

TS31/TS312

TS31-HR/TS32-HR

Induction Motor Speed Controller User's Manual

TROY Made by TROY Enterprise Co., Ltd



Environment Responsibility

- TROY is always committed to environment protection. All packaging material is recyclable and reusable.
- If disposing of used product, please recycle by type as per waste disposal procedures.
-----Protect the green earth with your care and commitment-----

※The product is subject to design modification for performance improvement without prior notice. For more details please contact your local seller.

Precautions

Precautions for using

1. Thank you for purchasing TROY products. Please read this user's manual thoroughly before installing and operating the driver, and always keep the manual where it is readily available.
2. The products described in this manual has been designed and manufactured for use in industrial machinery, and must not be used for any other purpose. We are not responsible for any damage caused through failure to observe this warning.
3. Check that the motor, driver and any accessories are all present. If an accessory is missing or damaged, contact the nearest our branches.
4. Never disassemble the motor and driver. Damage or performance impairment may result. Disassembly voids all warranties.

Precautions for maintenance

Check the ambient environments, clean the system equipment to remove dust and tighten the screws periodically. Also pay attention to the followings.

1. Contact us when repairs become necessary.
2. Since the temperature of the frame of the driver can rise high, be careful when conducting maintenance work or inspection work.

Precautions for warranty period

Within the period of one year after delivery of the system equipment, when failures occurring from design error or fabrication error attributable to the manufacture side occur, we will be repairing the failure free of charge within the reparable range or will replace with substitute. (We cannot hold ourselves responsible for breakage and accidents occurring from your use beyond the specified range described in this document.)

Precautions for disposal

When disposing of the driver and the motor, treat them as ordinary industrial waste.

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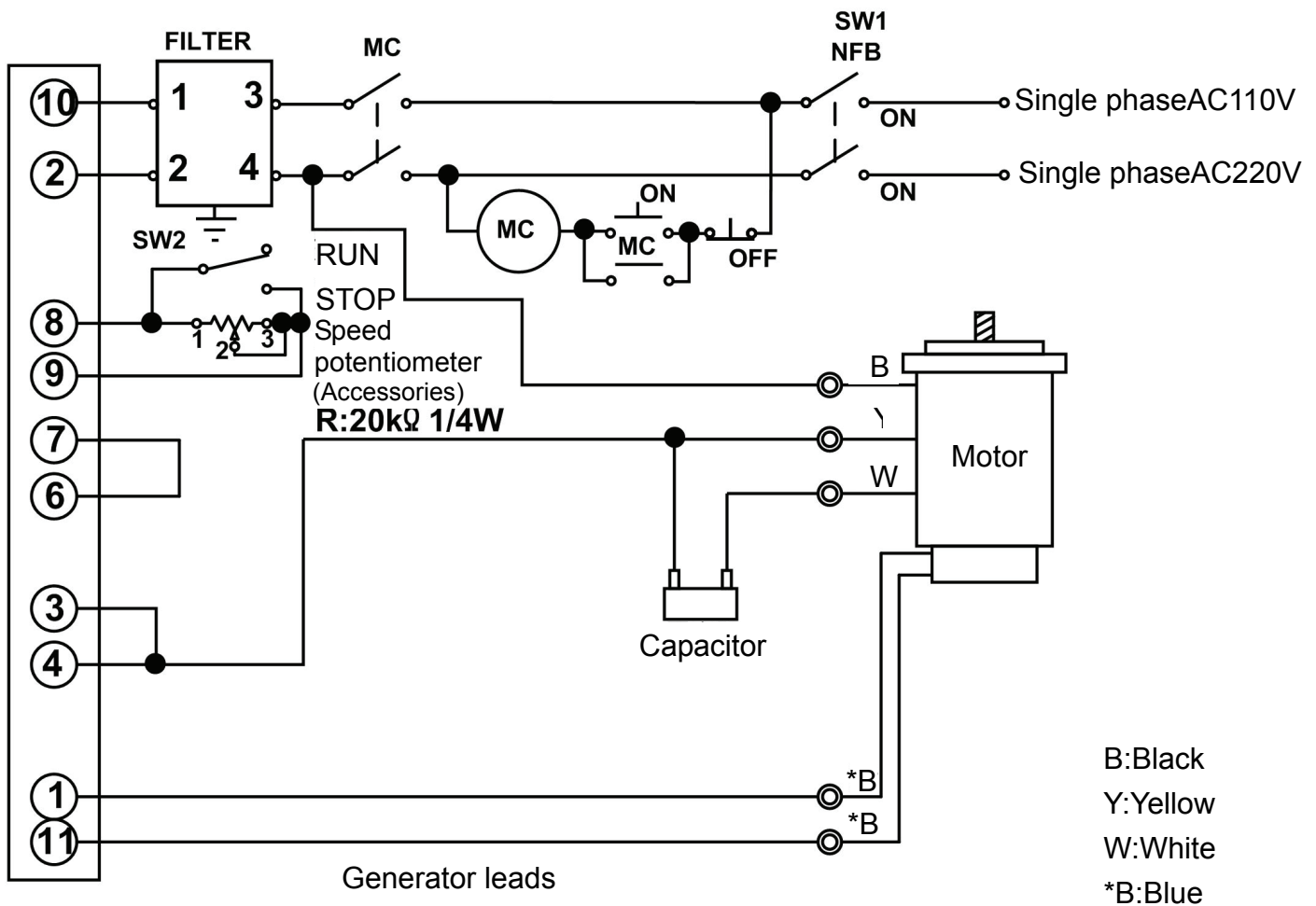
※For any operational or technical question with the product, please contact us for professional service 「0800-450-168」 during our business hours.

