



# COOLING CONTROLLER

CC 521

## APPLICATIONS

Deep Freezer

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Display Cabinet

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Chillers

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Heat pump

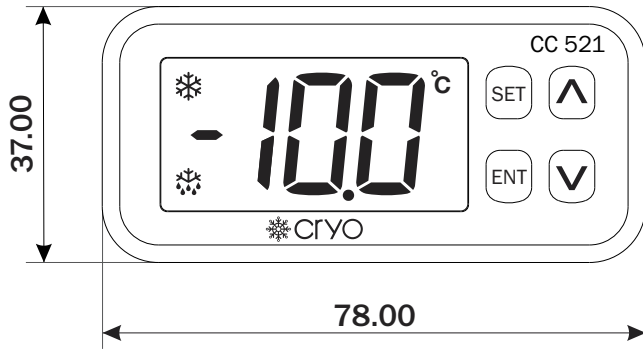
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Portable Chiller

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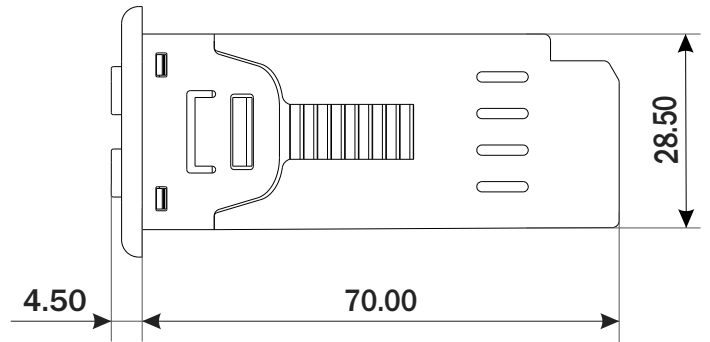
# Mechanical Dimensions

## Body Dimensions



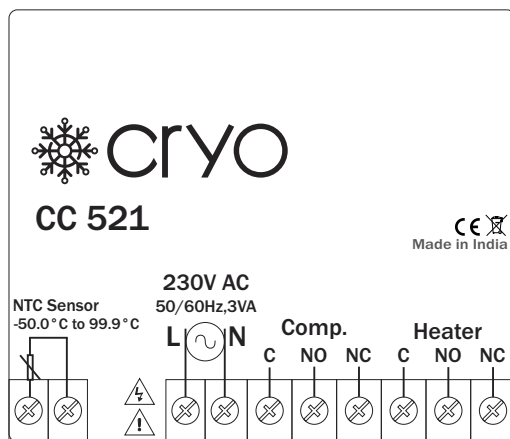
**FRONT VIEW**

All dimensions are in mm

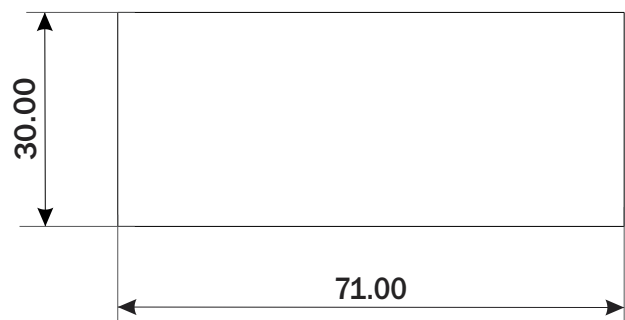


**RIGHT SIDE VIEW**

## Connection Diagram



## Panel Cutout



# TECHNICAL DATA

|                                                   |                             |
|---------------------------------------------------|-----------------------------|
| Control Action                                    | ON-OFF                      |
| Hysteresis                                        | 0.1 to 20.0 °C              |
| Offset Adjustment                                 | -9.0 to +9.0 °C             |
| Relay Delay Time                                  | 0 to 999 min                |
| Defrost Unit                                      | Minute or Second            |
| Defrost time                                      | 1 to 99 min or 1 to 99 Sec  |
| Defrost Frequency                                 | 1 to 99 Hour or 1 to 99 min |
| Defrost Duration<br>2 <sup>nd</sup> Relay Working | ON, OFF, As per set point   |

## Features

|                         |                       |
|-------------------------|-----------------------|
| Defrost Unit Selection  | Minute or Second      |
| Decimal Point Selection | 0.1 °C/1 °C           |
| Temperature Selection   | Celsius or Fahrenheit |

## Display & Keys

|         |                                             |
|---------|---------------------------------------------|
| Display | 3 digit, 0.62", 7 Segment RED/WHITE Display |
| Keys    | SET, UP, DOWN, ENTER                        |

## Input

|                    |                                     |
|--------------------|-------------------------------------|
| Sensor             | NTC Sensor                          |
| Range              | -50.0 °C to 99.9 °C                 |
| Accuracy           | ± 1% FSD<br>(Full Scale Deflection) |
| Nominal resistance | 10k ohm                             |

## Environmental Characteristics

|                       |                       |
|-----------------------|-----------------------|
| Operating Temperature | 0 to 55 °C            |
| Storage Temperature   | 0 to 70 °C            |
| Relative Humidity     | 95% RH Non-condensing |

## Auxiliary power supply

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Supply Voltage    | 230V AC, 50/60 Hz/<br>24V DC/12V DC<br>(factory set) |
| Power Consumption | 3VA Max @230V AC                                     |

## Mechanical Characteristics

|                       |                                |
|-----------------------|--------------------------------|
| Mounting Type         | Panel Mount                    |
| Dimension (HxWxD) mm  | 37 x 78 x 70                   |
| Panel Cutout (HxW) mm | 30 x 71                        |
| Material              | Body                           |
| Terminal Screw Size   | M3                             |
| Screw Torque (N.m)    | 0.5                            |
| Wire Gauge (AWG)      | 28-12                          |
| Weight (Approx) gms   | Unpacked : 200<br>Packed : 230 |
| Accessories           | 1 Pair of mounting clamps      |

## Output

|        |                                         |
|--------|-----------------------------------------|
| Relay  | 2.Nos.(NO-C-NC)                         |
| Rating | 10A @230V AC / 28V DC<br>Resistive Load |

## Ordering Information

| Part No.           | Keypad | Display colour | Body Colour |
|--------------------|--------|----------------|-------------|
| CC-521-B1-01-W     | Key    | White          | White       |
| CC-521-B1-01-R     | Key    | Red            | White       |
| CC-521-B1-01-W-BL  | Key    | White          | Black       |
| CC-521-B1-01-R-BL  | Key    | Red            | Black       |
| CC-521T-B1-01-W    | Touch  | White          | White       |
| CC-521T-B1-01-R    | Touch  | Red            | White       |
| CC-521T-B1-01-W-BL | Touch  | White          | Black       |
| CC-521T-B1-01-R-BL | Touch  | Red            | Black       |