DC Line - Powerpack EN 1 DC

Discharging power pack EN 1 DC

In combination with the connected direct voltage ionizing units, the EN 1 DC provides a high discharging output for the neutralization of electrostatic charges. It therefore ensures reliable electrostatic neutralization even in fast running processing. The use of the “DC Line” product family is also beneficial in applications where it is not possible to approach the surface to be discharged down to 30 mm.

Functional principle

The EN 1 DC supplies the connected ionizing units with continuous positive/negative high voltage (Figure 1). Due to the direct ion output, the DC Line ionising systems have high output reserves for the neutralization of electrostatic charges.

The direct voltage technology of the EN 1 DC offers major benefits for specific applications:

- The ionization system delivers a high discharging output for the neutralization of electrostatic charges.
- The total length of all high-voltage cables connected to the EN 1 DC must not exceed 50 m.
- The 6 high-voltage terminals are capable of supplying energy to ionizing bars with a total length of up to 8 m.
- The EN 1 DC is operated with 24V DC (machine voltage).

The EN 1 DC offers many additional technical functions as standard:

- High voltage and load condition are continuously monitored on the output side: high voltage failure and overload are displayed visually.
- A signalling socket provides monitoring and control signals.
- In the event of a spark-over between the ionizing unit and the charged surfaces, the high voltage is switched off on the output side.

Examples of applications

The EN 1 DC is particularly suited to applications where
- high electrostatic charges need to be removed
- high web speeds are achieved
- it is not possible to approach the surface to be discharged down to 30 mm (reaches up to approx. 100 mm are possible)
- long cable lengths are required
- long ionizing bar lengths are required.

Technical data *

<table>
<thead>
<tr>
<th>Model</th>
<th>EN 1 DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order no.</td>
<td>01.7868.000</td>
</tr>
<tr>
<td>Protection type</td>
<td>IP 54</td>
</tr>
<tr>
<td>Protection class</td>
<td>I</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V DC</td>
</tr>
<tr>
<td>Power consumption</td>
<td>40 VA</td>
</tr>
<tr>
<td>Nominal output voltage</td>
<td>approx. ± 5 kV DC</td>
</tr>
<tr>
<td>Capacity of signalling contacts</td>
<td>24 VAC / 35 VDC  max. 50 mA</td>
</tr>
<tr>
<td>HV terminals</td>
<td>6</td>
</tr>
<tr>
<td>Connectable length</td>
<td>50 m (total of all HV cables)</td>
</tr>
<tr>
<td>Bar length</td>
<td>8 m (total of all ionizing bars)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>+5 °C  to  +45 °C</td>
</tr>
<tr>
<td>Storage/transport temperature</td>
<td>-15 °C  to  +60 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>2.2 kg</td>
</tr>
<tr>
<td>Mains cable</td>
<td>2.6 m; fixed to the unit</td>
</tr>
</tbody>
</table>

Zubehör

Signalleitung K6, geschirmt
5 m, inkl. Meldestecker Best.-Nr.: 06.8976.000
10 m, inkl. Meldestecker Best.-Nr.: 06.8976.001
20 m, inkl. Meldestecker Best.-Nr.: 06.8976.002
Meldestecker Best.-Nr.: X-7807
Ionisationsstab EI DC Best.-Nr.: 03.5067.000
Ionisationselektrode DCJ Best.-Nr.: 04.7700.000
HS-Kabel Best.-Nr.: 06.0260.000
HS-Verteiler Best.-Nr.: 19.7006.000
**Signalling socket**

The signalling socket supplies monitoring and control signals for a monitoring control desk or a machine control system. This allows the load condition and high voltage of the EN 1 DC to be remotely monitored. By means of a control signal, the high voltage of the power pack can be switched from the control desk or machine control system.

**Technical data** *

- **Model:** EN 1 DC
- **Order no.:** 01.7868.000
- **Protection type:** IP 54
- **Protection class:** I
- **Supply voltage:** 24 V DC
- **Power consumption:** 40 VA
- **Nominal output voltage:** approx. ± 5 kV DC
- **Capacity of signalling contacts:** 24 VAC / 35 VDC max. 50 mA
- **HV terminals:** 6
- **Connectable length:** 50 m (total of all HV cables)
- **Bar length:** 8 m (total of all ionizing bars)
- **Operating temperature:** +5 °C to +45 °C
- **Storage/transport temperature:** -15 °C to +60 °C
- **Weight:** 2.2 kg
- **Mains cable:** 2.6 m; fixed to the unit

*) subject to technical changes