

RELION® PROTECTION AND CONTROL

REX640

Quick installation guide



Copyright

This document and parts thereof must not be reproduced or copied without written permission from ABB, and the contents thereof must not be imparted to a third party, nor used for any unauthorized purpose.

The software or hardware described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

Trademarks

ABB and Relion are registered trademarks of the ABB Group. All other brand or product names mentioned in this document may be trademarks or registered trademarks of their respective holders.

Open Source Software

This product contains open source software. For license information refer to product documentation at www.abb.com.

Warranty

Please inquire about the terms of warranty from your nearest ABB representative.

www.abb.com/service

www.abb.com/mediumvoltage

Note

The equipment can be opened by authorized personnel only. If this practice is not followed, the warranty expires.

<http://www.abb.com/mediumvoltage>

Disclaimer

The data, examples and diagrams in this manual are included solely for the concept or product description and are not to be deemed as a statement of guaranteed properties. All persons responsible for applying the equipment addressed in this manual must satisfy themselves that each intended application is suitable and acceptable, including that any applicable safety or other operational requirements are complied with. In particular, any risks in applications where a system failure and/or product failure would create a risk for harm to property or persons (including but not limited to personal injuries or death) shall be the sole responsibility of the person or entity applying the equipment, and those so responsible are hereby requested to ensure that all measures are taken to exclude or mitigate such risks.

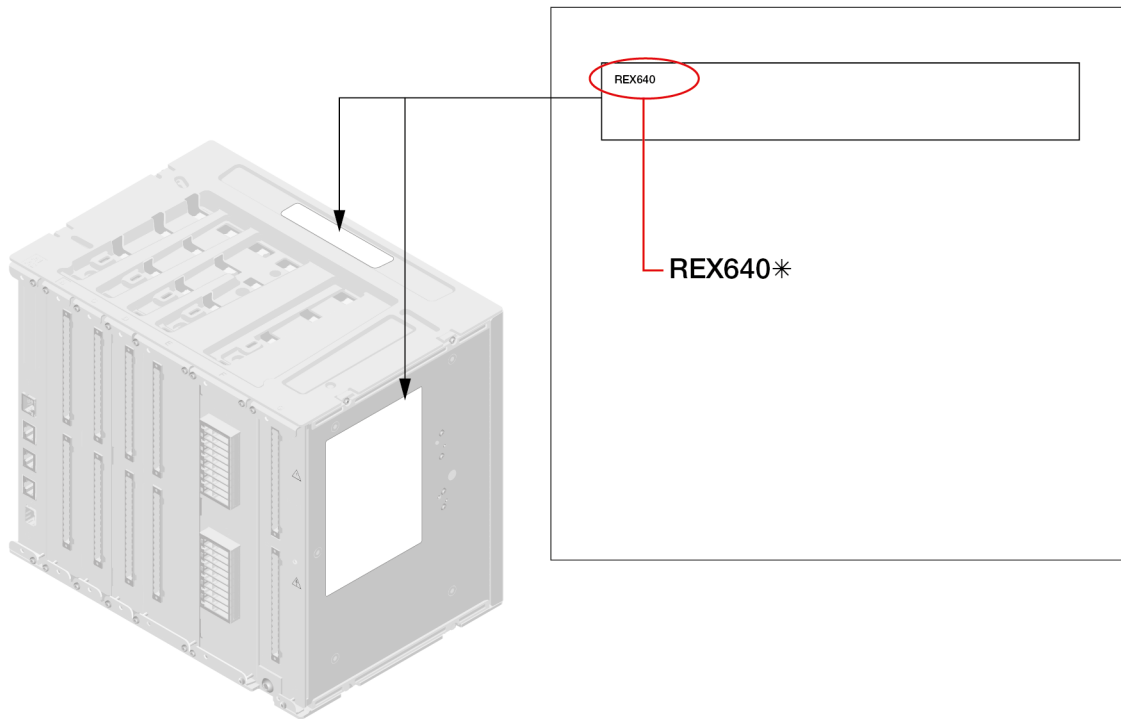
This product has been designed to be connected and communicate data and information via a network interface which should be connected to a secure network. It is the sole responsibility of the person or entity responsible for network administration to ensure a secure connection to the network and to take the necessary measures (such as, but not limited to, installation of firewalls, application of authentication measures, encryption of data, installation of antivirus programs, etc.) to protect the product and the network, its system and interface included, against any kind of security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information. ABB is not liable for any such damages and/or losses.

This document has been carefully checked by ABB but deviations cannot be completely ruled out. In case any errors are detected, the reader is kindly requested to notify the manufacturer. Other than under explicit contractual commitments, in no event shall ABB be responsible or liable for any loss or damage resulting from the use of this manual or the application of the equipment. In case of discrepancies between the English and any other language version, the wording of the English version shall prevail.

Conformity

This product complies with the directive of the Council of the European Communities on the approximation of the laws of the Member States relating to electromagnetic compatibility (EMC Directive 2014/30/EU) and concerning electrical equipment for use within specified voltage limits (Low-voltage directive 2014/35/EU). This conformity is the result of tests conducted by ABB in accordance with the product standard EN 60255-26 for the EMC directive, and with the product standards EN 60255-1 and EN 60255-27 for the low voltage directive. The product is designed in accordance with the international standards of the IEC 60255 series.

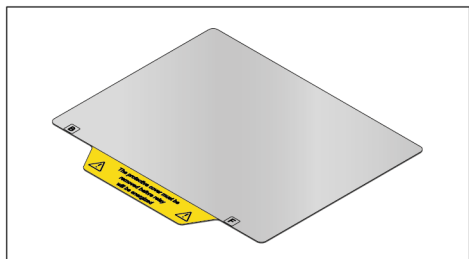
Document validity



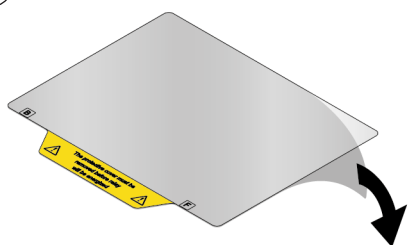
Contents

- 3 Copyright**
- 4 Document validity**
- 6 Attaching protective cover**
- 7 Mounting HMI**
 - 7 Flush mounting HMI
 - 9 Surface mounting HMI
 - 11 Tilt/inclined mounting HMI
- 13 Wall mounting protection relay**
- 15 Roof mounting protection relay**
- 18 Door mounting protection relay**
- 19 Rack mounting protection relay**
- 21 Door mounting protection relay with local HMI**
- 24 Rack mounting protection relay with local HMI**
- 28 Mounting in vertical position**

Attaching protective cover



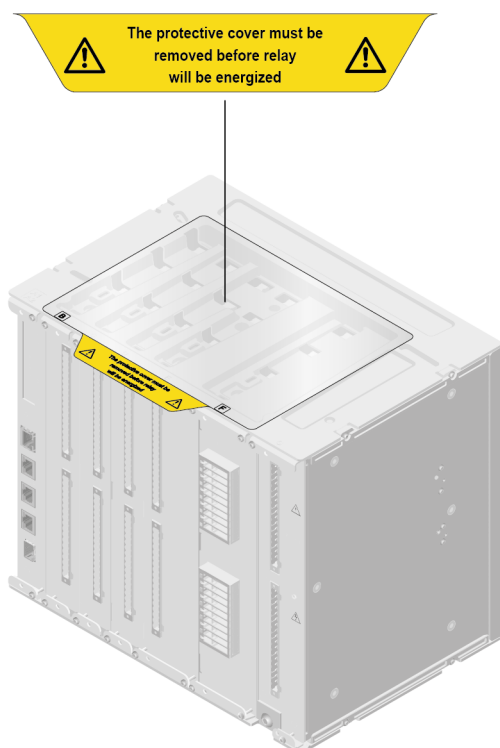
1



2

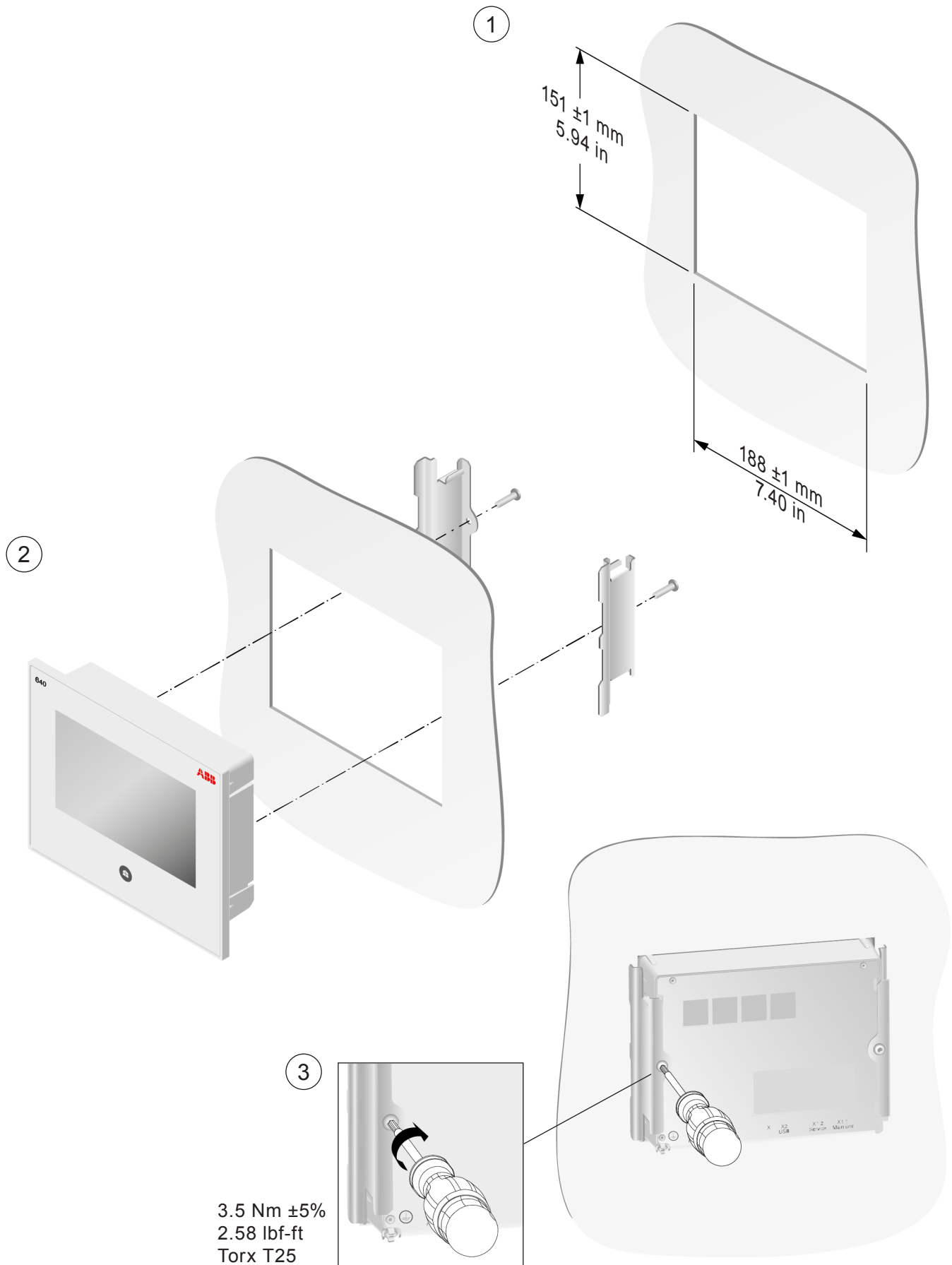


3



Mounting HMI

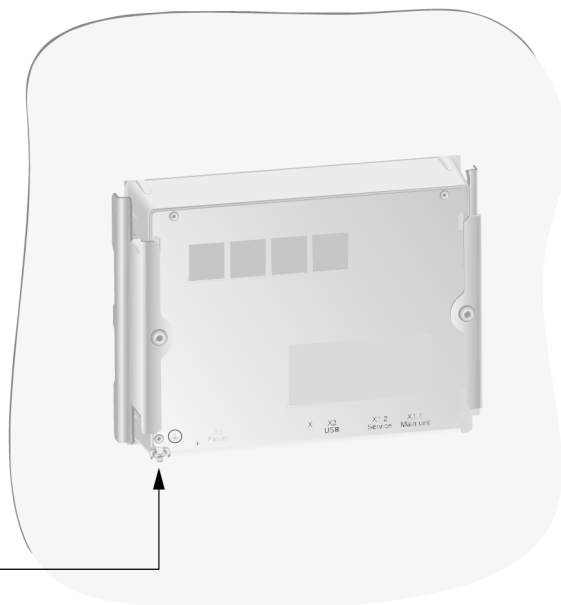
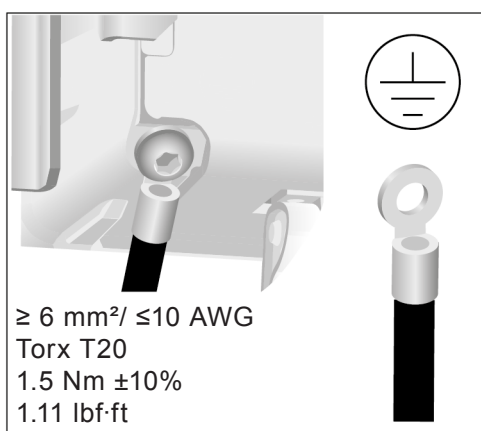
Flush mounting HMI



