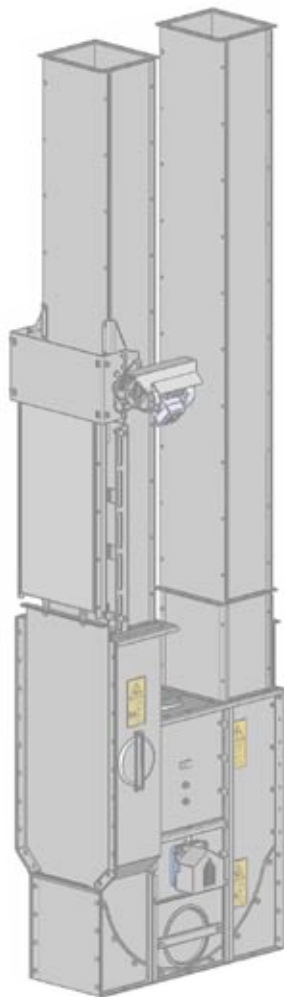


Installation Instructions

Shutter plate motor-drive for E-series elevator

408119 (en) 09-2023





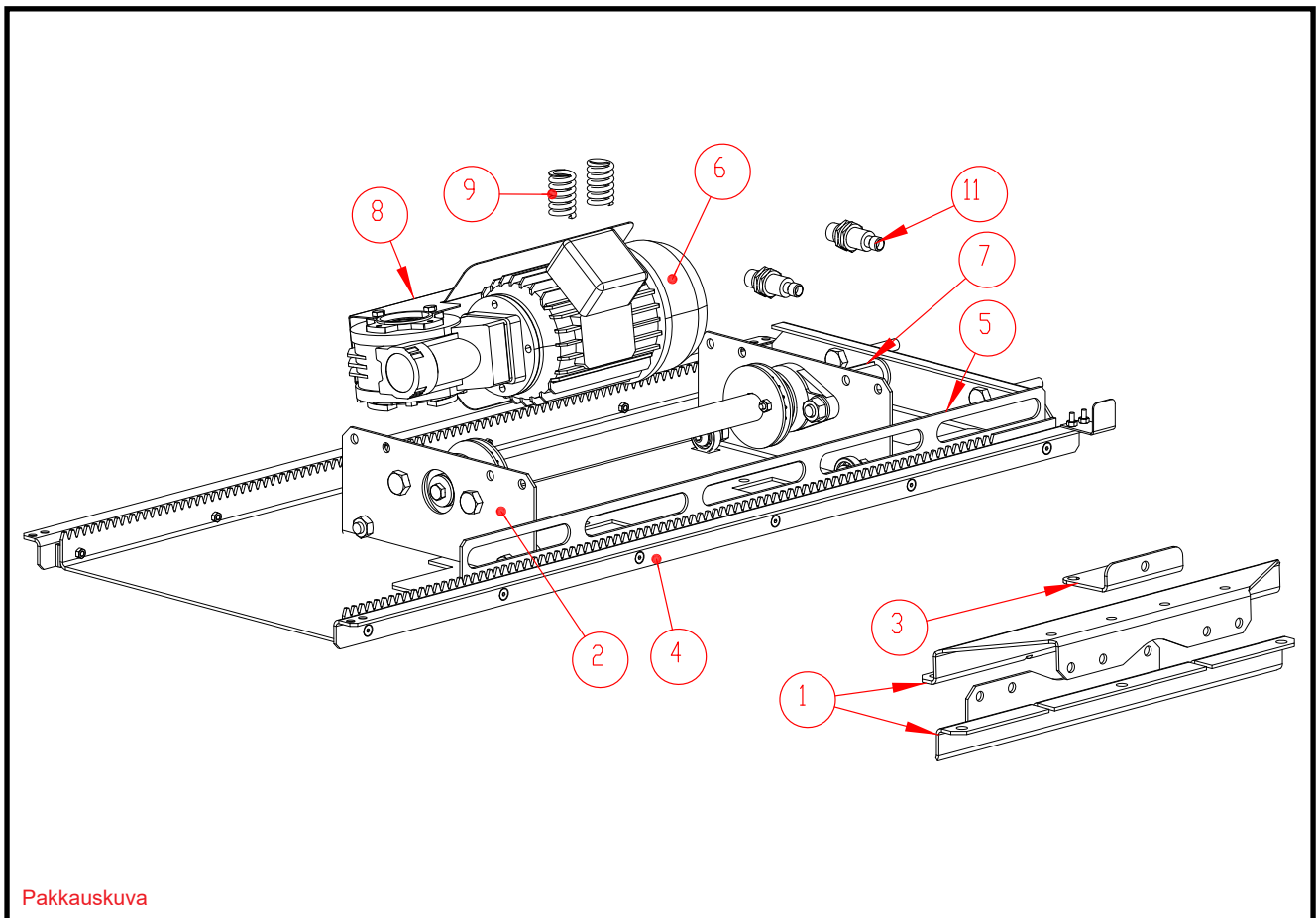
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MOTOR-DRIVEN SHUTTER PLATE

The motor-drive package contains the necessary mounting accessories for the E-series elevators.
The electrical connection is made in accordance with the documentation supplied with the control centre.