1.Specs

Driver model	TS31/TS31-SSSD/TS31-HR	TS32/TS32-SSSD/TS32-HR
Driver current	3A	
Power input	Single phase AC110V±10% 50/60Hz	Single phase AC220V±10% 50/60Hz
Drive power	Max 90W	
Speed regulation	50Hz:70~1400r/min 60Hz:70~1700r/min	
Dimension (mm)	82.6(L)X50(W)X80(H)	
Weight	152g	
Ambient temperature	0°C~40°C	

2.Wiring diagram

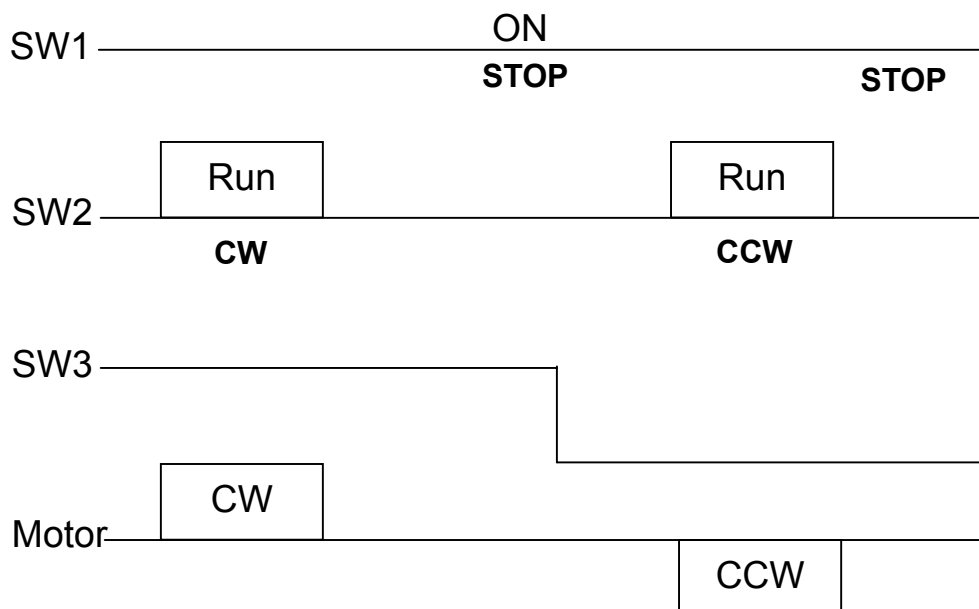
