

# ZTSN-... TRANSFORMER UNITS OF NORMAL DESIGN

## APPLICATION AREA

ZTSN-... transformer units of normal design are suitable for local protection and for supplying lighting circuits and other loads with voltages of 133V, 230V or 400V. These devices are designed for operation with connection to three-phase electric power networks with insulated neutral point of the supply transformer, with the rated voltage of 500 V and furnished with central protection against leakages.

## APPLICATION CONDITIONS

The device is suitable for working areas of underground operations without the hazard of methane explosion and the ones with the 'a' degree of methane explosion hazard as well as with the 'A' class of coal dust explosion hazard.



## CONFORMITY WITH STANDARDS

ZTSN-... transformer units of normal design are manufactured in line with rules of good engineering practice in the field of occupational safety as well as current state-of-art in technical expertise with consideration to applicable technical standards and the 2014/35/UE Low Voltage Directive.

## MARKING CODE

ZTSN - 2 32 / 5 - N

### Secondary side network voltage

- 1 – 3 x 133V, 50Hz
- 2 – 3 x 230V, 50Hz
- 4 – 3 x 400V, 50Hz

### Transformer power voltage

- 15 – 1,5 kVA;
- 25 – 2,5 kVA;
- 32 – 3,2 kVA;
- 63 – 6,3 kVA;
- 100 – 10,0 kVA

### Number of outlets

- 1 – one outlet
- 2 – two outlets
- ...
- 10 – ten outlets

### Manufacturing option

- None – enclosure of carbon steel sheets and coated with RAL 7032 paint
- N – enclosure made of stainless steel

## TECHNICAL PARAMETERS

<b>Power supply voltage:</b>	3 x 500 VAC
<b>Output voltage</b>	3 x 133 VAC, or
	3 x 130 VAC, or
	3 x 400 VAC
<b>Number of outlets</b>	1 ÷ 10
<b>Type of electric network:</b>	IT
<b>Index of protection:</b>	IP 54
<b>Resistance threshold for tripping of the central leakage protection</b>	15 kΩ ± 20% @ 400V
	7 kΩ ± 20% @ 230V
	7 kΩ ± 20% @ 230V
<b>Resistance threshold for tripping and reclosure of the interlocking leakage protection</b>	R <sub>trip</sub> : 25 kΩ ± 20% @ 400 V
	R <sub>trip</sub> : 15 kΩ ± 20% @ 230 V
	R <sub>trip</sub> : 15 kΩ ± 20% @ 230 V
	R <sub>rec</sub> : < 1.5 R <sub>trip</sub>
<b>Monitoring of the safety (earthing) circuit continuity for the output (secondary side) network</b>	R <sub>trip</sub> : 80 Ω ± 20%
	R <sub>rec</sub> : = 60 Ω ± 20%