

# Hour meters / timers, electromechanical

**Dual function counters**

**Pulse + time / 2 x time (AC+DC)**

**HC 77**



The counter combinations HC 77 and HC 77.55 comprise an hour meter and a totalizer. They can be controlled both simultaneously and separately.

These panel mount counters have a reduced mounting depth. They can be used in many different fields of application.

Optionally with 2 hour meters on request.

## Characteristics

- Hour meter and totalizer in one single device.
- Without reset.
- High shock resistance.
- Magnified large figures.
- Protection IP52 front side (optional IP65).
- Data retention in case of power failure.
- UL-approved.

## Benefits

- Long service life.
- Optional: counters controlled separately.

## Applications

General time measurement, maintenance intervals for measuring instruments (respiration units, oxygen, dialysis), small appliances, UV lamps, display panels in vehicles, lifts, heating burners.

## Type series

Description	Type	Options
Dual function counter 48 x 48 mm [1.89 x 1.89"]	<b>HC 77</b>	<ul style="list-style-type: none"> <li>- Color of housing grey Art. no. 3.55X.40X.XXX</li> <li>- Flat pin 0.8 x 6.3 mm [0.031 x 0.25"] Art.-No.: 3.55X.40X.XXX.011</li> </ul>
With adapter front bezel 55 x 55 mm [2.17 x 2.17"]	<b>HC 77.55</b>	<ul style="list-style-type: none"> <li>- Separate connections for running time meter and adding counter. This model is available for AC or DC (not mixed)</li> <li>- Adding counter max. 10 Hz</li> <li>- Electrical connection: 2 x cable 2 x 0.5 mm<sup>2</sup> [AWG20], NYFAZ, 0.5 m [1.64'] (hour meter cable red/black, adding counter grey cable) Art. no. 3.55X.40X.XXX.060</li> <li>- Sealed window (IP65 front side) with: <ul style="list-style-type: none"> <li>- Screw terminal Art. no. 3.55X.40X.XXX.419</li> <li>- Flat pin 0.8 x 6.3 mm [0.031 x 0.25"] Art. no. 3.55X.40X.XXX.062</li> <li>- Separated connections (cable) Art. no. 3.55X.40X.XXX.061</li> </ul> </li> <li>- Counter combination with 2 hour meters 10 ... 30 V DC <ul style="list-style-type: none"> <li>- 2 x cable 2 x 0.5 mm<sup>2</sup> [AWG20] Art. no. 3.554.401.351.060</li> <li>- Spring-type terminal on request</li> </ul> </li> </ul>

Order information:  
Art. no. (for special voltages etc. indicate exact model, voltage and frequency e.g. HC 77, 120 V AC, 60 Hz)

Accessories	Dimensions in mm [inch]	Order no.
<b>Adapter front bezel, 55 x 55 [2.17 x 2.17"]</b>	for cut-out 50 x 50 [1.97 x 1.97] to cut-out ø 50.5 [1.99], with clip mounting for counters 48 x 48 [1.89 x 1.89]	black <b>T008171</b>
<b>Adapter front bezel, 60 x 75 [2.36 x 2.95"]</b>	for cut-out 50 x 50 [1.97 x 1.97] to cut-out 45 x 45 [1.7 x 1.77], with screw mounting for counters 48 x 48 [1.89 x 1.89]	black <b>T008860</b>
<b>Adapter front bezel, 72 x 72 [2.83 x 2.83"]</b>	for cut-out 68 x 68 [2.68 x 2.68] to cut-out 45 x 45 [1.7 x 1.77], (Mating clip T009420 must be ordered separately)	black <b>T008177</b>
<b>Adapter front bezel, ø 72 [2.83"]</b>	for cut-out ø 60 [2.36] to 45 x 45 [1.77 x 1.77], with clip mounting for counters 48 x 48 [1.89 x 1.89]	black <b>N510226</b>

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: [www.kuebler.com/accessories](http://www.kuebler.com/accessories).

