

# **VLT® Automation Drive FC 360**

Dedicated drive for industrial applications in a compact, energy saving package.



The VLT® AutomationDrive FC 360 is a reliable, energy efficient and user-friendly solution placed in a price/performance sweet spot, making it a preferred choice for OEMs.

Designed to work in harsh and humid environments, the drive provides reliable operation in industries such as textile, plastic & rubber, metal work, material handling, food & beverage, and building materials.

The drive enables precise and efficient motor control of a wide range of industrial applications such as extruders, winders, conveyors, drawing benches, ring frame, texturizing, pumps, and fans.

The efficient cooling concept ensures there is no forced air over the printed circuit board, which improves reliability. Also, a removable fan makes it possible to clean the inside of the drive quickly and easily, thereby reducing the risk of downtime.

FC 360 reduces initial costs and effort with a wide range of built-in features that simplify installation and commissioning, including an EMC filter, built-in brake chopper up to 22kW, and a user-friendly graphic LCP that supports English and Chinese.

A built-in DC choke reduces harmonics to less than 43% ThiD, significantly extending the lifetime of the DC capacitors. Application selection guides enable users to set up common applications easily.

#### **Product range**

#### **Enclosure ratings**

IP 20

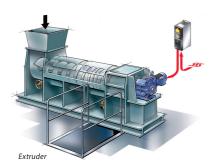
450	kg
force at 0.6 Hz	

The high torque performance of the 0.75 kW VLT® AutomationDrive FC 360 fully meets the demands of the tensile tester machine at Saumya Technocrates in India.

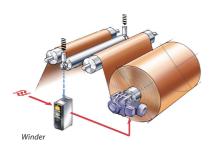
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Feature	Benefit		
Reliable	Maximum Uptime		
Max ambient temp $50^{\circ}\text{C}$ (up to $45^{\circ}\text{C}$ without derating in normal operation)	Reliable operation in many environments		
Coated PCB	Prepared for harsh environments		
Unique cooling concept with no forced air flow over electronics	Unequalled robustness - maximum uptime		
User friendly	Saves commissioning and operating cost		
Graphic LCP supporting English and Chinese	Easy setup		
Enhanced Numeric LCP	Easy setup		
Application selection and guidance	Easy commissioning		
Removable cooling fan	Fast cleaning and extended lifetime		
Integrated DC choke	Small power cables, less harmonics		
Built-in EMC filter	Meets class C3		
Versatile	Energy saving		
Automatic Energy Optimizer function	Saves 5-15% energy and reduces operation costs		
Built-in PID controller	Eliminates external controller		
Feed-forward PID	Higher stability for workbench		
Kinetic backup	Controlled ramp down at mains fail can reduce material waste		
Built-in brake chopper up to 22kW	Saves panel space and cost (no need to buy external braking chopper)		

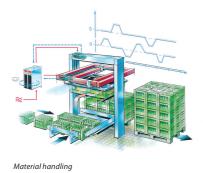












### **Specifications**

Mains supply (L1, L2, L3)	
Supply voltage	380 - 480V -15%/+10%
Supply frequency	50/60Hz
Displacement Power Factor(cos φ)	near unity (>0.98)
Switching on input supply L1, L2, L3	"max 2 times/min. (0.37-7.5kW) max 1 times/min. (11-75kW)"

Output data (U, V, W)	
Output voltage	0 - 100% of supply voltage
Switching on output	Unlimited
Ramp times	0.01 - 3600s
Frequency range	0 - 500Hz

Programmable Digital inputs (outputs)				
Digital inputs (outputs)	7 (2 can be configured as digital outputs)			
Logic	PNP or NPN			
Voltage level	0-24 V DC			
Note: Two digital outputs can be configured as pulse outputs				

Pulse/encoder inputs	
Pulse/encoder inputs	1/2
Voltage level	0-24 V DC

Note: One digital input can be configured as pulse input. Two digital inputs can be configured as encoder inputs

ge or current			
-10V (scaleable)			
20mA (scaleable)			
Current level 0/4 to 20mA (scaleable)			

Programmable Analog outputs (can be used as digital output)				
Analog outputs	2			
Current range at analog output	$\Omega/A$ to $20$ m $\Lambda$			

Current range at analog output	0/4 to 20mA

Relay outputs	2
Approvals	
CE, UL	

## Communication FC Protocol, Modbus RTU, Profibus (option), ProfiNet (option)

#### **Dimensions**

Voltage [V]	JI	J2	J3	J4	J5	J6	J7
380-480	0.37-2.2	3.0-5.5	7.5	11-15	18.5-22	30-45	55-75
Dimensions [mm]		< □	B B B B B B B B B B B B B B B B B B B			D + 1308C449.10	
Height A	210	272.5	272.5	320	410	520	550
Width B	75	90	115	135	150	233	308
Depth C (with option B)	168 (181)	168 (181)	168 (181)	245 (258)	245 (258)	242	332

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