



O/E/N 160

HIGH VOLTAGE DC CONTACTOR

FEATURES

- Contact Rating of 250A at 450VDC
- Gasless Technology in arc quenching
- Limiting Continuous Current 250A @ 85°C
- Maximum Short Circuit Current of 6000A
- With Economiser
- Low Height Version available

APPLICATION

- Main Contactor
- Battery Management System
- Fast Charging

CONTACTOR LOAD DATA

Contact Configuration	: 1 Form X
Contact Voltage Rating	: 450VDC
Contact Current Rating	: 250A
Continuous Current(@ 250A)	: 24 Hours @85°C
Continuous Current(@ 300A)	: 7 minute @85°C
Continuous Current(@ 600A)	: 1 minute @85°C
Maximum Short Time Current	: 6000A for 25ms
Contact Voltage Drop	: 100mV Max. @ 100A
Contact Material	: Silver Alloy

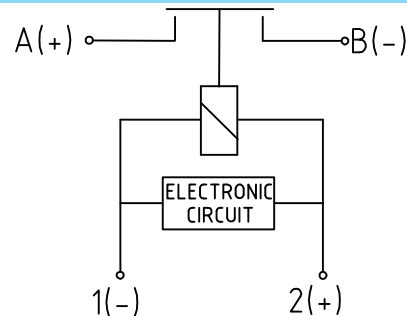
MOUNTING DETAILS

Coil Terminal Interface	: Connector ² (Coil-1&2)
Load Terminal Interface	: M6 Screw (load-A&B) (Refer Detail X)
Load Terminal Mounting Torque	: 5Nm Max.
Mounting Interface	: To Suit M6 Bolt

CONTACTOR GENERAL DATA

Operate / Release Time	: 25ms Max (@ 12VDC)
DI-electric Withstand Voltage	
B/W Load Terminals	: 2800Vrms
B/W Load Terminal To Coil	: 2800Vrms
Operating Voltage Range (Coil)	: 9VDC to 16VDC
Weight	: 605grams Max

WIRING DIAGRAM



ENVIRONMENTAL DATA

Insulation Resistance	: 200MΩ min@500VDC
Vibration Resistance (Functional)	: 10-500Hz, min. 10g
Shock Resistance	: 40g Half sine for 11ms
Operating Temp Range	: -40°C to +85°C
Enclosure Type	: IP54

ENDURANCE DATA

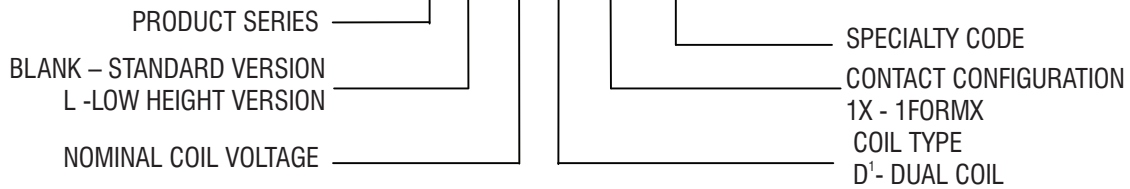
Electrical Life ³	: 50K Cycles with make current of 250A, 50 VDC @6CPM
	: 50K Cycles with break current of 100A, 400 VDC @6CPM
	: 5K Cycles with break current of 200A, 400 VDC @4CPM
	: 1K Cycles with make & break current of 250A, 450VDC @4CPM
Mechanical Life	: 200K Cycles with no load @10CPM

COIL DATA

Nominal Coil Voltage (VDC)	Coil Resistance		Operate Voltage (VDC)	Drop-Out Voltage (VDC)	Coil Current		Coil Power	
	Pick-up Coil ($\Omega \pm 10\%$)	Hold Coil ($\Omega \pm 10\%$)			Pick-up Coil ($A \pm 10\%$)	Hold Coil ($A \pm 10\%$)	Pick-up Coil ($W \pm 10\%$)	Hold Coil ($W \pm 10\%$)
12	3.3	36	≤ 8.5	≥ 12	3.63	0.33	43.63	4.0
24	13.2	144	≤ 17.0	≥ 2.4	1.81	0.16	43.63	4.0

