

BASIC SETUP—EXPANSION PORT EXAMPLES FOR THE VAS-2A8L-KE4-8SE SAFETY CONTROLLER

Basic setup for the case that uses the expansion port

In order to try example configurations using the expansion port on the Pepperl+Fuchs stand-alone safety controller, the following electrical connections need to be made. In addition to those connections, the configuration software SIMON+ must be installed on a Windows PC. The communication interface between SIMON+ and the safety controller is established through a USB connection.

- Supply – on grey terminal **AUX - ext. in**
- +24 VDC on grey terminal **AUX + ext. in**
- Expansion (-) – Blue lead of the yellow expansion cable to yellow expansion port terminal **ASI-**
- Expansion (+) – Brown lead of the yellow expansion cable to yellow expansion port terminal **ASI+**
- Output +24 VDC from safe output on terminal **1.14 ext. out**
- 0 VDC from safe output on terminal **0 V1 ext. out**
- All expansion modules are connected to the blue/brown expansion cable leads

Note: The following examples use devices connected to the expansion port. It is also possible to set up configurations that use both safety devices connected to onboard safe inputs and safe devices connected to the expansion board. Similarly, conventional I/O devices can be connected to the onboard safe inputs on the safety controller only. Examples for setups using the onboard connections can be found at www.sensing.net/asi-solutions

When devices (safe or conventional) are connected to the expansion port or when two safety controllers are exchanging data over the expansion port, the expansion port network needs to be powered separately. Because the Pepperl+Fuchs safety controllers use AS-Interface as the communication backbone between devices on the expansion port, an AS-Interface power supply must be used to power this port. Exactly one power supply must be used per segment. Contact Pepperl+Fuchs if you intend to set up segments that require more than 100 m of cable on the expansion port.

