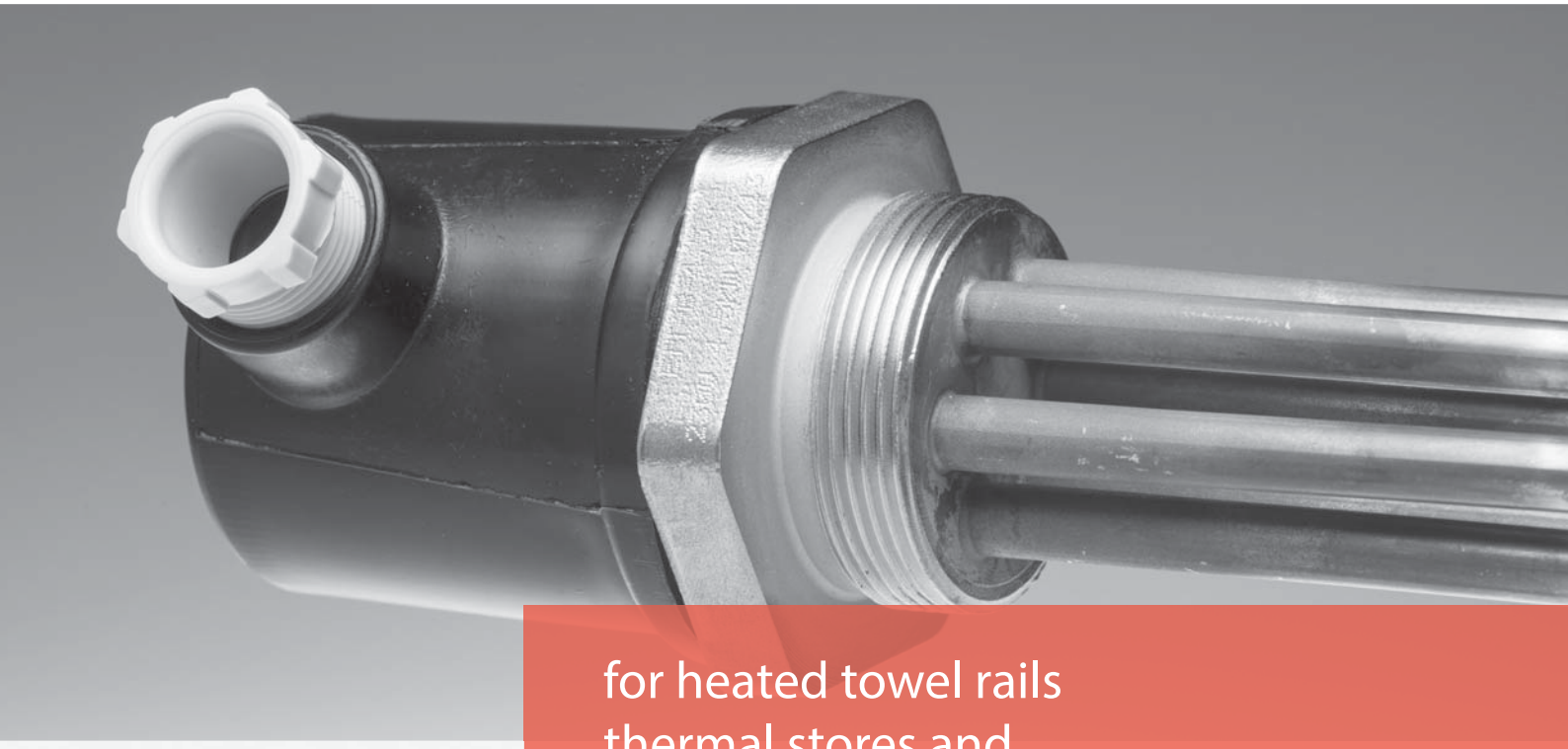
Regulus

TECHNICAL CATALOGUE

Electric **Heating Elements**



for heated towel rails
thermal stores and
hot water storage tanks

Energy-saving solutions

www.regulus.eu

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1992 – 2017

Product code overview

The following tables bring a basic overview of the heating elements available. Depending on the desired application, output and features of the heating element, the code can be identified in the table together with the page containing detailed information.

G ½" Electric Heating Elements for heated towel rails

		Output [W]												
Thermostats	**El. connection**	200	300	400	500	600	700	800	900	1000	1200	1350	**Series**	**Page**
none	3m twisted cable w. plug	11950	7145	7146	7585	7586	7587	7147	7148	7590	7591	8402	Z-ZT	2
	3m twisted cable w. plug&switch	-	13426	13427	13428	13429	13430	13431	13432	13433	13434	13435	Z-ZTV	3
plug-in ones	3m twisted cable w. plug	-	7573	7574	7575	7576	7577	7578	7579	7580	7581	8597	Z-SKVT	4
plug-in ones with timer	3m twisted cable w. plug	-	8841	8842	8843	8844	8845	8846	8847	8848	8849	8850	Z-SKVT-T	5
integrated ones with timer	1,2m cable, loose end	-	11034	11035	9143	11036	9144	11037	9145	-	-	-	TT-TDDW	6

G 6/4" Electric Heating Elements for thermal stores and hot water storage tanks

			Output [kW]												
Thermostats	**Application**	**El. connection**	1.2	2	2.4	3	4.5	5	6	7.5	8.2	9	12	**Series**	**Page**
none	thermal stores and hot water storage tanks	3x 230 V (1x 230 V), no cable	-	8935	-	8936	8937	-	8938	-	-	-	-	ETT-A	8
		3x 400 V, no cable	-	-	-	-	-	-	-	8939	-	8940	8941		
	thermal stores with DHW	3x 230 V (1x 230 V), no cable	-	14519	-	8902	-	14359	8897	-	-	-	-	ETT-C	9
		3x 400 V, no cable	-	-	-	-	-	-	-	9618	14501	12272	12273		
operating and safety ones in plastic head	thermal stores with DHW, thermal stores and hot water storage tanks	1x 230 V 3m cable **with plug**	15166	15167	15168	15169	-	-	-	-	-	-	-	ETT-M	10
operating and safety ones in aluminium head, **contactor**	thermal stores and hot water storage tanks	1x 230 V 2m cable, loose end	-	11783	-	11784	-	-	-	-	-	-	-	ETT-D	12
		1x 230 V 2m cable, loose end, **for PV source**	-	-	-	16250	12357	-		-	-	-	-	ETT-F	16
		3x 230 V 2m cable, loose end	-	11787	-	11788	11789	-	11216	-	-	-	-	ETT-G	18
		3x 400 V 2m cable, loose end	-	-	-	-	-	-	-	11215	-	11214	-		18
	thermal stores with DHW	3x 230 V 2m cable, loose end	-	14994	-	14995	-	14996	14997	-	-	-	-	ETT-L	20
		3x 400 V 2m cable, loose end	-	-	-	-	-	-	-	14998	14999	15000	-		20

The table showing what el. heating elements can be installed in specific Regulus thermal stores and hot water storage tanks can be found on the last page.

Regulus

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for heated towel rails

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for thermal stores and hot water storage tanks

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G 6/4" Electric Heating Elements with thermostats
for thermal stores and hot water storage tanks

20

M 48x2 Electric Heating Elements
for electric boilers

G 1/2“ ELECTRIC HEATING ELEMENTS with plug

Output: 200 - 1350 W
Application: heated towel rails

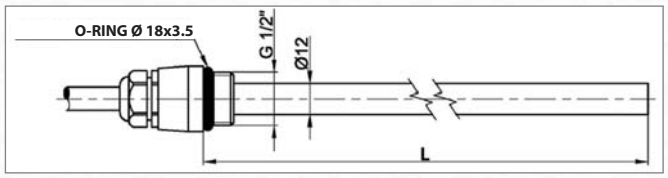
Z-ZT Electric Heating Elements

Resistance heating elements intended for heating of static or flowing water, antifreeze fluid or thermal oil in heated towel rails.
They are designed to be installed in any position except for vertical with el. cable upwards. The power supply spiral cable is fitted with Uni Schuko plug.
For room temperature control, the heating elements can be switched on/off by TZ33 or TZT63 plug-in thermostats. These heating elements are not equipped with a room thermostat.

