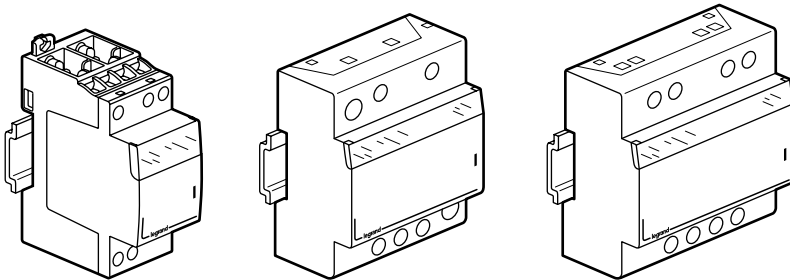


Modular safety isolating and bell transformers

Cat.Nos: 4 130 90/91/92/93
4 130 95/96/97/98



1. USE

1.1 Safety isolating transformer

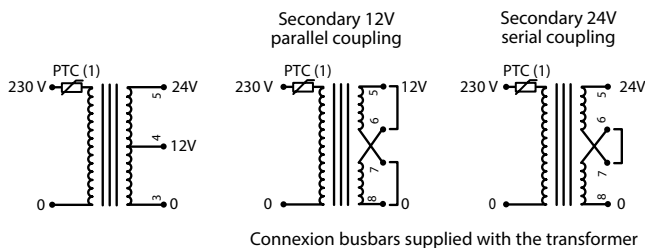
They are designed to protect people from electric shocks by using extra low voltage (ELV $U_{sec} \leq 50V$).

It powers up to 12 or 24V devices such as:

- relay;
- modular power contactor;
- signaling unit;
- latching relay;
- ...

Cat.Nos 4 130 95/4 130 96

Cat.Nos 4 130 97/4 130 98



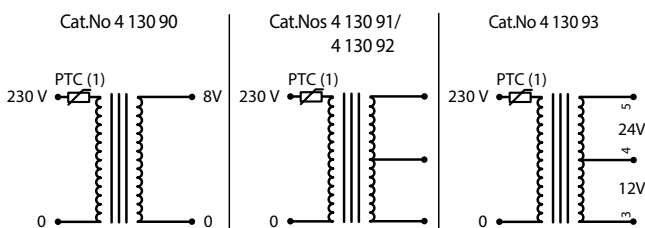
(1) PTC: refer to section 3.3

1.2 Bell transformer

It is a safety isolating transformer with secondary voltage not exceeding 24V and for a non permanent use.

It powers up to 8V-12V or 24V access control devices such as:

- bell;
- chime;
- door release;
- optical/electrical barrier;
- flood detector;
- temperature rise detector;
- ...



(1) PTC: refer to section 3.3

2. RANGE

2.1 Safety isolating transformer

Primary 230 V, secondary 12 V/24 V.

Cat.Nos	Number of modules	Rating (VA)
4 130 95	4	16
4 130 96	4	25
4 130 97	5	40
4 130 98	5	63

2.2 Bell transformer

Primary 230 V.

Cat.Nos	Number of modules	Secondary voltage (V)	Current (A)	Rating (VA)
4 130 90	2	8	0.5	4
4 130 91	2	8/12	1/0.66	8
4 130 92	4	8/12	3/2	24
4 130 93	4	12/24	1.5/1	18/24

3. TECHNICAL AND ELECTRICAL CHARACTERISTICS

3.1 General

- Single phase 50/60 Hz;
- Input voltage 230 V;
- Protected against involuntary or accidental contact with live parts (IPxxB);
- Class II under faceplate in distribution board;
- AC primary and secondary voltages.

3.2 Safety isolating transformer

Cat.Nos	Rating (VA)	No load losses (W)	Voltage drop (%) $\cos \varphi = 1$	Efficiency $\cos \varphi = 1$	Ucc %	Loaded primary current (A)
4 130 95	16	2.5	34.6	0.60	27.5	0.10
4 130 96	25	2.5	29	0.66	23.3	0.14
4 130 97	40	4	17.9	0.68	14.4	0.22
4 130 98	63	4	15.7	0.75	13.6	0.33


3. TECHNICAL AND ELECTRICAL CHARACTERISTICS (continued)

3.3 Protection of transformers

The transformers are protected against overloads and short-circuits by built-in PTC probe (Positive Coefficient of Temperature) into primary winding.

