

2UCD074000E418_A

PCS100 AVC-40-1B

Active Voltage Conditioner

Roof Kit Assembly Instruction



This installation instruction applies to the PCS100 AVC-40 1B.

The illustrations and drawings are example may not apply to all models.

All steps must be performed and ticked during the installation.



ABOUT THIS DOCUMENT

The Company

We are an established world force in the design and manufacturing of power electronics and power protection equipment.

As part of ABB, a world leader in electrical technology, we offer customers application expertise, service, and support worldwide.

We are committed to teamwork, high quality manufacturing, advanced technology and unrivalled service and support.

The quality, accuracy and performance of the Company's products result from over 100 years' experience, combined with a continuous program of innovative design and development to incorporate the latest technology.

Quality Control

The products listed in this catalogue are manufactured in an ISO 9001 accredited facility.



Registration No. 2469

For More Information

Further publications for the PCS100 AVC-40 UL are available to download for free from <http://new.abb.com/ups/power-and-voltage-conditioners/voltage-conditioners/pcs100-avc-40>



Document Information

Copyright notice

The information in this manual is subject to change without notice. This manual and parts thereof must not be reproduced or copied, or disclosed to third parties, nor used for any unauthorized purpose without written permission from ABB Ltd. The hardware and software described in this manual are provided under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

Document identification

Ownership: ABB Ltd., Power Conditioning Products

Document number: 2UCD740000E418

Issue date: 24/3/2022

Revision: Rev A

Contact information

Address: ABB Ltd. 111 Main North Road, Napier, New Zealand.

Website: <https://new.abb.com/ups>

This Document

This document contains information regarding:

- installation of the PCS100 AVC-40-1B roof kit

Usage

This document should be used when:

- installing the PCS100 AVC-40-1B roof kit

Who Should Read This Document?

This document is intended for:

- installation personnel

Prerequisites

An Installation Engineer working with the PCS100 AVC-40-1B must:

- be trained by ABB and have electrical operational and safety knowledge
- have sufficient training to operate in an accidentally touch safe service environment
- use this document in conjunction with the PCS100 AVC-40-1B User Manual



