

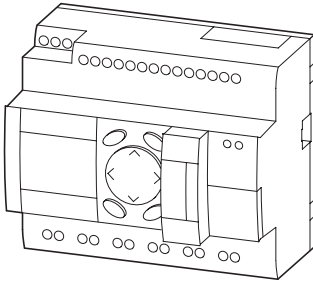
easyControl

EC4-200

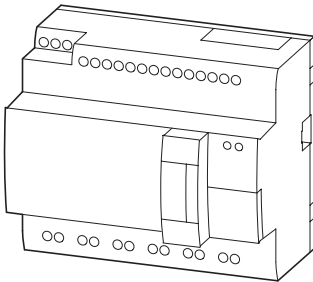
EASY618-...-E, EASY620-...-E

EASY200-EASY, EASY202-RE

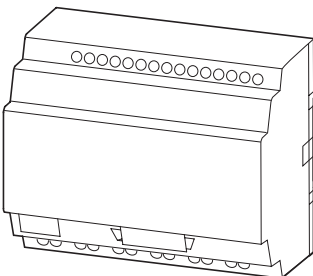
EC4P-221-M...D1, EC4P-222-M...D1



EC4P-221-M...X1, EC4P-222-M...X1



EASY618-...-E, EASY620-...-E



Lebensgefahr durch elektrischen Strom!

Nur Elektrofachkräfte und elektrotechnisch unterwiesene Personen dürfen die im Folgenden beschriebenen Arbeiten ausführen.

Die Stromversorgungsgeräte sind Einbaugeräte. Beachten Sie für die Installation der Geräte die länderspezifischen Vorschriften.

Electric current! Danger to life!

Only skilled or instructed persons may carry out the following operations. The power supply units are mounting devices. The national regulations/specifications must be observed for the installation of the devices.

Tension électrique dangereuse !

Seules les personnes qualifiées et averties doivent exécuter les travaux ci-après. Les blocs d'alimentation sont des appareils faisant partie intégrante d'une installation. Veuillez respecter les normes de mise en œuvre spécifiques aux différents pays.

Tensione elettrica: Pericolo di morte!

Solo persone abilitate e qualificate possono eseguire le operazioni di seguito riportate. Gli alimentatori sono unità per montaggio interno. Per l'installazione degli apparecchi è necessario rispettare le normative specifiche di ciascun paese.

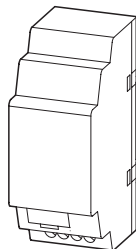
¡Corriente eléctrica! ¡Peligro de muerte!

El trabajo a continuación descrito debe ser realizado por personas cualificadas y advertidas. Las fuentes de alimentación son aparatos de montaje. Para la instalación de los aparatos han de tenerse en cuenta las normativas/especificaciones a nivel local.

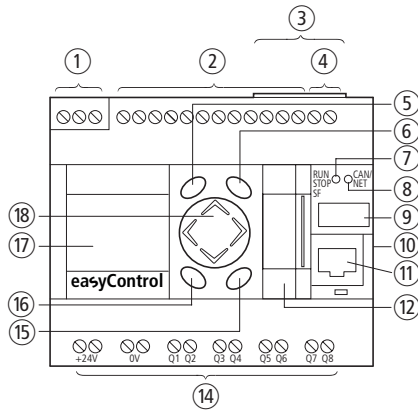
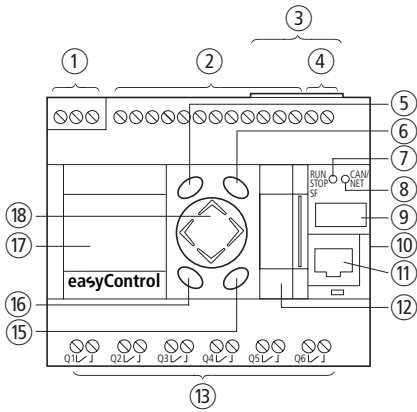


AWB2724-1584...

EASY200-EASY, EASY202-RE



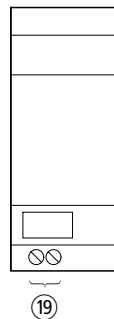
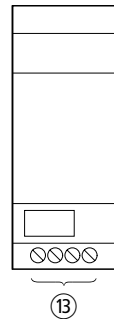
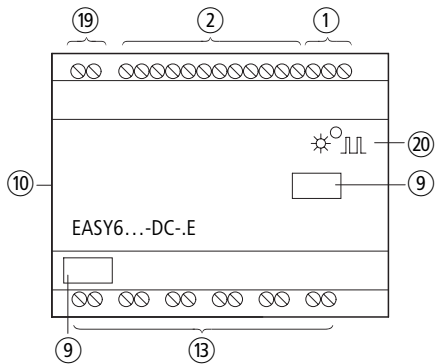
Frontansicht – Front view – Face avant – Vista frontale – Vista de frente



