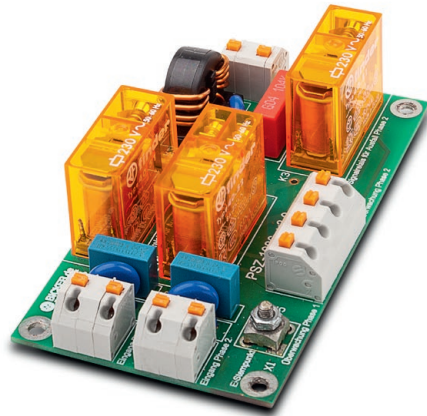


# PSZ-1086

## Phases redundancy module

- ✓ Potential-free monitoring contacts
- ✓ Phase monitoring
- ✓ Outage reliability
- ✓ Maximal in-out-current: 1.74 A ( $U_{in} = 230V$ )
- ✓ Input-output-voltage range: 184...250 V AC
- ✓ For 230 V systems



### Technical data

#### Input Data

Input voltage nominal	AC 230V <sub>rms</sub>
Input voltage range AC	184...250V <sub>rms</sub>
Maximal input current (RMS)	1.74 A ( $U_{in} = 230V$ )

#### Output Data

Output voltage nominal AC	230V <sub>rms</sub>
Output voltage range AC	184...250V <sub>rms</sub>
Maximal output current (RMS)	1.74 A ( $U_{in} = 230V$ )
Maximal effective output power AC1	400 W
Switch over time Phase 2 outage	≤25 ms ( $P_{out\_max}$ )
Switch over time Phase 2 recovery	≤10 ms ( $P_{out\_max}$ )

#### Monitoring Signal Data

Maximal voltage AC	250 V AC
Maximal current AC	8 A
Maximal voltage DC	30 V / 110 V / 220 V
Maximal current DC	10 A / 0.3 A / 0.12 A
Bounce time closing make contact	2 ms
Bounce time closing brake contact	5 ms

#### Input Terminal Data

Type of connection	Spring contact
Conductor cross-section rigid	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel with ferrule	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Stripping length	7 mm
Contact resistance	20 mΩ

#### Output Terminal Data

Type of connection	Spring contact
Conductor cross-section rigid	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel with ferrule	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Stripping length	7 mm
Contact resistance	20 mΩ

## Monitoring Terminal Data

Type of connection	Spring contact
Conductor cross-section rigid	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Conductor cross-section flexibel with ferrule	0.05 mm <sup>2</sup> ...1.31 mm <sup>2</sup> (30...16 AWG)
Stripping length	7 mm
Contact resistance	20 mΩ

## Environmental Conditions

Temperature	Operating: -30 °C...+85 °C Storage: -30 °C...+85 °C
Humidity	Operating: 10...85% RH, non-condensing Storage: 10...90% RH, non-condensing
Climate Class	3k3
Max. operation altitude	≤4000 m

