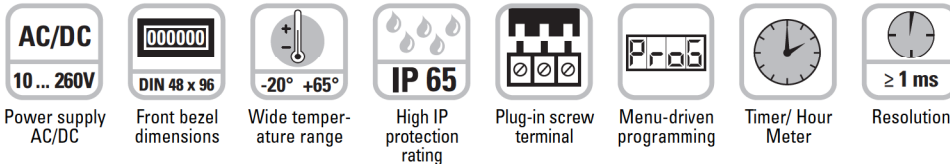**Kübler**

LED Timers – Codix 543

For use as a timer, hour meter or short-time meter

- Pulse width measurement (operating time)
- Time interval measurement (start/stop)

AC/DC 10 ... 260V	000000 DIN 48 x 96	-20° +65°	IP 65	Plug-in screw terminal	ProG		≥ 1 ms
Power supply AC/DC	Front bezel dimensions	Wide temperature range	High IP protection rating	Plug-in screw terminal	Menu-driven programming	Timer/ Hour Meter	Resolution

Powerful

- **High accuracy**
  Thanks to quartz time base

- **Robust housing**
  IP 65 protection

- **LED display**
  Very bright, 14 mm high

- **Time base can be set individually**
  Hours, minutes or seconds – can be set even more precisely thanks to the max. 3 decimal places. Smallest attainable resolution: milliseconds

- **Fast start-up time**
  Detects incoming pulses just 16 ms after being switched on –> so no pulses are lost with a simultaneous motor start-up
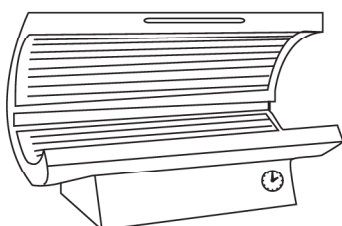
User-friendly

- **Big keys**
  Pressing either of the keys switches between displays
  Can also be operated when using gloves

- **Easy to programme**
  Easy menu-driven programming and operation
  Possibility to enter the programming mode during operation, with authentication query
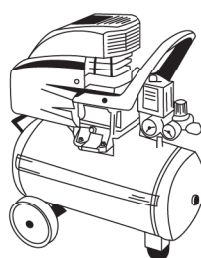
Universal

- **Individually programmable start/stop function**
  By means of 2 start/stop inputs, up to 4 different measuring principles can be achieved, e.g. active or passive pulse width measurement, time interval measurement with one input or with separate inputs

- **Manual or electrical reset**
  Tamper-proof, due to lockable reset function

- **User-programmable setpoint**
  Start time at which the time counting should begin

- **AC or DC power supply**
  With sensor power supply

- **Inputs**
  As an alternative to the HTL inputs, devices with a 4 ... 30 V DC input level are available, for use as parallel displays for PLCs

- **Optional output**
  1 Hz clock pulse for active time measurement

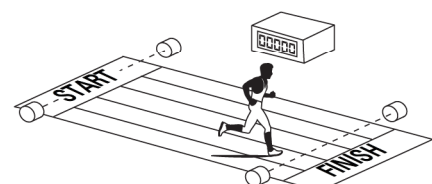## Applications for time and hour meters, short-time meters

- Time measurements such as hours run recording on all machines and plant, e.g. compressors, solariums, special lights and lamps.

- Accessories, OEM equipment or retrofitting to production machine

- Measurement of short times on processes and procedures, time recording (stopwatch function) at sporting events