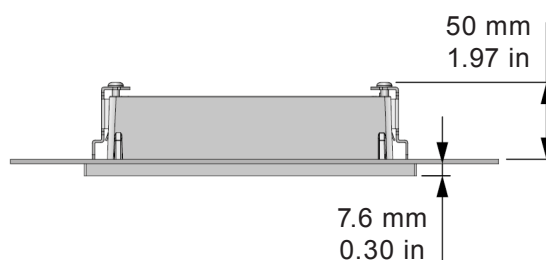
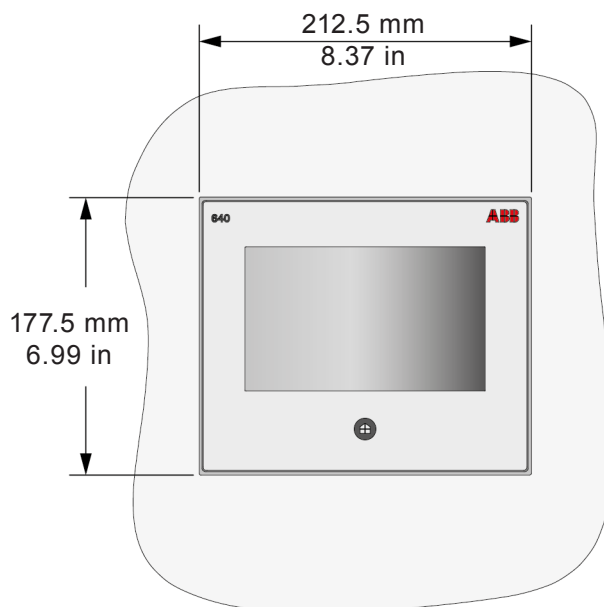
Mounting HMI

Flush mounting HMI

4

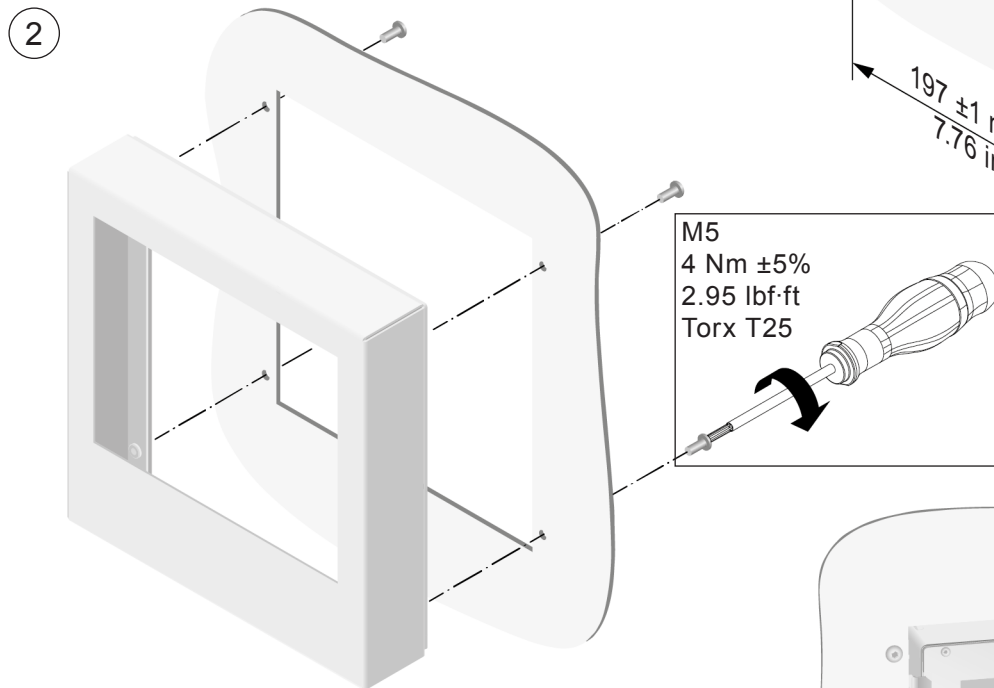
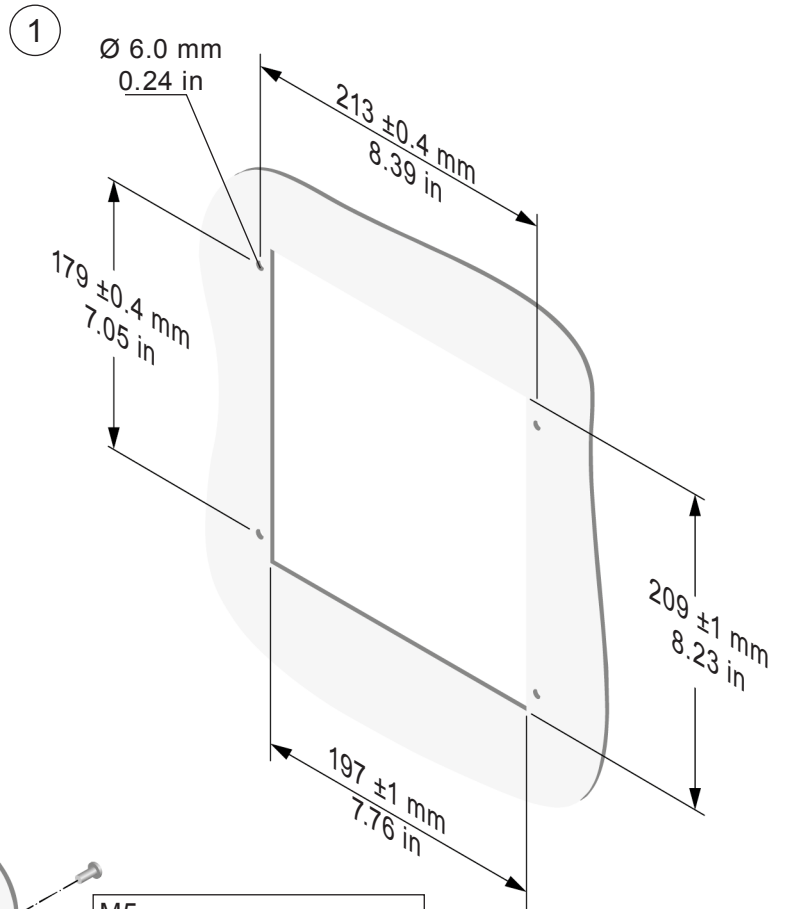
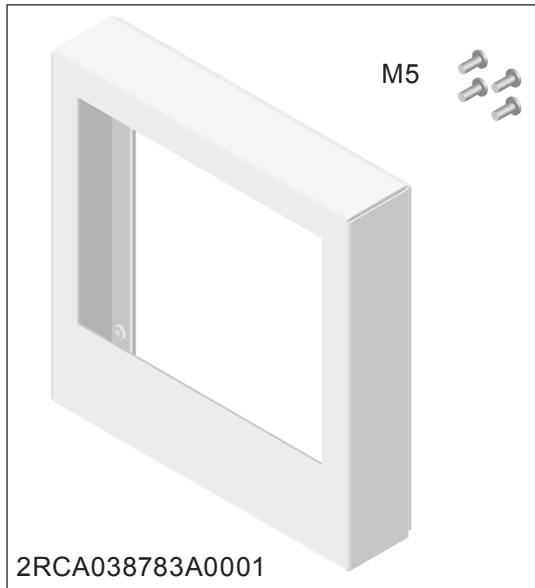


5

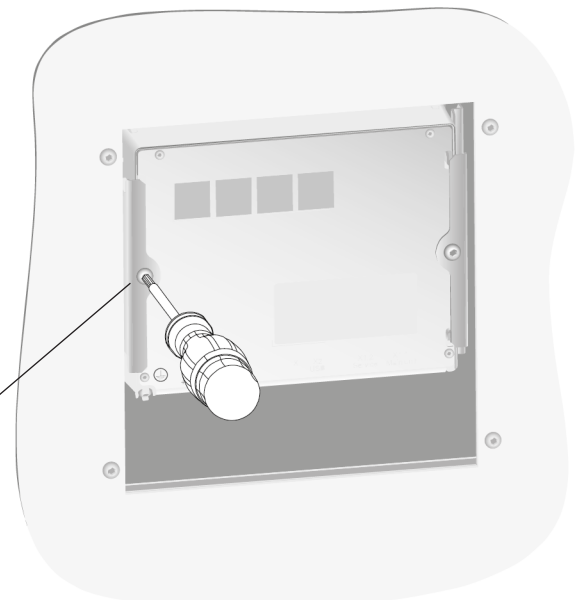
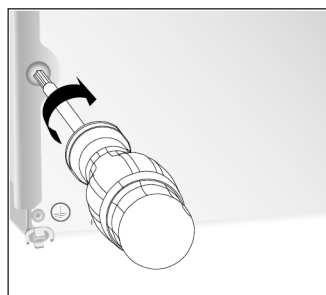


Mounting HMI

Surface mounting HMI



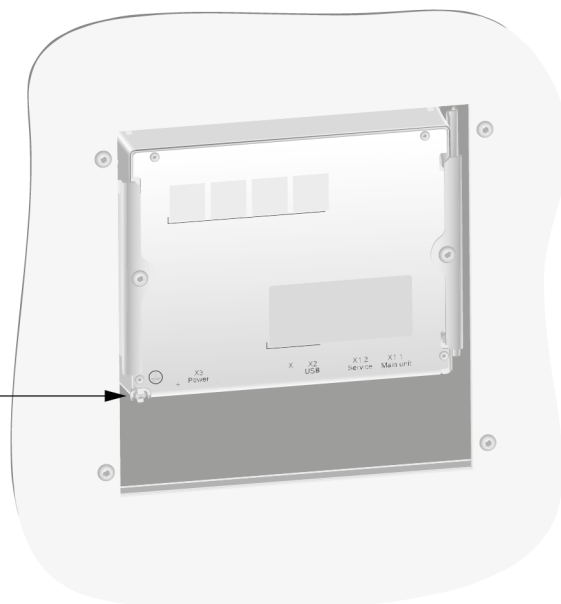
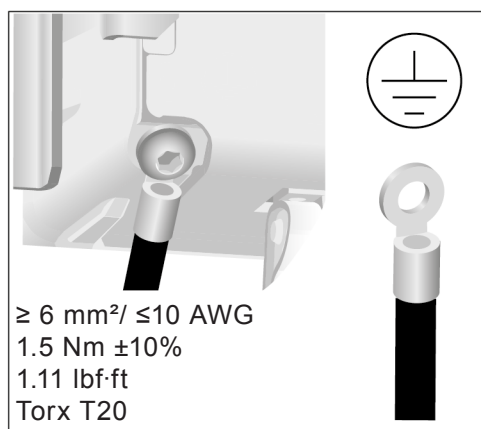
3.5 Nm ±5%
2.58 lbf-ft
Torx T25



