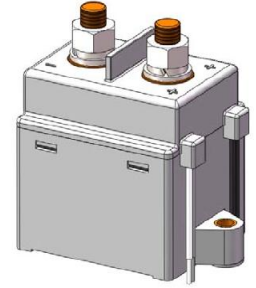


CHEV-60A~350A Series

60~350 Ampere high voltage relay



Features

- **Hermetically sealed:** Intrinsically safe, operates in harsh environments without oxidation or contamination of coil or contacts
- **Excellent switching performance:** Adopt the design of magnetic-driving, Fast extinguishing of arc gases and anti-welded contacts
- **Space saving:** Outline structure miniaturization
- **Mounting simplification:** No barrier around the main terminals
- **Optional auxiliary contact:** Be easy monitoring of power contact position
- **Economized coil system:** Energy saving by owned PWM design control
- **RoHS compliance**
- **REACH SvHC compliance**

Application

Battery Electric Vehicles(BEV), Fuel Cell Electric Vehicles(FCEV)
Hybrid Electric Vehicles(HEV), EV Charging Station, UPS

Coil

Series	Type	Coil voltage(DC)	Coil power(W)(Max.)
CHEV-60A	Standard	12V , 24V	6.0
	Economizes	12-24V	Start: 42, Hold: 1.7
CHEV-120A	Standard	12V , 24V	6.0
	Economizes	12-24V	Start: 42, Hold: 1.7
CHEV-150A	Standard	12V , 24V	6.0
	Economizes	12-24V	Start: 42, Hold: 1.7
CHEV-200A	Economizes	12-24V	Start: 42, Hold: 1.7
CHEV-250A	Economizes	12-24V	Start: 42, Hold: 1.7
CHEV-300A	Economizes	12-24V	Start: 55, Hold: 3.0
CHEV-350A	Economizes	12-24V	Start: 55, Hold: 3.0

Contact Data

Type	60A	120A	150A	200A	250A	300A	350A
Contact arrangement	1 form X						
Initial drop voltage(mV)	100						
Rated voltage(DC)	900VDC						
Rated current(A)	60	120	150	200	250	300	350
Electrical endurance	See the table						
Mechanical endurance	200,000 ops Min.(no load)						
Aux.-contact voltage	30VDC / 125VAC						
Aux.-contact current	2A(DC) / 3A(AC)						
Minimum load(Main terminal)	48VDC 100mA						
Minimum load(Aux.contact)	9VDC 100mA						

Characteristics

Operate time	25mS max.	
Release time	15mS max.	
Insulation resistance	100 MΩ min. (at1000 VDC)	
Dielectric strength	Coil-contact	3,000 VAC, 50/60 Hz (1 min)
	Contact-contact	3,000 VAC, 50/60 Hz (1 min)
Vibration resistance	Destruction	20G (10~2000Hz)
	Malfunction	20G (10~2000Hz)
Shock resistance	Destruction	40G(60~150A/S,SA), 50G(60~150A/E,EA200~350A)
	Malfunction	50G
Ambient temperature	-40~+85℃(with no icing or condensation)	
Ambient humidity	20% to 85% RH	
Mounting	60~120A: M4 Screw	
	150~350A: M5 Screw	
Weight	60~120A: About.210g	
	150~350A: About 410g	

Coil Data (23℃)

Series	Type	Coil voltage (VDC)	Coil resistance (Ω)±10%	Operate voltage (VDC)	Max operate voltage (VDC)	Release voltage (VDC)
CHEV-60/120	Standard	12	26	9.0 Min.	14.4	0.6 Min.
	Standard	24	104	18.0 Min.	28.8	1.2 Min.
	Economizes	12-24	4.6	9.0 Min.	36.0	6.0 Min.
CHEV-150A	Standard	12	26	9.0 Min.	14.4	0.6 Min.
	Standard	24	104	18.0 Min.	28.8	1.2 Min.
	Economizes	12-24	3.2	9.0 Min.	36.0	6.0 Min.
CHEV-200A	Economizes	12-24	3.2	9.0 Min.	36.0	6.0 Min.
CHEV-250A	Economizes	12-24	3.2	9.0 Min.	36.0	6.0 Min.
CHEV-300A	Economizes	12-24	2.8	9.0 Min.	36.0	6.0 Min.
CHEV-350A	Economizes	12-24	2.8	9.0 Min.	36.0	6.0 Min.

