POWER SUPPLY WITH LOGIC AND TIMING FUNCTIONS

SENSOR CONTROL UNITS

- *100-240 Vac or 24 Vac/Vdc power supply*
- *Single or double input for NPN/PNP, relay or 0-10V analogue sensors*
- *Boolean logic functions: NOT, AND, OR, NAND, NOR*
- *Timing functions: ON and/or OFF delay, monostable, bistable*

PSCU SERIES

The control units of the **PSCU** series can be used to supply low voltage photoelectric sensors, as well as inductive or capacitive proximity, with the possibility to process the outputs with logic and timing functions.

The input can be configured for 1 or 2 sensors, with NPN or PNP, with relay, or with 0-10 Vdc analog output, which can be controlled with different logic functions: NOT, AND, OR, NAND, NOR.

The signal resulting from the logic operations drives the controller output, which can be processed with timing functions: ON and/or OFF delay, monostable or bistable commutation.

On the **PSCU** control panel, protected by a transparent cover, are present the LEDs for power, inputs and output status indication, as well as the trimmer for the inputs sensitivity and the timer adjustment.

The input selection, the logic and the timing functions are easily configured using the dip-switches on the controller side, where the extractable terminal blocks for the connection are also present.

The **PSCU** series is suitable for DIN rail mounting and is available with a 100-240 Vac or 24 Vac/Vdc power supply input and relay SPDT or transistor NO-NC controller output.

DATASENSOR

TECHNICAL DATA

Power supply: .... 24 Vac/Vdc ±10% (PSCU-0x)

100 **...** 240 Vac (PSCU-1x)

Consumption: .... 2 VA max.

Sensor power supply: .... 20 Vdc ±10% 100 mA max. fold-back and short-circuit protected

Sensor input: .... switch selectable, 1 or 2 inputs, relay NPN/PNP (10 kΩ) or 0**...**10 Vdc (100 kΩ)

Logic functions: .... switch selectable: NOT, AND, OR, NAND, NOR

Output: .... relay SPDT 250 Vac, 8 A (PSCU-x0) transistor NPN/PNP NO-NC, 100 mA, optoisolated, fold-back short-circuit protected (PSCU-x1)

Response time: .... 10 ms max relay output (PSCU-x0) 100 µs max. transistor output (PSCU-x1)

Timing functions: .... monostable non-reset, delay on rising edge, delay on falling edge, delay on both edges, bistable (without timing)

Timing period: .... switch selectable: 0.004**...**1 s or 0.1**...**10 s

Setting: .... input 1 sensitivity trimmer, input 2 sensitivity trimmer, timing trimmer, 4+8 dip-switch for inputs, logic and timing functions selection

Indicators: .... input 1 green LED, input 2 green LED, output yellow LED, power green LED, short-circuit red LED

Connection: .... 2 extractable terminal blocks with 6+6 screw contacts

Electrical protection: .... class 1

Mechanical protection: IP20

Housing material: .... blend PC/ABS (UL94-V0)

Weight: .... 200 g max.

Operating temperature: .... -10 … +55 °C

Storage temperature: .... -20 … +65 °C

Reference standards: .... EN 61010-1
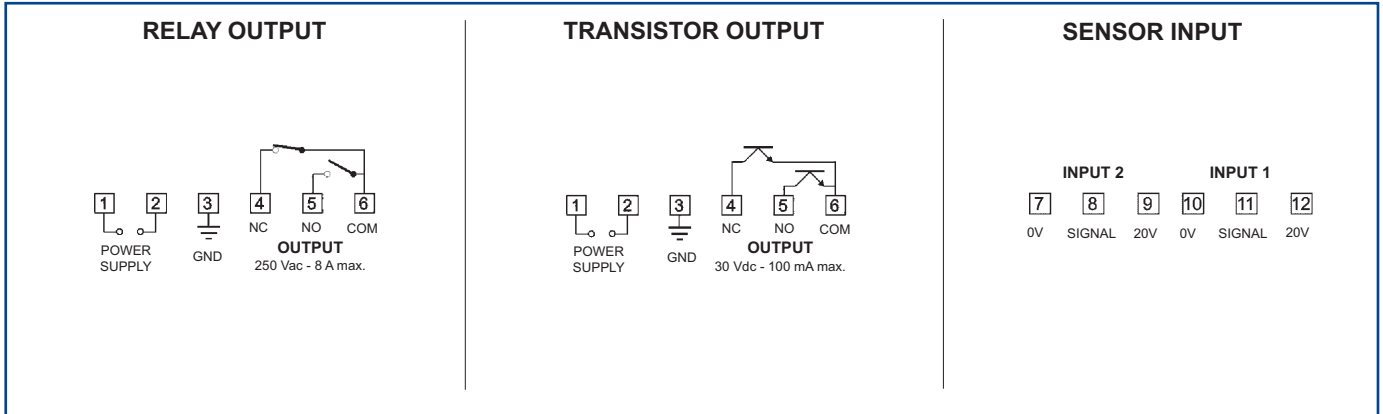
Certifications: .... CE

