

## e2c 20 / IP 20 Distributed I/O System for Switch Cabinets



Switch cabinets and distribution boxes continue to rely on wiring systems that can be controlled using standard fieldbus components, while enabling easy connection to sensors and actuators.

e2c 20 is a compact, IP20 rated, modular fieldbus station that enables a wide range of flexible applications. Interfaces to Profibus, DeviceNet and Ethernet/IP fieldbus systems are made available over the bus coupler.

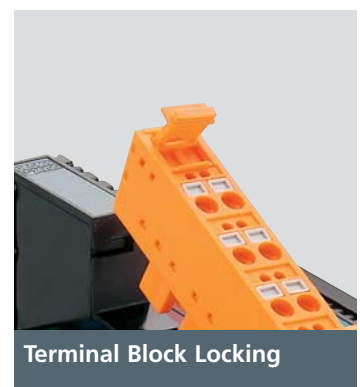
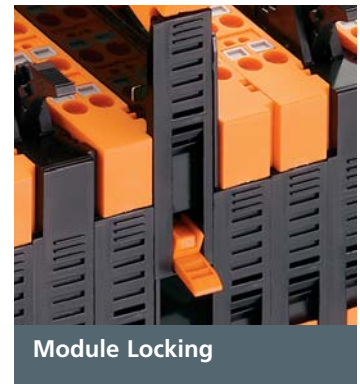
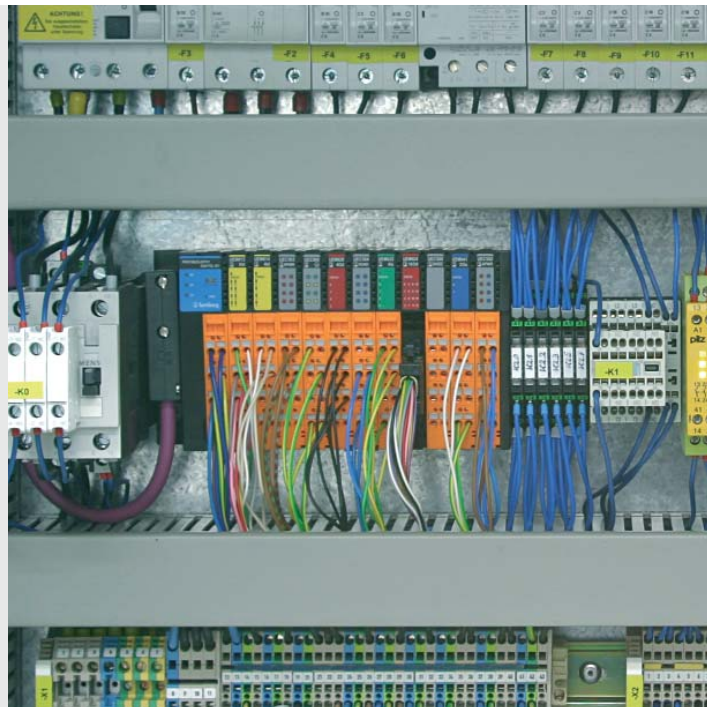
### ■ A proven, cost-effective solution for simple applications

IP 20 wiring systems are ideal for applications involving small assembly and handling machines where no long distances exist between the switch cabinet and a small number of I/O signals.

e2c 20 provides special features such as practical, removable terminal blocks, making it possible to wire and maintain systems and machines of this type cost-effectively.

## Installation

The station is mounted on a standard DIN rail. Wires are connected over spring cage terminals, which ensure fast and reliable wiring. Individual modules in the station are easy to replace. This is done by releasing the latch on the lower side of the module and taking the module out of the module group. No tools are required to replace the module. Since the terminal block (orange) can be completely removed from the module, it is not necessary to disconnect any of the wires before replacing a module. Simply pull out the latch located at the upper end of the terminal block. Afterwards, the block can be easily inserted into another module.



■ **the bus coupler**



The bus coupler is a component that depends on the fieldbus and exchange process, in addition to the diagnostic data from the station. At the same time, the bus coupler uses the internal bus to control communication with the attached I/O modules. The station is supplied with power entirely over the bus coupler. The I/O modules are attached next to the bus coupler.

■ **Interface to sensors and actuators: I/O modules**



Modules are available with both digital and analog inputs and outputs. Digital I/O modules are available with 4, 8 or 16 channels. The different number of channels allows users to adapt the station as needed. Analog modules can have 4 (input modules) or 2 channels (output modules), which cover the most commonly used measuring ranges.

■ **Special modules**



To extend the power capacity for the system, sensors and actuators beyond 10A or to create separate power groups, two modules are available. While one module is rated up to 230V/10A for the use with relay outputs, all other I/O modules can be supplied by a 24VDC/10A supply module. Additional system modules provide connections to 24VDC, ground (0V) and earth (shield).

■ **End cap**



The station is terminated with an end cap. The end cap protects contacts for the internal bus and power supply from inadvertent contact or damage.



**The benefits**

- Fieldbus independent I/O modules
- Power feeding at the bus coupler
- Mounting the modules on standard DIN rail
- Exchange of an I/O module inside the assembly without additional tools
- Connection via spring-type terminals
- Removable terminal blocks
- Wiring does not have to be disconnected if the module is changed

## Product Characteristics



Especially suitable for robotic applications (resistance to torsion).



Very good resistance to oils, coolants and lubricants as well as emulsions.



Suitable for use in C-Tracks.



Very good resistance to flying weld slag (e.g.) unfinished constructions).



Very good resistance to acids, lye and chemical cleaning agents.



Very good electromagnetic resistance (EMC) and shielded systems.



Very good vibration and shock resistance.



UL approved.



CSA approved.