# AVA-S20.61 SMART ON-OFF TIMER 177in.lbs

<table>
<thead>
<tr>
<th>Model</th>
<th>AVA-S20.61 177in.lbs SMART ON-OFF TIMER ACTUATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Voltage</td>
<td>High voltage Low voltage</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>230V AC/DC 24V AC/DC</td>
</tr>
<tr>
<td>Consumption</td>
<td>AC 95-265V 50/60Hz, DC 100-300V AC 18-26V 50/60Hz, DC 22-32V</td>
</tr>
<tr>
<td>Peak Current</td>
<td>9.6W run, 0.12W hold 9.6W run, 0.85W hold</td>
</tr>
<tr>
<td>Fuse</td>
<td>35mA for 5ms AC230V; 75mA for 5ms DC 110V 350mA for 5ms DC 24V</td>
</tr>
<tr>
<td>Time Mode/Loop Mode</td>
<td>Pulse or Time mode/loop by days, or weeks (configured by external push buttons &amp; OLED display)</td>
</tr>
<tr>
<td>Maximum Break Torque in.lbs</td>
<td>177 177</td>
</tr>
<tr>
<td>Run &amp; Reseat Torque in.lbs</td>
<td>177 177</td>
</tr>
<tr>
<td>Manual Operation</td>
<td>Yes, by hexagonal wrench (supplied in clip) when no power is being applied</td>
</tr>
<tr>
<td>Run time</td>
<td>≈ 10 sec ≈ 10 secs</td>
</tr>
</tbody>
</table>

**STANDARD FEATURES:**

- Operating Frequency: Not continuous; 75% duty cycle but recommended to allow ≥ 1 minute between cycles. ≤40 Timed operations per day.
- Position Sensing: No mechanical cams fitted; magnetic with digital sensing.
- Maximum Angle of Rotation: 330° ±5°
- Position Indication (Visual): 2 color (red/ yellow) dome for local visual confirmation.
- End Position Indication: 2 x Electronic relay
- Mounting Restriction: None, it can be mounted at any angle. Leave space for manual operation and electrical connection.
- ISO:5211: F03 & F05 (+ F04 which mounts at 45 degrees)
- Female Drive: 0.55” (14mm) octagon x 0.67” (17mm) deep
- Ingress Protection: IP67, cover recommended if exposed to direct rain or sun.
- Max Media Temperature: ≤ 176°F
- Ambient Temperature: -4°F to +140°F
- Non-operating Temperature: -40°F to ≥176°F
- Ambient Humidity: 5-95% RH non-condensing
- Explosion Proof: Actuator is not explosion proof and should not be placed in hazardous areas.
- Shock Resistance: ≥300m/s²
- Vibration: 10 to 55Hz, 1.5mm double amplitude (product damage most likely if exceeded)
- Noise level: ≤50dB
- Flame Retardant Level: V-0 rating based on UL-94 testing
- Certification: CE
- Maintenance: Maintenance free
- Cable Entry: Cable fitting provided, actuator pre-wired with approx. 20” flying lead
- Housing: Plastic (ABS) cover
- Weight: Standard ABS housing 1.37lbs
**DIMENSIONS (inch)**

AVA-S20.61 177in.lbs SMART ON-OFF TIMER ACTUATOR

**PART NUMBERS**

AVA-S20.61 177in.lbs SMART ON-OFF TIMER ACTUATOR

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage</th>
<th>Cover</th>
<th>Heater</th>
<th>Control of on-off function</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVA-S20.61-5</td>
<td>AC 230V or 24V AC/DC</td>
<td>P (ABS)</td>
<td>None</td>
<td>SPDT. Switchable +ve/ live  Relay end of travel confirmation</td>
</tr>
<tr>
<td>AVA-S20.61-6</td>
<td>AC 110V</td>
<td></td>
<td>2W/24kΩ</td>
<td></td>
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<tr>
<td></td>
<td>AC 24V or</td>
<td></td>
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<tr>
<td></td>
<td>DC 24V</td>
<td></td>
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<tr>
<td></td>
<td>Multi-voltage:</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>95-265V AC/DC</td>
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<td></td>
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<tr>
<td></td>
<td>24V AC/DC</td>
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</table>

**WIRING DIAGRAM**

AVA-S20.61 ON-OFF WIRING ‘1’

**NOTE: ACTUATORS SHOULD HAVE DEDICATED POWER AND CONTROL**
Overview: All AVA smart electric actuators have local controls as standard. An OLED screen and 3 positive push buttons create a user friendly interface for local control and a variety of adjustments. The screen is easy to read, with bright blue letters on a black background, and the use of the push buttons to adjust settings is intuitive. The local controls require power to be applied to the actuator to operate.

Local controls:

M button is used to enter and switch menus (Hold for three seconds).
K2 is used in conjunction with K3 for adjusting the actuator settings.
K3 is used for changing settings, navigating menus, exiting and saving.
OLED Screen with clear blue letters against a black background.

Standard local control function options:

- **MANUAL CONTROL**  
The AVA smart actuator can be opened and closed using the K2 and K3 buttons (hold down K3 for three seconds to access).
- **DEAD BAND**  
Adjusts the accuracy and sensitivity of the actuator.
- **SPEED CONTROL**  
The working time can be increased either by setting a step timer (run/stop/run/stop), or continuous running by adjusting the PWM.
- **CLOSED POSITION**  
The close position of the actuator can be adjusted by using the K2 and K3 buttons (zero adjustment).
- **REVERSE ACTING**  
Actuator closes when an open signal is received, and vice versa.
- **EXTEND ANGLE**  
Adjust the open position by adjusting the span of the actuator. Typically used to set 0-180 degree operation.
- **3 POSITIONS**  
Sets the 3rd position of the actuator (subject to wiring system).