FACTORY AUTOMATION
Recommended Replacement of Mitsubishi Electric Magnetic Contactors and Magnetic Starters

Please check your Magnetic Starters and Magnetic Contactors.

Have you been using your Magnetic Contactors and Magnetic Starters for 10 years or more? It is recommended that these parts are replaced after about 10 years of use.

Recommended time for replacement: 10 years after beginning use

- Under standard usage conditions, we recommend replacing the product every 10 years.
- If the number of open/close operations has exceeded that specified for the product, we recommend replacing it, even if it has been used for less than 10 years.

* For the number of open/close operations, please refer to the following table:

<table>
<thead>
<tr>
<th>Mechanical durability (ten thousand times)</th>
<th>N10 to N35/ T10 to T30</th>
<th>N50 to N800/ T65 to T100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1000</td>
<td>500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical durability (ten thousand times) (Category AC-3)</th>
<th>N10 to N65/ T10 to T65</th>
<th>N80 to N300/ T80 to T100</th>
<th>N400 to N800</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>200</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

Causes of Degradation, Degradation Warning Signs, and Predicted Failure

- Degradation factors
  - Environmental factors
  - Electrical factors
  - Mechanical factors
  - Other factors

- Warning signs
  - Rust/discole
  - Abnormal heating
  - Deformation/breakage
  - Abnormal odor/abnormal sound
  - Repeated occurrence of thermal trip

- Occurrence of failure
  - Conduction failure
  - Welding
  - Insulation failure
  - Malfunction
  - Coil layer short circuit

Machinery damaged
Electric shock
Production line stopped

Reference: "指导書更新ガイダンス (Guidance for Replacement of Magnetic Starters and Magnetic Contactors)" San5236, The Japan Electrical Manufacturers’ Association (JEMA)
How to check the manufacturing date

N Series

Example: 00 2000 February

* The last two digits of the Western calendar year + the month are displayed.
  The months from October to December are shown by letters of the alphabet.
  Example) September → 9, October → X, November → Y, December → Z.

K Series

Example: 90 1990 September

A Series

Example: 90 1990 June

When the lifespan (10 years) has expired, it is recommended to replace the product.

Since there is a high possibility that the lifespan (10 years) may have expired, it is recommended to replace the product.

Table for Replacement of Old Series with T Series (Current Products)

Symbols in columns of the replacement table stand for compatibility between each series and the current products as shown below:

○ : Replaceable
△ : Replaceable by adding an adapter dedicated to the S-T/N Series (available separately).
▲ : Not replaceable with standard models. Replaceable with S-NXA type models.
× : Not replaceable

<table>
<thead>
<tr>
<th>Mitsubishi Electric T Series</th>
<th>S-T10</th>
<th>S-T12</th>
<th>S-T20</th>
<th>S-T21</th>
<th>S-T25</th>
<th>S-T35</th>
<th>S-T50</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mitsubishi Electric T Series</th>
<th>S-T65</th>
<th>S-T80</th>
<th>S-T100</th>
<th>S-N125</th>
<th>S-N150</th>
<th>S-N180</th>
<th>S-N220</th>
<th>S-N300</th>
<th>S-N400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitsubishi Electric N Series (10A to 95A discontinued)</td>
<td>S-N65</td>
<td>S-N80</td>
<td>S-N95</td>
<td>S-N125</td>
<td>S-N150</td>
<td>S-N180</td>
<td>S-N220</td>
<td>S-N300</td>
<td>S-N400</td>
</tr>
<tr>
<td>Mitsubishi Electric A Series (discontinued)</td>
<td>S-A60</td>
<td>S-A65</td>
<td>S-A80</td>
<td>S-A100</td>
<td>S-A120</td>
<td>S-A125</td>
<td>S-A150</td>
<td>S-A220</td>
<td>S-A300</td>
</tr>
</tbody>
</table>

*1 Depending on the use, models stated as replaceable in the table above may not be correct.
*2 Models with a thermal relay are named ‘MSO’.
*3 For 125A and above, T Series lineup is not available.