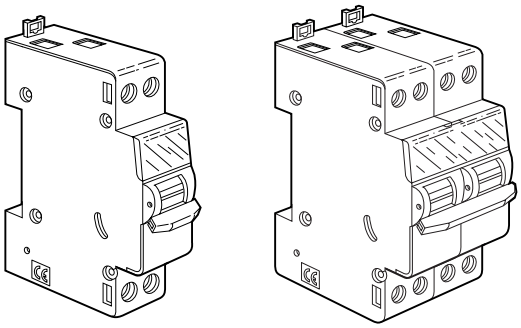
87045 LIMOGES Cedex
Telephone: +33(0)5 55 06 87 87 - Fax: +33(0)5 55 06 88 88

CX³ Two-way changeover switches

Catalogue number(s): 4 129 00 - 4 129 01 - 4 129 02 - 4 129 03 - 4 129 04



CONTENTS Page

1. Description - Use 1
2. Range 1
3. Overall dimensions 1
4. Preparation - Connection 1
5. General characteristics 2
6. Compliance and approvals 3
7. Equipment and accessories 3

1. DESCRIPTION - USE

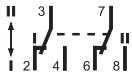
Changeover switch used to switch one or several circuits.

2. RANGE

4 129 00: Two-way switch, 250 V~ - 1 mod

32 A 

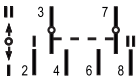
4 129 01 : Double two-way switch, 400 V~ - 2 mod

32 A 

4 129 02: Two-way switch with centre-point, 250 V~ - 1 mod

32 A 

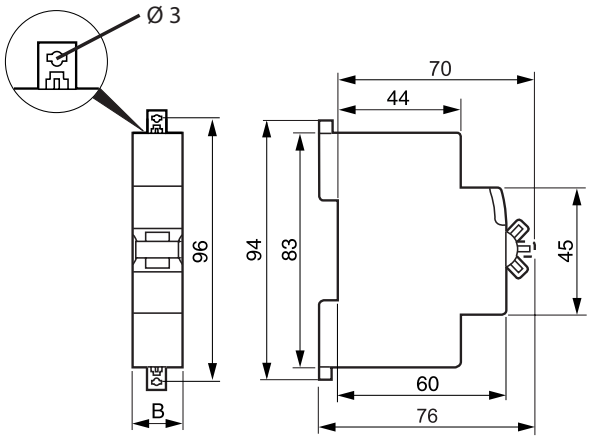
4 129 03: Double two-way switch with centre-point, 400 V~ - 2 mod

32 A 

4 129 04: NO + NC switch, 250 V~ - 1 mod

32 A 

3. OVERALL DIMENSIONS



	B
4 129 00/02/04	17.7
4 129 01/03	35.6

4. PREPARATION - CONNECTION

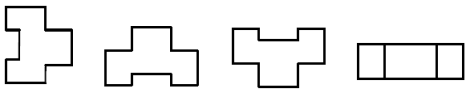
Mounting

. On EN 60715 or DIN 35 symmetrical rail

. With Ø 3 screws on plate using ends of released claws

Operating positions

. Vertical Horizontal Upside down On the side



Power supply

. **4 129 00/01/02**: via the top

. **4 129 03**: via the top (possibly via the bottom in specific cases)

. **4 129 04**: via either the top or bottom

Module maintenance

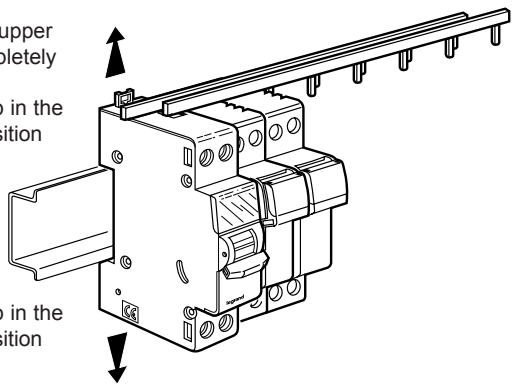
A changeover switch with 1/2 module per pole can be replaced in the middle of a row of supply busbars without disconnecting the other products. This method is valid for single-pole and double-pole switches.

. 4 129 00/02 :

Terminal alignment and spacing allows connection via a busbar with other products in the range.

