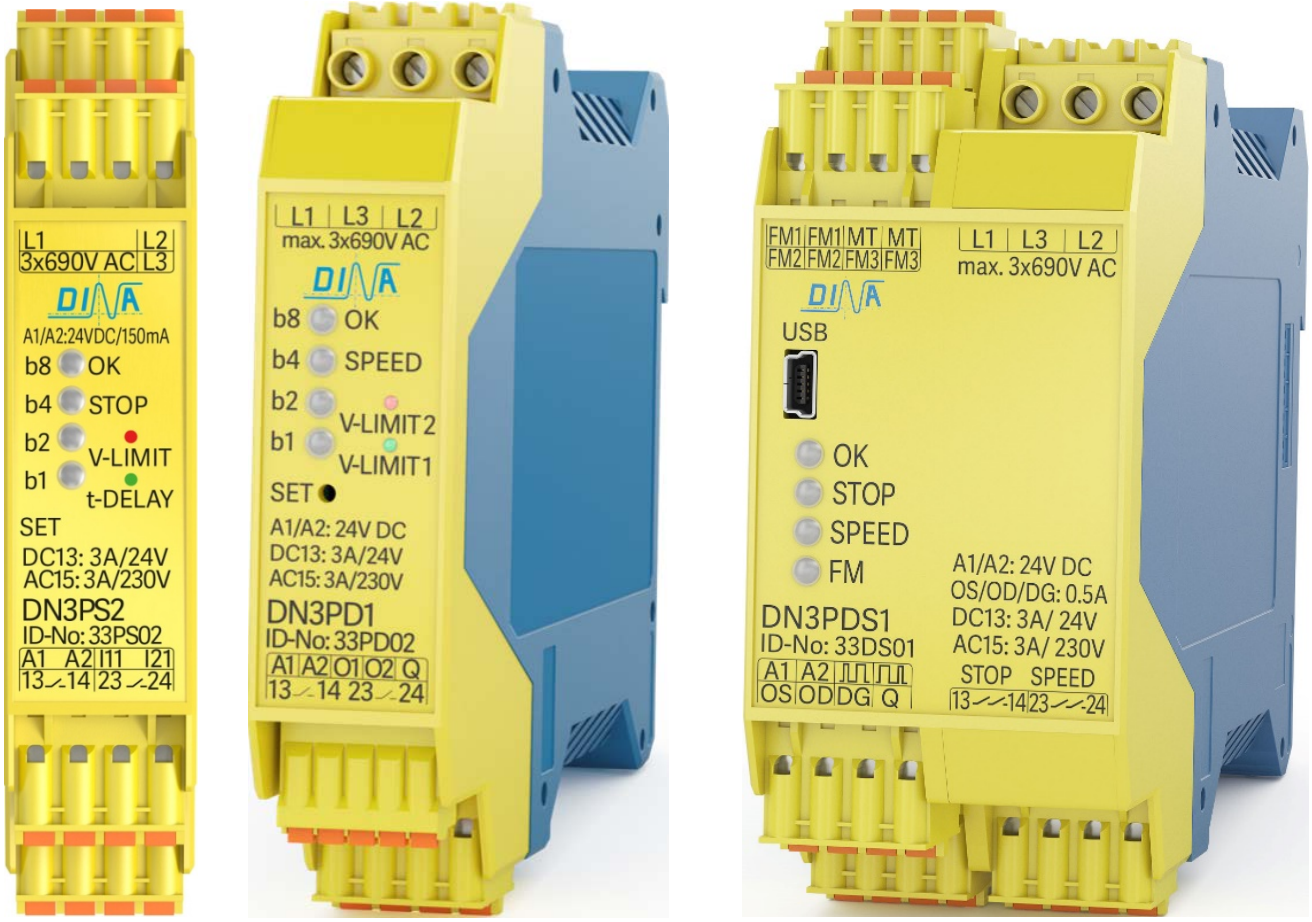
SAFEONE

Safe Standstill and Speed monitoring



we are safety

1 DN3PS2

Safety gear unit to monitor the standstill without sensor at 1- and 3-phases Motors

DN3PS2 is an economically user friendly solution to monitor the standstill of a motor without sensor.
Different inputs and outputs are available to fill field the safety category till PLe according to EN ISO 13849-1 respectively SIL 3 according EN 61508.
Switching status display is available using semi-conductor outputs and two coloured LED.

Usage.

