



# **CIMREX operator terminals**

.....  
Installation manual

MA00557E 2004-03

Multi language

## Installation manual for CIMREX-series operator terminals

# Foreword

The CIMREX terminal is an operator terminal in a family of terminals, developed to satisfy the demands of human-machine communication. Built-in functions such as displaying and controlling text, dynamic indication, time channels, alarm and recipe handling are included.

The terminals work, for the most part, in an object-oriented way, making them easy to understand and use. The programming of the terminals is made in a personal computer using the programming tool CIMREX PROG. The project is then transferred and stored in the terminal. Some terminal settings can also be made directly in the terminal.

For further information we refer to the programming manual for the terminal.

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Please read the entire installation manual prior to installing and using this equipment.

Only qualified personnel may install, operate or repair this equipment. Beijer Electronics AB is not responsible for modified, altered or renovated equipment.

Because the equipment has a wide range of applications, users must acquire the appropriate knowledge to use the equipment properly in their specific applications.

Only parts and accessories manufactured according to specifications set by Beijer Electronics AB may be used.

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# Installation manual

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# Safety precautions

## General

- Read the safety precautions carefully.
- Check the delivery for transportation damage. If damage is found, notify the supplier as soon as possible.
- The terminal fulfills the requirements of article 4 of EMC directive 89/336/EEC.
- Do not use the terminal in an environment with high explosive hazards.
- The supplier is not responsible for modified, altered or reconstructed equipment.
- Use only parts and accessories manufactured according to specifications of the supplier.
- Read the installation and operating instructions carefully before installing, using or repairing the terminal.
- Replacing the battery incorrectly may result in explosion. Only use batteries recommended by the supplier.
- Never pour fluids into any openings in the terminal. This may cause fire or electrical shock.
- Only qualified personnel may operate the terminal.

## During installation

- The terminal is designed for stationary installation on a plane surface.
- Put the terminal on a stable surface during installation. Dropping it or letting it fall may cause damage.
- Install the terminal according to the accompanying installation instructions.
- Ground the terminal according to the accompanying installation instructions.
- Only qualified personnel may install the terminal.
- Separate the high voltage, signal and supply cables.
- Make sure that the voltage and polarity of the power source is correct before connecting the terminal to the power outlet.
- The openings on the enclosure are for air convection. Do not cover these openings.
- Do not place the terminal where it might be exposed to strong magnetic fields.
- Do not install the terminal in direct sunlight.
- Peripheral equipment must be appropriate for the application.
- Some terminal models have a laminated film over the display to reduce the risk of scratches. To avoid static electricity that might damage the terminal, carefully remove the film.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **During use**

- Keep the terminal clean.
- Emergency stop and other safety functions may not be controlled from the terminal.
- Do not touch the keys, displays, etc. with sharp objects.
- Be aware that the terminal is operable and registers button presses and input via the touch screen even when background lighting is not on.

## **Service and maintenance**

- The agreed warranty applies.
- Clean the display and face with a soft cloth and mild detergent.
- Only qualified personnel should carry out repairs.

## **Dismantling and scrapping**

- The terminal or parts thereof shall be recycled according to local regulations.
- The following components contain substances that might be hazardous to health and the environment: lithium battery, electrolytic capacitor and display.

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# Installation

## Voltage requirements

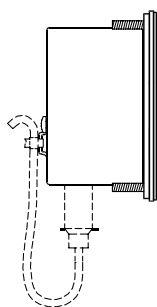
### CAUTION!

Do not apply reverse voltage, it can cause permanent damage.

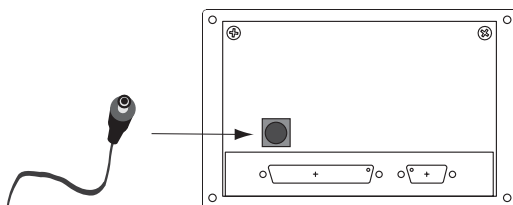
### CAUTION!

Ensure that the terminal and the controller system have the same electrical grounding (reference voltage level), otherwise errors in communication may occur.

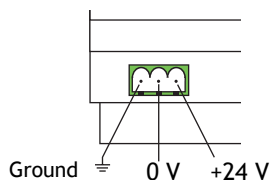
#### CIMREX 5



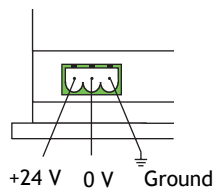
#### CIMREX 10



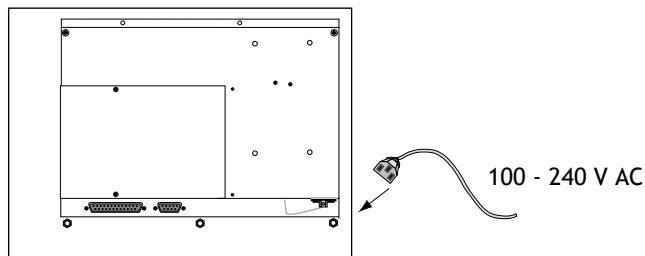
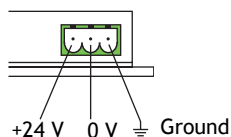
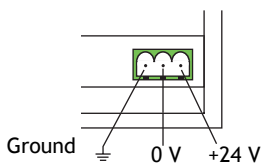
#### CIMREX 12, 20, 30, 41, 60, 70



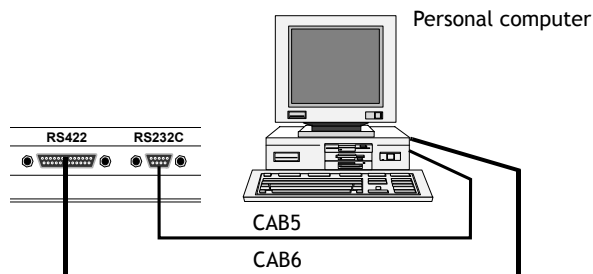
#### CIMREX 67, 69, 69T



Maximum length of 24 V DC power supply cable is 10 meters.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Connection to a printer**

The printer should have a serial interface and be equipped with IBM character set. Refer to the printer manual for the correct configuration. If you want to connect the terminal to a printer with a parallel interface you have to use the expansion card IFC PI. See the manual for IFC PI for further information.

**Connection to a personal computer**

To program the terminal it is recommended that the PC software is used. To install the PC software see the manual for this product. The communication parameters in the terminal and in the PC software should be set in the same way.



# Bezpečnostní předpisy

## Obecně

- Pročtěte si pozorně bezpečnostní předpisy.
- Zkontrolujte dodávku, abyste objevili eventuální škody vzniklé přepravou. Zjistíte-li škodu, uvědomte ihned dodavatele.
- Terminál splňuje požadavky dle článku 4 v direktivě EMC 89/336/EEC.
- Nepoužívejte terminál v prostředí, kde je velké nebezpečí výbuchu.
- Dodavatel nezodpovídá za modifikované, změněné nebo přestavěné vybavení.
- Pouze náhradní díly a příslušenství vyrobené dle specifikace dodavatele se smí používat.
- Před instalací, používáním nebo opravou terminálu si pozorně pročtěte návod k instalaci a návod k používání.
- Montujete-li baterii chybně může dojít k výbuchu. Používejte pouze baterie doporučené dodavatelem.
- Nikdy nelijte kapalinu do mezer nebo otvorů v terminálu. Toto může způsobit požár nebo může vybavení být elektricky vodivé.
- Je nutno, aby s terminálem pracovaly osoby s příslušným školením.

## Při instalaci

- Terminál je konstruován k pevné instalaci na rovné ploše.
- Během instalace umístěte terminál na stabilní podklad. Jestliže terminál upustíte nebo jestli spadne, může dojít k jeho poškození.
- Instalujte terminál dle přiloženého návodu k instalaci.
- Uzemnění je nutno provést dle přiloženého návodu k instalaci.
- Je nutno, aby instalaci prováděly osoby s příslušným školením.
- Kabely vysokého napětí, kabely signální a kabely napětí je nutno od sebe oddělit.
- Než dáte terminál pod napětí, přesvědčte se, že je napětí a polarita od zdroje proudu korektní.
- Otvory v pouzdře jsou určeny k cirkulaci vzduchu a nesmí být překryty.
- Neumísťujte terminál tam, kde je nebezpečí jeho vystavení silným magnetickým polím.
- Terminál nesmí být namontován v přímém slunečním světle.
- Okolní vybavení musí být vhodné tam, kde je použit.
- Některé modely mají na skle displaye laminovanou folii, aby nedošlo k jeho poškrábání. Stáhněte folii pomalu, abyste zabránili statické elektřině, která by mohla terminál poškodit.

**UL installation**

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

**Při používání**

- Udržujte terminál v čistotě.
- Funkce nouzového zastavení nebo jiné funkce bezpečnosti se nesmí ovládat terminálem.
- Klávesy, sklo displaye atd. nesmí být vystaveny vlivu ostrých předmětů.
- V případě poruchy podsvícení je terminál stále v provozu a zaznamenává stisknutí tlačítek a dotyky na obrazovku.

**Servis a údržba**

- Záruka platí dle smlouvy.
- K čištění skla displaye a panelu použijte jemný čistící prostředek a měkký hadřík.
- Opravy smí provádět pouze osoby s příslušným školením.

**Při demontáži a destrukci**

- Recyklace terminálu nebo jeho částí se provádí dle platných pravidel v aktuální zemi.
- Dejte pozor na to, že následující komponenty obsahují materiály, které mohou být škodlivé pro zdraví a prostředí: litiové baterie, kondenzátory elektrolytu a display.

Před instalací a používáním terminálu si přečtěte celý návod k instalaci. Vybavení smí instalovat, používat a opravovat pouze osoby s příslušným školením. Beijer Electronics AB nezodpovídá za modifikované, změněné nebo přestavěné vybavení. Z důvodu širokých možností použití vybavení je nutno, aby si uživatel sám opatřil dostatečné vědomosti tak, aby mohl vybavení používat ve své speciální aplikaci. Používejte pouze náhradní díly a příslušenství vyrobené dle specifikace firmy Beijer Electronics AB, jiné díly se nesmí používat.

BEIJER ELECTRONICS AB NEZODPOVÍDÁ ZA PŘÍMÉ NEBO NEPŘÍMÉ ŠKODY, VZNIKLÉ V SOUVISLOSTI S INSTALACÍ, POUŽÍVÁNÍM NEBO OPRAVOU TOHOTO VYBAVENÍ.

# Instalace

## Požadavky na napětí

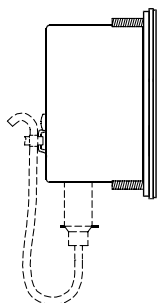
### POZOR!

Změna polarity způsobí nevratné poškození přístroje.

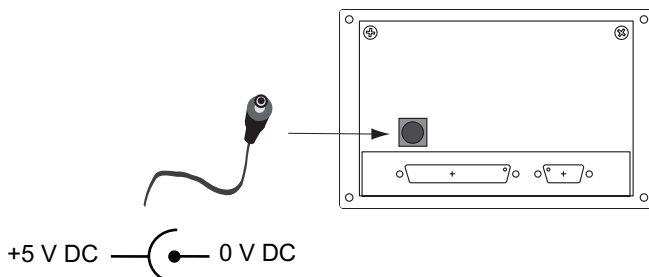
### Varování:

Zajistěte, aby terminál a řídicí systém měly společné elektrické uzemnění (referenční napětí), jinak může docházet k chybám v komunikaci.

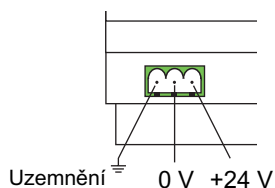
#### CIMREX 5



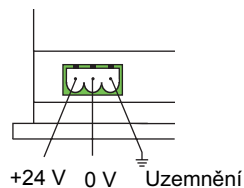
#### CIMREX 10



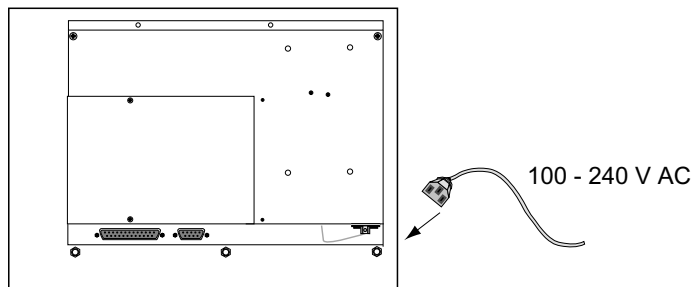
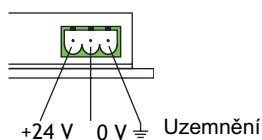
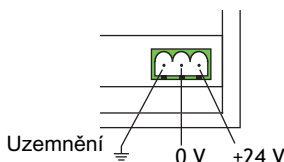
#### CIMREX 12, 20, 30, 41, 60, 70



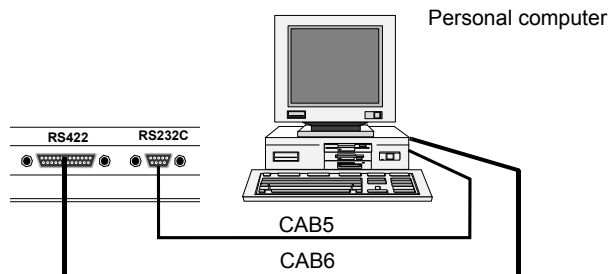
#### CIMREX 67, 69, 69T



Maximální délka napájecího kabelu 24 V ss. je 10 metrů.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Připojení k tiskárně**

Tiskárna musí být vybavena sériovým interfejsem a znakovou sadou IBM. Správná konfigurace se nastaví dle manuálu tiskárny. V případě použití tiskárny s paralelním portem musíte použít rozšiřující kartu IFC PI. Návod k instalaci obdržíte s kartou IFC PI.

**Připojení k personálnímu počítači**

Pro programování terminálu se doporučuje software na PC. Instalace PC software je uvedena v manuálu tohoto produktu. Komunikační parametry v terminálu a v software PC musí být nastaveny stejně.

# Sikkerhedsforskrifter

## Generelt

- Læs sikkerhedsforskrifterne grundigt igennem.
- Kontrollér leverancen for eventuelle transportskader. Giv straks leverandøren besked i tilfælde af skader.
- Terminalen opfylder kravene i artikel 4 i EMC-direktivet 89/336/EØF.
- Anvend ikke terminalen i et miljø med stor eksplosionsfare.
- Leverandøren påtager sig ikke noget ansvar for modificeret, ændret eller ombygget udstyr.
- Anvend kun reservedele og tilbehør, der er fremstillet i overensstemmelse med leverandørens specifikationer.
- Læs installations- og betjeningsvejledningen grundigt igennem, inden du installerer, anvender eller reparerer terminalen.
- Ved forkert montering af batteriet kan der opstå eksplosionsfare. Anvend kun batterier, der er anbefalet af leverandøren.
- Undgå, at der kommer væske i terminalens åbninger, hvilket kan gøre udstyret strømførende, og der kan opstå brand.
- Terminalen må kun håndteres af personer med relevant uddannelse.

## Ved installation

- Terminalen er konstrueret med henblik på fast installation på en plan overflade.
- Anbring terminalen på et stabilt underlag under installationen. Hvis terminalen tabes eller falder på gulvet, kan der opstå skader.
- Installér terminalen i overensstemmelse med den medfølgende installationsvejledning.
- Forbind terminalen til et stik med jordforbindelse i overensstemmelse med den medfølgende installationsvejledning.
- Terminalen skal installeres af personer med relevant uddannelse.
- Hold højspændings-, signal- og spændingskabler adskilt.
- Sørg for, at spænding og polaritet fra strømkilden er korrekt, inden terminalen kobles til.
- Åbningerne i chassis må ikke tildækkes, da de er beregnet til luftcirkulation.
- Placér ikke terminalen på steder, hvor den kan udsættes for stærke magnetfelter.
- Undgå at udsætte terminalen for direkte sollys.
- Kontrollér, at de perifere enheder er tilstrækkelige til terminalens anvendelsesformål.
- På visse terminalmodeller er displayet beklædt med en lamineret film for at minimere risikoen for ridser. Træk filmen af forsigtigt for at forhindre statisk elektricitet, der kan beskadige skærmen.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## Ved anvendelse

- Hold terminalen ren.
- Styr ikke nødstopfunktioner eller andre sikkerhedsfunktioner fra terminalen.
- Undgå at berøre taster, display etc. med skarpe genstande.
- Vær opmærksom på at selvom baggrundslyset skulle gå i stykker, kan terminalen stadig manøvreres og registrere tryk på taster og touchskærm.

## Service og vedligeholdelse

- Der ydes garanti i henhold til aftalen.
- Anvend et mildt rengøringsmiddel og en blød klud til rengøring af display og front.
- Terminalen må kun repareres af personer med relevant uddannelse.

## Ved afmontering og skrotning

- Genvinding af terminalen eller dele af terminalen skal ske i overensstemmelse med de gældende regler i de enkelte lande.
- Bemærk, at følgende komponenter indeholder dele, der kan være skadelige for helbred og miljø: lithiumbatteri, elektrolytkondensatorer samt display.

Læs hele installationsmanualen, inden du installerer og anvender udstyret. Udstyret skal installeres, anvendes og repareres af personer med relevant uddannelse. Beijer Electronics AB påtager sig ikke noget ansvar for modificeret, ændret eller ombygget udstyr. Som følge af udstyrets mange forskellige anvendelsesmuligheder er det brugerens ansvar at indhente tilstrækkelige oplysninger om brugen af udstyret i den pågældende applikation. Der må kun anvendes reservedele og tilbehør, der er fremstillet i overensstemmelse med Beijer Electronics AB's specifikationer.

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# Installation

## Spændingsforsyning

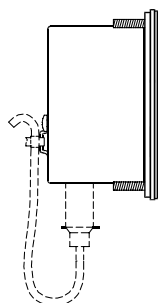
### Advarsel:

Byt ikke om på + og -, da forkert polairsering kan forårsage permanente skader.

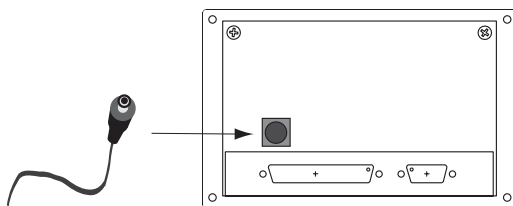
### Advarsel:

Sørg for at terminalen og styrsystemet har samme elektriske jordning, for at undgå at kommunikationsfejl opstår.

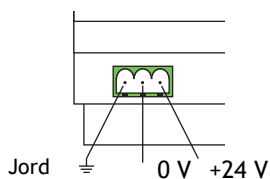
#### CIMREX 5



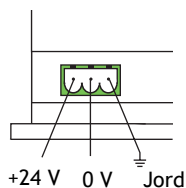
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

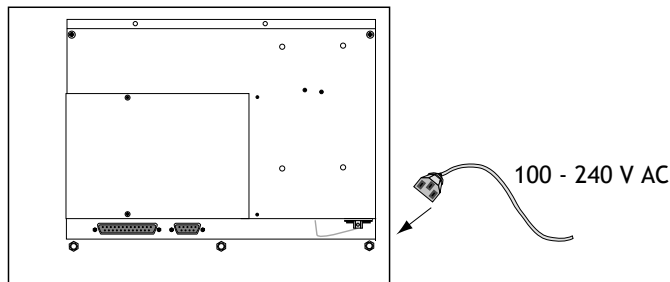


#### CIMREX 67, 69, 69T

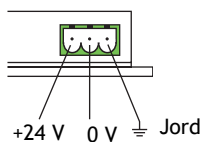


Længden af 24 V DC strømføringskablet må være max. 10 meter.

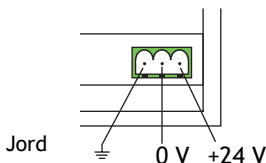
## CIMREX 90, 91



### CIMREX 90D



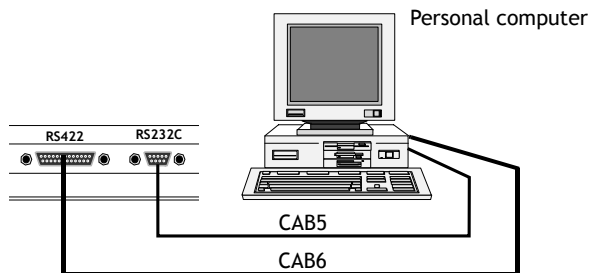
### CIMREX 91D



## Printertilslutning

Printeren skal have en seriel snitflade og skal indeholde IBM-tegnsætning. Læs printerens manual for den korrekte konfiguration. For tilslutning til printer med parallelt snitflade anvendes ekspansionskortet IFC PI. Se manualen for IFC PI for yderligere information.

## Tilslutning til PC'er



Terminalen programmeres via programpakken CIMREX PROG som skal være installeret på PC'eren. Kommunikations-parametrene i terminalen og CIMREX PROG skal have samme indstilling.



# Sicherheitsvorschriften

## Allgemeines

- Sicherheitsvorschriften sorgfältig durchlesen.
- Überprüfen Sie die Lieferung beim Empfang auf etwaige Transportschäden. Informieren Sie den Lieferanten umgehend, wenn Schäden entdeckt werden.
- Das Terminal erfüllt die Anforderungen gemäß Artikel 4 der EMC-Richtlinie 89/336/EEC.
- Setzen Sie das Terminal nicht in Umgebungen ein, in denen Explosionsgefahr besteht.
- Der Lieferant übernimmt keine Verantwortung für modifizierte, geänderte oder umgebaute Ausrüstung.
- Es dürfen nur Ersatzteile und Zubehör verwendet werden, die im Einklang mit den Spezifikationen des Lieferanten hergestellt wurden.
- Die Installations- und Benutzeranweisungen sorgfältig lesen, bevor das Terminal installiert, in Betrieb genommen oder repariert wird.
- Es besteht Explosionsgefahr, wenn die Batterie falsch montiert wird. Ausschließlich Batterien verwenden, die vom Lieferanten empfohlen werden.
- In die Schlitze oder Löcher des Terminals darf unter keinen Umständen Flüssigkeit eindringen. Dies kann einen Brand verursachen oder dazu führen, dass die Ausrüstung stromführend wird.
- Das Terminal darf nur von speziell ausgebildetem Fachpersonal bedient werden.

## Hinweise zur Installation

- Dieses Terminal ist für den Betrieb an einem festen Standort und an einem ebenen Gebiet ausgelegt.
- Das Terminal während der Installation auf einer festen Unterlage platzieren. Wenn das Terminal herunter fällt, kann es zu Beschädigungen kommen.
- Installieren Sie das Terminal gemäß der beiliegenden Installationsanleitung.
- Erden Sie das Gerät gemäß den Vorgaben in der beiliegenden Installationsanleitung.
- Die Installation muss von speziell ausgebildetem Fachpersonal vorgenommen werden.
- Hochspannungs-, Signal- und Versorgungsleitungen müssen getrennt verlegt werden.
- Bevor das Terminal an die Stromversorgung angeschlossen wird, sicherstellen, dass Spannung und Polarität von der Stromquelle korrekt sind.
- Die Öffnungen im Gehäuse sind für die Luftzirkulation bestimmt und dürfen nicht überdeckt werden.
- Das Terminal nicht an Stellen platzieren, an denen es einem starken Magnetfeld ausgesetzt wird.
- Das Terminal darf nicht in direkter Sonneneinstrahlung montiert werden.
- Die Peripherieausrüstung muss dem Verwendungszweck entsprechen.
- Bei bestimmten Terminalmodellen ist das Displayglas mit einem laminierten Film versehen, um Kratzern vorzubeugen. Um zu verhindern, dass es aufgrund von statischer Elektrizität zu Schäden am Terminal kommt, den Film vorsichtig abziehen.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## Hinweise zum Betrieb

- Halten Sie das Terminal stets sauber.
- Nothalt- und andere Sicherheitsfunktion dürfen nicht vom Terminal aus gesteuert werden.
- Achten Sie darauf, dass Tasten, Bildschirm usw. nicht mit scharfkantigen Gegenständen in Berührung kommen.
- Bei einem Ausfall der Hintergrundbeleuchtung ist das Bedienterminal weiterhin einsatzbereit und registriert Tastenbetätigungen sowie Eingaben per Berührungsbildschirm.

## Service und Wartung

- Garantieansprüche sind per Vertrag geregelt.
- Säubern Sie Bildschirm und Gerätevorderseite mit einem milden Reinigungsmittel und einem weichen Tuch.
- Reparaturen müssen von speziell ausgebildetem Fachpersonal vorgenommen werden.

## Hinweise zu Demontage und Entsorgung

- Eine vollständige oder teilweise Wiederverwertung des Terminals ist entsprechend den jeweils geltenden Bestimmungen vorzunehmen.
- Beachten, dass folgende Komponenten Stoffe enthalten, die eine Gefahr für Gesundheit und Umwelt darstellen können. Lithiumbatterie, Elektrolytkondensatoren und Bildschirm.

Das gesamte Installationshandbuch lesen, bevor die Ausrüstung installiert und in Betrieb genommen werden kann. Die Ausrüstung muss von dazu geschultem Personen installiert, betrieben und repariert werden. Beijer Electronics AB übernimmt keine Verantwortung für modifizierte, geänderte oder umgebaute Ausrüstung. Aufgrund des großen Einsatzspektrums für dieses Gerät liegt es im Verantwortungsbereich des Anwenders, sich ausreichende Kenntnisse über den ordnungsgemäßen Betrieb in der entsprechenden Anwendung zu verschaffen. Es dürfen nur Ersatzteile und Zubehör verwendet werden, die im Einklang mit den Spezifikationen von Beijer Electronics AB angefertigt wurden.

BEIJER ELECTRONICS AB ÜBERNIMMT KEINE HAFTUNG FÜR SCHÄDEN ODER VERLETZUNGEN, DIE DIREKT ODER INDIREKT DURCH INSTALLTION, ANWENDUNG ODER REPARATUR DIESER AUSTRÜSTUNG ERGEBEN.

# Installation

## Spannungsversorgung

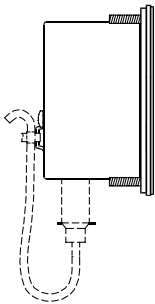
### Achtung!

Achten Sie beim Anschluss auf die richtige Polarität. Kommt es zu einer Verwechslung, wird das Gerät beschädigt.

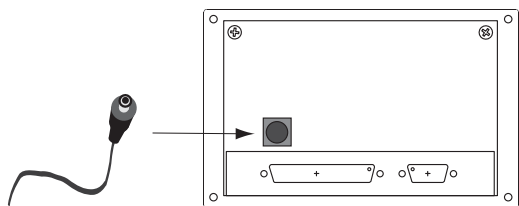
### Vorsicht!

Vergewissern Sie sich, dass Bedienterminal und Steuerung über dieselbe elektrische Erdung verfügen (Referenzspannungswert). Andernfalls können Kommunikationsfehler auftreten.

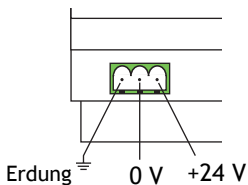
#### CIMREX 5



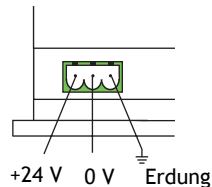
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

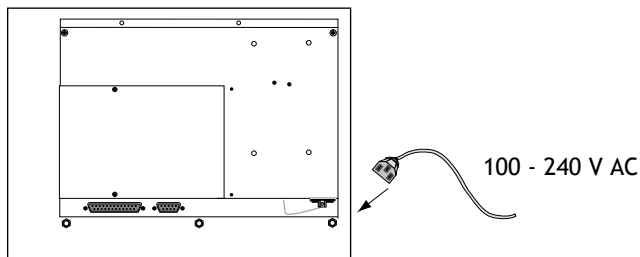


#### CIMREX 67, 69, 69T

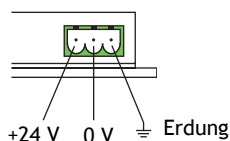


Die maximale Länge des Netzkabels (24 V GS) beträgt 10 m.

