SCHMERSAL
THE DNA OF SAFETY

PSC1-C-10



- **Safe remote IO communication**
- **Programmable Modular Safety System**
- **Free programmable in-/outputs, 2 A p-type**
- **Modularly extensible with up to 272 in-/outputs**
- **Setting and conversion of the field bus protocols by software**
- **Connection for all conventional safety switchgear up to PL e to ISO 13849-1**
- **Safe spindle monitoring To EN 61800-5-2 (Safe Drive Monitoring) for up to 12 spindles**

Data

Ordering data	
Product type description	PSC1-C-10
Article number (order number)	103012194
EAN (European Article Number)	4030661482101
eCl@ss number, Version 9.0	27-37-18-19
Certifications	
Certificates	TÜV cULus EAC
General data	
Product name	PSC1
Terminal (mechanical)	Removable screw terminals
Gross weight	100 g
General data - Features	
Number of pulse outputs (test pulse output)	2
Number of relay outputs (1-channel)	2

Number of digital fail-safe inputs	14
Number of fail-safe digital outputs	4
Number of signalling outputs	2
Safety appraisal	
Performance Level	e
Control category to EN13849	4
PFH-value	1.26 x 10^{-8} /h
Safety Integrity Level (SIL)	3
Mission Time	20 Year(s)
Mechanical data	
Mounting	can be clipped into standard rail
Mechanical data - Connection technique	
Cable section, minimum	0.2 mm²
Cable section, maximum	2.5 mm²
Wire cross-section, minimum	24 AWG
Wire cross-section, maximum	12 AWG
Mechanical data - Dimensions	
Width	45 mm
Height	100 mm
Depth	115 mm
Ambient conditions	
Protection class	IP20
Ambient temperature, minimum	+0 °C
Ambient temperature, maximum	+50 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Relative humidity, minimum	5 %
Relative humidity, maximum	85 %
Note (Relative humidity)	non-condensing
Ambient conditions - Insulation value	
	III
Degree of pollution to IEC/EN 60664-1	2

Electrical data	
Operating voltage, minimum	20.4 VDC
Operating voltage, maximum	28.8 VDC
Electrical data - Fail-safe digital outputs	
Rated operating current (safety outputs)	2,000 mA
Safety output	short-circuit proof, p-type (Q2 und Q3)
Electrical data - Electromagnetic compatibility (EMC)	
	DIN EN 62061 DIN EN 61800-3 DIN EN 61000-6-4 DIN EN 61000-6-7 DIN EN 61326-3 DIN EN 61000-6-2
Scope of delivery	
Included in delivery	Backplane bus connector Connector terminals

Documents

Datasheet (provisional PDF)
Configuration software (document with link)
(99,7 kB, 10.03.2020)
Field bus communication manual
(6,6 MB, 20.09.2019)
Installation manual
(8,6 MB, 10.05.2019, Revision 2.0)
Software manual
(7,2 MB, 20.09.2019)
TÜV certification
(600,5 kB, 10.05.2019, Revision 01)

EAC certification

Software (Download)

SISTEMA-VDMA library

Pictures

Product picture (catalogue individual photo)



ID: kpsc1f08

| 214,4 kB | .jpg | 27.093 x 53.763 mm - 320 x 635 Pixel - 300 dpi
| 105,0 kB | .png | 74.083 x 147.108 mm - 210 x 417 Pixel - 72 dpi
| 1,6 MB | .jpg | 314.678 x 625.122 mm - 892 x 1772 Pixel - 72 dpi

System components

Accessories



103008480 PSC1-A-90-PROG-CABLE

- The programming cable is required for programming and diagnostics on the PSC1-C-10 and PSC1-C-100 control systems.
  The programming cable consists of an interface converter and two cables, see the delivery.
  The interface converter converts the USB signals of the PC into RS485 signals for the programming interface of the PSC1 basic modules.



103015262 PSC1-A-99-SD-MEMORY-CARD

- The industry-capable microSD card is used to store application programs and parameters. As a flexible means of data storage with quick exchangeabillty, it allows for exchange or copying of complete projects without the need for a PC.
  The SD memory card is available for all PSC1-C-10 and PSC1-C-100 control systems with the MC, FB1 and FB2 option.



103008465 PSC1-A-80-CON-TBUS-POWER

- The bus connector connects the central expansion modules to the PSC1 basic module.
  It forms the communication channel or 'backplane bus' of every PSC system.
  The number of bus connectors required for the basic module and expansion modules is included in the delivery of the device.
  The number of connectors required is also specified in the technical data of each device,
  see 'Mechanical data'

  Caution:
  Devices and carrier rail bus connectors may only be installed and disassembled when de-energised.

  Note:
  Please use only original carrier rail bus connectors!



103008473 PSC1-A-91-SAFEPLC2

- The SafePLC2 programming system is a graphically-oriented editor for creation of a monitoring program for the PSC 1-C-10 and PSC 1-C-100 safety control systems.
  SafePLC2 enables graphic creation of sequence programs according to the function block method as well as the parameterisation of sensors, actuators and other technology functions used.
  A licence dongle is required to save, compile and for the transfer of the program to the control system.

  Note:
  This software package needs to be acquired once to program the PSC 1-C-10 and PSC 1-C-100 control systems.