●Uni-directional speed control



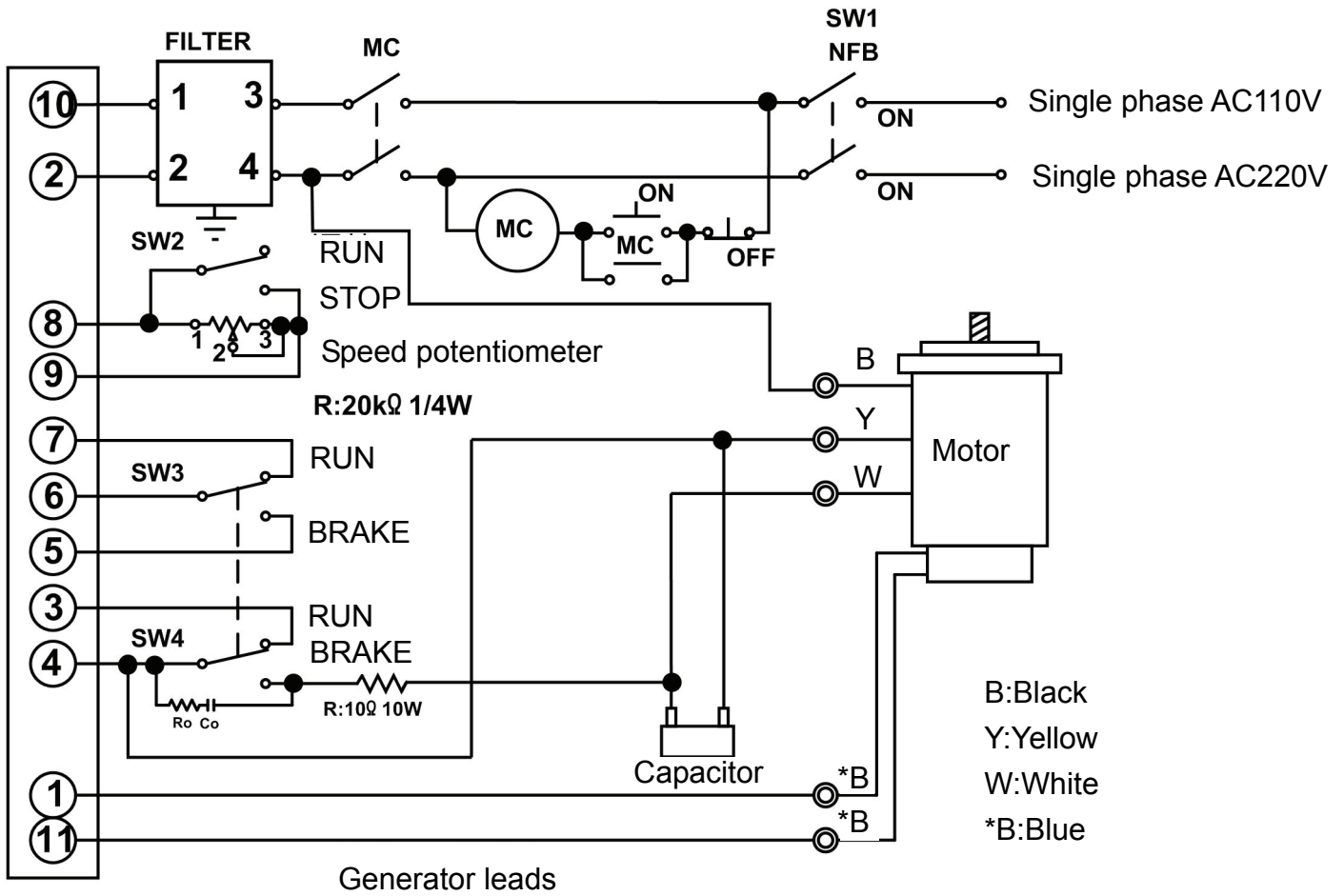
Capacity of external switch contact

SW1(NFB) · MC	AC110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
SW2	DC20V/10mA
SW3	AC110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
R	10Ω/10W
Ro-Co (Surge suppression)	Ro=5~200Ω (0.5W) Co=0.1~0.2 μF AC110V input:200W AC220V input:400W

