

APPLICATION GUIDE- AG260

SKID MOUNTED MEDIUM VOLTAGE SWITCHGEAR

Products: SAI SlimVAC 5kV Switchgear, SEL relays, SAI Master Control System

Issue: A new datacenter being constructed on an aggressive timeline required 5 kV switchgear lineups to be assembled, wired, tested, and skid mounted in order to ensure a fast and reliable installation.

Solution: SAI developed a solution utilizing the SAI SlimVAC Arc Resistant switchgear, SEL 487B, 700G, & 751 protective relays, and an SAI integrated master control system. SAI then worked with a structural engineering firm to develop a skid capable of supporting the required switchgear lineups during transportation and installation.

At the time of fabrication, the individual switchgear sections were welded to the skid. Then all bus connections were made, and all control wiring was run through an overhead wire trough and terminated to the equipment.



The assembly was equipped with pre-punched knockouts and bushings in the power cable compartment floor panels. The site was designed with underground tunnel troughs for conduits, so the skid mounted assembly could be placed over the floor openings, allowing for quick and easy training of all power and control cables into the lineup. All control, signal and communication conductors that were to be terminated at the site to external systems were run through the wire trough to a dedicated area in the master control compartment, minimizing the time required to make these connections. The skids were provided with both lifting eyes and removable fork pockets to allow for either overhead crane lifting or fork lift access at the site.

Result: With the SAI skid mounted solution, the data center was built quickly and efficiently, saving both time and money.

