











# DC Contactor

## CZWH400A DC Contactor



# **USES**

This product have one normally open and one normally close contact, for electric vehicles, telecommunication equipment, engineering machinery, car batteries, electric forklift trucks, trains, ships, electronic control systems such as uninterruptible power supply.

CZWH	400A	<u>-S</u>	<u>-C</u>	<u>-K</u>	<u>-M</u>	<u>- 🗆</u>	/24V
1	2	3	4	5	6	7	8

- 1 Product type
- 2 Rated current
- 3 Auxiliary switch: None Without auxiliary switch; S With auxiliary switch
- 4 Magnetic blowouts
- Megnetic holding structure: K Two joint magnetic retention(Single coil, Two joint self-locking); 2K Three joint magnetic retention(Double coil, Three joint self-locking)
- 6 Mounting bracket type: M Horizontal (default), 1L One vertical, 2L Two vertical
- 7 Other function codes: I: With suppressor diode, R: With pre-charged resistance ,CO: Continuous , IN:
- 8 Coil rated voltage: 6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,220V etc.

# USE OF THE ENVIRONMENT

_	_		
	טואו כ		$\Delta$
I URIJEI	< 11VI.5	1811	. 1 10 11

Contact lead M10 tightening	≯20.5 appropriate	U.N.W.	1593g		
Coil lead-out torque (N.m) ⇒ 0.8 appropriate		Package QTY.	20PCS		
Ambient temperature -25~+70°C					
Relative humidity	+20℃ 98%				
Vibration freq. atthe fixed	3G, 1 $\sim$ 50Hz amplitude 0.5mm				
Concussion	(60 $\sim$ 100) time/minute $\varsigma$	i0∼100) time/minute、			
Altitude	2000m				
Installation direction	Random	Mounting bracket type	M Horizontal (default), 1L One		
International protection	IP40 (According IEC60947)		vertical, 2L Two vertical		

#### ORDER FORM DESCRIPTION

When ordering, please state the following: name, full model, control coil voltage specification, installation frame type, whether with auxiliary contact, order quantity. For example: DC Contactor CZWH400A/24V 100pcs, indicating the load rated current 400A, without auxiliary contact, default mounting bracket, coil control voltage 24V purchase 100pcs. Special voltage specification products, such as user needs can be special order.









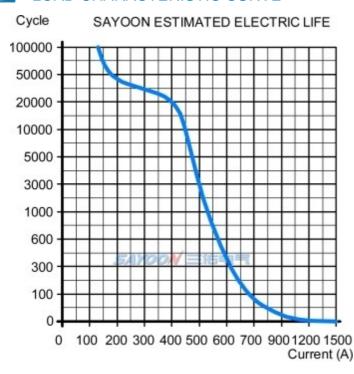


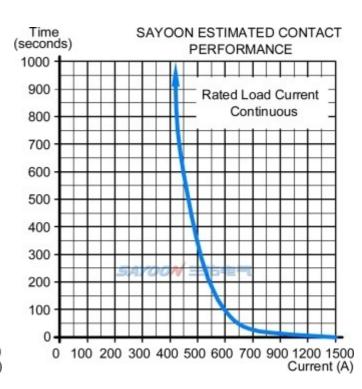
### TECHNICAL PARAMETERS

(Version 1.58)

SAYOON Product Type	CZWH400A		
Contact form	1 NO 1 NC		
Coil Rated voltage (DC V)	6V,12V,24V,36V,48V,60V,72V,84V,120V,150V,220V etc.		
Contact voltage (DC V)	≤80V		
Rated load current of contact 48V circuit (DC-1)	400A		
Typical voltage drop across contacts per 100A	≯80mV		
The cooling pull-in voltage at (20±5)℃ (V)	≯70%		
The cooling drop-out voltage at (20±5) ℃ (V)	<i>≯</i> 35%, <i>≮</i> 5%		
Working voltage range of 40°C coil	0.8-1.2Us		
Drop-out time (n/o contacts to open)	40ms		
Pull-in time (n/o contacts to close)	12ms		
Maximum bounce time for contact connection	10ms		
Maximum bounce time for contact disconnection	3ms		
Insulation resistance	20ΜΩ		
Electric strength to resist	50Hz/60Hz 1000VAC 1minute		
Typical fault currents which can be ruptured	1500A/5ms at 48V DC		
Coil power (W)	22-40		
Temperature rise of coil (K)	≤80		
Temperature rise on outgoing terminal (K)	≤65		
Electrical life	20,000 times		
Mechanical life	300,000 times		
Work specification	Continuous or Intermittent(default)		
Contact material	Ag alloy		
Load terminal type	M10 Screw		
Coil terminal type	6.3mm spade terminals		
Auxiliary contact rated load (optional)	2A/48VDC, 5A/24VDC		
Normally closed to normally open	14ms		

