



I/O expansion, 240VAC, 12DI, 6DO relays, easyLink

Part no. **EASY618-AC-RE**
 Catalog No. **212314**

EL-Nummer **4520945**
 (Norway)

Delivery program

| | | | |
|---------------------------|--|--|---|
| Product range | | | Control relay easyRelay Multi-function-display MFD-Titan |
| Product range | | | Remote I/O systems Compact PLCs |
| Subrange | | | I/O expansions digital |
| Basic function | | | Expansions |
| Description | | | Can be used through easyLink |
| Function | | | Expansions EASY... |
| Accessories | | | I/O expansions, digital |
| Inputs | | | |
| Inputs expansion (number) | | | digital: 12 |
| Supply voltage | | | 100 - 240 V AC |
| For use with | | | easy700 easy800 EC4P MFD-CP8.. |

Technical data

General

| | | | |
|--------|--|----|-----|
| Weight | | kg | 0.3 |
|--------|--|----|-----|

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 | θ | °C | -40 - +70 |
| relative humidity | | % | 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 (ESD) | | | |
| applied standard | | | IEC EN 61000-4-2, Level 3 |
| Air discharge | | kV | 8 |
| Contact discharge | | kV | 6 |
| Burst | | kV | according to IEC/EN 61000-4-4 Supply cables: 2 Signal cables: 2 |
| power pulses (Surge) | | | 2 kV (supply cables, symmetrical, EASY...AC) 0.5 kV (supply cables, symmetrical, easy-DC) according to IEC/EN 61000-4-5 |
| Immunity to line-conducted interference to (IEC/EN 61000-4-6) | | V | 10 |

Insulation resistance

| | | | |
|-----------------------|--|--|----------|
| Insulation resistance | | | EN 50178 |
|-----------------------|--|--|----------|

Power supply

| | | | |
|---------------------------|----------------|----|--|
| Rated operational voltage | U _e | V | 100/110/115/120/230/240 AC (-15/+10%) |
| Rated operational voltage | U _e | V | 100/110/115/120/230/240 AC (+10/-15 %) |
| Permissible range | U _e | | 85 - 264 V AC |
| Frequency | | Hz | 50/60 (± 5%) |
| Voltage dips | | ms | ≤ 20 |
| Heat dissipation | P | | normally 10 VA at 115/120 V AC normally 10 VA at 115/230 V AC |

Digital inputs 115/230 V AC

| | | | |
|----------------------------|----------------|------|---|
| Number | | | 12 |
| Status Display | | | LCD-Display |
| Potential isolation | | | from the outputs: yes |
| Input voltage (sinusoidal) | U _e | V AC | Signal 0: 0 - 40 Signal 1: 79 - 264 |
| Rated frequency | | Hz | 50/60 |
| Input current on 1 signal | | | |
| Input current at signal 1 | | mA | 12 x 0.25 (R1 to R12) |
| at 230 V AC, 50 Hz | | mA | 12 x 0.5 (R1 to R12) |
| Deceleration time | | ms | 80/66% (0 -> 1/1 -> 0, debounce ON 50/60Hz, I1 - I6, I9 - I12, R1 - R12) 20/16% (0 -> 1/1 -> 0, debounce OFF 50/60Hz, I1 - I6, I9 - I12, R1 - R12) 80/66% (1 -> 0, debounce ON 50/60Hz, I7, I8) 20/16% (1 -> 0, I7, I8, debounce OFF 50/60Hz) 80/66% (0 - 1, I7, I8, debounce ON 50/60Hz) 20/16% (0 - 1, I7, I8, debounce OFF 50/60Hz) |
| Cable length | | m | Normally 40 R1 to R12 (max. permissible per input) Normally 40 I1 to I6 (max. permissible per input) Normally 100 I7, I8 (max. permissible per input) Normally 40 I9 to I12 (max. permissible per input) |