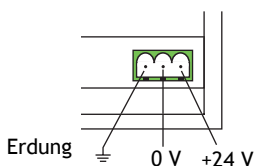
## CIMREX 90, 91



### CIMREX 90D



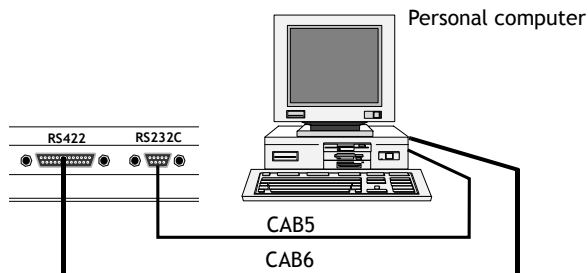
### CIMREX 91D



## Anschluss an einen Drucker

Der Drucker muß über eine serielle Schnittstelle und den IBM-Zeichensatz verfügen. Beachten Sie die Hinweise in der Bedienungsanleitung Ihres Druckers. Wenn Sie das Terminal an einen Drucker mit einer parallelen Schnittstelle anschließen möchten, müssen Sie die Erweiterungskarte IFC PI einsetzen. Weitere Informationen hierzu erhalten Sie in der Bedienungsanleitung zum IFC PI.

## Anschluss an einen Personal Computer



Die Programmierung des Terminals wird über die Software CIMREX PROG vorgenommen. Die Kommunikationsparameter im Terminal und in der PC-Software müssen übereinstimmen.

# Reglas de seguridad

## Generalidades

- Lea atentamente las reglas de seguridad.
- Controle el suministro para ver si se han producido daños de transporte. Si hay daños de transporte, notifíquelo inmediatamente al proveedor.
- La terminal cumple con los requisitos del artículo 4 en la Directiva EMC 89/336/CEE.
- No use la terminal en un ambiente con alto riesgo de explosiones.
- El proveedor no asume la responsabilidad por un equipo modificado, alterado o reconstruido.
- Se deben utilizar únicamente repuestos y accesorios fabricados según la especificación del proveedor.
- Lea detenidamente las instrucciones de instalación y operación antes de instalar, usar o reparar la terminal.
- Si la batería es montada incorrectamente, puede surgir el riesgo de explosión. Use exclusivamente las baterías recomendadas por el proveedor.
- Nunca vierta líquidos en grietas u orificios de la terminal. Esto puede provocar incendios o la conductividad eléctrica del equipo.
- La terminal debe ser manipulada por personas que han recibido una formación adecuada.

## Instalación

- La terminal está destinada a una instalación permanente sobre una superficie plana.
- Coloque la terminal sobre una base firme durante la instalación. La terminal puede dañarse si se cae o se deja caer.
- Instale la terminal conforme a las instrucciones de instalación incluidas.
- La puesta a tierra se debe realizar conforme a las instrucciones de instalación incluidas.
- La instalación debe ser realizada por personas que han recibido una formación adecuada.
- Los cables de alta tensión, de señales y de tensión deben separarse.
- Cerciórese de que la tensión y la polaridad de la fuente de energía sean correctas antes de conectar la tensión a la terminal.
- Las aberturas de la cubierta están destinadas a la circulación del aire y no deben cubrirse.
- No coloque la terminal en un lugar que pueda estar expuesto a campos magnéticos fuertes.
- La terminal no se debe montar a plena luz solar.
- Los equipos periféricos deben ser adecuados en el lugar de uso.
- Algunos modelos de terminal tienen una película laminada sobre el cristal del display para reducir el riesgo de rasguños. Para evitar la electricidad estática que puede ocasionar daños en la terminal, despegue la película con cuidado.

## **UL installation**

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Uso**

- Mantenga limpia la terminal.
- Las funciones de parada de emergencia y otras funciones de seguridad no deben ser controladas desde la terminal.
- Las teclas, el cristal del display, etc. no deben ser activados con objetos puntiagudos.
- Si la iluminación de fondo se avería, el terminal sigue funcionando y registra los botones presionados y la información ingresada a través de la pantalla táctil.

## **Servicio y mantenimiento**

- La garantía rige según el convenio.
- Para limpiar el cristal del display y el frente, use un detergente suave y un paño suave.
- Las reparaciones deben ser realizadas por personas que han recibido una formación adecuada.

## **Desmontaje y desguace**

- El reciclaje de la terminal o piezas de la terminal debe cumplir con las reglas vigentes en cada país.
- Observe que los siguientes componentes contienen sustancias que pueden ser nocivas para la salud y el entorno: batería de litio, condensadores electrolíticos y display.

Lea todo el manual de instalación antes de instalar o usar el equipo. El equipo debe ser instalado, usado y reparado por personas que han recibido una formación adecuada. Beijer Electronics AB no asume ninguna responsabilidad por un equipo modificado, alterado o reconstruido. Debido a la gran cantidad de aplicaciones del equipo, el usuario debe adquirir personalmente conocimientos suficientes para utilizarlo debidamente en su aplicación específica. Se deben utilizar únicamente repuestos y accesorios fabricados según la especificación de Beijer Electronics AB.

BEIJER ELECTRONICS AB NO SE RESPONSABILIZA POR DAÑOS DIRECTOS O INDIRECTOS EN VIRTUD DE LA INSTALACIÓN, USO O REPARACIÓN DE ESTE EQUIPO.

# Instalación

## Tensión de alimentación

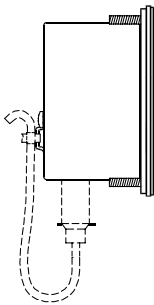
### ¡ATENCIÓN!

No aplique tensión invertida. Causaría avería permanente.

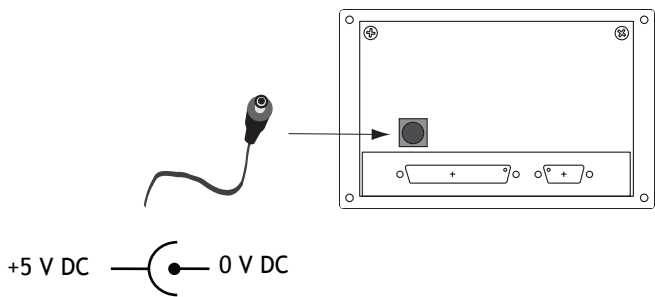
### ¡ATENCIÓN!

Comprobar que el terminal y el sistema controlador tengan la misma conexión eléctrica a tierra (nivel de tensión de referencia), de lo contrario pueden producirse errores en la comunicación.

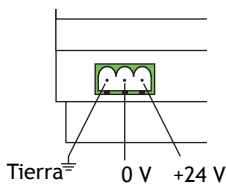
#### CIMREX 5



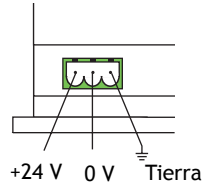
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

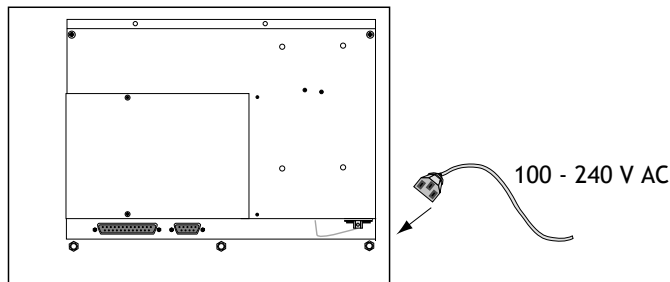


#### CIMREX 67, 69, 69T

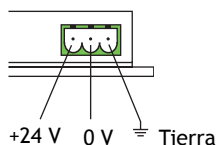


La longitud máxima del cable de alimentación eléctrica de 24 V DC es de 10 metros.

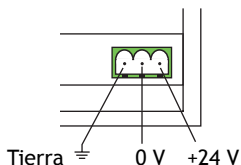
## CIMREX 90, 91



### CIMREX 90D



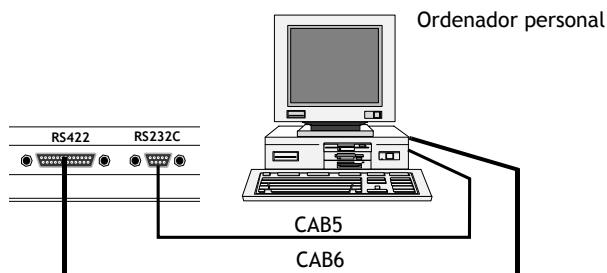
### CIMREX 91D



## Conexión de una impresora

La impresora debe estar equipada de un interfaz serie y debe disponer del juego de caracteres IBM. Consulte el manual de la impresora para una correcta configuración. Si desea conectar el terminal a una impresora con un interfaz paralelo debe utilizar la tarjeta de expansión IFC PI. Ver el manual de la tarjeta para más información.

## Conexión a un ordenador personal



Para programar el terminal se recomienda el uso del software del PC. Para instalarlo consulte el manual específico del producto. Los parámetros en el terminal y en el software del PC deben ajustarse de la misma manera.



# Consignes de sécurité

## Généralités

- Lire attentivement les consignes de sécurité.
- Contrôler la livraison afin de détecter les éventuels dommages dus au transport. Contacter le fournisseur au plus vite en cas de découverte de dommages.
- Le terminal remplit les exigences de l'article 4 de la directive sur la compatibilité électromagnétique 89/336/CEE.
- Ne pas utiliser le terminal dans un environnement présentant un risque élevé d'explosion.
- Le fournisseur décline toute responsabilité en cas de modification ou de reconstruction de l'équipement.
- Utiliser uniquement des pièces de rechange et des accessoires fabriqués conformément aux spécifications du fournisseur.
- Lire attentivement les instructions d'installation et d'utilisation avant de monter, d'utiliser ou de réparer le terminal.
- Un montage incorrect de la batterie peut entraîner un danger d'explosion. Utiliser uniquement des batteries recommandées par le fournisseur.
- Ne jamais verser de liquide dans les fentes et trous du terminal. Cela risque de déclencher un incendie ou l'équipement risque de devenir conducteur de courant.
- Le terminal doit être manipulé par des personnes ayant reçu une formation adéquate.

## Lors de l'installation

- Le terminal est conçu pour une installation fixe sur une surface plane.
- Placer le terminal sur une surface solide pendant l'installation. Lâcher ou faire tomber le terminal risque de l'endommager.
- Installer le terminal conformément aux instructions d'installation fournies.
- La mise à la terre doit être effectuée conformément aux instructions d'installation fournies.
- L'installation doit être effectuée par des personnes ayant reçu une formation adéquate.
- Les câbles de haute tension, de signaux et de tension doivent être séparés.
- S'assurer que la tension et la polarité de la source d'alimentation sont correctes avant de mettre le terminal sous tension.
- Les ouvertures du boîtier sont destinées à permettre la circulation de l'air et ne doivent pas être recouvertes.
- Ne pas placer le terminal à un endroit où il risque d'être exposé à de forts champs magnétiques.
- Ne pas monter le terminal à un endroit où il est exposé à la lumière directe du soleil.
- Le cas échéant, les équipements périphériques utilisés doivent être appropriés.
- Certains modèles de terminaux sont équipés d'un film laminé sur l'écran d'affichage afin de minimiser le risque de rayures. Retirer prudemment le film afin d'éviter toute électricité statique risquant d'endommager le terminal.

## **UL installation**

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Lors de l'utilisation**

- Maintenir le terminal propre.
- Les fonctions d'arrêt d'urgence et autres fonctions de sécurité ne doivent pas être commandées depuis le terminal.
- Les touches, l'écran d'affichage, etc., ne doivent pas entrer en contact avec des objets pointus.
- En cas de panne de l'éclairage arrière, le terminal est encore utilisable ; il enregistre les pressions de bouton et les saisies via l'écran tactile.

## **Maintenance et entretien**

- La validité de la garantie est conforme à l'accord.
- Utiliser un détergent neutre et un chiffon doux pour nettoyer l'écran d'affichage et l'avant.
- Les réparations doivent être effectuées par des personnes ayant reçu une formation adéquate.

## **Lors du démontage et de la mise au rebut**

- Le recyclage du terminal ou de ses pièces doit être effectué conformément aux réglementations en vigueur dans le pays concerné.
- Noter que les composants suivants contiennent des substances pouvant être nuisibles à la santé et à l'environnement : batterie au lithium, condensateur électrolytes et affichage.

Lire le manuel d'installation en entier avant d'installer et d'utiliser l'équipement. L'équipement doit être installé, utilisé et réparé par des personnes ayant reçu une formation adéquate. Beijer Electronics AB décline toute responsabilité en cas de modification ou de reconstruction de l'équipement. En raison du grand nombre de domaines d'utilisation de cet équipement, l'utilisateur doit acquérir lui-même des connaissances suffisantes à l'utilisation correcte de l'équipement pour son application spécifique. Utiliser uniquement des pièces de rechange et accessoires fabriqués selon les spécifications de Beijer Electronics AB.

BEIJER ELECTRONICS AB DÉCLINE TOUTE RESPONSABILITÉ POUR TOUT DOMMAGE DIRECT OU INDIRECT SURVENU AU COURS DE L'INSTALLATION, L'UTILISATION OU LA RÉPARATION DE CET ÉQUIPEMENT.

# Installation

## Alimentation

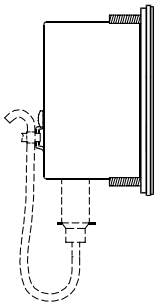
### ATTENTION!

Ne pas effectuer une inversion de tension cela causerais une destruction de l'appareil.

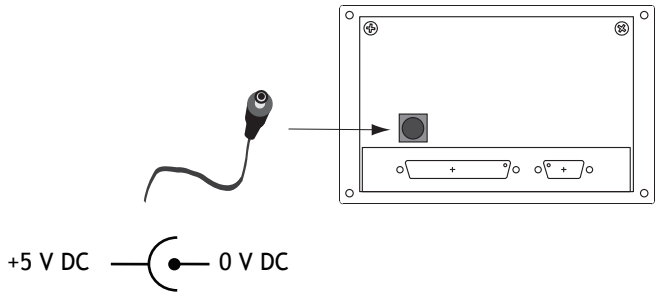
### ATTENTION!

Vérifier que le terminal et le système de commande ont la même mise à la terre électrique (niveau de tension de référence). Sinon, des erreurs de communication risquent de se produire.

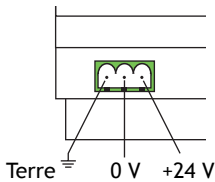
#### CIMREX 5



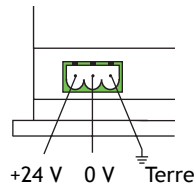
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

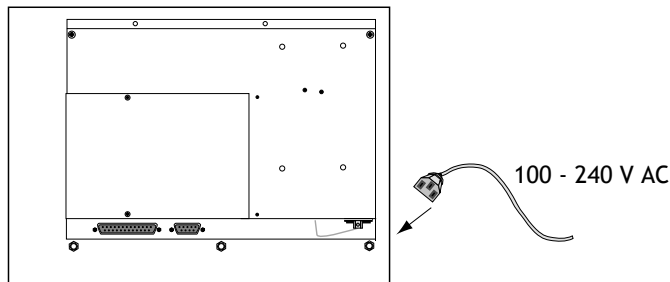


#### CIMREX 67, 69, 69T

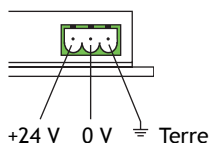


*La longueur maximale du câble d'alimentation électrique en 24 VCC est de 10 mètres.*

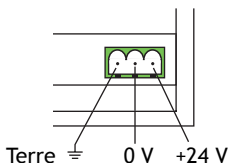
## CIMREX 90, 91



### CIMREX 90D



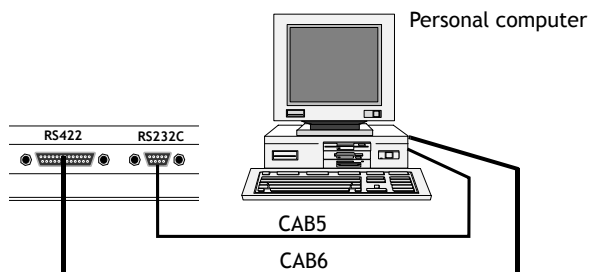
### CIMREX 91D



## Raccordement à une imprimante

L'imprimante devra posséder un interface série et être équipée avec un ensemble de caractère IBM. Se référer au manuel de l'imprimante pour une configuration correcte. Si vous voulez connecter le pupitre à l'imprimante avec une uaison paralelee vous devez utiliser la carte d'extension IFC PI. Consultez le manuel pour le IFC PI pour plus d'informations.

## Raccordement à un PC



Pour programmer le terminal, il est recommandé d'utiliser le logiciel PC. Pour installer le logiciel PC référez-vous au manuel de ce produit. Il faut le paramétrage du logiael PC et du terminal soient les mênues.

# ΠΡΟΦΥΛΑΞΕΙΣ ΑΣΦΑΛΕΙΑΣ

## ΓΕΝΙΚΑ

- Διάβαστε προσεκτικά την οδηγία ασφαλείας.
- Ελέγξτε για τυχόν ζημιά κατά την μεταφορά. Εάν ανιχνευθεί ζημιά, ειδοποιήστε τον προμηθευτή το ταχύτερο δυνατόν.
- Η συσκευή πληρεί τις απαιτήσεις του άρθρου 4 της οδηγίας 89/336/EEC (EMC).
- Μη χρησιμοποιείτε την συσκευή σε περιβάλλον με εύφλεκτα ή εκρηκτικά υλικά.
- Ο κατασκευαστής δεν φέρει ευθύνη για τροποποιημένες, μεταποιημένες ή ανακατασκευασμένες συσκευές.
- Χρησιμοποιείτε μόνο υλικά και αξεσουάρ , κατασκευασμένα σύμφωνα με τις προδιαγραφές του κατασκευαστή.
- Διαβάστε προσεκτικά τις οδηγίες εγκατάστασης και λειτουργίας πριν από την εγκατάσταση, χρήση ή επισκευή της συσκευής.
- Η λανθασμένη αντικατάσταση της μπαταρίας μπορεί να οδηγήσει σε έκρηξη. Χρησιμοποιήστε μόνο μπαταρίες συνιστώμενες από τον κατασκευαστή.
- Ποτέ μην χύνετε υγρό σε κανένα από τα ανοίγματα της συσκευής. Μπορεί να προκαλέσει φωτιά ή ηλεκτρικό σοκ.
- Μόνο ειδικευμένο προσωπικό θα πρέπει να χειρίζεται τη συσκευή

## ΚΑΤΑ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ

- Η συσκευή είναι σχεδιασμένη για σταθερή τοποθέτηση σε επίπεδη επιφάνεια.
- Τοποθετήστε τη μονάδα σε σταθερή επιφάνεια κατά την εγκατάσταση. Πέσιμο ή πτώση μπορεί να προκαλέσει ζημιά.
- Τοποθετήστε τη συσκευή σύμφωνα με τις συνοδεύουσες οδηγίες εγκατάστασης.
- Γειώστε τη συσκευή σύμφωνα με τις συνοδεύουσες οδηγίες εγκατάστασης.
- Μόνο ειδικευμένο προσωπικό θα πρέπει να εγκαταστήσει τη συσκευή.
- Διαχωρίστε τα καλώδια υψηλής τάσης, σήματος και τροφοδοσίας.
- Βεβαιωθείτε ότι η τάση και η πολικότητα της τροφοδοσίας είναι σωστή πριν συνδεθεί ή συσκευή με την τροφοδοσία.
- Τα ανοίγματα στο περίβλημα της συσκευής είναι για απαγωγή θερμότητας. Μην καλύπτετε αυτά τα ανοίγματα.
- Μην τοποθετείτε τη συσκευή σε περιβάλλον που μπορεί να εκτεθεί σε ισχυρά μαγνητικά πεδία.
- Μην τοποθετείτε τη συσκευή εκτεθειμένη στον ήλιο.
- Ο περιφερειακός εξοπλισμός πρέπει να είναι κατάλληλος για την εφαρμογή.
- Μερικά μοντέλα της συσκευής έχουν ένα λεπτό φιλμ επάνω στην οθόνη για αποφυγή γρατσουνιών. Για αποφυγή στατικού ηλεκτρισμού που μπορεί να βλάψει τη συσκευή, αφαιρέστε προσεκτικά το φιλμ.

## ΕΓΚΑΤΑΣΤΑΣΗ UL

- Η καλωδίωση της τροφοδοσίας και των εισόδων/ εξόδων πρέπει να είναι σύμφωνη με τις μεθόδους καλωδίωσης για CLASS 1, DIVISION 2 (ARTICLE 501 – 4 CD) του Εθνικού Ηλεκτρικού Κώδικα, NFPA 70) και σύμφωνα με την αρχή που έχει τη δικαιοδοσία.

## ΚΑΤΑ ΤΗΝ ΧΡΗΣΗ

- Διατηρείτε την συσκευή καθαρή.
- Επείγουσα διακοπή και άλλες λειτουργίες ασφαλείας μπορεί να μην ελέγχονται από την συσκευή.
- Μην αγγίζετε τα πλήκτρα, οθόνες κτλ με αιχμηρά αντικείμενα.
- Σε περίπτωση αποτυχίας του εσωτερικού φωτισμού, η συσκευή παραμένει λειτουργική και ανταποκρίνεται στην πίεση κομβίων και εισόδων μέσω της οθόνης αφής.

## SERVICE ΚΑΙ ΣΥΝΤΗΡΗΣΗ

- Ισχύει η συμφωνημένη εγγύηση
- Καθαρίζετε την οθόνη και την πρόσοψη με μαλακό πανί και ελαφρύ καθαριστικό
- Μόνο ειδικευμένο προσωπικό θα πρέπει να κάνει επισκευές .

## ΔΙΑΛΥΣΗ ΚΑΙ ΑΝΑΚΥΚΛΩΣΗ

- Η συσκευή ή μέρος της , θα πρέπει να ανακυκλώνονται σύμφωνα με τις κατά τόπους κανονισμούς.
- Τα παρακάτω εξαρτήματα περιέχουν ουσίες που μπορεί να είναι επιβλαβείς στην υγεία και το περιβάλλον : Μπαταρία λιθίου, ηλεκτρολυτικός πυκνωτής και οθόνη.

Παρακαλούμε , διαβάστε ολόκληρο το εγχειρίδιο εγκατάστασης πριν κάνετε εγκατάσταση και χρήση της συσκευής. Μόνο ειδικευμένο προσωπικό μπορεί να εγκαταστήσει, λειτουργήσει ή επισκευάσει την συσκευή. Η Beijer Electronics AB δεν φέρει ευθύνη για τροποποιημένες, μεταποιημένες ή ανακατασκευασμένες συσκευές. Λόγω του ότι η συσκευή έχει μια ευρεία γκάμα εφαρμογών, οι χρήστες θα πρέπει να αποκτήσουν την κατάλληλη γνώση για σωστή χρήση της συσκευής στην συγκεκριμένη εφαρμογή. Θα πρέπει να χρησιμοποιούνται μόνο υλικά και αξεσουάρ που έχουν κατασκευαστεί σύμφωνα με τις προδιαγραφές που έχουν τεθεί από την Beijer Electronics AB.

Η Beijer Electronics AB ΔΕΝ ΘΑ ΕΙΝΑΙ ΥΠΟΛΟΓΗ ΣΕ ΚΑΝΕΝΑ ΓΙΑ ΟΠΟΙΑΔΗΠΟΤΕ ΑΜΕΣΗ, ΕΜΜΕΣΗ, ΕΙΔΙΚΗ, ΣΥΜΠΤΩΜΑΤΙΚΗ Ή ΕΠΑΚΟΛΟΥΘΗ ΖΗΜΙΑ, ΩΣ ΑΠΟΤΕΛΕΣΜΑ ΤΗΣ ΕΓΚΑΤΑΣΤΑΣΗΣ, ΧΡΗΣΗΣ Ή ΕΠΙΣΚΕΥΗΣ ΑΥΤΗΣ ΤΗΣ ΣΥΣΚΕΥΗΣ, ΕΙΤΕ ΕΑΝ ΟΔΗΓΕΙ ΣΕ ΒΛΑΒΗ, ΣΥΜΒΑΣΗ Ή ΑΛΛΙΩΣ.

Η ΜΟΝΗ ΑΠΟΚΑΤΑΣΤΑΣΗ ΓΙΑ ΤΟΝ ΠΕΛΑΤΗ ΘΑ ΕΙΝΑΙ Η ΕΠΙΣΚΕΥΗ , ΑΝΤΙΚΑΤΑΣΤΑΣΗ Ή ΕΠΙΣΤΡΟΦΗ ΧΡΗΜΑΤΩΝ ΤΗΣ ΑΞΙΑΣ ΑΓΟΡΑΣ , ΚΑΙ Η ΕΠΙΛΟΓΗ ΤΗΣ ΕΦΑΡΜΟΖΟΜΕΝΗΣ ΚΑΛΥΨΗΣ ΒΡΙΣΚΕΤΑΙ ΜΟΝΟ ΣΤΗΝ ΔΙΑΚΡΙΤΙΚΗ ΕΥΧΕΡΕΙΑ ΤΗΣ BEIJER ELECTRONICS AB.

# ΕΓΚΑΤΑΣΤΑΣΗ

## ΑΠΑΙΤΗΣΕΙΣ ΤΑΣΗΣ

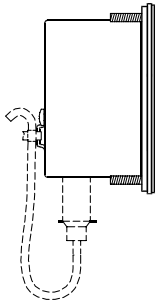
### ΠΡΟΣΟΧΗ :

μη εφαρμόζετε αντίστροφη τάση, μπορεί να προκαλέσει μόνιμη ζημιά.

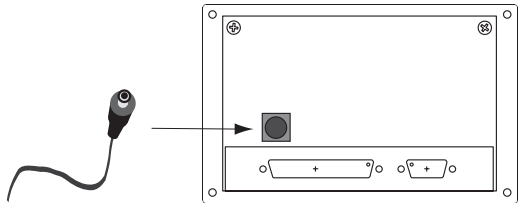
### ΠΡΟΣΟΧΗ :

σιγουρέψτε ότι η συσκευή και το σύστημα τάσης έχουν την ίδια ηλεκτρική γείωση (επίπεδο τάσης αναφοράς) , ειδάλλως μπορούν να συμβούν σφάλματα στην επικοινωνία.

