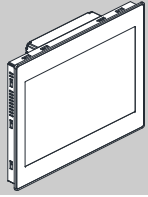


# CDPX-X-A-W-13



## FESTO

Brief description  
Kurzbeschreibung

Festo AG & Co. KG  
Postfach  
D-73726 Esslingen  
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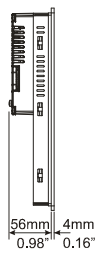
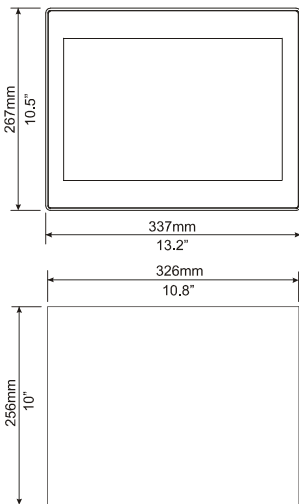
IND. CONT. EQ.



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### Dimension-Cut out/ Abmessungen-Einbauausschnitt



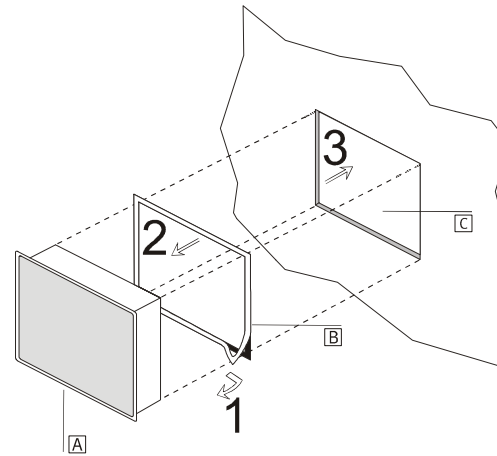
### Technical specifications/ Technische Merkmale

Power supply / Spannungsversorgung	
Power supply voltage / Eingangsspannung	18 - 30 V DC
Current consumption / Stromaufnahme	1.2 A at 24 V DC 1.2 A bei 24 V DC
Back-up battery / Back-up Batterie	3V 50mA Lithium, rechargeable, not user-replaceable, PANASONIC model VL2330 or equivalent with the work temperature of CDPX. 3 V 50mA Lithium, wiederaufladbar, nicht austauschbar, PANASONIC Model VL2330, bzw. Äquivalenttyp mit gleicher Arbeitstemperatur wie CDPX
Fuse / Sicherung	overcurrent protection device / Elektronischer Überlastungsschutz

Environmental conditions / Umgebungsbedingungen	
Operating temperature / Betriebstemperatur	0 - +50° C EN 60068-2-14
Storage temperature / Lagertemperatur	-20 - +70° C EN 60068-2-14
Operating and storage humidity / Betriebs- und Lagerfeuchtigkeit	5 - 85%RH non-condensing nicht kondensierend EN 60068-2-30
Vibration / Schwingungen	5 - 9 Hz, 7 mm peak / Spitze 9 - 150 Hz, 1 G EN 60068-2-6
Shock / Erschütterung	50 g, 11 ms, 3 pulses per axis EN 60068-2-27
Protection class / Schutzklasse	Front IP66 Rear IP20 EN 60529
Keyboard reliability / Tastaturzuverlässigkeit	>3 million operations >3 Millionen Operationen

