

Artificial Lift



Switchboards and
Transformers

Switchboards

Switchboards are employed on applications that do not require the speed modifications and efficiency optimizations provided by a variable-speed drive. A switchboard is installed on the downhole side of a step-down transformer, and provides the means to energize and de-energize equipment when required.

Summit ESP® – A Halliburton Service provides switchboards that are preconfigured for the installation of Summit ESP motor controllers.

Motor controllers allow the use of set points to protect motors and electrical systems, and to shut down the ESP system when operating conditions warrant.

The Summit ESP motor controller features an intuitive touchscreen control panel with the specific words instead of codes, along with an interface designed for simplicity. Any feature can be accessed in three or less steps without scrolling. Terminology and menu structure are nearly identical to that of the Summit ESP variable-speed drive, providing continuity for operators and simplifying operations throughout the field.

Summit ESP switchboards come standard with rugged heavy-gauge-steel, pad-mountable NEMA 3R enclosures and surge arrestors.

3.6 KV Switchboard Technical Specifications

Number	Description		Unit	NEMA 3R Enclosed
1	Rated voltage		kV	3.6
2	Rated current		Amps	40-200
3	Rated making capacity		kA	4
4	Rated breaking capacity		kA	3.2
5	Limit breaking capacity		kA	4
6	Short time withstand current		kA/S	4
7	Short circuit breaking current		kA	≤40
8	1 min. power frequency withstand voltage	Between phases, phase to earth (lightning arrester removed)	kV	13
		Vacuum breaks	kV	32
		Secondary circuit	kV	2
9	Mechanical lifetime	Vacuum contactor	10,000 times	200
10	Electric lifetime	Vacuum contactor	10,000 times	20 (AC-3)
11	Secondary control	Rated voltage	V	120AC
		Rated power	VA	≥800/100 (attracting/holding)
12	Weight		lb	915
			kg	415

Switchboards

Part Number	Description
800313	Switchboard, 1500 V, with Recording Ammeter
800105	Switchboard, 1500 V, with Motor Controller, Display, Fuses, No Recording Ammeter
800106	Switchboard, 3600 V, with Motor Controller
800104	Switchboard, 3600 V, with Motor Controller, Recording Ammeter
800103	Switchboard, 5000 V, with Motor Controller

Transformers

Transformers are available in a variety of kVA ratings and construction types, with UL/cUL certifications for most applications, such as three-phase pad mount, single-phase pole mount, step-up, step-down, and combination phase-shifting / step-down units. Step-down / phase shifting units are three-phase pad.

Please contact your local Summit ESP® representative for detailed information about our transformers.

Step-Up Pad Mount

Part Number	Description
900016	Transformer, 70 kVA, 480 - (1097-1900V)
900059	Transformer, 83 kVA, Dry, 480 - (600-1602Y)
900014	Transformer, 100 kVA, 480 - (600/2078V)
900001	Transformer, 130 kVA, 480 - (750-2685V)
900011	Transformer, 150 kVA, 480 - (750-2685V)
900057	Transformer, 200 kVA, 480 - (1100-3811V)
900004	Transformer, 260 kVA, 480 - (1100-3811V)
900012	Transformer, 400 kVA, 480 - (1100/3811V)
9000121	Transformer, 400 kVA, 480 - (1400-4850V)
900005	Transformer, 520 kVA, 480 - (480:1100-3800V)
9000051	Transformer, 520 kVA, 480 - (1400-4850V)
900010	Transformer, 750 kVA, 480 - (1250/4330V)
900015	Transformer, 1000 kVA, 480 - (1260-4988V)

- Notes:**
1. UL/cUL available for most transformers on request
 2. Other sizes and configurations available on request