DATASHEET

Product Name	Digital LED Wall Clock	
Type / Model	NDC 57/4 THS R L20 12DC USB	
Order Code	ZZ0945-3.00	Date of last revision: 26.01.2022

Product Description

The **NDC 57/4 THS R L20 12DC USB** is a large size digital LED clock, which can display time, date, temperature and humidity information. Its aesthetic design and high brightness LED display with large viewing angle makes it suitable for use in modern interior environments such as offices, banks, public institutions, bus and railways stations, airports, manufacturing plants, production lines, warehouses, etc. All displaying parameters (e.g. time, date, duration of each information, brightness, etc.) can be set with the remote control or PC software application via USB connection.

Clock installation is simple, wall mounting bracket, power supply adapter and installation guide are included.

Various optional accessories are available, please see the list and brief description below.

Main Features

- Displaying **TIME**, **DATE**, **TEMPERATURE** and **RELATIVE HUMIDITY**;
- Displaying format: **HH:MM** (hours : minutes) and **DD:MM** (day : month);
      XX,X° (temperature in °C) and **XX rH** (relative humidity in %RH);
- **57 mm** (2.3") digit height, up to **23 m** readability;
- High-brightness LEDs with large viewing angle 120°;
- Alternating of each information and its duration can be set from 0 to 99 sec;
- Automatic or manual LED brightness control (built-in light sensor);
- Stylish frame made of anodized aluminum profile;
- Tinted acrylic glass with non-glare surface;
- Wireless setup using IR remote control;
- USB interface for PC connection and setup using NDC_config sw application;
- Can be set as Count-up or Count-down timer/counter (with optional trigger input and Relay switch output);
- Built-in time scheduler for triggering alarm events, e.g. time breaks, work shifts (with optional Relay output).