- 3-phases motor with frequency converters
- Motor with star/ three-angle connection
- 1-phase AC motors

Terminals.

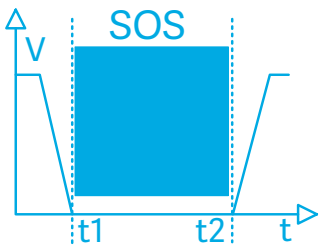
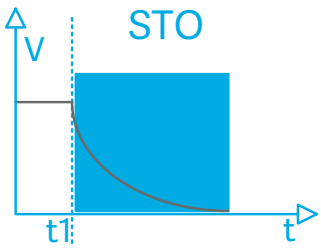
- 2 terminals to connect the power supply (24V DC to A1/ A2
- 3 measuring terminals to connect the motor phases (≤ 3 x 690V AC to L1, L2 and L3)
- 2 contact outputs for safe disconnection of the power (13-14/ 23-24)
- 2 inputs to mute the function (24V DC to I11 and I21) or
  2 semi-conductor outputs to transmit the switching status to a higher CNC (O1, O2)

Functionality.

- Configuration happens using a button at the unit and 4 two coloured LED.
- Configurable switching threshold
- Configurable time delay of the switching threshold

Advantages.

- No sensors required
- Pluggable spring load clamps
- 22.5 mm housing width
- Installation on a 35mm DIN rail according to EN 60715

Safety function	Function	Safety function	Function
Safe Operating Stop Safe monitored operating stop		**Safe Torque OFF** Safe monitored torque off (Power off)	

2 DN3PD1

Safety gear unit to monitor the standstill and speed without sensor at 1- and 3-phases Motors

DN3PD1 is an economically user friendly solution to monitor the standstill and speed of a motor without sensor.

Different inputs and outputs are available to fill field the safety category till PLe according to EN ISO 13849-1 respectively SIL 3 according EN 61508.

Switching status display is available using semi-conductor outputs and two coloured LED.

Usage.

- 3-phases motor with frequency converters
- Motor with star-three angle connection
- 1-phase AC motors

Terminals.

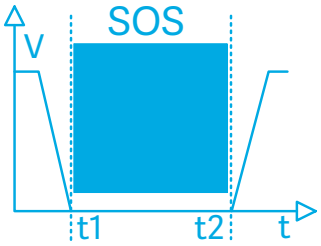
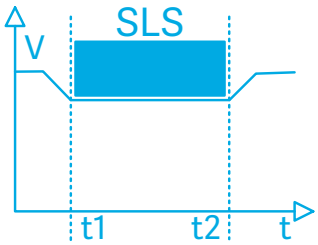
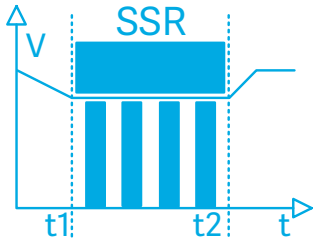
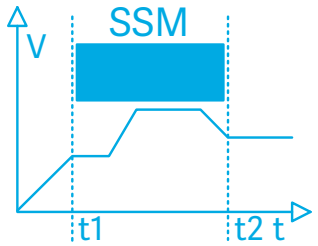
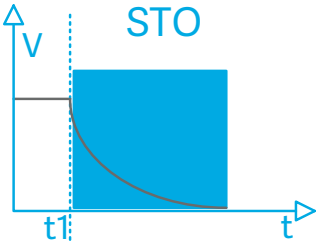
- 2 terminals to connect the power supply (24V DC) using A1/ A2
- 3 measuring terminals to connect the motor phases (≤ 3 x 690V AC) to L1, L2 and L3
- 1 quit input to reset the function after an error (24V DC to Q)
- 2 contact outputs for safe disconnection of the power (13-14/ 23-24)
- 2 semi-conductor outputs to transmit the switching status to a higher CNC (O1, O2)

Functionality.

- Configuration happens using a button at the unit and 4 two coloured LED.
- Configurable monitoring frequency 0,15 to 600Hz
- Configurable quit function automatically or manual (24V DC to Q).

Advantages.

