

High Voltage Contactors IHV350 Series

- Load voltage 12-1800VDC, Consistent current 350A
- 2,300A interrupt@450VDC
- Hermetically sealed, Operates in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation
- Built-in coil economizer – only 4W hold power in the range of specified ambient temperature and coil voltage, and it limits back EMF to 0V
- Moving contact rotates to provide fresh contact resistance and low power consumption
- Sealed control connector

Typical applications

DC Charging, Solar Inverter, Energy Store Station, Test Equipment
Battery Management System, Electric Forklift, AGV, Rail Transit
Motor Control Circuit Isolation, Circuit Protection and Safety in Industrial Machinery

Approvals

cULus E58304

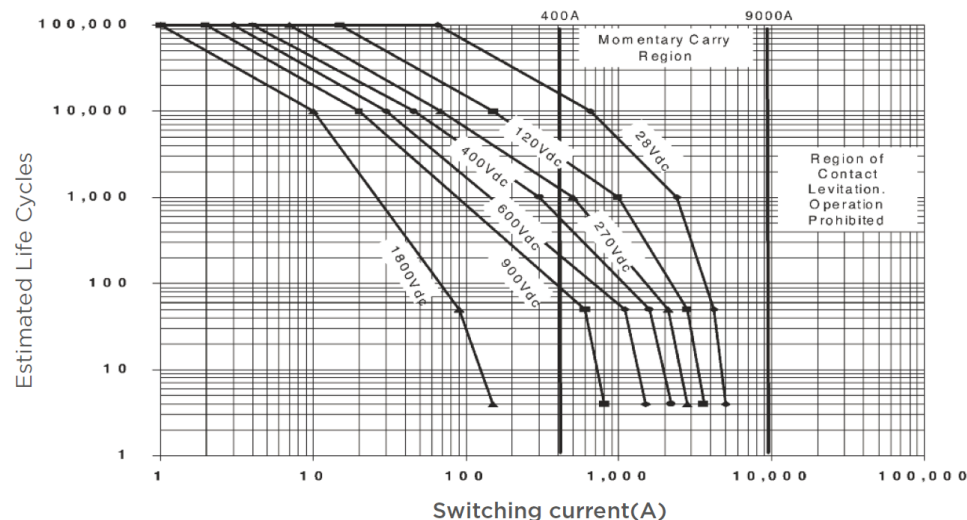
Main Contact Data

Contact arrangement	1 Form X (SPST-NO-DM)
Switching voltage (Max)	1,800VDC
Rated current	350A (Continuous) 450A (6.5 minutes)
Initial voltage drop	< 60mV (350A after 1 minute)
Operate time max. 25°C	25ms
Operate bounce time max. 25°C	7ms
Release time, (Include arc time)	15ms
Mechanical life	200,000 cycles

Contact ratings

Load	Cycles
350A, +450VDC, make / break	2,500
350A, +750VDC, make / break	1,000
350A, +900VDC, make / break	120
350A (reverse polarity), +450VDC, make / break	10
2300A, +450VDC, break only	2

Estimated rated switching life cycles



Coil versions, DC coil

Nominal Voltage	Operate Voltage Max.	Maximum Voltage	Release Voltage	Inrush Current (Max.)	Holding Current (Avg.)	Inrush Time (Max.)
12 VDC	10VDC	14VDC	4VDC	2.8A	0.36	200ms
24 VDC	19VDC	28VDC	9VDC	1.8A	0.11	200ms

Insulation Data

Dielectric withstand voltage (leakage current <1mA)	
between open contacts	4,000Vdc
between contact and coil	2,200Vdc
Initial insulation resistance @ 500VDC	
between open contacts	> 1×10 ⁸ Ω
between contact and coil	> 1×10 ⁸ Ω

