



FlexInterlock-M

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BENEFITS

- HV interlock generation for test benches
- Integrated evaluation unit for interlock
- redundant switch contacts

HV INTERLOCK GENERATOR AND EVALUATION UNIT

FlexInterlock-M is a module for the use in test benches which emulates an HV interlock's functionality according to an HV battery by generating and evaluating an HV interlock signal. Several redundant switch contacts and LEDs are provided to signalize whether the HV interlock was or was not detected.

FUNCTION GENERATION AND EVALUATION

Via a push-pull output stage, the generator module produces a PWM signal with a frequency of 88 Hz, a duty cycle of 50% and a voltage spike of 0V to 12V (KL30). The hereby resulting alternating signal current has a value of 20mA (10mA or 30mA available on demand). The module has two potential-free switching contacts and two digital high-side-switching outputs for signaling the interlock status. In addition, two redundant semiconductor relays are shored which interject the interlock if the device is not powered.

FlexInterlock-M

CHARACTERISTICS

- Emulation of an HV interlock's functionality for the use in test benches
- Generation of an interlock signal (signal current 20 mA)
- Several redundant switch contacts and LEDs to signalize the interlock status
- If desired, the interlock generator can be switched on and off via a KL.15-Signal.

FIELDS OF APPLICATION

- Test benches/hardware in-the-loop
- Error diagnostics in HV interlock circuits
- End-of-line tests
- Prototypical HV components

ORDER NUMBERS

70007443

PRODUCT-SPECIFIC VERSIONS

- On demand: 10 mA/30 mA interlock signal current
- Alternatively: available version only as interlock signal generator (Order number 70007486 without evaluation unit)

ACCESSORIES (OPTIONAL)

- On demand: Connector cable with customer-specific plug connectors

DELIVERY PACKAGE

- FlexInterlock-M
- Connector cable (MQS on banana jacks)
- Manual

TECHNICAL DATA

	FlexInterlock-M
Supply voltage	+9 VDC to +16 VDC
Supply current	150 mA (max)
Operating temperature	0 °C to 75 °C
Frequency interlock signal	88 Hz (+/- 2%)
Duty cycle interlock signal	50 % (+/- 2%)
Flanks interlock signal	0.01 V/us to 0.1 V/us
Signal current	20 mA (10 mA/30 mA on demand)
Casing/Protection class	107 x 109 x 34 mm/IP 41
Weight	App. 250 g

CAPACITY SWITCH CONTACTS

	FlexInterlock-M
High side switch	36 V (absolute maximum)
High side switch	200 mA (absolute maximum)*
Potential-free switch contacts	45 V (absolute maximum)
Potential-free switch contacts	50 mA*

*safeguarded through resettable semiconductor fuse