DOC. N° 1SDH002123A1001 - ECN000204728 - Rev. C

Ekip UP+

User manual

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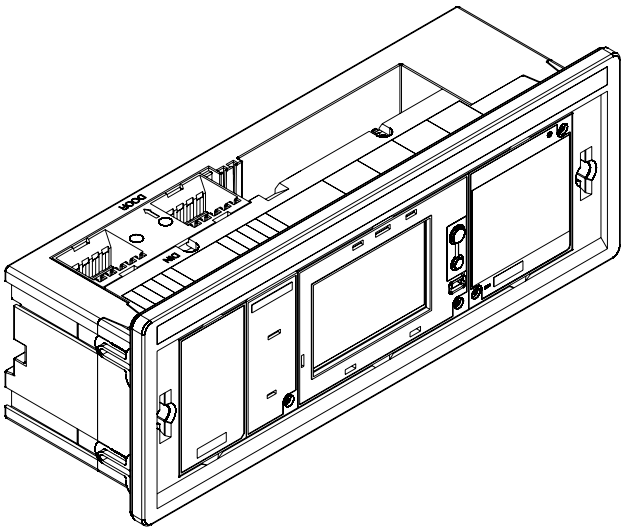
GUIDA INTRODUTTIVA
GETTING STARTED
ERSTE SCHRITTE
GUIDE DE DÉMARRAGE
GUÍA DE INICIO

1 Ekip UP+ Monitor, Control, Protect



2

Per eventuali informazioni non contenute in questo documento, vedi il manuale d'uso e lo schema elettrico:
For any information not contained in this document, see the user manual and the wiring diagram:
Informationen, die nicht in diesem Dokument enthalten sind, finden Sie im Benutzerhandbuch und des Schaltbildes:
Pour toute information non contenue dans ce document, voir le manuel d'utilisation et le schéma électrique:
Para cualquier información no contenida en este documento, consulte el manual de uso el esquema eléctrico:

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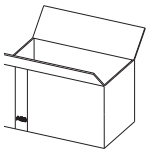
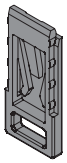


A

x4

B



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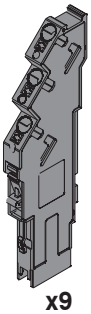
C



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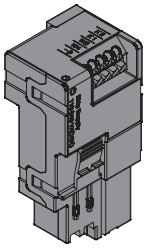
D



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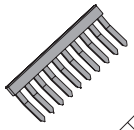

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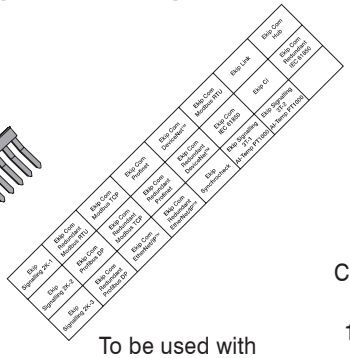
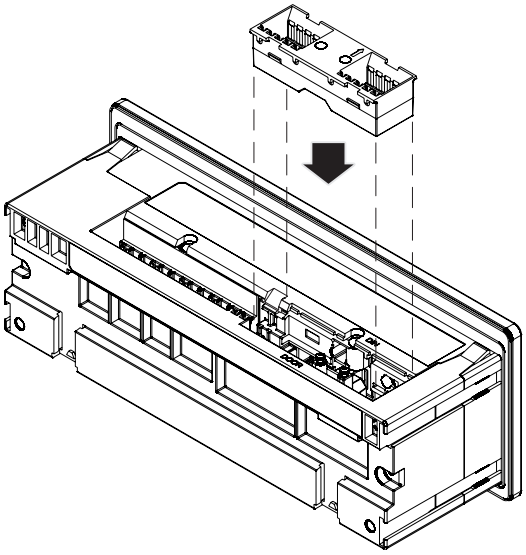
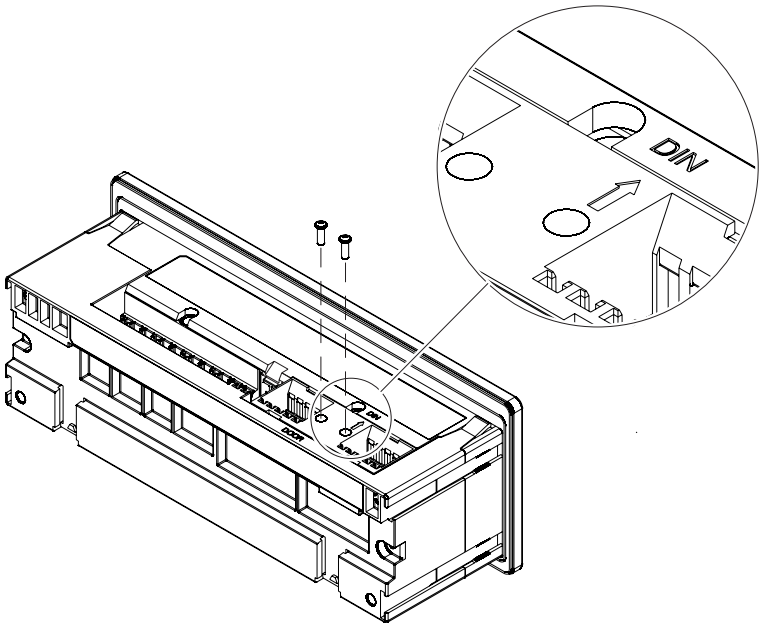
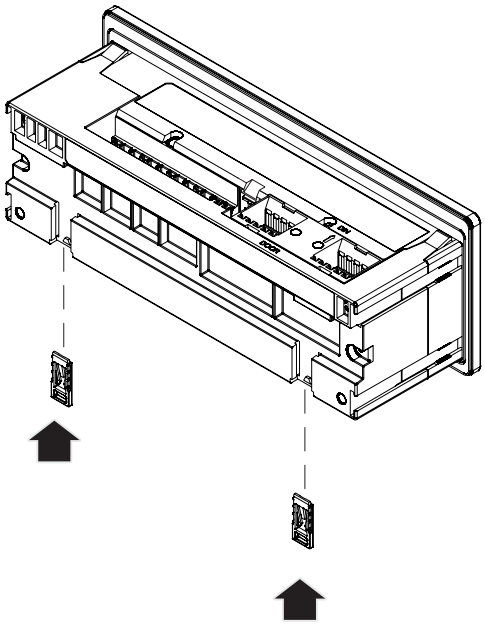

Ekip Signalling 2K-2
Ekip Com Modbus RTU
Ekip Signalling 2K-2
Ekip Com Modbus TCP
Ekip Signalling 2K-2
Ekip Com Profibus DP
Ekip Signalling 2K-2
Ekip Com Modbus RTU
Ekip Com Profibus
Ekip Com Modbus TCP
Ekip Com Profibus
Ekip Com Modbus RTU