Timing chart



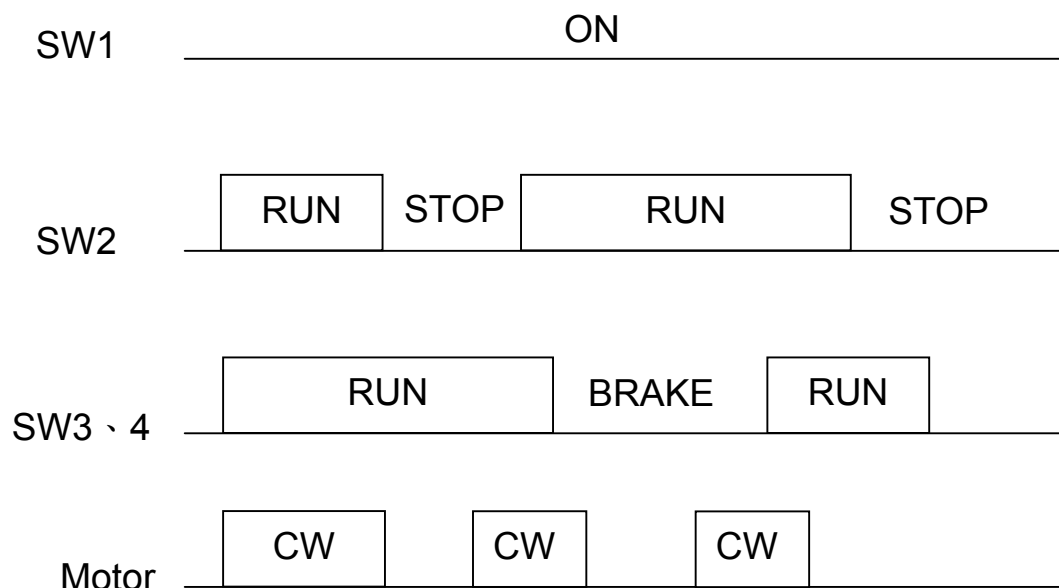
●Uni-directional speed control · instantaneous stop
Max 25W



Capacity of external switch contact

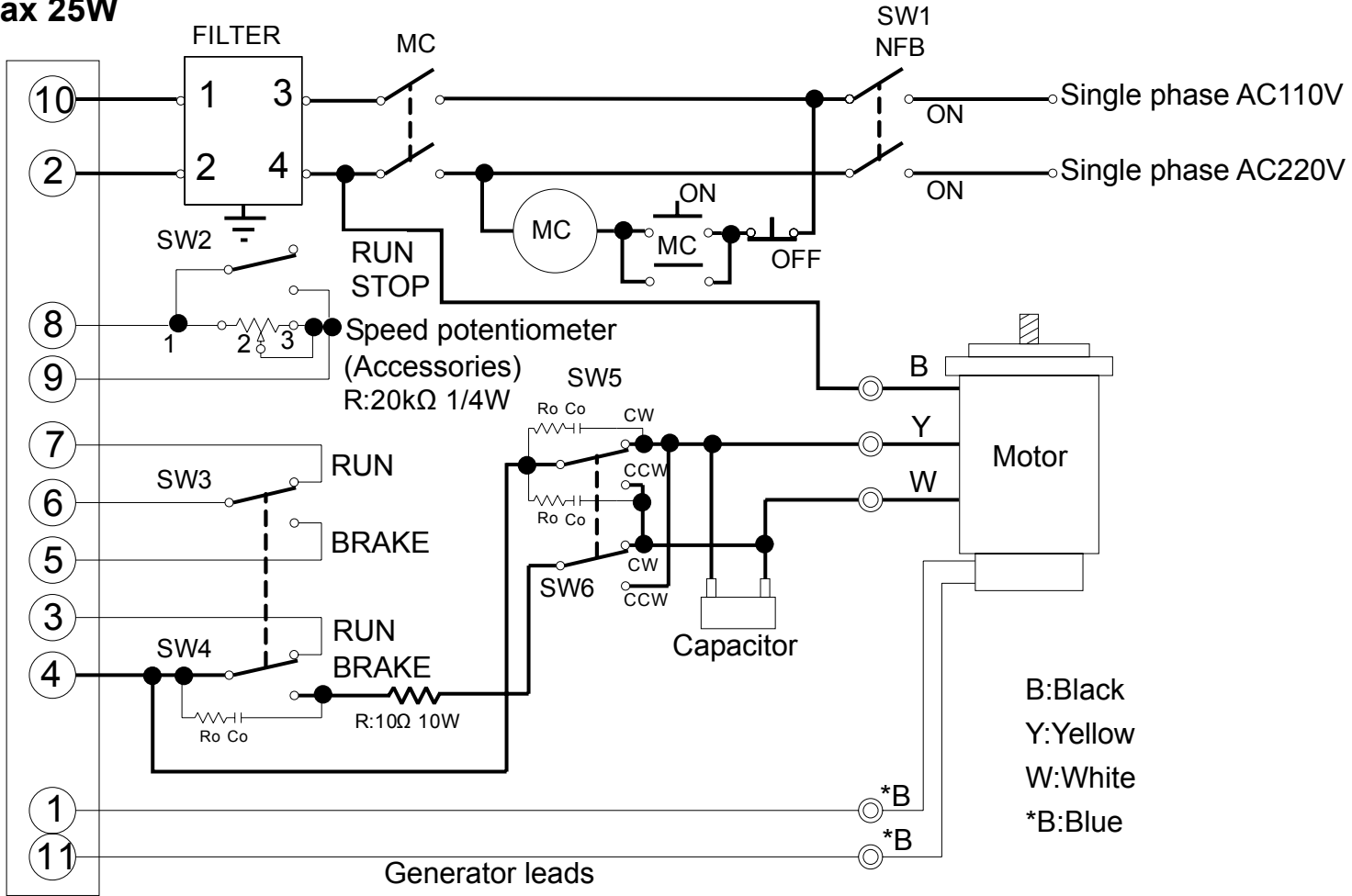
SW1(NFB) 、 MC	AC110V input : AC125V/Min 5A AC220V input:AC250V/Min 5A
SW2	DC 20V/10mA
SW3	DC 20V/10mA
SW4	AC 110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
R	10Ω/10W
Ro-Co (Surge suppression)	Ro=5~200Ω (0.5W) Co=0.1~0.2μF AC110V input:200W AC220V input:400W

