

Fact Sheet

VLT® AutomationDrive FC 360

High performer in challenging environments



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 right mix

of features gives you freedom to achieve your system goals

The drive enables precise and efficient motor control of a wide range of industrial applications such as extruders, winders, conveyors, drawing benches, 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 commis-

sioning, including an EMC filter, built-in brake chopper up to 22 kW, and a user-friendly numeric LCP.

A built-in DC choke reduces harmonics to 40-48% THiD, significantly extending the lifetime of the DC capacitors. Application selection guides enable users to set up common applications with ease.

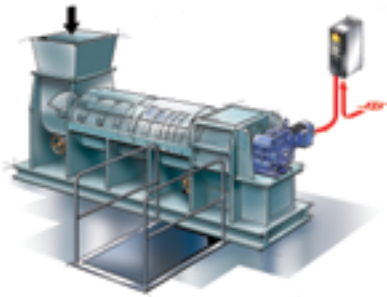
Product range

3 x 380 – 480 V.....0.37-75 kW

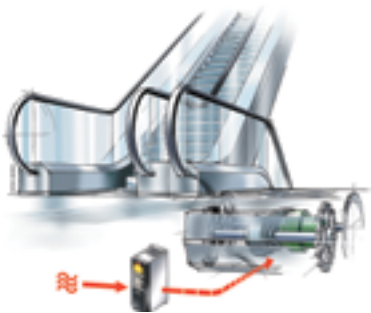
Enclosure ratings

IP20

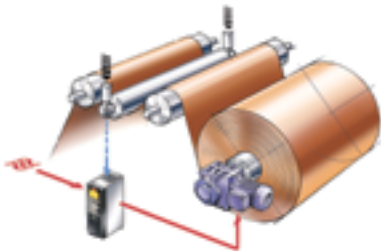
Feature	Benefit
Reliable	Maximum uptime
Maximum ambient temperature 55 °C (up to 45~50 °C without derating in normal operation)	Reliable operation in many environments
Coated PCB	Prepared for harsh environments
Unique cooling concept with no forced air flow over electronics	Unequaled robustness – maximum uptime
User friendly	Saves commissioning and operating cost
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	Increases reliability and reduces interference with sensitive electronics
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 22 kW	Saves panel space and cost (no need to buy external braking chopper)
PM motor control up to 75 kW	High efficiency
Torque control	Solution for winder applications
Built-in position controller	Saves external position controller



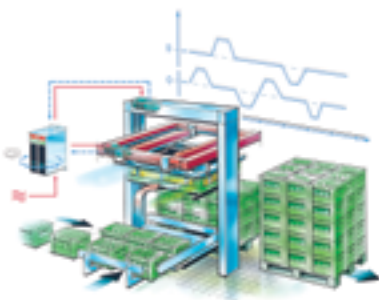
Extruder



Escalator



Winder



Material handling

Specifications

Mains supply (L1, L2, L3)

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

Output data (U, V, W)

Output voltage	0-100% of supply voltage
Switching on output	Unlimited
Ramp times	0.01-3600 sec.
Output frequency	0-500 Hz

Programmable digital inputs (outputs)

Digital inputs (outputs) *	7 (2)
Logic	PNP or NPN
Voltage level	0-24 VDC

*Note: Two digital outputs can be configured as pulse outputs

Pulse/encoder inputs

Pulse inputs (encoder inputs)**	2 (1)
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

Programmable analog inputs

Analog inputs	2
Modes	Voltage or current
Voltage level	0 V to +10 V (scaleable)
Current level	0/4 to 20 mA (scaleable)

Programmable analog outputs (can be used as digital output)

Analog outputs	2
Current range at analog output	0/4-20 mA

Programmable relay outputs

Relay outputs	2
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Approvals

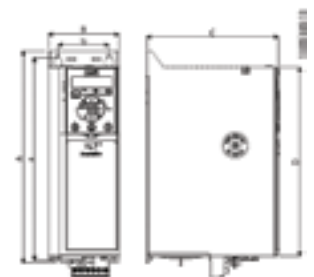
CE

Communication

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

Voltage

[V]	J1	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]

	A	B	C	D	E	F	G
Hight A	210	272.5	272.5	317.5	410	515	550
Width B	75	90	115	135	150	233	308
Depth C (with option B)	168 (173)	168 (173)	168 (173)	245 (250)	245 (250)	242	332