Pakkauskuvat

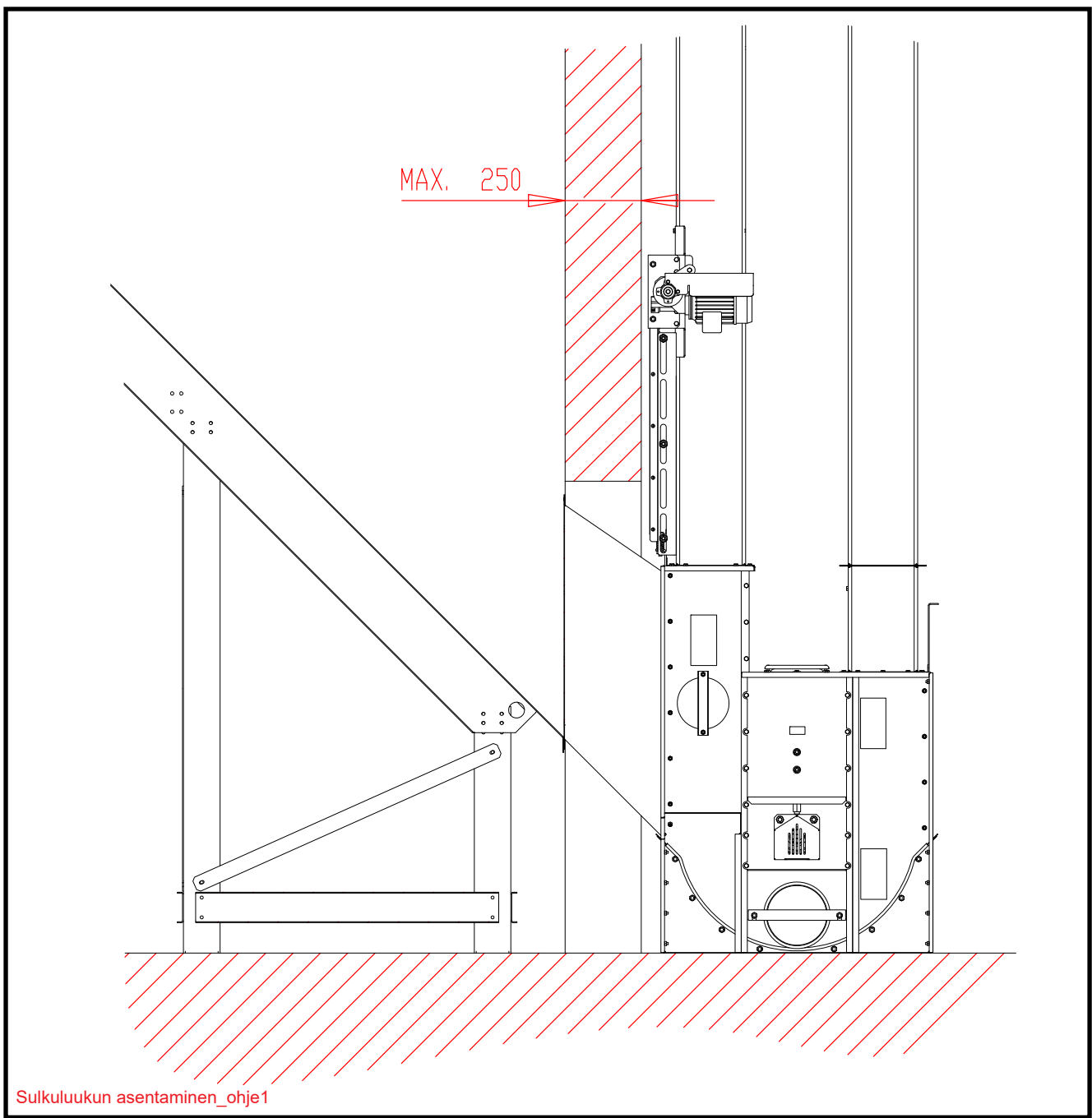


Part	Part no	Denomination	Drawing No.	Pcs	Weight
1	A76541	ELEV MOT SHUTTER PLATE M 21 FASTENING	A76541	2	1,1
2		ELEV MOT SHUTTER PLATE M 21 BODY PRE-ASSY		1	7,7
3	A76542	ELEV MOT SHUTTER PLATE M 21 TORQUE SUPPORT	A76542	1	0,2
4		ELEV MOT SHUTTER PLATE M 21 RACK PRE-ASSY		1	13,0
5	A76547	ELEV MOT SHUTTER PLATE M 21 LIMIT FASTENING	A76547	1	0,7
6	304010	MOT KV MOM. SUPPORT 0.18KW VSF-045 I=102		1	10,2
7	A72035	WEDGE 6X6-60	A72035	1	
8	A76548	ELEV MOT SHUTTER PLATE M 21 RAIN PROTECTION	A76548	1	0,4
9	120545	SPRING PRESSURE 4,0 D24/d16 L40mm c55N/mm art.1757		2	
10	110810	NUT NYLOC M12 DIN985		2	
11	300322	LIMIT SWITCH INDUCTIVE M18 10..30V DC		2	0,1
12	101810	HEX BOLT ZN 8X16 DIN933	101810	17	
13	110540	NUT M8 DIN 934		17	
14	408119	ASSY MANUAL AND US. MOT. DR. SHUT.		1	



