

AMIKON TECHNICAL DOCUMENTATION

Product Data Sheet

Siemens 6ES7138-4FA02-0AB0

PROFIsafe Digital Input Module



TYPE	SUPPLY	INTERFACE	INPUTS
4/8 F-DI	24 V DC	PROFIsafe	8 physical channels

Siemens 6ES7138-4FA02-0AB0 is a 24 V DC ET 200S electronic input module for PROFIsafe operation. Its eight physical inputs can be evaluated individually or arranged as four paired inputs, with two protected sensor supplies available for the connected circuits.

01

VERIFIED TECHNICAL INFORMATION

Input arrangement	8 single-channel inputs or 4 two-channel input evaluations
Supply requirements	24 V DC nominal; 20.4-28.8 V DC permissible; no reverse-polarity protection
Process-image allocation	6 input bytes and 4 output bytes
Sensor-supply capacity	2 outputs, 0-300 mA each; maximum total 600 mA
Sensor-supply voltage	At least L+ minus 1.5 V under load
Sensor-supply protection	Electronic short-circuit protection; response threshold 0.7-1.8 A
Input signal thresholds	Signal 0: -30 to +5 V; signal 1: +15 to +30 V

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

Input current	3.7 mA typical at signal 1
Input filtering	Common selectable delay of 0.5, 3 or 15 ms; not the complete safety-function response time
Input characteristic	IEC 61131 Type 1
Sensor compatibility	Switches and 3- or 4-wire proximity sensors; 2-wire sensor connection not supported
Input isolation	Isolated from backplane bus; not isolated between channels or from load supply L+
Power dissipation	4 W typical
Module consumption	Backplane 28 mA typical; L+ 120 mA typical without sensor load
Status and diagnostics	Green input LEDs, red SF group-fault LED and red sensor-supply fault indication; diagnostic reporting supported

03 SOURCE AND CONFIGURATION CHECKS

The module combines configurable input filtering with channel indications, a group-fault display and diagnostic reporting. Its role depends on the maintained safety project, sensor evaluation and selected power module; a matching terminal footprint alone does not establish application suitability or interchangeable safety performance.

Selected Siemens product-reference pages for FA02; not a complete commissioning manual. An unresolved probability-value discrepancy in the 2005 manual is excluded from this package and from authored claims. Obtain applicable manufacturer clarification before safety calculations.

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](#)