- ① Spannungsversorgung: 24 V DC/0 V
- ② Eingänge
12 Digital-Eingänge 24 V DC
– 4 auch als Analog-Eingänge nutzbar
– 4 auch als Interrupt- oder Impuls-Eingänge nutzbar
- ③ Netzwerkanschlüsse
2 × CAN/easyNet
- ④ EC4P-221/222-...AD1, ...AX1
Analog-Ausgang 0 bis 10 V DC/10 Bit
- ⑤ DEL-Taste
- ⑥ ALT-Taste
- ⑦ RUN/STOP/SF-LED
- ⑧ CAN/NET-LED
- ⑨ Gerätekennzeichnungsetikett
- ⑩ Zentrale Kopplung (easyLink)
- ⑪ Programmierschnittstelle
- ⑫ Schnittstelle (mit Abdeckung): Steckplatz für Speicherkarte, Programmierkabel, Modemkabel
- ⑬ Ausgänge (Relais)
EC4P-221/222-MR...1, EASY6...RE, EASY202-RE
- ⑭ Ausgänge (Transistor)
EC4P-221/222-MT...1, EASY6...TE
- ⑮ OK-Taste
- ⑯ ESC-Taste
- ⑰ LCD-Anzeige (EC4P-221/222-M...D1)
- ⑱ Cursorarten: rechts, links, oben, unten
P-Taste an: Eingang P1 = Cursor links
Eingang P2 = Cursor oben
Eingang P3 = Cursor rechts
Eingang P4 = Cursor unten
- ⑲ Dezentrale Kopplung
- ⑳ Power-LED

- ① Voltage supply: 24 V DC/0 V
- ② Inputs
12 digital inputs 24 V DC
– 4 can also be used as analog inputs
– 4 can also be used as interrupt or pulse inputs
- ③ Network connections
2 × CAN/easyNet
- ④ EC4P-221/222-...AD1, ...AX1
Analogue output 0 to 10 V DC/10 bits
- ⑤ DEL button
- ⑥ ALT button
- ⑦ RUN/STOP/SF-LED
- ⑧ CAN/NET-LED
- ⑨ Component label
- ⑩ Central connection (easyLink)
- ⑪ Programming interface
- ⑫ Interface (with cover): slot for memory card, programming cable, modem cable
- ⑬ Outputs (relay)
EC4P-221/222-MR...1, EASY6...RE, EASY202-RE
- ⑭ Outputs (transistor)
EC4P-221/222-MT...1, EASY6...TE
- ⑮ OK button
- ⑯ ESC button
- ⑰ LCD display (EC4P-221/222-M...D1)
- ⑱ Cursor buttons: right, left, up, down
P button on: Input P1 -> Cursor left
Input P2 -> Cursor up
Input P3 -> Cursor right
Input P4 -> Cursor down
- ⑲ Remote connection
- ⑳ Power LED

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- ① Alimentation: 24 V CC/0 V
- ② Entrées
12 entrées TOR 24 V CC
– dont 4 utilisables comme entrées analogiques
– dont 4 utilisables comme entrées interrupt ou d'impulsion
- ③ Raccordements réseau
2 × CAN/easyNet
- ④ EC4P-221/222-...AD1, ...AX1
Sortie analogique 0 à 10 V CC/10 bits
- ⑤ Touche DEL
- ⑥ Touche ALT
- ⑦ RUN/STOP/SF-LED
- ⑧ CAN/NET-LED
- ⑨ Étiquette d'appareil
- ⑩ Couplage centralisé (easyLink)
- ⑪ Interface de programmation
- ⑫ Interface (avec cache): emplacement pour carte mémoire, câble de programmation, câble de modem
- ⑬ Sorties (relais)
EC4P-221/222-MR...1, EASY6...RE, EASY202-RE
- ⑭ Sorties (transistor)
EC4P-221/222-MT...1, EASY6...TE
- ⑮ Touche OK
- ⑯ Touche ESC
- ⑰ Visualisation par DCL (EC4P-221/222-M...D1)
- ⑱ Touches de direction : droite, gauche, haut, bas
Affectation des touches P :
 entrée P1 -> flèche « gauche »
 entrée P2 -> flèche « haut »
 entrée P3 -> flèche « droite »
 entrée P4 -> flèche « bas »
- ⑲ Couplage décentralisé
- ⑳ DEL tension d'alimentation

- ① Tensione di alimentazione: 24 V DC/0 V
- ② Ingressi
12 ingressi 24 V DC
– 4 utilizzabili anche come ingressi analogici
– 4 utilizzabili anche come ingressi interrupt o impulso
- ③ Collegamenti di rete
2 × CAN/easyNet
- ④ EC4P-221/222-...AD1, ...AX1
Uscita analogica da 0 a 10 V DC/10 bit
- ⑤ Tasto DEL
- ⑥ Tasto ALT
- ⑦ RUN/STOP/SF-LED
- ⑧ CAN/NET-LED
- ⑨ Targhetta apparecchio
- ⑩ Collegamento locale (easyLink)
- ⑪ Interfaccia di programmazione
- ⑫ Interfaccia (con coperchio): slot per scheda memoria, cavo di programmazione, cavo di modem
- ⑬ Uscite (relè)
EC4P-221/222-MR...1, EASY6...RE, EASY202-RE
- ⑭ Uscite (transistor)
EC4P-221/222-MT...1, EASY6...TE
- ⑮ Tasto OK
- ⑯ Tasto ESC
- ⑰ Display a LCD (EC4P-221/222-M...D1)
- ⑱ Tasti cursore, destra, sinistra, su, giù
Tasto P su: lato P1 -> cursore a sinistra
 lato P2 -> cursore su
 lato P3 -> cursore a destra
 lato P4 -> cursore giù
- ⑲ Collegamento remoto
- ⑳ LED Power