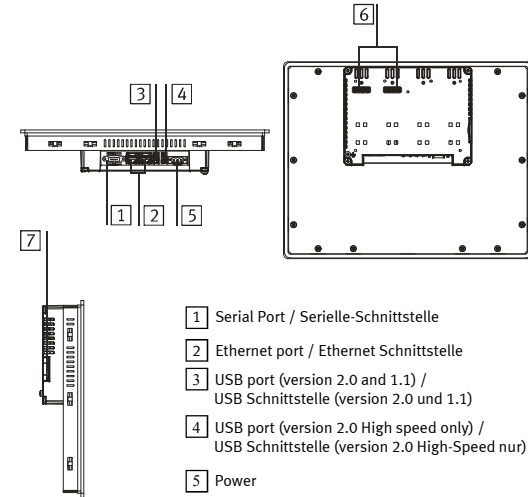
Electromagnetic Compatibility (EMC) / Elektromagnetische Kompatibilität (EMK)	
Emitted interference / Ausgesandte Interferenz	Classe A / Klasse A EN 55011
Immunity to radiated radio frequency for electromagnetic fields / Funkverträglichkeit für elektromagnetische Felder	80 MHz - 1 GHz, 10 V/m EN 61000-4-3 1.4 GHz - 2 GHz, 3 V/m 2 GHz - 2.7 GHz, 1V/m
Immunity to disturbances induced by radio frequency fields / Verträglichkeit gegen Störungen induziert durch Radiofrequenzfelder	0.15 - 80 MHz, 10 V EN 61000-4-6
Immunity to interference, burst / Störfestigkeit, Burst	2 KV power supply / 2 KV Stromzufuhr EN 61000-4-4 1 KV signal lines / 1 KV Signallinien
Electrostatic discharge / Elektrostatische Entladung	8 KV in air / 8 KV in der Luft EN 61000-4-2
Interfaces / Schnittstellen:	
-Serial port / Serielle-Schnittstelle	RS-232, RS-422, RS-485, 9-pin sub-D connector 300 - 38400 baud / RS-232, RS-422, RS-485, 9-poliger Sub-D Stecker 300 - 38400 baud
-Ethernet port	2 RJ45 10/100 Mbit/s
-USB port / USB Schnittstelle	2 Host Interface (1 version 2.0, 1 version 2.0 and 1.1) / 1 version 2.0, 1 version 2.0 und 1.1)
-Expansion slot / Erweiterungssteckplatz	Optional Plugin / Optionales Plugin
Others: / Sonstiges:	
-Real time clock / Echtzeituhr	Clock and calendar with back-up battery / Uhr und Kalender mit Batterie
-Max. deviation of real time clock/month / Max. Abweichung der Echtzeituhr/Monat	130 s at 25 °C 130 s bei 25 °C
-Programming software / Programmiersoftware	Designer Studio CDPX

### Applying the rectangular gasket/ Verwendung der rechteckigen Dichtung



- A CDPX
- B Gasket / Dichtung
- C Installation cut-out/ Einbauausschnitt

### Connections/ Anschlüsse

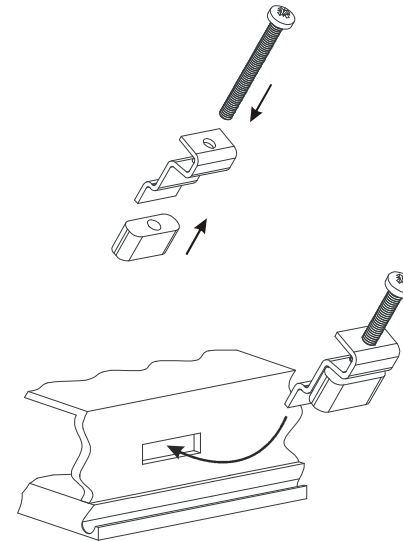


- 1 Serial Port / Serielle-Schnittstelle
- 2 Ethernet port / Ethernet Schnittstelle
- 3 USB port (version 2.0 and 1.1) / USB Schnittstelle (version 2.0 und 1.1)
- 4 USB port (version 2.0 High speed only) / USB Schnittstelle (version 2.0 High-Speed nur)
- 5 Power
- 6 Expansion slot / Erweiterungssteckplatz
- 7 SD Card slot / SD Card-Slot



All ports are SELV (Safety Extra - Low Voltage)  
Alle Anschlüsse sind SELV (Kleinspannung)

### Fixing bracket/ Befestigung

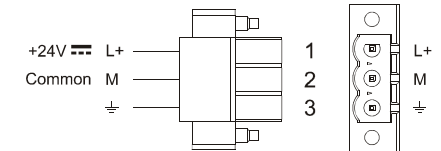


Screw each fixing screw until the plastic or aluminium bezel corner get in contact with the panel.  
Alle Befestigungsschrauben so aufschrauben, bis der Winkel des Kunststoff- bzw. alurahmen auf dem Bediensystem genau liegt.

### Power supply/ Spannungsversorgung



Extra low voltage power supply / Limited power source.  
Kleinspannung Stromversorgung / Limitierte Stromquelle.



