

## 4 digit LCD module 166



- 4-digit LCD totaliser for panel mounting
- Removable housing for special applications
- Power supply from replaceable lithium battery, 3 ... 4 years at 20 °C [68 °F]
- Max. count frequency 18 Hz by contact

### Applications:

devices without power supply  
easy counting  
self powered device  
vending machines  
gaming machines  
printers and copiers

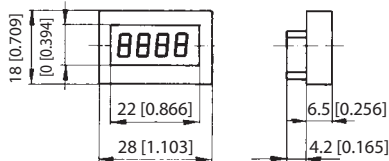
### Technical data:

Power supply:	1.5 V lithium battery Type 386 or SR 43
Battery operating life:	3 ... 4 Years at 20 °C [68 °F]
Display:	LCD 4-digit, 6 mm [0.236"] high
Count range:	9999 with zero blanking
Count input:	max. count frequency 18 Hz counting by closed contact
0 reset:	quick removal or the battery or connect the two pins on the back of the unit

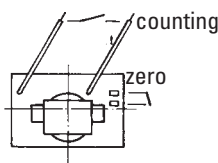
Interference emission:	EN 50081-2/EN 55011 class B
Interference resistance:	EN 6100-6-2 EN 50081-1
Working temperature:	0 ... +50 °C [32 ... 122 °F]
Storage temperature:	-10 ... +60 °C [14 ... 140 °F]
Housing:	clear and black
Protection:	IP 40
Weight:	7.5 g [0.265 oz]
Electrical connections:	Flying leads 18 cm [0.591 feet] long

### Dimensions:

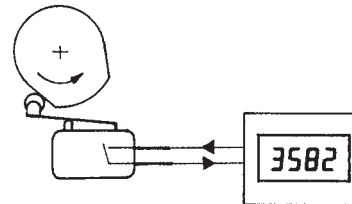
without housing



Flying leads  
180 mm [7.087"] long

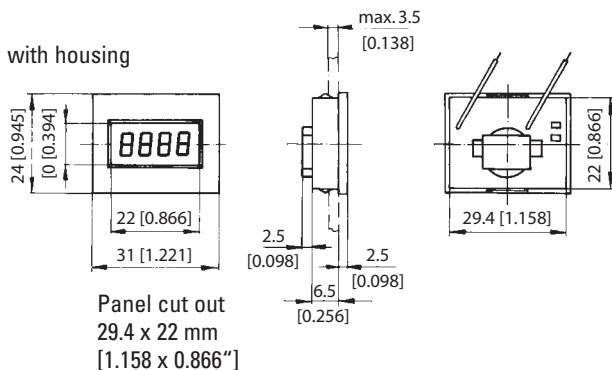


### Application



Control with contact

with housing



### Order code:

Art. no.: 0.166.012.830\*

### Delivery specification:

LCD module  
Operating manual

\* standard stock model

## 6 digit LCD module 167/168



- 6-digit LCD display counter for panel or PCB mount (removable mounting)
- 3 V DC power supply
- Current consumption <math>< 5 \mu\text{A}</math> (- Inputs TTL/CMOS compatible
- Electrical zero reset

### Type 167:

count mode: adding

### Type 168:

count mode: adding/subtracting

1 count input

1 direction input

### Applications:

simple counting  
position-, length- and distance  
measurement, PCB counter

### Technical data:

Power supply:	2.6 ... 3.4 VDC
Current consumption:	typical 5 $\mu\text{A}$ , 10 $\mu\text{A}$ at 10 kHz
Display:	LCD, 6-digit, 6 mm [0.236"] high
Count range:	999999
Overflow	
Type 167:	from 999 999 to zero
Type 168:	adding from 999 999 to zero subtracting from zero to 999 999
Count input:	max. count frequency 10 kHz min. pulse time 50 $\mu\text{s}$ negative triggered (NPN)
0 reset:	min. pulse time 15 ms negative triggered (NPN)

Direction input (Only Type 168): switch to 0 V or negative triggered (NPN)

Open input: count mode adding

Input to zero: 0 V: count mode subtract.

Interference resistance: EN 50081-1

Emitted interference: EN 55022 class B

Working temperature:  $-10 \dots +60 \text{ }^\circ\text{C}$  [ $14 \dots 140 \text{ }^\circ\text{F}$ ]

Storage temperature:  $-10 \dots +60 \text{ }^\circ\text{C}$  [ $14 \dots 140 \text{ }^\circ\text{F}$ ]

Housing: clear and black

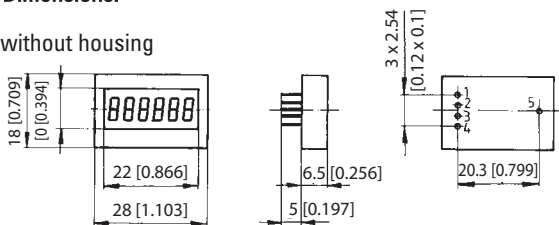
Protection: IP 40

Weight: 7.5 g [0.265 oz]

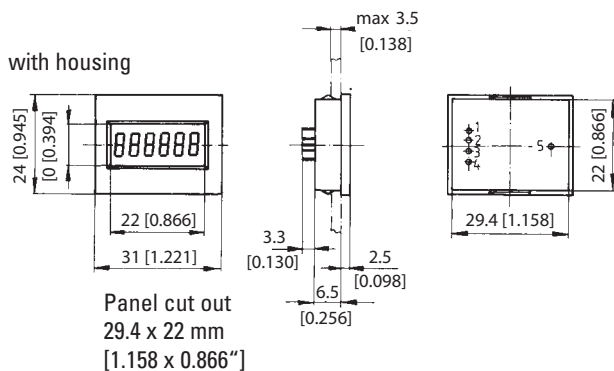
Electrical connection: PCB pin  $\varnothing$  0.4 mm [0.016"]

### Dimensions:

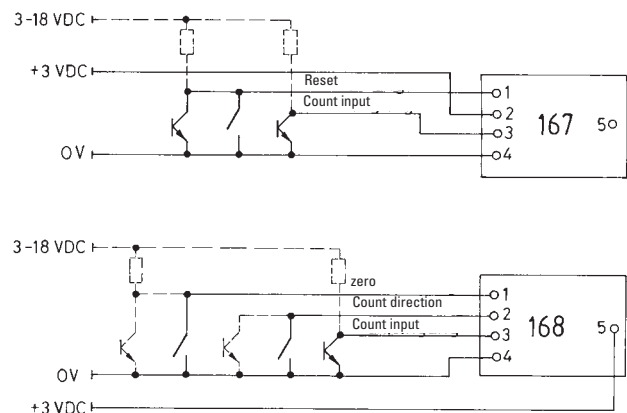
without housing



with housing

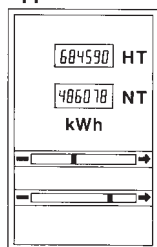


### Connections:



Pin-No.	Function	
	Type 167	Type 168
1	Reset	Reset
2	+ 3 VDC	Count direction
3	Count input	Count input
4	0 V	0 V
5	0 V	+3 VDC

### Applications:



kWh counter

### Order code:

Type 167: 0.167.012.000\*

Type 168: 0.168.012.000\*

### Delivery specification:

LCD module

Operating manual

\* standard stock model