

Fact Sheet

### VLT® DriveMotor FCP 106



# Standalone frequency converter for mounting on any standard induction or permanent magnet motor from 0.55-7.5 kW.

With a wide range of standard integrated pump and fan features, the VLT® DriveMotor FCP 106 can provide efficient control of motors in the 0.55 – 7.5 kW range.

By mounting the drive directly on the motor, owners are free to choose their own manufacturer and design the optimal system for their application. Once attached to the motor the drive automatically sets the optimal parameters to provide stable, energy efficient operation.

efficiency. The VLT® DriveMotor FCP 106 complies with both IE3 and IE4 (fprEN 60034-30-1) efficiency requirements. The FCP 106 is the perfect solution for both OEMs and end-users. By mounting the drive directly on the motor, with an adjustable adaptor plate, you eliminate the need for cabinets and reduce cable costs significantly. Setup is easy with VLT® Motion Control Tool MCT 10.

### Compatible with VLT® DriveMotor FCM 300

The FCP 106 can be retrofitted on a FCM 300 motor with an adaptor plate.

#### **Product range**

#### Available enclosure ratings

IP 54 (UL type 3R).....0.55 – 7.5 kW

#### PC software tool: VLT® Motion Control Tool MCT 10

Ideal for commissioning and servicing the drive with induction motor attached.



Mount the FCP 106 on your preferred motor.

Feature	Benefit		
Alphanumerical display, 7 languages	Effective commissioning		
External connection for display as standard	Fast connectivity		
Motor data pre-programmed	No programming needed		
IP 54/UL type 3R enclosure	Reliable in wet and dirty environments		
PCB protection class 3C3	Reliable in corrosive environments		
Vibration fullfilling LVD requirments	Suitable for all motor mounted challenges		
110% overload (0.55 – 7.5 kW)	Optimised for fans and pumps		
160% overload (0.55 – 5.5 kW)	High starting torque by one step up in power size		
Asynchronous or permanent magnet motor	Free choice of motor technology		
Sleep mode	Save energy and extend lifetime		
Automatic Energy Optimizer function	Saves an additional 5-15% energy		
AHU dedicated functions	Reduces cost and saves energy		
Pump dedicated functions	Protects the pump and extends the lifetime		
Built-in PI controller	No external PI controller required		
Smart Logic Controller	Often makes PLC/DDC unnecessary		
Control signal for mechanical brake	Reduce effort in PLC		
FC Protocol, Modbus, Metasys, BACnet, integrated	Flexible connectivity		
Integrated DC link	Meets EN 61000-6-12, small power cable		
Integrated EMC filters	Meets EN 61800-3, (C1 and C2), and EN 55011 Class (B and A1)		



### VLT® Control Panel LCP 31 (LCP only)

Alphanumerical display for commissioning and status indication during operation. Connection easy accessible through cable gland.

Ordering number: 132B0200

## VLT® Control Panel LCP 31 Mounting Kit

Including 3 m cable, panel mounting bracket, gasket and fastners.

Ordering number: 134B0557

#### **Local Operation Pad LOP**

Panel for start/stop and setting the reference.

Ordering number: 175N0128

#### Potentiometer for cable gland

For setting the reference directly at the drive.

Ordering number: 177N0011

#### **Motor Adapter Plate FCP 106**

MH1 – Ordering number: 134B0340 MH2 – Ordering number: 134B0390 MH3 – Ordering number: 134B0440

#### Wall Mounting Plate FCP 106

MH1 – Ordering number: 134B0341 MH2 – Ordering number: 134B0391 MH3 – Ordering number: 134B0441

### Crimp terminals for mounting FCP on motor

 $0.2 - 0.5 \text{ mm}^2$ , 25 pcs.

Ordering number: 134B0495

0.5 – 1.0 mm<sup>2</sup>, 25 pcs.

Ordering number:134B0496

1.0 - 2.5 mm<sup>2</sup>, 25 pcs.

Ordering number: 134B0497

 $2.5 - 4.0 \text{ mm}^2$ , 25 pcs.

Ordering number: 134B0498

 $4.0 - 6.0 \text{ mm}^2$ , 25 pcs.

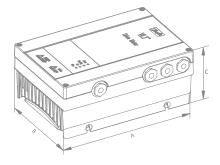
Ordering number: 134B0499

#### **Specifications**

- p			
Mains supply (L1, L2, L3)			
Supply voltage	380 - 480 V ±10%		
Supply frequency	50/60 Hz		
Displacement power factor (cos φ) near unity	(> 0.98)		
Switching on input supply L1, L2, L3	1–2 times/min.		
Output data (U, V, W)			
Output voltage	0-100% of supply voltage		
Switching on output	Unlimited		
Ramp times	1–3600 sec.		
Output frequency	0–590 Hz		
Digital inputs			
Programmable digital inputs	4		
Logic	PNP or NPN		
Voltage level	0-24 VDC		
Analogue input			
Analogue inputs	2		
Modes	Voltage or current		
Voltage level	0 V to +10 V (scaleable)		
Current level	0/4 to 20 mA (scaleable)		
Digital/analogue output			
Programmable outputs	2		
Analogue output current level	0/4-20 mA		
Relay outputs			
Programmable relay outputs	2 (resistive load 250 VAC, 3 A 30 VDC, 2 A)		
Additional features when mounting the elect	ronic (FCP 106) on your motor		
Note your production info into the drive	Identification of your programming		
Change motor data to fit your motor	Optimize settings for your motor settings		
Create new factory settings (CSIV Technology)	Ensure correct motor data settings		
Motor cable length up to 0.5 m	Mount FCP on every side of the motor		
Custom adapter plate	Mount FCP on every motor make		
Oversized FCP can be mounted on motor	Higher overload for critical applications		
Motor independent cooling	FCP fits on any motor		

#### **Dimensions**

Dimensions	kW	Length	Width	Height
(mm)		Α	В	C
MH1	0.55 0.75 1.1 1.5	231	162	107
MH2	2.2 3 4	277	187	113
МНЗ	5.5 7.5	322	220	124



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