

XD Series Flex 2 Single/Double/Triple Bi-Stable Relays & VSR/ACRs

500 Amp Continuous Capability Per Relay / Extremely Compact Footprint

Available With or Without Intuitive Front Facing Manual Override Knobs with Ability to Lock Relays ON or OFF for Servicing

Flexible Functionality via Dip Switches, utilize cach as a Relay/Battery Disconnect, Voltage Sensing Relay, or Low Voltage Disconnect

Improved Alternative Replacement to Legacy Remote Switching Solutions.

Remote ON/OFF/Auto Inputs Allows Forced Close or Open or Allowing Automatic Operation Based on Voltage Sensing

Local and Remote LED Indicators Per Relay

Mechanical Only Contactor Options













Ultra-Low Power Draw: Lowest off-state current draw in industry (1.3 mA) combined.



Diagnostic Feedback via optional external LEDs control lines and on-board LEDs for each relay



Simple & Robust Installation: Sealed plugs/harnesses included.



Bullet-proof Construction: Sealed unit, high temperature materials allow mounting anywhere on vehicle. Integrated thermal overload protection



Flexible Application Options: Install as a Remote Battery Disconnect Switch, Voltage Sensing Relay, or Low Voltage Disconnect. On/Off trigger via external signal and/or alternator voltage sense.



Optional Kill Switch eliminates need for using thermal circuit breakers as service maintenance switches, reducing voltage drop to electrical loads.



Meets Stringent OEM Standards for electrical transient self-protection



4 Year Industry Leading Warranty

Install Guidelines & Dip Switch Settings

(1) DISCONNECT BATTERY FROM POWER DISTRIBUTION SYSTEM BEFORE INSTALLING PRODUCT TO PREVENT ELECTRICAL SHOCK OR PRODUCT DAMAGE (2) INSTALL A 7.5 - 10.0 A FUSE ON THE BLACK GROUND RETURN WIRE

(3) DIP SWITCHES ARE SET FOR INDIVIDUAL RELAYS WITHIN AN XD RELAY WITH TWO OR **MORE RELAY POSITIONS**

VSR "ON"

Voltage

12.5 /

25.0

12.9 /

13.1

26.2

13.5 /

27.0

VSR

Relay

VSR or Relay



VSR "OFF"

4 5 6 Voltage

12.0/24.0

□□□12.3/24.6

□□□12.5/25.0

□□□12.6/25.2

DS1 determines the function of the device. If DS1 = OFF, relay will act as a simple **Battery Disconnect SwitCh Remote Relay.** If DS1 = ON, relay will operate as a Voltage Sensing Relay (VSR) and will utilize DS2-DS6 to determine VSR response per individual application requirements

DS2-DS3: Determines 120 sec ON Trigger Voltage, 30 sec ON Voltage is 0.6 (1.2) Vdc higher. Once above this voltage, time delay to turning the relay ON is counting until ON event. If voltage is less than this setting, time delay is re-set to 0.

DS4-DS6: Determines OFF Trigger Voltage. See methods of operation for device response to voltages below this setting. Setting below 12.7 (25.4) Vdc allows accessory loads partial use of start battery energy, while ensuring sufficient starting = Default ability.

General Specifications (Each Relay) 8.0 - 36.0 Auto-Ranging Input Voltage Range (Vdc) Nominal Voltage (Vdc) 12 24 17.0 34.0 Over Voltage Protection (Vdc) (5 sec) State Change Current (20 msec) 5.0 A 3.0 A Standby Current (mA) 1.3 1.3 Live Current Switching -50,000 cycles 12V/300A 24V/300A 1,000,000 cycles Mechanical Switching Life 2/0 AWG - 30sec/5min/Continuous 1000 / 400 / 225 Amps 4/0 AWG - 30sec/5min/Continuous 1100 / 400 / 300 Amps 2x 4/0 AWG - 30sec/5min/Cont. 1600 / 700 / 500 Amps **Hardware Material** Stainless Steel Self-Locking **Terminal Stud Torque** 120 in-lbs **LED/Aux Output Max Drive Current** 400 milli-Amps Typ Source Current for All Ctrl Lines 10 micro-Amps **Operating Temperature Range** -40 to 105 C **Ignition Protection** SAE J1171 / ISO 8846

_LED Indicators	Local LED	Rem LED
Relay OFF - Normal	Off	Off
Relay ON - Normal	On Off	On
Relay On - Pending Off	On w/3x Off Flashes	On
Relay Off - Pending On	Off w/3x On Flashes	Off
Relay Off - Start Isolation Mode	Off w/4x On Flashes	Off
Relay Off - Over-Voltage Mode	Off w/5x On Flashes	Off
Manual Override Engaged	Off w/2x On Flashes	Off w/2x On Flashes
Relay Off - Power Hibernation Mode	Off w/1x On Flash	Off
Power Up / Manual Mode Exited and Pending On or Off Event	Continuous Flashing	Off

Detailed Operational Modes & Responses

Relay Mode - Relay Closes (Turns ON) Immediately if:

1) Voltage on Either Input to Relay > 9 Vdc (minimum operating Voltage) and either any of the following two conditions exist:

