## Output controller (6 x 3000 W)



Output controller LST6x13-DL switches up to six consumers (AC, rated power 3000 W each).

## Index

The six outputs of the output controller are controlled via DL outputs.

| Index | Channel |
| :---: | :--- |
| 1 | Digital ON/OFF for output 1 |
| 2 | Digital ON/OFF for output 2 |
| 3 | Digital ON/OFF for output 3 |
| 4 | Digital ON/OFF for outputs 1-3 (simultaneous) |
| 5 | Digital ON/OFF for output 4 |
| 6 | Digital ON/OFF for output 5 |
| 7 | Digital ON/OFF for output 6 |
| 8 | Digital ON/OFF for outputs 4-6 (simultaneous) |
| 9 | Analogue 0-5 seconds. Ramp for gradual ramping up of outputs 4-6 over the <br> specified time. The outputs are also activated through index 8. |

If index 9 is greater than 0 , outputs 4-6 are evenly ramped up via phase cycling over the time specified with index 9 . If $\mathbf{0}$ is entered, ramping is disabled.
Each output has a blocking time of 5 seconds. When an output is switched off, it can be switched on again only after 5 seconds.
The output controller communicates the status of each output via the DL bus. These can be read at the controller via digital DL inputs.

| Index | Channel |
| :---: | :--- |
| 1 | Digital ON/OFF for output 1 status |
| $\ldots$ | $\ldots$ |
| 6 | Digital ON/OFF for output 6 status |

## Ramp

Outputs 4-6 can be ramped up via phase cycling over a time between 1 and 5 seconds. This application must be used only for asynchronous motors up to 1.5 kW .
The ramp time is specified with index 9 . The outputs are ramped up through index 8.

## Connection

Both the DL bus (DL and GND) and a $\mathbf{1 2} \mathbf{V}$ supply (e.g. from the CAN bus) must be connected. Make sure that you use cables with a suitable cross-section and temperature resistance according to the applicable standards.
Three-phase consumers must be protected with a suitable motor circuit breaker.
Example: Connecting a 3-phase consumer at outputs 1-3 and a motor at 4-6.

L1 L2 L3


## DL address

The power controller's address is 1 as per factory settings. Dip switches on the PCB are used to change the address. The effective address is derived from address 1 (= factory setting) plus the sum of all the values of the DIP switches set to ON.

## Example:

| desired address | $\mathbf{6}$ |
| :--- | ---: |
| factory setting | 1 |
| dip switches 1 and 4 | +5 |
| sum = address | $=6$ |
| dip switches 1 and 4 mus be set |  |
| to $\mathbf{O N}$. |  |



Correct position of dip switches according to example.

## Programming



DL outputs - Output 1 - Output $\times$
Drawing object: Output 1-Output

Parameters
Des. group Output
Designation Output
Des. index
Input variable
Source type Fixed value
Source 1: Enable
Target
Address
Index

OK OK, without allocation Cancel

The consumers to be switched are specified to the output controller over the DL bus. For this purpose, a DL bus output is programmed to transmit a digital (On/Off) value.
Example: The first output of an output controller with the address $\mathbf{1}$ is activated with index 1. Here, this value comes from a digital fixed value, but the source is irrelevant as long as a digital On/Off signal is used.

## Technical data

| DL bus load | $10 \%$ |
| :--- | :--- |
| Power consumption | max. 1 W |
| IP rating | IP 40 |
| Terminal capacity | max. $1.5 \mathrm{~mm}^{2}$ |
| Max. ambient temperature | $45^{\circ} \mathrm{C}$ |
| Fuse | No internal fuse protection <br> Device and consumers must be protected with <br> suitably rated fuses according to the applicable <br> standards. |
| Resistive loads | max. $6 \times 3000 \mathrm{~W}$ |
| Inductive loads | Max. starting current 30 A |
| Electronic (capacitive) loads | Not suitable |

Subject to technical modifications as well as typographical and printing errors. This manual is only valid for devices with the corresponding firmware version. Our products are subject to constant technical advancement and further development. We therefore reserve the right to make changes without prior notice.