Optional Accessories - can be ordered separately as required

- Remote control IR:
    - At least 1 pc. is necessary to be purchased with clock.
    - In case of purchasing more clocks, only one remote control is needed.
- Temperature and humidity sensor:
    - Internal (plug-in probe): THS Sensor 40 3,3DC I2C
    - Already included with NDC...THS clock version delivery (replaceble item)
- Relay voltage-free contact switch
    - Can be used for triggering external device (e.g. acoustic or light alarm)
- Counter / timer input
    - Used for triggering counter or timer events (e.g. count-down, count-up)
- GPS interface and GPS receiver
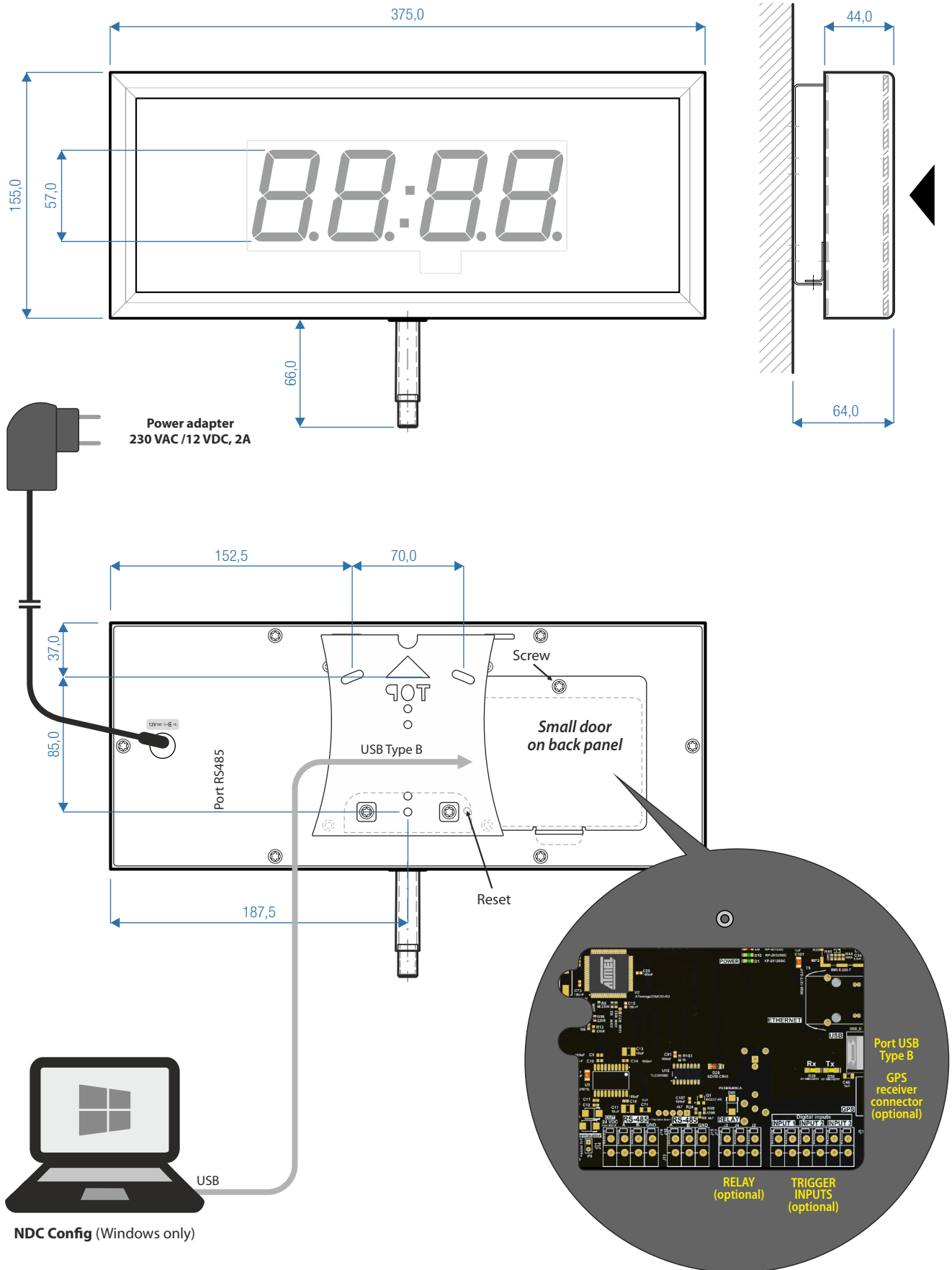   - Used for time synchronization with GPS satelite

Clock Specifications

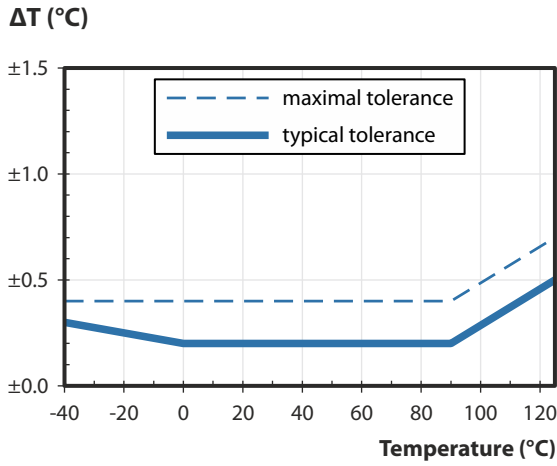|	
Number of characters	4
Height of characters	57 mm
Displaying format	88:88, HH:MM (time), DD:MM (date), XX.X° (temperature), XX rH (relative humidity)
Readability range	Up to 23 meters
LED type	Super-bright 7-segment LED modules
LED colour	RED
Viewing angle	120°
Time accuracy	+/- 4 sec. max deviation per month, when no external time synchronisation is used
Frame construction	Anodized aluminium frame, steel back panel coated with black powder paint
Frame colour	Platinum grey (see picture on page 1)
Front cover	Non-glare PMMA glass, grey tinted, 3 mm thick
Class of protection	IP 20, indoor use only
Interfaces	1x USB type B, for PC connection (for setting clock parameters or data logging) 1x IR, for remote control (used for setting clock parameters or data logging)
Power supply	Power adapter 230 VAC /12 VDC, 2A (included)
Power consumption	9 W max.
Dimensions	375 mm x 155 mm x 64 mm
Weight	1,8 kg
Operating temperature	0°C ~ +70°C (indoor use only)
Accessories included	Wall mounting brackets, screws and fasteners, power supply adapter, manual
Software for PC (Windows) - available for download	DataLoggerTH - used for recording and viewing temp/humidity data on PC NDC_config - used for setting clock configuration parameters

