

## **Installation Instructions**

# LOP Connection and Set-up VLT® DriveMotor FCP/FCM 106

# **Items Supplied**

- Local operating panel (LOP), 175N0128 IP 65, see *Illustration 1.1*.
- Fixture for LOP, 175N2717 (included in 175N0128), see Illustration 1.2.
- LOP cable.

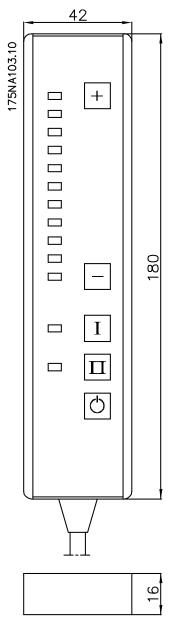


Illustration 1.1 Local Operation Panel (LOP) 175N0128 IP 65

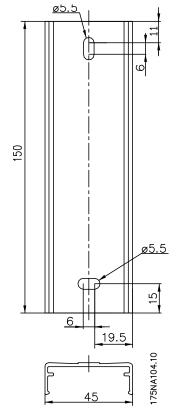


Illustration 1.2 Fixture for LOP 175N2717 (included in 175N0128)



## Safety Instructions

Refer to VLT® DriveMotor FCP 106 and FCM 106 Operating Instructions for detailed information about safety precautions for installation.

# **A**WARNING

### **DISCHARGE TIME**

The frequency converter contains DC-link capacitors, which can remain charged even when the frequency converter is not powered. High voltage can be present even when the warning LED indicator lights are off. Failure to wait the specified time after power has been removed before performing service or repair work can result in death or serious injury.

- 1. Stop the motor.
- Disconnect AC mains, permanent magnet type motors, and remote DC-link supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
- 3. Wait for the capacitors to discharge fully, before performing any service or repair work. The duration of waiting time is specified in *Table 1.1*.

Voltage [V]	Power Range <sup>1)</sup> [kW]	Minimum waiting time (min)
3x400	0.55-7.5	4

Table 1.1 Discharge Time

1) Power ratings relate to NO, see VLT® DriveMotor FCP 106 and FCM 106 Operating Instructions.

## Connection to FCP 106 or FCM 106

- 1. Connect the LOP as shown in *Table 1.2* and *Illustration 1.3*.
- 2. After completing connections, cut off or isolate excess wire.
- 3. Connect terminal 27 V to +24 V or set parameter 5-12 Terminal 27 Digital Input to [0] No operation.

Terminal	Dual-speed	Dual-mode	<b>Dual-direction</b>		
	operation operation		operation		
18	Purple		Gray		
19		_			
27		Brown			
29	Green				
12		Red			
50		Yellow			
55		Blue	_		

**Table 1.2 Electrical Connections** 

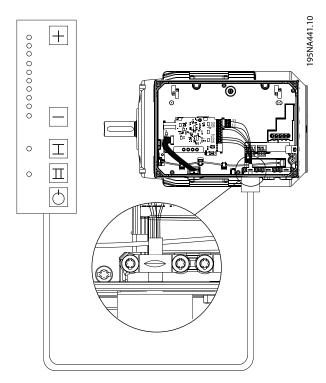
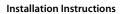


Illustration 1.3 LOP Connections to FCP 106 or FCM 106





## Set-up

- 1. Perform set-up according to *Table 1.3*.
- 2. Use the [+]/[-] keys to set reference.
- 3. At power-up, the unit is always in stop mode. The set reference is stored during power down. To set up permanent start mode, connect terminal 12 to terminal 19 and do not connect purple/gray wire to terminal 12. Permanent start mode disables the stop function on the LOP.

Function	Settings	Key I (Start)	Key II (Start)	Ó
				Key (Stop)
Default - Dual speed operation	No changes to factory setting.	Run on set	Run on 5 Hz <sup>1)</sup>	Stop (and reset <sup>2)</sup>
(connect purple or orange wire)		reference (+/-)	jog speed	- if trip)
Function 2 - Dual-mode	Select the modes of operation in set-ups 1 and 2.	Run with	Run with	Stop (and reset <sup>2)</sup>
operation	Set parameter 0-10 Active Set-up to [9] Multi Set-up.	set-up 1	set-up 2	- if trip)
(connect purple or orange wire)	Set parameter 5-13 Terminal 29 Digital Input to [23] Set-up			
	select bit 0.			
Function 3 - Dual direction	Set parameter 4-10 Motor Speed Direction to [2] Both	Run forward	Run reverse	Stop (and reset <sup>2)</sup>
operation (connect gray wire)	directions.			- if trip)
	Set parameter 5-13 Terminal 29 Digital Input to [11] Start			
	reversing.			

### Table 1.3 LOP Operation Mode

- 1) Set jog speed in parameter 3-11 Jog Speed [Hz]
- 2) When reset is required, set parameter 5-11 Terminal 19 Digital Input to [1] Reset.



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