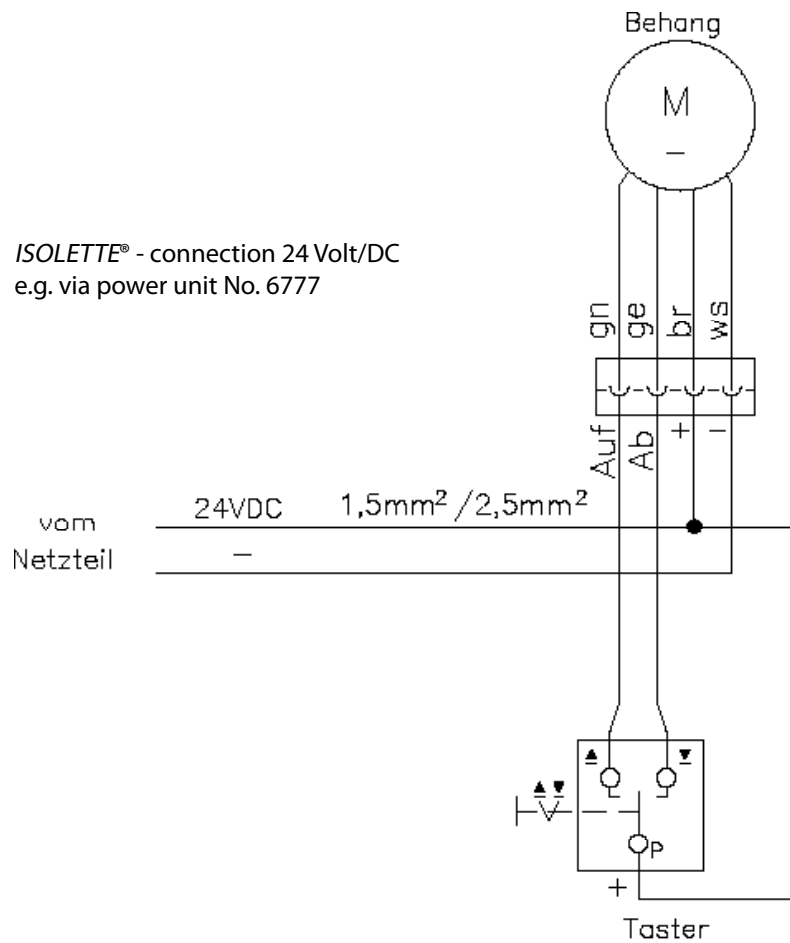


ISOLETTE® - Circuit diagram for switch connector/encoder motor

ISOLETTE® - connection 24 Volt/DC
e.g. via power unit No. 6777



Voltage drop diagram for the encoder motor

Data:

L	total length of the cable	
k	kappa for copper	56
A	a cross section of the control cable in mm ²	
UA	voltage drop on the motor cable in V	3
I	rated motor current in A	0,3

Formel:

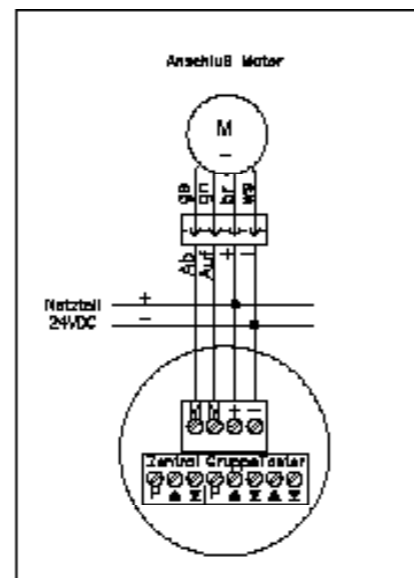
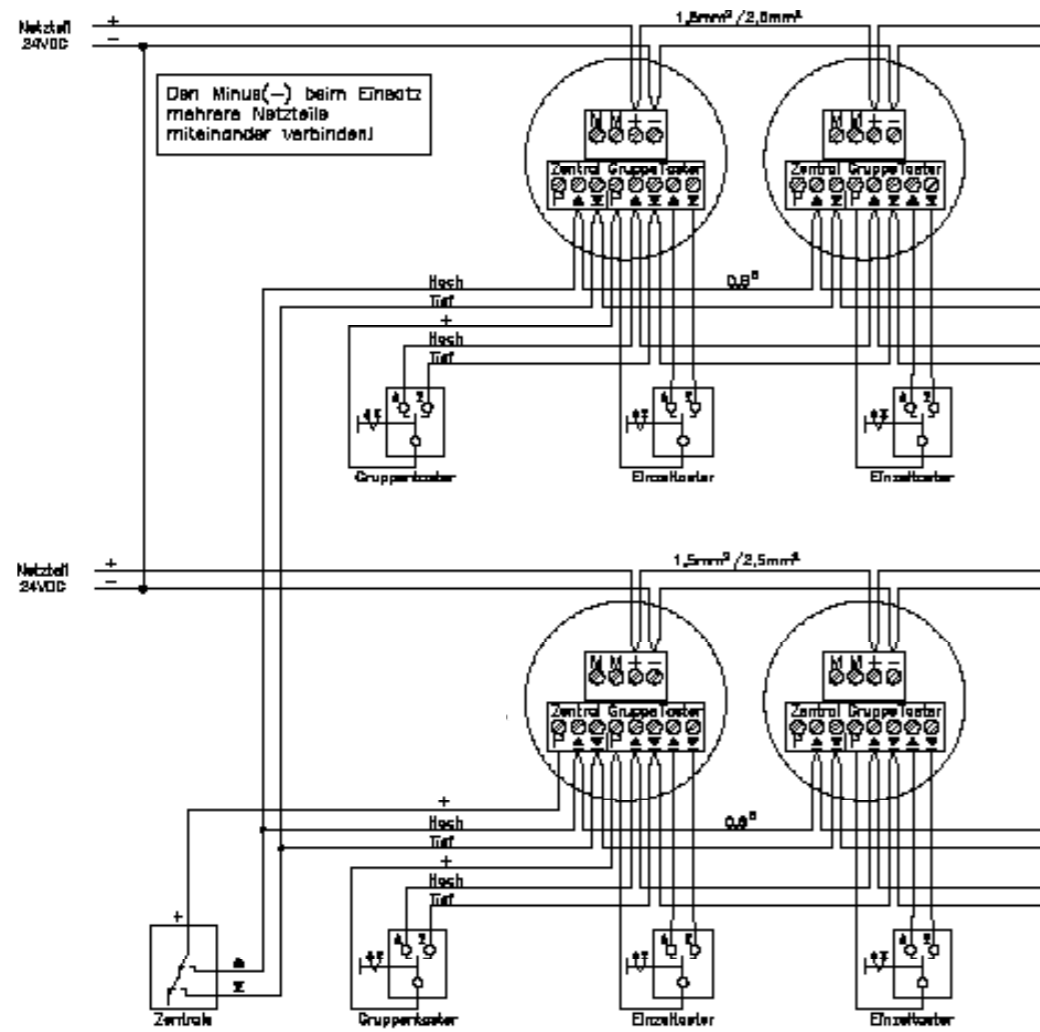
$$L = \frac{k * A * UA}{2 * I}$$

Total length of the four-wire motor cable at a cross-section of

a cross-section in mm ²	0,14	0,25	0,5	1,0	
Cable length	58,80	105,00	210,00	420,00	Metres