Other Data

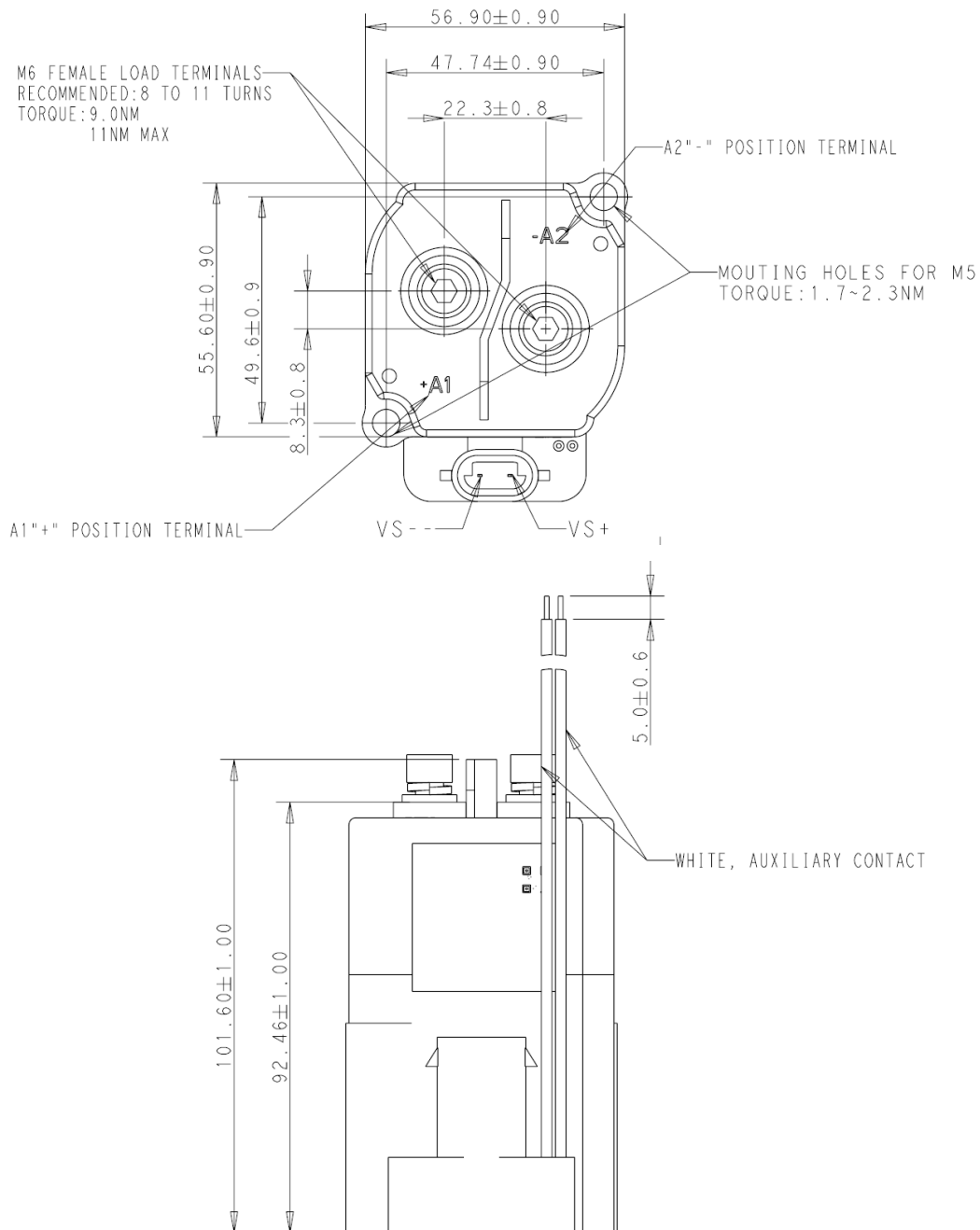
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Ambient temperature	-40°C to 85°C
DC coil	Sine, 80 – 2000Hz, 10G
Vibration resistance (functional),	11ms 1/2 Sine, Peak 20G
Shock resistance (functional)	Screw for contact, wire for coil
Terminal type	About 800g
Weight	10pcs/carton
Packaging/unit	

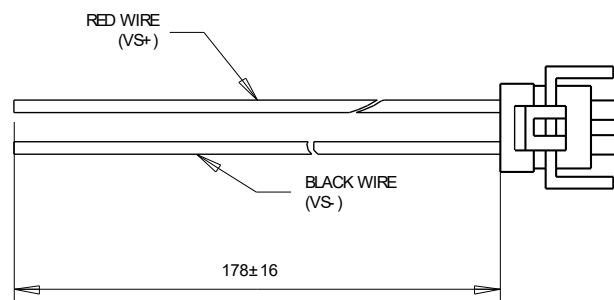
- 1) Resistive load includes inductance L=25uH. Load @2300A tested @200uH
- 2) Carry current> 250A, twin wire 54mm² is recommended.

High Voltage Contactors IHV350 Series (Continued)

Dimension



Tolerances are shown for reference purposes only



Note: Sealed control connector is provided, UL STYLPE3239, Silicon insulation, 10KV or greater, 22 gage.

High Voltage Contactors IHV350 Series (Continued)

Product code structure

IHV350	A	A	N	F	A	XX
Product series IHV350 = 350Amp, 12 - 1800VDC Contactor						
Contact form A = 1 Normally Open H = 1 Normally Open + NO Aux Contacts						
Coil Voltage A = 12VDC, D = 24VDC (Coil with the Economizer)						
Coil Wire Length N = No Lead Wires						
Coil Terminal Connection F = Quickly Connect Terminal						
Mounting & Power Terminal A = Bottom Mount						
Customer Special Designator XX = 2 Digits or Letters Specified by Manufacturer						

Product code	Contact form	Mounting position	Coil	Part number
IHV350AANFA	Normally Open	Bottom	12VDC	2071429-1
IHV350ADNFA			24VDC	2071429-2
IHV350HANFA	Normally Open + NO Aux Contact		12VDC	1-2071429-1
IHV350HDNFA			24VDC	1-2071429-2