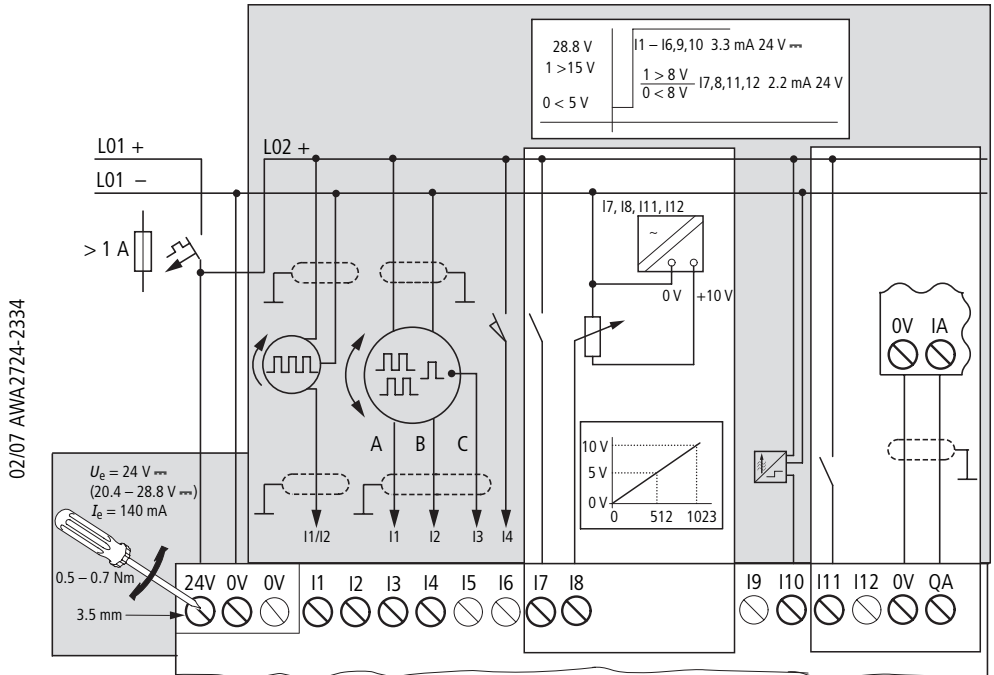
- ① Tensión de alimentación: 24 V DC/0 V
 - ② Entradas
 - 12 entradas 24 V DC
 - 4 también pueden utilizarse como entradas analógicas
 - 4 también pueden utilizarse como entradas interrupt o impulso
 - ③ Conexiones de red
 - 2 × CAN/easyNet
 - ④ EC4P-221/222-...AD1, ...AX1
 - Salida analógica 0 hasta 10 V DC/10 bits
 - ⑤ Tecla DEL
 - ⑥ Tecla ALT
 - ⑦ RUN/STOP/SF-LED
 - ⑧ CAN/NET-LED
 - ⑨ Indicador aparato
 - ⑩ Acoplamiento centralizado (easyLink)
 - ⑪ Interface de programación
- ⑫ Interface (con tapa): emplazamiento para tarjeta de memoria, cable de programación, cable de módem
 - ⑬ Salidas (relé)
 - EC4P-221/222-MR...1, EASY6...RE, EASY202-RE
 - ⑭ Salidas (transistor)
 - EC4P-221/222-MT...1, EASY6...TE
 - ⑮ Tecla OK
 - ⑯ Tecla ESC
 - ⑰ Indicador LCD (EC4P-221/222-M...D1)
 - ⑱ Teclas de cursor: derecha, izquierda, arriba, abajo.
 - Tecla P sobre: Entrada P1 -> Cursor izquierda
 - Entrada P2 -> Cursor arriba
 - Entrada P3 -> Cursor derecha
 - Entrada P4 -> Cursor abajo
 - ⑲ Acoplamiento descentralizado
 - ⑳ LED alimentación

EC4-200

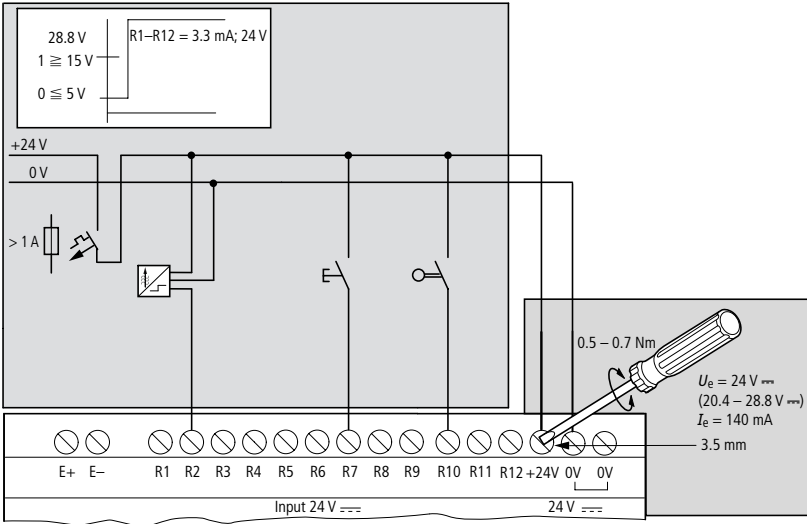
Standardanschluss – Standard connection – Raccordement standard – Conexión estándar

Spannungsversorgung – Power supply – Tension d'alimentation – Tensione di alimentazione – Tensión de alimentación

Digital-Eingänge, Analog-Eingänge, Analog-Ausgang
Digital inputs, analog inputs, analog output
Entrées TOR, entrées analogiques, sortie analogique
Ingressi digitali, ingressi analogici, uscita analogica
Entradas digitales, entradas analógicas, salida analógica