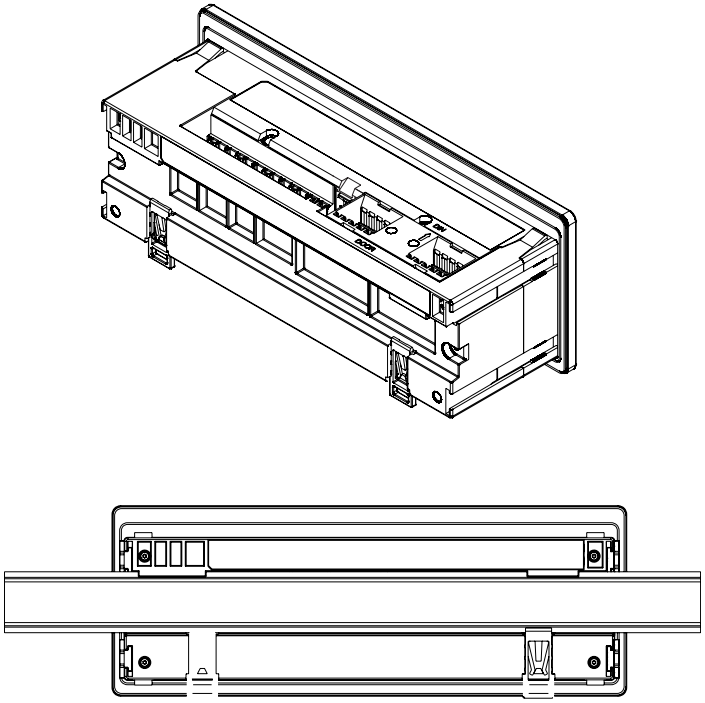
3 DIN-RAIL MOUNTING



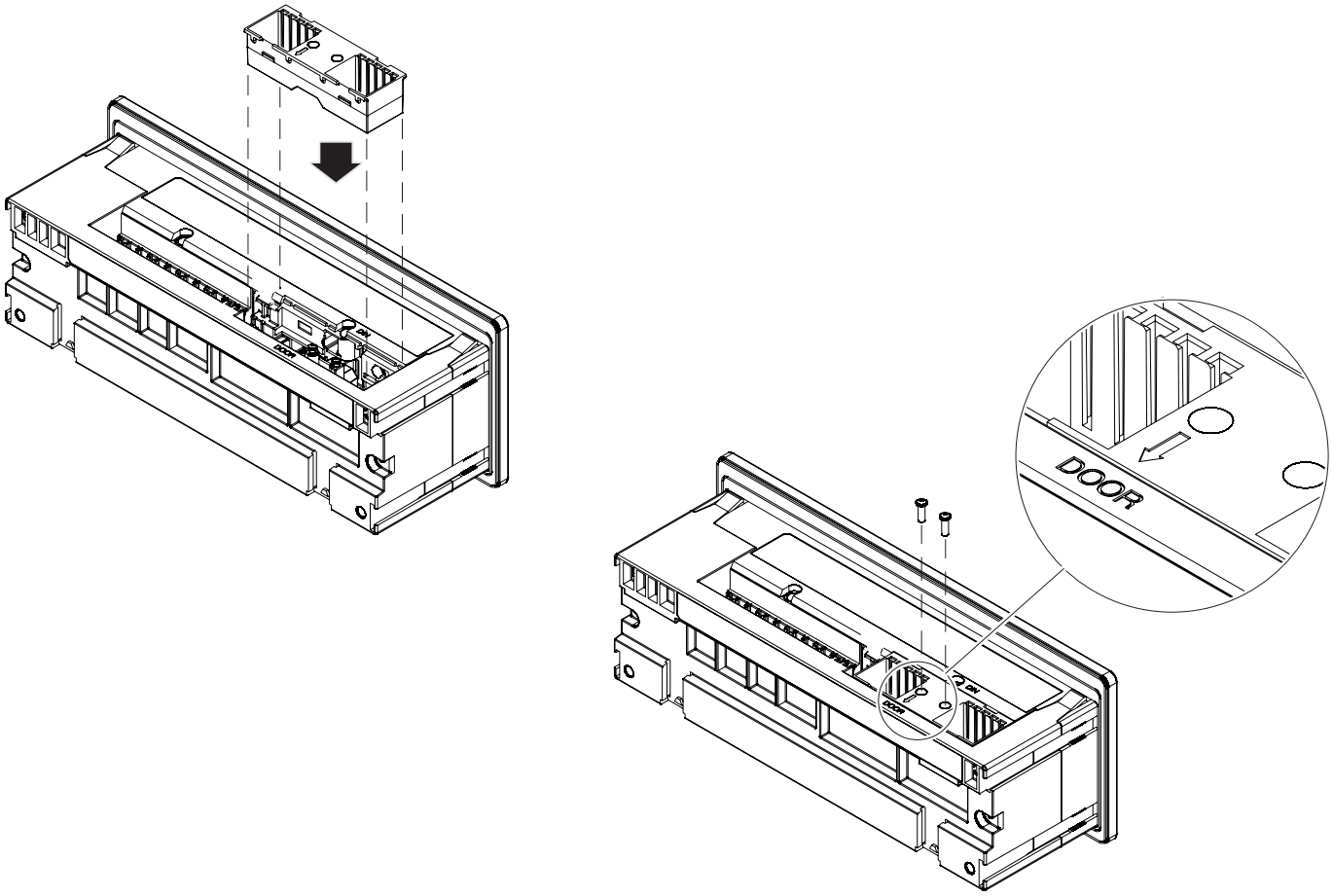


4 DIN-RAIL MOUNTING

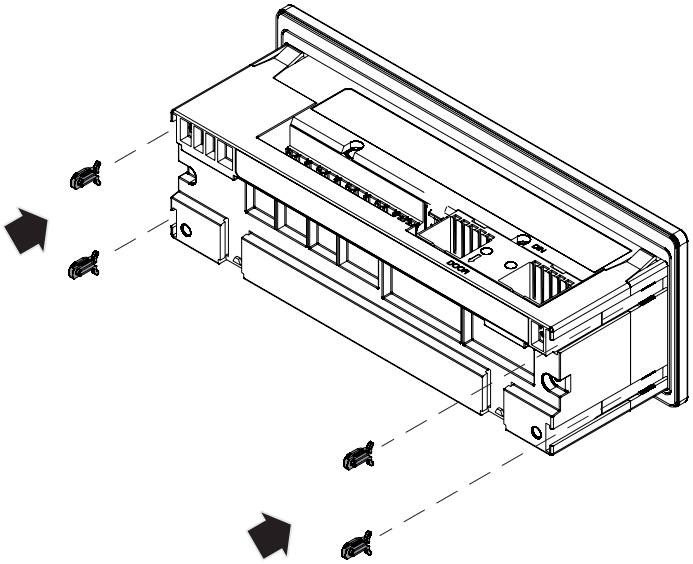


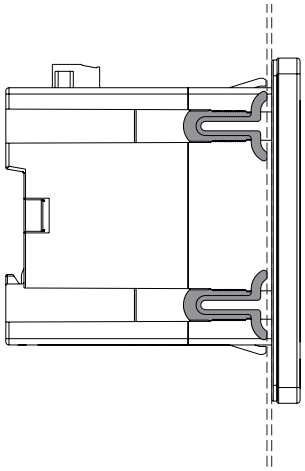


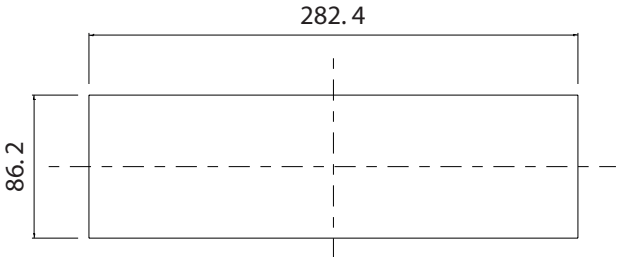
5 DOOR PANEL MOUNTING



6 DOOR PANEL MOUNTING



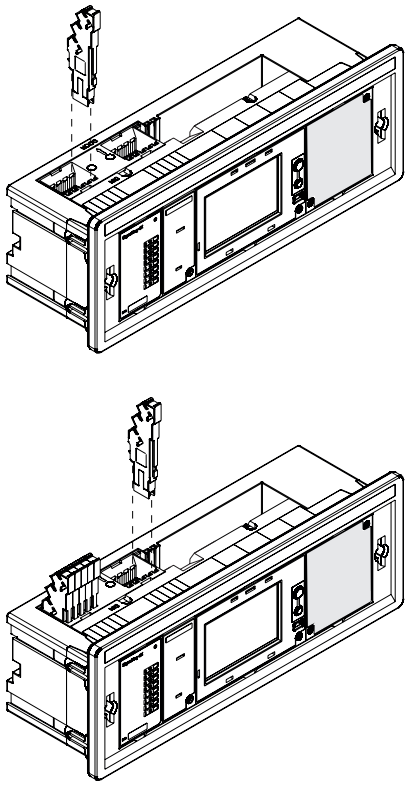




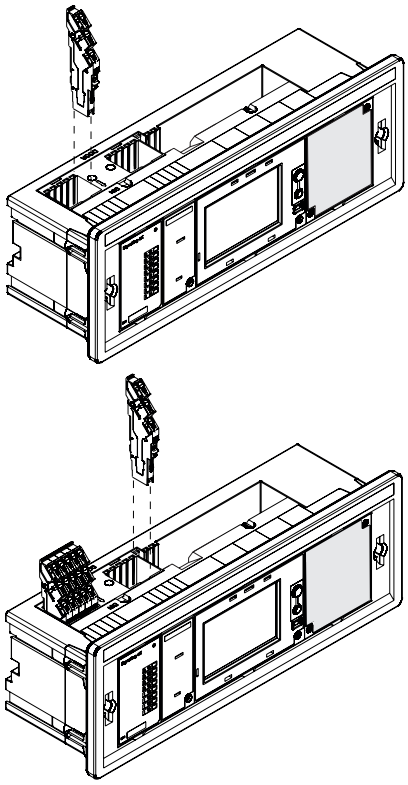
DOOR PANEL DRILLING TEMPLATE

7 AUX-TERMINAL MOUNTING DETAIL

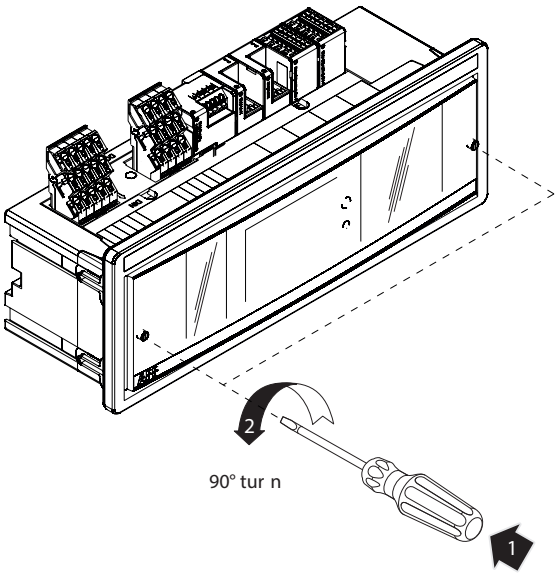
PANEL-DOORTERMINALFITTING
(cables connected to rear of unit)

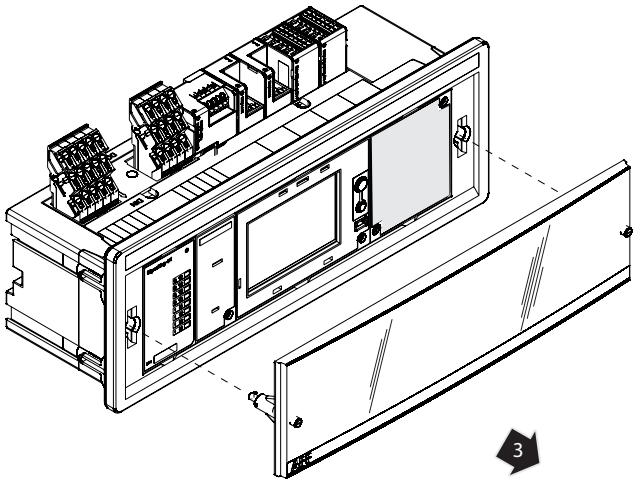


DIN RAIL TERMINAL FITTING
(cables connected to front of unit)



8 TRANSPARENT COVER REMOVAL

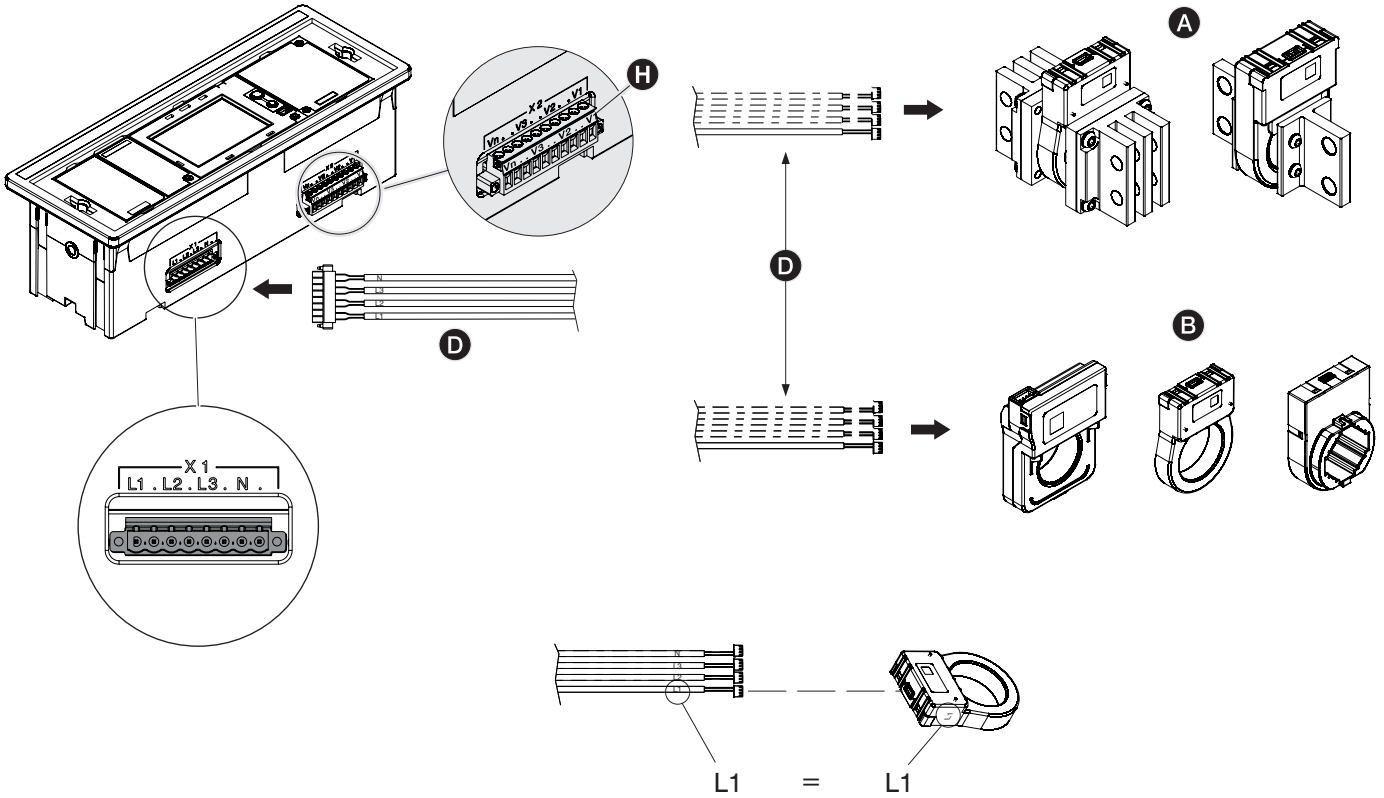




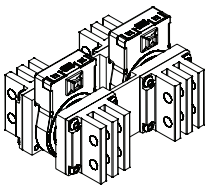
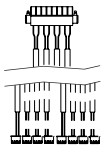
SENSORI DI CORRENTE
CURRENT SENSOR
STROMSENSOREN
CAPTEURS DE COURANT
SENSORES DE CORRIENTE

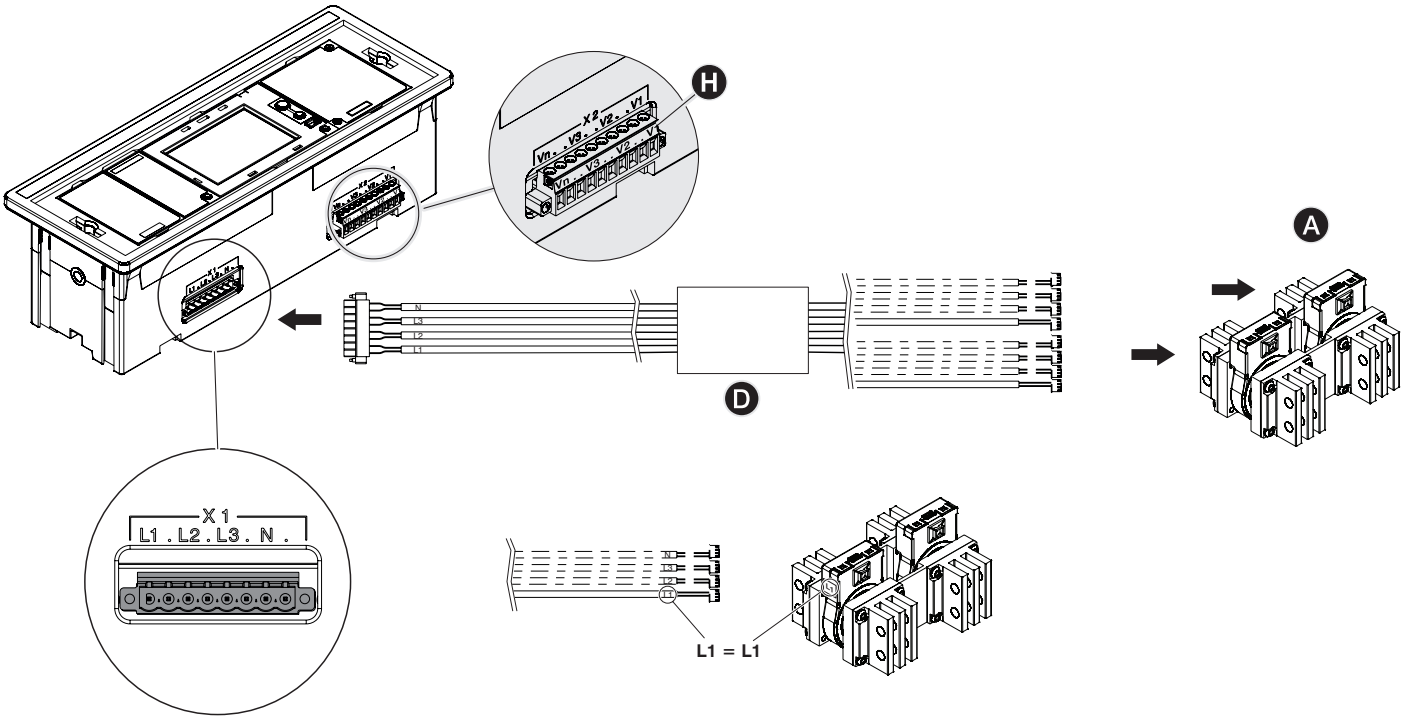
1

	A	B	C1	C2	D	E	F	G	H
				2x L1 L1 2x L2 L2 2x L3 L3 2x Ne Ne				L1 . L2 . L3 . N .	Vn . . V3 . . V2 . . V1
2000A 4000A	3/4	/	/		1	/	4	1	1
400A 1600A	/	3/4	/		1	/	4	1	1
4000A	/	/	3/4		/	1	4	1	1
4000A	/	/	1		/	1	4	1	1