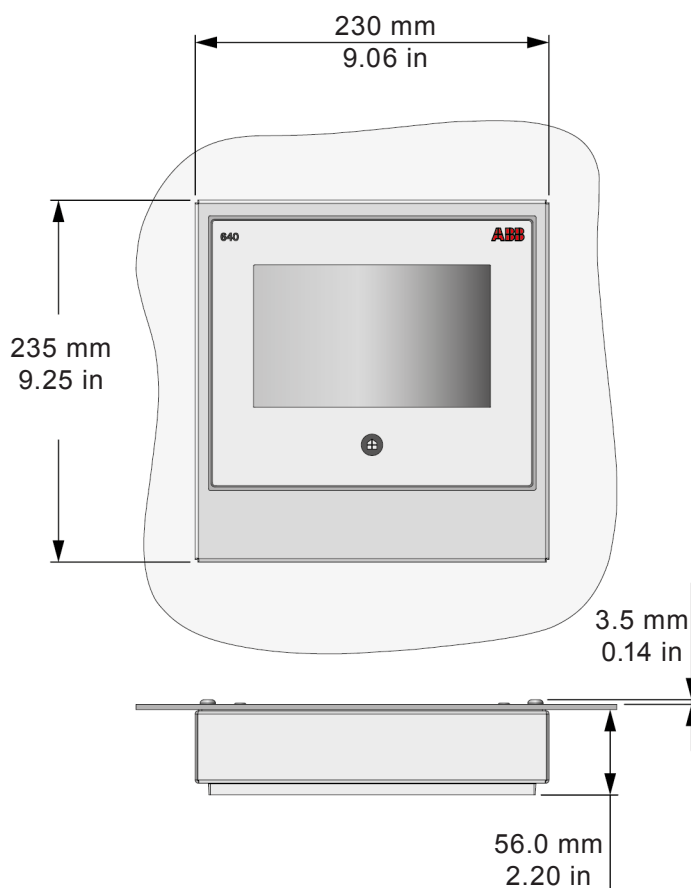
Mounting HMI

Surface mounting HMI

3

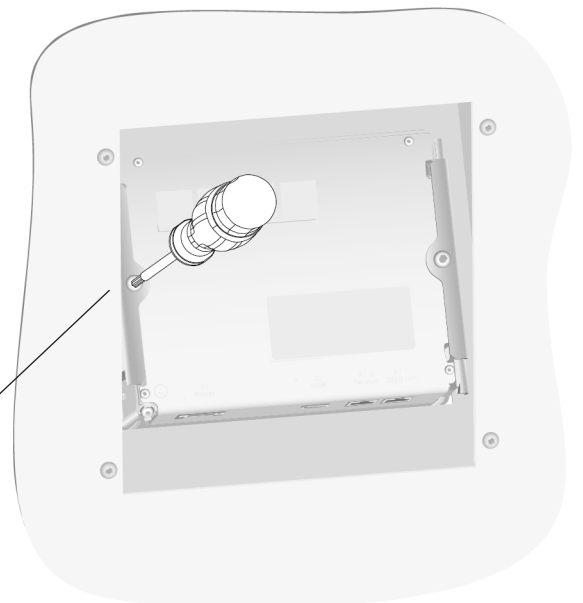
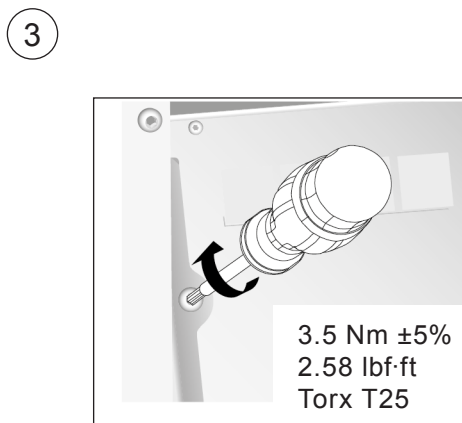
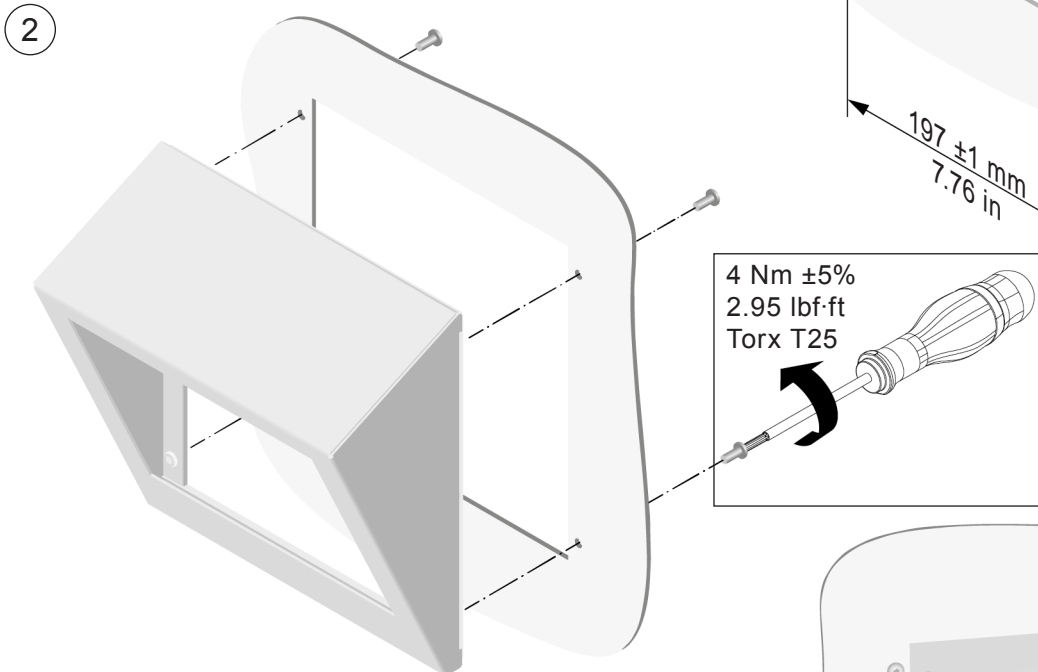
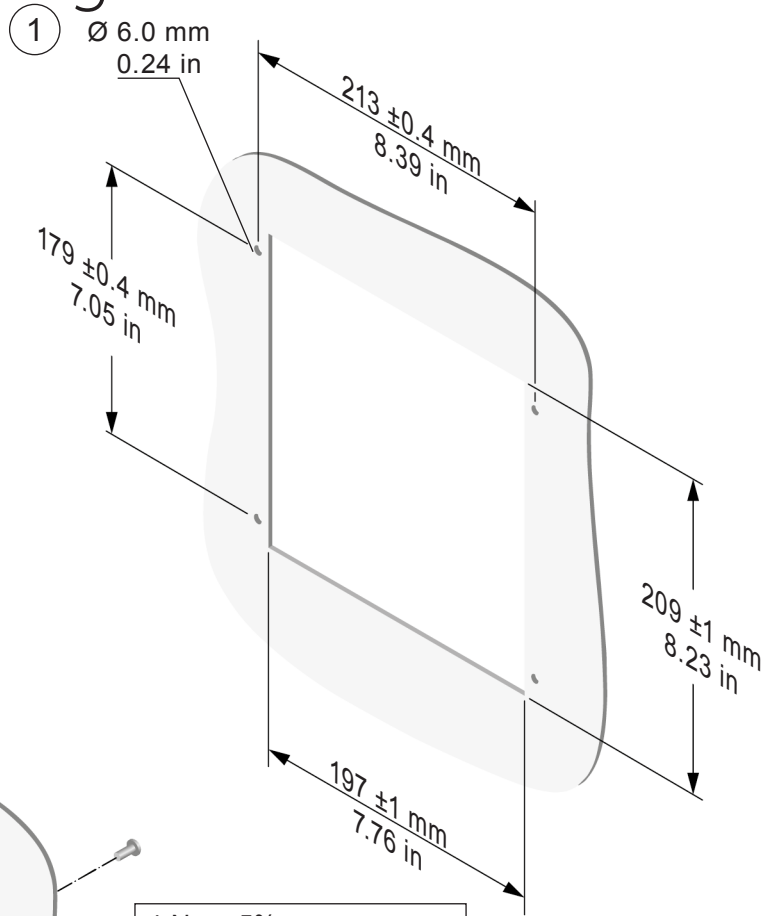
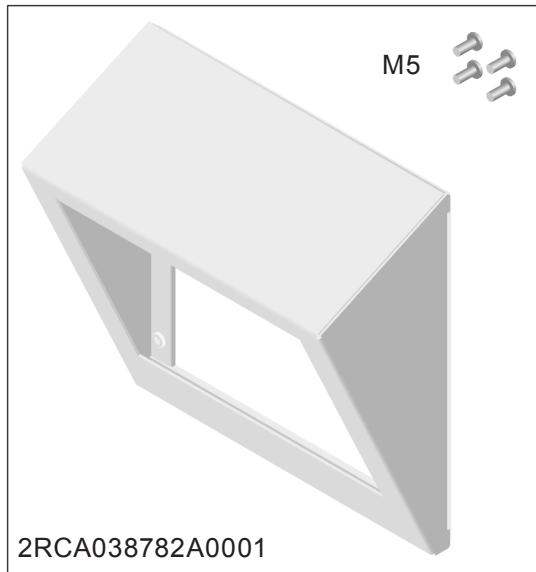


4



Mounting HMI

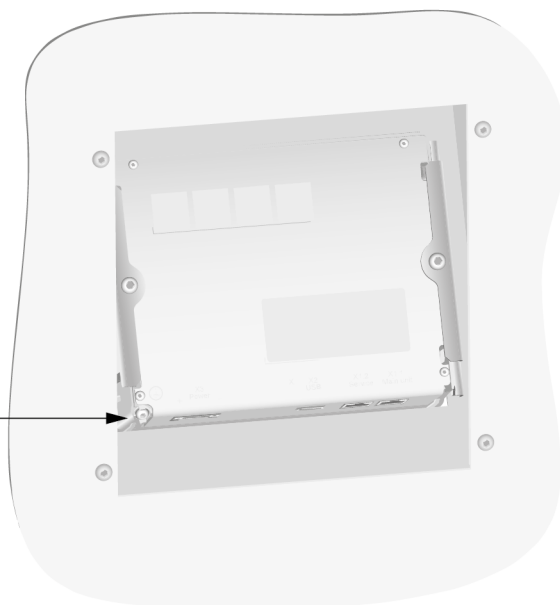
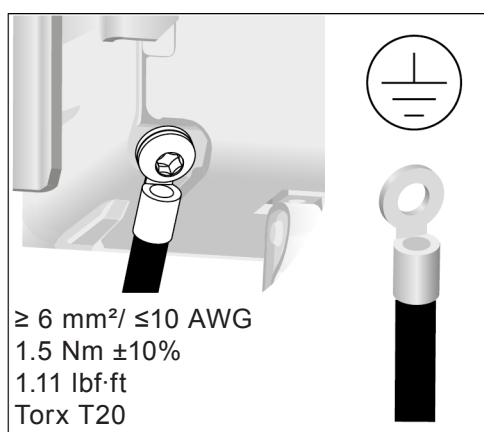
Tilt/inclined mounting HMI



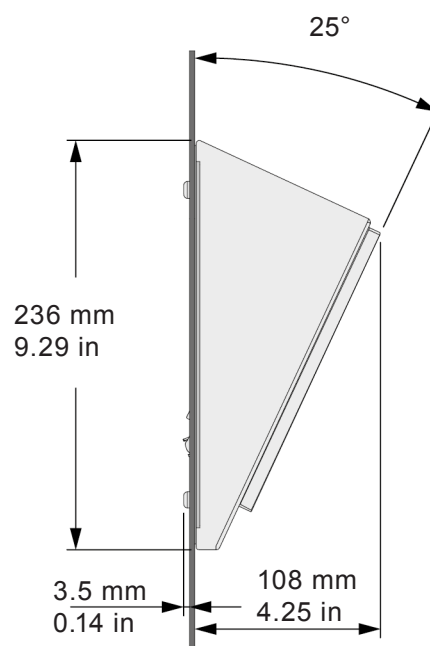
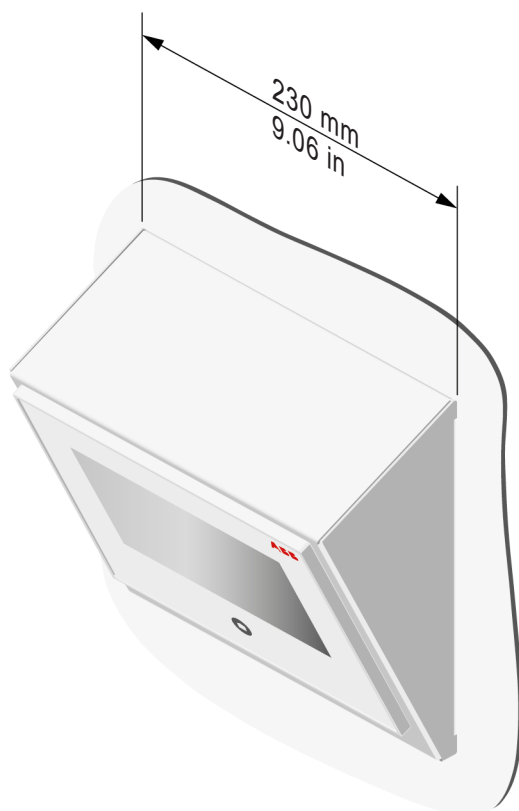
Mounting HMI

Tilt/inclined mounting HMI

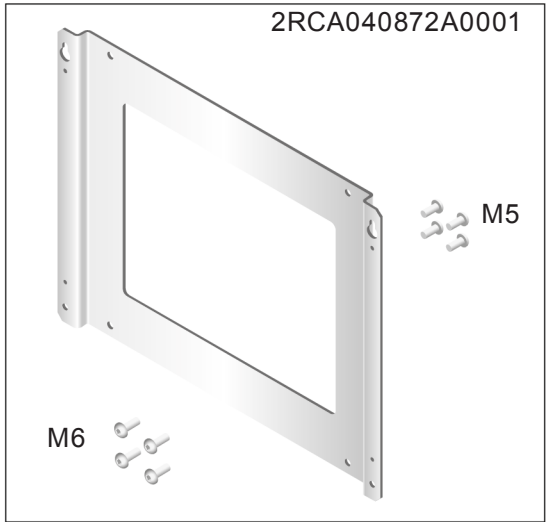
4



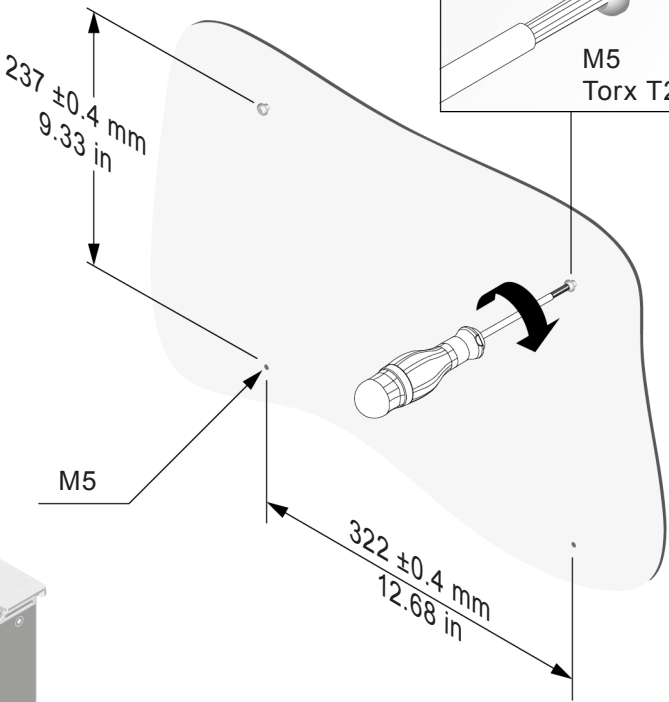
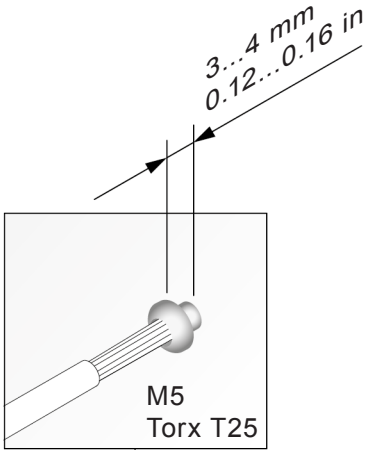
5



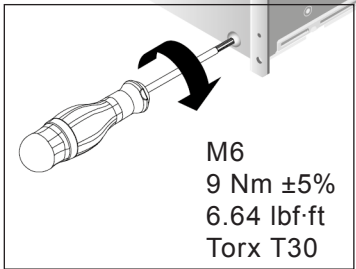
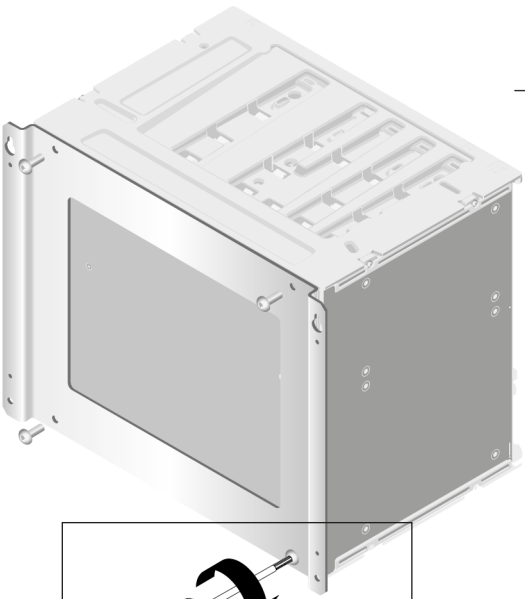
Wall mounting protection relay