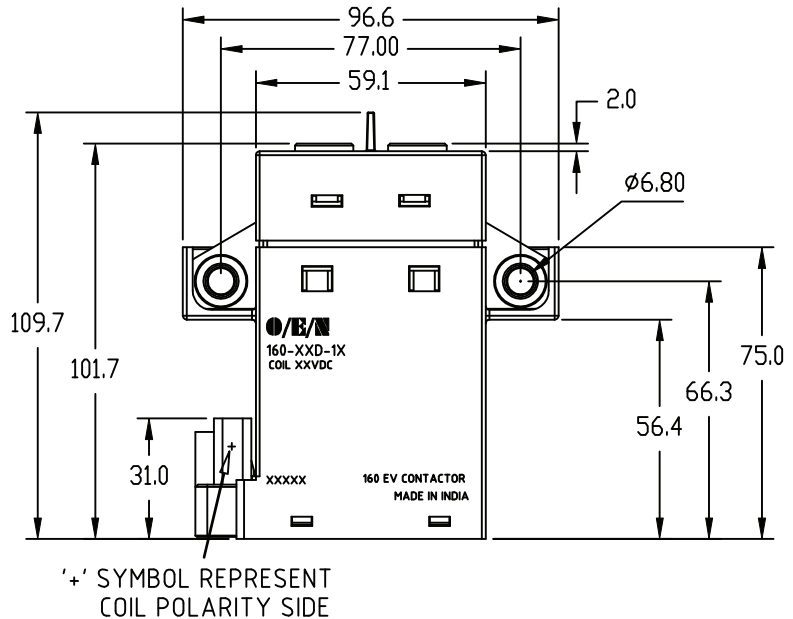
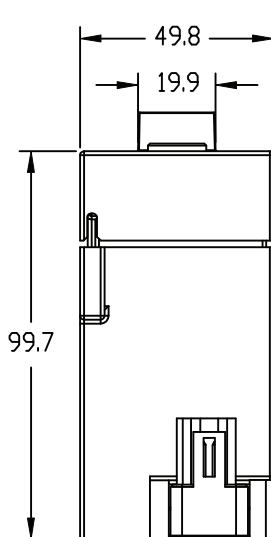
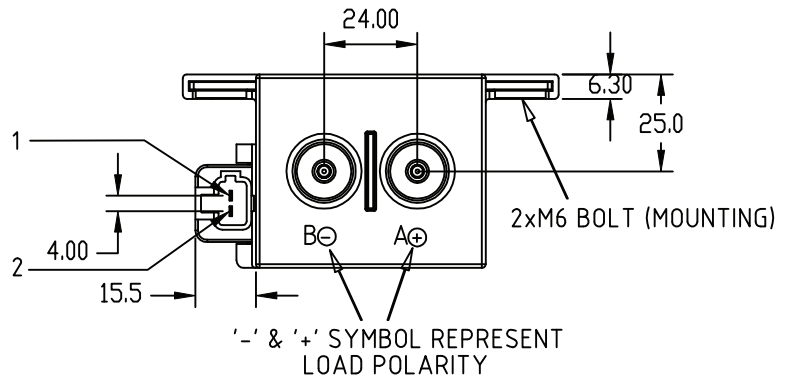
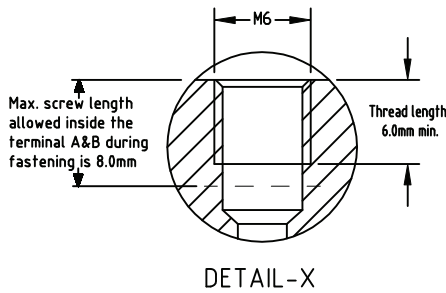
HOW TO ORDER

