

Large Power Transformers



We are now proud to offer *Mitsubishi Electric* large power transformers for delivery to the US, building on over 80 years of experience in the transformer industry. Our high quality transformers are manufactured at the *Mitsubishi Electric Aiko Works*, located in Japan—one of the most advanced transformers manufacturing facilities in the world.

The *Mitsubishi Electric Aiko Works* has produced transformers with ratings up to 3000 MVA bank-capacity and 1050 kV voltage class, and is a world leader in research and development of tomorrow's transformer technology. Since 1910, *Mitsubishi Electric* has supplied a total transformer capacity of more than 740 million kVA.

For the US market, we are currently focusing on providing large power transformers primarily of 300 MVA, 230 kV and greater—where many of the benefits of our shell-form design can be realized. We also offer generator step-up transformers for combustion turbine, combined cycle and other power plant applications.



Mitsubishi Electric is a leading manufacturer of shell-form design transformers. The shell-form design is utilized for all *Mitsubishi Electric* transformers larger than 120 MVA, of the 230 kV voltage class and higher. The shell-form design offers many benefits for these larger class power transformer ratings. Some of the advantages are:

- Compact, space saving design
- Excellent short circuit capability
- Excellent mechanical strength
- High design versatility
- Low losses
- Low noise level
- Efficient core cooling
- High reliability



In addition to our oil-filled shell transformers, *Mitsubishi Electric* can also supply SF6 gas insulated transformers for applications where a non-flammable, non-polluting transformer is desired, such as in densely populated areas, inside buildings, and in areas near lakes and rivers where potential oil leakage from a conventional transformer would be harmful to the environment.

Other products we can offer are shunt reactors, phase shifters, split-winding transformers, integrated transformers and special divided construction type transformers. These special divided con-

struction type transformers are used for applications where size and weight limits of the transformer are restricted due to certain transportation restraints.



Mitsubishi Electric also supplies on-line dissolved gas analyzers (on-line DGA) for monitoring the level of combustible gases present in the transformer insulating oil. These on-line DGA devices can be supplied as part of a new *Mitsubishi Electric* transformer, or can be installed on any existing transformer that may require monitoring of the combustible gas levels present in the insulating oil. Portable DGA devices are also available.

Mitsubishi transformers have provided their customers with transformers featuring excellent performance and a level of high reliability proven through more than 80 years of operational performance and experience. We will continue to be a leader in the development and manufacturing of power transformers, supplying the largest, highest quality transformers to meet the ever-increasing needs of the energy transmission and distribution systems throughout the world.