Warmth and safety for your house

Commercial Construction

• Quality • Reliability • Delivery reliability
• Our knowledge for your application

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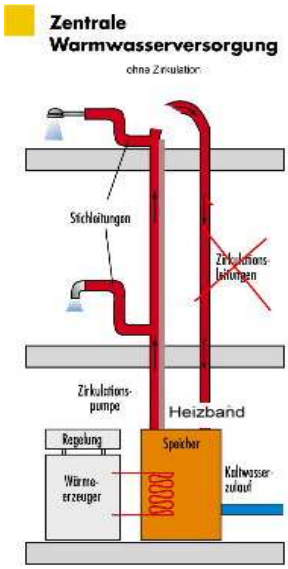
The most common applications for trace heating in commercial constructions are:

Frost protection and Temperature maintenance

Damages by frost at water pipes

Safety for your roof and gutter against high snow loads and icicles

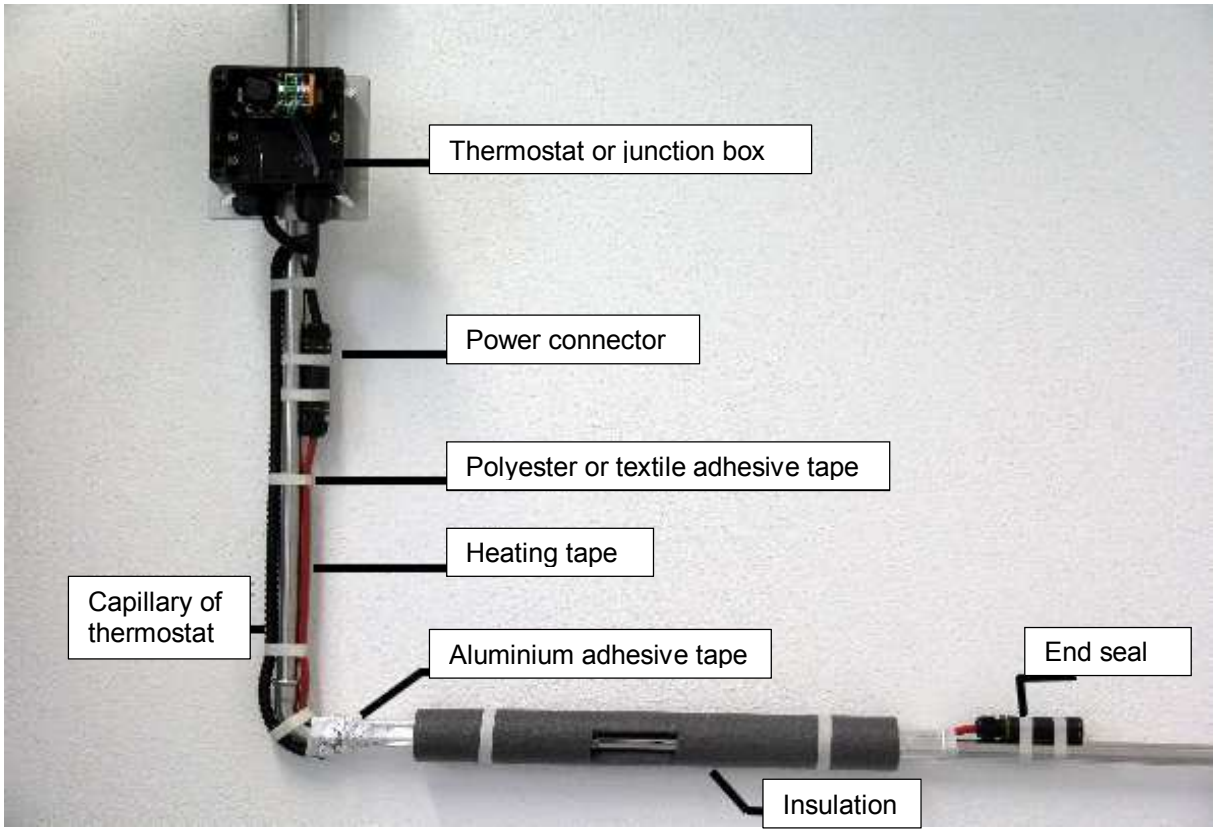
Temperature maintenance and decontamination of legionella in warm water pipes