2) Rem On/Off Ctrl (Red) wire is connected to +Vdc (maintain if desire is for device to stay Closed) or

3) Momentary ON Signal Wire (Brown) is Connected to +Vdc Until Device Closes, Up to 3 seconds. (+Vdc may then remain or be removed while device remains Closed either way)

4) DS1 = Off, Setting Device as an Simple Relay Relay Mode - Relay Open (Turns OFF) Immediately if:

1) Voltage on Either Input to Relay > 9 Vdc (minimum operating Voltage) and either any of the following three conditions exist:

2) Rem On/Off Ctrl (Red) wire changes from +Vdc to Floating or 3) Rem On/Off Ctrl (Red) wire is connected to Ground (may be momentarily or permanently connected for device to stay Closed) or

4) Momentary OFF Signal Wire (Green) is Connected to +Vdc Until Device Opens, Up to 1 Second (+Vdc may then remain or be removed while device will remain Open either way)

5) Rem Ctrl (Red) wire and Momentary ON Signal Wire (Brown) must not have +Vdc applied, they will override Off Signal from Green Wire

6) DS1 = Off, Setting Device as an Simple Relay VSR Mode - Relay Closes (Turns ON) after 120 sec if:

Voltage on Either Input > V_On as determined by DS2-DS3 and Rem Ctrl (Red) wire is not connected to +Vdc or Gnd and

3) Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) Not

Connected to +Vdc

4) DS1 = On, Setting Device as an Voltage Sensing Relay (VSR)

VSR Mode - Relay Closes (Turns ON) after 30 sec if:

1) Voltage on Either Input to Relay > V_on + 0.6 V (1.2V if on 24V System) as determined by DS4-DS6 and

Rem Ctrl (Red) wire is not connected to +Vdc or Gnd

3) Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) Not Connected to +Vdc

4) DS1 = On, Setting Device as an Voltage Sensing Relay (VSR) VSR Mode - Relay Automatically Opens (Turns OFF) if:

Voltage on Either Input < V_Off as determined by DS4-DS6 and

Rem Ctrl (Red) wire is not connected to +Vdc or Gnd and

Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) are Not Connected to +Vdc and

4) DS1 = On, Setting Device as an Voltage Sensing Relay and

5) At least 120 sec has passed since the device was either forced Closed by the Red input wire or the device automatically Closed and

6) The advanced charge management algorithm has determined that any electrical charging, if operating, is not equal to or great than the electrical loads discharging the connected batteries.

VSR Mode - Relay Opens (Turns OFF) after 15 sec if:

1) Voltage on Either Input to Relay > Over-voltage set point for 15 continuous seconds and

2) Rem Ctrl (Red) wire is not connected to +Vdc or Gnd

VSR Mode - Relay Immediately Closes (Turns ON) Immediately if: Voltage on Either Input > 9 Vdc (minimum operating Vdc) and

2) Rem Ctrl (Red) wire is connected to +Vdc
VSR Mode - Relay Immediately Opens (Turns OFF) immediately if:
1) Voltage on Either Input to Relay > 9 Vdc (minimum operating

Voltage) and either any of the following three conditions exist:

Rem Ctrl (Red) wire is connected to Gnd

3) Start Isolation Input Wire SI#1 (Brown) is Connected to +Vdc 4) Start Isolation Input Wire SI#2 (Green) is Connected to +Vdc

VSR Mode - Start Isolation Prevents Voltage Based Automatic Closing:
1) For as long as one or more of the two Start Isolation Lines SI#1

and/or SI#2 have +Vdc applied on the wires

2) For 3 minutes after +Vdc is no longer applied to both Start Isolation Lines SI#1 and/or SI#2 have +Vdc applied on the wires

Manual Override Prevents Remote or Voltage Based Open or Closing: 1) For as long as the manual knob (if equipped) is not positioned in

the "Auto/Rem" orientation Upon Startup or Returning Device from Manual to Auto/Rem Mode: 1) The remote LED will remain OFF regardless of the physical status

of the VSR until the VSR is remotely forced ON/OFF or automatically attempts to turn itself ON/OFF.

2) The local LED will rapid flash if the device has an input voltage that would dictate a pending ON or OFF is necessary.







Fig 1 - Relay Mode - Control Wiring Options

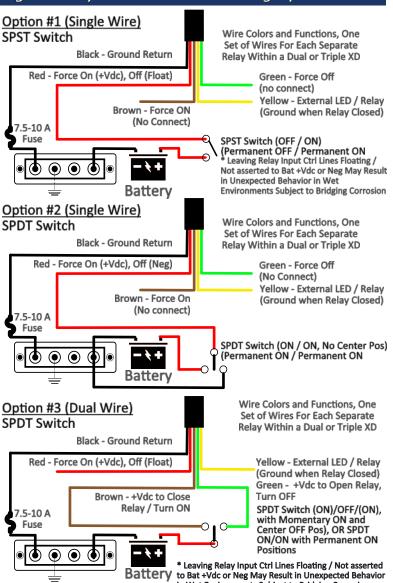
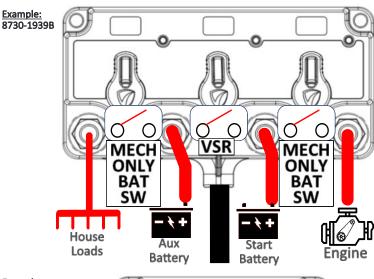