2

	A	D	E	F	G	H
					L1 . L2 . L3 . N .	Vn . . V3 . . V2 . . V1
4000A 6300A	3/4	1	/	4	1	1



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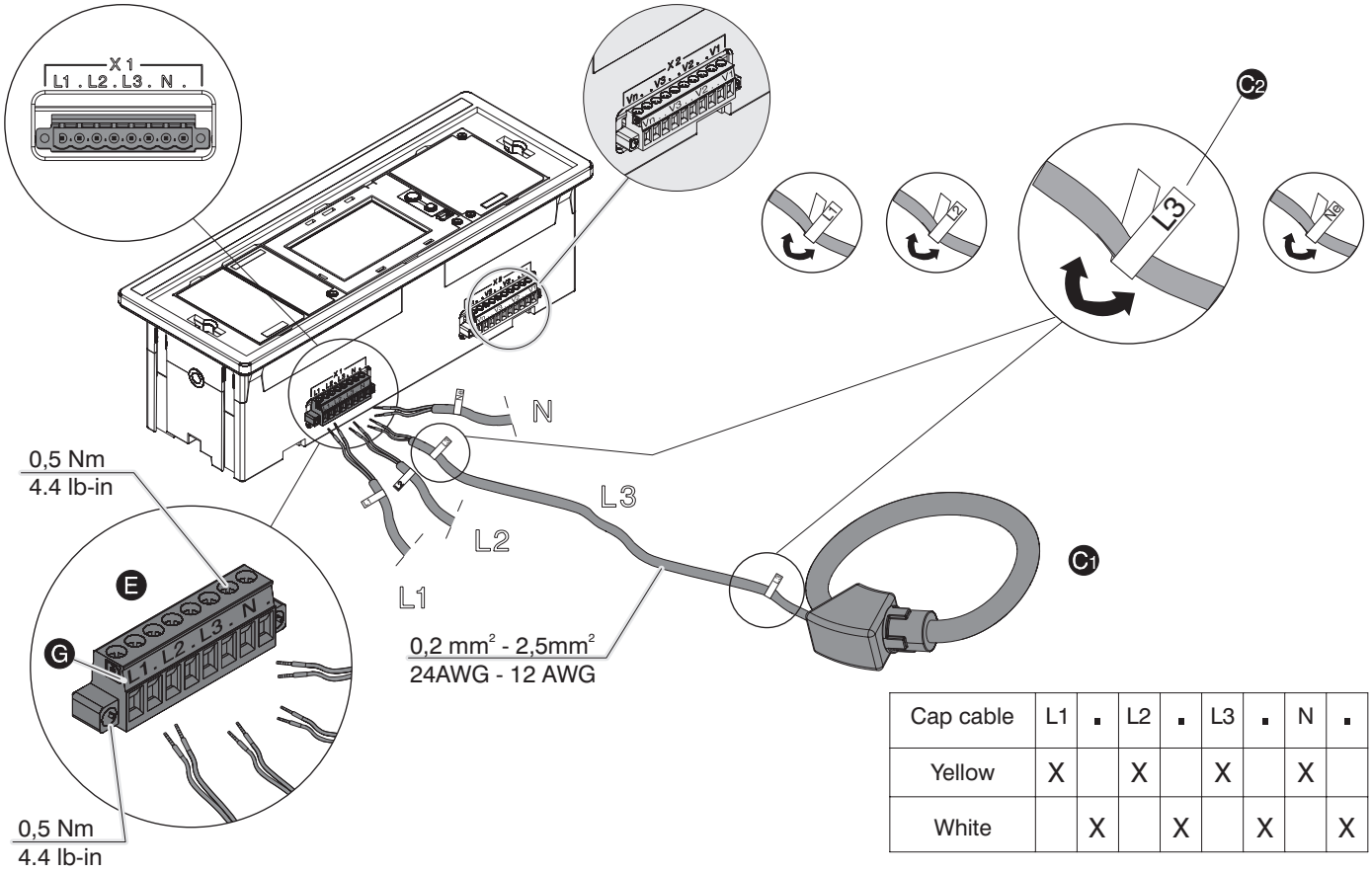
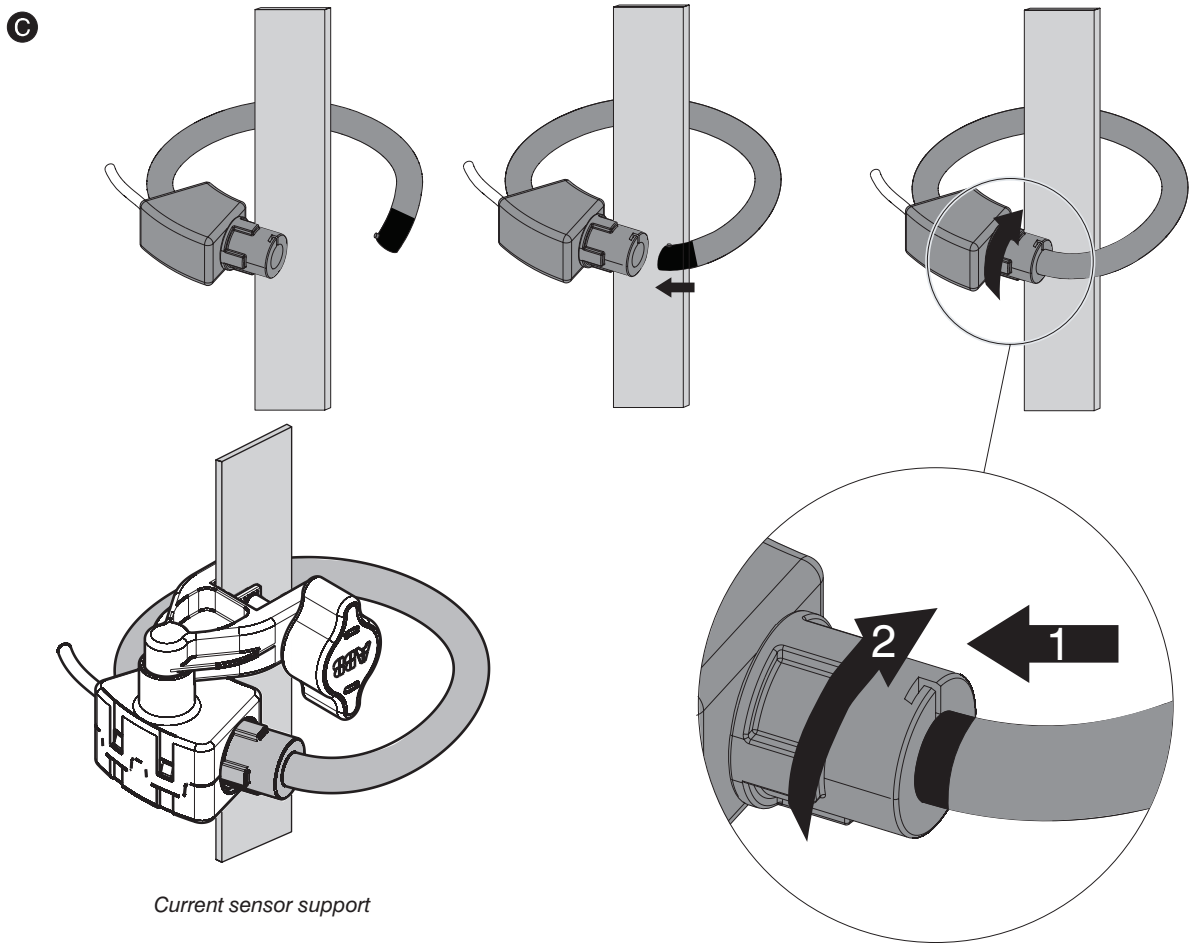
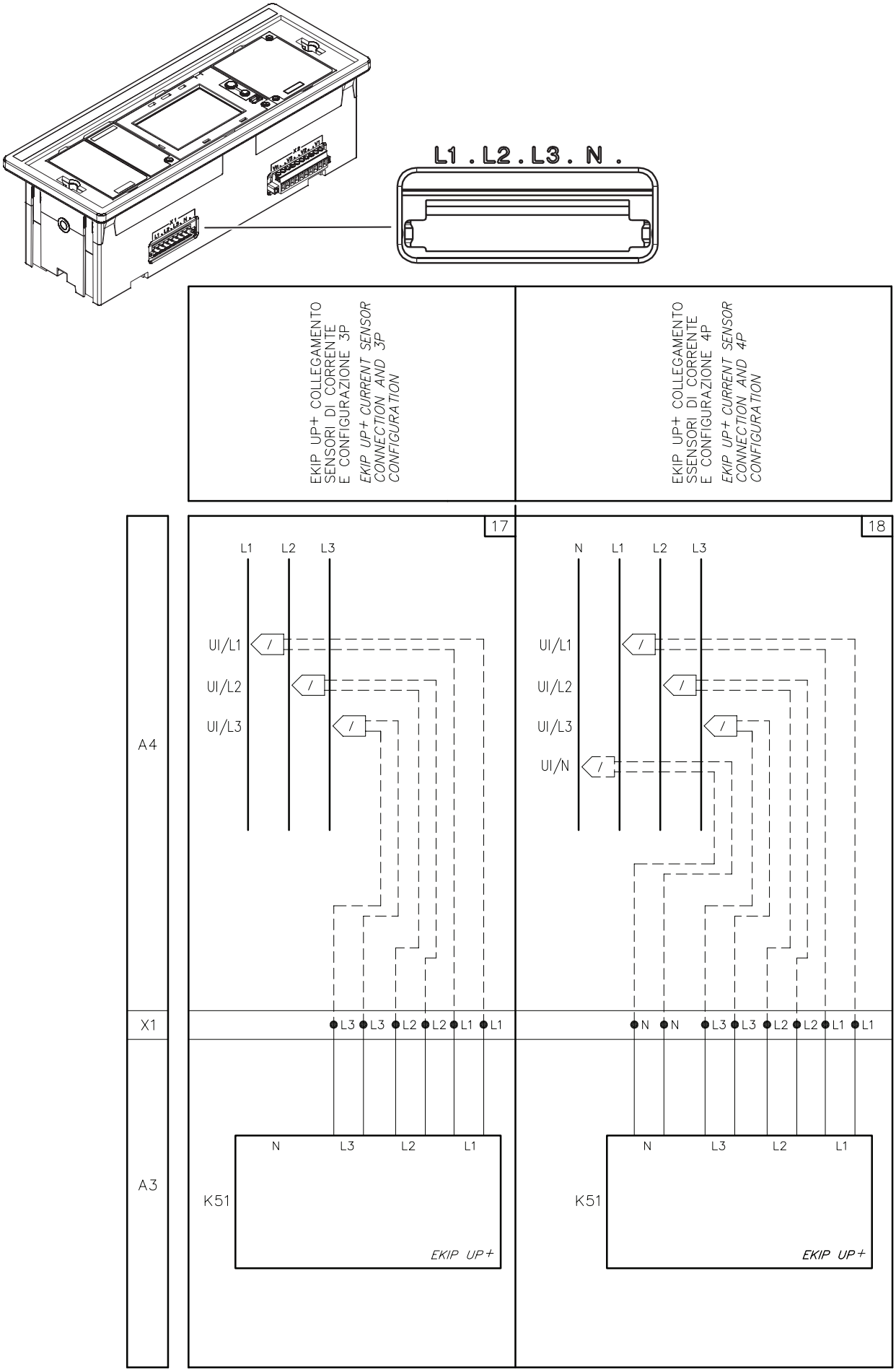