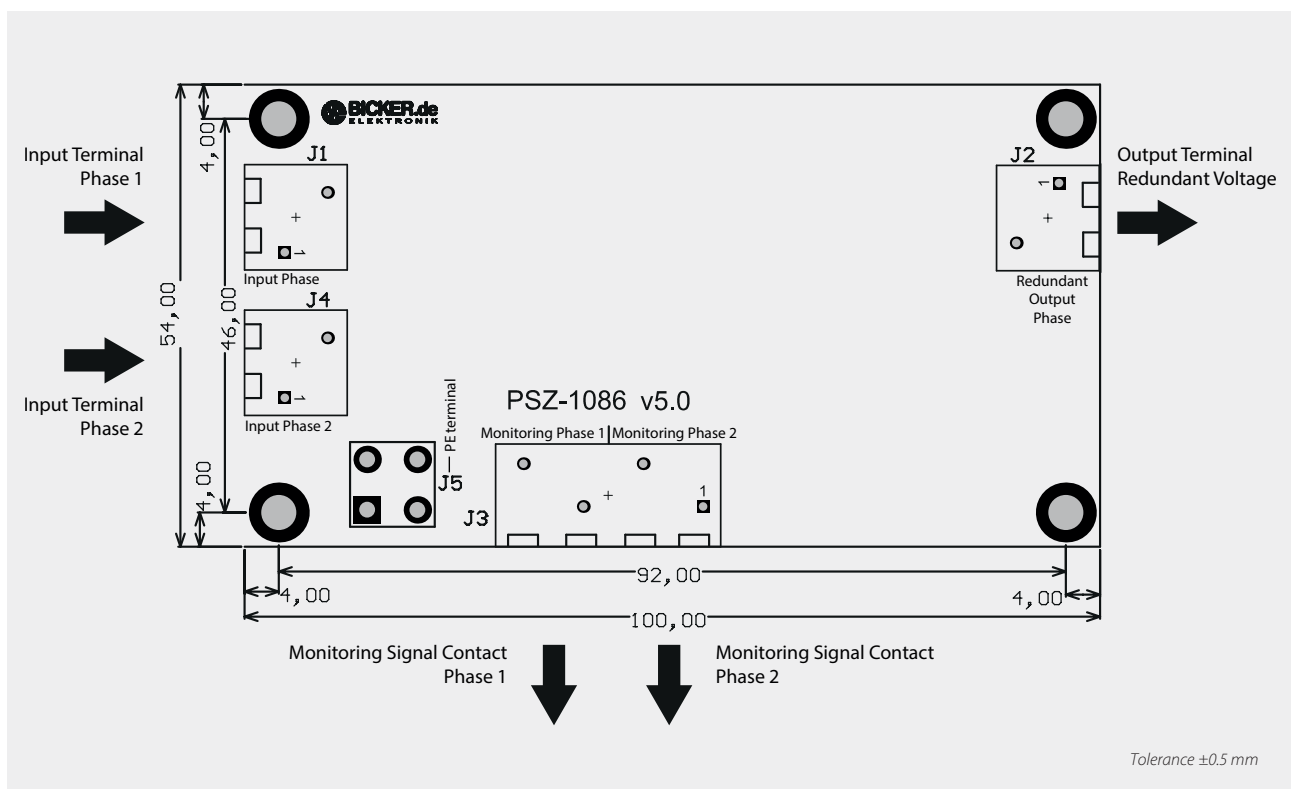
## General Data

Dimensions (W x D x H)	100 x 54 x 26,5 mm ±0.5 mm
Weight	94 g

## FUNCTION DESCRIPTION

Connect two different phase conductor with the neutral conductor to the input terminals J1 and J4 (e.g. J1 >> L1+N and J4 >> L2+N). During normal operation the phase conductor connected to J4 (= Input terminal Phase 2) will be passed through to the output terminal J2 (= Output terminal redundant voltage). In case that one phase conductor falls out, the opposite phase conductor takes over. The potential-free state signals of the two phase conductors are connected to the monitoring signal terminal block J3. The contacts J3.1 and J3.2 report the state of the phase conductor connected to J4 (Input terminal Phase 2). They represent the monitoring contacts for phase 2. The contacts J3.3 and J3.4 report the state of the phase conductor connected to J1 (Input terminal Phase 1). They represent the monitoring contacts for phase 1. The related logic table is content of this datasheet. The terminal J5 is intended for connecting the PE conductor.

## Mechanical Dimensions PSZ-1086



## MONITORING CONTACTS LOGIC TABLE

	Monitoring signal contact Phase 2	Monitoring signal contact Phase 1	Voltage redundant output
Input Phase 1 = 230V Input Phase 2 = 230V	0.1 $\Omega$ (Contact closed)	0.1 $\Omega$ (Contact closed)	230 V
Input Phase 1 = 230V Input Phase 2 = 0 V	> 40 M $\Omega$ (Contact open)	0.1 $\Omega$ (Contact closed)	230 V
Input Phase 1 = 0 V Input Phase 2 = 230 V	0.1 $\Omega$ (Contact closed)	> 40 M $\Omega$ (Contact open)	230 V
Input Phase 1 = 0 V Input Phase 2 = 0 V	> 40 M $\Omega$ (Contact open)	> 40 M $\Omega$ (Contact open)	0 V