Technical Data

HEATING ELEMENT	stainless steel AISI A304
CONNECTION	G 1/2“ M
HEATING ELEMENT BODY	chrome plated brass
POWER SUPPLY	230 V 50 Hz
EL. WIRING	1/N/PE AC 230V
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	I
OPERATING THERMOSTAT	fixed setting, automat. reset
SWITCH-OFF TEMP.	80 ± 5 °C
SWITCH-ON TEMP.	35 ± 15 °C
SAFETY THERMOSTAT	fixed setting, no reset
SWITCHING TEMP.	110 +0/-5 °C
POWER CABLE	
CROSS SECTION	3× 0.75 mm²
LENGTH	3 m
CABLE GLAND	Pg9

Dimensions, Models



MODEL		Z-ZT 200	Z-ZT 300	Z-ZT 400	Z-ZT 500	Z-ZT 600	Z-ZT 700	Z-ZT 800	Z-ZT 900	Z-ZT 1000	Z-ZT 1200	Z-ZT 1350
NOMINAL OUTPUT	W	200	300	400	500	600	700	800	900	1000	1200	1350
NOMINAL CURRENT	A	0.9	1.3	1.8	2.2	2.6	3.0	3.5	3.9	4.4	5.2	5.9
ELEMENT LENGTH (L) ± 5 mm	mm	318	395	435	535	585	685	735	835	885	1045	1135
CODE	--	11 950	7 145	7 146	7 585	7 586	7 587	7 147	7 148	7 590	7 591	8 402

Accessories

G1/2”T-piece, FFM, to install a heating element into a radiator in a hot-water heating system - *code: 7 926*

TZ33 Plug-in Thermostat - *code: 6 295*

The heating element is switched on/off to keep the room temperature at the value set by the rotating knob. The desired temperature is set by rotating the thermostat control knob.

TZT63 Plug-in Thermostat - *code: 8 269*

Thermostat with 2 control modes:

- current – heating element switched on/off to keep the room temperature at the set value
- timer – when switched on, the element keeps heating for the set period (15 min. to 5 hours). Room temperature is then shown on the display together with countdown time to switch off.

G 1/2“ ELECTRIC HEATING ELEMENTS with plug&switch

Output: 300 - 1350 W
Application: heated towel rails

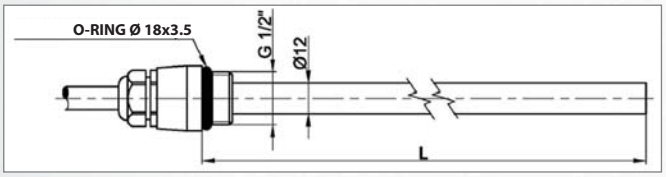
Z-ZTV Electric Heating Elements

Resistance heating elements intended for heating of static or flowing water, antifreeze fluid or thermal oil in heated towel rails.
They are designed to be installed in any position except for vertical with el. cable upwards. The power supply spiral cable is fitted with Uni Schuko plug with switch.
For room temperature control, the heating elements can be switched on/off by TZ33 or TZT63 plug-in thermostats. These heating elements are not equipped with a room thermostat.

Technical Data

HEATING ELEMENT	stainless steel AISI A304
CONNECTION	G 1/2“ M
HEATING ELEMENT BODY	chrome plated brass
POWER SUPPLY	230 V 50 Hz
EL. WIRING	1/N/PE AC 230V
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	I
OPERATING THERMOSTAT	fixed setting, automat. reset
SWITCH-OFF TEMP.	80 ± 5 °C
SWITCH-ON TEMP.	35 ± 15 °C
SAFETY THERMOSTAT	fixed setting, no reset
SWITCHING TEMP.	110 +0/-5 °C
POWER CABLE	
CROSS SECTION	3× 0.75 mm²
LENGTH	3 m
CABLE GLAND	Pg9

Dimensions, Models



MODEL		Z-ZTV 300	Z-ZTV 400	Z-ZTV 500	Z-ZTV 600	Z-ZTV 700	Z-ZTV 800	Z-ZTV 900	Z-ZTV 1000	Z-ZTV 1200	Z-ZTV 1350
NOMINAL OUTPUT	W	300	400	500	600	700	800	900	1000	1200	1350
NOMINAL CURRENT	A	1.3	1.8	2.2	2.6	3.0	3.5	3.9	4.4	5.2	5.9
ELEMENT LENGTH (L) ± 5 mm	mm	395	435	535	585	685	735	835	885	1045	1135
CODE	--	13 426	13 427	13 428	13 429	13 430	13 431	13 432	13 433	13 434	13 435

Accessories

G1/2”T-piece, FFM, to install a heating element into a radiator in a hot-water heating system - *code: 7 926*

TZ33 Plug-in Thermostat - *code: 6 295*

The heating element is switched on/off to keep the room temperature at the value set by the rotating knob. The desired temperature is set by rotating the thermostat control knob.

TZT63 Plug-in Thermostat - *code: 8 269*

Thermostat with 2 control modes:

- current – heating element switched on/off to keep the room temperature at the set value
- timer – when switched on, the element keeps heating for the set period (15 min. to 5 hours). Room temperature is then shown on the display together with countdown time to switch off.

G 1/2“ ELECTRIC HEATING ELEMENTS with plug-in thermostat and T-piece

Output: 300 - 1350 W
Application: heated towel rails

Z-SKVT Electric Heating Elements

Resistance heating elements intended for heating of static or flowing water, antifreeze fluid or thermal oil in heated towel rails.

They are designed to be installed in any position except for vertical with el. cable upwards. The power supply spiral cable is fitted with Uni Schuko plug.

These heating elements come in a kit with a TZT33 plug-in thermostat and a G 1/2“ FFM T-piece, for installation into a heated towel rail connected in a traditional hot-water heating circuit.

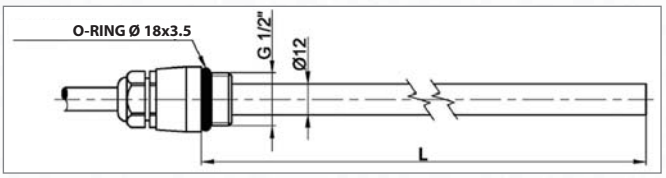
The heating element is switched on/off to keep the room temperature at the value set by the rotating knob.

The desired temperature is set by rotating the thermostat control knob.

Technical Data

HEATING ELEMENT	stainless steel AISI A304
CONNECTION	G 1/2“ M
HEATING ELEMENT BODY	chrome plated brass
POWER SUPPLY	230 V 50 Hz
EL. WIRING	1/N/PE AC 230V
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	I
OPERATING THERMOSTAT	fixed setting, automat. reset
SWITCH-OFF TEMP.	80 ± 5 °C
SWITCH-ON TEMP.	35 ± 15 °C
SAFETY THERMOSTAT	fixed setting, no reset
SWITCH-OFF TEMP.	110 +0/-5 °C
ROOM THERMOSTAT	analog
SPST CONTACT	16 A
TEMPERATURE ADJUSTMENT RANGE	5 - 35 °C
TEMPERATURE ADJUSTMENT METHOD	rotating knob
SWITCHING DIFFERENCE	0.5 °C
IP RATING	IP 20
POWER CABLE	
CROSS SECTION	3× 0.75 mm²
LENGTH	3 m
CABLE GLAND	Pg9

Dimensions, Models



MODEL		Z-SKVT 300	Z-SKVT 400	Z-SKVT 500	Z-SKVT 600	Z-SKVT 700	Z-SKVT 800	Z-SKVT 900	Z-SKVT 1000	Z-SKVT 1200	Z-SKVT 1350
NOMINAL OUTPUT	W	300	400	500	600	700	800	900	1000	1200	1350
NOMINAL CURRENT	A	1.3	1.8	2.2	2.6	3.0	3.5	3.9	4.4	5.2	5.9
ELEMENT LENGTH (L) ± 5 mm	mm	395	435	535	585	685	735	835	885	1045	1135
CODE	--	7 573	7 574	7 575	7 576	7 577	7 578	7 579	7 580	7 581	8 597

G 1/2“ ELECTRIC HEATING ELEMENTS
with plug-in thermostat w. timer and T-piece

Output: 300 - 900 W
Application: heated towel rails

Z-SKVT-T Electric Heating Elements

Resistance heating elements intended for heating of static or flowing water, antifreeze fluid or thermal oil in heated towel rails.

They are designed to be installed in any position except for vertical with el. cable upwards. The power supply spiral cable is fitted with Uni Schuko plug.