Cap cable	L1	.	L2	.	L3	.	N	.
Yellow	X		X		X		X	
White		X		X		X		X

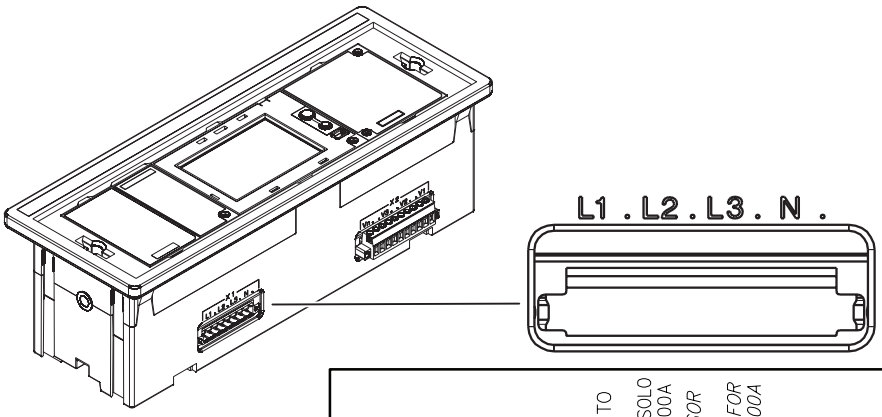


Current sensor support

3

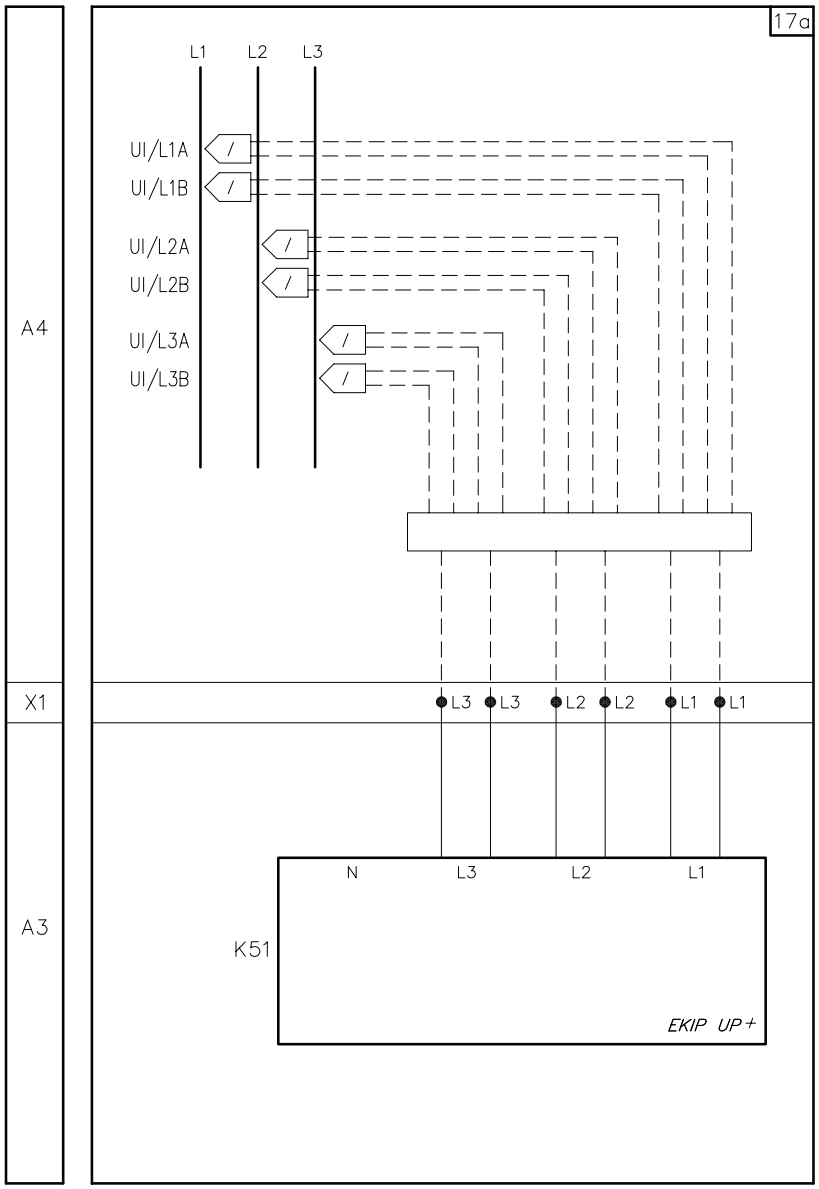

L1 . L2 . L3 . N .
EKIP UP+ COLLEGAMENTO
SENSORI DI CORRENTE
E CONFIGURAZIONE 3P
EKIP UP+ CURRENT SENSOR
CONNECTION AND 3P
CONFIGURATION
EKIP UP+ COLLEGAMENTO
SSENSORI DI CORRENTE
E CONFIGURAZIONE 4P
EKIP UP+ CURRENT SENSOR
CONNECTION AND 4P
CONFIGURATION
17
18
L1
L2
L3
N
UI/L1
UI/L2
UI/L3
UI/N
A4
X1
A3
K51
EKIP UP+

3



EKIP UP+ COLLEGAMENTO
SENSORI DI CORRENTE
E CONFIGURAZIONE 3P – SOLO
PER SENSORE 4000A–6300A

EKIP UP+ CURRENT SENSOR
CONNECTION AND 3P
CONFIGURATION – ONLY FOR
SENSOR TYPE 4000A–6300A



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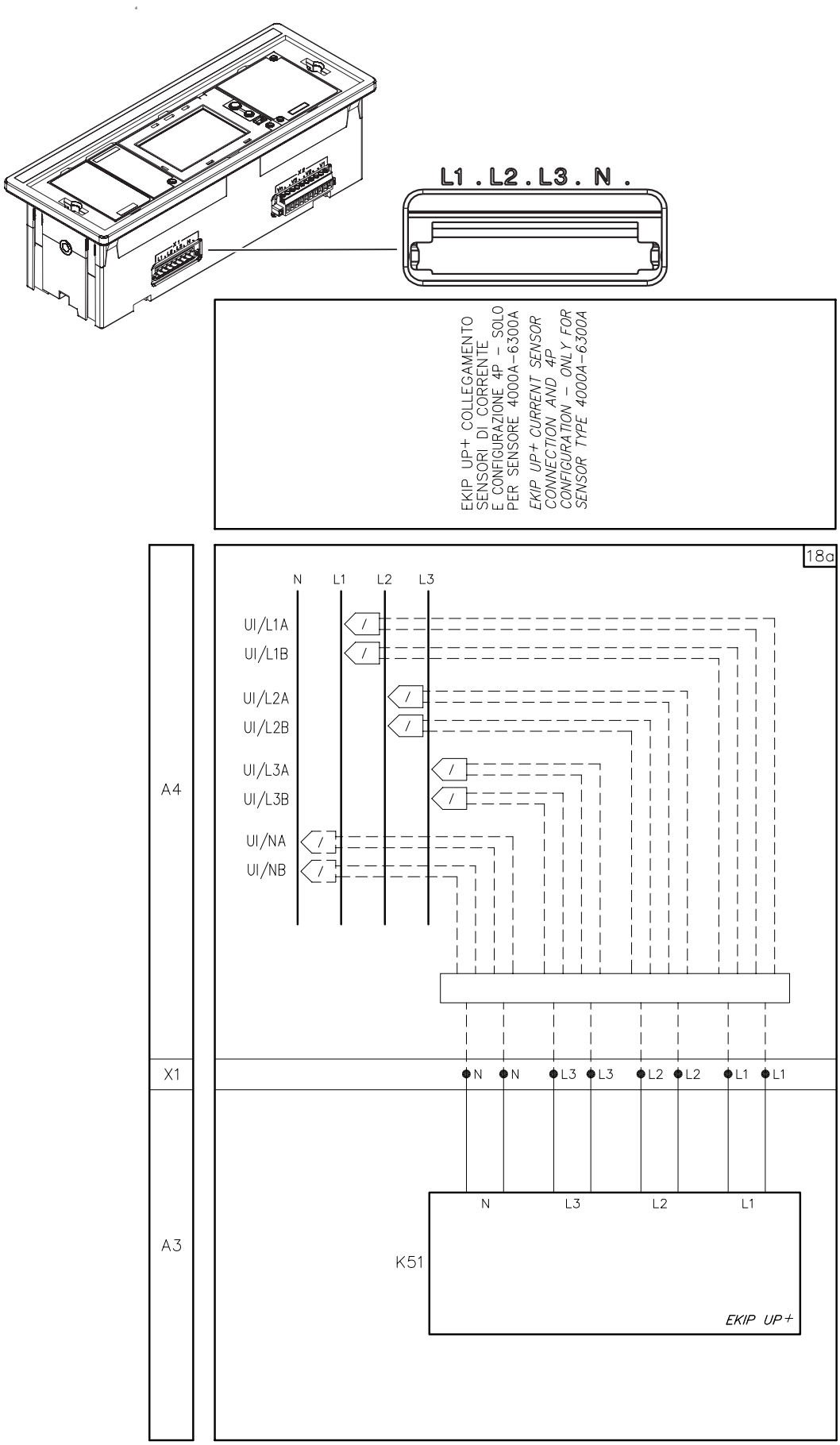
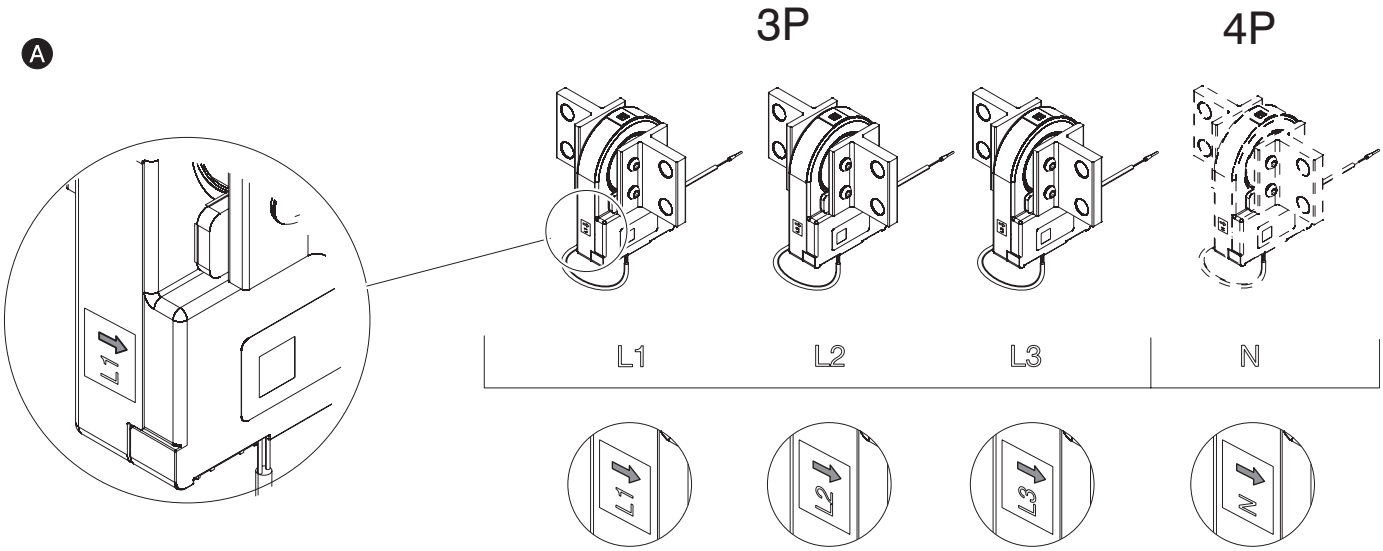
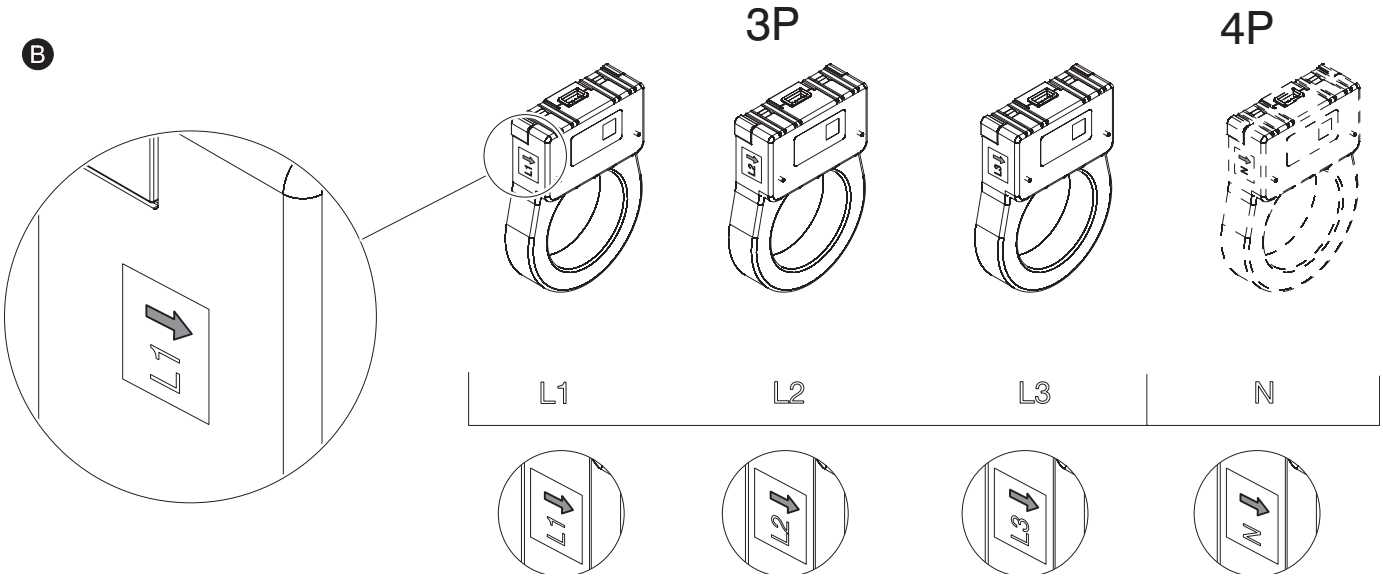
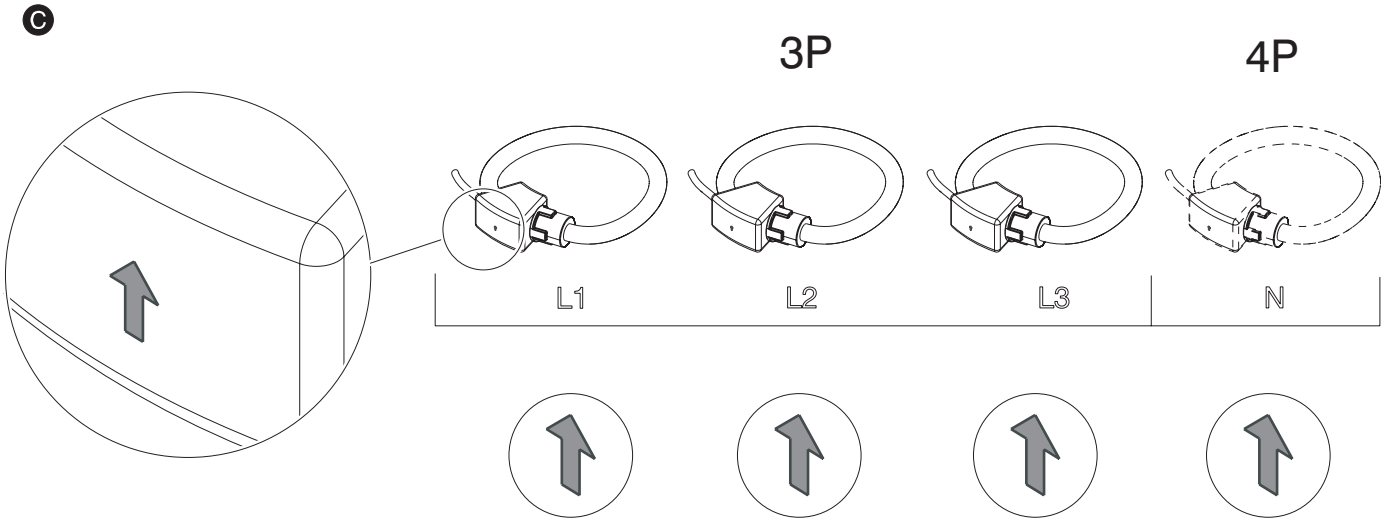

