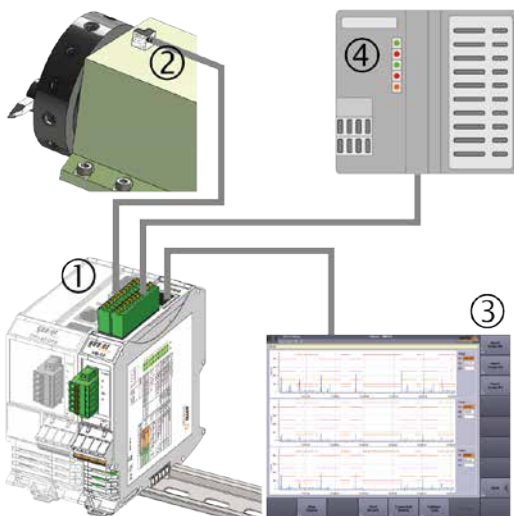


## HSC MACHINE COLLISION DETECTION STAND-ALONE OR AS GENIOR MODULAR UNIT

### Stand-alone operation of VM-02



VM-02 module (1) with VA-3D 3-axis accelerometer (2), visualization (3) on an external PC and machine control (4) (illustration not to scale)

### Features

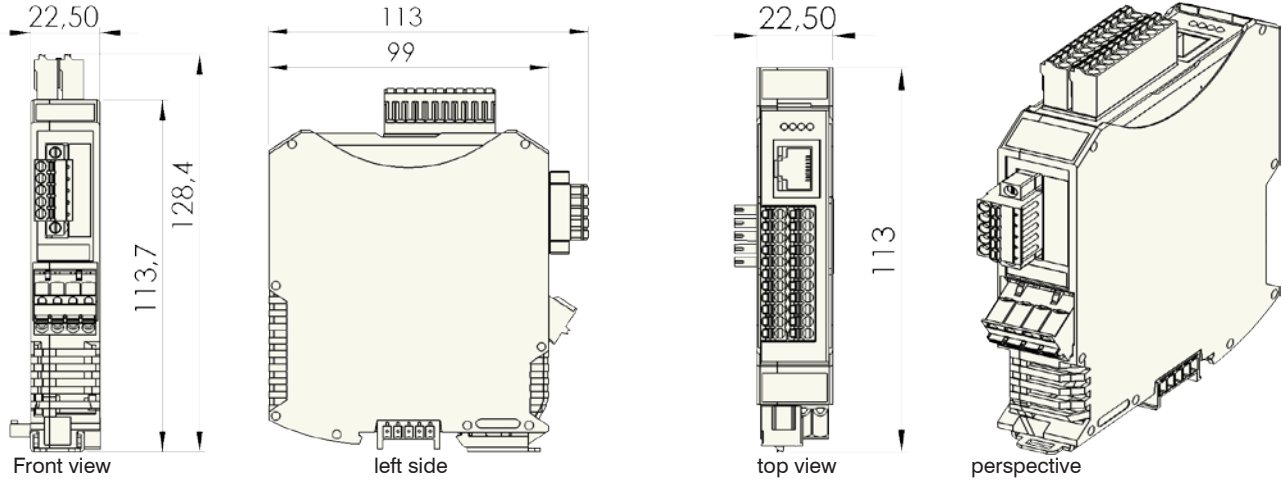
- Stand-alone operation
- 3 independent sensor inputs (IEPE-Standard)
- 3 limits defineable
- 10 Hz ... 5.6 kHz frequency range
- Band-pass filter freely selectable (minimum 200 Hz)
- 25 kHz sampling rate
- 16 bit resolution
- Physical I/O-interface (3 inputs – 4 outputs)
- 3 different operation modes
- 3 different static alarms per mode
- Fast alarm messages (< 1 ms)
- Stop-event data recording
- Signal values log file
- Signals: 3 x acceleration (g)

If VM-02 is connected to the GENIOR MODULAR system, the following additional signals are available for tool and process monitoring:

- 3 x vibration velocity (mm/s)
- 3 x acceleration (g)

# HSC Machine Collision Detection Stand-alone or as GENIOR MODULAR unit

VM-02



| <b>O830Z710104</b>                  |  |
|-------------------------------------|--|
| Dimensions                          | see drawing  |
| Mounting                            | Mounting on standard mounting rail acc. to DIN EN 60715        |
| Weight                              | 0.192 kg   |
| Material                            | Polyamide PA6.6  |
| Flammability class                  | VO (UL94)  |
| Storage temperature                 | -20 °C ... +60 °C  |
| Operation temperature               | 0 °C ... +50 °C  |
| Rel. humidity                       | 5 – 85 % without condensation                                  |
| Degree of protection                | IP20   |
| Contacting                          | Spring terminal, in-rail bus connector                         |
| Voltage supply                      | 24 V DC $\pm$ 20 % max. 5 % ripple (via in-rail bus connector) |
| Nom. current consumption            | max. 250 mA  |
| Resolution                          | 16 bit   |
| Measuring inputs                    | 3 X IEPE   |
| Accuracy                            | < 0.5 %  |
| Frequency range                     | 10 Hz ... 5.6 kHz  |
| Sampling rate                       | 25 kHz   |
| Suitable sensors (order separately) | All acceleration sensors with IEPE-interface                   |
| Conformity                          | CE   |

| <b>Use for collision monitoring purposes</b> |   |
|--|---|
| Interface                                    | 10/100 Base T Ethernet  |
| Input signals                                | 3 input signals   |
| Output signals                               | 4 output signals  |
| Notice                                       | Note that only acceleration values are measured when the VM-02 module is used for collision monitoring. |
| Inputs                                       |   |
| 1-signal source:                             | 8 V – 36 V / 5 mA   |
| 0-signal source:                             | 0 V – 7 V / 5 mA  |
| 1-signal sink:                               | 0 V – 19 V / 5 mA   |
| 0-signal sink:                               | 20 V – 36 V / 5 mA  |
| Outputs                                      |   |
| 1-signal source:                             | 24 V typical, max. 100 mA   |
| 0-signal source:                             | open  |
| 1-signal sink:                               | 0 V – 1 V   |
| 0-signal sink:                               | open  |

| <b>Operation with GENIOR MODULAR</b> |               |
|--------------------------------------|---------------|
| Interface                            | ARTIS CAN bus |



[www.marposs.com](http://www.marposs.com)

For a full list of address locations, please consult the Marposs official website

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