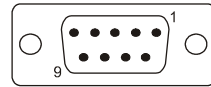
DC Power Connector, Female - R/C Terminal Blocks (XCFR2), manufactured by Weidmüller Inc., Cat. No. BLZ 5.08, torque 4.5 lb-in

DC Spannungs-klemme, weiblich - R/C Terminal Block (XCFR2), hergestellt durch Weidmüller Inc., Katalog Nr. BLZ 5.08, Drehmoment 4.5 lb-in

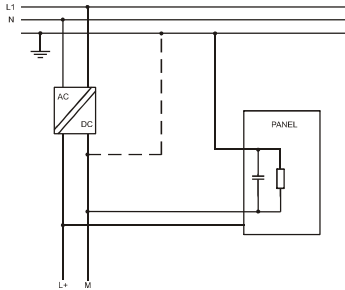
## Serial Port connector and pin assignment/ Serielle Schnittstelle mit Pin Zuordnung



Don't open the panel rear cover when the power supply is applied.  
Das Bediengerät nicht unter Spannung öffnen.



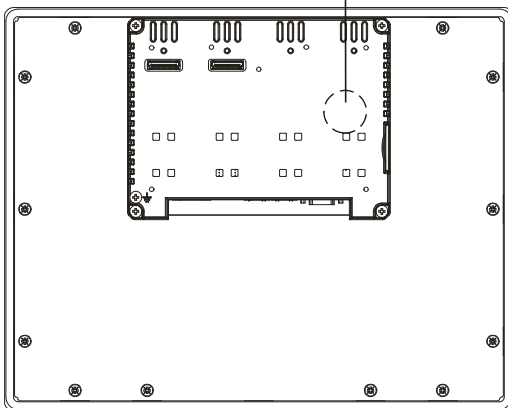
Pin	Description / Beschreibung
1	GND
2	
3	TX/CHA-
4	RX/CHB-
5	
6	+5 V output (Max 100mA) +5 V Ausgang (max100mA)
7	CTS/CHB+
8	RTS/CHA+
9	



Ensure that the power supply has enough power capacity for the operation of the equipment.  
Stellen Sie sicher, dass die Spannungsversorgung genügend Leistungskapazität für den Betrieb des Gerätes aufweist.

## Dispose of batteries/ Batterie-Entsorgung

1



1 Battery

## Dedicated LEDs / Zugewiesene LED's

The table below shows the name and the symbol (if available) of the LEDs dedicated to special functions. / Die Tabelle unten zeigt den Namen und das Symbol (falls vorhanden) der LED's denen spezielle Funktionen zugewiesen sind.

=on / leuchtet; =LED flashes / LED blinkt )

LED Name/symbol	Colour / Farbe	Status	Meaning / Bedeutung
not marked (above left) / nicht beschriftet (oben links)	red / rot		Hardware fault / Hardware Fehler
			Battery low or alarm requires acknowledgment / Batterieleistung gering oder Alarm steht an
	green / grün		Normal operation/ Normalbetrieb
			Communication error / Kommunikationsfehler

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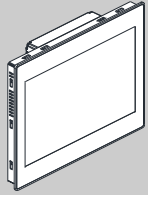
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Dispose of batteries according to local regulations.  
Akkus müssen ordnungsgemäß entsorgt werden.



# CDPX-X-A-W-13



## FESTO

Brief description  
Descripción resumida

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www.festo.com



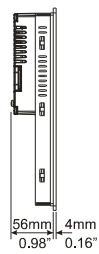
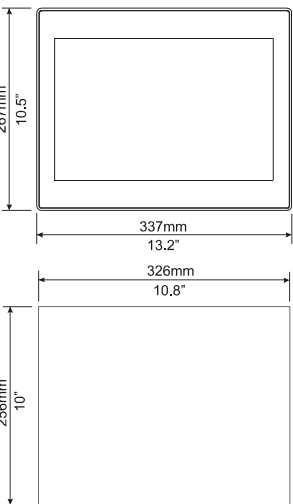
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### Dimension-Cut out/ Dimensiones de hueco para montaje



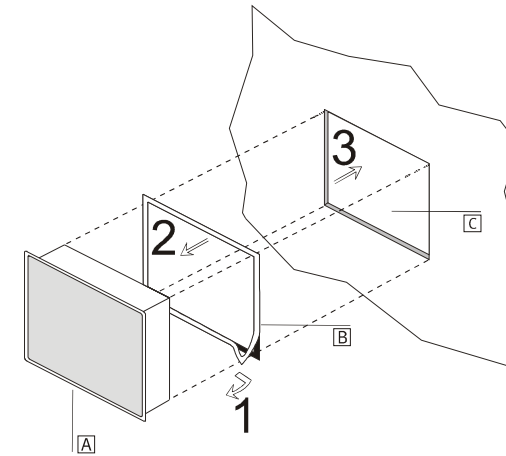
### Technical specifications/ Características técnicas