1

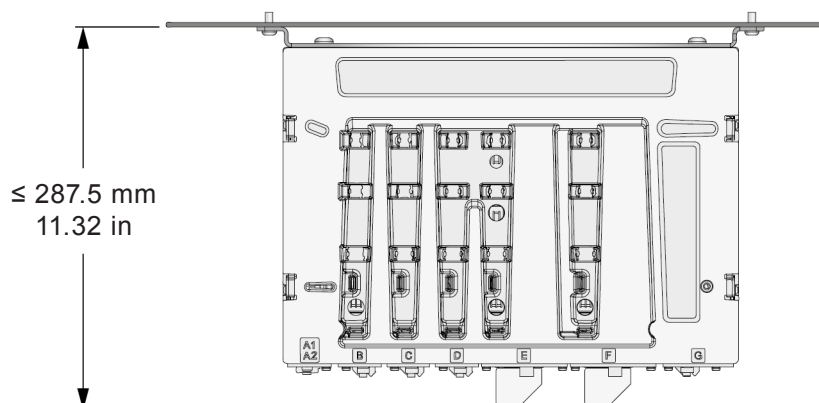
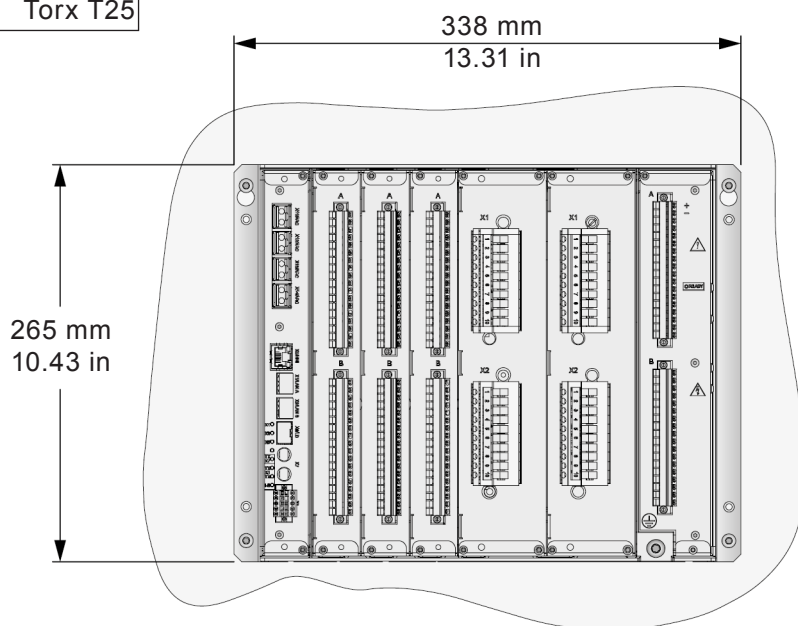
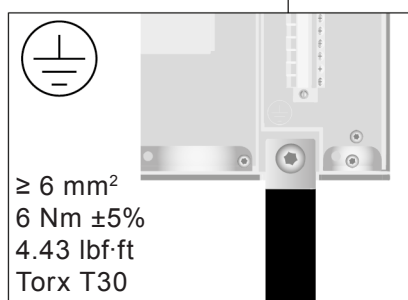
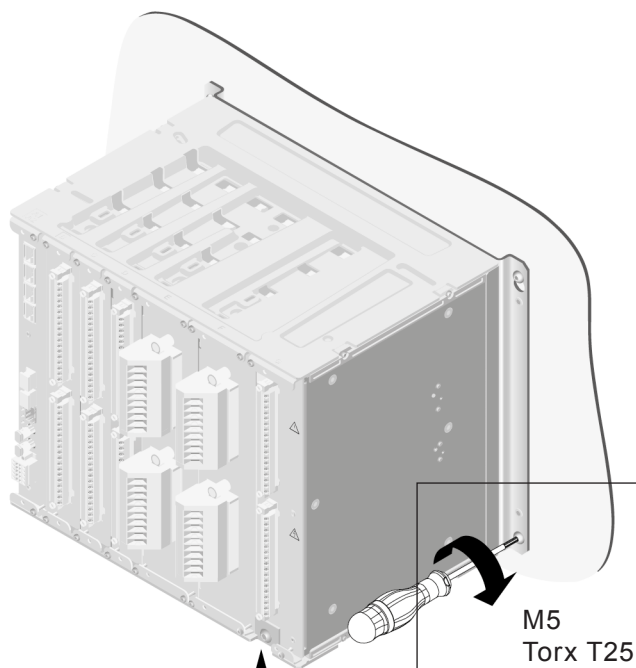


2

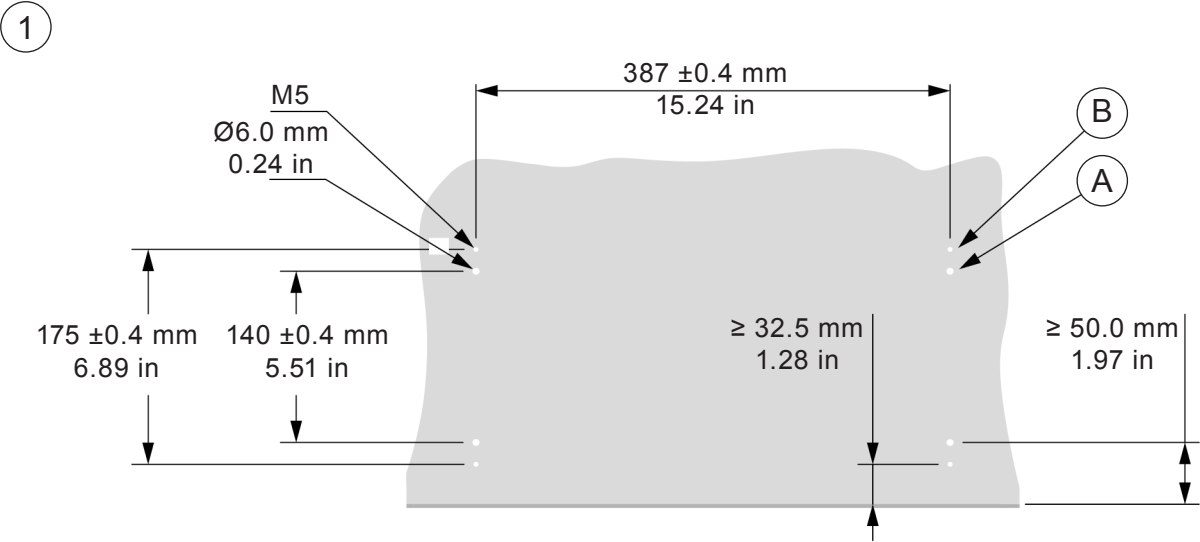
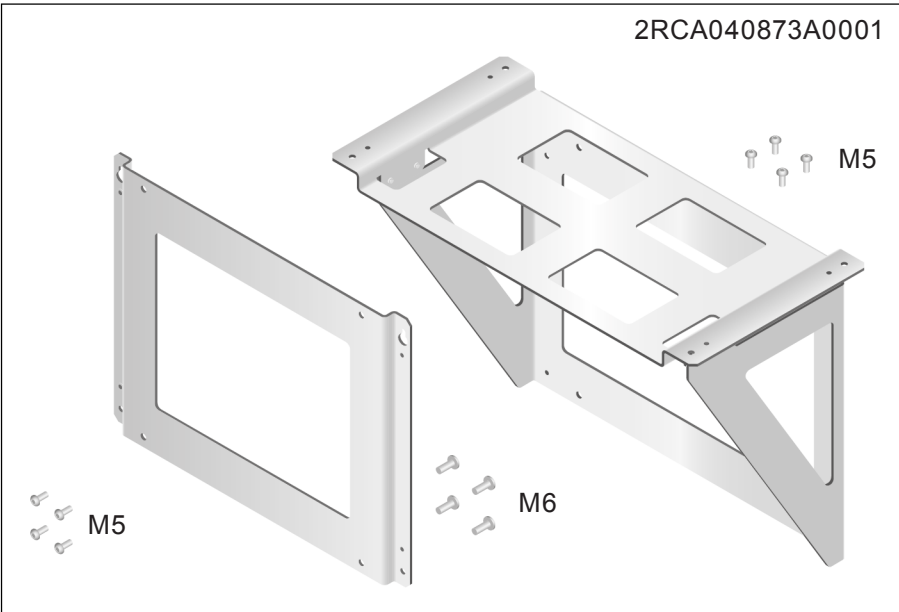


Wall mounting protection relay

3

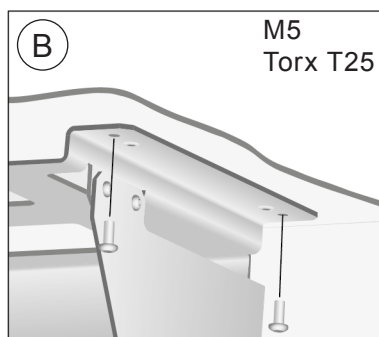
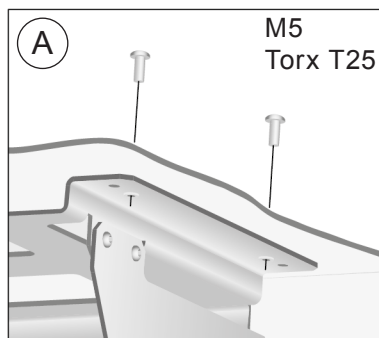
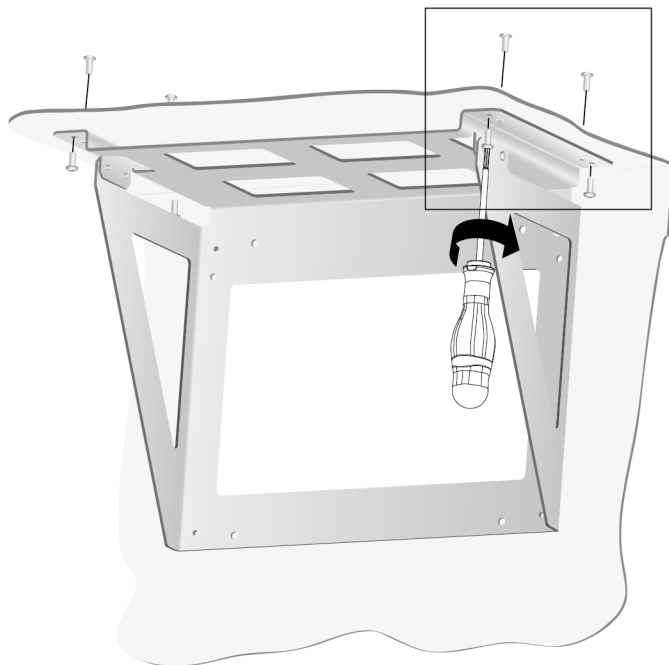


Roof mounting protection relay

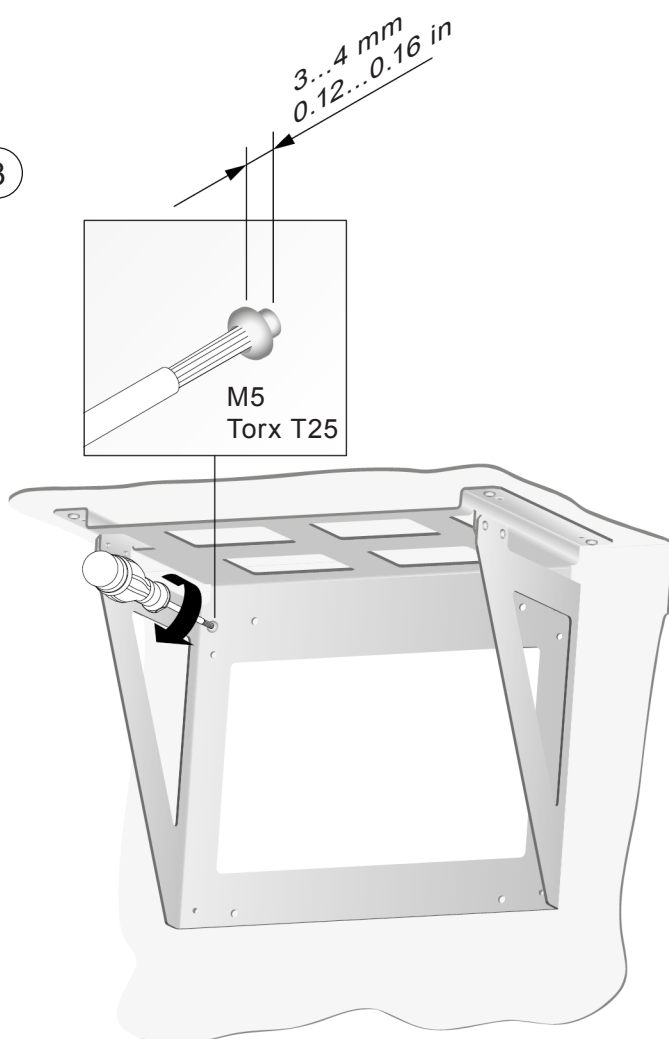


Roof mounting protection relay

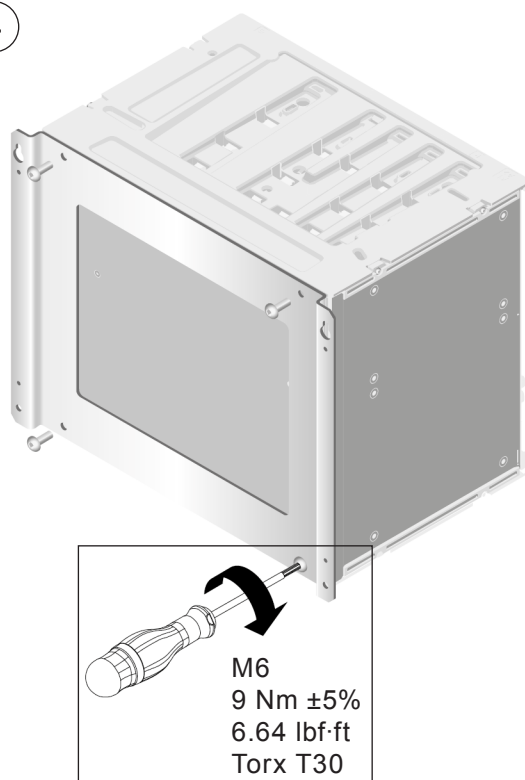
2



3

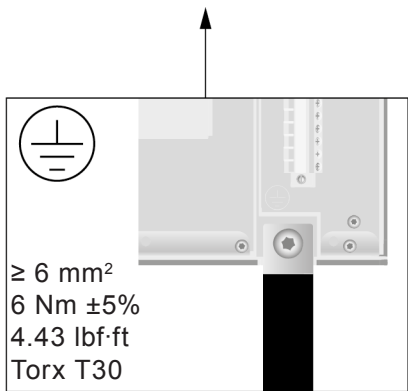
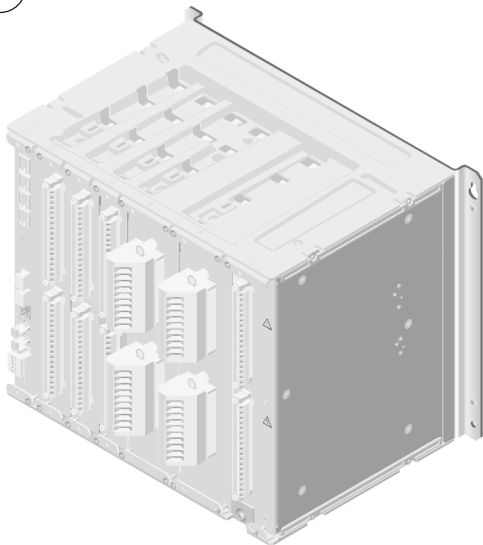