TABLES

	LOGIC FUNCTIONS	
	SENSOR OUTPUT	CONTROLLER OUTPUT
NOT *		
AND **		
OR **		
NAND **		
NOR **		

* *Logic function on 1 or 2 sensor output*
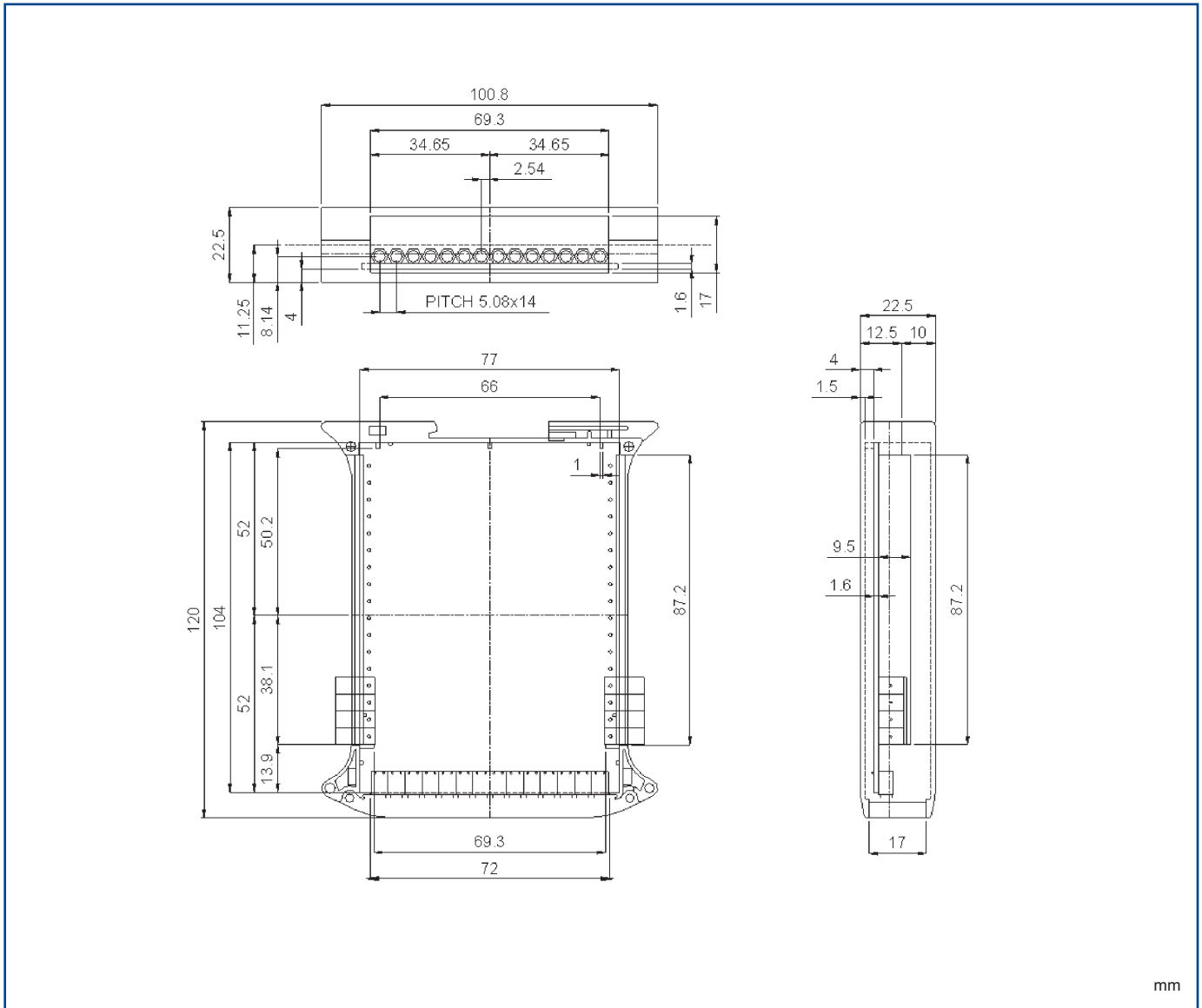** *Logic function between 1 and 2 sensor outputs*

TIMING FUNCTIONS

Sensor output after logic functions

One-shot retriggered on rising edge

One-shot not retriggered

ON delay retriggered on rising edge

OFF delay retriggered on falling edge

ON/OFF delay retriggered

Toggle on rising edge T= blanking time

CONNECTIONS

RELAY OUTPUT

1	2	3	4	5	6
POWER SUPPLY		GND	NC	NO	COM

OUTPUT
250 Vac - 8 A max.

TRANSISTOR OUTPUT

1	2	3	4	5	6
POWER SUPPLY		GND	NC	NO	COM

OUTPUT
30 Vdc - 100 mA max.

SENSOR INPUT

INPUT 2   INPUT 1

7	8	9	10	11	12
0V	SIGNAL	20V	0V	SIGNAL	20V

DIMENSIONS

mm

MODEL SELECTION AND ORDER INFORMATION

MODEL	POWER SUPPLY	OUTPUT TYPE	CODE N°
PSCU-00	24 Vac/Vdc	relay SPDT	95A350100
PSCU-01	24 Vac/Vdc	transistor NPN/PNP NO-NC	95A350110
PSCU-10	100 ... 240 Vac	relay SPDT	95A350120
PSCU-11	100 ... 240 Vac	transistor NPN/PNP NO-NC	95A350130

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