

IHV350 SERIES CONTACTOR



Features

- Load Voltage 12-1800VDC, Consistent current 350A, 2,300A interrupt @450VDC
- 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.
- Hermetically Sealed – intrinsically safe. Operates in explosive/harsh environments without oxidation or contamination of contacts, including long period of non-operation
- Moving contact rotates to provide fresh contact resistance and low power consumption
- Sealed control connector

Applications

- DC charging pile, ESS, Solar Inverter
- Test equipment, Rail Transit, BMS, E-forklift
- Motor Control Circuit Isolation, Circuit Protection and Safety in Industrial Machinery

Coil (Valid Over Temperature Range)

Nominal Voltage	12VDC	24VDC
Continuous Maximum Voltage	14VDC	28VDC
Pick-up Voltage (Max.)	10VDC	19VDC
Drop-out Voltage (Min.)	4VDC	9VDC
Inrush Current (Max.)	2.8A	1.8A
Holding Current (Avg.)	0.36A	0.11A
Inrush Time (Max.)	200mS	200mS

Insulation Data

Dielectric Withstand Voltage 2,200 Vrms @ sea level (leakage <1mA)	
Open Contact	4,000VDC
Contacts to Coil	2,200VDC
Insulation Resistance, Terminal to Terminal / Terminals to Coil	
Initial Insulation Resistance (500Vdc)	>100MΩ

*After Electrical Endurance Test , don't guarantee the dielectric and insulation performance is same as initial data.

High Voltage DC Contactors

Main Contact Data

Contact Form	SPST-NO-DM (1 Form X)
Switching Voltage (Max.)	1,800 VDC
Load Current	350A (Continuous) 450A (6.5 min)
Initial voltage drop (350A)	120mV (Max.)
Operate Voltage(Max.25°C)	25mS
Operate Bounce (Max.25°C)	5mS
Release Time (Include arc time)	15mS
Mechanical Life	200,000 cycles

Hot Switching Performance (Polarity Sensitive)

350A	+450VDC	Make/Break	2,500 cycles
350A	+750VDC	Make/Break	1,000 cycles
350A	+900VDC	Make/Break	120 cycles
350A (reverse polarity)	+450VDC	Make/Break	10 cycles
2,300A	+450VDC	Break Only	2 cycles

