ABB drives for cranes
ACS380, 0.37 to 22 kW

Designed to move your overhead and tower cranes reliably day after day.

- All built-in for efficient overhead and tower crane movements
  The drive includes built-in control for hoist, trolley and long travel/slew movements and the essential functions for typical crane applications. It works precisely both in open and closed loop configurations.

- Reliable operation
  With their coated circuit boards, 50 °C ambient rating and advanced cooling system, ACS380 drives are made to last even in demanding atmospheres.

- A lot packed into a compact unit
  The drive includes an integrated brake chopper for dynamic braking and safe torque off (SIL 3) as standard. The drive can be installed in a crane cabinet either to a DIN rail or with a screw installation.
Technical data

<table>
<thead>
<tr>
<th>Voltage and power range</th>
<th>1-phase, 200 to 240 V, +10%/-15%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.25 to 3 kW</td>
</tr>
<tr>
<td></td>
<td>3-phase, 200 to 240 V, +10%/-15%</td>
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<tr>
<td></td>
<td>0.25 to 15 kW</td>
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<tr>
<td></td>
<td>3-phase, 380 to 480 V, +10%/-15%</td>
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<tr>
<td></td>
<td>0.37 to 22 kW</td>
</tr>
<tr>
<td>Built-in braking chopper and common DC connection with internal charging circuit</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz ±5%</td>
</tr>
<tr>
<td>Degree of protection</td>
<td>IP20 as standard (UL open type)</td>
</tr>
<tr>
<td>Ambient conditions</td>
<td>-10 to +50 °C (14 to 122 °F), up to +60 °C (140 °F) with derating (except R0)</td>
</tr>
<tr>
<td>Altitude</td>
<td>230 V units: 0 to 2000 m above sea level (with derating above 1000 m)</td>
</tr>
<tr>
<td></td>
<td>400 V units: 0 to 4000 m above sea level (with derating above 1000 m, see manual for usage restriction at 4000 m)</td>
</tr>
<tr>
<td>Compliance</td>
<td>CE, RoHS, UL, EAC, CSA, TÜV NORD</td>
</tr>
<tr>
<td>EMC</td>
<td>EMC category C2 (200 V &amp; 400 V) or EMC category C4 (200 V) and C3 (400 V), according to EMC Directive 2014/30/EU, EN 61800-3:2004 + A1 2012</td>
</tr>
<tr>
<td>User interface</td>
<td>Integrated icon-based control panel</td>
</tr>
<tr>
<td>Drive programming</td>
<td>Adaptive programming</td>
</tr>
<tr>
<td>Motor control</td>
<td>Vector and scalar, both in open or closed loop</td>
</tr>
</tbody>
</table>

Ordering variants

**IO controlled crane drive**

4 DI + 2 DI/DO + 2 AI + 1 AO + 1 R0 + STO
Embedded modbus

**Options:**

- One of following side extension options
  - HTL/TTL encoder & ext. 24 V DC supply
  - 4 × relay output module
  - External 24 V DC supply

**Fieldbus controlled crane drive**

2 DI + 1 R0 + STO + one preconfigured fieldbus

**Options:**

- Fieldbus options
  - PROFIBUS, PROFINET, EtherNet/IP™, Modbus TCP/IP, EtherCAT®, POWERLINK, DeviceNet™, CanOpen®

- One of following side extension options
  - HTL/TTL encoder & ext. 24 V DC supply
  - 4 × relay output module
  - External 24 V DC supply

- One front extension I/O option
  - can be used together with fieldbus
  - 3 DI + 1 DO + 1 AI

Learn more from ACS380 product catalog

ACS380 - part of ABB’s all-compatible crane drives portfolio

**Why select ABB's all-compatible crane drives?**

- The ACS380 and ACS880 drives give the same user experience
- Possibility to use same assistant control panel or PC tool
- Adaptive block programming for extended crane functionality

**Works with following crane interfaces**

- Joystick
- Pendant controller
- Motor potentiometer
- Fieldbus control

**Built-in crane application includes**

- Slowdown logic
- End limit logic
- Fast stop function
- Mechanical brake control
- And much more

**Robust design**

- Advanced cooling system
- Earth fault protection based on three-phase current measurement