L1 . L2 . L3 . N .
EKIP UP+ COLLEGAMENTO
SENSORI DI CORRENTE
E CONFIGURAZIONE 4P – SOLO
PER SENSORE 4000A–6300A
EKIP UP+ CURRENT SENSOR
CONNECTION AND 4P
CONFIGURATION – ONLY FOR
SENSOR TYPE 4000A–6300A
18a
N
L1
L2
L3
UI/L1A
UI/L1B
UI/L2A
UI/L2B
UI/L3A
UI/L3B
UI/NA
UI/NB
A4
X1
N N L3 L3 L2 L2 L1 L1
A3
K51
N
L3
L2
L1
EKIP UP+

4







5

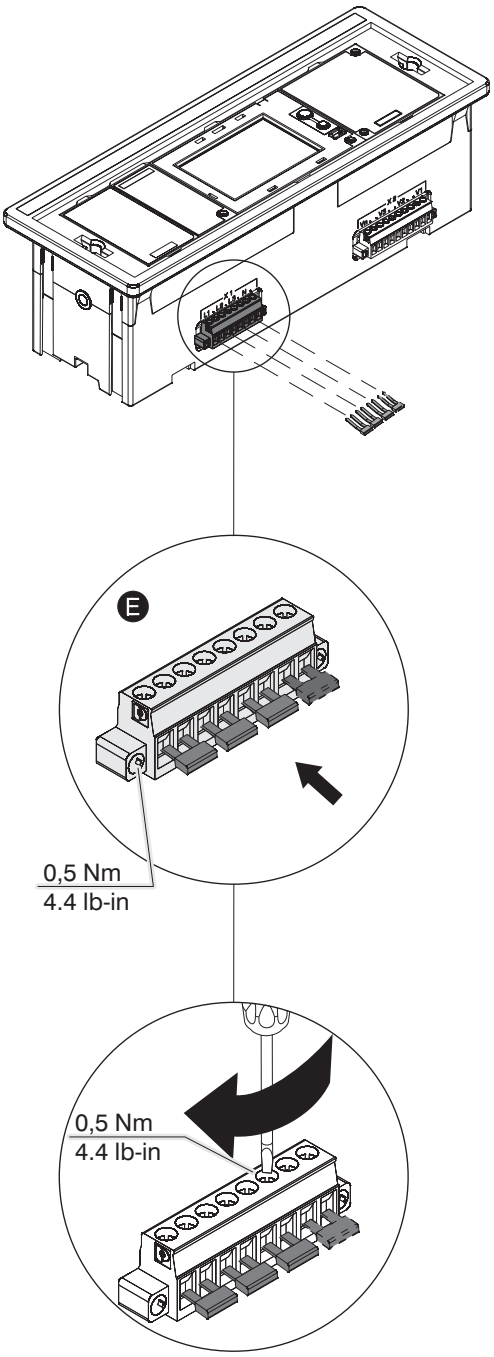
- In caso di disconnessione dei sensori di corrente esterni, è ncessario cortocircuitare le connessioni come indicato. Con questa connessione i valori di corrente letti saranno nulli.

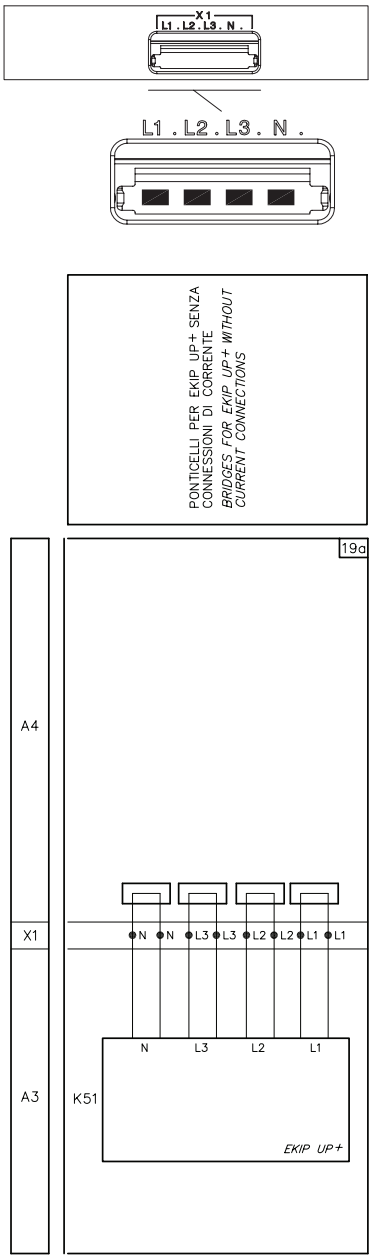
- In case of disconnection of the external current sensors, it is necessary to short-circuit the connections as indicated. With this connection, current values will be null.

- Im Falle einer Trennung der externen Stromsensoren ist es notwendig, die Anschlüsse wie angegeben kurzzuschließen. Mit dieser Verbindung, die Strom werte sind null.

- En cas de déconnexion des capteurs de courant externes, il est nécessaire de court-circuiter les connexions comme indiqué. Avec cette connexion, valeurs de courant seront nuls.

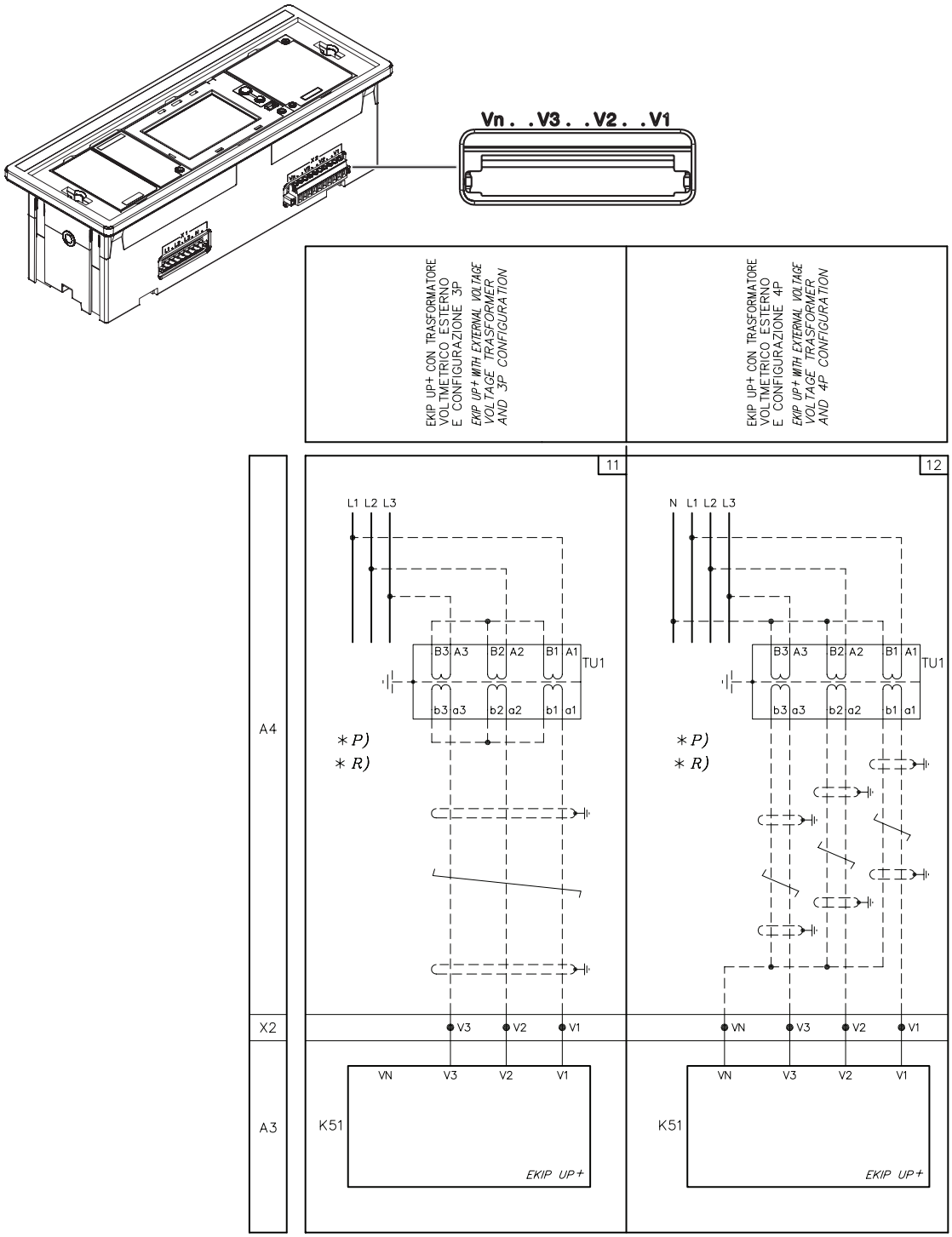
- En caso de desconexión de los sensores de corriente externos, es necesario cortocircuitar las conexiones como se indica. Con esta conexión, valores de corriente serán nulos.





CABLAGGIO DELLE PRESE DI TENSIONE
VOLTAGE SOCKET WIRING
VERDRAHTUNG DER SPANNUNGSABZAPFUNGEN
CÂBLAGE PRISES TENSION
CABLEADO TOMAS DE VOLTAJE

1



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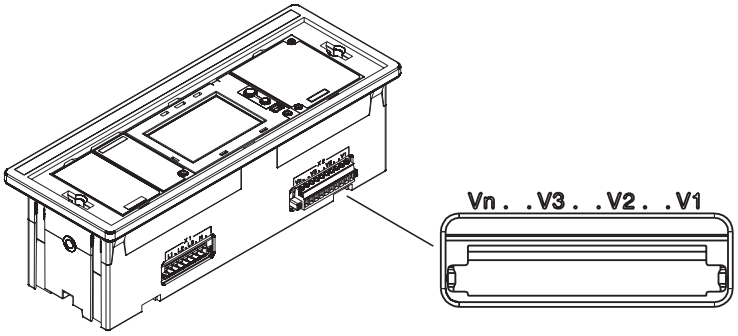
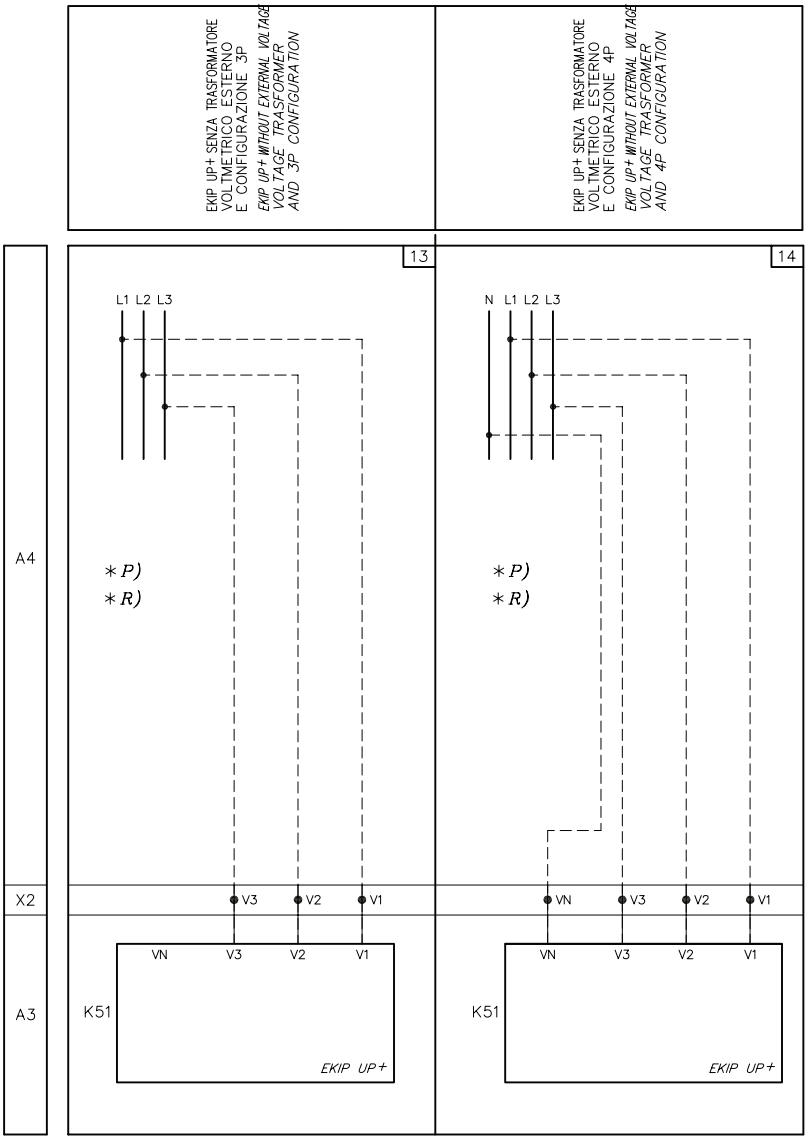

