

## Schedule (1)

### Operating Conditions

Quantity	Range/Scope															
Frequency <sup>(1)</sup>	The manufacturer shall specify the nominal frequency ( $f_{nom}$ ) of the device, and a tolerance of ( $\pm 2\%$ ) around this nominal frequency shall be permitted. The device must operate normally within this range. If the manufacturer specifies more than one nominal frequency, the rated operating conditions shall be deemed to cover the full combined ranges of all specified nominal frequencies, with the ( $\pm 2\%$ ) tolerance applied to each.															
Voltage	<ul style="list-style-type: none"> <li>– Alternating Current Electric Vehicle Supply Equipment (AC EVSE): Nominal Voltage (<math>U_{nom}</math>): <math>U_{nom}, 0.9 \times U_{nom}</math> to <math>1.1 \times U_{nom}</math></li> <li>– Direct Current Electric Vehicle Supply Equipment (DC EVSE): From the lowest to the highest output voltage.</li> </ul>															
Current	<ul style="list-style-type: none"> <li>– The starting current (<math>I_{st}</math>), the minimum current (<math>I_{min}</math>), and the maximum current (<math>I_{max}</math>) shall be specified by the manufacturer.</li> <li>– The minimum current (<math>I_{min}</math>) must be equal to or less than the transition current (<math>I_{tr}</math>)</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Mode</th> <th style="text-align: center;">AC</th> <th style="text-align: center;">AC</th> <th style="text-align: center;">DC</th> <th style="text-align: center;">DC</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>I_{tr}</math></td> <td style="text-align: center;"><math>\leq 5.0 \text{ A}</math></td> <td style="text-align: center;"><math>\leq 0.10</math></td> <td style="text-align: center;"><math>\leq 25 \text{ A}</math></td> <td style="text-align: center;"><math>\leq 0.10</math></td> </tr> <tr> <td style="text-align: center;"><math>I_{max}</math></td> <td style="text-align: center;"><math>\leq 80 \text{ A}</math></td> <td style="text-align: center;"><math>&gt; 80 \text{ A}</math></td> <td style="text-align: center;"><math>\leq 500 \text{ A}</math></td> <td style="text-align: center;"><math>&gt; 500 \text{ A}</math></td> </tr> </tbody> </table>	Mode	AC	AC	DC	DC	$I_{tr}$	$\leq 5.0 \text{ A}$	$\leq 0.10$	$\leq 25 \text{ A}$	$\leq 0.10$	$I_{max}$	$\leq 80 \text{ A}$	$> 80 \text{ A}$	$\leq 500 \text{ A}$	$> 500 \text{ A}$
Mode	AC	AC	DC	DC												
$I_{tr}$	$\leq 5.0 \text{ A}$	$\leq 0.10$	$\leq 25 \text{ A}$	$\leq 0.10$												
$I_{max}$	$\leq 80 \text{ A}$	$> 80 \text{ A}$	$\leq 500 \text{ A}$	$> 500 \text{ A}$												
Power Factor <sup>(1)</sup>	$\geq 0.9$															
Temperature	<p>The manufacturer shall specify the temperature range from the lower to the upper temperature limit, as follows:</p> <ul style="list-style-type: none"> <li>– Lower temperature limit from the values: (-55 °C, -40 °C, -25 °C, -10 °C, +5 °C)</li> </ul>															

	<ul style="list-style-type: none"> <li>- Upper temperature limit from the values: (+30 °C, +40 °C, +55 °C, +70 °C, +85 °C)</li> </ul>
Humidity and Water	<p>The manufacturer shall specify the environmental class for the Electric Vehicle Supply Equipment (EVSE) as follows:</p> <ul style="list-style-type: none"> <li>- <b>H1:</b> Enclosed locations where the EVSE is not exposed to condensed water, precipitation, or ice formations.</li> <li>- <b>H2:</b> Enclosed locations where the EVSE may be exposed to condensed water, water from sources other than rain, or ice formations.</li> <li>- <b>H3:</b> Open locations with average climatic conditions.</li> </ul>
Harmonics <sup>(1)</sup>	<ul style="list-style-type: none"> <li>- For AC EVSE: The EVSE shall operate correctly when the supply voltage distortion is less than 10% and the load current distortion is less than 3% for all harmonic indices.</li> </ul>
Ripple <sup>(2)</sup>	<ul style="list-style-type: none"> <li>- For DC EVSE: The ripple produced on the output of the EVSE shall comply with the international standard (IEC 61851-23) and shall only measure energy containing frequencies up to (2) kHz.</li> </ul>
Load Balance <sup>(1)</sup>	<ul style="list-style-type: none"> <li>- For polyphase EVSE: EVSE shall operate correctly with any combination of active phases.</li> </ul>
MMQ <sup>(3)</sup> (Minimum Measured Quantity)	<ul style="list-style-type: none"> <li>- For AC EVSE: The MMQ must not exceed (0.1) kWh.</li> <li>- For DC EVSE: The MMQ must not exceed (1.0) kWh.</li> </ul>
<p><sup>(1)</sup> Applies only to AC EVSE.</p> <p><sup>(2)</sup> Applies only to DC EVSE.</p> <p><sup>(3)</sup> If the Minimum Measurable Quantity (MMQ) is not marked, it must be specified.</p>	