Frost protection and Temperature maintenance

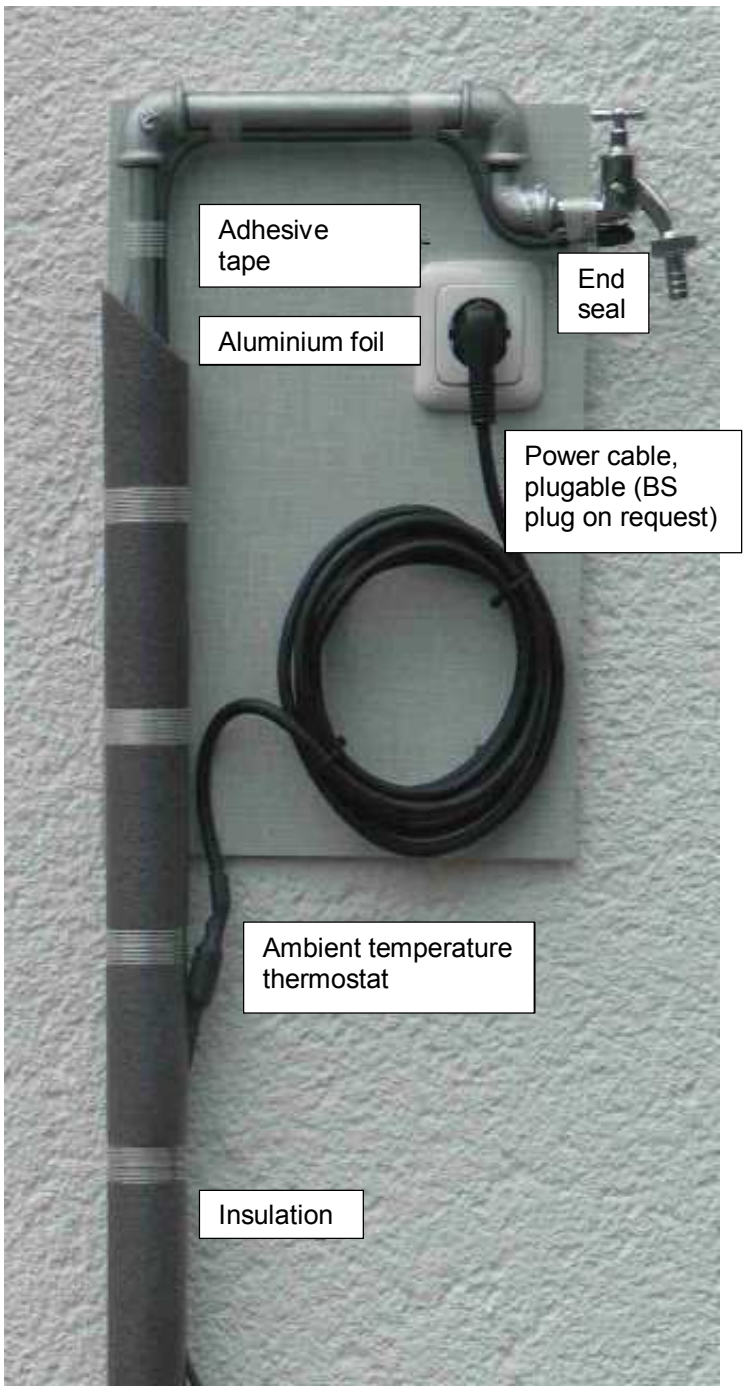
The task of the trace heating system is to take care that the pipe temperature never fall 0°C under worst temperature conditions.
To allow the trace heating system to work against frost, it is very important to install insulation on the pipes.
You can use pre-formed insulation, which you can buy in every home depot or you can use mineral wool mats.

System build up for frost protection with the needed components:



The build up of the system will be done on site. To connect to trace heating system to the electrical network you need an authorized person.

System build up with pre-assembled heating tapes



The total system is ready made and plugable. You only need the required length of heating circuit und the accessories for the installation. The system can be plug in without any authorized person.

Components:

Description	Required / Amount
Power cable to connection box or thermostat	AL1 up to 2,5mm², 3 wire, on site or from Quintex
Mounting plate for the connection box or thermostat to mount on a pipe MP1	1 x per heating circuit
 Connection box AGB1 with minithermostat or thermostat IRM040	1 x per heating circuit
 Termination set with power connection and end seal (IAL5S) also e.a. buyable Power connection IAL5A End seal IAL5E	1 x je Heizkreis Optional Optional
 Polyester-(PEK100) or textile adhesive tape (GEK130)	2 x 3,14 x pipe diameter (m) x 5 x pipe length = total length Quantity = total length / 50 (round up please)

Description	Required / Amount
 Heating tape ILL12 or ILL 23 Technical Data s. page 11	length = length of pipe
 Aluminium adhesive tape ALK150	Quantity = length of pipe / 50 (round up)
 Label KZE	Quantity = length of pipe / 3 (round up)

All products are easy to purchase via our webshop.
Please pay attention to the maximum circuits length linked to the type of heating.