Vn . .V3 . .V2 . .V1


EKIP UP+ SENZA TRASFORMATORE
VOLTMETRICO ESTERNO
E CONFIGURAZIONE 3P
EKIP UP+ WITHOUT EXTERNAL VOLTAGE
VOLTAGE TRASFORMER
AND 3P CONFIGURATION
EKIP UP+ SENZA TRASFORMATORE
VOLTMETRICO ESTERNO
E CONFIGURAZIONE 4P
EKIP UP+ WITHOUT EXTERNAL VOLTAGE
VOLTAGE TRASFORMER
AND 4P CONFIGURATION
13
14
L1 L2 L3
N L1 L2 L3
A4
*P)
*R)
X2
V3 V2 V1
VN V3 V2 V1
A3
K51
EKIP UP+

3

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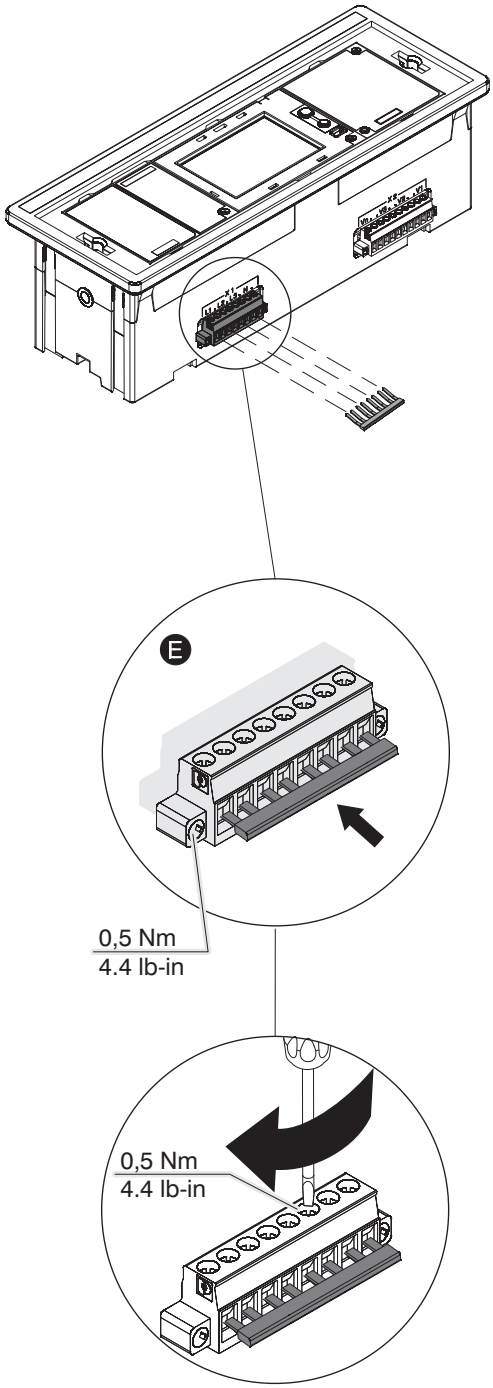
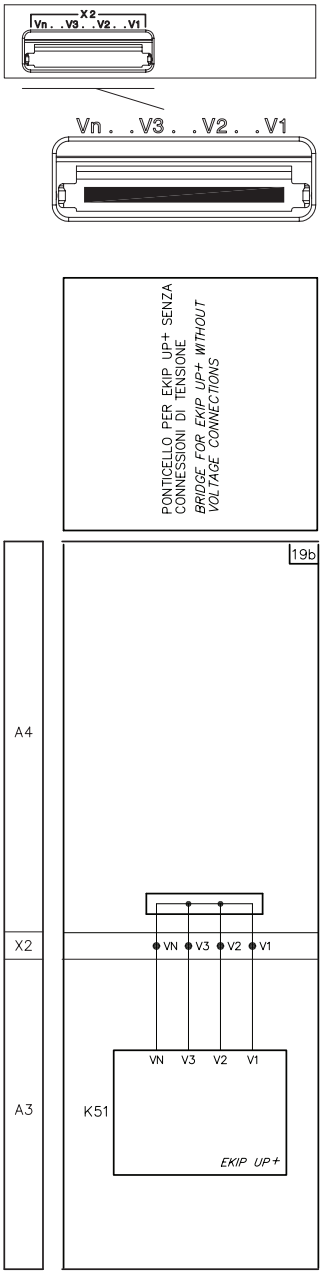
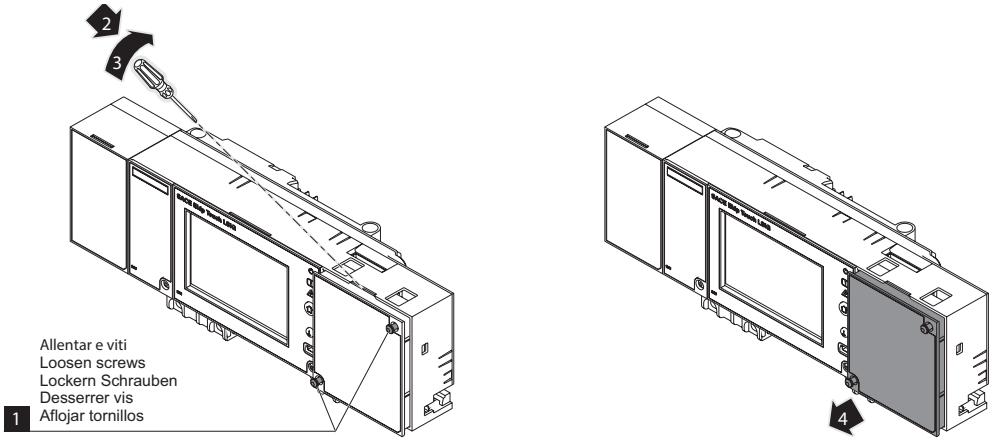




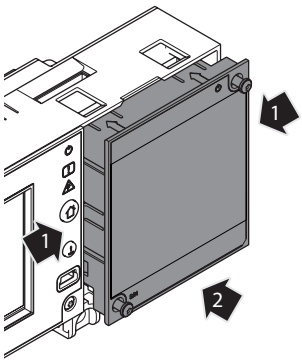
4

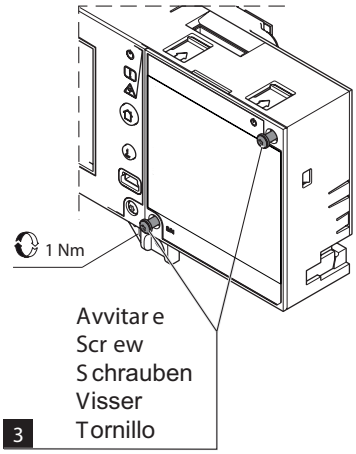
PRIMA DI ESEGUIRE PROVE DIELETTRICHE RIMUOVERE IL MODULO EKIP MEASURING COME ILLUSTRATO IN FIGURA
REMOVE THE EKIP MEASURING MODULE AS ILLUSTRATED IN THE FIGURE BEFORE PERFORMING DIELECTRIC TESTS
VOR DER AUSFÜHRUNG DER DIELEKTRISCHEN PRÜFUNGEN DAS MODUL EKIP MEASURING AUSBAUEN, WIE IN DER ABBILDUNG ZU SEHEN IST
AVANT D'EFFECTUER DES ESSAIS DIÉLECTRIQUES ENLEVER LE MODULE EKIP MEASURING COMME ILLUSTRÉ DANS LA FIGURE
ANTES DE EFFECTUAR PRUEBAS DIELÉCTRICAS QUITAR EL MÓDULO EKIP MEASURING COMO SE VE EN LA FIGURA

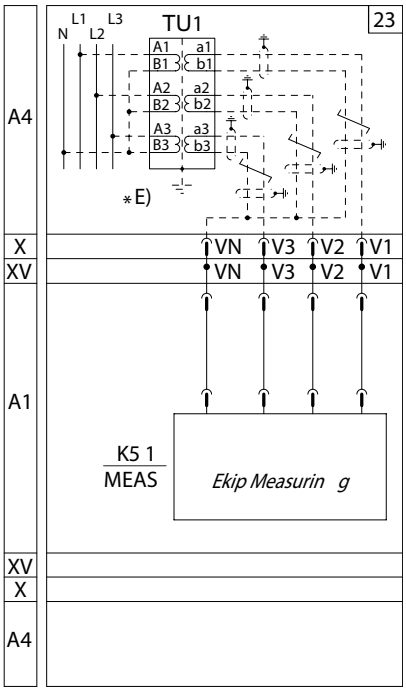


5

DOPO AVER ESEGUITO LE PROVE DIELETTRICHE, RIMONTARE IL MODULO MEASURING COME ILLUSTRATO IN FIGURA
REASSEMBLE THE EKIP UP MEASURING MODULE AS ILLUSTRATED IN THE FIGURE AFTER HAVING PERFORMED DIELECTRIC TESTS
NACH DER AUSFÜHRUNG DER DIELEKTRISCHEN PRÜFUNGEN DAS MODUL EKIP MEASURING WIEDER EINBAUEN, WIE IN DER ABBILDUNG ZU SEHEN IST
APRÈS AVOIR EFFECTUÉ DES ESSAIS DIÉLECTRIQUES, REMONTER LE MODULE EKIP MEASURING COMME ILLUSTRÉ DANS LA FIGURE
DESPUÉS DE EFECTUAR LAS PRUEBAS DIELÉCTRICAS VOLVER A MONTAR EL MÒDULO MEASURING COO SE VE EN LA FIGURA

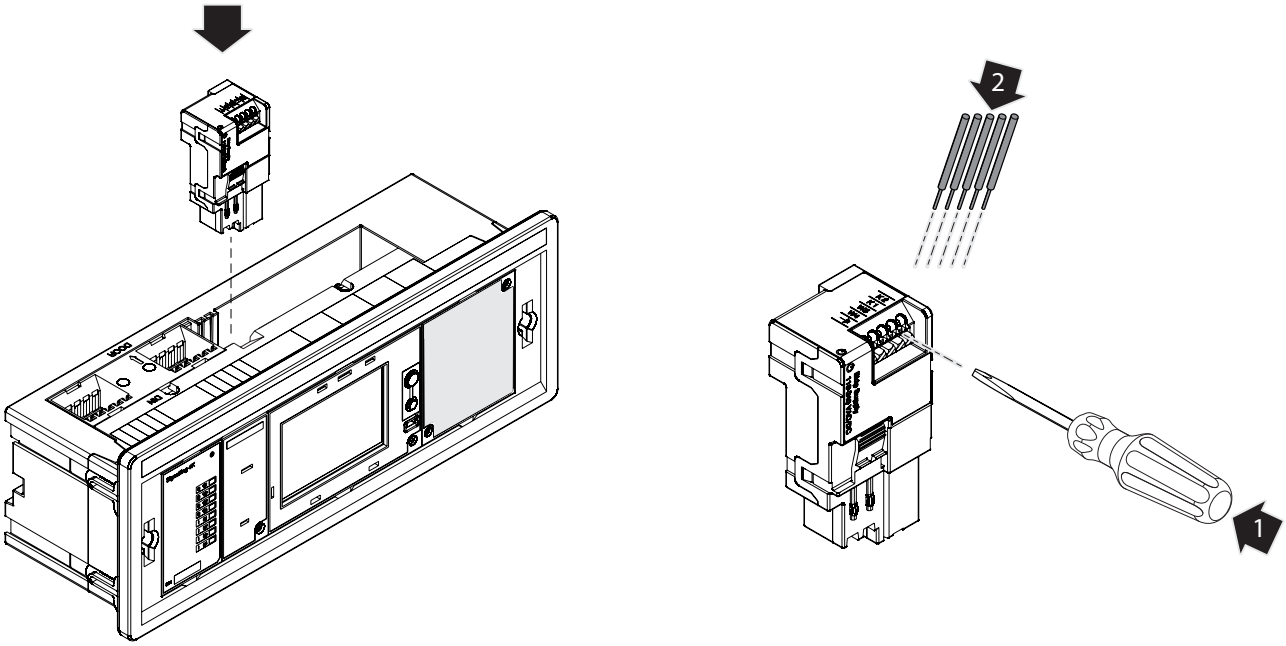






ALIMENTAZIONE TRAMITE EKIP SUPPLY
FEEDING THROUGH EKIP SUPPLY
FÜTTERUNG DURCH DAS EKIP SUPPLY
ALIMENTATION PAR EKIP SUPPLY
ALIMENTACION MEDIANTE EKIP SUPPLY

