### CONSTRUCTION MATERIALS TESTING SOLUTIONS

# TRC Advanced Climatic Cabinets

CONTROLS' new Advanced Climatic Cabinets (TAC) are multipurpose, suitable for aggregates, cement, concrete, bricks, blocks, asphalt and other construction materials.

These Advanced Climatic Cabinets have been designed to be user-friendly, intuitive and above all highly accurate.

Fitted with a new and improved thermoregulator, the intuitive interface features a 7" touchscreen color display that makes it easy to programme freezing and thawing cycles.

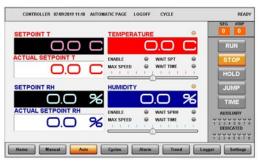
All models can record temperature, humidity (when applicable) and time measurements in full compliance with all the relevant Standards.

Version with temperature and humidity control is capable of generating 95% humidity with accuracy and reliability, making it also a perfect solution for cement specimen curing.

# Two versions of this advanced thermal chamber are available:

- 10-D1429/B: temperature controlled from -30 to +70°C, for testing aggregates conforming to EN 1367-1 and other similar tests on concrete and other construction materials;
- **10-D1429/D:** temperature and humidity-controlled respectively from -30 to +70°C and from 20 to ≥95% humidity, for aggregates and various other tests.

For the determination of resistance to freezing and thawing of aggregates, the accessory 48-D0457, should be used. Please refer to our accessories section.



Large and easy-to-use 7" color touchscreen display

### Benefits

**High performing** — Advanced controller with storage of 100 temperature and humidity cycle programs, each one with up to 64 segments.

**Energy efficient** — Heat loss is reduced by 30% thanks to a high density polyurethane insulation (42 kg/m3), CFC-free and 90mm thick (instead of the usual 60 mm).

**Flexible** — up to three movable temperature sensors (two optional) can be positioned inside the cabinet or placed in the sample to meet Standards' requirements. One fixed also included as standard.

**Standards compliant** — temperature, humidity and time are all recorded in accordance with Standards.

**High accuracy** —  $\pm 1^{\circ}$ C,  $\pm 5\%$ RH (RH with 10-D1429/D models only).

**Intuitive interface** — with a large and easy-to-use 7" color touchscreen display.



# **Specifications**

### **Technical specifications**

Capacity: 500 liters

7" colour display, 800x480 pixels

512 MB internal memory

Integrated Industrial USB port in front panel

Function controller: programmer for 100 cycle programs, each one up to 64 segments

Temperature range/accuracy: -30 to +70°C/±1°C

Humidity range: from 20 to ≥95% (model 10-D1429/D)

Power: Cooling system 1,100 W, Heating system 1,500 W

Internal air circulation: 450 m3/h

Shelves dimensions (L x D): 530 x 650 mm, 4 included 40 kg loading cap. each

Internal dimensions (W x D x H): 560 x 680 x 1300 mm

External dimensions (W x D x H): 730 x 850 x 2100 mm

Weight approx.: 180 kg

### **Ordering information**

#### 10-D1429/B

Temperature-controlled cabinet, 500 l cap., temperature range -30 to +70°C. 230 V, 50 Hz, 1 ph.

10-D1429/BY As above but 220 V, 60 Hz, 1 ph.

10-D1429/BZ As above but 110 V, 60 Hz, 1 ph.

#### 10-D1429/D

Temperature and humidity-controlled cabinet, 500 l cap., temperature range -30 to +70°C, humidity range from 20 to  $\geq$  95%. 230 V, 50 Hz, 1 ph.

10-D1429/DY As above but 220 V, 60 Hz, 1 ph.

10-D1429/DZ As above but 110 V, 60 Hz, 1 ph.

# **Accessories**

#### 48-D0457

Metal can 2,000 ml cap. with removable lid and 1 kg ballast. Conforming to EN 1367-1. Used for determining the resistance to freezing and thawing of aggregates including lightweight types. Weight approx.: 2.5 kg

#### **UPGRADING**

10-D1429/1 Third PT 100 sensor including hardware module

10-D1429/2 Fourth PT 100 sensor



48-D0457: Metal can for thawing and freezing aggregates

## **Contact Us**

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