

Edition

11/2023

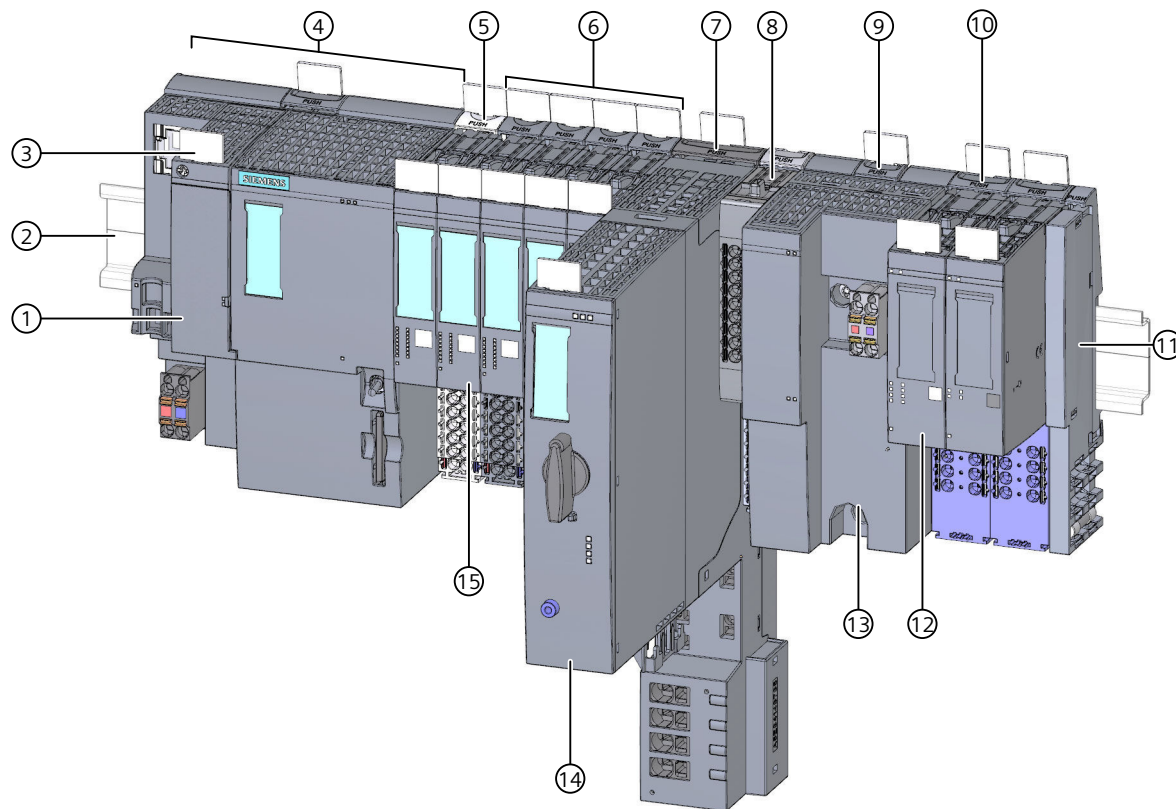
SYSTEM MANUAL

# SIMATIC

## ET 200SP

ET 200SP Distributed I/O System

## Configuration example



- ① BusAdapter
- ② Mounting rail
- ③ Reference identification label
- ④ CPU/interface module
- ⑤ Light-colored BaseUnit BU..D with infeed of supply voltage
- ⑥ Dark-colored BaseUnits BU..B for conducting the potential group further
- ⑦ BaseUnit for motor starters
- ⑧ Potential distributor module
- ⑨ Ex BaseUnit for Ex power module
- ⑩ Ex BaseUnit for Ex I/O module
- ⑪ Server module (included in the scope of supply of the CPU/interface module)
- ⑫ Ex I/O module
- ⑬ Ex power module
- ⑭ ET 200SP motor starter
- ⑮ I/O module

Figure 5-2 Configuration example of the ET 200SP

## 5.3 How are SIMATIC Safety F-systems structured with ET 200SP?

### SIMATIC Safety F-system with ET 200SP

The figure below shows an example of a configuration for a SIMATIC Safety F-system with ET 200SP distributed I/O system and PROFINET IO. You can configure the PROFINET IO lines with copper cable, fiber-optic cable or WLAN.

Fail-safe I/O modules and non-fail-safe I/O modules can be combined in an ET 200SP configuration.

The fail-safe IO controller (F-CPU) exchanges safety-related and non-safety-related data with fail-safe and non-fail-safe ET 200SP modules.

ET 200SP Fe.g. CPU 1512SP F-1 PN and CM DP

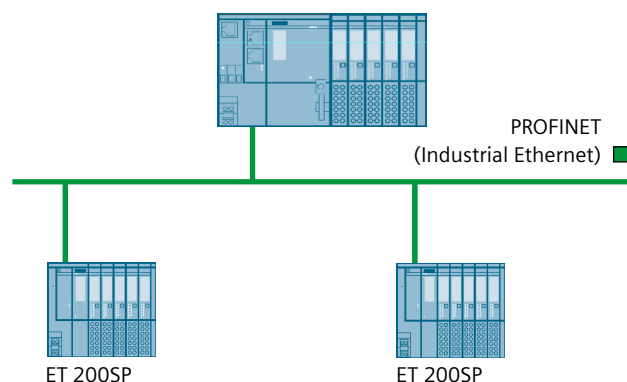


Figure 5-3 Fail-safe SIMATIC Safety automation system (sample configuration)

### Fail-safe ET 200SP I/O modules

The following fail-safe I/O modules are available for the ET 200SP distributed I/O system:

- Fail-safe power modules are used to supply the potential group load voltage and for the safety-related tripping of the load voltage for non-fail-safe output modules.
- Fail-safe digital input modules detect the signal states of safety-related sensors and send the relevant safety frames to the F-CPU.
- Fail-safe digital output modules are suitable for safety-related shutdown procedures with short circuit and cross-circuit protection up to the actuator.

### ET 200SP fail-safe motor starters

Fail-safe motor starters are suitable for safety-related tripping of motor loads.