Preventa safety controllers with pre-defined functions

XPSMP

Catalogue

January 2015
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Preventa safety controller modules XPSMP are designed for a Performance Level of up to PL e/Category 4 conforming to standard EN/ISO 13849-1.

They enable two independent safety functions (selected from a choice of 15 pre-defined configurations) to be performed using the same product. Configuration selection is easily made using 3 buttons on the front face of the module. These 15 pre-programmed safety functions provide a solution for the majority of safety applications, for example: monitoring Emergency stops, limit switches, safety mats and sensing edges, enabling switches, coded magnetic switches, type 4 safety light curtains conforming to EN 61496-1.

Safety controllers XPSMP incorporate 6 safety outputs (3 per function) and 3 solid-state signalling outputs for signalling to the process PLC.

To aid diagnostics, the modules have LEDs on the front face which provide information on the monitoring circuit status. They also indicate and assist selection of the 2 required configurations.

### Maximum achievable safety level
- PL e/Category 4 conforming EN ISO 13849-1,
- SIL CL 3 conforming to EN/IEC 61508 and EN/IEC 62061

### Product certifications
- UL
- CSA
- TÜV

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Synchronisation time</th>
<th>Type of start (1)</th>
<th>Start test</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Automatic or unmonitored</td>
<td>Monitored</td>
<td></td>
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<tr>
<td>Functions disabled</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Emergency stop monitoring, 1-channel wiring (category 2)</td>
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<td>X</td>
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<tr>
<td></td>
<td>2</td>
<td>–</td>
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<tr>
<td>Emergency stop monitoring, 2-channel wiring, or guard monitoring (category 4)</td>
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<td>4</td>
<td>Unlimited</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.5 s</td>
<td>X</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1.5 s</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Unlimited</td>
<td>–</td>
<td>–</td>
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<tr>
<td></td>
<td>8</td>
<td>Unlimited</td>
<td>–</td>
<td>X</td>
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<tr>
<td>Guard monitoring for injection press or blowing machine (category 4)</td>
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<td>–</td>
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<td>Enabling grip switch monitoring (3 position switch) (category 4)</td>
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<td>Sensing mat and edges monitoring (category 3)</td>
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<td></td>
<td>12</td>
<td>–</td>
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<td>X</td>
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<tr>
<td>Relay output safety light curtain monitoring (category 4)</td>
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<tr>
<td>Coded magnetic switch monitoring (category 4)</td>
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<tr>
<td></td>
<td>15</td>
<td>1.5 s</td>
<td>–</td>
<td>X</td>
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</table>

(1) Automatic start: there is no contact or it is shunted.
Unmonitored start: The output is activated on closing of the start contact.
Monitored start: the start input is monitored so that there is no start-up in the event of the start contact being shunted or the start circuit being closed for more than 10 seconds.
Start-up is triggered following activation of the start button (push-release function) on opening of the contact.

(2) Tool zone guard with 3rd switch.
Additional rear guard (optional) with automatic start. The opening of the guard cuts all outputs.
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References, schemes

References

<table>
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<tr>
<th>Description</th>
<th>Type of terminal block connection</th>
<th>Number of safety circuits</th>
<th>Additional outputs</th>
<th>Supply</th>
<th>Reference</th>
<th>Weight kg/lb</th>
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</thead>
<tbody>
<tr>
<td>Modules for 2 independent safety functions</td>
<td>Integrated in module</td>
<td>3 NO per function</td>
<td>3 solid-state</td>
<td>24 V</td>
<td>XPSMP11123</td>
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<tr>
<td>Removable from module</td>
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<td>3 solid-state</td>
<td>24 V</td>
<td>XPSMP11123P</td>
<td>0.320/0.71</td>
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<tr>
<td></td>
<td>(6 NO total)</td>
<td></td>
<td></td>
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</table>

Schemes

Wiring diagram and Functional Diagram are available on the “e-Shop” via the partnumber. Click on a partnumber, the hyperlink opens the “e-Shop”

Direct access to information on the internet

Click on “Documents & Download”
Click on “Instruction sheet”
### Preventa safety controllers

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<tbody>
<tr>
<td>XPSMP11123P</td>
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January 2015