Achieve greater intelligence in less space!

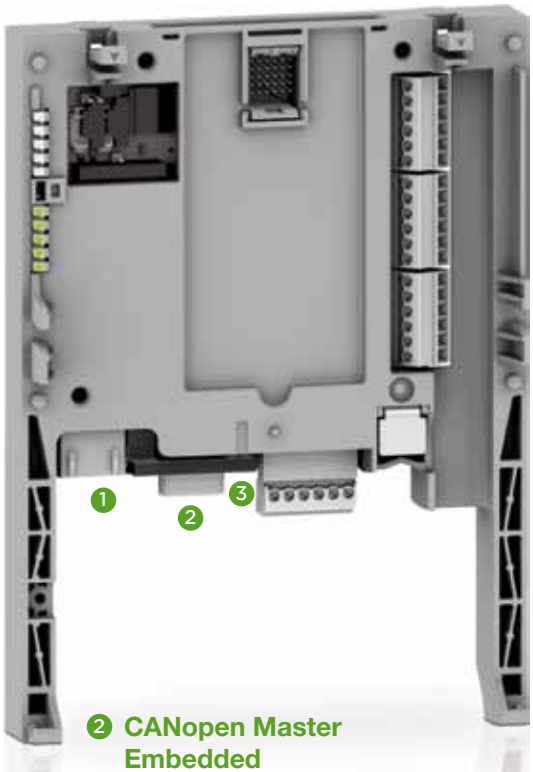
Altivar IMC
Integrated Controller Card
for Altivar 61 & 71 variable speed drives

SoMachine

Schneider Electric

>Drive capabilities increased tenfold with the Integrated Controller Card Altivar IMC

The Integrated Controller Card Altivar IMC is a new, compact and optimized controller dedicated to OEM Machine Builders who design machines for applications such as Hoisting, Pumping, Textile, and Woodworking. Based on the concept of «Flexible Machine Control» by Schneider Electric, the new Integrated Controller Card Altivar IMC improves the expandability of machines and satisfies OEM requirements for performance, installation simplicity and ease of machine evolution.

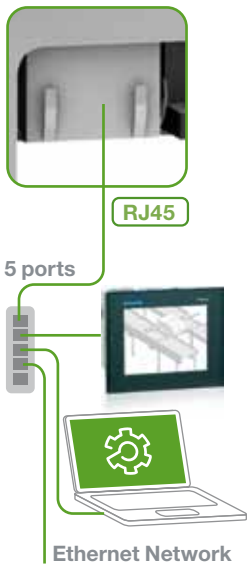


1 Ethernet Embedded: Performance and Openess

> 10/100 Mbits/s
Available Protocols:
- Ethernet Modbus TCP
- SoMachine Protocol

+

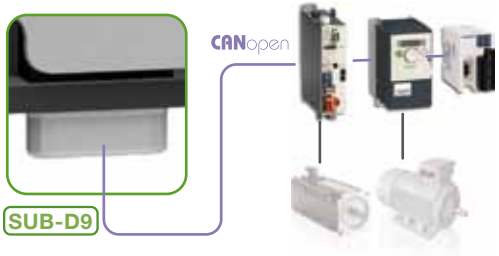
- FTP Server Embedded
- WebServer Embedded



2 CANopen Master Embedded

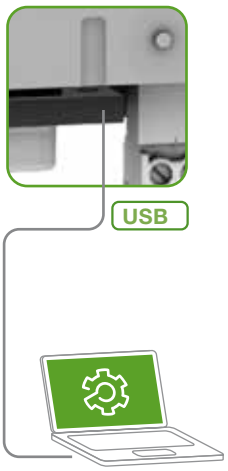
> Flexibility for your Distributed Architectures:
- Up to 16 Slaves
- Up to 1 Mbits/s

> Speed Up Machine Design:
- CANopen Configurator integrated in SoMachine Software
- PLCOpen Motion Libraries



3 Speed up machine design

> SoMachine Software:
- 5 Programing Languages (IEC 1131-3)
- Function Blocks
- Tested, Validated, Documented Architectures
- Maximise Operation and Reduce Maintenance
- Diagnosis through transparency and remote access



30%
less costly than a conventional PLC-based solution

> A more intelligent drive

• Performs more complex operations (2MB memory)
• Reduces program loading time (Mini-B USB connectors)
• Communicates with all other system devices (embedded Ethernet connection and CANopen port)

