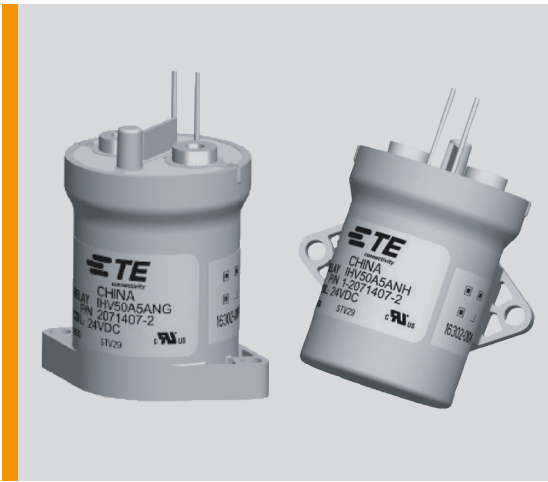


IHV50 SERIES CONTACTOR

- Hermetically sealed — intrinsically safe. Operates in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation
- 8kV isolation between open contacts permits use for high voltage isolation and carry
- 12, 24 and 48 Vdc coils
- Designed accordance to AIAG QS9000
- Not position sensitive, can be mounted in any orientation
- RoHS compliance



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

Approval

cULus E58304

Mechanical

Compact epoxy-sealed resin enclosure occupies only about 4 in³ (65.5 cm³)

Robust integral mounting plate on either bottom or side of enclosure accepts two M4 screws

Inert gas filled contact chamber

Flying leads for coil connections

Load terminals threaded for M5 bolts (not included)

Weight - about 190g

Coil Operating Voltage (Valid Over Temperature Range)

Nominal Voltage	12Vdc	24Vdc	48Vdc
Maximum Voltage	16Vdc	28Vdc	52Vdc
Pick Up Voltage (20°C)	8Vdc	16Vdc	33Vdc
Drop Out Voltage (20°C)	1.2Vdc	2.4Vdc	4.8Vdc
Coil Current (@Vnom, +20°C)	461mA	250mA	122mA
Coil Power @ Vnom, +20°C	5.5W	6W	6W
Pickup (Close) Voltage Max .@85°C	9.6Vdc	19.2Vdc	38.4Vdc
Coil Resistance @ +20°C ± 5% (Ω)	26	96	392

High Voltage DC Contactors

Main Contact Data

Contact Form	SPST-NO-DM (1 Form X)
Switching Voltage (Max)	900VDC *
Load Current	Continuous — 50A (Current depends upon conductor size) Short Term, Minutes — 100A 3 minutes (at +40°C)
Initial Voltage drop	< 60mV (50A after 1 minute)
Operate time (Max)	25mS
Operate bounce (Max)	5mS
Mechanical Life	1000,000 cycles
Release Time	<10mS
Maximum Short Circuit Current (1/2 cycle 60Hz)	1250A

Hot Switching Performance (Polarity Sensitive)

50A	+450VDC	make / break	5,000 cycles
50A	+750VDC *	make / break	3,000 cycles
50A	-450VDC	make / break	1,000 cycles
500A	+450VDC	break only	10 cycles
300A		make only	26 cycles

Insulation Data

Dielectric Withstand Voltage , Initial (leakage <1mA)	
Between Open Contacts	5600Vrms / 8000Vdc
Contacts to Coil	2000Vrms / 4000Vdc
Insulation Resistance, Terminal to Terminal / Terminals to Coil	
When New	100 megohms, min. @ 500Vdc
At End of Life	50 megohms, min. @ 500Vdc

Environmental Data

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

Sine Vibration, 15G peak — 55 - 2,000 Hz.

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

* Please contact TE engineers for above 450VDC high voltage switching application

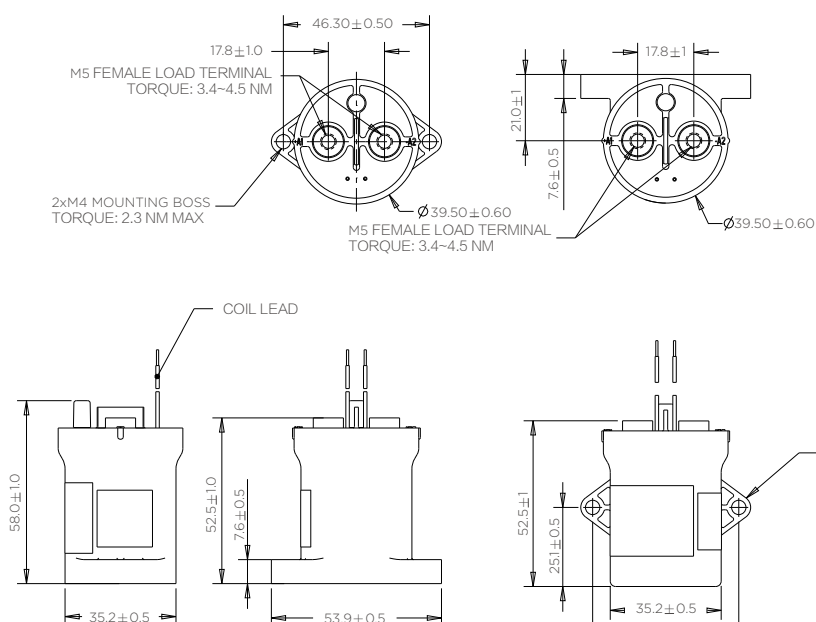
Nomenclature

	IHV50	A	4	A	N	G	XX
Product Series	IHV50 = 50A Contactor						
Contact Form	A = 1 Normally Open						
Coil Voltage	4 = 12VDC, 5 = 24VDC, 6 = 48VDC						
Coil Wire Length	A = 15.3 inch / 390mm						
Coil Terminal Connection	N = NONE						
Mounting & Power Terminal	G = Bottom Mount & Female 10mm X M5 Threaded Terminal H = Side Mount & Female 10mm X M5 Threaded Terminal						
Customer Special Designator	XX = 2 Digits or Letters Specified by Manufacturer						

High Voltage DC Contactors

DIMENSIONS(Unit:mm)

BOTTOM MOUNTING TYPE



Tolerances are shown for reference purposes only.

PART NUMBER	PRODUCT NAME	COIL VOLTAGE	安装方式
2071407-1	IHV50A4ANG	12VDC	BOTTOM
2071407-2	IHV50A5ANG	24VDC	BOTTOM
2071407-3	IHV50A6ANG	48VDC	BOTTOM
1-2071407-1	IHV50A4ANH	12VDC	SIDE
1-2071407-2	IHV50A5ANH	24VDC	SIDE
1-2071407-3	IHV50A6ANH	48VDC	SIDE

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