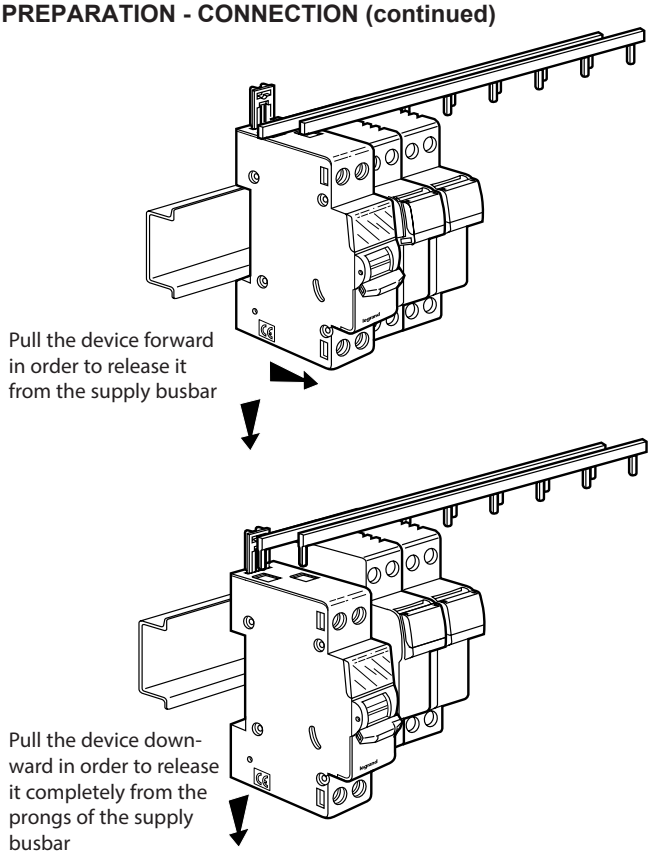
Unscrew the upper terminal completely

Put the clamp in the unlocking position



Put the clamp in the unlocking position

4. PREPARATION - CONNECTION (continued)



Connection

. Terminals protected against direct finger contact IP20, with device wired

. Cage terminals with quick release captive screws

. Terminals fitted with flaps preventing a cable being placed under the terminal, with the terminal partly open or closed

. Terminal alignment and spacing allows connection via prong-type supply busbars with other products in the range except for Cat. No. 4 129 04.

. Terminal depth: 14 mm

. Screw head: combined Pozidriv

. Tightening torques:

Min.	0.8 Nm
Max.	1.8 Nm
Recommended	1.2 Nm

Type of conductor

Flexible with cable ends	1.5 to 6 mm²
Rigid	1.5 to 6 mm²

Recommended tools

Flat screwdriver	Ø 4 mm
Pozidriv screwdriver	PZ 1

Manual actuation of the device

. 4 129 00/01/04:

. Via 2-position handle: I - II

. 4 129 02/03:

. Via 3-position handle: I - 0 - II

4. PREPARATION - CONNECTION (continued)

Contact status display

. By marking on the handle

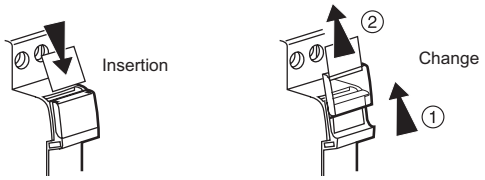
Padlocking

. Possible for preventing switching

. Not possible for safety maintenance

Labelling

. Circuit identification by way of a label inserted in the label holder situated on the front of the product



5. GENERAL CHARACTERISTICS

Marking on the front

. By permanent pad printing

Marking on the top

. By permanent pad printing

Rated current

. 32 A: with resistive load

. 20 AX: with fluorescent load

Operating voltage

. Single pole: Ue = 250 V~

. Double pole: Ue = 400 V~

Overvoltage category

. 4 kV~

Rated frequency

. 50/60 Hz with standard tolerances

Short-circuit characteristics

According to IEC/EN 60947-3:

