



JYSK STANDARD

Clocks

Scope

The standard describes requirements, specifications and test-methods for clocks, watches and their components.

Change-log

Section	Changes
All	Updated standard format and wording. Updated tables and references. Old chapter 2.3 regarding watches removed. Old chapter 3/3.1 merged with 2.1 .
1	Battery requirements differentiated for <i>wall hanging</i> and <i>free standing</i> clocks.
2.1	Approved clock movements (Table 3) updated.

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1 General requirements

Clocks must comply with [Table 1](#).

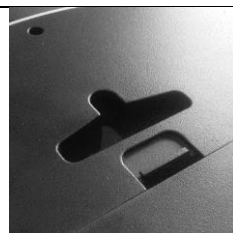
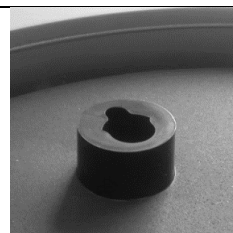
Power supply	Clocks must be battery driven. Rationale: Clocks supplied by mains electricity require extensive testing to show compliance with the <i>Low Voltage Directive (LVD)</i> . Testing would as a minimum include the harmonized standards EN 60335-1 and EN 60335-2-26 .			
Batteries	<ul style="list-style-type: none">• Must not be included with the product.• The type and amount of battery must be stated on the packaging.• Use of 'alkaline' batteries must be advised in the supplied instructions.			
Change of batteries	The product must be designed to allow easy change of batteries			
	Construction requirements	Wall hanging clocks	The battery compartment must be <i>directly accessible</i> or <i>accessible without use of tools</i> .	
		Free standing clocks	The battery compartment design must comply with JYSK 4005 .	
Radio	Products using the radio frequency spectrum are not permitted. Rationale: Products that use the radio frequency spectrum require extensive testing to show compliance with the <i>Radio Equipment Directive (RED)</i> .			
Alarms	Loudness must be specified in the format [dB(A) @ 10 cm] Permitted range: 60-90 Tolerance: Less than ±3			
Wall mounting	Wall hanging clocks must include a 'keyhole' or similar shaped recess for hanging. The internal recess edge must be ≤4 mm from the plane that contacts with the wall.			
Safety	Sharp edges	Accessible sharp edges are not permitted. Terminals in the battery compartment are omitted regarded they do not pose a safety risk.		
	Glass thickness (When included)	Nominal	Tolerance	Minimum
		≥1,5 mm	±0,2 mm	≥1,4 mm

Table 1 – Requirements for clocks

2 Type-specific requirements

2.1 Analog clocks

Analog clocks must comply with [Table 2](#).




Examples			
Crystal oscillator	32,768 kHz		
Battery type for clock movement	1 x 1,5 V AA battery		
Operation voltage	1,3 ~ 1,7 V		
Operation temperature	-10°C ~ 50°C		
Current consumption	≤200 µA at 1,5V DC		
Clock movements	<p>Must be sweep and not noisy. Only approved movements according to Table 3 must be used - Use of other movements must be approved by JYSK C&Q.</p> <p>The following is as a minimum required for the approval process of other movements:</p> <ul style="list-style-type: none"> • Three physical samples • Brand and model designation • Specifications from the movement manufacturer: <ul style="list-style-type: none"> • Accuracy • Current consumption • Hand allowance 		
Time keeping accuracy according to ISO 19235 or GB/T 6046-2016	Instantaneous rate (\bar{m})	±1,0 [s/d]	
	Voltage coefficient (C_v) or (C_v)	±1,5 [s/(d·V)]	
	Temperature coefficient (C_t)	C_{t1} : 0 ~ 0,12 [s/(d·°C)] C_{t2} : 0 ~ -0,12 [s/(d·°C)]	
Hands <ul style="list-style-type: none"> • Hour- • Minute- • Second- 	<ul style="list-style-type: none"> • Length • Weight • Unbalance 	Must be within the allowance specified by clock-movement manufacturer.	
	<ul style="list-style-type: none"> • Material 	Plastic or metal	

Table 2 – Requirements for analog clocks

Brand	Model*	Producer
Heng-Rong	• HR1688SS	Dongguan Heng-Rong Hardware Electronic Technology Co., Ltd.
JH	• S001	Dongguan Jiahao Clock Manufacturing Co., Ltd.
JinHong	• JH-8188S	Zhangzhou Jinhong Electronic Co., Ltd.
Long Deli	• 8188S	Fujian Virtue Industry Co., Ltd. or Tong yuan electronic Co., Ltd
POWER	<ul style="list-style-type: none"> • KS302 • KSA302 • KSC302 	Shenzhen Golden Power Precision Electronics Co., Ltd.
Sang tai	• 7168S	Zhangzhou Sangtai Timepiece Co., Ltd.
YOUNG TOWN	• 12888ST	Dongguan Young Town Co., Ltd.
ZHONGHUI	• Q6	Longhai Zhonghui Watch Co. Ltd.
* Note: Most models exist in several versions with different shafts.		

Table 3 – Approved clock movements

2.2 Digital clocks

Digital clocks must comply with [Table 4](#).


Examples			
Crystal oscillator	32,768 kHz		
Battery	Permitted types	1,5 V AA 1,5 V AAA	
	Number of batteries	1 to 3	
Operation temperature	-10°C ~ 50°C		
Time keeping accuracy according to ISO 19235 or GB/T 6046-2016	Instantaneous rate (\bar{m})	$\pm 1,0$ [s/d] (30 seconds pr. month)	
	Voltage coefficient (C_u) or (C_v)	$\pm 1,5$ [s/(d·V)]	
	Temperature coefficient (C_t)	C_{t1} : 0 ~ 0,12 [s/(d·°C)] C_{t2} : 0 ~ -0,12 [s/(d·°C)]	

Table 4 – Requirements for digital clocks