Fig 2 - Mechanical Only Contactor Option

XD Series Single, Dual, and Triple XD Relays are available with one or more positions constructed as a mechanical only battery switch / mechanical contactor. This offers the option for certain application a more cost effective solution to variations with all relay positions that are remote relays. See examples below



Example: 8720-1930B

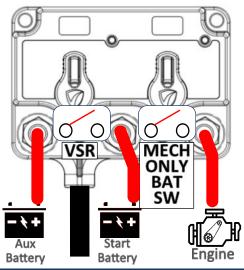


Fig 3 - XD Series Part Number Guide

in Wet Environments Subject to Bridging Corrosion

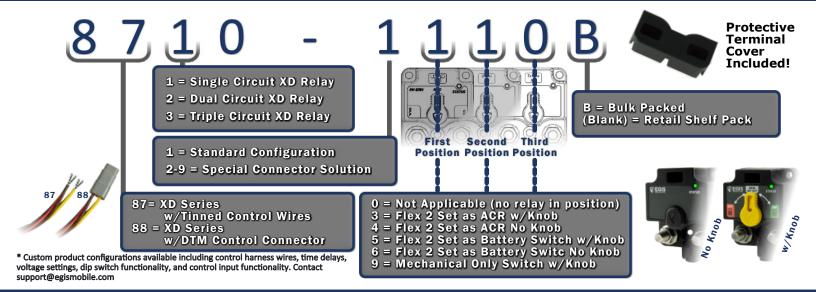


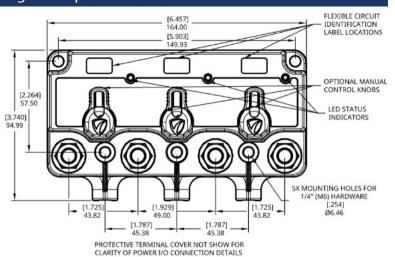


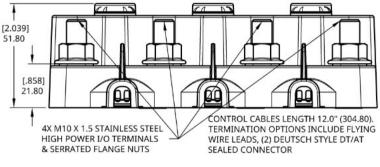






Fig 4 - Triple XD Series - Dimensions





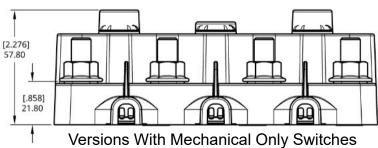


Fig 5 - Dual XD Series - Dimensions

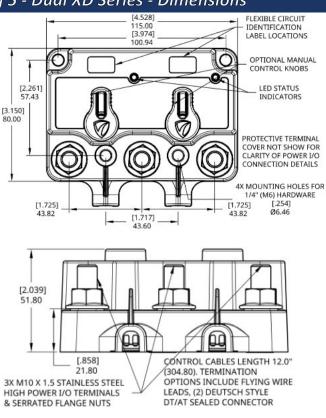
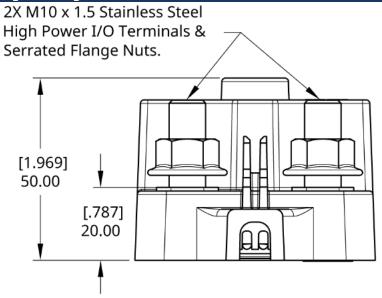
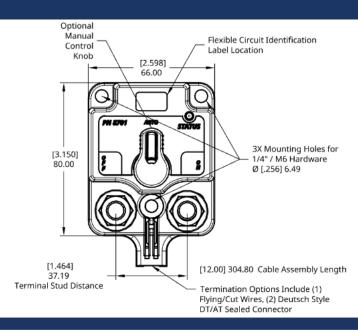


Fig 6 - Single XD Series - Dimensions













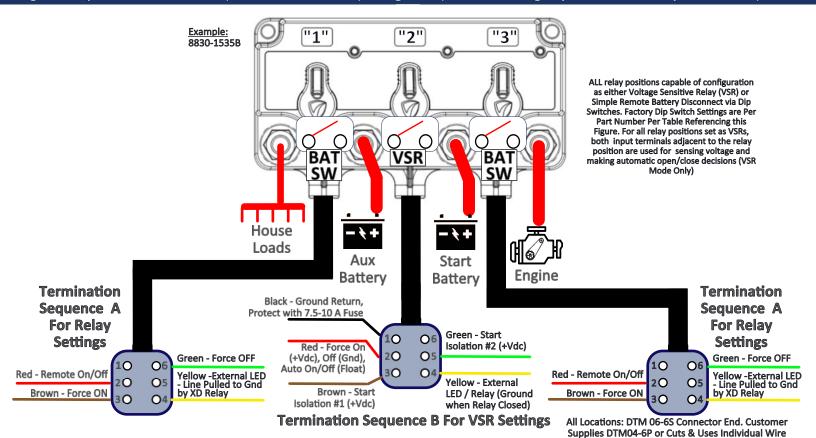
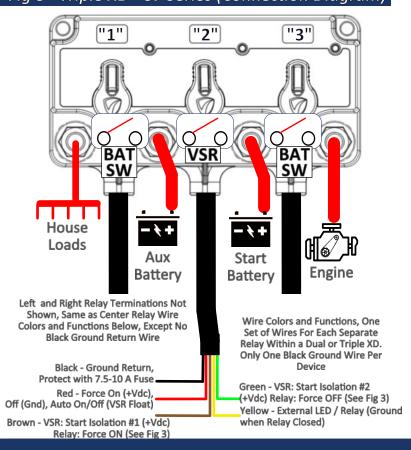


