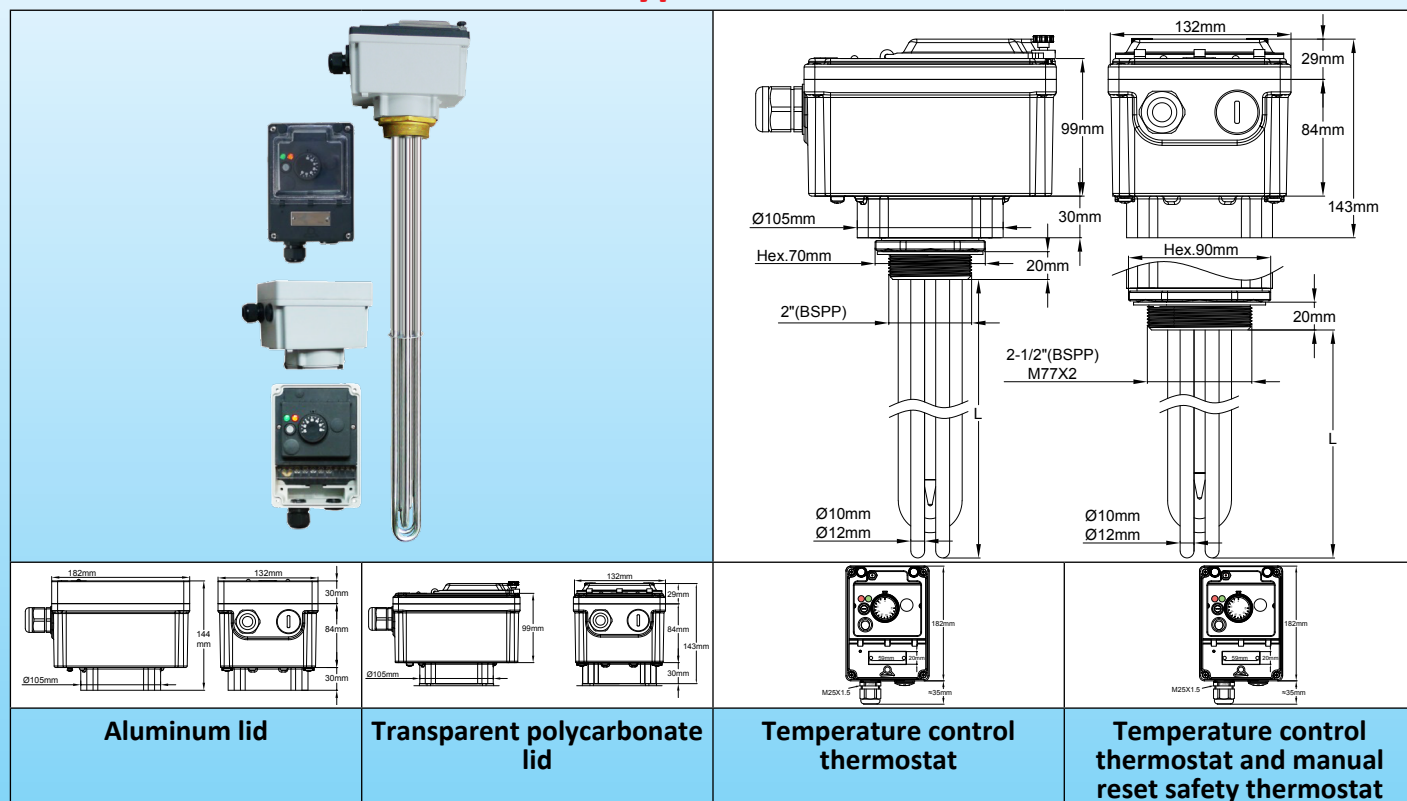


Immersion heaters with aluminum connection box

Immersion heaters with 182mm × 130mm × 144mm aluminum and plastic enclosure. Fittings from 2" to M77x2. With mechanical thermostat. With or without manual reset thermostat. Power up to 21kW with built-in power relay. Heating elements dia. 10 and 12mm.

Type 9STP



Main applications: Industrial liquid heating, hot water circuits, containers and buffer tanks.

These heaters with aluminum enclosure are designed for industrial applications of medium power in three-phase, which require the use of contactors. They can receive one power relay, 3 poles 32A resistive. They exist only with thermostat temperature control. The enclosure lid may be transparent polycarbonate or aluminum.

They are equipped with a device that allows adjusting the enclosure position after tightening of the fitting.