Relay outputs

| | | | |
|---|----------------|-------------------|--|
| Number | | | 6 |
| Outputs in groups of | | | 1 |
| Parallel switching of outputs for increased output | | | Not permissible |
| Protection of an output relay | | | Miniature circuit-breaker B16 or fuse 8 A (slow) |
| Potential isolation | | | from power supply: yes From the inputs: yes in groups Safe isolation according to EN 50178: 300 V AC Basic isolation: 600 V AC |
| Lifespan, mechanical | Operations | x 10 ⁶ | 10 |
| Contacts | | | |
| Conventional thermal current (10 A UL) | | A | 8 |
| Recommended for load: 12 V AC/DC | | mA | > 500 |
| Short-circuit-proof cos φ = 1, characteristic B16 at 600 A | | A | 16 |
| Short-circuit-proof cos φ = 0.5 to 0.7, characteristic B16 at 900 A | | A | 16 |
| Rated impulse withstand voltage U _{imp} of contact coil | | kV | 6 |
| Rated operational voltage | U _e | V AC | 250 |
| Rated insulation voltage | U _i | V AC | 250 |
| Safe isolation according to EN 50178 | | V AC | 300 between coil and contact 300 between two contacts |
| Breaking capacity | | | |
| AC-15, 250 V AC, 3 A (600 Ops./h) | Operations | | 300000 |
| DC-13, L/R ≤ 150 ms, 24 V DC, 1 A (500 S/h) | Operations | | 200000 |
| Filament bulb load | | | |
| 1000 W at 230/240 V AC | Operations | | 25000 |
| 500 W at 115/120 V AC | Operations | | 25000 |
| Fluorescent lamp load | | | |
| Fluorescent lamp load 10 x 58 W at 230/240 V AC | | | |
| With upstream electrical device | Operations | | 25000 |
| Uncompensated | Operations | | 25000 |
| Fluorescent lamp load 1 x 58 W at 230/240 V AC, conventional, compensated | Operations | | 25000 |
| Switching frequency | | | |

| | | |
|---|-------------------|------------------------|
| Mechanical operations | x 10 ⁶ | 10 |
| Switching frequency | Hz | 10 |
| Resistive load/lamp load | Hz | 2 |
| Inductive load | Hz | 0.5 |
| UL/CSA | | |
| Uninterrupted current at 240 V AC | A | 10 |
| Uninterrupted current at 24 V DC | A | 8 |
| AC | | |
| Control Circuit Rating Codes (utilization category) | | B 300 Light Pilot Duty |
| Max. rated operational voltage | V AC | 300 |
| max. thermal continuous current cos φ = 1 at B 300 | A | 5 |
| max. make/break cos φ ≠ capacity 1 at B 300 | VA | 3600/360 |
| DC | | |
| Control Circuit Rating Codes (utilization category) | | R 300 Light Pilot Duty |
| Max. rated operational voltage | V DC | 300 |
| Max. thermal uninterrupted current at R 300 | A | 1 |
| Max. make/break capacity at R 300 | VA | 28/28 |

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 | 10 | |
| 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