Cable length = maximum distance from the transformer to the motor

ISOLETTE® - Circuit diagram for relay IV „round“/encoder motor



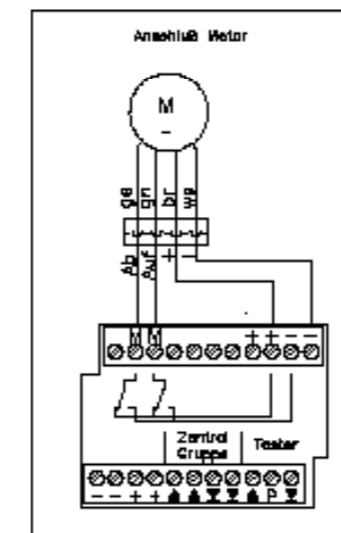
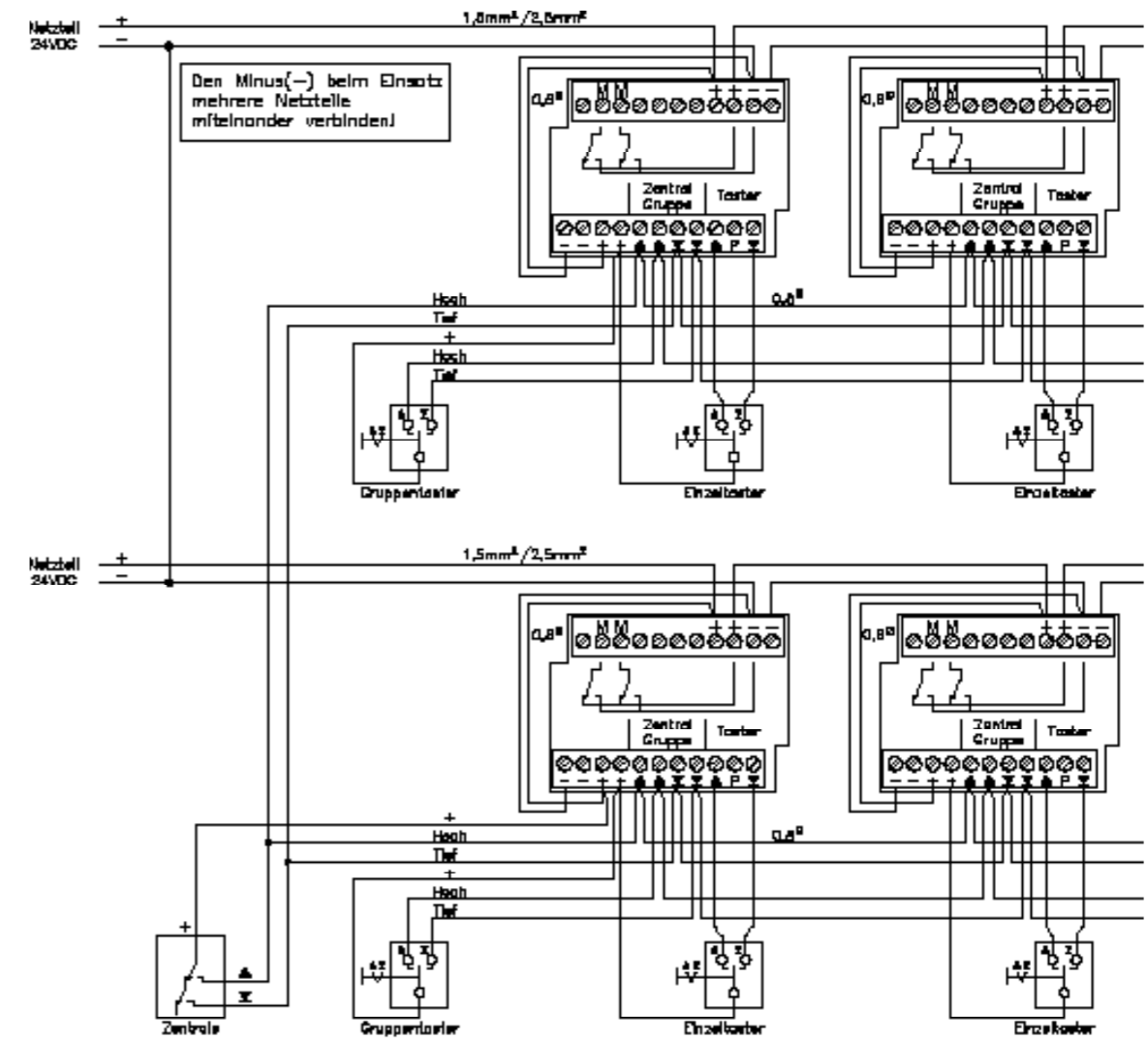
Technical data:

Cat. No.: 9113
 Supply voltage: 24 V/DC
 Current consumption: 20 mA
 Output current: 5A
 Protection type: installation dependent
 Dimensions: D 52 x H 29 mm

Connection:
 via screw terminals
 max. 15 drives in parallel

Subject to technical modifications.

ISOLETTE® - Circuit diagram for relay IV „square“/encoder motor



Technical data:

Cat. No.: 9114
 Supply voltage: 24 V/DC
 Current consumption: 20 mA
 Output current: 5A
 Protection type: installation dependent
 Dimensions: L 75 x W 75 x H 20 mm

Connection:
 via screw terminals
 max. 15 drives in parallel

Subject to technical modifications.

ISOLETTE® - Relay IV/Description

ISOLETTE® - relay IV for encoder motor
Item no. 9113 and 9114 for a max. of 15 drives

Relay IV operates in conjunction with the encoder motor rotor according to the time logic principle.

It is used in decentralised systems. In this conjunction, the relays are installed in the vicinity of the motors and switches. They are integrated into sockets in suspended ceilings, wiring ducts or on-site recesses. The control cable is looped, i.e. conducted from controller to controller, and is connected to these on site. Relay IV is used to control 24 V encoder motors. The control voltage is supplied via a preceding power supply.

It is operated via a control centre and/or switch/button. The relay has three different operating options:

Central input, group input and single button input. Buttons can be connected to these three inputs for simple controlling tasks. With smarter solutions, it is possible to connect a timer, an automatic sun control or also a temperature-controlled solution at the central input. There is also the possibility to connect a central control unit upstream, which decides on all three criteria when a blind is raised or lowered. If an EIB actuator is connected to the central input, the run time of the motor must be set on the motor.

The term time logic stands for a specific sequence within the control units for executing group and/or individual operations within groups = hierarchical structures with push button switches.



