



Main

Range of product	Altivar IMC
Product or component type	Drive controller card
Module configuration	Configured and programmed with SoMachine software
Product specific application	-
Discrete I/O number	16
Analogue I/O number	4

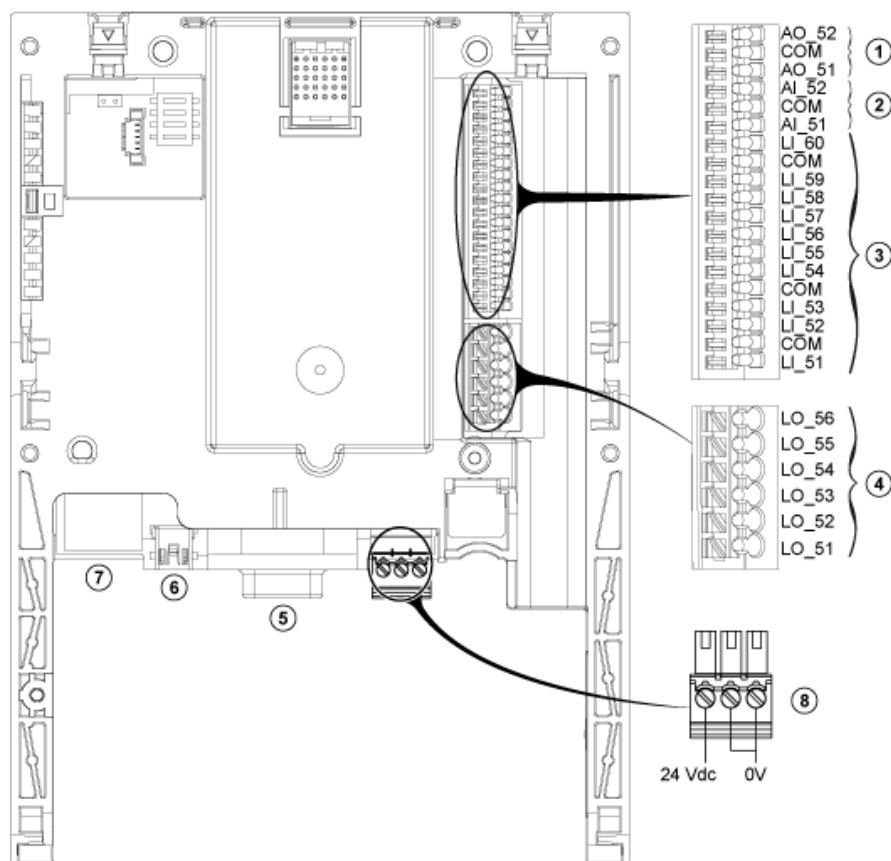
Complementary

Discrete input number	4 discrete input(s) for fast input 6 discrete input(s) for input
Discrete input type	Configurable for incremental encoder (LI59, LI60) Configurable for incremental encoder (LI51, LI52) Configurable as single phase counter (LI51, LI59)
Discrete input logic	Positive logic (sink) for fast input Sink or source (positive/negative) for input
Discrete input voltage	24...30 V
Discrete input voltage type	DC
Number of common point	3 common point(s) for logic input 1 common point(s) for analogue input 1 common point(s) for analogue output
Voltage state1 guaranteed	≥ 11 V for logic input
Voltage state 0 guaranteed	≤ 5 V for logic input
Input impedance	4.4 kOhm for logic input 500 Ohm for analogue output
Input frequency	≤ 100 kHz for fast input (encoder mode) ≤ 100 kHz for fast input (counter mode)
Discrete output number	6 discrete output(s) for transistor output
Discrete output logic	Positive logic (source)
Discrete output voltage	24...30 V DC for transistor output
Discrete output current	2 A for transistor output (LO51...LO56)
Output compatibility	Level 1 PLC for transistor output
Absolute accuracy error	$\pm 1\%$ for a temperature variation 60 °C (analogue output) $\pm 1\%$ for a temperature variation 60 °C (analogue input)
Short-circuit protection	With short-circuit protection for output and fast output
Overvoltage protection	With overvoltage protection for output and fast output
Overload protection	With overload protection for output and fast output
Analogue input number	2
Analogue input type	Configurable voltage or current
Analogue input range	0...20 mA 0...5 V
Analogue input resolution	10 bits
Analogue output number	2
Analogue output range	0...20 mA
Analogue output resolution	12 bits
Linearity error	$\pm 0.2\%$ of maximum value for analogue output $\pm 0.4\%$ of maximum value for analogue input