Timing chart

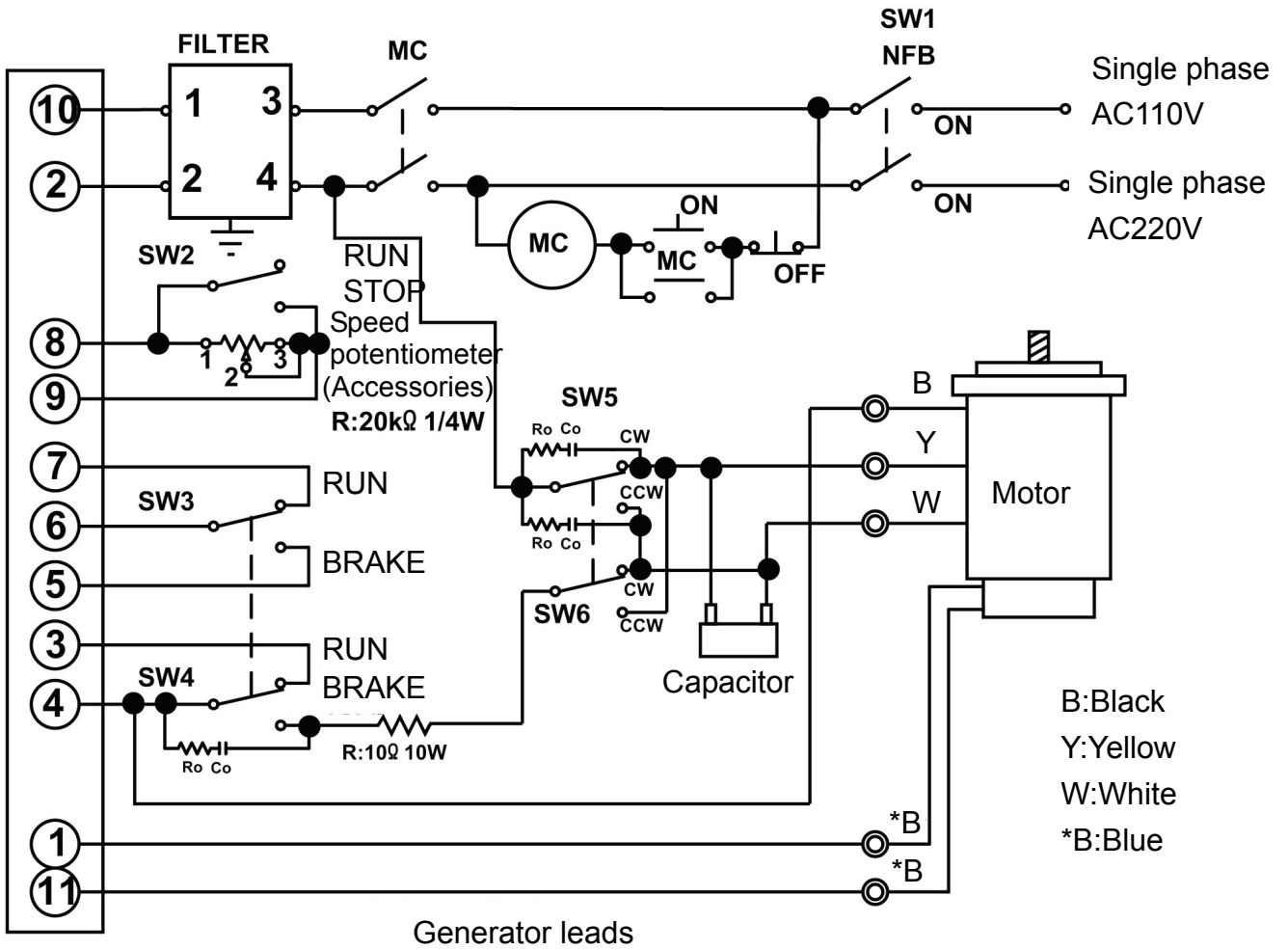


●Uni-directional speed control · instantaneous stop

Max 25W



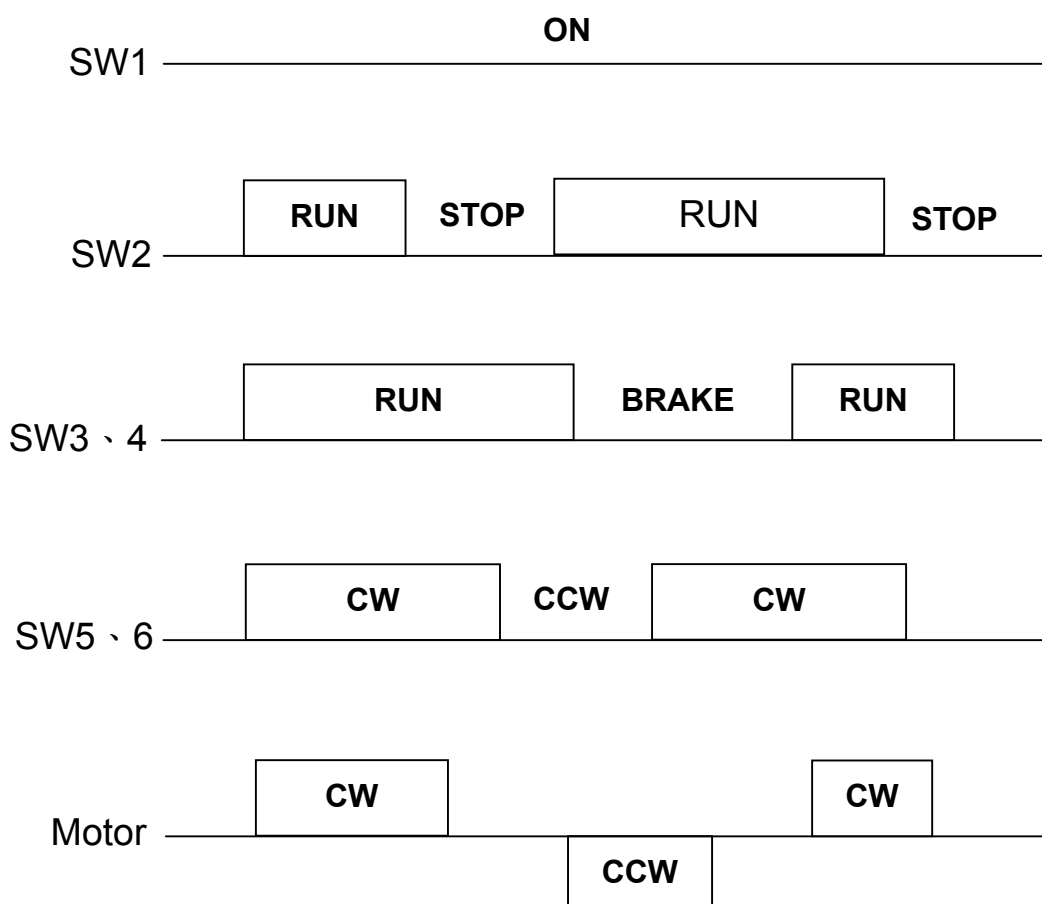
Min 40W



Capacity of external switch contact

SW1(NFB) 、 MC	AC110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
SW2	DC20V/10mA
SW3	DC20V/10mA
SW4	AC110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
SW5 、 6	AC110V input:AC125V/Min 5A AC220V input:AC250V/Min 5A
R	10Ω/10W
Ro – Co	Ro = 5~200Ω (0.5W) Co = 0.1~0.2μF AC110V input:200W AC220V input:400W