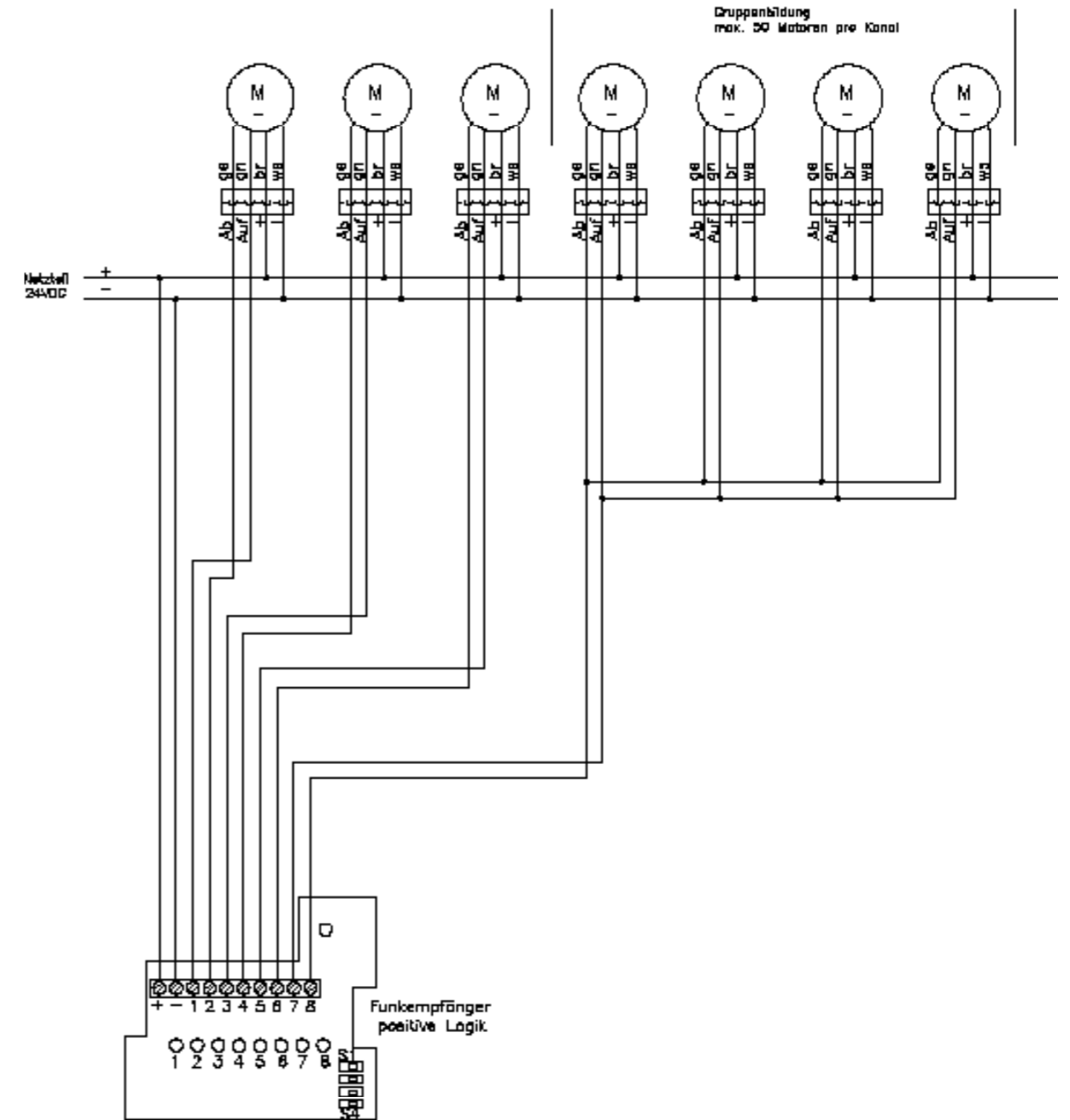
Motors are optionally traversed into both directions via the central input, as long as a signal is present.

Signals via group single input are performed in the area of up to 3 seconds as long as they are present. They are stored for a period of about 3 seconds (latching) and are kept active until the end position is reached. Move the switch in the opposite direction to stop.

For this purpose, central input P is switched to the direction terminals (high/low), terminal P also to the direction terminals (high/low) for group and individual switch input. At simultaneously present signals from the centre and switch, the central command overrides the group command and the button command. Group command and button command are of equal rank. The retract command is provided with priority, if both direction signals are simultaneously present at the central, group or button input.