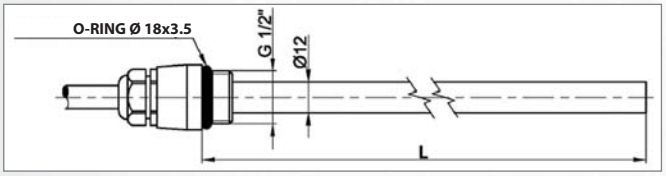
These heating elements come in a kit with a TZT 63 plug-in thermostat and a G 1/2“ FFM T-piece, for installation into a heated towel rail connected in a traditional hot-water heating circuit.

The heating element is switched on/off to keep the room temperature at the value set by the rotating knob. In the timer mode, the element heats during the preset time (15 min. to 5 hours). LCD display shows the room temperature and countdown time to switching off.

Technical Data

HEATING ELEMENT	stainless steel AISI A304
CONNECTION	G 1/2“ M
HEATING ELEMENT BODY	chrome plated brass
POWER SUPPLY	230 V 50 Hz
EL. WIRING	1/N/PE AC 230V
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	I
OPERATING THERMOSTAT	fixed setting, automat. reset
SWITCH-OFF TEMP.	80 ± 5 °C
SWITCH-ON TEMP.	35 ± 15 °C
SAFETY THERMOSTAT	fixed setting, no reset
SWITCH-OFF TEMP.	110 +0/-5 °C
ROOM THERMOSTAT	analog
SPST CONTACT	16 A
TEMPERATURE ADJUSTMENT RANGE	5 - 35 °C
TEMPERATURE ADJUSTMENT METHOD	keys
SWITCHING DIFFERENCE	0.5 °C
ROZSAH NASTAVENÍ ČASOVAČE	15 min. - 5 hours, in 15min. steps
IP RATING	IP 20
POWER CABLE	
CROSS SECTION	3× 0.75 mm²
LENGTH	3 m
CABLE GLAND	Pg9

Dimensions, Models



MODEL		Z-SKVT-T 300	Z-SKVT-T 400	Z-SKVT-T 500	Z-SKVT-T 600	Z-SKVT-T 700	Z-SKVT-T 800	Z-SKVT-T 900	Z-SKVT-T 1000	Z-SKVT-T 1200	Z-SKVT-T 1350
NOMINAL OUTPUT	W	300	400	500	600	700	800	900	1000	1200	1350
NOMINAL CURRENT	A	1.3	1.8	2.2	2.6	3.0	3.5	3.9	4.4	5.2	5.9
ELEMENT LENGTH (L) ± 5 mm	mm	395	435	535	585	685	735	835	885	1045	1135
CODE	--	8 841	8 842	8 843	8 844	8 845	8 846	8 847	8 848	8 849	8 850

G 1/2“ ELECTRIC HEATING ELEMENTS with thermostat

Výkony: 300 - 1350 W
Application: heated towel rails

TT-TDDW Electric Heating Elements

Resistance heating elements intended for heating of static or flowing water, antifreeze fluid or thermal oil in heated towel rails.

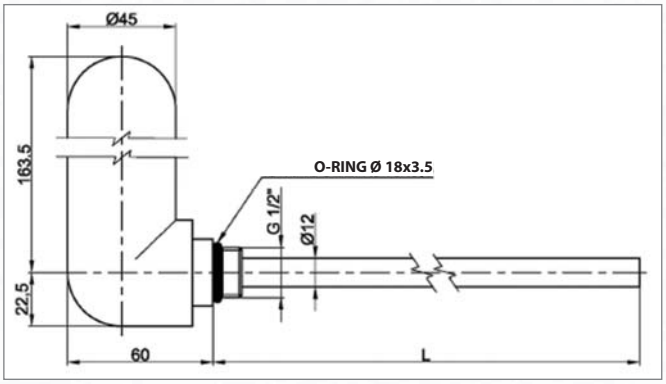
They are designed to be installed in any position except for vertical with el. cable upwards. They can be power supplied either by a cable wired to a terminal box or through an electric plug (not included in supply).

These elements are fitted with a white thermostat with timer.

Technical Data

HEATING ELEMENT	stainless steel AISI A304
CONNECTION	G 1/2“ M
HEATING ELEMENT BODY	chrome plated brass
POWER SUPPLY	230 V 50 Hz
EL. WIRING	1/N/PE AC 230V
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	II
ROOM THERMOSTAT	analog
SPST CONTACT	16 A
TEMPERATURE ADJUSTMENT RANGE	7 - 30 °C
TEMPERATURE ADJUSTMENT METHOD	rotating knob
STANDBY POWER	10 VA
MODES	comfort, day, night, antifrost protection, 2hour timer
OPERATING THERMOSTAT	fixed setting, automat. reset
SWITCH-OFF TEMP.	80 ± 5 °C
SWITCH-ON TEMP.	35 ± 15 °C
SAFETY THERMOSTAT	fixed setting, no reset
SWITCH-OFF TEMP.	110 +0/-5 °C
POWER CABLE	
CROSS SECTION	3× 0.75 mm²
LENGTH	1.2 m
CABLE GLAND	H05VV-F

Dimensions, Models



MODEL		TT-TDDW 300	TT-TDDW 400	TT-TDDW 500	TT-TDDW 600	TT-TDDW 700	TT-TDDW 800	TT-TDDW 900
NOMINAL OUTPUT	W	**300**	**400**	**500**	**600**	**700**	**800**	**900**
NOMINAL CURRENT	A	1.3	1.8	2.2	2.6	3.0	3.5	3.9
ELEMENT LENGTH (L) ± 5 mm	mm	395	435	535	585	685	735	835
CODE	--	11034	11035	9143	11036	9144	11037	9145

Accessories

Uni Schuko plug with switch and timer — white - *code: 11 841*

G 6/4“ ELECTRIC HEATING ELEMENTS

Output: 2 - 12 kW
Application: thermal stores or hot water storage tanks

ETT-A Electric Heating Elements

Nickel-plated resistance heating elements without thermostatic head intended for heating of static or flowing heating water or antifreeze fluid in thermal stores or drinking water 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.

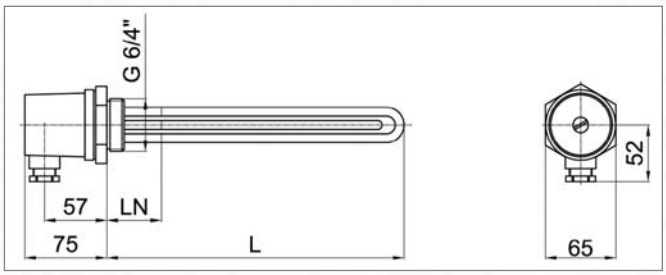
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a cable (not included in supply) wired to a terminal box or fuse board.

These elements are fitted with neither operating nor safety thermostat.

Technical Data

HEATING ELEMENT	nickel plated copper
CONNECTION	G 6/4“ M
HEXAGON WITH G 6/4“ THREAD	nickel plated brass
POWER SUPPLY	230V or 400/230V 50 Hz
IP RATING	IP 54
PROTECTION CLASS BY EN 61140 ed.2	I

Dimensions, Models

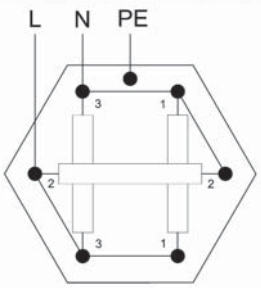


MODEL		ETT-A 2.0	ETT-A 3.0	ETT-A 4.5	ETT-A 6.0	ETT-A 7.5	ETT-A 9.0	ETT-A 12.0
NOMINAL OUTPUT	kW	2.0	3.0	4.5	6.0	7.5	9.0	12.0
NOMINAL CURRENT PER ONE PHASE	A	2.9/8.7*	4.3/13.0*	6.5/19.6*	8.7/26.1*	10.8	13.0	17.4
ELEMENT LENGTH (L)	mm	245	305	370	495	585	680	815
NON-HEATING END LENGTH (LN)	mm	100	100	100	100	100	100	100
CODE	--	8 935	8 936	8 937	8 938	8 939	8 940	8 941

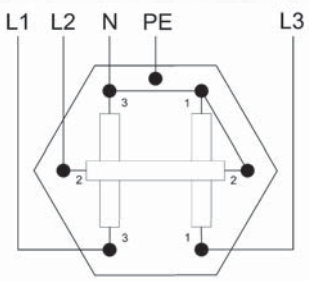
** 3x230V wiring/1x230V wiring*

Electric Wiring

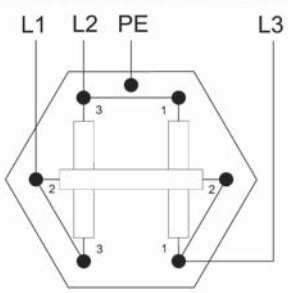
1x230 V – 2 to 6 kW
suitable for 2 and 3kW elements only



3x230 V – 2 to 6 kW



3x400 V – 7.5 to 12 kW



G 6/4“ ELECTRIC HEATING ELEMENTS

Output: 2 - 12 kW
Application: thermal stores with DHW

ETT-C Electric Heating Elements

Non-nickel-plated resistance heating elements with a longer non-heating end, without thermostatic head intended for heating of static or flowing heating water or antifreeze fluid **in thermal stores with DHW**. They are not intended for hot water storage tanks! These elements are not intended for stainless steel tanks.

