

Hour meters / timers, electromechanical

Dual function counters	Pulse + time / 2 x time (AC+DC)	HC77
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The counter combinations HC77 and HC77.55 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
Dual function counter 48 x 48 mm [1.89 x 1.89"]	HC77
With adapter front bezel 55 x 55 mm [2.17 x 2.17"]	HC77.55

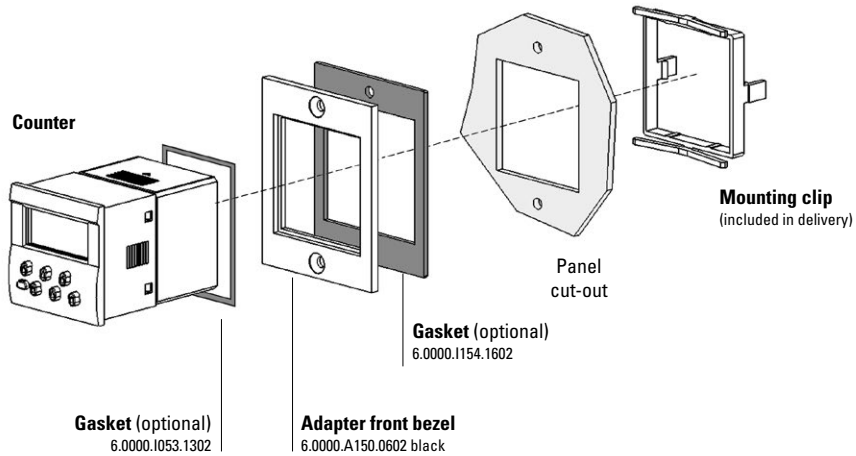
Order information:

Art. no. (for special voltages etc. indicate exact model, voltage and frequency
e.g. HC77, 120 V AC, 60 Hz)

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Accessories / Mounting examples



		Type / size	Description		Order no.	suitable gasket
Adapter front bezel		55 x 55 mm [2.17 x 2.17]	for cut-out 50 x 50 mm [1.97 x 1.97"] or ø 50,5 mm [1.99"] to cut-out 45 x 45 mm [1.77 x 1.77"]	grey black	6.0000.A100.1601 6.0000.A100.1602	6.0000.I104.1402
		55 x 55 mm [2.17 x 2.17]	for cut-out 50 x 50 mm [1.97 x 1.97"] to cut-out 45 x 45 mm [1.77 x 1.77"]	black	6.0000.A100.1602	6.0000.I133.0802
		60 x 75 mm [2.36 x 2.95]	for cut-out 50 x 50 mm [1.97 x 1.97"] to cut-out 45 x 45 mm [1.77 x 1.77"]	black	6.0000.A150.0602	6.0000.I154.1602
		72 x 72 mm [2.83 x 2.83]	for cut-out 68 x 68 mm [2.68 x 2.68"] to cut-out 45 x 45 mm [1.77 x 1.77"]	grey black Mating clip	6.0000.A160.1901 6.0000.A160.1902 6.0000.S100.0002	6.0000.I164.1402
		ø 72 mm [2.83]	for cut-out ø 60 mm [2.36"] to cut-out 45 x 45 mm [1.77 x 1.77"]	black	6.0000.A220.2002	–
Gasket counter			48 x 48 mm (for installation in adapter front bezel)		6.0000.I053.1302	

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Technical data

Electrical characteristics		
Electrical connection	screw terminal (tightening torque max. 0.8 Nm)	
Power consumption	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
Rated voltages	AC (50 or 60 Hz)	20 ... 30/42 ... 48/100 ... 130/187 ... 264 V
	DC	10 ... 30/36 ... 80/100 ... 130 V
On time	100 %	
Count mode	adding	
Accuracy	AC	supply frequency + 30 ms
	DC	< 0.003 % (at 24 h)
Reset	no reset	
Device safety	designed to protection class	EN 61010 part 1 2
	application area	pollution level 2

General technical data		
Operating indicator of the running time meter	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
Height of figures	4 x 1.7 mm [0.16 x 0.067"] optical	
Color of figures	hour meter	hour: white on black decimal: red on black
	pulse counter	white on black
Operating temperature	-15 °C ... +50 °C [+5 °F ... +122 °F] (non-condensing)	
Relative humidity at +30 °C [+86 °F]	≤ 80 % (non-condensing)	
Altitude	up to 2000 m [6562']	
Mounting position	any	

Mechanical characteristics		
Protection	IP52 (front side) when built in	
Housing color	black (standard)	
Weight	HC77	65 g [2.29 oz]
	plug in frame 55	8 g [0.28 oz]
	plug in frame 72	13 g [0.46 oz]