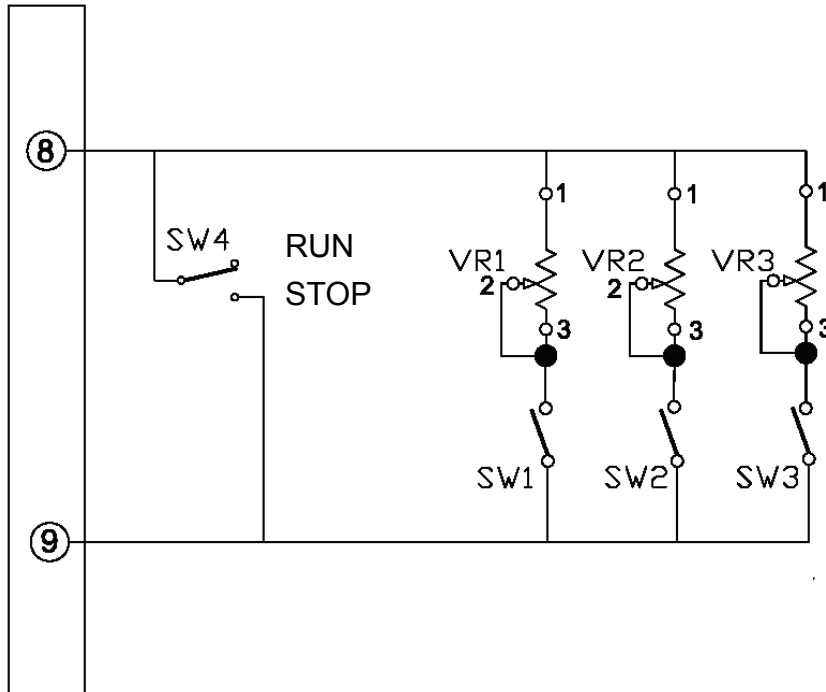
Timing chart



3.Speed control method

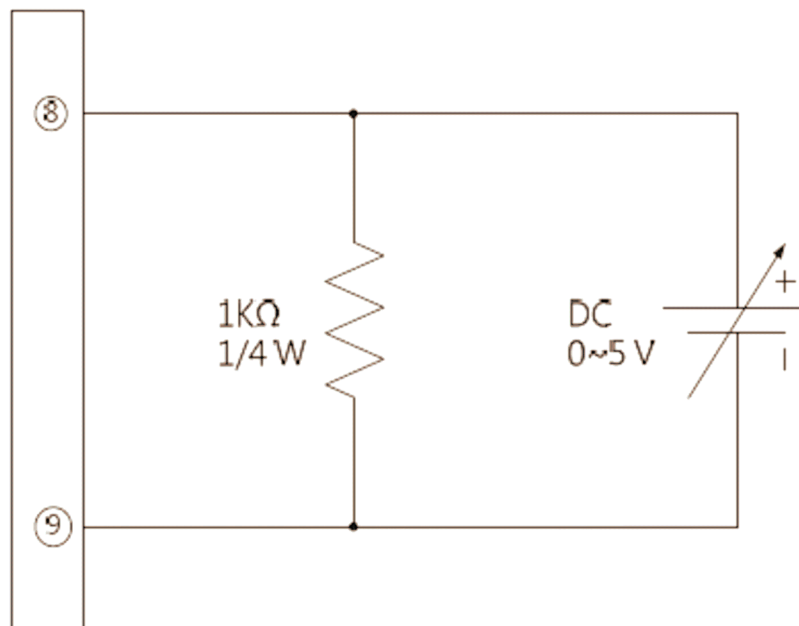
External variable resistance

Speed potentiometer

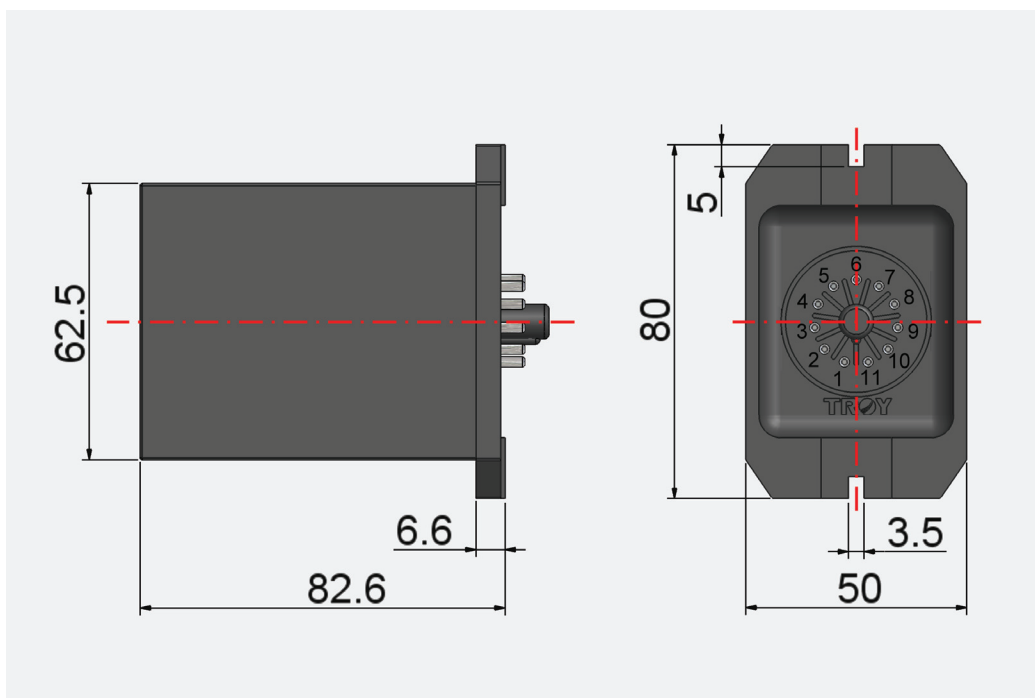


DC voltage (DC0V~5V) The applicable model : TS31,TS31-SSSD,TS32,TS32-SSSD

Speed potentiometer



4.Dimension



*For environment protection, paper saving and resources preservation, please download the user's manual directly from SUNHOLY website : [http:// www.sunholy.com.tw](http://www.sunholy.com.tw)

Our constant aim : Demand for professionalism

Our belief : Commitment to every detail

Our innovation : Introduction of cutting-edge equipments

Our pride : Pursuit of superior products

We are confident that each SUNHOLY products bears tests

For we are highly motivated !

Complete SUNHOLY service system

We offer our customers a complete service package :

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- ⊕ 『 Periodical motor E-newspaper 』
- ⊕ 『 Motor selection and calculation service 』
- ⊕ 『 Professional on site service 』
- ⊕ 『 On-site motor technical seminar service 』
- ⊕ 『 Total motor solution & after sales service 』

Ready for request!.



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