

PS Power Supply, 6ES7138-7EA00-0AA0

Product Information Leaflet

This product information leaflet contains important information about the PS power supply submodule.

Characteristics

- The PS power supply supplies all of the output voltages required for the ET 200iSP. The output voltages are electrically isolated from the DC 24V supply voltage and from each other (those that are connected to the TM-PS-A/TM-PS-B terminal submodule) and are intrinsically safe.
- The PS power supply is plugged into the TM-PS-A/TM-PS-B terminal submodule.

Further information

Further information about the power supply submodule is provided in the *ET 200iSP Distributed I/O* (6ES7152-1AA00-8BA0) manual.

This manual can be requested from the Siemens representative or office in your area or free-of-charge on the Internet at:

<http://www.siemens.com/automation/service&support>

Maintenance

The power supply is maintenance-free. If a repair is necessary, the power supply must be returned to the following address:

Siemens AG, Elektronikwerk,
Östliche Rheinbrückenstr. 50, D-76187 Karlsruhe
Repairs may only be performed by the manufacturer.

Certification

CENELEC



II 2 G and I M2

Ex de [ib] IIC T4; Ex de [ib] I

KEMA 04 ATEX 2263

IECEX KEM 05.0004

CE 0344**Note**

The PS power supply with device category 2G may be used in zone 1 hazardous areas.

Installation**Danger**

It is possible that sparks or impermissibly high surface temperatures may occur during the installation. Never perform an installation under explosive conditions!

- In making the installation, observe the EN 60 079-14 regulations.
- The PS power supply must be mounted in Zone 1 in an enclosure with the EEx e degree of protection.
- In Zone 2, the PS power supply must be mounted in an enclosure providing a degree of protection of at least IP 54 (must have manufacturer's statement for Zone 2).

Wiring the TM-PS-A/TM-PS-B terminal submodule

- When laying the cable and connecting the submodule, observe the regulations in EN 60 079-14 plus any applicable national regulations.
- In wiring the submodule, you must strictly separate the intrinsically safe lines from the non-intrinsically safe. Intrinsically safe and non-intrinsically safe lines may not be laid together in a single cable duct.

- Connect the DC 24V to the TM-PS-A/TM-PS-B power supply submodule (terminal L+ / M). You must connect the potential equalization wire (in accord with EN 60 079-14) to the terminal PA.
The comprehensive terminal assignment can be found in the *ET 200iSP Distributed I/O* manual.

**Danger**

Zone 1: In Zone 1, the wires for the supply voltage may only be connected to or disconnected from the TM-PS-A/TM-PS-B terminal submodule when the supply voltage has been switched off (wires are voltage-free).

Zone 2: In Zone 2, when there is risk of explosion, the supply voltage must be switched off (wires are voltage-free) before the wires for the supply voltage are connected to or disconnected from the TM-PS-A/TM-PS-B terminal submodule. In Zone 2, if there is no risk of explosion, the supply voltage wires may be connected to or disconnected from the TM-PS-A TM-PS-B power supply submodule when they are live.

Assembly

- In Zone 1 and Zone 2, the power supply submodules may be inserted and removed during operation. The enclosure (EEx e / IP 54) in which the ET 200iSP is found may only be opened briefly for this purpose (see the ET200iSP manual).

Commissioning

- The relevant national regulations must be observed when commissioning the system.

- When checking the functionality of the equipment, observe the EN 60 079-17 guidelines. This standard includes the regulations found in the international standard IEC 60 079-17.

Technical Data

Voltages, currents, potentials	
Supply voltage	DC 24V
Reverse polarity protection	Yes
Isolation	
• between supply voltage and power bus	Yes
• between supply voltage and backplane bus as well as the IM supply	Yes
Voltages, currents, potentials	
Insulation tested with	
• between supply voltage and all output voltages	DC 600 V
Current consumption	
• from DC 24 V supply voltage	max. 4 A
Power loss of submodule	20 W
Approved input power	max. 78.6 W
Safety data	
Maximum value	
• U_m	60 V dc
Further information: see corresponding EC special test certificate	