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Installation Instructions
Installationsanleitung
Manuel d'installation
Instrucciones de Instalación
Istruzioni per l'installazione

a	PV-DCBOX-T1/2 1100V-3MPP-MC4-IP67	DCT17YMC	TYPE 1
b	PV-DCBOX-T2 1100V-3MPP-MC4-IP67	DCT27YMC	TYPE 2

ENGLISH

Please read the following before installing
your Surge Protective Device:

- Verify the system voltage and configuration on the label if it is appropriate for the application.
- Risk of Electric Shock – Installation and maintenance should be performed by qualified personnel only.
- Disconnect from energized circuits before installing or servicing.
- Safety rules and regulations applicable to all devices connected to power lines should always be followed. National standards and safety regulations must be followed.
- The external mechanical integrity of the device must be checked before installation. Products with visible damage should not be installed.
- Its use is only permitted within the limits shown and stated in these installation instructions. Opening or tampering with the device invalidates the warranty.
- Connecting leads shall be kept as short as possible, without loops.

DEUTSCH

Bitte lesen Sie die folgenden Angaben vor
Installation der Überspannungsschutzgerät:

- Sicherstellen, dass die Systemspannung und -konfiguration auf dem Etikett für die Anwendung geeignet ist.
- Stromschlaggefahr – Installation und Wartung sollten nur vom Fachmann durchgeführt werden.
- Gerät vor der Installation oder Wartung/ Reparatur von spannungsführenden Leitungen trennen.
- Die Sicherheitsvorschriften und -regeln für alle an Stromleitungen angeschlossenen Geräte sind stets zu befolgen. Vor Ort geltende Normen und Sicherheitsvorschriften befolgen.
- Vor der Installation ist die externe mechanische Unversehrtheit des Geräts sicherzustellen. Produkte mit sichtbaren Schäden dürfen nicht installiert werden.
- Das Gerät ist nur für den Betrieb innerhalb der angegebenen Grenzwerte zugelassen. Wird das Gerät geöffnet oder manipuliert, erlischt die Garantie.
- Anschlussleitungen sollten so kurz wie möglich gehalten werden, dürfen keine Schleifen enthalten.

FRANÇAIS

Veuillez lire les instructions suivantes avant
d'installer votre parafoudre:

- Vérifiez que la tension et la configuration du système sur l'étiquette du produit convient à l'application
- Déconnectez le produit de circuits sous tension avant l'installation ou l'entretien
- Les règles de sécurité et les réglementations applicables aux appareils connectés aux lignes électriques doivent toujours être respectées. Les normes nationales et les règles de sécurité doivent être respectées
- L'intégrité mécanique externe du produit doit être vérifiée avant l'installation. Les produits présentant des dommages visibles ne doivent pas être installés
- L'utilisation du produit est uniquement autorisée dans les limites indiquées dans ce manuel d'installation. Le désassemblage ou la modification du produit annule sa garantie
- Les câbles de raccordement doivent être aussi courts que possible, sans boucle.

ESPAÑOL

Lea las siguientes instrucciones antes de la
instalación de su dispositivo de protección
contra sobretensiones:

- Compruebe que la tensión y configuración del sistema que aparecen en la etiqueta son adecuadas para su instalación.
- Riesgo de descarga eléctrica: únicamente personal cualificado puede instalar o dar mantenimiento a este dispositivo.
- Desconecte los circuitos con tensión antes instalarlo o darle mantenimiento.
- Siga siempre todas las normativas y reglamentos de seguridad pertinentes a todos los dispositivos conectados a la red eléctrica. Debe respetar la normativa nacional y los reglamentos de seguridad.
- Compruebe la integridad mecánica externa del dispositivo antes de su instalación. Nunca instale productos que presenten daños visibles.
- Sólo se permite utilizarse dentro de los límites establecidos en estas instrucciones de instalación. Abrir o alterar el dispositivo anula la garantía.
- Las conexiones de cables deben ser lo más cortas posibles, sin bucles.

