SIMATIC NET POWER RAIL BOOSTER V2.0

# Product Data Sheet

## 6ES7972-4AA01-0XA0

PROFIBUS power rail booster

| NOMINAL DC SUPPLY | MAXIMUM SUPPLY CURRENT | MAXIMUM INRUSH CURRENT | INCOMING PROTECTION |
|---|---|---|---|
| **24 V DC, SELV** | **1.2 A** | **20 A** | **6 A Category C circuit breaker** |

Siemens 6ES7972-4AA01-0XA0 is the V2.0 Power Rail Booster for transmitting PROFIBUS DP signals through contact-rail arrangements. It converts between an RS485 PROFIBUS segment and the power-rail signal path, with automatic recognition of supported rates from 9.6 to 500 kbit/s.

## 01 TECHNICAL DATA

| | |
|---|---|
| Nominal DC supply | 24 V DC, SELV |
| Maximum supply current | 1.2 A |
| Maximum inrush current | 20 A |
| Incoming protection | 6 A Category C circuit breaker |
| Maximum power dissipation | 20 W |
| Supported transfer rates | 9.6, 19.2, 45.45, 93.75, 187.5 and 500 kbit/s |
| Baud-rate selection | Automatic |
| Signal propagation delay | 6 bit times maximum |
| Retimer accuracy | +/-0.1% |
| PROFIBUS signal level | RS485 |

## 02 ADDITIONAL PRODUCT DATA

| | |
|---|---|
| Power-rail signal level | Differential up to 40 V |
| Alarm contact voltage | 30 V DC or 250 V AC maximum |
| Alarm contact current | 2 A maximum |
| Ingress protection | IP20 |
| Operating temperature | 0...+60 degrees C |

## 03 PRODUCT FUNCTION

The unit uses a nominal 24 V DC SELV supply, draws up to 1.2 A and dissipates up to 20 W. Isolated interfaces and a group-fault signaling contact support installation diagnostics; the V2.0 execution must not be mixed with the older 6ES7972-4AA00-0XA0 generation.

## 04 SYSTEM COMPATIBILITY

Mount 6ES7972-4AA01-0XA0 horizontally on a vertical wall using the specified rail fixing and isolate supply power before fitting or removing it. Connect RS485, rail conductors, SELV supply and fault contact according to the documented terminal maps.

## 05 REFERENCE

Siemens Power Rail Booster User Guide V2.0 G34924-R2100-U2-A1, September 2003

**AMIKON PRODUCT SUPPORT**

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