FARADY®

Low Voltage Regulator

Contact Type

Smart IGBT Type

FARADY ELECTRIC CO.,LTD

General

To face the challenge of global warming, all power utility shifted to seeking for increase renewable energy connect to Grid. Like distributed renewable energy is widely connected to LT side ,such like 0.4KV.

Upon more and more distributed renewable energy injection to LT line, those RE-energy not only booster LT and transformer voltage also reduce transformer receiving capacity.

Farady Electric LSVR series voltage regulators are especially designed to regulation on-grid site voltage problem to increase transformer capacity to receiving more RE-energy.

Application

- Distributed renewable on-grid site
- Telecom power supply
- Agriculture irrigation
- Tunnel project
- Long feeder line in rural area

Function

- **Automatic voltage regulation function**
  Adjust the voltage output voltage and set valve according to the real-time monitoring
- **Wireless remote control**
  Transfer the real-time data to the background management system through the monitoring system to improve the scientific construction and transformation of the distribution network.
- **Capacitor compensation(optional)**
  0~25% power capacitor reactive power compensation
- **Electric energy data measurement.**
  Three-phase current-voltage measurement, and store power quality data.

Features-Smart IGBT Type

◆Automatic control with intelligent controller

◆Outdoor IP44 protection class

◆New technology with IGBT module

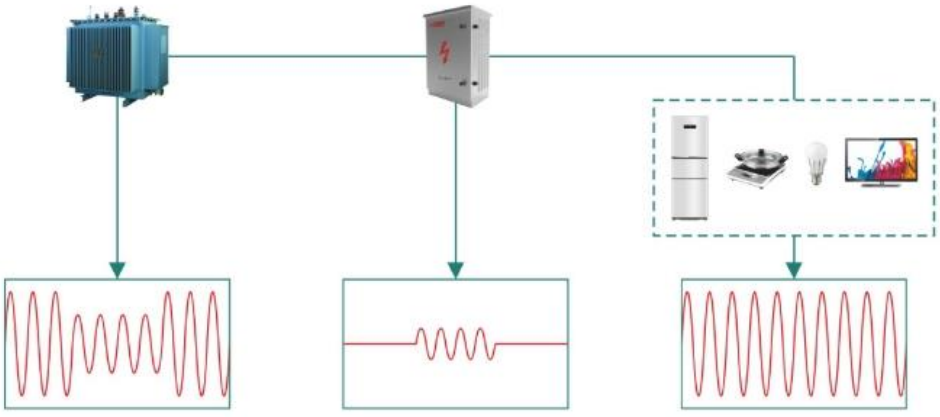
◆Larger regulation range up to ±20%UN

◆Fast response time <5ms

◆ Average loss <0.5% p Long-term 1.1 times

◆ Integrated structural design, easy installation and maintenance

IGBT Module



Before and after VR installed

Features-Contact Type

◆Automatic control with intelligent controller

◆Larger regulation range up to ±20%UN

◆Real time monitoring of Electric power quality

◆ Average loss <0.5% p Long-term 1.1 times

◆ Integrated structural design, easy installation and maintenance

◆Foil coil winding, AMA interlayer insulation

◆Pressed vacuum heating process

◆ Wound core structure, noise level <45dB

◆ Average loss <0.5% p Long-term 1.1 times

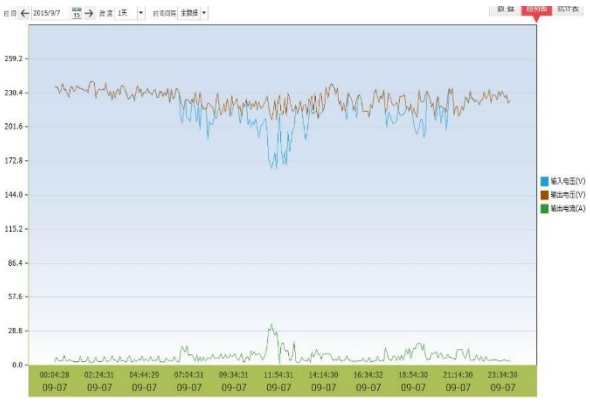
◆High-quality contactors with an electrical life of 100,000 times

◆Switching transition <5ms

◆ Maintenance free for 20 years

◆ Reactive power compensation with Auto-capacitors

Intelligent



◆Automatic mode using single-phase voltage regulation algorithm

◆Manual mode with up/down operation

◆Complete parameterization on the touch screen

◆Parallel operation regulation

◆Overvoltage protection

◆Undervoltage protection, overcurrent, overload protection, tap changer motor protection

◆Advanced voltage regulation algorithms,

◆Remote communication -SCADA

◆RS 485/232 port & USB

◆Event recording functions

◆Data reading\product upgrade functions

Application

Technical Parameters

Name	Category	Capacity (KVA)	Capcitor (kvar)	Size（mm）	Weight（kg）
LSVR	Single Phase 10KVA	10	/	460*500*750	85
		10	/	580*500*800	90
		10	5	580*500*800	95
		10	5	580*500*800	95
	Single Phase 20KVA	20	/	460*500*750	85
		20	/	580*500*800	90
		20	5	580*500*800	95
		20	5	580*500*800	95
	Single Phase 30KVA	30	5	460*500*750	90
		30	5	580*500*800	95
		30	10	580*500*800	100
		30	10	580*500*800	100
	Single Phase 40KVA	40		580*500*800	105
		40		580*500*800	105
		40	10	580*500*800	105
		40	10	580*500*800	105
	Three Phase 30KVA	30	/	700*600*850	180
		30	10	700*600*850	185
	Three Phase 60KVA	60	/	700*600*850	190
		60	20	700*600*850	195
	Three Phase 90KVA	90	/	700*600*850	200
		90	30	700*600*850	205