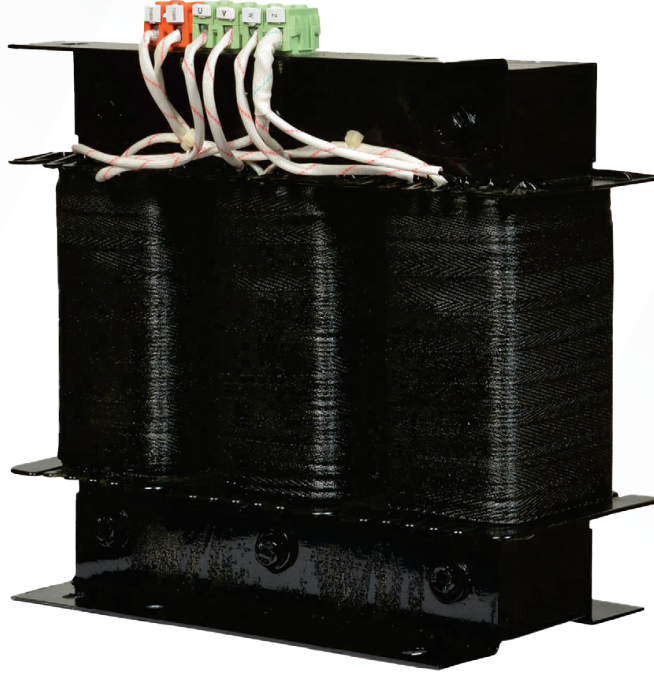


# Shunt Reactor User Manual



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## PROPER USE and SAFETY REQUIREMENTS



Cut all the power when connecting and disconnecting the device to a panel.



Do not clean the device with a solvent or similar material. Only use a dry cloth.



Please do not intervene to the device when a technical problem is encountered and get in contact with a technical service within the shortest time.



If the warnings are not taken into account, our company or the authorized dealer shall not be held responsible for the negative consequences.



Do not dispose in the trash, the device must be delivered to the collection centers (electronic device recycling centers). It should be recycled or disposed of without harming human health and environment.



The installation, assembly, activation and operation of the device should be done and used by only expert professionals and in accordance with safety regulations and instructions.

# 1. INTRODUCTION

## 1.1. General Features

MV cables, UPS devices and electronic ballasted lighting elements used in enterprises have capacitive characteristics. In enterprises with such capacitive loads, it is necessary to use shunt reactors to meet the reactive power requirement and to keep the reactive ratios within the desired limits.

Nowadays, the load profile of the enterprises is gradually changing and the compensation operations performed in the past using only capacitors are no longer sufficient. With the continuous increase in the number of devices with capacitive characteristics, it has become mandatory to use shunt reactors in addition to capacitors in order to provide accurate compensation.

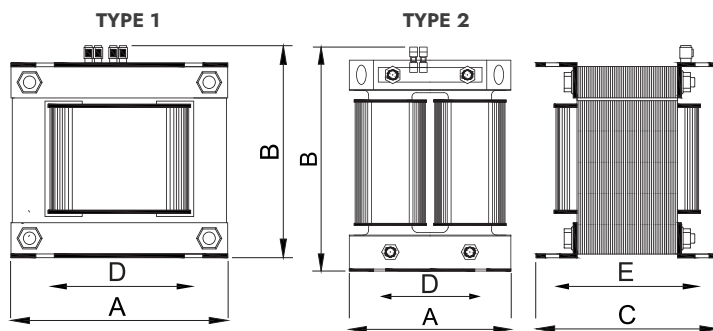
Depending on the size of the plant and the load profile, the capacity of the shunt reactors to be used varies. It is important to select the most suitable shunt reactor after analyzing the plant correctly, taking into account the cost.

## 1.2. Technical Features

- **Standard:** EN 60076-6 / EN 61558-2-20
- **Nominal Voltage:** 230 - 400 V AC
- **Nominal Power:** 0,5-50 kVAr
- **Nominal Frequency:** 50 Hz
- **Reactor Factor:** %100
- **Inductivity Tolerance:** %5
- **Isolation (Winding-Core):** 3 kV
- **Isolation Class:** Class F 155 °C
- **Humidity:** %95
- **Cooling:** Natural T40
- **Connection:** Terminal Block, Lug or Busbar
- **Core:** Low Loss, Siliceous Sheet, Air Gap
- **Winding Material:** Aluminum or Copper
- **Thermal Protection:** 120 °C (NC Contact)
- **Protection Class:** IP40

## 1.3. Technical Drawing

### 1.3.1. SVC - Monophase Shunt Reactor (230 V)



Type 2 applies to SRM 7.5 and SRM 10.0.

· Product sizes indicated in the table may vary.  
You can contact for detailed information.

