
	Service info Frost protection heating cable	
	Re: TAK5	
	Date November 24th, 2014	
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Frost protection heating cable for TAK5

1 Introduction

These instructions put you in the position to install the frost protection cable as intended.

- > Please read these instructions carefully before installing the frost protection cable.
- > Keep these instructions ready and available at all times.
- > Comply with all safety instructions in these instructions at all times.
- > Please also observe the original operating manual of the automatic feeder.


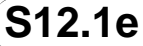

2 For your safety

2.1 Target group

2.1.1 Necessary qualifications of the service technician


Only trained service technicians are authorized to install the frost protection cable.


Service technicians are electricians with appropriate qualifications, i.e. they are able to assess the work assigned to them and detect potential risks on the basis of their technical training as well as their knowledge of the relevant standards. This also includes knowledge of relevant accident prevention regulations, generally accepted safety regulations, EC guidelines and country-specific standards and provisions.


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2.2 Indication of hazards

Hazards are indicated by a key word and a corresponding symbol, depending on the severity and probability:

	Danger! For an imminent danger, resulting in serious injuries or death.
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	Warning! For a potentially dangerous situation which may cause serious injuries or even death.
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	Caution! For a potentially dangerous situation which may cause minor injuries or material damage.
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Attention	For a potentially harmful situation in which the product or an item can become damaged within its environment.
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Note	For application notes and other useful information.
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However, it is just as important to comply with any other notes and information which are not highlighted, so as to avoid failures which in turn may cause direct or indirect injuries or material damage.

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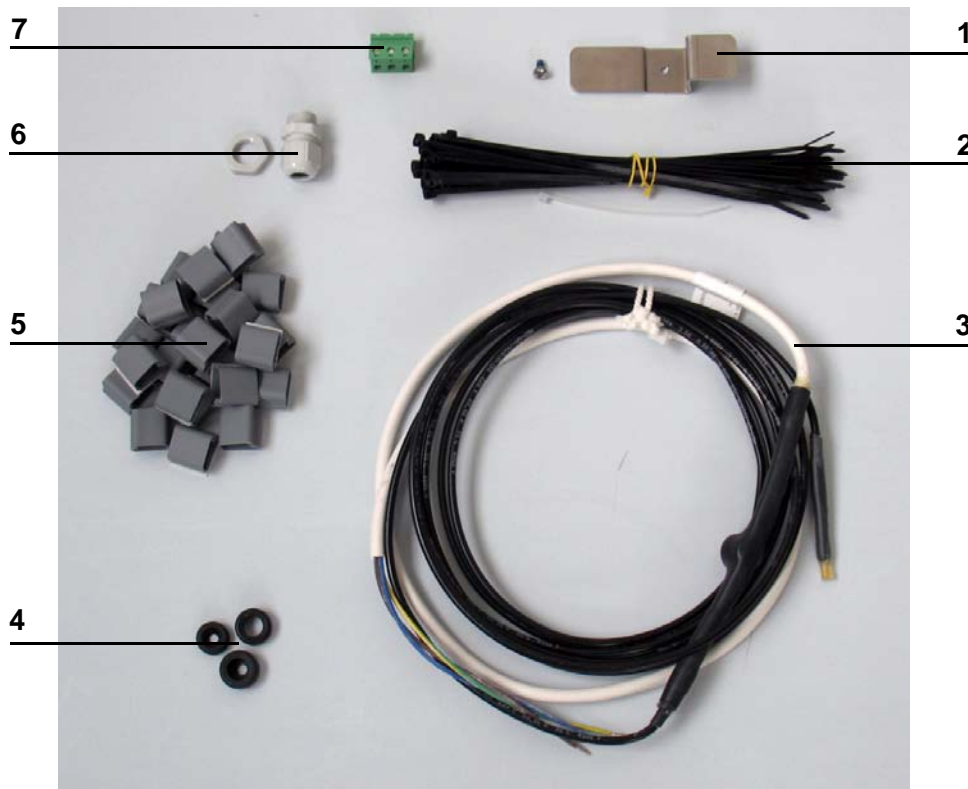
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3 Scope of delivery