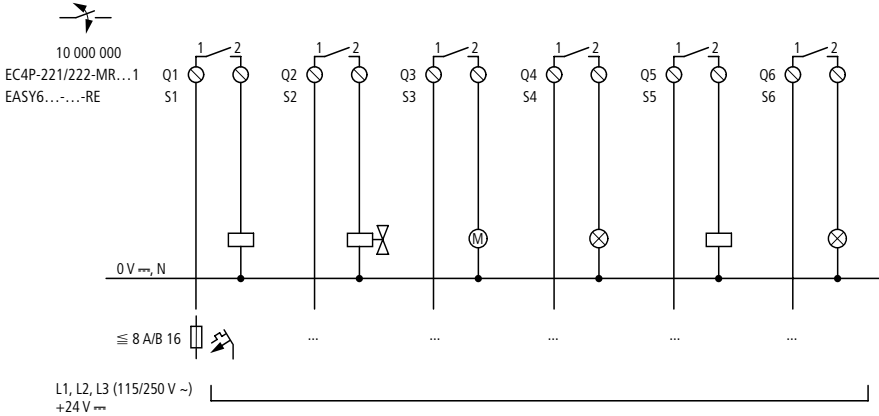


EASY6...- DC-E



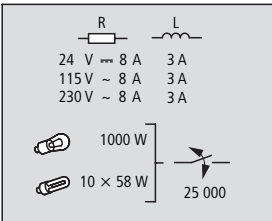
Relais-Ausgänge – Relay outputs – Sorties à relais – Uscite a relè – Salidas con relé

EC4P-221/222-MR...1, EASY6...-...-RE

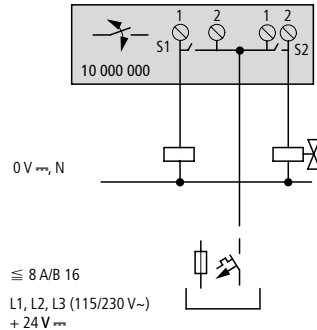


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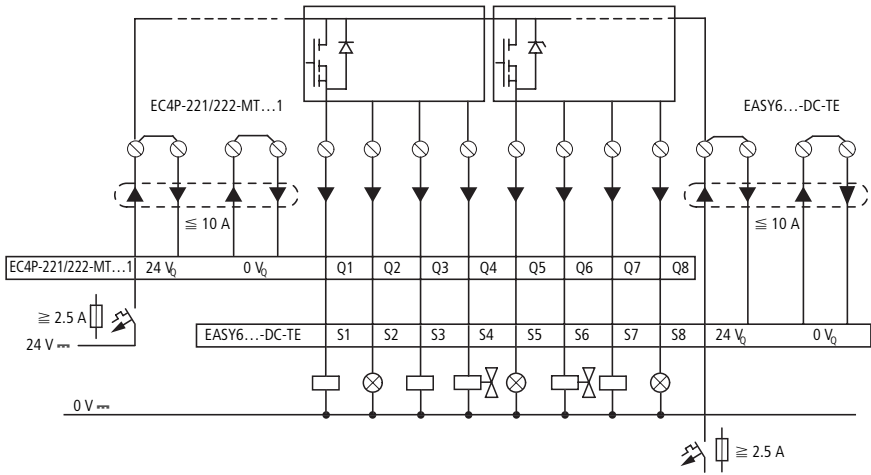
EC4P-221/222-MR...1, EASY6...-...-RE



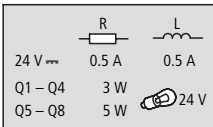
EASY202-RE



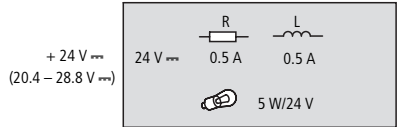
EC4P-221/222-MT...1, EASY6...-DC-TE



EC4P-221/222-MT...1

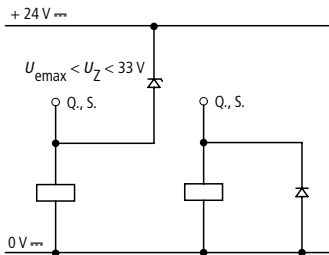


EASY6...-DC-...



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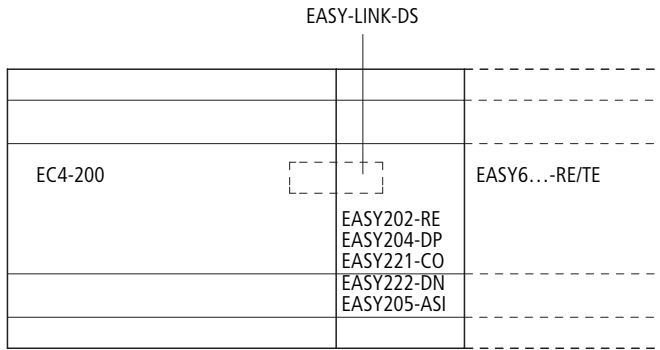
Schutzbeschaltung – Protective circuit – Circuit de protection – Circuito di protezione – Circuito supresor



