

# Hour meters / timers, electromechanical

Dual function counters

Pulse + time for DIN rail (AC+DC)

SHC 77



The counter combinations SHC 77 comprise an hour meter and a totaliser. They can be controlled both simultaneously and separately.

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

## Characteristics

- Hour meter and totaliser in one single device  
optional: counters controlled separately
- Without reset
- High shock resistance
- Magnified large figures
- Protection IP52 (on the front side)
- Data retention in case of power failure

- Long service life
- UL-approved

## Applications

General counting, alarm systems, pay stations, electricity meters, vending and gaming machines, copying machines, medical equipment, car washes, lifts, heating burners

## Type series

Description	Type	Options
Dual function counter, common connections	<b>SHC 77</b>	SHC 77: The two meters are connected in parallel, this means, that the adding counter registers the total number of events and the time meter the total operating time of the device.
Dual function counter, separate connections	<b>SHC 77.60</b>	SHC 77.60: Hour meter and adding counter have two separate connections. This version is available for either AC or DC version (not mixed).

Order information: Art.-No. (for special voltages etc. indicate exact counter types, voltage and frequency e.g. SHC 77, 120 V AC, 60 Hz)

## General technical data

<b>Operating indicator of the hour meter</b>	AC	fast rotating wheels with red dashes: 99999.99 h
	DC	1/100 h display turns continuously by 1 digit per 36 s: 999999.99 h
<b>Height of figures</b>	4 x 1.7 mm [0.16 x 0.067"] optical	
<b>Colour of figures</b>	hour meter	hours: white figures on black
	1/10 u. 1/100 h adding counter	red figures on black white figures 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>Colour of housing</b>	black (standard)	
<b>Weight</b>	SHC 77	85 g [3.00 oz]
	SHC 77.60	105 g [1.70 oz]

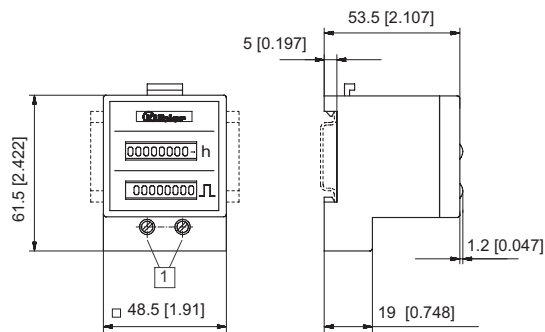
## Electrical characteristics

<b>Electrical connection</b>	SHC 77	screw terminal (tightening torque max. 0.8 Nm)
	SHC 77.60	2 x cable – 2 x 0.5 mm <sup>2</sup> [AWG20] NYFAZ, 0.5 m [1.64'] hour meter red/black adding counter grey
<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 187 ... 264 V AC, 50 Hz	approx. 1.43 VA 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>Test voltage</b>	2500 V AC, 50 Hz	
<b>EMC</b>	Emitted interference	EN 55011 class B
	Immunity to interference	EN 61000-6-2
<b>Device safety</b>	Designed to	EN 61010 part 1
	Protection class	2
	Application area	Pollution level 2
<b>UL approval</b>	E128604	

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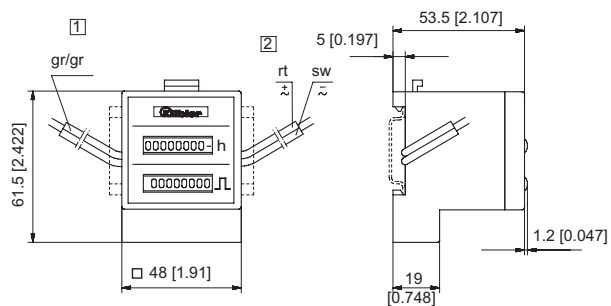
**Dual function counter with common connections**  
Type SHC 77



1 Screw terminal

Type	Display	Voltage	Art.-No.					
			10 ... 30 V	20 ... 30 V	36 ... 80 V	42 ... 48 V	100 ... 130 V	187 ... 264 V
SHC 77	7/8 digits	AC (50 Hz)		3.553.401.071		3.553.401.072	3.553.401.074	3.553.401.075
		AC (60 Hz)		3.553.401.081		3.553.401.082	3.553.401.084	3.553.401.085
		DC	3.553.401.351		3.553.401.353		3.553.401.381	

**Dual function counter with separate connections**  
Type SHC 77.60



1 adding counter  
2 hour meter

Type	Display	Voltage	Art.-No.					
			10 ... 30 V	20 ... 30 V	36 ... 80 V	42 ... 48 V	100 ... 130 V	187 ... 264 V
SHC 77.60	7/8 digits	AC (50 Hz)		3.553.401.071.060		3.553.401.072.060	3.553.401.074.060	3.553.401.075.060
		AC (60 Hz)		3.553.401.081.060		3.553.401.082.060	3.553.401.084.060	3.553.401.085.060
		DC	3.553.401.351.060		on request		3.553.401.381.060	