

# Hand clock

## Analogue Clock

BT 980

### Description:

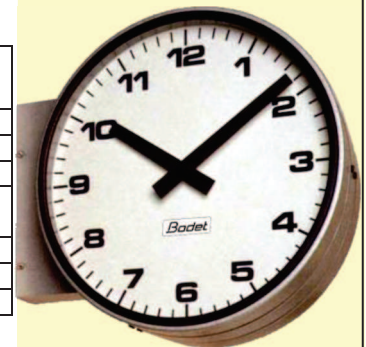
The BT980 clocks are intended to be used on railway, subway and bus stations platforms, workshops ...

- ▶ Indoor or outdoor, waterproof, backlit analogue display clock.
- ▶ Display of hour and minute or hour, minute and second, depending on model.
- ▶ Dial marking: Arabic figures, DIN or notches.
- ▶ Versions: quartz (independent), ½ minute series slave clock, minute 24V HM slave, AFNOR coded time slave or FI synchronised slave clock.
- ▶ Backlighting: by par neon tube on waterproof models.

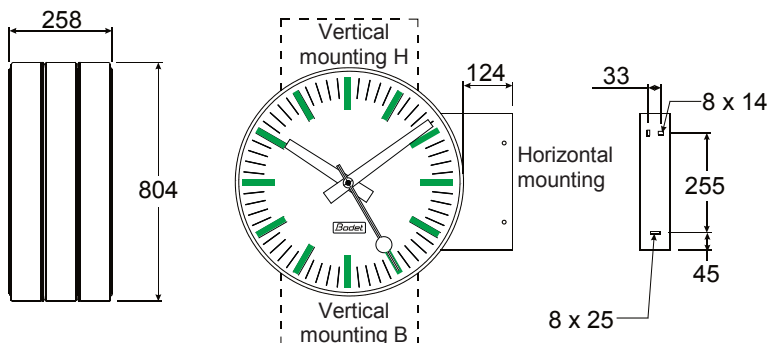


### Technical characteristics:

- ▶ Swivel opening as an option.
- ▶ Double side hanging bracket for wall or ceiling mounting.
- ▶ Double side for wall or ceiling mounting.
- ▶ Viewing distance: 100 m.
- ▶ Light grey lacquered aluminium casing.
- ▶ Safety glass crystal.
- ▶ White dial.
- ▶ Protection Index : IP54



Movement	Power supply	Operating temperatures	Display
Quartz with time setting box.	110 to 240 Volt - 50Hz ±10%	-40°C à +50°C	HM
24V minute parallel slave	Consumption: 10mA	-40°C à +70°C	HM
½ minute series slave	Voltage drop: 0,9V	-40°C à +70°C	HM
½ minute series slave	Voltage drop : 0,9V	-25°C à +70°C	HMS
Servo controlled second	+230 Volt - 50Hz ±10%		
SR2/SR3 slave	Consumption: 32mA at 24V	- 40°C à +70°C	HM
AFNOR slave	230 Volt - 50Hz ±10%	-25°C à +70°C	HM/HMS
Radio FI slave	230 Volt - 50Hz ±10%	-25°C à +70°C	HM/HMS



Models	Poids
SF (Single Face)	14 kg
SFEE (SF Waterproof and Backlit)	18 kg
DFEE (Double Face EE)	34 kg

