KAISER NIENHAUS
Komfort & Technik GmbH

Multiple control unit
with extension inputs for group and central control, Item 331560

Installation and Operating Instructions

Description

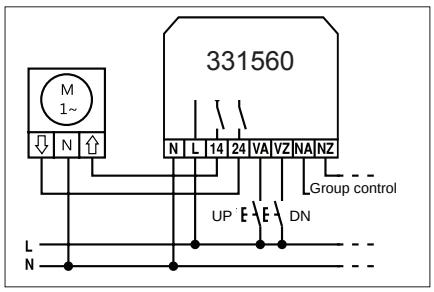


Fig. Connecting the 331560

The electronic control unit 331560 is a universal motor control for clockwise/anticlockwise rotation. It can be used as a one-button or two-button motor control. The priority extension inputs allow several 331560 units to be combined into group and central controls. The motor running time can be limited, e.g. to avoid overloading the motor in the event of a mechanical blockage. A convenient, automatic and adjustable closing function prevents, among other things, a roof window from being left open unintentionally. With venetian blind control, the slats can be adjusted precisely or set automatically to a specific angle when switching off.

Function

The 331560 is controlled by standard push-buttons or switches that do not require mechanical interlocking. A short pulse on the local inputs VA (UP) or VZ (CLOSE) selects the respective running direction. The drive runs to its end position and the set time elapses. A repeated pulse (on VA or VZ) during the running time stops the motor. For one-button motor control, both local inputs are controlled with one push-button (not available in SJ mode). With this control, the running direction changes after each pulse (Up-Stop-Close-Stop). Via the extension inputs NA (UP) and NZ (CLOSE), any number of drives can be opened or closed simultaneously in a defined way, regardless of their current state. When controlled via an extension input, the motor only runs as long as the upstream group control unit applies the signal. If NA and NZ are active at the same time, NA has priority. As long as NA or NZ is active, the local inputs remain blocked. If the 331560 is used as a group control unit, the extension inputs are not time-monitored. This means the subordinate control units can be held in a desired position for any length of time (e.g. by wind monitors). In venetian blind mode “J”, the drive is stopped again immediately after a short pulse (<1s) on a local input. With a longer pulse (>1s), the drive runs to the end position again. This makes it possible to adjust the slats of a venetian blind with short presses. With one-button motor control, the running direction is not changed by pulses in quick succession. This makes it easier to position venetian blind slats. In the “Privacy venetian blind” mode (SJ), a short press on the local inputs VA or VZ adjusts the venetian blind slats, e.g. from the vertical angle to the horizontal angle (privacy screen on/off). The motor running time for this angle adjustment is adjustable from 0.1 to 1.4s. Pressing the button 3 times starts the complete motor running time (adjustable from 3 to 240s). If automatic return is set, the drive starts in the CLOSE direction once the set return delay has elapsed. The timer is started by the local input VA. If VA is activated for longer than 2s, the return time is doubled.
In venetian blind mode, a counter-pulse is set instead of the closing function, which automatically positions the slats after a motor stop. The operating mode “Motor control, central push-button” (Z) allows simple central control in smaller systems without an upstream group control unit. Here the extension inputs can be controlled directly with push-buttons, similar to the local inputs, but they have priority and the running direction cannot be stopped.

Installation Dimensions, Technical Data

Operating voltage:	230 V 50/60 Hz 10% or 24 V DC/AC 10 %
Control voltage:	= operating voltage
Power consumption:	passive: 0.2W / active: 0.4W
Running time:	3 - 240s
Autom. return time:	3s - 30min
Counter-pulse:	0.1 - 1.3s
Relay changeover pause:	0.6s
Ambient temperature:	-10°C to +45°C
Interference immunity:	to IEC 801-4 level 4
Creepage/clearance:	to VDE 0110 Gr. C/250V
Insulating housing:	non-flammable VDE 0304 Part 3, level FV 0
Relay output:	2 NO contacts on supply voltage 10A 250V AC
Connections:	Socket terminals with captive M3.5 screws (2 x 1.5 mm² / 1 x 2.5 mm²)
Dimensions:	43 x 43 x 18.5 mm3