Power supply / Alimentación	
Power supply voltage / Tensión de entrada	18 - 30 V DC
Current consumption / Consumo de corriente	1.2 A at 24 V DC 1,2 A con 24 V CC
Back-up battery / Batería de reserva	3V 50mA Lithium, rechargeable, not user-replaceable, PANASONIC model VL2330 or equivalent with the work temperature of CDPX. 3 V 50 mA litio, recargable, no recambiable, modelo PANASONIC VL2330 o equivalente con la misma temperatura de trabajo que CDPX
Fuse / Fusible	overcurrent protection device / overcurrent protection device / protección contra sobrecarga electrónica

Environmental conditions / condiciones ambientales	
Operating temperature / Temperatura de servicio	0 - +50° C EN 60068-2-14
Storage temperature / Temperatura de almacenamiento	-20 - +70° C EN 60068-2-14
Operating and storage humidity / Humedad de servicio y de almacenamiento	5 - 85%RH non-condensing sin condensación EN 60068-2-30
Vibration / Vibraciones	5 - 9 Hz, 7 mm peak / pico 9 - 150 Hz, 1 G EN 60068-2-6
Shock / Sacudida	50 g, 11 ms, 3 pulses per axis / impulsos por eje EN 60068-2-27
Protection class / clase de protección	Front IP66 / Delante IP 66 Rear IP20 / Detrás IP 20 EN 60529
Keyboard reliability / Fiabilidad del teclado	>3 million operations >3 millones de operaciones

Electromagnetic Compatibility (EMC) / Compatibilidad electromagnética (CEM)	
Emitted interference / Interferencia emitida	Clase A / Clase A EN 55011
Immunity to radiated radio frequency for electromagnetic fields / Compatibilidad radio para campos electromagnéticos	80 MHz - 1 GHz, 10 V/m EN 61000-4-3 1.4 GHz - 2 GHz, 3 V/m 2 GHz - 2.7 GHz, 1V/m
Immunity to disturbances induced by radio frequency fields / Compatibilidad contra interferencias inducidas por campos de radiofrecuencia	0.15 - 80 MHz, 10 V EN 61000-4-6
Immunity to interference, burst / Resistencia a interferencias, señal piloto	2 KV power supply / 2 KV de suministro de corriente 1 KV signal lines / KV de líneas de señal EN 61000-4-4
Electrostatic discharge / Descarga electrostática	8 KV in air / 8 KV en el aire EN 61000-4-2
Interfaces / Interfaces:	
-Serial port / Interfaz serie	RS-232, RS-422, RS-485, 9-pin sub-D connector 300 - 38400 baud / RS-232, RS-422, RS-485, conector Sub-D de 9 pines 300 - 38400 baud / 300 - 38400 baudios
-Ethernet port / puerto Ethernet	2 RJ45 10/100 Mbit/s
-USB port / interfaz USB	2 Host Interface (1 version 2.0, 1 version 2.0 and 1.1) / 2 interfaces host (1 versión 2.0, 1 versión 2.0 y 1.1)
-Expansion slot / ranura para tarjetas accesorias	Optional Plugin / Plugin opcional
Others: / Otros:	
-Real time clock / reloj en tiempo real	Clock and calendar with back-up battery / Reloj y calendario con batería
-Max. deviation of real time clock/month / desviación máx. de la hora en tiempo real/mes	130 s at 25 °C 130 s a 25 °C
-Programming software / Software de programación	Designer Studio CDPX

