

IP 54 or IP 55 variable speed drives for asynchronous and synchronous motors

Type of machine	Simple machines	Pumps and fans (building HVAC)) (1)
		
Power range for 50...60 Hz (kW) line supply	0.18...15	0.75...75
Single-phase 200...240 V (kW)	0.18...2.2	–
Three-phase 380...480 V (kW)	–	0.75...75
Three-phase 380...500 V (kW)	0.37...15	–
Degree of protection	IP 55	IP 55
Variants	Enclosure user-definable up to 4 kW: Vario switch disconnecter, LEDs, selector switch, potentiometer	–
Drive		
Output frequency	0.1...500 Hz	0.1...200 Hz
Type of control	Sensorless flux vector control Voltage/frequency ratio	Sensorless flux vector control Voltage/frequency ratio (2 points) Energy saving ratio
Asynchronous motor	–	–
Synchronous motor	170...200% of the nominal motor torque	120% of the nominal motor torque for 60 seconds
Transient overtorque		
Functions		
Number of functions	50	50
Number of preset speeds	16	7
Number of I/O		
Analog inputs	3	2
Logic inputs	6	3
Analog outputs	1	1
Logic outputs	–	–
Relay outputs	2	2
Communication		
Integrated	Modbus and CANopen	Modbus, METASYS N2, APOGEE FLN, BACnet
Available as an option	Modbus TCP, Fipio, PROFIBUS DP, DeviceNet	LonWorks
Cards (available as an option)	–	–
Dialogue tools	IP 65 remote terminal	IP 54 or IP 65 remote graphic display terminal
Configuration tools	SoMove Simple Loader	PCSoft for ATV 212 drive Multi-Loader
Standards and certifications	IEC 61800-5-1, IEC 61800-3 (environments 1 and 2, categories C1 to C3) CE, UL, CSA, C-Tick, GOST	
References	ATV 31C	ATV 212W
Catalogues	"Altivar 31C variable speed drives" (1) Heating, Ventilation and Air Conditioning	"Altivar 212 variable speed drives"



**Pumps and fans
(industrial)**



0.75...90

–

0.75...90

–

IP 54

– Equipped with a Vario switch disconnecter

0.1...599 Hz from 0.75 to 45 kW
0.1...500 Hz from 55...90 kW

Sensorless flux vector control
Voltage/frequency ratio (2 or 5 points)
Energy saving ratio

Vector control without speed feedback

110% of the nominal motor torque for 60 seconds

>100

8

2...4

6...20

1...3

0...8

2...4

Modbus and CANopen

Modbus TCP Daisy Chain, Modbus/Uni-Telway, EtherNet/IP, DeviceNet, PROFIBUS DP V0 and V1, INTERBUS, CC-Link, LONWORKS, METASYS N2, APOGEE FLN, BACnet

I/O extension cards, "Controller Inside" programmable card, multi-pump cards, encoder interface cards

IP 54 or IP 65 remote graphic display terminal

SoMove

Simple Loader, Multi-Loader

IEC 61800-5-1, IEC 61800-3 (environments 1 and 2, categories C1 to C3), IEC 61000-4-2/4-3/4-4/4-5/4-6/4-11

CE, UL, CSA, DNV, C-Tick, NOM, GOST

ATV 61W

ATV 61E5

"Altivar 61 variable speed drives"

Complex machines



0.75...75

–

0.75...75

–

IP 54

– Equipped with a Vario switch disconnecter

0.1...599 Hz from 0.75 to 37 kW
0.1...500 Hz from 45 to 75 kW

Sensorless flux vector control
Voltage/frequency ratio (2 or 5 points)
ENA System

Vector control with or without speed feedback

220% of the nominal motor torque for 2 seconds
170% for 60 seconds

>150

16

2...4

6...20

1...3

0...8

2...4

Modbus TCP Daisy Chain, Modbus/Uni-Telway, EtherNet/IP, DeviceNet, PROFIBUS DP V0 and V1, INTERBUS, CC-Link

Interface cards for incremental, resolver, SinCos, SinCos Hiperface®, EnDat® or SSI encoders, I/O extension cards, Controller Inside programmable card

IP 54 or IP 65 remote graphic display terminal

SoMove

Simple Loader, Multi-Loader

IEC 61800-5-1, IEC 61800-3 (environments 1 and 2, categories C1 to C3), IEC 61000-4-2/4-3/4-4/4-5/4-6/4-11

CE, UL, CSA, DNV, C-Tick, NOM, GOST

ATV 71W

ATV 71E5

"Altivar 71 variable speed drives"



More technical information on www.schneider-electric.com