25. CONTROL SYSTEM COMPONENTS

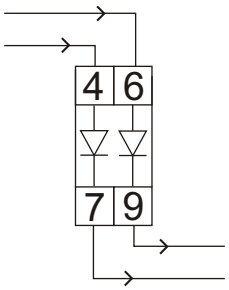
SEP-01 SEPARATOR OF INPUT SIGNAL

PURPOSE

The SEP-01 serve to separating of input signal in automatic arrangement with separated control groups and central control.

FUNCTIONING

Input signal goes in "one way".



current load	<1A 1000V
working temperature	-25÷50°C
terminal	screw terminals 2,5mm²
dimensions	1 module (18mm)
fixing	on rail TH-35

EXAMPLE OF USE: *Central control - look chapter 4*

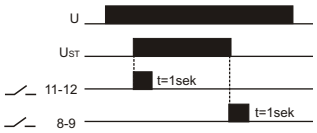
PSI-02 CONTINUOUS - PULSE SIGNAL CONVERTER

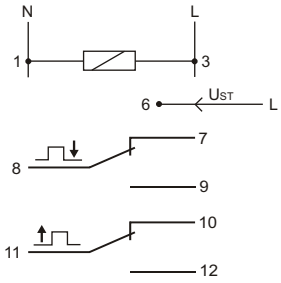
PURPOSE

The PSI-02 converter serves to break up a control signal into single pulses required in automatic control systems.

FUNCTIONING

After the application of the control signal to the UST input (leading edge), the converter generates a pulse on output 6 (contact 5-6 closed for 1 second). After the decay of the control signal (trailing edge), the converter sends another pulse on output 8 (contact 7-8 closed for 1 second).





supply	PSI-02 230V	230V AC
	PSI-02 24V	24V AC/DC
current load		<2×8A
contact		separated 2×1N/O
input signal		230V AC
time of input signals		1sec
working temperature		-25÷50°C
terminal		screw terminals 2,5mm²
dimensions		1 module (18mm)
fixing		on rail TH-35

EXAMPLE OF USE: *Roller blinds group control system (see chapter 22).*

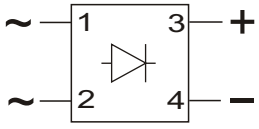
MPG-03 FULL-WAVE BRIDGE RECTIFIER (in GREATZ circuit)

PURPOSE

The MPG-02 changes alternating current into unidirectional direct current.

FUNCTIONING

Proper operation of the rectifier (i.e. presence of voltage on terminals 3-4) is signalised by a green LED.



supply	110÷264V AC
	12÷48V AC
current load	<2A
signalization of supply	LED green
working temeperature	-25÷50°C
terminal	screw terminal 2,5mm²
dimensions	1 module(17,5mm)
fixing	on rail TH-35

ELECTROMAGNETIC RELAYS

PURPOSE

Electromagnetic relay in single-module casing intended for direct assembly on the TH-35 bus bar.

FUNCTIONING

Application of the power supply voltage to the relay's coil results in a shift of the contact. After the decay of the voltage in question, the contact returns to the initial position.

PK-1P *Contact 1C/O (16A).*

PK-2P *Contacts 2C/O (2×8A).*

PK-3P *Contacts 3C/O (3×8A).*

PK-4PZ *Contacts 2C/O (2×8A) + 2NO (2×8A).*

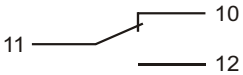
PK-4PR *Contacts 2C/O (2×8A) + 2NC (2×8A).*

Order labelling method:

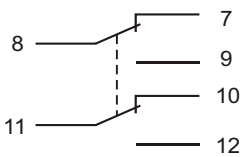
PK-2P 48V *supply voltage*

appl. standard no.	IEC 61095
power supply	
PK-xP 230V	230V AC
PK-xP 110V	110V AC/DC
PK-xP 48V	48V AC/DC
PK-xP 24V	24V AC/DC
PK-xP 12V	12V AC/DC
connection current	
PK-1P	Ie=16A
PK-2P	Ie=2×8A
PK-3P	Ie=3×8A
PK-4PZ	Ie=4×8A
PK-4PR	Ie=4×8A
connection voltage	Ue=250V
usage category	AC-7a
insulation voltage	400V
voltage surge resistor	contact pair coil, 6 kV
separate current circuits	3.6 kV
contact gap	1.2 kV
pollution level	3
overvoltage capacity	6 kV
safety label	B
protection level	IP20
operating time	max. 40 msec
turn-off time	max. 20 msec
mechanical life	5 x 10^6 cycles
current consumption	25mA
voltage indicator	LED
terminal	screw terminals 2.5 mm^2
working temperature	-25÷50°C
dimensions	1 module (18 mm)
fixing	on rail TH-35

