Overview

The PSC1-C-10 is a modular and freely programmable compact safety controller for safe signal processing of safety sensors and switches. Options include integrated safe speeds and/or universal communications interface for safe and auxiliary data exchange over various network protocols including:

- EthernetIP
- EtherCAT
- Profinet
- ProfiBus
- Profisafe/Net
- Safety Over EtherCAT

The main PSC1 module can expand with up to 2 expansion modules to offer 64 I/O. Safe Master to Master communication (SMMC) is possible between 4 master modules while maintaining PLe to ISO 13849 and SIL3 to IEC 61508.

Optional main modules also include safe drive monitoring (SDM) for 1 or 2 axis. SMMC capability would allow safe monitoring for a maximum of 8 axis in a system. Monitoring functions include options such as safe torque off (STO), safe stop 1 (SS1) for Stop Category 1, safe stop 2 (SS2) for Stop Category 2, safe limited speed (SLS), safe direction (SDI), safe speed monitoring (SSM) and Safely-Limited Increment (SLI). Encoders for monitoring may operate using TTL, SIN/COS, SSI (Gray code / binary code), or HTL.

In addition to freely programming the safety functions, safe outputs can easily be reprogrammed to serve as safe inputs on the expansion modules to easily adapt to specific application requirements. The 2A semiconductor safety outputs on the main module can also be programmed to be either p-switching or p-in-switching.

Written program can be downloaded to the PSC1 either by computer interface or through a memory card on selected modules. Memory card options allow for quick programming of identical systems.

Available Literature

PSC1 Brochure, 16 pages

Ordering Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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| PSC1-C-10 | 14 safe inputs  
4 safe semiconductors (2A)  
2 safe relay outputs  
2 auxiliary outputs (250mA)  
2 test pulses |
| PSC1-C-10-0-0 | Without drive monitor |
| SDM1 | Safe Drive Monitor, 1 axis |
| SDM2 | Safe Drive Monitor, 2 axes |
| PSC1-C-10-0-0 | Without connectivity |
| FB1 | Master-to-Master communication  
Profinet, EtherCAT, EthernetIP fieldbus |
| FB2 | Master-to-Master communication  
Profinet fieldbus |
| MC | Memory Card (SDHC) |

Expansion modules

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</table>
| PSC1-E-31-12DI-10DIO | I/O expansion module offering:  
12 safe inputs  
10 safe configurable input/output  
2 auxiliary semiconductors |
| PSC1-E-33-12DI-6DIO-4RO | I/O expansion module offering:  
12 safe inputs  
6 safe configurable input/output  
4 safe relay outputs  
2 auxiliary semiconductors |

Accessories

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>PSC1-A-91-SAFEPLC2</td>
<td>SafePLC2 programming software, with dongle</td>
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<tr>
<td>PSC1-A-99-PROG-CABLE</td>
<td>SafePLC2 programming cable</td>
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<tr>
<td>PSC1-A-99-SD-MEMORY-CARD</td>
<td>SDHC memory card - Capacity: 16 GB</td>
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