IL05013007Z (AWA2528-1858) [https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05013007Z2018\\_02.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05013007Z2018_02.pdf)

### Manual "easy800 control relays" MN04902001Z (AWB2528-1423)

Handbuch „Steuerrelais easy800“ MN04902001Z (AWB2528-1423) - Deutsch [https://es-assets.eaton.com/DOCUMENTATION/AWB\\_MANUALS/MN04902001Z\\_DE.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04902001Z_DE.pdf)

Manual "easy800 control relays" MN04902001Z (AWB2528-1423) - English [https://es-assets.eaton.com/DOCUMENTATION/AWB\\_MANUALS/MN04902001Z\\_EN.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04902001Z_EN.pdf)

### Manual "easy500, easy700 control relays" MN05013003Z (AWB2528-1508)

Handbuch „Steuerrelais easy500, easy700“ MN05013003Z (AWB2528-1508) - Deutsch [https://es-assets.eaton.com/DOCUMENTATION/AWB\\_MANUALS/MN05013003Z\\_DE.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05013003Z_DE.pdf)

Manual "easy500, easy700 control relays" MN05013003Z (AWB2528-1508) - English [https://es-assets.eaton.com/DOCUMENTATION/AWB\\_MANUALS/MN05013003Z\\_EN.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05013003Z_EN.pdf)

### Manual "easyControl, EC4-200 programmable PLC" MN05003003Z

Handbuch „easyControl, SPS EC4-200“ MN05003003Z - Deutsch [https://es-assets.eaton.com/DOCUMENTATION/AWB\\_MANUALS/MN05003003Z\\_DE.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05003003Z_DE.pdf)

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