

# SV MRO

## STAND-ALONE SAFETY SPEED MONITORING INTERFACE



Safety level:

**SIL 3**

SIL 3 – SILCL 3  
PL e – Cat. 4



## Stand-alone safety speed monitoring interface

- Overspeed and Zero speed control
- Safety level up to PL e - SIL 3.
- Manual or Automatic restart selectable.
- EDM feedback input for external contactors monitoring.
- Enable inputs to by-pass the unit when more SV MRO are used for different thresholds monitoring.
- LED "Fault" and a PNP system status output.
- PNP status output indicating overspeed thresholds crossing.
- 2 inputs for PNP proximities switches.
- 3 front panel selectors allow configuration of the speed threshold.
- Operating temperature  $-40^{\circ}\text{C} \dots +55^{\circ}\text{C}$ .



## Stand-alone safety speed monitoring interface

Speed threshold configuring selectors:

- frequency (Hz) 0,5 ... 990
- frequency (rpm) 10 ... 49500 equivalent 0,17...825 Hz.

Speed threshold settings:

- selector **P1** tenths;
- selector **P2** units;
- selector **P3** multiplier.

P1 and P2 selectors allow to set numeric values from 01 to 99. P2 selector allows to set a multiplier to apply to the numeric value obtained with the first two.

The multiplier can be set in "Hz" or in "rpm" (round per minute).



