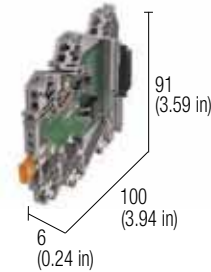
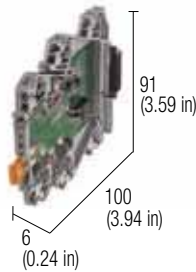


Solid state 12-24 Vdc single relay with fuse

- 5 A / 24 Vdc rated current
- Common negative or positive input
- Overload, short-circuit protected output with replaceable fuse
- Status LED display, reverse polarity protection
- 6 mm wide
- Plug-in jumper available

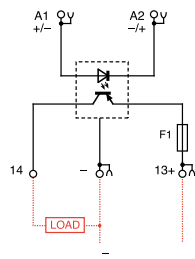


NOTES

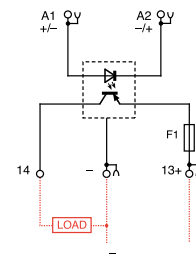
(1) The fast blow-out fuse is calibrated to protect the output stage of the module and it is connected in series to the positive pole; it is possible to replace the fuse with lower rated current values, selected to protect also the load and its wires; a fuse having a current rating higher than 5 A does not protect the output against short circuit and overloads.

(2) In order to assure the IP20 protection degree, the last module must be protected and insulated using the CK/PT end section.

BLOCK DIAGRAM



BLOCK DIAGRAM



VERSIONS

Pluggable relay —
Fixed relay —

Cat. No. XCKS15NA

—
CCKS15NA

Cat. No. XCKS15NB

—
CCKS15NB

INPUT TECHNICAL DATA

Input voltage
Level 1 (high) input signal
Level 0 (low) input signal
Rated current

4.5...12 Vdc
≥4.5 Vdc
≤4 Vdc
≤5 mA @ 12 Vdc

19...30 Vdc
≥ 20 Vdc
≤18 Vdc
≤ 5 mA @ 24 Vdc

OUTPUT TECHNICAL DATA

Output voltage
Continuous load current
Max. current
Min. applicable load
Leakage current 0 signal
Isolation between open contacts
Protection fuse (1)

5.2...60 Vdc, max. 100 V (peak)
5 A / 24 Vdc @ 25°C
7.5 A / 1 s, 25 A / 50 ms
5.2 V / 10 mA
25 µA @ 60 Vdc between 13 and 14
3 kVac / 60 s
F 5 A

5.2...60 Vdc, max. 100 V (peak)
5 A / 24 Vdc @ 25°C
7.5 A / 1 s, 25 A / 50 ms
5.2 V / 10 mA
25 µA @ 60 Vdc between 13 and 14
3 kVac / 60 s
F 5 A

GENERAL TECHNICAL DATA

Operating temperature
I/O isolation
Max. switching frequency
Protection degree
Reference Standard
Pollution degree
Overvoltage category
Connection terminals
Housing material
Approx. weight
Mounting information

-20...+60°C
3 kVac / 60 s
400 Hz max.
IP20 IEC529 EN60529
IEC 664-1, EN50081-1
2
II
2.5 mm² (AWG 14), AWG26-14 spring type
Polyamide UL94V-0
32 g (1.13 oz)
vertical on rail adjacent without gap

-20...+60°C
3 kVac / 60 s
400 Hz max.
IP20 IEC529 EN60529
IEC 664-1, EN50081-1
2
II
2.5 mm² (AWG 14), AWG26-14 spring type
Polyamide UL94V-0
32 g (1.13 oz)
vertical on rail adjacent without gap

MOUNTING ACCESSORIES

Mounting rail type according to IEC60715/TH35-7,5
Mounting rail type according to IEC60715/G32
Replacement relay (1)
Plug-in jumper —
Marking tags blank

