MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6SL3053-0AA00-3AA0

VSM10 VOLTAGE SENSING MODULE

Used with the applicable SINAMICS VSM10 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens D21.3 2011, VSM10 Voltage Sensing Module, catalog page 2/167

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Overview



The VSM10 Voltage Sensing Module allows the line supply or motor voltage characteristic to be precisely sensed. The VSM10 Voltage Sensing Module is integrated in Active Interface Modules chassis format and in Smart Line Modules chassis format.

In addition, the VSM10 is used to switch to a rotating synchronous motor (flying restart function).

Design

The VSM10 Voltage Sensing Module has the following interfaces:

- 1 connection for direct voltage sensing up to 690 V
- 1 connection for voltage sensing using voltage transformers, max. 100 V
- 2 analog inputs (reserved for resonance monitoring in Active Interface Modules, chassis format)
- 1 temperature sensor input (KTY84-130 or PTC)
- 1 DRIVE-CLiQ socket
- 1 connection for the electronics power supply via the 24 V DC supply connector
- 1 PE/protective conductor connection

The VSM10 Voltage Sensing Module can be snapped onto a TH 35 top-hat rail to EN 60715 (IEC 60715).

The status of the VSM10 Voltage Sensing Module is indicated by a two-color LED.

Selection and ordering data

Description	Order No.
VSM10 Voltage Sensing Module Without DRIVE-CLiQ cable	**6SL3053-0AA00-3AA0**

For SINAMICS S150 and SINAMICS S120 Cabinet Modules, to implement the flying restart function, VSM10 can be ordered as option with order code **K51**.

Technical data

VSM10 Voltage Sensing Module 6SL3053-0AA00-3AA0	
Current demand, max. at 24 V DC	0.2 A
• Conductor cross-section, max.	2.5 mm^2
Power loss	< 5 W
Line voltage detection	
• Input resistance	
- Terminal X521	> 362 kΩ/phase
- Terminal X522	> 2.5 MΩ/phase
Analog inputs (reserved for monitoring an Active Interface Module, chassis format)	
• Internal resistance, approx. (between differential inputs)	100 kΩ
• Resolution	12 bit
PE connection	M4 screw
Dimensions	
• Width	50 mm
• Height	150 mm
• Depth	111 mm
Weight, approx.	0.9 kg
Conformity	CE
Approvals, according to	cULus