# Siemens 6ES5183-3UA13

I/O Expansion Unit / Slot allocation before expansion

Siemens 6ES5183-3UA13 is the EU183U expansion unit for a SIMATIC S5-135U/155U installation, with its own AC power supply, fans, cable duct and 21 module slots. It extends digital and analog I/O through the selected interface-module arrangement; the installed module types and slot assignments remain subject to the EU183U configuration limits.

## NUMBERED POSITIONS / INTERFACE OCCUPANCY MUST BE RETAINED

| 3 | 11 | 19 | 27 | 35 | 43 | 51 | 59 | 67 | 75 | 83 | 91 | 99 | 107 | 115 | 123 | 131 | 139 | 147 | 155 | 163 |
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| **Expansion-unit designation** | EU183U |
| **Control-system family** | SIMATIC S5-135U / S5-155U |
| **Module slots** | 21 |
| **Associated power supply** | 6ES5955-3LC42 |
| **Own power supply** | Yes |
| **Fan assembly** | Yes; three independently monitored fans in the power supply |
| **Cable duct** | Yes |
| **Permitted I/O types** | DI, DQ, AI and AQ |
| **Intelligent I/O without page addressing** | Permitted, subject to module-specific slot assignment |
| **Intelligent I/O with page addressing** | Not supported in EU183U |
| **Communication processors in EU183U** | Not supported |
| **Interrupt processing** | No |

Important Notice: Verify EU183U slot allocation, the fitted 6ES5955-3LC42 supply and its voltage selector. Do not apply EU185U communication-processor or page-addressed IP capabilities to this expansion unit.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Selected input, three output domains

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| **Associated PSU input selection** | 120 V or 230 V AC, selectable |
| **Associated PSU 120 V input range** | 93-132 V AC |
| **Associated PSU 230 V input range** | 187-264 V AC |
| **Associated PSU rated frequency** | 50/60 Hz; permitted range 47-63 Hz |
| **Associated PSU input current at 120 V rated load** | 2.5 A RMS |
| **Associated PSU input current at 230 V rated load** | 1.5 A RMS |
| **Associated PSU 5 V output rating** | 5 V DC / 18 A |
| **Associated PSU 15 V output rating** | 15 V DC / 0.5 A |
| **Associated PSU 24 V output rating** | 24 V DC / 1 A |
| **Associated PSU output regulation** | 5 V and 15 V regulated; 24 V coarsely stabilized |

## MATCH THE SELECTOR

120 V and 230 V have separate permitted ranges. A 120 V selector setting on a 230 V line can damage the PSU.

## REGULATION IS NOT IDENTICAL

The 5 V and 15 V rails are regulated. The 24 V rail is coarsely stabilized and has a separate 1 A rating.

## EXACT POWER-SUPPLY ASSOCIATION

The 6ES5183-3UA13 entry is mapped to 6ES5955-3LC42. The 40 A -3LF42 and the 24 V-input variants belong to different unit entries; their figures are not used here.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Topology and interface positions

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|---|---|
| **Maximum centralized connection length** | 2 m between the CC interface and the last EU interface |
| **IM300 slot in EU183U** | 163 |
| **IM310 / IM314 / IM318 slot in EU183U** | 3 |
| **IM317 slots in EU183U** | 3 or 147 |
| **IM312-3 slot in EU183U** | 163 |
| **DI / DQ / AI / AQ slot range in EU183U** | 3 to 155 in the numbered slot positions; interface occupancy also applies |
| **Monitoring module 313 slots** | 3 or 163 |

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| **Centralized / IM300-3 or IM301-3 with IM312-3** | Maximum total line length 2 m; last IM312-3 uses 6ES5760-0AB11. |
| **Distributed / IM301-3 or IM301-5 with IM310** | 6ES5721 cable arrangement, 1-200 m; last IM310 uses 6ES5760-1AA11. |
| **Distributed / IM304 with IM314** | 6ES5721 cable arrangement, 1-600 m; last IM314 uses 6ES5760-1AA11. |

## INTERFACE / COMMUNICATION PATH

The central controller and EU183U communicate through the installed interface-module pair. Centralized arrangements use a total line length of no more than 2 m; distributed arrangements depend on the chosen interfaces and cable, so the rack itself does not define a universal remote-distance rating.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Ambient conditions and cooling evidence

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| **Installation arrangements** | Cabinet, rack or wall mounting according to the system installation requirements |
| **Degree of protection** | IP20 when unused slots have dummy front plates |
| **Protection class** | I |
| **Operating supply-air temperature** | 0 to +55 C at the lower air inlet |
| **Transportation and storage temperature** | -40 to +70 C |
| **Maximum relative humidity** | 95% at 25 C, without condensation |
| **Operating altitude range** | -1000 to +1500 m above sea level |
| **Maximum temperature change in operation** | 10 K/h |
| **Maximum temperature change in transport/storage** | 20 K/h |
| **Cold-delivery acclimatization** | At least 3 hours after delivery below 0 C; avoid condensation |
| **Fan-monitoring indication delay** | Approximately 6 seconds after monitoring is enabled or reset |

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| **One fan failed** | Assigned Fan LED lights; defective fan switches off and remaining fans run faster. |
| **Two fans failed** | Fan and Alarm indications; shutdown depends on the F-R jumper. |
| **Insufficient airflow** | All three Fan LEDs flash with Alarm; check the fitted filter and air route. |
| **Reset after repair** | The monitor becomes active approximately 6 seconds after reset. |

Do not suppress fan-driven shutdown for continuous operation. With F-R open, the manual requires switching off the supply within 60 seconds at the latest to prevent overheating.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Model-specific engineering decisions

### Can all 21 positions be filled with digital or analog I/O modules?

No. DI, DQ, AI and AQ are shown at the numbered positions from 3 through 155; slot 163 is used for specified interface or monitoring modules. A receiving interface can also occupy slot 3, so the installed topology must be considered before allocating I/O.

