

# SVC Load Drivers Datasheet



**ADDRESS:** Ikitelli OSB Mah. Cevre  
14. Blok Sok. Telas Blok Dis Kapi  
No: 1 Kat: 1-2 Basaksehir/Istanbul

**Phone:** +90 212 438 80 24  
**Fax:** +90 212 438 80 25

**info@gruparge.com**

## 1.1. General Features

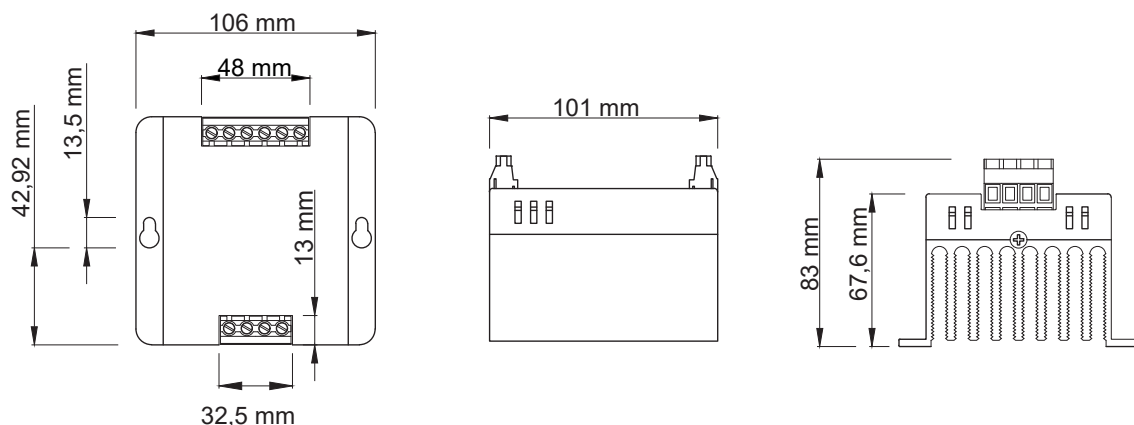
SVC drives are switching elements that enable sensitive compensation even at low powers by activating the single-phase shunt reactors connected to each phase as much as the system needs. In the SVC system, the power of the shunt reactors is controlled by triggering at certain angles through thyristors. These reactors can be precisely adjusted in 1000 steps each, for a total of 3000 steps. SVC Drives are designed to drive 3 single phase shunt reactors. In this way, the power of these reactors, each of which is connected to a separate phase, is controlled independently and to provide the desired power.

## 1.2. Technical Features

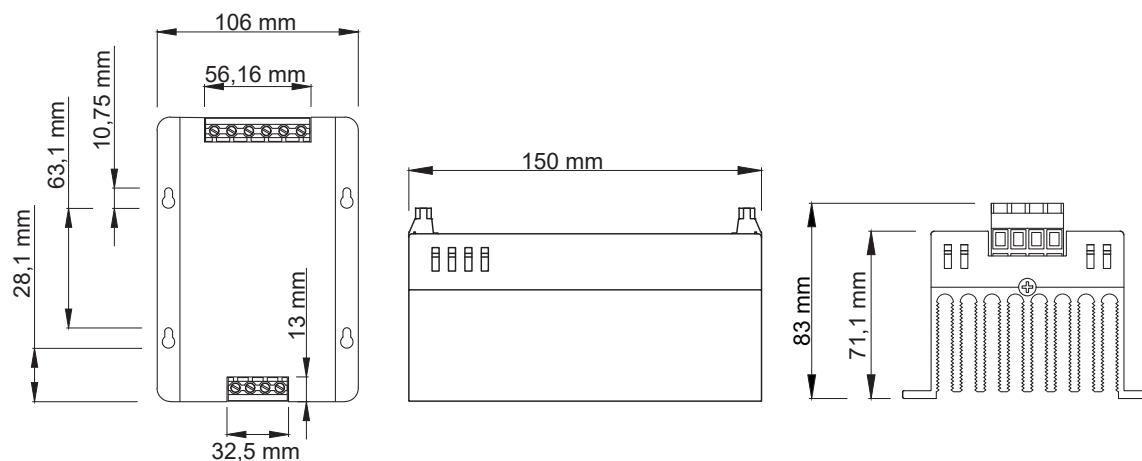
- **Nominal Voltage:** 400 V.
- **Nominal Frequency:** 50 Hz.
- **Trigger Voltage:** 12 V DC.
- **Maximum Operating Current of the Device (IRms):**
  - For SVC5; 7.2 A,
  - For SVC10; 14.4 A
  - For SVC20; 28.8 A,
  - For SVC30; 43.3 A
  - For SVC60; 87 A.
- **Ambient Temperature:** -10 C° / +45 C°.
- **Protection Class:** IP00.
- **Response Time:** 20 ms.
- **Humidity:** %95.
- **Nominal Cable Cross Section:**
  - For SVC5; 3(1x2.5) mm<sup>2</sup>,
  - For SVC10; 3(1x4) mm<sup>2</sup>
  - For SVC20; 3(1x10) mm<sup>2</sup>,
  - For SVC30; 3(1x16) mm<sup>2</sup>
  - For SVC60; 3(1x35) mm<sup>2</sup>
- For powers greater than 60 kVAr, solutions can be produced by connecting up to 3 drives in parallel.
- 20, 30 and 60 kVAr models have NC (Normally Closed) thermal control.
- Inductive Static Contactors should be used for fast switching on of Three-Phase Shunt Reactors.