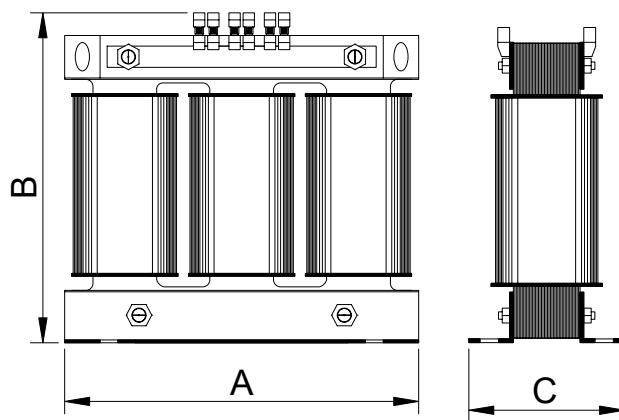
#### SVC Shunt Reactors

Product Name	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SVC-R 1.0	120	100	102	95	75
SVC-R 1.5	150	125	110	105	85
SVC-R 3.0	192	160	134	150	110

#### Monophase Shunt Reactors (230 V)

Product Name	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SRM 1.0	150	125	105	-	-
SRM 1.5	150	125	120	105	95
SRM 3.0	192	160	144	150	120
SRM 5.0	210	270	180	195	119
SRM 7.5	210	280	210	232	126
SRM 10.0	260	330	200	232	136

### 1.3.2. Three-phase Shunt Reactor (400 V)

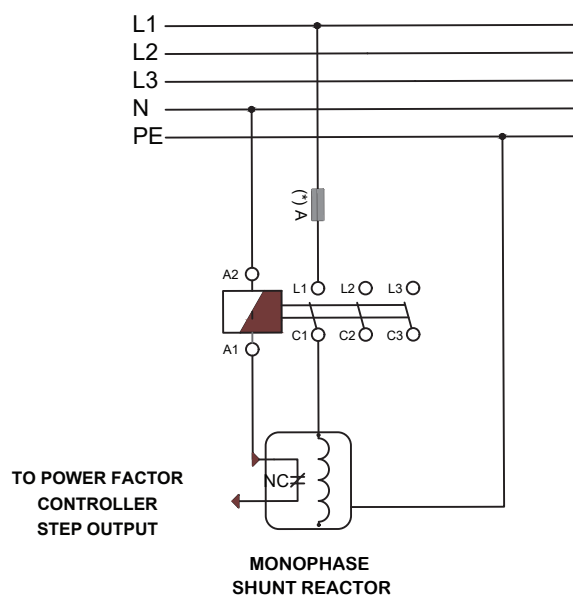


· Product sizes indicated in the table may vary.  
You can contact for detailed information.

Product Name	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SRT 0.5	150	150	72	100	55
SRT 1.0	180	175	85	125	60
SRT 1.5	180	175	115	125	90
SRT 2.5	240	225	100	175	75
SRT 5.0	295	255	170	200	135
SRT 7.5	295	255	180	200	145
SRT 10.0	370	330	190	350	109
SRT 12.5	390	330	210	350	119
SRT 15.0	390	330	220	350	139
SRT 20.0	460	380	220	420	129
SRT 25.0	460	380	230	420	149
SRT 50.0	520	430	290	510	229

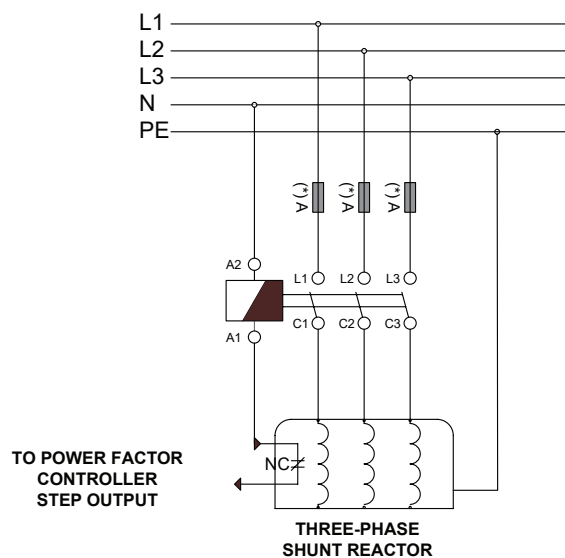
## 1.4. Connection Diagram

### 1.4.1. Monophase Shunt Reactor (230 V)



(\*)For the recommended fuse current and cable cross-section, please refer to the rated operating current table in the section related to the product of your choice.

### 1.4.2. Three-Phase Shunt Reactor (400 V)



(\*)For the recommended fuse current and cable cross-section, please refer to the rated operating current table in the section related to the product of your choice.