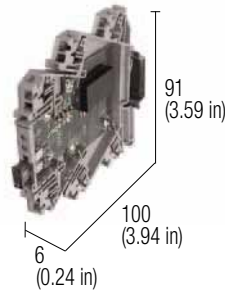


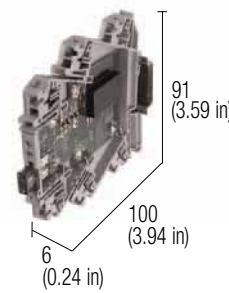
24 Vdc relay modules

CKR series

- Built-in replaceable contact protection fuse
- AC/DC common negative or positive input
- Status LED display, reverse polarity protection, crow-bar diode
- 6 mm wide
- Plug-in jumper available



CE

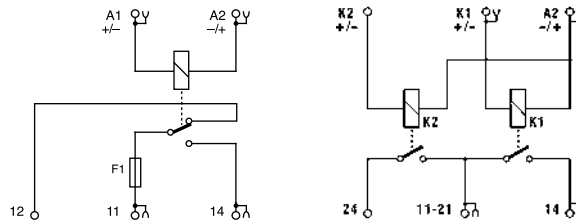


CE

NOTES

- (1) The contact rated voltage is 250 Vac; max operating voltage of the contact of the module is 50 Vac-Vdc, limited by the voltage ratings of the adopted type of fuse, which is rated for ≤ 50 Vac-75 Vdc SELV voltages; WARNING: if used with higher voltage, it does not guarantee breaking power and thus safety, and IP protection degree is lowered to IP 00; fuses with higher current ratings are not allowed and do not protect the contact against short circuit and overcurrents
- (2) Version available upon request.
- (3) In order to assure the IP20 protection degree, the last module must be protected and insulated using the CK/PT end section.

BLOCK DIAGRAM



VERSIONS

- 1 channel
- 2 channels

Cat. No. XCKR16

CKR16

Cat. No. XCKR25

CKR25

INPUT TECHNICAL DATA

- Rated voltage
- Rated current (1 channel)
- Turn ON time
- Turn OFF time
- Protection circuit

- 24 Vac/dc $\pm 10\%$
- ≤ 15 mA $\pm 10\%$ @ 24 Vdc
- 5 ms
- 10 ms
- bridge rectifier

- 24 Vac/dc $\pm 10\%$
- ≤ 13 mA $\pm 10\%$ @ 24 Vdc
- 5 ms
- 10 ms
- bridge rectifier

OUTPUT TECHNICAL DATA

- Type and number of contacts
- Nominal current (resistive load)
- Current breaking power
- Current of the fuse max.

- SPDT AgSnO₂
- 6 A / 250 Vac
- 30 A
-

- 2PST (NO) AgSnO₂
- 5 A / 250 Vac
- 30 A
-

GENERAL TECHNICAL DATA

- Operating temperature
- Coil/contact isolation
- Isolation between output terminals
- Protection degree
- Overvoltage category / pollution degree
- Reference Standard
- Status display
- Connection terminals
- Housing material
- Approx. weight
- Mounting information
- Mounting information

- 20...+60°C
- 3 kVdc / 60 s
- IP 20 IEC529, EN60529
- II / 2
- IEC 664-1, DIN VDE 0110.1
- green LED
- 2.5 mm² AWG26-14 fixed spring type
- polyamide UL94V-0
- 40 g (1.41 oz)
- vertical on rail adjacent without gap

- 20...+60°C
- 3 kVdc / 60 s
- IP 00 IEC529, EN60529
- II / 2
- IEC 664-1, DIN VDE 0110.1
- green LED
- 2.5 mm² AWG26-14 fixed spring type
- polyamide UL94V-0
- 43 g (1,52 oz)
- vertical on rail adjacent without gap

ACCESSOIRES DE MONTAGE

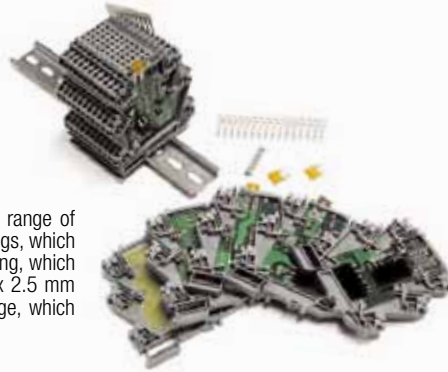
- Mounting rail type according to IEC60715/TH35
- Mounting rail type according to IEC60715/G32
- Replacement relay (1)
- Plug-in jumper —
- Marking tags blank
- End plate

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

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

