

## FEATURES

- Outline dimension(47.6mm×40.0mm×45.1mm)
- 1 Form X arrangement
- Contact gap,3.6mm Min.
- Designed to meet UL/CUL,TUV requirements
- PCB terminal for the mounting
- RoHS compliance
- REACH SVHC compliance



## APPLICATION

DC Power Control  
 Inverter precharging circuit control  
 Industrial Control

## COIL PARAMETER

Coil voltage	12VDC,24VDC,48VDC
Coil power	3.2W

## CONTACT DATA

Type	CHDR-150H	CHDR-100H	CHDR-100
Contact arrangement	1 Form X		
Contact material	Ag Alloy		
Initial contact resistance	100mΩ max.@6VDC,1A		
Max. switching voltage	60VDC	60VDC	48VDC
Max. switching current	150A	100A	100A
Max. switching power	9000W	6000W	4800W
Contact rating	150A@60VDC (Resistive load)	100A@60VDC (Resistive load)	100A@48VDC (Resistive load)
Mechanical endurance	1,000,000 ops Min.(no load)		
Electrical endurance	1,000 cycles	1,000 cycles	3,000 cycles
Minimum load (reference value)	100mA @5VDC		

## COIL DATA @23°C

CHDR				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
12	267	45	9	0.6
24	133	180	18	1.2
48	67	720	36	2.4

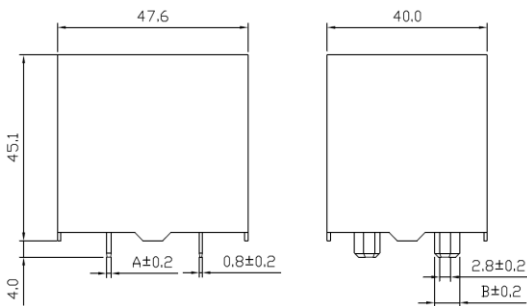
## CHARACTERISTICS

Operate voltage	75% of nominal voltage or less	
Release voltage	5% of nominal voltage or more	
Operate time (At nominal voltage)	30ms max.	
Release time(At nominal voltage)	30ms max.	
Insulation resistance	1,000MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	4,000 VAC, 50/60Hz (1min)
	Between open contacts	1,300 VAC, 50/60Hz (1min)
Surge voltage between coil and contacts	6,000V(1.2/50μs)	
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000 m/s <sup>2</sup> (100G approximately )
	Malfunction	100 m/s <sup>2</sup> (10G approximately)
Ambient temperature	Operating: -40~+85°C Operating: -40~+65°C ( Only for CHDR-150H type) (without icing or condensation)	
Ambient humidity	Operating: 20% to 85% RH	
Terminal	PCB terminals	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight),plastic cover.(RT II)	
Weight	Approx. 165g	

## ORDERING INFORMATION

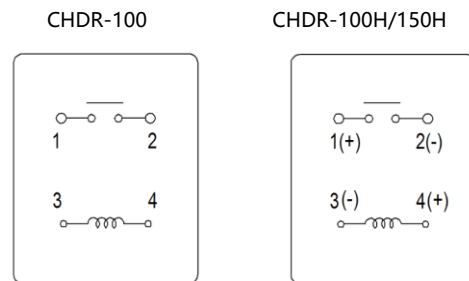
CHDR	-1	12	D100	H	000
1. Product Family CHDR Series					
2. Number of Poles 1=1 pole					
3. Rated Coil Voltage 12 =12VDC, 24 =24VDC, 48 =48VDC					
4. Current Rating D100=100A D150=150A					
5. Load voltage type H=60VDC(100A&150A) Blank=48VDC (100A)					
6. Additional numbers and /or letters 000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements					

## OUTLINE DIMENSION

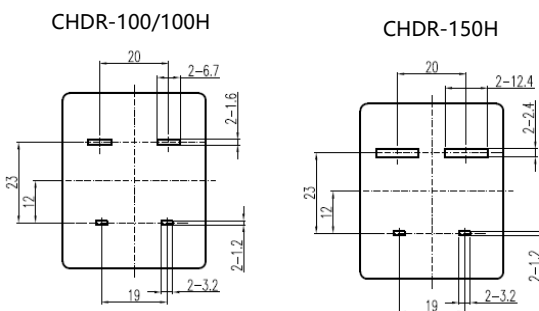


Model	A Terminal	B Terminal
CHDR-100/100H	1.2	6.3
CHDR-150H	2.0	12.0

## WIRING DIAGRAMS (BOTTOM VIEWS)



## PC BOARD LAYOUTS (BOTTOM VIEWS)



Remark: 1) The reference tolerance in outline dimension:

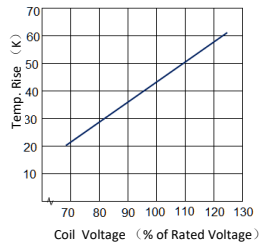
outline dimension  $\leq 1\text{mm}$ , reference tolerance is  $\pm 0.2\text{mm}$ ;

outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , reference tolerance is  $\pm 0.3\text{mm}$ ;

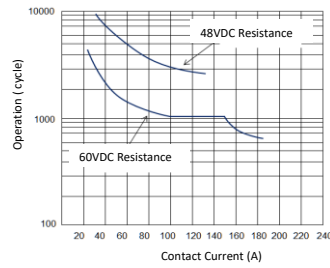
outline dimension  $> 5\text{mm}$ , reference tolerance is  $\pm 0.5\text{mm}$ .

## Reference Date

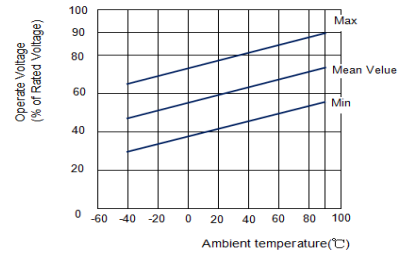
Coil Temperature Rise



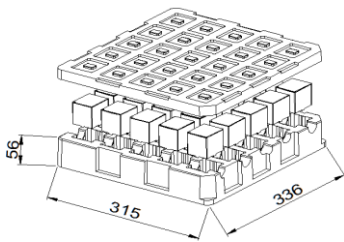
Electrical Endurance



Coil Operate Voltage & Temperature Cure



## PACKAGING



25 pcs inside a box

50 pcs inside a carton

Disclaimer:

The specification is for reference only, if you need more detail information, please contact Churod. We could not evaluate all the performance and all parameters for every possible application.

And the user should be in a right position to choose the suitable product for their own application. If there is any new need, please contact Churod for the technical service.

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