#### CIMREX 5

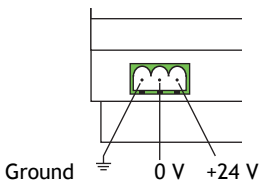


#### CIMREX 10

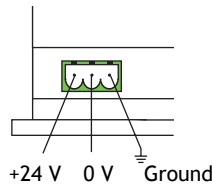


+5 V DC — ( ) — 0 V DC

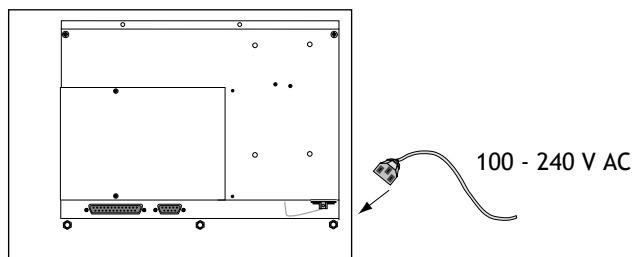
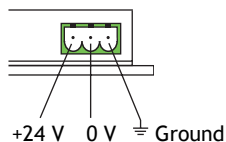
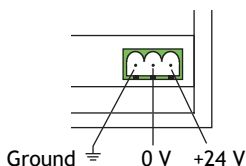
#### CIMREX 12, 20, 30, 41, 60, 70



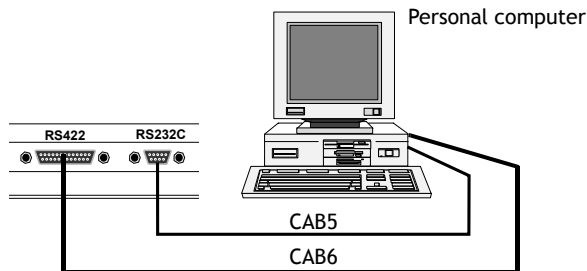
#### CIMREX 67, 69, 69T



Μέγιστο μήκος καλωδίου τροφοδοσίας 24 VDC : 10 μέτρα.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****ΣΥΝΔΕΣΗ ΣΕ ΕΚΤΥΠΩΤΗ**

Ο εκτυπωτής θα πρέπει να έχει σειριακό interface και να είναι εφοδιασμένος με το σετ χαρακτήρων IBM. Ανατρέξτε στο εγχειρίδιο του εκτυπωτή για την σωστή διαμόρφωση. Εάν θέλετε να συνδέσετε τη συσκευή σε εκτυπωτή με παράλληλο interface, θα πρέπει να χρησιμοποιήσετε την κάρτα επέκτασης IFC PI. Δείτε το εγχειρίδιο της IFC PI για περισσότερες πληροφορίες.

**ΣΥΝΔΕΣΗ ΣΕ ΠΡΟΣΩΠΙΚΟ ΗΛΕΚΤΡΟΝΙΚΟ ΥΠΟΛΟΓΙΣΤΗ**

Για προγραμματισμό της συσκευής συνιστάται η χρήση του λογισμικού προγραμματισμού. Για την εγκατάσταση του λογισμικού προγραμματισμού, δείτε το εγχειρίδιο του προϊόντος. Οι παράμετροι επικοινωνίας στη συσκευή και στο λογισμικό προγραμματισμού θα πρέπει να τοποθετηθούν με τον ίδιο τρόπο.



# Norme di sicurezza

## Generalità

- Leggere attentamente le norme di sicurezza.
- Controllare che la merce consegnata non abbia subito danni durante il trasporto; in caso contrario comunicare al più presto i danni rilevati al fornitore.
- Il terminale soddisfa i requisiti stabiliti dall'art. 4 della direttiva EMC 89/336/CEE.
- Non utilizzare il terminale in un ambiente in cui sussiste un forte rischio di esplosione.
- Il fornitore non si assume la responsabilità per attrezzature modificate, manomesse o ricostruite.
- Utilizzare esclusivamente ricambi ed accessori prodotti secondo le specifiche del fornitore.
- Leggere attentamente le istruzioni per l'installazione e l'uso prima di installare, utilizzare o riparare il terminale.
- In caso di montaggio errato della batteria, sussiste il pericolo di esplosione. Utilizzare esclusivamente le batterie raccomandate dal fornitore.
- Non versare mai liquidi nelle aperture o nei fori del terminale, poiché potrebbero provocare incendi o trasformare l'attrezzatura in elemento elettroconduttore.
- Il terminale deve essere utilizzato da personale addestrato.

## Durante l'installazione

- Il terminale è costruito per installazioni fisse su superfici piane.
- Durante l'installazione, posizionare il terminale su un piano stabile. In caso di caduta, il terminale potrebbe danneggiarsi.
- Installare il terminale secondo le istruzioni per l'installazione allegate.
- Effettuare la messa a terra secondo le istruzioni per l'installazione allegate.
- L'installazione deve essere effettuata da personale addestrato.
- Tenere separati i cavi di alta tensione, segnale e tensione.
- Prima di dare tensione al terminale, assicurarsi che la tensione e la polarità di rete siano corrette.
- Le aperture presenti nell'involucro sono destinate alla circolazione dell'aria e non devono essere coperte.
- Non posizionare il terminale in luoghi in cui sussiste il rischio di forti campi elettromagnetici.
- Non installare il terminale in modo che sia esposto a luce solare diretta.
- L'attrezzatura complementare deve essere adatta all'ambiente in cui è utilizzata.
- Il display di alcuni modelli di terminali è protetto da una pellicola antigraffio. Per evitare la formazione di elettricità statica che potrebbe danneggiare il terminale, rimuovere con cura la pellicola.

## **UL installation**

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Durante l'uso**

- Tenere il terminale pulito.
- Non attivare le funzioni di arresto di emergenza o altre funzioni di sicurezza dal terminale.
- Non utilizzare oggetti affilati su tasti, display ecc.
- In caso di errore di illuminazione dello sfondo, il terminale è ancora operativo e registra le pressioni dei pulsanti ed i dati inseriti per mezzo del touch screen.

## **Assistenza e manutenzione**

- La garanzia segue le clausole del contratto.
- Per pulire il display e il frontalino, utilizzare detergente neutro ed un panno morbido.
- Le riparazioni devono essere effettuate da personale addestrato.

## **In sede di smontaggio e rottamazione**

- Il riciclaggio del terminale o di parti di esso deve avvenire in base alla vigente legislazione nazionale.
- Ricordare che i seguenti componenti contengono sostanze nocive per la salute e l'ambiente: batterie al litio, condensatori ad elettrolito e display.

Leggere il manuale di installazione prima di installare e utilizzare l'attrezzatura. L'attrezzatura deve essere installata, utilizzata e riparata da personale addestrato. La Beijer Electronics AB non si assume la responsabilità per attrezzature modificate, manomesse o ricostruite. Poiché l'attrezzatura copre un vasto numero di applicazioni, spetta all'utente procurarsi personalmente le conoscenze sufficienti per il corretto utilizzo dell'attrezzatura nella propria applicazione. Utilizzare esclusivamente ricambi ed accessori prodotti secondo le specifiche della Beijer Electronics AB.

LA BEIJER ELECTRONICS AB DECLINA OGNI RESPONSABILITA' PER DANNI DIRETTI O INDIRETTI INSORTI IN SEDE DI INSTALLAZIONE, UTILIZZO O RIPARAZIONE DELLA PRESENTE ATTREZZATURA.

# Installazione

## Alimentazione

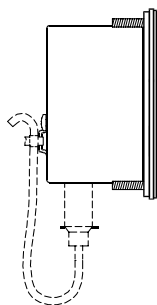
### Attenzione!

Non invertire la polarità in quanto si causano danni permanenti.

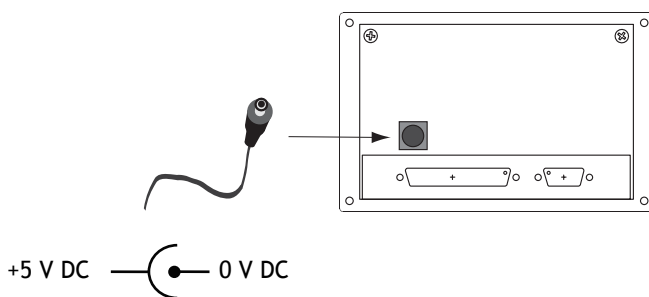
### Attenzione!

Accertarsi che il terminale ed il controller abbiano lo stesso punto di massa (livello di tensione di riferimento), altrimenti possono verificarsi errori di comunicazione.

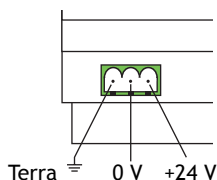
#### CIMREX 5



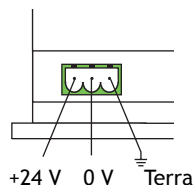
#### CIMREX 10



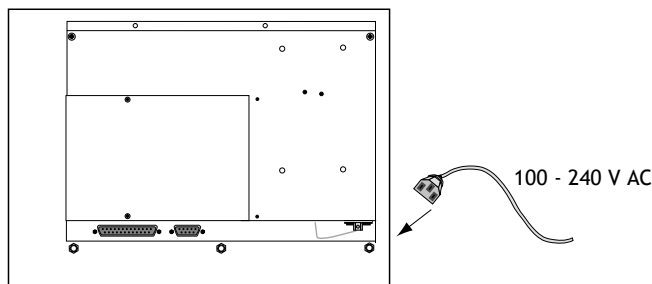
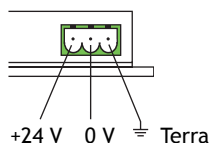
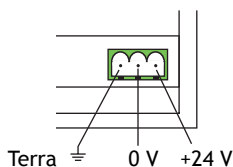
#### CIMREX 12, 20, 30, 41, 60, 70



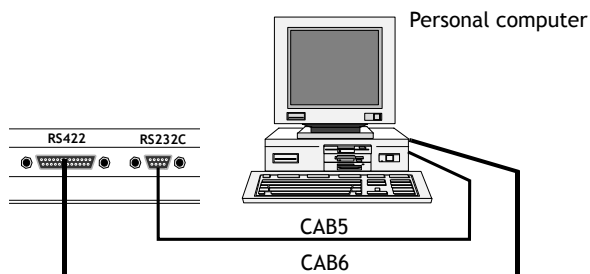
#### CIMREX 67, 69, 69T



*La lunghezza massima del cavo di alimentazione 24 V DC è 10 metri.*

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Connessione ad una stampante**

La stampante deve avere l'interfaccia seriale e deve essere IBM compatibile. Fare riferimento al manuale della stampante per la configurazione corretta. Se si vuole collegare il terminale ad una stampante parallela, si usare la scheda di espansione IFC PI. Per ulteriori informazioni consultare il manuale della IFC PI.

**Connessione ad un Personal computer**

Per programmare il terminale si deve di usare il Software relativo. Per installare il software vedere il manuale del prodotto. I Parametri di comunicazione del terminale e del software di programmazione devono essere settati nello stesso modo.

# Veiligheidsvoorschriften

## Algemeen

- Lees de veiligheidsvoorschriften nauwkeurig door.
- Controleer de geleverde goederen op eventuele transportschade. Breng bij schade de leverancier zo snel mogelijk op de hoogte.
- De terminal voldoet aan de eisen als gesteld in artikel 4 in de EMC-richtlijn 89/336/EEC.
- Gebruik de terminal niet in een explosieve omgeving.
- De leverancier kan niet aansprakelijk worden gesteld voor aangepaste, gewijzigde of omgebouwde uitrusting.
- Alleen reserveonderdelen en accessoires die conform de specificaties van de leverancier zijn gefabriceerd, mogen worden gebruikt.
- Lees de installatie- en gebruikshandleiding nauwkeurig door, voordat de terminal wordt geïnstalleerd, bediend of gerepareerd.
- Bij verkeerde plaatsing van de batterij bestaat de kans op ontploffing. Gebruik alleen batterijen die door de leverancier worden aanbevolen.
- Er mag nooit vloeistof via spleten of openingen in de terminal komen. Dit kan brand of kortsluiting veroorzaken.
- De terminal moet door deskundig personeel worden bediend.

## Installatie

- De terminal is geconstrueerd voor vaste installaties op een vlakke ondergrond.
- Plaats de terminal tijdens de installatie op een vaste ondergrond. Als de terminal kantelt of valt, kan er schade ontstaan.
- Installeer de terminal volgens de bijgeleverde installatiehandleiding.
- De aarding dient volgens de bijgeleverde installatiehandleiding te geschieden.
- De installatie dient door deskundig personeel te worden uitgevoerd.
- Scheid hoogspannings-, signaal- en spanningskabels.
- Ga na of de spanning en polariteit van de krachtbron juist zijn, voordat de terminal van spanning wordt voorzien.
- De openingen in de behuizing zijn bedoeld voor de luchtcirculatie en mogen niet worden afgedekt.
- Plaats de terminal niet op plaatsen waar de kans bestaat op sterke magnetische velden.
- Monteer de terminal niet in direct zonlicht.
- De randapparatuur moet geschikt zijn voor de gebruikte plaats.
- Bij bepaalde modellen van de terminal is gelamineerd folie aangebracht op het display om de kans op krassen te minimaliseren. Ter voorkoming van statische elektriciteit wat schade aan de terminal kan veroorzaken, moet het folie voorzichtig worden verwijderd.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## Gebruik

- Houd de terminal schoon.
- Bedien de noodstopfuncties of andere veiligheidsfuncties niet vanaf de terminal.
- Bewerk toetsen, display, e.d. niet met scherpe voorwerpen.
- Indien zich een storing in het achtergrondlicht voordoet, kan de terminal nog steeds gebruikt worden. Via het touchscreen worden het drukken op de knoppen en andere vormen van invoer geregistreerd.

## Service en onderhoud

- De garantie geldt zoals overeengekomen.
- Gebruik een mild schoonmaakmiddel en een zachte doek voor het reinigen van display en front.
- Reparaties mogen alleen door deskundig personeel worden uitgevoerd.

## Demontage en verschroten

- Recycling van (delen van) de terminal dient in overeenstemming te zijn met de geldende regelgeving in het betreffende land.
- Let op dat de volgende onderdelen stoffen bevatten die schadelijk kunnen zijn voor gezondheid en milieu: lithiumbatterij, elektrolysecondensatoren en display.

Lees de hele installatiehandleiding door voordat de uitrusting wordt geïnstalleerd en gebruikt. De uitrusting dient geïnstalleerd, gebruikt en gerepareerd te worden door deskundig personeel. Beijer Electronics AB is niet verantwoordelijk voor aangepaste, gewijzigde of omgebouwde uitrusting. Vanwege het grote aantal verschillende toepassingsgebieden voor de uitrusting dient de gebruiker zelf voldoende kennis te vergaren voor het juiste gebruik van zijn specifieke toepassing. Alleen reserveonderdelen en accessoires die zijn gefabriceerd conform de specificaties van Beijer Electronics AB mogen worden gebruikt.

BEIJER ELECTRONICS AB KAN NIET AANSPRAKELIJK WORDEN GESTELD VOOR DIRECTE OF INDIRECTE SCHADE ALS GEVOLG VAN DE INSTALLATIE, HET GEBRUIK OF REPARATIES VAN DEZE UITRUSTING.

# Installatie

## Voltage vereiste

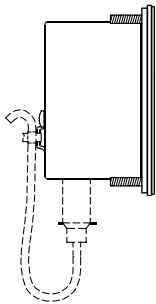
### WAARSCHUWING:

Verwissel nooit de polariteit van de spanning; dit kan blijvende schade veroorzaken.

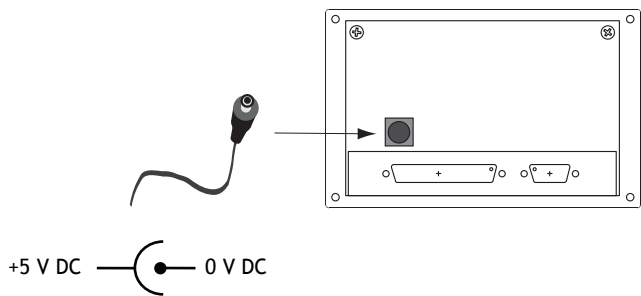
### WAARSCHUWING:

De terminal en het besturingssysteem dienen op dezelfde manier geaard te zijn (niveau referentiespanning). Indien dit niet het geval is kunnen er fouten in de communicatie optreden.

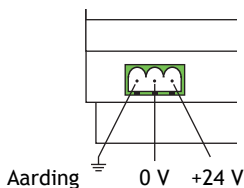
#### CIMREX 5



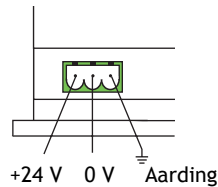
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

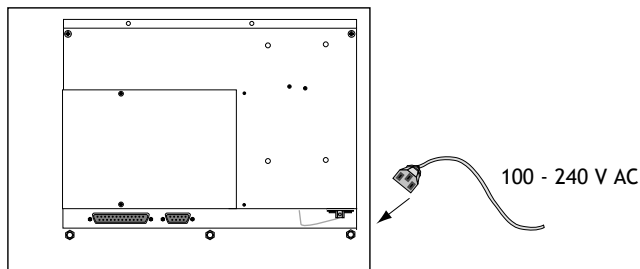


#### CIMREX 67, 69, 69T

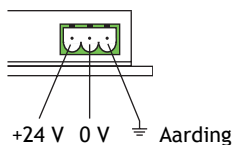


De maximumlengte van de 24 V DC stroomtoevoerkabel is 10 meter.

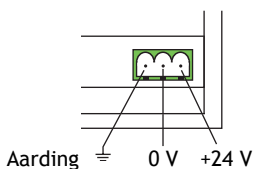
## CIMREX 90, 91



### CIMREX 90D



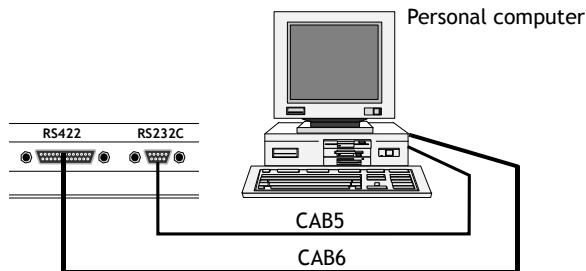
### CIMREX 91D



## Aansluiting op een printer

De printer moet voorzien zijn van een seriële interface en een IBM karakterset. Raadpleeg de printerhandleiding voor de juiste configuratie. Indien de terminal wordt aangesloten op een parallele interFace, dient er gebruik te worden gemaakt van de uitbreidingsmodule IFC PI. Zie de manual van de IFC PI voor verdere informatie.

## Verbinding met een personal computer



Om de terminal te programmeren wordt het aanbevolen om de PC software te gebruiken. Zie de handleiding van dit product om de PC software te installeren. De communicatie parameters in het bedieningspaneel en in de PC software dienen op dezelfde wijze ingesteld te worden.



# Sikkerhetsforskrifter

## Generelt

- Les nøye gjennom sikkerhetsforskriftene.
- Kontroller leveransen for å oppdage eventuelle transportskader. Underrett leverandøren snarest dersom det oppdages skader.
- Terminalen oppfyller kravene ifølge artikkel 4 i EMC-direktivet 89/336/EEC.
- Ikke bruk terminalen i et miljø der det er stor risiko for eksplosjoner.
- Leverandøren tar ikke ansvar for modifisert, endret eller ombygd utstyr.
- Det må kun brukes reservedeler og tilbehør lagd ifølge leverandørens spesifikasjoner.
- Les installerings- og brukerbeskrivelsen nøye før terminalen installeres, brukes eller repareres.
- Det kan oppstå fare for eksplosjon dersom batteriet monteres feil. Bruk kun batterier som anbefales av leverandøren.
- Det må aldri helles væske i sprekker eller hull i terminalen. Dette kan forårsake brann eller at utstyret blir strømførende.
- Terminalen skal håndteres av personer med adekvat opplæring.

## Ved installering

- Terminalen er konstruert for faste installasjoner på en plan flate.
- Plasser terminalen på et stabilt underlag under installeringen. Hvis terminalen mistes eller faller ned, kan det oppstå skader.
- Installer terminalen ifølge vedlagte installeringsbeskrivelse.
- Jording skal skje ifølge vedlagte installeringsbeskrivelse.
- Installering skal utføres av personer med adekvat opplæring.
- Høyspennings-, signal- og spenningskabler må separeres.
- Slå fast at spenning og polaritet fra kraftkilden er korrekt før terminalen settes under spenning.
- Åpningene i dekelet er ment til luftsirkulasjon og må ikke tildekkes.
- Ikke plasser terminalen der det er risiko for at den utsettes for kraftige magnetfelt.
- Terminalen bør ikke monteres i direkte sollys.
- Periferutstyr må være egnet der det brukes.
- Enkelte terminalmodeller har en laminert film over displayglasset for å redusere risikoen for riper. Trekk filmen forsiktig av for å unngå statisk elektrisitet som kan forårsake skader på terminalen.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## Ved bruk

- Hold terminalen ren.
- Nødstoppfunksjoner eller andre sikkerhetsfunksjoner må ikke styres fra terminalen.
- Taster, displayglass osv. må ikke påvirkes med spisse gjenstander.
- Ved feil på bakgrunnsbelysningen kan terminalen fortsatt brukes, og knappetrykk og inn-mating registreres via berøringsskjermen.

## Service og vedlikehold

- Garanti gjelder ifølge avtale.
- Bruk mildt rengjøringsmiddel og myk klut for å rengjøre displayglass og front.
- Reparasjoner skal utføres av personer med adekvat opplæring.

## Ved demontering og kassering

- Gjenvinning av terminalen eller deler av terminalen skal skje ifølge gjeldende regler i respektive land.
- Legg merke til at følgende komponenter inneholder stoffer som kan være skadelige for helse og miljø: litiumbatteri, elektrolyttkondensatorer samt display.

Les hele installeringshåndboken før utstyret installeres og brukes. Utstyret skal installeres, brukes og repareres av personer med adekvat opplæring. Beijer Electronics AB tar ikke ansvar for modifisert, endret eller ombygd utstyr. På grunn av det store antallet bruksområder for utstyret, må brukeren selv innhente tilstrekkelig kunnskap for å bruke dette riktig på sitt spesielle bruksområde. Det må kun brukes reservedeler og tilbehør lagd ifølge spesifikasjoner fra Beijer Electronics AB.

BEIJER ELECTRONICS AB FRASKRIVER SEG ALT ANSVAR FOR DIREKTE ELLER INDIREKTE SKADER SOM OPPSTÅR I FORBINDELSE MED INSTALLERING, BRUK ELLER REPARASJON AV DETTE UTSTYRET.

# Installasjon

## Spenningsforsyning

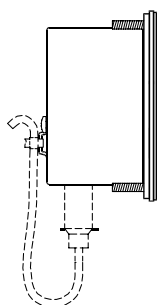
### ADVARSEL!

Tilkobling av feil spenningspolaritet, kan forårsake permanent ødeleggelse av utstyret.

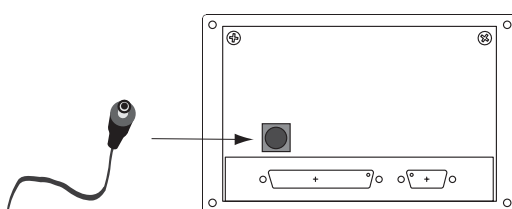
### ADVARSEL!

Påse at terminalen og kontrollersystemet har samme elektriske jording (referansespenningsnivå), ellers kan det oppstå feil i kommunikasjonen.

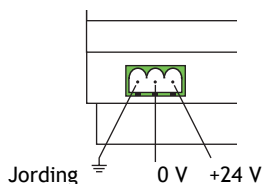
#### CIMREX 5



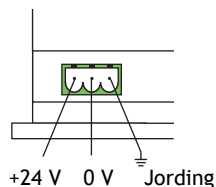
#### CIMREX 10



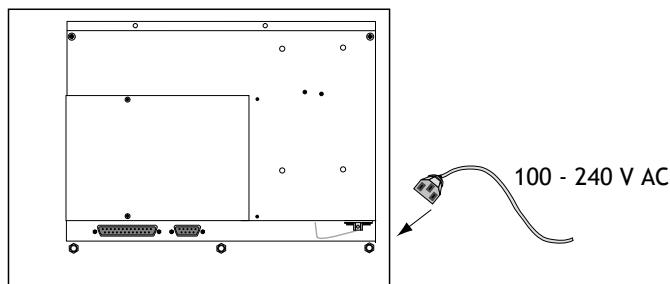
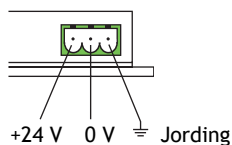
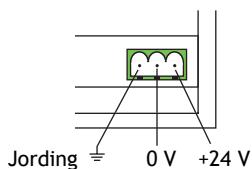
#### CIMREX 12, 20, 30, 41, 60, 70



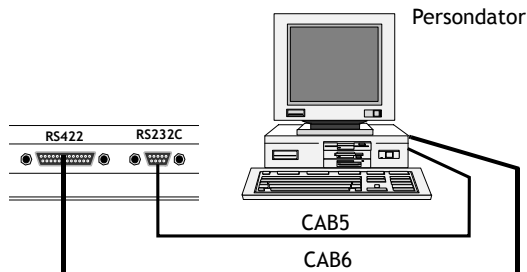
#### CIMREX 67, 69, 69T



Maksimal lengde på 24 V DC strømtilførselsledning er 10 meter.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Tilkobling skrivere**

Skriveren skal ha et serielt grensesnitt og være satt opp med IBM-tegnoppsett. Se skriverens manual for korrekt konfigurering. For tilkobling til skriver med parallellt grensesnitt benyttes ekspansjonskortet IFC PI- Se manualen for IFC PI for ytterligere informasjon.

**Tilkobling til PC**

Terminalen programmeres via programpakken CIMREX PROG som må være installert på PC'n. For installasjon se manual til CIMREX PROG. Kommunikasjonsparametrene i terminalen og i CIMREX PROG skal være innstilte på samme måte.

## Zalecane środki ostrożności

### Zasady ogólne

- Uważnie przeczytać wszystkie instrukcje dotyczące bezpieczeństwa.
- Sprawdzić, czy urządzenie nie uległo uszkodzeniu podczas transportu. W przypadku zauważenia uszkodzeń, jak najszybciej powiadomić o tym dostawcę.
- Produkt spełnia wytyczne artykułu 4 dyrektywy EMC 89/336/EEC dot. zgodności elektromagnetycznej urządzeń.
- Nie używać terminala w środowisku, w którym istnieje duże ryzyko wybuchu.
- Dostawca nie ponosi odpowiedzialności za sprzęt, który został w jakikolwiek sposób zmodyfikowany.
- Używać wyłącznie części i akcesoriów wyprodukowanych zgodnie ze specyfikacjami dostawcy.
- Przed zainstalowaniem, rozpoczęciem korzystania lub naprawą terminala uważnie przeczytać instrukcje instalacji i obsługi.
- Nieprawidłowa wymiana baterii grozi wybuchem. Należy korzystać wyłącznie z baterii zalecanych przez dostawcę.
- Nigdy nie wlewać żadnych płynów do otworów terminala. Grozi to pożarem lub porażeniem prądem elektrycznym.
- Terminal mogą obsługiwać wyłącznie wykwalifikowani pracownicy.

### Instalacja

- Terminal jest przeznaczony do instalacji stacjonarnej na płaskiej powierzchni.
- Podczas instalacji umieścić terminal na stabilnej płaszczyźnie. Upuszczenie grozi uszkodzeniem terminala.
- Terminal zainstalować zgodnie z załączoną instrukcją instalacji.
- Terminal uziemić zgodnie z załączoną instrukcją instalacji.
- Terminal mogą instalować wyłącznie wykwalifikowani pracownicy.
- Oddzielić przewody wysokiego napięcia, sygnałowe i zasilania.
- Przed podłączeniem terminala do gniazdka sieciowego sprawdzić, czy napięcie i biegunowość źródła zasilania są prawidłowe.
- Otwory w obudowie służą do cyrkulacji powietrza. Nie należy ich zakrywać.
- Nie ustawiać terminala w miejscach narażonych na działanie silnych pól magnetycznych.
- Nie instalować terminala w miejscu narażonym na bezpośrednie działanie promieni słonecznych.
- Sprzęt peryferyjny musi być odpowiedni do danego zastosowania.
- W niektórych typach terminali wyświetlacz pokryty jest folią ochronną, aby zapobiec zadrapaniom. Aby uniknąć zbierania się ładunków elektrostatycznych, które mogłyby uszkodzić terminal, należy ostrożnie zdjąć tę folię.