## 1.3. Technical Drawing

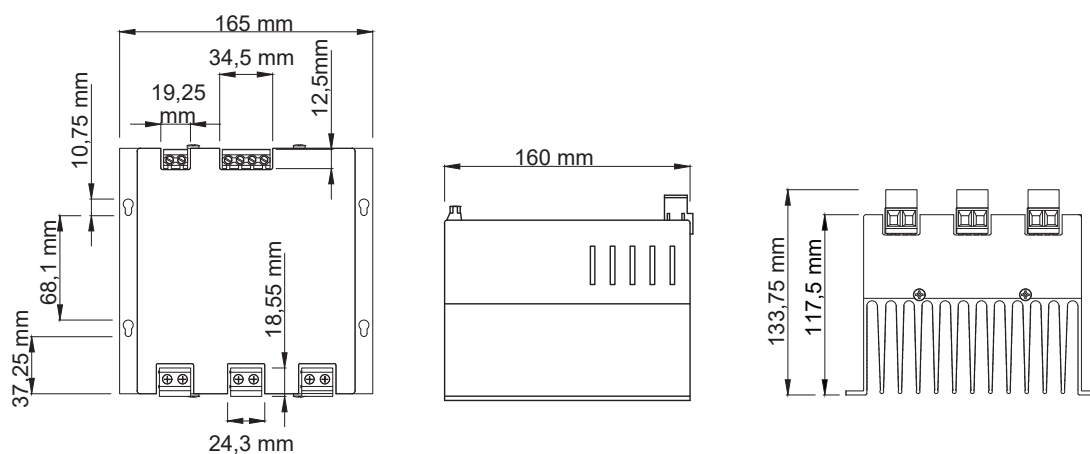
1.3.1. 5 kVAr SVC Load Driver



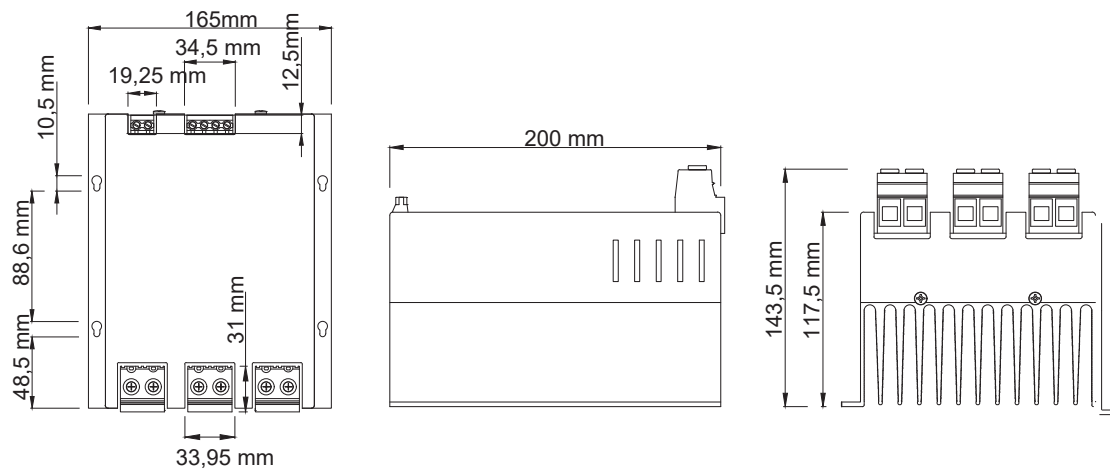
### 1.3.2. 10 kVAr SVC Load Driver



