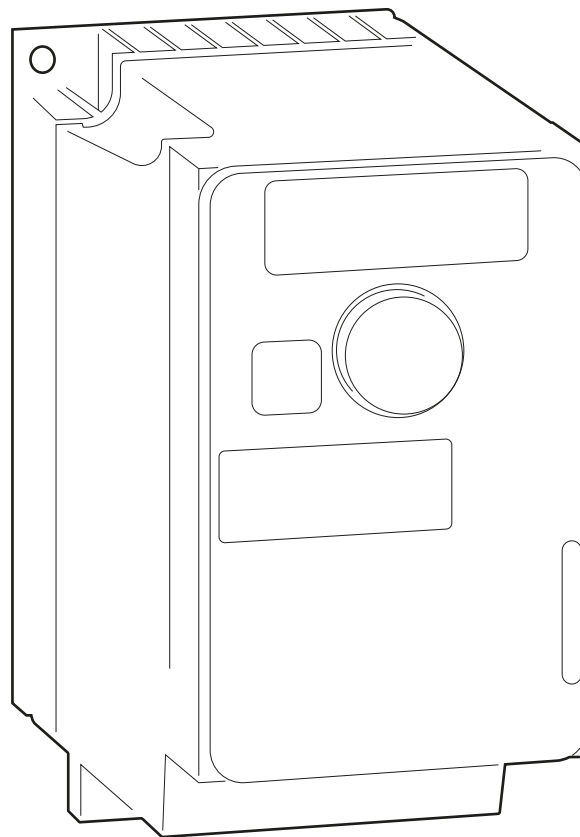




Programming manual

SFC

SFC PS
0,37-7,5 kW



General

This manual is a quick aid for easy programming of the frequency converter together with the potentiometer **SFC PS** and shall not be seen as a complete product manual.

Function

All programming is executed on the keys at the front display **Fig. 1**. The jog dial (1) is used for navigating the menus and to select or confirm information. The ESC key (2) quits a menu/ parameter or clears and reverts the value. The front panel is opened via button (3).

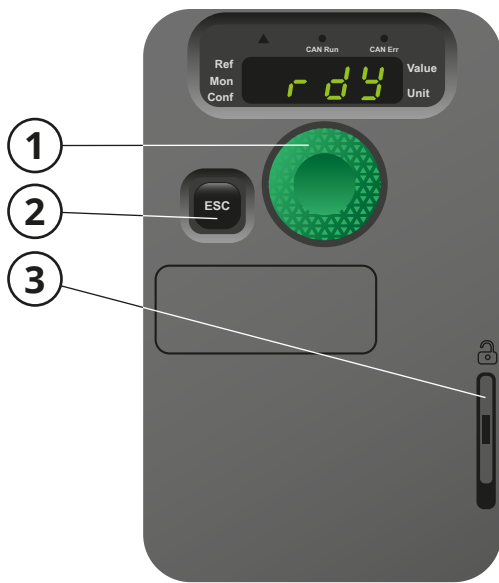


Fig. 1

Parameter choice

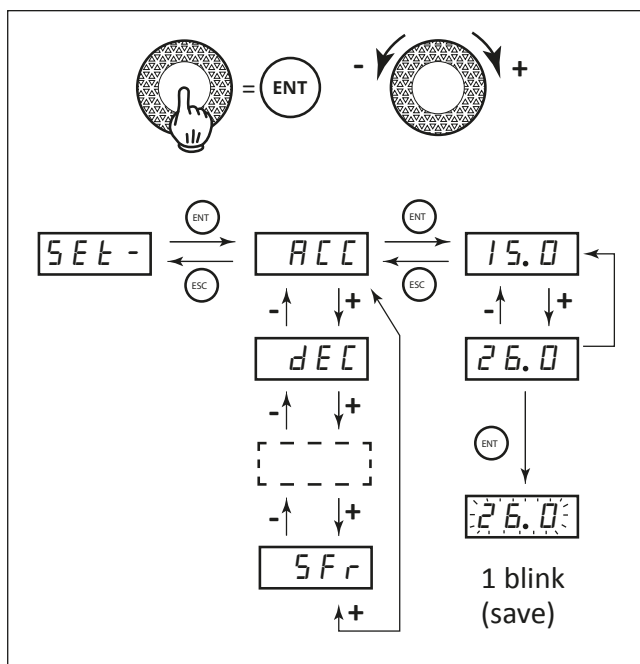


Fig. 2

Electrical wiring

The supply voltage is connected to terminal (6) **Fig 3**. The supply cable for the fan motor is connected to terminal (7). The start signal is wired between DI1 and +24 at terminal (8). The signal from the potentiometer is wired between COM, AI1 and 10V at terminal (9).

