



NEW ENERGY ENTERPRISES

DC CONTACTOR

Selection Guide

DC Contactor



浙江南峰电气有限公司

ZHEJIANG NANFENG ELECTRIC APPLIANCE CO., LTD.

NANFENG Electric Used and Experienced



DC Contactor

TK Series Type Fully Sealed High Voltage DC Contactor	TK50D	1	TK400D	9
	TK1-100D	3	TK2000DP	11
	TK200A	5	TK200H	13
	TK200D	7		
ZJW Series DC Contactor	ZJW50A	17	ZJW500A	25
	ZJW100A	19	ZJW800A	27
	ZJW200A	21	ZJW900A	29
	ZJW400A	23		
ZJ Series DC Contactor	ZJ50D	33	ZJ500B	53
	ZJ100D	35	ZJ1000B	55
	ZJ200D	37	ZJ2000B	57
	ZJ400D	39	ZJ700AB	59
	ZJ600D	41	ZJ400AB	61
	ZJ100A	43	ZJ600AB	63
	ZJ200A	45	ZJ800AB	65
	ZJ400A	47		
	ZJ600A	49		
	ZJ800A	51		
ZJQ Series DC Contactor	ZJQ100A	67	ZJQ150-T	77
	ZJQ100H	69	ZJQ300A	79
	ZJQ100-T	71	ZJQ300H	81
	ZJQ150A	73	ZJQ300A-T	83
	ZJQ150H	75		
ZJW Series DC Contactor	ZJWTP50	85	ZJW100-02	107
	ZJWTP100	87	ZJW100-22	109
	ZJW100	89	ZJW100-30	111
	ZJW1200	91	ZJW100-03	113
	ZJW100H-T	93	ZJW100-33	115
	ZJW200H-T	95	ZJW200-20	117
	ZJW400H-T	97	ZJW200-22	119
	ZJW50-20	99	ZJW200-30	121
	ZJW50-02	101	ZJW200-03	123
	ZJW50-22	103	ZJW200-33	125
	ZJW100-20	105	ZJW200-40	127
JX Series DC Contactor	JX50DT	129	JX500H	131
NR Series DC Contactor	NR80A	133	NR500A	137
	NR200A	135		
NF Series DC Contactor	NF200A	139	NF400A	143
	NF200CZ	141	NF400CZ	145

Emergency Power OFF Switch

ZJK Series Emergency Power OFF Switch	ZJK125A	147	ZJK250A	151
	ZJK300A	149		

Connector

CH Series Connector	CHJ	153	CHR	155
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NEW ENERGY ENTERPRISES

- TK series DC contactor adopts screw-type structure, compact product structure and excellent environmental resistance. It is widely used in DC power supply systems such as electric vehicles, communication power supplies and inverters.
- The product adopts natural arc extinguishing and magnetic blow arc extinguishing, and the arc extinguishing effect of the product is stable and effective, and is not affected by the package leakage rate. The product contacts are made of silver alloy contacts, the contact resistance is stable, and the resistance to fusion welding is strong. The product contact pressure element is specially designed to make the pressure uniform contact break and balance. The series has a wide load current range of 50A, 100A, and 200A current levels, and the load low voltage covers all ranges below DC 750V.
- This series of products is unipolar normally open (NO).
- In this series of products, TK200A, TK200H, TK100G and TK200G all have energy-saving circuit boards. The starting current of the product coil is generally not more than 3A, the coil holding current is within 0.8A, and the input terminal is maintained at about 0.2A. The energy-saving board has a voltage rating of 12V and 24V.

For more information please visit: www.kingnan.com





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TK50D

TYPE FULLY SEALED HIGH VOLTAGE DC CONTACTOR



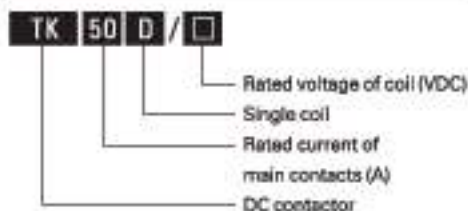
Application

The products are mainly used to control switching on/off of power supply of storage battery car, electric forklift, electric winch, electric car, excavator, air conditioner in vehicle, power source for communication facility.