4

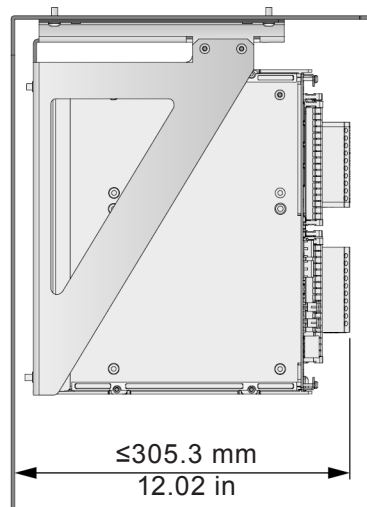
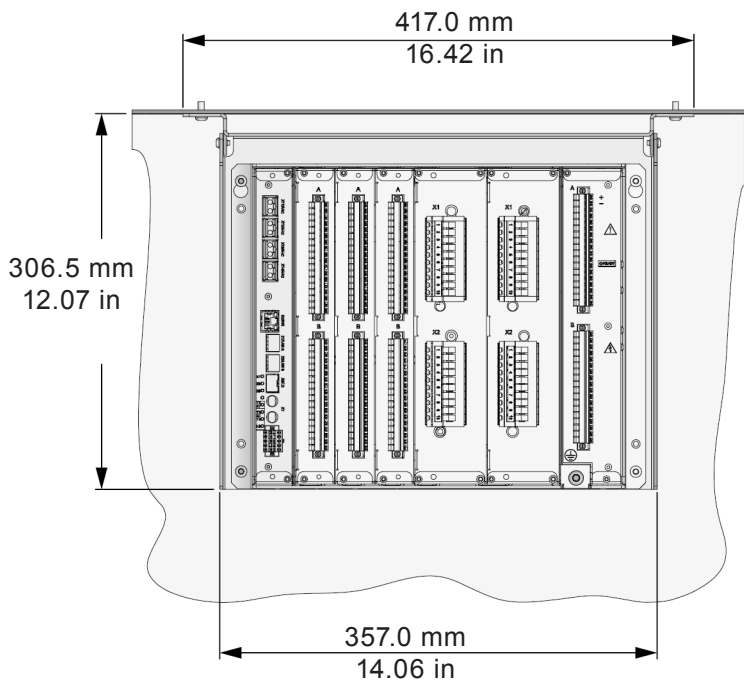
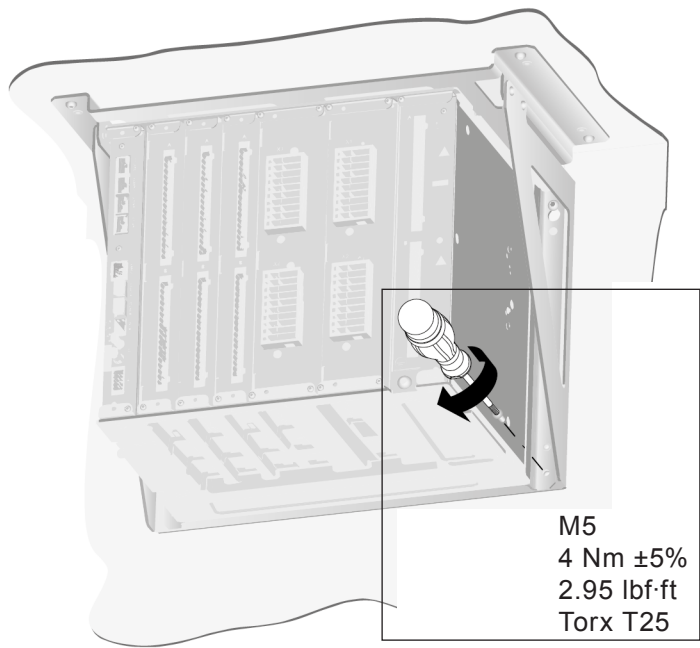