MODE REQUIRED BY MOTOR-DRIVE

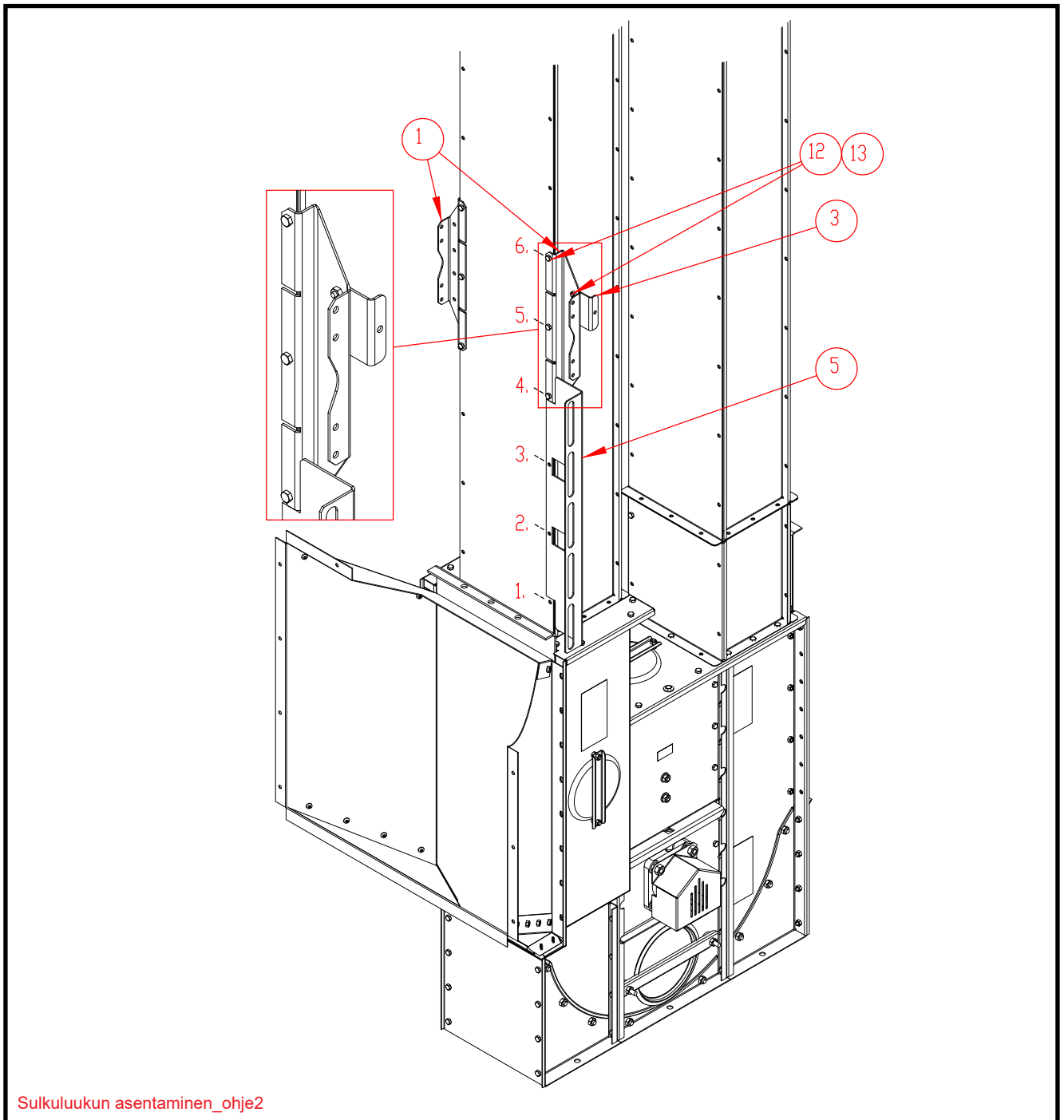
The motor drive of the shutter plate is designed to be installed between the elevator pipe and the hopper. When using the Antin spout, the maximum wall thickness of the hopper must be 250 mm in order to leave the space required for installation. The lowest elevator pipe can be 1 m or 2 m.





INSTALLING THE FASTENINGS

The torque support for the motor is attached to the fastening. The fastenings and the edge fastenings are secured as shown in the illustration, do not tighten the fastening screws.



