

AMIKON TECHNICAL DOCUMENTATION

Product Data Sheet

Siemens 6ES7138-4FB03-0AB0

PROFIsafe Digital Output Module



TYPE	SUPPLY	CHANNEL	SWITCHING
4 F-DO	24 V DC	2 A nominal	P/M

Siemens 6ES7138-4FB03-0AB0 is the ET 200S four-channel fail-safe digital output module for 24 V DC loads. Each output uses P/M switching and has a 2 A nominal rating, while the permissible module current depends on mounting orientation and ambient temperature.

01

VERIFIED TECHNICAL INFORMATION

Output arrangement	4 fail-safe P/M-switching digital outputs
Rated load supply	24 V DC; permissible 20.4-28.8 V DC; no reverse-polarity protection
Channel current	2 A nominal; permissible on-state current 20 mA to 2.4 A
Total-current derating	Horizontal: 6 A up to 40 C, 5 A up to 55 C, 4 A up to 60 C; vertical: 4 A up to 40 C
Load resistance	12 ohm to 1 kohm
Lamp-load limit	Maximum 10 W
Maximum switching frequency	Resistive load 30 Hz; inductive load 0.1 Hz; lamp load 10 Hz

Exact-model Siemens sources are identified in the accompanying reference. This independently prepared summary does not replace safety engineering or commissioning procedures.

02 TECHNICAL INFORMATION CONTINUED

On-state voltage drop	Combined output minimum L+ minus 2.0 V; P-switch minimum L+ minus 1.5 V; M-switch drop maximum 0.5 V
Off-state residual current	Direct-load value maximum 0.5 mA; with interface-relay arrangement, P-switch maximum 0.5 mA and M-switch maximum 4 mA
Output readback time	Selectable 1, 5, 10, 50, 100, 200 or 400 ms; default 1 ms; capacitive-load and interference restrictions apply
I/O address allocation	5 input bytes and 5 output bytes; only documented useful-data addresses may be accessed
Output-cable limit	Maximum 200 m shielded or unshielded, with corresponding P and M lines routed together as specified
Module supply consumption	Typical 100 mA from L+ without load; maximum 28 mA from the backplane; typical dissipation 3.5 W
Unsupported output connections	Do not parallel separate output channels for higher current or redundant control; direct control of a digital input is not supported
Diagnostic functions	Short-circuit, overload, overtemperature and selectable wire-break diagnostics; SF and status indicators are not safety-function signals

03 SOURCE AND CONFIGURATION CHECKS

The module operates through PROFIsafe with configurable channel diagnostics and readback timing. Load selection must account for the two-sided switching circuit, test pulses, residual current and the published thermal limits; four channels rated at 2 A do not imply an unrestricted 8 A module output.

Selected original Siemens pages combine the complete English exact-model datasheet (2017), Chinese operating-manual extracts (08/2008, A5E00888115-07) and the English safety-value supplement (10/2015, A5E03310062-AE). Inductive-voltage limitation differs between historical manufacturer documents and remains unresolved; it is not an approved design value. This reference package is not an installation guide. Installation Instructions are omitted pending resolution.

Confirm supplied hardware, firmware and approved project documentation. Product net mass is not shipment gross weight. Installation and return to service require qualified personnel.

[Siemens official exact-model product reference](#)