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

[Us] rated supply voltage	24 V DC
Supply voltage limits	19...30 V
Memory description	Program memory: 1 Mo Internal data storage (FRAM): 64 ko Flash: 2000 kB Internal RAM: 2000 kB
Integrated connection type	CANopen: male SUB-D 9 for CANopen - master access Programming port: mini B USB - 480 Mbit/s MDI/MDX port: RJ45 for Ethernet - 10BASE-T/100BASE-TX
CANopen feature profile	DR 303-1 DS 301 V4.02
Class	Class M20 - <= 32 slave(s) for CANopen
Communication service	10 PDOs per slave (transmission/emission) 320 TPDOs and RPDOs maxi
Transmission rate	20 kbit/s with 2500 m cable CANopen 50 kbit/s with 1000 m cable CANopen 125 kbit/s with 500 m cable CANopen 250 kbit/s with 250 m cable CANopen 500 kbit/s with 100 m cable CANopen 1000 kbit/s with 20 m cable CANopen
Local signalling	1 LED green/red for USER (programmable) 1 LED green/red for CAN (CANopen activity) 1 LED green/red for MS (Module Status) 1 LED green/red for NS (Network Status) 1 LED green/yellow for ETH (Ethernet activity)
Electrical connection	1 connector - RJ45 for programming with SoMachine software/Ethernet Modbus TCP network 1 male connector - SUB-D 9 for connection to the CANopen bus 1 connector - mini B USB for programming with SoMachine software 1 connector with removable screw terminal block - 3 contacts - <= 1 x 1.5 mm ² - AWG 16 for connecting the 24 V DC power supply 3 connectors with screw terminal block - <= 1 x 1.5 mm ² - AWG 16 for inputs/outputs
Tightening torque	0.25 N.m
Associated complete product	ATV61 ATV71 TCSXCNAMUM3P
Product weight	0.185 kg

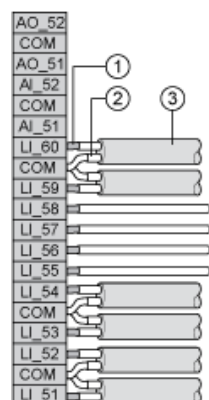
Terminals of the Card



- (1) Analog Outputs
- (2) Analog Inputs
- (3) Digital Inputs
- (4) Digital Outputs
- (5) CANopen SubD9
- (6) Mini USB
- (7) Ethernet RJ45
- (8) 24 Vdc terminal block

Logic Inputs LI51...LI60

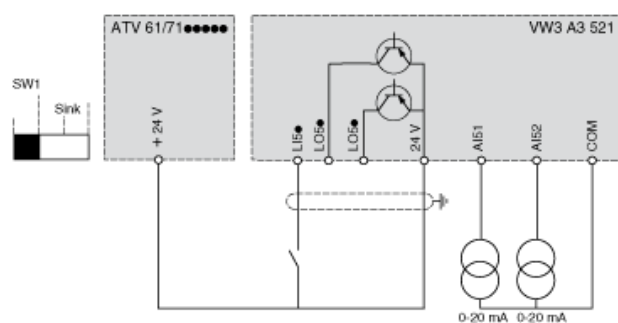
Shielded Twisted Pair



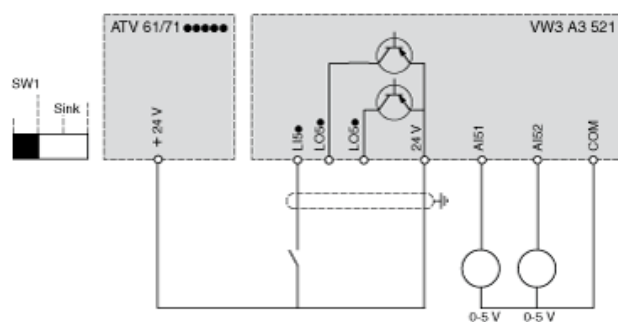
- (1) Signal
- (2) Common
- (3) Shield connected to the ground

I/O Wiring Diagrams

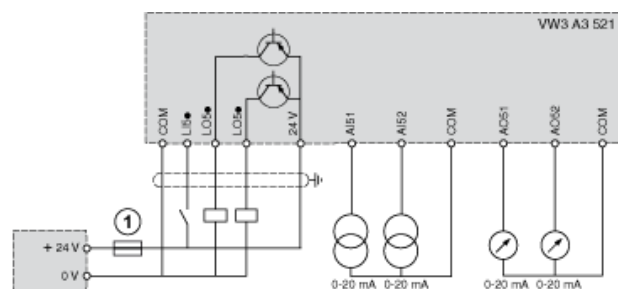
Current Mode, Power Consumption < 200 mA



Voltage Mode, Power Consumption < 200 mA



Current Mode, Card Powered by External Power Supply



- (1) 2 A fast blow fuse for power supply