1.1 Connection plan

![Connection diagram]

Starting

2.1 Operation Conditions

- IP 00, open box

- relative Humidity 20% to 80%
  Humidity class F (DIN 40040)

- Storage temperature -15 bis +70 Grad Celsius

- Operating temperature +5 bis +40 Grad Celsius

  ! with high motor current linked to high ambient temperature the driver must be forced ventilated
2.2 Power Supply

Operating voltage: 24-80V DC

Note: A charging capacitor of 10 000yF must be connected to the supply in order to prevent the permissible voltage from being exceeded during a braking operation. Reversal of the inputs/outputs can destroy the output module.

2.3 Motor connection

Motors with 8 leads are connected internal parallel.

! never disconnect leads when driver is operating
2.4 Signal connections

2.4.1 Clock and direction

Clock:
max. Frequency: 100 kHz

Direction:
defines the direction of the motor

2.4.2 Tor and Reset

Tor:

If the input Tor is energized, clock signals to the driver are blocked. So you can drive more drivers with one clock-generator selective.

Reset:

If the driver sets an error output (because of too high phase current or temperature), the reset input must be energized. The motor will be reinitialised and will take in the next full step position. After that the reset signal has to be disconnected for normal operation.
2.4.3 Technical specifications

**Signal Clock/Direction**

- **activ:**
  - min 4.5 Volt
  - max 10.0 Volt
- **not activ:**
  - min -5 Volt
  - max 1.0 Volt

Input current: \( I := \frac{(U_{on} - 1.5 \text{ Volt})}{200 \text{ Ohm}} \)

- Clock-duration: min 5 ys
- Clock-break: min 5 ys

**Signal Tor, Reset**

- **activ:**
  - min 4.5 Volt
  - max 10.0 Volt
- **not activ:**
  - min -5 Volt
  - max 1.0 Volt

Input current: \( I := \frac{(U_{on} - 1.5 \text{ Volt})}{200 \text{ Ohm}} \)

- Clock-duration: min 100 ms
- Clock-break: min 100 ms

**Signal ready**

- Relais contacted with floating output

- Circuit Voltage: 125 Volt maximal
- Circuit Current: 0.5 Ampere, only resistive load
2.5 Handling

2.5.1 Step resolution

with jumper

! only with driver in off-mode

<table>
<thead>
<tr>
<th>BCD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>I(A)</td>
<td>2.0</td>
<td>3.0</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
<td>7.5</td>
<td>8.0</td>
<td>8.5</td>
</tr>
</tbody>
</table>

! Step 7,8,9 only in off-mode adjustable

2.5.2 Current adjustment

2.5.3 Automatic current reduction

The current reduction is active if the clock input is not under current for min. 100 ms.
3 Dimensions