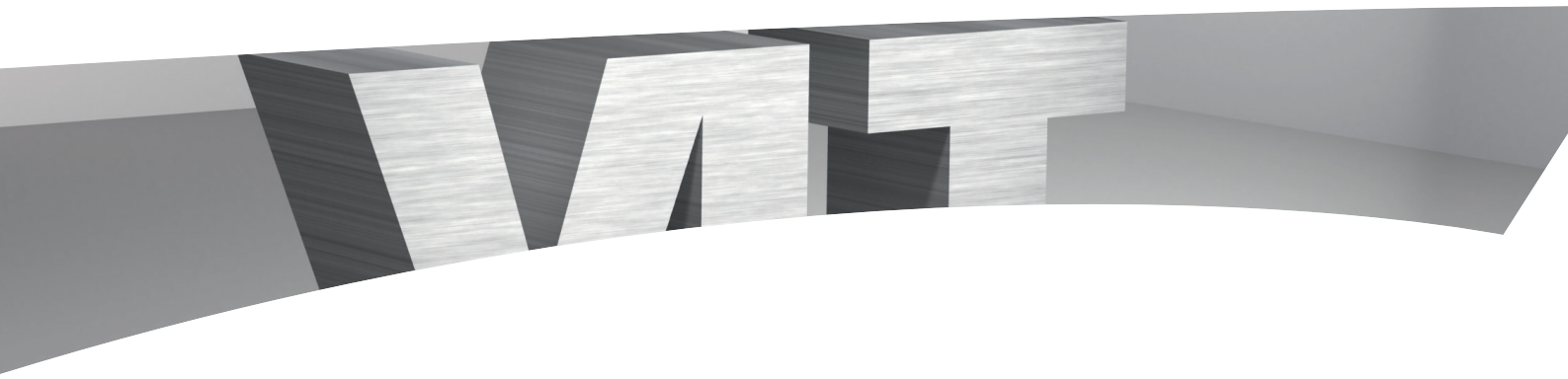

VLT® AutomationDrive

The VLT® AutomationDrive is extremely configurable and represents a drive concept covering the whole production or machine.

The make-through modular design makes upgrade easy as well as adaptation of future features.
On-board manuals make operation easy and the built-in Smart Logic Control allows for basic programming covering many common PLC functions.

Pluggable options
Numerous I/O options, fieldbus options and programmable extentions are available, mounted and tested from factory or to plug in for changover or upgrade.

Awarded
VLT® AutomationDrive was given the Frost & Sullivan award for innovation and the iF design award for its user-friendliness.

The perfect solution for:
- Industrial automation
- High dynamic applications
- Safety installations

Power range

0.25 – 37 kW	(200 – 240 V)
0.37 – 1000 kW	(380 – 500 V)
0.75 – 1000 kW	(525 – 600 V)
11 – 1000 kW	(600 – 690 V)

With 110% overload torque (normal overload)

Features	Benefits
Reliable	**Maximum up-time**
• One wire safety terminal	• Suitable for cat. 3 safety installations
• Available in IP 66 enclosures	• Suitable for harsh and wash down areas
• Ambient temperature 50° C without derating	• Less need for cooling or oversizing
User-friendly	**Saves commissioning and operating cost**
• Pluggable options	• Easy upgrade and change over
• Awarded control panel	• User-friendly
• Onboard manual	• Easy operation
• Spring loaded cage clamps	• Optimum process control
• Pluggable terminals	• Easy connection
Innovative	**Saves time and money**
• Modular design	• Flexibility
• Smart Logic Control	• Replace expensive PLC
• Safety terminal	• Suitable for cat. 3 safety applications
• Pluggable options	• Easy upgrade and change over
• Intelligent heat management	• Excess heat effectively removed

VLT®
THE REAL DRIVE

Options

Synchronizing and positioning

The Synchronizing Controller and positioning controller expand the functional properties and offer a host of user-friendly benefits based on thought-through and innovative features.

MCB 112 PTC Relay Card

Stops the motor in case of over-heating (signal from sensor) and resumes operation when the temperature is normal.

Sine-Wave Filters

Optimise the motor power current providing a sinusoidal phase-to-phase motor voltage. They reduce motor insulation stress, acoustic noise, and bearing currents.

dU/dt Filters

Eliminate very fast voltage changes to reduce the motor insulation stress. Are recommended in applications with older motors, aggressive environments or frequent braking.

Disconnect switch

Specifications

Mains supply (L1, L2, L3)	
Supply voltage	200-240 V, 380-480 V, 380-500 V, 525-600 V ±10%
Supply frequency	50/60 Hz
True Power Factor (λ)	0.92 nominal at rated load
Switching on input supply L1, L2, L3 (power-ups)	Maximum 2 times/min.
Digital inputs	
Programmable digital inputs	FC 301: 4 (5) / FC 302: 4 (6)
Logic	PNP or NPN
Voltage level	0 – 24 VDC
Analog inputs	
Number of analog inputs	2
Modes	Voltage or current
Voltage level	FC 301: 0 to + 10 / FC 302: -10 to +10 V (scaleable)
Pulse/encoder inputs	
Programmable pulse/encoder inputs	2/1
Voltage level	See section on digital input
Maximum voltage on input	28 V DC
Digital output	
Programmable digital/pulse outputs	2
Voltage level at digital/frequency output	0 – 24 V
Relay outputs	
Programmable relay outputs	FC 301: 1 / FC 302: 2
Cable lengths and cross sections	
Max. motor cable length: – Screened/armoured – Unscreened/unarmoured	 FC 301: 50 m / FC 302: 150 m FC 301: 75 m / FC 302: 300 m

Cabinet sizes [mm]

IP 20 and IP 21/NEMA1

Enclosure name		A1*	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3
Power range [kW]	Min.	0.25	0.25	3	5.5	11	15	22	90	132	250	450	710
	Max.	1.5	5.5	7.5	18.5	30	45	90	132	315	560	710	1000
Height	IP20	200	268	268	481	651	680	770	1159	1540	2000	2000	2000
	IP21 / NEMA1	307	370	370									
Width	without Option C	75	90	130	242	242	308	370	420	420	600	1400	1600
	with slim Option C		130	170									
	with wide Option C		1550	190									
Depth	without Option A or B	205	205	205	261	261	310	335	373	373	494	600	600
	with Option A or B	219	219	219									

** Only FC 301*

IP 54/IP 55/IP 66/NEMA12

Enclosure name		A5	B1	B2	C1	C2	D1	D2	E1	E2	E3
Height		420	481	651	680	770	1159	1540	2000	2000	2000
Width		242	242	242	308	370	420	420	600	1400	1600
Depth		200	261	261	310	335	373	373	494	600	600

IP 00/Chassis

Enclosure name		D1	D2	E1
Height		997	1277	1499
	without Option C, with slim Option C and with wide Option C	408	408	585
Depth	without Option A or B	373	373	494
	with Option A or B