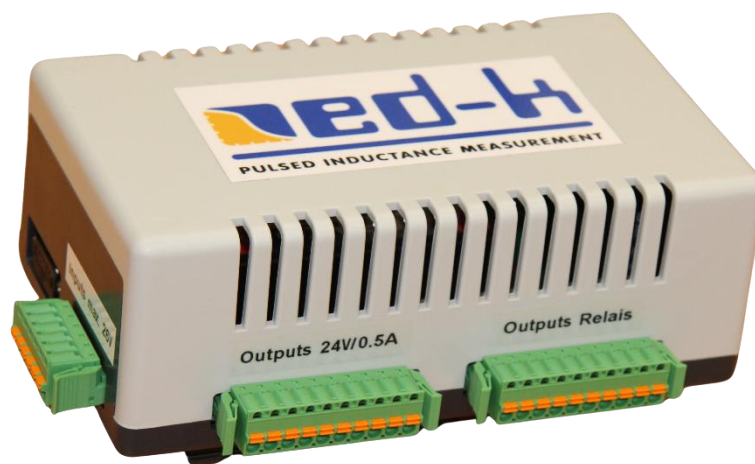

INTERFACEBOX INT1 FOR POWER CHOKE TESTER DPG SERIES

Description and Technical Data



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Description

The InterfaceBox INT1 is a separate IO unit to enable our PC software to work with a partially or fully automated production line.

The InterfaceBox INT1 has 5 universally configurable discrete outputs (24VDC/0.5A and potential-free relay contact) and 3 universally configurable discrete inputs (potential-free switch or 5-26VDC).

Outputs

Each output can be assigned to a specific function. Currently 4 functions are defined.

Function	Description
TestInProgress	Active as long as a measurement is in progress
LimitTestFailed	Active if the limit curve test was not passed
ReadyForMeasurement	Active when the DPG is ready to start a new measurement
MeasurementFinished	Active after a measurement has been completed
Unused	Output is not used

This can trigger certain functions of the production line or signal the status of the DPG measuring device, e.g., ejecting a good test item, ejecting a bad test item, inserting a new test item, switching on a warning lamp or a horn, DPG is ready for the next measurement, etc.

Each output can be assigned a delay time until activation and a time period for activation.

Inputs

The inputs can also be assigned to specific functions.

Function	Description
StartMeasurement	Start new measurement by an external signal, e.g. foot switch
HaltMode	Measurement in progress will be completed, new measurements are blocked
Unused	Input is not used

This allows the PLC of the production line to trigger certain functions, e.g. starting a new measurement, blocking further measurements. In a semi-automatic production line, for example, a foot switch could be connected to start a new measurement.

Each input can be assigned a separate delay time until the function is activated. During this time, the input signal must remain active so that the assigned function is triggered.

Connections

The connection to the PC is made via a proprietary USB to D-Sub-9 adapter. Plugs with spring terminals are available for connecting the discrete inputs and outputs.

Configuration

The inputs and outputs are easily configured in the settings dialog of the DPG10 main application.

Technical Data

Electrical properties of the inputs (J4)

Pin	Name	Specification
1	+24V	Internal pull-up resistor 10k Ω to 24V
2	TTL5	Input active: 5-26V, input inactive: 0-2V, $R_{in} > 22k\Omega$
3	+24V	Internal pull-up resistor 10k Ω to 24V
4	TTL6	Input active: 5-26V, input inactive: 0-2V, $R_{in} > 22k\Omega$
5	+24V	Internal pull-up resistor 10k Ω to 24V
6	TTL7	Input active: 5-26V, input inactive: 0-2V, $R_{in} > 22k\Omega$

If a potential-free switch is connected, it must be connected to pins 1 and 2 or 3 and 4 or 5 and 6. The common signal ground GND for the inputs has to be tapped at J2.

Electrical properties of the 24V outputs (J2)

Pin	Name	Specification
1	TTL0	+24VDC +/- 4%, max. 0.5A
2	GND	0V (common signal ground)
3	TTL1	+24VDC +/- 4%, max. 0.5A
4	GND	0V (common signal ground)
5	TTL2	+24VDC +/- 4%, max. 0.5A
6	GND	0V (common signal ground)
7	TTL3	+24VDC +/- 4%, max. 0.5A
8	GND	0V (common signal ground)
9	TTL4	+24VDC +/- 4%, max. 0.5A
10	GND	0V (common signal ground)

The total current of all outputs must not exceed 1.5A! The outputs are short-circuit proof and equipped with temperature protection.

Electrical properties of the relay outputs (J3)

Pin	Name	Specification
1	TTL0_a	potential-free NO contact, 250VAC/8A or 30VDC/5A
2	TTL0_b	
3	TTL1_a	potential-free NO contact, 250VAC/8A or 30VDC/5A
4	TTL1_b	
5	TTL2_a	potential-free NO contact, 250VAC/8A or 30VDC/5A
6	TTL2_b	
7	TTL3_a	potential-free NO contact, 250VAC/8A or 30VDC/5A
8	TTL3_b	
9	TTL4_a	potential-free NO contact, 250VAC/8A or 30VDC/5A
10	TTL4_b	