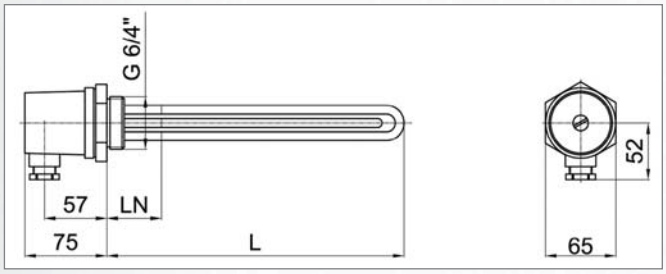
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a cable (not included in supply) wired to a terminal box or fuse board.

These elements are fitted with neither operating nor safety thermostat.

Technical Data

HEATING ELEMENT	copper - no surface finish
CONNECTION	G 6/4“ M
HEXAGON WITH G 6/4“ THREAD	nickel plated brass
POWER SUPPLY	230 V or 400/230V 50 Hz
IP RATING	IP 54
PROTECTION CLASS BY EN 61140 ed.2	I

Dimensions, Models



The elements feature a longer non-heating end (dimension LN) that permits their use for Regulus Thermal Stores with DHW.

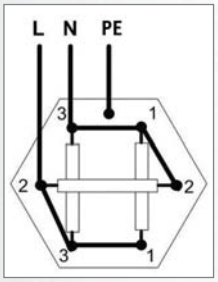
MODEL		ETT-C 2.0	ETT-C 3.0	ETT-C 5.0	ETT-C 6,0	ETT-C 7.5	ETT-C 8.2	ETT-C 9.0	ETT-C 12.0
NOMINAL OUTPUT	kW	2.0	3.0	5.0	6,0	7.5	8.2	9.0	12.0
NOMINAL CURRENT PER ONE PHASE	A	1.9/5.8*	2.9/8.7*	6.5/19.6*	8.7/26.1*	10.8	11.8	13.0	17.4
ELEMENT LENGTH (L)	mm	310	370	500	555	635	700	755	955
NON-HEATING END LENGTH (LN)	mm	180	180	180	180	180	180	180	180
CODE	--	14 519	8 902	14 359	8 897	9 618	14 501	12 272	12 273

** 3x230V wiring/1x230V wiring*

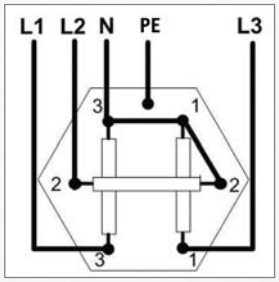
Electric Wiring

1/N/PE AC 230V or 3/N/PE AC 400/230V:

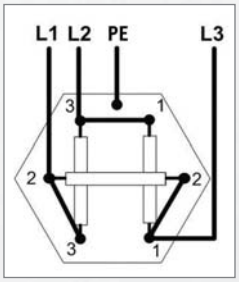
1x 230 V - 2 to 6 kW



3x 230 V - 2 to 6 kW



3x 400 V - 7.5 to 12 kW



G 6/4“ ELECTRIC HEATING ELEMENTS with thermostatic head and el. plug

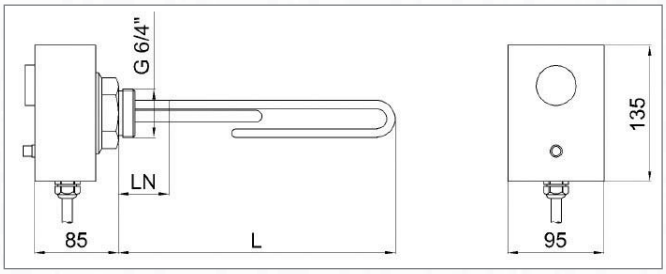
Output: 1.2 - 3 kW
Application: hot water storage tanks, thermal stores with DHW

ETT-M Electric Heating Elements

Nickel-plated resistance heating elements with a longer non-heating end, with thermostatic head intended for heating of static heating water or antifreeze fluid in **thermal stores with DHW** or for drinking water heating in **hot water storage tanks**. These elements are not intended for stainless steel tanks.

They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. The power supply cable is fitted with **Uni Schuko plug.**

Dimensions, Models



The elements feature a longer non-heating end (dimension LN) that permits their use for Regulus Thermal Stores with DHW.

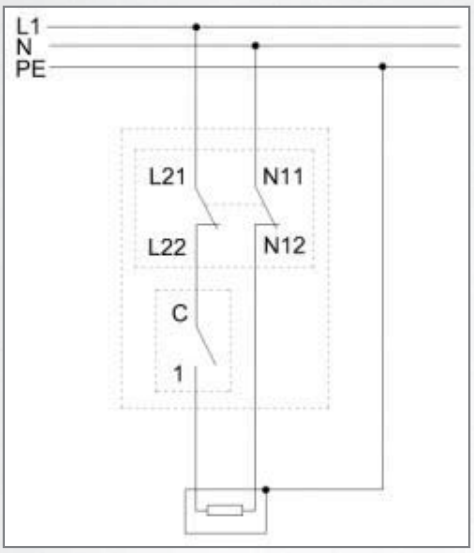
Technical Data

HEATING ELEMENT	nickel plated copper
CONNECTION	G 6/4“ M
HEXAGON WITH G 6/4“ THREAD	nickel plated brass
CASE	PC, flame rating UL94-5V
POWER SUPPLY	230V 50 Hz
IP RATING	IP 40
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	cca 60 °C
SAFETY THERMOSTAT	capillary type, fixed setting
SWITCH OFF TEMP.	99 +0/-10 °C
RESET	manual, after temperature drops below 40 °C

MODEL		ETT-M 1.2	ETT-M 2.0	ETT-M 2.4	ETT-M 3.0
NOMINAL OUTPUT	kW	1.2	2.0	2.4	3.0
NOMINAL CURRENT	A	5.2	8.7	10.4	13.0
ELEMENT LENGTH (L)	mm	300	350	420	450
NON-HEATING END LENGTH (LN)	mm	180	180	180	180
CODE	--	15 166	15 167	15 168	15 169

Electric Wiring

1/N/PE AC 230V



POWER CABLE	
CROSS SECTION	3× 1.5 mm²
LENGTH	3 m
CABLE GLAND	Pg11

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

Output: 2 - 3 kW
Application: thermal stores and hot water storage tanks

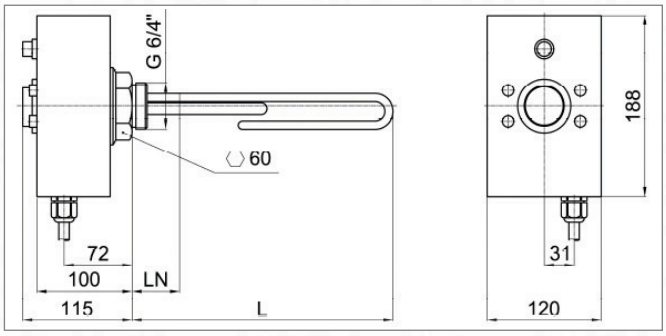
ETT-D Electric Heating Elements

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 5-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