### Applying the rectangular gasket / Utilización de la junta rectangular

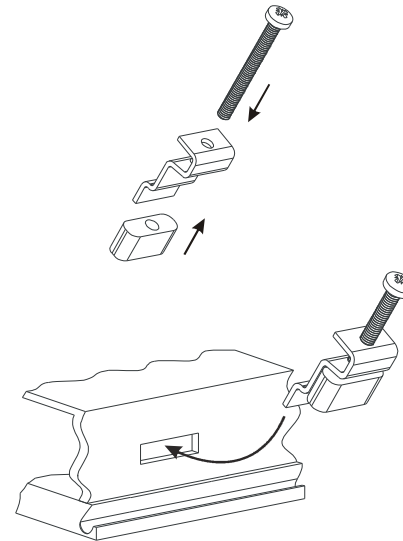


A CDPX

B Gasket / Junta

C Installation cut-out / Hueco para montaje

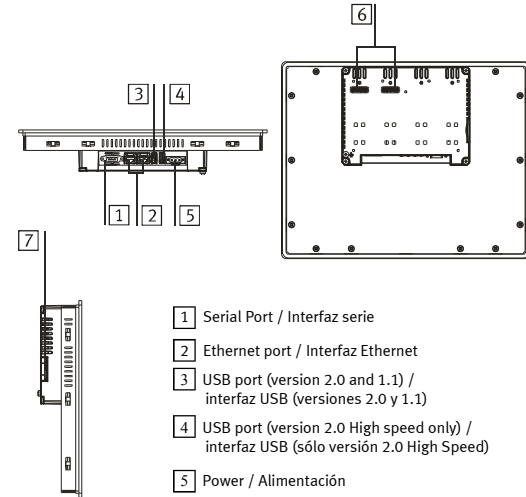
### Fixing bracket / Fijación



Screw each fixing screw until the plastic or aluminium bezel corner get in contact with the panel.

Todos los tornillos de fijación deben atornillarse hasta que la esquina del marco de plástico o aluminio entre en contacto con el sistema de mando.

### Connections / Tomas de conexión



1 Serial Port / Interfaz serie

2 Ethernet port / Interfaz Ethernet

3 USB port (version 2.0 and 1.1) / interfaz USB (versiones 2.0 y 1.1)

4 USB port (version 2.0 High speed only) / interfaz USB (sólo versión 2.0 High Speed)

5 Power / Alimentación

6 Expansion slot / Ranura para tarjetas accesorias

7 SD Card slot / Ranura para tarjeta SD

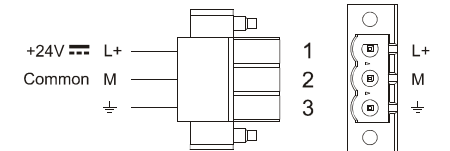


All ports are SELV (Safety Extra - Low Voltage)  
Todas las tomas de conexión son SELV (bajo voltaje)

### Power supply / Alimentación



Extra low voltage power supply / Limited power source.  
Alimentación de corriente de bajo voltaje / fuente de alimentación limitada.



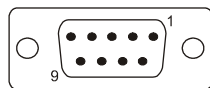
DC Power Connector, Female - R/C Terminal Blocks (XCFR2), manufactured by Weidmuller Inc., Cat. No. BLZ 5.08, torque 4.5 lb-in

Conector de alimentación CC, hembra R/C regleta de terminales (XCFR2), fabricado por Weidmuller Inc., catálogo nº BLZ 5.08, par de apriete 4,5 lb-in

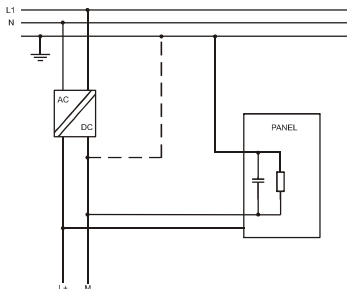
## Serial Port connector and pin assignment / Interfaz serie con asignación de pines



Don't open the panel rear cover when the power supply is applied.  
No se debe abrir la unidad de indicación y control bajo tensión.



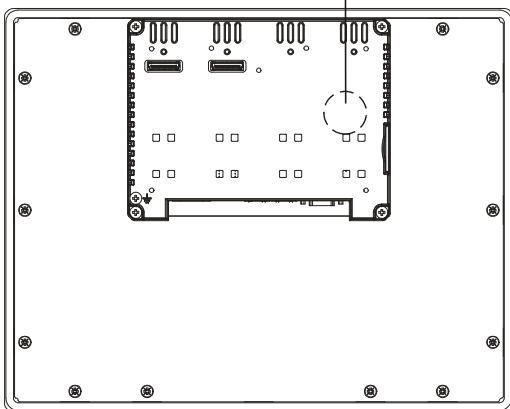
Pin	Description / Descripción
1	GND
2	
3	TX/CHA-
4	RX/CHB-
5	
6	+5 V output (Max 100 mA) Salida de +5 V (máx. 100 mA)
7	CTS/CHB+
8	RTS/CHA+
9	



Ensure that the power supply has enough power capacity for the operation of the equipment.  
Asegúrese de que la fuente de alimentación tiene suficiente capacidad de potencia para el funcionamiento del dispositivo.

