



ENERGY AUTOMATION PRODUCTS

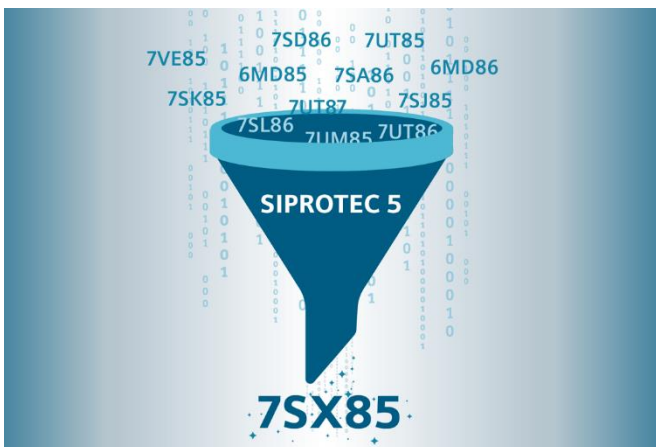
SIPROTEC 7SX85

Universal Protection Relay

[siemens.com/7SX85](https://www.siemens.com/7SX85)

Benefit from the advantages

One device type covers all protection, control and automation tasks in the medium voltage, distribution and transmission grids with 3-pole tripping.

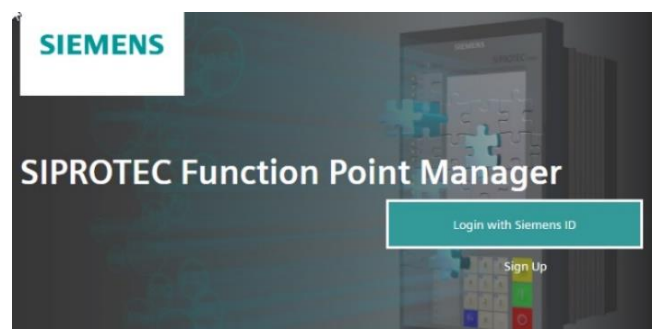


The SIPROTEC 7SX85 elegantly supports the versatile operating processes in the power supply chain, whether in utilities, industry, or infrastructure.

With the new SIPROTEC 7SX85 universal protection device, you leverage the full power of the complete SIPROTEC 5 system platform.

When selecting a device, use one of the 3 predefined hardware variants and assemble your desired device from the hardware catalog and add the required functionality:

- Up to 443 binary inputs, 225 binary outputs and 64 analog inputs
- Load the required functions from the extensive SIPROTEC 5 function library into the device configuration simply by dragging and dropping them with DIGSI 5
- Possible main protection functions: overcurrent protection, distance protection, line differential protection, transformer differential protection, motor and generator protection, and capacitor protection
- The range of functions that can be used in the device is determined by the specified function class
- If required, simply extend the function point class in a few minutes via the new SIPROTEC Function Point Manager application.



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Your benefit with only 1 universal type of device

- Optimization of investment and operating costs
 - Time and cost savings during project planning
 - Significant reduction of logistics and spare part costs
- Full flexibility until shortly before commissioning, easy function adjustment via the function point manager
- For grid operators: easy adaptation when network conditions change after commissioning, e. g. use as line differential protection instead of distance protection
- For industrial applications: simple addition of necessary motor or frequency protection functions to the feeder protection
- For energy producers: Easy adaptation of device functions when connecting regenerative feeders
- Migration of existing device specific application templates and parameterizations (7SA86, etc.)
- Optimally suited for retrofit applications

Areas of application:

- Protection and control of feeders, lines, transformers, motors, generators, and capacitor banks
- Detection and selective 3-pole tripping of short-circuits
- Selective detection of all ground faults

Protection applications and functions:

- Directional and non-directional overcurrent protection of feeders, with additional functions
- Distance protection for overhead lines and cables, with a wide variety of pickup methods
- Differential protection of overhead lines and cables of all lengths with up to 6-line ends fed from one or more sides
- Transformer differential protection for two- and multi-winding transformers with versatile, additional protection functions
- Motor protection against short circuits, all kinds of thermal overload, unbalances, and instabilities, and blocked or idle driving conditions
- Protection of generators, power units and synchronous motors
- Detection of ground faults of any type in isolated or arc-suppression-coil grounded power systems

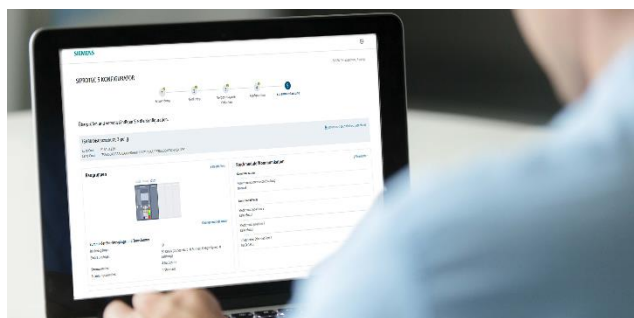
- Protection functions for capacitor banks, such as current-unbalance, peak overvoltage, overcurrent, overload, or differential protection
- Arc protection
- Overvoltage and undervoltage protection, with all methods
- Frequency protection and frequency-change protection
- Power protection, with all methods

Automation, control, and monitoring

- Automatic frequency unloading for load shedding in case of underfrequency, considering changed feed-in conditions due to decentralized power generation
- Synchronization of 2 power grids for up to 4 synchronization points
- Automatics, controls, synchrocheck and protection against switching faults
- Voltage controller function for power transformers (two-winding and three-winding transformers)
- Phasor Measurement Unit (PMU)

Our tip:

Register in the Industry Mall, create an account and benefit fully from our SIPROTEC 5 configurator.



Advantages / benefits for users registered and logged in to the Industry Mall:

- Personal product list, with automatic storage of the last 50 configurations
- Insertion of comments (e. g. naming of a branch name for the configured device)
- Automatic saving of the function point calculation
- Visibility of regional list prices (non-logged-in users get the message: Price on request)

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