160 X-XXD-1X-XX

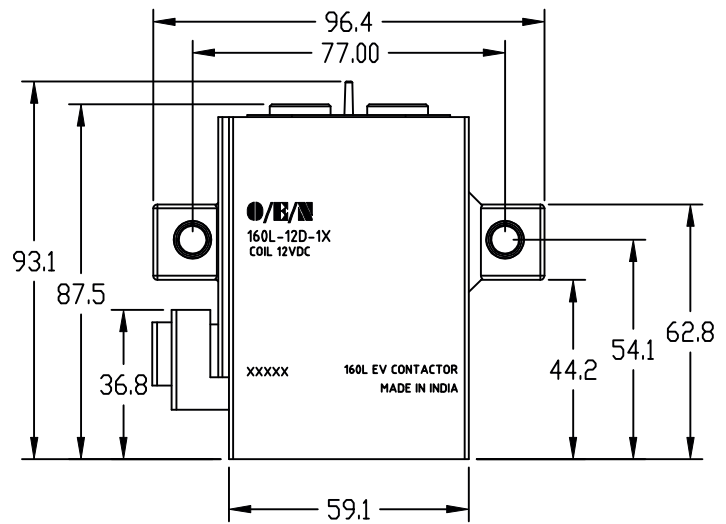
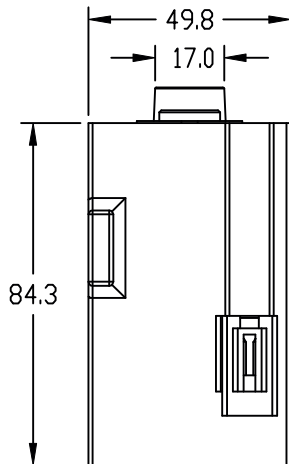
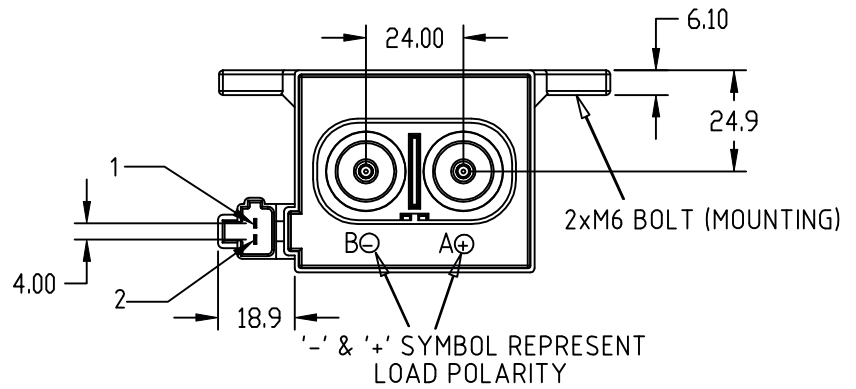
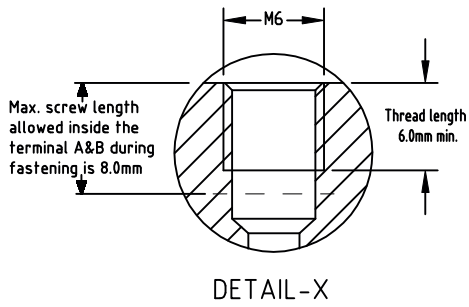


DIMENSIONS

Standard Version



Low Height Version



NOTE:

1. Dual coil version is with internal economizer circuit. (3.3 coil is switched off internally max 250ms after pull-in)
2. Coil connector required at harness side is 2.311 090 11 2-Pole Connector. (Yazaki 7283-1020 equivalent)
3. Both coil and load side have polarity (Refer wiring diagram for details).
4. Electrical Life Test conducted at 25°C and Cable Size 50mm²