Red LED: One or more fuses are blown
Green LED: All fuses are OK

**How to remove:**
Press upper and lower snap fittings together and pull EFM unit out

**Phase overview XR DC version**

- L+ L-
- 50 mm busbar

- L+ L-
- 185 mm busbar
Technical data for XR EFM

**Input voltage limits**
- **Rated AC voltage** $U_e$ 340-770V
- **DC 110**: Rated DC voltage $U_e$ 45...140V
- **DC 500**: Rated DC voltage $U_e$ 135-550V
- **Power consumption**: 2W

**Functional characteristics**
- **Operating time** $t_e$ ≤ 4 s
- **Measuring accuracy**: ± 5 %

**Signaling output terminals (multiplug)**
- **Normally open**
  - Terminals 11 – 12
- **Normally closed**
  - Terminals 12 - 13
- **Rated load, inductive**
  - 2A at 24 VDC
  - Utilization category DC-1
- **Rated load, resistive**
  - 4A at 24 VDC
  - Utilization category DC-13
- **Wiring capacity [mm²]**
  - Stranded / solid : 0.08 – 0.5/
    - 0.08 – 0.75
  - Stranded with ferrule, no plastic sleeve : 0.25 – 0.34
  - Stranded with twin ferrule, plastic sleeve : 0.5

**EFM unit’s dielectric properties (IEC 60947-1)**
- **Rated impulse withstand voltage** ($U_{imp}$) 6.0kV
- **All poles connected together/Earth** 1.89 kV/1 min 50 Hz
- **All poles connected together/Aux. contacts** 1.89 kV/1 min 50 Hz
- **Insulation resistance**
  - 1 MΩ, 500 VDC

**Insulation test**
The EFM unit will survive an insulation test voltage of 1.6kV. However, by insulation test, we recommend to disconnect the EFM module (fig.b). This will also avoid leakage current between the main phases.
If needed, the EFM module can be compl. removed by also disconnecting the internal plug to the rear side of the Multiplug (fig.a).

**Power supply**
EFM is powered by the XR busbar contacts, and it starts to operate once the XR switch is in closed position.

---

**Fuse Status**

<table>
<thead>
<tr>
<th>Fuse Status</th>
<th>Green (LD)</th>
<th>Red (LD)</th>
<th>NO contact 11-12</th>
<th>NC contact 13-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. XR in ON Position</td>
<td></td>
<td></td>
<td>Open</td>
<td>Closed</td>
</tr>
<tr>
<td>Fuses OK</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Fuses BLOWN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| | | | | |
| 2. XR in OFF Position | | | | |
| Fuses OK | | | x | x | |
| Fuses BLOWN | | | | | |