TOX®-Servocontroller

Data sheet 40.70
2018/08
TOX®-Servocontroller

General data and operating conditions

The central intelligence: The freely parameterizable servo controller is a single-axis servo controller with integrated logic.

It controls and regulates the TOX®-ElectricDrive system with all required functions. Benefits are the immediate processing of process data and a direct response to their deviations. The process data can be viewed during and after production for a complete quality certificate, and documented accordingly.

The modules can be easily replaced by means of the plug-in system

<table>
<thead>
<tr>
<th>Operating conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Circuit type</td>
<td>With grounded star-circuit Unlimited use</td>
</tr>
<tr>
<td><strong>IT-net</strong></td>
<td>Follow instructions for special measures!</td>
</tr>
<tr>
<td>Standards</td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>CE Low voltage directive (2006/95/EC)</td>
</tr>
<tr>
<td>Approvals</td>
<td>UL 508C Power Conversion Equipment (File-No. 32659)</td>
</tr>
<tr>
<td>Enclosure</td>
<td></td>
</tr>
<tr>
<td>Enclosure type</td>
<td>EN 60529 IP20</td>
</tr>
<tr>
<td>NEMA 250 Contact protection according to type 1</td>
<td></td>
</tr>
<tr>
<td><strong>Climatic conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Operation*</td>
<td>IEC/EN 60721-3-3 EN 50178 3K3 (-10 ... +55°C) Derating of rated output current +45 ... +55°C: 2.5% / °C</td>
</tr>
<tr>
<td>Relative air moisture</td>
<td>max. 85%, without condensation</td>
</tr>
</tbody>
</table>

*Attention: In case of an installation at 1000 m above sea level the reduction of the nominal current will be 5% / 1000 m.
For TOX®-ElectricDrive-systems up to 10 kN press force

**Dimensions**

<table>
<thead>
<tr>
<th>Basic device incl. mounting base mm</th>
<th>a</th>
<th>b</th>
<th>b1</th>
<th>e</th>
<th>f</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90</td>
<td>481</td>
<td>350</td>
<td>288</td>
<td>348</td>
<td>5.3</td>
</tr>
</tbody>
</table>

* Mounting plate existing (comes with the switch cabinet)
- Built-in depth of switch cabinet: 400 mm
- Dimensions of ballast resistor W/H/D: T/H/B 30/60/355 mm
TOX®-Servocontroller

For TOX®-ElectricDrive-systems 25 - 100 kN press force

Dimensions

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<th>Type</th>
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<th>e</th>
<th>f</th>
<th>Weight kg</th>
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<td>481</td>
<td>350</td>
<td>288</td>
<td>348</td>
<td>8.1</td>
</tr>
<tr>
<td>EX-K</td>
<td>120</td>
<td>481</td>
<td>350</td>
<td>288</td>
<td>348</td>
<td>8.1</td>
</tr>
</tbody>
</table>

* Mounting plate existing (comes with the switch cabinet)
- Built-in depth of switch cabinet: 400 mm
- Dimensions of ballast resistor W/H/D: T/H/B 30/60/355 mm
For TOX®-ElectricDrive-systems 200 - 700 kN press force

- Built-in depth of switch cabinet: 400 mm
- Dimensions of ballast resistor W/H/D: T/H/B 30/60/355 mm

* Mounting plate existing (comes with the switch cabinet)
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Wiring diagram

Block diagram
Use of the TOX®-ElectricDrive system.
Simplified diagram.

- Ballast-resistor
- Emergency switch button light grille/protective door
- Emergency switch
- Standard interface, Profinet
- Emergency switch box with a delay of approx. 150 – 500 ms as per risk analysis and afterrunning test

- Servocontroller
  - X105
  - MX01
  - MSI
  - X3
  - X7
  - X105
  - E/S
  - MX02

- Ethernet, programming, process data
- Force sensor
- Resolver
- Motor
- Control, digital, PLC
- PC

- green: Scope of delivery TOX®-ElectricDrive Set
- red: supplied by customer

Subject to technical modifications. TB 40.70_201808.en