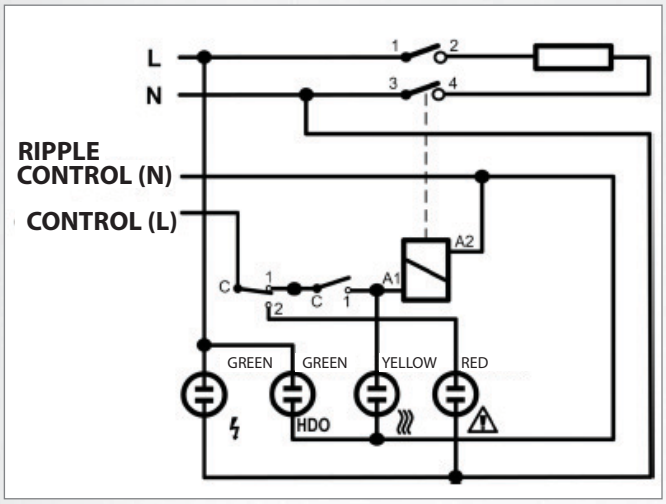
MODEL		ETT-D 2.0	ETT-D 3.0
NOMINAL OUTPUT	kW	2.0	3.0
NOMINAL CURRENT	A	8.7	13.0
ELEMENT LENGTH (L)	mm	315	370
NON-HEATING END LENGTH (LN)	mm	100	100
CODE	--	11 783	11 784

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

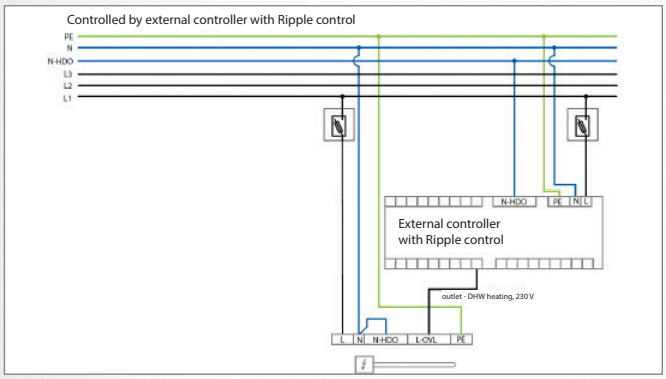
Electric Wiring

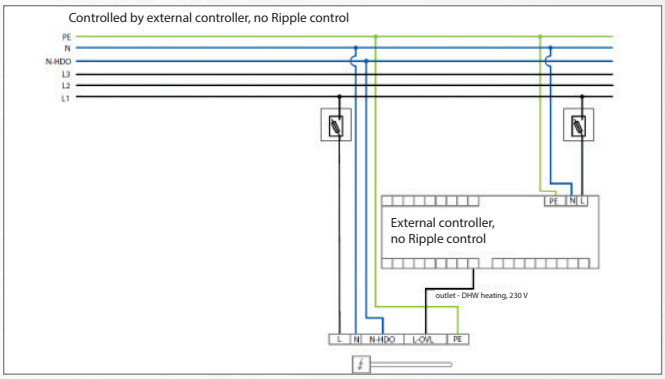
1/N/PE AC 230V

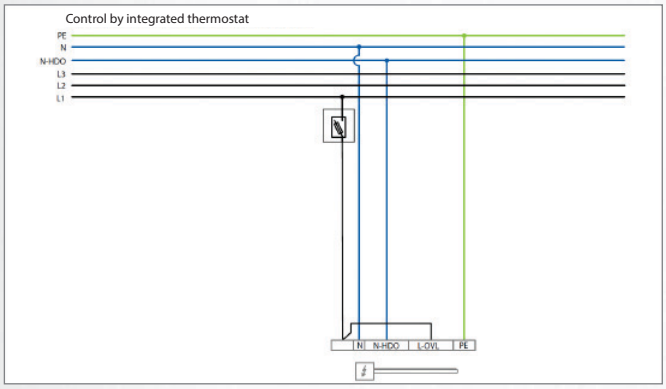


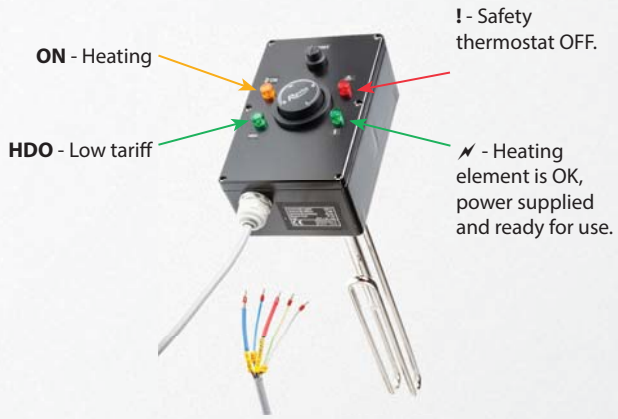
POWER CABLE	
CROSS SECTION	5× 1.5 mm²
LENGTH	2 m
CABLE GLAND	Pg11

Wiring examples:









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.**

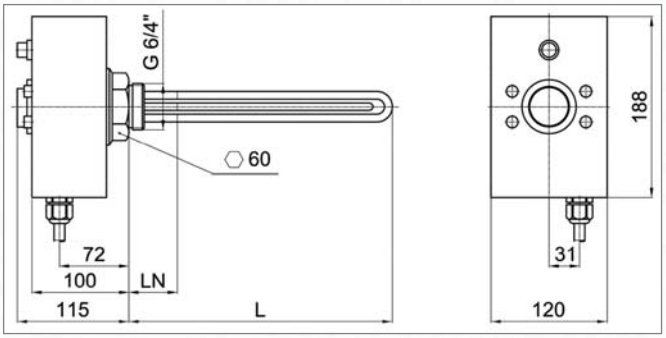
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a 7-core cable wired to a terminal box or fuse board.

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

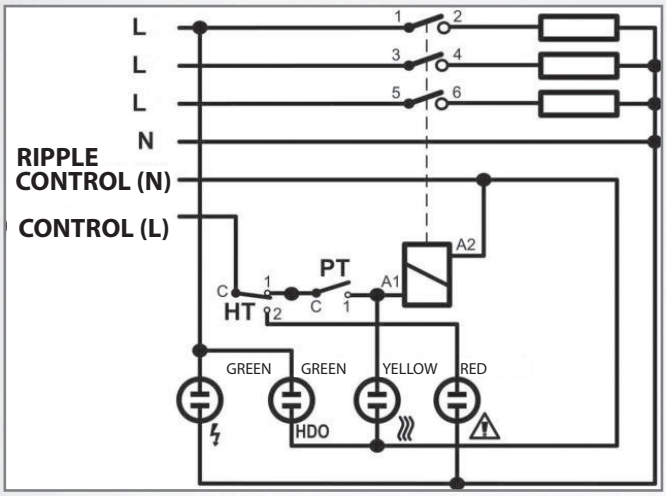


MODEL		ETT-F 3	ETT-F 4.5
NOMINAL OUTPUT	kW	3.0	4.5
NOMINAL CURRENT	A	4.3	6.5
ELEMENT LENGTH (L)	mm	365	463
NON-HEATING END LENGTH (LN)	mm	180	180
CODE	--	16 250	12 357

