

#### **RECYCLER GUIDE**

# **SIMATIC**

## HMI

Unified Comfort Panels and Unified Basic Panels

Reference product: 6AV2128-3MB06-0AX1

This document covers all variants in the range 6AV2128-3KB06-0AX0, 6AV2128-3MB06-0AX0, 6AV2128-3KB36-0AX0, 6AV2128-3MB36-0AX0, 6AV2128-3KB06-0AX1, 6AV2128-3MB36-0AX1, 6AV2128-3GB06-0AX1, 6AV2128-3GB36-0AX0, 6AV2128-3GB06-0AX1, 6AV2128-3GB36-0AX1, 6AV2128-3GB36-0AX1, 6AV2123-3KB32-0AW0, 6AV2123-3MB32-0AW0, 6AV2123-3DB32-0AW0, 6AV2123-3GB32-0AW0.



# **SIEMENS**

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| HMI                                   |
|---------------------------------------|
| <b>Recycler Guide for SIMATIC HMI</b> |
| Unified Comfort Panels and            |
| Unified Basic Panels                  |

**Product Information** 

**SIMATIC** 

#### Legal information

#### Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

#### **⚠** DANGER

indicates that death or severe personal injury will result if proper precautions are not taken.

#### **∕** WARNING

indicates that death or severe personal injury may result if proper precautions are not taken.

#### **CAUTION**

indicates that minor personal injury can result if proper precautions are not taken.

#### NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

#### **Qualified Personnel**

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

#### **Proper use of Siemens products**

Note the following:

#### **∕** WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

#### **Trademarks**

All names identified by <sup>®</sup> are registered trademarks of Siemens Aktiengesellschaft. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

#### **Disclaimer of Liability**

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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About this guide

In order to conserve important resources, we work on reducing the materials we use and supporting the recycling economy right from the product design stage. An important way to achieve this goal is the resource recovery of electronic products at the end of their service life.

The Siemens Recycler Guides provide recyclers of electronic products with instructions on how to disassemble products safely in order to maximize resource recycling. The Recycler Guides provide step-by-step disassembly instructions and material composition information to help recyclers direct specific materials to specialized recyclers.

Disassembly may only be carried out by specialists trained in the recycling of electronic devices. The recycler is responsible for independently evaluating and ensuring compliance with all applicable environmental, health and safety regulations. This includes, among other things, the legal requirements in the area of management, handling, shipping and disposal as well as applicable laws to ensure the health and safety of all employees involved.

If you have any questions or feedback regarding this Recycler Guide, please use this address: recycling@siemens.com

Safety instructions

The recycler is responsible for independently evaluating all activities of its employees in performing or supporting the work and ensuring compliance with all applicable legal requirements. This includes, but is not limited to, laws regarding the health and safety of all employees performing or assisting in that work. The recycler is also responsible for assessing the workplace and ensuring that the area in which the work is carried out meets all ergonomic requirements to ensure the protection of its employees.

#### Danger notice (DIN EN ISO 7010)



Warning against hand injuries



Warning against pointed/sharp objects

Wear personal protective equipment throughout the recycling process.



Wear hand protection



Wear eye protection



Wear protective clothing



Wear a mask



Wear foot protection

Recommended tool

For the disassembly of the product, we recommend using the following tool:



Slotted screwdriver



Torx screwdriver T10

#### **Additional tool**

0

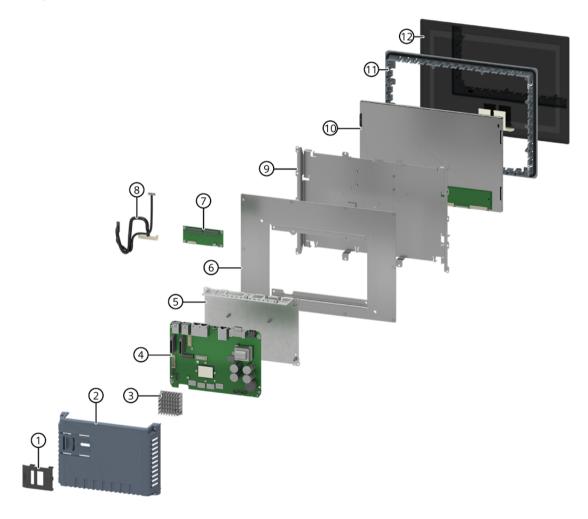
Spatula

**Disassembly instructions** 

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The following guide provides detailed information on how to disassemble the product at the end of its service life and on what materials you can collect and recycle. In doing so, you support the recycling economy.

