

Description
Provide extra safety low voltage
8, 12, 24V~.

Technical data
Secondary voltages:
8, 12, 24V~
Bell transformers are short-
circuit protected.
Bells/buzzers:
Max. continuous duty \leq 30
minutes.

Connection capacity
6 mm² rigid wire
4 mm² flexible wire
Cable clamp type

Sound level
Bells: 85 dBA
Buzzers: 78 dBA

When a bell transformer is
installed in an enclosure with
mains voltage equipment, 230V

cable should be used on the
secondary side of the
transformer or extra low voltage
cable should be sheathed within
the enclosure.

Note
The transformers have a higher
no load voltage. The stated
voltages correspond to the
voltages on nominal load.

Description	Characteristics	Width in I 17.5mm	Pack qty.	Cat. ref.
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ST313

Safety transformers	16VA 50/60Hz	4	1	ST313
	230V 12-24V~ 50/60Hz	4	1	ST312
	40VA 50/60Hz	4	1	ST314
	63VA 50/60Hz	6	2	ST315



ST301

Bell transformers	230V/8-12V~ 50/60Hz 4VA - 8-12V : 0.33A	2	6	ST301
	230V/8-12V~ 50/60Hz 8VA - 8V : 1A 12V : 0.67A	2	6	ST303
	230V/8-12V~ 50/60Hz 16VA - 8V : 2A 12V : 1.33A 24V : 0.67A	3	1	ST305



SU212

Bells	8/12V~			
	5VA - 0.33A	1	12	SU212
	230V~ 6.5VA - 0.03A	1	12	SU213



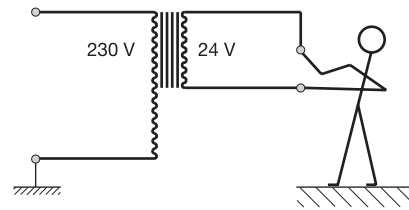
SU214

Buzzers	8/12V~			
	4VA - 0.35A	1	12	SU214
	230V~ 6.5VA - 0.03A	1	12	SU215



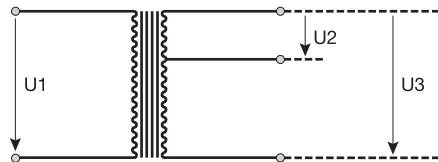
Safety transformers

These transformers are designed to ensure personal safety, their primary winding are electrically separated from their secondary windings and they are intended to feed safety extra low voltage circuits $U \leq 50V$. A thermal overload, in the primary windings, ensures that if a short circuit or an overload occurs in the output it will not damage the device.



Bell transformers

Bell transformers are similar to safety transformers but the secondary voltages do not exceed 24 volts, they are also similarly protected against short circuits and overloads, by thermal protection in the primary winding.



Compliance with the standards

The bell and safety transformers comply with EN 60742 (BS 3535).

Technical specification

reference	ST301	ST303	ST305	ST312	ST313	ST314	ST315
nominal power	4VA	8VA	16VA	25VA	16VA	40VA	60VA
designation	bell	bell	bell	safety	safety	safety	safety
primary voltage	230 volts	230 volts	230 volts	230 volts	230 volts	230 volts	230 volts
secondary voltage	U_2	12 volts $I_n = 0.33A$	8 volts $I_n = 1A$	8 volts $I_n = 2A$	12 volts $I_n = 2.08A$	12 volts $I_n = 1.33A$	12 volts $I_n = 5.25A$
	U_3	12 volts $I_n = 0.5A$	12 volts $I_n = 0.67A$	12 volts $I_n = 1.33A$	24 volts $I_n = 1.04A$	24 volts $I_n = 0.67A$	24 volts $I_n = 2.63A$
no load secondary voltage	U_2	12 volts	15 volts	12.4 volts	19 volts	15.5 volts	13.6 volts
	U_3	18 volts	21.8 volts	18.5 volts	29 volts	29.7 volts	27 volts
galvanic insulation	4kV	4kV	4kV	4kV	4kV	4kV	4kV
max functional temperature	35°C	35°C	35°C	35°C	35°C	35°C	35°C
overload and S/C protection	thermal cut out in the primary winding						

Number of products that can be operated simultaneously by a transformer

transformer	reference	ST301		ST303		ST305		ST312		ST313		ST314		ST315	
		8V	12V	8V	12V	8V	12V	12V	24V	12V	24V	12V	24V	12V	24V
power		4	4	8	8	16	16	25	25	16	16	40	40	63	63
bell	SU212 8/12V	1	1	3	2	5	3	-	-	-	-	-	-	-	-
buzzer	SU214 8/12V	1	1	3	2	5	3	-	-	-	-	-	-	-	-
relays	ER124 12V	-	-	-	-	-	-	4	-	2	-	7	-	8	-
	ER139 12V	-	-	-	-	-	-	2	-	1	-	3	-	4	-
	ER123 24V	-	-	-	-	-	-	-	2	-	2	-	7	-	8
	ER138 24V	-	-	-	-	-	-	-	2	-	1	-	3	-	4
contactors	ES224 24V	-	-	-	-	-	-	5	-	3	-	11	-	12	-
	ES424 24V	-	-	-	-	-	-	3	-	2	-	7	-	8	-
latching relays	EPN519 12V	-	-	-	1	-	2	3	-	2	-	4	-	4	-
	EPN513 24V	-	-	-	-	-	-	-	2	-	2	-	3	-	3
	EPN518 24V	-	-	-	-	-	-	4	-	3	-	7	-	8	-
	EPN525 24V	-	-	-	-	-	-	4	-	3	-	4	-	6	-
	EPN528 24V	-	-	-	-	-	-	-	2	-	1	-	3	-	4
	EPN541 24V	-	-	-	-	-	-	-	2	-	1	-	3	-	4