ISOLETTE® - Circuit diagram for remote control/encoder motor

Direct connection via push button/switch

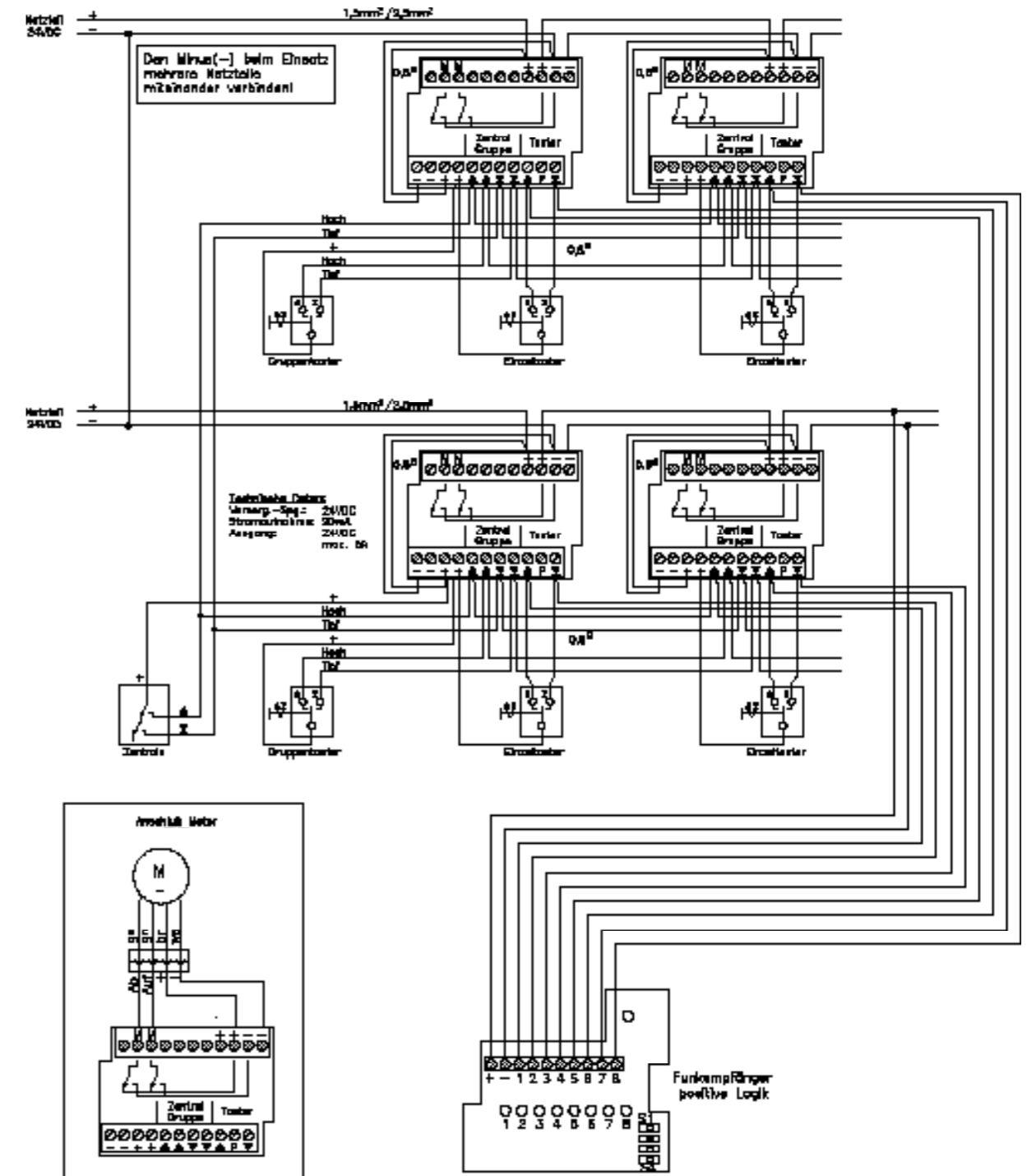
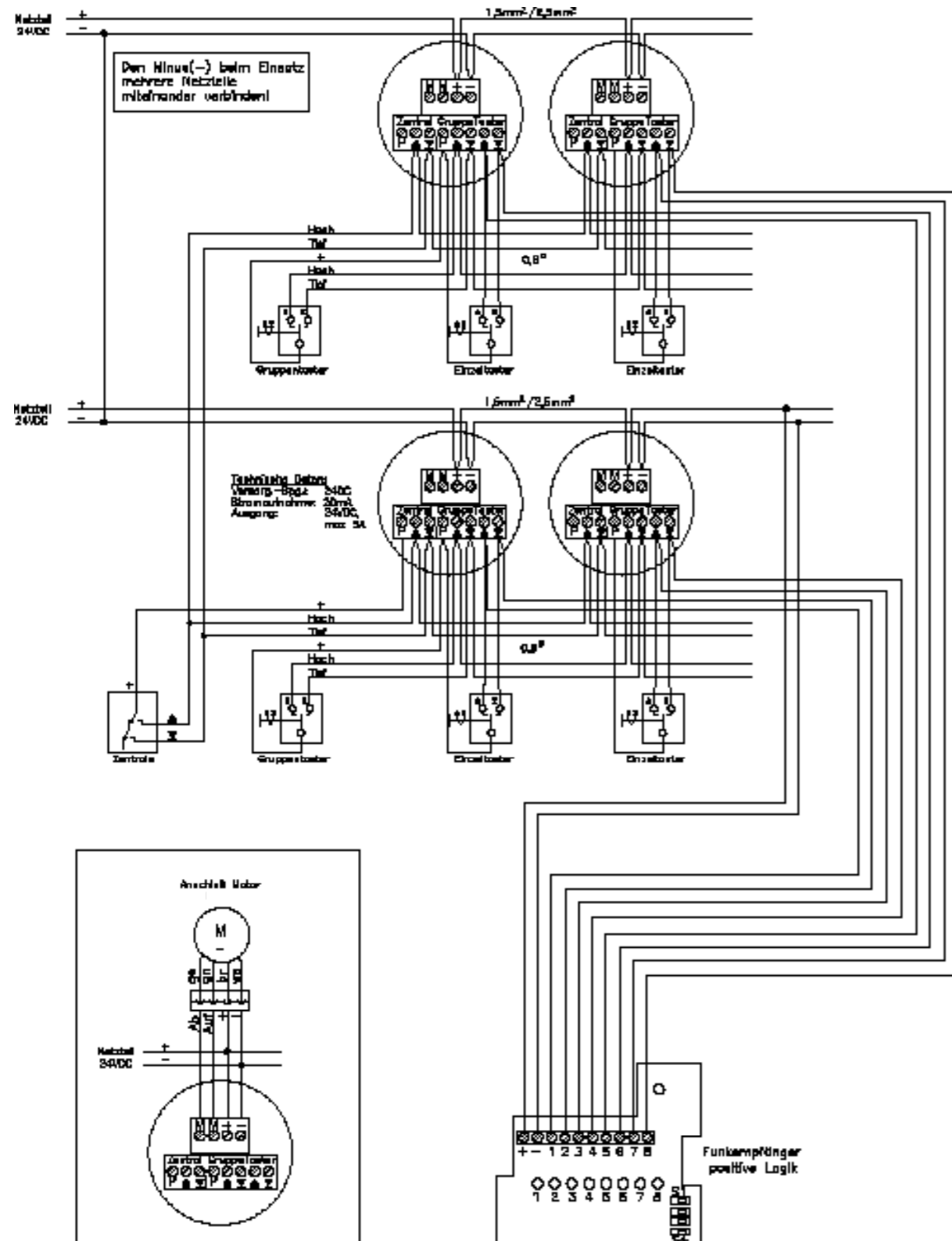


ISOLETTE® - Circuit diagram for remote control/encoder motor

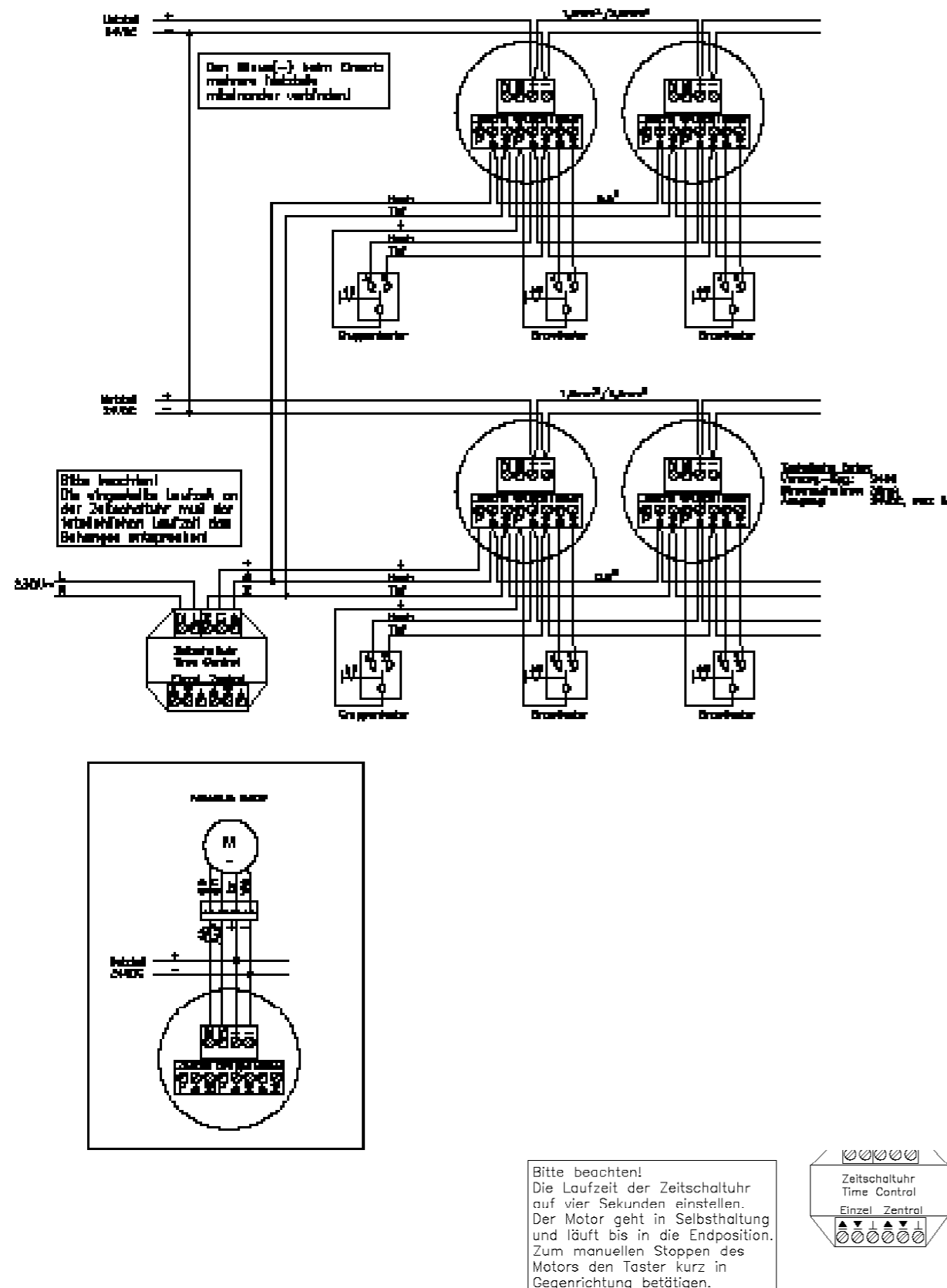
ISOLETTE® - Circuit diagram for remote control/encoder motor