Fig 8 - Triple XD - 87 Series (Connection Diagram)



<u>Triple XD Relay Part Numbers and Dip Switch</u> <u>Settings (Fig 7)</u>

Terminations

<u>settings (Fig 7)</u>						
<u>Left</u>	<u>Relay</u>	<u>Center Relay</u>		<u>Right Relay</u>		
Knob	Setting	Knob	Setting	Knob	Setting	Bulk PNs
Yes	VSR	Yes	VSR	Yes	VSR	8830-1333B
No	VSR	No	VSR	No	VSR	8830-1444B
Yes	Relay	Yes	VSR	Yes	Relay	8830-1535B
Yes	Relay	No	VSR	Yes	Relay	8830-1545B
Yes	Relay	Yes	Relay	Yes	Relay	8830-1555B
No	Relay	Yes	VSR	No	Relay	8830-1636B
No	Relay	No	VSR	No	Relay	8830-1646B
No	Relay	No	Relay	No	Relay	8830-1666B

<u>Triple XD Relay Part Numbers and Dip Switch</u> <u>Settings (Fig 8)</u>

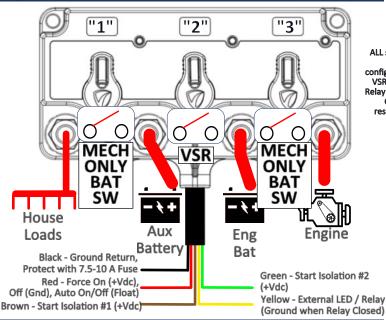
<u>Left Relay</u>		<u>Center Relay</u>		<u>Right Relay</u>				
	Knob	Setting	Knob	Setting	Knob	Setting	Bulk PNs	
	Yes	VSR	Yes	VSR	Yes	VSR	8730-1333B	
	No	VSR	No	VSR	No	VSR	8730-1444B	
	Yes	Relay	Yes	VSR	Yes	Relay	8730-1535B	
	Yes	Relay	No	VSR	Yes	Relay	8730-1545B	
	Yes	Relay	Yes	Relay	Yes	Relay	8730-1555B	
	No	Relay	Yes	VSR	No	Relay	8730-1636B	
	No	Relay	No	VSR	No	Relay	8730-1646B	
	No	Relay	No	Relay	No	Relay	8730-1666B	



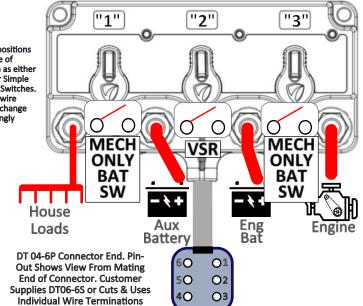








ALL switch positions capable of configuration as either VSR/ACR or Simple Relay via Dip Switches. Control wire responses change accordingly



Fin DT Connector Functions (Fig 10)	Pin	Wire
o Pili Di Collilectoi Fullctiolis (Fig 10)	#	Color
Ground (Required), Protect w/ 7.5 - 10.0 A Fuse	1	Black
Relay 2 Rem Ctrl Signal (Optional / Recommended)	2	Red
Relay 2 Start Isolation #1 / Relay Mode OFF (+Vdc)	3	Brown
Relay 2 Rem Indicator (Active Low), (Optional)	4	Yellow

Relay 2 Start Isolation #2 / Relay Mode ON (+Vdc) Green

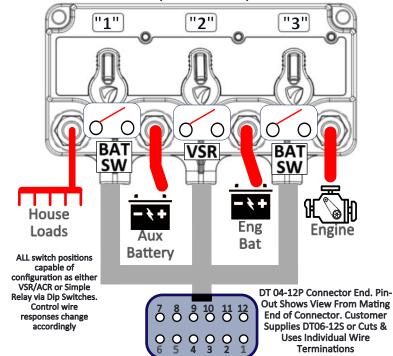
Triple XD Relay Part Numbers and Dip Switch Settings (Fig 9 & 10) <u>Left Relay</u> Center Relay Right Relay Bulk PNs Knob Setting Knob Setting Knob Setting Yes None (1) **VSR** None (1) 8730-1939B Yes Yes Yes None (1) No **VSR** Yes None (1) 8730-1949B Yes None (1) Yes **VSR** Yes None (1) 8830-1939B None (1) **VSR** Yes None (1) 8830-1949B Yes No

Triple XD Relay Part Numbers and Dip Switch Settings (Fig 10)

