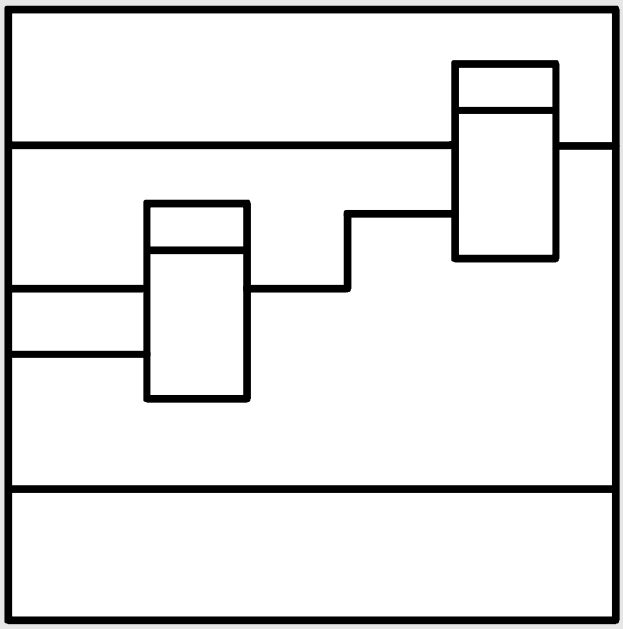
SIMADYN D
Digital Control System

User Manual

Interface board SU11



Edition 05.95

DK-Nr. 287140

User Manual, Interface board SU11

Edition		Edition status
1	Interface board SU11	11.93
2	Interface board SU11	09.94
3	Interface board SU11	05.95

We have checked the contents of this Manual to ensure that they coincide with the described hardware and software. However, deviations cannot be completely ruled-out, so we cannot guarantee complete conformance. However, the information in this document is regularly checked and the necessary corrections included in subsequent editions. We are thankful for any recommendations or suggestions.

Contents

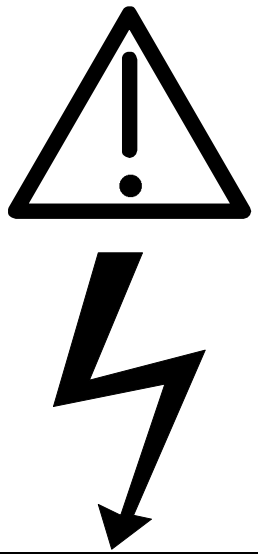
N O T E !

The information in this Manual does not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met in connection with installation, operation or maintenance.

Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, please contact your local Siemens office.

Further, the contents of this Manual shall not become a part of or modify any prior or existing agreement, committment or relationship. The sales contract contains the entire obligation of Siemens. The warranty contained in the contract between the parties is the sole warranty of Siemens. Any statements contained herein do not create new warranties nor modify the existing warranty.

Warning information



W A R N I N G !

Electrical equipment has components which are at dangerous voltage levels.

If these instructions are not strictly adhered to, severe bodily injury and material damage can result.

Only appropriately qualified personnel may work on this equipment or in its vicinity.

This personnel must be completely knowledgeable about all the warnings and service measures according to this User Manual.

The successful and safe operation of this equipment is dependent on proper handling, installation, operation and maintenance.

Definitions

* **QUALIFIED PERSONNEL**

For the purpose of this User Manual and product labels, a „Qualified person“ is someone who is familiar with the installation, mounting, start-up and operation of the equipment and the hazards involved. He or she must have the following qualifications:

1. Trained and authorized to energize, de-energize, clear, ground and tag circuits and equipment in accordance with established safety procedures.
2. Trained in the proper care and use of protective equipment in accordance with established safety procedures.
3. Trained in rendering first aid.

* **DANGER**

For the purpose of this User Manual and product labels, „Danger“ indicates death, severe personal injury and/or substantial property damage will result if proper precautions are not taken.

* **WARNING**

For the purpose of this User Manual and product labels, „Warning“ indicates death, severe personal injury or property damage can result if proper precautions are not taken.

* **CAUTION**

For the purpose of this User Manual and product labels, „Caution“ indicates that minor personal injury or material damage can result if proper precautions are not taken.

* **NOTE**

For the purpose of this User Manual, „Note“ indicates information about the product or the respective part of the User Manual which is essential to highlight.

C A U T I O N !

This board contains components which can be destroyed by electrostatic discharge. Prior to touching any electronics board, your body must be electrically discharged. This can be simply done by touching a conductive, grounded object immediately beforehand (e.g. bare metal cabinet components, socket protective conductor contact).

W A R N I N G !

Hazardous voltages are present in this electrical equipment during operation.

Non-observance of the safety instructions can result in severe personal injury or property damage.

It is especially important that the warning information in all of the relevant Operating Instructions are strictly observed.

1. Ordering information

SU11: 6DD 1681- 0EA1

2. Function description

Using the SU11 interface board, 20-pin terminal block, conditioned binary/analog SIMADYN D process signals are connected-through to the SIMADYN D specific system boards by changing-over from terminal connection to ribbon cable connection. The process signals are connected-through without any additional signal processing.

3. Board design

-20-pin transfer board which can be snapped onto a mounting rail
-20 terminals (X2) for process signals
-4 terminal connections (X2), unassigned
-2*10-pin ribbon cable connector X1.

