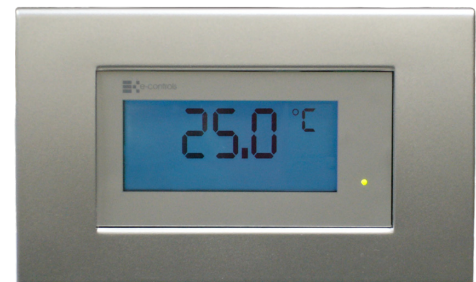# e-Clima®

TEMPERATURE, HUMIDITY AND PRESSURE PARAMETER DISPLAY
Ref: DC.621000-000

Instruction sheet

e-Clima is a device that allows displaying temperature, relative humidity and pressure parameter values from different sensors installed in a room.
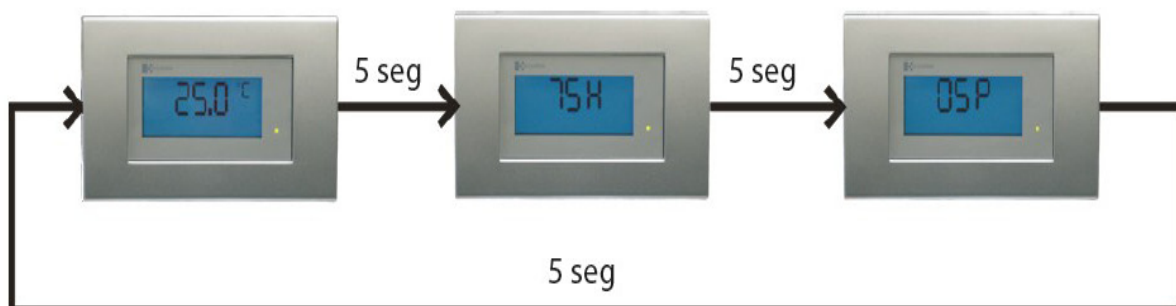
CE LonMark®

Product Description

This device allows the sequential display of temperature, humidity and pressure values supplied by external sensors; values for each parameter are shown on the screen following a continuous cycle. The unit is automatically configured to display these values based on network variables connected to the sensors through the ISO/IEC 14908 (LonWorks®) communication bus included.

Two versions are available, one without local control and another featuring local control that allows value modification through a front 4 pushbutton keypad, enabling temperature and relative humidity setpoints to be sent through the LonWorks network to a remote climate control device.

The unit includes an analogue input to connect a temperature sensor (ref. no. AC.000101-000) and display its value directly on the screen.

Operating Sequence

Operating Description

Automatic startup after a voltage drop, LCD backlight enabling, external temperature sensor input activation and display time for each parameter, may be defined through its configuration variables.

LCD backlight turns off automatically after 5 seconds unless configured for continuous operation.

Installation Instructions

This device should not be installed on shelves, behind curtains, above or near heat sources, or exposed to direct sunlight. For fast and accurate ambient temperature measurement, the display should be installed such that air may circulate vertically. Installation height should be approximately 1.5 m from the floor.
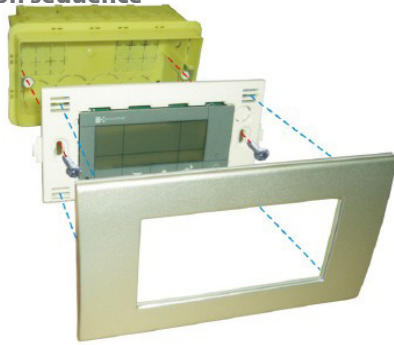
Caution:

Prior to installing or removing the device, ensure that there is no mains voltage present in the wiring to be connected or near the unit.

Do not cut or wind network cables that are wired to the unit.

Do not work on the wiring with wet hands.

Installation sequence
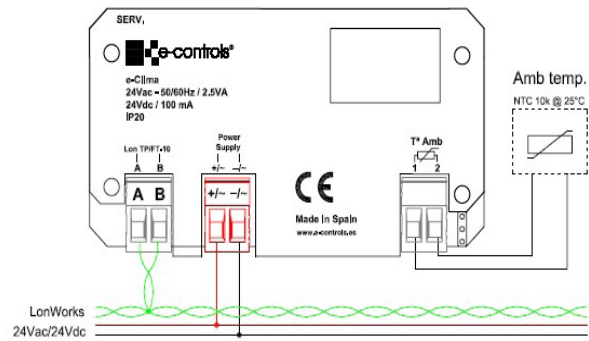

Do not open or pierce the unit.

Keep the device and the supply wires away from moisture and dust.

Use a damp cloth to clean the device.

Installation Steps:

1º Install the Bticino 504E standard back box

2º Insert the e-Clima unit and screw on to the back box

3º Fit the frame onto the device

Wiring Diagram

Technical Features

Supply Power

Operating voltage . . . . 24 Vca ±20%; 50/60 Hz
24 Vcc
Power consumption . . . . .0,9 VA
110mA

Communications

Technology . . . . LonWorks®
Standar . . . . ISO/IEC 14908
Protocol . . . . LonTalk®
Transmission channel . . . . TP/FT-10; 78 kbps
LonMark® compatible device

Temperature sensor inputs

Sensor type . . . . Resistive
Sensor características . . . . Interchangeable NTC, 1%
10 kW at 25ºC (77ºF)
Temperature measuring range . . . . 10ºC to 40ºC

Indicators

Service Pin (SERV) - back side

Received parameters through network variables

Temperature range . . . . -199,9º to +199,9º (ºC / ºF)
Temperature resolution 0,1ºC (-99,9 to 99,9) / 1º (remainder)
Temp. setpoint range . . . . . -50ºC to +50ºC (-125ºF to +125ºF)
Humidity range . . . . 0% to 99%
Humidity resolution 1%
RH setpoint range . . . . 0% to 99%

Pressure range . . . . -99 Pa to +99Pa
Pressure resolution 1Pa

Temperature

Operating . . . . 0ºC to +50ºC (32ºF to 104ºF)
Storage . . . . -20ºC to +85ºC (-4ºF to +185ºF)

Humidity (non condensing)

Operating . . . . 10% a 90% RH at 50ºC
Storage . . . . 95% RH at 50ºC

Dimensions, weight and installation

Dimensions . . . . .136x70x50 mm
Weight . . . . 215 gr.
Flush mount back box . . . . Bticino 504 E (not incluided)
Frames . . . . Bticino, Light series (not incluided)
Plug In connectors . . . . YES
Conductor cross sectional area . . . . 0,5 mm² to 2,5 mm²
Protection index IP20
Electrical safety . . . . Clase III

Product standard

Automatic electrical controls for household
and similar use . . . . EN 60730-1

CE Conformity

Low Voltage Directive 2006/95/EC
Electromagnetic Compatibility Directive 2004/108/EC

Regulations

Safety . . . . EN 60730-1
Emissions . . . . EN 61000-6-3
Immunity . . . . EN 61000-6-1

Product References Nos.

e-Clima® DC621000-000

Related Products

e-Clima® Setpoints DC.621001-000
External temperature sensor, pure white . . . AC.000101-000
External temperature sensor, brushed aluminium . . . .
. . . . .AC.000101-001
230 Vca a 24 Vca transformer AC.300000-000
115 Vca a 24 Vca transformer AC.400000-000