

Hour meters / timers, electromechanical

Dual function counters

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

HC77



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

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

With adapter front bezel 55 x 55 mm [2.17 x 2.17"]

Type

HC77

HC77.55

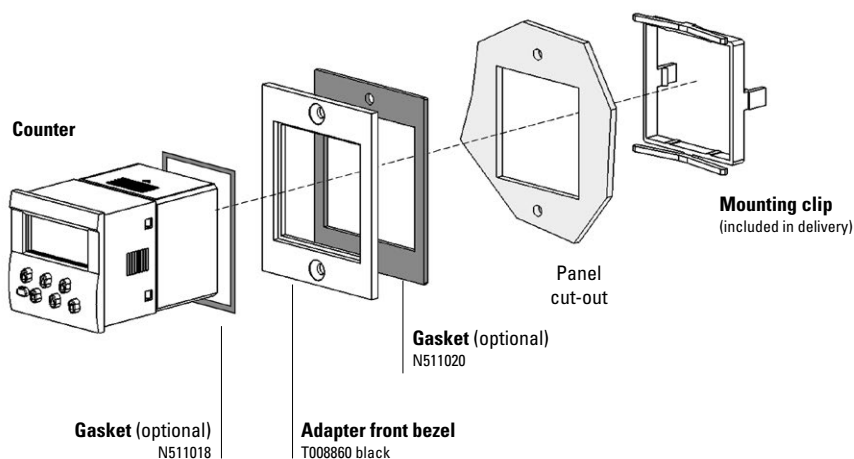
Order information:

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	T008170 T008171	N511017
		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	T008853	N511004
		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	T008860	N511020
		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	T008176 T008177 T009420	N511016
		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	N510226	—
Gasket counter			48 x 48 mm (for installation in adapter front bezel)		N511018	

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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]

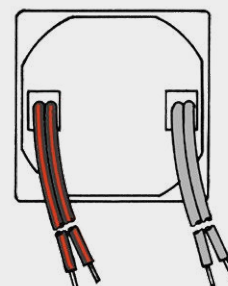
Approvals

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	Art. no. 3.55X.40X.XXX.060	
available for AC or DC (not mixed)		
adding counter max. 10 Hz		
electrical connection: 2 x cable 2 x 0,5 mm ² [AWG20], NYFAZ, 0,5 m [1.64'] long		

hour meter
2 x cable red/black



adding counter
2 x cable grey

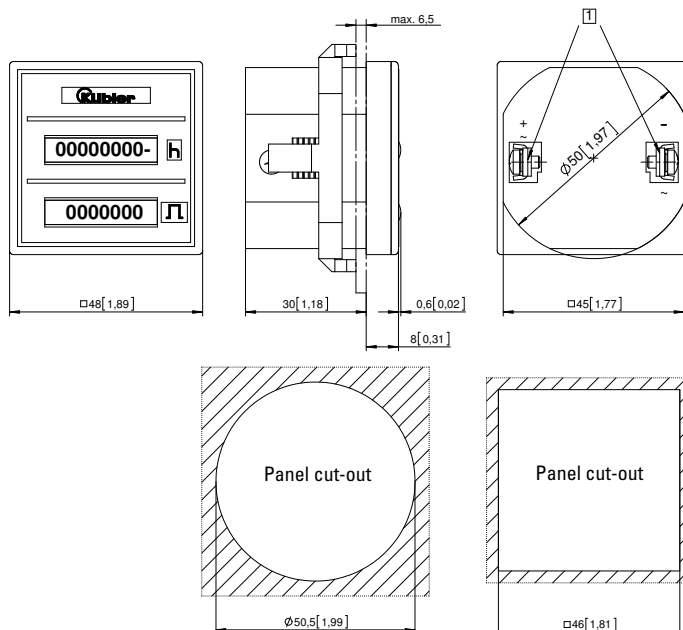
Sealed window (IP65 front side) with:	screw terminal	Art. no. 3.55X.40X.XXX.419
	flat pin 0.8 x 6.3 mm [0.031 x 0.25"]	Art. no. 3.55X.40X.XXX.062
	Separated connections (cable)	Art. no. 3.55X.40X.XXX.061
Counter combination with 2 hour meters	10 ... 30 V DC	
	2 x cable 2 x 0,5 mm ²	Art. no. 3.554.401.351.060
	spring-type terminal	on request

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

Type HC77

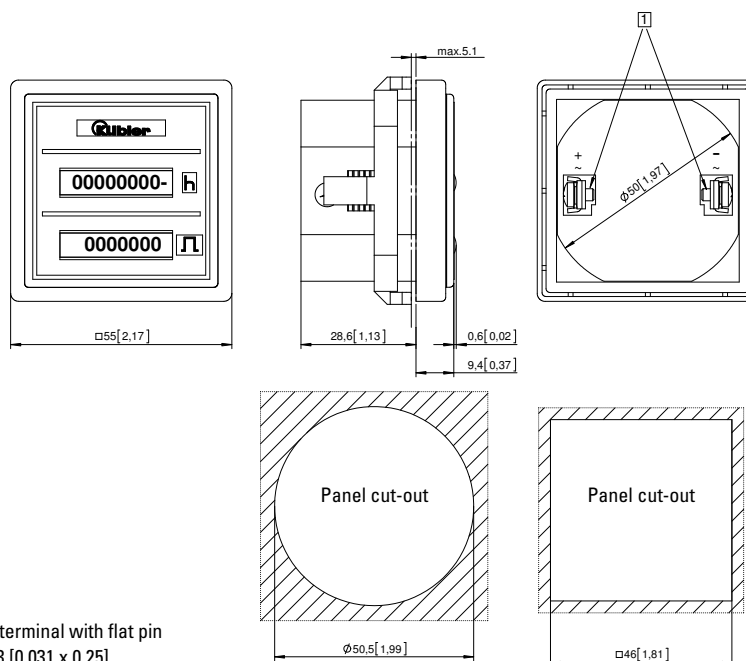


1 Screw terminal with flat pin
0.8 x 6.3 [0.031 x 0.25]

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