TECHLINE®
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# Actuator LA33
## With CANopen 0-point
# **Connection diagram**



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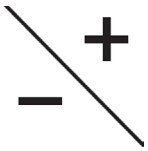
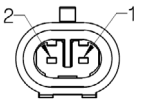
## Connection diagram

33XXXXXXXX003X2X=XXXXXX0HXXXXX



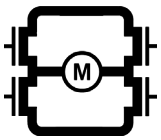
| | | Power |
|---|---|---|
| 24/48 V DC + | **BROWN** | **2** |
| GND - | **BLUE** | **1** |

AMP




Deutsch

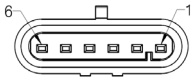

| | | Signal |
|---|---|---|
| Not to be connected | **ORANGE** | **5** |
| Digital input | **RED** | **1** |
| Digital input | **BLACK** | **2** |
| Not to be connected | **LIGHT BLUE** | **6** |
| Bus | **YELLOW** | **3** |
| Bus | **GREEN** | **4** |
| Not to be connected | **GREY** | **0** |
| Data | **VIOLET** | **7** |
| Data GND | **WHITE** | **8** |





Service-
Interface

AMP

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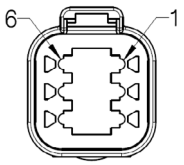

## I/O specifications

<table>
<tr><th>Input/Output</th><th>Specification</th><th>Comments</th></tr>
<tr><td>Description</td><td>Compatible with the CiA 301 standard.<br>Using CANopen messages to command movement, setting parameters and to deliver feedback from the actuator.<br>Actuator support LSS</td><td>CANopen</td></tr>
<tr><td>Brown<br>Connect to positive</td><td>24-48 V DC + (VCC)<br>Connect Brown to positive
<table>
<tr><th>Vsup</th><th>Vmin</th><th>Vmax</th><th></th></tr>
<tr><td rowspan="2">24 V</td><td>16 V</td><td>36 V</td><td>Motor running</td></tr>
<tr><td>10 V</td><td>60 V</td><td>Motor not running<br>CAN communication possible</td></tr>
<tr><td rowspan="2">48 V</td><td>36 V</td><td>58 V</td><td>Motor running</td></tr>
<tr><td>24 V</td><td>60 V</td><td>Motor not running<br>CAN communication possible</td></tr>
</table>
24 V, current limit 13 A<br>48 V, current limit 8 A</td><td rowspan="2">Note: Do not swap the power supply polarity on the Brown and Blue wires!<br>The PCB is coupled to the housing through a capacitor.<br>Current limit levels can be adjusted through Actuator Connect®.<br>If the temperature drops below 0 °C, all current limits will automatically increase with a factor 2.</td></tr>
<tr><td>Blue<br>Connect to negative</td><td>- (GND)</td></tr>
<tr><td>Orange</td><td>Not to be used</td><td></td></tr>
<tr><td>Red</td><td>Extends the actuator</td><td rowspan="2">The signal becomes active at:<br>> 67% of $V_{IN}$ = ON<br>The signal becomes inactive at:<br>< 33% of $V_{IN}$ = OFF<br>Input current: 10 mA</td></tr>
<tr><td>Black</td><td>Retracts the actuator</td></tr>
<tr><td>Light Blue</td><td>Not to be used</td><td>Not to be used</td></tr>
</table>

| Input/Output | Specification | Comments |
|---|---|---|
| Green | CAN_L | CANopen assumes a physical layer according to ISO 11898-2.<br>Speed: Autobaud up to 500 kbps<br>Max. bus length at 125 kbps: 500 meters<br>Max. bus length at 250 kbps: 250 meters<br>Max. bus length at 500 kbps: 100 meters<br>Max. stub length at 125 kbps: 22 meters<br>Max. stub length at 250 kbps: 11 meters<br>Max. stub length at 500 kbps: 5,5 meters<br>Max. node count: 127<br>Wiring: Unshielded twisted pair |
| Yellow | CAN_H | |
| Violet | Service interface | Only Actuator Connect® can be used as service interface.<br>Use Grey adapter cable |
| White | Service interface GND | |