ITALIANO

Prima di installare il limitatore di sovratensione
(SPD: Surge Protective Device), leggere attentamente quanto segue:

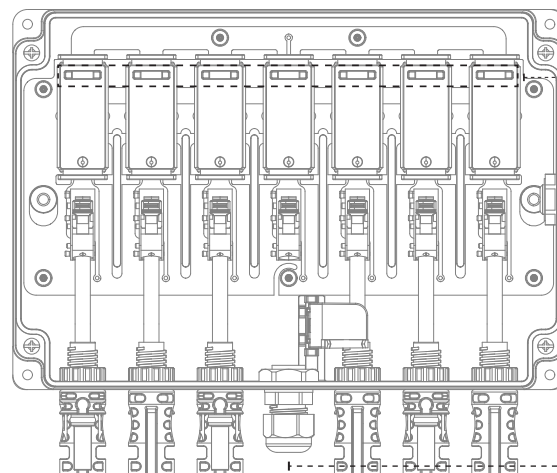
- Verificare la tensione e la configurazione del sistema sull'etichetta per capire se sono appropriati per l'applicazione del dispositivo.
- Rischi di elettrocuzione – L'installazione e la manutenzione devono essere effettuate unicamente da personale qualificato.
- Togliere corrente ai circuiti, prima dell'installazione o della manutenzione.
- È necessario rispettare sempre le normative e i regolamenti di sicurezza applicabili, per tutti i dispositivi collegati alla linea elettrica. È necessario rispettare gli standard nazionali e i regolamenti di sicurezza.
- Prima dell'installazione, è necessario verificare l'integrità meccanica esterna del dispositivo. Non bisogna installare prodotti che mostrino danni evidenti.
- Il suo uso è consentito solo entro i limiti indicati e dichiarati in queste istruzioni di installazione. L'apertura o la manomissione del dispositivo causano l'annullamento della garanzia.
- L'interconnessione delle parti conduttrici deve essere la più corta possibile, evitando la formazione di anelli.

TECHNICAL DATA	Product type		① Type 1 1100V	② Type 2 1100V
	U _{CPV}	DC	1100V	1100V
	I _n (8/20)		20 kA	20 kA
	I _{max} (8/20)		40 kA	40 kA
	I _{imp} (10/350)		6.25 kA	-
	I _{Total} (8/20) / I _{Total} (10/350)		50 kA / 12.5 kA	40 kA / -
	U _p		4400V	4200V
	I _{scpv}		11 kA	9 kA
	I _L		45 A	45 A
	I _{PE}	AC/DC	< 1 mA / < 50 µA	< 1 mA / < 50 µA
Mech. & Envi.	I _{cpv}	DC	< 50 µA	< 50 µA
	SPD Failure Mode		Open Circuit Failure Mode (OCFM)	
	Type of PV System		Not earthed/earthed	
	Number of Strings per MPPT		3	3
	Ta		-40°C to +85°C [-40°F to +185°F]	
	RH		5%...95%	
	Mounting		Outdoor wall	
	Altitude (max)		4000m [13123ft]	
	IP		67	

INSTALLATION



WARNING!
Before the first use of the PV Box, modules shall be firmly pressed into the PCB, as connecting on a dislocated SPD module can result in non-functional surge protection.



Fault Indication

- ☒ Green / Grün
- ☒ Not Green / Nicht grün
- ↓
- Replace PV Box
Ersetzen PV Box

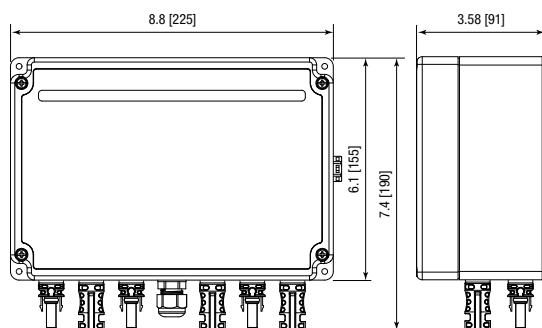
- Wire insulation outer diameter:
min ø 4 mm
max ø 8 mm