<u>Left Relay</u>		<u>Center Relay</u>		<u>Right Relay</u>			
	Knob	Setting	Knob	Setting	Knob	Setting	Bulk PNs
	Yes	Relay	Yes	VSR	Yes	Relay	8830-2535B
	Yes	Relay	No	VSR	Yes	Relay	8830-2545B
	Yes	Relay	Yes	Relay	Yes	Relay	8830-2555B
	No	Relay	Yes	VSR	No	Relay	8830-2636B
	No	Relay	No	VSR	No	Relay	8830-2646B
	No	Relay	No	Relay	No	Relay	8830-2666B

Fig 11 - Triple XD - 88 Series (Single DT Conn)

Ex: 8830-2535B, 8830-2545B, 8830-2636B



12 Pin Connector Functions (Fig 11)	Pin #	Wire Color
Ground (Required), Protect w/ 7.5 - 10.0 A Fuse	1	Black
Relay 1 Rem Ctrl Signal (Optional / Recommended)	2	Red
Relay 1 Rem Indicator (Active Low), (Optional)	3	Yellow
Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd)	4	Red
Relay 2 Rem Indicator (Optional / Recommended)	5	Yellow
Relay 2 Start Isolation #1 Input (Optional)	6	Brown
Relay 2 Start Isolation #2 Input (Optional)	7	Green
Relay 3 Rem Ctrl Signal (Optional / Recommended)	8	Red
Relay 3 Rem Indicator (Active Low), (Optional)	9	Yellow

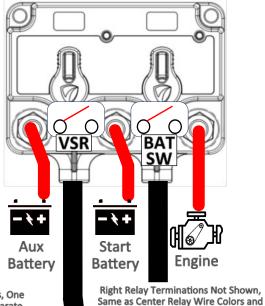






Example: 8720-1530B

ALL switch positions capable of configuration as either VSR/ACR or Simple Relay via Dip Switches. Control wire responses change accordingly



Wire Colors and Functions, One Set of Wires For Each Separate Relay Within a Dual or Triple XD, Only One Black Ground Wire Per Device

> Black - Ground Return, Protect with 7.5-10 A Fuse

Red - Force On (+Vdc), Off (Gnd), Auto On/Off (Float)

Brown - (VSR Mode) Start Isolation #1 (+Vdc) (Relay Mode) Turn ON (+Vdc) Yellow - External LED / Relay (Ground when Relay Closed)

Functions Below (Except for "9"

Mechanical Only Positions, Where No

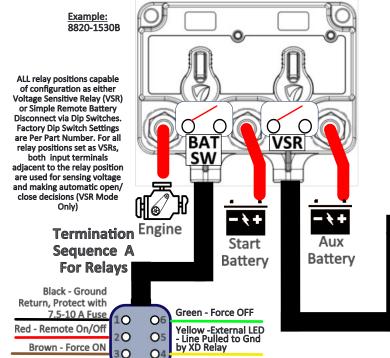
Control Wires Exit Device). Only One

Black Ground Wire Per Device

Green - (VSR Mode) Start Isolation #2

(+Vdc); (Relay Mode) Turn OFF (+Vdc)

Fig 13 - Dual XD - 88 Series (DTM Connectors) (Matches Legacy Remote Relay Solutions)



Dual XD Relay Part Numbers and Dip Switch
Settings (Fig. 12)

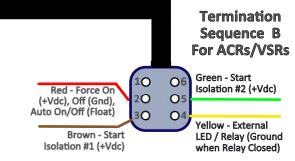
<u>Left</u>	<u>Relay</u>	<u>Righ</u>	<u>it Relay</u>	
Knob	Setting	Knob	Setting	Bulk PNs
Yes	VSR	Yes	VSR	8720-1330B
No	VSR	No	VSR	8720-1440B
Yes	VSR	No	Relay	8720-1350B
Yes	Relay	Yes	VSR	8720-1530B
No	VSR	Yes	Relay	8720-1450B
Yes	Relay	No	VSR	8720-1540B
Yes	Relay	Yes	Relay	8720-1550B
No	Relay	No	Relay	8720-1660B
Yes	VSR	Yes	Mech Only	8720-1390B
No	VSR	Yes	Mech Only	8720-1490B
Yes	Relay	Yes	Mech Only	8720-1590B

 Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location

<u>Dual XD Relay Part Numbers and Dip Switch</u> <u>Settings (Fig 13)</u>

ı			<u> Set</u>	tings	(FIG 13)		
		Left Relay	<u>′</u>		Right Relay	<u>z</u>	
	Knob	Setting	Term Seq	Knob	Setting	Term Seq	Bulk PNs
	Yes	VSR	В	Yes	VSR	В	8820-1330B
	No	VSR	В	No	VSR	В	8820-1440B
	Yes	VSR	В	No	Relay	Α	8820-1350B
	Yes	Relay	Α	Yes	VSR	В	8820-1530B
	No	VSR	В	Yes	Relay	Α	8820-1450B
	Yes	Relay	Α	No	VSR	В	8820-1540B
	Yes	Relay	Α	Yes	Relay	Α	8820-1550B
	No	Relay	Α	No	Relay	Α	8820-1660B
	Yes	VSR	В	Yes	Mech Only	-	8820-1390B
	No	VSR	В	No	Mech Only	-	8820-1490B
	Yes	Relay	В	Yes	Mech Only	-	8820-1590B

 Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location



DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations



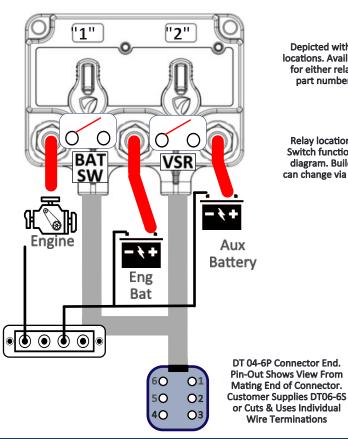
DTM 06-6S Connector End. Customer Supplies

DTM04-6P or Cuts & Uses Individual Wire Terminations

www.egismobile.com 360.768.1211 Bellingham, WA U.S.A

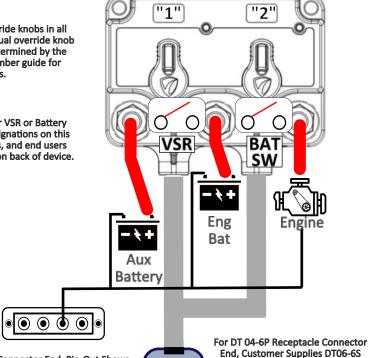






Depicted with manual override knobs in all locations. Availability of manual override knob for either relay position determined by the part number. See part number guide for further details.

Relay locations set to either VSR or Battery Switch functionality per designations on this diagram. Builders, installers, and end users can change via dip switches on back of device.



Connector End. Pin-Out Shows View From Mating End of Connector. Customer Supplies Mating Connector or Cuts & Uses Individual Wire Terminations

Plug Connector.

For DT06-6S Plug Connector End,

Customer Supplies DT04-6P

Receptacle Connector

	6 Pin Connector Functions (Fig 15)	Pin #	Wire Color
Ī	Ground (Required), Protect w/ 7.5 - 10.0 A Fuse	1	Black
	Relay 1 Rem Ctrl Signal (Optional / Recommended)	2	Red
	Relay 1 Rem Indicator (Active Low), (Optional)	3	Yellow
	Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd)	4	Red
	Relay 2 Rem Indicator (Optional / Recommended)	5	Yellow
	Relay 1 Start Isolation #1 Input (Optional)	6	Brown

01

O2

O3

50

40

Du	Dual XD Part Numbers Dip Switch Settings (Fig 15)							
<u>Left Relay</u>		Riah	t Relay		Housing Connector			
		mgn	<u>t neray</u>					
Knob	Setting	Knob	Setting	Bulk PNs	Color	Gender		
Yes	VSR	Yes	Relay	8820-6350B	Gray	Receptacle		
No	VSR	Yes	Relay	8820-6450B	Gray	Receptacle		
Yes	VSR	No	Relay	8820-6360B	Gray	Receptacle		
No	VSR	No	Relay	8820-6460B	Gray	Receptacle		
Yes	VSR	Yes	Relay	8825-6350B	Black	Plug		

6 Pin Connector Functions (Fig 14)	Pin #	Wire Color
Ground (Required), Protect w/ 7.5 - 10.0 A Fuse	1	Black
Relay 1 Rem Ctrl Signal (Optional / Recommended)	2	Red
Relay 1 Rem Indicator (Active Low), (Optional)	3	Yellow
Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd)	4	Red
Relay 2 Rem Indicator (Optional / Recommended)	5	Yellow
Relay 2 Start Isolation #1 Input (Optional)	6	Brown

Relay 2 Star	elay 2 Start Isolation #1 Input (Optional)							
Dual XD Part Numbers Dip Switch Settings (Fig 14)								
<u>Left Relay</u>		<u>Righ</u>	<u>t Relay</u>					
Knob	Setting	Knob	Setting	Ви	lk PNs			
Yes	Relay	Yes	VSR	882	0-6530B			
Yes	Relay	No	VSR	882	0-6540B			
No	Relay	Yes	VSR	882	0-6630B			

VSR

Relay

8820-6640B

8820-6550B

No

Yes



Relay

Relay

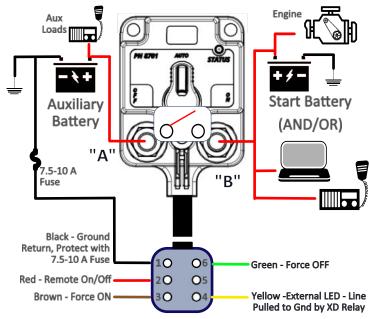
No

Yes





Fig 16 - Single XD - 87/88 Remote Relay/Battery Switch (Connector Matches Legacy Blue Sea Systems Relays)



A) 88xx-xxxx Part Numbers Use a DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations.

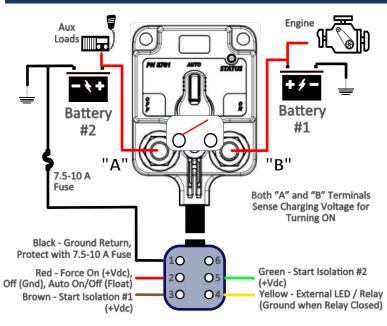
B) 87xx-xxxx Part Numbers Provide Flying Wires With Colors Matching the Same Functions Outlined on the Connector End Diagram, But Without the Connector.

