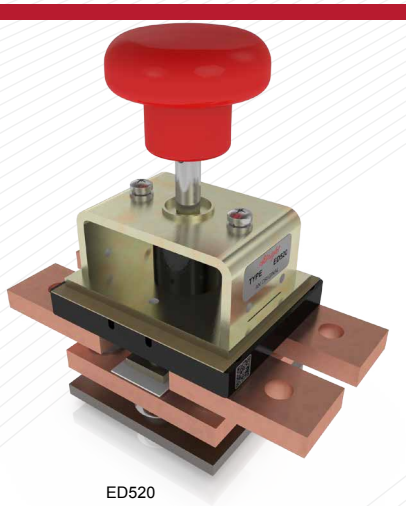
The ED520 range of switches have been designed to provide a rapid means of disconnecting batteries or other power supplies in the event of serious electrical faults. Whilst the switches are primarily intended for use with battery powered vehicles they are also suitable for use with static power systems. All types are capable of safely rupturing full load battery currents in the event of an emergency.

- Uninterrupted current - no or infrequent load switching requirements (maintains a lower contact resistance).

The ED520 is a manually operated device with a snap action for both opening and closing of the main contacts. The ED520 is easy to install (see drilling details) and can be mounted using the main terminal busbars or secured with supplied M5 posidrive mounting screws on the frame of the device.



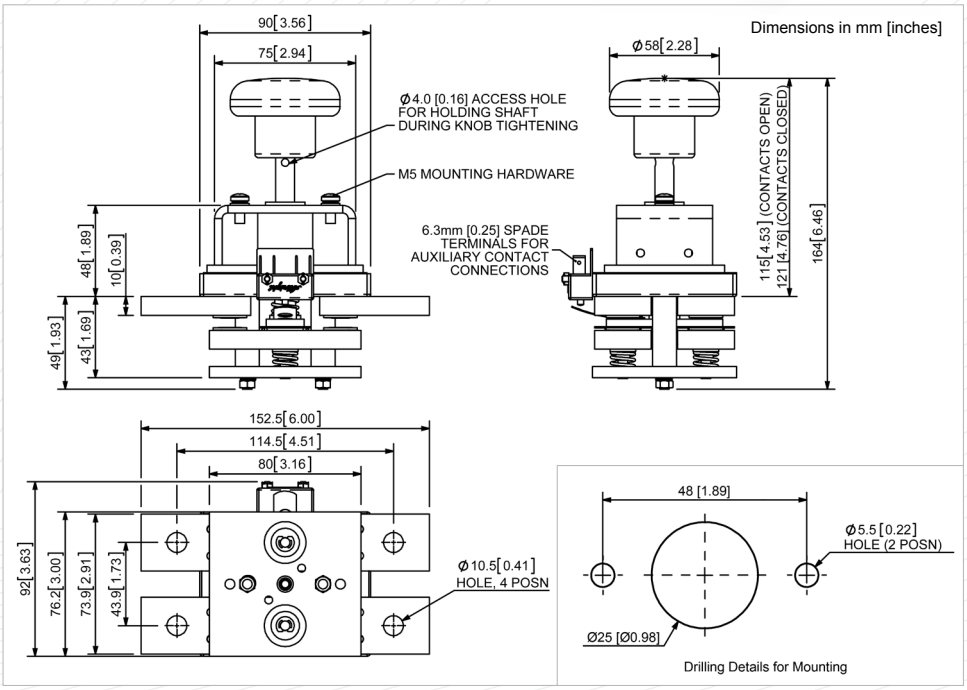
ED520

Precautions:

The switch is to be used to rupture current in an emergency or as a no-load isolator.

Do not use as a regular On-Load Switching Device.

Application	Uninterrupted
Thermal Current Rating (I^th)	500A
Intermittent Current Rating:	
30% Duty	915A
40% Duty	790A
50% Duty	705A
60% Duty	645A
70% Duty	600A
Overload Currents that can be Ruptured:	
ED520	750A at 60V D.C.
Maximum Recommended Contact Voltages (U_e):	
ED520	60V D.C.
Typical Voltage Drop per pole across New Contacts at 100A	20 - 50mV
Mechanical M.T.B.F	>10 x 10^3
Operating Ambient Temperature	- 40˚C to + 60˚C
Guideline Contactor Weight:	
ED520	1800 gms
With Auxiliary	+ 20 gms
Auxiliary Details	
Auxiliary Thermal Current Rating	15A
Auxiliary Contact Switching Capabilities (Resistive Load):	
	15A at 24V D.C.
	10A at 48V D.C.
	5A at 96V D.C.
Advised Connection Sizes for Maximum Continuous Current	
Copper busbar	322mm² [0.50 inch²]
Key: ◢ = *Uninterrupted*	
Note: *Where applicable values shown are at 20˚C*	

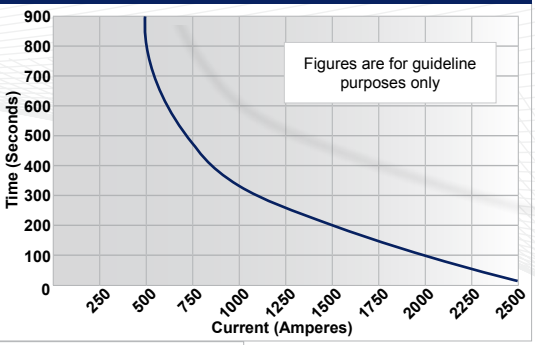


The Use of Battery Disconnecting Switches in Electric Vehicles

Modern battery powered electric vehicles are inherently very reliable and safe. However, even when sophisticated electronic controllers are used it is desirable to have a means of disconnecting the battery in the event of an emergency, such as a vehicle failing to stop or an electrical short circuit.

In many countries it is mandatory to fit one or more devices to achieve an emergency disconnection of the battery.

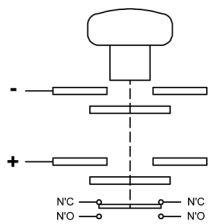
ED520 Contactor Performance



Contact Performance Key:

Uninterrupted Current

Connection Diagram



ED520 Available Options

General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	X	
Magnetic Blowouts†	X	
Magnetic Blowouts - High Powered†	X	
Mounting Brackets	X	
Closed Contact Housing	X	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	X	
Lockable	X	
Contacts		
Large Tips	X	
Textured Tips	X	
Silver Plating	○	

Key: Optional ○ Standard ● Not Available X

† Connections become polarity sensitive