## Dispose of batteries / Eliminación de la batería

1



1 Battery / Batería

## Dedicated LEDs / LED asignados

The table below shows the name and the symbol (if available) of the LEDs dedicated to special functions. / La tabla de abajo muestra el nombre y el símbolo (sí existe) de los LED a los que se han asignado funciones especiales.

= on / encendido; = LED flashes / LED intermitente

LED Name / Símbolo	Colour / Color	Status / Estado	Meaning / Significado
not marked (above left) / no marcado (arriba a la izquierda)	red / rojo		Hardware fault / Error de hardware
			Battery low or alarm requires acknowledgment / Potencia de batería baja o alarma pendiente
	green / verde		Normal operation / Funcionamiento normal
			Communication error / Error de comunicación

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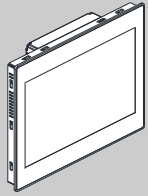
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Dispose of batteries according to local regulations.  
Las baterías usadas deben desecharse debidamente.



# CDPX-X-A-W-13



## FESTO

Descrizione  
Description sommaire

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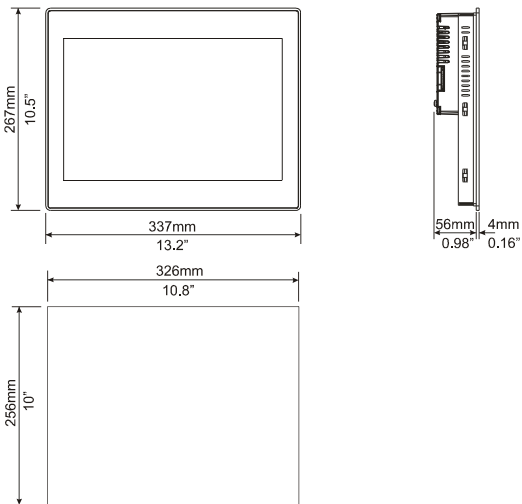
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1202NH

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Dimensioni taglio / Dimensions de la découpe de montage



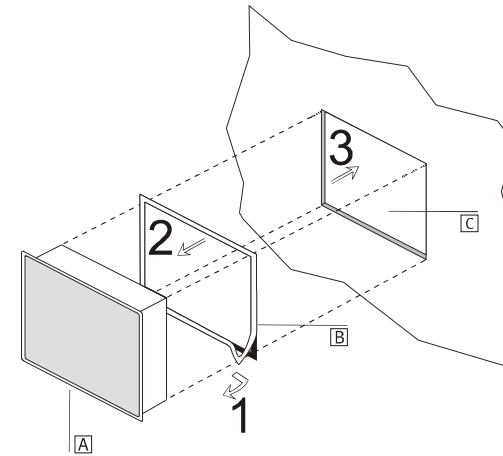
## Caratteristiche tecniche / Caractéristiques techniques

Alimentazione di tensione / Alimentation électrique	
Tensione di ingresso / Tension d'entrée	18 - 30 V DC
Assorbimento elettrico / Intensité absorbée	1.2 A con 24 V DC 1.2 A à 24 V CC
Batteria di back-up / Pile de secours	3 V 50mA litio, ricaricabile, non sostituibile, modello PANASONIC VL2330, o tipologia equivalente con la stessa temperatura di lavoro come CDPX 3 V 50 mA, au lithium, rechargeable, non interchangeable, PANASONIC modèle VL2330, ou d'un type équivalent ayant la même température de travail que CDPX
Fusibile / Fusible	Protezione elettronica contro sovraccarichi / Protection électronique contre les surcharges

Condizioni ambientali / Conditions d'environnement	
Temperatura d'esercizio / Température de service	0 - +50° C EN 60068-2-14
Temperatura di stoccaggio / Température de stockage	-20 - +70° C EN 60068-2-14
Umidità d'esercizio e di stoccaggio / Humidité pour le fonctionnement et le stockage	5 - 85%RH senza formazione di condensa / sans condensation 5 - 85 % HR EN 60068-2-30
Vibrazioni / Vibrations	5 - 9 Hz, 7 mm picco / pointe 9 - 150 Hz, 1 G EN 60068-2-6
Scossa / Choc	50 g, 11 ms, 3 pulses per axis 50 g, 11 ms, 3 impulsions par axe EN 60068-2-27
Classe di protezione / Classe de protection	Front IP66 / Avant IP66 Rear / Arrière IP20 EN 60529
Affidabilità della tastiera / Fiabilité du clavier	>3 milioni di operazioni / >3 millions d'actions