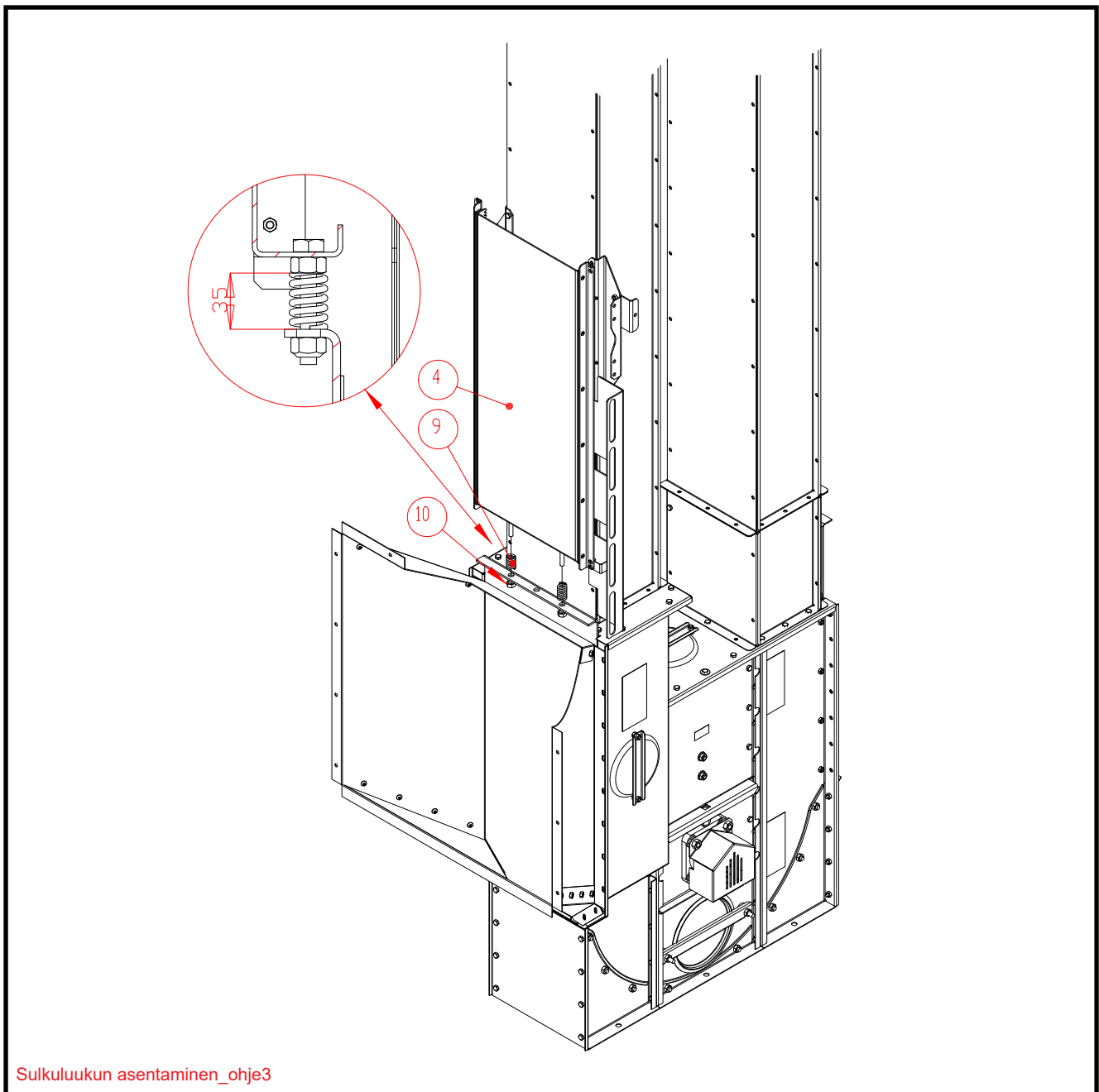


INSTALLING THE GEAR-DRIVE

The gear-driven plate is installed to the shutter plate by springs. The spring is then tightened to length of 35 mm.

The gear should be facing the elevator pipes.

Note the direction of the shutter plate edge away from the elevator pipes.

