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

OWN SUPPLY & COOLING

The EU183U has its own power supply, fans and cable duct.

I/O ELIGIBILITY

DI, DQ, AI, AQ and eligible IPs without page addressing; not a CPU or CP rack.

Expansion-unit designation	EU183U
Control-system family	SIMATIC S5-135U / S5-155U
Module slots	21
Associated power supply	6ES5955-3LC42

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.

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

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

VOLTAGE SELECTION

Check the actual incoming line and selected 120/230 V position before restoring power.

LOAD DISTRIBUTION

Keep 5 V / 18 A, 15 V / 0.5 A and 24 V / 1 A as separate supply domains.

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I/O Expansion Unit / Topology and interface positions

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

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.

The table presents selected parallel/centralized arrangements, not every available interface. Serial and fiber-optic routes have their own manuals and limits; none changes the EU183U module-eligibility boundary.

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I/O Expansion Unit / Ambient conditions and cooling evidence

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

FAN VS AIRFLOW

An assigned Fan LED identifies a slow/stopped fan. Three flashing Fan LEDs with Alarm indicate inadequate airflow.

COVER AND AIR ROUTE

IP20 needs dummy front plates in empty slots. Keep the lower air inlet, fans and any filter arrangement clear.

F-R open is not permission for continuous operation after multiple fan failure: the manufacturer requires supply shutdown within 60 seconds at the latest.

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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.

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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.

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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.

SOURCE SCOPE

The exact order-number mapping, EU183U slot matrix and associated supply provide the product facts. General power-supply pages also describe other rack types; backup provisions limited to the CC/EU185U are not presented as EU183U capabilities.

Manufacturer Manual Excerpt: 34 unchanged original pages, not the complete system manual. The separate supplement is cited, not merged without notice.

RELATED S5 FAMILY CATALOG

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

View Siemens 6ES5928-3UA11 page

View Siemens 6ES5928-3UB12 page

View Siemens 6ES5931-8MD11 page

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