



SUB1 Motor Operator



Catalog SUB1-150483AL

Type: SUB1

Torque: 10,000, 15,000, 20,000, 30,000 inch-lbs

Operating Speed: 0-2, 3-5, 6-8, 9-11 seconds

Motor Control Voltage: 48, 125 VDC

Description

A single speed, torsional output motor operator for the control of group operated substation disconnect switches. This unit will operate all configurations and brands of switches without limitation. It is efficiently designed to be powerful yet compact, with a small footprint and light unit weight.

Application

Provides local and remote operation of substation switches up to 500 kV.

Features & Benefits

- Powerful gear mechanism and motor provides ample torque and speed for any switch configuration and size
- Simple, efficient design enhances product reliability
- Maintenance-free
- Low cost
- Easy to install
- Operates all makes and models of substation switches without limitation

Ordering Information

Standard Equipment

Type "SUB1" motor operators come complete with a local/remote switch, open/close push buttons and local indicating lights, 8 form "c" auxiliary contacts for customer use, DC knife switch, AC knife switch, DC fuse protection, AC fuse protection, 100 watt heater and thermostat, convenience receptacle, terminal blocks, interior convenience light and switch, torque relief knob, manual operation swing handle and interlock, external coupling/de-coupling mechanism, 2" IPS control pipe coupling, removable door with lift-off hinges, louvre with removable screen/dust filter, packlockable door latch, drawing tube, aluminum enclosure and a removable conduit plate.

Status Points

"SUB1" operators are provided with status points for local/remote switch position indication, loss of DC voltage, loss of AC voltage, swing handle latch status and position indication for the eight auxiliary contacts. Status points are NO and NC.

Optional features, ratings and product specifications are listed on the following page.

To Be Specified on Order

To obtain pricing information or to place an order, the following minimum information must be specified:

- Catalog Number
- Torque: 10,000, 15,000, 20,000 or 30,000 inch-lbs
- Motor Control Voltage: 48 or 125 VDC
- Operating Speed Range: 0-2, 3-5, 6-8, 9-11 seconds
- Mounting structure with details and control pipe offset dimension
- IPS of switch control pipe
- Direction to open: CW or CCW
- Optional equipment or non-standard features
- Manufacturer and catalog number of switch to operate
- Customer specifications

An Order Specification checklist is available to assist you in organizing and completing the information required. You may obtain a copy of the checklist by contacting SEECO, your local sales representative, or on-line at www.seecoswitch.com



Catalog Numbers and Ratings

Operating Voltage	Operating Speed	Enclosure Material	Torque (inch-lbs)			
			10,000	15,000	20,000	30,000
48 VDC	0-2	AL	SUB1-100480AL	SUB1-150480AL		
	3-5				SUB1-200483AL	
	6-8				SUB1-200486AL	
	9-11					SUB1-300489AL
125 VDC	0-2	AL	SUB1-101250AL	SUB1-151250AL		
	3-5				SUB1-201253AL	
	6-8				SUB1-201256AL	
	9-11					SUB1-301259AL

Optional Equipment

Open/Closed Designator Assembly
Switch Position Status Indic. (dry contact)
Momentary local/remote switch
Aux. Switch Expansion Board (8 form "c")
Mounting Bracket
Operation Counter
Universal Joint for 1-1/2" IPS
Universal Joint for 2" IPS
Pipe Coupling for 1-1/2" IPS
Miscellaneous Optional Feature(s)