They can be made in:

- 6 standard power levels: 6kW; 9kW; 12kW; 15kW; 18kW; 21kW.
- 3 types of standard fittings with dia. 10mm heating elements: 2", 2"½ and M77x2
- 2 types of standard fittings with dia. 12mm heating elements: 2"½; M77x2
- 2 types of surface load density: 5W/cm² and 10W/cm². See technical introduction to optimize the surface load.

Heater tube material: 3 heating elements, dia.10mm or 12mm, AISI 304 or Incolloy 800 (AISI 316; AISI 321; Incolloy 825 on request).

Fitting material: brass, swiveling on housing, brazed on tubes. Supplied without gasket and without nut. See accessories below.

Thread:

- Dia. 10mm heating elements: 2", 2"½ and M77x2
- Dia. 12mm heating elements: 2"½; M77x2

Temperature control:

Mechanical thermostat, temperature range 30-90°C (85-195°F). Other ranges available.

Enclosure: Extremely robust, die-cast aluminum, 3mm wall thickness. Silicone foam gasket. Stainless steel cover screws with locking nuts. Gray epoxy paint RAL7035. Protected against galvanic corrosion. Designed for outdoor installation, IP65 and IK10. It also includes:

- A fuse to protect internal circuits
- An illuminated on- off switch
- A pilot light for power supply and a pilot light for power output.

There are 2 models of covers:

- **PA66 lid**, with a polycarbonate transparent window allowing access to the settings. This window can be secured with seals. This case also includes a separate lid, with independent seals, providing access to electrical connections. In models with failsafe manual reset limiter, reset can be accessed after opening the window.

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- Aluminum lid. This model provides access to settings only after removing the cover. It is convenient for industrial applications that do not request frequent changes in settings.

Cable glands: One M25, PA66, and one more hole for M25, closed by a plastic cap.

Thermowell: in standard two thermowells in AISI304, dia.8 × 7mm.

Electric connections:

Made on a built-in terminal block, with 6 terminals 10mm² and 2 terminals 2.5mm².

This terminal block is provided with a strap between terminals 1 and 2. By removing this strap, it is possible to connect an additional safety device, a remote control, or a timer.

Support grid: 1 grid AISI 304 for lengths from 400 to 600mm, 2 grids above.

Not heating immersed zone: 50mm.

Surface load: standard 5W/cm² or 10W/cm², other values on request.

Voltage: 380-400V, three phases with neutral only.

Standard options:

Plastic cover with transparent polycarbonate window.

Aluminum cover.

Variants on request:

- 4-40°C (40-105°F) adjustable thermostat, manual reset at 60°C (140°F).

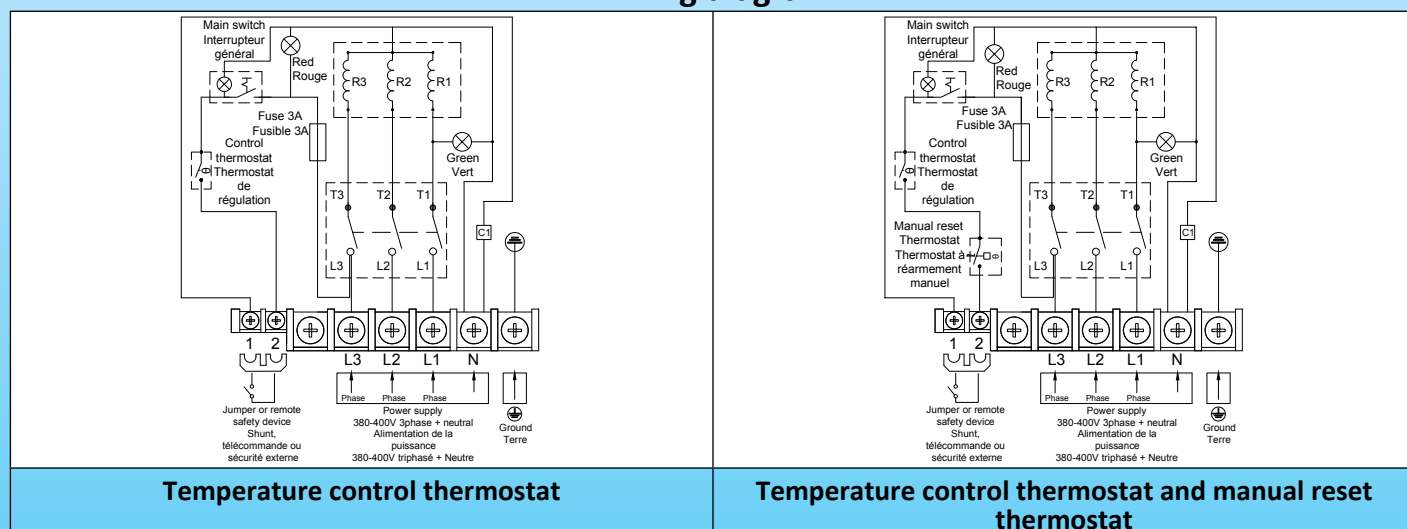
- 0-60°C (32-140°F), adjustable thermostat, manual reset at 80°C (176°F).