Connection via relay IV „round“ - No. 9113

Connection via relay IV „square“ - No. 9114

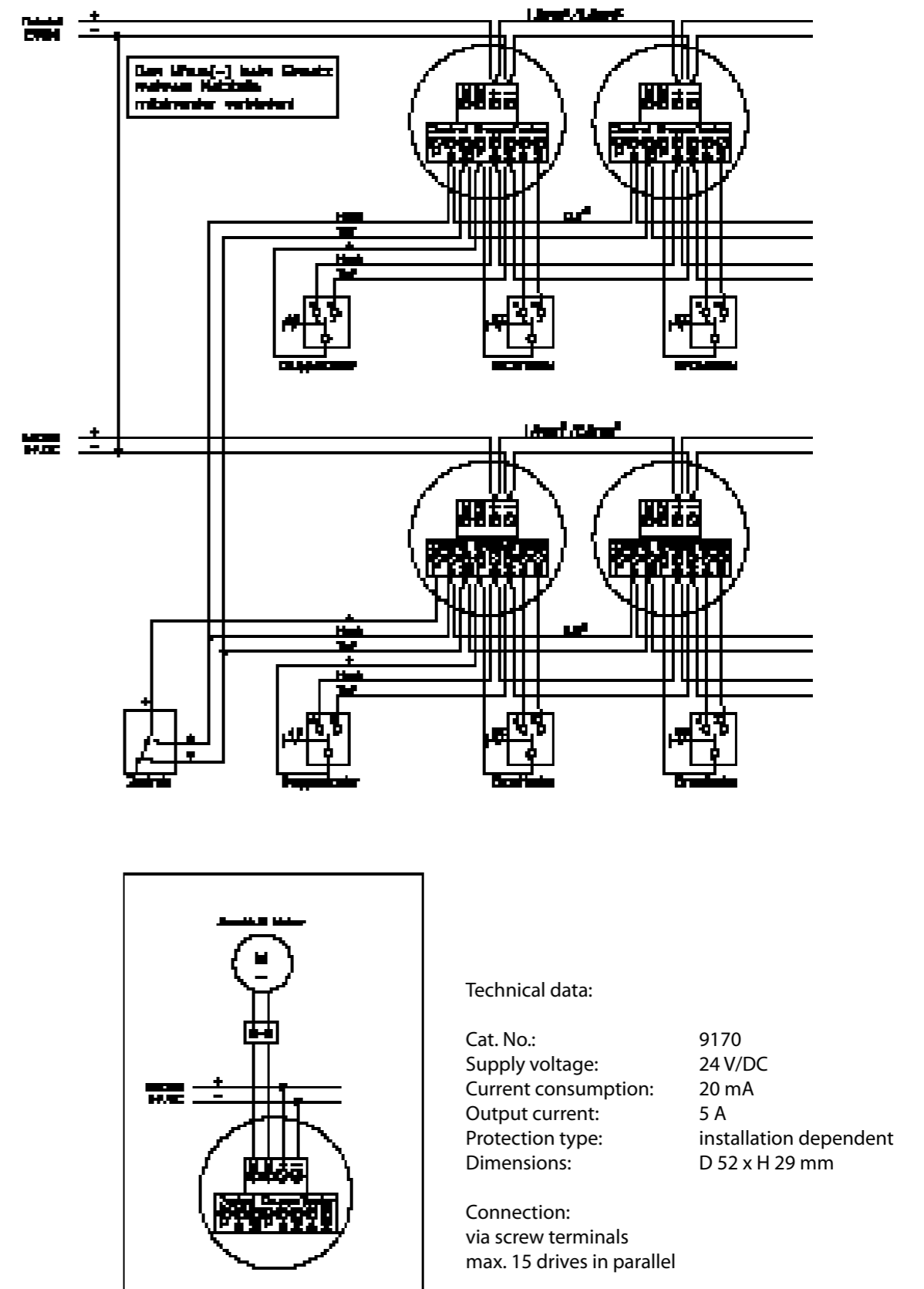


ISOLETTE® - Circuit diagram for timer control/encoder motor



Subject to technical modifications.

ISOLETTE® - Circuit diagram for pulse relay IV / motor only turning + reversing



Subject to technical modifications.

ISOLETTE® - Relay IV pulse/Description

ISOLETTE® -Circuit diagram for the remote control/pulse relay IV

ISOLETTE® - Pulse relay IV only turning + reversing
Item no. 9170 for max. 15 drives

The relay operates on the time logic principle. It is used in decentralised systems. In this conjunction, the relays are installed in the vicinity of the motors and switches. They are integrated into sockets in suspended ceilings, wiring ducts or on-site recesses. The control cable is looped, i.e. routed from controller to controller, and is connected to these on site. The relay is used to activate 24 V motors. The control voltage is supplied via a preceding power supply.

It is operated via a control centre and button. The relay has three different operating options:

Central input, group input and single button input. Buttons can also be connected to these three inputs for simpler controlling tasks.