ILL122CT max. circuit length = 180m
ILL232CT max. circuit length = 124m

For more information use our homepage: www.quintex.info
Or contact us by email: info@quintex.info

Pre-assembled heating circuits:

Description	Required / Amount
 Heating tape ILL12 or ILL 23 Technical Data s. page 11	length = length of pipe
 Polyester-(PEK100) or textile adhesive tape (GEK130)	2 x 3,14 x pipe diameter (m) x 5 x pipe length = total length Quantity = total length / 50 (round up please)
 Aluminium adhesive tape ALK150	Quantity = length of pipe / 50 (round up)
 Label KZE	Quantity = length of pipe / 3 (round up)

Safety of your roof and gutter against high snow loads and icicles

The task of the trace heating with this application is to avoid high snow loads on your roof or very dangerous icicles at your gutter. The winter of 2010 had shown the risk of high snow loads dramatically.
Following the experts, the climate change will lead to a bit higher temperature, but the snow will come more seldom but then much wetter than ever and this means the snow is much heavier. Some roofs are not build for such loads.
At minimum risky for people as the snow load are icicles at the gutter.
Depending on the height of a building the damage could be very high. Additionally the whole substance of the building can be damaged by water that is not running through the gutter. These damages are not directly visible.

System build up for roof and gutter de-icing:

Description	Required / Amount
Power cable to connection box or thermostat	AL1 up to 2,5mm², 3 wire, on site or from Quintex
Mounting plate for the connection box or thermostat to mount on a pipe MP1	1 x per heating circuit
 Connection box AGB1 with minithermostat or thermostat IRM040	1 x per heating circuit
 Label KZE	Quantity = length of pipe / 3 (round up)

Or:

	Ice control system CREM1	1x for all heating circuits
	Sensor for snow and humidity	1x for all heating circuits
	Temperature sensor	1x for all heating circuits

All 3components CREM1 + both sensors are an ice warning system

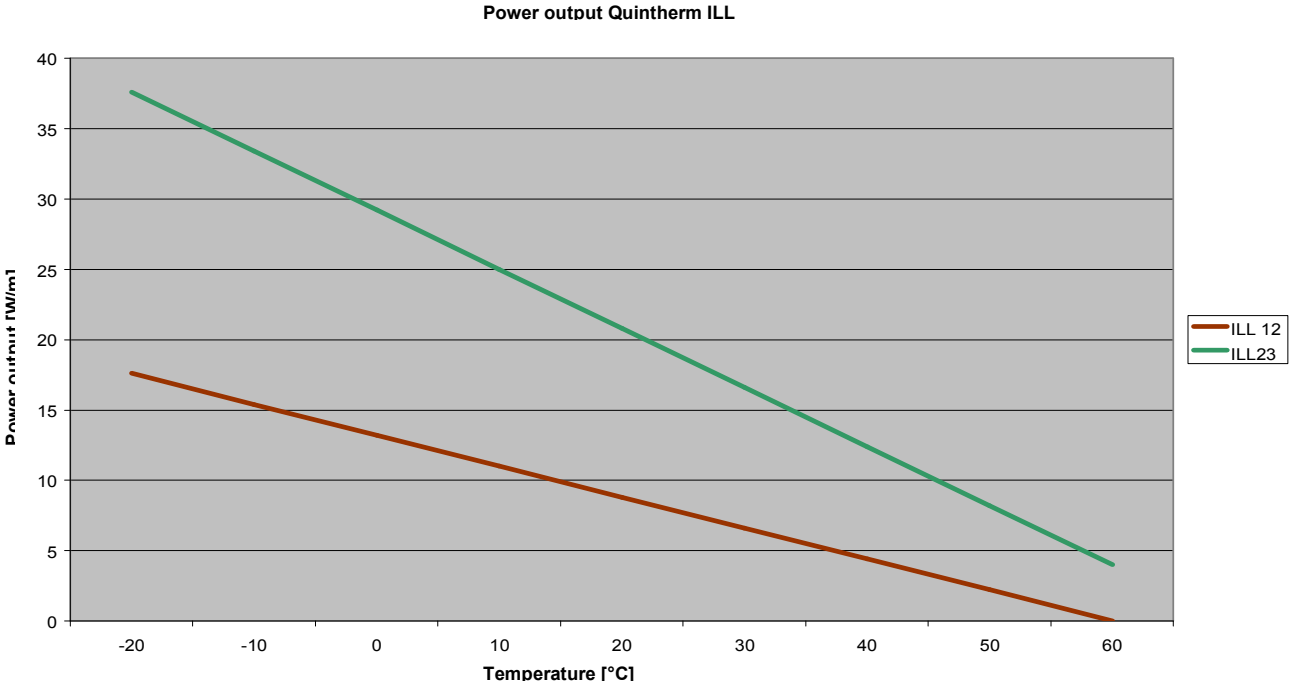
Description	Required / Amount
 Termination set with power connection and end seal (IAL5S) also e.a. buyable Power connection IAL5A End seal IAL5E ***shall be mounted outside the gutter!***	1 x per heating circuit Optional Optional
 Aluminium adhesive tape ALK150	Quantity = length of pipe / 50 (round up)
 Heating tape CLD Technical data s. page 12 Max. circuit length 88m!	Total length = total gutter length + total length of down pipe +1 + heated roof area [m²] x 4
 Fix strip for heating tape AB_CLD	Quantity = length of gutter x 4

