Induction or radiant cooktop with automatic cooking sensor function

The cooking assistance function for induction and radiant cooktops is the guarantee for simple cooking and promise excellent cooking results. The recommended temperature levels are suitable for each type of cooking like keep warm, simmering, cooking, steam pressure cooking and deep frying. They allow cooking processes without excessive boiling and promise perfect cooking result.

The sensors measure throughout the complete cooking process the temperature of the cooking vessel. This allows regulating the cooking power to maintain the desired temperature. If the selected temperature is reached, the food can be added. The temperature is automatically kept constant, without the temperature level needs to be changed.

The cooking sensor function consists out of two parts:

YL245:

This small electronic printed circuit board is the interface between the device internal communication bus and the Bluetooth LE air interface. It has no interfaces to the operator and is only controlled thru the communication bus.

WSP-I:

The WSP-I is the battery drive mobile part of the cooking sensor function. Therefore a ferromagnetic silicone ring will be glued to the cooking vessel. To this ring the cooking sensor can be attached. It will measure the temperature of the vessel and transmit it via Bluetooth LE to the YL245. For operator interactions it contains a push button for connection and assignment to the right cooking zone and a LED to display connection states and a empty battery.

YL245: variant-depending Schematics, Component-Mounting-Diagrams and Bill-of-Material

Description

The module YL245 is used as a wireless control board in induction and radiant hobs. The following features are provided:

- BLE: Bluetooth Low Energy communication to module YL244 (wireless sensor probe)
- DBUS2: diagnostics interface and universal bus system for connecting several modules (user-interface, power-board,...) within a home appliance, interface X2 & X3
- FS: Frying Sensor, temperature control for a pan at a radiant-heater, temperature measured with PT1000-sensor, interface X1

YL245 variants

YL245 P02

Module is equipped with all necessary components for the features BLE & DBUS2.

YL245 P03

Module is equipped with all necessary components for the features BLE & DBUS2 & 1x FS.

YL245 P04 (maximal equipment)

Module is equipped with all necessary components for the features BLE & DBUS2 & 2x FS.