Electric Wiring

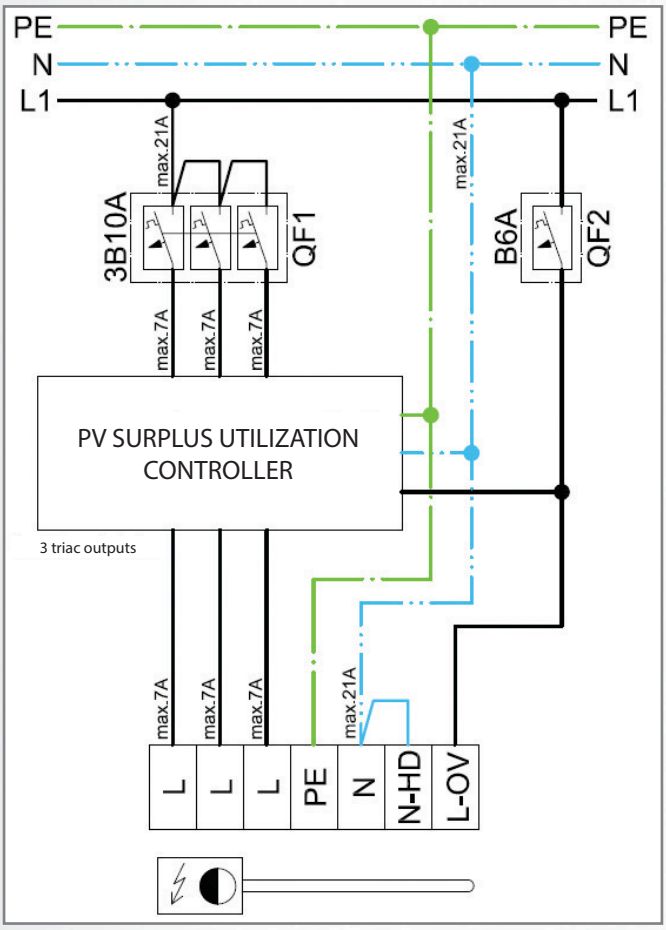
1/N/PE AC 230V

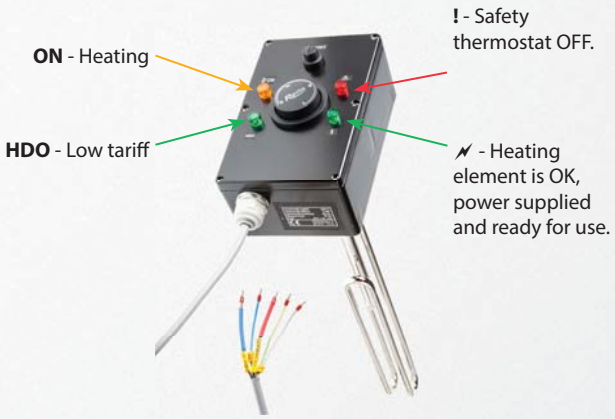
Continuous output control through a wattrouter.



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

Wiring examples:





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

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

ETT-G 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.

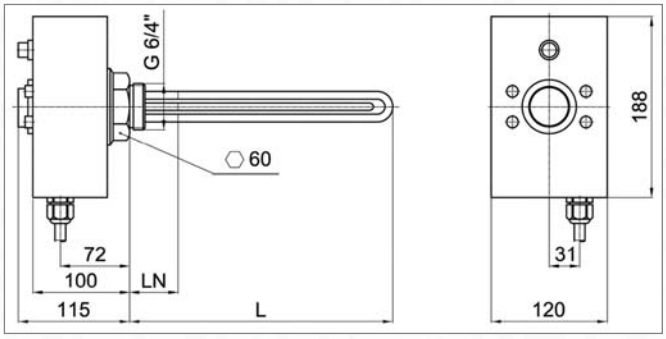
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a 7-core cable wired to a terminal box or fuse board.

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

Technical Data

HEATING ELEMENT	nickel plated copper
CONNECTION	G 6/4“ M
HEXAGON WITH G 6/4“ THREAD	nickel plated brass
POWER SUPPLY	400/230V 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



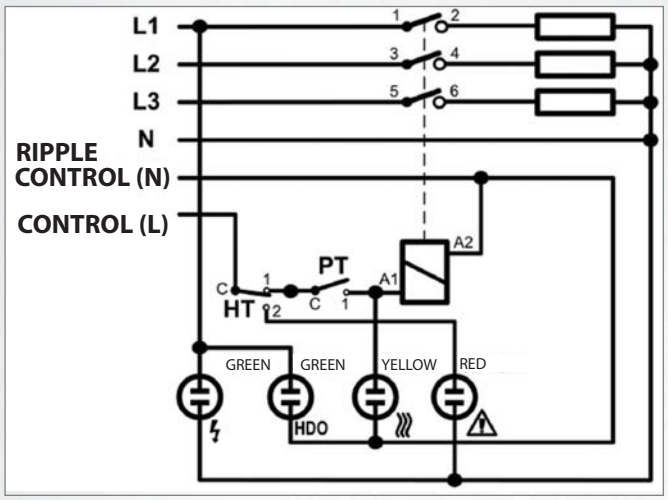
MODEL		ETT-G 2.0	ETT-G 3.0	ETT-G 4.5	ETT-G 6.0	ETT-G 7.5	ETT-G 9.0
NOMINAL OUTPUT	kW	2.0	3.0	4.5	6.0	7.5	9.0
NOMINAL CURRENT	A	2.9	4.3	6.5	8.7	10.8	13.0
ELEMENT LENGTH (L)	mm	225	285	383	478	570	665
NON-HEATING END LENGTH (LN)	mm	100	100	100	100	100	100
CODE	--	11 787	11 788	11 789	11 216	11 215	11 214

Electric Wiring

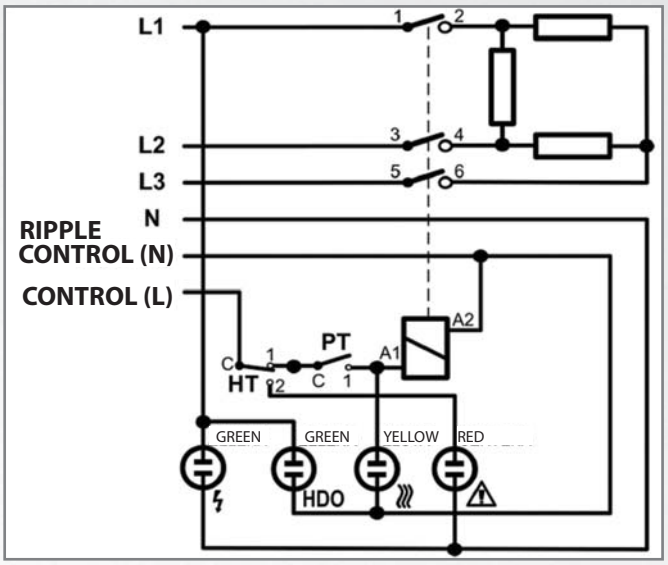
3/N/PE AC 400/230V

POWER CABLE	
CROSS SECTION	7× 1.5 mm²
LENGTH	2 m
CABLE GLAND	Pg11

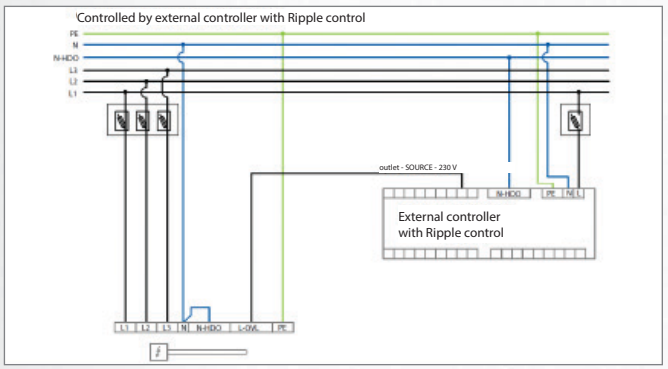
2- 6 kW

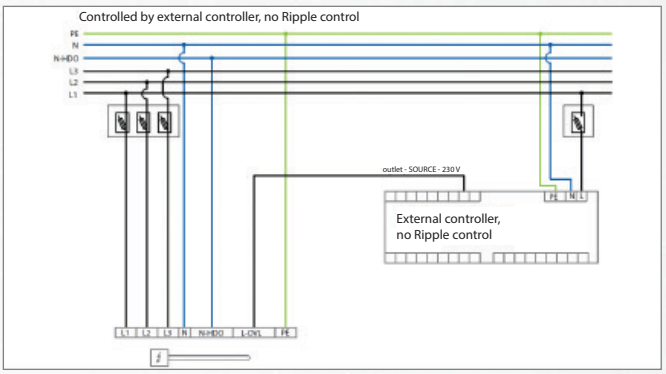


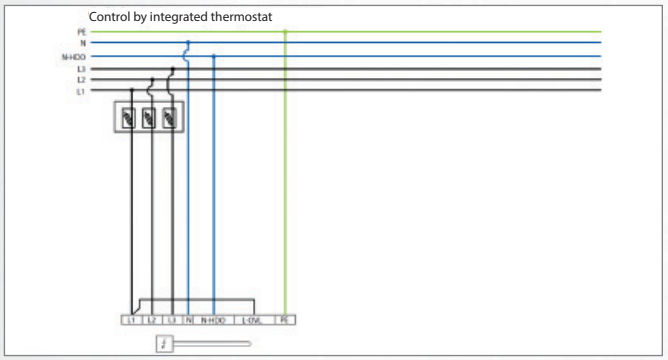
7.5 - 9 kW

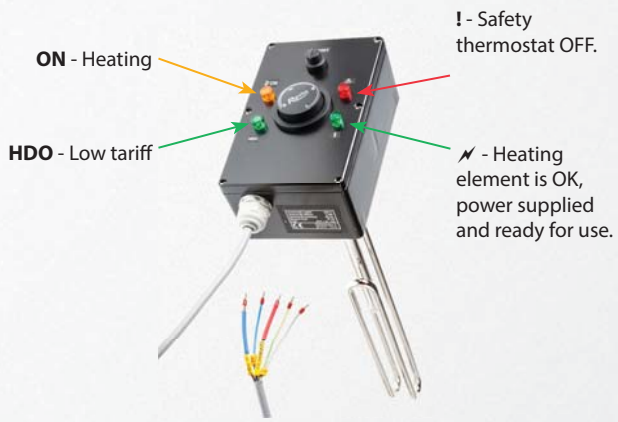


Wiring examples:









