

Installation and Operation Manual

CLUSTER-Switch.*plus*

Connection of several **osi** controllers of the plus series

Art. No.: 310.010.0055



Connectable controls



POOL-Control-45-exclusiv
Filter-control.*plus*
Attraktion-control.*plus*
Cover-control.*plus*
Alarm-control.*plus*
external Touch-Panel (Smart)



Technical data

Dimensions:	220 x 285 x 80mm
Operating voltage:	1/N/PE 230V 50Hz
Power consumption:	< 10 W
Protection class:	IP 40
Ambient temperature	0-40°C
Air humidity:	0-95% non condensing
Internet connection:	LAN
Ports:	8
LAN sockets:	RJ45
Suitable connecting lines	Patch cables

Function

The CLUSTER-switch.plus is a connecting element between a Pool-Control-45 exclusiv and other  controllers of the plus series. The individual devices are connected via the local network. The respective  devices are connected to the CLUSTER-switch.plus using patch cables.

Installation

The swimming pool is to be constructed in such a way that a possible technical defect, a power failure or a defective control cannot cause any consequential damage.

Mounting

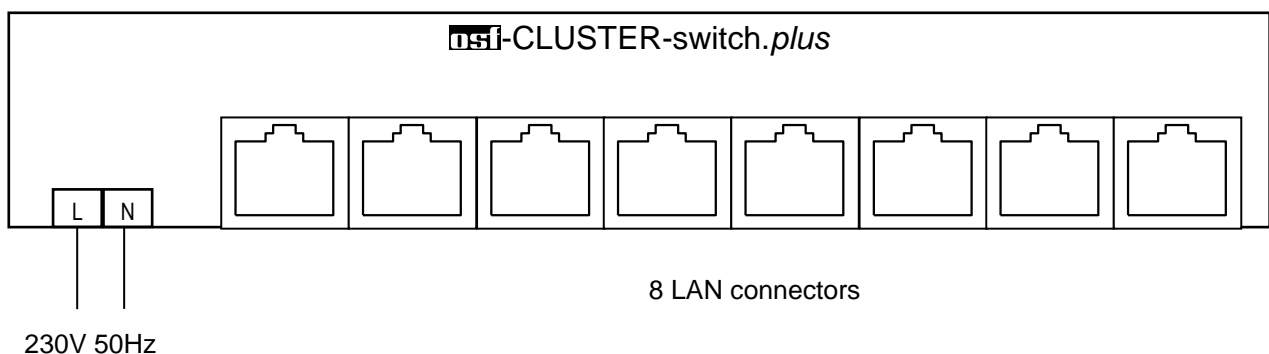
The housing is fixed vertically and permanently to a solid wall with adequate load-bearing capacity. The place of installation must be dust-free and protected against water in order to ensure that the device works properly. The ambient temperature should lie between 0° C and + 40° C and should be as constant as possible. The relative humidity must not exceed 95% and no condensation may occur. Direct incidence of heat or sunlight on the device must be avoided. The control unit is not suitable for outdoor installation.

Electrical Connection

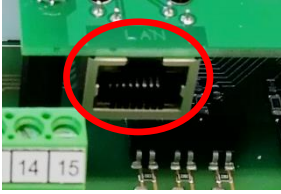
The control device must be fixed at a location where it is protected against moisture in accordance with its class of protection. The power supply to the device must be fed via an all-pin main switch with contact opening width of at least 3 mm and a residual current circuit breaker (RCCB) with $I_{FN} \leq 30 \text{ mA}$. **Before opening the housing, it is absolutely necessary to de-energize the device electrically. The electrical connection as well as the work of adjustment and servicing should be carried out only by an approved electrician! The connection diagrams enclosed and the relevant safety provisions applicable must be observed and followed.** The installation and operating instructions for the devices connected to the CLUSTER-switch.plus must be observed.

Low-voltage cables should not be laid along with three-phase or AC cables in the same cable duct. In general, laying low-voltage cables near three-phase or AC cables must be avoided.

