

1. INTRODUCTION

1.1 General description

The Carel passive temperature probes are devices that, when connected to the controller, provide a resistance value, which is then converted to a temperature by the electronic controller. These are used in HVAC/R applications, and represent a complete range capable of satisfying a variety of needs in different installations. The probes are made using materials that guarantee constant quality.

The range includes various models that differ based on the performance of the system and the fields of application. The probes have different types of sensor (NTC, PTC, Pt1000), caps, index of protection, cable length, operating ranges and mechanical dimensions.

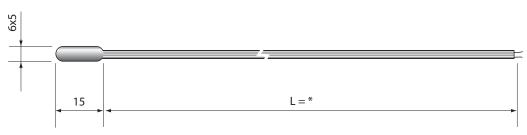
In addition, models are available for use in hydronic systems, applied directly onto the tubing, which simplify installation and offer a faster response in the reading, improving the wiring of the HVAC/R unit and improving performance.

The probes are used together with Carel electronic controllers (parametric and programmable).

2. NTC TECHNICAL SPECIFICATIONS

2.1 Models NTC*HP*

Storage conditions	-20T70 ℃
Operating range	-50T105 °C in air
	-50T50 °C in fluid
Connections	Stripped ends, dimensions: 5±1 mm
Sensor	NTC 10 k Ω ±1% at 25 °C Beta 3435
Dissipation factor (in air)	approx. 3 mW/°C
Thermal constant over time (in air)	approx. 75 s
Cable	Black two-wire flat cable, with tinned copper wire size 0.3 mm ²
Sensitive element index of protection	IP67
Sensitive element housing	Polyolefin
Classification according to protection against electric shock (sensitive element & cable)	Basic insulation for 250 Vac
Category of resistance to heat and fire	Flame retardant
Standard	NSF



^{* =} see table of product codes in price list



Warning: all measures present in this manual are in millimeters.