## **Zgodność ze standardami UL**

- Zasilanie, a także przewody urządzeń wejściowych i wyjściowych muszą być zgodne z metodami okablowania dla Klasy 1, Kategorii 2 (Artykuł 501-4 (b) Krajowego Kodeksu Elektrycznego, NFPA 70) oraz wytycznymi odpowiednich władz.

## **Eksplatacja**

- Utrzymywać terminal w czystości.
- Wyłącznikiem bezpieczeństwa i innymi funkcjami bezpieczeństwa nie można sterować z poziomu terminala.
- Nie dotykać klawiszy, ekranów itp. ostrymi przedmiotami.
- Pamiętać, że terminal reaguje na przyciskanie klawiszy oraz wprowadzanie danych za pośrednictwem ekranu dotykowego nawet wówczas, kiedy jego podświetlenie jest wyłączone.

## **Serwis i konserwacja**

- Terminal objęty jest gwarancją, której warunki określono w umowie.
- Wyświetlacz oraz pozostałe powierzchnie zewnętrzne czyścić za pomocą miękkiej tkaniny i łagodnego detergentu.
- Naprawy powierzać wyłącznie wykwalifikowanemu personelowi.

## **Demontaż i złomowanie**

- Terminal oraz jego części demontować i złomować zgodnie z przepisami obowiązującymi w kraju użytkowania.
- Niżej wymienione części zawierają substancje, które mogą stanowić zagrożenie dla zdrowia oraz środowiska naturalnego: bateria litowa, kondensator elektrolityczny i wyświetlacz.

Przed instalacją i rozpoczęciem eksploatacji niniejszego sprzętu należy zapoznać się z całym podręcznikiem instalacji. Niniejsze urządzenie mogą instalować, obsługiwać i naprawiać wyłącznie wykwalifikowani pracownicy. Beijer Electronics AB nie ponosi odpowiedzialności za sprzęt, który został w jakikolwiek sposób zmodyfikowany. Ze względu na szeroki zakres zastosowań niniejszego urządzenia, użytkownicy muszą zdobyć odpowiednią wiedzę na temat prawidłowej eksploatacji w określonym zakresie.

Należy używać wyłącznie części i akcesoriów wyprodukowanych zgodnie ze specyfikacjami firmy Beijer Electronics AB.

BEIJER ELECTRONICS AB NIE PONOSI ODPOWIEDZIALNOŚCI ZA SZKODY BEZPOŚREDNIE, POŚREDNIE, PRZYPADKOWE, SZCZEGÓLNE, MORALNE LUB WTÓRNE, BĘDĄCE SKUTKIEM INSTALACJI, EKSPLOATACJI LUB NAPRAWY NINIEJSZEGO SPRZĘTU, NIEZALEŻNIE OD TEGO, CZY WYNIKAJĄ ONE Z NARUSZENIA PRAWA CYWILNEGO, UMOWY CZY TEŻ Z INNYCH PRZYCZYŃ. NABYWCA MA PRAWO WYŁĄCZNIE DO NAPRAWY SPRZĘTU, JEGO WYMIANY LUB ZWROTU KOSZTÓW ZAKUPU; PRZY CZYM PRAWO WYBORU JEDNEGO SPOŚRÓD WYMIENIONYCH ROZWIĄZAŃ PRZYSŁUGUJE WYŁĄCZNIE FIRMIE BEIJER ELECTRONICS AB.

# Instalacja

## Napięcie zasilania

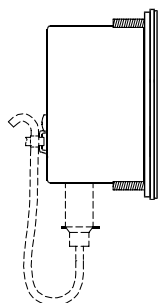
### UWAGA!

Nie należy stosować napięcia wstecznego, gdyż grozi to trwałym uszkodzeniem urządzenia.

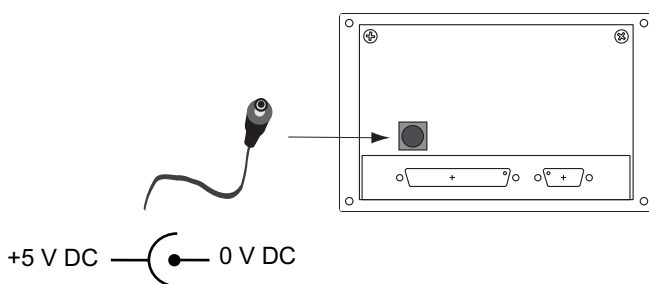
### UWAGA!

Należy sprawdzić, czy terminal i kontroler posiadają to samo uziemienie elektryczne (poziom napięcia odniesienia) w przeciwnym razie mogą wystąpić błędy w komunikacji.

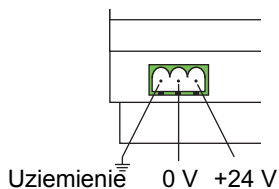
#### CIMREX 5



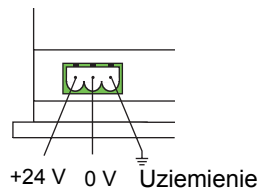
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

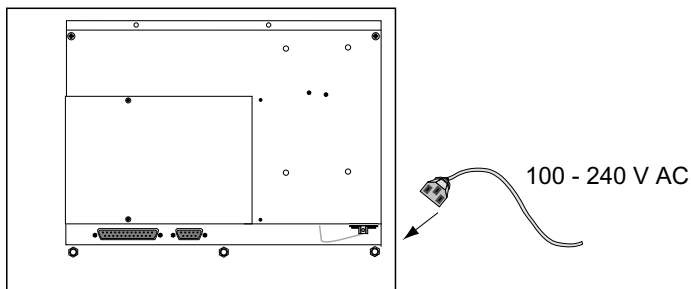


#### CIMREX 67, 69, 69T

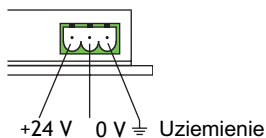


Przewód zasilania prądem stałym 24 V nie może być dłuższy niż 10 metrów.

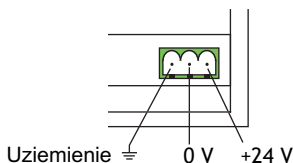
## CIMREX 90, 91



### CIMREX 90D



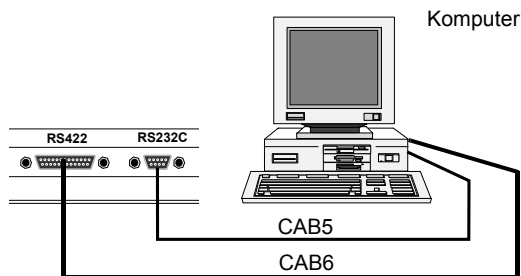
### CIMREX 91D



## Podłączanie do drukarki

Drukarka powinna posiadać szeregowy interfejs oraz zestaw czcionek IBM. Informacje na temat prawidłowej konfiguracji znajdują się w instrukcji drukarki. W przypadku podłączenia terminala do drukarki z interfejsem równoległym należy użyć karty rozszerzeń IFC PI. Więcej informacji znajduje się w instrukcji karty IFC PI.

## Podłączanie do komputera PC



Do programowania terminala zaleca się użyć oprogramowania PC. Informacje na temat instalacji oprogramowania PC znajdują się w załączonej do niego instrukcji. Parametry komunikacji terminala i oprogramowania PC powinny być ustawione w taki sam sposób.



# Instruções de segurança

## Generalidades

- Leia minuciosamente estas instruções de segurança.
- Verifique o conteúdo no acto da entrega quanto a eventuais danos de transporte. Comunique imediatamente ao fornecedor caso tenha encontrado algum dano.
- O terminal satisfaz as exigências contidas no artigo 4 da directiva CEM 89/336/CEE.
- Não utilize o terminal em ambientes com alto risco de explosões.
- O fornecedor não assume quaisquer responsabilidades por modificações, transformações ou conversões no equipamento.
- Só é permitida a utilização de peças sobresselentes e acessórios fabricados em conformidade com as especificações do fornecedor.
- Antes de instalar, utilizar ou efectuar reparações no terminal, leia atentamente as instruções de instalação e do utilizador.
- Poderão ocorrer situações de perigo de explosão se a bateria for montada incorrectamente. Utilize apenas as baterias recomendadas pelo fornecedor.
- Substâncias líquidas nunca poderão ser introduzidas em fendas ou aberturas do terminal. Tal prática poderá causar incêndios ou transformar o equipamento em condutor de electricidade.
- O terminal deverá ser manuseado por pessoas devidamente qualificadas.

## Ao instalar

- O terminal é projectado para utilização em instalações fixas, sobre superfície plana.
- Durante a instalação, posicione o terminal sobre uma base estável. Se o deixar cair ou se este sofrer uma queda, poderão ocorrer danos.
- Instale o terminal em conformidade com as instruções de instalação que acompanham o mesmo.
- A ligação à terra deverá ser efectuada conforme as instalações de instalação que acompanham o produto.
- A instalação deverá ser realizada por pessoal devidamente qualificado.
- Os cabos de alta tensão, de sinal e de tensão deverão ser separados.
- Certifique-se de que a tensão e polaridade da fonte de corrente eléctrica estão correctas antes de ligar a tensão.
- As aberturas na tampa destinam-se à circulação de ar e não poderão ser cobertas.
- Não posicione o terminal em lugares sob risco de exposição a fortes campos magnéticos.
- O terminal não deverá ser montado em local directamente exposto à luz solar.
- O equipamento periférico deverá adequar-se ao local em que é utilizado.
- Alguns modelos de terminal possuem uma película laminada, aplicada sobre o vidro do visor para reduzir o risco de arranhões. Para evitar electricidade estática que possa ocasionar danos ao terminal, remova com cuidado esta película.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## Ao utilizar

- Conserve o terminal limpo.
- As funções de parada de emergência não podem ser comandadas a partir do terminal.
- Teclas, vidro do visor, etc., não poderão ser submetidos à acção de objectos cortantes.
- Em caso de falha da luz posterior, o terminal continua a ser operável e regista premir de botões e entradas através do écran sensível ao toque.

## Assistência e manutenção

- A garantia tem validade conforme os termos constantes no documento de garantia.
- Utilize um agente de limpeza leve e um pano macio para limpar o vidro do visor e a parte frontal.
- As reparações deverão ser executadas por pessoal devidamente qualificado.

## Desmontagem e recolha à sucata

- A reciclagem do terminal ou suas partes deverão ser executadas em conformidade com as regras vigentes no país respectivo.
- Convém observar que os seguintes componentes contêm substâncias que podem ser prejudiciais à saúde e ao meio ambiente: baterias de lítio, condensadores electrolíticos e o visor.

Leia todo o conteúdo do manual de instalação antes do equipamento ser instalado e utilizado. O equipamento deverá ser instalado, utilizado e reparado por pessoal devidamente qualificado. A Beijer Electronics AB não assume quaisquer responsabilidades por equipamentos modificados, transformados ou convertidos. Devido ao grande número de sectores de aplicação do equipamento, o próprio utilizador deverá adquirir conhecimentos suficientes para utilizar correctamente o equipamento na sua aplicação especial. Unicamente peças sobresselentes e acessórios fabricados em conformidade com as especificações da Beijer Electronics AB poderão ser utilizados.

A BEIJER ELECTRONICS AB ISENTA-SE DE TODA E QUALQUER RESPONSABILIDADE POR DANOS DIRECTOS OU INDIRECTOS DECORRENTES DA INSTALAÇÃO, UTILIZAÇÃO OU REPARAÇÃO DESTE EQUIPAMENTO.

# Instalação

## Tensão de alimentação necessária

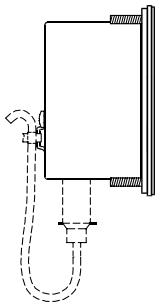
### Advertência:

Não inverter a tensão, poderá danificar o terminal.

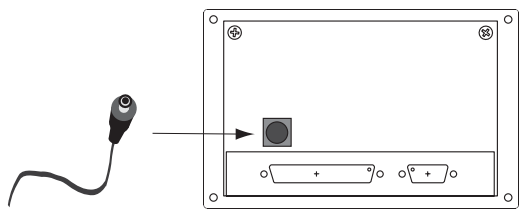
### Advertência:

Certifique-se de que o terminal e o sistema da controladora têm a mesma ligação eléctrica à terra (nível de tensão de referência), do contrário poderão ocorrer erros de comunicação.

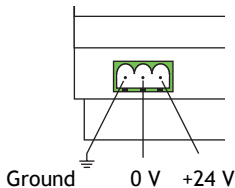
#### CIMREX 5



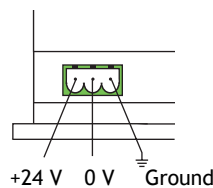
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

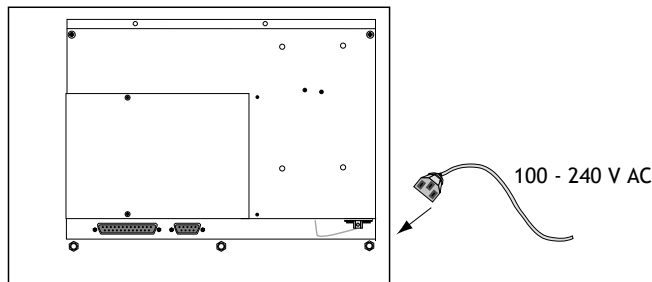


#### CIMREX 67, 69, 69T

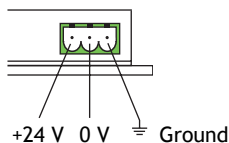


*O comprimento máximo do cabo de alimentação eléctrica de 24 V CC é de 10 metros.*

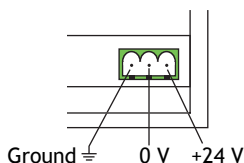
## CIMREX 90, 91



### CIMREX 90D



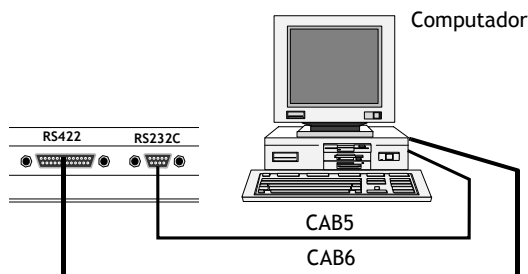
### CIMREX 91D



## Ligação a uma impressora

A impressora deve possuir uma interface série e estar equipada com a configuração de carácter IBM. Recorra ao manual da impressora para uma correcta configuração. Se pretender ligar o terminal a uma impressora através da Interface paralela, é necessário usar a expansão IFC PI. Consultar o manual IFC PI para mais informações.

## Ligação a um computador pessoal



É recomendado software para PC na programação do terminal. Para instalar o software consultar o manual do produto. Os parâmetros de comunicação no terminal e no software devem ser iguais.

# Varnostni predpisi

## Splošno

- Natančno preberite varnostne predpise.
- Dobavljeno blago najprej preglejte zaradi morebitnih poškodb pri prevozu. Če odkrijete poškodbe, nemudoma obvestite dobavitelja.
- Terminal izpolnjuje zahteve, navedene v členu 4 v EMU-direktivi 89/336/EEC.
- Terminala ne uporabljajte v okolju, izpostavljenemu veliki nevarnosti eksplozij.
- Dobavitelj ne odgovarja za izdelek, ki je modificiran, spremenjen ali dograjen.
- Uporabljati smete le rezervne dele in pribor, ki so v skladu s specifikacijo dobavitelja.
- Natančno preberite navodila za inštalacijo in uporabo, predno terminal inštalirate, uporabite ali popravljate
- Če baterijo montirate napačno, obstaja nevarnost eksplozije. Uporabljajte le baterije, ki jih priporoča dobavitelj.
- Nikoli ne vlivajte tekočin v razmake in luknje v terminalu. Takšno ravnanje lahko povzroči požar ali pa električno prevodnost naprave.
- S terminalom smejo upravljati le osebe z ustreznim strokovnim znanjem.

## Ob inštalaciji

- Terminal je primeren za trajne inštalacije na ravni površini.
- Ob inštalaciji mora terminal stati na trdni podlagi. Če pade na tla, ali pa če se prevrne, se lahko poškoduje.
- Terminal inštalirajte v skladu s priloženim opisom za inštalacijo.
- Poskrbite za ozemljitev v skladu s priloženim opisom za inštalacijo.
- Inštalacijo mora opraviti oseba z ustreznim strokovnim znanjem.
- Visokonapetostne, signalne in napetostne kable je potrebno ločiti.
- Prepričajte se, da so napetost in poli iz izvora energije pravilni, predno terminal priključite.
- Odprtine na zunanjem ovojju so namenjene cirkulaciji zraka in jih zato ne smete prekrivati.
- Terminala nikoli ne postavite na mesto, kjer bo morebiti izpostavljen močnim magnetnim poljem.
- Terminala nikoli ne izpostavljajte direktni sončni svetlobi.
- Vse dodatne naprave morajo biti prilagojene namenu uporabe.
- Nekateri modeli terminala imajo preko displaya laminiran film, ki preprečuje praske. Da bi se izognili nevarnosti nastanka statične elektrike, ki lahko poškoduje terminal, morate film odstraniti izredno previdno.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Ob uporabi**

- Poskrbite, da bo terminal vedno čist.
- Funkcij, namenjenih za ustavitev delovanja v stiski in drugih varnostnih funkcij, ne smete nikoli upravljati s pomočjo terminala.
- Tipk, stekla displaya ipd. nikoli ne izpostavljajte ostrim predmetom.
- V primeru napake v ozadju je mogoče terminal še vedno upravljati s pomočjo dotičnega ekrana, ki registrira vse pritiska na gumbe in druge inpute.

## **Servis in vzdrževanje**

- Garancija velja v skladu s pogodbo.
- Za čiščenje stekla displaya in sprednje strani uporabite mehko krpo in blago čistilno sredstvo.
- Popravila smejo opravljati le osebe z ustreznim strokovnim znanjem.

## **Ko terminal demontirate in zavržete**

- Reciklaža terminala in njegovih sestavnih delov mora biti v skladu s predpisi, veljavnimi v državi.
- Zavedajte se, da naslednje komponente vsebujejo snovi, nevarne zdravju in okolju: litij baterija, elektrolitski kondenzatorji in display.

Preberite celotni priročnik za inštalacijo, predno napravo inštalirate in uporabite. Napravo sme inštalirati, uporabljati in popravljati le oseba z ustreznim strokovnim znanjem. Beijer Electronics AB ne prevzema odgovornosti za modificirano, spremenjeno ali dograjeno napravo. Ker ima naprava zelo široko področje uporabe, mora uporabnik sam poskrbeti za zadostno znanje o uporabi naprave za njegove specifične potrebe. Uporabljati smete le rezervne dele in pribor, ki so v skladu s specifikacijo Beijer Electronics AB.

BEIJER ELECTRONICS AB SE ODREKA ODGOVORNOSTI ZA DIREKTNE IN INDIREKTNE POŠKODBE NAPRAVE, KI SO NASTALE V ZVEZI Z INŠTALACIJO, UPORABO ALI POPRAVILOM.

# Priključitev

## Napajanje

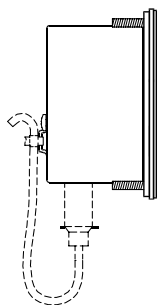
### POZOR!

Ne uporabi nasprotné napetosti povzročila bo trajno okvaro.

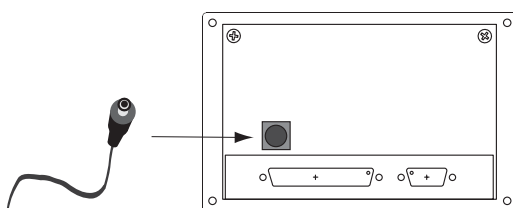
### Opozorilo:

Prepričajte se, da imata terminal in kontrolni sistem enako električno ozemljitev (referenčno napetost), sicer obstaja nevarnost napak pri njunem medsebojnem komuniciranju. i n

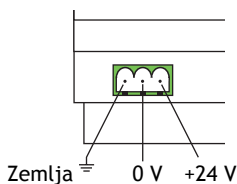
#### CIMREX 5



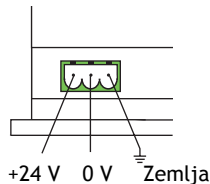
#### CIMREX 10



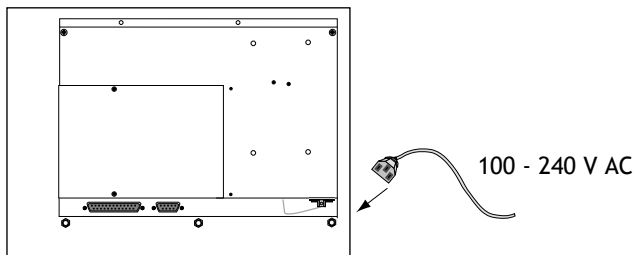
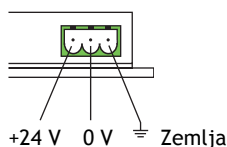
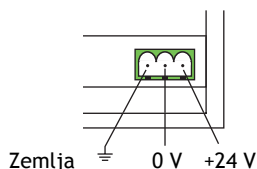
#### CIMREX 12, 20, 30, 41, 60, 70



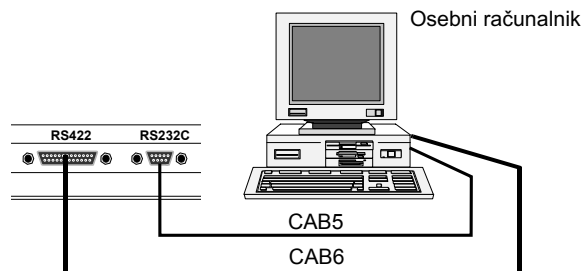
#### CIMREX 67, 69, 69T



Maksimalna dolžina kabla za prenos moči z napetostjo 24 V DC je 10 metrov.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Povezava s tiskalnikom**

Tiskalnik naj bo opremljen s serijskim RS232C vmesnikom in IBM naborom znakov. Za pravilno konfiguracijo glej priročnik tiskalnika. Če želite povezati terminal s tiskalnikom preko paralelnega vmesnika, morate uporabiti razširitevno kartico IFC PI. Nadaljne informacije najdete v priročniku za IFC PI.

**Povezava z osebnim računalnikom**

Za programiranje terminala priporočamo uporabo PC programa. Za instalacijo PC programa glej priročnik za PC program. V terminalu in PC programski opreми morajo biti parametri enako nastavljeni.



# Turvamääräykset

## Yleistä

- Lue turvamääräykset huolellisesti.
- Tarkasta toimitus havaitaksesi mahdolliset kuljetusvauriot. Ilmoita havaitut vauriot pikimmiten toimittajalle.
- Pääte täyttää EMC-direktiivin 89/336/EEC artiklan 4 mukaiset vaatimukset.
- Älä käytä päätettä ympäristössä, jossa on suuri räjähdysvaara.
- Toimittaja ei vastaa laitteesta, johon on tehty modifiointejja, muutoksia tai lisäyksiä.
- Vain toimittajan määrittysten mukaisia lisävarusteita saa käyttää.
- Lue asennus- ja käyttökuvaus huolellisesti ennen päätteen asennusta, käyttöä tai korjausta.
- Virheellisesti asennettu akku voi aiheuttaa räjähdysvaaran. Käytä vain toimittajan suosittelemia akkuja.
- Nestettä ei koskaan saa kaataa päätteen rakoihin tai reikiin. Seurauksena voi olla tulipalo tai laitteen muuttuminen virtaa johtavaksi.
- Päätettä saa käsitellä vain tarvittavan koulutuksen saanut henkilökunta.

## Asennus

- Pääte on tarkoitettu kiinteään asennukseen tasaiselle pinnalle.
- Sijoita pääte tukevalle alustalle asennuksen ajaksi. Päätteen pudottaminen tai putoaminen voi aiheuttaa vahinkoa.
- Asenna pääte mukana toimitetun asennusohjeen mukaisesti.
- Maadoitus on tehtävä mukana toimitetun asennusohjeen mukaisesti.
- Asentajalla on oltava tarvittava koulutus.
- Suurjännite-, signaali- ja jännitekaapelit on erotettava toisistaan.
- Varmista, että teholähteestä saatavan jännite ja napaisuus ovat oikein ennen jännitteen kytkemistä päätteeseen.
- Kotelon aukot ovat kiertoilma-aukkoja eikä niitä saa peittää.
- Älä sijoita päätettä paikkaan, jossa se on alttiina voimakkailla magneettikentille.
- Päätettä ei saa asentaa suoraan auringonvaloon.
- Oheislaitteiden on sovelluttava käyttökohteisiinsa.
- Joidenkin päätemallien näytöissä on laminoitu kalvo naarmuuntumisvaaran vähentämiseksi. Vedä kalvo irti varovasti, ettei se synnytä staattista sähköä, joka voi vaurioittaa päätettä.

## UL installation

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Käyttö**

- Pidä pääte puhtaana.
- Hätäpysäytystoimintoja tai muita turvatoimintoja ei saa ohjata päätteestä.
- Näppäimiä, näyttöruutua jne. ei saa käsitellä terävillä esineillä.
- Jos taustavalo rikkoutuu, pääte pysyy toiminnassa ja rekisteröi painikkeiden painallukset ja syötteen kosketusnäytöltä.

## **Huolto ja kunnossapito**

- Takuu on voimassa sopimuksen mukaisesti.
- Käytä mietoa puhdistusainetta ja pehmeää liinaa näyttöruudun ja etuosan puhdistukseen.
- Korjaukset saa tehdä vain tarvittavan koulutuksen omaavat henkilöt.

## **Purkaminen ja romutus**

- Pääte tai sen osat on kierrätettävä käyttömaassa voimassa olevien määräysten mukaisesti.
- Huomaa, että seuraavat komponentit sisältävät aineita, jotka voivat olla haitallisia terveydelle ja ympäristölle: litiumakku, elektrolyyttikondensaattorit sekä näyttö.

Lue koko asennusopas ennen laitteen asentamista ja käyttöä. Laitetta asentavilla, käytävillä ja korjaavilla henkilöillä on oltava tarvittava koulutus. Beijer Electronics AB ei vastaa laitteesta, johon on tehty modifiointeja, muutoksia tai lisäyksiä. Koska laitetta voidaan käyttää monilla erilaisilla käyttöalueilla, on käyttäjän hankittava itse riittävät tiedot voidakseen käyttää laitetta oikein omassa sovelluksessaan. Vain Beijer Electronics AB:n määritysten mukaisia lisävarusteita saa käyttää.

BEIJER ELECTRONICS AB EI VASTAA MINKÄÄNLAISISTA SUORISTA TAI EPÄSUORISTA VAHINGOISTA, JOTKA OVAT SYNTYNEET TÄMÄN LAITTEEN ASENNUKSEN, KÄYTÖN TAI KORJAUKSEN YHTEYDESSÄ.

# Asennus

## Jännitesyöttö

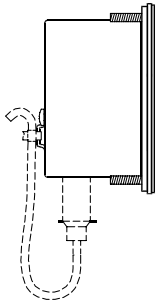
### VAROITUS!

Jännitteen kytkeminen väärin saattaa vaurioittaa päätettä pysyvästi.

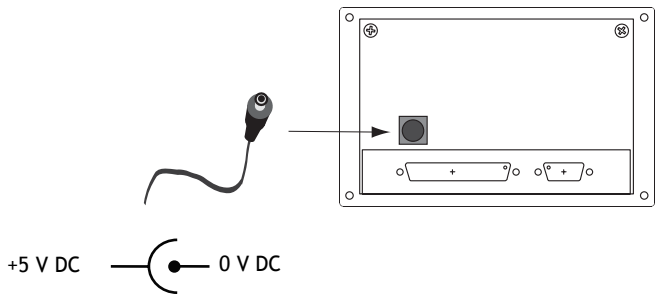
### VAROITUS!