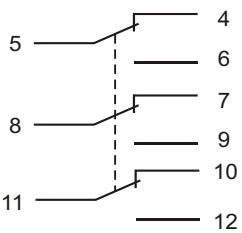
PK-1P



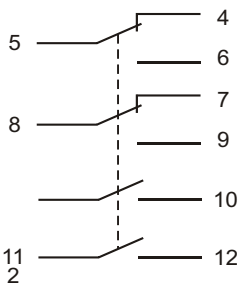
PK-2P



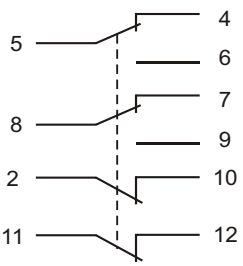
PK-3P



PK-4PZ



PK-4PR



Loadability for contats of relays

						ALTERNATING CURRENT			DIRECT CURRENT
				70µF		**AC-1**	**AC-3**	**AC-15**	**DC-1** 24V/230V
	BULBS HALOGEN LIGHTS	**INCOMPENSATED FLUORESCENT LIGHTS**	**COMPENSATED OF FLUORESCENT LIGHTS**	**FLUORESCENT LIGHTS COMPENSATED IN PARALLEL**	**ECONOMIC FLUORESCENT LIGHT**	non-inductive or low-inductive loads resistive furnance	squirerel-cage motor, switching motors in operation	controlling of alternative electro-magnetic loads	non-inductive or low-inductive, resistive furnances
5A	600W	300W	300W	200W	240W	1800VA	0,30KW	280VA	5A/012A
8A	1100W	550W	550W	350W	300W	2200VA	0,45KW	325VA	8A/0,18A
10A	1500W	650W	650W	500W	350W	2500VA	0,6KW	500VA	10A/0,25A
16A	2300W	1000W	1000W	800W	550W	4200VA	1KW	750VA	16A/0,35A
30A	4000W	1900W	1900W	1500W	1000W	7500VA	1,7KW	1400VA	30A/0,7A

ELECTROMAGNETIC CONTACTORS

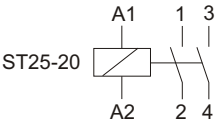
PURPOSE

Electromagnetic contactors in module casing intended for direct assembly on the TH-35 bus bar.

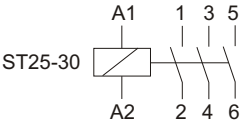
FUNCTIONING

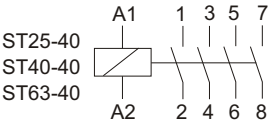
Application of the power supply voltage to the relay's coil results in a shift of the contact. After the decay of the voltage in question, the contact returns to the initial position.

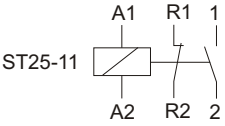
ST-25-
ST-40-
ST-65-

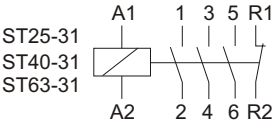


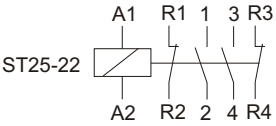
appl. standard no.	IEC 61095
protection level	IP20
working temperature	-25÷50°C
fixing	on rail TH-35

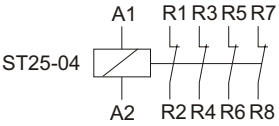












TYPE	CONTACTS	CURRENT	SUPPLY	MODULE	SCREW
ST25-20	2NO	25A	230V AC	1	4mm²
ST25-20/24	2NO	25A	24V AC	1	4mm²
ST25-11	1NO+1NC	25A	230V AC	1	4mm²
ST25-30	3NO	25A	230V AC	2	4mm²
ST25-31	3NO+1NC	25A	230V AC	2	4mm²
ST25-31/24	3NO+1NC	25A	24V AC	2	4mm²
ST25-40	4NO	25A	230V AC	2	4mm²
ST25-40/24	4NO	25A	230V AC	2	4mm²
ST25-04	4NC	25A	230V AC	2	4mm²
ST25-22	2NO+2NC	25A	24V AC	2	4mm²
ST40-40	4NO	40A	230V AC	3	10mm²
ST40-40/24	4NO	40A	24V AC	3	10mm²
ST40-31	3NO+1NC	40A	230V AC	3	10mm²
ST63-40	4NO	63A	230V AC	3	10mm²
ST63-40/24	4NO	63A	24V AC	3	10mm²
ST63-31	3NO+1NC	63A	230V AC	3	10mm²