Roof mounting protection relay

5

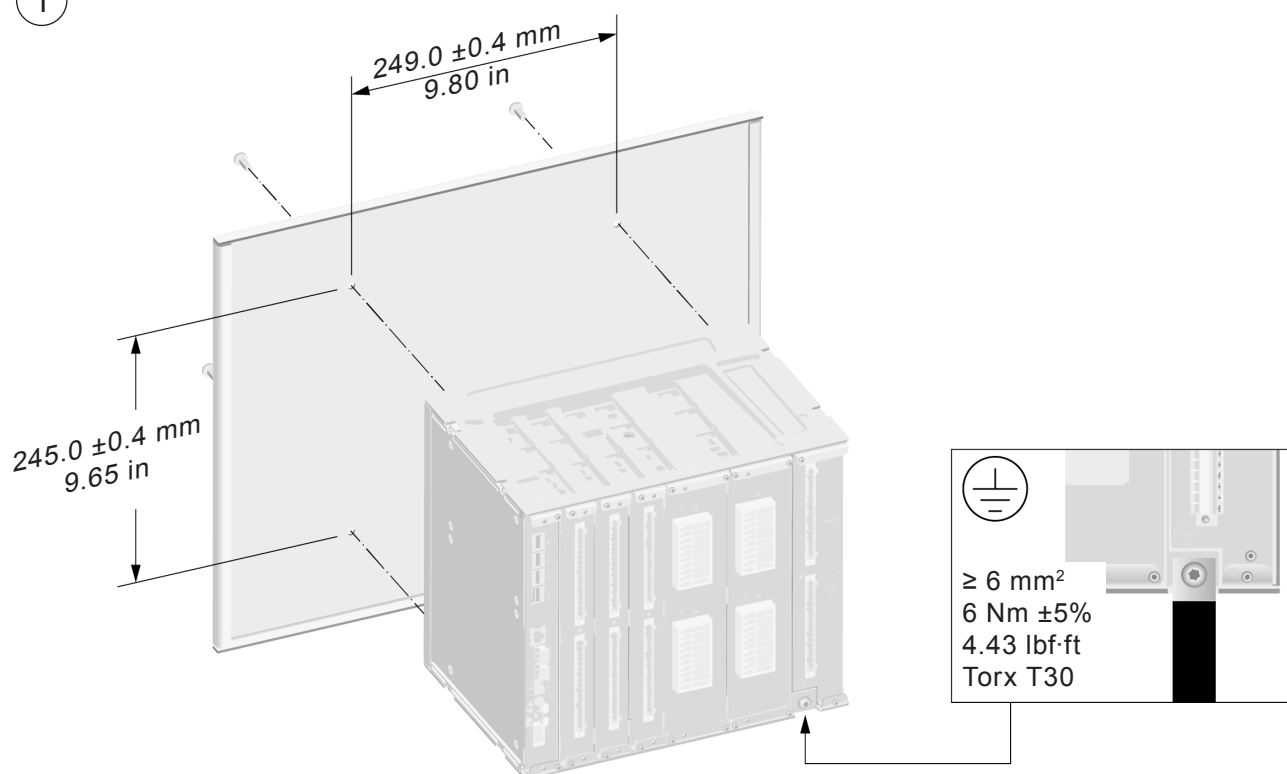


6

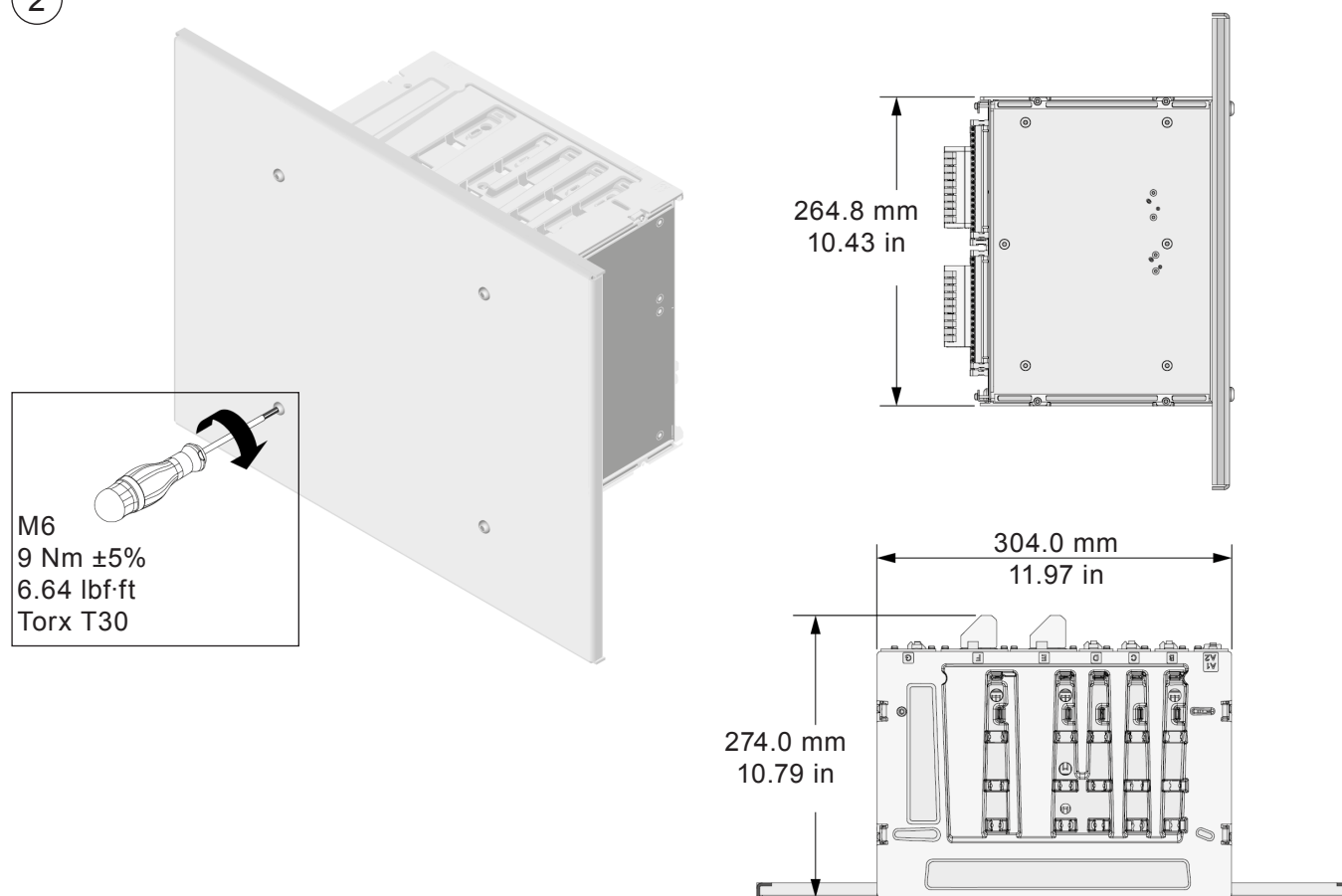


Door mounting protection relay

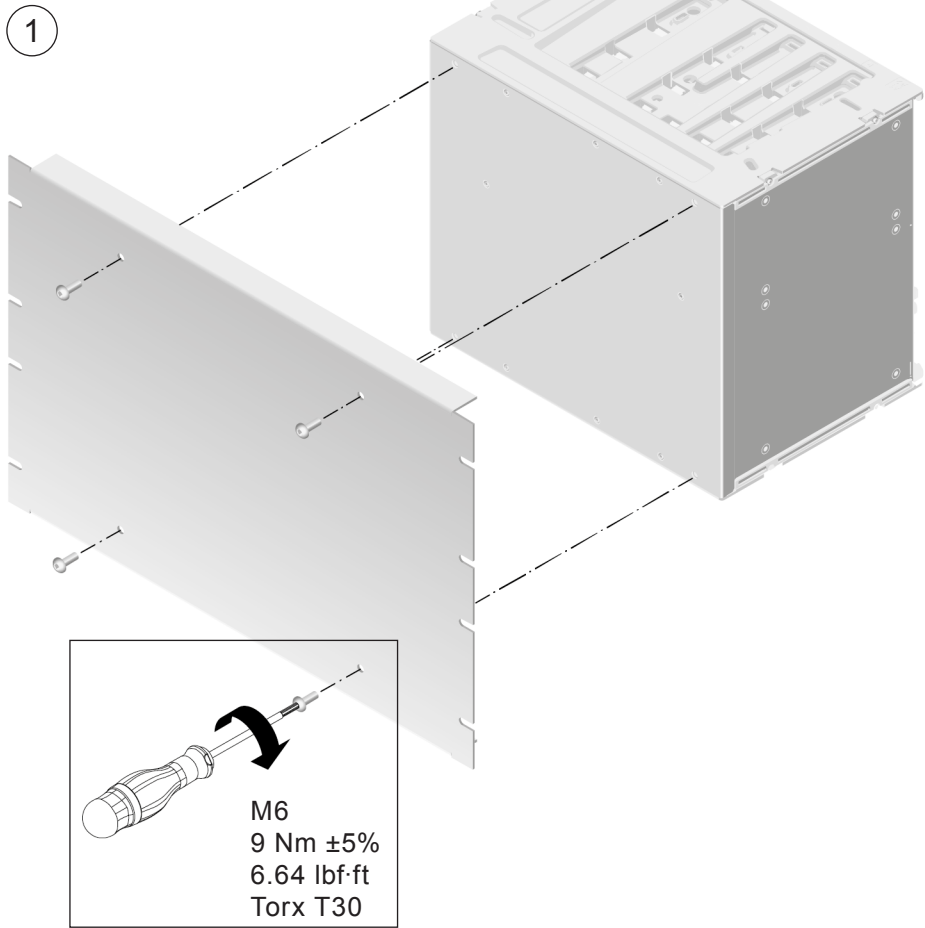
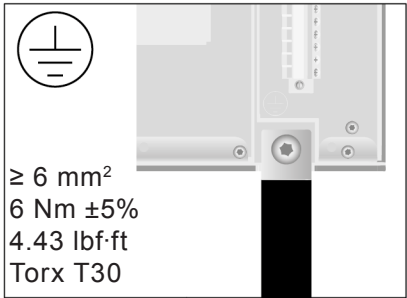
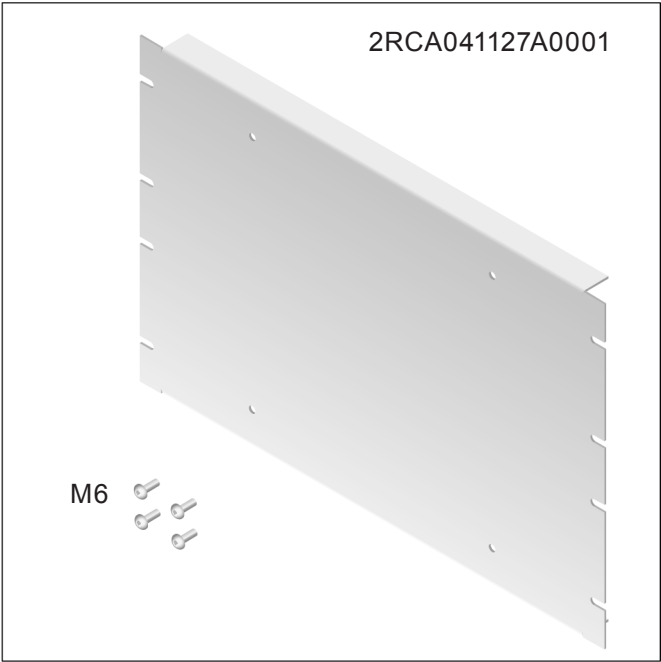
①



②

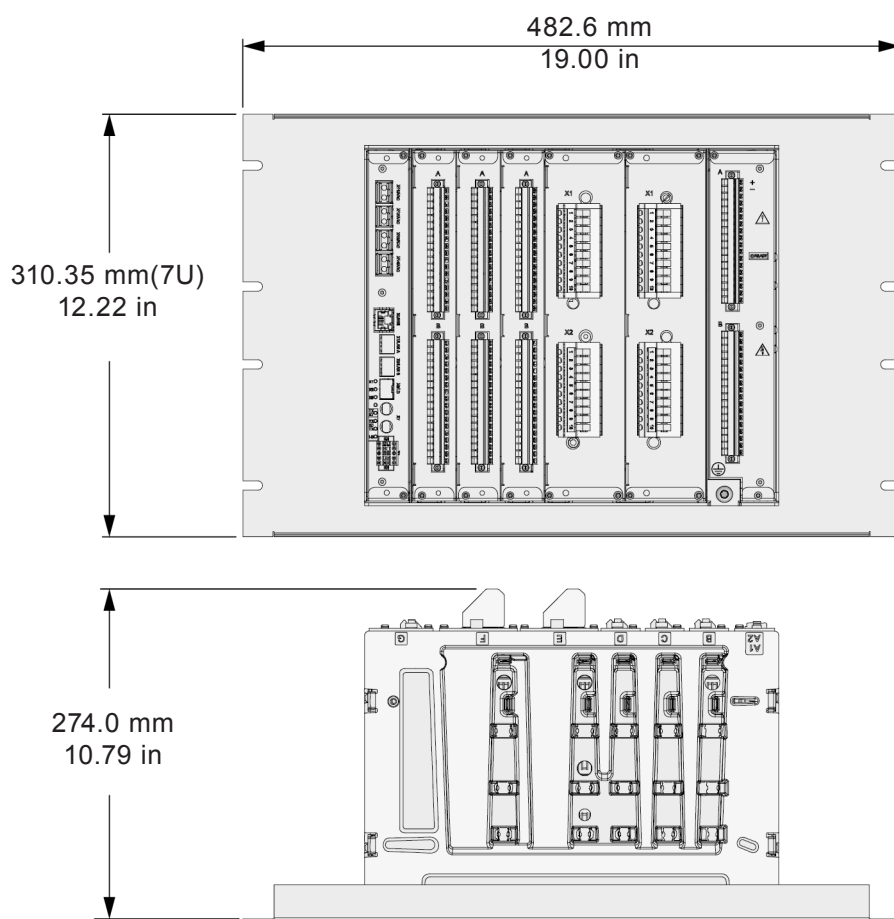
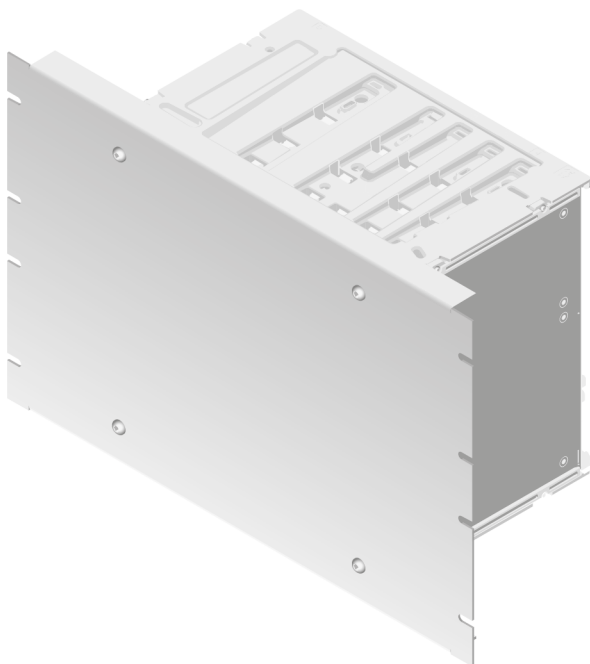


Rack mounting protection relay

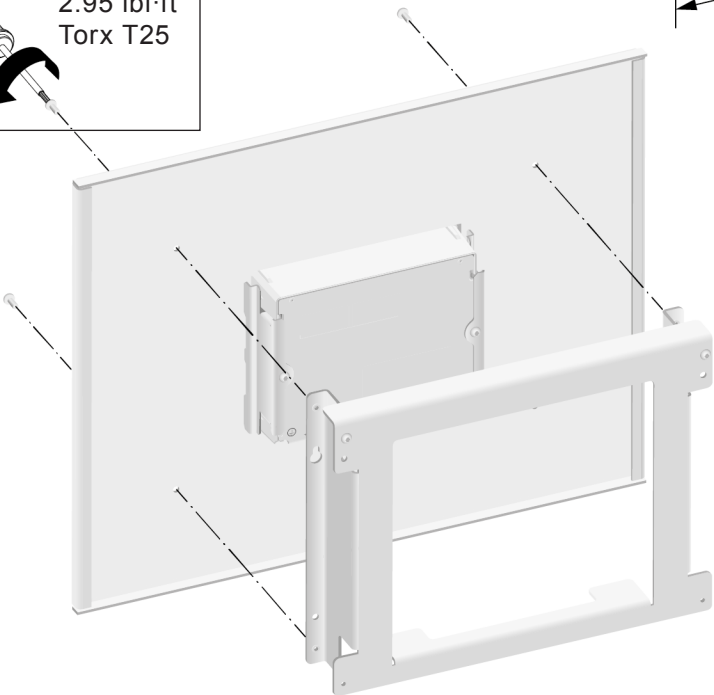
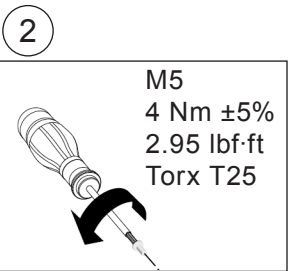
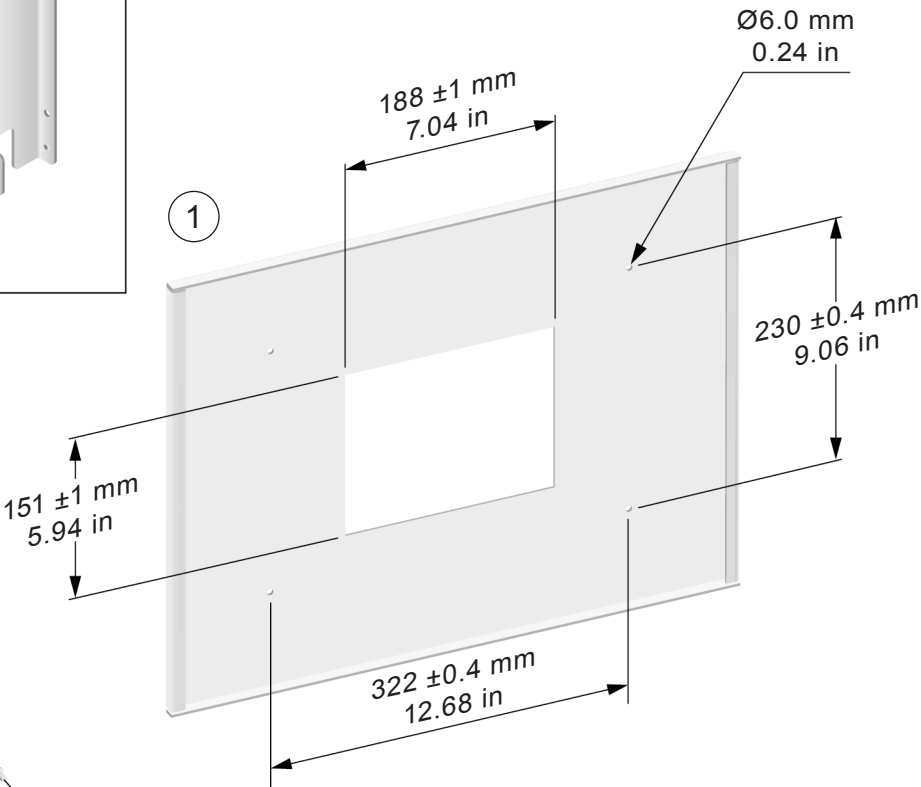
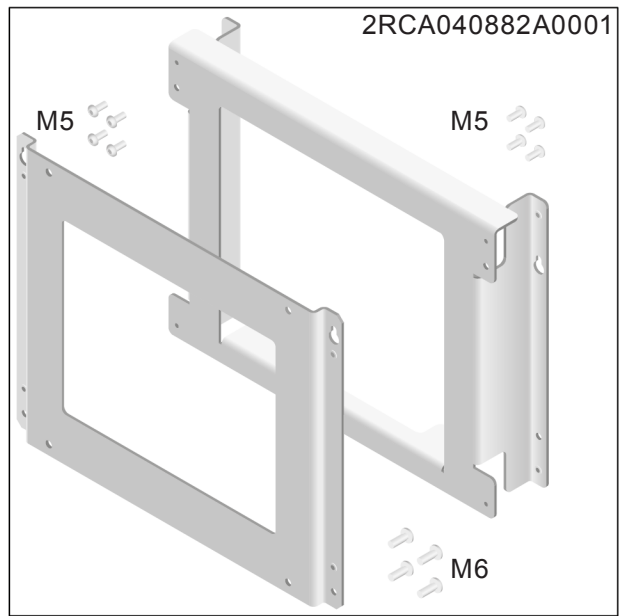