SAFETY

Safety Instructions

	<p>IT</p> <p>Attenzione: Tensione pericolosa! Fare riferimento alle istruzioni per l'uso. Prima di intervenire su questo dispositivo, scollegare e isolare tutte le fonti di alimentazione. Attenzione! L'installazione deve essere eseguita esclusivamente da un installatore qualificato.</p>
AR	<p>LT</p> <p>تذير: جهد كهربائي خطير! راجع تعليمات التشغيل افصل الكهرباء وقم بتأمينها قبل العمل في هذا الجهاز . تنبيه! يجب عدم التركيب إلا من خلال شخص على دراية بمجال التقنية الكهربائية</p> <p>Įspėjimas: Pavojinga įtampa! Žr. naudojimo instrukcijas. Atjunkite ir laikinai užblokuokite maitinimą prieš dirbdami su šiuo įrenginiu. Dėmesio! Įrengti gali tik asmuo, turintis elektrotechniko patirties.</p>
BG	<p>LV</p> <p>Предупреждение: Опасно напряжение! Вижте инструкциите за работа. Изключете и блокирайте захранването преди да работите с устройството. Внимание! Да се монтира само от експерт електротехник.</p> <p>Brīdinājums: Bīstams spriegums! Skatiet darba norādījumus. Pirms sākat darbu ar šo ierīci, atvienojiet un bloķējiet strāvas padevi. Uzmanību! Uzstādīšanu drīkst veikt tikai persona ar zināšanām par elektrotehniku.</p>
CS	<p>NL</p> <p>Varování: Nebezpečné napětí! Viz návod k obsluze. Před zahájením prací na tomto zařízení odpojte a uzamkněte napájení. Pozor! Toto zařízení smí instalovat pouze osoba s elektrotechnickou odborností.</p> <p>Waarschuwing: Gevaarlijke spanning! Raadpleeg de bedieningsinstructies. Koppel dit apparaat los van de stroomvoorziening voordat u werkzaamheden uitvoert. Let op! Installatie mag alleen worden uitgevoerd door een monteur met elektrotechnische expertise.</p>
DA	<p>NO</p> <p>Advarsel: Farlig elektrisk spænding! Se betjeningsvejledningen. Frakobl enheden, og afbryd strømforsyningen, før du arbejder med denne enhed. Giv agt! Installation må kun foretages af personer med elektroteknisk ekspertise.</p> <p>Advarsel: Farlig spenning! Se i bruksanvisningen. Koble fra og steng av strømmen før du arbeider på denne enheten. Forsiktig! Montering skal kun utføres av kvalifiserte personer med elektrokompetanse.</p>
DE	<p>PL</p> <p>Warnung: Gefährliche Spannung! Siehe Bedienungsanleitung. Vor dem Arbeiten Gerät ausschalten und von der Spannungsversorgung trennen. Achtung! Installation nur durch elektrotechnische Fachkraft.</p> <p>Ostrzeżenie: Niebezpieczne napięcie! Patrz: instrukcja obsługi. Przed rozpoczęciem wykonywania pracy z tym urządzeniem odłącz i zablokuj zasilanie. Uwaga! Montaż może wykonywać wyłącznie osoba posiadająca doświadczenie elektrotechniczne.</p>
EL	<p>PT</p> <p>Προειδοποίηση: Επικίνδυνη τάση! Ανατρέξτε στις οδηγίες λειτουργίας. Αποσυνδέστε και απομονώστε την παροχή ισχύος προτού ξε κινήσετε τις εργασίες σε αυτήν τη συσκευή. Προσοχή! Η εγκατάσταση πρέπει να γίνεται μόνο από αδειούχο ηλεκτρολόγο εγκαταστάτη.</p> <p>Aviso: Tensão perigosa! Consulte as instruções de operação. Desconecte e desligue a energia elétrica antes de trabalhar nesse dispositivo. Atenção! A instalação deve ser feita apenas por uma pessoa com especialidade eletrotécnica.</p>
EN	<p>RO</p> <p>Warning: Hazardous voltage! Refer to installation instructions. Disconnect and lock out power before working on this device. Attention! Installation by person with electrotechnical expertise only.</p> <p>Avertisment: Tensiune electrică periculoasă! Consultați instrucțiunile de utilizare. Deconectați și închideți sursa de energie înainte de a lucra cu acest dispozitiv. Atenție! Instalare</p>

<p>Advertencia: ¡Tensión peligrosa! Consulte las instrucciones de funcionamiento.</p> <p>ES Antes de trabajar con este dispositivo, desconecte y bloquee la corriente. ¡Atención! La instalación debe ser realizada únicamente por un técnico electricista.</p>	<p>Внимание: Опасное электрическое напряжение! Обратитесь к инструкциям по эксплуатации.</p> <p>RU Отключите питание и обесточьте устройство перед началом работ. Внимание! Установка должна выполняться только специалистом по электротехническим работам.</p>
<p>Hoiatus: Elektrilöögi oht! Lisateavet vaadake kasutusjuhendist. ET Enne selle seadmega töötamist ühendage lahti ja lukustage toide. Tähelepanu! Seadet tohib paigaldada ainult elektrotehnilise kogemusega isik.</p>	<p>Výstraha: Nebezpečné napätie! Pozrite si návod na použitie. SK Pred začatím prác na tomto zariadení odpojte a zablokujte napájanie. Pozor! Inštaláciu smie vykonávať len osoba s odbornými znalosťami v oblasti elektrotechniky.</p>
<p>Varoitus: Vaarallinen jännite! Katso käyttöohje. FI Katkaise virta ja estä virran kytkeminen lukituksella ennen töiden aloittamista. Huomio! Asennuksen saa suorittaa vain henkilö, jolla on kokemusta sähkötekniikasta.</p>	<p>Opozorilo: Nevarna napetost! Glejte navodila za uporabo. SL Pred delom na tej napravi izklopite in zaklenite električno napajanje. Pozor! Namestitev sme izvesti samo elektrotehnični strokovnjak.</p>
<p>Avertissement: Tension dangereuse! Consultez les consignes d'utilisation. FR Débranchez et verrouillez l'alimentation électrique avant d'entreprendre des travaux sur cet appareil. Attention! L'installation doit être effectuée uniquement par une personne ayant une expertise en électrotechnique.</p>	<p>Varning: Livsfarlig spänning! Se i bruksanvisningen. SV Frånkoppla och blockera anläggning eller en anläggningsdel innan arbete utförs. Obs! Får endast installeras av behörig elektriker.</p>
<p>Upozorenje: Opatan napon! Pogledajte upute za uporabu. HR Odspojite i isključite struju prije rada na ovom uređaju. Pažnja! Ugradnja je dopuštena samo osobama stručnim u području elektrotehnike.</p>	<p>Uyarı: Tehlikeli gerilim! Çalışma talimatlarına bakın. TR Bu cihaz üzerinde çalışmadan önce elektriği kesin ve kilitleyin. Dikkat! Yalnızca elektroteknik uzmanlığa sahip kişiler tarafından kurulabilir.</p>
<p>Figyelmeztetés: Veszélyes feszültség! Lásd a használati utasítást. HU Válassza le és zárja ki az áramellátást, mielőtt a berendezésen dolgozni kezd. Figyelem! Az üzembe helyezést csak elektrotechnikai szakértelemmel rendelkező személy végezheti el.</p>	<p>警告：高压危险! 请参见操作手册 ZH 操作本设备前请断开并锁定电源。 注意！安装仅限专业电工人员。</p>