Others

Shock, 11ms 1/2 sine(operating) — 20G Peak

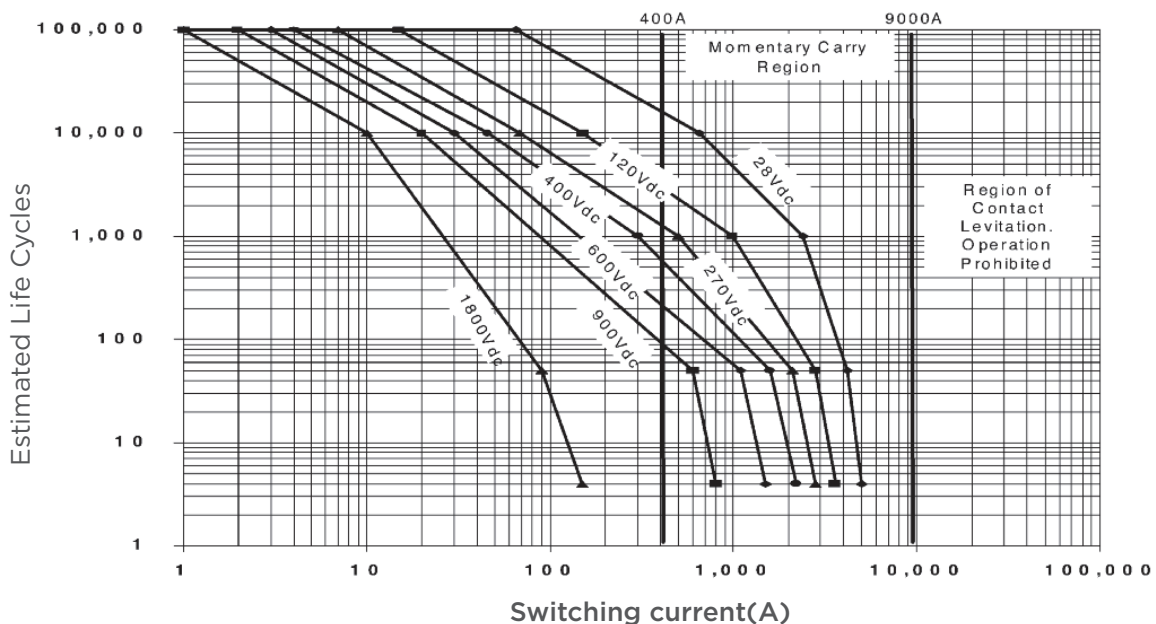
Vibration, Sine, 55 - 2000Hz — 10G Peak

Operating Temperature Range : -40°C to +85°C

Weight : about 800g

Contact Ratings

Estimated rated switching life cycles



Note:

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

High Voltage DC Contactors

Naming Rules for Product Number

IHV350 A A N F A XX

Product Series:

IHV350 = 350 Amp, 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

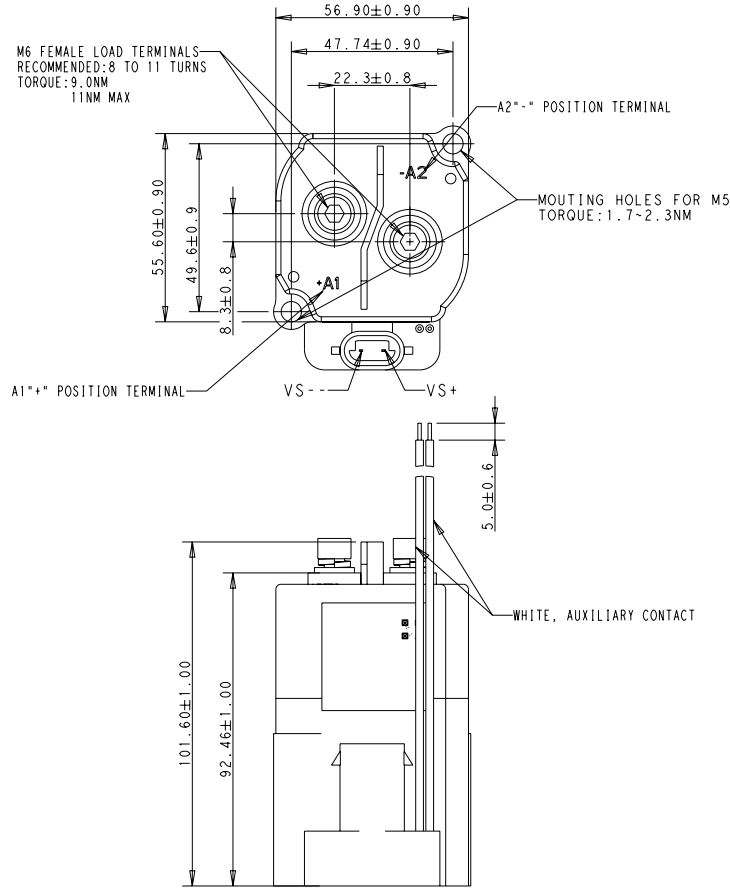
Customer Special Designator:

XX = 2 Digits or Letters Specified by Manufacturer

High Voltage DC Contactors

Dimensions

(Unit: mm)



Note: Tolerance are shown for reference purpose only.

PART NUMBER	PRODUCT NAME	COIL VOLTAGE	AUX CONTACT	MOUNT
2071429-1	IHV350AANFA	12VDC	NONE	BOTTOM
2071429-2	IHV350ADNFA	24VDC	NONE	BOTTOM
1-2071429-1	IHV350HANFA	12VDC	NORMALLY OPEN	BOTTOM
1-2071429-2	IHV350HDNFA	24VDC	NORMALLY OPEN	BOTTOM

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