Rack mounting protection relay

2

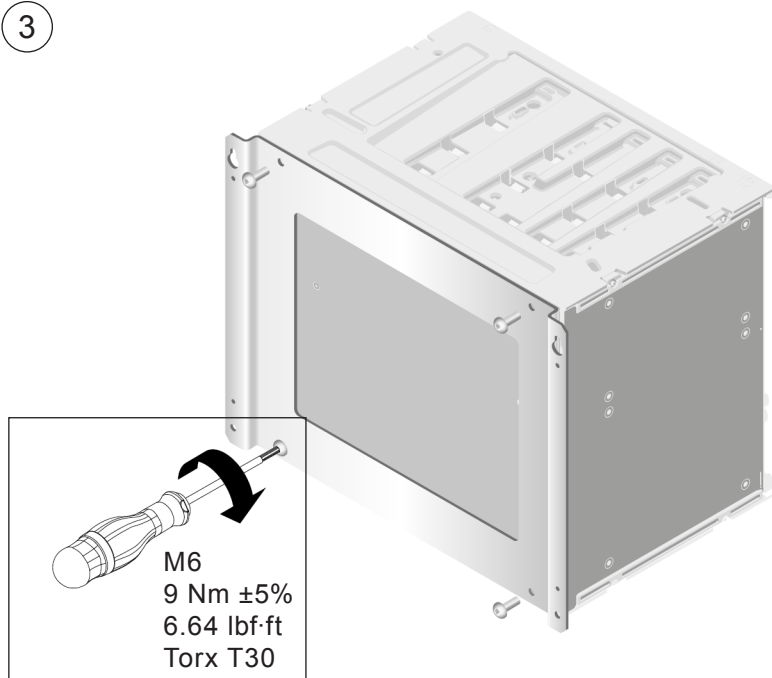


Door mounting protection relay with local HMI

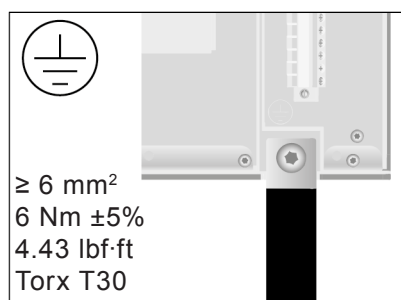
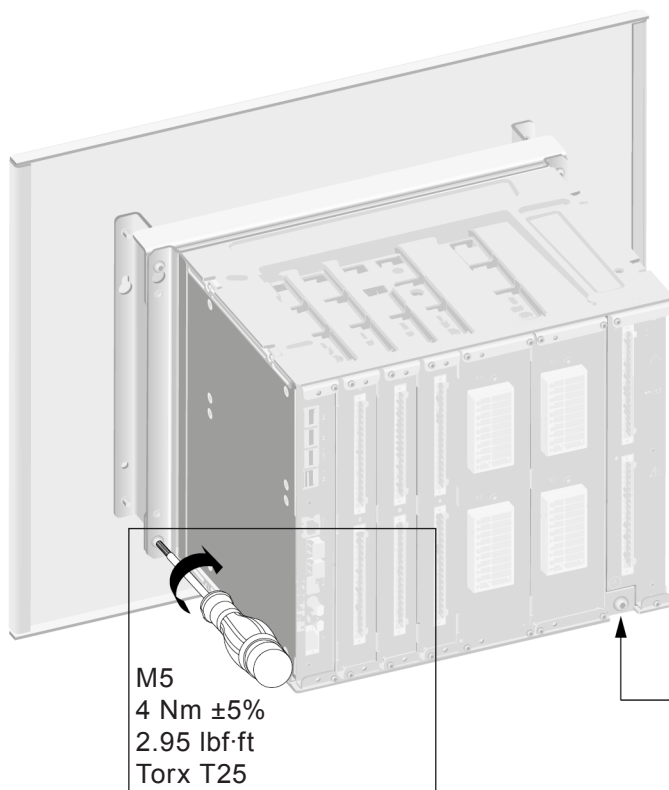


Door mounting protection relay with local HMI

3

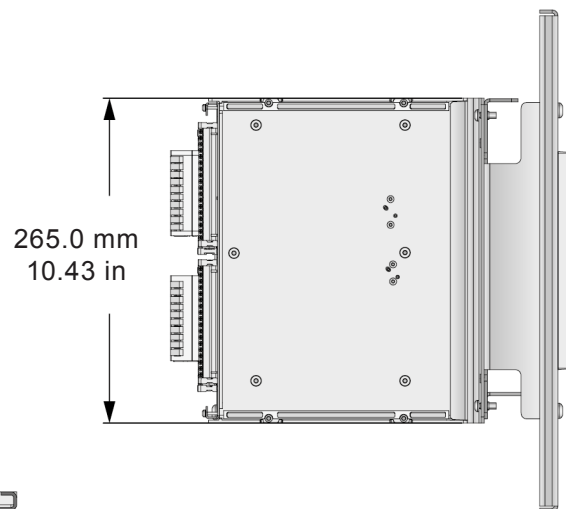
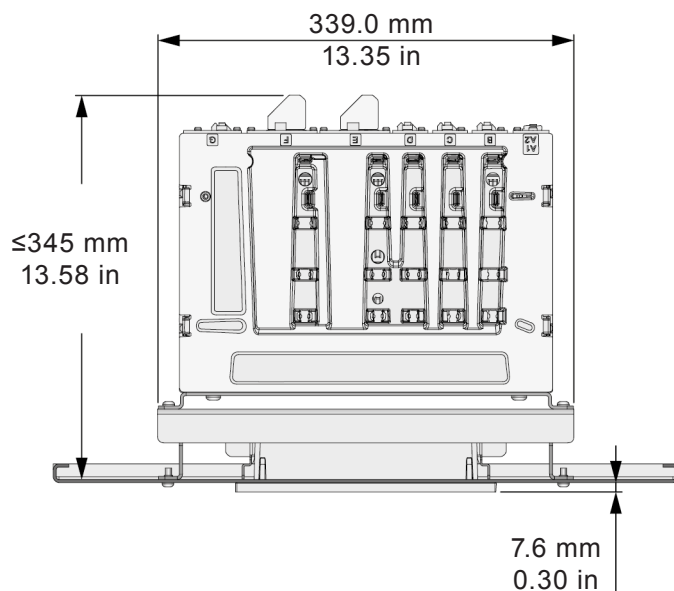
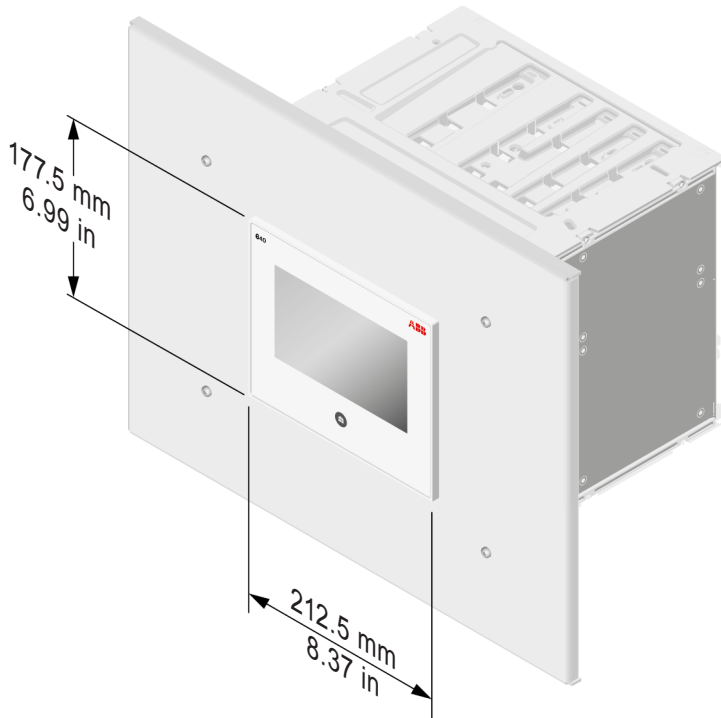


4

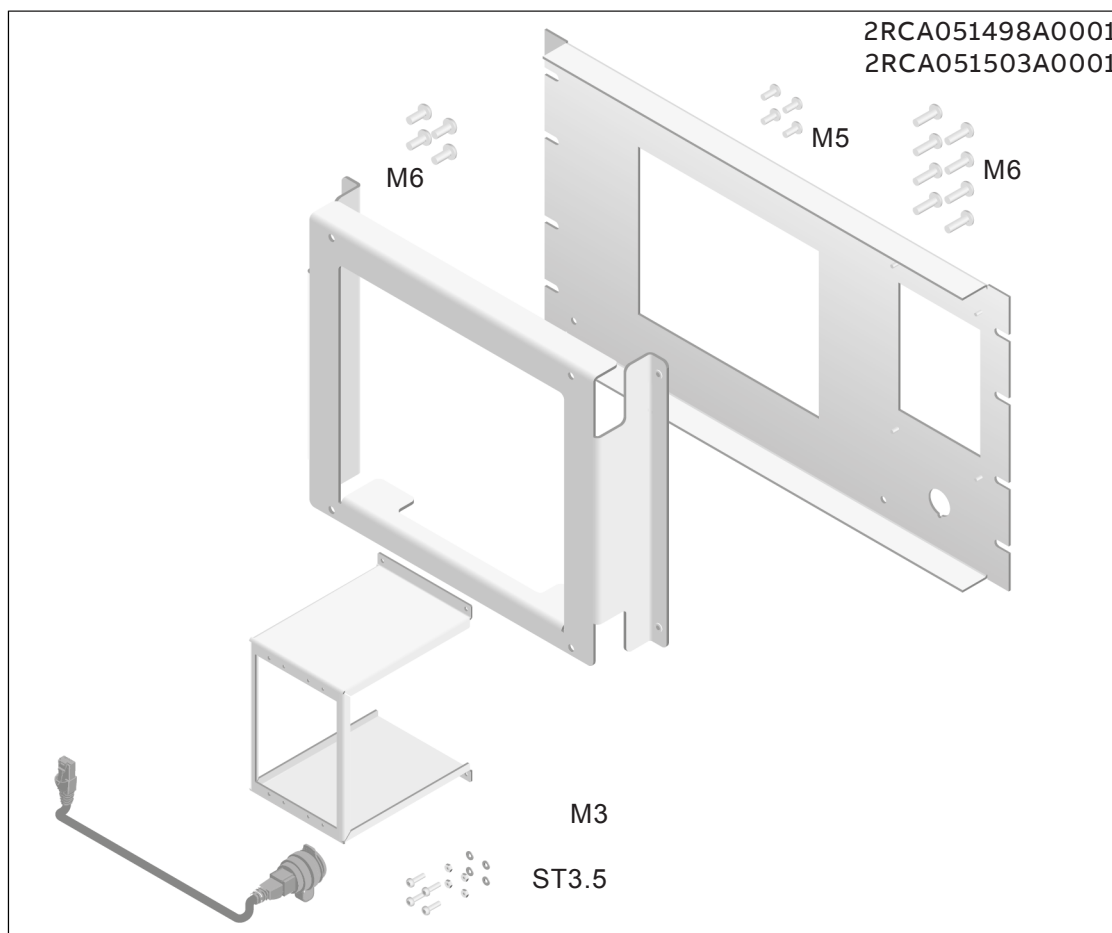
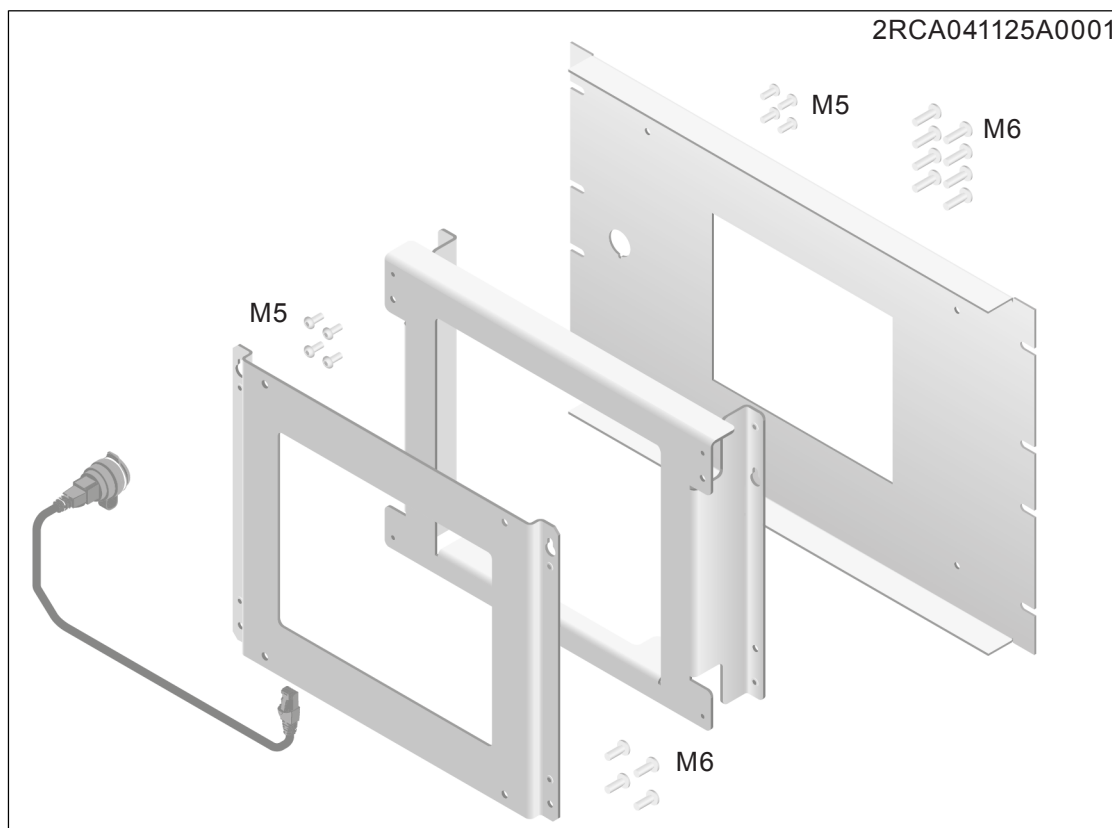