- 30-110°C (85-230°F) adjustable thermostat, manual reset at 130°C (266°F).

- Thermal cut out inside a thermowell.

It is also possible to produce models with digital electronic control. Ask our commercial department.

Wiring diagram



Main references with transparent polycarbonate window*

5W/cm²; 2"½** brass fitting, without manual reset thermostat.

Heating element diameter	Dia. 10mm heating elements		Dia. 12mm heating elements	
Power	6kW	9kW	12kW	15kW
Length (mm)	660	980	1100	1350
AISI 304 Reference	9STPD7QV060C1660	9STPD7QV090C1980	9STPD7QV120C2K00	9STPD7QV150C2O50
Incolloy 800 reference	9STPD7QV060CL660	9STPD7QV090CL980	9STPD7QV120CMK00	9STPD7QV150CMO50

10W/cm², 2"½** brass fitting, without manual reset thermostat.

Heating element diameter	Dia. 10mm heating elements			Dia. 12mm heating elements		
Power	6kW	9kW	12kW	15kW	18kW	21kW
Length (mm)	350	500	650	680	810	950
AISI 304 Reference	9STPD7QV060C1350	9STPD7QV090C1500	9STPD7QV120C1650	9STPD7QV150C2680	9STPD7QV180C2810	9STPD7QV210C2950
Incolloy 800 reference	9STPD7QV060CL350	9STPD7QV090CL500	9STPD7QV120CL650	9STPD7QV150CM680	9STPD7QV180CM810	9STPD7QV210CM950

5W/cm², 2"½* brass fitting, with manual reset thermostat set at 100°C (212°F)**

Heating element diameter	Dia. 10mm heating elements		Dia. 12mm heating elements	
Power	6kW	9kW	12kW	15kW
Length (mm)	660	980	1100	1350
AISI 304 Reference	9STPD7QV060C166N	9STPD7QV090C198N	9STPD7QV120C2K0N	9STPD7QV150C2O5N
Incolloy 800 reference	9STPD7QV060CL66N	9STPD7QV090CL98N	9STPD7QV120CMK00	9STPD7QV150CMO5N

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10W/cm², 2"½* brass fitting, with manual reset thermostat set at 100°C (212°F)**

Heating element diameter	Dia. 10mm heating elements			Dia. 12mm heating elements		
Power	6kW	9kW	12kW	15kW	18kW	21kW
Length (mm)	350	500	650	680	810	950
AISI 304 Reference	9STPD7QV060C135N	9STPD7QV090C150N	9STPD7QV120C165N	9STPD7QV150C268N	9STPD7QV180C281N	9STPD7QV210C295N
Incolloy 800 reference	9STPD7QV060CL35N	9STPD7QV090CL50N	9STPD7QV120CL65N	9STPD7QV150CM68N	9STPD7QV180CM81N	9STPD7QV210CM95N

* For plain aluminum cover, replace TPD by TPG in the reference.

** 2" brass fitting instead of 2"½, replace D7 by D6 in the reference. (Only possible on dia. 10mm heating elements)
M77x2 brass fitting instead of 2"½, replace D7 by D8 in the reference. (Possible on dia. 10mm and dia. 12mm heating elements).

*** Manual reset thermostat set at 60°C, 80°C, 110°C, 130°C. (140°F, 176°F, 230°F, 266°F), replace the last character N by E, J, Q, U.

References of accessories in option (not included in the product, must be ordered separately):

Nuts

	Thread	2"	2"½	M77x2
	Brass	9BRRA3000ELH304A	9BRRA3000ELH314A	9BRRA3000ELH306A
	AISI304	9BRRA3000ELH348A	9BRRA3000ELH142A	9BRRA3000ELH150A
	AISI316	9BRRA3000ELH204A	9BRRA3000ELH214A	9BRRA3000ELH206A

Gaskets

	Thread	2"	2"½- M77x2
	NBR	9BRJ03000ELH203A	9BRJ03000ELH201A
	Fiber	9BRJ03000ELH028A	9BRJ03000ELH030A
	PTFE	9BRJ03000ELH034A	9BRJ03000ELH036A