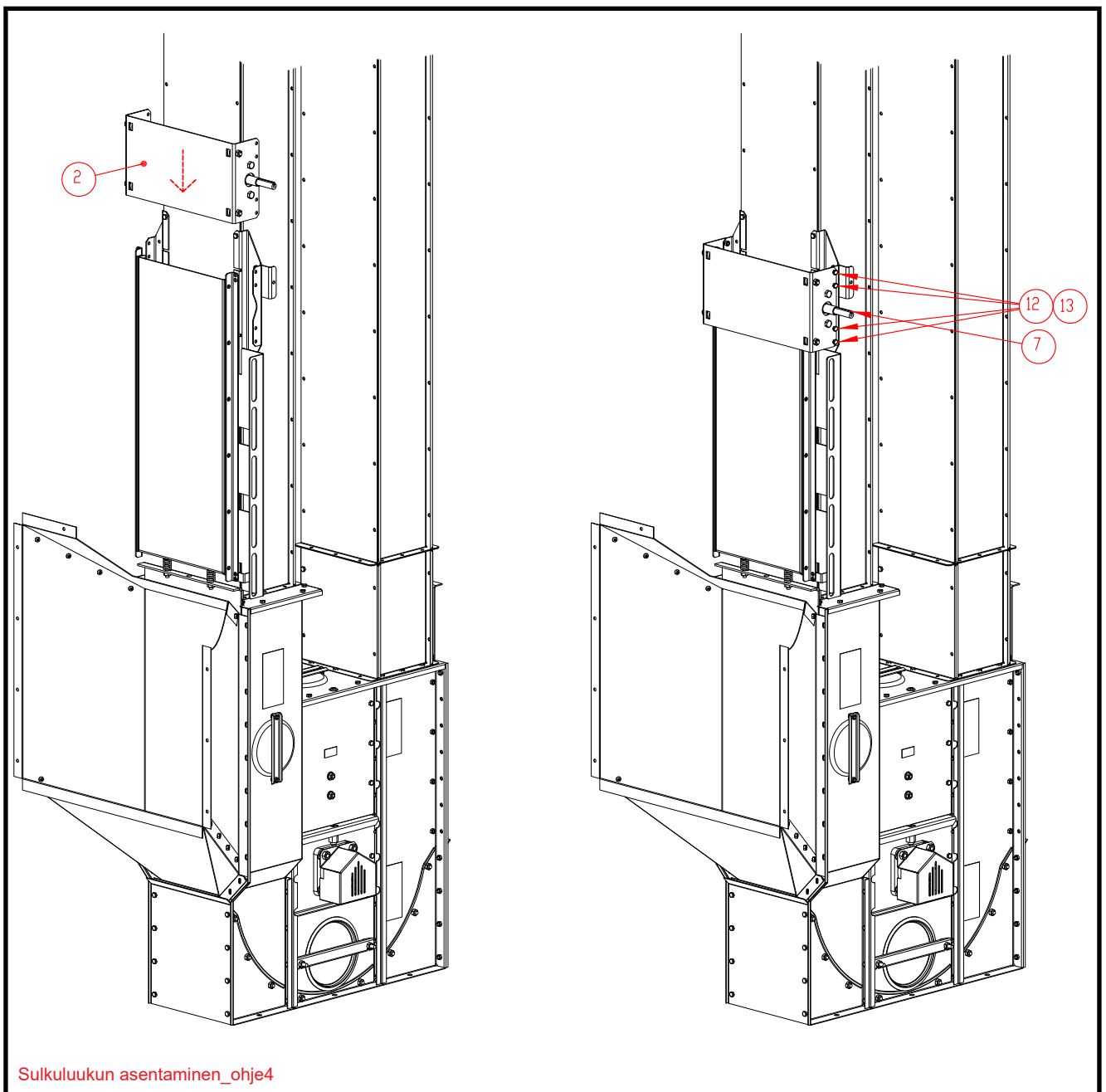


Sulkuluukun asentaminen_ohje3



CONNECTING THE FRAME PLATE AND THE GEAR

The frame plate is inserted into the rack plate by threading from above.

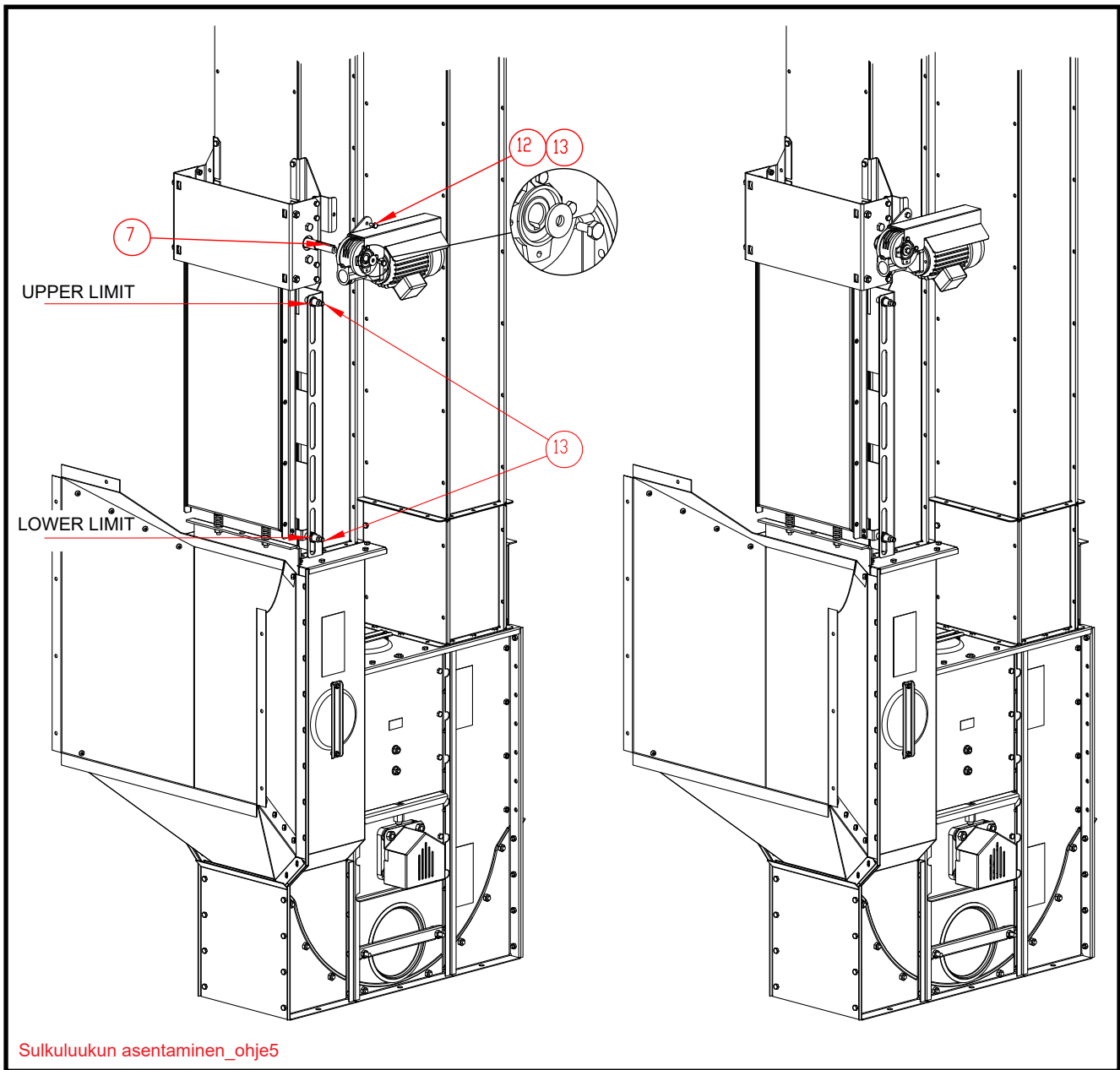




INSTALLATION OF MOTOR AND LIMIT SENSORS

Make sure that the wedge (9) is in place on the shaft, put the motor in place (by turning the motor, position the wedge groove of the gear sleeve shaft). Fastening with a fender washer and M8x16 screw.