1 Holder with screw	5 Glue plates
2 Cable ties	6 Cable gland
3 Frost protection cable	7 Terminal clamp
4 Bushings	

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4 General notes

1. The thermostat switches on at around 5° C and off again at around 15° C.
2. Do not wind the heating cable, it must remain straight over the entire length of the pipe/hose.
3. The heating cable must not touch, cross or overlap itself at any point. This causes the cable to overheat.
4. To protect from fire, the heating cable must have a distance of at least 30 mm from all flammable materials.
5. Minimum bending radius 25 mm.
6. Install the heating cable so that it cannot be mechanically damaged. Never use the cable in areas with animals (including the milk line to the teat).
7. Do not squash the cable, stand on it or lay it over sharp edges and protect it from rodents.
8. To make installation easier, have a light (e.g. a flashlight), cleaning agent (e.g. spirit) and a cleaning cloth ready.

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5 Connecting the frost protection cable to the main board



Warning!

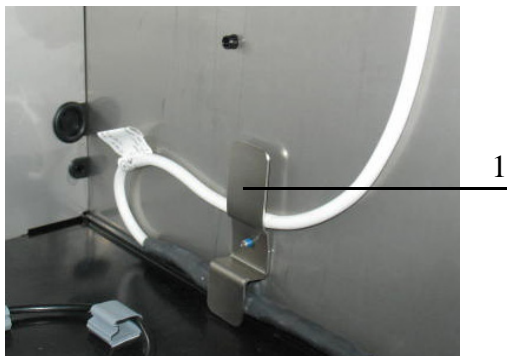
Electric shock!

- Disconnect the automatic feeder safely from the power source before opening the control box.

1. Open the control box on the back of the automatic feeder.
2. Connect the frost protection cable to the main board of the automatic feeder, as indicated in the machine's circuit diagram provided.

6 Fixing the holder for the frost protection cable

1. Open the right side door of the automatic feeder.
2. Fix the holder for the temperature sensor (1) at the pre-drilled point on the rear wall of the automatic feeder.



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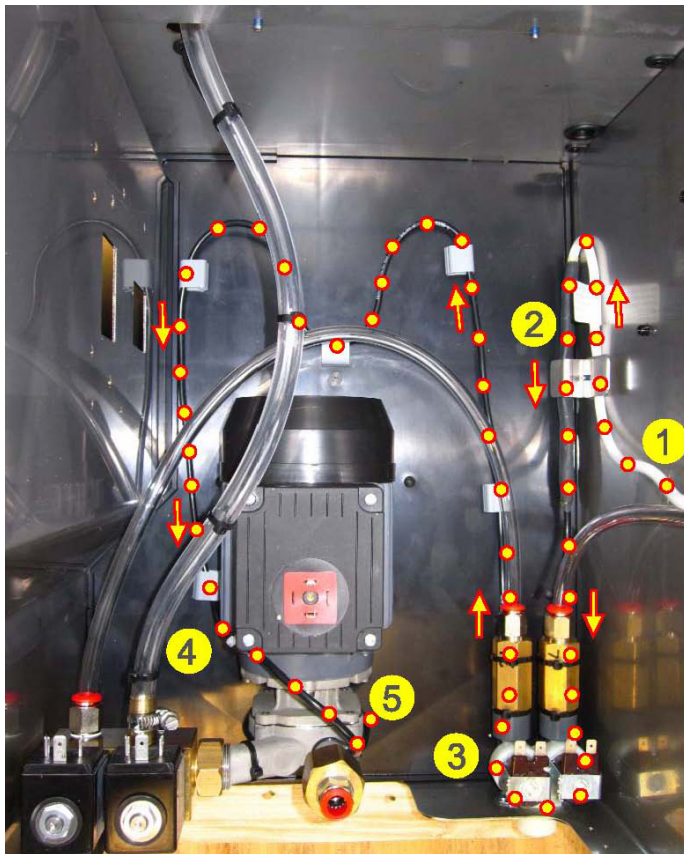