Varmista, että päätteen ja ohjausjärjestelmän maadoitus on samanlainen (vertailujännitetaso), muussa tapauksessa tiedonsiirrossa voi esiintyä virheitä.

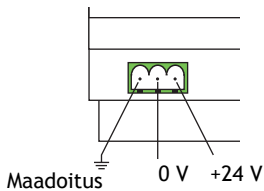
#### CIMREX 5



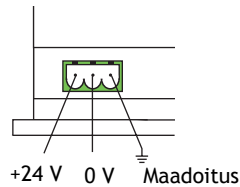
#### CIMREX 10



#### CIMREX 12, 20, 30, 41, 60, 70

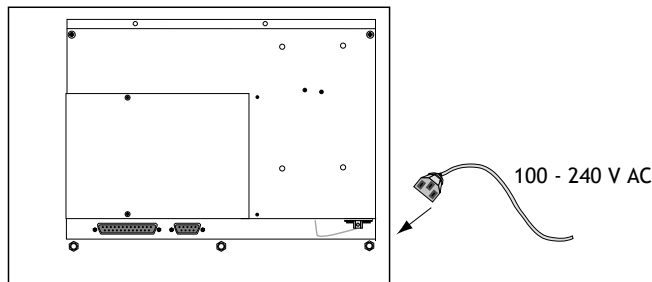


#### CIMREX 67, 69, 69T

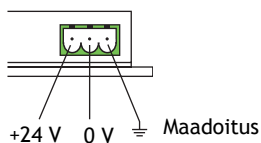


24 V DC verkkokaapelin maksimipituus on 10 metriä.

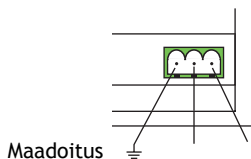
## CIMREX 90, 91



### CIMREX 90D



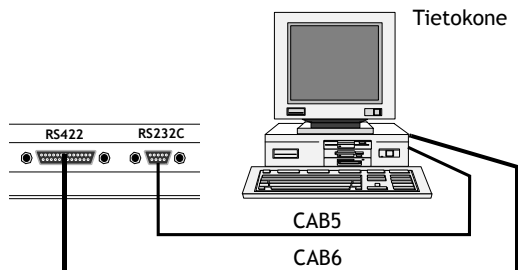
### CIMREX 91D



## Kirjoitinliityntä

Kirjoittimessa täytyy olla sarjaliitäntä ja IBM merkistö. Katso kirjoittimen ohjekirjasta mitkä ovat oikeat määrittelyt. Mikäli päätteeseen liitetään kirjoitin jossa on rinnakkaisliitäntä, on päätteessä käytettävä IFC PI-laajennuskorttia. Lisätietoja on IFC PI-kortin ohjekirjassa.

## Liittäminen tietokoneeseen



Päätteen ohjelmointiin suositellaan käytettäväksi tietokoneohjelmaa. Ohjelman asentaminen tietokoneeseen on selostettu ohjelmiston käsikirjassa. Kommunikointiparametrit sovelluksen siirtoa varten täytyvät olla samat ohjelmassa ja päätteessä.

# Säkerhetsföreskrifter

## Allmänt

- Läs noga igenom säkerhetsföreskrifterna.
- Kontrollera leveransen för att upptäcka eventuella transportskador. Meddela leverantören snarast om skador upptäcks.
- Terminalen uppfyller kraven enligt artikel 4 i EMC-direktivet 89/336/EEC.
- Använd inte terminalen i en miljö där det finns hög risk för explosioner.
- Leverantören tar inte ansvar för modifierad, ändrad eller ombyggd utrustning.
- Endast reservdelar och tillbehör tillverkade enligt specifikation av leverantören får användas.
- Läs installations- och användarbeskrivningen noga innan terminalen installeras, används eller repareras.
- Fara för explosion kan uppstå om batteriet monteras felaktigt. Använd endast batterier som rekommenderas av leverantören.
- Vätska får aldrig hällas i springor eller hål i terminalen. Detta kan orsaka brand eller att utrustningen blir strömförande.
- Terminalen ska hanteras av personer med adekvat utbildning.

## Vid installation

- Terminalen är konstruerad för fasta installationer på en plan yta.
- Placera terminalen på ett stadigt underlag under installationen. Om terminalen tappas eller faller ner kan skador uppstå.
- Installera terminalen enligt medföljande installationsbeskrivning.
- Jordning ska ske enligt medföljande installationsbeskrivning.
- Installation ska göras av personer med adekvat utbildning.
- Högspannings-, signal- och spänningskablar måste separeras.
- Fastställ att spänning och polaritet från kraftkällan är korrekt innan terminalen spänns sätts.
- Öppningarna i höljet är avsedda för luftcirkulation och får inte övertäckas.
- Placera ej terminalen där det finns risk att den utsätts för starka magnetfält.
- Terminalen bör ej monteras i direkt solljus.
- Kringutrustning måste vara lämplig där den används.
- Vissa terminalmodeller har en laminerad film över displayglaset för att minska risken för repor. För att förhindra statisk elektricitet som kan orsaka skador på terminalen, dra försiktigt av filmen.

## **UL installation**

- Power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods (Article 501-4 (b) of the National Electrical Code, NFPA 70) and in accordance with the authority having jurisdiction.

## **Vid användning**

- Håll terminalen ren.
- Nödstoppsfunktioner eller andra säkerhetsfunktioner får ej styras från terminalen.
- Tangenter, displayglas etc får ej påverkas med vassa föremål.
- Även om bakgrundsbelysningen skulle sluta fungera är terminalen manövrerbar och registrerar knapptryckningar samt inmatning via pekskärm.

## **Service och underhåll**

- Garanti gäller enligt avtal.
- Använd milt rengöringsmedel och mjuk trasa för att rengöra displayglas och front.
- Reparationer ska utföras av personer med adekvat utbildning.

## **Vid nedmontering och skrotning**

- Återvinning av terminalen eller delar av terminalen skall ske enligt gällande regler i respektive land.
- Beakta att följande komponenter innehåller ämnen som kan vara skadliga för hälsa och miljö: litiumbatteri, elektrolytkondensatorer samt display.

Läs hela installationsmanualen innan utrustningen installeras och används. Utrustningen ska installeras, användas och repareras av personer med adekvat utbildning. Beijer Electronics AB tar inte ansvar för modifierad, ändrad eller ombyggd utrustning. På grund av det stora antalet användningsområden för utrustningen, måste användaren själv inhämta tillräcklig kunskap för att rätt använda denna i sin speciella applikation. Endast reservdelar och tillbehör tillverkade enligt specifikation från Beijer Electronics AB får användas.

BEIJER ELECTRONICS AB FRÅNTAGER SIG ALLT ANSVAR FÖR DIREKTA ELLER INDIRECTA SKADOR SOM UPPKOMMIT I SAMBAND MED INSTALLATION, ANVÄNDNING ELLER REPARATION AV DENNA UTRUSTNING.

# Installation

## Spänningsmatning

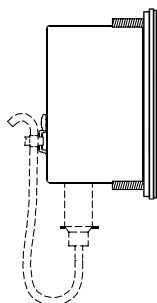
### WARNING!

Vänd ej polerna för spänningsmatningen, då det kan orsaka bestående skador.

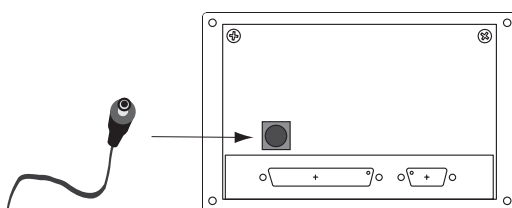
### WARNING

Säkerställ att terminalen och styrsystemet har samma elektriska jordning (märkspänning), annars kan kommunikationsfel uppstå.

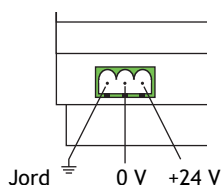
#### CIMREX 5



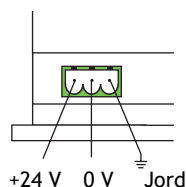
#### CIMREX 10



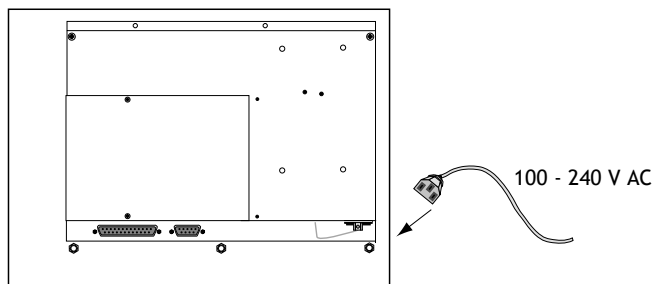
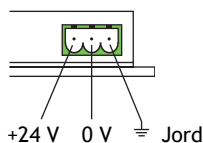
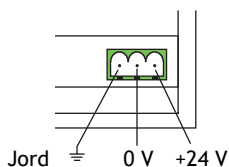
#### CIMREX 12, 20, 30, 41, 60, 70



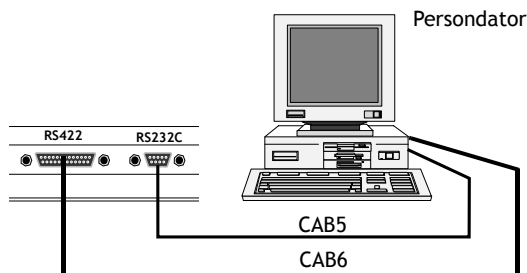
#### CIMREX 67, 69, 69T



Maximal längd på 24 V DC strömförsörjningskabel är 10 meter.

**CIMREX 90, 91****CIMREX 90D****CIMREX 91D****Anslutning till skrivare**

Skrivaren ska ha ett seriellt gränssnitt och vara försedd med IBM-teckenuppsättning. Se skrivarens manual för korrekt konfiguration. För anslutning till skrivare med parallellt gränssnitt används expansionskortet IFC PI. Se manualen för IFC PI för vidare information.

**Anslutning till persondator**

För programmering av terminalen måste programpaketet CIMREX PROG vara installerad på persondatorn. Kommunikationsparametrarna i terminalen och i CIMREX PROG måste vara inställda på samma sätt.



## Technical data

### Technical data for CIMREX 5

| Parameter                          | CIMREX 5  |
|------------------------------------|---|
| Front panel, W x H x D             | 104 x 69 x 3.5 mm   |
| Mounting depth                     | 35 mm with or without D-sub   |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material                  | Membrane switch keyboard with polyester domes. Overlay film of Autotex F207 * with print on reverse side. 1 million operations.   |
| Reverse side material              | Alu-Zinc  |
| Weight, excl. D-sub                | 0.2 kg  |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |
| Serial port RS232C                 | A RS232C port is available when the enclosed adapter 232-25-ADP is mounted on the RS422 port.   |
| Flash memory for application       | 16 kb   |
| Power consumption at rated voltage | Max: 200 mA   |
| Display                            | STN-LCD. 2 lines of 16 characters, 5 mm character height. LED backlight lifetime at the ambient temperature of +25 °C: 50,000 h.  |
| Active area of display, W x H      | 55.7 x 11.0 mm  |
| Contrast setting                   | Through potentiometer on the upper right corner on the back of the terminal.  |
| Power supply                       | +5 V DC $\pm 5\%$ from controller system or externally. Battery eliminator (connector 2.1 mm, center pin 0 V).  |
| Ambient temperature                | 0 ° to + 50 °C  |
| Storage temperature                | -20 ° to +70 °C   |
| Relative humidity                  | Max. 85 % non-condensed   |
| EMC tests on the terminal          | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. |
| UL approvals                       | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |

## *Technical data*

| Parameter                         | CIMREX 5   |
|-----------------------------------|--|
| DNV approval                      | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only). |
| MTBF (Mean time between failures) | 402,225 h  |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 10

| Parameter                          | CIMREX 10   |
|------------------------------------|---|
| Front panel, W x H x D             | 142 x 90 x 3.5 mm   |
| Mounting depth                     | 29 mm excl. D-sub 97 mm incl. D-sub   |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material                  | Membrane switch keyboard with polyester domes. Overlay film of Autotex F207 * with print on reverse side. 1 million operations.   |
| Reverse side material              | Alu-Zinc  |
| Weight, excl. D-sub                | 0.5 kg  |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |
| Flash memory for application       | 64 kb   |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error: 1 min/month = 12 min/year.<br>Minimum life of the real time clock battery: 10 years           |
| Power consumption at rated voltage | Max: 200 mA   |
| Display                            | STN-LCD. 2 lines of 20 characters, 5 mm character height. LED backlight lifetime at the ambient temperature of +25 °C: 50,000 h.  |
| Active area of display, W x H      | 73.5 x 11.5 mm  |
| Contrast setting                   | Through potentiometer center on the back of the terminal. ("LCD Contrast" printed next to hole)   |
| Power supply                       | +5 V DC ±5 % from controller system or externally.<br>Battery eliminator (connector 2.1 mm, center pin 0 V).  |
| Ambient temperature                | 0 ° to +50 °C   |
| Storage temperature                | -20 ° to +70 °C   |
| Relative humidity                  | Max. 85 % non-condensed   |
| EMC tests on the terminal          | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. |
| UL approvals                       | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |

## *Technical data*

| Parameter                         | CIMREX 10   |
|-----------------------------------|---|
| DNV approval                      | Det Norske Veritas type approval certificate.<br>Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only). |
| MTBF (Mean time between failures) | 345,155 h   |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 12

| Parameter                          | CIMREX 12   |
|------------------------------------|---|
| Front panel, W x H x D             | 142 x 90 x 3 mm   |
| Mounting depth                     | 43.3 mm excl. D-sub and 108.5 mm incl. D-sub  |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material                  | Membrane switch keyboard with polyester domes.<br>Overlay film of Autotex F207 * with print on reverse side.<br>1 million operations.   |
| Reverse side material              | Alu-Zinc  |
| Weight, excl. D-sub                | 0.37 kg   |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |
| Serial port RS485                  | Available through RS422. Requires software configuration.   |
| Flash memory for application       | 64 kb   |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error: 1 min/month = 12 min/year.<br>Minimum life of the real time clock battery: 10 years.            |
| Power consumption at rated voltage | Max: 150 mA.  |
| Display                            | STN-LCD. 2 lines of 20 characters, 5.55 mm character height.<br>LED backlight lifetime at the ambient temperature of +25 °C: 50,000 h. Backlight dimming 0-100%.                    |
| Active area of display, W x H      | 75.4 x 11.5 mm  |
| Contrast setting                   | Through potentiometer on the back of the terminal.  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.                     |
| Fuse                               | 800 mA <sub>T</sub> , 5 x 20 mm   |
| Ambient temperature                | 0 ° to +50 °C   |
| Storage temperature                | -20 ° to +70 °C   |
| Relative humidity                  | Max. 85 % non-condensed   |
| EMC tests on the terminal          | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. Noise tested according to EN61000-6-3 emission and EN61000-6-2 immunity. |
| UL approvals                       | Certification in progress.  |

| Parameter    | CIMREX 12  |
|--------------|--|
| DNV approval | Det Norske Veritas type approval certificate.<br>Location classes: Temperature A, Humidity B, Vibration A,<br>EMC B, Enclosure C (panel front only). |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 20

| Parameter                          | CIMREX 20   | CIMREX 20 of hardware version type no 04760 or higher    |
|------------------------------------|---|--|
| Front panel, W x H x D             | 147 x 163.5 x 5 mm  |  |
| Mounting depth                     | 38 mm excl. D-sub 107 mm incl. D-sub  | 41 mm excl. D-sub 107 mm incl. D-sub                     |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)  |  |
| Rear panel seal                    | IP 20   |  |
| Keyboard material                  | Membrane switch keyboard with polyester domes. Overlay film of Autotex F207 * with print on reverse side. 1 million operations.   |  |
| Reverse side material              | Alu-Zinc  |  |
| Weight excl. D-sub                 | 0.7 kg  |  |
| Serial port RS485                  | -   | Available through RS422. Requires software configuration |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |  |
| Flash memory for application       | 64 kb   |  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year. Minimum life of real time clock battery: 10 years.  |  |
| Power consumption at rated voltage | Max: 150 mA   |  |
| Display                            | STN-LCD. 4 lines of 20 characters, 5 mm character height. LED backlight lifetime at the ambient temperature of +25 °C: 50,000 h.  |  |
| Active area of display, W x H      | 70.4 x 20.8 mm  |  |
| Contrast setting                   | Through potentiometer on upper right corner on the back of the terminal. ("LCD Contrast" printed next to hole)  |  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block. CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742. UL: The power supply must conform with the requirements for class II power supplies. |  |
| Fuse                               | 1 AT, Littlefuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA, 5 x 20 mm  | 800 mA, 5 x 20 mm  |

| Parameter                 | CIMREX 20   | CIMREX 20 of hardware version type no 04760 or higher   |
|---------------------------|---|---|
| Ambient temperature       | 0 ° to +50 °C   |   |
| Storage temperature       | -20 ° to +70 °C   |   |
| Relative humidity         | Max 85 % non-condensed.   |   |
| EMC tests on the terminal | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. Noise tested according to EN61000-6-3 emission and EN61000-6-2 immunity. |
| UL approvals              | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   | Certification in progress   |
| DNV approval              | -   | Certification in progress   |
| MTBF                      | 124,864 h   |   |

\* See section *Chemical resistance for keyboard and display*.



## Technical data for CIMREX 30

| Parameter                          | CIMREX 30  |
|------------------------------------|--|
| Front panel, W x H x D             | 214 x 194 x 6 mm   |
| Mounting depth                     | 69 mm excl. D-sub, 110 mm incl. D-sub  |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)   |
| Rear panel seal                    | IP 20  |
| Keyboard material                  | Membrane switch keyboard with polyester domes.<br>Overlay film of Autotex F207 * with print on reverse side.<br>1 million operations.  |
| Reverse side material              | Yellow-chromated steel plate   |
| Weight excl. D-sub                 | 1.5 kg   |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.   |
| Expansion slots                    | 1  |
| Flash memory for application       | 400 kb   |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year.<br>Minimum life of real time clock battery: 10 years.  |
| Power consumption at rated voltage | Without load: 300 mA<br>Max load: 450 mA   |
| Display                            | STN-LCD. 240 x 64 pixels, monochrome, graphic and text, 4 rows of 20 characters or 8 rows of 40 characters. LED backlight life-time at the ambient temperature of +25 °C: 50,000 h.  |
| Active area of display, W x H      | 127.2 x 33.9 mm  |
| Contrast setting                   | Programmable   |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742. UL: The power supply must conform with the requirements for class II power supplies. |
| Fuse                               | 1 AT, Littlefuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA <sub>T</sub> , 5 x 20 mm   |
| Ambient temperature                | 0 ° to +50 °C  |
| Storage temperature                | -20 ° to +70 °C  |
| Relative humidity                  | Max 85 % non-condensed.  |

| Parameter                 | CIMREX 30   |
|---------------------------|---|
| EMC tests on the terminal | Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. |
| UL approvals              | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |
| DNV approval              | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only).                                    |
| MTBF                      | 104,322 h   |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 41

| Parameter                          | CIMREX 41   |
|------------------------------------|---|
| Front panel, W x H x D             | 142 x 90 x 47.5 mm  |
| Mounting depth                     | 43.5  |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material/Front panel      | Touch screen: Polyester on glass *, 1 million finger touch operations. Frame: Autotex F207 *. Touch protection film: Autoflex EB.*  |
| Reverse side material              | Alu-Zink  |
| Weight excl. D-sub                 | 0.4 kg  |
| Serial port RS422                  | 25-pin D-sub contact.   |
| Serial port RS232C                 | 9-pin D-sub contact.  |
| Serial port RS485                  | Available through RS422 with software settings.   |
| Built-in Ethernet                  | RJ45 connector, 10/100 Mbit/s   |
| Flash memory for application       | 400 kb  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year. Minimum life of real time clock battery: 10 years.  |
| Power consumption at rated voltage | Max 150 mA  |
| Display                            | FSTN-LCD, 320 x 240 pixels, monochrome, graphic and text. LED backlight lifetime at the ambient temperature of +25 °C: 50,000 h. Dimming of backlight 1-100%.   |
| Active area of display, W x H      | 76.8 x 57.6mm   |
| Contrast setting                   | Through potentiometer on the back of the terminal.  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block. CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742. UL: The power supply must conform with the requirements for class II power supplies. |
| Fuse                               | 800 mA <sub>T</sub> , 5 x 20 mm   |
| Ambient temperature                | 0 ° to +50 °C   |
| Storage temperature                | -20 ° to +70 °C   |
| Relative humidity                  | 5-85 % non-condensed.   |

| Parameter                 | CIMREX 41   |
|---------------------------|---|
| EMC tests on the terminal | Noise tested according to EN61000-6-3 emission and EN61000-6-2 immunity. The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. |
| UL approvals              | Certification in progress   |
| DNV approval              | Certification in progress   |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 60

| Parameter                          | CIMREX 60  |
|------------------------------------|--|
| Front panel, W x H x D             | 214 x 232 x 5 mm   |
| Mounting depth                     | 69 mm excl. D-sub, 110 mm incl. D-sub  |
| Front panel seal                   | IP 65, NEMA 4X (indoor use only)   |
| Rear panel seal                    | IP 20  |
| Keyboard material                  | Membrane switch keyboard with polyester domes.<br>Overlay film of Autotex F207 * with print on reverse side.<br>1 million operations.  |
| Reverse side material              | Yellow-chromated steel plate   |
| Weight excl. D-sub                 | 1.4 kg   |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.   |
| Expansion slots                    | 1  |
| Flash memory for application       | 400 kb   |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year.<br>Minimum life of real time clock battery: 10 years.  |
| Power consumption at rated voltage | Without load: 300 mA<br>Max load: 450 mA   |
| Display                            | STN-LCD. 240 x 128 pixels, monochrome, 16 rows of 40 characters. CCFL backlight lifetime at the ambient temperature of +25 °C: 15,000 h.   |
| Active area of display, W x H      | 127.2 x 33.9 mm  |
| Contrast setting                   | Programmable   |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742. UL: The power supply must conform with the requirements for class II power supplies. |
| Fuse                               | 1 AT, Littlefuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA <sub>T</sub> , 5 x 20 mm   |
| Ambient temperature                | 0 ° to +50 °C  |
| Storage temperature                | -20 ° to +70 °C  |
| Relative humidity                  | Max 85 % non-condensed.  |

| Parameter                 | CIMREX 60   |
|---------------------------|---|
| EMC tests on the terminal | Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. |
| UL approvals              | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |
| DNV approval              | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only).                                    |
| MTBF                      | 61,368 h  |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 67

| Parameter                          | CIMREX 67   |
|------------------------------------|---|
| Front panel, W x H x D             | 200 x 150 x 5 mm  |
| Mounting depth                     | 69 mm with or without D-sub   |
| Front panel seal                   | IP 65, NEMA 4X (Indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material/<br>front panel  | Touch screen: Polyester on glass *, 1 million finger touch operations. Frame: Autotex F207 *.<br>Touch protection film: Autoflex EB.*   |
| Reverse side material              | Yellow-chromated steel plate  |
| Weight, excl. D-sub                | 1.5 kg  |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |
| Serial port RS485                  | 4-pin jack connection block, chassis-mounted male.  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |
| Expansion slots                    | 1   |
| Flash memory for application       | 400 kb  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year.<br>Minimum life of real time clock battery: 10 years.   |
| Power consumption at rated voltage | Without load: 250 mA.<br>Max load: 400 mA   |
| Display                            | STN-LCD, 320 x 240 pixels. 16 grey scales, graphics and text.<br>CCFL backlight lifetime at the ambient temperature of +25 °C: 25,000 h. Touch screen.  |
| Active area of display, W x H      | 115.2 x 86.4 mm   |
| Contrast setting                   | Programmable  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.<br>UL: The power supply must conform with the requirements for class II power supplies. |
| Fuse                               | 1 AT, Littlefuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA <sub>T</sub> , 5 x 20 mm  |
| Ambient temperature                | 0° to +50 °C  |
| Storage temperature                | -20° to +70 °C  |

| Parameter                         | CIMREX 67   |
|-----------------------------------|---|
| Relative humidity                 | Max 85 % non-condensed.   |
| EMC tests on the terminal         | Noise tested according to EN50081-2 emission and EN61000-6-2 immunity. The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. |
| UL approvals                      | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |
| DNV approval                      | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only).                                    |
| MTBF (Mean time between failures) | 92,578 h  |

\* See section *Chemical resistance for keyboard and display*.