Safety Notices

This document contains important information regarding the installation of the ABB PCS100 AVC-40-1B roof kit. This assembly instructions provide technical guidance for installation engineers. The following safety instructions are to be observed.



DANGER

This checklist does not provide sufficient information for safe service of the PCS100 AVC-40-1B. For such service information refer to appropriate manual.



CAUTION – Trained Commissioning Engineers

All operations on the PCS100 AVC-40-1B must only be carried out by a trained commissioning engineer familiar with the contents of this checklist. Hazardous conditions could arise from incorrect adjustment.



DANGER – Stored Charge

Stored charge is present after the device is switched off.



DANGER – Protective Covers

Normal operation of this product requires any protective covers in place and doors secured closed.



DANGER – Personal Protection Equipment

Ensure safety glasses are worn while working if any part of the unit could be energized. Ensure appropriate safety footwear is worn if inserting or removing modules or components from the product.

Contents

About This Document	2
The Company.....	2
Quality Control.....	2
For More Information.....	2
Document Information.....	3
This Document.....	3
Usage.....	3
Who Should Read This Document?.....	3
Prerequisites.....	3
Safety	4
Safety Instructions.....	4
Safety Notices.....	6
Roof kit Installation	8
1.1 Tools Required.....	9
1.2 Roof Kit assembly.....	10
11.1.1 Assembly Instruction.....	11

ROOF KIT INSTALLATION



Figure 1-1: PCS100 AVC-40 1B with Roof Kit

Roof Kit

Roof Kits are available to prevent small amounts of liquid from falling onto the top of the enclosures.








The roof kit option increases the units' protection degree to IP21. These are only for indoor use.

There is a 7.87" (200 mm) clearance from the enclosure top to the roof kit to allow for ventilation of the transformer enclosure.

The roof kit will only cover the main enclosure.

1.1 Tools Required

The tools required on each task are shown in the specific figure and represented as follows. The values beside the tool picture show the specific size and torque value to be used.

Image	Description
 16mm 44Nm	Torque wrench with 16 mm socket
 8 mm 20 Nm	Torque wrench with 8 mm socket
 8 mm	Socket driver with 8 mm socket
 16mm	Socket driver with 16 mm socket
 8 mm	8mm spanner
 16 mm	16 mm spanner
	Step ladder

1.2 Roof Kit assembly

The roof kit is shipped separately, and it must be assembled on site. Roof kit includes:

Item	Quantity
Top Hat 800Wx800D	1
Top Hat support brackets	4
Bolt M16x45	4
Screw M8x16 Hex Torx	4
Washer Schnor M16	4
Washer Flat HDG M16xDia 34mm 3mm thick	4