In the event of an overload, it switches off the power supply and allow the transformer to cool down before switching on again.

3.4 Heating value (Mega Joule)

Safety isolating transformer 

Cat.Nos	4 130 95	4 130 96	4 130 97	4 130 98
H. value (MJ)	12.2	12.2	14.6	15.5

Bell transformer 

Cat.Nos	4 130 90	4 130 91	4 130 92	4 130 93
H. value (MJ)	5.6	6.3	11.3	11.4

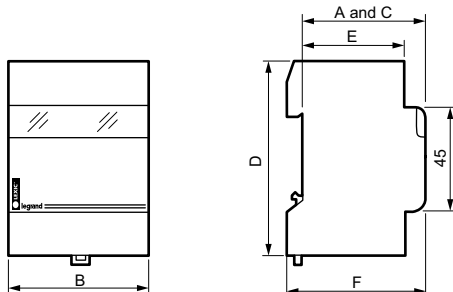
3.5 Material characteristics



- Mineral added 6/6 polyamid casing;
- Transparent polycarbonate label holder;
- Polyamide or polyacetal clamp.

4. FIXING AND DIMENSIONS



- Wall or rail DIN \sqcup 7.5 or 15 mm* depth for 4 modules units.
- Only rail DIN \sqcup 7.5 or 15 mm* depth for 2 and 5 modules units.

(*) Unclippable with tool



Cat.Nos		Dimensions (mm)					
		A	B	C	D	E	F
4 130 90		60	36	60	84	44	66
4 130 91		60	36	60	84	44	66
4 130 92		60	72	60	84	44	66
4 130 93		60	72	60	84	44	66
4 130 95		60	72	60	84	44	66
4 130 96		60	72	60	84	44	66
4 130 97		60	89	60	95	44	66
4 130 98		60	89	60	95	44	66

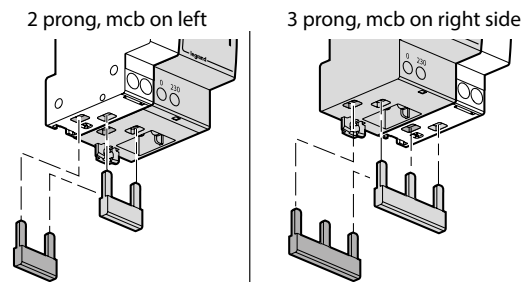
5. CONNECTIONS

Product	Primary flexible or rigid	Secondary flexible or rigid
Safety isolating transformer 	1 to 4 mm ²	1 to 4 mm ²
Bell transformer 		

For models Cat.Nos 4 130 90 and 4 130 91 (2 modules):

For these 2 products it is possible for a supply busbar to run through on upper side of the device.

On lower side, they allow the supply of primary terminals straight from a protective device using single phase and neutral comb prong:



6. MARKING


The information printed on the front panel by pad printing guarantees excellent durability:

- Reference number;
- Primary and secondary voltage;
- Ratings → safety isolating transformers;
- Secondary currents → bell transformers;
- Conformity to standards;
- Connection diagram (depending on model);
- Type (bell or safety);
- Terminal identification (depending on model).

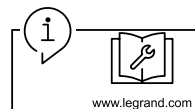
The transformers are fitted with a label holder that accepts all types of labels from the modular range.

7. CONFORMITY

Legrand Modular safety isolating and bell transformers are compliant with:

- Safety Isolating transformer EN 61558-2-6 agreement.
- Bell transformer EN 61558-2-8 agreement.
- French regulations ERP (buildings receiving general public) and IGH (high rise buildings).
-  Marking.

8. OTHER INFORMATION



For further technical information, please contact Legrand technical support.

Unless otherwise indicated, data reported in this document refers exclusively to test conditions according to product standards.

For different conditions of use of the product, inside electrical equipment or in any different installation context, refer to the regulatory requirements of the equipment, local regulations and design specifications of the system.