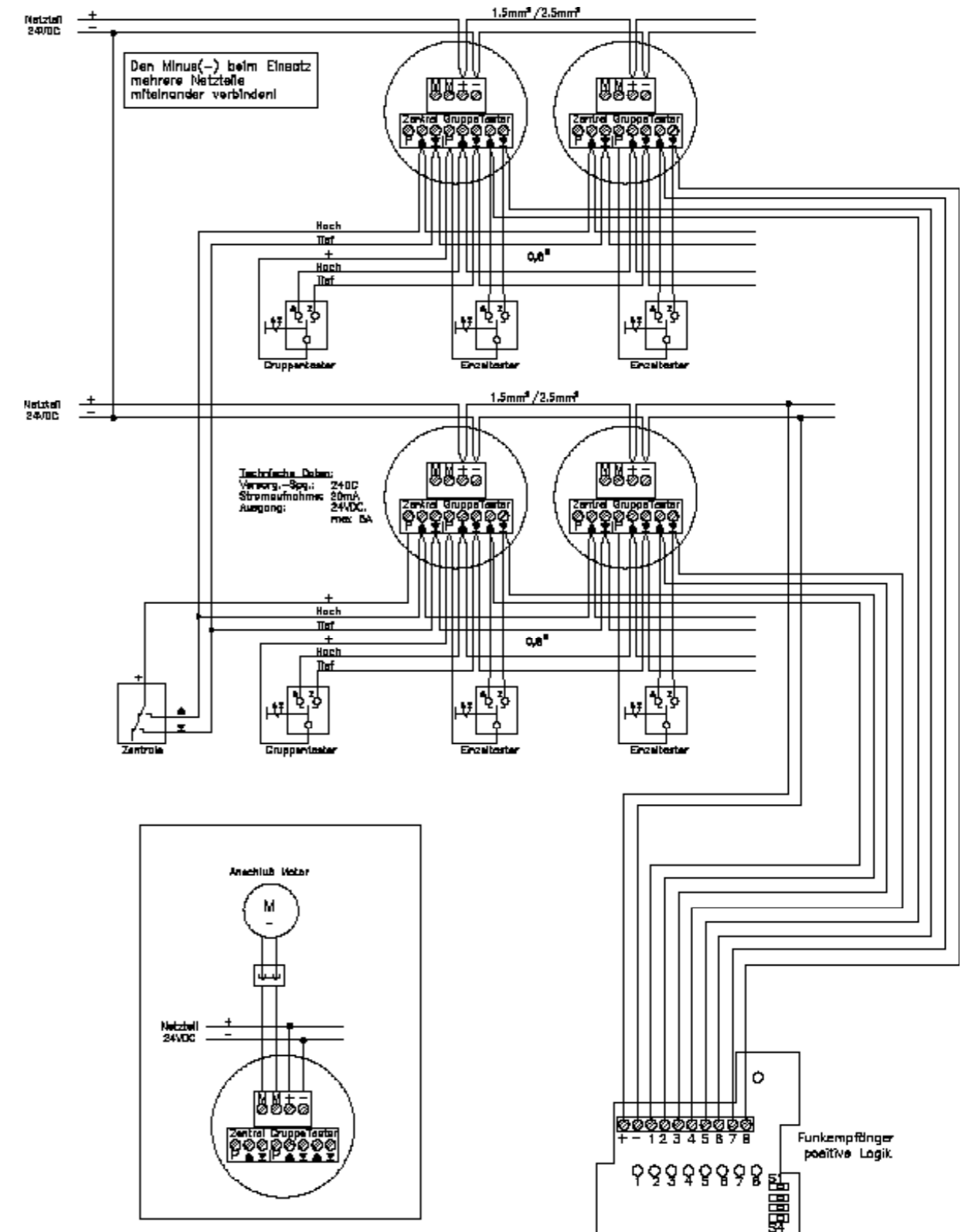
Smarter solutions offer the option to connect a timer at the central input, as well as an automatic sun control unit or also a temperature-controlled solution. There is also the possibility to connect a central control unit upstream, which decides on all three criteria when a blind is raised or lowered.



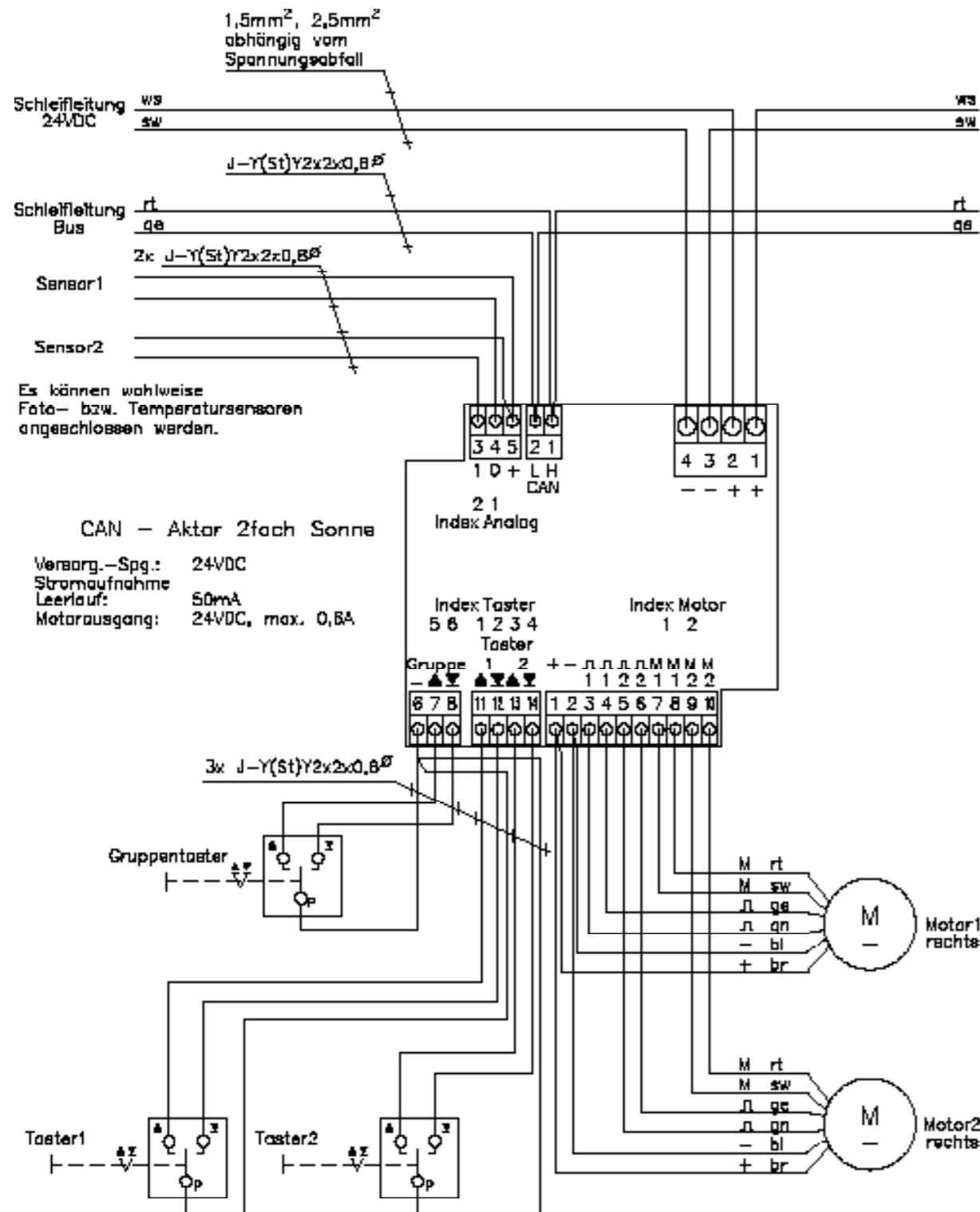
When operating via the single input switch and a counter-command is received from the centre at the same time, the relays are switched over at a delay by a dedicated electronic system in order to prevent the relays from sticking, as in conventional controllers.

The central command overrides the button command when signals of the centre and the buttons are present simultaneously.