Compatibilità elettromagnetica (EMK) / Compatibilité électromagnétique (CEM)	
Interferenza emessa / Emission d'interférences	Classe A / Classe A EN 55011
Compatibilità radio per campi elettromagnetici / Perturbation des champs électromagnétiques	80 MHz - 1 GHz, 10 V/m 1.4 GHz - 2 GHz, 3 V/m 2 GHz - 2,7 GHz, 1V/m EN 61000-4-3
Tolleranza disturbi indotta dovuta ai campi di frequenze radio / Immunità aux interférences des fréquences radio	0,15 - 80 MHz, 10 V EN 61000-4-6
Immunità ai disturbi, burst / Immunité au bruit, burst	2 KV alimentazione di corrente / 2 KV alimentation électrique 1 KV linee di segnale / 1 KV lignes de signaux EN 61000-4-4
Scarica elettrostatica / Décharge électrostatique	8 KV nell'aria / 8 KV dans l'air EN 61000-4-2
Interfacce / Interfaces :	
-Interfaccia seriale -Port série	RS-232, RS-422, RS-485, spina Sub-D a 9 poli 300 - 38400 baud / RS-232, RS-422, RS-485, connecteur Sub-D 9 broches 300 - 38400 bauds
-Ethernet port / Port Ethernet	2 RJ45 10/100 Mbit/s
-Interfaccia USB / Port USB	2 Host Interface (1 versione 2.0, 1 versione 2.0 e 1.1 / 1 version 2.0, 1 version 2.0 et 1.1)
-Estensione degli slot / Slot d'extension	Plug-in opzionale / Plugin optionnel
Altro: / Autres :	
-Orologio interno -Horloge temps réel	Orologio e calendario con batteria / Heure et calendrier avec pile
-Deviazione max. dell'orologio interno/mese	130 s at 25 °C
-Décalage max. de l'horloge temps réel/mois	130 s bei 25 °C
-Software di programmazione -Logiciel de programmation	Designer Studio CDPX

## Utilizzo della guarnizione rettangolare / Pose du joint rectangulaire

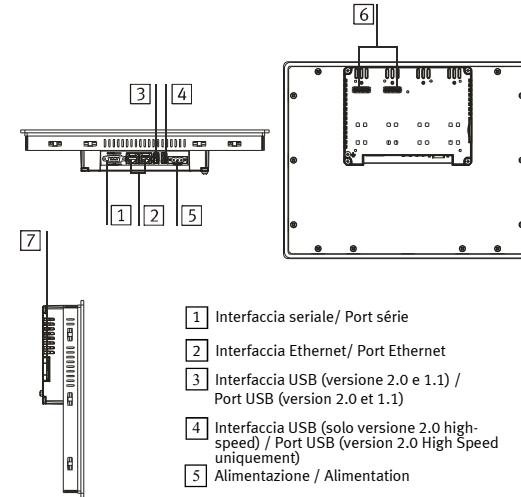


A CDPX

B Guarnizione / Joint

C Installazione taglio / Découpe de montage

## Attacchi / Connexions



1 Interfaccia seriale / Port série

2 Interfaccia Ethernet / Port Ethernet

3 Interfaccia USB (versione 2.0 e 1.1) / Port USB (version 2.0 et 1.1)

4 Interfaccia USB (solo versione 2.0 high-speed) / Port USB (version 2.0 High Speed uniquement)

5 Alimentazione / Alimentation

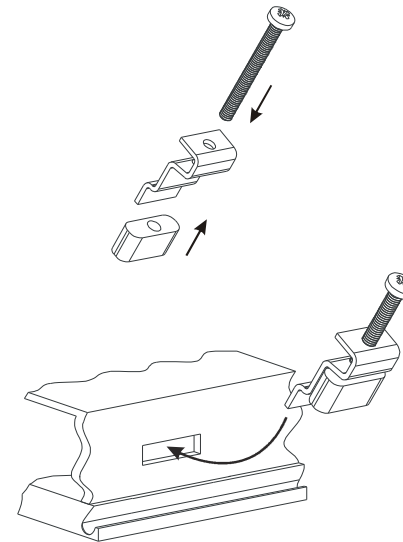
6 Estensione degli slot / Slot d'extension

