



# UL-/CAN/CSA Heating hoses



Many of our customers export to the US and Canada - a UL approval for the US or a CAN/CSA certificate for Canada is a prerequisite for this. In addition, the approvals simplify market access in many other countries, as the standards enjoy a high reputation worldwide and serve as a benchmark.

KLETTI is the only company in Europe authorized to manufacture and certify heating hoses according to UL and CAN/CSA specifications. The certification of our production processes and products is carried out by TÜV Süd.

TÜV Süd checks whether materials, components, systems, and the production process meet the specific requirements. Only if this is the case, our heating hoses are allowed to display the UL or CAN/CSA test mark, for which a fee is charged.

- Required for the export in the US and Canada
- Certification by TÜV Süd
- UL/CSA standards enjoy a high reputation worldwide
- Certificates available upon request

## TECHNICAL DATA

|   |   |
|---|---|
| Operating temperature                               | Max. 100 °C / 200 °C / 250 °C, Temperature individually adjustable  |
| Nominal voltage                                     | 12 – 600 VAC, 1-phase   |
| Amperage  | Max. 16 A per heating circuit, several heating circuits with separate sensor possible   |
| Nominal width                                       | DN 3 – 150, from DN 40 only with stainless steel- or PTFE corrugated hose as pressure hose  |
| Pressure hose*<br>(see data sheet „pressure hoses“) | PTFE-T1, -T2, -T3<br>Stainless steel corrugated hose<br>PTFE corrugated hose<br>PA hose (NY500)   |
| Connection fittings                                 | Customized  |
| Test voltage  | High voltage test up to 2500 VAC  |
| Heating element                                     | Manufactured in accordance with the DIN standard, insulated with PFA or PTFE depending on the version and covered with nickel-plated protective braid, moisture-proof (only up to 250 °C) |
| Temperature sensor                                  | Pt-100, Pt-1000, Ni-120, NTC (-100K), or thermocouple (type K, type J), others on request   |
| Limiter   | Voltage < 42 VAC = Limiter is mandatory (overheating protection)<br>Voltage > 42 VAC = Limiter is optional  |
| Thermal insulation                                  | Heat resistant aramid thermofleece, silicone foam (depending on version)  |
| Outer protection                                    | Polyamide braiding, corrugated tube (different versions), metal braiding (stainless steel or galvanized), others on request   |
| Power supply line                                   | 1,5 m with 7-pin circular plug (standard), compatible with our temperature controlling devices, others on request   |
| Control wires                                       | According to customer request, cross sections from 0,5 to 2,5 mm <sup>2</sup>   |
| End caps  | Silicone or hard cap with traction relief, clip fittings (only for corrugated tubes), Self-welding silicone tape (only in exceptional cases)  |
| Manufactured length                                 | Max. 100 m, depending on version  |
| Certification                                       | CE-mark, UL- CAN/CSA certification  |
| Ordering data                                       | See technical questionnaire   |
| Protection class                                    | IP 54, IP65 or IP66 (IP 66 not for all sizes and versions)  |

\* Pressure hoses used for the production of certified UL- CAN/CSA heated hoses are specified with 5 times safety against bursting. Example: If the hose burst pressure is 500 bar, we indicate the hose with a max. operating pressure of 100 bar.

Further information and suitable accessories can be found on our website: [www.kletti-gmbh.com](http://www.kletti-gmbh.com).

Do you have any questions or need an offer?

Contact us: [sales@kletti-gmbh.com](mailto:sales@kletti-gmbh.com)