6 Pin DTM Connector Functions	Pin #	Wire Color
Ground Reference (Required)	1	Black
Single Wire Close/Open (See Pg 3, Relay Mode)	2	Red
Relay Close (See Pg 3 it Relay Mode, If Changed to VSR then Start Isolation #1 Function)	3	Brown
Remote Indicator	4	Yellow
Relay Open (See Pg 3 it Relay Mode, If Changed to VSR then Start Isolation #2 Function)	6	Green

Single XD Part Numbers Dip Switch Settings For Abou								
Knob	Default Setting	Termination	Bulk PNs					
Yes	Relay	Flying Wires	8710-1500B					
Yes	Relay	DTM Connector	8810-1500B					
No	Relay	Flying Wires	8710-1600B					
No	Relay	DTM Connector	8810-1600B					
Yes	Mechanical Only	None	8710-1900B					

Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location. No control wire terminations are present

Fig 17 - Single XD - 87/88 Voltage Sensitive Relay (VSR/ ACR) (Connector Matches Legacy Blue Sea System ACRs)



A) 88xx-xxxx Part Numbers Use a DTM 06-65 Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations.

B) 87xx-xxxx Part Numbers Provide Flying Wires With Colors Matching the Same Functions Outlined on the Connector End Diagram, But Without the Connector.

6 Pin DTM Connector Functions	Pin #	Wire Color
Ground Reference (Required)	1	Black
VSR ON/Auto/Off (If Changed to Relay Mode then Single Wire Close/Open (See Pg 3) Start Isolation #1 Function (If Changed to Relay	2	Red
Start Isolation #1 Function (If Changed to Relay then Relay Close (See Pg 3)	3	Brown
Remote Indicator	4	Yellow
Start Isolation #2 Function (If Changed to Relay then Relay Open (See Pg 3)	5	Green

<u>Single XI</u>	<u> Part Numbers Dip</u>	Switch Settings	<u>For Above</u>
Knob	Default Setting	Termination	Bulk PNs
Yes	VSR	Flying Wires	8710-1300B
Yes	VSR	DTM Connector	8810-1300B
No	VSR	Flying Wires	8710-1400B
No	VSR	DTM Connector	8810-1400B
	Knob Yes Yes No	KnobDefault SettingYesVSRYesVSRNoVSR	Yes VSR Flying Wires Yes VSR DTM Connector No VSR Flying Wires







XD Battery Disconnet - Competitor Compariosn / Cross Reference





Product Comparison Summary								
Feature/Specification	XD Series ACR	ML-ACR						
Universal 12/24 Control Voltage	Yes	No, 12 or 24 Vdc						
Cover for Power Terminals	Included	No						
Function & Cable Label Sheet	Included	Not Included						
Local Status Led Indicator	Yes	No						
Ability to Manually Lock On	Yes	No						
Intuitive Manual Override	Yes	No						
Terminal Stud Material	Stainless	Copper (2)						
Simple Bottom Cable Entry	Yes	No ⁽³⁾						
Product Assemblies for 2-7 Relays	Yes (5)	No						
Dust & Water IP Rating	IP67 / IP6K9K	IP66 ⁽⁴⁾						
Pressure Regulated Enclosure	Yes	No						
Marine Grade Control Wiring	Yes	No						
Mounting Footprint Width	66 ⁽⁶⁾	95						
Mounting Footprint Length	80 ⁽⁶⁾	140						
Mounting Depth	50	51.5						
Standby Current Draw	1.2 mA	0 - 8 mA ⁽¹⁾						
Max Continuous Current	500 A	500 A						
Power Input Stud Size	M10 (3/8")	3/8" (M10)						

- (1) Excessive standby current drains batteries as no charge source is present potentially permanently damaging batteries and voiding battery warranties. The XD Series Standby current is 70% lower than the competitor's auto-release version, and so low (1.2 mA) that on its own would take 9 years to drain a Group 31 battery.
- (2) Copper terminal studs in general are susceptible to thread damage if excessive assembly torque on the attachment nut is applied. The result is stripping of the threads and spinning of the nut; and a reduction or loss of clamping force between the cable terminal and device terminal. This can result in increased resistance and possibly overheating of the device and power cables.
- (3) Studs parallel to the mounting surface require right angle cable terminal lugs to achieve bottom cable entry
- (4) IP67 and IP6K9K are standard marine / harsh environment ingress performance levels to ensure effective long-term performance. Customers are encouraged to independantly evaluate legacy product to water entry susceptibility.
- (5) XD Series products are also available in single housing double and triple relay versions which provide significant cost, space, and standby current draw benefits versus existing industry options.
- (6) XD Series mounting footprint is 60% smaller and much lighter, critical in today's systems with very limited space allocated for power management and where the affect of total system weight on vessel / vehicle performance has received greater attention.

riigii Airipere Keriiote Buttery Switches									
Blue Sea	Vdc		Egis Mobile	Vdc		Manual			
Sys P/N	vac		Electric P/N	Vac		Control	Leads	Method ⁽¹⁾	
7700	12		8710-1500B	12/24		Yes	Wires	Bi-Stable	
7700100	12		8810-1500B	12/24		Yes	DTM	Bi-Stable	
7702	24		8710-1500B	12/24		Yes	Wires	Bi-Stable	
7702100	24	ш \	8810-1500B	12/24		Yes	DTM	Bi-Stable	
7713	12	/	8710-1500B	12/24		Yes	Wires	Auto-Release	