Table 1-1: PCS100 AVC-40 1B Roof kit parts

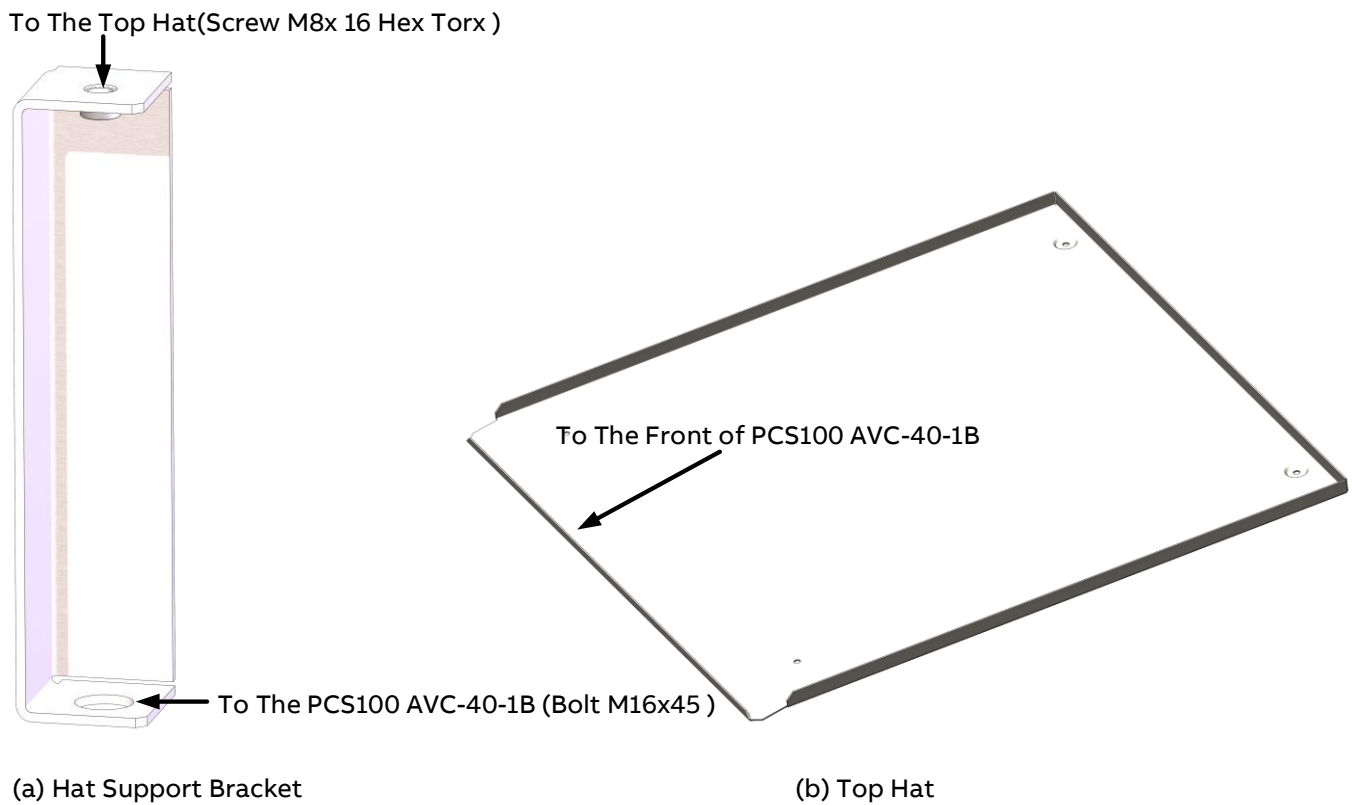


Figure 1-2: PCS100 AVC-40 UL Roof Kit (a): Hat support brackets; (b) Top hat.