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

Output: 2 - 9 kW
Application: thermal stores with DHW

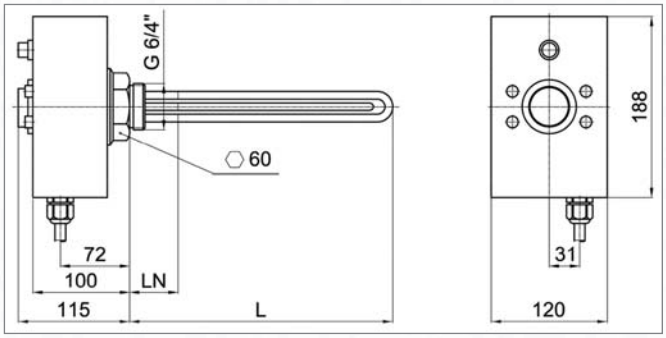
ETT-L Electric Heating Elements

Non-nickel-plated resistance heating elements with a longer non-heating end, with **a thermostatic head and contactor**, intended for heating of static heating water or antifreeze fluid **in thermal stores with DHW**. They are not intended for hot water storage tanks! These elements are not intended for stainless steel 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	nickel plated copper
CONNECTION	G 6/4“ M
HEXAGON WITH G 6/4“ THREAD	nickel plated brass
POWER SUPPLY	400/230V 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
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

The elements feature a longer non-heating end (dimension LN) that permits their use for Regulus Thermal Stores with DHW.

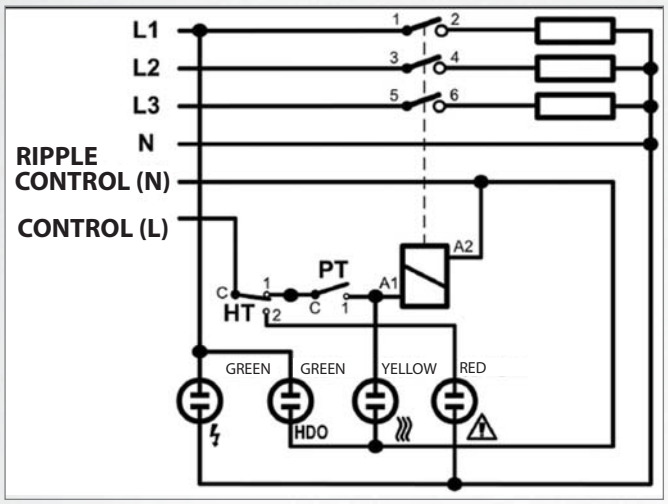
MODEL		ETT-L 2.0	ETT-L 3.0	ETT-L 5.0	ETT-L 6.0	ETT-L 7.5	ETT-L 8.2	ETT-L 9.0
NOMINAL OUTPUT	kW	2.0	3.0	5.0	6.0	7.5	8.2	9.0
NOMINAL CURRENT	A	2.9	4.3	7.3	8.7	10.8	11.8	13.0
ELEMENT LENGTH (L)	mm	310	370	500	555	635	700	755
NON-HEATING END LENGTH (LN)	mm	180	180	180	180	180	180	180
CODE	--	14 994	14 995	14 996	14 997	14 998	14 999	15 000

Electric Wiring

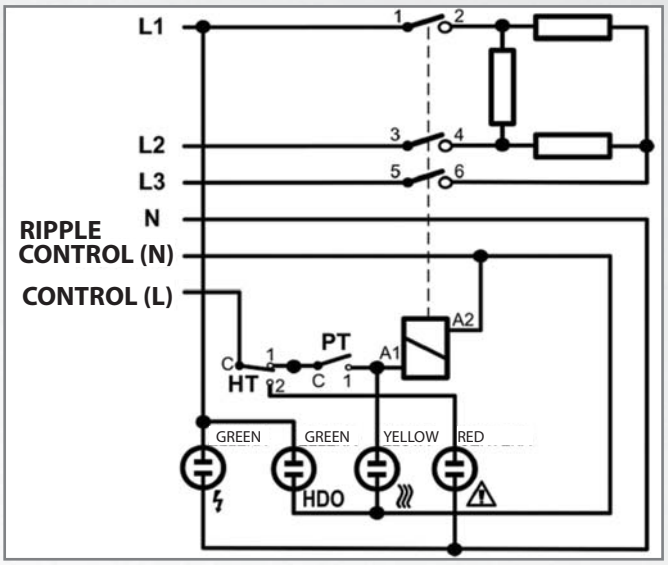
3/N/PE AC 400/230V

POWER CABLE	
CROSS SECTION	7× 1.5 mm²
LENGTH	2 m
CABLE GLAND	Pg11

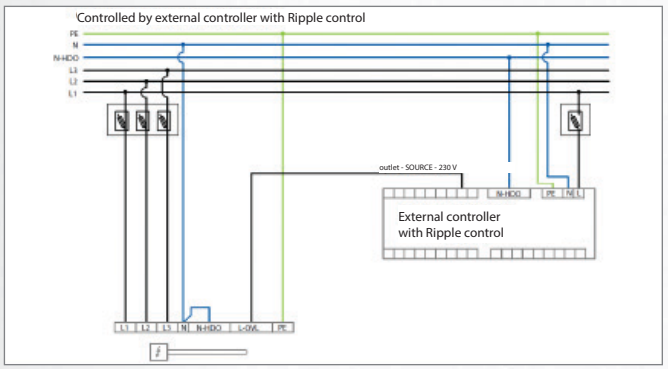
2- 6 kW

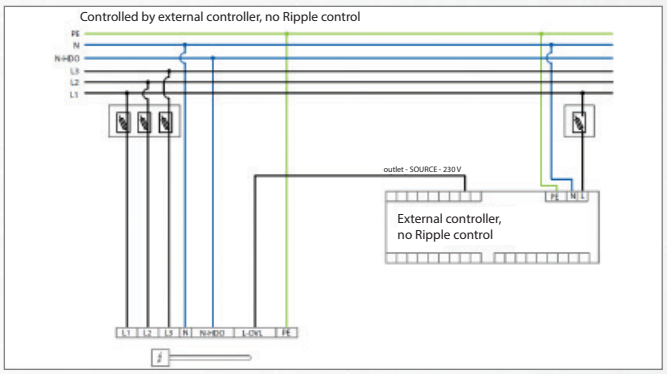


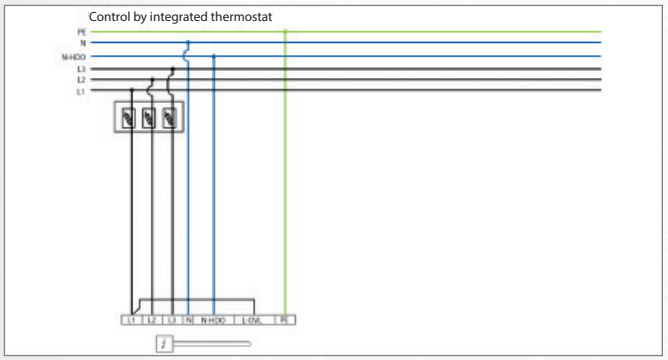
7.5 - 9 kW

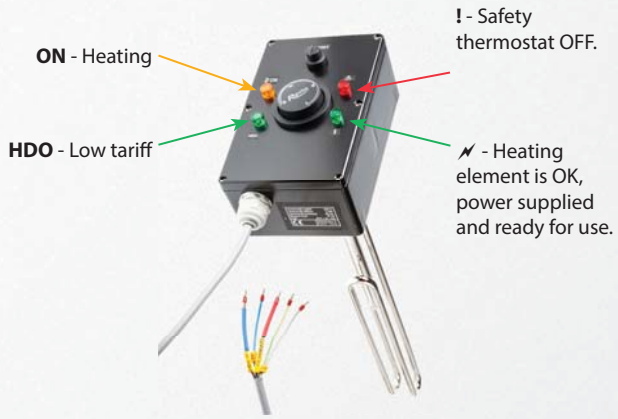


Wiring examples:









M 48x2 ELECTRIC HEATING ELEMENTS

Output: 2 - 7.5 kW
Application: electric boilers

ETT-B Electric Heating Elements

Non-nickel-plated resistance heating elements without thermostatic head intended for heating of static or flowing heating water or antifreeze fluid **in electric boilers**. These elements are not intended for stainless steel tanks.

