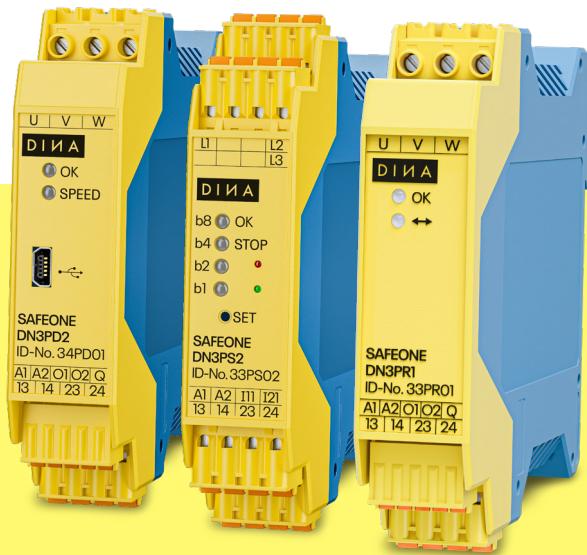


SAFEONE DN3P

Sensorless, carefree, safe



Safe drive monitoring
easier than ever.

SAFEONE DN3P

Brief description

Our DN3P products are suitable for the safe monitoring of speed, standstill, position & direction of rotation as well as the monitoring of a speed range - all of that without the need of a measuring system / encoder.

Compared to conventional drive monitoring solutions, neither proximity switches nor incremental encoders are required to measure the operating status. Our innovative solutions are thus a good choice for retrofits as well as for designing state-of-the-art machines up to Performance Level e.

The simple installation and the user-friendly parameterization make safety child's play. You just need to quickly configure the most essential parameters, everything else has already been taken care of.

Your advantages at a glance

SIMPLE SAVING

For you, no measuring system means: fewer components, lower costs as well as faster documentation and validation.

MAKE YOURSELF INDEPENDENT

Can be combined with all kinds of systems and controls and used with all three-and single-phase motors up to performance level e.

FITS IN EACH AND EVERY CONTROL CABINET

With a construction width of only 22.5 mm.

INDIVIDUALLY CUSTOMISED FOR YOU

Each SAFEONE can be precisely adapted to your application:

- DN3PD2 - Adjustable speed limits from 0 to 600 resp. 1200 Hz
- DN3PS2 - adjustable switching threshold 50-500mV
- DN3PS2 / DN3PD2 - various adjustable delay times

SIMPLEST CONFIGURATION

Depending on the model, via USB interface on the PC or directly using the SET button.

PLUG & PLAY

Easy to install without prior knowledge.

Also the integration into the circuit diagram is pretty simple.

Application areas

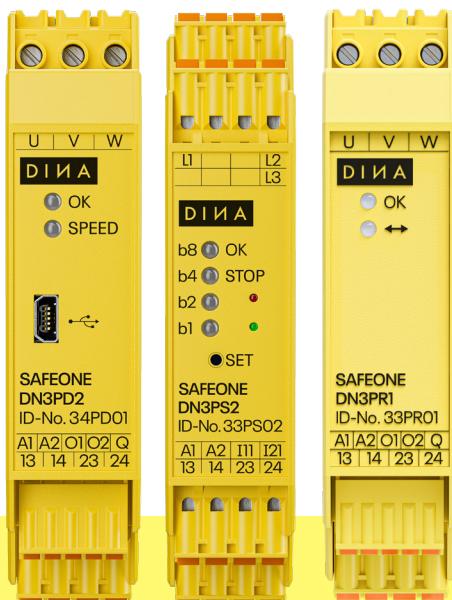
COMPATIBILITIES

- Three-phase-motors with frequency converter
- Single-phase AC motors
- Motors with star-delta connection
- Servomotors

INDUSTRIES

- Wood processing
- Metal processing
- Construction machinery
- Spindles
- Centrifuges

and many more...



Motion monitoring in detail

The motion monitoring module SAFEONE DN3PD2 supervises either a safe speed range, a safe limited speed or a safe maximum speed.

The frequency supplied from the drive is safely monitored.

The module can be conveniently configured using the innovative GO: BEYOND software and USB interface.



Standstill monitoring in detail

The standstill monitoring module DN3PS2 does not require any additional measuring system, which makes it unique in this form.

1- or 3-phase motors can be monitored safely up to 690V AC with Performance Level e. The module detects the electromagnetic force (EMF) of the motor while running out.

A limit and an additional time delay can be parameterized.



Rotation direction monitoring in detail

The module measures the frequency of the 3 motor phases as long as the drive is running. The output provides a signal when the drive moves in the preset desired direction. However, the contact output opens immediately should the drive move in a different, wrong direction, which interrupts the circuit and stops the drive.



Technical data at a glance

	DN3PD2	DN3PS2	DN3PS2
Construction width	22,5 mm	22,5 mm	22,5 mm
Switching power	up to 5 A	up to 3 A	up to 3 A
In- / Outputs	2 Relay outputs + 2 diagnostic outputs	2 Relay outputs + 2 diagnostic outputs	2 Relay outputs + 2 diagnostic outputs
Terminals	Morsetti di tensione a molla, morsetti a vite	Morsetti di tensione a molla, morsetti a vite	Morsetti di tensione a molla, morsetti a vite
Certifications	PLe (EN ISO 13849-1) SIL3 (IEC 61508) SIL CL3 (IEC 62061) UL-certified	PLe (EN ISO 13849-1) SIL3 (IEC 61508) SIL CL3 (IEC 62061) UL-certified	PLe (EN ISO 13849-1) SIL3 (IEC 61508) SIL CL3 (IEC 62061) UL-certified

Project set up

Hardware Parameterization		✓	
Software Parameterization	✓		

Motion Monitoring

Motion Monitoring	sensorless	sensorless	sensorless
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Diagnosis and visualization

Hardware diagnosis / LED	✓	✓	✓
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Safety features

Safe Operating Stop (SOS)	✓		
Safe Torque OFF (STO)	✓	✓	
Safe Speed Range (SSR)	✓		
Safe Speed Monitor (SSM)	✓		
Safe Limited Speed (SLS)	✓		
Safe Minimal Speed (SMS)	✓		✓

Operating mode switch over

Muting function (bypass)		✓	
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We look forward to hearing from you!

DINA

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