CE

Safety Instructions

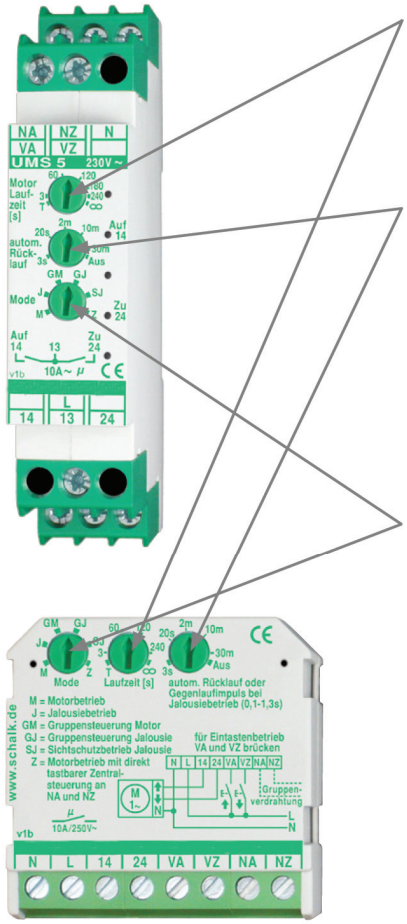
The electrical connection may only be carried out by an approved electrician in accordance with the wiring diagrams shown in these instructions. Observe the VDE regulations, especially in damp rooms. The VDE regulations contain mandatory protective measures. Failure to do so poses a danger to life! Installation and connection work must always be carried out with the power disconnected; to do this, the supply lines must be disconnected from the mains on all poles and secured against being switched on again. Disconnection from the mains must be made with switching devices that guarantee a contact gap of at least 3mm. Make sure that nobody is within the travel range of the roller shutters and that nothing can block the movement of the curtains. These operating instructions must be observed and are part of the device and of our warranty conditions.

KAISER NIENHAUS
Komfort & Technik GmbH

Multiple control unit
with extension inputs for group and central control, Item 331560

Installation and Operating Instructions

Controls and Displays 331560



“Motor running time” adjuster:
Sets the motor running time:

T	Momentary mode (motor only runs as long as the inputs are activated)
3...240	motor running time in seconds
∞	no running time limit

“Autom. return” adjuster:
Sets the automatic return time / counter-run pulse / slat running time:
In mode “M” (motor control):
Time for automatic closing function 3s..30min, or Off (function deactivated)
In mode “J” (venetian blind control):
Duration of counter-run pulse 0.1s to 1.3s, or Off (function deactivated)

In mode “SJ” (privacy venetian blind):
Slat running time 0.1s to 1.4s

“Mode” adjuster:
Sets the operating mode:

M	Motor control (short press gives UP, DOWN or STOP)
J	Venetian blind control (short press for fine slat angle adjustment or STOP, long press for UP/DOWN)
GM	Group unit for motor control* (no time monitoring)
GJ	Group unit for venetian blind control* (no time monitoring)
SJ	331560 only: privacy venetian blind (short press switches privacy ON/OFF, triple press moves the venetian blind)
Z	Motor control, central momentary (all inputs operated with push-buttons)

Status LEDs:
Legend:
- ○ LED off
- ● LED lit red
- ◔ LED flashing red
- ● LED lit green
- ◔ LED flashing green
- ◔ LED flashing alternately red/green