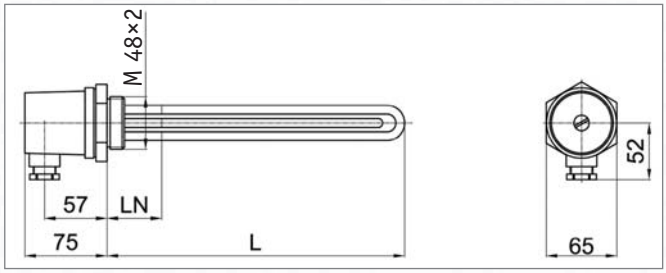
They are designed to be installed in a horizontal position so that the element is completely immersed, the cable gland downwards. They are power supplied by a cable (not included in supply) wired to a terminal box or fuse board.

These elements are fitted with neither operating nor safety thermostat.

Technical Data

HEATING ELEMENT	copper - no surface finish
CONNECTION	M 48×2 M
HEXAGON WITH G 6/4" THREAD	nickel plated brass
POWER SUPPLY	230 V or 400/230V 50 Hz
IP RATING	IP 54
PROTECTION CLASS BY EN 61140 ed.2	I

Dimensions, Models



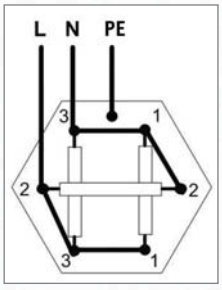
MODEL		ETT-B 2.0	ETT-B 3.0	ETT-B 4.5	ETT-B 6.0	ETT-B 7.5
NOMINAL OUTPUT	kW	2.0	3.0	4.5	6.0	7.5
NOMINAL CURRENT PER ONE PHASE	A	2.9/8.7*	4.3/13.0*	6.5/19.6*	8.7/26.1*	10.8
ELEMENT LENGTH (L)	mm	178	240	333	428	520
NON-HEATING END LENGTH (LN)	mm	45	45	45	45	45
CODE	--	4 973	4 972	4 971	4 970	4 969

** 3x230V wiring/1x230V wiring*

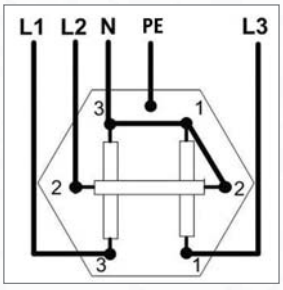
Electric Wiring

1/N/PE AC 230V or 3/N/PE AC 400/230V:

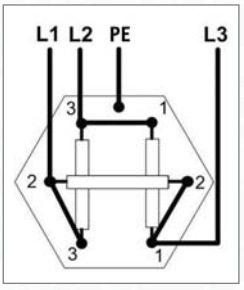
230 V – 2 and 3 kW



3× 230 V – 2 to 6 kW



3× 400 V –7.5 kW



Electric heating element compatibility table for Regulus thermal stores/HW storage tanks

Tank/store model	No. of G 3/6" tappings to install EHE	Max. output of 3x230/400V heat. elem., no thermostat	Max. output of 3x230/400V heat. elem. w. thermostat
HOT WATER STORAGE TANKS			
RxBC200	1[1]	6 kW	6 kW
RxBC300	1[1]	6 kW	6 kW
RxBC400	1[1]	7.5 kW	7.5 kW
RxBC500	1[1]	9 kW	9 kW
RxBC750	1[1]	12 kW	9 kW
RxBC1000	1[1]	12 kW	9 kW
RxBC1500	1[1]	12 kW	9 kW
RxBC2000	1[1]	12 kW	9 kW
RxBC2500	1[1]	12 kW	9 kW
RxBC3000	1[1]	12 kW	9 kW
RBC200HP	1[1]	6 kW	6 kW
RBC300HP	1[1]	6 kW	6 kW
RBC400HP	1[1]	7.5 kW	7.5 kW
RBC500HP	1[1]	9 kW	9 kW
RBC750HP	1[1]	12 kW	9 kW
RBC1000HP	0[1]	12 kW	9 kW
RBC1500HP	0[1]	12 kW	9 kW
RxDC160	1	6 kW	6 kW
RxDC200	1	6 kW	6 kW
RxDC250	1	6 kW	6 kW
RxDC300	1[1]	6 kW	6 kW
RGC120 H	1	3 kW	3 kW
THERMAL STORES WITH DHW			
DUO 390/130	3[3]	5 kW	5 kW
DUO 600/200	3[3]	5 kW	5 kW
DUO 750/200	3[3]	7.5 kW	7.5 kW
DUO 1000/200	3[3]	8.2 kW	8.2 kW
DUO 1700/200	3[3]	12 kW	9 kW
HSK500	1	9 kW	9 kW
HSK800	1	12 kW	9 kW
HSK1000	1	12 kW	9 kW
HSK1500	1	12 kW	9 kW
HSK2000	1	12 kW	9 kW
HSK 390 P/PR	3[3]	6 kW	6 kW
HSK 600 P/PR	3[3]	6 kW	6 kW
HSK 750 P/PR	3[3]	8.2 kW	8.2 kW
HSK 1000 P/PR	3[3]	9 kW	9 kW
HSK 1700 P/PR	3[3]	12 kW	9 kW
VEGA 390	2	6 kW	9 kW
VEGA 1000	2	9 kW	9 kW
LYRA 1000	2	12 kW	9 kW

Tank/store model	No. of G 3/6" tappings to install EHE	Max. output of 3x230/400V heat. elem., no thermostat	Max. output of 3x230/400V heat. elem. w. thermostat
THERMAL STORES			
PS 600 ES+	3[2]	9 kW	9 kW
PS 900 ES+	3[2]	12 kW	9 kW
PS 1100 ES+	3[2]	12 kW	9 kW
PS 500 E+	4[2]	9 kW	9 kW
PS 750 E+	4[2]	12 kW	9 kW
PS 1000 E+	4[2]	12 kW	9 kW
PS 1100 E+	4[2]	12 kW	9 kW
PS 1250 E+	4[2]	12 kW	9 kW
PS 200 N+	8[2]	6 kW	6 kW
PSxx 300 N+	8[2]	7.5 kW	8 kW
PS 400 N+	8[2]	7.5 kW	8 kW
PSxx 500 N+	8[2]	9 kW	9 kW
PS 600 N+	8[2]	9 kW	9 kW
PS 700 N+	8[2]	9 kW	9 kW
PSxx 800 N+	8[2]	12 kW	9 kW
PS 900 N+	8[2]	12 kW	9 kW
PSxx 1000 N+	8[2]	12 kW	9 kW
PS 1100 N+	8[2]	12 kW	9 kW
PSxx 1500 N+	8[2]	12 kW	9 kW
PSxx 2000 N+	8[2]	12 kW	9 kW
PSxx 3000 N25	8[4]	12 kW	9 kW
PSxx 4000 N25	8[4]	12 kW	9 kW
PSxx 5000 N25	8[4]	12 kW	9 kW
PS 400 K+	8[2]	9 kW	9 kW
PS 500 K+	8[2]	9 kW	9 kW
PS 600 K+	8[2]	9 kW	9 kW
PS 700 K+	8[2]	12 kW	9 kW
PS 900 K+	8[2]	12 kW	9 kW
PS 1100 K+	8[2]	12 kW	9 kW

[1] - *the tank can be fitted with a flange + tapping to receive one more heating element*

[2] - *number of all G 6/4" tappings to be connected to heat sources*

[3] - *P model features an extra 4th tapping for a PV powered heating element*

[4] - *all tappings are 2.5", an adapter shall be used when installing el. heating elements*

Max. output of a 230V heating element with thermostat is 3 kW for all stores and tanks, except for RGC 120 H (2.4 kW).

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