



- *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.

## TECHNICAL DATA

<b>Power supply:</b> .....	24 Vac/Vdc $\pm 10\%$ (PSCU-0x) 100 ... 240 Vac (PSCU-1x)
<b>Consumption:</b> .....	2 VA max.
<b>Sensor power supply:</b> .....	20 Vdc $\pm 10\%$ 100 mA max fold-back and short-circuit protected
<b>Sensor input:</b> .....	switch selectable, 1 or 2 inputs, relay NPN/PNP (10 k $\Omega$ ) or 0...10 Vdc (100 k $\Omega$ )
<b>Logic functions:</b> .....	switch selectable: NOT, AND, OR, NAND, NOR
<b>Output:</b> .....	relay SPDT 250 Vac, 8 A (PSCU-x0) transistor NPN/PNP NO-NC, 100 mA, optoisolated, fold-back short-circuit protected (PSCU-x1)
<b>Response time:</b> .....	10 ms max relay output (PSCU-x0) 100 $\mu$ s max. transistor output (PSCU-x1)
<b>Timing functions:</b> .....	monostable non-reset, delay on rising edge, delay on falling edge, delay on both edges, bistable (without timing)
<b>Timing period:</b> .....	switch selectable: 0.004...1 s or 0.1...10 s
<b>Setting:</b> .....	input 1 sensitivity trimmer, input 2 sensitivity trimmer, timing trimmer, 4+8 dip-switch for inputs, logic and timing functions selection
<b>Indicators:</b> .....	input 1 green LED, input 2 green LED, output yellow LED, power green LED, short-circuit red LED
<b>Connection:</b> .....	2 extractable terminal blocks with 6+6 screw contacts
<b>Electrical protection:</b> .....	class 1
<b>Mechanical protection:</b> .....	IP20
<b>Housing material:</b> .....	blend PC/ABS (UL94-V0)
<b>Weight:</b> .....	200 g max.
<b>Operating temperature:</b> .....	-10 ... +55 $^{\circ}$ C
<b>Storage temperature:</b> .....	-20 ... +65 $^{\circ}$ C
<b>Reference standards:</b> .....	EN 61010-1
<b>Certifications:</b> .....	CE

## TABLES

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

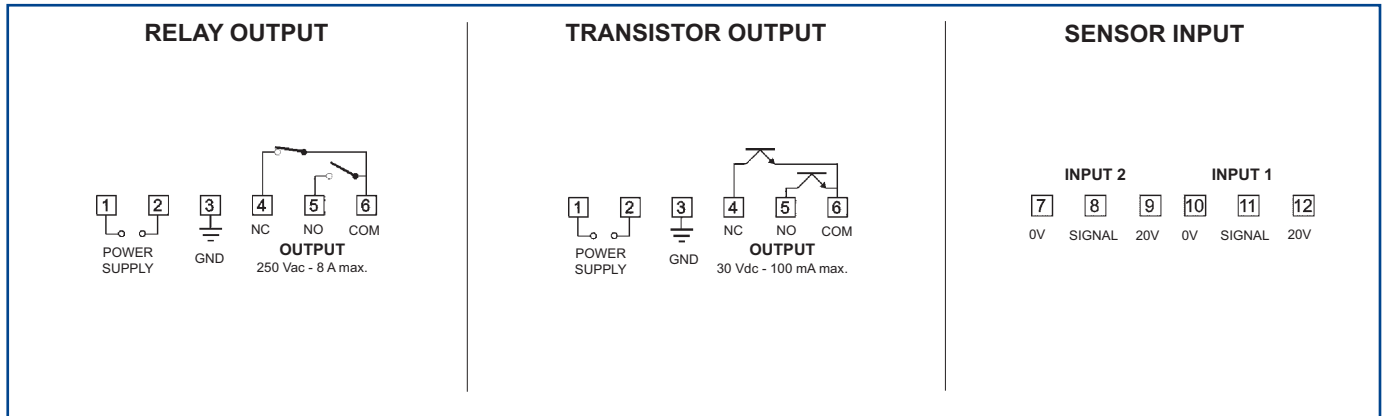
\* Logic function on 1 or 2 sensor output