Conductor:
ø 0.2mm² - 16mm²

Stranded / Flexible
PV cables with ferrule only

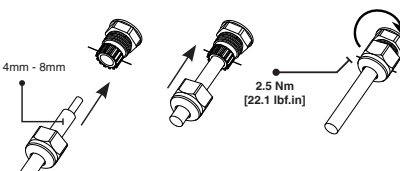


DIMENSION DRAWING

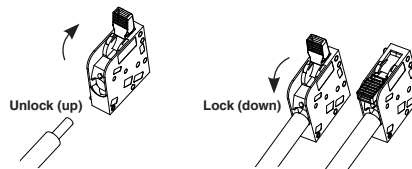


CONNECTING CABLES

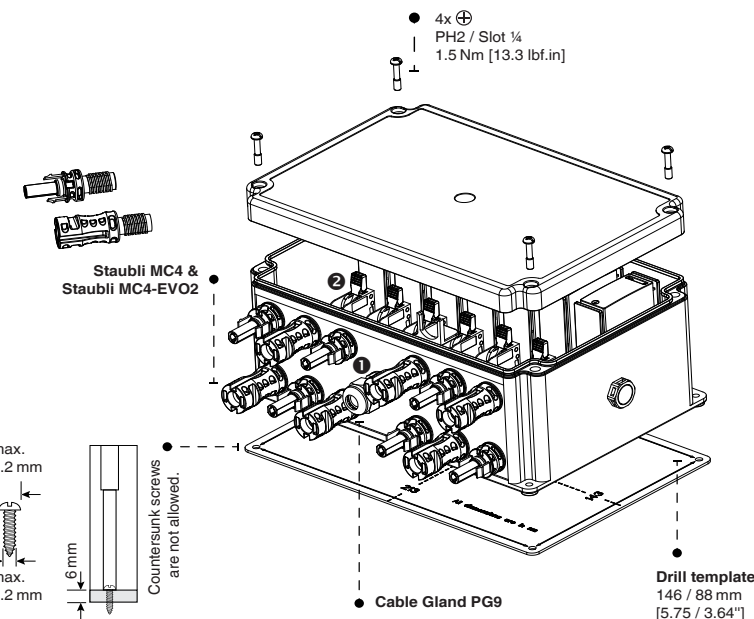
① Cable Gland



② Connectors

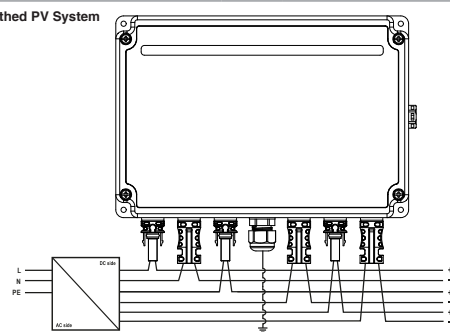


MOUNTING & PRODUCT DESCRIPTION



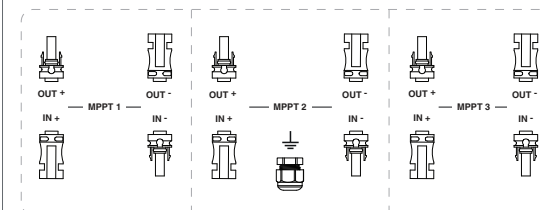
NETWORK CONNECTIONS

Unearthed PV System



+/-	min ø 6 mm ² [T1], min ø 2.5 mm ² [T2]	↓, PE	min ø 16 mm ² [T1], min ø 6 mm ² [T2]
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Inputs / Outputs



Polarities can be reversed, but this must be applied uniformly on all connections.
Determination of which connector in a connector block will be used as input and which as output can also be determined by installer differently, but should be kept the same plug orientation across the whole installation.

For earthed PV System the wiring is the same, without connecting (-) to PV box.