# G 6/4“ ELECTRIC HEATING ELEMENTS with thermostatic head and contactor

Output: 3 - 4,5 kW

Application: thermal stores and hot water storage tanks (heated by PV)

## ETT-F Electric Heating Elements

**Nickel-plated** resistance heating elements **with a thermostatic head and contactor**, intended for heating of static heating water or antifreeze fluid in thermal stores or for drinking water heating in hot water storage tanks. A heating element designed **to use electricity from PV panels.**

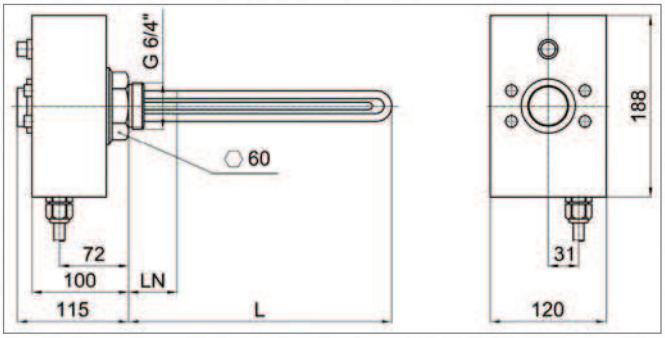
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a 7-core cable wired to a terminal box or fuse board.

**The heating element features one input for a Ripple control signal and one for master heating system controller.**

## Technical Data

| | |
|---|---|
| HEATING ELEMENT | nickel plated copper |
| CONNECTION | G 6/4“ M |
| HEXAGON WITH G 6/4“ THREAD | nickel plated brass |
| CASE | aluminium alloy |
| POWER SUPPLY | 230V 50 Hz |
| IP RATING | IP 54 |
| PROTECTION CLASS BY EN 61140 ed.2 | I |
| **OPERATING THERMOSTAT** | capillary type, adjustable |
| SWITCH-OVER CONTACT | 16 A |
| TEMPERATURE ADJUSTMENT RANGE | from 0 ± 5 °C to 90 ± 3 °C |
| TEMPERATURE ADJUSTMENT METHOD | rotating knob |
| SWITCHING DIFFERENCE | 5 ± 1.5 °C |
| LOWER LIMIT | about 15 °C – frost protection |
| UPPER LIMIT | about 60 °C – for HW storage tanks |
| **SAFETY THERMOSTAT** | capillary type, fixed setting |
| SWITCH OFF TEMP. | 99 +0/-6 °C |
| RESET | manual, after temperature drops below 50 °C |
| **CONTACTOR** | AC1 : 20 A / 690 V, 1Z |
| COIL VOLTAGE | AC 220 – 240 V |
| FREQUENCY | 50 Hz |

## Dimensions, Models

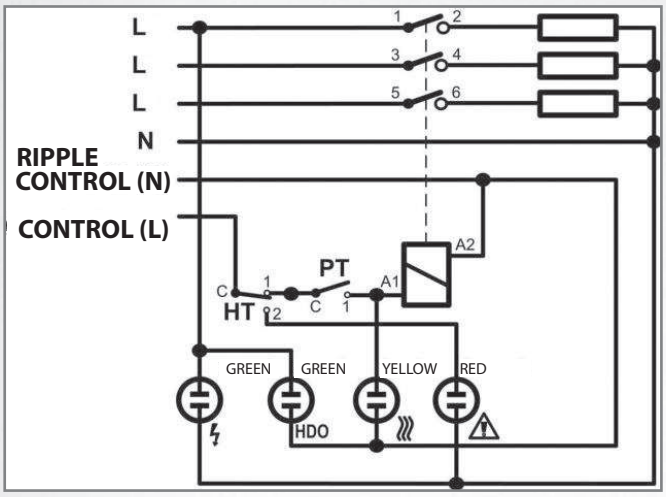



| MODEL | | ETT-F 3 | ETT-F 4.5 |
|---|---|---|---|
| NOMINAL OUTPUT | kW | 3.0 | 4.5 |
| NOMINAL CURRENT | A | 4.3 | 6.5 |
| ELEMENT LENGTH (L) | mm | 365 | 463 |
| NON-HEATING END LENGTH (LN) | mm | 180 | 180 |
| CODE | -- | 16 250 | 12 357 |

## Electric Wiring

1/N/PE AC 230V

Continuous output control through a wattrouter.




| POWER CABLE | |
|---|---|
| CROSS SECTION | 7× 2.5 mm² |
| LENGTH | 2 m |
| CABLE GLAND | Pg11 |

**Wiring examples:**