When installing the motor on the torque support, it must be noted that when attaching the torque support, do not use the motor to twist the shutter plate downwards too much, the shutter plate must remain slightly open.



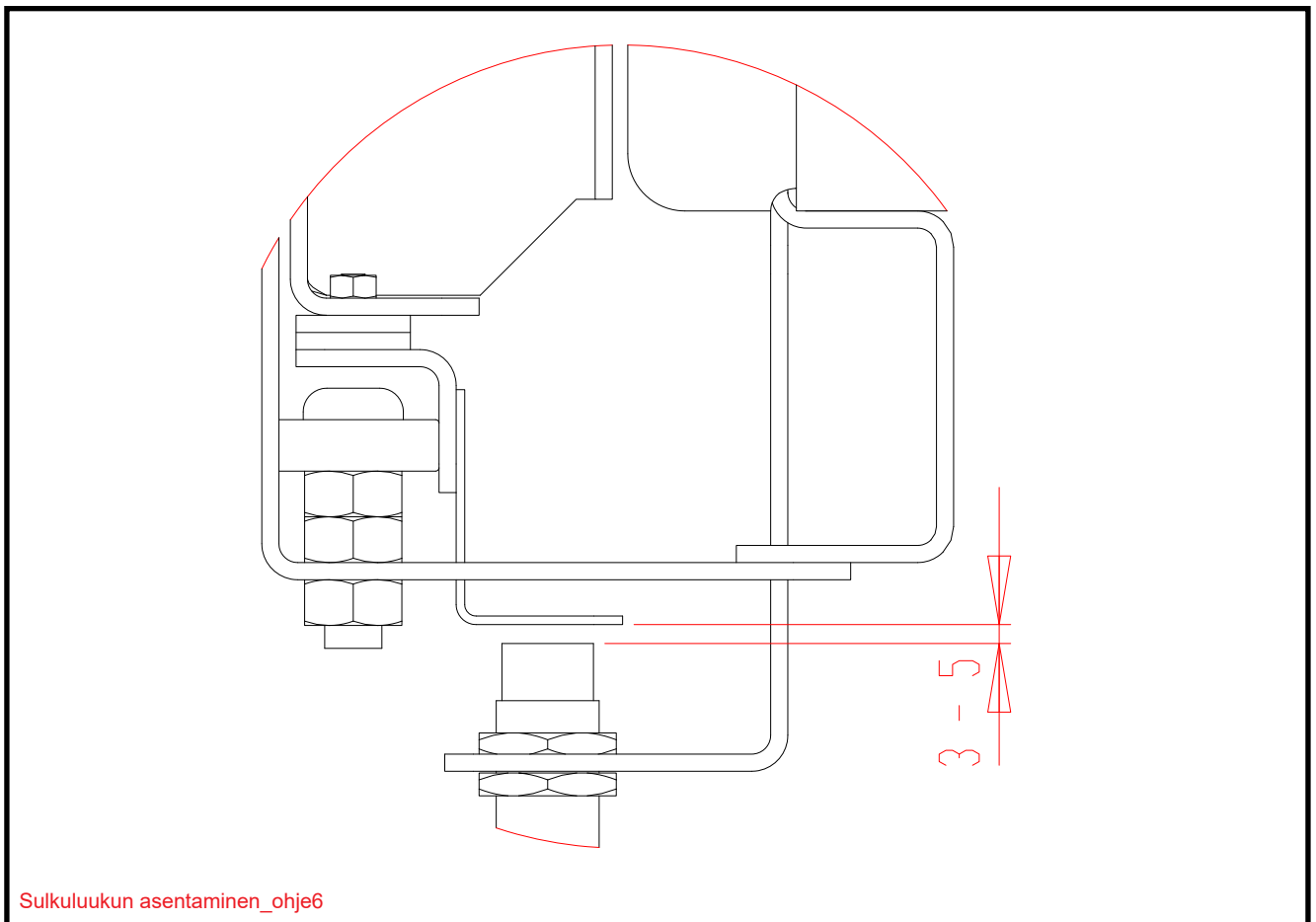


The limit sensors are installed 3–5 mm from the limit obstacle, as shown in the picture. When adjusting the clearance, make sure that the gear plate is pulled to the edge on the sensor side, side clearance removed.

The position of the lower limit must be adjusted in the height direction so that the springs collapse together in the lower position, with the spring compressed 29–33 mm.

The upper limit is adjusted according to the capacity of the elevator/piping.