Yes

Yes

Yes

Wires

DTM

Auto-Release

Auto-Release

Auto-Release

(1) Control Method Determined by Dip Switch Selection on Device

8810-1500B 12/24

8710-1500B 12/24

8810-1500B 12/24

7713100

7717

7717100

12

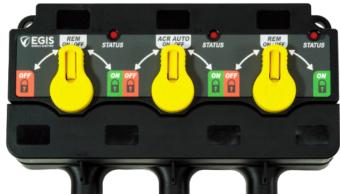
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24

High Ampere Solenoids								
Blue Sea Sys P/N	Vdc		Egis Mobile Electric P/N	Vdc		Manual Control	Control Leads	Control Method ⁽²⁾
7701	12		8710-1600B			No	Wires	Bi-Stable
7701100	12		8810-1600B	12/24		No	DTM	Bi-Stable
7703	24		8710-1600B	12/24		No	Wires	Bi-Stable
7703100	24	ш,	8810-1600B	12/24		No	DTM	Bi-Stable
7718	12		8710-1600B	12/24		No	Wires	Auto-Release
7718100	12		8810-1600B	12/24		No	DTM	Auto-Release
7719	24		8710-1600B	12/24		No	Wires	Auto-Release
7719100	24		8810-1600B	12/24		No	DTM	Auto-Release

(2) Control Method Determined by Dip Switch Selection on Device

High Amp Automatic Charging Relays (ACRs)									
Blue Sea Sys P/N	Vdc		Egis Mobile Electric P/N	Vdc		Manual Control	Control Leads		
7620	12		8710-1400B	12/24		No	Wires		
7620100	12		8810-1400B	12/24		No	DTM		
7621	24		8710-1400B	12/24		No	Wires		
7621100	24	⊔ \	8810-1400B	12/24		No	DTM		
7622	12	\Box /	8710-1300B	12/24		Yes	Wires		
7622100	12		8810-1300B	12/24		Yes	DTM		
7623	24		8710-1300B	12/24		Yes	Wires		
7623100	24		8810-1300B	12/24		Yes	DTM		



* XD Series Dual and Triple Relays can be configured to have each individual internal relay replicate legacy competitor product functionality and connect with external controls with the same DTM connector and pin-out locations, simplifying product transition.

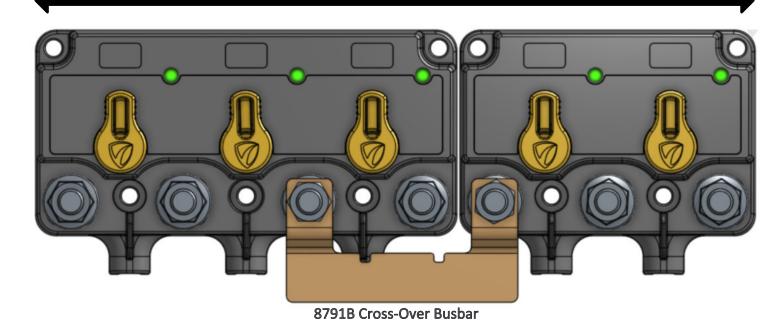


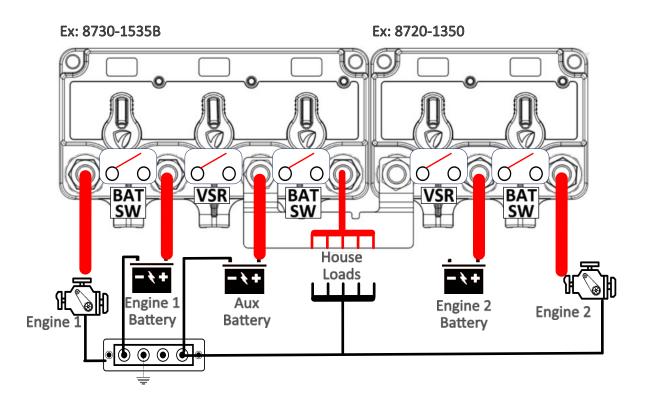




Triple Battery Relay / VSR Cluster

11" (280 mm)





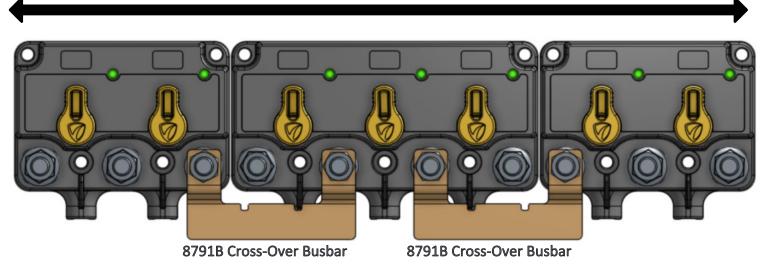






Quad Battery Bank Relay / VSR Cluster

15.75" (400 mm)



Ex: 8720-1530 Ex: 8730-1535 Ex: 8720-1350

