

**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

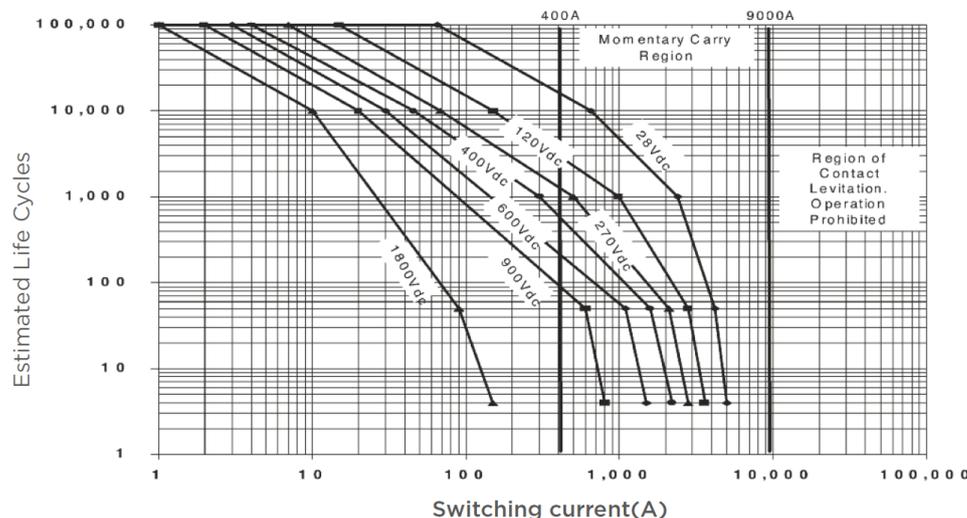
**Main Contact Data**

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 <sup>8</sup> Ω
between contact and coil	> 1×10 <sup>8</sup> Ω

**Other Data**

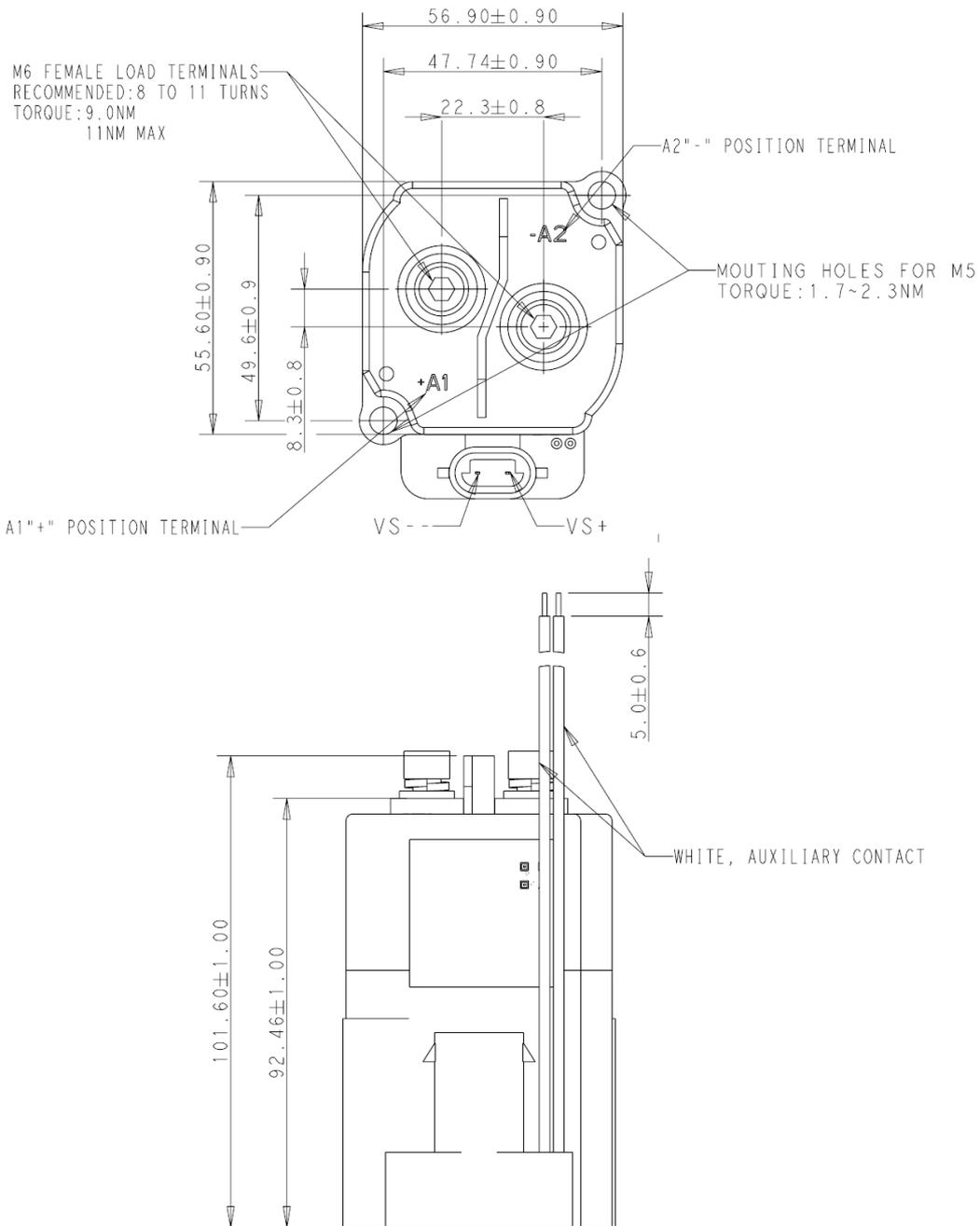
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

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

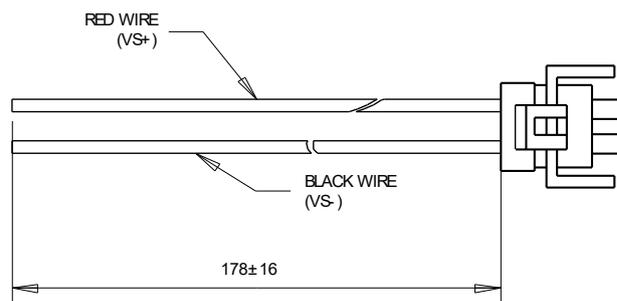
1) Resistive load includes inductance L=25uH. Load @2300A tested @200uH  
2) Carry current> 250A, twin wire 54mm<sup>2</sup> is recommended.

**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)

<b>Product code structure</b>	IHV350	A	A	N	F	A	XX
<b>Product series</b> IHV350 = 350Amp, 12 - 1800VDC Contactor							
<b>Contact form</b> A = 1 Normally Open H = 1 Normally Open + NO Aux Contacts							
<b>Coil Voltage</b> A = 12VDC, D = 24VDC (Coil with the Economizer)							
<b>Coil Wire Length</b> N = No Lead Wires							
<b>Coil Terminal Connection</b> F = Quickly Connect Terminal							
<b>Mounting &amp; Power Terminal</b> A = Bottom Mount							
<b>Customer Special Designator</b> 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