### References

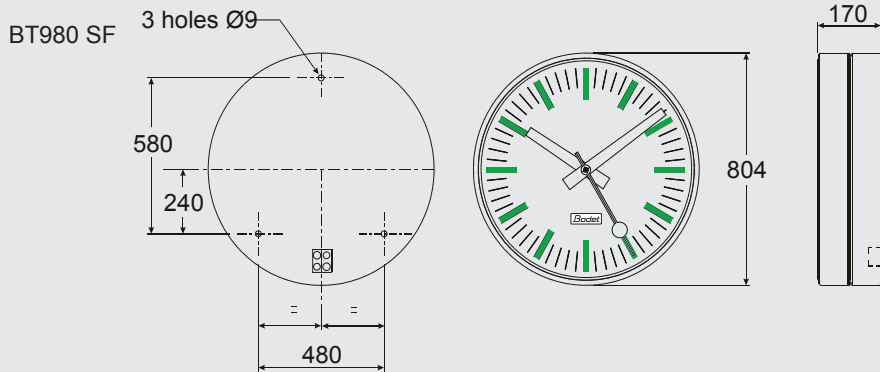
	ISF	SFEE	DFEE FVH	DFEE FVB	DFEE FH
▶ Quartz with time setting box	931512	931532	931552		931562
▶ 24V minute parallel slave	931515	931535	931555		931565
▶ ½ minute series slave	931516	931536	931556		931566
▶ SR2/SR3 slave			931557		
▶ ½ min. series with swivel opening		931576	931596	931546	931586
▶ ½ min. series HMS with swivel opening		931578	931598	931548	931588
▶ AFNOR HMS + radio FI slave		931570	931590	931540	931580
▶ AFNOR HM + radio FI swivel		931579			931589
▶ AFNOR HM + radio FI		931539	931559		931569



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### **Movements and synchronisation:**

#### Quartz movement with time setting box

- ▶ The clock is totally independent, the time information is given by its own time base. Precision  $\pm 1$  minute per year.
- ▶ Backup in case of power failure: 72 h.

#### Minute series impulses movement (for BT radio system)

- ▶ The slave clocks are connected to a BT radio synchronisation receiver which sends an electric pulse every minute to the clocks.
- ▶ Line current: 65 to 100 mA depending on shunt value.

#### SR2-SR3 impulses slave movement

- ▶ The slave clocks are connected to a distribution network that sends an electric pulse every minute.
- ▶ Pulse amplitude: 20 to 30V.

#### AFNOR time coded slave movement

- ▶ The time coded time distribution consists of transmitting a complete time message every second. The time setting of the clocks is accomplished automatically and as soon as the clocks are connected to the network.
- ▶ The AFNOR code and is not sensitive to and does not emit electric disturbances.
- ▶ A battery keeps the clock operating in case of power failure (1 hour).

#### FI radio slave movement

- ▶ The radio synchronisation France Inter allows an absolute time precision as well as automatic summer/winter changeovers.
- ▶ A battery keeps the clock operating in case of power failure (1 hour).

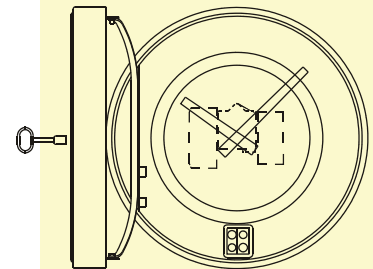
#### 24V minute parallel impulses slave movement

- ▶ The slave clocks are connected to a distribution line and driven by electric pulses that are sent by the master clock every minute.

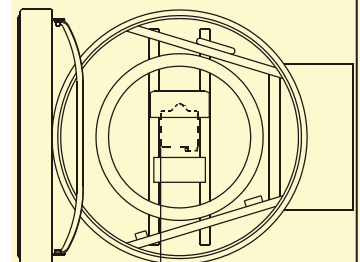
### **Norms:**

- ▶ Norm NF EN60950 : Safety of information technology equipment.
- ▶ Norm RADIO : EN 300-220-3 and norm CEM of RADIO products : EN 301-489-3.
- ▶ Norm AFNOR NF S 87-500 C.

### **BT980 SF swivel arm opening**



### **BT980 DF swivel arm opening**



### **Accessories:**

- |                      |         |
|----------------------|---------|
| ▶ Time setting box   | 933 006 |
| ▶ 230V FI radio box  | 933 010 |
| ▶ 230V DCF radio box | 933 011 |



**Bodet**