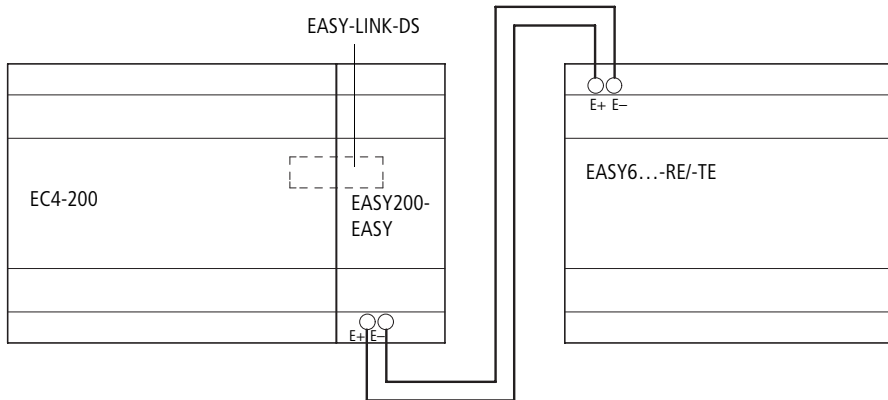
Anschluss – Connection – Connexion – Collegamento – Conexión

Zentrale Erweiterung – Central expansion – Extension centralisée – Espansione locale – Ampliación centralizada:
 EASY202-RE, EASY6...-RE/TE

Netzwerkkopplung – Network connection – Liaison réseau – Collegamento rete – Conexión red
 EASY204-DP, EASY221-CO, EASY222-DN, EASY205-ASI



Dezentrale Erweiterung – Remote expansion – Extension décentralisée – Espansione remota – Ampliación descentralizada



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Erweiterung – Expansion – Extension – Espansione – Ampliación

Einbau 1 + 2 + 3, Ausbau 4 + 5 + 6

Fitting 1 + 2 + 3, removing 4 + 5 + 6

Montage 1 + 2 + 3, démontage 4 + 5 + 6

Montaggio 1 + 2 + 3, smontaggio 4 + 5 + 6

Montaje 1 + 2 + 3, desmontaje 4 + 5 + 6



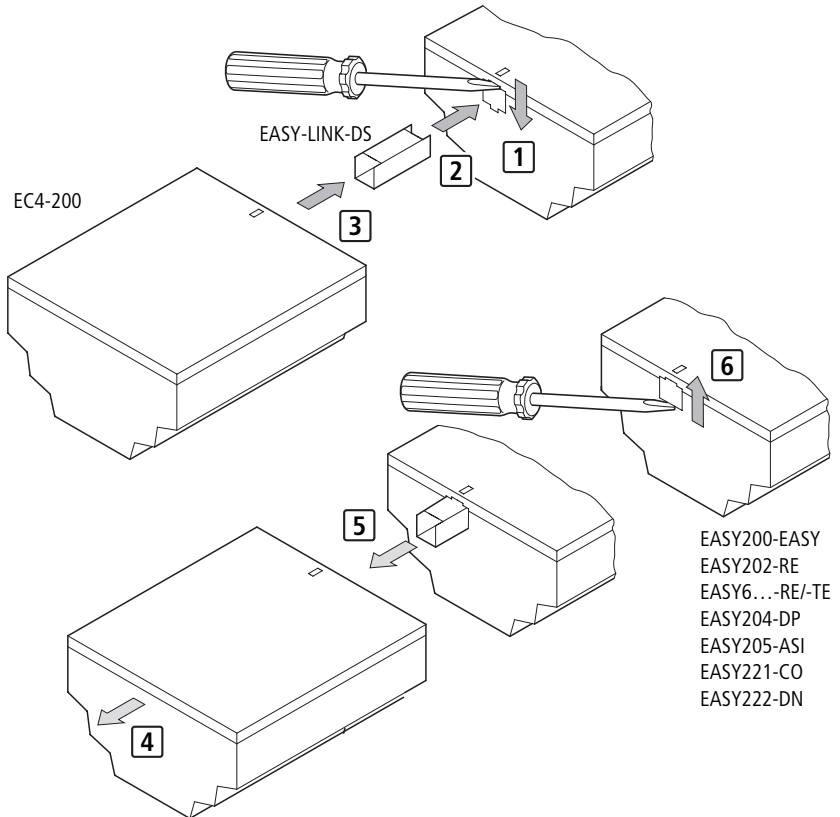
Geräte müssen spannungsfrei sein!

Devices must be de-energized!

Assurer la mise hors tension des appareils !

Gli apparecchi non devono essere alimentati!

¡Los aparatos deben encontrarse libres de tensión!



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Temperaturbereich:

Temperature range:

Plage de température :

Campo temperatura:

Margen de temperatura:

-25 °C ... +55 °C

- LCD-Anzeige im Bereich 0 °C bis 55 °C lesbar
- Betaugung des Gerätes unbedingt verhindern!
- LCD display legible in range 0 °C to 55 °C
- On no account allow condensation to form on the device!
- Afficheur à cristaux liquides lisible dans la plage 0 °C à 55 °C
- Eviter impérativement toute condensation sur l'appareil !
- Visualizzatore LCD leggibile ad una temperatura compresa da 0 °C a 55 °C
- Impedire assolutamente la formazione di condensa sull'apparecchio!
- El visualizador LCD puede leerse dentro de un margen entre 0 °C – 55 °C
- ¡Evitar que se produzca condensación en el aparato!

