



ICC 150 Series

High Voltage Contactors

ICC-150-B-A-12

ICC-150-B-A-24

FEATURES

SPST Normally Open High Voltage Contactors

- Hermetic Seal with gas fill
- Optional Auxiliary Contacts – for main position feedback
- Wide range of options
- Meets RoHS 2011/65/EU
- CE certified
- UL recognized (File E536110) Please refer to UL file for specific part numbers that are recognized



SPECIFICATIONS

| CHARACTERISTIC | MEASURE |
|---|-------------------------------------|
| Contact Arrangement | Form X, SPST NO |
| Max Switching Voltage | 1,000 VDC |
| Dielectric Withstand Voltage Contacts to Coil | 4,000 VAC, 1 minute |
| Dielectric Withstand Voltage Across Open Contacts | 4,000 VDC, 1 minute |
| Continuous Current - 35mm ² conductor 6AWG, 13.3mm ² | 150A 100A |
| Overload Current: 30 seconds 3 Minutes | 500A 200A |
| Make and Break | See table |
| Max Short Circuit Current -1 second | 1,250 A |
| Min Insulation Resistance | 1,000 Mohm @ 1,000V |
| Contact Resistance (Max) | 0.4mohm @ 100A (0.25mohm typical) |
| Operate Time (Max, incl bounce) | 25ms |
| Release Time (Max) | 10ms |
| Shock - Functional, 1/2 Sine, 11ms | 20G |
| Shock – Destructive, 1/2 Sine, 11ms | 50G |
| Operating Temperature | -40°C to 85°C |
| Ingress Protection | Exceeds IP69, (Hermetically sealed) |
| Mechanical life | 500,000 |

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SPECIFICATIONS - *Continued*

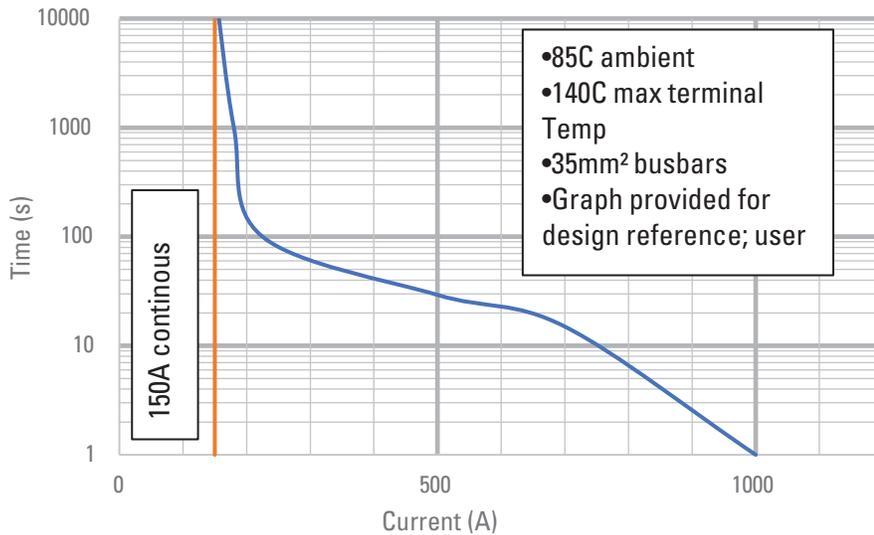
AUXILIARY CONTACTS

| | MEASURE |
|---------------------|----------|
| Contact Arrangement | SPST |
| Continuous Current | 2A |
| Minimum Current | 5mA @ 8V |

COIL @ 20°C

| | MEASURE | | |
|------------------------|---------|----------|----------|
| Nominal Voltage | 12V | 24V | 48V |
| Pick-up Voltage (Max) | 9.6 VDC | 19.2 VDC | 38.4 VDC |
| Drop-out Voltage (Min) | 0.8 VDC | 1.6 VDC | 3.3 VDC |
| Holding Current | 0.46A | 0.25A | 0.12A |
| Coil Resistance +/- 5% | 26Ω | 96Ω | 392Ω |
| Coil Power | 5.5W | 6W | 6W |

