CHAR-C Series 75A Photovoltaic Relay

Churod Electronics

Product FEATURES

- Outline Dimension: 38 mm×33 mm×39.5 mm
- 1 Form X arrangement， GAP≧4.0 mm
- Designed to meet GB21711.1, IEC61810, UL60947-1, RoHS, REACH SVHC requirements
- Environmental protection category RTII
- Contact switching capability with 75A
- Applied to the inverter in solar photovoltaic field
- To reduce power loss, a small coil holding-voltage has been used for working coil
- Insulation class: F class

File NO. E341422

File NO. R50499133

File NO. CQC21002285874

APPLICATION

- Circuit Control of Inverter

COIL PARAMETERS

Rated voltage (VDC)	Rated power (W)	Rated current (mA)	Coil resistance (Ω±10%)	Operate voltage (VDC)	Release voltage (VDC)
6	1.92	320	18.75	≤4.5	≥0.6
9	1.92	213	42.2	≤6.75	≥0.9
12	1.92	160	75	≤9	≥1.2
24	1.92	80	300	≤18	≥2.4
48	1.92	40	1200	≤36	≥4.8

Notes:

1) The above values are the initial at 23℃.

HOLD VOLTAGE

Rated voltage (VDC)	Hold voltage of coil (VDC)
6	3.3~6
9	4.95~9
12	6.6~12
24	13.2~24
48	26.4~48

Notes:

1) The above values are only the reference values at 23℃. Please contact the com

for details.

CONTACT PARAMETERS

Contact configuration	1 Form X
Contact material	Ag Alloy
Initial contact resistance	≤5 mΩ (6 VDC 20 A)
Rated current	75 A
Contact rating	Making 30 A; Carry 90 A; Break 30 A
Rated switching voltage	1000 VAC
Max. breaking current	83 A
Max. switching power	83000 VA
Electrical endurance	≥3×10^(4) cycles (at 85 ℃, 1 s ON/9 s OFF)
Mechanical endurance	1 Million cycles, Coil:0.2 s ON / 0.2 s OFF

Notes:

1) The life expectancy will be lower when a diode is used in parallel with the coil.

OTHER PARAMETERS

Dielectric strength	between open contacts	2500 VAC. 50/60 Hz 1 min
	between coil to contacts	5000 VAC. 50/60 Hz 1 min
Insulation resistance		100 MΩ (1000 VDC)
Operate time (Rated voltage)		≤35 ms (at 85 ℃)
Release time (Rated voltage)		≤10 ms
Vibration resistance	Between coil and contacts	10 Hz~ 55 Hz, 1.5 mm
	Malfunction	10 Hz~ 500 Hz, 49 m/s2
Shock resistance	Between coil and contacts	981 m/s2
	Malfunction	98.1 m/s2
Operating temperature		—40 ℃~85 ℃ (Without condensation and freez
Operating humidity		20% RH ~85% RH
Terminal style		PCB terminal
Category of protection		RT II (Flux proof)
Weight		About 89.5 g

Notes:

1) Unless otherwise specified, the above values are the initial at 23℃.

ORDERING INFORMATON

	CHAR	-1	12	A75	C	,XXX

1.Product Family

CHAR series

2.Contact form

1=1 Form A (SPDM)

3.Coil rated voltage

06 =06 VDC 09 =09 VDC 12 =12 VDC 24 =24 VDC 48 =48 VDC

4.Rated switching current

A75= 75 A

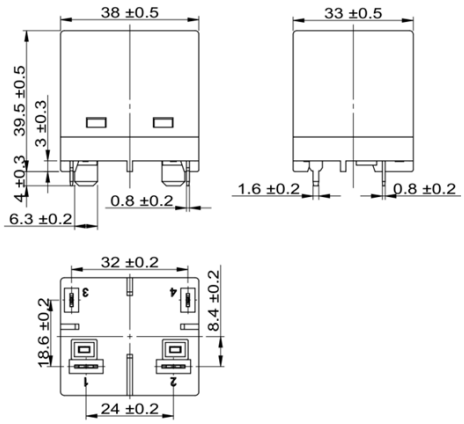
5.Product code

C series

6.Additional numbers and letters

000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements

OUTLINE DIMENSION



Notes:

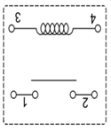
1) Unmarked geometric toletance are as follows:

outline dimension ≤1mm, reference tolerance is ±0.2mm;

outline dimension >1mm and ≤5mm, reference tolerance is ±0.3mm;

outline dimension >10mm, reference tolerance is ±0.5mm;

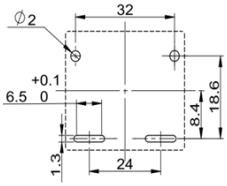
WIRING DIAGRAMS



Notes:

1) The schematic of wiring diagrams is the bottom view in the above.

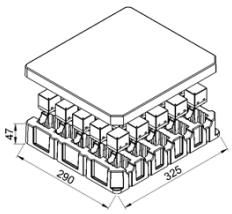
PCB BOARD LAYOUTS



Notes:

1) The schematic of assembling with PCB is the bottom view in the above.

PACKAGING FIGURE



25 pcs inside a box
100 pcs inside a carton

Disclaimer:

This specification is for reference only. For more details, please contact Churod. We are not able to evaluate all the performance and parameters of every possible application.

If you have any new needs, please contact us in time, we will be happy to serve you.