

AMIKON TECHNICAL DOCUMENTATION

Product Data Sheet

Siemens 6ES7136-6BA00-0CA0

Fail-safe eight-channel digital input module



INPUTS	EVALUATION	BASEUNIT	SUPPLY
8 x 24 V DC	1oo1 / 1oo2	A0 / CC01	24 V DC

Siemens 6ES7136-6BA00-0CA0 is the SIMATIC ET 200SP F-DI 8x24VDC HF fail-safe digital input module. It provides eight 24 V DC inputs with configurable 1oo1 or paired 1oo2 sensor evaluation. Achievable safety performance depends on the complete application, qualified sensors and wiring.

01

VERIFIED TECHNICAL INFORMATION

Digital inputs	8 inputs; P-reading, IEC 61131 type 1
Sensor evaluation	1oo1: eight process signals; 1oo2: four paired process signals
Rated supply voltage	24 V DC; permissible 20.4-28.8 V DC
Supply current without load	75 mA rated
Sensor supplies	8 outputs; maximum 0.3 A each at 60 °C, 0.8 A total
Sensor-supply protection	Electronic short-circuit protection
Typical power loss	4 W

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

02 TECHNICAL INFORMATION CONTINUED

Address allocation	6 input bytes and 4 output bytes, including reserved PROFIsafe data
Input signal levels	Signal 0: -30 to +5 V; signal 1: +15 to +30 V
Typical input current at signal 1	3.7 mA
Configurable input delay	0.4-20 ms; not the complete safety response time
Maximum cable length	1000 m shielded; 500 m unshielded
Compatible BaseUnit	Type A0; color code CC01
Electrical isolation	From backplane bus; not between input channels
Maximum achievable safety level	SIL 3 / Category 4 / PL e, only with the documented application conditions

03 SOURCE AND CONFIGURATION CHECKS

The module uses an A0 BaseUnit, a 24 V DC supply and eight monitored sensor supplies. Integration requires PROFIsafe addressing, suitable test parameters and evaluation of channel status. Apply the later Siemens product-information corrections alongside the original manual, especially for timing and recommissioning.

The 2013 terminal table and block diagram disagree. Installation drawings and an installation PDF are therefore not supplied. Later Siemens corrections supersede obsolete pulse-stretching, diagnostic and response-time statements; this is a product reference, not a complete safety-system engineering manual.

Confirm the 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](#)