Mains connection

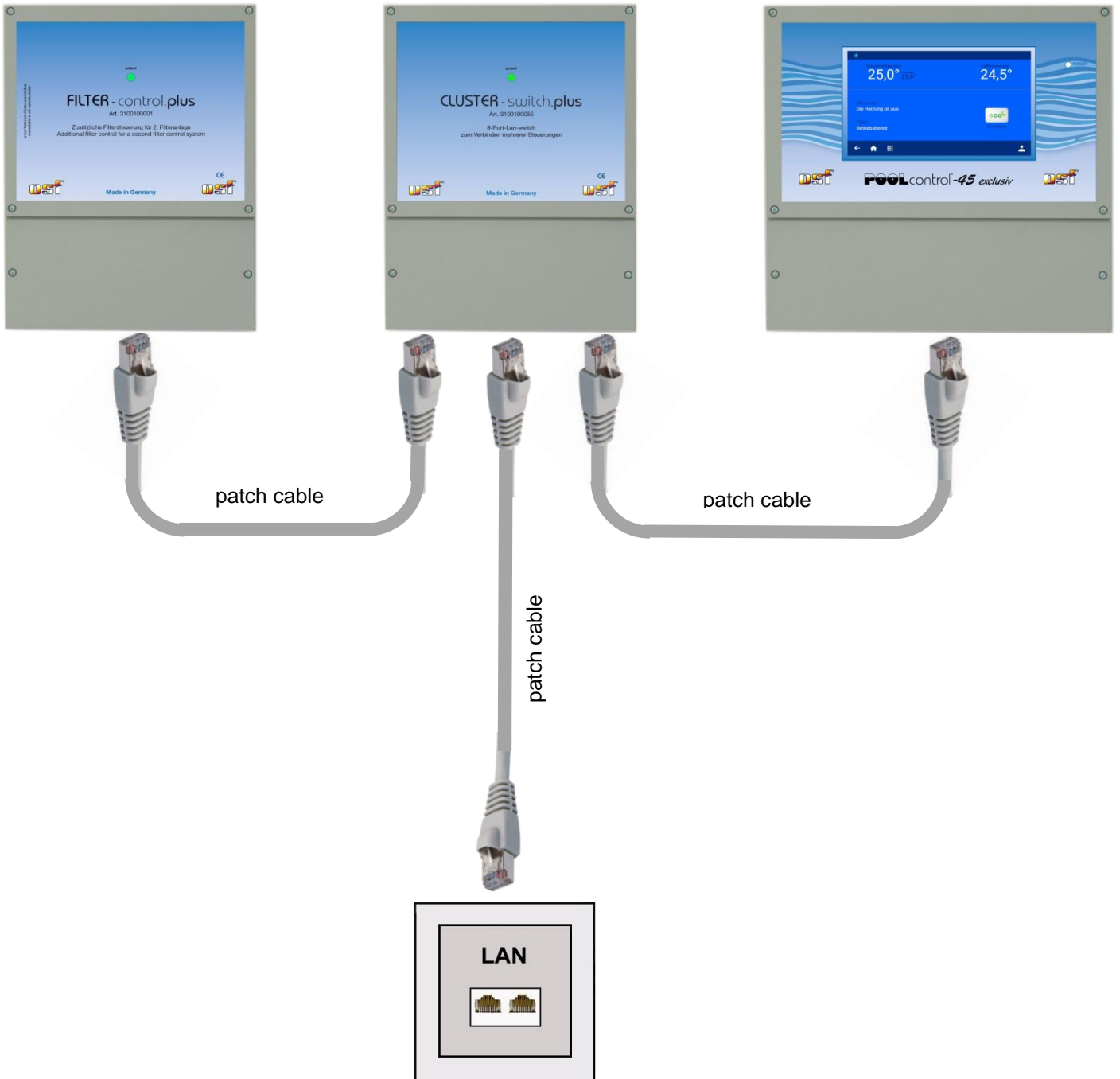


Connection of the controls to the CLUSTER-switch.plus



Communication between the individual controls takes place via a local Ethernet network. The CLUSTER-switch.plus serves as a link between the respective **tsi** controls of the plus series.

Patch cables are used for the connection. One end of the patch cable is connected to the LAN connection of the controller and the other end to the CLUSTER-switch.plus of the local network.



After connecting the cables and switching on the controls, a logical connection must be established between the devices. The details can be found in the installation and operating instructions for the corresponding devices. The two **tsi** devices then exchange data via a local network.

Connection of several controls to the CLUSTER-switch.plus