- No sensors required
- Pluggable spring load clamps
- 22.5 mm housing width
- Installation on a 35mm DIN rail according to EN 60715

DN3PD1 Safety function	Function
Safe Operating Stop Safe monitored operating stop	
Safe Limited Speed Safe monitored maximal speed of a motor	
Safe Speed Range Safe monitored minimal speed of a motor	
Safe Speed Monitor Safe monitored reduced speed	
Safe Torque OFF Safe monitored torque off (Power off)	

3 DN3PDS1

Safety switchgear to monitor the standstill and speed without sensor at 1- and 3-phases motors in different function modes

DN3PDS1 is an economically user friendly solution to monitor the standstill and speed of a motor in different function modes without sensor.
Different inputs and outputs are available to fill field the safety category till PLe according to EN ISO 13849-1 respectively SIL 3 according EN 61508.
Switching status display is available using semi-conductor outputs and LED.

Usage.

- 3-phases motor with frequency converters
- Motor with star-three angle connection
- 1-phase AC motors

Terminals

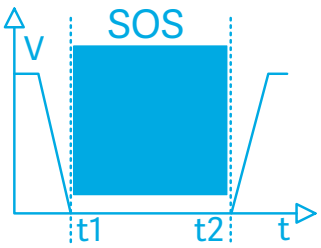
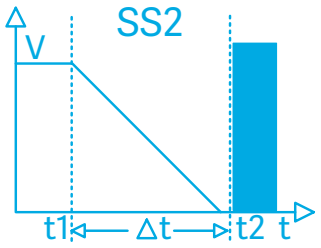
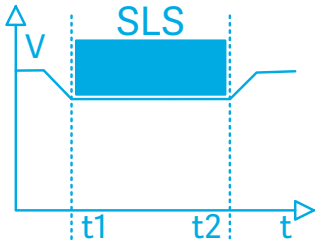
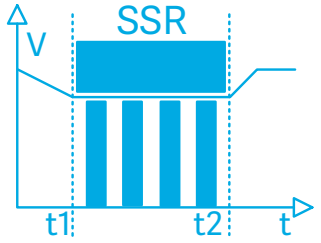
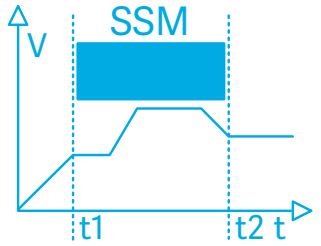
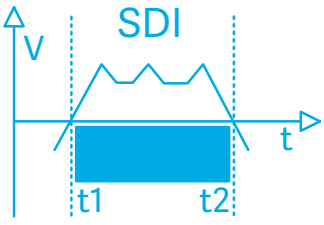
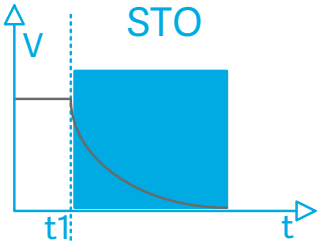
- 2 terminals to connect the power supply (24V DC to A1/ A2)
- 3 measuring terminals to connect the motor phases (≤ 3 x 690V AC to L1, L2 and L3
- 2 inputs to monitor the setting tool function mode (FM2)
- 2 inputs to monitor the semi-automatic function mode (FM3)
- 2 inputs to monitor the automatic function mode (FM1)
- 2 inputs to mute the function during the automatic function mode (MT)
- 1 quit input to rest the function after an error
- 2 clock outputs to control the function modes and (MT) inputs
- 1 safe STOP semi-conductor output to enable a safety cover (OS) or
  1 safe contact output to enable a safety cover (13-14)
- 1 safe speed semi-conductor output to enable an emergency stop function (OD) or
  1 safe contact output to enable an emergency stop function (23-24)
- 1 semi-conductor output to transmit the switching status to a higher CNC (DG)

Functionality.

- Configuration happens using an USB interface at the unit
  All configurations happen at the PC and will be transmitted to the unit using the USB interface
- Configurable monitoring frequency 0,15 to 600Hz
- Configurable quit function automatically or manual.

Advantages.

- No sensors required
- Pluggable using spring load clamps
- 22.5 mm housing width
- Installation on a 35mm DIN rail according to EN 60715

DN3PDS1 safety functions	Functions
Safe Operating Stop Safe monitored operating stop.	
Safe Stop 2 Stop category 2 according to DIN EN 60204-1	
Safe Limited Speed Safe monitored maximal speed	
Safe Speed Range Safe monitored minimal speed	
Safe Speed Monitor Safe monitored reduced speed.	
Safe Direction Safe monitored movement direction	
Safe Torque OFF Safe monitored torque off (Power off)	

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