Automate your process for traceability, time and money savings

DEFINITION
A SWITCHING MATRIX IS A SCANNER (RELAYS) DEDICATED TO AUTOMATE A TEST PROCESS. IT ALLOWS YOU TO AUTOMATICALLY TEST SEVERAL PRODUCTS AT THE SAME TIME, OR SEVERAL POINTS OF A DEVICE UNDER TEST. OUR MATRICES ARE ORGANIZED INTO MODULES (MODULO 4) IN ORDER TO GIVE YOU A GREAT FLEXIBILITY. EITHER YOU CAN DRIVE OUR SYSTEM OR OUR SOFTWARE SOLUTION CAN

APPLICATION
WHEN SEVERAL HIGH VOLTAGE OR GROUND BOND TEST POINTS ARE NEEDED, IT BECOMES INTERESTING TO AUTOMATE THE TEST PROCESS FOR SAVING TIME AND MONEY, SECURING THE TESTING, AND TRACE ALL RESULTS. OUR MATRICES ARE DEDICATED FOR THAT JOB

- power supplies, inverters (input tested against output)
- cables (when switching power is a must)
- motors, harnesses, cable assemblies (groups of cables tested against other groups)
- IEC 335 household manufacturer (washing machines, coffee machines, fridges, heaters, boilers, ...)
- IEC 204 industrial equipment (compressor, electrical tools, ...)
- IEC 598 lighting industry (street lights, professional lighting, medical lighting, bulbs, ...)
- IEC 601 medical industry (scanners, surgery equipments, X-ray, electrical beds, ...)
- IEC 950 information technology industry (modems, satellite receivers, servers, printers, cash dispensers, ...)
- IEC 61730-2, IEC 61215, IEC 61646, UL1703 (solar panels, inverters, converters, solar cables, solar connectors)

SPECIFICATION OVERVIEW
FROM 4 TEST POINTS TO MUCH MORE, OUR SWITCHING MATRICES COVER A WIDE RANGE OF POWERS

- Continuity test in 2 and 4 wires mode up to 40 A
- Insulation test up to 2121 V DC
- Hipot test up to 100 KV AC and 100 KV DC / 100 A
- For MX series, discharge systems are available
## Technical specifications

### Selector guide
From the below board select the right product according to your application

<table>
<thead>
<tr>
<th>Sefelec</th>
<th>Switching Matrix range</th>
<th>Switching module</th>
<th>Number of test points</th>
<th>Switching Matrix (scanner) type</th>
<th>Ground continuity (Ground bond test) / 2/4 wires continuity test</th>
<th>AC/DC Dielectric strength test (Hipot test) / Flowing current test</th>
<th>DC Insulation test / resistance test</th>
<th>Interface</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXS3200-HV</td>
<td>EXS3200-MOD-HV4</td>
<td>4-128</td>
<td>High voltage</td>
<td>-</td>
<td>5 kV AC / 2 A max 7 kV DC / 2 A max</td>
<td>1 kV DC 200 GΩ max</td>
<td>RS232, dry contacts</td>
<td>Yes in option</td>
<td></td>
</tr>
<tr>
<td>EXS3200-HC</td>
<td>EXS3200-MOD-HC4</td>
<td>4-128</td>
<td>High current</td>
<td>40 A AC/DC max from 1 mΩ</td>
<td>-</td>
<td>-</td>
<td>RS232, dry contacts</td>
<td>Yes in option</td>
<td></td>
</tr>
<tr>
<td>EXS3200-HC</td>
<td>EXS3200-MOD-HC4</td>
<td>4-128</td>
<td>High current</td>
<td>40 A AC/DC max from 1 mΩ</td>
<td>5 kV AC / 2 A max 7 kV DC / 2 A max</td>
<td>1 kV DC 200 GΩ max</td>
<td>RS232, dry contacts</td>
<td>Yes in option</td>
<td></td>
</tr>
<tr>
<td>EXS3200-HC</td>
<td>EXS3200-003-00</td>
<td>4-128</td>
<td>Low resistance (able to withstand 5 kV AC*)</td>
<td>5 A DC max 4 wires from 1 mΩ</td>
<td>-</td>
<td>-</td>
<td>RS232, dry contacts</td>
<td>Yes in option</td>
<td></td>
</tr>
<tr>
<td>EXS3200-HC</td>
<td>EXS3200-004-00</td>
<td>4-128</td>
<td>Medium current</td>
<td>5 A DC max 4 wires from 1 mΩ</td>
<td>5 kV AC / 2 A max 7 kV DC / 2 A max</td>
<td>1 kV DC 200 GΩ max</td>
<td>RS232, dry contacts</td>
<td>Yes in option</td>
<td></td>
</tr>
<tr>
<td>SYNOR 5000 Series</td>
<td>8-100 000</td>
<td>10 A DC max</td>
<td>High voltage Medium current</td>
<td>10 A DC max</td>
<td>6 kV AC / 2 A max 6 kV DC / 2 A max</td>
<td>20-2121 V DC 50 kΩ - 5 GΩ max</td>
<td>Ethernet</td>
<td>Winpass</td>
<td></td>
</tr>
<tr>
<td>MX Series</td>
<td>2-512</td>
<td>Very high voltage</td>
<td>Very high current</td>
<td>2 A typical</td>
<td>100 kV AC / 100 A max 100 kV DC / 100 A max</td>
<td>1.5 kV DC 200 GΩ max</td>
<td>RS232, 0-10V, PLC in option</td>
<td>Test Lab</td>
<td></td>
</tr>
</tbody>
</table>

* mostly used when some low resistance and high voltage points are common

For product datasheet, options and accessory details, or for more technical information, go to our website

[www.sefelec.com](http://www.sefelec.com)