. Icw = 384 A

Dielectric strength

. Ui = 2 kV~

Utilisation category

. AC22: mixed loads

. A: frequent operations

5. GENERAL CHARACTERISTICS (continued)

Pollution degree

. 2

Dissipated power per pole

. 1.5 W

Protection index or class

. Terminals protected against direct contact, protection index against solid objects and liquids (wired device): IP20 in accordance with standards IEC/EN 60529 and NF 20-010

. Class II in relation to metal conductive parts

. Protection index against mechanical impacts IK04 in accordance with standard EN 62262

Plastic materials

. PC

. Zero-halogen plastic materials

Enclosure resistance to heat and fire

. Resistance to incandescent wire tests at 960°C, in accordance with standard IEC 60695-2-10 and 60695-2-11

Ambient temperatures

. Operation from -5°C to +40°C

. Storage from -10°C to +70°C

. The following climatic conditions can affect device performance: hot and dry; cold and dry; hot and humid; salt spray

Volume when packed

. Single pole:

  . packaging: by 10

  . volume: 1.6 dm^3

. Double pole:

  . packaging: by 5

  . volume: 1.6 dm^3

Average unit weight

. 1 module: 65 g

. 2 modules: 130 g

Distance between contacts Cat. No. 4 129 03

. The distance between the contacts allows two different power supplies to be used.

6. COMPLIANCE AND APPROVALS

Compliance with standards

. IEC/EN 60669-1

Respect for the environment - Compliance with European Union Directives

. Compliance with Directive 22002/95/EC of 27/01/03 known as “RoHS” which provides for a restriction on the use of hazardous substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) brominated flame retardants from 1st July 2006

. Compliance with Directive 91/338/EC of 18/06/91 and decree 94-647 of 27/07/04

Packaging

. Design and manufacture of packaging compliant with decree 98-638 of 20/07/98 and Directive 94/62/EC

Approvals obtained

. See list of available approvals

7. EQUIPMENT AND ACCESSORIES

Wiring accessories

. supply busbars

. incoming terminals

Installation software

. XL PRO³

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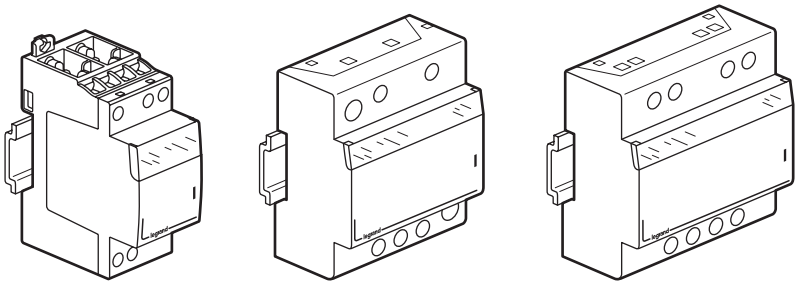
Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

Modular safety isolating and bell transformers

Cat number(s): 4 130 90/91/92/93
4 130 95/96/97/98



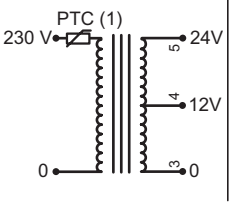
SUMMARY PAGES

1. Operating principle 1
2. General characteristics 1
3. Ranges ..... 1 to 2
4. Technical characteristics 2
5. Electrical characteristics 2
6. Miscellaneous 2

1. OPERATING PRINCIPLE

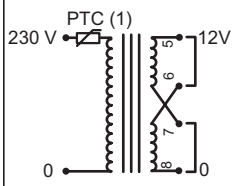
a. Safety isolating transformer: designed to protect people from electric shocks by using extra low voltage (ELV $U_{sec} \leq 50V$).
Power to 12 or 24V devices such as:
- relay
- modular power contactor
- signaling unit
- latching relay
- …

Cat number 4 130 95/96

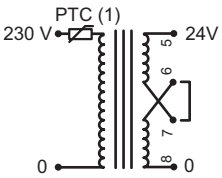


Cat number 4 130 97/98

Secondary 12V parallel coupling



Secondary 24V serial coupling

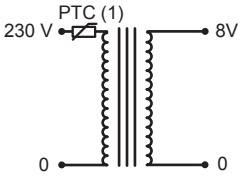


Connexion busbars supplied with the transformer

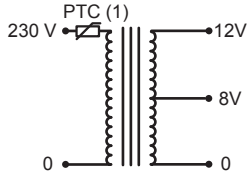
b. Bell transformer: safety isolating transformer with secondary voltage not permanently exceeding 24V and for a non permanent using.
Power to 8V-12V or 24V access control devices such as:
- bell
- chime
- door release
- optical/electrical barrier
- …