## Components of the product



| Position | Part                                  | Material      | Disassembly step |
|----------|---------------------------------------|---------------|------------------|
| 1        | Protective cover of the SD card slots | POM           | Step 2           |
| 2        | Rear cover                            | Polycarbonate | Step 1           |
| 3        | Heat sink                             | Aluminum      | Step 3           |
| 4        | Assembled PCB                         | Electronics   | Step 5           |

| Position | Part                         | Material  | Disassembly step |
|----------|------------------------------|---|------------------|
| 5        | Interface plate              | Aluminum  | Step 6           |
| 6        | Cover plate                  | Aluminum  | Step 7           |
| 7        | Touch controller             | Electronics   | Step 9           |
| 8        | Cable                        | Electronics   | Step 4, 8        |
| 9        | Display panel                | Steel   | Step 10          |
| 10       | Display                      | Electronics   | Step 10          |
| 11       | Front frame                  | Product group 1, 2: Aluminum<br>Product group 3, 4: Plastic | Step 11          |
| 12       | Touch screen and cover glass | Electronics   | Step 11          |

#### **Product groups**

This Recycler Guide covers four product groups of the HMI product family. The devices in these 4 product groups differ in terms of their features, but are similar in terms of their design. Follow steps 1 to 12 of this guide for the disassembly. Deviations that are specific to a particular product group are explicitly mentioned in the text.

## **Product group 1**

Unified Comfort Panels 10/12 inches

| Designation                            | Order number       |
|--|--------------------|
| MTP1000 Unified Comfort                | 6AV2128-3KB06-0AX0 |
| MTP1200 Unified Comfort                | 6AV2128-3MB06-0AX0 |
| MTP1000 Unified Comfort (neutral)      | 6AV2128-3KB36-0AX0 |
| MTP1200 Unified Comfort (neutral)      | 6AV2128-3MB36-0AX0 |
| MTP1000 Unified Comfort Atex           | 6AV2128-3KB06-0AX1 |
| MTP1200 Unified Comfort Atex           | 6AV2128-3MB06-0AX1 |
| MTP1000 Unified Comfort Atex (neutral) | 6AV2128-3KB36-0AX1 |
| MTP1200 Unified Comfort Atex (neutral) | 6AV2128-3MB36-0AX1 |

## **Product group 2**

**Unified Comfort Panels 7 inches** 

| Designation                           | Order number       |
|---------------------------------------|--------------------|
| MTP700 Unified Comfort                | 6AV2128-3GB06-0AX0 |
| MTP700 Unified Comfort (neutral)      | 6AV2128-3GB36-0AX0 |
| MTP700 Unified Comfort Atex           | 6AV2128-3GB06-0AX1 |
| MTP700 Unified Comfort Atex (neutral) | 6AV2128-3GB36-0AX1 |

## **Product group 3**

Unified Basic Panels 10/12 inches

| Designation           | Order number       |
|-----------------------|--------------------|
| MTP1000 Unified Basic | 6AV2123-3KB32-0AW0 |
| MTP1200 Unified Basic | 6AV2123-3MB32-0AW0 |

## **Product group 4**

Unified Basic Panels 4/7 inches

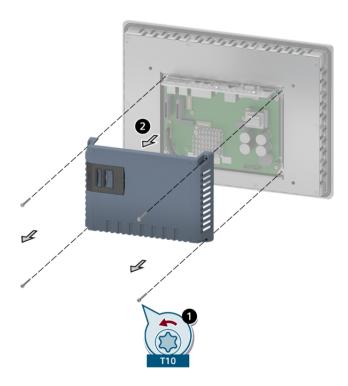
| Designation          | Order number       |
|----------------------|--------------------|
| MTP400 Unified Basic | 6AV2123-3DB32-0AW0 |
| MTP700 Unified Basic | 6AV2123-3GB32-0AW0 |

## Dismantling the product

Follow these steps for disassembly:

#### 1. Disassembly of the rear cover

- 1. Remove the four screws with a T10 Torx screwdriver.
- 2. Remove the rear cover.