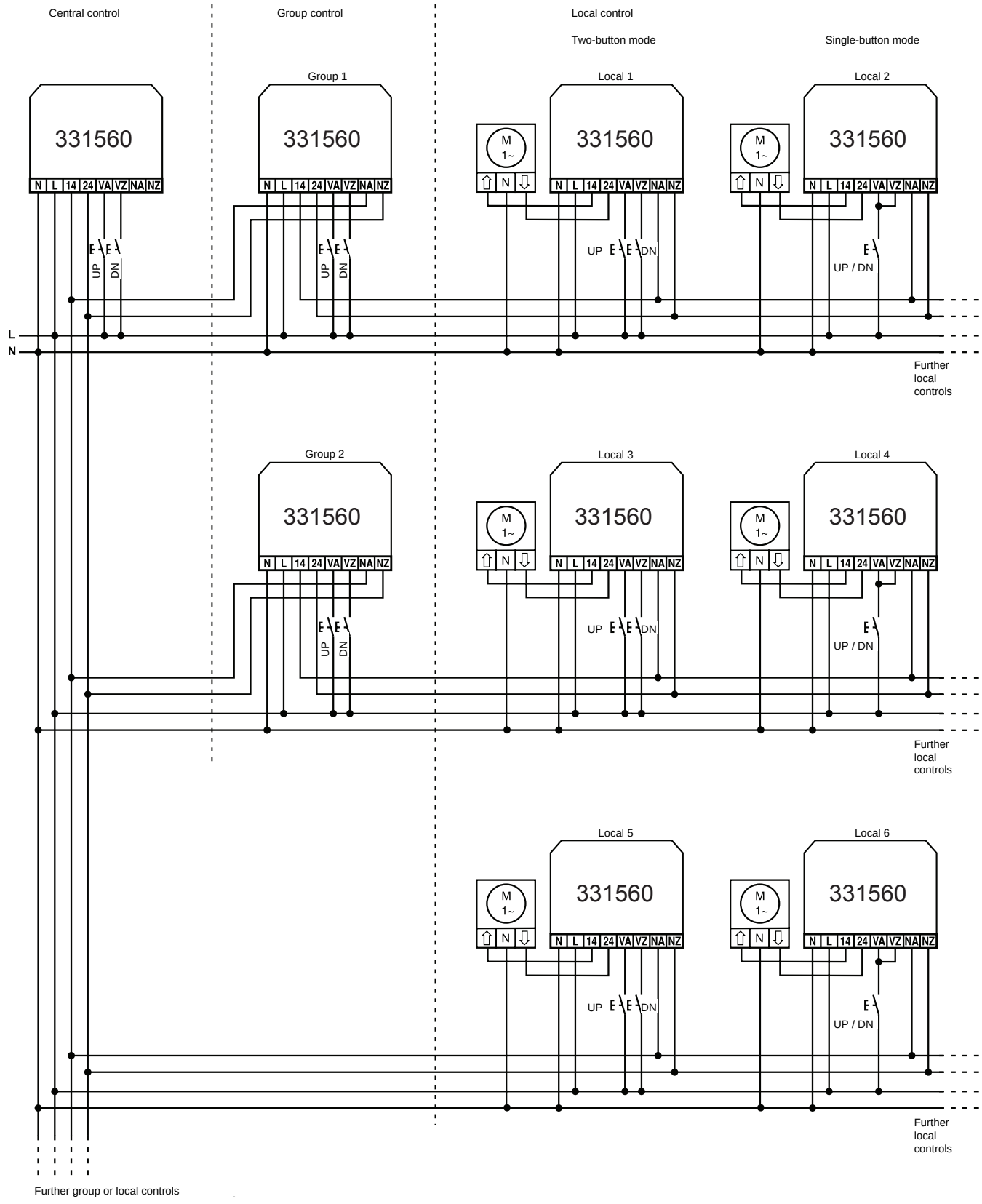
* In modes GM and GJ, the relay outputs M1 or M2 (14 or 24) stay switched through as long as an extension input remains activated. This allows priority control (with the local inputs locked) by sensors (e.g. wind monitor, rain sensor, etc.).