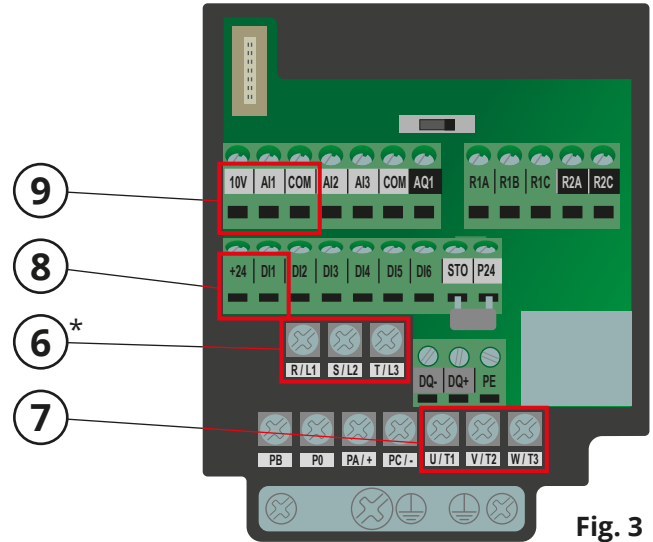
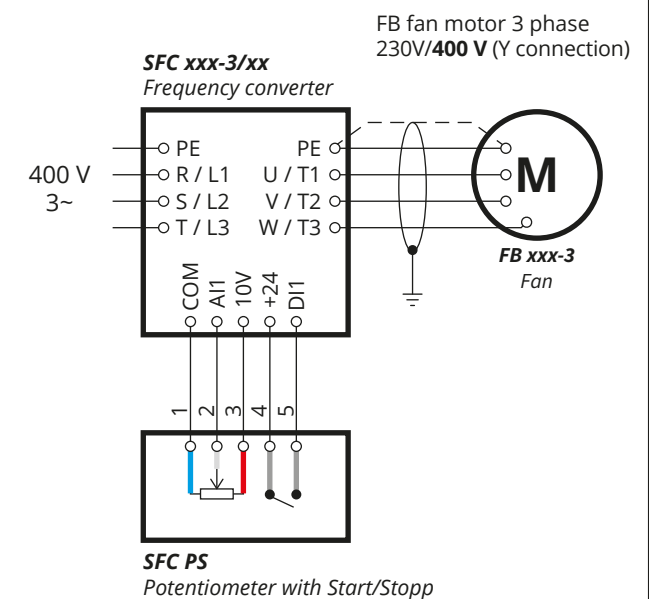
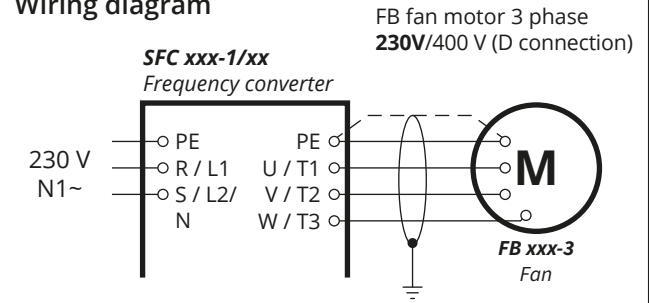


Fig. 3

* When the supply is 1 phase, the terminals are marked "R/L1" and "S/L2/N".

When the supply is 3 phase, the terminals are marked "R/L1", "S/L2" and "T/L3".

Wiring diagram



Programming

Program all parameters as per the programming guide, see page 3. Start from the top (and go down) accordingly. During the programming, the fan must not receive any start signal. This means that DI1 and +24 (8) cannot be a closed circuit.

Note! The green parameters can be changed, to optimise current system. The red parameters can be found on the motor.

PROGRAMMING GUIDE						
Menu	Submenu	Parameter	Function	Factory settings	Recommended value	Chosen value
ConF	FULL		Access to configuration	-	-	
drC-	CEC		Variable torque	5td	UF9	
SI P-		bFr	Motor frequency (Hz)	50	Varies	
SI P-		UnS	Nominal motor voltage (V)	-	Varies	
SI P-		FrS	Nominal motor frequency (Hz)	500	Varies	
SI P-		nCr	Nominal motor current (A)	-	Varies	
SI P-		nSP	Nominal motor speed (rpm)	1400	Varies	
SI P-		ACC	Acceleration (s)	30	50	
SI P-		dEC	Retardation (s)	30	50	
SI P-		LSP	Min. frequency (Hz)	00	150	
SI P-		HSP	Max. frequency (Hz)	500	500	
SI P-		I tH	Thermal motor protection (A) = motor current	-	Varies	
drC-	ASY-	nPC	Motor parameter choice	nPr	CO5	
drC-	ASY-	CO5	Motor's Cos Phi	-	Varies	
drC-		SFr	Switch frequency (kHz)**	40	16	
I_0-		CEC	2 wire type	Ern	LEL	
FUn-	5tt-	5tt	Stop type	5tt	nSt	

** Only to be changed when there is unusual noise from the motor.

Default reset

When resetting to the factory settings, please proceed as below:

If the display doesn't show *rdY*, press **ESC** until it does. Enter menu *ConF* and select parameter *FE5-*. Change the value from *FE5I* to *FrY-*, confirm with **ENT**. Change *ALL_* to *ALL''* by pressing **ENT**. Go back one step in the menu with **ESC** and change from *FrY-* to *BF5*. Press **ENT** and change *n0* to *YE5* by pressing and holding **ENT** for 5 seconds.

The frequency inverter will now have the initial factory settings and is ready for programming again.

Troubleshooting



Troubleshooting when power is on, should only be performed by an authorised electrician.

Information that makes it easier to identify occurred problems that are easy to solve can be found in the troubleshooting guide. Always go through troubleshooting guide before contacting FUMEX.

TROUBLESHOOTING GUIDE		
Symtom	Probable cause	Recommended measure
1. Programming failure.	D11 and +24 are closed.	Remove wiring.
	The parameters are not programmed in the correct order.	Program the parameters, as per the programming guide from the top to the bottom.
2. The system does not work.	The wiring is not done as per the wiring diagram.	Check the wiring.
3. Performance loss of the fan.	Wrong rotation direction of the fan.	Check rotation direction.