Letter

B
G
K
L
M
Q
S1
S2
W
Z

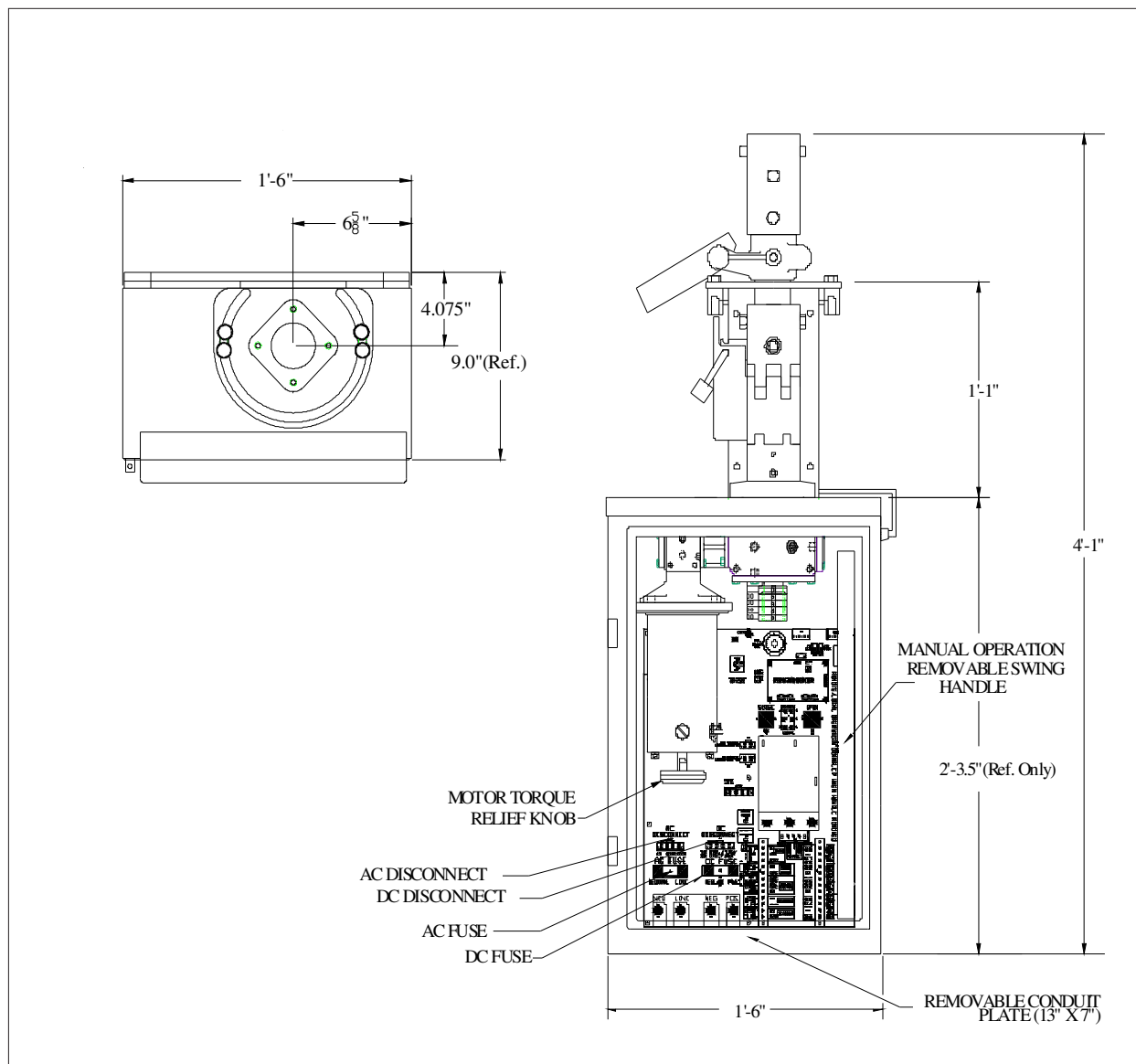
(1) To specify an option, add a hyphen (-) to the base catalog number and your desired option by letter. Reference the following example: SUB1-151253AL-GQ for optional switch position indication and operation counter.

(2) For a more complete description of optional equipment, please refer to the Overview Section for the SUB product family, which immediately precedes this catalog section.





Dimensional Data



Specifications

Operating Voltage	48 or 125 VDC
Heater and Receptacle	120 VAC
Temperature Range	-40° to +85° C
Motor	1 HP DC
Pipe Coupling	1-1/2, 2 inch IPS
Torque (inch-lbs)	10,000, 15,000, 20,000, 30,000
Operating Speed	0-2, 3-5, 6-8, 9-11 seconds (180°)
Rotation	0-270°

(1) A complete product specification can be found immediately following the SUB product catalog section. The specification document provides a more detailed technical description than this catalog, with an emphasis on industry standards, design criteria, and product features and functionality. Sample specifications (templates) for customer use in creating their own internal specification, can be obtained by contacting SEECO's Engineering department.



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