

## Technical Information

### EE 1650<sup>M</sup>

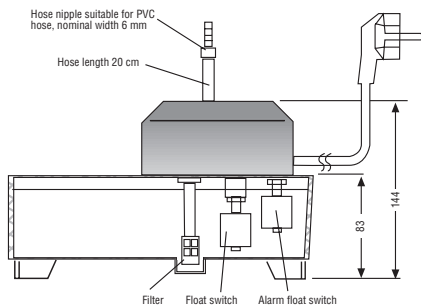
Mounting, maintenance and operating instructions for condensate delivery pump EE 1650<sup>M</sup>  
Bestell-Nr. 9005401001



## Functional characteristics and installation instructions

### Description

The Eckerle condensate delivery pump EE 1650<sup>M</sup> is intended as a compact unit for the delivery of condensate produced by air conditioning systems. The condensate is guided into the integrated plastic tank and fully automatically pumped away. The pump is controlled by an electronic float switch control system with a separate overflow protection (potential-free relay with load capacity up to 8 A (ohmic load)).



### Equipment of the EE 1650<sup>M</sup>

2L condensate tanks with a height of 83 mm

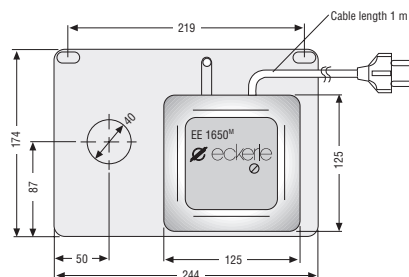
### Application of the EE1650<sup>M</sup>

Condensate delivery system for small and medium air conditioning installations. For this field of application, use of a low-noise pump is of major significance.

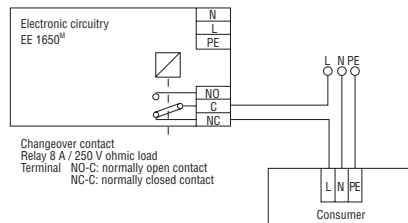
Field of application up to 35 kW cooling output.

### Safety equipment

The delivery system is equipped with 2 separately operating float switches. The working float switch activates and deactivates the pump depending on the level of liquid (with run-on time). The alarm float switch throws over the switch contact via the potential-free relay. For more details, see the connection example of the potential-free relay. We recommend connecting the air conditioning unit via the potential-free relay in order to achieve a greater degree of operating liability, with contactor depending on load.



## Connection example for potential-free contact



### Specifications EE 1650<sup>M</sup>

Delivery height	max. 15 m
Delivery volume	max. 32 l/h
Tank capacity EE 1650M	2 l
Voltage	230 V / 50 Hz
Output	40 Watt
Throw-over contact	8 A / 250 V ohmic load

#### Switching points:

START	40±2 mm
STOP	30±2 mm
ALARM	52±2 mm

Dimensions measured from the mounting surface

Pump module (L x W x H)	244 x 174 x 144 mm
Weight	1.6 kg

### Commissioning, mounting and installation

The condensate delivery pump can be commissioned in a few simple stages:

- There is an opening pre-punched on the inside of the lid (40 mm) through which the condensate is passed by means of a pipe (nominal width 40 mm) or hose to the inside. The supply line must be installed sloping downwards towards the tank.
- Position the lid on the container, ensuring that the suction hose with filter is positioned in accordance with the diagram.
- Now connect the delivery side PVC hose (6 mm nominal width) to the hose nipple.
- By drilling a hole of around 10 mm in diameter in the area of the dip in the condensate tray, it is possible to also position the device in a tray integrated in the air conditioning unit. Before drilling, remove the lid of the tray.

**During operation, steps must be taken to ensure that no liquid runs over the pump. Please also observe the switching points.**

- Connect the potential-free relay.  
**Observe the admissible delivery height in the output diagram.**



- The mains plug is connected last. The pump must be connected to a separate power source (230 V/50 Hz).

The pump must be positioned horizontally when mounting, as otherwise the impairment to the correct function of the float switches can result. On initial commissioning, the pump must be vented by lifting the lid. See the instructions on the lid.

- Check the function of the pump.

#### Note!

Do not use the pumps in the open air, only in enclosed buildings.

The pump features a run-on time, i.e. when the working float switch has reached its bottom-most position again, the pump only switches off after 30–50 seconds. During this period, the pump tank is pumped off to a lower water level.

### Maintenance EE 1650M

Maintenance is restricted to a check of the suction filter and possible dirt deposits in the tray. We recommend performing this check once a year, and where applicable cleaning the suction filter and condensate tray.

#### Safety remark:

During maintenance work, the pumps must always be switched off by pulling out the mains plug. Please note: there may still be voltage active at the potential-free relay.

### Delivery output