7 SD Card-Slot / Slot pour carte SD



Tutti i raccordi sono SELV (bassissima tensione di sicurezza)  
Toutes les connexions sont SELV (très basse tension)

## Fissaggio / Fixation

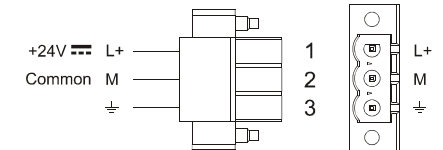


Svitare tutte le viti di fissaggio finché l'angolo del telaio in plastica o in alluminio non si trova esattamente sul sistema di comando.  
Serrer chaque vis de fixation jusqu'à ce que l'angle d'encadrement en plastique ou en alu repose exactement sur le système de commande.

## Alimentazione di tensione / Alimentation électrique



Alimentazione a bassissima tensione di sicurezza /  
Fonte di energia elettrica limitata.  
Alimentation très basse tension / source de courant limitée.



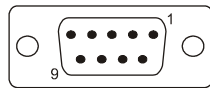
Morsetto di tensione DC, femmina - R/C blocco terminale (XCFR2), prodotto da Weidmuller Inc., catalogo n° BLZ 5.08, coppia 4,5 lb-in

Connecteur d'alimentation CC femelle - bornier R/C (XCFR2), fabriqué par Weidmuller Inc., réf. catalogue BLZ 5.08, couple 4,5 lb-in

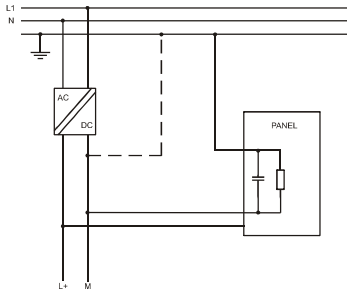
## Interfaccia seriale con associazione Pin / Connecteur série et affectation des broches



Non aprire l'apparecchio d'uso sotto tensione.  
Ne pas ouvrir l'appareil lorsqu'il est sous tension.



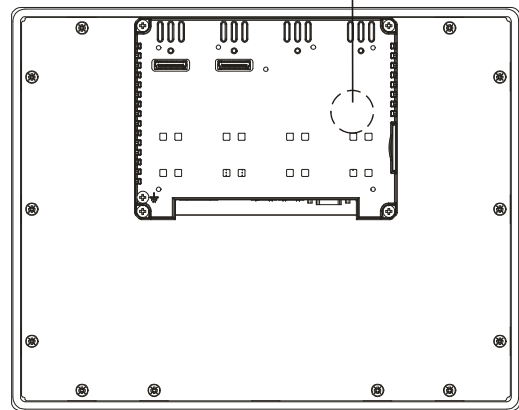
Pin	Descrizione / Description
1	GND
2	
3	TX/CHA-
4	RX/CHB-
5	
6	+5 V uscita (max 100mA) Sortie +5 V (100 mA max.)
7	CTS/CHB+
8	RTS/CHA+
9	



Assicurarsi che l'alimentazione di tensione presenti una capacità di prestazione sufficiente per il funzionamento dell'apparecchio.  
S'assurer que l'alimentation électrique offre une puissance suffisante pour le fonctionnement de l'appareil.

## Smaltimento batterie / Mise au rebut des piles

1



1 Batteria / Pile



Le batterie devono essere smaltite nel rispetto delle leggi vigenti in materia.  
Les piles doivent être mises au rebut conformément à la réglementation.



## LED assegnati / LED spécifiques

La tabella qui di seguito mostra il nome e il simbolo (se presente) dei LED assegnati alle funzioni speciali. / Le tableau ci-dessous indique le nom et le symbole (le cas échéant) des LED auxquelles sont affectées des fonctions spéciales.

= acceso / LED allumée ;  
 = LED flashes / LED clignotante )

LED Simbolo/ Symbole	Colore/ Couleur	Stato/ Etat	Significato / Signification
non contrassegnato (in alto a sinistra) / sans inscription (en haut à gauche)	rosso/ rouge		Errore hardware / Défaut matériel
			Il livello batteria basso o l'allarme richiede la conferma / Pile faible ou alarme activée
	verde/ verte		Normale funzionamento/ Fonctionnement normal
			Errore di comunicazione/ Erreur de communication

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