

FEATURES

- PCB terminal, large current latching contactor: small size(39.2*22*27.5mm)
- Double contact for arc extinguishing structure, Load is non-polarity
- Low contact pressure drop
- Lightning strike surge current maximum 20KA
- Short-circuit resistance current 10KA, Ment Class 2 grade(With SPCD circuit breaker)
- Contact GAP: $\geq 1.5\text{mm}$
- Compressive strength between coil and contact 3000VAC
- High rated insulation withstand voltage:500VAC
- Contact arrangement: Main normally open contacts; Auxiliary normally open contacts
- UL,CCC compliance
- RoHS compliance
- REACH SvHC compliance



File NO. E341422



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APPLICATION

- 5G communication power supply
- Charging pile
- Other DC load devices

COIL PARAMETER

Coil voltage	12-60VDC	
Coil power	CHDR-125LA	53W
	CHDR-110LA/80LA	7.7W

CONTACT DATA

Type	CHDR-125LA	CHDR-110LA	CHDR-80LA
Contact arrangement	1 Form A		
Contact material	Ag Alloy		
Initial contact resistance	0.8m Ω Max.@6VDC 20A		
Max. switching voltage	80VDC	60VDC	24VDC
Max. switching current	125A	110A	80A
Max. switching power	10000W	6600W	1920W
Main contact rated load (Resistive Load)	125A@80VDC	110A@60VDC	80A@24VDC
Auxiliary contact rated load (Resistive Load)	1A@80VDC		
Mechanical endurance	100,000 ops Min.(no load)		
Electrical endurance (Resistive Load)	6,000 ops Min.		10,000 ops Min.
Minimum load (reference value)	Main Contact:100mA@ 1VDC Auxiliary Contact:1mA@ 3VDC		

COIL DATA @23°C

CHDR-125LA(53W),Standard				
Nominal coil voltage (VDC)	Nominal Current (A)	Coil Resistance (Ω) $\pm 10\%$	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
12	4.4	2.7	5.4	5.4
24	2.2	10.8	10.8	10.8
48	1.1	43.4	21.6	21.6
60	0.9	68.0	27.0	27.0

CHDR-110LA/80LA(7.7W),Sensitive				
Nominal coil voltage (VDC)	Nominal Current (A)	Coil Resistance (Ω) $\pm 10\%$	Operate Voltage (VDC Max.)	Release Voltage (VDC Max.)
12	0.6	18.7	8.4	8.4
24	0.3	75.0	16.8	16.8
48	0.2	299.0	33.6	33.6
60	0.1	467.0	42.0	42.0

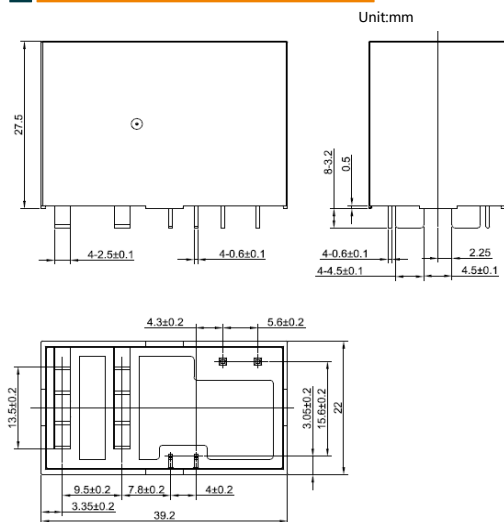
CHARACTERISTICS

Operate voltage	70% of nominal voltage or less	
Release voltage	70% of nominal voltage or more	
Operate time(At nominal voltage)	$\leq 30\text{ms}$	
Release time (At nominal voltage)	$\leq 30\text{ms}$	
Operate bounce time (At nominal voltage)	$\leq 3\text{ms}$	
Insulation resistance	1,000 M Ω (at 500 VDC)	
Dielectric strength	Between coil and main contacts	3,000 VAC, 50/60 Hz (1 Min)
	Between coil and Auxiliary contacts	2,000 VAC, 50/60 Hz (1 Min)
	Between open main contacts	3,000 VAC, 50/60 Hz (1 Min)
	Between open Auxiliary contacts	1,000 VAC, 50/60 Hz (1 Min)
	Between main contacts and Auxiliary contacts	3,000 VAC, 50/60 Hz (1 Min)
	Between Live part and ground electrode	3,000 VAC, 50/60 Hz (1 Min)
Rated impulse withstand voltage	Between coil and contacts	6,000V(1.2/50 μs)
Vibration resistance	Functional	10 ~ 55 Hz, Acceleration $\leq 2\text{G}$
	Destructive	10 ~ 55 Hz, Acceleration $\leq 5\text{G}$
Shock resistance	Functional	5G Min.
	Destructive	30G Min.
Ambient temperature	Operating: -40~+85°C (without icing or condensation)	
Storage ambient temperature	Operating: -40~+75°C (without icing or condensation)	
Ambient humidity	5% to 85%Rh at 20°C	
Terminal shape	PCB Terminal	
Protection grade	IP00	
Weight	Approx. 49g	

ORDERING INFORMATION

1. Product Family	CHDR	-1	60	D125	L	A	,000
2. Number of Poles	1=1 pole						
3. Rated Coil Voltage	12,24,48,60VDC						
4. Rated load current	D125: DC125A D110: DC110A D80: DC80A						
5. Product type	L: Latching type						
6. Contactor construction	A: Auxiliary normally open contacts						
7. Additional numbers and /or letters	000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements						

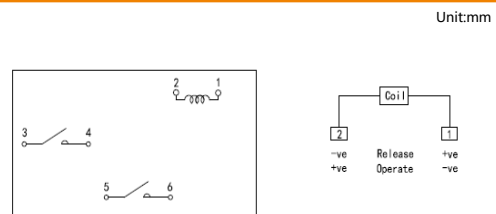
OUTLINE DIMENSION



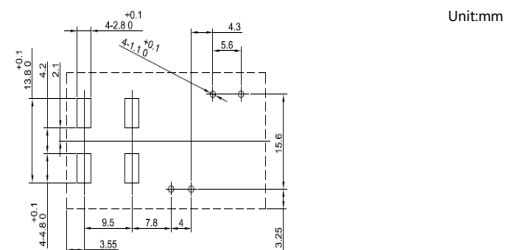
Remark:

- The reference tolerance in outline dimension:
- outline dimension ≤ 1 mm, reference tolerance is ± 0.2 mm;
- outline dimension > 1 mm and ≤ 5 mm, reference tolerance is ± 0.3 mm;
- outline dimension > 5 mm, reference tolerance is ± 0.5 mm.
- The reference tolerance for PC Board layout is ± 0.1 mm.

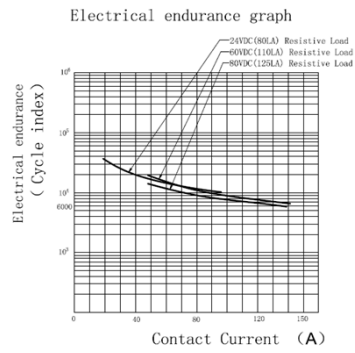
WIRING DIAGRAMS(BOTTOM VIEWS)



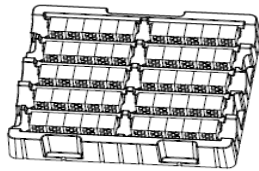
PC BOARD LAYOUTS (BOTTOM VIEWS)



REFERENCE DATA



PACKAGING FIGURE



50 pcs inside a box

250 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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