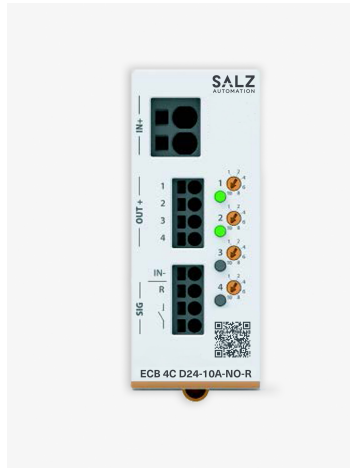


ECB 4C D24-10A-NO-R

4-Channel Electronic Circuit Breaker, 24VDC, 10A, N/O contact



4-channel Electronic Circuit Breaker manages current distribution for 24VDC systems with adjustable outputs from 1 to 10A. It includes a normally open contact and remote reset.

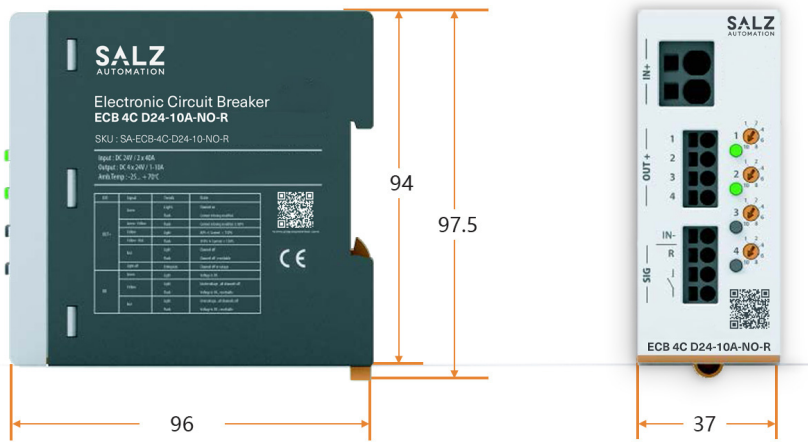
ECB 4C D24-10A-NO-R is a 4-channel electronic circuit breaker from SALZ Automation that manages current distribution in 24VDC systems. Each channel lets you control the output current from 1 to 10A, ensuring the system runs smoothly and safely. It acts as a circuit breaker, including a normally open (n/o) contact and a remote reset for quick recovery. Perfect for industrial automation, it offers reliable protection and efficient current management. It is compatible with DIN rails.

ORDER DETAILS

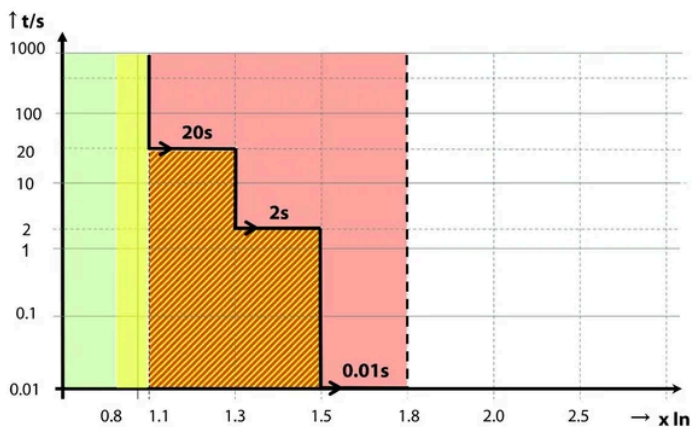
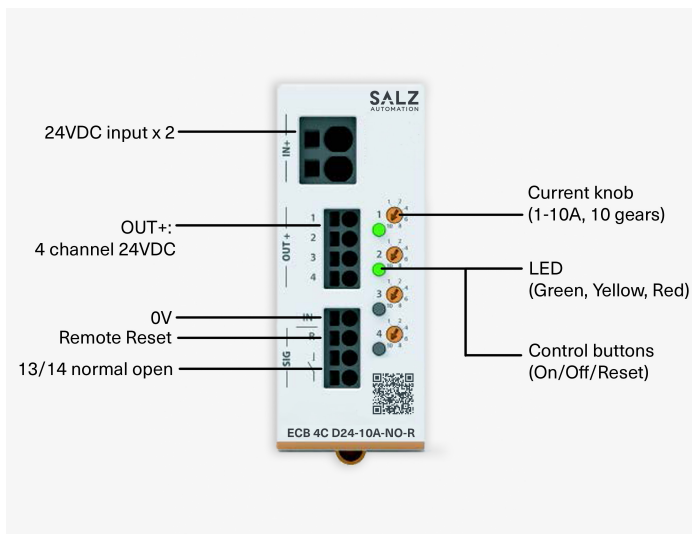
Function: 4-channel, electronic circuit breaker, 24VDC, current distribution, adjustable output, 1...10A, remote signaling, normally open contact, remote reset, DIN Rail compatible
SKU/Order No.: SA-ECB-4C-D24-10-NO-R