#### LOAD CHARACTERISTIC CURVE













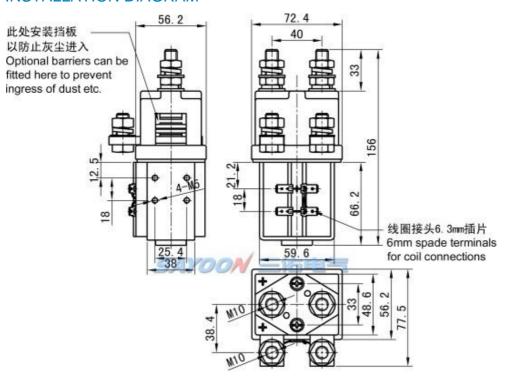


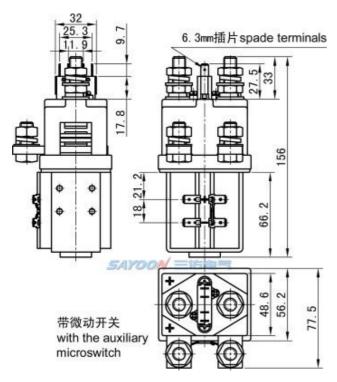
# OTHER TECHNICAL PARAMETERS

Normally open to normally closed	8ms
Testing organization certification	CE,FCC

Note: As regarding to the different using environments of customers which requires different focus of the functions, and in order to improve the comprehensive properties of our products, sayoon may adjust the coil parameters, temperature rise and so on. The above parameters are for reference only, For details, please refer to the guidelines for selection and use of the SAYOON DC contactor.

## INSTALLATION DIAGRAM





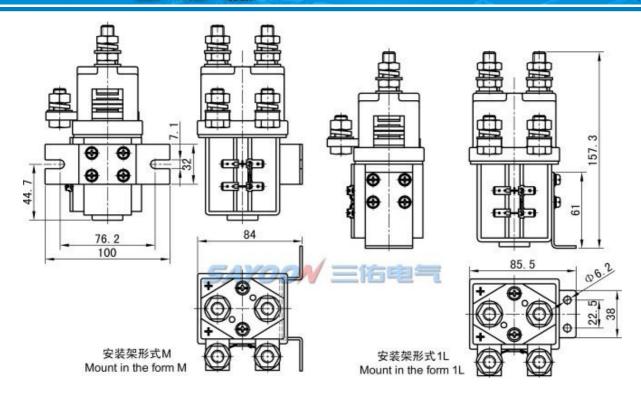








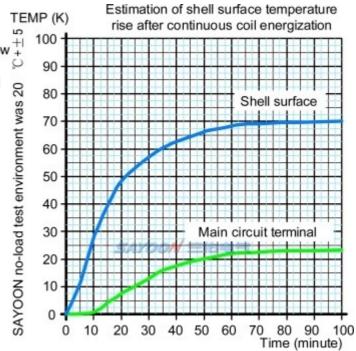




## WIRING DIAGRAM

# Single Pole Double Throw + Changeover) Contactor 1.2.3.4 Contact Terminal A1.A2 Coil Terminal A2 A2

# ■ TEMPERATURE RISE CURVE



















Suitable for electric forklift, battery cars, tractors, excavators, brick machine, cleaning vehicles, automotive air-conditioning, communication power supply, uninterruptible power supply, power supply switches such as electroplating electronic control system control circuit, has the advantages of small volume, large load capacity, long service life, easy maintenance and other characteristics, welcomed by users. The products in accordance with the standard of the JB2286-78, JB3974-85, YD / 585-92, YD / T512-92 requirements; the plant and related test unit test, meet the standard requirements, the user use for many years, the maximum to meet user needs, quality and reliable.

## 3D NUMERICAL AND MODELING INTERACTIVE DISPLAY

CZWH400A-L: http://www.sayoon.com/en/v3d/p.html?type=czwh400a-l CZWH400A-S-L: http://www.sayoon.com/en/v3d/p.html?type=czwh400a-s-l CZWH400A-S-M: http://www.sayoon.com/en/v3d/p.html?type=czwh400a-s-m