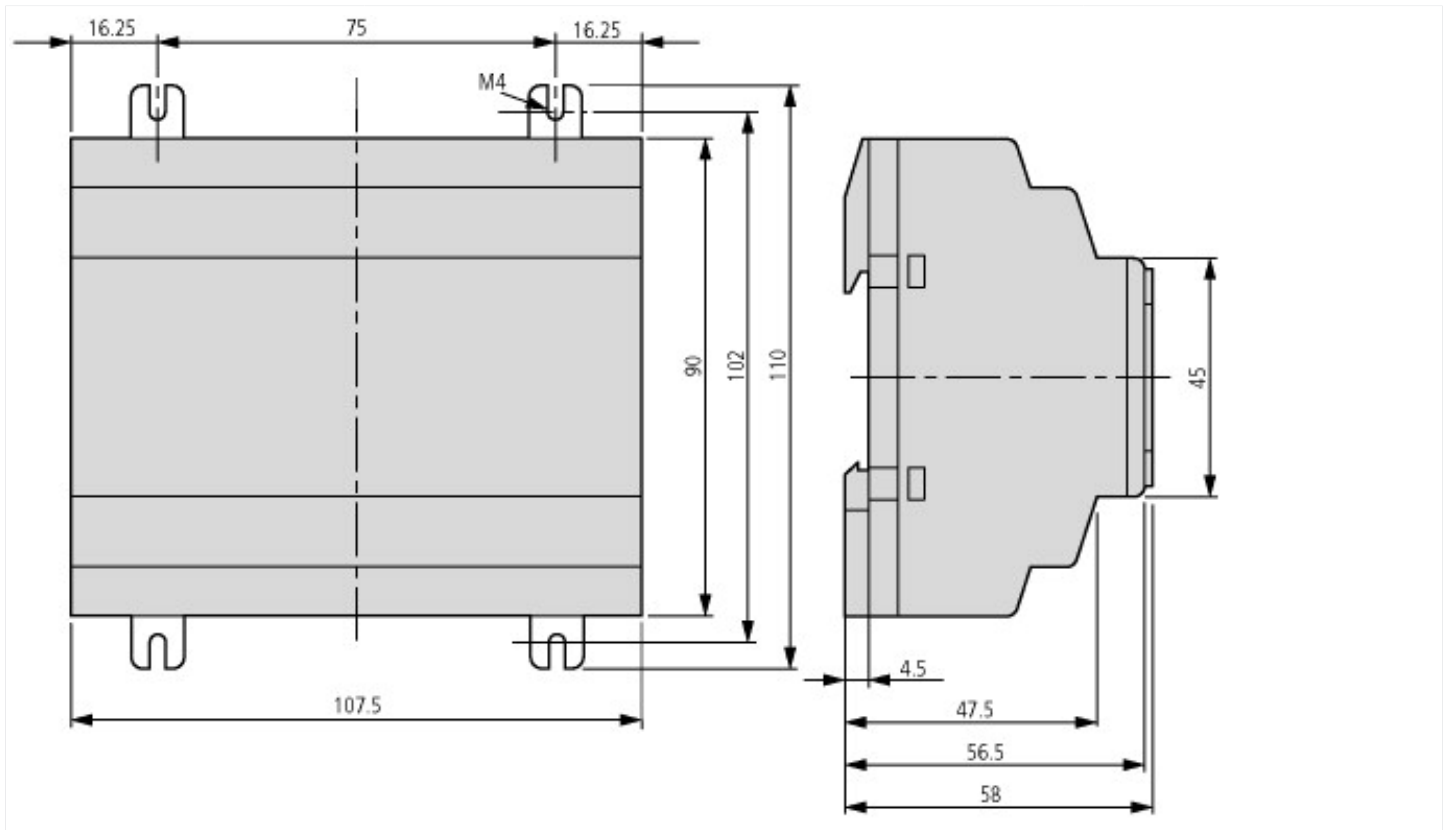
| | | |
|---|---|----------|
| Supply voltage AC 50 Hz | V | 85 - 264 |
| Supply voltage AC 60 Hz | V | 85 - 264 |
| Supply voltage DC | V | 0 - 0 |
| Voltage type of supply voltage | | AC |
| Switching current | A | 8 |
| Number of analogue inputs | | 0 |
| Number of analogue outputs | | 0 |
| Number of digital inputs | | 12 |
| Number of digital outputs | | 6 |
| With relay output | | Yes |
| 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 | | 1 |
| 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 | | No |
| 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 | | No |
| 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 | 107.5 |
| 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 "easyControl: compact PLC" IL05003003Z (AWA2724-2334)

| | |
|--|---|
| Instruction leaflet "easyControl: compact PLC" IL05003003Z (AWA2724-2334) | https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05003003Z2018_02.pdf |
| Instruction leaflet "easy control relays" IL05013006Z (AWA2528-1837) | |
| Instruction leaflet "easy control relays" IL05013006Z (AWA2528-1837) | https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05013006Z2018_02.pdf |
| Instruction leaflet "easy control relays" IL05013012Z (AWA2528-1979) | |
| Instruction leaflet "easy control relays" IL05013012Z (AWA2528-1979) | https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05013012Z2010_11.pdf |
| Instruction leaflet "easy control relays" IL05013012Z (AWA2528-1979) | https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05013012Z2018_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 |
| Manual "easy800 control relays" MN04902001Z (AWB2528-1423) - English | https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04902001Z_EN.pdf |