4. Application information

Process signals in a voltage range of +/- 60V and a current range of 0.5A are permissible.
The transfer board can be used with the SIMADYN D-specific system boards according to the following overview:

Boards	Cable type
EA12 X5 EM11 X6 EM13 X6	SC11/SC12

5. Technical data

INSULATION GROUP	acc. to VDE 0160/Draft, came into force 12/90 60V DC rated insulation voltage
AMBIENT TEMPERATURE	0 to 55 ^{o}C
STORAGE TEMEPRATURE	-40 to 70 ^{o}C
HUMIDITY RATING acc. to DIN 40040	F
DEGREE OF PROTECTION acc. to DIN 40050	IP00
MECHANICAL STRESSING	acc. to SN 29010 Class 12
MOUNTING SYSTEM	Can be snapped onto mounting rails
DIMENSIONS	118mm*135mm*42mm
WEIGHT	approx. 280g
PROCESS SIGNAL VOLTAGE	$\pm$ 60V 0.5A

6. Connector assignment

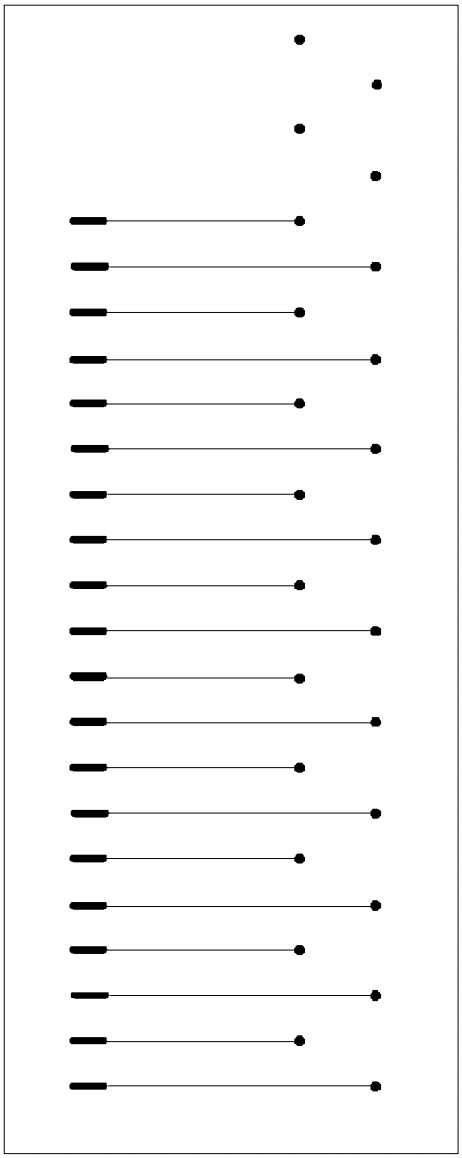
The terminals numbers of X2 are identical with the ribbon cable connector numbering X1 according to the way the pins are numbered.

6.1. Assignment of flat connector X1, terminal block X2

Pin at X1	Channel number	Terminal at X2
1	Channel 1	1
2	Channel 2	2
3	Channel 3	3
4	Channel 4	4
5	Channel 5	5
6	Channel 6	6
7	Channel 7	7
8	Channel 8	8
9	Channel 9	9
10	Channel 10	10
11	Channel 11	11
12	Channel 12	12
13	Channel 13	13
14	Channel 14	14
15	Channel 15	15
16	Channel 16	16
17	Channel 17	17
18	Channel 18	18
19	Channel 19	19
20	Channel 20	20

7. Attachments

7.1. Overview diagram



SIMADYN D , SU11 , 6DD1681-0EB1 , 20-pin termin

Overview diagram

7.2. Dimension drawing

Dimension drawing 3SE.465 681.9040.10 MB

8. ECB instructions

Components which can be destroyed by electrostatic discharge (ECB)

Generally, electronic boards should only be touched when absolutely necessary.

The human body must be electrically discharged before touching an electronic board. This can be simply done by touching a conductive, grounded object directly beforehand (e.g. bare metal cubicle components, socket outlet protective conductor contact.

Boards must not come into contact with highly-insulating materials - e.g. plastic foils, insulated desktops, articles of clothing manufactured from man-made fibers.

Boards must only be placed on conductive surfaces.

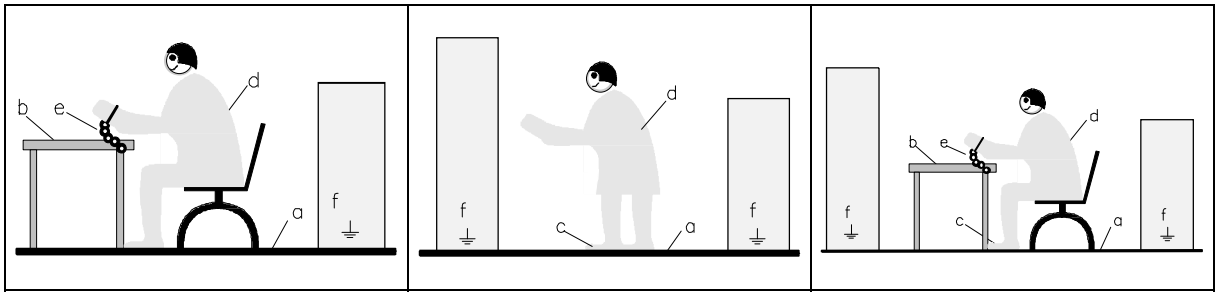
When soldering, the soldering iron tip must be grounded.

Boards and components should only be stored and transported in conductive packaging (e.g. metalized plastic boxes, metal containers).

If the packing material is not conductive, the boards must be wrapped with a conductive packing material, e.g. conductive foam rubber or household aluminum foil.

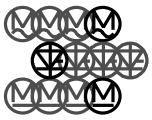
The necessary ECB protective measures are clearly shown in the following diagram.

a = Conductive floor surface
b = ECB table
c = ECB shoes
d = ECB overall
e = ECB chain
f = Cubicle ground connection



Seated	Standing	Standing/sitting

Drives and Standard Products
Motors and Drives Systems Group
Postfach 3269, D-91050 Erlangen



System-Based
Technology