

## ► Safe small controllers PNOZmulti 2 – New motion monitoring functions

# NEW



The motion monitoring modules for the configurable small controllers PNOZmulti 2 ensure safe monitoring of your drives. Existing safety functions have now been supplemented with monitoring of safely limited acceleration SLA-M and safe acceleration range SAR-M. This makes your plant and machinery even safer and more productive. The SLA-M function safely monitors the maximum acceleration of the drive, if necessary, preventing the motor from exceeding the defined acceleration limit. The SAR-M function ensures that the safely limited acceleration remains within defined limit values.

Configuration of the safety functions is performed using the software tool PNOZmulti Configurator. This makes it easy to define limit values and ranges. A separate module program mIQ that is then run locally is configured for the motion monitoring modules. Fine-granular configuration of several monitoring areas is possible. The module program mIQ guarantees safe delayed shutdown of the drive.



### Your benefits at a glance

- Realize safety functions in accordance with IEC 61800-5
- Comprehensive motion monitoring safety functions for high availability of your application. New: SLA-M and SAR-M. In addition to SS1/SS2/SSR/SSM/SDI/SOS
- Simple configuration of the functions via certified software blocks in the PNOZmulti Configurator
- Maximum flexibility due to the module program mIQ
- Fast response times – load on base unit is reduced
- Productive plant and machinery – reduce your costs with the highest safety
- Play it safe and use PNOZmulti 2 – the worldwide safety standard for all machine types



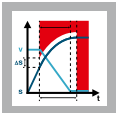
## Safe small controllers PNOZmulti 2 – new motion monitoring safety functions



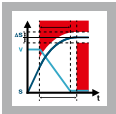
PNOZ m EF 1MM



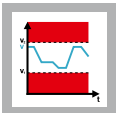
PNOZ m EF 2MM



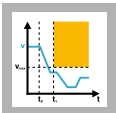
SS1



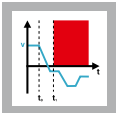
SS2



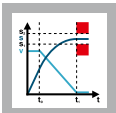
SSR



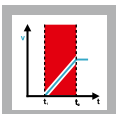
SSM



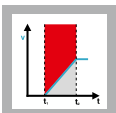
SDI



SOS



SLA



SAR

## Technical features

## PNOZ m EF 1MM

- For monitoring of one axis

## PNOZ m EF 2MM

- Monitoring of two independent axes (8 limit frequencies can be selected)

## Common features

- Configuration of special module programs (mIQ). The user program consists of a main program and one or more module programs. Each module is configured in a separate module program. The module program is structured and configured in the same way as the main program; however, the only elements available are those that are actually needed by the module to be configured.
- Safety functions in accordance with IEC 61800-5-2: 2016-04 for adjustable speed electrical power drive systems, Part 5-2: Safety requirements – Functional
  - New: monitoring of safely limited acceleration: SLA-M
  - New: monitoring of the safe acceleration range: SAR-M
  - Safe stop 1: SS1
  - Safe stop 2: SS2
  - Safe speed range: SSR
  - Safe speed monitor: SSM
  - Safe direction: SDI
  - Safe operating stop: SOS
- Can be used with the base units PNOZ m B0 or PNOZ m B1
- Approvals: CE, cULus Listed, EAC (Eurasian), TÜV, BG, CCC

## Order number

- |                                    |         |
|------------------------------------|---------|
| ► PNOZ m EF 1MM                    | 772 170 |
| ► 1 set of spring-loaded terminals | 783 542 |
| ► 1 set of plug-in screw terminals | 793 542 |

- |                                    |         |
|------------------------------------|---------|
| ► PNOZ m EF 2MM                    | 772 171 |
| ► 1 set of spring-loaded terminals | 783 544 |
| ► 1 set of plug-in screw terminals | 793 544 |

Connection to all common incremental encoders via industry-compatible interface MINI-IO, using drive-specific connection cable. Available versions at [www.pilz.us](http://www.pilz.us), webcode: web87010 e.g.

- |                             |         |
|-----------------------------|---------|
| ► MM A MINI-IO CAB99 1.50 m | 772 200 |
|-----------------------------|---------|

- |  |               |
|--|---------------|
| ► PNOZmulti Configurator, Version 10.6 | 773 010B i.a. |
|--|---------------|
- Demo software can be downloaded from the Internet (for registered users), information at [www.pilz.us](http://www.pilz.us), webcode: web8633, Download tab



Webcode:  
web10759

Online information  
at [www.pilz.us](http://www.pilz.us)

Safe small controllers PNOZmulti 2 with module program (mIQ) for configuration of several monitoring areas, such as velocity or rotational speed, which are then executed locally on the expansion module.