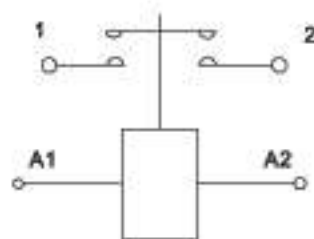
Ordering Notice

For example: TK50D/12V
The DC contactor of main contact is one NO, rated voltage not more than DC 750V, current 500A, coil voltage is DC12

Model and Meanings



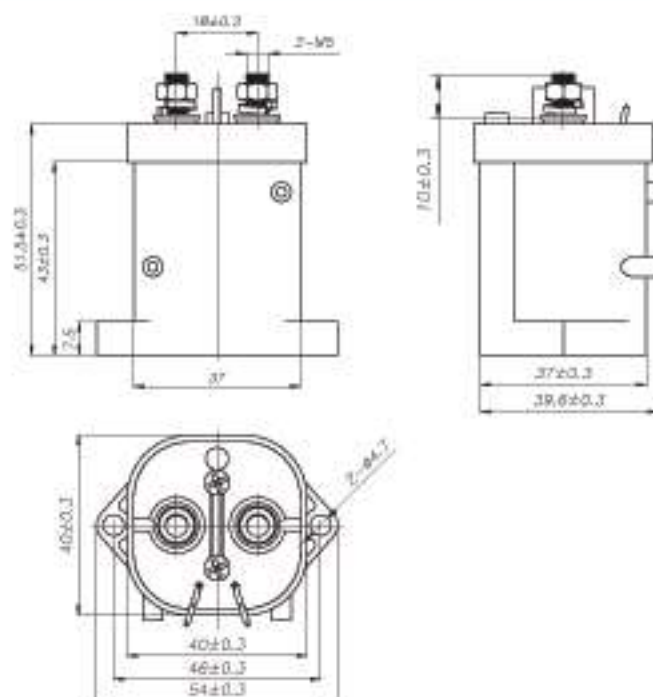
Electric Wiring Diagram



Basic Technical Parameters (at normal conditions)

Electric Parameters			
Contact type	One pair of bridge type moving open (NO) contacts	Pickup time(ms)	≤50
Rated voltage of contacts (DC)	≤220V	Release time(ms)	≤50
Rated current of contacts (A)	50	Instantaneous max (closing) current	7Ie, ≤1s
Switching load capacity of contact(DC)	750V, 15A	Insulation resistance(MΩ)	≥100
	600V, 20A	Dielectric withstand voltage	1500V,p.f. 1min, no breakdown
	450V, 40A	Electric cycles (10 ⁵)	≥1
	220V, 50A	Mechanical cycles (10 ⁵)	≥30
Voltage drop on contacts(mV)	≤100	Temperature rise on outgoing terminal	≤65
Coil voltage specification(DC)	12V, 24V, 48V, 72V etc	Temperature rise of coil(K)	≤85
DC power consumption of coil (W)	≤5	Material of contact	AgCu(X10)
Pickup voltage(DC)	≤75%Us	Working duty	Long term
Release voltage(DC)	≥5%Us; ≤40%Us	Acting frequency	≤1Hz
Mechanical/Ambient Conditions			
Torque of outgoing terminal on contact M5(N.m)	≥2.6N appropriate	Protection grade	IP67
Leading mode of coil	High temperature insulated multiple-stranded CU wire	Mounting methods	Freely
Working temperature	-25~+55°C	Vibration	Sine shock: 2.5g, (5~50) Hz
Mounting altitude	≤2Km	Impact	50g, 11ms(Half sine)
Conversion Table for Coil Specification(20°C)			
Voltage(V)	Coil resistance(1±10%)Ω	Voltage(V)	Coil resistance(1±10%)Ω
12	27.0	60	611.0
24	107.6	72	880.0
48	418.8	80	1107.0

Outline and Mounting Picture





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TK_i-100D

TYPE FULLY SEALED HIGH VOLTAGE DC CONTACTOR



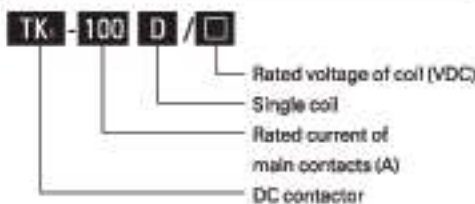
Application

The products are mainly used to control switching on/off of power supply of storage battery car, electric forklift, electric winch, electric car, excavator, air conditioner in vehicle, power source for communication facility.

Features

The main circuit and coil input of the product are non-polar.

