Preventa XPS
Safety modules
XPSABV
For Emergency stop and switch monitoring - Category 1

Catalog
July 2019
Quick access to product information

Get technical information about your product

Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

Find your catalog

> With just 3 clicks, you can reach the Industrial Automation and Control catalogs, in both English and French
> Download Digi-Cat with this [link](#)

Select your training

> Find the right [Training](#) for your needs on our Global website
> Locate the training center with the selector tool, using this [link](#)
Preventa XPS
Safety modules

- Type XPSABV,
  For Emergency stop, switch and safety light curtain monitoring
  - Operating principle ................................................................. page 2
  - References ............................................................................ page 2
  - Schemes .............................................................................. page 3

- Product reference index
  - Index ..................................................................................... page 4
Operating principle

Safety modules XPSABV are used for monitoring Emergency stop circuits conforming to standards EN/ISO 13850 and EN/IEC 60204-1 and also meet the safety requirements for the electrical monitoring of switches in protection devices conforming to standard EN/ISO 14119.

They provide protective for both the machine operator and the machine by immediately stopping the dangerous movement on receipt of a stop instruction from the operator, or on detection of a fault in the safety circuit itself. In addition to the stop category 0 instantaneous opening safety outputs (2 for XPSABV), the modules incorporate stop category 1 time delay outputs (1 for XPSABV) which allow for controlled deceleration of the motor components until a complete stop is achieved (for example, motor braking by variable speed drive).

At the end of the preset delay, the supply is disconnected by opening the time delay output circuits.

- The time delay of the 3 output circuits is adjustable between 0.15 and 3 seconds or 1.5 and 30 seconds, depending on the model, using a selector switch.
- To aid diagnostics, the modules have LEDs which provide information on the monitoring circuit status.
- The Start button monitoring function is configurable depending on the wiring.

Maximum achievable safety level

- PL e/Category 4 (instantaneous safety outputs) and PL d/Category 3 (time delay safety outputs) conforming to EN/ISO 13849-1
- SIL CL3 (instantaneous safety outputs) and SIL CL2 (time delay safety outputs) conforming to EN/IEC 61508 and EN/IEC 62061

Product certifications

- UL
- CSA
- BG

References

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of safety circuits</th>
<th>Additional outputs</th>
<th>Setting range of time delay</th>
<th>Supply</th>
<th>Reference</th>
<th>Weight kg/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety modules for Emergency stop and switch monitoring</td>
<td>3 NO (1 NO time delay)</td>
<td>–</td>
<td>0.15…3 s</td>
<td>24 V</td>
<td>XPSABV1133P</td>
<td>0.28/0.617</td>
</tr>
<tr>
<td>Captive screw clamp terminals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terminal block removable from module</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring terminals</td>
<td>3 NO (1 NO time delay)</td>
<td>–</td>
<td>0.15…3 s</td>
<td>24 V</td>
<td>XPSABV1133C</td>
<td>0.27/0.60</td>
</tr>
<tr>
<td>Terminal block removable from module</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captive screw clamp terminals</td>
<td>3 NO (1 NO time delay)</td>
<td>–</td>
<td>1.5…30 s</td>
<td>24 V</td>
<td>XPSABV11330P</td>
<td>0.28/0.61</td>
</tr>
<tr>
<td>Terminal block removable from module</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring terminals</td>
<td>3 NO (1 NO time delay)</td>
<td>–</td>
<td>1.5…30 s</td>
<td>24 V</td>
<td>XPSABV11330C</td>
<td>0.27/0.60</td>
</tr>
<tr>
<td>Terminal block removable from module</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Preventa XPS
Safety modules
XPSABV for Emergency stop and switch monitoring

Operating principle

Safety modules XPSABV are used for emergency stop circuits conforming to standards EN 13850 and EN 60204-1, and designed to ensure the safety requirements for electrical equipment used in protection devices. They provide protection for both the machine operator and the machine by immediately stopping the dangerous movement on receipt of a stop instruction from the operator or on detection of a fault in the safety circuit itself.

Preventa XPSABV are designed to fulfill the safety-related requirements of SIL CL3 (time delay safety outputs) and SIL CL2 (time delay safety outputs) conforming to EN/IEC 62061 and SIL CL3 (instantaneous safety outputs) and SIL CL2 (instantaneous safety outputs) conforming to EN/IEC 61508. They are also certified to UL, DIN 41, and Category 4 safety standard for XPSABV, which allows for controlled deceleration of the motor components until a maximum achievable safety level is reached.

At the end of the preset delay, the supply is disconnected by opening the time delay output circuits.

References

To aid diagnostics, the modules have LEDs which provide information on the monitoring circuit status.

For more information, please refer to the technical data sheet.

Click on a part number, the hyperlink opens the web

Click on "Documents & Download"

Click on "Instruction sheet"
Preventa XPS  
Safety modules  
XPSABV for Emergency stop and switch monitoring

<table>
<thead>
<tr>
<th>XPSABV1133C</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>XPSABV1133P</td>
<td>2</td>
</tr>
<tr>
<td>XPSABV11330C</td>
<td>2</td>
</tr>
<tr>
<td>XPSABV11330P</td>
<td>2</td>
</tr>
</tbody>
</table>
The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design: Schneider Electric
Photos: Schneider Electric

http://www.schneider-electric.com/machinesafety