

Claims

1. System with a controller and with an actuator as well as with an assembly
for providing functional safety, the assembly having a switching unit, which
is inserted into an electrical supply line of the actuator and is operated by
means of a control device of the assembly, which is connected to the con-
troller in terms of signal technology.
2. System according to claim 1,
characterized in
that the switching unit has a number of switching elements, which are elec-
trically connected in series and are inserted into the supply line.
3. System according to claim 2,
characterized in
that two of the switching elements are each a mechanical switch.
4. System according to claim 2 or 3,
characterized in
that one of the switching elements is a semiconductor switch.
5. System according to one of claims 2 to 4,
characterized in
that the switching unit has a fuse, which is electrically connected in series
with the switching elements.
6. System according to one of claims 2 to 5,
characterized in
that the switching unit has a control unit, by means of which the switching
elements are actuated.
7. System according to one of claims 1 to 6,
characterized in

that the switching unit has an additional switching element, which is inserted into a ground line of the actuator.

8. System according to one of claims 1 to 7,

5

characterized by

a further actuator with a further supply line, the switching unit having a number of further switching elements, which are electrically connected in series and are inserted into the further supply line, or the assembly having a further switching unit, which is inserted into the further supply line and is operated by means of the control device.

10

9. System according to one of claims 1 to 8,

characterized in

that the control device and the switching unit are connected by means of a first bus system in terms of signal technology, the control device being configured as a master of the first bus system.

15

10. System according to one of claims 1 to 9,

characterized in

that the control device and the controller are connected by means of a second bus system in terms of signal technology, the control device being configured as a slave of the second bus system.

20

11. Assembly for providing functional safety according to one of claims 1 to 10.

25

12. Switching unit according to one of claims 1 to 10.