7 Installing the frost protection cable

The following figures show how the frost protection cable should be installed and fixed in the automatic feeder. The course of the frost protection cable is made visible through



7.1 Compact



1. Feed the frost protection cable along the inside of the automatic feeder to the holder (1).

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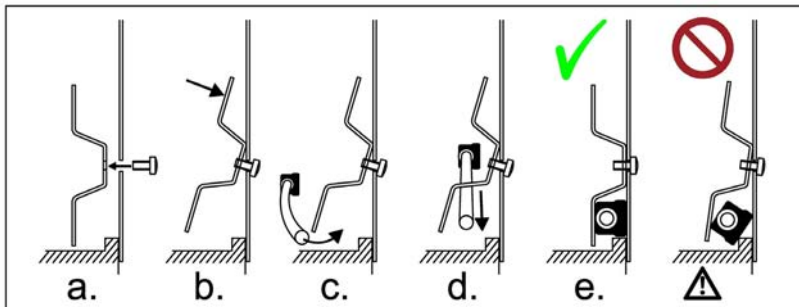
Date

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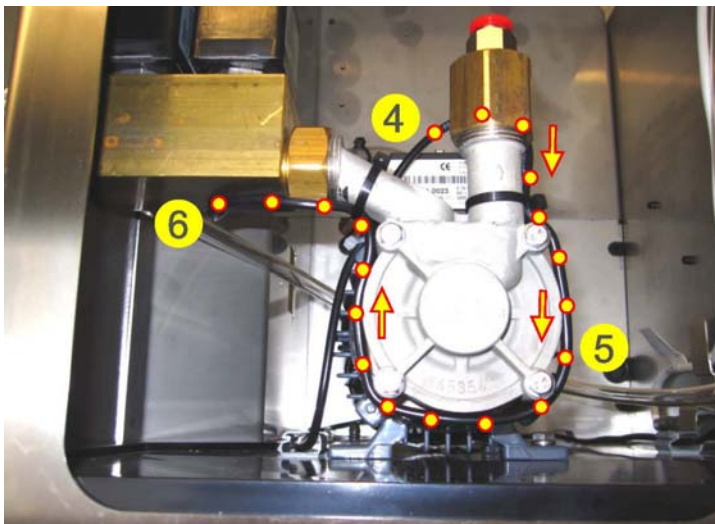
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2. Push the temperature sensor under the holder (2) and tighten the fixing screw.



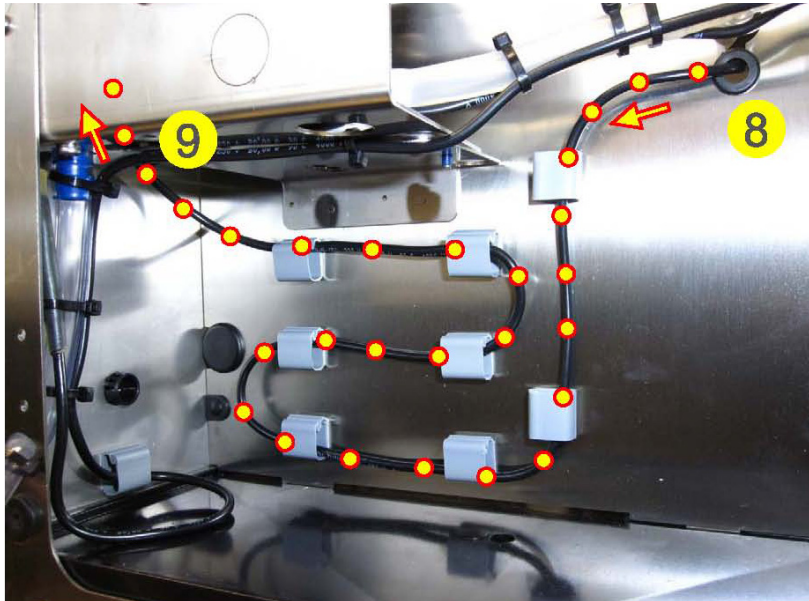
3. Fix the frost protection cable on the bottom of the valves (3) with cable ties.
4. Feed the cable along the base of the automatic feeder to the milk pump (4) as shown in the figure above.