## Technical data for CIMREX 69 and CIMREX 69T

| Parameter                          | CIMREX 69   |  | CIMREX 69T                |  |
|------------------------------------|---|--|---------------------------|--|
| Front panel, W x H x D             | 200 x 150 x 5 mm  |  |                           |  |
| Mounting depth                     | 69 mm with or without D-sub   |  |                           |  |
| Front panel seal                   | IP 65, NEMA 4, NEMA 4X (Indoor use only)  |  |                           |  |
| Rear panel seal                    | IP 20   |  |                           |  |
| Keyboard material/<br>front panel  | Touch screen: Polyester on glass *, 1 million finger touch operations. Frame: Autotex F207 *.<br>Touch protection film: Autoflex EB *.  |  |                           |  |
| Reverse side material              | Yellow-chromated steel plate  |  |                           |  |
| Weight, excl. D-sub                | 1.5 kg  |  |                           |  |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |  |                           |  |
| Serial port RS485                  | 4-pin jack connection block, chassis-mounted male.  |  |                           |  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |  |                           |  |
| Expansion slots                    | 1   |  |                           |  |
| Flash memory for application       | 400 kb  |  |                           |  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year. Minimum life of real time clock battery: 10 years.  |  |                           |  |
| Power consumption at rated voltage | Without load: 250 mA.<br>Max load: 450 mA   |  |                           |  |
| Display                            | STN-LCD, 320 x 240 pixels   |  | TFT-LCD, 320 x 240 pixels |  |
|                                    | 256 colors, graphics and text. Touch screen. CCFL backlight lifetime at the ambient temperature of +25 °C:  |  |                           |  |
|                                    | 40,000 h  |  | 50,000 h                  |  |
| Active area of display, W x H      | 115.2 x 86.4 mm   |  |                           |  |
| Contrast setting                   | Programmable  |  | -                         |  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.<br>UL: The power supply must conform with the requirements for class II power supplies. |  |                           |  |
| Fuse                               | 1 AT, Littelfuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA <sub>T</sub> , 5 x 20 mm  |  |                           |  |
| Ambient temperature                | 0° to +50 °C  |  |                           |  |

| Parameter                         | CIMREX 69  | CIMREX 69T   |
|-----------------------------------|--|--|
| Storage temperature               | -20° to +70 °C   |  |
| Relative humidity                 | Max 85 % non-condensed.  |  |
| EMC tests on the terminal         | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC.   |  |
|                                   | Noise tested according to EN50081-2 emission and EN61000-6-2 immunity.   | Noise tested according to EN50081-1 emission and EN61000-6-2 immunity. |
| UL approvals                      | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)  |  |
| DNV approval                      | Det Norske Veritas type approval certificate.<br>Location classes:<br>Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only). |  |
| MTBF (Mean time between failures) | 73,458 h   | -  |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 70

| Parameter                          | CIMREX 70   |
|------------------------------------|---|
| Front panel, W x H x D             | 276 x 198 x 5.7 mm  |
| Mounting depth                     | 88 mm excl. D-sub, 110 mm incl. D-sub   |
| Front panel seal                   | IP 65, NEMA 4X (Indoor use only)  |
| Rear panel seal                    | IP 20   |
| Keyboard material/front panel      | Membrane switch keyboard with polyester domes. Overlay film of Autotex F207 * with print on reverse side. 1 million operations.   |
| Reverse side material              | Yellow-chromated steel plate  |
| Weight, excl. D-sub                | 1.7 kg  |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.   |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.  |
| Expansion slots                    | 2   |
| Flash memory for application       | 400 kb  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year. Minimum life of real time clock battery: 10 years.  |
| Power consumption at rated voltage | Without load: 300 mA<br>Max load: 550 mA  |
| Display                            | STN-LCD, 320 x 240 pixels. 256 colors, graphics and text. CCFL backlight lifetime at the ambient temperature of +25 °C: 40,000 h.   |
| Active area of display, W x H      | 115.2 x 86.4 mm   |
| Contrast setting                   | Programmable  |
| Power supply                       | +24 V DC (20-30 V DC) 3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.<br>UL: The power supply must conform with the requirements for class II power supplies. |
| Fuse                               | 1 AT, Littlefuse R452 001 (Nano <sup>2</sup> SMF Slo-Blo) or 800 mA <sub>T</sub> , 5 x 20 mm  |
| Ambient temperature                | 0° to +50 °C  |
| Storage temperature                | -20° to +70 °C  |
| Relative humidity                  | Max 85 % non-condensed.   |

| Parameter                         | CIMREX 70   |
|-----------------------------------|---|
| EMC tests on the terminal         | Noise tested according to EN61000-6-3 emission and EN61000-6-2 immunity. The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC. |
| UL approvals                      | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   |
| DNV approval                      | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only).                                      |
| MTBF (Mean time between failures) | 84,496 h  |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 90 and CIMREX 90D

| Parameter                          | CIMREX 90  | CIMREX 90D   |
|------------------------------------|--|--|
| Front panel, W x H x D             | 367 x 274 x 6 mm   |  |
| Mounting depth                     | 90 mm excl. D-sub, 110 mm incl. D-sub  |  |
| Front panel seal                   | IP 65, NEMA 4  | IP 65, NEMA 4X (indoor use only)   |
| Rear panel seal                    | IP 20  |  |
| Keyboard material/<br>front panel  | Membrane switch keyboard with polyester domes.<br>Overlay film of Autotex F207 * with print on reverse side.<br>1 million operations.                              |  |
| Reverse side material              | Yellow-chromated steel plate.  |  |
| Weight, excl. D-sub                | 3.5 kg   | 3.2 kg   |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.  |  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.   |  |
| Expansion slots                    | 2  |  |
| Flash memory for application       | 1,600 kb   |  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year.<br>Minimum life of real time clock battery: 10 years |  |
| Power consumption at rated voltage | Max: 0.17 - 0.35 A<br>(240 - 100 V AC)   | 1 A (24 V)   |
| Display                            | TFT-LCD, 640 x 480 pixels, 256 colors, graphic and text. CCFL backlight lifetime at the ambient temperature of +25 °C: 50,000 h                                    |  |
| Active area of display, W x H      | 211.2 x 158.4 mm   |  |
| Color setting                      | The brightness of the colors is programmable.  |  |
| Fuse                               | External AC: F2.5 A, Internal DC: T4 A   | External DC: F6.3 A, Internal DC: T4 A   |
| Power supply                       | 100 - 240 V AC.<br>UL: Power Supply Cord - intended to be used with a listed/CN cordset rated 250 V, minimum 10 A.   | +24 V DC (20-30 V DC)<br>3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.<br>UL: The power supply must conform with the requirements for class II power supplies. |
| Ambient temperature                | 0 ° to +50 °C  |  |

| Parameter                         | CIMREX 90  | CIMREX 90D   |
|-----------------------------------|--|--|
| Storage temperature               | -20 ° to +70 °C  |  |
| Relative humidity                 | Max 85 % non-condensed.  |  |
| EMC tests on the terminal         | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC.                                     |  |
|                                   | Noise tested according to EN50081-2 emission and EN61000-6-2 immunity.   | Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity. |
| UL approvals                      | UL 1950, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)                  |
| DNV approval                      | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only). |  |
| LVD                               | EN60950  | -  |
| MTBF (Mean time between failures) | 89,274 h   | 104,464 h  |

\* See section *Chemical resistance for keyboard and display*.

## Technical data for CIMREX 91 and CIMREX 91D

| Parameter                          | CIMREX 91  | CIMREX 91D   |
|------------------------------------|--|--|
| Front panel, W x H x D             | 290 x 247 x 5 mm   |  |
| Mounting depth                     | 109 mm excl. D-sub, 130 mm incl. D-sub   |  |
| Front panel seal                   | IP 65, NEMA 4  | IP 65, NEMA 4X (indoor use only)   |
| Rear panel seal                    | IP 20  |  |
| Keyboard material/front panel      | Touch screen: Polyester on glass *, 1 million finger touch operations. Frame: Autotex F207 *.  |  |
| Reverse side material              | Yellow-chromated steel plate.  |  |
| Weight, excl. D-sub                | 3.3 kg   | 3.0 kg   |
| Serial port RS422                  | 25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.  |  |
| Serial port RS232C                 | 9-pin D-sub contact, chassis-mounted male with standard locking screws 4-40 UNC.   |  |
| Expansion slots                    | 2  |  |
| Flash memory for application       | 1,600 kb   |  |
| Real time clock                    | ±10 PPM + error because of ambient temperature and supply voltage. Total max error 1 min/month = 12 min/year. Minimum life of real time clock battery: 10 years. |  |
| Power consumption at rated voltage | Max: 0.17 - 0.35 A<br>(240 - 100 V AC)   | 1 A (24 V)   |
| Display                            | TFT-LCD, 640 x 480 pixels, 256 colors, graphics and text. CCFL backlight lifetime at the ambient temperature of +25 °C: 50,000 h. Touch screen.                  |  |
| Active area of display, W x H      | 211.2 x 158.4 mm   |  |
| Color setting                      | The brightness of the colors is programmable.  |  |
| Fuse                               | External AC: F2.5 A, Internal DC: T4 A   | External DC: F6.3 A, Internal DC: T4 A   |
| Power supply                       | 100 - 240 V AC.<br>UL: Power Supply Cord - intended to be used with a listed/ CN cordset rated 250 V, minimum 10 A.  | +24 V DC (20 - 30 V DC)<br>3-pin jack connection block.<br>CE: The power supply must conform with the requirements for SELV or PELV according to IEC 950 or IEC 742.<br>UL: The power supply must conform with the requirements for class II power supplies. |

| Parameter                         | CIMREX 91  | CIMREX 91D   |
|-----------------------------------|--|--|
| Ambient temperature               | 0 ° to +50 °C  |  |
| Storage temperature               | -20 ° to +70 °C  |  |
| Relative humidity                 | Max 85 % non-condensed.  |  |
| EMC tests on the terminal         | The terminal conforms with the essential protection requirements in article 4 of the directive 89/336/EEC.                                     |  |
|                                   | Noise tested according to EN50081-2 emission and EN61000-6-2 immunity.   | Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity. |
| UL approvals                      | UL 1950, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)   | UL 508, UL 1604 (Class I, Div 2, Groups A, B, C, D, T4)                  |
| DNV approval                      | Det Norske Veritas type approval certificate. Location classes: Temperature A, Humidity B, Vibration A, EMC B, Enclosure C (panel front only). |  |
| LVD                               | EN60950  | -  |
| MTBF (Mean time between failures) | 91,650 h   | 101,016 h  |

\* See section *Chemical resistance for keyboard and display*.



# Chemical resistance

## Chemical resistance for metal casing

The metal casing is surface treated with electrochemical oxidation. This surface withstands most detergents. However, prolonged exposure to strong alkali-based solutions should be avoided, as this may cause the color or print to wear off.

## Chemical resistance for keyboard and display

### Autotex F207

Autotex F207 covers the membrane keyboard. On some models, Autotex F207 also covers the display.

| Autotex F207 on membrane keyboard and display | Autotex F207 on membrane keyboard |
|---|-----------------------------------|
| CIMREX 5                                      | CIMREX 30                         |
| CIMREX 10                                     | CIMREX 60                         |
| CIMREX 12                                     | CIMREX 70                         |
| CIMREX 20                                     | CIMREX 90, CIMREX 90D             |

### Solvent resistance

Autotex F207 withstands exposure of more than 24 hours duration under DIN 42 115 Part 2 to the following chemicals without visible change:

|   |                                       |                                      |
|---|---------------------------------------|--------------------------------------|
| Potassium ferrocyanide/<br>ferricyanide | Sodium hypochlorite <20 %<br>(bleach) | 1.1.1. Trichloroethane<br>(Genklene) |
| Cyclohexanol                            | Acetaldehyde                          | Ethylacetate                         |
| Diacetone alcohol                       | Aliphatic hydrocarbons                | Diethyl ether                        |
| Glycol                                  | Toluene                               | N-Butyl acetate                      |
| Isopropanol                             | Xylene                                | Amylacetate                          |
| Glycerine                               | White spirit                          | Butylcellosolve                      |
| Methanol                                | Formic acid <50 %                     | Ether                                |
| Triacetin                               | Acetic acid <50 %                     | MIBK                                 |
| Dowanol DRM/PM                          | Phosphoric acid <30 %                 | Cutting oil                          |
| Acetone                                 | Hydrochloric acid <36 %               | Potassium carbonate                  |
| Methyl ethyl ketone                     | Nitric acid <10 %                     | Washing powders                      |
| Dioxan                                  | Trichloroacetic acid <50 %            | Fabric conditioner                   |
| Cyclohexanone                           | Sulphuric acid <10 %                  | Ferric chloride                      |

## Chemical resistance

|                         |                          |                    |
|-------------------------|--------------------------|--------------------|
| Ethanol                 | Formaldehyde 37 % - 42 % | Ferrous chloride   |
| Isophorone              | Potassium hydroxide <30  | Dibutyl Phthalate  |
| Ammonia <40 %           | Linseed oil              | Diocetyl Phthalate |
| Caustic soda <40 %      | Paraffin oil             | Sodium carbonate   |
| Hydrogen peroxide <25 % | Blown castor oil         | Petrol             |
| Alkalicarbonate         | Silicone oil             | Teepol             |
| Bichromate              | Turpentine substitute    | Water              |
| Diesel oil              | Universal brake fluid    | Sea water          |
| Acetonitrile            | Decon                    |                    |
| Sodium bisulphate       | Aviation fuel            |                    |

Autotex withstands DIN 42 115 Part 2 exposure of <1 hour duration to glacial acetic acid without visible change.

Autotex is **not** resistant to high pressure steam at over 100 °C or the following chemicals:

|                               |                   |
|-------------------------------|-------------------|
| Concentrated mineral acids    | Benzyl alcohol    |
| Concentrated caustic solution | Mehylene chloride |

Autotex withstands 24 hours exposure to the following reagents at 50 °C without visible staining:

|             |             |        |          |
|-------------|-------------|--------|----------|
| Top Job     | Grape Juice | Ariel  | Ajax     |
| Jet Dry     | Milk        | Persil | Vim      |
| Gumption    | Coffee      | Wisk   | Domestos |
| Fantastic   |             | Lenor  | Vortex   |
| Formula 409 |             | Downey | Windex   |

Very slight discoloration was noted under critical viewing conditions with the following materials:

|              |                |             |         |
|--------------|----------------|-------------|---------|
| Tomato juice | Tomato ketchup | Lemon juice | Mustard |
|--------------|----------------|-------------|---------|

## Outdoor use

In common with all polyester based films Autotex F207 is not suitable for use in conditions of long term exposure to direct sunlight.

## Display surface

The display surface on CIMREX 30, CIMREX 60, CIMREX 70 and CIMREX 90 withstands exposure of more than 24 hours duration to the following chemicals without visible change:

|   |                          |                                       |
|---|--------------------------|---------------------------------------|
| Acetic acid <5 %                            | Dichloromethane          | Nitric acid (specific gravity 1.42)   |
| Glacial acetic acid (specific gravity 1.05) | Di-ethylether            | Nitric acid <40 %                     |
| Ethyl acetate                               | Di-isobutylene           | Oleic acid                            |
| Acetone                                     | Di-methyl hormamide      | Olive oil                             |
| Aqueous ammonia (specific gravity 0.9)      | Ethyl alcohol <95 %      | Pure water                            |
| Aqueous ammonia <10 %                       | 2-ethyl hexoic acid      | Seawater                              |
| Benzene                                     | Hydrochloric acid < 35 % | Sodium carbonate <20 %                |
| Carbon tetrachloride                        | Hydrogen peroxide < 28%  | Sodium hypochlorite <10 %             |
| Caustic soda <48 %                          | Isopropyl alcohol        | Sulfuric acid (specific gravity 1.84) |
| Citric acid                                 | Kerosene                 | Sulfuric acid <30 %                   |
| Cotton seed oil                             | Methy alcohol            | Toluene                               |

## Touch screen surface

The touch screen surface on CIMREX 41, CIMREX 67, CIMREX 69, CIMREX 69T, CIMREX 91 and CIMREX 91D withstands exposure to the following solvents without visible change:.

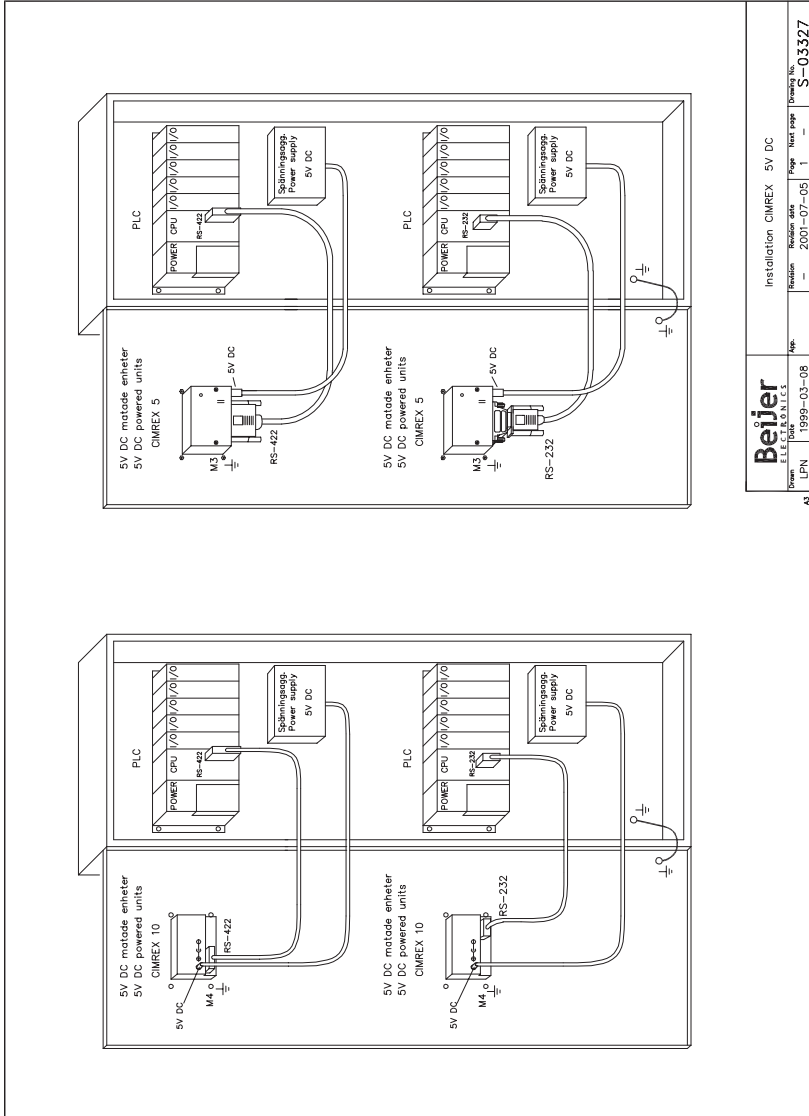
| Solvent                | Time       |
|------------------------|------------|
| 35 % Hydrochloric-Acid | 30 minutes |
| 29 % Ammonia           | 12 hours   |
| 5 % Caustic-Soda       | 5 hours    |
| Toulene                | 24 hours   |
| Acetone                |            |
| Methyl-Ethyl-Keton     |            |
| Ethyl-Acetate          |            |
| Butyl-Acetate          |            |
| Ethanol                |            |

## **Autoflex EB**

It is recommended to use the Autoflex EB touch display protection film, supplied with the operator terminals with touch display (CIMREX 41, CIMREX 67, CIMREX 69, CIMREX 69T, CIMREX 91 and CIMREX 91D).

# Terminal drawings

## CIMREX-series Installation, 5 V DC

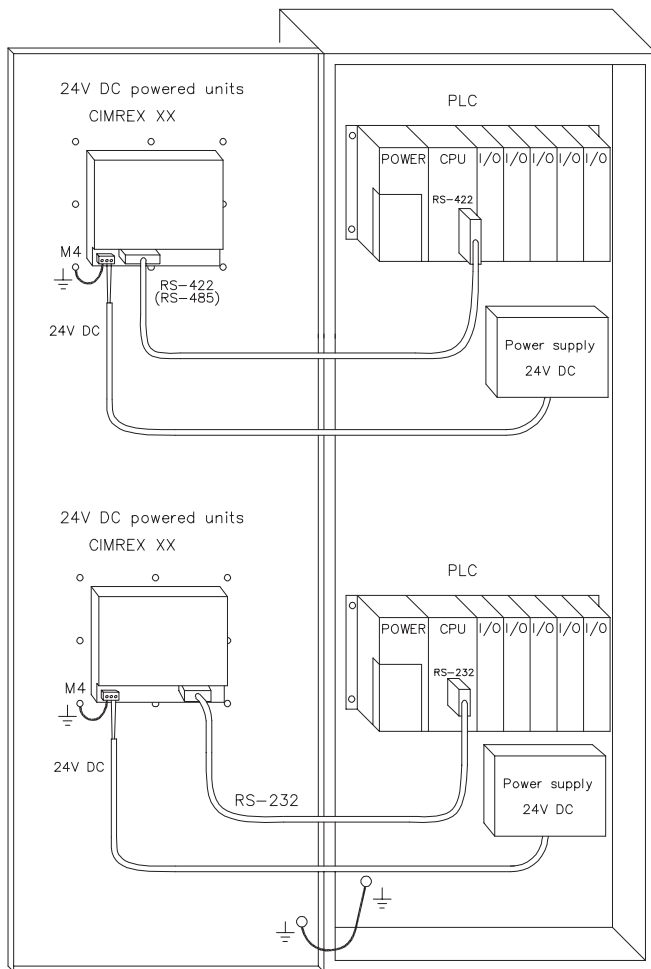


**Beijer**  
ELECTRONICS

Installation CIMREX 5V DC

| Page | Next page | Version No. |
|------|-----------|-------------|
| 1    | 1         | S-03327     |

# CIMREX-series Installation, 24 V DC

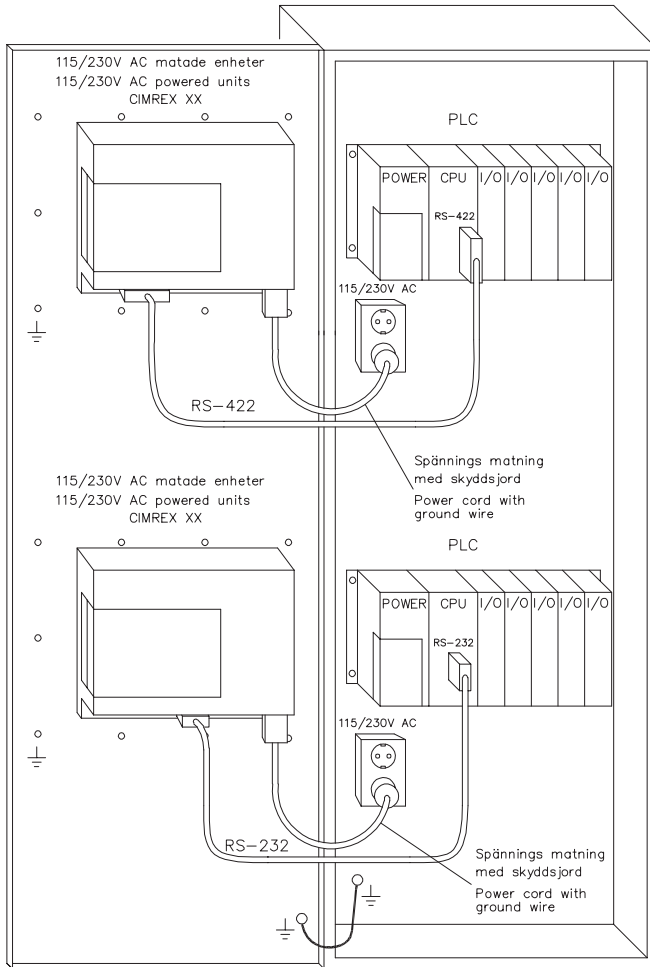


Drawn to scale 1:1



| Beijer<br>ELECTRONICS |            | Installation<br>CIMREX 24 VDC |          |               |      |           |             |
|-----------------------|------------|-------------------------------|----------|---------------|------|-----------|-------------|
| Drawn                 | Date       | App.                          | Revision | Revision date | Page | Next page | Drawing No. |
| NON                   | 2004-02-25 |                               | —        | —             | 1    | —         | S-04764     |

# CIMREX-series Installation, 115/230 V AC



|                              |            |                                 |          |               |      |           |             |
|------------------------------|------------|---------------------------------|----------|---------------|------|-----------|-------------|
| <b>Beijer</b><br>ELECTRONICS |            | Installation CIMREX 115/230V AC |          |               |      |           |             |
| Drawn                        | Date       | App.                            | Revision | Revision date | Page | Next page | Drawing No. |
| LPN                          | 1999-03-04 |                                 | —        | 2001-07-12    | 1    | —         | S-03325     |

## CIMREX-series RS232, RS422, RS485 and RS422/RS485

## RS-232

| Pin no | Name       | Signal direction<br>Terminal ↔ XXX |
|--------|------------|------------------------------------|
| 1      | +5V >200mA | ↖                                  |
| 2      | TxD        | ↗                                  |
| 3      | RxD        | ↖                                  |
| 5      | 0V         |                                    |
| 7      | CTS        | ↖                                  |
| 8      | RTS        | ↗                                  |

D-sub  
9-pin Male  
9-pin Male

<sup>d)</sup> Only for Cimrex5 with 232–25-ADP. On all other terminals, not connected.

## RS-485

Only for Cimrex67, Cimrex69

| Pin no | Name    | Signal direction<br>Terminal $\leftrightarrow$ XXX |
|--------|---------|--|
| 1      | Tx/Rx+  | $\triangleleft$                                    |
| 2      | Tx/Rx-  | $\triangleleft$                                    |
| 3      | 0V      |  |
| 4      | $\perp$ |  |

4-pin Plug-in block

## RS-422

| Pin no | Name                               | Signal direction<br>Terminal $\leftrightarrow$ XXX |
|--------|------------------------------------|--|
| 2      | +1k $\Omega$                       | $\nabla$   |
| 15     | -1k $\Omega$                       |  |
| 3      | +5k $\Omega$                       | $\nabla$   |
| 16     | -5k $\Omega$                       |  |
| 4      | +RTS                               | $\nabla$   |
| 17     | -RTS                               |  |
| 5      | +CTS                               | $\nabla$   |
| 18     | -CTS                               |  |
| 20 (1) |                                    |  |
| 21 (1) |                                    |  |
| 7,8    | 0V                                 |  |
| 14     | +5V<br>G50mA                       | $\nabla$   |
| 12,13  | R <sub>2</sub> 15V<br>24,25 >200mA | $\nabla$   |
| 9      | R <sub>3</sub> 7k $\Omega$         | $\nabla$   |
| 10     | R <sub>4</sub> 0 $\Omega$          | $\nabla$   |
| 22     | CTS                                | $\nabla$   |
| 23     | RTS                                | $\nabla$   |

D-sub  
25-pin female  
25-pin female

) Pin no 20 connected to pin no 21 internal in the terminal

2) Only for Cimrex5, Cimrex10

3) RS-232 C/mre5 only

## RS-422/485

| RS-422         |               | Signal direction<br>Termind $\leftrightarrow$ XXX |               | RS-485 |                                  | Signal direction<br>Termind $\leftrightarrow$ XXX |               |
|----------------|---------------|---|---------------|--------|----------------------------------|---|---------------|
| Pin no         | Name          |   | $\rightarrow$ |        | Name                             |   | $\rightarrow$ |
| 2              | -1x0          |   | $\rightarrow$ |        | T <sub>x</sub> /R <sub>+</sub>   |   | $\rightarrow$ |
| 15             | +1x0          |   |               |        |                                  |   |               |
| 3              | +Rx0          |   | $\rightarrow$ |        |                                  |   |               |
| 16             | -Rx0          |   |               |        |                                  |   |               |
| 4              | +RTS          |   | $\rightarrow$ |        |                                  |   |               |
| 17             | -RTS          |   |               |        |                                  |   |               |
| 5              | +CTS          |   | $\rightarrow$ |        |                                  |   |               |
| 18             | -CTS          |   |               |        |                                  |   |               |
| 20 1)          |               |   |               |        |                                  |   |               |
| 21 1)          |               |   |               |        |                                  |   |               |
| 6              | Nc            |   |               |        | Connect to 19<br>for termination |   |               |
| 19             | Nc            |   |               |        | Connect to 6<br>for termination  |   |               |
| 7,8            | 0V            |   |               |        | 0V                               |   |               |
| 14             | +5V<br>≤50mA  |   | $\rightarrow$ |        | +5V<br>≤50mA                     |   | $\rightarrow$ |
| 12,13<br>24,25 | +5V<br>≥200mA |   | $\rightarrow$ |        | +5V<br>≥200mA                    |   | $\rightarrow$ |

D-sub  
 25-Pin Female  
 25-pin Female

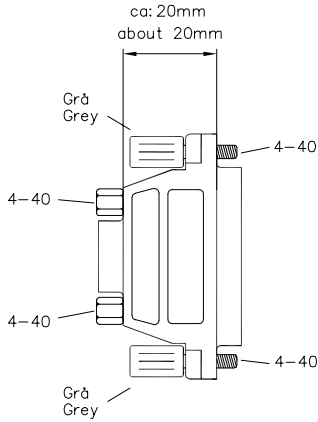
1) Pin no 20 connected to pin no 21 internal in the terminal

Termination only PS-485:

120 ohm 1/4W between pin 6-19

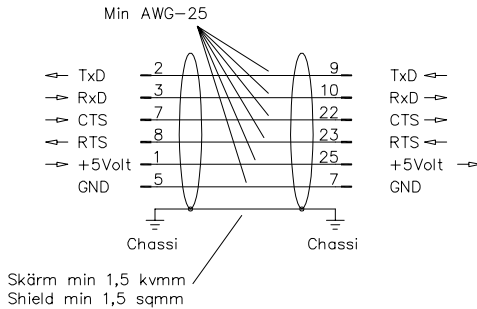


## 232-25-ADP adapter to CIMREX 5



9pol D-sub Hane  
9pin D-sub Male

25pol D-sub Hane  
25pol D-sub Male

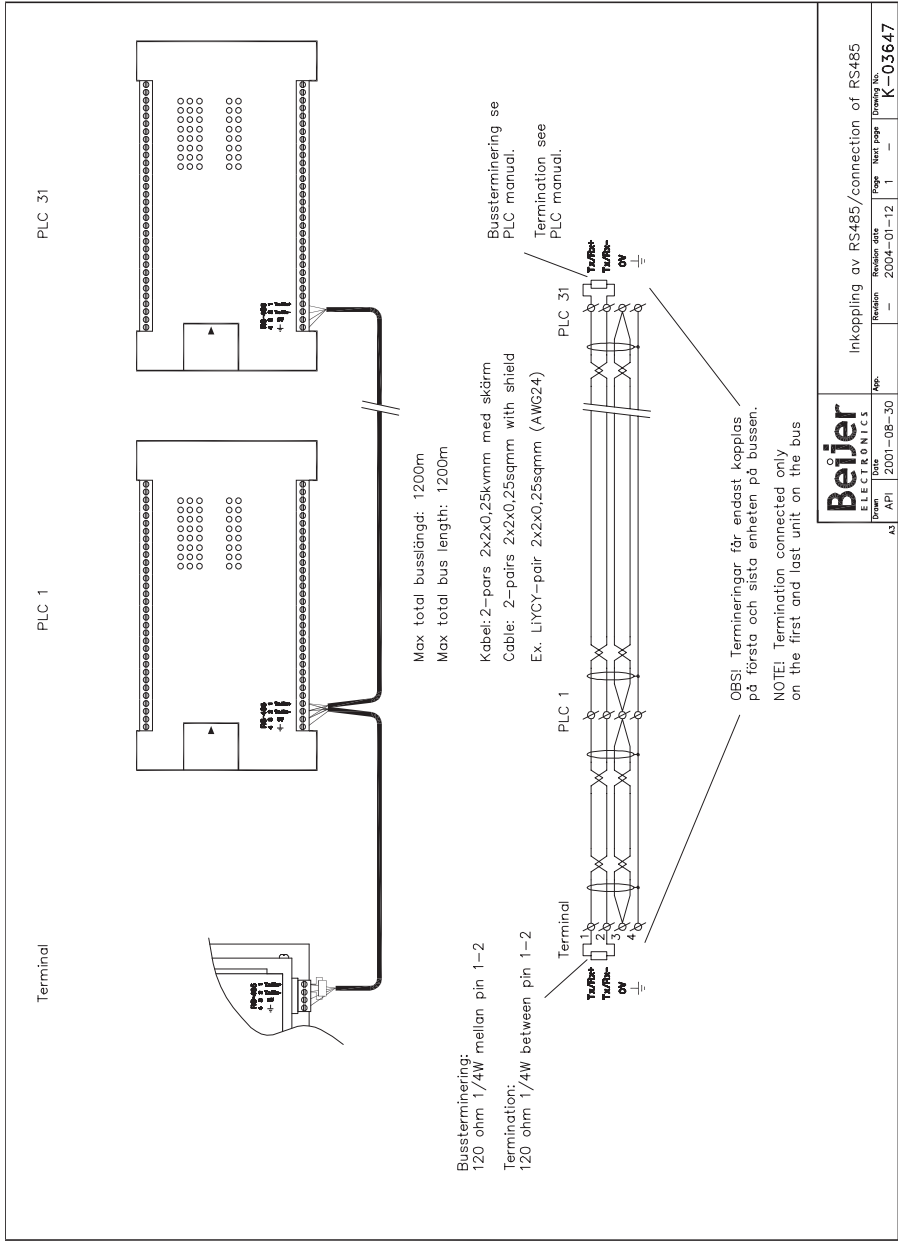


Drawn to scale 1:1



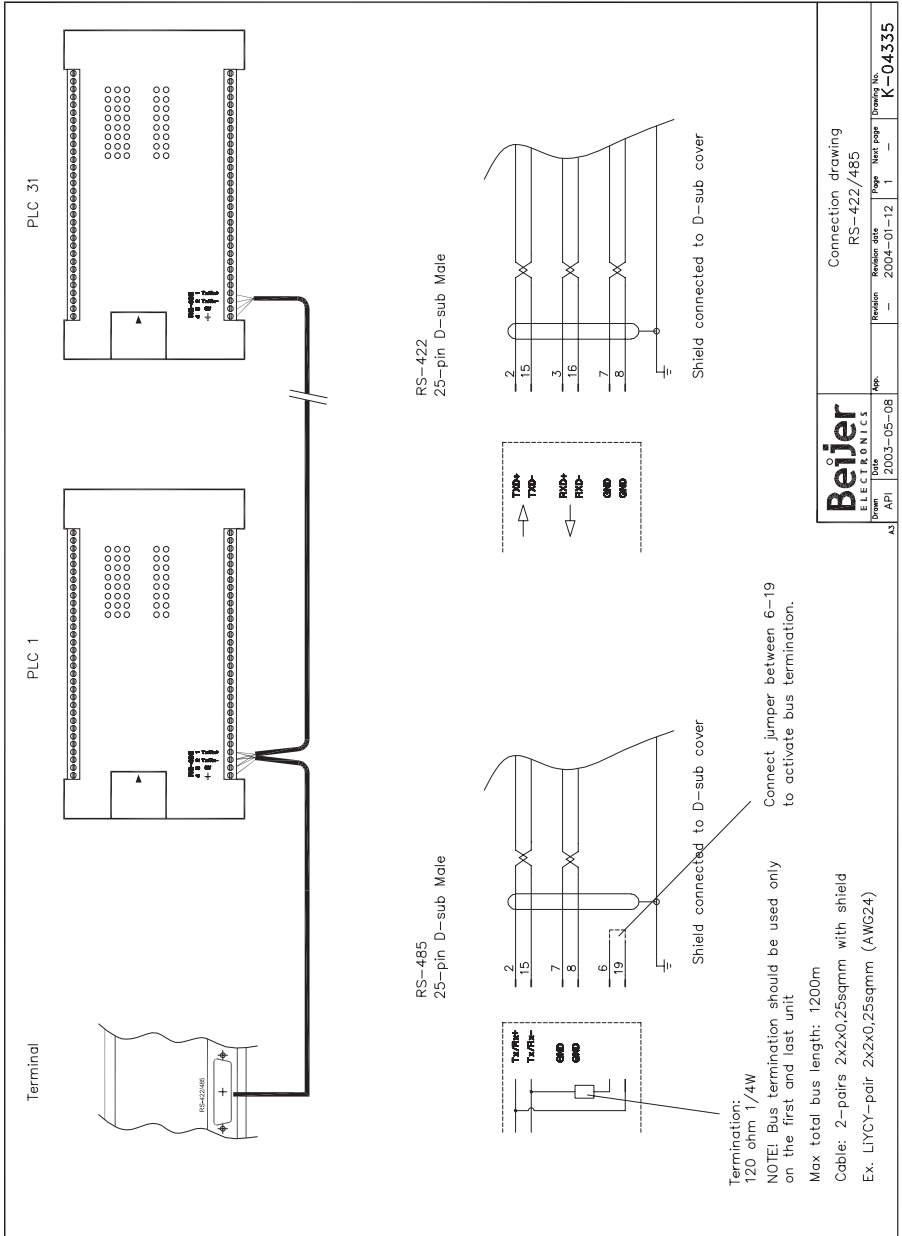
| Beijer<br>ELECTRONICS |            | 232-25-ADP |          |               |      |           |             |
|-----------------------|------------|------------|----------|---------------|------|-----------|-------------|
| Drawn                 | Date       | App.       | Revision | Revision date | Page | Next page | Drawing No. |
| LPN                   | 1999-11-26 |            | -        | 2000-07-25    | 1    | -         | S-02860     |

RS485 connection

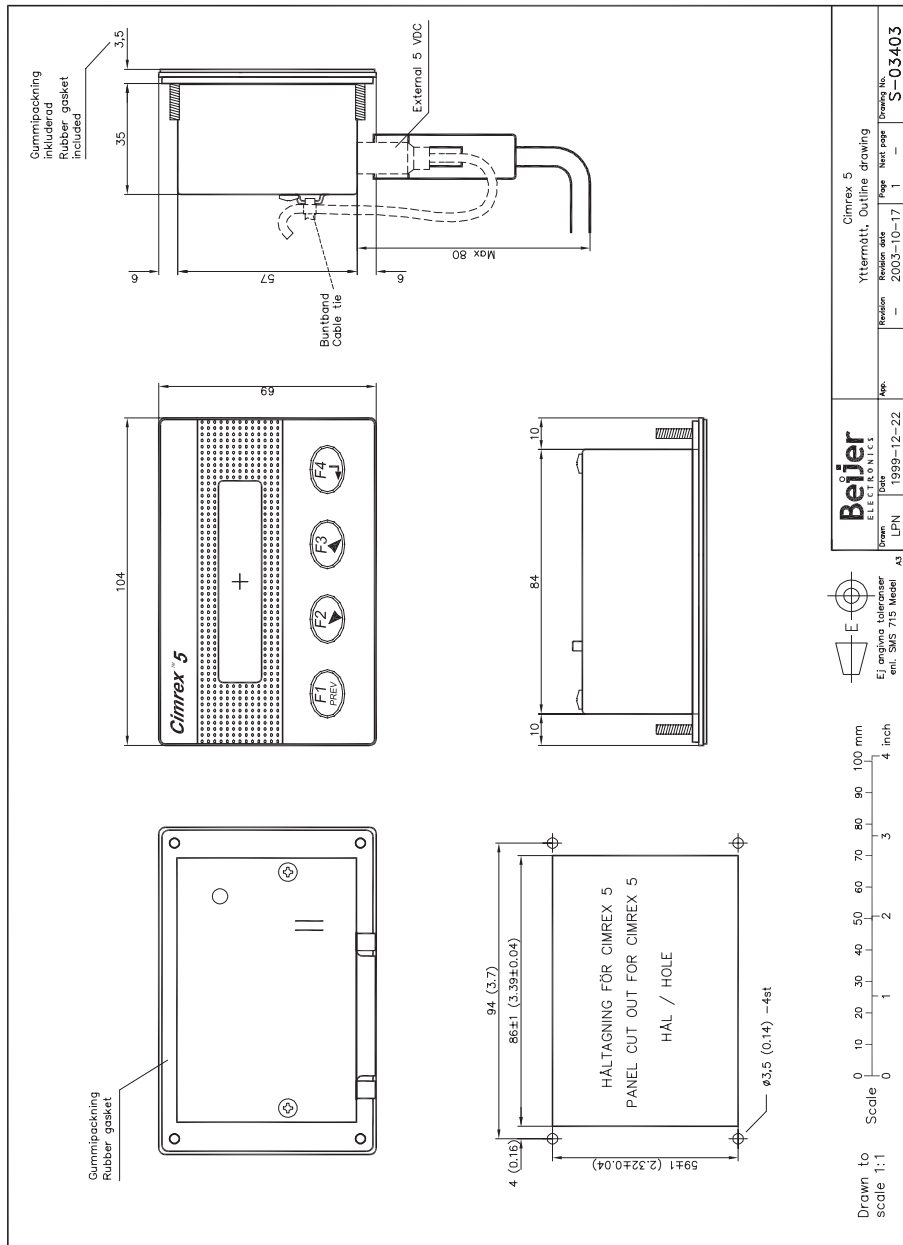


|                              |            |  |          |
|------------------------------|------------|--|----------|
| <b>Beijer</b><br>ELECTRONICS |            | Inkoppling av RS485/ connection of RS485 |          |
| Rev                          | Revision   | Page                                     | Page No. |
| API                          | 2001-08-30 | 1  | K-03647  |
| AS                           |            |  |          |

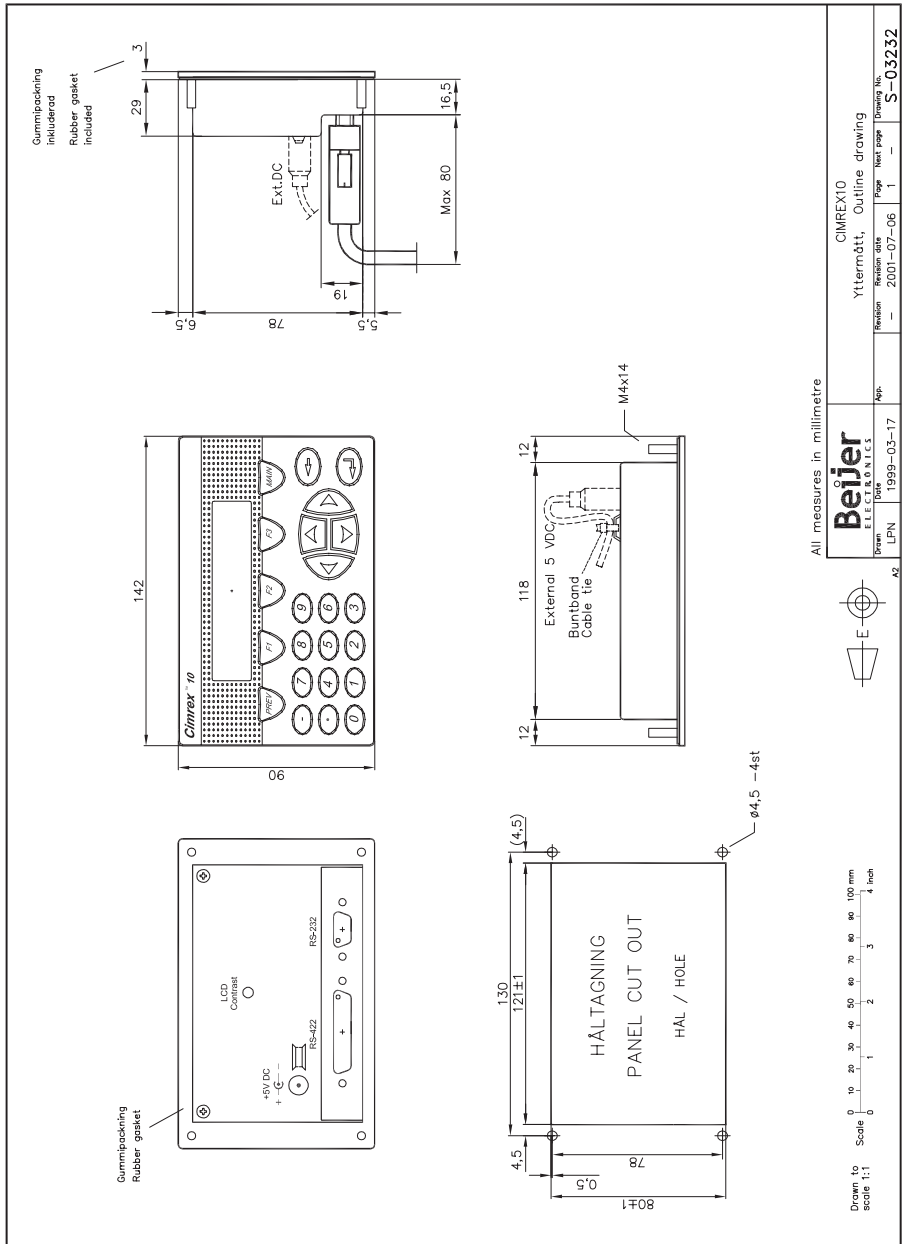
# RS422/485 connection for CIMREX 12, CIMREX 20 and CIMREX 41



