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

2 - 9 kW Output: Application: thermal stores and hot water storage tanks

# **ETT-P 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. These elements are not intended for stainless steel tanks. They are suitable for drinking water heating in hot water storage tanks.

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.

### DIMENSIONS, MODELS







### **TECHNICAL DATA**

HEATING ELEMENT CONNECTION HEXAGON WITH G 6/4" THREAD POWER SUPPLY **IP RATING** PROTECTION CLASS BY EN 61140 ed.2

#### **OPERATING THERMOSTAT**

SWITCH-OVER CONTACT TEMPERATURE ADJUSTMENT RANGE TEMPERATURE ADJUSTMENT METHOD SWITCHING DIFFERENCE

LOWER LIMIT

UPPER LIMIT

#### SAFETY THERMOSTAT

SWITCHING TEMP.

RESET

#### CONTACTOR

COIL VOLTAGE FREQUENCY

nickel plated copper G 6/4" M nickel plated brass

400/230V 50 Hz IP 54 I

capillary type, adjustable

16 A from 0  $\pm$  5 °C to 90  $\pm$  3 °C

rotating knob

5 ± 1.5 °C

about 15 °C - frost protection about 60 °C - for HW storage tanks

capillary type, fixed setting

99 +0/-6 °C

manual, after temperature drops below 80 °C

AC1 : 20 A / 690 V, 1Z

AC 220 - 240 V 50 Hz

MODEL		ETT-P 2.0	ETT-P 3.0	ETT-P 4.5	ETT-P 6.0	ETT-P 7.5	ETT-P 8.2	ETT-P 9.0
NOMINAL OUTPUT	kW	2.0	3.0	4.5	6.0	7.5	8.2	9.0
NOMINAL CURRENT	А	2.9	4.3	6.5	8.7	10.8	11.9	13.0
ELEMENT LENGTH (L)	mm	310	370	500	555	635	700	755
NON-HEATING END LENGTH (LN)	mm	180	180	180	180	180	180	180
CODE		19041	19043	18915	18386	19045	19042	19044

# 3/N/PE AC 400/230V

2- 6 kW

#### t 99°C L1 110 11 12 113 2 101 L2 <u>116</u> 3 21 111 <u>4 102</u> 5 6 103 L3 <u>117</u> 31 32 112 104 Ν (N) <u>A2</u> 115 <sup>+t</sup> 1 RIPPLE CONTROL white 108 A (L)<u>107</u> 109 114 CONTROL red GREEN GREEN $\gg$ 4 106 105

## WIRING EXAMPLES

Control via external controller w. Ripple control



Control via external controller without Ripple control





Control via integrated thermostat w. Ripple control



CROSS SECTION	7× 1.5 mm <sup>2</sup>
LENGTH	2 m
CABLE GLAND	Pg11

7,5 - 9 kW