Technical Data ILL12 and ILL23:

Maximum temperature switch on:	85°C
Maximum temperature switch off :	85°C
Minimum installation temperature	-40°C
Voltage	220 -277AC V

Build up	Dimens.[mm]	Min.Bend radius [mm]
Polyolefin outer sheath **ILL12/ILL23**	10,5x5,9	35

	Switch on temp [°C]	6A	10A	16A	20A	25A
ILL12	5°C	78	132	180	-	-
	0°C	74	124	180	-	-
	–20°C	56	94	150	180	-
	–40°C	46	76	124	154	-
ILL23	5°C	46	76	124	-	-
	0°C	42	70	114	124	-
	–20°C	34	56	88	110	-
	–40°C	28	46	72	90	-



Frost protection down to -20°C
Thermal cond. 0,035 W/m K
Pipe diameter

Insulation thickness [mm]	**DN**	15	20	25	32	40	50	65	80	100	125	150	200
	Zoll	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"
10		ILL12	ILL23	ILL23	ILL23	ILL23	ILL23	ILL23					
15		ILL12	ILL12	ILL12	ILL23	ILL23	ILL23	ILL23	ILL23	ILL23			
20		ILL12	ILL12	ILL12	ILL12	ILL12	ILL23	ILL23	ILL23	ILL23	ILL23		
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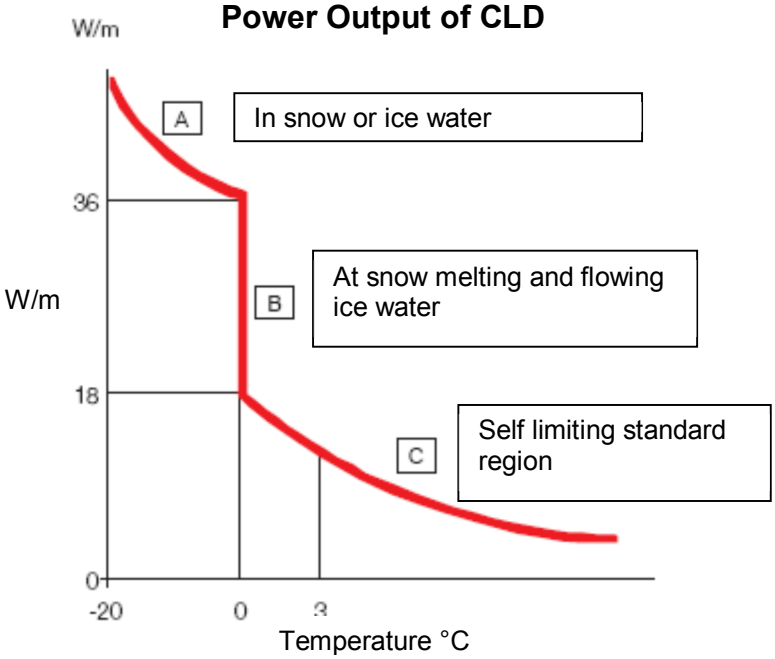
Technical Data CLD:

Power Output of CLD



MAXIMUM TEMPERATURE	65°C (150°F)
MINIMAL INSTALLATION TEMPERATURE	–30°C (–22°F)
SUPPLY VOLTAGE	220 – 240VAC 110 – 120VAC (auf Anfrage)
MAXIMUM RESISTANCE OF BRAIDING	18.2 Ohm/km

Dimensions and weight

Type	Dimension (mm)	Wight kg/100m	Min. Bending radius
CLD	10.5 x 5.9	10.0	35mm

Maximum heating circuit length at circuit breaker size: C-Characteristic

Type	Switch on temp.[°C]	230V				
		6A	10A	16A	20A	30A
CLD	10°C	34	56	88	92	-
	0°C	28	48	76	92	-
	-20°C	22	36	58	74	92