## Stand-alone safety speed monitoring interface

Examples of speed threshold settings

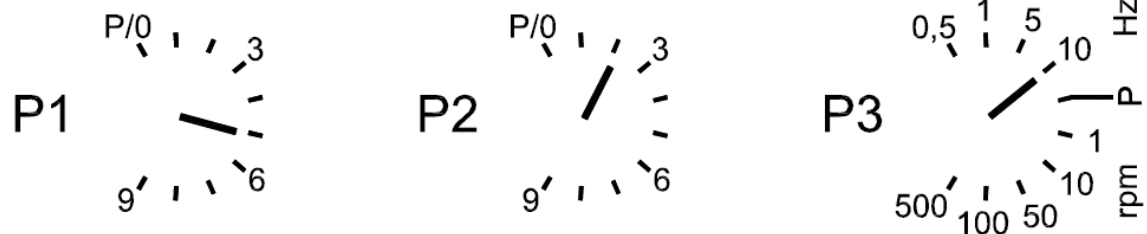


Figure 2 - Example 1: 520Hz

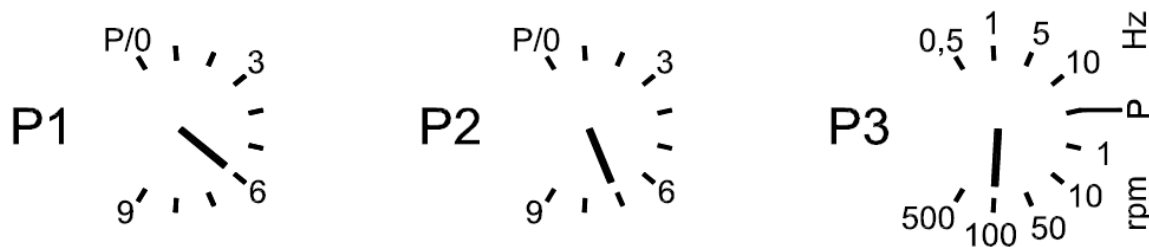


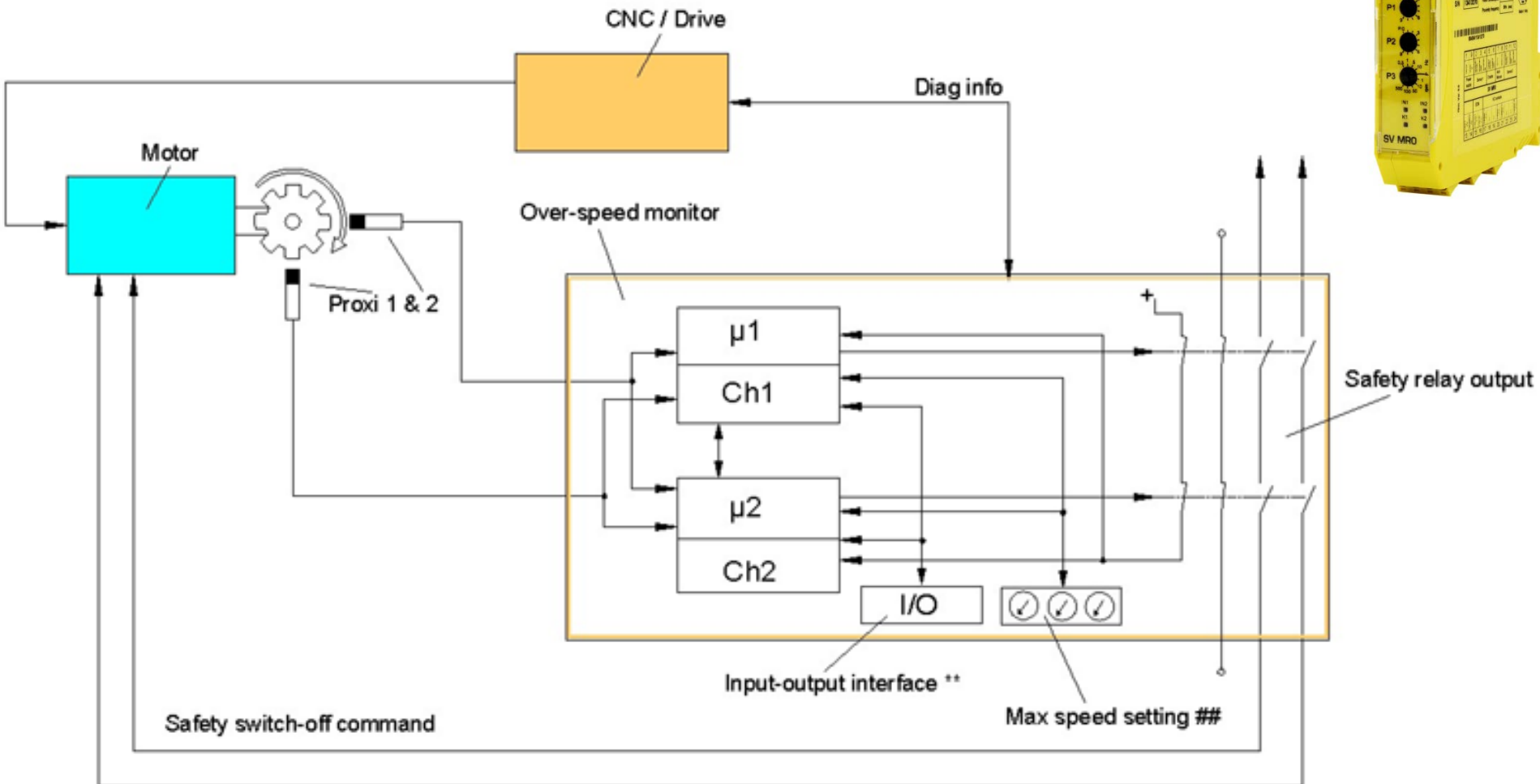
Figure 3 - Example 2: 6700rpm





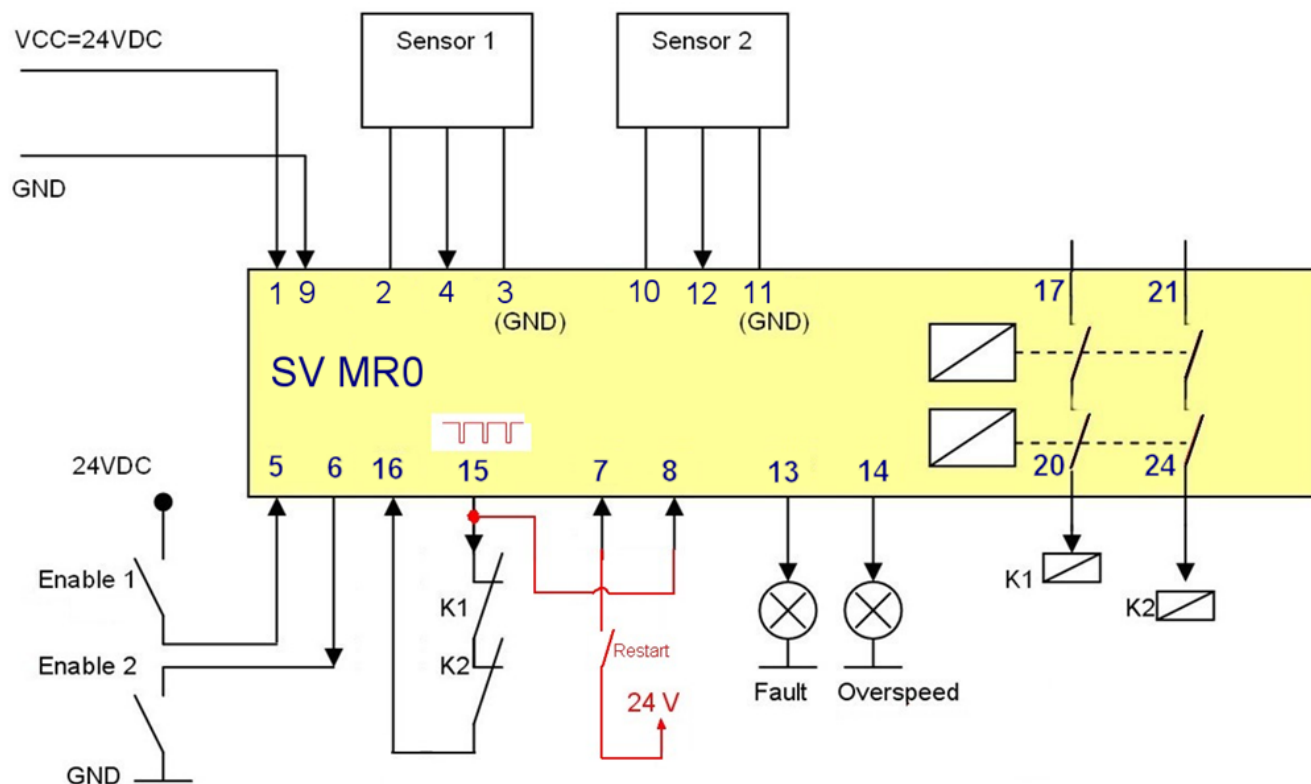
## Stand-alone safety speed monitoring interface

