

# PLC-RSC- 24DC/ 1ICT/ACT - Relay Module



1078680

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PLC-INTERFACE for high inrush currents, consisting of PLC-BSC.../1 IC/ACT basic terminal block with screw connection and pluggable miniature relay, for mounting on DIN rail NS 35/7.5, max. inrush current up to 800 A, 1 N/O contact, 24 V DC input voltage

## Product description

The relay module is particularly suitable for switching strong capacitive loads, such as LED lights. The ballasts installed in the LED lights often have extremely high switch-on peaks which cause standard relay contacts to fuse. The leading tungsten pre-contact ensures that switch-on currents of up to 800 A can be switched safely.

## Your advantages

- Direct connection of load return line thanks to actuator version
- Efficient connection to system cabling using V8 adapter
- Safe isolation between coil and contact side
- Max. inrush current of 800 A
- Functional plug-in bridges

## Commercial data

Item number	1078680
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	CK621A
Catalog page	Page 383 (C-5-2019)
GTIN	4055626794600
Weight per piece (including packing)	77.24 g
Weight per piece (excluding packing)	44.1 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Notes

General	Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or FBST 500....
General	The PLC-ATP separating plate should be installed for safe isolation between adjacent modules
General	The PLC-ATP separating plate is required at the start and end of every PLC terminal strip.
General	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.

### Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	high inrush currents
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles

### Insulation characteristics

Insulation	Safe isolation, reinforced insulation
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### Insulation characteristics: Standards/regulations

Insulation	Safe isolation, reinforced insulation
Overvoltage category	III
Pollution degree	3

### Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Standards/regulations

Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range	20.2 V DC ... 33.6 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U <sub>N</sub>	18 mA
Typical response time	8 ms

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Typical release time	10 ms
Coil voltage	24 V DC
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

## Output data

### Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Note regarding the switch contact	With tungsten leading contact
Contact material	AgSnO
Note	Main contact silver tin oxide (AgSnO <sub>2</sub> ): lead contact tungsten
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (100 mA)
Limiting continuous current	6 A 10 A (the value is permissible if both connections 13, both connections 14 and both connections BB are bridged)
Maximum inrush current	165 A (20 ms) 800 A (200 µs)
Min. switching current	100 mA (12 V)
Interrupting rating (ohmic load) max.	144 W (at 24 V DC) 58 W (at 48 V DC) 48 W (at 60 V DC) 50 W (at 110 V DC) 80 W (at 220 V DC) 1500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	240 W (for 24 V DC. The value is permissible if both connections 13, both connections 14 and both connections BB are bridged.) 2500 VA (for 250 V AC. The value is permissible if both connections 13, both connections 14 and both connections BB are bridged.)
Switching capacity min.	1200 mW
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 110 V, DC13) 0.2 A (at 250 V, DC13) 6 A (at 24 V, AC15) 6 A (at 120 V, AC15) 6 A (at 250 V, AC15)

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

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Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

## Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Relay)	RT II (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

## Approvals

### CE

Certificate	CE-compliant
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### UKCA

Certificate	UKCA-compliant
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### Shipbuilding approval

Certificate	TAE0000196
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### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### DNV GL data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

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## EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive

## Standards and regulations

### Standards/regulations

Standards/regulations	IEC 60947-5-1
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## Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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