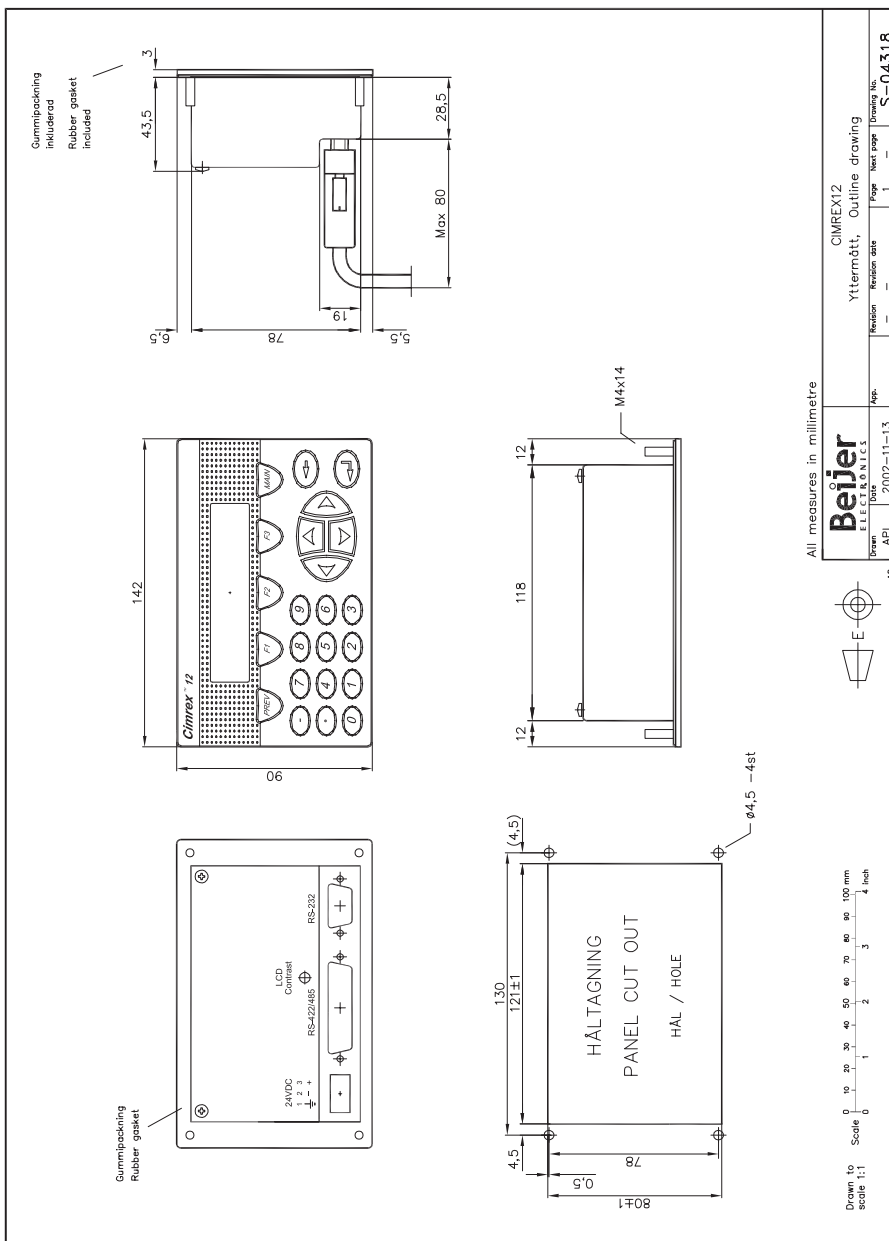
# CIMREX 5 Outline



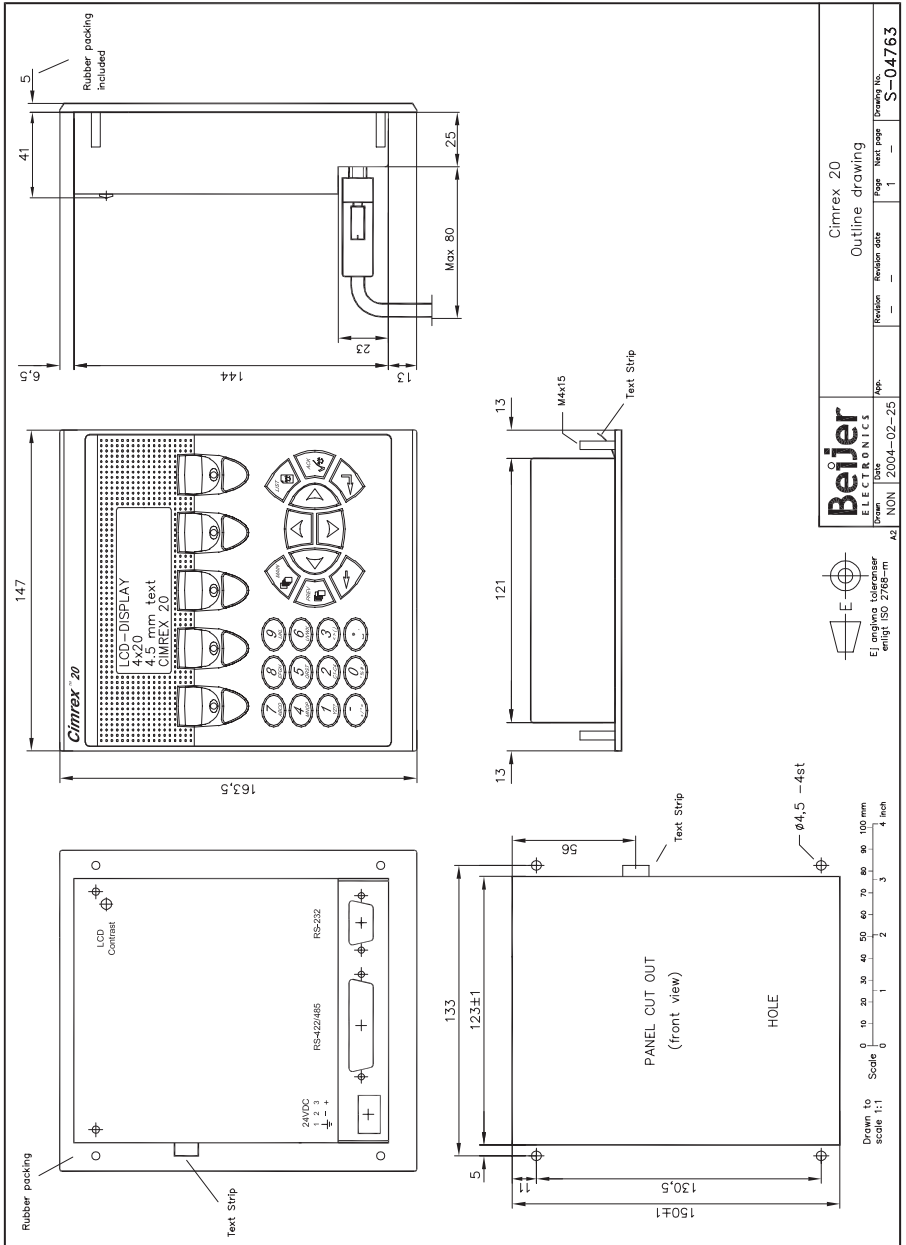
## CIMREX 10 Outline



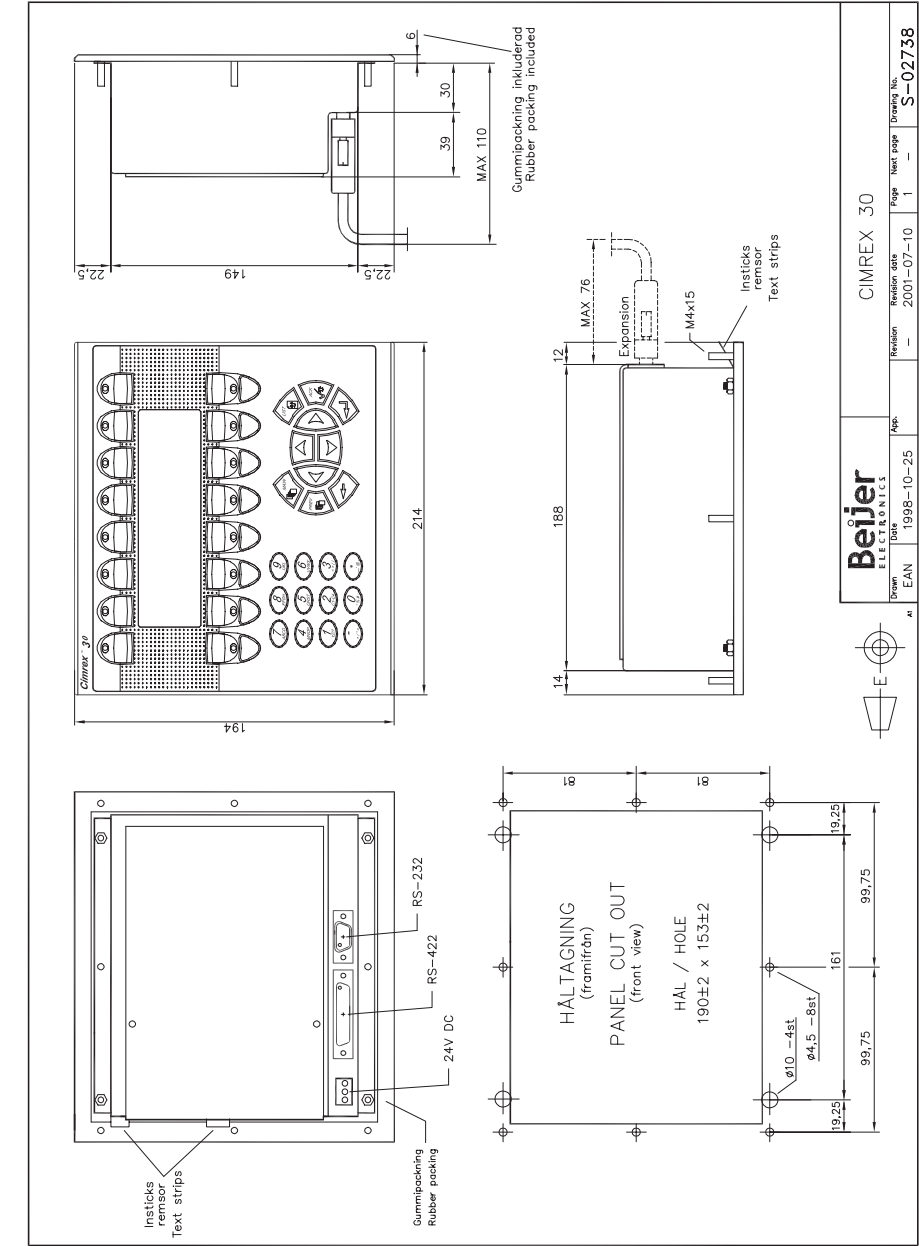
## CIMREX 12 Outline



# CIMREX 20 Outline

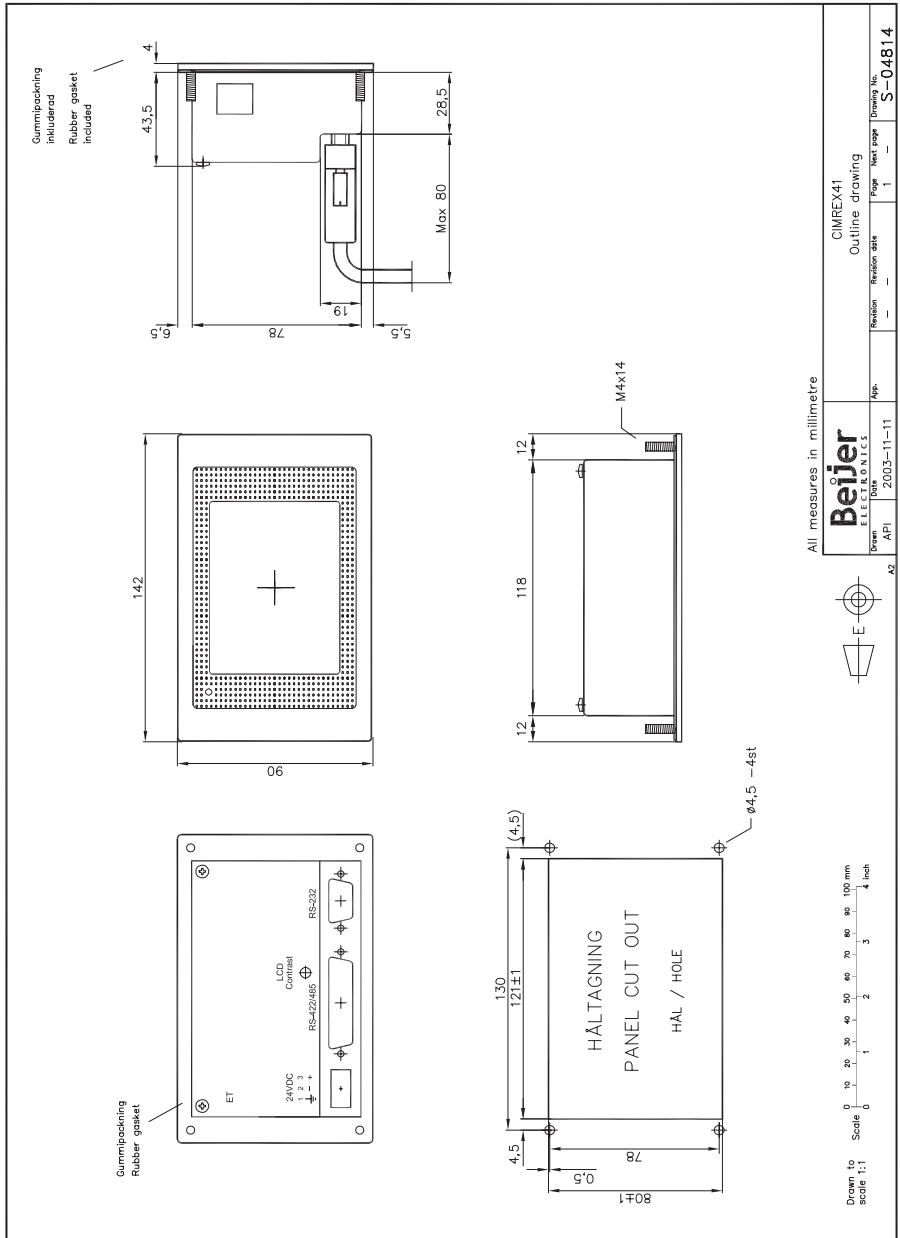


## CIMREX 30 Outline

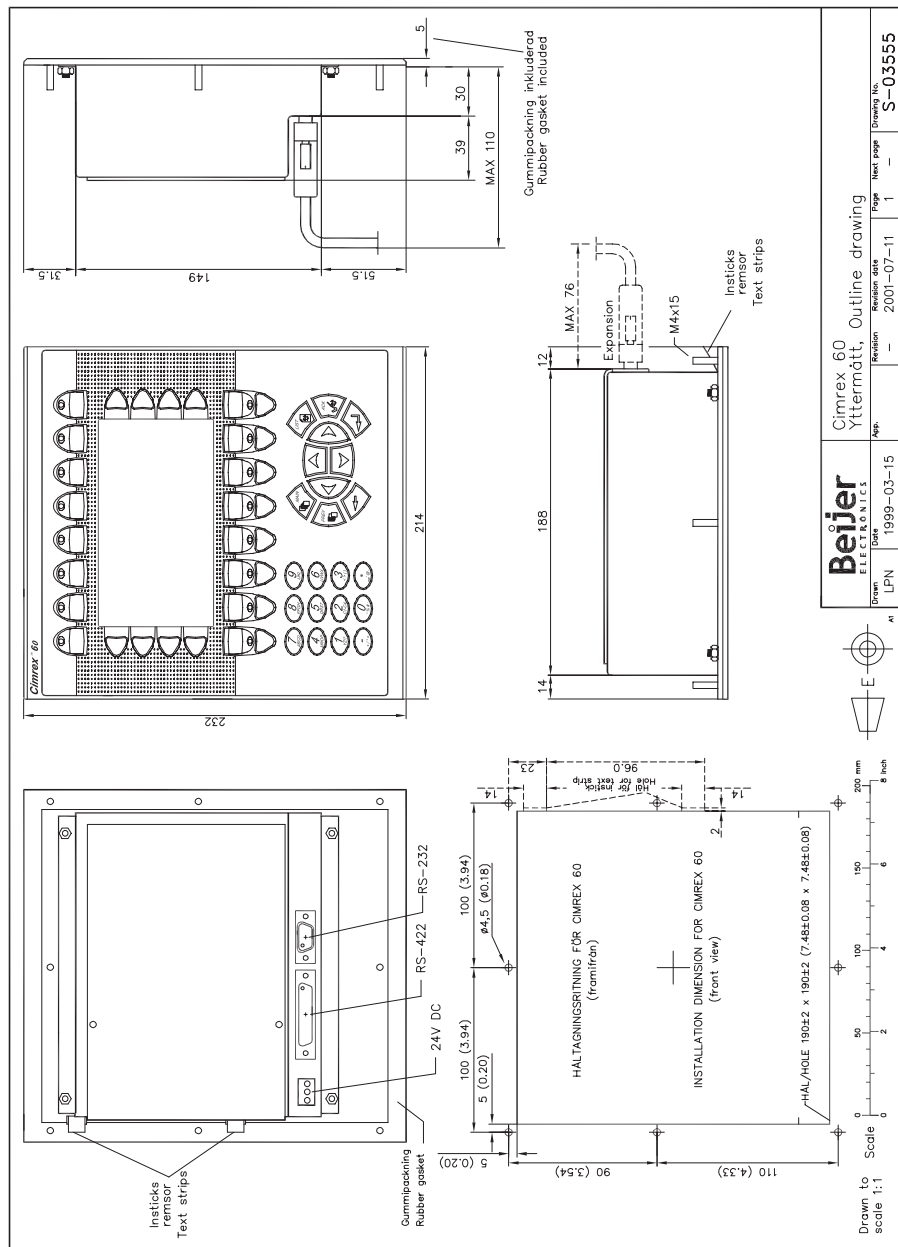




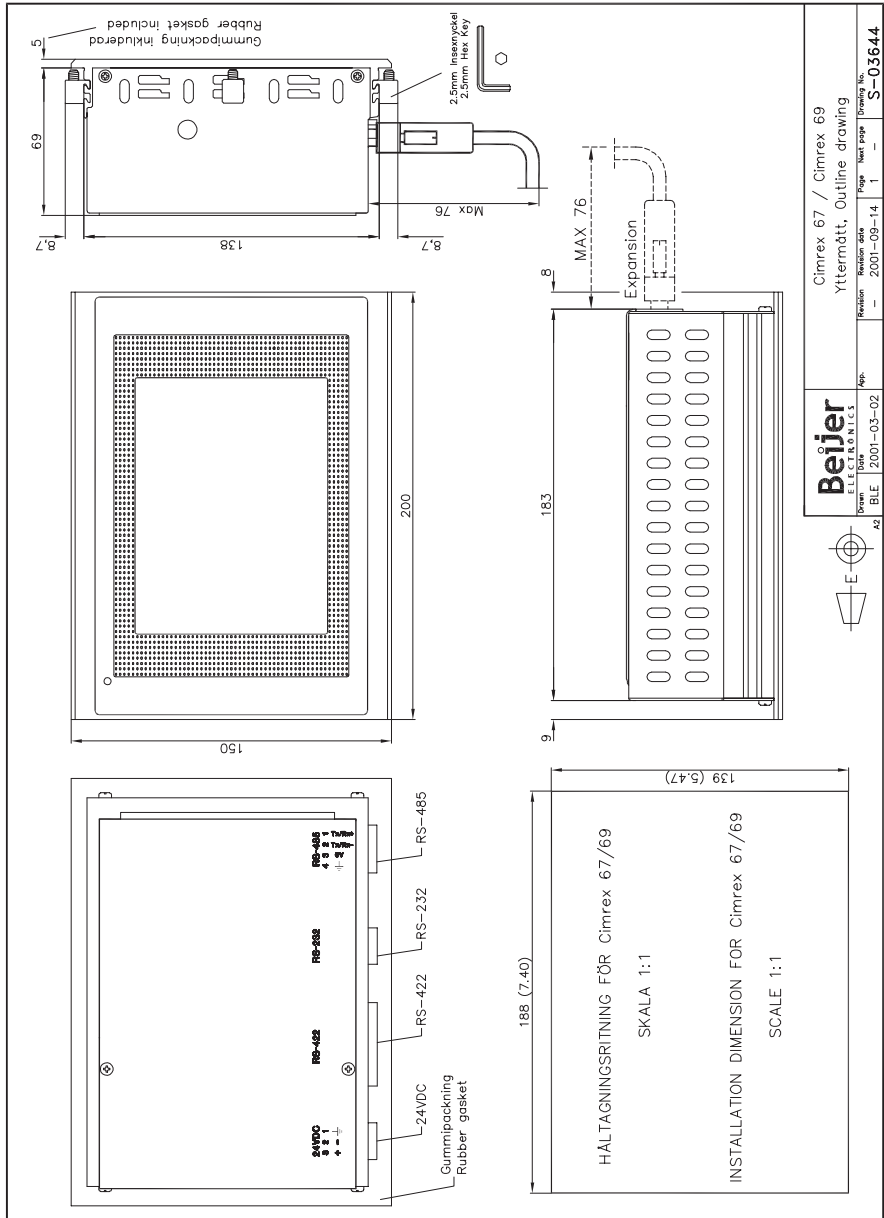
## CIMREX 41 Outline



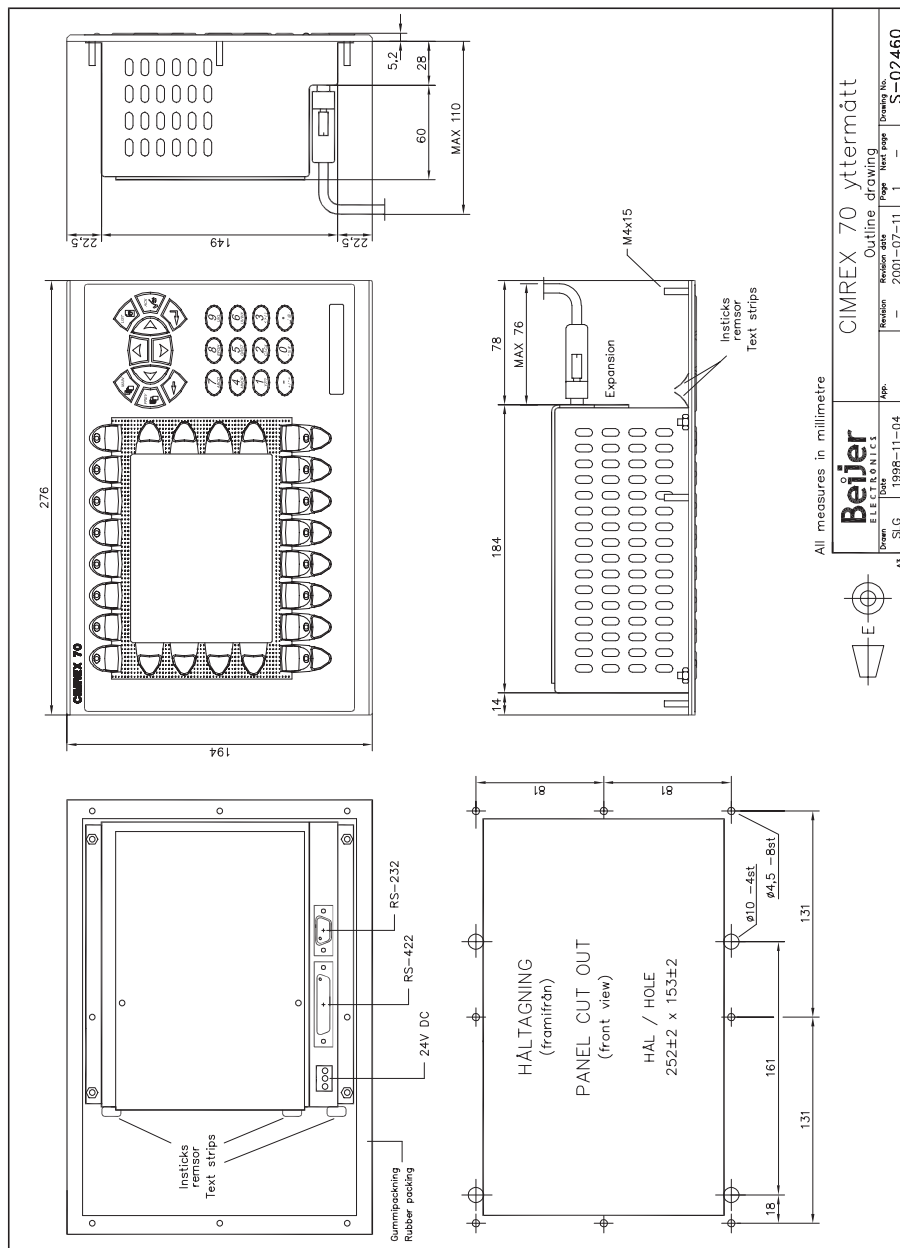
## CIMREX 60 Outline



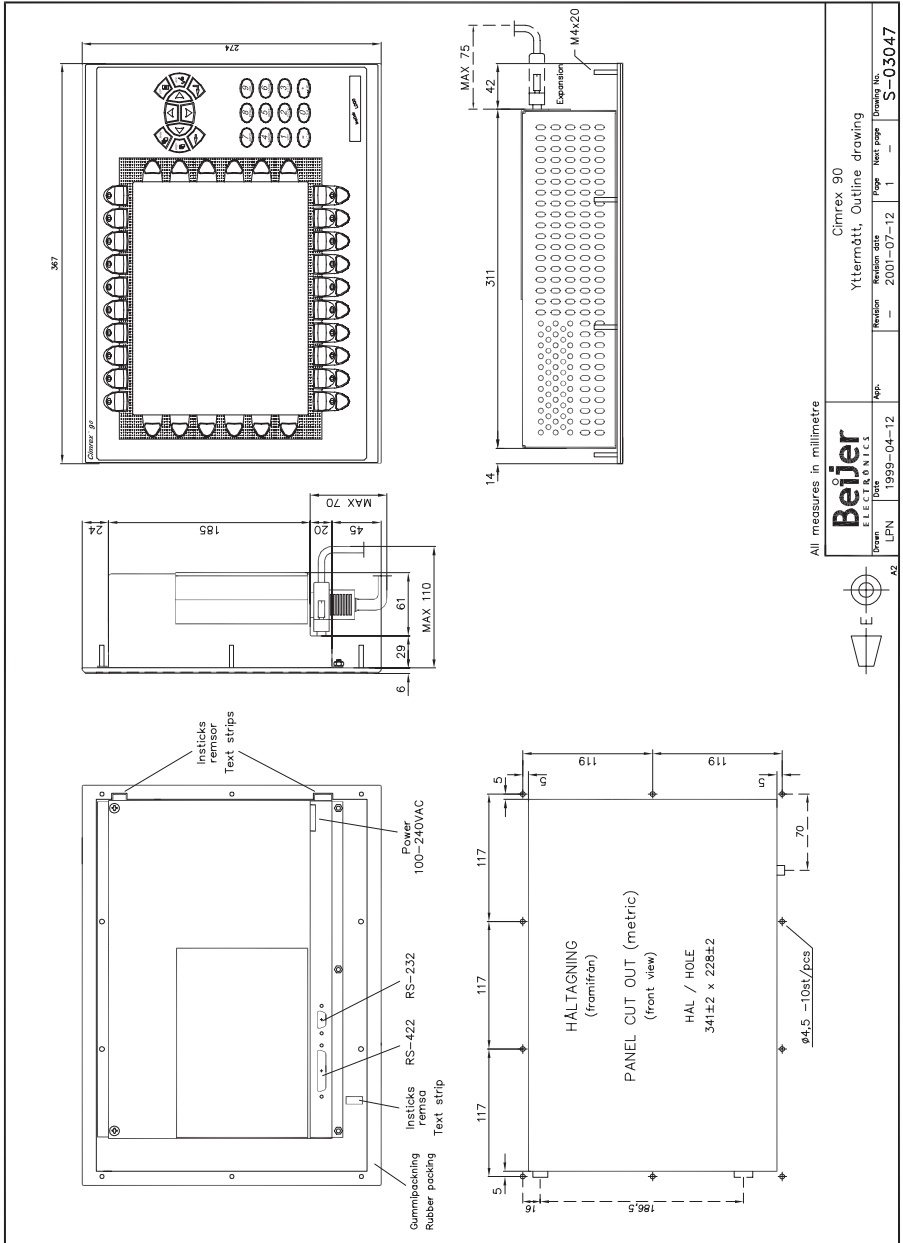
## CIMREX 67/CIMREX 69/CIMREX 69T Outline



# CIMREX 70 Outline

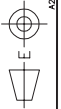


# CIMREX 90 Outline

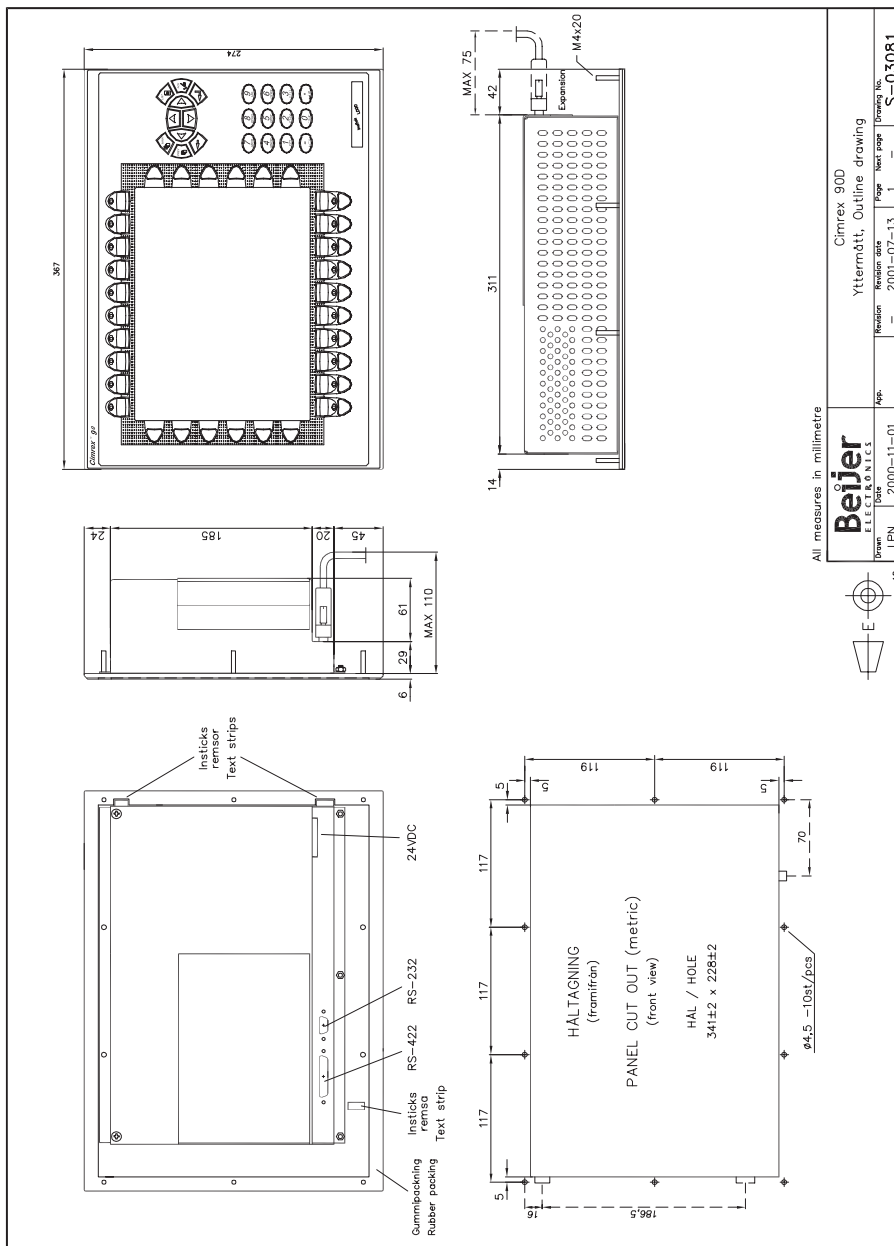


All measures in millimetre

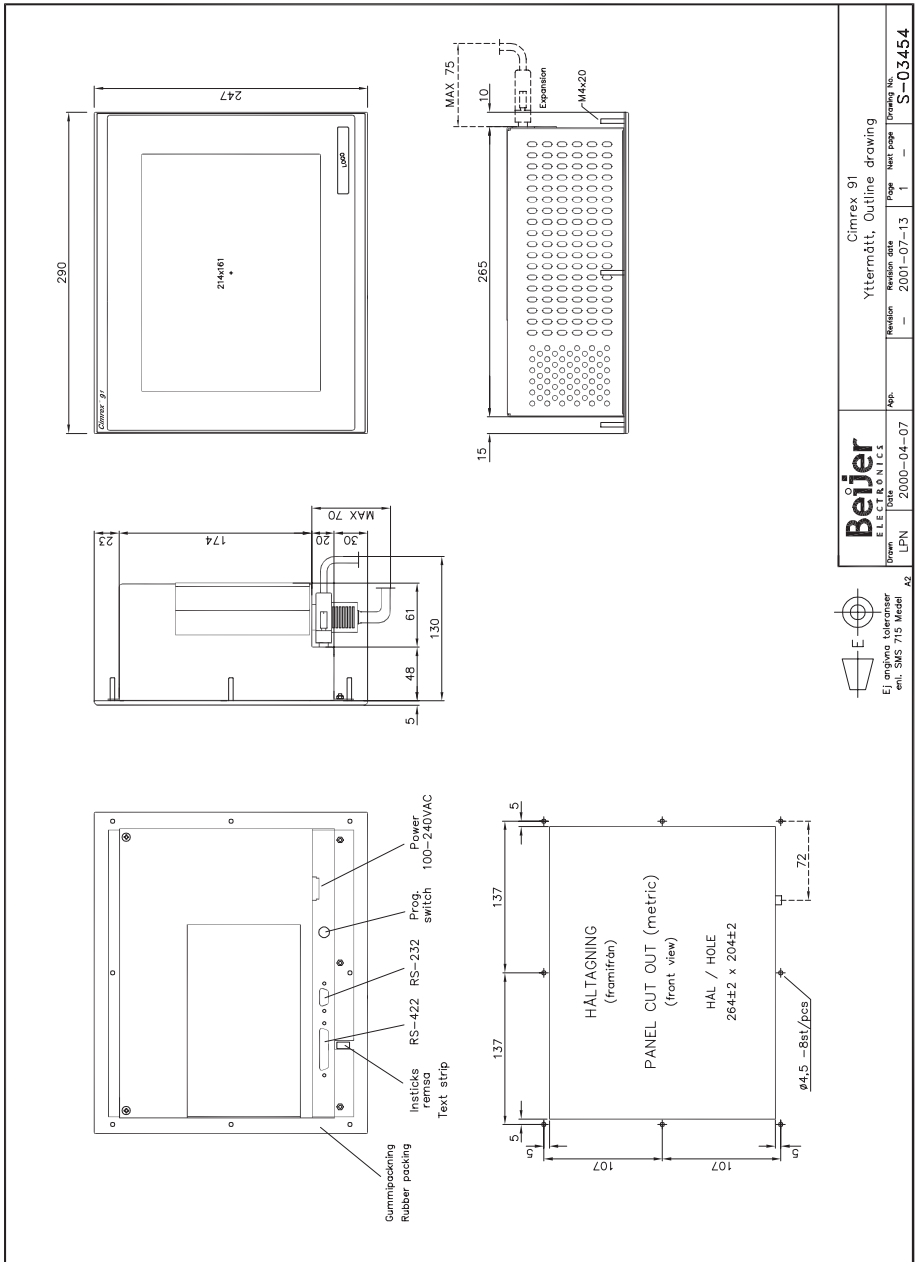
|                       |     |   |            |                     |   |
|-----------------------|-----|---|------------|---------------------|---|
| Beijer<br>ELECTRONICS |     | CIMREX 90<br>Yttermätt, Outline drawing |            | Drawing No. S-03047 |   |
| Drawn                 | LPN | Date                                    | 1999-04-12 | Appr.               |   |
| Revision              |     | Revision date                           | 2001-07-12 | Page                | 1 |
|                       |     |   |            | Next page           |   |



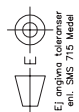
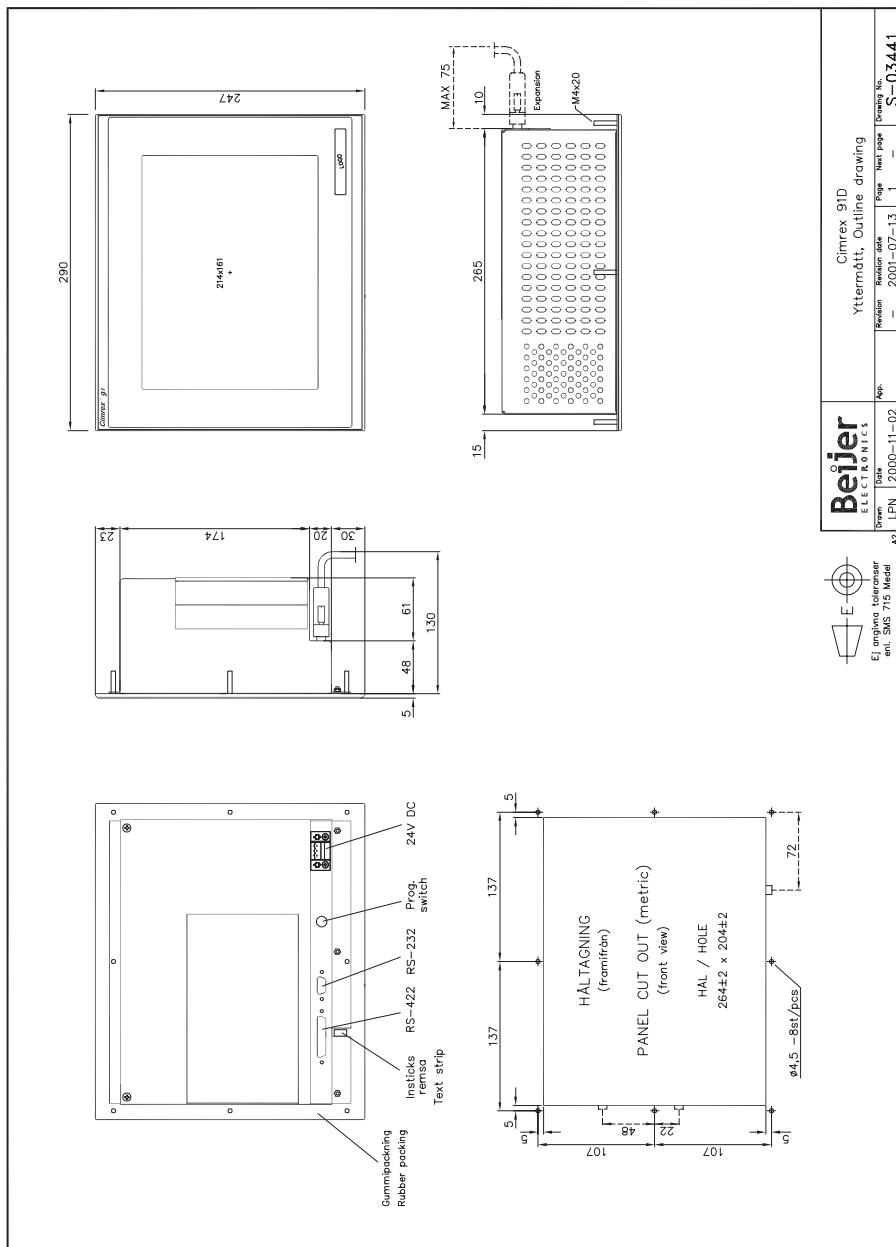
# CIMREX 90D Outline



## CIMREX 91 Outline



# CIMREX 91D Outline



|                              |  |  |  |          |               |      |           |             |
|------------------------------|--|--|--|----------|---------------|------|-----------|-------------|
| <b>Beijer</b><br>ELECTRONICS |  | Cimrex 91D<br>Yttermött, Outline drawing |  | Revision | Revision date | Page | Next page | Drawing No. |
| LPN                          |  | 2000-11-02                               |  | Rev      | 2001-07-13    | 1    | 2         | S-03441     |