

Assembly Instruction ATCA Ergonomic handle

SAFETY INSTRUCTIONS AND WARNINGS:

Please read the following instructions carefully before the equipment is assembled and operated. This will ensure that you have taken adequate precautions to protect yourself and thus avoid damage to the product.

SAFETY PRECAUTIONS

Only skilled personnel are authorized to assemble handles, front panels and boards. Take care that the boards are not connected to a bus system or to a mains supply. ESD precautions have to be taken according to the board manufacturer.

INSTALLATION AND OPERATION PROCEDURES

The assembling has to be made on a clean and even surface and with the use of the correct assembling tools in the right size. Interventions with wrong tools can cause the loss of warranty. Passivated and other conductive surfaces may not be touched with bare hands due to possible corrosion. It's strongly recommended to wear protective gloves to assemble parts with conductive surfaces.

FAULT CONDITION

To simplify the handling in the case of a repair please contact ELMA Electronic by telephone before return shipment of the product www.elma.com

1. Preparation of work:

Depending on your configuration, not all steps shown in this assembly instruction will be required.

It is recommended to determine optimum build sequence through prototype build prior to larger volume production for any chassis configuration.

It is recommended that protective gloves are used for the assembly of clear passivated components in order to minimise marks or blemishes to the material.

Necessary tool: Screwdriver Philips No. 1

Torques: M 2.5 => 0.6 Nm
 M 3 => 1.0 Nm



Bill of material, which is mentioned in this instruction:

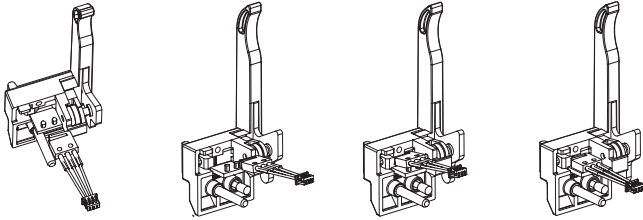
- 1 ATCA Ergonomic handle top (pre-assembled)
- 1 ATCA Ergonomic handle bottom (pre-assembled)
- 2 M3 self-locking shoulder screws (loose packed in handle package)
- 2 M2.5x4mm self-locking front panel assembly screws (loose packed in handle package)
- 1 Front panel
- 1 Overlay for front panel
- 1 EMC Gasket (self adhesive)
- 1 Microswitch
- 1 AdvancedTCA board

2. Preparation of components prior to plug-in unit assembly:

Pre-assembly of the following components will optimise final plug-in unit assembly build time.

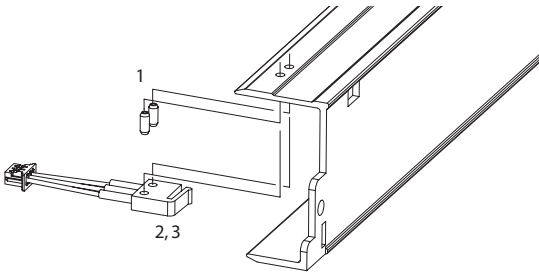
2.1 Microswitch assembly to handle:

- Possible without tools
1. Handle stays in the locked (closed) position
 2. Check the microswitch orientation according the drawing below
 3. Push microswitch onto the handle



2.2 Microswitch assembly to front panel:

1. Press studs (ELMA part number: 5686-05) into the panel
2. Check the microswitch orientation according the drawing below
3. Push microswitch onto the studs



2.3 Overlay assembly to front panel:



- Pull off a small part of the protective tape on the adhesive side of the overlay
- Position the overlay one side of the front panel and fix it

It's strongly recommended to wear protective clothes to assemble parts with conductive surfaces



- Pull off the protective tape and fix the overlay continuously
- Fix the overlay in rolling over with the fingers

2.3 EMC gasket assembly to front panel:



- Pull off a small part of the protective tape on the adhesive side of the gasket
- Position the gasket one side of the front panel and fix it

It's strongly recommended to wear protective gloves to assemble parts with conductive surfaces



- Pull off the protective tape and fix the gasket continuously. Prevent buckling of the gasket
- Fix the gasket in rolling over with the fingers. The front panel is now ready for the handle assembly

3. Assembly ATCA Ergonomic Handle to Front Panel:

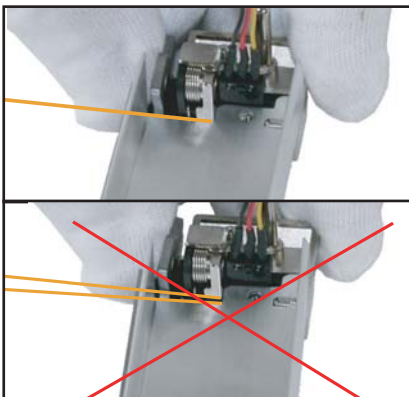


- Handle stays in locked (closed) position
- Position top and bottom handle next to the front panel

It's strongly recommended to wear protective gloves to assemble parts with conductive surfaces



- Insert the front panel onto the handles
- Make sure the rectangular protrusion in the handle base part fits into the rectangular hole in the front panel
- Make sure the locking mechanism of the handle lays on the inside of the front panel



- Align the front panel with the handle

Important: Make sure that there is no gap between the handle and the panel



- Fix the handles on both sides with the M2.5x4mm self-locking screws (Tuflok)

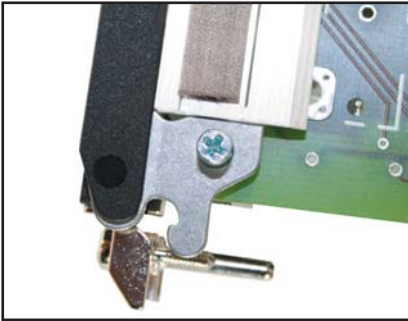
4. Assembly Handle and Front Panel to AdvancedTCA PCB:



- Handle stays in locked (closed) position
- Position the AdvancedTCA board on both sides between the metal and the black plastic of the handle

ESD precautions have to be taken according to the board manufacturer

It's strongly recommended to wear protective gloves to assemble parts with conductive surfaces



- Insert the M3 self-locking shoulder screws (Tuflok)



- Fix the shoulder screws
- Connect the microswitch with the opposite connector on the AdvancedTCA board (in case the microswitch is not assembled to the board)



- The ATCA Ergonomic Handle can be unlocked (opened) now

Your AdvancedTCA plug-in unit is ready to use