

Take Timer with DCF option

The timer 1180 is built in a standard 190 x 40 x 107 mm plug-in unit with LED numerical displays.

It can be used both in Down-timer (count-down) and Up-timer (stop-watch) mode. In conjunction with the receiver 1176 the time information transmitted by the Physikalisch-Technischen Bundesanstalt (PTB) can be used for precise time display.



TECHNICAL SPECIFICATIONS

General

Weight: 700 g
 Dimensions: 190 x 40 x 107 mm
 Supply voltage: 12 V to 38 V DC / 10 V to 24 V AC
 Current drain: 12 V / 190 mA
 24 V to 38 V / 125 mA
 Connector: 64-pin connector DIN 41612
 Fastening: M3-screws (see accessories)
 Display: 7 digits LED display,
 Height 14,2 mm, colour green
 Digit 1/10 colour yellow
 Modes: Up-Timer
 Down-Timer
 DCF - real time clock

Up Timer

Range: 9 h 59 m 59 s
 Resolution: 1/10 s
 Memory: 5 time values

Down Timer

Range: 09 h 59 m 59 s
 Resolution: 1 s
 Presets: 5 time values

Interfaces

Remote display interface: Electrical: RS-422
 Signals: DCK (data clock)
 FCK (frame clock)
 DATA (8 bit Slot)
 Clock rates: DCK 10 kHz
 FCK 1.25 kHz
 Format: NRZ word length 8 bit
 Bit 0-3 segment addresses
 Bit 4 decimal point
 Bit 5-7 digit addresses
 Supply: +5 V (logic)
 +24 V (input voltage)
 GND (signal)
 0 V (input voltage)

Remote control interface: serial transmission of all timer functions
 parallel transmission of: START, STOP, RESET (active low)
 Electrical: RS-422
 Signals: DCK (data clock)
 RFCK (rem. frame clock)
 RDATA (rem. data)
 START
 STOP
 Clock rate: DCK 10 kHz
 RFCK 1.25 kHz
 Format: NRZ word length 8 bit
 LSB first
 Supply: +5 V (logic)
 GND (signal)

Control output 1&2: opto couplers CNY74-2 (U_{CEmax} : 70 V)
 Control output 3: TTL-compatible 5 V via 470 Ω

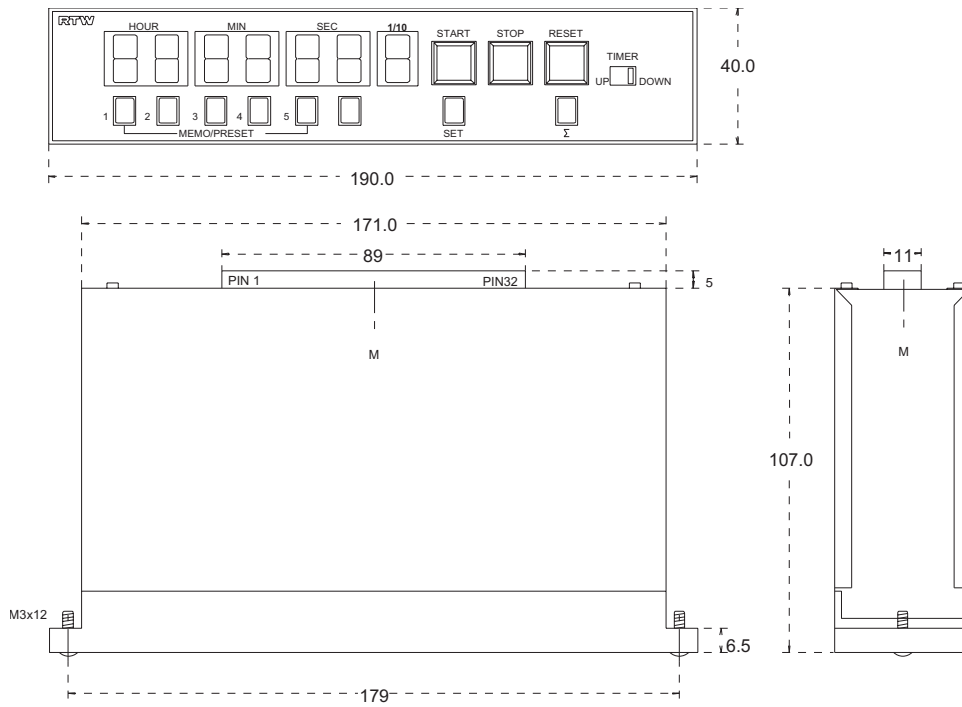
DCF-Mode:

Calibration: during power up and at full hour
 DCF-interface: +12 V (1176 supply voltage)
 Gnd
 DCF signal in

Items delivered

Timer 1180DCF: • mating connector
 • operating manual

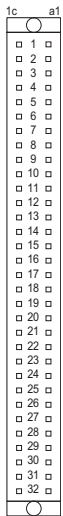
Order number: 1180DCF



Abmessungen in Millimeter: Darstellung auf 45% reduziert. Dimensions in mm. Size reduced to approx. 45%.

CONNECTION

The timer is connected up using a 64-pin female connector (DIN 41612). The connector is wired up as follows:



pin 14c :	+FCK (6)		pin 13a:	DCK (1)	
pin 15c:	+DAT (7)	Display	pin 14a:	-FCK (2)	
pin 16c:	+5 V (8)		pin 15a:	-DAT (3)	Display
pin 17c:	GND (9)		pin 16a:	+VIN (4)	
pin 18c:	OUT3 (1)		pin 17a:	0 V (5)	
pin 19c:	+OUT1* (2)	Outputs	pin 18a:	GND (6)	
pin 20c:	+OUT2* (3)		pin 19a:	-OUT1* (7)	Outputs
pin 21c:	+5 V (4)		pin 20a:	-OUT2* (8)	
pin 22c:	0 V (5)		pin 21a:	GND (9)	
pin 23c:	STOP (6)		pin 22a:	START (1)	
pin 24c:	DCK (7)		pin 23a:	RESET (2)	
pin 25c:	RDATA (8)	Remote	pin 24a:	RFCK (3)	Remote
pin 26c:	GND (9)		pin 25a:	+5 V (4)	
pin 29c:	+12 V	DCF	pin 26a:	0 V (5)	
pin 30c:	0 V DC		pin 28a:	0 V	DCF
pin 31c:	Vin AC	Supply	pin 29a:	DCF in	
pin 32c:	+Vin DC/Vin AC		pin 30a:	0 V DC	
			pin 31a:	Vin AC	Supply
			pin 32a:	+Vin DC/Vin AC	

*+ = Collector
- = Emitter

COLOURS

RAL 1015 Light ivory
RAL 7011 Iron grey

ACCESSORIES

Subject to technical changes without prior notice 04/2004



Case without power supply
Order no. 1023E



Remote display
Order no. 1197A



Remote display
Order no. 1183



19"-1 unit height mounting panel
Order no. 12993



19"-1 unit height mounting panel
Order no. 12994



Bracket
Order no. 1127H



DCF-receiver
Order no. 1176



Clamping locks
Order no. 13973