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(54) **DESIGN STRUCTURE OF
MACHINE-WASHABLE TEMPERATURE
CONTROLLER**

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(57) **ABSTRACT**

The present disclosure provides a design structure of a machine-washable temperature controller, to highly integrate a waterproof design and improve structure stability. The design includes a temperature controller body. The temperature controller body includes a silicone shell having a concave cavity. A PCBA board is disposed in the concave cavity of the silicone shell. The design is unique in that a silicone support plate without a retaining wall board and a webbing-type electronic wire are provided. Strengthening and waterproofing of the overall structure are implemented through silicone with a specific viscosity. The webbing-type electronic wire is connected through a wiring slot notch, and a key portion is processed through a gum dipping technology, to enhance waterproof effect. After silicone for surface waterproof encapsulation is cooled, the overall structure becomes a rugged and sealed one-piece structure. This ensures stability and reliability in a laundry process, and provides an efficient and reliable solution for temperature control in a machine laundry environment of heating clothes. In this innovative technology, the PCBA board has better sealing effect and better effect on resistance to machine washing torque without a wiring structure, showing a broad application prospect.

