

# TDGC<sub>2</sub> TSGC<sub>2</sub> VOLTAGE REGULATOR

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## APPLICATIONS:

The TDGC<sub>2</sub> and TSGC<sub>2</sub> regulator have many advantages: Such as no wave form distortion, Small in size, Light in weight, high efficiency, easy-to-run, reliable and able to operate for a long time, It can be widely used in industries Such as chemical metallurgical instrumental, mechanical and electrical and light industry, as well as for scientific experiments, public utility and domestic electrical appliances in order to adjust voltage, speed or light, to control temperature and power, It is a kind of ideal adjustable Ac power source,

## BASIC PRINCIPLE:

The contact voltage regulator actually is an autotransformer whose transformation ratio can be continuously changed, By combination of the hand-wheel, shaft and brush holder, a carbon brush traverses the base coil surface to the transformation ratio continuously, So the output voltage of the unit is smoothly controlled from zero to line value or even higher.

## OPERATION CONDITIONS:

- Ambient Temperature
- Maximum Temperature +40°C
- Maximum Daily Average Temperature +30°C
- Maximum Yearly Average Temperature +20°C
- Minimum Temperature -5°C

Elevation: The place for installation should be with an elevation of less than 1,000 meters

Relative Humidity: The maximum average monthly relative humidity is 90% and the average temperature of this month should be 25°C.

- voltage waveform of the Source: nearly sinusoidal.
- At the installation place, any existence of gas, Steam, Chemical deposit, dust, dirt and other explosive or corrosive mediums, which would bring severe effect its insulation is not allowed.
- At the installation place, no obvious vibration and bumping are permitted,
- In door use.
- Use in parallel is not allowed.

## INSTALLATION AND MAINTENANCE:

- Source voltage value should be in accordance with the input voltage value printed on the name plate of the regulator.
- The grounding of the regulator must be good enough to ensure safety.
- The operation state of the regulator should be checked up frequently, If the electric brush is found to be wear out or in complete, it should be replaced with a new one of the same kind at once, Before use, put a sand paper NO.0 under the brush. And turn the hand wheel for several times to level its bottom and ensure good contact, The new copper graphite combined brush replaced must strictly accord with the specification.

The regulator can be installed horizontally. On the face plate only for single unit regulator structure or vertically on other case, It can be fixed through the installation hole on the base of the regulator

## MAIN SPECIFICATIONS

TYPE	RATED CAPACITY (KVA)	NO OF PHASE	NOMINAL FREQUENCY (HZ)	RATED INPUT VOLTAGE(V)				RATED OUTPUT VOLTAGE(V)	RATED OUTPUT CURRENT(A)
TDGC <sub>2</sub> -0.2	0.2	1	50~60	110	220	230	110 or 220	0~250	0.8
TDGC <sub>2</sub> -0.5	0.5								2
TDGC <sub>2</sub> -1	1								4
TDGC <sub>2</sub> -2	2								8
TDGC <sub>2</sub> -3	3								12
TDGC <sub>2</sub> -4	4								16
TDGC <sub>2</sub> -5	5								20
TDGC <sub>2</sub> -7	7								28
TDGC <sub>2</sub> -10	10								40
TDGC <sub>2</sub> -15	15								60
TDGC <sub>2</sub> -20	20								80
TDGC <sub>2</sub> -30	30								120
TSGC <sub>2</sub> -3	3								3
TSGC <sub>2</sub> -6	6	8							
TSGC <sub>2</sub> -9	9	12							
TSGC <sub>2</sub> -12	12	16							
TSGC <sub>2</sub> -15	15	20							
TSGC <sub>2</sub> -20	20	27							
TSGC <sub>2</sub> -30	30	40							