

Hour meters / timers, electromechanical

Dual function counters	Pulse + time / 2 x time (AC+DC)	HC 77
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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.

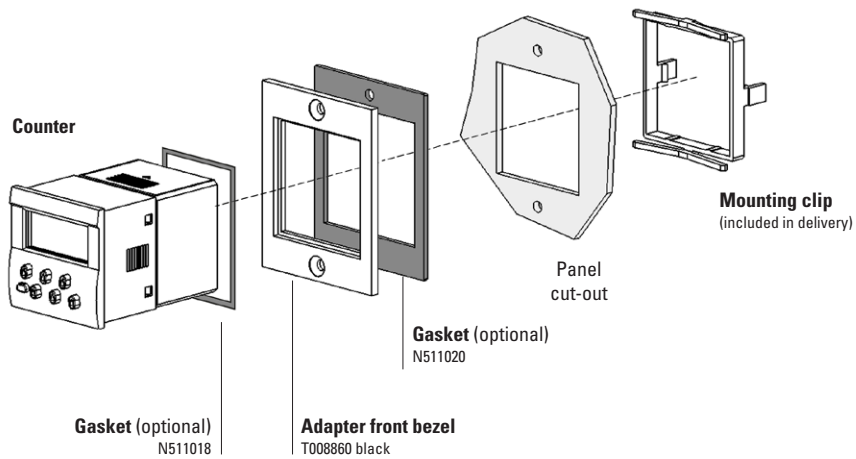
Type series

Description	Type	Options
Dual function counter 48 x 48 mm [1.89 x 1.89"]	HC 77	<ul style="list-style-type: none"> • Color of housing grey Art. no. 3.55X.400.XXX
With adapter front bezel 55 x 55 mm [2.17 x 2.17"]	HC 77.55	<ul style="list-style-type: none"> • Flat pin 0.8 x 6.3 mm [0.031 x 0.25"] Art.-No.: 3.55X.40X.XXX.011 • Separate connections for running time meter and adding counter. This model is available for AC or DC (not mixed) <ul style="list-style-type: none"> Adding counter max. 10 Hz Electrical connection: 2 x cable 2 x 0.5 mm² [AWG20], NYFAZ, 0.5 m [1.64'] (hour meter cable red/black, adding counter grey cable) Art. no. 3.55X.40X.XXX.060 • Sealed window (IP65 front side) with: <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - 2 x cable 2 x 0.5 mm² [AWG20] Art. no. 3.554.401.351.060 - Spring-type terminal on request
Order information:		
Art. no. (for special voltages etc. indicate exact model, voltage and frequency e.g. HC 77, 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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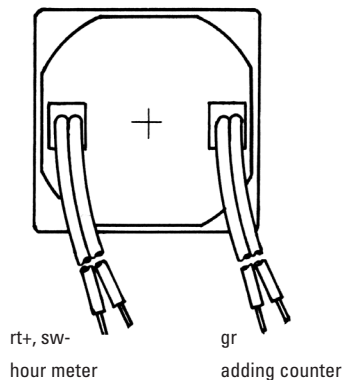
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Technical data

General technical data		Electrical characteristics		
Operating indicator of the running time meter	AC	fast rotating wheel with red dashes: 99999.99 h	Electrical connection	screw terminal (tightening torque max. 0.8 Nm)
	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"]	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
Color of figures	hour meter	hour: white on black decimal: red on black	Rated voltages	AC (50 or 60 Hz) 20 ... 30/42 ... 48/100 ... 130/187 ... 264 V DC 10 ... 30/36 ... 80/100 ... 130 V
	pulse counter	white on black	On time	100 %
Operating temperature		-15 °C ... +50 °C [+5 °F ... +122 °F] (non-condensing)	Count mode	adding
Relative humidity at +30 °C [+86 °F]		≤ 80 % (non-condensing)	Accuracy	AC supply frequency + 30 ms DC < 0.003 % (at 24 h)
Altitude		up to 2000 m [6562']	Reset	no reset
Mounting position		any	EMC standards	EN 55011 class B EN 61000-6-2, EN 61000-6-3
Mechanical characteristics			Device safety	designed to protection class 2 application area pollution level 2
Protection		IP52 (front side) when built in	UL approval	file E128604
Color of housing		black (standard)		
Weight	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]		

Terminal assignment

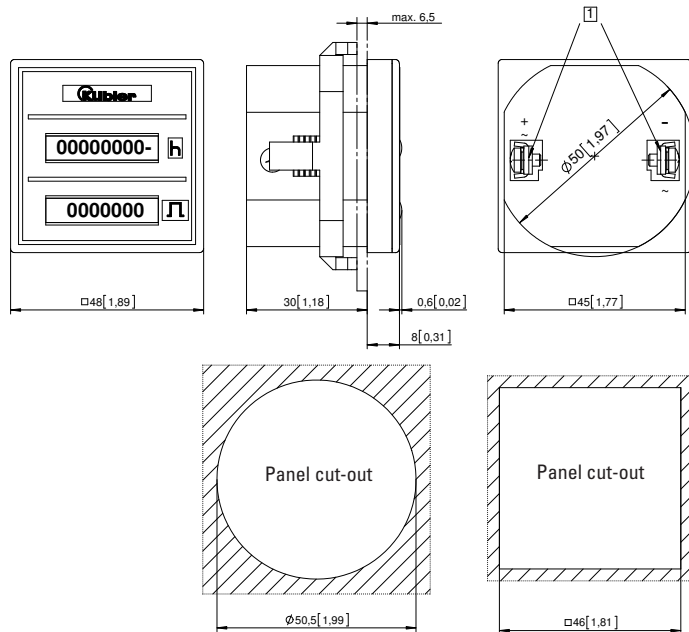
Counter with separate connections (rear view)



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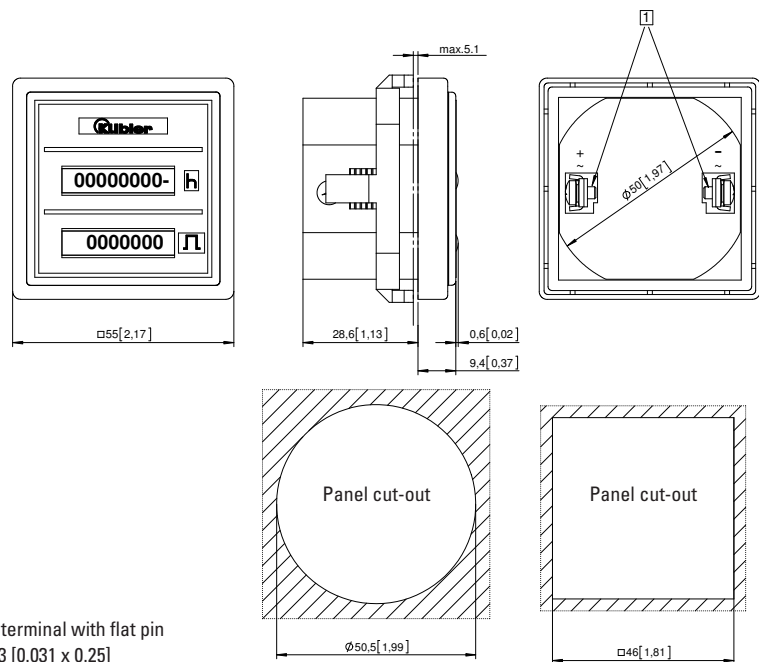
Dual function counter 48 x 48 [1.89 x 1.89"]
Type HC 77



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 ¹⁾	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 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			