

TVR 11

3-50kVA

Microprocessor Control

Wide Voltage Range

High Protection

SERVICE /
TECH. SUPPORT

ECO FRIENDLY

90
V/SCORRECTION
SPEED

0.8

POWER FACTOR

Tescom TVR 11 Series Servo Voltage Regulators provide safe energy for your loads in sites where your mains is irregular or where the power supply voltage is unstable, such as a generator. By keeping the voltage within certain tolerances, it offers full protection against the risk of damage caused by excessive fluctuations in voltage.

With microprocessor control, the necessary signals for the desired regulation are transmitted to the DC motor. The DC motor provides movement in the direction of adding or subtracting voltage for regulation on the variac to which it is mechanically connected. This supplied voltage is transferred to the differential auxiliary transformer (booster transformer). As a result, electronically controlled stable voltage is provided in the output voltage against voltage changes.

TVR 11 series with high correction speed, fully mechanical and electronic protection are offered in the power range of 3-50kVA with 1 phase input and 1 phase output.

GENERAL SPECIFICATIONS

- 1 phase input 1 phase output
- Wide power and voltage interval
- High reliability thanks to Microprocessor and Smart Driver
- Fast Regulation
- High efficiency
- Load transfer to Bypass via pole change switch
- Safe and economic usage
- Overcurrent and overload protection
- Digitally displayed status, input & output measurements
- Optional 1.0 output power factor (PF) option

TECHNICAL SPECIFICATIONS

| MODEL | TVR 1103 | TVR 1105 | TVR 1107 | TVR 1110 | TVR 1115 | TVR 1120 | TVR 1125 | TVR 1130 | TVR 1140 | TVR 1150 | |
|--|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| Power (kVA) | 3 | 5 | 7,5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | |
| INPUT | | | | | | | | | | | |
| In. vol. correct. interval | 160 - 260 / 90 - 285 VAC (Optional) | | | | | | | | | | |
| In. vol. operating. interval | 155 - 265 VAC | | | | | | | | | | |
| Operation frequency | 47...65 Hz | | | | | | | | | | |
| Line input protection | Overcurrent, Low and High voltage protection | | | | | | | | | | |
| Current at input | 16 | 24 | 36 | 48 | 72 | 96 | 120 | 144 | 192 | 240 | |
| OUTPUT | | | | | | | | | | | |
| Output voltage | 220 / 230 / 240 VAC RMS \pm 1% | | | | | | | | | | |
| Overloading | 10 Sec. 200% Load | | | | | | | | | | |
| Correction speed | ~ 90 Volt / Sec. | | | | | | | | | | |
| Upturn period | ~ 90 Volt / Sec. (160 VAC - 260 VAC) | | | | | | | | | | |
| Output protection | Protects load by opening the circuit when overburden, short circuit occurs (optional) | | | | | | | | | | |
| Current at output | 11 | 18 | 27 | 36 | 54 | 72 | 90 | 108 | 144 | 180 | |
| GENERAL | | | | | | | | | | | |
| Working principle | Servo Motor, Microprocessor Controlled, Full Automatic | | | | | | | | | | |
| Cooling | Smart fan system | | | | | | | | | | |
| Measured value monitor. | TESCOM TRUE RMS Panel Voltmeter (74x74mm) output voltage and line voltage monitorization | | | | | | | | | | |
| Total efficiency | > 96% | | | | | | | | | | |
| Mechanic By-pass | Available | | | | | | | | | | |
| Protection level (*) | IP 20 | | | | | | | | | | |
| ENVIRONMENTAL | | | | | | | | | | | |
| Operating temperature | -10°C / 50°C | | | | | | | | | | |
| Storage temperature | -25°C / 60°C | | | | | | | | | | |
| Relative humidity | < 90%, DIN (40040) | | | | | | | | | | |
| Altitude | < 2000 m. | | | | | | | | | | |
| Acoustic level | < 50 dB (1m ²) | | | | | | | | | | |
| Standards | CE / ISO 9001 | | | | | | | | | | |
| DIMENSIONS | | | | | | | | | | | |
| WxDxH (cm) | 56x39x32 | | | | | 52x65x68 | | | 50x62x85 | | |
| Weight (kg) | 28 | 30 | 34 | 47 | 55 | 95 | 110 | 130 | 155 | 180 | |
| (*) Optional different protection class option | | | | | | | | | | | |