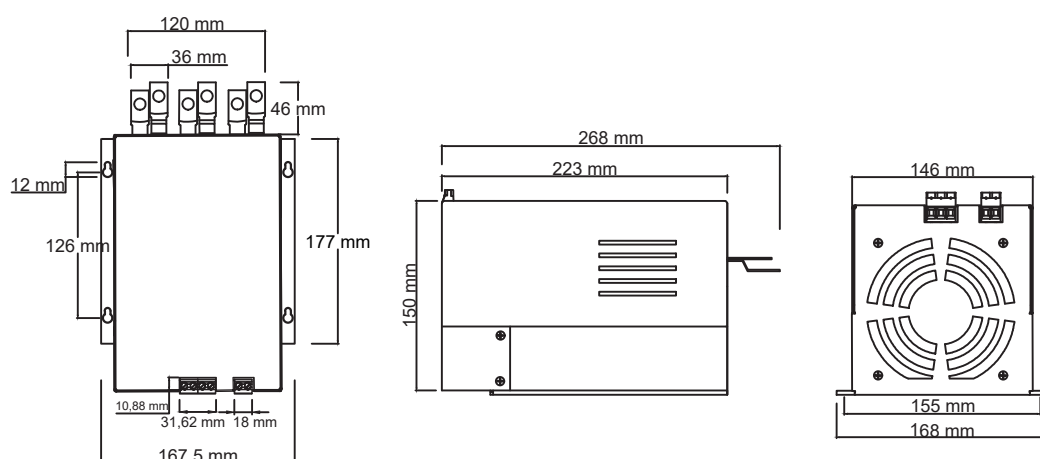
### 1.3.3. 20 kVAr SVC Load Driver



### 1.3.4. 30 kVAr SVC Load Driver

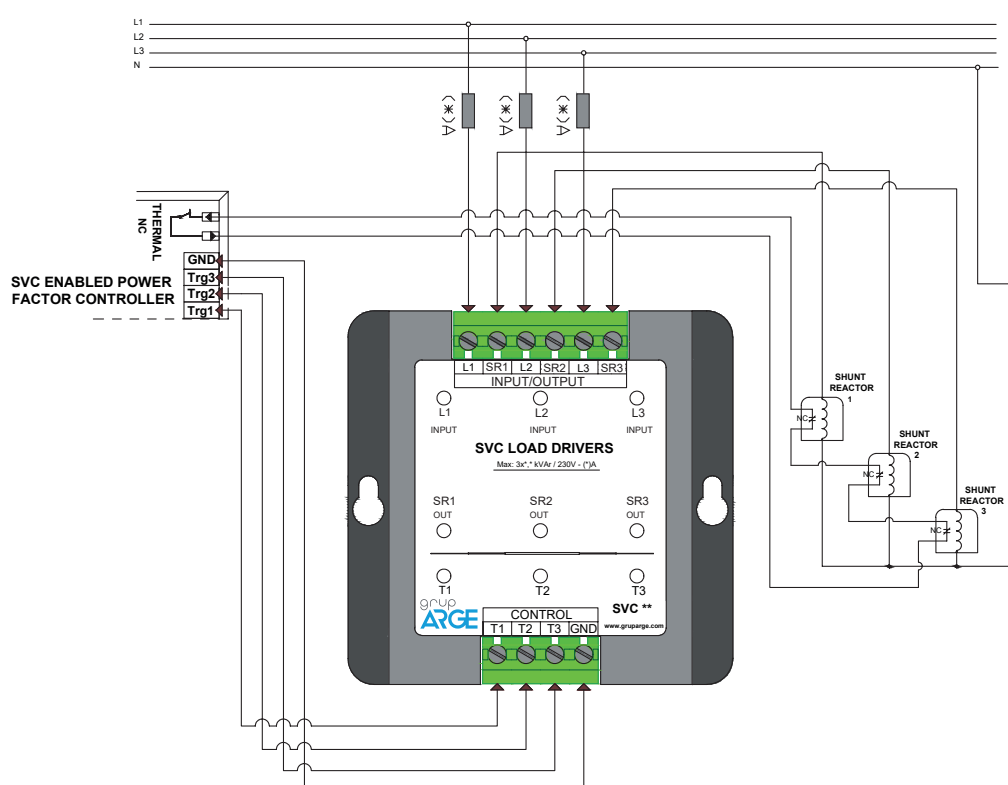


### 1.3.5. 60 kVAr SVC Load Driver

