PCD7.L252 Coupling Module

Describtion

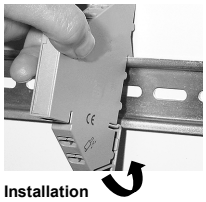
These one-stage coupling modules are used for safe potential separation between logic and load. They are provided with a manual control facility with feedback signal for the switch position and a LED for status indication.
These coupling modules are provided with spring clamp terminal blocks allowing easy and quick wire termination. No tool is required to terminate solid wires and stranded wires with end sleeves. And to terminate stranded wires without end sleeves just a screwdriver will do. The terminated wires are easy to release with a screwdriver.

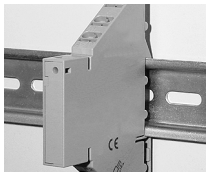
Technical Data

Input	
Operating voltage U_B	24 V AC/DC
Power consumption at U_B	ca. 13 mA
Operating voltage range	0.85 … 1.1×U_B
Protective circuitry	free wheeling diode
Indication of operating status	LED (green)
Response time	about 10 ms
Release time	about 5 ms
Switch	
breaking capacity max.	24 V / 50 mA AC/DC
breaking capacity min.	20 mV / 1 µA AC
mechanical endurance	5 × 10^2 switchings
test voltage	500 V, 50 Hz, 1 min.
Output	
Output material	1 changeover contact
Contact material	$AgSnO_2$
Switching voltage max.	250 V AC/DC
Making current	
(max. 4 s at 10 % ED)	8 A
Continous current	8 A
Breaking capacity	24 V DC / 180 W
(ohm resistive load)	50 V DC / 65 W
	230 V DC / 50 W
	250 V AC / 2000 VA
Breaking capacity min.	24 V DC/ 20 mA
Mecanical endurance	2 × 10^7 switching cycles
Electrical endurance	
at max. switching load	1 × 10^5 switching cycles
Switching frequency max.	
at max. current	300 switching cycles/h
Electric strength	
test voltage coil/contact	4000 V AC, 50 Hz, 1 min.
test voltage open contact	1000 V AC
Rated surge voltage Uimp	4000 V
Isolation per VDE 0110	
rated voltage	250 V
overvoltage category	III
pollution degree	2
Temperature Range	
Operating temperature range	–20 °C … +55 °C
Storage temperature range	–25 °C … +70 °C
Housing	
Type of protection (EN 60 529)	IP20
Material	polyamide 6.6 V0
Wire cross section	
solid wire	0.08 … 2.5 mm²
stranded wire without end sleeve	0.08 … 2.5 mm²
stranded wire with end sleeve	0.08 … 1.5 mm²
Dimensions WxHxL	11.2 × 88 × 60 mm
Weight	43 g
Mounting position	any
Mounting	standard rail TH35 per IEC 60715

Mounting

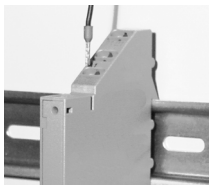
On standard rail TH35 per IEC 60715 (35 × 7.5 mm), in junction boxes And/or distribution panels.

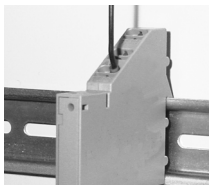




Installation
Electric installation and device termination shall be done by qualified persons only, by respecting the VDE specifications and local regulations.

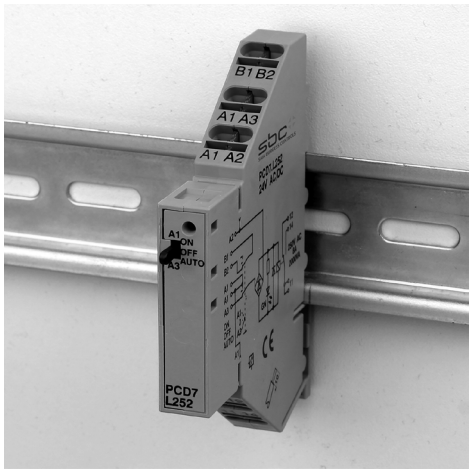
1. Power down the equipment.





2. Strip the wire by 10 mm. Wire cross section:

Solid wire	0.08 – 2.5 mm²
Stranded wire w/o end sleeve	0.08 – 2.5 mm²
Stranded wire with end sleeve	0.08 – 1.5 mm²



a) Solid wires and wire with end sleeves are plugged directly
Insert the wire straight into the contact and press until the wire snaps In the spring.

b) When terminating stranded wires without end sleeves it is necessary to open the spring with a flat-bladed screwdriver (blade width max. 3.0 mm): enter the screwdriver to the test sleeve situated below the Contact and remove the screwdriver.

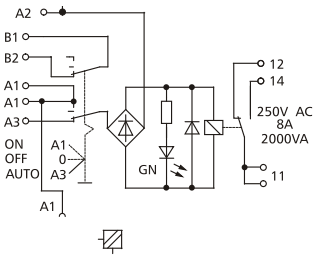
3. De

Wiring

B1	B2
A1	A3
A1	A2
11	12
11	14

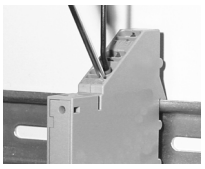
A1 - A2
operating voltage
A2 - A3
operating voltage
B1 - B2
switching contact
11 - 12 - 14
output contact
1 changeover contact

Wiring diagram



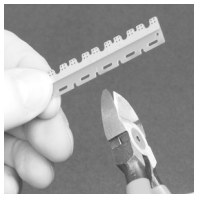
4. Release a wire

Open the spring by inserting a flat-bladed screwdriver (blade width max. 3.0 mm to the test sleeve situated below the conact and remove the wire.

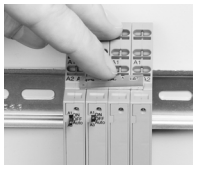


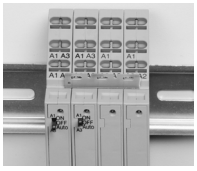
5. Release the Module from the standard rail
Slightliy push the clamp at the bottom of the module with a flat-bladed screwdriver and draw off upwards.

Connecting Bridge
The connecting bridge (Order-Nr. PCD7.L291) allows to interconnect up to 10 coupling modules (total currenct max. 2 A).



Cut the needed number of contacts with wire cutting pliers at the respective predetermined cutting point. Then insert the connecting bridge from the top into the contact slot and press it downwards into place.





The tails of the connecting bridge carry potential, therefore place the bridge in the middle of the aligned modules to eliminate any accidential touch.

Saia-Burgess Controls AG
Bahnhofstrasse 18
3280 Murten / Switzerland
T+ 41 026 580 30 00
www.saia-pcd.com