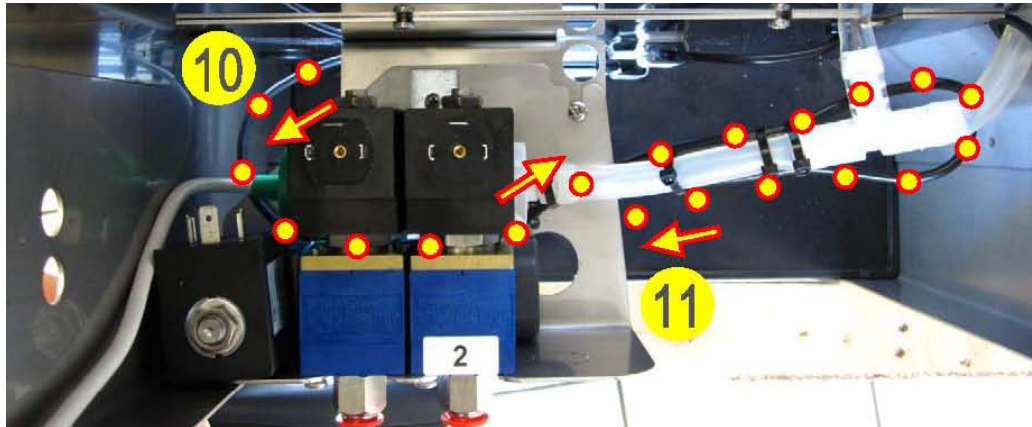
5. Fix the frost protection cable on the milk pump (5) and feed it to the flush valve (6).

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6. Fix the frost protection cable to the bottom of the flush valve and to the flushing hose (6).
7. Fit a bushing to the opening in the dividing wall and push the frost protection cable into the left part of the automatic feeder housing (7).

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8. Feed the frost protection cable along the dividing wall to the retaining plate of the valve unit (8).
9. Feed the frost protection cable behind the retaining plate of the valve unit (9).

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10. Push the frost protection cable between the feeding pump and the valve unit (10).

11. Fix the frost protection cable twice on the hose connection between the mixer and the feeding pump (11).

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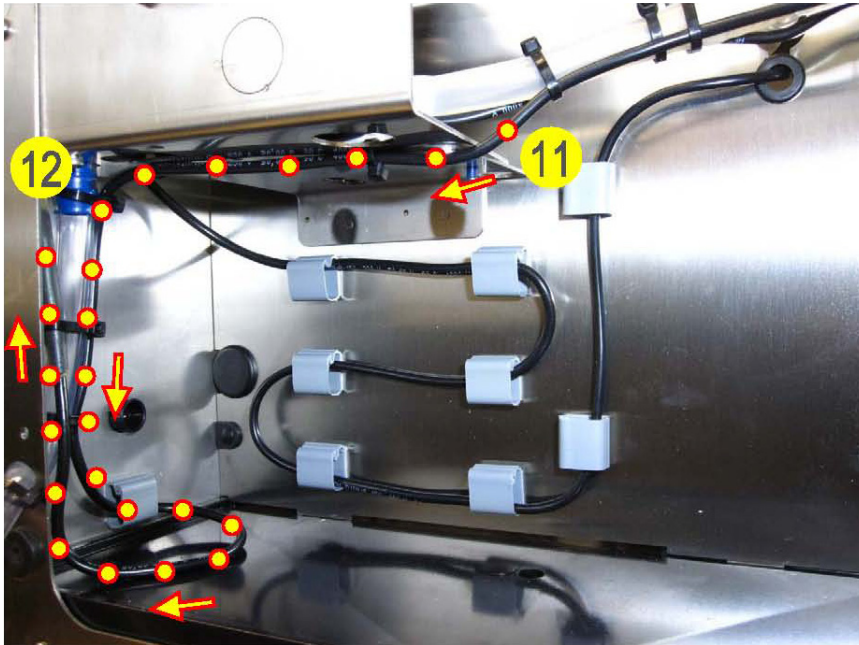
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12. Fix the frost protection cable to the bottom of the valve unit retaining plate and the mixer drain hose (11).
13. Feed the frost protection cable along the base of the automatic feeder and fix the end to the mixer drain hose (12).
14. Activate the frost protection cable by setting the switch S2 on the main board of the automatic feeder to **ON** (see accompanying circuit diagram).
15. Close all doors on the automatic feeder and the control box correctly.
16. Where necessary, connect the automatic feeder to the power source again and switch it on.

