

## Product Description

$24 \times 48 \mathrm{~mm}$ hour meters for flush mounting. 10 to 260 V AC or DC input. The front key, which can be locked, allows
fast and easy input reset. NPN input to set the time range (Mode) and to enable the device reset.

Approvals

## (Ec7 ${ }_{\text {us }}$ Rohs

## Backlight

| 85 | Without backlight |
| :--- | :--- | :--- |
| 86 | With backlight |

## General Data

| Display | 8 digits LED type |
| :---: | :---: |
| Dimensions of digits | H 8mm/0.31" |
| Viewing angle | frontal |
| Colour of digit figures | X |
| Power supply | Non-replaceable lithium battery (lifetime up to 8 years at $20^{\circ} \mathrm{C}$ ) |
| Backlight consumption | 24VDC $\pm 20 \% 5 \mathrm{~mA}$ |
| Operating temperature | $-10 \ldots+55^{\circ} \mathrm{C} / 14 \ldots 151^{\circ} \mathrm{F}$ |
| Storage temperature | $-20 \ldots+70^{\circ} \mathrm{C} /-4 \ldots 158^{\circ} \mathrm{F}$ |
| Mounting position | Panel mounting |
| Housing colour | RAL7021 (grey) |
| Dimensions LxH | $24 \times 48$ acc. to DIN 43700 STD |
| Weight | $50 \mathrm{~g} / 1.76 \mathrm{oz}$ |
| Panel cut-out LxH | $22.2^{+0.3} \times 45^{+0.6} \mathrm{~mm} / 0.87^{+0.01} \times 1.77^{+0.022}$ |
| Protection degree | IP65 (front) |
| Pollution degree | 2 |
| EMC emitted: immunity: | acc. to directive 89/36/ENG <br> EN61000-6-3, <br> EN550011 class B <br> EN61000-6-2 <br> EN61010 (AC version only) |

- 8 digit LCD display
- 8 mm digits
- Reset button with locking function
- 8 years battery lifetime

Electrical or manual reset input

- Setting time mode (through electrical control)
- For front panel mounting
- $24 x 48 \mathrm{~mm}$ housing

Ordering Key
FSA 01 A12 850


Time Range

| 01 | 99999h $59 \mathrm{~m} / 99999.99 \mathrm{~h}$ |
| :--- | :--- |
| $\mathbf{0 2}$ | $9999 \mathrm{~h} 59 \mathrm{~m} / 9999999.9 \mathrm{~s}$ |

Input Type

|  | Type A | Type B |
| :--- | :---: | :---: |
| $\mathbf{0}$ | - | $0 \div 0.7 \mathrm{VDC} \mathrm{NPN}$ |
| $\mathbf{1}$ | - | $4 \div 30 \mathrm{VDC} \mathrm{PNP}$ |
| $\mathbf{3}$ | $10 \div 260 \mathrm{VAC} / D C$ | $10 \div 260 \mathrm{VAC} / \mathrm{DC}$ |

## Measuring Specifications

| Time range |  |
| :---: | :---: |
| FSA01 | 99999h 59m / 99999.99h |
| FSA02 | 9999h 59m / 9999999.9s |
| Counting system | adding |
| Counting system | programmable |
| Reset |  |
| Manual | front push button |
| Electrical | rear input |
| Pulse time | type0/1: $<50 \mathrm{~ms}$ type2: $<16 \mathrm{~ms}$ |
| Reset key locking |  |
| N.C. / High | locked |
| low level | active |

## Input Specifications

| Voltage range | $0 \div 30 \mathrm{VDC}$ (types 1 and 2) <br> $0 \div 260 \mathrm{VAC} / \mathrm{DC}$ (type 3) |
| :---: | :--- |
| Switching level | Low: $0 \div 0.7 \mathrm{~V}$ High: $3 \div 30 \mathrm{~V}$ |
| Type 0 | Low: $0 \div 0.7 \mathrm{~V}$ High: $4 \div 30 \mathrm{~V}$ <br> Type 1 |
| Low: $0 \div 2 \mathrm{~V}$ High: $10 \div 260 \mathrm{AC/DC}$ |  |

## Package Content

| 1 | Instrument FSA |
| :--- | :--- |
| 1 | Panel mounting clip |
| 1 | Bezel for screw mounting ( $56 \times 40 \mathrm{~mm} / 2.205 \times 1.575$ ") <br> panel cut-out ( $50 \times 25 \mathrm{~mm} / 1.969 \times 0.984$ ) |
| 1 | Bezel for clip mounting $(53 \times 28 \mathrm{~mm} / 2.087 \times 1.103$ "), panel <br> cut-out ( $50 \times 25 \mathrm{~mm} / 1.969 \times 0.984$ ) |
| 1 | Gasket |
| 1 | Multilingual operating manual |

Dimensions (mm/inches)


## Bezel Dimensions (mm/inches)



## Connections


## Display