Rating Specification

Item	Voltage	SA60	EA60	SA120	EA120	SA150	EA150	EA200	EA250	EA300	EA350
Electrical endurance (Making/Breaking) (cycles)	400VDC	35,000	55,000	9,500	14,000	4,000	19,000	9,500	6,500	4,500	3,000
	750VDC	4,000	6,000	1,000	1,500	1,000	2,000	1,000	700	500	350
Electrical endurance (Only for Breaking) (cycles)	400VDC	55,000	82,000	13,500	20,000	13,500	27,000	13,500	9,700	6,800	4,800
	750VDC	5,700	8,500	1,400	2,000	1,400	2800	1,400	1,000	700	500

Ordering Information

CHEV -1 12 S A 60 , 000

1.Product family

CHEV series

2.Number of poles

1 = 1 pole

3. Rated coil voltage

12 =12VDC 24 =24VDC 12=12-24VDC

4. Coil type

S = Standard , For 60A~150A

E = Economizes, For 60A~350A

5. Aux.contact

A = With aux. contact

Blank = Without aux.contact

6. Contact current

60 = 60A

120 = 120A

150 = 150A

200 = 200A

250 = 250A

300 = 300A

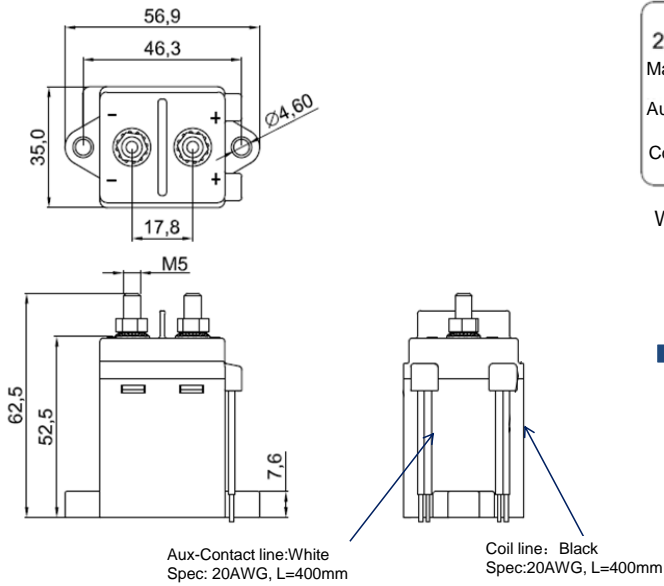
350 = 350A

7. Additional numbers and / or letters

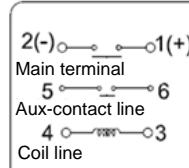
000-999, AAA-ZZZ, aaa-zzz or blank,only for specitic customer requirements

Outside Dimension

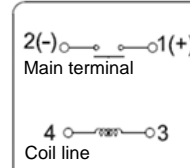
CHEV-60A/120A



Wiring Diagram



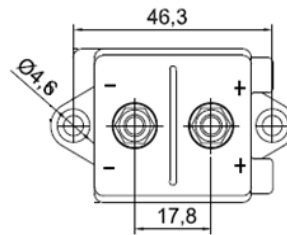
With Aux.contact



Without Aux.contact

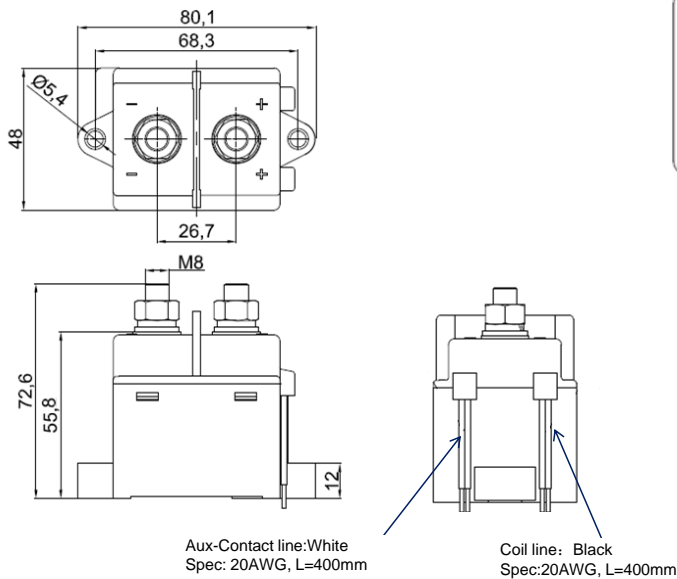
Mount Dimension

Unit:mm

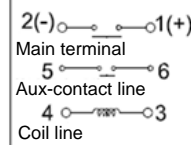


Outside Dimension

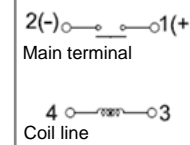
CHEV-150A/200A/250A/300A/350A



Wiring Diagram



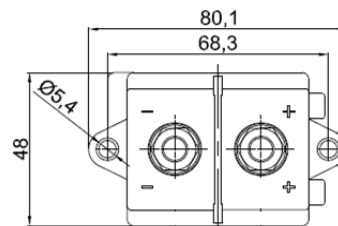
With Aux.contact



Without Aux.contact

Mount Dimension

Unit:mm



Remark:

1, Dimension Tolerance

Outline Dimension > 10mm and ≤ 50mm, reference tolerance: ±0.6mm;
Outline Dimension > 50mm, reference tolerance: ±1.0mm;

2, Main terminal robustness:

CHEV-60~120A: 3.0~3.5 N · m
CHEV-150~350A: 8.0~9.0 N · m

3, Mounting terminal robustness:

CHEV-60~120A: 2~2.4N · m
CHEV-150~350A: 3~4 N · m