- Hours run recording for motor vehicles and time monitoring for rally vehicles

Hours run of UV lamps

Operating hours
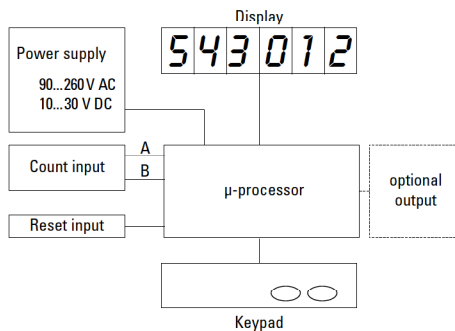
Short time measurement > 1 ms
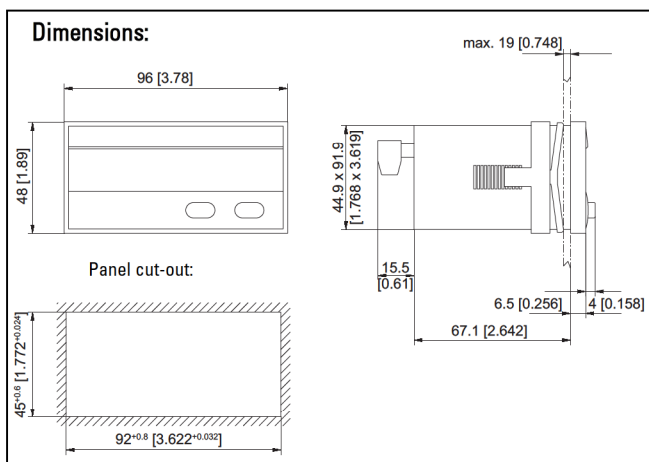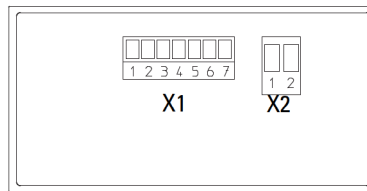
LED Timers – Codix 543

Technical data:

Supply voltage:	10 ... 30 V DC, with reverse polarity protection 90 ... 260 V AC
Current consumption:	max. 50 mA, 6 VA
Display:	6-digit red 7-segment LED display; 14 mm [0.551"] high
Data backup:	EEPROM
Housing:	dimension 96 x 48 mm [3.78 x 1.89"] according to DIN 43 700; RAL 7021, grey
Polarity of Inputs:	programmable, npn or pnp for all inputs
Input resistance:	approx. 5 kΩ
Resolution:	0.001 s
Reset time:	5 ms

Input switching level (standard version):	DC-version:
	  low: 0 ... 0.2 [0 ... 0.008"] x U_B [V DC]
	  high: 0.6 [0.024"] x U_B ... 30 V DC
	AC-version:
	  low 0 ... 4 V DC
	  high 12 ... 30 V DC

Input switching level 4 ... 30 V DV version:	low 0 ... 2 V DC high 4 ... 30 V DC
Voltage supply for sensors:	24 V DC ±15 %/100 mA at AC version
Power consumption (Optocoupler)	max. 30 V, 10 mA
Ambient temperature:	–20 ... +65 °C [–4 ... 149 °F] non-condensing
Storage temperature:	–25 ... +70 °C [–13 ... 158 °F]
Altitude	up to 2000 m
Accuracy:	< 50 ppm
EMC:	Immunity to interference: EN55011 class B Emitted interference EN61000-6-2
Device safety:	design to: EN61010 Part 1 protection Class: 2 application area: Soiling Level 2
Protection:	IP 65 front side
Weight:	approx. 150 g [5.291 oz]

Block diagram:

Connections:

Dimensions:

Panel cut-out:

Connection: X2

Pin	AC-version	DC-version
1	90 ... 260 V AC	0 V DC (GND)
2	90 ... 260 V AC	10 ... 30 V DC

Connection: X1

Pin	AC-Version	DC-Version
1	Optocoupler output Emitter	
2	Optocoupler output Collector	
3	INP C (Frequency)	
4	INP B (Count)	
5	INP A (Count)	
6	GNDout	n.c.
7	+24 Vout	n.c.

Delivery specification:
Digital display
Mounting clip
Gaskets
Multilingual operating instructions

Order code:

6.543.01X.XX0

Output
1 = Optocoupler output
2 = No output*

Input switch level
0 = Standard*
A = 4 ... 30 V DC level

Power supply
0 = 90 ... 260 V AC*
3 = 10 ... 30 V DC
* standard stock model

Replacement parts:
7-pin screw terminal	RM 3,81 1 ... 7:	N100387
2-pin screw terminal	RM 5,08 1 ... 2:	N100133