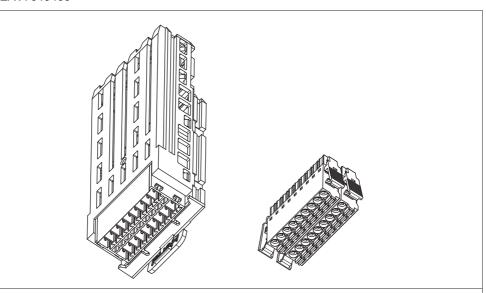


## Extension module of Digital and Analog I/O



## A A DANGER

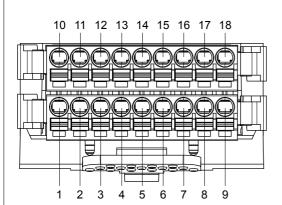
## HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Only appropriately trained persons who are familiar with and understand the contents of this manual and all other
  pertinent product documentation and who have received safety training to recognize and avoid hazards involved are
  authorized to work on and with this drive system. Installation, adjustment, repair, and maintenance must be
  performed by qualified personnel.
- The system integrator is responsible for compliance with all local and national electrical code requirements as well as all other applicable regulations with respect to grounding of all equipment.
- Many components of the product, including the printed circuit boards, operate with mains voltage. Do not touch. Use
  only electrically insulated tools.
- Do not touch unshielded components or terminals with voltage present.
- Motors can generate voltage when the shaft is rotated. Prior to performing any type of work on the drive system, block
  the motor shaft to prevent rotation.
- AC voltage can couple voltage to unused conductors in the motor cable. Insulate both ends of unused conductors of the motor cable.
- Do not short across the DC bus terminals or the DC bus capacitors or the braking resistor terminals.
- · Before performing work on the drive system:
  - Disconnect all power, including external control power that may be present.
  - Place a "Do Not Turn On" label on all power switches.
  - Lock all power switches in the open position.
  - Wait 15 minutes to allow the DC bus capacitors to discharge. The DC bus LED is not an indicator of the absence of DC bus voltage that can exceed 800 Vdc.
  - Measure the voltage on the DC bus between the DC bus terminals using a properly rated voltmeter to verify that the voltage is <42 Vdc.
  - If the DC bus capacitors do not discharge properly, contact your local Schneider Electric representative. Do not repair or operate the product.
- Install and close all covers before applying voltage.

Failure to follow these instructions will result in death or serious injury.

Electrical equipment should be installed, operated, serviced, and maintained only by qualifed personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this product. © 2014 Schneider Electric. All Rights Reserved.





Maximum wire size: 1.0 mm<sup>2</sup> (AWG 16)

Stripping length: 10 mm

## Note: Only one VW3A3203 can be installed for one drive

PIN	SIGNAL	FUNCTION	ELECTRIC CHARACTERISTICS
1	SHLD	Shield connection AI4	Software-configurable Voltage, current, PT100,PT1000, KTY84, PTC measurement: Voltage differential input circuit: • Range: -10Vdc+10Vdc
2	Al4+	Differential Analog Input 4 Depending on SW configuration Differential Voltage measurement	<ul> <li>Impedance: 20kΩ</li> <li>Resolution: 11bit + sign bit</li> <li>Accuracy: ± 0.6% for a temperature variation of 60°C</li> <li>Linearity: ± 0.15% of maximum value</li> </ul>
3	AI4-	PTx measurement 020mA measurement Al4- reference potential forAl4+	Current measurement:         • Range: X-Y mA by programming X and Y from 0 to 20 mA         • Impedance: 250 $\Omega$ • Resolution: 10bit         • Accuracy: $\pm 0.6\%$ for a temperature variation of 60°C
4	Al4+L	3 wire PTx compensation connection	Linearity: ± 0.15% of maximum value     Sampling period: 1ms     PTx measurement: Type of PTx and mode selected via parameter     PT100, PT1000, PTC, KTY84
5	SHLD	Shield connection AI5	<ul> <li>PT100:</li> <li>1 or 3 thermal sensors mounted in series (configurable by software)</li> <li>Thermal sensor current: 7,5 mA maximum</li> <li>Range: -20200°C</li> <li>Accuracy: +-3°C final for a temperature variation of 60°C</li> </ul>
6	AI5+	Differential Analog Input 5 Depending on SW configuration Differential Voltage measurement PTx measurement	• PT1000, KTY84: - 1 or 3 thermal sensors mounted in series (configurable by software) - Thermal sensor current: 1mA maximum - Range: -20200°C
7	AI5-	020mA measurement AI5- reference potential forAI5+	<ul> <li>Accuracy: +-3°C final for a temperature variation of 60°C</li> <li>PTC:         <ul> <li>3 or 6 thermal sensors mounted in series (configurable by software)</li> <li>Thermal sensor current: 1mA maximum</li> <li>Nominal value: &lt;1.5 kΩ</li> </ul> </li> </ul>
8	AI5+L	3 wire PTx compensation connection	- Normal value: $<1.5 \text{ M}^{2}$ - Overheat trigger threshold: $3 \text{ k}\Omega$ - Overheat reset threshold: $1.8 \text{ k}\Omega$ - protected for low impedance: $<50 \Omega$ - detection of high impedance: $>100 \text{k}\Omega$

PIN	SIGNAL	FUNCTION	ELECTRIC CHARACTERISTICS
9	DQ12	Digital Output 12	The levels of the digital 24 Vdc output signals DQ, comply with IEC/ EN61131-2 standard • Logic Type selected via DQCOM wiring • Output voltage: ≤ 30Vdc • Switching current: ≤ 100mA • Voltage drop at 100mA load: ≤ 3Vdc • Sampling period: 1ms
10	DICOM	Digital input common Reference potential for the digital inputs	The levels of the digital 24 Vdc input signals DI, comply with IEC/ EN61131-2 standard • Logic Type selected via DICOM wiring • Positive logic (Source) : State 0 if ≤ 5Vdc, state 1 if ≥11Vdc • Negative logic (Sink) : State 0 if ≥16Vdc, state 1 if ≤ 10Vdc • Maximum voltage: 30Vdc • Input current (typical): 2.5mA • Sampling period: 1ms
11	DI11	Digital input 11	
12	DI12	Digital input 12	
13	DI13	Digital input 13	
14	DI14	Digital input 14	
15	DI15	Digital input 15	
16	DI16	Digital input 16	
17	DQCOM	Digital output common Reference potential for the digital outputs	The levels of the digital 24 Vdc output signals DQ, comply with IEC/ EN61131-2 standard • Logic Type selected via DQCOM wiring • Output voltage: ≤ 30Vdc • Switching current: ≤ 100mA • Voltage drop at 100mA load: ≤ 3Vdc • Sampling period: 1ms
18	DQ11	Digital Output 11	