### Does EU183U accept the same communication processors as EU185U?

EU183U does not support CPs or intelligent I/O modules with page addressing. It accepts the listed digital/analog I/O and eligible IPs without page addressing; the EU185U capability column is not an alternative specification for this rack.

### Can the 40 A rating of another expansion-unit configuration be used for 6ES5183-3UA13?

No. This order code is associated with 6ES5955-3LC42, whose 5 V output is rated at 18 A. The 5 V / 40 A rating belongs to 6ES5955-3LF42 and different central-controller/EU185U entries; it does not change the EU183U configuration or its assigned supply rating.

### Why should the 24 V output not be described as equivalent to the 5 V rail?

The supply provides 5 V at 18 A, 15 V at 0.5 A and 24 V at 1 A. The 5 V and 15 V outputs are regulated, while the 24 V output is coarsely stabilized, so both current capacity and regulation differ.

### Which terminator belongs at the end of a centralized IM312-3 chain?

The last IM312-3 requires 6ES5760-0AB11. That centralized connection has a total maximum length of 2 m between the CC interface and the last EU interface; do not substitute the IM310/IM314 end terminator solely because it is also an S5 accessory.

### Does one distance figure apply to every distributed EU183U installation?

No. The interface table gives IM301/IM310 arrangements up to 200 m, IM304/IM314 up to 600 m, and other documented serial or fiber-optic arrangements with different limits. Keep the installed pair and its own manual with the cable-length decision.

### Is the rack always IP20 when one or more module positions are empty?

The IP20 specification is conditional on empty slots being covered by dummy front plates. Check those covers and the installed cabinet arrangement together; the designation alone does not establish the completed installation's protection condition.

### What distinguishes a stopped fan from inadequate overall airflow?

A stopped or slow fan lights its corresponding Fan LED. Inadequate airflow makes all three Fan LEDs flash with the Alarm indication, for example when a fitted filter mat is obstructed. Clear the cause before reset; the monitoring indication takes approximately six seconds to reappear after enable or reset.

## DO NOT MOVE EU185U CAPABILITIES INTO THIS UNIT

The rack comparison deliberately separates EU183U from EU185U. A similar housing, the same slot count or a shared power-supply option does not make their permitted processor and page-addressing functions identical.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Controlled restoration checklist

### 01 / EU183U RESTORATION

Disconnect the system voltage before removing or replacing the power-supply unit.

### 02 / EU183U RESTORATION

Check the 120/230 V selector against the actual line voltage before energization.

### 03 / EU183U RESTORATION

Map every module to its permitted EU183U slot; do not treat all 21 positions as interchangeable I/O slots.

### 04 / EU183U RESTORATION

Retain the CC/EU interface pair, cable route and the appropriate last-interface terminator.

### 05 / EU183U RESTORATION

Keep CPs and page-addressed IPs out of EU183U positions that do not support them.

### 06 / EU183U RESTORATION

Cover unused module slots with the required dummy front plates to retain the stated IP20 condition.

### 07 / EU183U RESTORATION

Keep the lower air inlet, fans and any fitted filter mat clear; investigate fan and airflow indications before resetting them.

### 08 / EU183U RESTORATION

After restoration, check supply LEDs, fan monitoring, configured I/O communication and the intended process response.

### SERVICE BOUNDARY

Power-supply removal requires disconnection from the system voltage. Any fan servicing during operation must follow the manufacturer procedure and the site maintenance controls; do not generalize that permission to rack or PSU removal.

# Siemens 6ES5183-3UA13

I/O Expansion Unit / Evidence, portfolio and contact

## SOURCE LEDGER

**S5-135U/155U System Manual**

C79000-G8576-C199-07, edition 07, 11/1999; original pp19-25,79-86,101-117. Exact EU183U order-number mapping and slot matrix are on original pp81-82.

**S5-135U/155U Supplement to the Manual**

C79000-Z8576-C199-01, 1997; original p1 identifies 6ES5183-3UA13 as expansion unit 183U, 230 V / 18 A.

The manufacturer link on the product page is a 34-page original-page excerpt, not the complete system manual. The supplement is cited as a separate source, not silently inserted into that excerpt.

## RELATED S5 FAMILY CATALOG

S5 family catalogue browsing only; no EU183U compatibility, CPU installation, replacement or matching-supply claim.

View Siemens 6ES5430-4UA12 page

View Siemens 6ES5470-4UB12 page

View Siemens 6ES5460-4UA12 page

## CONTACT APTER POWER

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEB www.apterpower.com

Siemens
6ES5183-3UA13