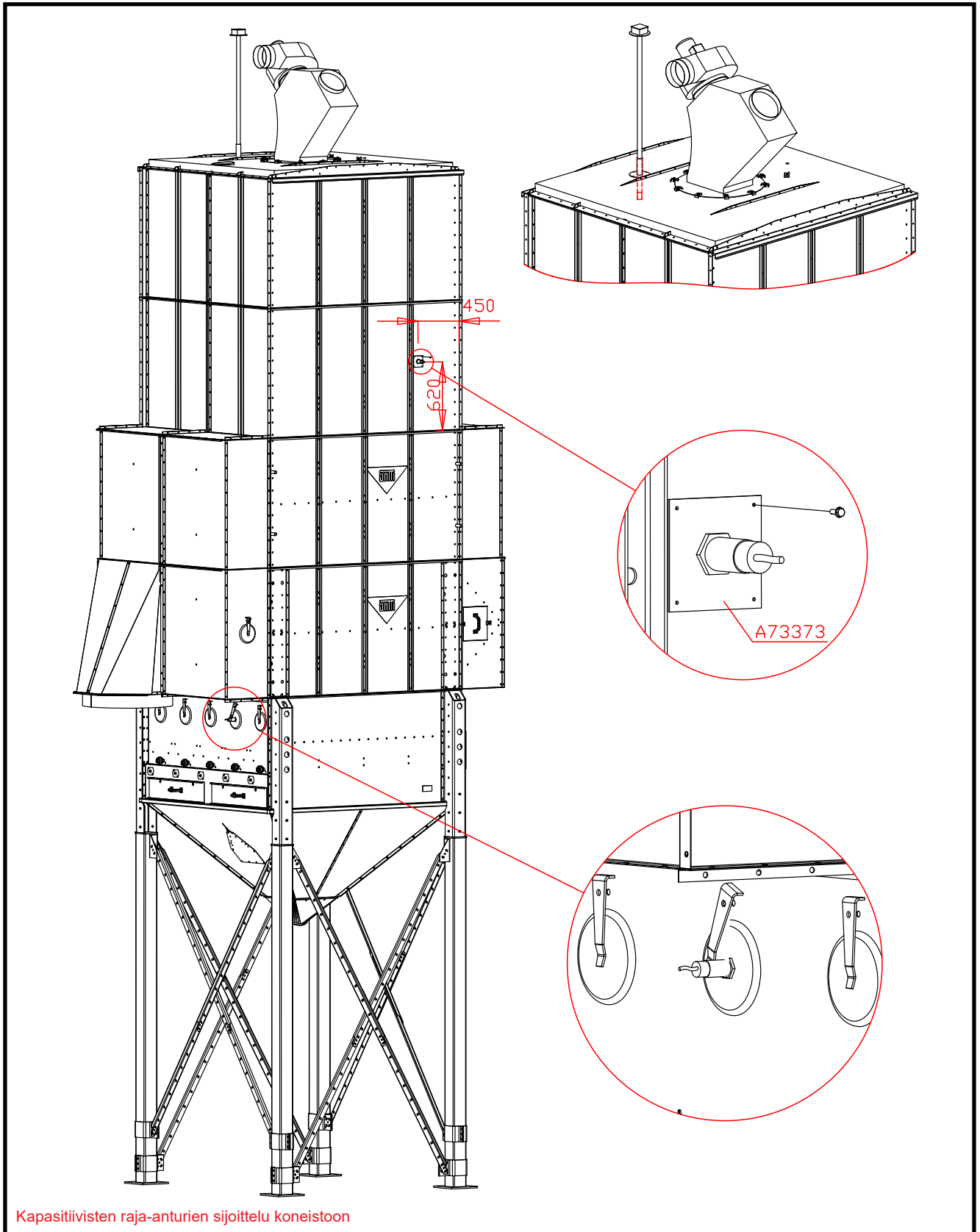
The connection is made in accordance with the documentation supplied with the control centre.







