

Safety Calculator

PAScal



Software to verify the functional safety of control functions on plant and machinery

Features

- Calculation of PFH_D value
- Verification with the specified Performance Level in accordance with EN ISO 13849-1 or SIL in accordance with EN IEC 62061
- Extensive Pilz component library, which you can expand with your own components
- Consideration of architecture
- Risk assessment to determine the necessary SIL or PL
- Report to simplify certification
- CCF Editor to quantify common cause failure
- Illustration of how individual components influence the overall result
- TÜV tested
- User interface in German, English
- For Windows® 2000 and XP

Order reference

Description	Safety Calculator
Name	Order no.
Demo version of PAScal...	
... without manual	850 050D
Licences for the full version	
Basic licence	850 050B
User licence	850 050K
Multi-user licence	850 050M

Order guidelines

Please order the demo version plus one of the licences for the full version.

Basic licence: Single user licence, issued to one owner (company name and location/project must be stated)

User licence: Discounted licence for an additional workstation, issued to the owner of a basic licence

Multi-user licence: Multi-user licence, price graduated according to the number of workstations (up to 25, up to 50, up to 100 and more than 100 workstations)

Description

The PAScal Safety Calculator decomposes the safety-related control functions into their component parts and calculates the overall PFH_D value. The result is verified with the prescribed performance level in accordance with EN ISO 13849 or safety integrity level in accordance with EN IEC 62061. The graphical representation shows users how individual components influence overall safety. With the PAScal Safety Calculator, users have a tool which makes it much easier to implement the systematic procedure in compliance with the new standards.

According to the approach of IEC 62061, safety-related control functions are divided into subsystems such as sensors, inputs, logic, outputs and actuators. The architecture can be specified separately for each subsystem. Subsystems may be combined as required.

The calculation tool also considers

- The dangerous failure rate λ_D of the individual components
- The factors listed in EN ISO 13849-1 for evaluating common cause failure (CCF),
- The parameters that depend on logic or electronics and affect diagnostic coverage (DC) (e.g. detection of shorts across contacts, feasibility test).

The PAScal Safety Calculator is based on an extensive component library, which already contains Pilz products. The component library contains the base values required for the calculation. Components can be assigned to the subsystems via drag and drop. Users are able to define their own components and add them to the database.

Integral online help is provided to help users as they work with PAScal.

System requirements:

- Windows® 2000/XP
- PC with min. 1 GHz processor
- RAM: Min. 256 MB
- Hard drive: Approx. 300 MB of available disk space
- To view the online help: Browser, compatible with HTML 3.2. Recommended: Internet Explorer from Version 5.0, Netscape Navigator from Version 5.0