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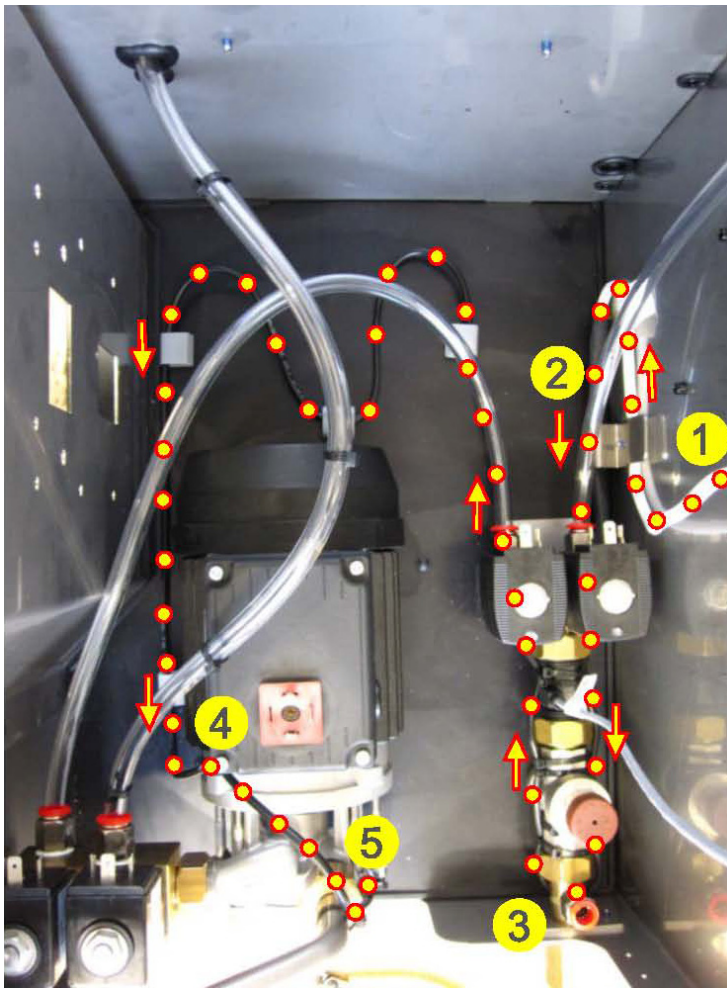
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7.2 Vario



1. Feed the frost protection cable along the inside of the automatic feeder to the holder (1).
2. Push the temperature sensor under the holder (2) and tighten the fixing screw.