EXAMPLE OF SENSOR PLACEMENT





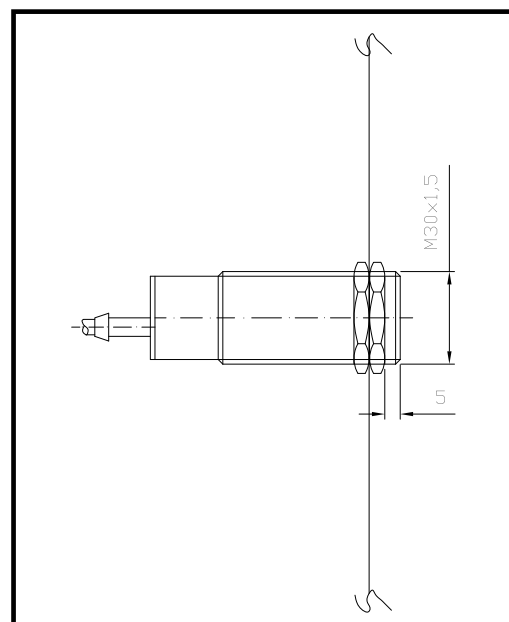
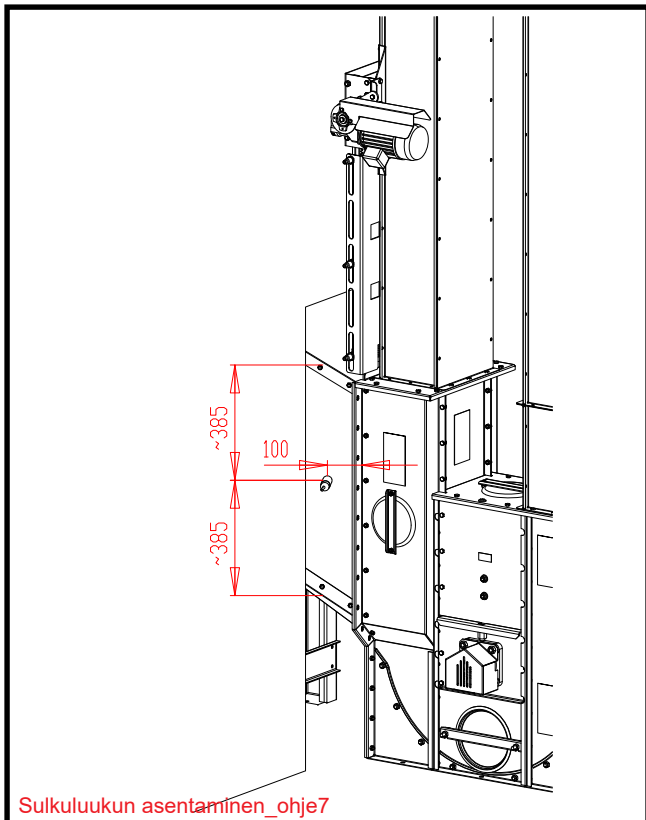
INSTALLATION OF CAPACITIVE SENSORS

The number of sensors required depends on the selected hardware configuration and equipment. If necessary, refer to the documentation supplied with the control centre.

- The upper limit of the machinery is installed as close as possible to the pre-cleaner, but not to the grain spout.
- The intermediate limit in the machinery is installed from the bottom to the first upper tank. If motorised brush channel shutter plates (Optivol) are used, the intermediate limit is usually installed at the level of the lowest Optivol sensor.
- The lower limit on the machinery can be attached to the cleaning hatch D170 or to either side next to it.
- The lower limit of the hopper is attached halfway through the side panel of the elevator spout. The sensor head is on the hopper side.

For capacitive transducers (lower limit and lower limit of the hopper), drill a hole of $\varnothing 30$ mm. The sensor is installed with the two M30 nuts supplied with the sensor package, on both sides of the plate.

Attaching the capacitive sensor as an intermediate limit is done with the sensor fastening (A73373). The sensor is installed on the sensor fastening with the two M30 nuts supplied with the sensor package, on both sides of the plate. A hole is made in the side plate of the upper tank at the point shown in the picture. The hole should be large enough to allow the sensor nut to pass through. However, the hole must not be too large for the mounting plate to cover it. The mounting plate is attached to the upper tank plate with drill screws. The hole does not need to be round. Installation of the sensor so that the end of the sensor protrudes approx. 5 mm from the fixing nut.







GUARANTEE TERMS

Antti-Teollisuus Oy guarantees all the products manufactured by the company, subject to the following terms:

1. The guarantee period lasts for one year starting from the date of delivery from the factory; and in any case, at least one harvest season.
2. The guarantee covers defects in material and workmanship observed during the guarantee period.
3. The guarantee period for the heat exchanger of the dryer heater lasts for five years from the date of delivery from the factory.
4. The instructions given by the manufacturer and the valid regulations have been followed during assembly, operation and servicing.
5. The electric installation must be carried out by a duly authorised service provider.
6. The manufacturer is not responsible for any guarantee or commitment that the distributor may have granted.

Compensation under the guarantee

The guarantee covers repair or replacement of faulty parts, as deemed appropriate by the manufacturer. The guarantee covers neither consequential losses caused by breakdown of the appliance nor the labour, travel or daily allowances which are incurred as a result of replacing any parts.

The guarantee does not cover the assembly and adjustment of the machinery.

A prerequisite for validity of the product guarantee is that the control system and the components used are approved by Antti-Teollisuus.

Restrictions

Compensation under the guarantee will not be made in the following cases:

1. If the reason for the defect is normal wear, abnormal operating conditions, incorrect installation, inadequate servicing, carelessness or unintended use.
2. The defect has resulted from incorrect voltage or any other disturbance in the electrical supply network.
3. The defect has resulted from a thunderstorm, fire, flooding or any other external factor.
4. The defect has resulted from water or other contaminants in the fuel or from the use of fuel not suitable for the burner.
5. If the user has modified the appliance or attached additional equipment to it without the consent of the manufacturer, or if the pre-set fixed values of the limiting devices have been changed.

Claiming for compensation

1. The manufacturer and distributor must be notified of the defect in writing without delay.
2. The make, type and serial number, as well as the date of delivery/putting into operation of the machine, must be stated.
3. Upon request, the faulty part or appliance must be delivered to the guarantor without delay. If the part is not returned, the guarantor is entitled to invoice for the replacement part.



EU Declaration of Conformity

ANTTI-TEOLLISUUS OY
Koskentie 89
FIN-25340 KANUNKI
Tel.: +358 (0)2 7744700

declares that

MOTOR-DRIVEN SHUTTER PLATE

conforms with the provisions of the following directives:

- **Machine Directive 2006/42/EY**

Kuusioki 01.10.2020

Kalle Isotalo
Managing Director