@AXIS - the multi-axis controller

The universal multi-axis controller is designed for position, pressure and power control of up to 8 axis with a fieldbus interface. Each axis can be regulated independently or dependently from each other to a specific aim or load.

- Control structure: PID velocity servo-controlled
- Master / slave operation => synchronous operation (electrical clutch)
- Pressure control (proportional valve, pressure limiting valve)
- Position control (different driving data records)
- Fieldbus variation: Profibus, Fiber Optic
- Parameterization via fieldbus and serial interface
- PLC function blocks for easy integration
The @Axis controller offers a structural switch (which is a variable switching on and off of the integral part through limited values) and a velocity pre-control. The Controller will be defined as a data control block (RCB) and rapidly changes between the position and power control. Parameter data can be programmed over a fieldbus or serial monitor and saved to a FLASH-EPROM.

**System features:**
- Ability to define a multiple go to „home positions“
- Set null bias through offset and preset values
- Software filter of the actual value
- Drift compensation
- Different contouring error treatments
- Limitation and offset of the correcting variable (analog output)
- Force control
- Pressure control
  - proportional valve
  - pressure limiting valve
  - dependent of plunger position (set point table)
- Contour processing (command value curve)
  - time-dependent
  - dependent on external position and pressure (realizing “flying shears“)
- Point-to-point movement
  - trapeze, inclined sine
  - 2 different velocities (rapid traverse / creep motion)
- Different controlled drives
  - ramp
  - limit switch
- Master-/Slave operation
  - open loop synchronization control
  - different transformation ration (angular cut)

**Special features:**
- Software filter for noise of the actual value signals
- Brake & release signal
- Additional digital in-/output
- 20 movement tables per axis definable
  - automatic sequence start / single block handling
  - execution of movement table with digital IN/OUT
  - execution of movement table with virtual digital IN/OUT

**Aid Tools:**
- S7 function blocks for programming
- Serial monitor for parameterization, tests and diagnoses

**Customer specific features:**
We realize your vision, contact us.

**Environmental condition**

<table>
<thead>
<tr>
<th>EMC</th>
<th>EN 6100-4-2 (IEC-801-2)</th>
<th>EN 6100-4-4 (IEC-801-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature [°C]</td>
<td>0…55</td>
<td>0…55</td>
</tr>
<tr>
<td>Humidity (rel)</td>
<td>98% (non condensed)</td>
<td>98% (non condensed)</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP20 (DIN 40 050)</td>
<td>IP20 (DIN 40 050)</td>
</tr>
</tbody>
</table>

**Electrical data**

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>24V DC 20%</th>
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</thead>
<tbody>
<tr>
<td>Power consumption</td>
<td>150mA</td>
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