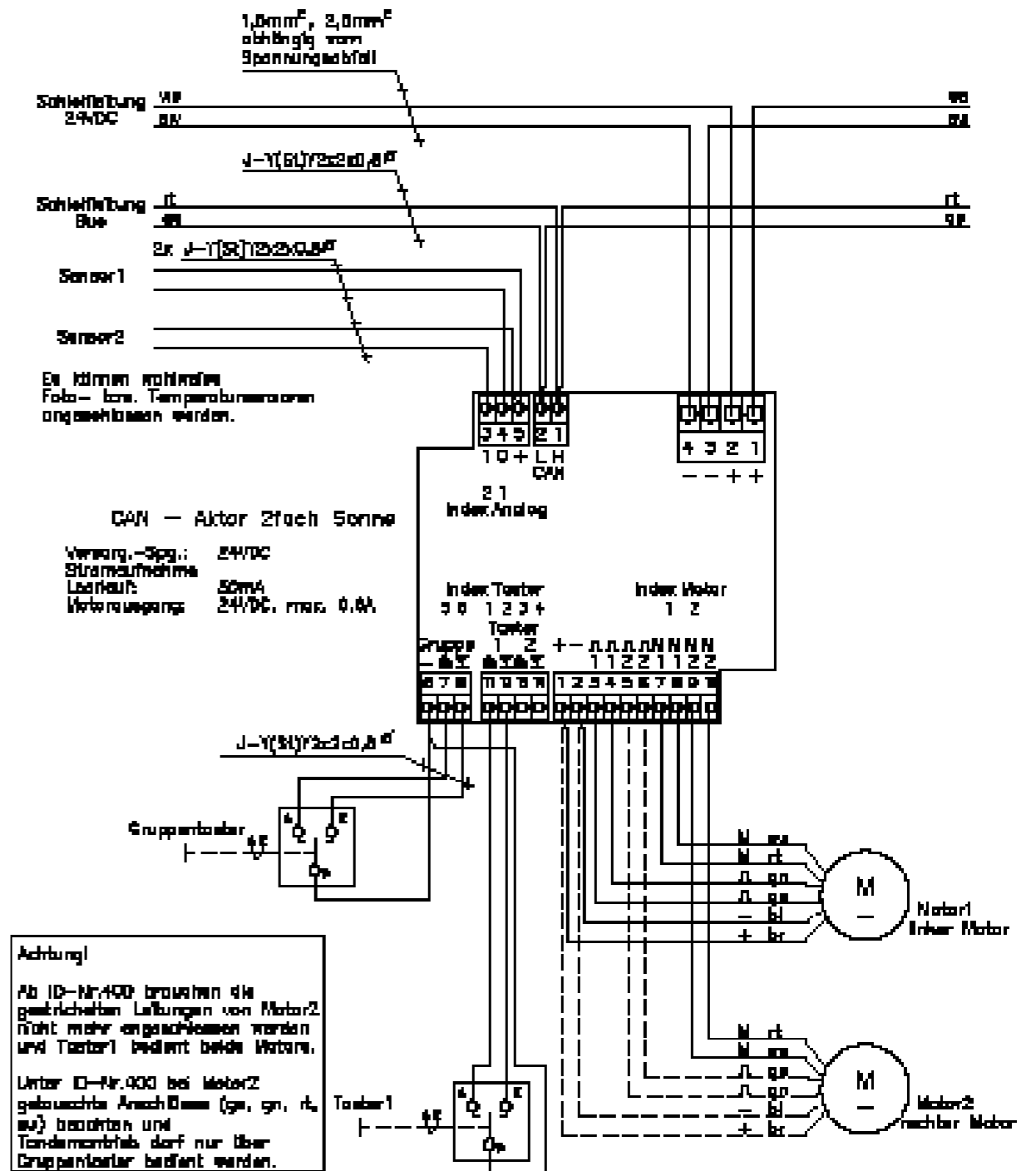
The pulse relay allows the operator a run time of only a second. This is necessary for the blind that may only turn in order to prevent damage to the motor.



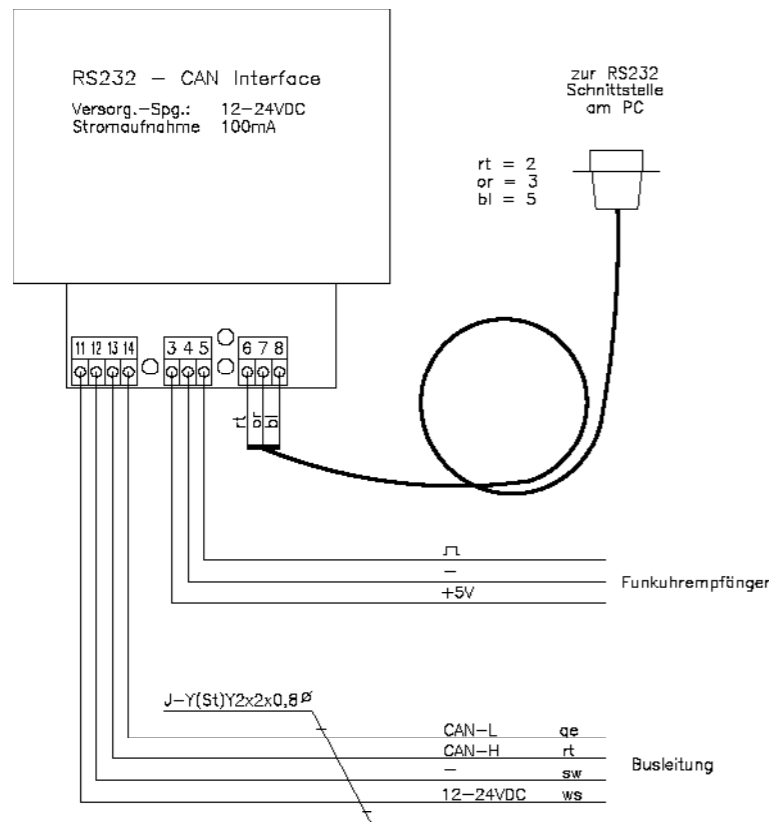
ISOLETTE® - Circuit diagram/CAN-BUS control unit „single“



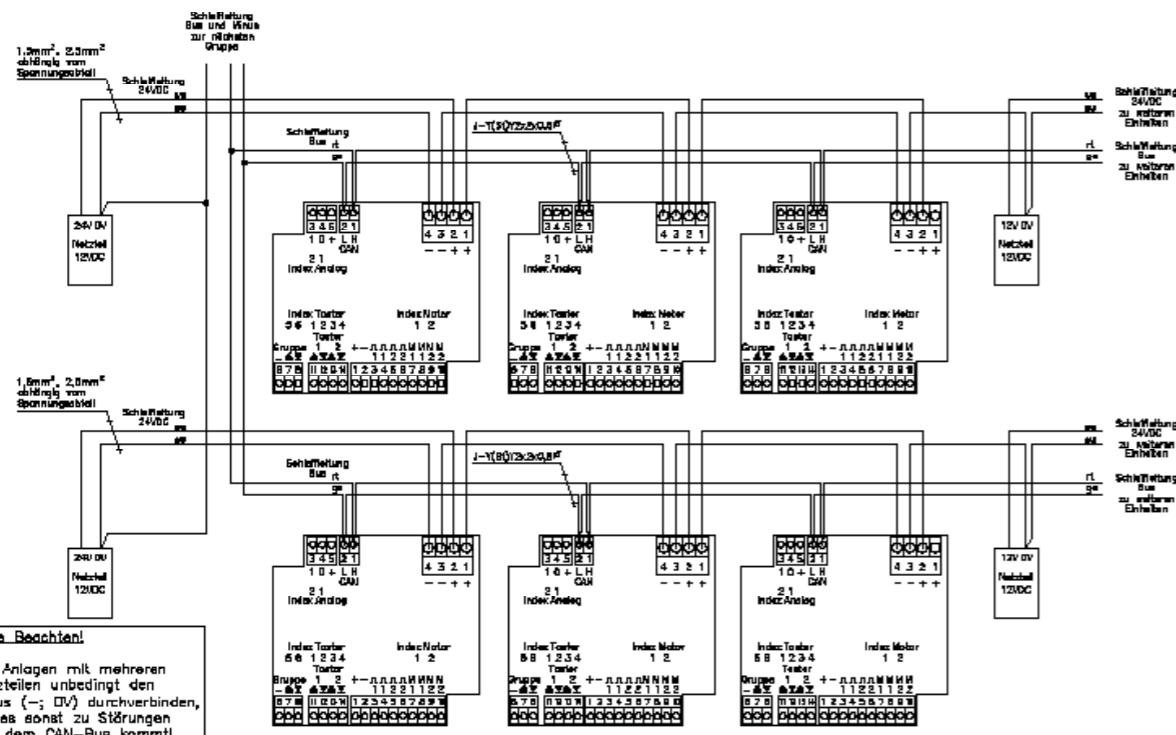
ISOLETTE® - Circuit diagram/CAN-BUS control unit „tandem“