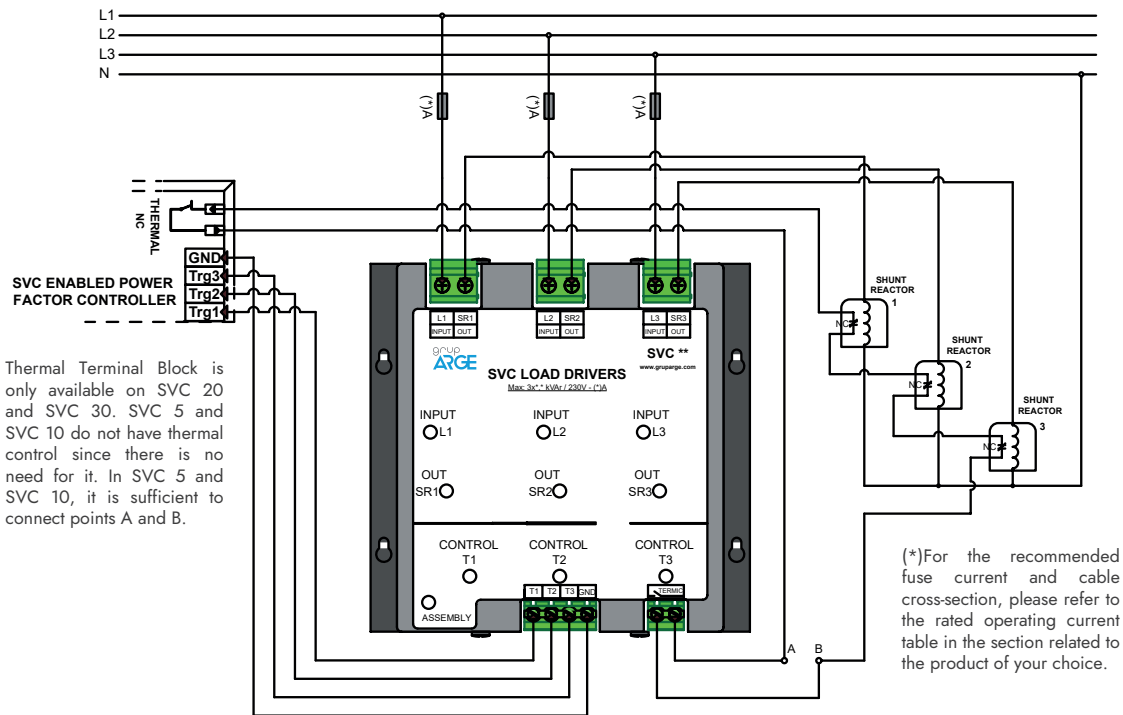


## 1.4. Connection Diagram

### 1.4.1. SVC (5 - 10 kVAr) Load Driver



#### 1.4.2. SVC (20 - 30 kVar) Load Driver



#### 1.4.3. SVC (60 kVar) Load Driver