Mechanical Dimensions



Drawings



Technical Data

Output Data

| | |
|-----------------|---|
| Output Channels | 4 |
|-----------------|---|

Input Data

| | |
|---------------------------|--|
| Nominal Operating Voltage | 24 VDC |
| Input Voltage Range DC | 18 ... 30 VDC |
| Input Peak Current | Max. 40ADC (IN + with at least 1x6mm ²) |
| Input Current (typ.) | 10A |
| Efficiency (typ.) | >99% |
| Power Consumption (max.) | ≤0.6W (No-load operation)/ ≤9.5W (Nominal Operation) |

Coil Data

| | |
|-----------------|---|
| Nominal Current | 1-10ADC (adjustable per output channel) |
|-----------------|---|

Contact Data

| | |
|------------------------|-------|
| Max. switching current | 1000A |
|------------------------|-------|

Characteristics

| | |
|--|---|
| Dielectric strength (between contact sets) | Max. 30VDC (Load Circuit) |
| Semiconductor Type | MOSFET |
| Rated Surge Voltage | 0.5kV |
| Required Backup Fuse | Only required if I _{max} of power supply > the short- circuits switching capacity. Integrated fail-safe element. |
| Closed Circuit Current (I _o) | typ. 50mA |
| Module Initialization Time | 50ms - 1s |
| Waiting time after switching off a channel | ≤10s (at overload / short circuit) |
| Measuring Tolerance I | typ. 10 % Rated current |

Temperature Derating

| | |
|--|-------|
| Temperature Derating at 40°C | 40ADC |
| Temperature Derating at 40°C for UL 2367 | 35ADC |
| Temperature Derating at 50°C | 30ADC |
| Temperature Derating at 60°C | 25ADC |
| Temperature Derating at 70°C | 20ADC |

Protection Circuit

| | |
|---|---|
| Shutdown Time | 0.01s(> 1.5I(n)), 2s (1.3...1.5I(n)), 30s (1.1...1.3 I(n)) {I(n) = Rated Current} |
| Undervoltage Switch-off | ≤18VDC |
| Overvoltage switch-off | ≥30VDC |
| Remote On/Off (RC) | N/O Contact (13/14) |
| Remote Reset/ Disconnection Input Voltage | 12 ... 30VDC |
| Current consumption | Typ. 0.5mA (at 24VDC) |
| Fail-safe Element | 13ADC (per output channel) |

Operation and Status Indication

| | |
|-------------------------------------|--|
| Group power down | None |
| Circuit Operate | Press Channel Button for on/off/reset |
| Knob Operate | Rotate + Press channel button for 2s |
| DC OK LED off | Off (No supply voltage) |
| DC OK LED (Yellow Flashing) | Undervoltage switch-off inactive |
| DC OK LED (Yellow) | Undervoltage active, voltage < 18 V, active channels switched off and channel LEDs are lit red |
| DC OK LED (Green) | Operating voltage in nominal range 18 ... 30 V |
| DC OK LED (Red Flashing) | Overvoltage switch-off inactive |
| DC OK LED (Red) | Overvoltage switch-off active, voltage > 30.5 V, channels switched off and channel LEDs are lit red) |
| Channel LED off | Channel switched off |
| Channel LED (Yellow) | Channel switched on, channel load > 80% |
| Channel LED (Yellow-Green flashing) | Channel switched on, nominal current assistant active |
| Channel LED (Green) | Channel switched on |