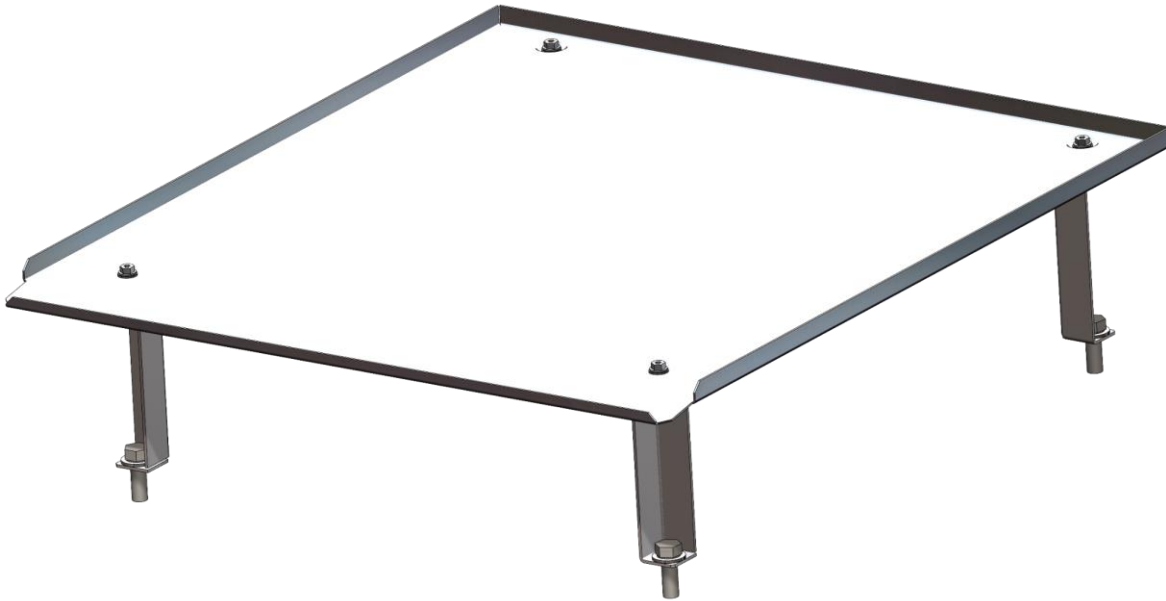


Figure 1-3:PCS100 AVC-40-1B Roof Kit Assembly

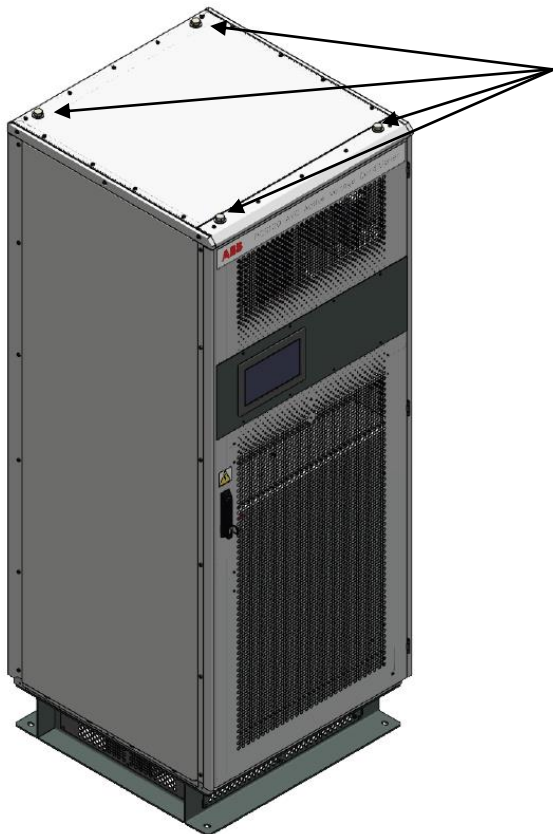
11.1.1 Assembly Instruction



Work from heights

Heights have the risk to cause severe harm.
Make sure to use an appropriate gear such as a ladder while installing the roof kit.

- a) Loosen and remove the top four M16 bolts in the PCS100 AVC-40 1B enclosure. Retain for reuse.



Loosen and remove these M16 bolts

Figure 1-4: PCS100 AVC-40-1B

- b) Place top hat support brackets aligning with the holes of the roof of the PCS100 AVC-40-1B.
- c) Use the four M16 rubber washers and schnors supplied with the roof top kit and four M16 bolts you removed to mount the brackets on the PCS100 AVC-40-1B roof.
- d) Place the top hat on the four brackets and use four M8 screws (Hex Torx) to mount the top hat into the brackets.
- e) Finished product should look like **Figure 1-1**.



<https://library.abb.com>

ABB Ltd.

111 Main North Road
4110 Napier
New Zealand

abb.com/UPS

2UCD074000E418_A

