Switchgear must be selected based on the equipment’s ratings and capabilities to satisfy application requirements. While the majority of installed medium voltage switchgear is air-insulated, here are some key aspects of gas insulated switchgear (GIS) for consideration:

1. **Improved dielectric strength**
   - By using gas insulation instead of air, GIS is compact and virtually maintenance-free with the vacuum interrupter and three-position switch inside the tank.

2. **Reduced space requirements**
   - GIS enclosures are up to 70 percent more compact in some voltage classes, which saves on building costs and frees up space for revenue-generating equipment.

3. **Less complex and time-intensive annual maintenance**
   - With the majority of medium-voltage components sealed and protected from the environment, GIS avoids the need for enclosed parts to be cleaned. There is also less of a need for operators to interact with the equipment, and therefore less likelihood of incidental contact.

4. **Decreased likelihood of arc events**
   - A shielded and grounded, solid-insulated busbar system provides phase-to-phase isolation and reduces the risk of phase-to-phase faults. Additionally, with the majority of medium-voltage parts sealed, GIS technology avoids accidental arcing that could be caused by animal intrusion and dust.

By design, construction and operation, gas insulated switchgear increases productivity while reducing risk for your operation. Further, at 27 and 38 kV ratings, gas insulated equipment takes up a lot less space to minimize building costs and maximize footprint for revenue-generating equipment.

Learn more about medium-voltage switchgear options.
For more information about Eaton’s GIS technology visit Eaton.com/XGIS.