1



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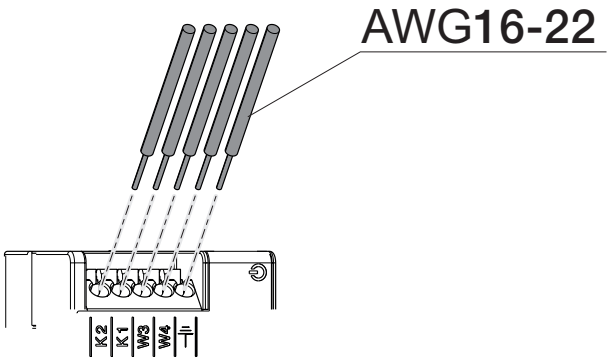
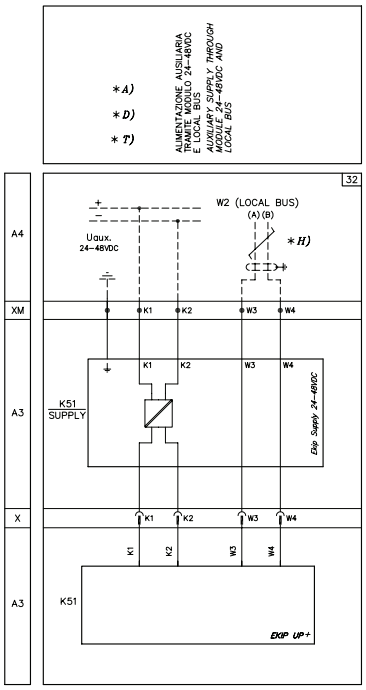
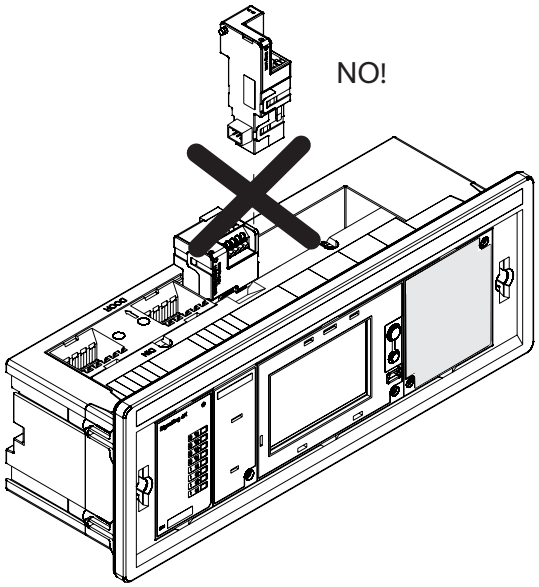
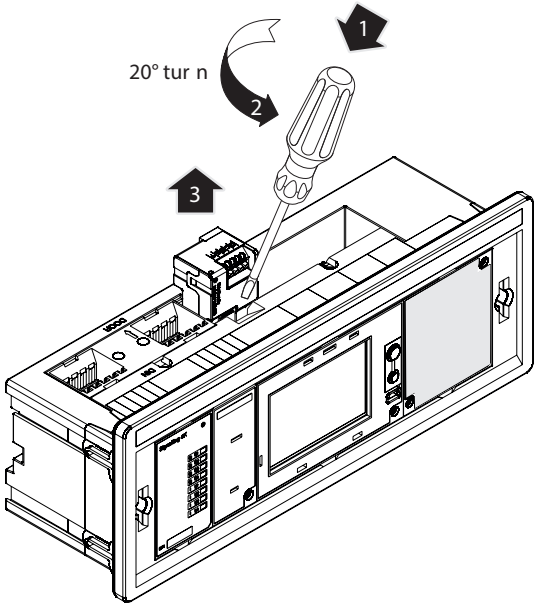




INSERIMENTO DI MODULI AGGIUNTIVI
CONNECTION OF ADDITIONAL MODULES
EINBAU VON ZUSATZMODULEN
INTRODUCTION DE MODULES ADDITIONNELS
INSERCIÓN DE MÓDULOS ADICIONALES

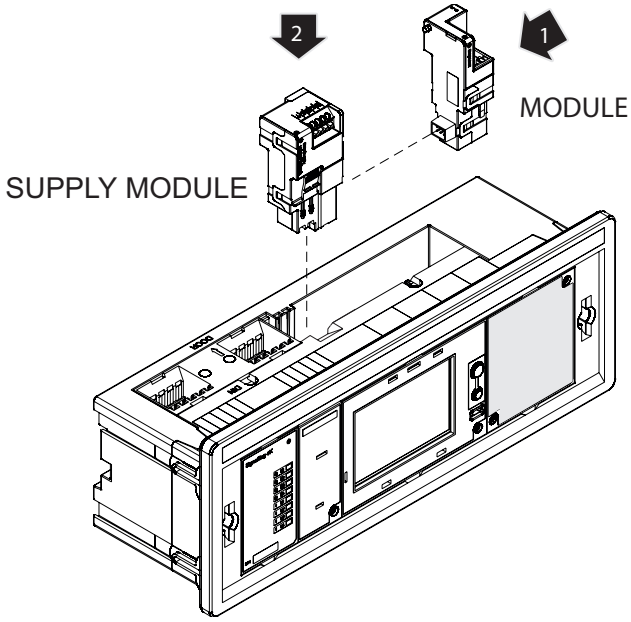
1

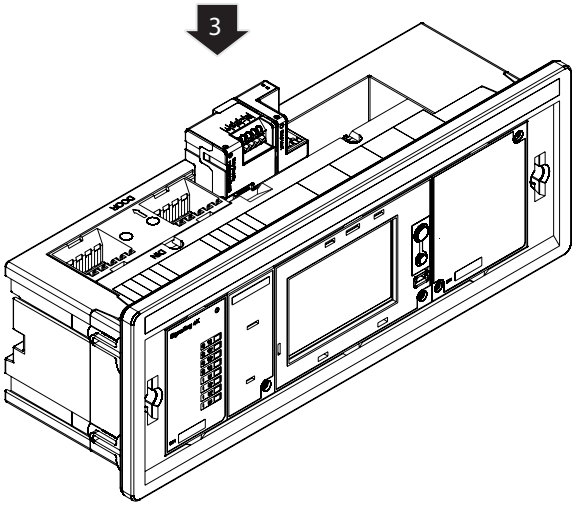




2

Per ulteriori informazioni vedere vedere manuale d'uso 1SDH002003A1001
Consult operation manual 1SDH002003A1001 for further details
Für weitere Informationen siehe die Betriebsanleitung 1SDH002003A1001
Pour plus d'informations consulter le manuel d'utilisation 1SDH002003A1001
Para más información véase el manual de uso 1SDH002003A1001





WIZARD HMI E VERIFICA ALLARMI
ALARM VERIFICATION AND HMI WIZARD
WIZARD HMI UND ALARMPRÜFUNG
WIZARD HMI ET VÉRIFICATION ALARMES
WIZARD HMI Y VERIFICACIÓN ALARMAS

- All'accensione Ekip UP+ mostra la finestra di Wizard, una procedura assistita per l'immediata regolazione di alcuni parametri: lingua, data, ora, tensione di impianto e password.
  A procedura ultimata la finestra non apparirà piu, a meno che sia resettata da Ekip Connect con comando "Reset Wizard": in questo caso il Wizard sarà mostrato alla prima riaccensione utile.

  NOTA: per motivi di sicurezza ABB consiglia fortemente di modificare la password fin dal primo accesso e di conservarla con cura. Per ulteriori informazioni vedere manuale d'uso 1SDH002003A1001.

- When powered, Ekip UP+ displays the Wizard window, a user-friendly procedure for immediate adjustment of certain parameters: language, date, time, voltage of the installation and password.
  After the procedure has terminated, the window will no longer appear unless it is reset by Ekip Connect with the "Reset Wizard" command: in this case, Wizard will appear when the apparatus is powered-on the next time.

  NOTE: for security reasons, ABB strongly advises you to change the password right from the first access and to safeguard it with care. Consult operation manual 1SDH002003A1002 for further details.

- Beim Einschalten zeigt Ekip UP+ das Wizard-Fenster ein Verfahren mit Anleitung für die sofortige Einstellung einiger Parameter an:Sprache, Datum, Uhrzeit, Anlagenspannung und Passwort.
  Am Ende des Verfahrens erscheint das Fenster nicht mehr, es sei denn, es wird von Ekip Connect mit dem Befehl "Reset Wizard" zurückgestellt: In diesem Fall wird das Wizard bei der ersten nützlichen Wiedereinschaltung wieder zu sehen sein.

  ANM: Aus Sicherheitsgründen empfiehlt ABB dringend, das Passwort schon beim ersten Zugang zu ändern und es sorgfältig aufzubewahren. Für weitere Informationen siehe die Betriebsanleitung 1SDH002003A1003.

- Au moment de l'allumage Ekip UP+ la boîte de dialogue Wizard s'affiche, une procédure assistée pour le réglage immédiat de certains paramètres: langue, date, heure, tension d'installation et le mot de passe.
  Quand la procédure est terminée la boîte de dialogue ne s'affichera plus, à moins d'être réinitialisée par Ekip Connect avec la commande "Reset Wizard": dans ce cas le Wizard sera affiché au premier allumage utile.

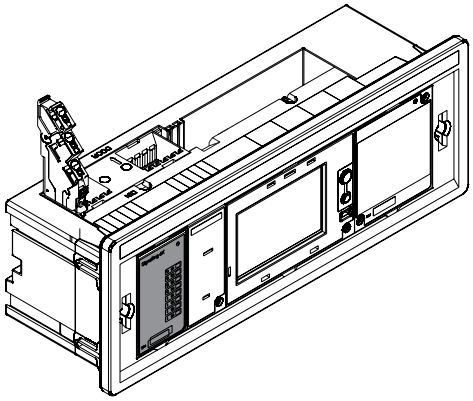
  REMARQUE: pour des raisons de sécurité ABB conseille fortement de modifier le mot de passe dès le premier accès et de le conserver soigneusement. Pour plus d'informations consulter le manuel d'utilisation 1SDH002003A1004.

- En el encendido el Ekip UP+ muestra la ventana de Wizard, un procedimiento asistido para el ajuste inmediato de algunos parámetros: idioma, fecha, hora, voltaje de instalación y contraseña.
  Finalizado el procedimiento la ventana ya no aparecerá, a menos que sea reseteada por Ekip Connect con mando "Reset Wizard": en este caso el Wizard aparecerá en el primer reencendido útil.

  NOTA: por motivos de seguridad ABB aconseja vivamente modificar la contraseña desde el primer acceso y conservarla cuidadosamente. Para más información véase el manual de uso 1SDH002003A1005.

EKIP SIGNALLING 4K

1



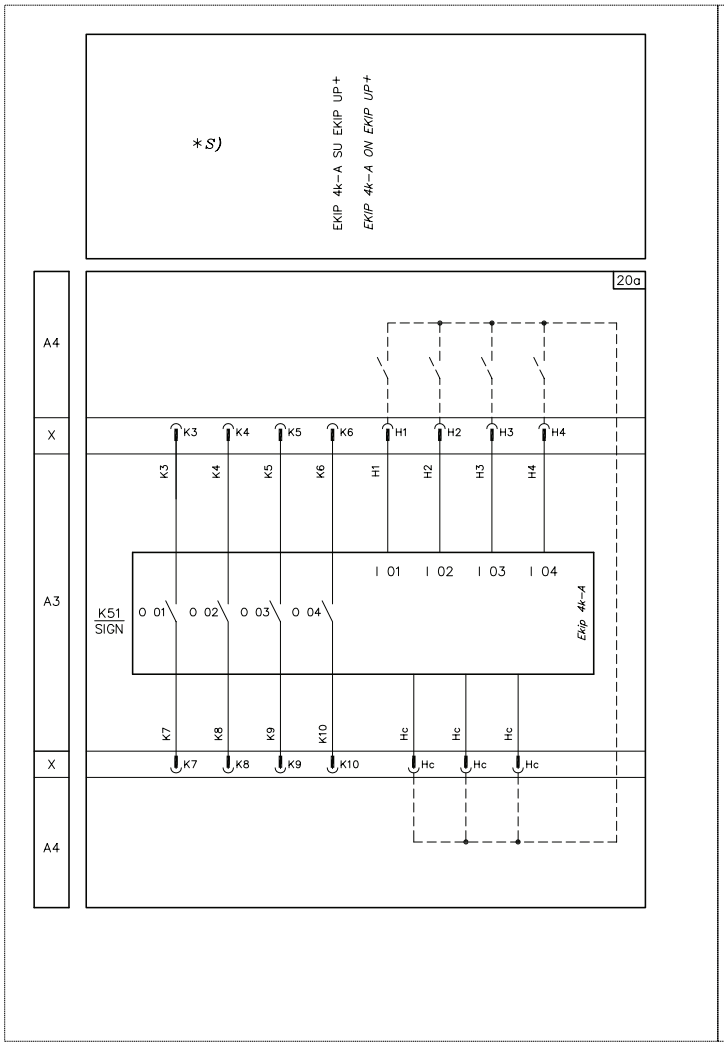
Il modulo 4k è disponibile in due versioni: 4k-A e 4k-B.
4k-A, fornito di base con Ekip UP$^+$ Monitor, svolge la funzione di digital I/O per stati ed input. Ha disponibili 4 contatti.
4k-B, fornito di base con Ekip UP$^+$ Protect, dispone di due pulsanti per effettuare operazioni di apertura e chiusura tramite il comando diretto. È fornito di due contatti digitail I/O per stati ed input.