> A more open human-machine interface

• Direct customisation of the Altivar drive's graphic display (8 lines of 24 characters)
• Dedicated Altivar IMC menu
• Customisable menu tailored to the application

> Easy to integrate

Altivar IMC integrates seamlessly into numerous different application architectures, including:
• Hoisting
• Textiles
• Winder/Unwinder
• Pumping (booster stations and irrigation)
• …

> Flexible machine control

The Altivar IMC is part of a wider platform offer:
• Logic controllers Modicon M238, M258
• Logic Motion Controller Modicon LMC058
• HMI controller Magelis XBT-GC

> So Machine

Shorter machine development times
Using SoMachine programming software means there is just:
• One project file
• One software program
• One application download
SoMachine is the dedicated software used by all controllers

> Open and communicative

Totally transparent access to all other devices in the system architecture via CANopen with FDT/DTM technology. The integrated controller card Altivar IMC can also use the:
• Drive local I/O
• Drive extension I/O card
• Drive communication option card
• Encoder interface card speed feedback counter
• Drive parameters (speed, current, torque, etc.)

>Selection guide

Integrated controller card Altivar IMC

Power supply	24 Vdc
Ethernet [1]	1 (RJ45)
CANopen master	1 (Sub-D9)
USB port (USB mini B)	1
Digital Inputs	10 Inputs[2] - 24 Vdc
Digital Outputs	6 Outputs - Trans 0,2A - Source
Analog Inputs	2 Inputs 0 - 20 mA
Analog Outputs	2 Outputs 0 - 20 mA
Real time clock	Integrated
Reference	**VW3A3521S0**

(1) Modbus TCP, Server WEB / FTP

(2) 4 available for: 2 High Speed Counter (Single phase) 100kHz or 2 Incremental Encoder (A / B) 100kHz

Digital I/O card

Power supply	Internal delivery	Internal delivery
Digital Inputs	4 Inputs - 24 Vdc	4 Inputs - 24 Vdc
Digital Outputs	2 Outputs - Trans 0,2A - Sink/Source	2 Outputs - Trans 0,2A - Sink/Source
Frequency Control Input	-	1 Input Frequency, range: 0...30 kHz
Analog Input	-	1 Input configurable voltage or current (1)
Analog differential Input	-	1 Input X-Y mA differential current
Analog Outputs	-	2 Outputs configurable voltage or current (2)
Relays Outputs	1 Relay with NC + NO - 5A 250Vac/30Vdc	1 Relay with NC + NO - 5A 250Vac/30Vdc
PTC Probe	1 Input for a maximum of 6 PTC probe	1 Input for a maximum of 6 PTC probe
References	**VW3A3201**	**VW3A3202**

(1) 0-10V, X-YmA from 0 to 20mA

(2) ±10V, 0-10V, X-YmA from 0 to 20mA

Communication card	ATV71	ATV61
Modbus Plus	**VW3 A3302**	**VW3 A3302**
Uni-Telway	**VW3 A3303**	**VW3 A3303**
InterBus-S	**VW3 A3304**	**VW3 A3304**
Profibus DP	**VW3 A3307**	**VW3 A3307**
DeviceNet	**VW3 A3309**	**VW3 A3309**
Ethernet Modbus TCP (Daisy Chain)	**VW3 A3310D**	**VW3 A3310D**
Fipio	**VW3 A3311**	**VW3 A3311**
LonWorks	**-**	**VW3 A3312**
METASYS N2	**-**	**VW3 A3313**
APOGEE FLN	**-**	**VW3 A3314**
BACnet	**-**	**VW3 A3315**
EtherNet IP	**VW3 A3316**	**VW3 A3316**
CC-Link	**VW3 A3317**	**VW3 A3317**

ATV61 / ATV71 I/O Embedded

Power supply	Internal delivery or external delivery
Digital Inputs	5 Inputs - 24 Vdc
Digital Inputs Or PTC	1 Input configurable as Digital input 24 Vdc or Input for a maximum of 6 PTC probe
Safety Input	1 input for the Power Removal safety function and/or for thermal protection of the ATEX motor in applications in explosive atmospheres
Analog Input	1 Input configurable voltage or current (0-10V, X-YmA from 0 to 20mA)
Analog differential Input	1 Input ± 10V
Analog Outputs	1 analog output configurable as voltage or current, or as a logic output
Relays Outputs	1 Relay with NC + NO - 5A 250Vac/30Vdc 1 Relay with NO - 5A 250Vac/30Vdc

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