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<b>Dual function counters</b>	<b>Pulse + time / 2 x time (AC+DC)</b>	<b>HC 77</b>
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## Technical data

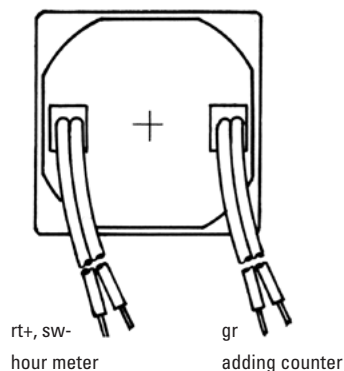
General technical data	
<b>Operating indicator of the running time meter</b>	AC fast rotating wheel with red dashes: 99999.99 h
	DC 1/100 h display turns continuously by 1 digit in 36 s: 999999.99 h
<b>Height of figures</b>	4 x 1.7 mm [0.16 x 0.067"] optical
<b>Color of figures</b>	hour meter hour: white on black decimal: red on black
	pulse counter white on black
<b>Operating temperature</b>	-15°C ... +50°C [+5°F ... +122°F] (non-condensing)
<b>Mounting position</b>	any

Mechanical characteristics	
<b>Protection</b>	IP52 (front side) when built in
<b>Color of housing</b>	black (standard)
<b>Weight</b>	HC 77 65 g [2.29 oz]
	plug in frame 55 8 g [0.28 oz]
	plug in frame 72 13 g [0.46 oz]

Electrical characteristics	
<b>Electrical connection</b>	screw terminal (tightening torque max. 0.8 Nm)
<b>Power consumption</b>	10 ... 30 V DC approx. 1 W
	36 ... 80 V DC approx. 1.65 W
	100 ... 130 V DC approx. 1.75 W
	20 ... 30 V AC, 50 Hz approx. 0.53 VA
	42 ... 48 V AC, 50 Hz approx. 0.53 VA
	100 ... 130 V AC, 50 Hz approx. 1.43 VA
187 ... 264 V AC, 50 Hz approx. 3.0 VA	
<b>Rated voltages</b>	AC (50 or 60 Hz) 20 ... 30/42 ... 48/100 ... 130/187 ... 264 V
	DC 10 ... 30/36 ... 80/100 ... 130 V
<b>On time</b>	100 %
<b>Count mode</b>	adding
<b>Accuracy</b>	AC supply frequency + 30 ms
	DC < 0.003 % (at 24 h)
<b>Reset</b>	no reset
<b>EMC standards</b>	EN 55011 class B
	EN 61000-6-2, EN 61000-6-3
<b>Device safety</b>	designed to protection class 2
	application area pollution level 2
<b>UL approval</b>	file E128604

### Terminal assignment

Counter with separate connections (rear view)



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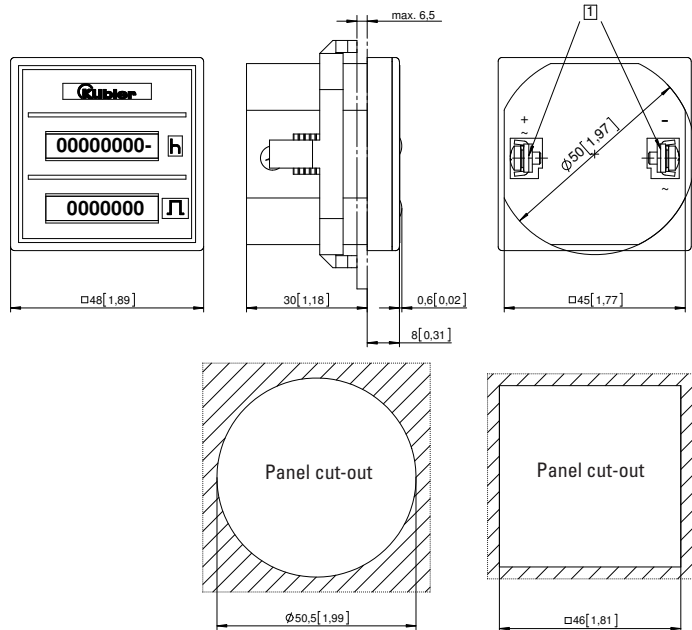
## Dual function counters