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

—
—
Cat. No. PTCK42 (42 poles)
Cat. No. NU0851

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

—
—
Cat. No. PTCK42 (42 poles)
Cat. No. NU0851

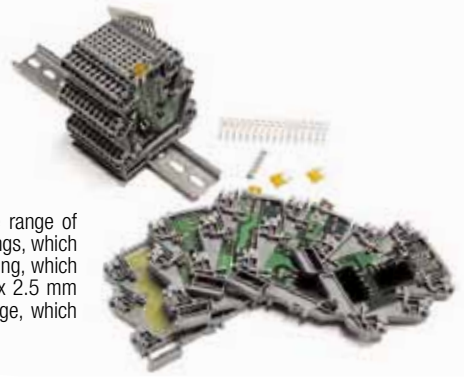
End plate

Cat. No. XCKPT

Cat. No. XCKPT

CK system interface

The series is a collection of interfaces for sensors and actuators, is composed by a wide range of electromechanical relay and solid state relay modules and passive interfaces in modular housings, which are only 6 mm wide thus saving valuable space. All products are mounted inside the CK housing, which is also available for use as a housing for custom. The CK housing can be equipped with six 2.5 mm spring-clamp terminals and four contacts for the insertion of a PTC parallel connection bridge, which provides for quick and easy circuit bridging and saves space and harness time.



The product range is currently composed by:

- Single electromechanical relay with 6 A/250 Vac SPDT protected with replaceable fuse, status Led display on front panel, AC/DC input and positive or negative common on relay coil.
- Double electromechanical relay with 5 A/250 Vac SPST (NO), two status LED displays on front panel, AC/DC input and positive or negative common on relay coil.
- Single solid state relay for common negative load, 5 A /48 Vdc output current, protected with replaceable fuse, status LED display on front panel and positive or negative common on input.
- Double solid state relay suitable for 12-24 Vdc 2.5 A loads, status LED display on front panel and positive or negative common of the input and output as well.
- Diode-holder modules with common anode (CK...AC) or common cathode (CK...CC).
- Lamp and LED test modules.
- Supply connection and distribution modules with LED display.

Composition of an interface with the CK System:

- The required modules must be selected and mounted on the DIN rail.
- The common poles of inputs and outputs can be connected in parallel using the fast connection bridges **PTC/CK/42**.
- For the connection of inputs and outputs of the relay module interface, we recommend to use the **CKF** supply distribution module: it allows to connect and distribute the feeding potential to inputs and outputs on all adjacent modules; the CKF module can be mounted as first module, or even better, in the middle position of the interfaces assembly, to divide 50+50% the current on the bridge and to reduce voltage drop and heating; the CKF- is available with LED for ON display, and is equipped with four 2.5 mm / AWG 26 ÷ 14 / 24 A rated spring-clamp terminals - input and output.
- In order to assure the IP XXB protection degree, the last module must be protected and insulated using the **CK/PT** end section.
- Main technical data and BLOCK DIAGRAM are printed on one side of each module; for individual terminal block marking, CNU/8 marking tags are available; CNU/8 marking tags are available in blank format for pen or plotter marking, or with the Cabur Jet marking printer.
- If the input and output power supply cables of the interface assembly are directly connected to eg. the first module, two cables must be connected on a single terminal block (feeding wire and load wire) forcing to reduce the cross-section of each conductor to less than 2,5 mm²; consequently, this means a current and a reduction of the total number of relay modules that can be fed; the problem can be solved by using the CKF feeder distribution module as described in the third point.

Easy Bridge system

The fast connection bridge **PTC/CK/42** has 42 poles, and a rated current of 32 A; WARNING: the total current is limited by the rated current of the spring-clamp terminal block (24 A): if a PTC/CK serves 10 relays, a rated current of 2,4 A can be distributed on to each relay.

The use of PTC/CK bridges is simple and cost effective; the following instructions must be followed:

- after having cut the PTC/CK/42-pole bar according to required number of poles, in order to maintain the IPXXB protection degree the bar must be sheared in proximity of the end poles (see pictures 1 and 2);
- insert the jumper in the slot of the CK terminals (see picture 3);
- by using the blade of a screwdriver, the PTC bridge must be pushed down until it snaps into the female contacts; in case of long jumpers, the operation shall be started by pushing the bridge in the middle, then gradually on left / right sides; the jumper will then result completely IPXXB insulated (see picture 4);
- to remove the jumper, the blade of a screwdriver shall be inserted into the slot provided in the upper side of the PTC bridge, then lifted up and finally extracted; in case of long jumpers, the bridge shall be lifted in the middle, then gradually on left / right sides (pictures 5 and 6).