①
CAN/easyNet

1 4

②
EU4A-RJ45-CAB1

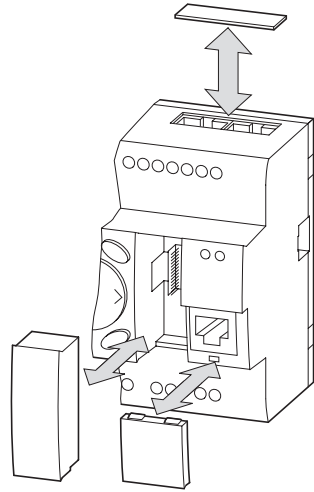
EC4-200 ↔ PC (RS 232)

XT-CAT5-X-2/5

EC4-200 ↔ PC (Ethernet)

③
EU4A-MEM-CARD1

Adapter mit Speicherkarte
Adapter with memory card
Adaptateur avec carte mémoire
Adattatore con scheda memoria
Adaptador con tarjeta de memoria



1 Verschlusskappe entfernen –
Remove sealing cap – Retirer cache –
Rimuovere calotta di chiusura – Quitar tapón

2a 2b stecken – fit – enficher –
inserire – meter

3a 3b entfernen – remove –
retirer – rimuovere – quitar

4 Verschlusskappe stecken – Fit sealing cap –
Enficher cache – Inserire calotta di chiusura –
Meter tapón



Warnung!

Decken Sie die Schnittstelle ab.
Elektrostatische Entladungen können bei
geöffneter Schnittstelle das Gerät zerstören.

Warning!

The interface must be kept closed.
Electrostatic discharges may destroy the device
if the interface is open.

Avertissement !

Lorsqu'aucun connecteur n'est enfiché dans
l'interface, cette dernière doit impérativement être
obturée à l'aide du capot prévu à cet effet
(fourni avec l'appareil). Dans le cas contraire, des
décharges électrostatiques risquent d'endommager
gravement l'appareil et de le rendre inutilisable.

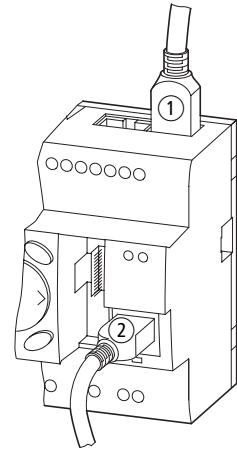
Avvertimento!

L'interfaccia deve restare chiusa. Scariche
elettrostatiche con interfaccia aperta possono
distruggere l'apparecchio.

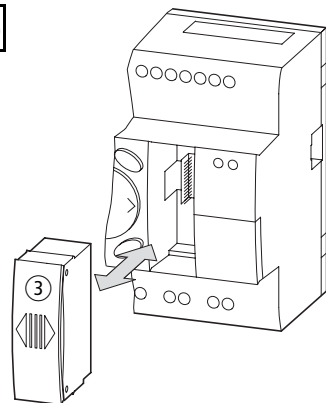
¡Advertencia!

La interface debe permanecer cerrada.
De lo contrario, descargas electrostáticas
podrían dañar el aparato.

2a 3a

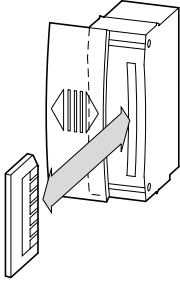


2b 3b



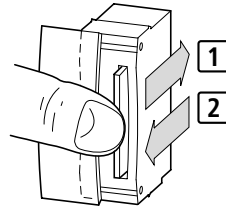
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Speicherkarte stecken
 Fit memory card
 Enficher carte mémoire
 Inserire scheda di memoria
 Meter tarjeta de memoria



Speicherkarte eindrücken, bis sie einrastet.
 Insert memory card and latch in.
 Enficher carte mémoire et encliqueter.
 Inserire scheda di memoria e far scattare.
 Meter tarjeta de memoria y enclavar.

Speicherkarte ziehen
 Remove memory card
 Retirer carte mémoire
 Estrarre scheda di memoria
 Extraer tarjeta de memoria

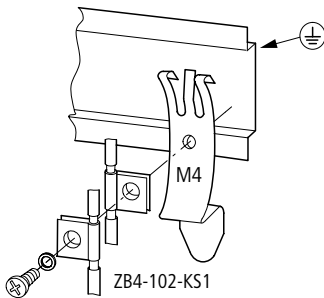


Speicherkarte eindrücken, bis sie entrastet.
 Insert memory card and unlatch.
 Enficher carte mémoire et débrocher.
 Inserire scheda di memoria e sbloccare.
 Meter tarjeta de memoria y desenclavar.

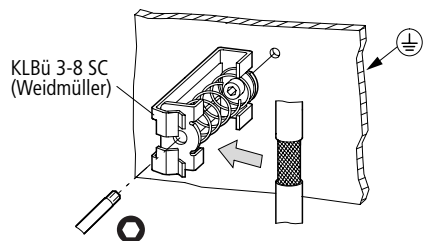
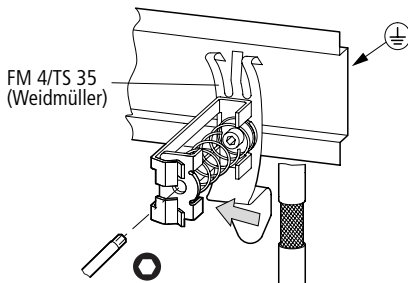
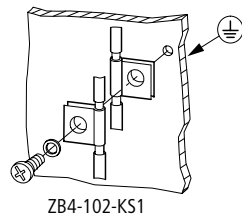
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**Schirmerdung – Earthing the screen – Mise à la terre du blindage –
 Collegamento alla terra dello schermo – Conexión a tierra de pantalla**

① für Hutschiene – for top-hat rail –
 pour profilé-support – per guida –
 para carril DIN