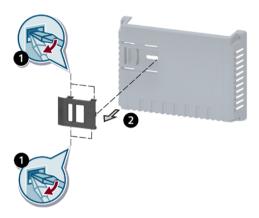


## 2. Disassembly of the protective cover of the SD card slots

#### Note

This step is not required for product groups 3 and 4.

- 1. Use a flat-tip screwdriver to press down the snap hooks on the protective cover of the SD card slots.
- 2. Remove the protective cover from the rear cover.

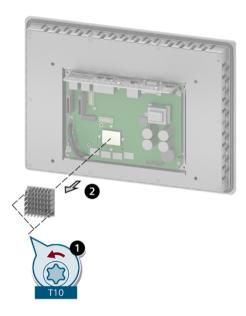


## 3. Disassembly of the heat sink

#### Note

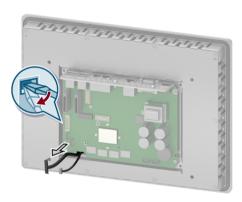
This step is not required for product groups 3 and 4.

- 1. Remove the integrated screws with a T10 Torx screwdriver.
- 2. Remove the heat sink.



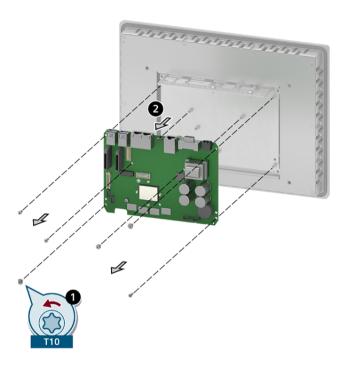
## 4. Disassembly of the cable connectors

Loosen the 2 cable connectors by pressing the snap hook downwards with a flat-tip screwdriver.



## 5. Disassembly of the assembled PCB

- 1. Remove the six screws with a T10 Torx screwdriver.
- 2. Remove the assembled PCB.

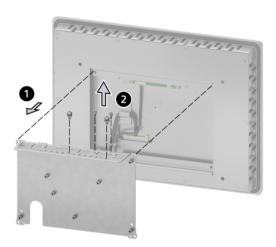


#### 6. Disassembly of the interface plate

#### Note

This step is not required for product groups 3 and 4.

- 1. Remove the interface plate.
- 2. Remove the four screws with a T10 Torx screwdriver.

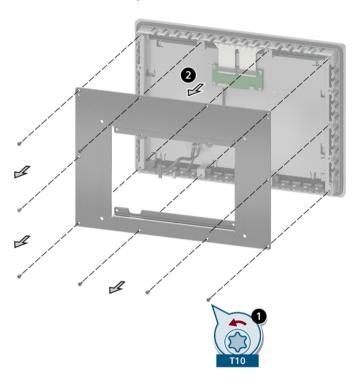


## 7. Disassembly of the cover flap

#### Note

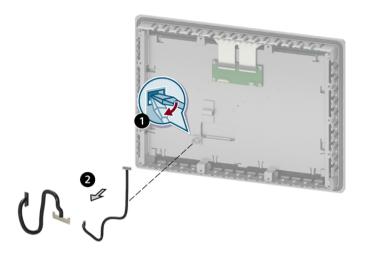
This step is not required for product groups 2 and 4.

- 1. Remove the ten screws with a T10 Torx screwdriver.
- 2. Remove the cover plate.



## 8. Disassembly of the cables

- 1. Loosen the cables with a flat-blade screwdriver.
- 2. Remove the cable.

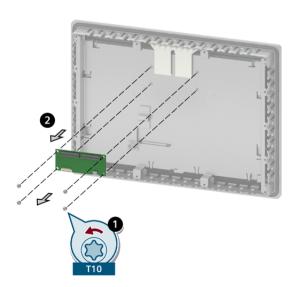


## 9. Disassembly of the touch controller

- 1. Remove the four screws with a T10 Torx screwdriver.
- 2. Remove the touch controller.

#### Note

The touch controller can also be bonded. Use a spatula to remove the bonded touch controller.