KAISER NIENHAUS
Komfort & Technik GmbH

Multiple control unit
with extension inputs for group and central control, Item 331560

Installation and Operating Instructions

331560 in Group and Central Controls



KAISER NIENHAUS
Komfort & Technik GmbH

Multiple control unit
with extension inputs for group and central control, Item 331560

Installation and Operating Instructions

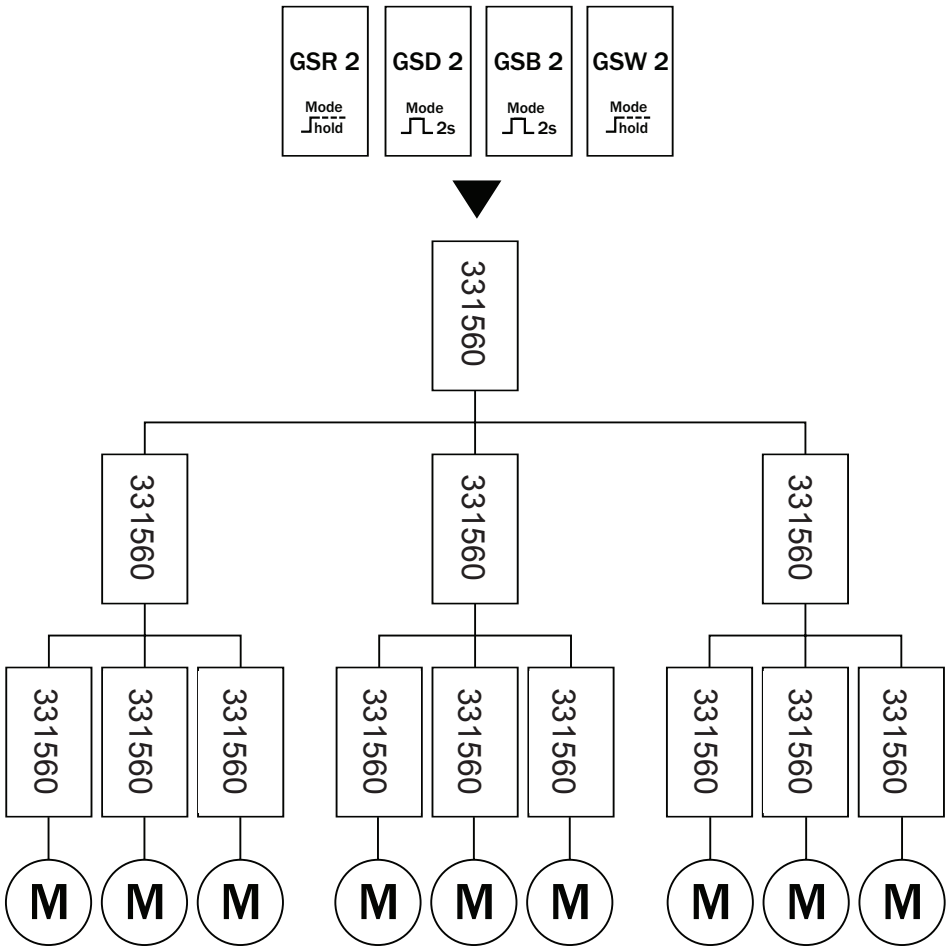
Limit Switches in Combination with the 331560

Limit switch
for rain, twilight, shading or wind

Central control
The central control unit is controlled by push-buttons and any limit switches

Group controls
Groups are controlled by the central control unit and by push-buttons

Local controls
The individual local controls are controlled by the group controls and by their own push-buttons



Local Control

Each 331560 controls one drive via outputs 14 and 24. It is controlled at the local inputs (VA and VZ) with conventional double push-buttons. Mutual interlocking of the running directions and a running time limit are ensured by the 331560.

Central and Group Control

Several 331560 units can be combined at their extension inputs (NA and NZ) simply by connecting them in parallel. By adding a further (higher-level) control upstream, these devices can be operated together. This forms a so-called group. Group controls can in turn be combined using the same scheme so that they can be operated together by a higher-level control. This further combination is called central control.

Rain, Wind and Sun

The various limit switches are connected via inputs VA/VZ or NA/NZ on the central control. Safety-relevant control signals from rain or wind must be applied to the extension inputs as a continuous signal. This blocks the system and protects it optimally against accidental incorrect operation.
Control signals without safety requirements, e.g. for shading or twilight automation, are applied to the local inputs as short pulses. The system remains fully operable for the user.