Also:
- flood detector
- temperature rise detector

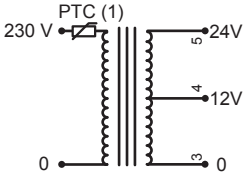
Cat.No 4 130 90



Cat.Nos 4 130 91/92



Cat.No 4 130 93



(1) PTC refer to general characteristics

2. GENERAL CHARACTERISTICS

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

2.1 Standards and Conformities

Safety Isolating transformer EN 61558-2-6 agrement
Bell transformer EN 61558-2-8 agrement
Comply with French regulations ERP (buildings receiving members of general public) and IGH (high rise buildings)
CE Marking

2.2 Protection of transformers

Protected against overloads and short-circuits by built-in PTC (Positive coefficient of temperature) into primary winding.
In the event of an overload, switch off power supply and allow the transformer to cool down before switching on again.

3. RANGES

3.1 Safety isolating transformer

Primary 230 V, secondary 12 V / 24 V.

Rating (VA)	Catalogue number	Number of modules
16	4 130 95	4
25	4 130 96	4
40	4 130 97	5
63	4 130 98	5

3.2 Bell transformer

Primary 230 V.

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

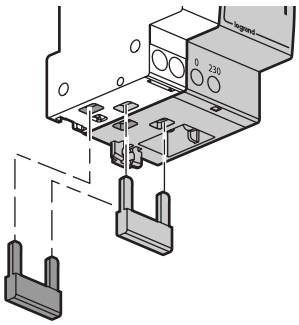
Technical data sheet: F01391EN/02 Updated on: 28/07/2017 Created on: 22/11/2011

Modular safety isolating and bell transformers

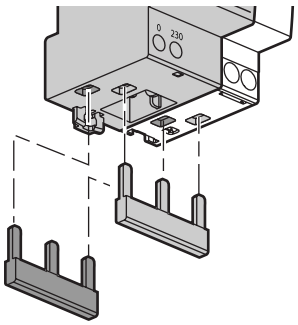
Cat number(s): 4 130 90/91/92/93
4 130 95/96/97/98

For models 4 130 90 – 4 130 91 (2 modules)
Possibility for supply busbar to run through on upper side of device.
On lower side, allow the supply of primary terminals straight from protective using single phase and neutral comb prong:

2 prong, mcb on left side



3 prong, mcb on right side



4. TECHNICAL CHARACTERISTICS

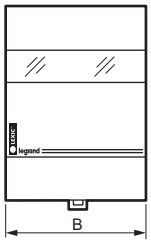
4.1 Identification

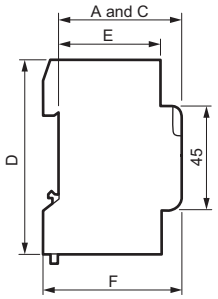
Excellent durability of data pad printed on front cover:
- reference number,
- primary and secondary voltages
- ratings => safety isolating transformers,
- secondary currents => bell transformers,
- conformity to standards,
- connection diagram (depending on model),
- type (bell or safety),
- terminal identification (depending on model).

4.2 Fixing/dimensions

Wall or rail din ⎍ 7.5 or 15 mm* depth for 4 module units.

Rail din ⎍ 7.5 or 15 mm* depth for 2 and 5 module units.





Cat number		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

(*) Unclipable with tool

4.3 Connection

	Primary flexible or rigid	Secondary flexible or rigid
🔔	1 to 4 mm²	1 to 4 mm²

4.4 Identification

Label holder on front cover. Suitable with any Lexic range label.

4.5 Materials

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

5. ELECTRICAL CHARACTERISTICS

Safety isolating transformer

Cat number	Rating (VA)	No load losses (w)	Voltage drop (%) cos φ = 1	Efficiency cos φ = 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

6. MISCELLANEOUS

Heating value (Mega Joule)

Bell transformer 🔔

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

Isolating safety transformer

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