OMM 601UC

- **6 digit programmable projection**
- **Counter/frequency meter/stopwatch**
- **Measuring range < 50 kHz**
- **Calibration and filtration constant, Preset**
- **Comparator, Data backup**
- **Size of DIN 72 x 24 mm**
- **Power supply 10...30 V AC/DC**

Description

The OMM 601UC model is a small universal 6 digit panel programmable impulse counter/frequency meter/repeat/phase/stopwatch.
The instrument is based on an 8-bit processor that secures high accuracy, stability and easy operation of the instrument.

Standard functions

Programmable display projection

Measuring modes	counter (C)/frequency meter (F)/stopwatch
Calibration	calibration coefficient may be set in „CM" for every channel
Projection	-99999...999999 with fixed or floating DP in adjustable format 10/24/60
Measuring channels	C and F, it is possible to evaluate the counter as well as the signal frequency status from one measuring input
Time base	0,05/0,5/1/2/5/10/20/50 s

Digital filters

Filtration constant	limiting the maximum input frequency, suppressing interfering impulses, 10 Hz...2 kHz
Floating average	from 2...54 measurements
Exponen. average	from 2...100 measurements
n-th value	from 2...100 measurements
Radius of insensitiv.	band of suppressed change of measured value

Function

Preset	initial non-zero value, which is always read after instrument resetting
Summation	registration of the number upon shift operation
Pre-division constant	increas. cal. constant 1/10/60/100/1000/3600
Min/max. value	registration of min./max. value reached during measurements
Top value	the display shows only max. (min.) value for a selected time period
Round up/down	setting the projection step for display
Math. operations	polynome, 1/x, logarithm, exponential, power, root, sin x

External control

Hold	display/instrument blocking
Lock	control keys blocking

Output

Limit	relay with switching contact, type LIMIT/FROM-TO/DOSING The limit has both adjustable hysteresis and optional delay of the switch-on. Reaching the limit is signalled by LED and at the same time by the switch-on of the relevant relay.

Operation

The instrument is set and controlled by four control keys. All programmable settings of the instrument are realised in two adjusting regimes.

Configuration menu	(hereinafter referred to as CM) is protected by an optional number code and contains complete instrument setting
User menu	may contain arbitrary programming settings defined in „CM" with another selective restriction (see, change)

All programmable parameters are stored in the EEPROM memory (they hold even after the instrument is switched off). The measured units may be projected on the display.

Technical data

INPUT

Type:	upon contact, TTL, NPN/PNP
Measurement:	1x counter UP or DOWN/measurement of frequency 1x stopwatch/watch, measuring range is adjustable
Input frequency:	0,02...50 kHz

PROJECTION

Display:	999999, red or green 7-segment LED, digit height 9,1 mm
Decimal point:	adjustable - in Configuration menu
Brightness:	adjustable - in Configuration/User menu

INSTRUMENT ACCURACY

Tempco:	60 ppm/°C
Accuracy:	±0,01 % of range (frequency)
Time base:	0,05/0,5/1/2/5/10/20/50 s
Calibration coefficient:	0,00001....999999
Filtration constant:	0/0,01/0,02/0,045/0,055/0,065/0,1/0,2/0,5/1/2 kHz
Division constant:	1/10/60/100/1000/3600
Presetting:	0...999999
Function:	data backup, summation - registration of shift operation Hold, Lock (upon contact)
Watch-dog:	reset after 2,0 s
Calibration:	at 25°C and 40 % r.h.

COMPARATOR

Type:	digital, adjustable in programming mode, contact switch-on < 30 ms
Limit	999999
Hysteresis:	0...99999
Delay:	0...99,9 s
Output:	1 relay with switching contact (48 VAC/50 VDC, 3 A)

POWER SUPPLY

	10...30 V DC, max. 140 mA, (24 V/45 mA), isolated 12...28 V AC, max. 160 mA, (24 V/110 mA), isolated

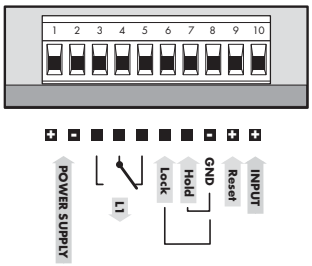
MECHANIC PROPERTIES

Material:	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions:	72 x 24 x 106 mm
Panel cut:	68 x 22,5 mm

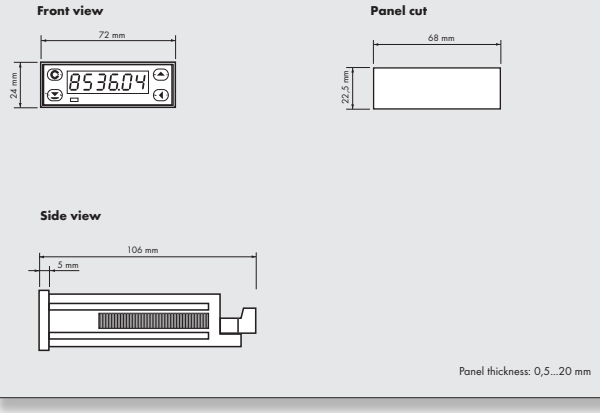
OPERATING CONDITIONS

Connection:	connector terminal board, conductor section up to 2,5 mm^2
Stabilization period:	within 15 minutes after switch-on
Working temperature:	0°...60°C
Storage temperature:	-10°...85°C
Covering:	IP42 (front panel only)
Overvoltage category:	EN 61010-1, A2, for pollution degree II III. - instrument power supply, relay outputs (300 V) II. - input, output (300 V)
EMC:	EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

Connection



Dimensions



Order code

OMM 601UC - x

Display color
1: red
2: green

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