Door mounting protection relay with local HMI

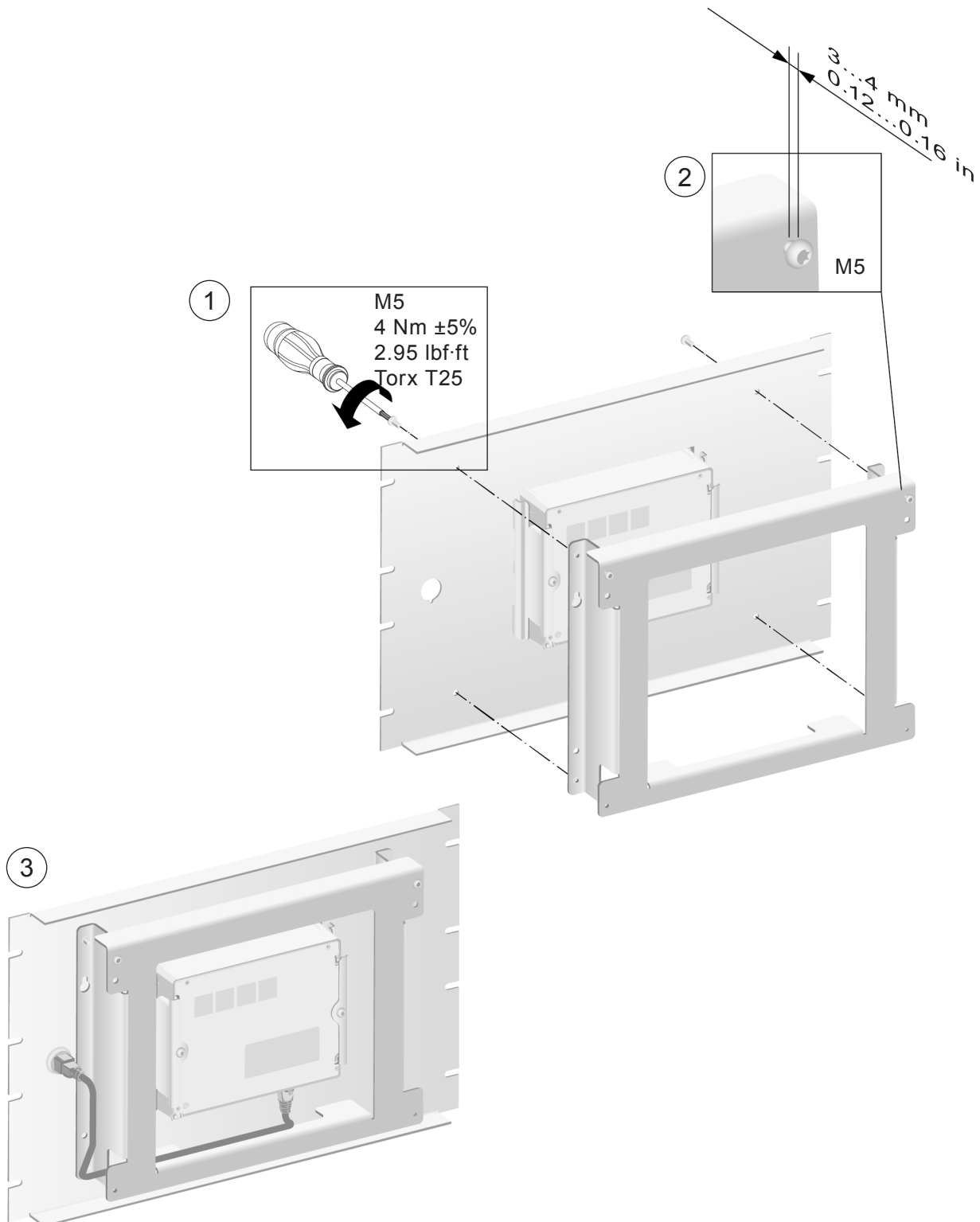
5



Rack mounting protection relay with local HMI

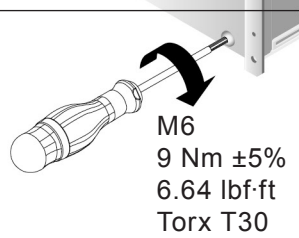
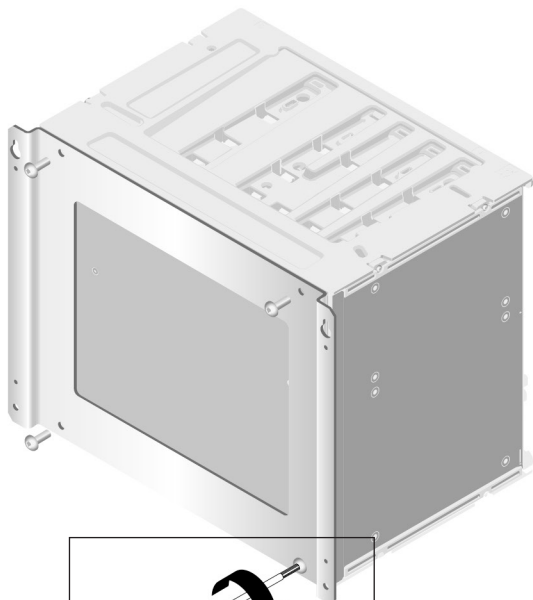


Rack mounting protection relay with local HMI

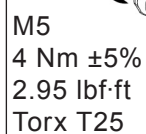
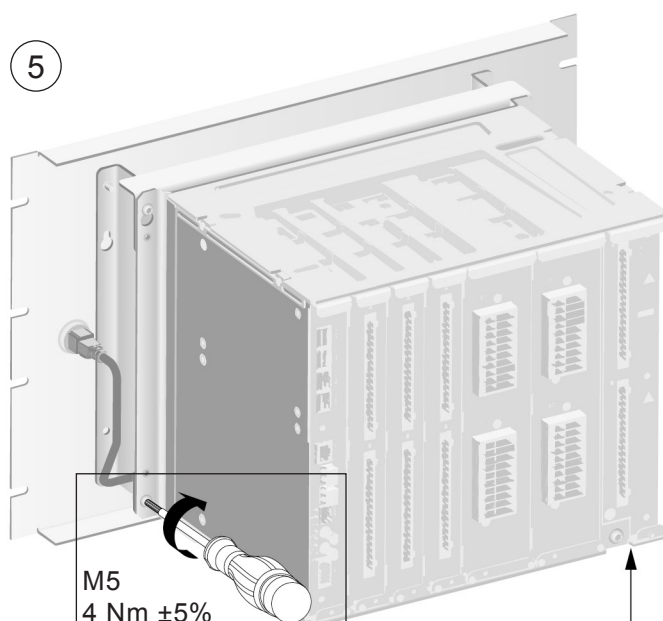


Rack mounting protection relay with local HMI

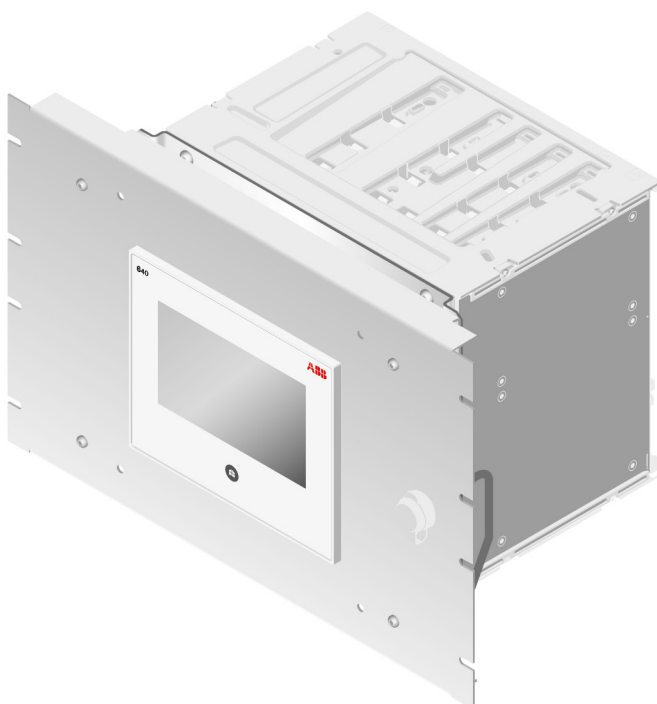
4



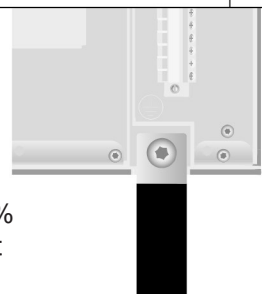
5



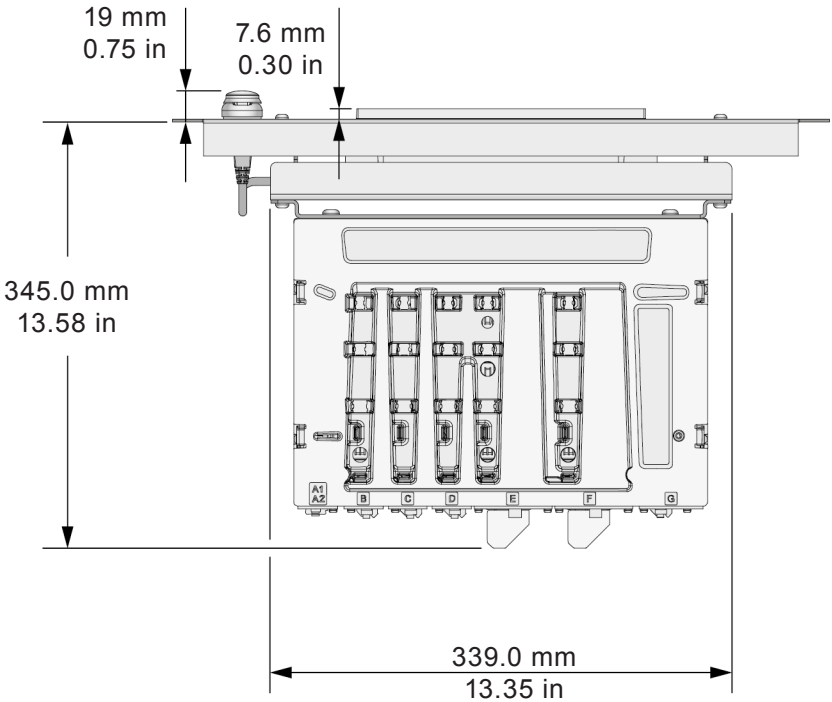
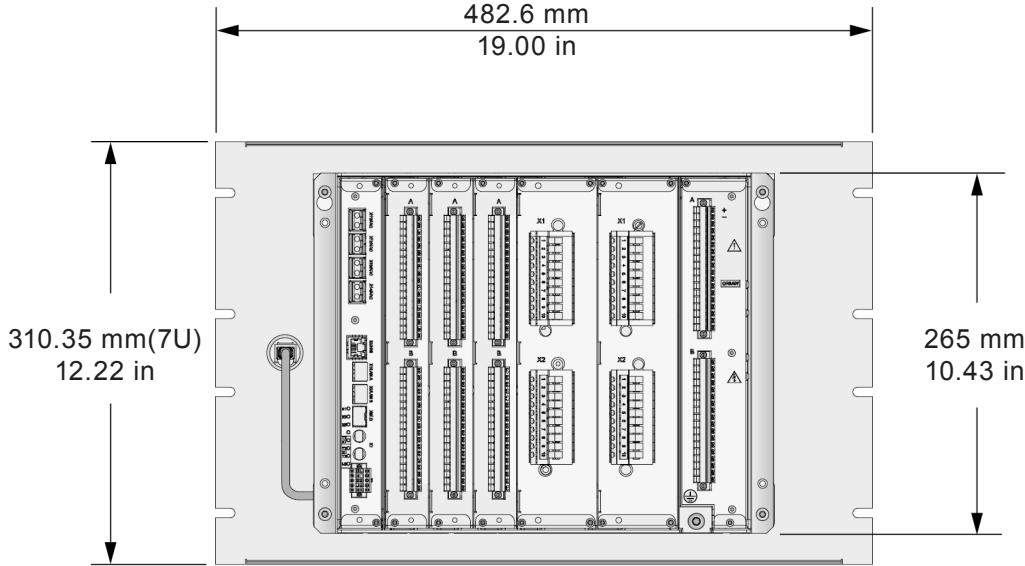
6



$\geq 6 \text{ mm}^2$
6 Nm $\pm 5\%$
4.43 lbf·ft
Torx T30



Rack mounting protection relay with local HMI



Mounting in vertical position

Mounting REX640 in a vertical position (modules aligned in a horizontal direction) is an alternative for wall and door mounting without local HMI. REX640 shall be positioned Slot G on the top. Otherwise, instructions on the respective mounting option are applicable.

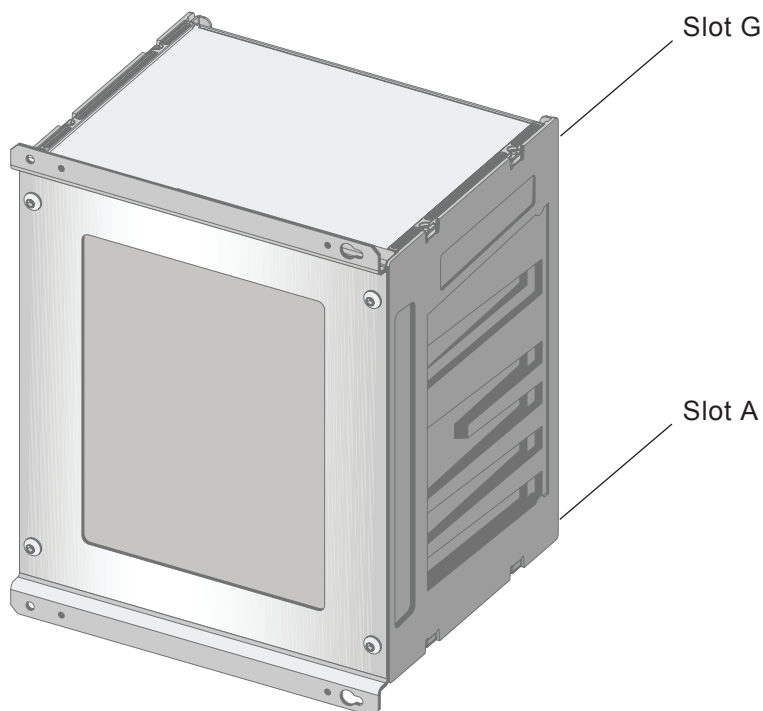


ABB Distribution Solutions

P.O. Box 699

FI-65101 VAASA, Finland

Phone +358 10 22 11

www.abb.com/mediumvoltage

Additional information

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB OY does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB OY.

© Copyright 2023 ABB. All rights reserved.
Specifications subject to change without notice.



1MRS758935E © Copyright 2023 ABB. All rights reserved.