② für Montageplatte – for mounting plate –
 pour platine de montage – per piastra di
 montaggio – para placa de montaje



ISO11898

Baudrate/Leitungslänge – Baud rate/cable length – Vitesse de transmission/longueur des câbles – Velocità di trasmissione in baud/lunghezza linea – Velocidad de transmisión/longitud de cable

Baudrate Baud rate Vitesse de transmission Velocità di trasmissione Velocidad de transmisión [kBaud]	[m]
500	100
250	250
125	500
50	1000 ¹⁾
20	2500 ¹⁾
10	5000 ¹⁾

1) inklusiv Bridges und Repeater – Inclusive bridges and repeater –
Ponts et répéteur inclus – Bridge e repeater inclusi –
Bridges y repeater incluidos

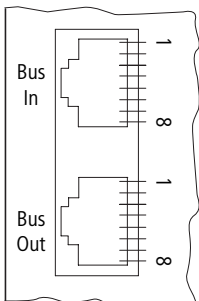
Leitungslänge, Widerstand und Querschnitt – Cable length, resistance and cross-section – Longueur des câbles, résistivité et sections – Lunghezza linea, resistenza e sezione cavo – Longitud de cable, resistencia y sección

l	Leitungswiderstand Cable resistance Résistivité Resistenza conduttore Resistencia de cable	\varnothing	AWG
[m]	[m Ω /m]	[mm ²]	
0 – 40	≤ 140	0.13	26
0 – 175	≤ 70	0.25 – 0.34	23, 22
0 – 250	≤ 60	0.34 – 0.6	22, 21, 20
0 – 400	≤ 40	0.5 – 0.6	19, 20
0 – 600	≤ 26	0.75 – 0.8	18
0 – 1000	≤ 16	1.5	16

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Anschlüsse CAN – Connections CAN – Connexions CAN – Collegamenti CAN – Conexiones CAN

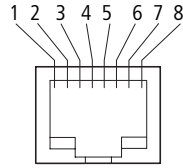
RJ 45



- | | | |
|---|-------|--------------|
| 1 | ————— | (E) CAN_H |
| 2 | ————— | (E) CAN_L |
| 3 | ————— | GND (Ground) |
| 4 | ————— | SELECT_IN |
| 1 | ————— | (E) CAN_H |
| 2 | ————— | (E) CAN_L |
| 3 | ————— | GND (Ground) |
| 4 | ————— | SELECT_OUT |

**Programmierschnittstelle – Programming interface – Interface de programmation –
Interfaccia di programmazione – Interface de programación**

RJ 45			
Signal – Segnale – Señal			
EC4-...	221-...	222-...	
	RS 232	RS 232	Ethernet
1	–	–	Tx+
2	–	–	Tx-
3	–	–	Rx+
4	GND	GND	–
5	TxD	TxD	–
6	–	–	Rx-
7	GND	GND	–
8	RxD	RxD	–



**Quetschwerkzeug für RJ-45-Stecker – Plug crimping tool – Outil de sertissage pour connecteurs –
Attrezzo per crimpare il connettore – Herramienta de presión, conector**

EASY-NT-TOOL bis 0,4 mm² möglich
 possible up to 0.4 mm²
 possible jusqu'à 0,4 mm²
 possibile fino a 0,4 mm²
 posible hasta 0,4 mm²

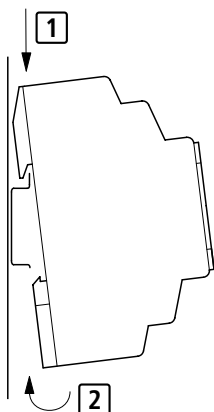
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**Netzabschlusswiderstand – Mains terminating resistor – Résistance de terminaison de bus –
Resistenza di terminazione della rete – Resistencia de terminación de red**

Erster und letzter Platz mit EASY-NT-R
 First and last location with EASY-NT-R
 Première et dernière positions avec EASY-NT-R
 Prima ed ultima posizione con EASY-NT-R
 Primera y última posición con EASY-NT-R

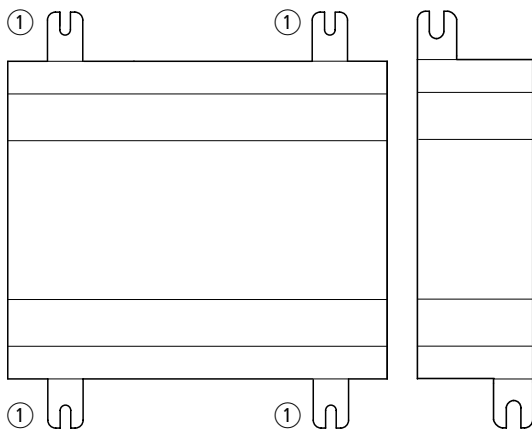
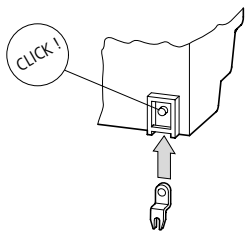
Montage – Fitting – Montaggio – Montaje

auf 35-mm-Hutschiene
on 35 mm top-hat rail
sur profilé-support 35 mm
su guida DIN 35 mm
sobre guía simétrica de 35 mm



auf Montageplatte (waagrecht)
on mounting plate (horizontal)
sur plaque de montage (horizontal)
su piastra di montaggio (orizzontale)
sobre placa de montaje (horizontal)