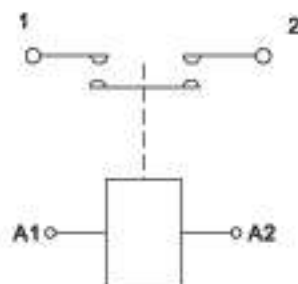
Model and Meanings



Ordering Notice

For example: TK_i-100D/12V
The DC contactor of main contact is one NO, rated voltage not more than DC 750V, current 100A, coil voltage is DC12V

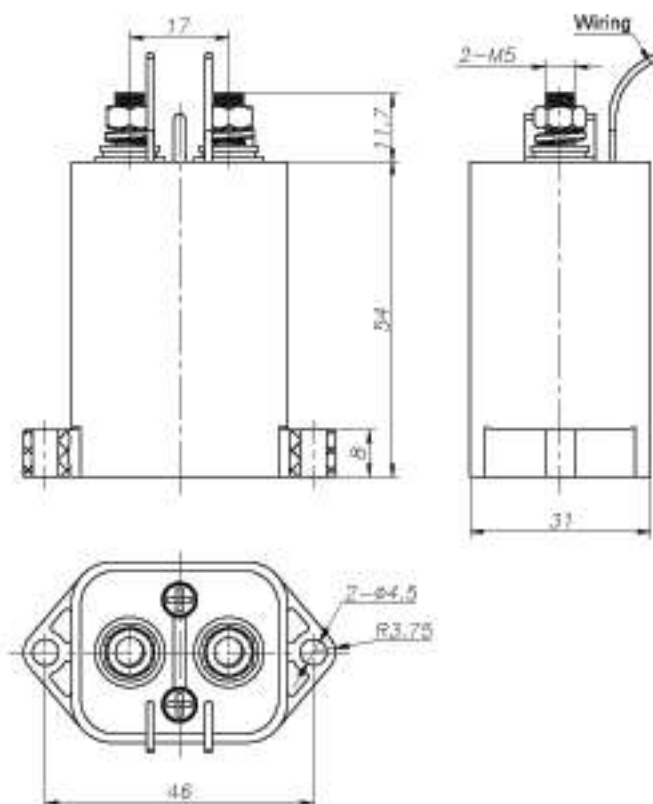
Electric Wiring Diagram



Basic Technical Parameters (at normal conditions)

Electric Parameters			
Contact type	One pair of bridge type moving open (NO) contacts	Pickup voltage(DC)	$\leq 75\% U_s$
Rated voltage of contacts (DC)	150V	Release voltage(DC)	$\geq 5\% U_s$; $\leq 40\% U_s$
Rated current of contacts (A)	100	Pickup time(ms)	≤ 30
Switching load capacity of contact(DC)	750V, 15A	Release time(ms)	≤ 50
	600V, 20A	Insulation resistance(M Ω)	≥ 100
	450V, 40A	Dielectric withstand voltage	2000V.p.t. 1min, no breakdown
	150V, 100A	Electric cycles (10^4)	≥ 1
Main contact overload capability	200A, ≥ 5 min	Mechanical cycles (10^4)	≥ 30
	250A, ≥ 1 min	Temperature rise on outgoing terminal	≤ 65
	300A, ≥ 30 s	Temperature rise of coil(K)	≤ 85
Voltage drop on contacts(mV)	≤ 80	Material of contact	AgCuO(15)
Coil voltage specification(DC)	12V, 24V, 48V	Working duty	Long term
DC power consumption of coil (W)	≤ 3.8	Acting frequency	≤ 1 Hz
Mechanical/Ambient Conditions			
Torque of outgoing terminal on contact M5(N.m)	> 2.8 N appropriate	Protection grade	IP67
Loading mode of coil	High temperature insulated multiple-stranded CU wire	Mounting methods	Freely
Working temperature	$-25 \sim +55^\circ\text{C}$	Vibration	Sine shock: 2.5g, (5—50) Hz
Mounting altitude	≤ 2 Km	Impact	50g, 11ms(Half sine)

Outline and Mounting Picture





NEW ENERGY ENTERPRISES

TK200A

TYPE FULLY SEALED HIGH VOLTAGE DC CONTACTOR



Application

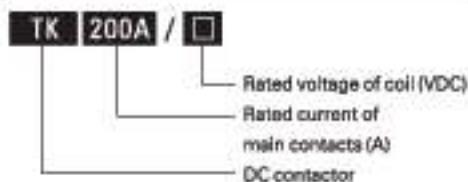
The products are mainly used to control switching on/off of power supply of storage battery car, electric forklift, electric winch, electric car, excavator, air conditioner in vehicle, power source for communication facility.

Ordering Notice

For example: TK200A/12V

The DC contactor of main contact is one NO, rated voltage not more than DC 220V, current 200A, coil voltage is DC12V

Model and Meanings



Electric Wiring Diagram