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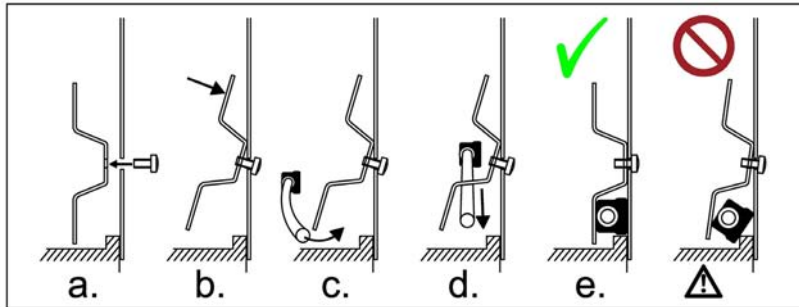
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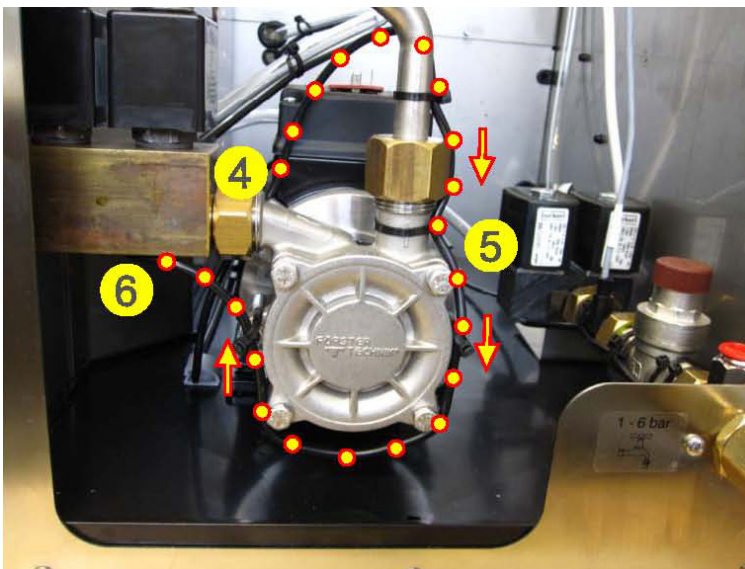
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3. Fix the frost protection cable on the bottom of the valves and on the pressure regulator (3) with cable ties.
4. Feed the cable along the base of the automatic feeder to the milk pump (4) as shown in the figure above.



5. Fix the frost protection cable on the milk pump (5) and feed it to the flush valve (6).

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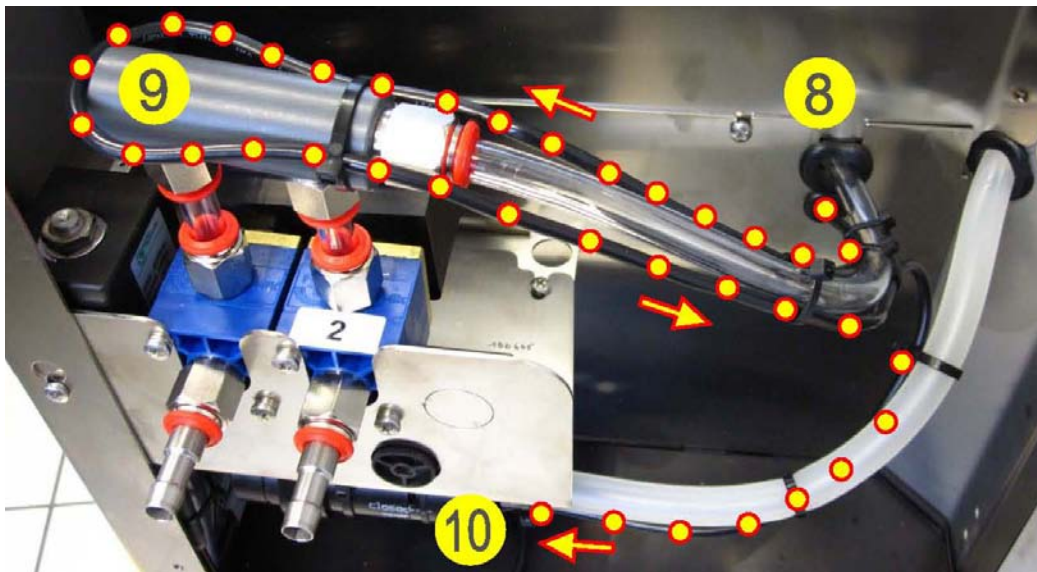
6. Fix the frost protection cable to the bottom of the flush valve and to the flushing hose (6).
7. Fit a bushing to the opening in the dividing wall and push the frost protection cable into the left part of the automatic feeder housing (7).