Sensor Specifications *(clock version NDC...THS, plug-in sensor included)*

|	
Temperature measuring range	-35°C ~ +70°C
Temperature accuracy	±0,3°C typical, see graph No. 1 on page 2
Humidity measuring range	0% ~ 99%
Humidity accuracy	±2% RH typical, see graph No. 2 on page 2
Sensor type	SHT31 (Sensirion AG, Switzerland)
Communication interface	I2C, connector jack 3,5 mm on sensor probe - detachable from clock frame

Dimensional drawing

375,0

155,0

57,0

44,0

64,0

66,0

**Power adapter
230 VAC /12 VDC, 2A**

152,5

70,0

37,0

85,0

187,5

Screw

TOP

USB Type B

Port RS485

*Small door
on back panel*

Reset

**Port USB
Type B**

**GPS
receiver
connector
(optional)**

POWER

ETHERNET

USB

Rx Tx

GPS

RS-485 RS-485 RELAY

INPUT 1 INPUT 2 INPUT 3

Digital inputs

**RELAY
(optional)**

**TRIGGER
INPUTS
(optional)**

USB

NDC Config (Windows only)

Graphs - Temperature and Relative Humidity *(Sensirion SHT31 parameters)*

ΔT (°C)

Graph No. 1: Accuracy of temperature in °C.
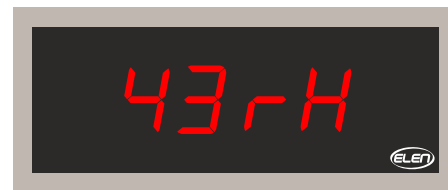
ΔRH (%RH)
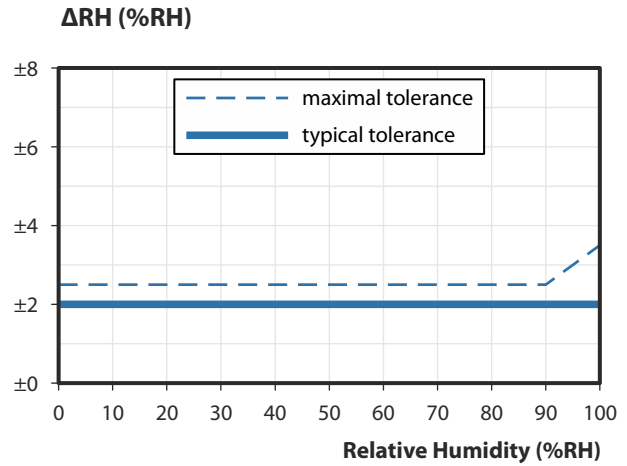
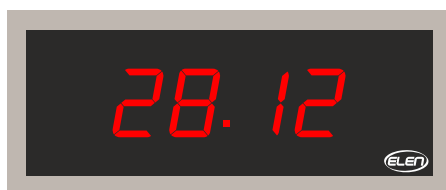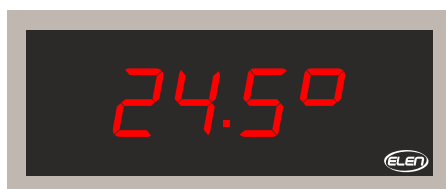**Graph No. 2:** Accuracy of relative humidity at 25°C .

View options
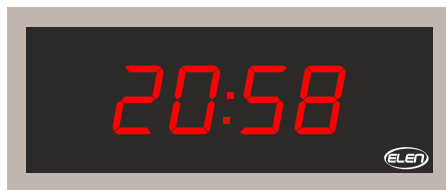
Time

Relative Humidity

Date

Temperature

IR (optional)