### Block diagram



## Stand-alone safety speed monitoring interface

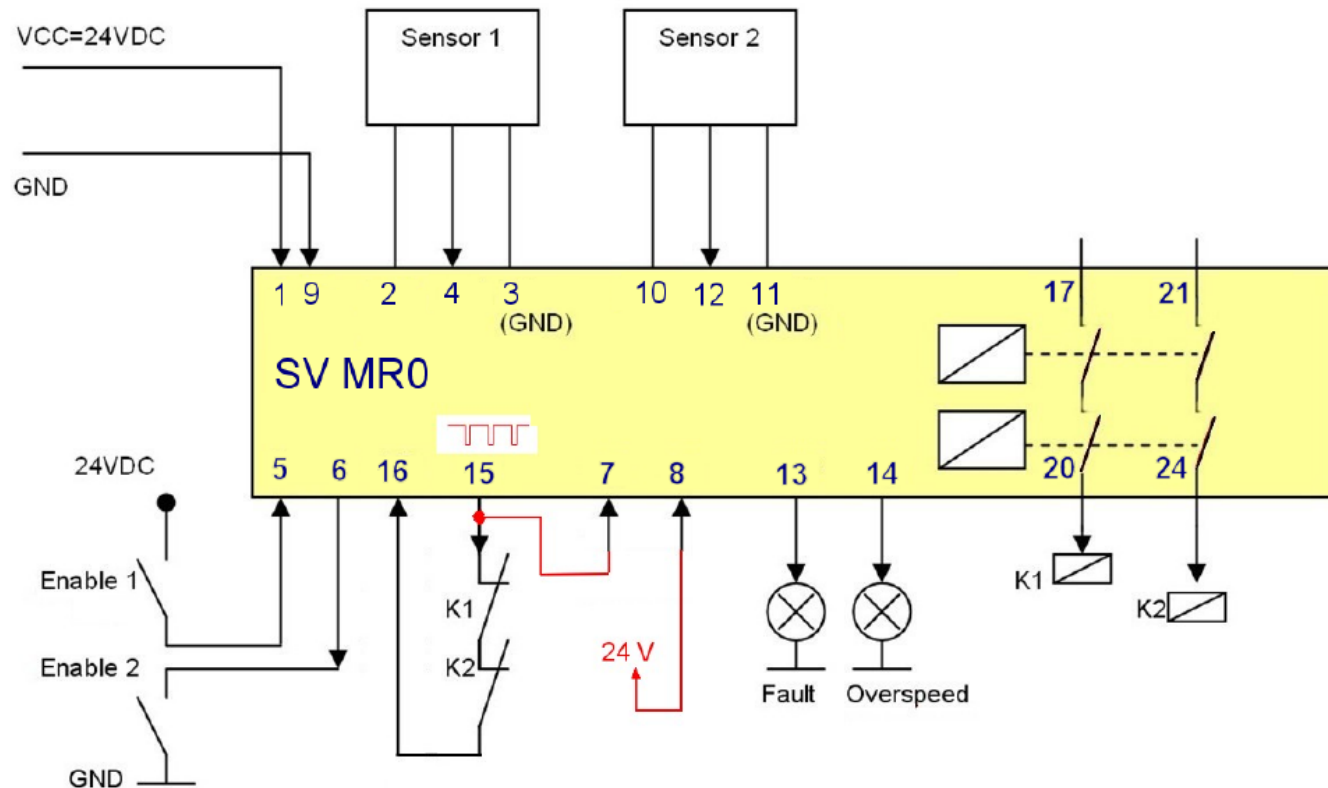
### AUTOMATIC/MANUAL MODE SELECTIONS



Manual mode selection

## Stand-alone safety speed monitoring interface

### AUTOMATIC/MANUAL MODE SELECTIONS



Automatic mode selection