| | |
|----------------------------------|--|
| Channel LED (Green Flashing) | Channel switched on, programming mode active |
| Channel LED (Red) | Channel switched off, over- or undervoltage active |
| Channel LED (Red Flashing) | Channel switched off, ready to be switched back on, overload or short-circuit release |
| Channel LED (Red-Green Flashing) | Channel switched on, overload mode, capacity approximately 105 ... 130% , shutdown after 30s |

Lifetime

| | |
|-----------------------------------|------------|
| MTBF (IEC61709, SN 29500) at 25°C | 1,000,000h |
|-----------------------------------|------------|

Contact Characteristics

| | |
|---|---|
| Contact form | Push-in contacts |
| IN+ conductor cross section, flexible with ferrule (with plastic sleeve) | 0.25 mm ² ... 4 mm ² |
| IN+ conductor cross section, flexible with ferrule (without plastic sleeve) | 0.25 mm ² ... 6 mm ² |
| IN- conductor cross section, flexible with ferrule (with plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| IN- conductor cross section, flexible with ferrule (without plastic sleeve) | 0.25 mm ² ... 2.5 mm ² |
| OUT conductor cross section, flexible with ferrule (with plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| OUT conductor cross section, flexible with ferrule (without plastic sleeve) | 0.25 mm ² ... 2.5 mm ² |
| NO conductor cross section, flexible with ferrule (with plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| NO conductor cross section, flexible with ferrule (without plastic sleeve) | 0.25 mm ² ... 2.5 mm ² (Channel switched off, over- or undervoltage active) |

Mechanical Data

| | |
|--------------------------------------|--------|
| Weight (typ.) | 155 g |
| Mounting DIN Rail according EN 60715 | Yes |
| Housing | PA 6.6 |

Dimensions

| | |
|-------------|---------------------------|
| Height (mm) | 94 |
| Width (mm) | 37 |
| Depth (mm) | 96 (incl. DIN rail 7.5mm) |

Ambient Condition

| | |
|---|--|
| Operating Altitude (max. above sea level) | ≤2000m (no derating)/ 2000...4000m (derating) |
| Operating Humidity (non-condensing) | 240 h, 95 % RH,40°C |
| Vibration | 5 ... 24.9 Hz (Amplitude 1.6 mm, In accordance With IEC 60068-2-6, Test Fc) , 24.9 ... 150 Hz (Acceleration 4g; In accordance with EC 60068-2-6) |
| Impact / Shock | 30g (IEC 60068-2-27, Test Ea) |
| Degree of Protection | IP20 |
| Ambient Temperature (operating) | -25 ... 70°C |
| Ambient Temperature (storage/transport) | -40 ... 80°C |
| Salt spray test | Parts for 72h, entire product for 48h |

Certification

| | |
|---------------|----|
| Certification | CE |
|---------------|----|

Safety Standards

| | |
|-------------------------------|----------------------------|
| Temperature Test | EN 60068-2-1 |
| General Principles | GB 17701/EN 60934 |
| ElectroMagnetic Compatibility | EN 61000-6-2, EN 61000-2-3 |
| Environmental Testing | EN 60068-2-6 |
| Surge Protection | GB/T 17626.5 Class II |

Standards and Regulations

| | |
|---------------------|--------------------------------|
| Vibration | IEC 60068-2-6, Test Fc |
| Shock Test | IEC 60068-2-27, Test Ea |
| Safety Standard | EN 50178 |
| Degree of Pollution | 2 |
| In Compliance With | CE: EN 61000-6-2, EN 61000-2-3 |
| RoHs | 2.0 |

Commercial Data

| | |
|-----------------------|----------|
| Customs Tariff Number | 85362010 |
|-----------------------|----------|