

Features

- Outline dimension: PCB: 38mm×29.8mm×33.6mm
TAB: 61.1mm×29.8mm×32mm
- 1A (SPDM) , GAP>3.0mm
- IEC61810, IEC60664, RoHS, REACH SvHC compliance
- Epoxy resin seal , Environmental protection category RTII
- 20A 85°C carrying capacity
- PCB mounting type or TAB mounting type



Application

EV
Precharge circuit control of inverter
Industrial DC control unit
AGV

Coil parameters@ 23℃

Rated voltage (VDC)	Rated power (W)	Rated current (mA)	Coil resistance (Ω±10%)	Operate voltage (VDC)	Release voltage (VDC)
9	2	220	42.5	≤6.75	≥0.45
12	2	160	76	≤9	≥0.6
18	2	110	170	≤13.5	≥0.9
24	2	80	303	≤18	≥1.2
36	2	55	682	≤27	≥1.8
48	2	40	1212	≤36	≥2.4
60	2	33	1894	≤45	≥3.0
110	2	18	6368	≤82.5	≥5.5

Notes: The above values are the initial at 23℃.

Contact parameters

Contact form	1A(SPDM)
Contact material	AnSnO2
Initial voltage drop	≤60 mV at 20 A
Rated current (Resistive Load)	20 A (@2.5mm ² PCB or #250 TAB)
Rated switching voltage	600 Vd.c.
Minimum applicable load	48Vd.c., 100mA
Max switching voltage	600 Vd.c.
Rated switching current	20A (600 Vd.c.)
Electrical life (Resistive Load)	DV: 1000 次 (600 Vd.c. 20 A) 3000 次 (500 Vd.c. 20 A) DH: 6000 次 (72 Vd.c. 20 A)
Current tolerance	20A, continuous; 30A, 1.0 h; 40A, 20 min; 80A, 30 s; 120A, 10 s; 200A, 0.6 s;
Mechanical life	200000次, ON:OFF: 0.2s: 0.2s

Notes: Electrical life at 23℃, ON: OFF=1s: 9s. During the test, the coil was not connected to the surge suppression device. If the coil parallel diode is used, the release time of the relay will be lengthened and the life will be reduced.

Other parameters

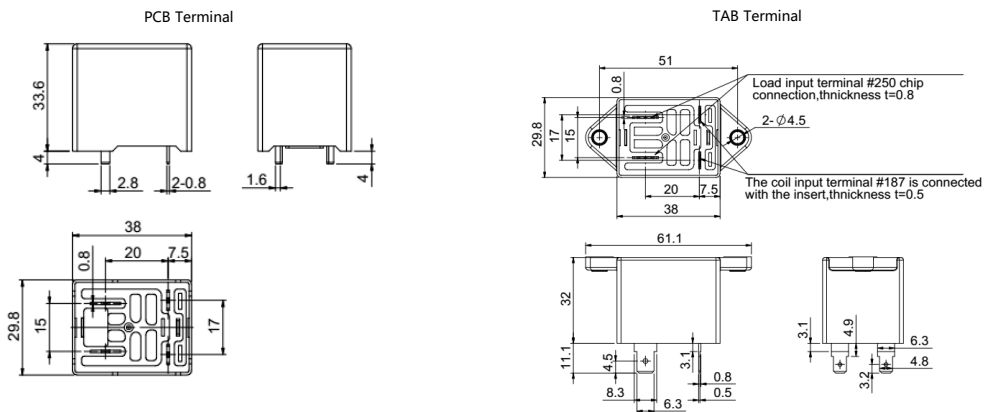
Dielectric strength	between open contacts	2500 Va.c. 50/60 Hz 1 min
	between coil to contacts	3500 Va.c. 50/60 Hz 1 min
Insulation resistance		1000 MΩ at 1000 Vd.c.
Operate time (at rated voltage)		≤25ms
Release time (at rated voltage)		≤10ms
Vibration resistance	Destruction	10Hz~ 500Hz., 49m/S ²
	Functional	10Hz~ 500Hz., 49m/S ²
Shock resistance	Destruction	490m/s ²
	Functional	ON: 196m/s ² OFF: 98m/s ²
Ambient temperature		-40℃~85℃(No dew, No ice)
Relative humidity		5% RH ~85% RH
Terminal style		PCB terminal, TAB terminal
Installation		PCB terminal, M4 screw
Environmental protection category		RTII
Weight		PCB: 65g, TAB: 67g
Overall dimensions		PCB: 38mm×29.8mm×33.6mm TAB: 61.1mm×29.8mm×32mm

Notes: The above values are conservative at 23℃.

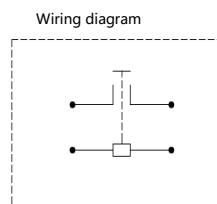
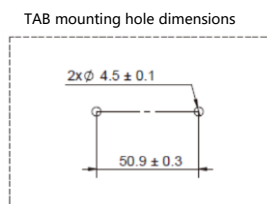
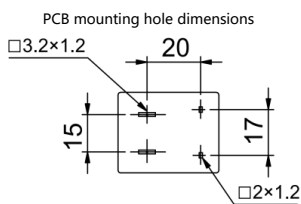
Selection of reference

	CHDR1	-1	12	DV	20	T	,XXX
1.Product code	CHDR1 series						
2.Contact form	1=1 Form A(SPDM)						
3.Coil rated voltage	09,12,18,24,36,48,60,110VDC						
4.Rated switching voltage	DV = 600VDC DH = 72VDC						
5.Rated switching current	20 =20A						
6.Terminal style	blank=PCB terminal T=Tab terminal						
7.Additional numbers and /or letters	000-999 , aaa-zzz or blank , which does not represent electrical changes, only for specific customer requirements						

Outline dimension



Mounting hole dimensions and wiring diagram



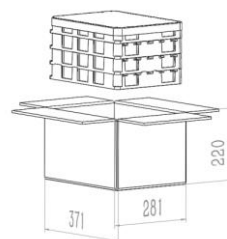
Notes: No dimensional tolerance:
 size ≤10mm; tolerance : ±0.2mm;
 size 10~50mm; tolerance : ± 0.3mm;
 size > 50mm; tolerance : ±0.4mm .

Notes:

- Please avoid sticking grease and other foreign bodies on the lead end, PCB terminal use above 2.5mm² connecting wires.TAB terminal use #250. Otherwise, it may cause abnormal fever at the end of the derivation.
- PCB Terminal welding temperature and time are recommended not to exceed 260°C/10S, In the case of overrange, damage may result.
- TAB mounting hole use screw M4,Please control the torque within 2~3N*m.In the case of overrange, damage may result.

Notes: The load and and the coil is non-polar.

Packaging figure



Each plastic box 25PCS , Per carton 100PCS.

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.