

Hour meters / timers, electromechanical

Dual function counters	Pulse + time for DIN rail (AC+DC)	SHC77
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The counter combinations SHC77 comprise an hour meter and a totalizer. 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 totalizer 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	SHC77	SHC77: 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	SHC77.60	SHC77.60: 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. SHC77, 120 V AC, 60 Hz)		

General technical data

Operating indicator of the hour meter	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
Height of figures	4 x 1.7 mm [0.16 x 0.067"] optical	
Color of figures	hour meter	hours: white figures on black
	1/10 u. 1/100 h adding counter	red figures on black white figures 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	

Electrical characteristics

Electrical connection	SHC77	screw terminal (tightening torque max. 0.8 Nm)
	SHC77.60	2 x cable – 2 x 0.5 mm ² [AWG20] NYFAZ, 0.5 m [1.64'] hour meter red/black adding counter grey
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 187 ... 264 V AC, 50 Hz	approx. 1.43 VA 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	
Test voltage	2500 V AC, 50 Hz	
Device safety	designed to protection class	EN 61010 part 1
	application area	2 pollution level 2

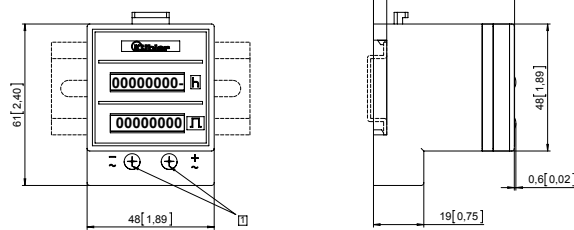
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Mechanical characteristics	
Protection	IP52 (front side) when built-in
Housing color	black (standard)
Weight	SHC77 85 g [3.00 oz] SHC77.60 105 g [3.70 oz]

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

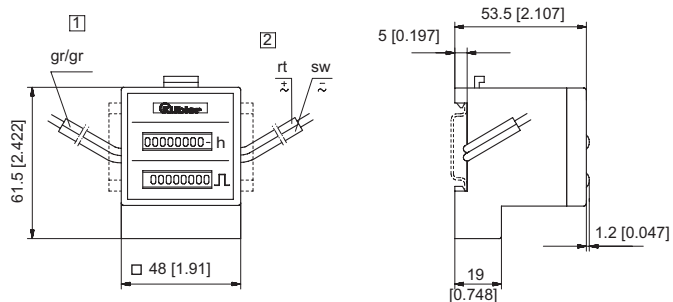
Dual function counter with common connections
Type SHC77



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
SHC77	7/8 digits	AC (50 Hz)		3.553.401.071		3.553.401.072	3.553.401.074	3.553.401.075
	7/8 digits	AC (60 Hz)		3.553.401.081		3.553.401.082	3.553.401.084	3.553.401.085
	7/8 digits	DC	3.553.401.351		3.553.401.353		3.553.401.381	

Dual function counter with separate connections
Type SHC77.60



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
SHC77.60	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
	7/8 digits	AC (60 Hz)		3.553.401.081.060		3.553.401.082.060	3.553.401.084.060	3.553.401.085.060
	7/8 digits	DC	3.553.401.351.060		on request		3.553.401.381.060	