## Pulse + time / 2 x time (AC+DC)

## HC 77

### Dual function counter 48 x 48 [1.89 x 1.89"]

#### Type HC 77

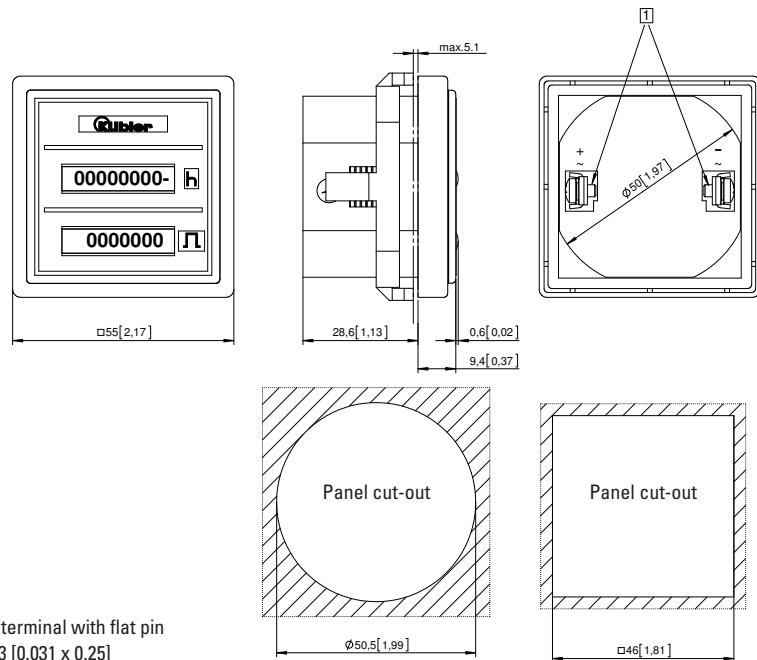


1) Screw terminal with flat pin  
0.8 x 6.3 [0.031 x 0.25]

Type	Display	Voltage	Art. no.					
			10 ... 30 V	20 ... 30 V	36 ... 80 V	42 ... 48 V	100 ... 130 V	187 ... 264 V
HC 77	7/8 digits	AC (50 Hz)		3.550.401.071		3.550.401.072	3.550.401.074 <sup>1)</sup>	3.550.401.075 <sup>1)</sup>
	7/8 digits	AC (60 Hz)		3.550.401.081		3.550.401.082	3.550.401.084	3.550.401.085
	7/8 digits	DC	3.550.401.351 <sup>1)</sup>		3.550.401.353		3.550.401.381	
Color of housing grey:			Art. no.		3.550.400.XXX			

### Dual function counter 48 x 48 [1.89 x 1.89"] with adapter front bezel 55 x 55 [2.17 x 2.17"]

#### Type HC 77.55



1) Screw terminal with flat pin  
0.8 x 6.3 [0.031 x 0.25]

Type	Display	Voltage	Art. no.					
			10 ... 30 V	20 ... 30 V	36 ... 80 V	42 ... 48 V	100 ... 130 V	187 ... 264 V
HC 77.55	7-/8 digits	AC (50 Hz)		3.551.401.071		3.551.401.072	3.551.401.074	3.551.401.075
	7/8 digits	AC (60 Hz)		3.551.401.081		3.551.401.082	3.551.401.084	3.551.401.085
	7/8 digits	DC	3.551.401.351		on request		3.551.401.381	
Color of housing grey:			Art. no.		3.551.400.XXX			