ISOLETTE® - Circuit diagram/CAN BUS Interface

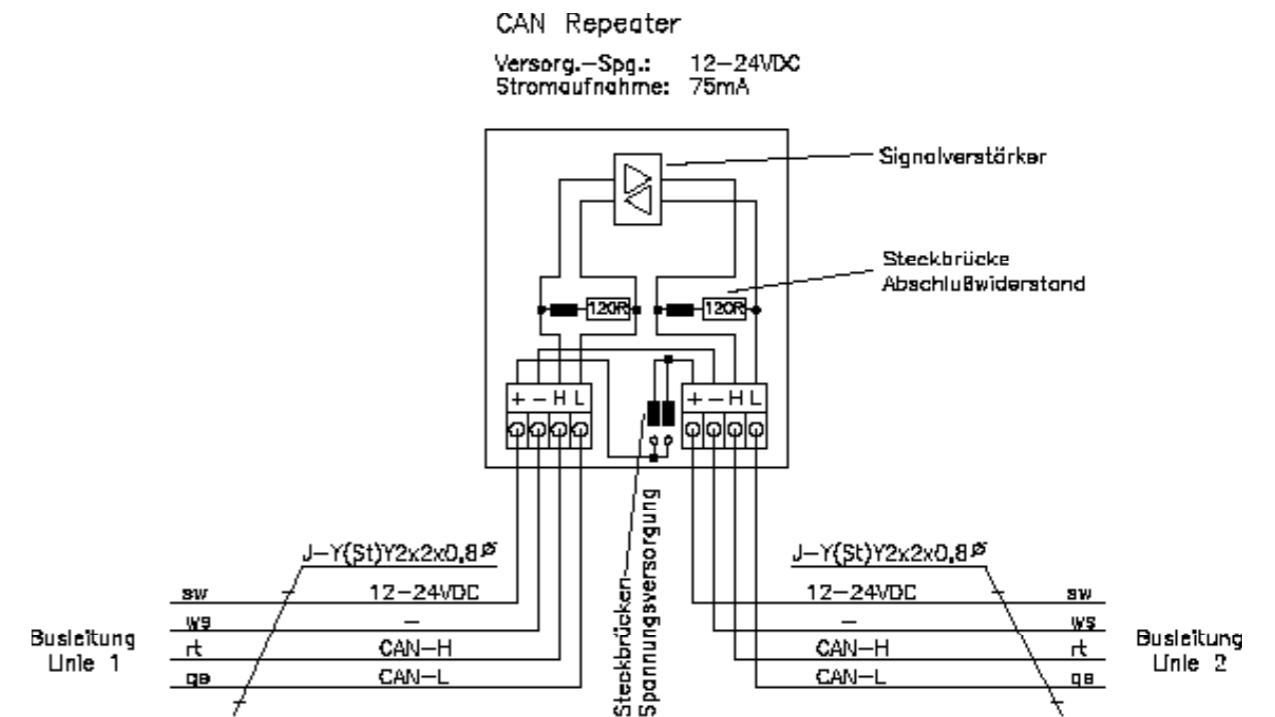


Connecting multiple CAN controller boards through



Subject to technical modifications.

ISOLETTE® - Circuit diagram/CAN BUS amplifier



Abschließen der Busleitung!
Damit der CAN-Bus einwandfrei arbeiten muß die Busleitung abgeschlossen werden. Hierfür sind auf dem Repeater für jede Linie eine Steckbrücke mit einem Abschlußwiderstand 120R vorgesehen. Pro Linie muß mit mindestens einem (120R) Abschlußwiderstand idealerweise mit maximal zwei (60R) Abschlußwiderständen abgeschlossen werden. Werksseitig ist die Brücke gesteckt.
Bitte beachten!
Bei mehr als zwei Abschlußwiderständen pro Linie ist die Kommunikation auf dem Bus gestört.

Durchschleifen der Versorgungsspannung!
Pro Linie ist idealerweise ein Netzteil für die Versorgungsspannung vorzusehen. Durch werkseitig offene Brücken sind die Linie voneinander getrennt. Soll dennoch die nächste Linie mit dem vorhandenen Netzteil versorgt werden, so sind beide Brücken zu stecken.
Bitte beachten!
Werden die Brücken gesteckt obwohl für beide Linien ein eigenes Netzteil vorhanden ist, so werden die Netzteile unter Umständen zerstört!

Subject to technical modifications.

ISOLETTE® - Circuit diagram/notes

General safety instructions.

- Observe polarity - the wrong polarity may result in damage
- Provide adequate ventilation of the transformers

- The cross sections of the cables must be determined according to the cable lengths

Electrical installation

Work on the 230 volt wiring must be carried out by a qualified electrician (according to VDE 0100). Whenever it is assumed that safe operation is not possible, the units may not be started or must be shut down.

Description of ISOLETTE® software CAN Control

The operating software CanControl provides a customisable user interface, with which the blinds and consumers that are connected to the CAN modules can be controlled and monitored.

Used on any computer workstation and, therefore, a remote operation of the consumers and blinds is possible via a network or the Internet. Innovative window technology, stationary or flexible.

Adding levels in which in turn, individual consumers, blinds and groups can be defined. Display of sensor values.

Operation of the entire building from the work area of the doorman, the building engineer or from individual windows directly at individual work areas. The status of the modules is displayed immediately.

Setting up to three predefined scenes, global for groups of consumers or locally for individual consumers.

Insert images, such as the layout of the building for each level. Operation using a mouse or touch screen. Individual labelling of levels and consumers with meaningful names. Easy allocation of modules.

Applicable regulations

Locally applicable assembly and installation provisions, guidelines and regulations must be observed. This applies particularly to:

- The VDE guidelines and regulations, e.g. DIN VDE 0100, for example DIN VDE 0632
- The IEC regulations
- The guidelines and regulations of the Commercial Trade Association, e.g. the accident prevention regulations for electrical systems and equipment BGV A2 (previously VBG4)

System Requirements:

Can be installed on many platforms, including PCs, Macs, hand-helds, and mobile phones in Windows or Linux. Requirements are only that the software Flash Version 9 can be installed on the platform. At least 5 MB of hard disk space (depending on the number of users).

Windows

- Intel® Pentium® 1 GHz processor or higher
- Microsoft® Windows® 2000 with Service Pack 4; Windows XP with Service Pack 2, or Windows Vista® Home Premium, Business, Ultimate, or Enterprise

- at least 512 MB of RAM

Mac OS X

- PowerPC® G4 1GHz processor or higher, or Intel Core™ Duo 1.83 GHz or higher
- Mac OS X v10.5.1 or 10.4.910 (PowerPC); Mac OS X v10.4.9 or later, 10.5.1 (Intel)
- min. 512 MB of RAM