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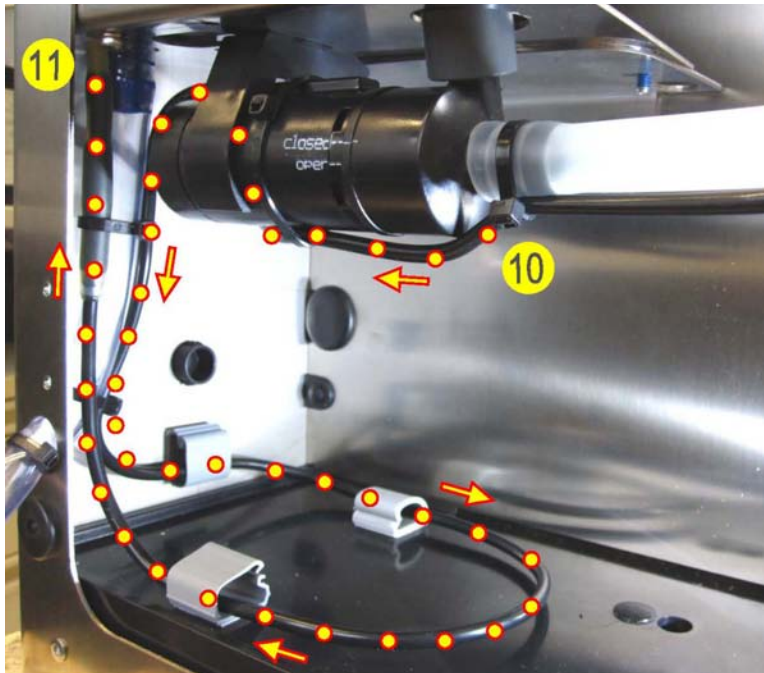
8. Fix the frost protection cable twice to the flushing hose (8) and to the coupler (9).
9. Fix the frost protection cable on the hose connection between the mixer and the feeding pump (10).

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10. Fix the frost protection cable to the feeding pump and the mixer drain hose (10).

11. Feed the frost protection cable along the base of the automatic feeder and fix the end to the mixer drain hose (11).

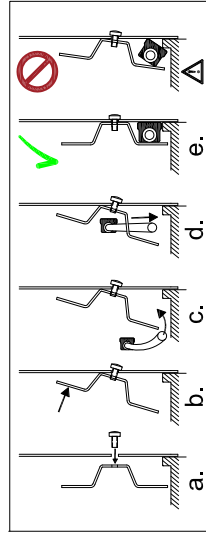
12. Activate the frost protection cable by setting the switch S2 on the main board of the automatic feeder to **ON** (see accompanying circuit diagram).