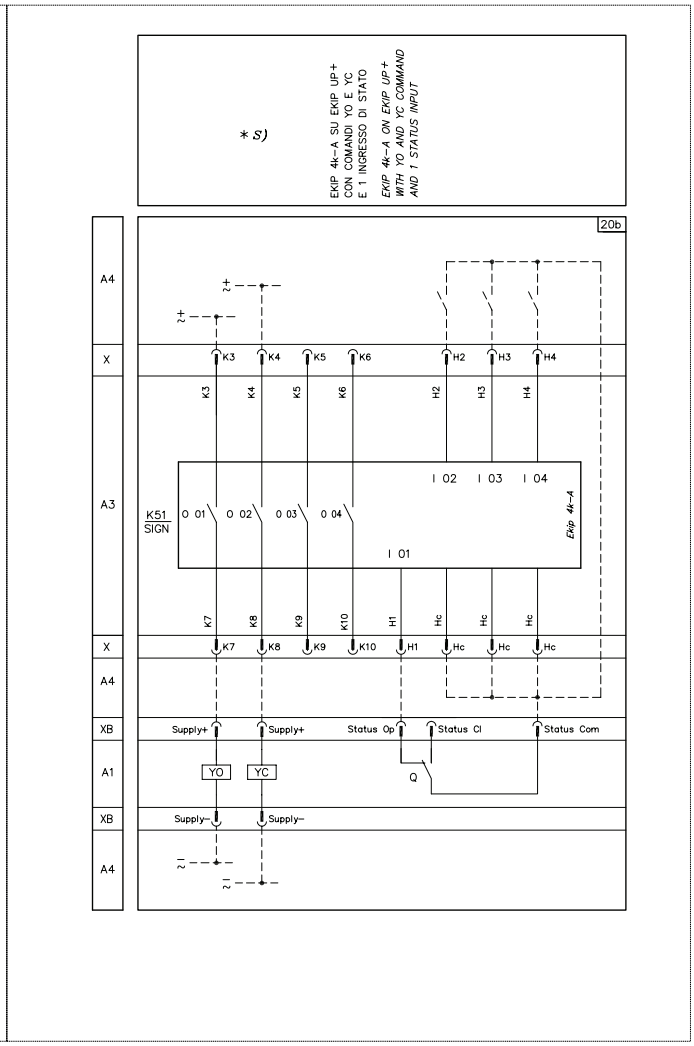
The 4k module is available in two versions: 4k-A and 4k-B.
4k-A, supplied as standard with Ekip UP$^+$ Monitor, acts as a digital I / O for states and inputs. It has 4 contacts available.
4k-B, supplied as standard with Ekip UP$^+$ Protect, has two buttons for opening and closing operations via direct command. It is equipped with two digital I / O contacts for status and input.

Das 4k-Modul ist in zwei Versionen erhältlich: 4k-A und 4k-B.
4k-A, standardmäßig mit Ekip UP$^+$ Monitor geliefert, fungiert als digitale I / O für Zustände und Eingänge. Es stehen 4 Kontakte zur Verfügung.
4k-B wird standardmäßig mit Ekip UP$^+$ Protect geliefert und verfügt über zwei Tasten zum Öffnen und Schließen über direkten Befehl. Es ist mit zwei digitalen I / O Kontakten für Status und Eingang ausgestattet.

Le module 4k est disponible en deux versions: 4k-A et 4k-B.
4k-A, fourni en standard avec Ekip UP$^+$ Monitor, agit comme une I / O numérique pour les états et les entrées. Il dispose de 4 contacts disponibles.
4k-B, fourni en standard avec Ekip UP$^+$ Protect, dispose de deux boutons pour les opérations d'ouverture et de fermeture via commande directe. Il est équipé de deux contacts de I / O numériques pour l'état et l'entrée.

El módulo 4k está disponible en dos versiones: 4k-A y 4k-B.
4k-A, suministrado de serie con Ekip UP$^+$ Monitor, actúa como I / O digital para estados y entradas. Tiene 4 contactos disponibles.
4k-B, suministrado de serie con Ekip UP$^+$ Protect, tiene dos botones para operaciones de apertura y cierre vía comando directo. Está equipado con dos contactos de I / O digitales para estado y entrada.


20a
A4
X
A3
X
A4
K3
K4
K5
K6
H1
H2
H3
H4
K51
SIGN
O 01
O 02
O 03
O 04
I 01
I 02
I 03
I 04
Ekip 4k-A
K7
K8
K9
K10
Hc
*S)
EKIP 4k-A SU EKIP UP+
EKIP 4k-A ON EKIP UP+


20b
A4
X
A3
X
A4
XB
A1
XB
A4
K3
K4
K5
K6
H2
H3
H4
K51
SIGN
O 01
O 02
O 03
O 04
I 01
I 02
I 03
I 04
Ekip 4k-A
K7
K8
K9
K10
H1
Hc
Supply+
Supply+
Status Op
Status Cl
Status Com
YO
YC
Q
Supply-
Supply-
*S)
EKIP 4k-A SU EKIP UP+
CON COMANDI YO E YC
E 1 INGRESSO DI STATO
EKIP 4k-A ON EKIP UP+
WITH YO AND YC COMMAND
AND 1 STATUS INPUT

*S):

- Rappresentazione ingressi e uscite come da fabbrica con 1 input di stato:
  - uscita O 01 collegata a bobina per l'apertura del CB/sezionatore;
  - uscita O 02 collegata a bobina (o motore) per la chiusura del CB/sezionatore;
  - ingresso I 01 collegato all'ingresso di stato (contatto chiuso equivale a stato CB=aperto).

  Per i limiti di funzionamento, le soluzioni di configurazione di O 02 e I 01 e la modifica ditutti gli altri input/output vedi manuale d'uso di Ekip UP+, sezione dedicata al modulo 4K.

- Representation of inputs and outputs as from factory with 1 status input:
  - output O 01 connected to coil for opening CB/disconnector;
  - output O 02 connected to coil (or motor) for closing CB/disconnector;
  - input I 01 connected to status input (contact made is equivalent to CB status=open).

  Consult the Ekip UP+ operation manual in the section dedicated to module 4K for theoperating limits, the configuration solutions for O 02 and I 01 and modification of all the other inputs/outputs

- Darstellung der werksmäßigen Ein- und Ausgänge mit 1 Statuseingang:
  - Ausgang O 01 mit Anschluss an Spule zum Ausschalten des Leistungsschalters/Trennschalters;
  - Ausgang O 02 mit Anschluss an Spule (oder Motor) zum Einschalten des Leistungsschalters/Trennschalters;
  - Eingang I 01 mit Anschluss an Statuseingang (geschlossener Kontakt entspricht Leistungsschalter=aus).

  Für die Betriebsgrenzwerte, die Konfigurationslösungen von O 02 und I 01 und die Änderungaller anderen Ein-/Ausgänge siehe die Betriebsanleitung von Ekip UP+, Abschnitt für das Modul 4K.

- Représentations des entrée et sorties comme en usine avec 1 entrée d'état:
  - sortie O 01 reliée à la bobine d'ouverture du Disjoncteur/sectionneur;
  - sortie O 02 reliée à la bobine (ou moteur) pour la fermeture du Disjoncteur/sectionneur;
  - entrée I 01 reliée à l'entrée d'état (contact fermé équivaut à état Disjoncteur=ouvert).

  Pour les limites de fonctionnement, les solutions de configuration de O 02 et I 01 et la modification de toutes les autres entrées/sorties voir le manuel d'utilisation de Ekip UP+, section dédiée au module 4K.

- Representación de las entradas y las salidas como definidas en fábrica, con 1 input de estado:
  - salida O 01 conectada a bobina para la apertura del interruptor/seccionador;
  - salida O 02 conectada a bobina (o motor) para el cierre del interruptor/seccionador;
  - entrada I 01 conectada en el input de estado (contacto cerrado equivale a estado del interruptor=abierto).

  Para conocer los límites de funcionamiento, las soluciones de configuración de O 02 y I 01 y la modificación de todas las restantes entradas/salidas, véase el manual de uso del Ekip UP+, en la sección dedicada al módulo 4K.

TRIP TEST DA HMI
HMI TRIP TEST
TRIP-TEST VON HMI
TEST DE DÉCLENCHEMENT DE IHM
PRUEBA DE APERTURA DESDE HMI

Test attuatori di apertura e chiusura

NOTA: solo con Ekip UP+ versione Monitor, Control, Protect

- Connettere gli attuatori di apertura e chiusura dell'interruttore/ sezionatore a Ekip UP+ (vedi schema elettrico 1SDM000020A1001). Se necessaria una tipologia di collegamento diversa da quella di default richiamata alla pagina prcedente, fare riferimento al manuale d'uso di Ekip UP+.
- Porre l'interruttore/sezionatore in posizione di chiuso.
- Fornire alimentazione ausiliaria a Ekip UP+ e tensione nominale agli attuatori.
- Eseguire un test di apertura da menu (Test-Test Protection, comando Apri Unità) e verificare la corretta lettura del cambio stato (menu Informazioni-Unità digitale, parametro Stato Unità).
- Ripetere il test eseguendo il comando di chiusura (Chiudi Unità).

Opening and closing actuator test

NOTE: only with the Monitor, Control, Protect version of Ekip UP+

- Connect the opening and closing actuators of the circuit-breaker/disconnector to Ekip UP+(see circuit diagram 1SDM000020A1001). Refer to the Ekip UP+ operation manual if a different type of connection from the fault connection indicated on the previous page is required.
- Set the circuit-breaker/disconnector to the closed position.
- Energize Ekip UP+ with an auxiliary power source and power the actuators with rated voltage.
- Perform an opening test from the menu (Test-Test Protection, Open Unit command) and make sure that the change of state reading is correct (Information-Digital Unit, Unit State parameter).

Test der Aus- und Einschaltaktuatoren

ANM.: nur mit Ekip UP+ Version Monitor, Control, Protect

- Die Aus- und Einschaltaktuatoren des Leistungsschalters/Trennschalters an Ekip UP+ anschließen(siehe Schaltbild 1SDM000020A1001). Wenn ein Anschlusstyp erforderlich ist, der nicht dem auf der vorherige Seite genannten Default-Typ entspricht, ist Bezug auf die Betriebsanleitung von Ekip UP+ zu nehmen.
- Die Leistungsschalter/Trennschalter in die Ein-Position bringen.
- Ekip UP+ mit Hilfssteuerspannung und die Aktuatoren mit Bemessungsspannung versorgen.
- Vom Menü (Test-Test Protection, Befehl Schaltgerät ausschalten) her einen Ausschalttest ausführen und prüfen, dass die Ablesung des Zustandswechsels korrekt erfolgt (Menü Informationen-digitales Gerät, Parameter Zustand Schaltgerät).

Test actionneurs d'ouverture et fermeture

REMARQUE: seulement avec Ekip UP+ version Monitor, Control, Protect

- Connecter les actionneurs d'ouverture et de fermeture du disjoncteur/sectionneur à Ekip UP+ (voir le schéma électrique 1SDM000020A1001). Si un type de raccordement différent est nécessaire que celui de default rappelé à la page précédente, faire référence au manuel d'utilisation de Ekip UP+.
- Placer le disjoncteur/sectionneur dans la position de fermé.
- Fournir l'alimentation auxiliaire à Ekip UP+ et une tension nominale aux actionneurs.
- Effectuer un test d'ouverture depuis le menu (Test-Test Protection, commande Ouvre Unité) et vérifier la lecture correcte du changement d'état (menu Informations-Unité numérique, paramètre Etat Unité).

Prueba actuadores de apertura y cierre

NOTA: solo con Ekip UP+ versión Monitor, Control, Protect

- Conectar los actuadores de apertura y cierre del interruptor/seccionador al Ekip UP+ (véase el esquema eléctrico 1SDM000020A1001). Si se hace necesaria una tipología de conexión distinta a la predefinida, mostrada en la página anterior, consultar el manual de uso del Ekip UP+.
- Poner el interruptor/seccionador en posición de cerrado.
- Dar alimentación auxiliar al Ekip UP+ y tensión nominal a los actuadores.
- Efectuar una prueba de apertura desde el menú (Test-Test Protection, mando Abrir Unidad) y verificar la lectura correcta del cambio de estado (menú Informaciones-Unidad digital, parámetro Estado Unidad).

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