For more than 100 years, Mersen have been providing the market with safe, reliable and longer life time off-load disconnectors and change-overs. These devices offer high performances and robustness for heavy duty and railway requirements with very limited maintenance.

Mersen offers one of the largest product ranges on the market for On-Board applications under 85VDC, 750VDC, 1,500VDC, 3,000VDC and 25kVAC.

Mersen has a switch solution that will meet your unique needs. Our standard On-Board Type A disconnector range is rigorously engineered to meet your technical specifications in different configurations (Disconnector, Change-over, earthing).

Operation: They are operated manually up to 25,000 cycles.
Phase to Phase distance, Signaling, Terminal Box or Locking system can be studied and customised.
Indoor use in a currentless state

TECHNICAL DATA OVERVIEW

<table>
<thead>
<tr>
<th>Size per Standard</th>
<th>On Board Disconnectors A 125 to 630 Amp for DC under 85VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Temperature</td>
<td>-40°C to +70°C</td>
</tr>
<tr>
<td>Number of Poles</td>
<td>1 to 4 poles with same or different current ratings (for more poles please consult)</td>
</tr>
</tbody>
</table>

FEATURES & BENEFITS

- No Load operation, Indoor Type equipment
- This technology offer various configurations - Disconnector or Change-over - 1 to 2 different positions - 1 to 4 poles - different ratings possible per pole
- High short-circuit currents withstand
- Electrical contact by connecting plates and movable contacts silvered copper.
- Temperature rise at nominal current is less than 40°K (with 70°C max. ambient temperature)
- Visible break by direct seeing of the mobile silver-plated copper contacts.
- Large isolation air and creepage distance.
- Easy connections to Copper busbar by bolting and self-supporting.
- Self-cleaning blade contacts, ideal for polluted environments.

APPLICATIONS

- Battery isolation, auxiliary circuit
- Power control with the possible functions to disconnect, to change-over or to earth the power source of rolling stock applications (Train, Tramway, Metro)

STANDARDS

- IEC 60077-1
- IEC 60077-2
- IEC 61373
- EN 50124

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.
**PRODUCT RANGE**

### On-board Type A 85VDC

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Voltage drop</th>
<th>Number of poles/phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 10 1P 125A TSDC</td>
<td>10 mV</td>
<td>1 pole disconnector</td>
</tr>
<tr>
<td>A 10 1P 200A TSDC</td>
<td>10 mV</td>
<td>1 pole disconnector</td>
</tr>
<tr>
<td>A 10 1P 320A TSDC</td>
<td>10 mV</td>
<td>1 pole disconnector</td>
</tr>
<tr>
<td>A 10 1P 630A TSDC</td>
<td>10 mV</td>
<td>1 pole disconnector</td>
</tr>
<tr>
<td>A 12 2P 200A TSDC</td>
<td>10 mV</td>
<td>2 poles change-over</td>
</tr>
<tr>
<td>A 12 2P 630A TSDC</td>
<td>10 mV</td>
<td>2 poles change-over</td>
</tr>
<tr>
<td>A 10 2P 125A TSDC</td>
<td>10 mV</td>
<td>2 poles disconnector</td>
</tr>
<tr>
<td>A 12 2P 125A TSDC</td>
<td>10 mV</td>
<td>2 poles change-over</td>
</tr>
<tr>
<td>A 10 2P 320A TSDC</td>
<td>10 mV</td>
<td>2 poles change-over</td>
</tr>
<tr>
<td>A 10 2P 630A TSDC</td>
<td>10 mV</td>
<td>2 poles disconnector</td>
</tr>
</tbody>
</table>

### DIMENSIONS

**A 85VDC Disconnector : 1 POLES 200Amp - 2 POSITIONS 1-0 (Open - Closed) MANUAL OPERATION**

dwg 1045573

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**Disconnector FA range 85VDC 125 to 630Amp**

**DIMENSIONS**

A 85VDC Disconnector : 2 POLES 200Amp - 2 POSITIONS 1-0 (Open - Closed) MANUAL OPERATION
dwg 808113

![Disconnector Diagram]

**FUNCTIONS**

**Salty / Laden atmosphere**

All the FA Disconnector range can withstand 96h00 (inside and outside) under salty atmosphere (more time withstand under request).
Disconnector FA range 85VDC 125 to 630Amp

FUNCTIONS

Connection plate adaptation
To adapt the disconnector connexion to the Busbar or cables.

Training and technical support
All around the world, Mersen technical team can help you for technical support and can offer you customized training sessions for your Maintenance team.

LCC; RAMS; Type tests
Mersen teams can supply Life Cycle Costs (LCC), Reliability Availability Maintainability Safety (RAMS), and Failure Mode and Effect Analysis (FMEA) studies. They can operate Qualification type tests.

ACCESSORIES

Lubricants

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Item number</th>
<th>Package</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper Grease</td>
<td>L108501</td>
<td>1 piece</td>
<td>1 kg</td>
</tr>
</tbody>
</table>