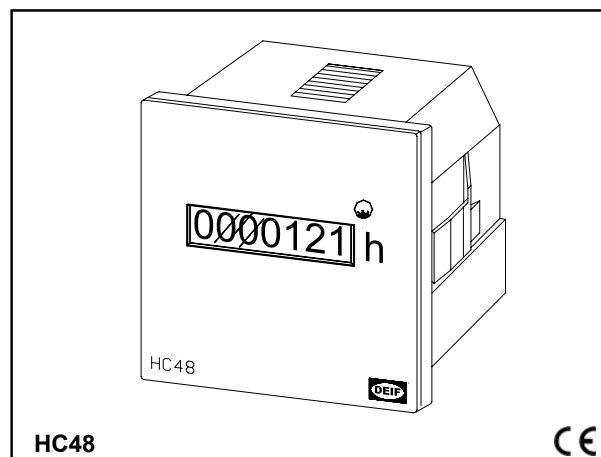*Type HC48*

Running hours counters

- **For AC or DC measuring voltage**

- **AC: Synchronous motor, DC: Step motor**

- **Standard IP40. Special version IP65**

- **In DIN size case, 48 x 48 mm, aluminium clamp mounting**

- **Adapter frames: 55 x 55 mm, 72 x 72 mm**

HC48   CE

Application

Hour meters HC48 are designed for the determination and monitoring of operating time, warranty period and maintenance intervals on electrically driven machines and devices, mainly in mechanical processing, woodworking, textile and paper industry, on central heating boilers, electrical furnaces, power drives and rectifiers etc. They are available in a variety of mounting techniques, for all common voltages and with a mounting depth of only 32 mm. As a special version, they offer a fully sealed plastic housing. Hour meters are connected in parallel to the control circuit behind the start gear, thus working only during the operation of a machine or device. The hour meters cover a time range from 0 to 99,999.99 h (AC) resp. 999,999.9 (DC). They restart automatically at 0 when leaving the range limit. There is no separate reset facility.

Technical specifications

Connection:	AC and DC: combined - flat pins 6.3 x 0.8 mm with screw terminals simple – flat pins 6.3 x 0.8 mm
Supply voltage:	AC: 24V, 110V, 230V, 400V (±10%) DC: 10-48V, 110V (±10%)
Mains frequency:	AC: 50Hz, 60Hz
Motor:	AC: synchronous motor; DC: step motor
Protection class:	AC and DC: IP40 front side
Operating temp. range:	AC: -25°C....+70°C; DC: -20°C....+55°C
Reading accuracy:	AC: 1/100 hour (36 sec.); DC: 1/10 hour (6 min.)
Counting range:	AC: 99,999.99 hours; DC: 999,999.9 hours
Number of digits:	AC: 5 integers, 2 decimals; DC: 6 integers, 1 decimal

The following data applies for AC and DC:

|	
Digit size:	4 mm
Digit colour:	Integers (white), decimals (red)
Housing colour:	Black
Mounting:	Aluminium clamp A, snap fastener F, DIN-rail D. When ordering mounting type aluminium clamp A or DIN-rail D, it is possible to dismount the aluminium clamp or the adaptor for DIN-rail, thus obtaining mounting type F. Please note that the panel cut-out must be (1) for this application.
Front dimensions:	48 x 48 mm
Adapter frames:	55 x 55 mm, 72 x 72 mm
Special versions:	IP65 (only mounting aluminium clamp A and no frame)
EMC:	EN50081-1 and EN50082-2

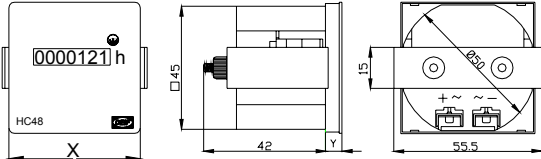## Dimensional details

All dimensions in mm

(1)   (2)   (3)

50+1

45+0.5   51   ○ 46
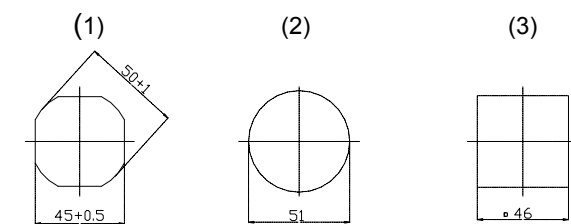
HC48 Panel cut-out   Weight: Approx. 0.050 kg

Type HC48
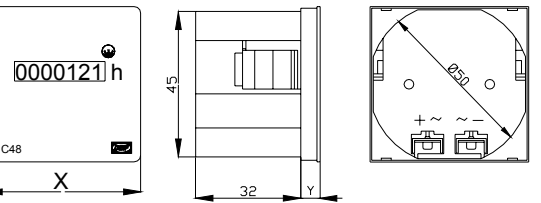
Mounting instructions

Mounting A
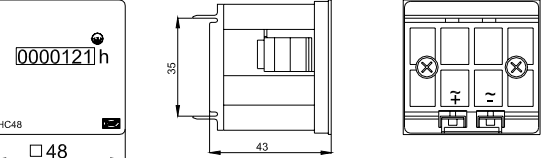
x (mm)	y (mm)	Mounting hole
48 x 48	6	1
55 x 55	7	1, 2 or 3
72 x 72	7	1, 2 or 3

Mounting F

x (mm)	y (mm)	Mounting hole
48 x 48 mm	6	1

Mounting D

Order specifications

	Type	Measuring voltage	(Frequency)
Examples:	HC48	230V AC	50 Hz
	HC48	10-48V DC	-
	HC48	400V AC	60 Hz
	Mounting	**Adapter frame**	**Protection class**
	D	No	IP40
	A	72 x 72 mm	IP40
	A	No	IP65

Due to our continuous development we reserve the right to supply equipment which may vary from the described.