

SINAMICS G130

Converter built-in units

Supplementary system components > VSM10 Voltage Sensing Module**Overview**

The VSM10 Voltage Sensing Module enables the line or motor voltage characteristic to be measured precisely. The phase differential voltage can be measured, either grounded (in the delivery state with jumper plugged in) or isolated.

In addition, the VSM10 Voltage Sensing Module is used to connect to rotating synchronous motors – or for a "quick flying restart" of rotating induction motors.

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, maximum voltage 100 V
- 1 temperature sensor input for KTY84-130, Pt1000 or PTC (Pt1000 can be used from firmware V4.7 HF17)
- 1 DRIVE-CLiQ socket
- 1 connection for the electronics power supply via the 24 V DC supply connector
- 1 plug-in jumper for either grounded (delivery state) or isolated measurement
- 1 PE/protective conductor connection

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

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

Selection and ordering data

Description	Article No.
VSM10 Voltage Sensing Module Without DRIVE-CLiQ cable	6SL3053-0AA00-3AA1
Accessories for re-ordering	
Dust protection blanking plugs (50 units) For DRIVE-CLiQ port	6SL3066-4CA00-0AA0

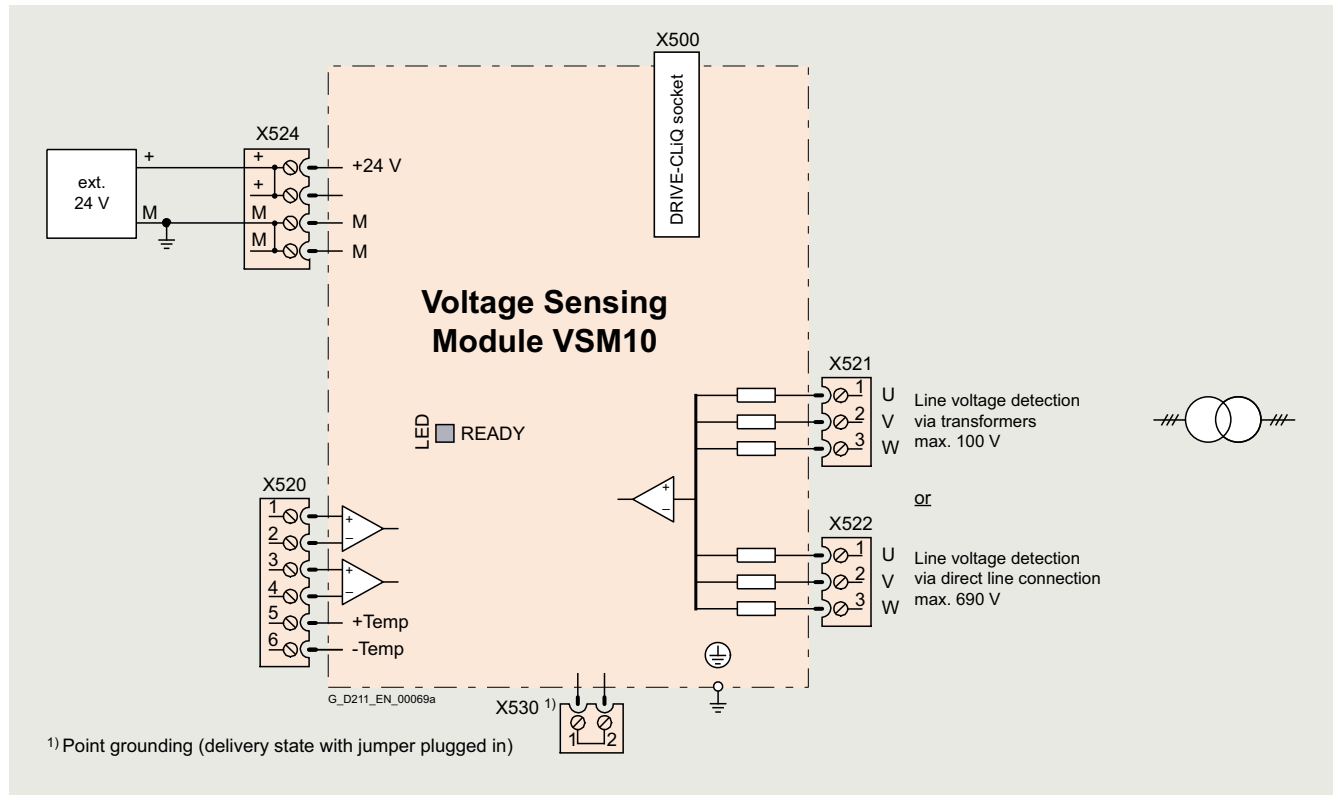
For the SINAMICS G150, the VSM10 Voltage Sensing Module can be ordered as an option with order code **K51** to implement the flying restart function.

Technical specifications

VSM10 Voltage Sensing Module 6SL3053-0AA00-3AA1	
Power requirement, max. at 24 V DC	0.2 A
• Conductor cross section, max.	2.5 mm ²
Power loss, max.	10 W
Line voltage detection	
• Insulation resistance neutral point - ground when the jumper is not inserted	> 10 MΩ
• Input resistance	
- Terminal X521	> 362 kΩ/phase
- Terminal X522	> 2.5 MΩ/phase
Analog inputs (reserved for monitoring an Active Interface Module in chassis format)	
• Internal resistance, approx. (between differential inputs)	100 kΩ
• Resolution	12-bit + sign
PE connection	M4 screw
Dimensions	
• Width	50 mm (1.97 in)
• Height	150 mm (5.91 in)
• Depth	111 mm (4.37 in)
Weight, approx.	1 kg (2.21 lb)
Certificate of suitability	cULus

Integration

The VSM10 Voltage Sensing Module communicates with the CU320-2 Control Unit via DRIVE-CLiQ.



Connection example of a VSM10 Voltage Sensing Module