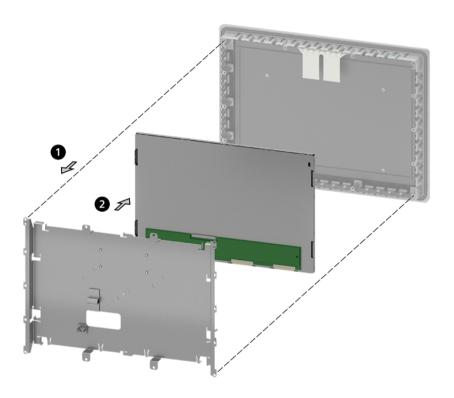


## 10. Disassembly of the display

- 1. Remove the display panel from the front using a flat-blade screwdriver.
- 2. Pull the display off the display panel.

#### Note

In product groups 3 and 4, the display is bonded. Use a spatula to loosen the bonded display.



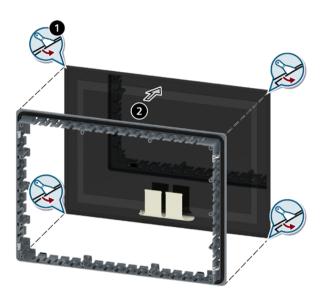
## 11. Disassembly of the touch screen

1. Loosen the bonded front frame with a spatula.

#### Note

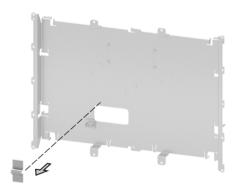
The touch screen cannot be removed non-destructively.

2. Remove the touch screen from the front frame.



## 12. Disassembly of the U-Clip cable inlet

Remove the U-clip cable inlet. Use a flat-tip screwdriver to do this.



**Explanation of substances and components** 

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#### Components according to Directive 2012/19/EU Annex VII

You must remove at least the following substances, mixtures and components from the product:

| Substance/mixture/component  | Position | Disassembly step |
|--|----------|------------------|
| Liquid crystal displays (possibly with enclosure) with a surface area of less than 100 cm <sup>2</sup> | 10       | Step 10          |
| PCBs with a surface area greater than 10 cm <sup>2</sup>   | 4, 10    | Step 5, 10       |
| Plastic with brominated flame-retardants   | 4, 7     | Step 5, 9        |
| External electrical cables   | 8        | Step 8           |

#### **Additional information**

In order to support the recycling economy, SIEMENS creates transparency that goes beyond the regulatory requirements. See the table for additional information on smaller PCBs or displays, as well as metal alloys containing elements that may be critical at the end of the service life, such as beryllium or lead.

This information does not fall within the scope of Annex VII of Directive 2012/19/EU.

| Substance/mixture/component  | Position | Disassembly step                          |
|--|----------|---|
| PCBs with a surface area less than 10 cm <sup>2</sup>                  | 7        | Step 9                                    |
| Aluminum alloys with a lead content of more than 0.1 percent by weight | 11       | Step 10: Only for product groups 1 and 2. |

Received material fractions

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All results from this process must be managed, handled, and disposed of in accordance with applicable waste laws and regulations including, but not limited to, the Waste Framework Directive and its national legislation in Europe and worldwide.

The following table contains the main material fractions. The table does not claim to be complete.

| Position                         | Possible material fractions (not exhaustive) |
|----------------------------------|--|
| 2                                | Polycarbonate                                |
| 3, 5, 6, 11 - Product group 1, 2 | Aluminum                                     |
| 4, 7                             | Copper, precious metals, tin                 |
| 10, 11                           | Steel, glass, copper, precious metals, tin   |

Disclaimer of liability

The Recycler Guide is for information purposes only.

This Recycler Guide does not guarantee the composition of any product or that the product will retain a specific composition for a specific period of time. Therefore, all warranties, assurances, conditions implied by statute or common law are excluded to the fullest extent permitted by applicable law.

The Recycler Guide provides information about the disassembly process of an appliance so that the components can be assigned to the correct recycling channels. Reuse of dismantled components is not permissible.

Siemens therefore assumes no liability for errors or consequences that may result from the use of this information to the greatest possible legal extent.

Please note that the data in this Recycler Guide cannot be compared to data calculated based on product category rules (PCRs) other than the above standards. The values given are only valid in the specified context and cannot be used directly to create the environmental compatibility assessment of a plant.