CURRENT CARRY



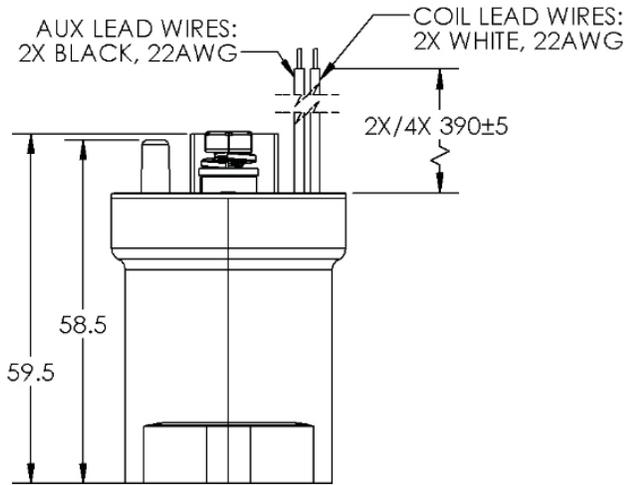
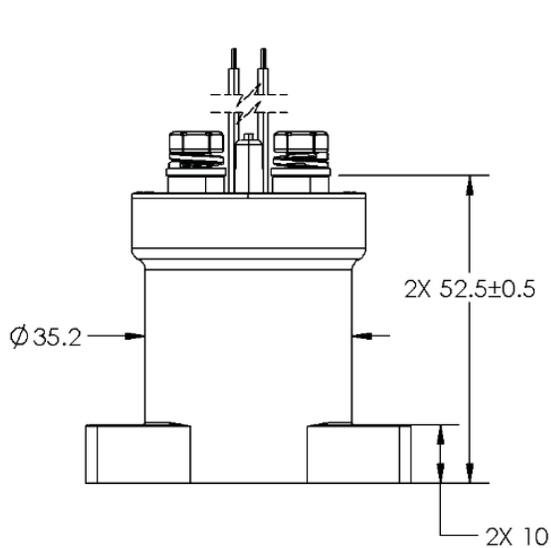
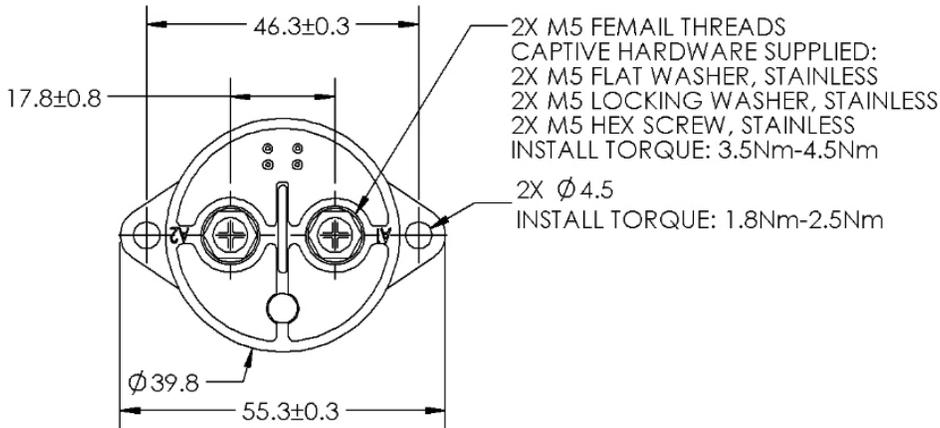
RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)

| POLARITY SENSITIVE VERSION | VOLTAGE | CURRENT | CYCLES (1 cycle = 1 make + 1 break) |
|----------------------------|---------|---------------------|--|
| 450V | 100A | 8,000 | |
| 450V | 1,500A | 1 (Fault Interrupt) | |
| 650V | 100A | 1,000 | |

| BI-DIRECTIONAL VERSION | VOLTAGE | CURRENT | CYCLES (1 cycle = 1 make + 1 break) |
|------------------------|---------|---------|--|
| 450V | 100A | 6,000 | |
| 650V | 100A | 600 | |

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PRODUCT DIMENSIONS [mm]



GENERAL TOLERANCES
 <10mm: ±0.3mm
 10-50mm: ±0.6mm
 >50mm: ±1.0mm

DIMENSIONAL AND INSTALLATION

| CHARACTERISTIC | MEASURE |
|--|------------------------------|
| Weight | 190g (0.42 lb) |
| Mounting Position | Any / Not Position Sensitive |
| Package Quantity | 30 |
| Coil / Aux Wires | 22 AWG |
| Install Torque M5 Main Terminals | 2.5-4.5 Nm (22-40 in-lb) |
| Install Torque M4 mounting hardware | 2.3 Nm |

NOTES

- The auxiliary contacts are connected internally via an armature on the main contact plunger. As the main contacts close, they automatically cause the auxiliary contacts to close.
- Polarity Sensitive versions are marked +A1 and -A2 for the power terminals. For applications that require the contactor under load, please ensure current is flowing from the +A1 to the -A2 terminal when breaking/opening under load. For Bi-Directional versions the direction of current does not matter when breaking under load.
- Attached cables and busbars directly to the main terminal pad using the recommended install torque. Do not use washers or other materials between the contactor and the conductor. This will ensure the lowest possible contact resistance.
- Avoid excessive coil voltages. Exceeding the ratings on the datasheet may result in high coil temperature and coil failure.
- Contactor may be used above Max Switching Voltage if the application does not require significant load breaking. Please contact salesusa@isabellenhuetten.com to discuss in more detail.

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