Module with 6 electrically isolated inputs for alternating current. The inputs are set up for source operation and have one common "COM" terminal. Only the positive half-wave of the alternating current is used.

### Technical data

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of inputs</td>
<td>6 electrically isolated from the CPU, source operation, all inputs to the module in the same phase</td>
</tr>
<tr>
<td>Input voltage</td>
<td>115/230 VAC 50/60 Hz, sinusoidal (80 … 250 VAC)</td>
</tr>
<tr>
<td>Input current</td>
<td>115 VAC: 5 … 6 mA (wattless current) 230 VAC: 10 … 12 mA (wattless current)</td>
</tr>
<tr>
<td>Input delay switch-on</td>
<td>typical 10 ms; max. 20 ms</td>
</tr>
<tr>
<td>Input delay switch-off</td>
<td>typical 20 ms; max. 30 ms</td>
</tr>
<tr>
<td>LED</td>
<td>supplied directly from input current</td>
</tr>
<tr>
<td>Resistance to interference acc. to IEC 801-4</td>
<td>4 kV under direct coupling 2 kV under capacitive coupling (whole trunk group)</td>
</tr>
<tr>
<td>Electrical isolation voltage</td>
<td>2000 VAC, 1 min</td>
</tr>
<tr>
<td>Electrical isolation resistance</td>
<td>100 MD/500 VDC</td>
</tr>
<tr>
<td>Optocoupler isolation voltage</td>
<td>2.5 kV</td>
</tr>
<tr>
<td>Internal current consumption (from +5 V bus)</td>
<td>&lt; 1 mA</td>
</tr>
<tr>
<td>Internal current consumption (from V+ bus)</td>
<td>0 mA</td>
</tr>
<tr>
<td>External current consumption</td>
<td>0 mA</td>
</tr>
<tr>
<td>Terminals</td>
<td>Plug-in I/O spring terminal block, 10-pole up to 2.5 mm2, labelled 0 to 9, connector type A</td>
</tr>
</tbody>
</table>

### LEDs and connection terminals

- **LED 0...7**
  - **Terminal 0**
  - **Terminal 9**
  - **Description Label**
  - **Address Label**

### Schematic diagram

- **PCD3.E500**
- **6 Inputs 115-230 VAC**
- **E0, E1, E2, E3, E4, E5, COM**
- **Input 115-230 VAC, 50/60 Hz**
- **Output 10/20 ms**
- **Source Operation**

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Saia-Burgess Controls AG
Input circuits and terminal designation

Source operation (positive logic):

Switch closed (positive at input): Input state "H" = LED on
Switch open: Input state "L" = LED off

Phase 115 - 230V 50/60 Hz *)
Neutral lead *)
*) Could be changed, if allowed

Installation instructions

For reasons of safety it is not permissible to connect low voltages (up to 50 V) and higher voltages (50 ... 250 V) to the same module.

If a module is connected to a higher voltage (50 ... 250 V), approved components for this voltage must be used for all elements that are electrically connected to the system.

Using higher voltage (50 ... 250 V), all connections to the relay contacts must be connected on the same circuit, i.e. in such a way that they are all protected against one AC phase by one common fuse. Each load circuit may however be fused individually.

The PCD3.E500 module is certified according to UL 508.
Operation in accordance with UL61010 is not possible.

I/O modules and I/O terminals may only be plugged in or out when the Saia PCD is not powered on. The external module power supply must also be switched off.

Watchdog: This module can be used on all base addresses; there is no interaction with the watchdog on the CPUs.

Further information can be found in the document:
"27-600 ENG Manual I/O-Modules for PCD1 / PCD2 and PCD3"
ATTENTION
These devices must only be installed by a professional electrician, otherwise there is the risk of fire or the risk of an electric shock.

WARNING
Product is not intended to be used in safety critical applications, using it in safety critical applications is unsafe.

WARNING - Safety
The unit is not suitable for the explosion-proof areas and the areas of use excluded in EN61010 Part 1.

WARNING - Safety
Check compliance with nominal voltage before commissioning the device (see type label).
Check that connection cables are free from damage and that, when wiring up the device, they are not connected to voltage.
Do not use a damaged device!

NOTE
In order to avoid moisture in the device due to condensate build-up, acclimatise the device at room temperature for about half an hour before connecting.

CLEANING
The device can be cleaned in dead state with a dry cloth or cloth soaked in soap solution.
Do not use caustic or solvent-containing substances for cleaning.

MAINTENANCE
These devices are maintenance-free. If damaged, no repairs should be undertaken by the user.

GUARANTEE
Opening the module invalidates the guarantee.

Observe this instructions (data sheet) and keep them in a safe place.
Pass on the instructions (data sheet) to any future user.

WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive
The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

EAC
EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.
### Order details

<table>
<thead>
<tr>
<th>Type</th>
<th>Short description</th>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCD3.E500</td>
<td>6 digital inputs</td>
<td>Digital input module, 6 inputs 110 … 240 VAC, source operation, with galvanic isolation, 20 ms input delay, connection with pluggable spring terminals, plug-in type A, (4 405 4954 0) included</td>
<td>100 g</td>
</tr>
<tr>
<td></td>
<td>110 … 240 VAC, 20 ms</td>
<td>kööbhöök</td>
<td></td>
</tr>
</tbody>
</table>

### Order details accessories

<table>
<thead>
<tr>
<th>Type</th>
<th>Short description</th>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 405 4954 0</td>
<td>Plug-in, type A</td>
<td>Plug-in I/O spring terminal block, 10-pole up to 2.5 mm², labelled 0 to 9, connector type A</td>
<td>15 g</td>
</tr>
</tbody>
</table>