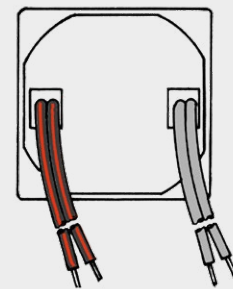
Approvals		
UL compliant in accordance with	File no. E128604	
CE compliant in accordance with		
	EMC Directive	2014/30/EU
	RoHS Directive	2011/65/EU
	Low Voltage Directive	2014/35/EU

Options

Housing color	grey	Art. no. 3.55X.400.XXX
Flat pin 0.8 x 6,3 mm [0.031 x 0.25"]	Art. no. 3.55X.40X.XXX.011	

Separate connections for running meter and adding counter
 available for AC or DC (not mixed)
 adding counter max. 10 Hz
 electrical connection: 2 x cable 2 x 0,5 mm² [AWG20], NYFAZ, 0,5 m [1.64'] long

hour meter
 2 x cable red/black



adding counter
 2 x cable grey

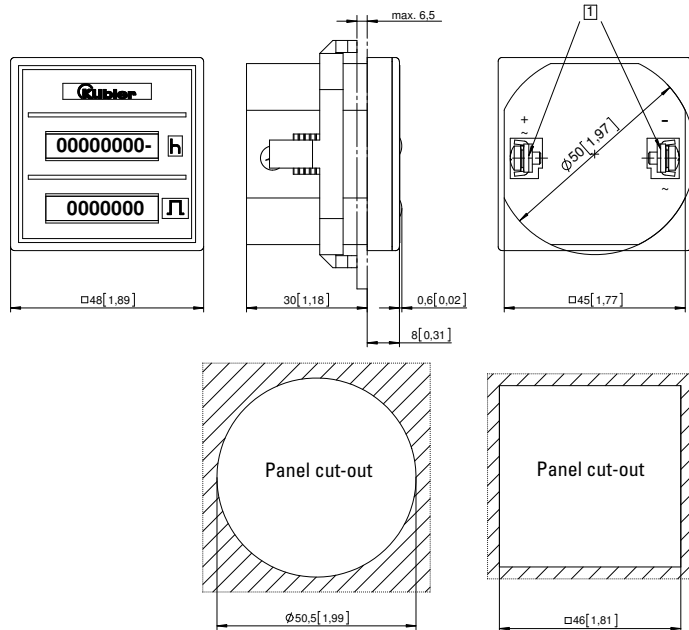
Sealed window (IP65 front side) with:		
screw terminal	Art. no. 3.55X.40X.XXX.419	
flat pin 0.8 x 6.3 mm [0.031 x 0.25"]	Art. no. 3.55X.40X.XXX.062	
Separated connections (cable)	Art. no. 3.55X.40X.XXX.061	

Counter combination with 2 hour meters	10 ... 30 V DC	
2 x cable 2 x 0,5 mm ²	Art. no. 3.554.401.351.060	
spring-type terminal	on request	

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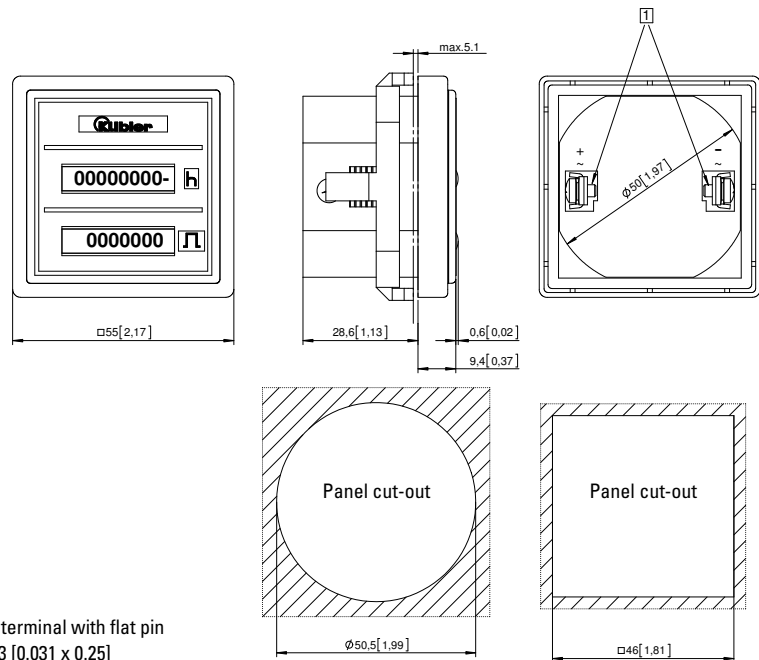
Dual function counter 48 x 48 [1.89 x 1.89"]
Type HC77



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
HC77	7/8 digits	AC (50 Hz)		3.550.401.071		3.550.401.072	3.550.401.074	3.550.401.075 ¹⁾
	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 ¹⁾		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 HC77.55



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
HC77.55	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			

Dimensions in mm [inch]

1) Stock types