\*\* Logic function between 1 and 2 sensor outputs

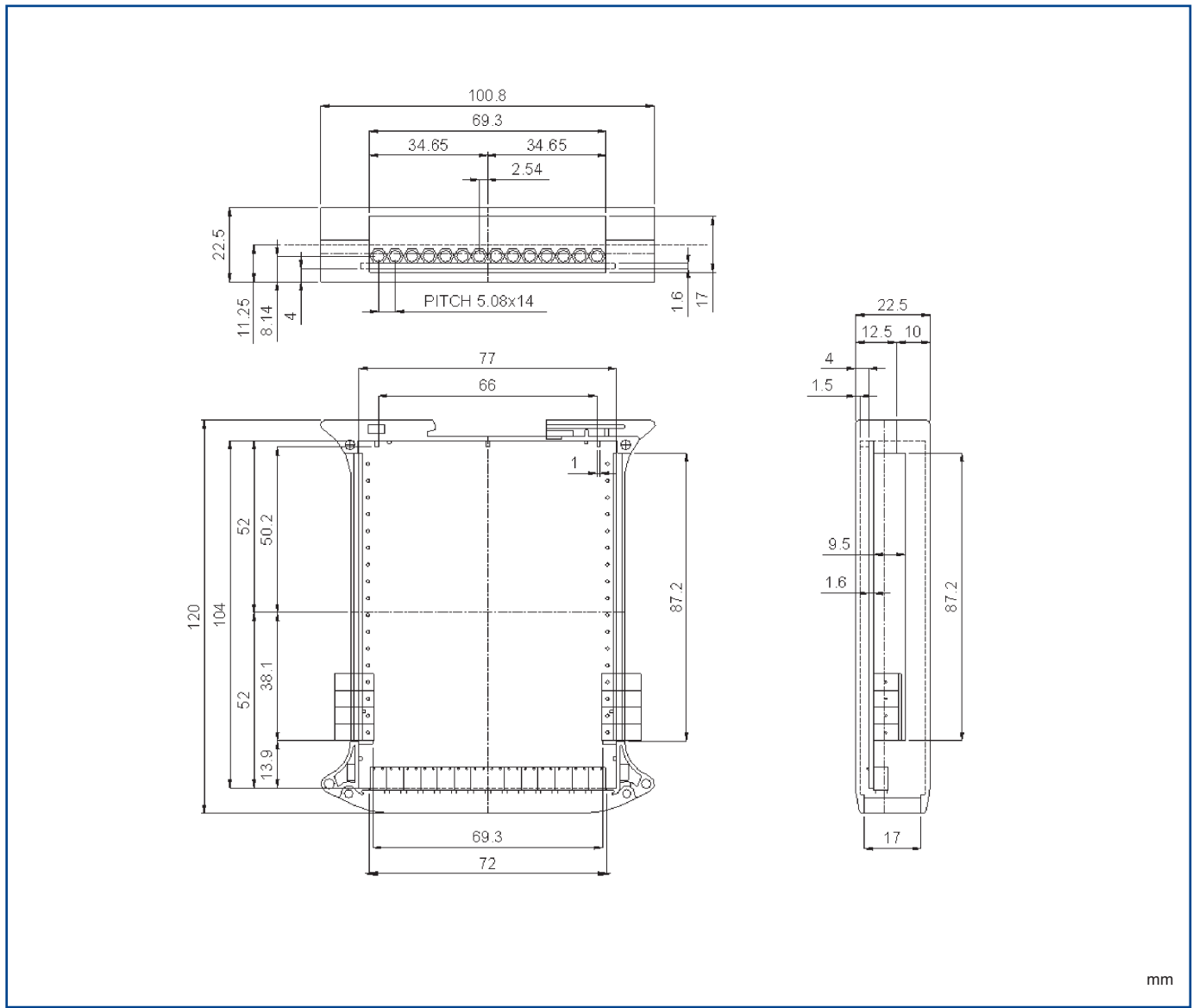
TIMING FUNCTIONS	
	Sensor output after logic functions
	One-shot retriggered on rising edge
	One-shot not retriggered
	ON delay retriggered on rising edge
	OFF delay retriggered on falling edge
	ON/OFF delay retriggered
	Toggle on rising edge T= blanking time



# CONNECTIONS



# DIMENSIONS

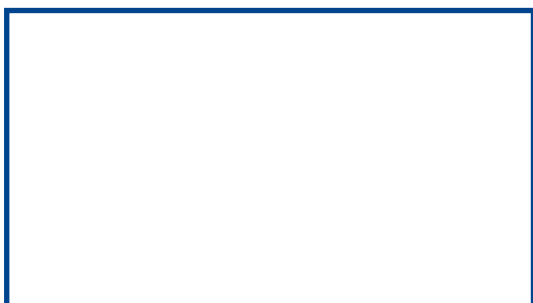


mm

## 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

*Distributed by:*



DATASENSOR SpA endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use DATASENSOR SpA can guarantee only the data indicated in the instruction manual supplied with the products.

Printed in Italy in July 2005  
Rev. 05

# SENSOR CONTROL UNITS