13. Close all doors on the automatic feeder and the control box correctly.

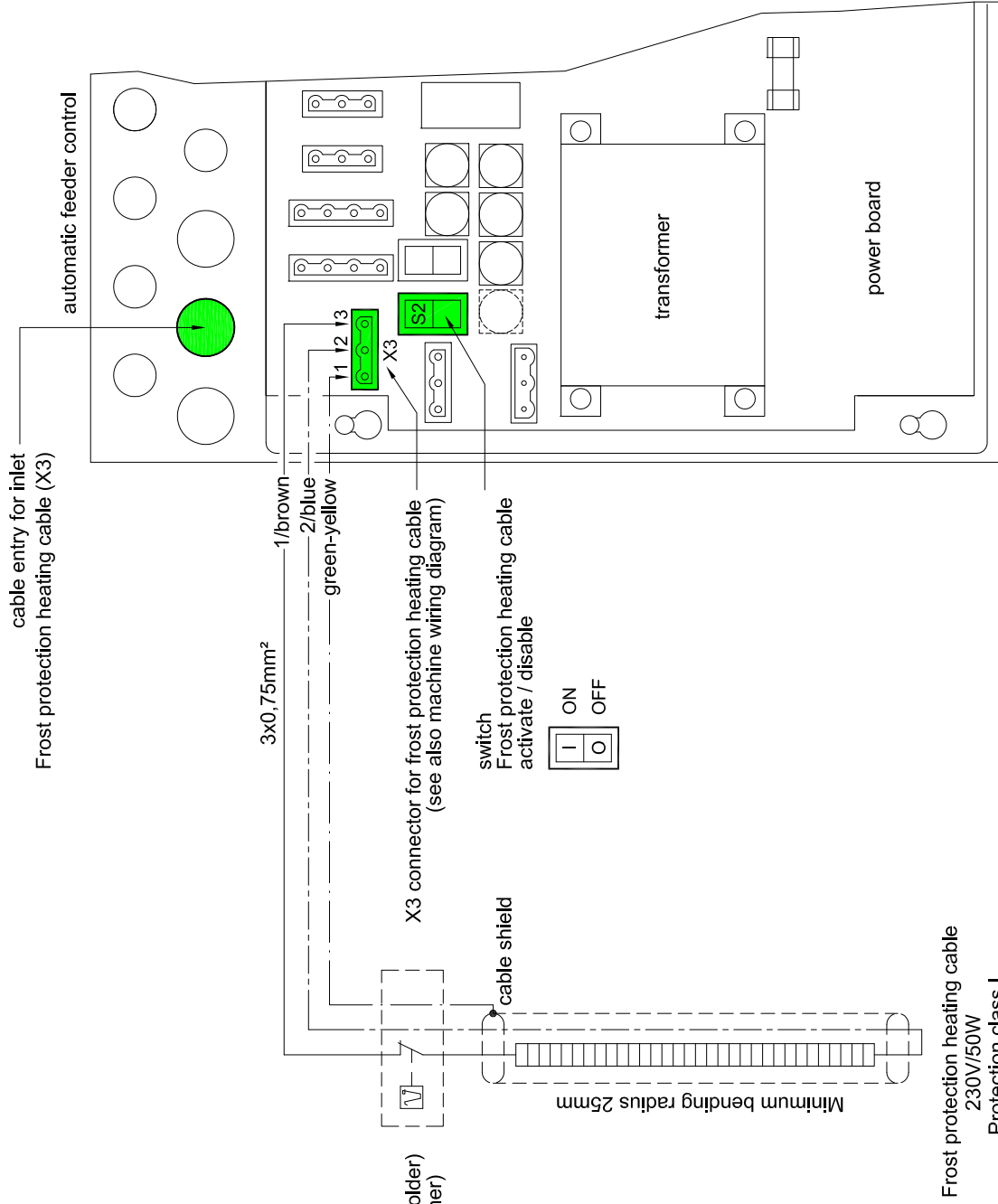
14. Where necessary, connect the automatic feeder to the power source again and switch it on.

layout drawings:
 SK30107 Compact Kombi
 SK30106 Vario Kombi
 SK30104 Compact Pulver
 SK30108 Vario Pulver

anti-icing thermostat
 Secure the sensor head
 in the lower area
 of the exterior automatic feeder
 wall from the inside
 (at the coldest point).



! Do not wind the heating cable. It has to be stretched over the complete pipe-/hose length.
 Make sure that the heating cable does not touch itself, cross or overlap none of its parts.
 This causes to overheating of the cable.



geändert:	Frost protection heating cable 230V for Calf feeder Vario+ / Compact+	Zeichnungs-Nr.: PL30218	Versions-Nr.: 001	Blatt 1 / 1
Abbildung Thermostat		erstellt: 11.11.2014 jr	Ersatz für:	Artikel-Nr.
Mindestbiegeradius 25mm		bearbeitet: 11.11.2014 jr	gültig ab:	
Draststellung		freigegeben:	gültig bis:	