

# FMBT-21 Modbus/TCP adapter module

## Quick installation and start-up guide

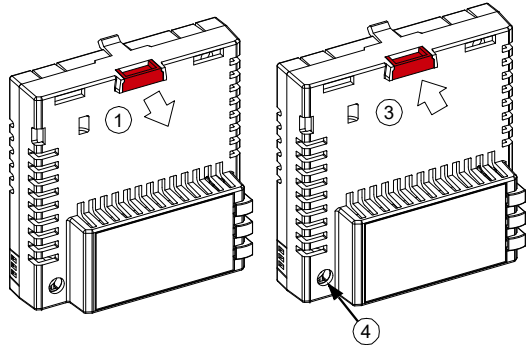
### Safety instructions



**WARNING!** Obey the safety instructions of the drive. If you ignore them, injury or death, or damage to the equipment can occur.

### Mechanical installation

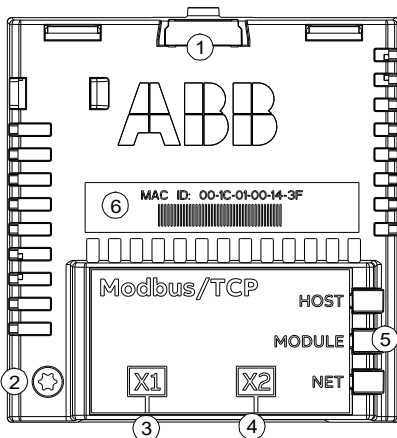
1. Pull out the lock.
2. Install the module carefully to an option module slot of the drive. See the drive hardware manual.
3. Push in the lock.
4. Tighten the screw to torque 0.8 N·m using a Torx TX10 screwdriver.



**WARNING!** Do not use excessive force, or leave the screw too loose. Over-tightening can damage the screw or module. A loose screw decreases the EMC performance, and can cause an operation failure.

### Electrical installation

#### Layout of the module



No.	Description
1	Lock
2	Mounting and grounding screw
3	RJ-45 connector [X1] to Ethernet
4	RJ-45 connector [X2] for chaining another module
5	Diagnostic LEDs
6	MAC address

## Start-up

To control the drive with the adapter module, set at least the basic parameters listed in the table below. For full parameter descriptions, refer to the adapter module's user manual or to the drive's firmware manual.

### ■ Basic parameter settings

Index	Name	Value
20.01	Ext1 commands	Fieldbus A
22.11	Speed ref1 source	FBA A ref 1
28.11	Frequency ref1 source	FBA A ref 1
50.01	FBA A enable	Enable (or select the option slot in which the module is installed). This activates the communication module. The HOST LED becomes green.
50.02	FBA A comm loss func	Fault
51.02	Profile	The ABB Drives communication profile is the default value.
51.04	IP configuration	Set the IP address according your network configuration.
51.05...08	IP address	
51.09	Subnet CIDR	

This table shows the default register address, when the Address mode (parameter 51.23) is zero and the ABB Drives communication profile is used.

Register Address	Register Data (16-bit)
(4)00001	ABB Drives Profile Control Word
(4)00002	Reference 1
(4)00003	Reference 2
(4)00004	ABB Drives Profile Status Word
(4)00005	Actual 1
(4)00006	Actual 2
(4)00101...(4)09999	Drive Parameter Access (16-bit); Register Address = (4)00000 + 100 × Group + Index
(4)20000...(4)29999	Drive Parameter Access (32-bit); Register Address = (4)20000 + 200 × Group + 2 × Index

To take the settings into use, validate and refresh the parameters with parameter 51.27 FBA par refresh.

## Further information

See the latest version of FMBT-21 Modbus/TCP adapter module user's manual (3AXD50000158607 [English]) in ABB library ([www.abb.com/drives/documents](http://www.abb.com/drives/documents)).

For more information on ABB fieldbus options and protocols, see the fieldbus communications web page ([new.abb.com/drives/connectivity/fieldbus-connectivity](http://new.abb.com/drives/connectivity/fieldbus-connectivity)).



FMBT-21 manual



Fieldbus communications web page

[abb.com/drives](http://abb.com/drives)

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



3AXD50000158560B

