

# VFD HOUSES

## DELIVERING CUSTOMIZED TURNKEY SOLUTIONS FOR YOUR POWER REQUIREMENTS

VFD power houses are custom designed with the highest quality material combined with the latest generator and superior AC drive technology and controls. Our VFD power houses are designed to deliver reliable performance in demanding drilling environments. SMEC designed VFD house is incorporated with all the necessary arrangements for the requisite power solutions required for AC drives, MCC, control system components, all the hardware required to generate and distribute power for the available equipment on the rig, VFD control cubicles and other instruments that support the system are present in VFD House / System. The system operates within the range of 380 V to 600 V AC.

The customization of the systems for designing shall be undertaken with the customer input for completing a user-friendly system that can be made in a scalable architecture. We also support for optimization of user requirements in respect to distribution panels, Orientation and handling capability viz. Top lifted, skidded, or trailer mounted as per the drilling contractor's site layout and transportation methodology. The system offers superior performance and control for drilling operations with optimal monitoring systems.



## WHY SMEC?

### Features:

- Advanced AC variable frequency drives (VFD) with integral dV/dT filters for compatibility with Drawworks
- Top Drive and Mud Pumps
- Generator controls for automatic breaker closing synchronization and load sharing
- Programmable Logic Controllers (PLCs) and communication networks for ease of operation
- Formed wall construction with insulation in walls, ceiling, and under skid
- Variety of transportation characteristics (skid mounted, top lifted, or trailer mounted)
- Covered and protected subfloor wiring with removable plates and rubber matting
- HVAC systems rated and designed for 100% sensible heat loads
- Greater dynamic braking and rectifier capacity for longevity
- Includes remote input/output boxes and critical sensors
- Two personnel doors with convenient, foldable steps
- Porch mounted equipment includes power and lighting transformers, VFD dynamic braking resistors
- Streamlines energy delegation and conversion for reliable service