ZB4-101-GF1

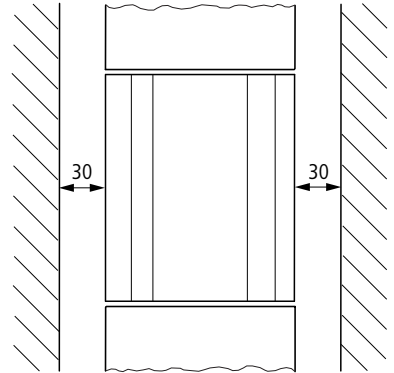
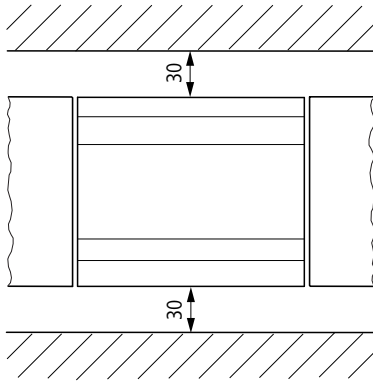


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- ①
3 Gerätefüße ausreichend
3 fixing feet sufficient
3 pattes de fixation suffisient
3 piedini di fissaggio sufficienti
3 pies de sujeción adecuados

Einbaulage – Mounting position – Position de montage – Posizione di montaggio – Posición de montaje

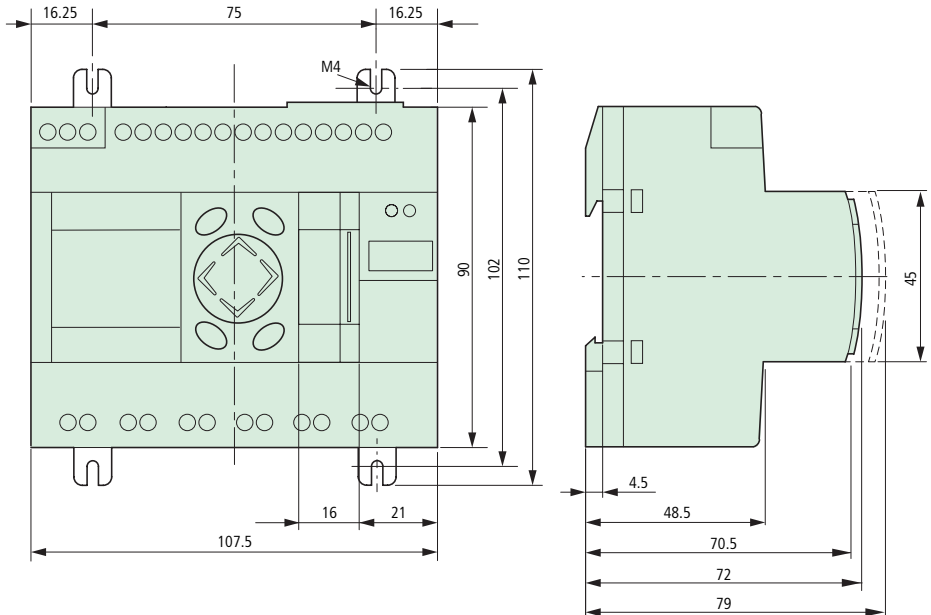
mit Hutschiene (waagrecht und senkrecht)
 with top-hat rail (horizontal and vertical)
 sur profilé chapeau (horizontale et verticale)
 su guida DIN (orizzontale e verticale)
 sobre carril (horizontal y vertical)

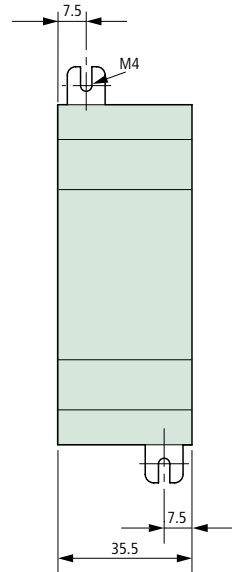
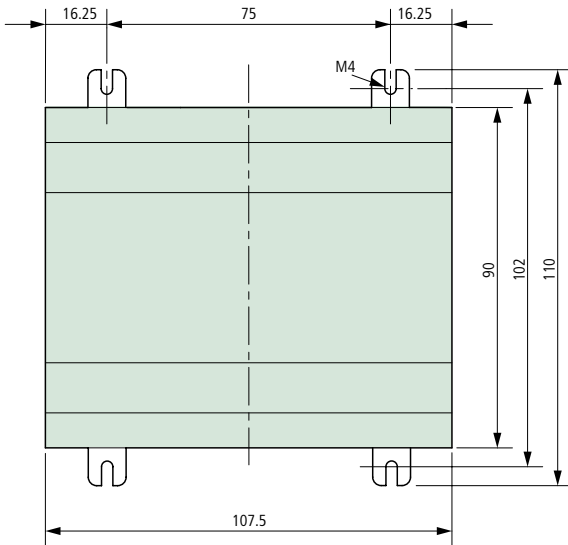
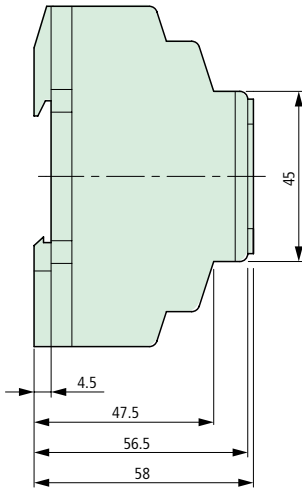


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Abmessungen – Dimensions – Dimensioni – Dimensiones [mm]

EC4-200





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