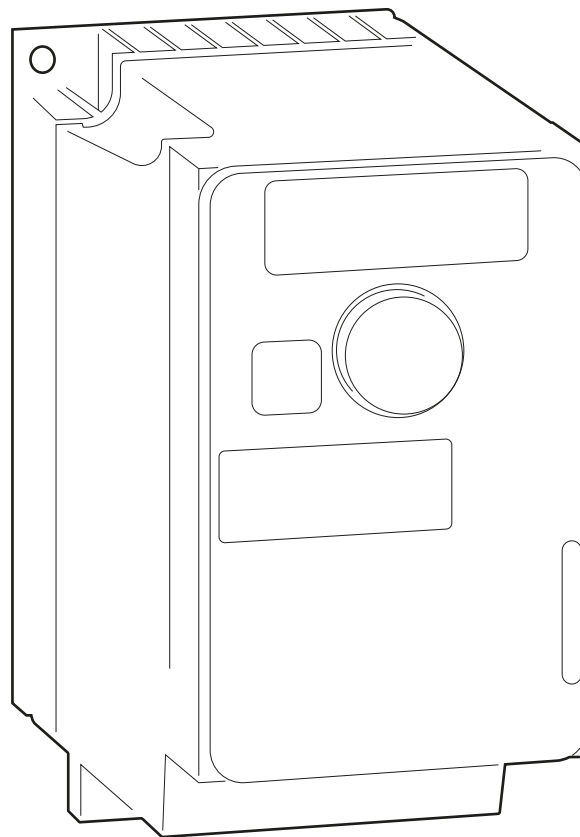




Programming manual

SFC

SFC VSS
0,37-7,5 kW



General

This manual is a quick aid for easy programming of the frequency converter together with the rotary switch **SFC VSS** 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).

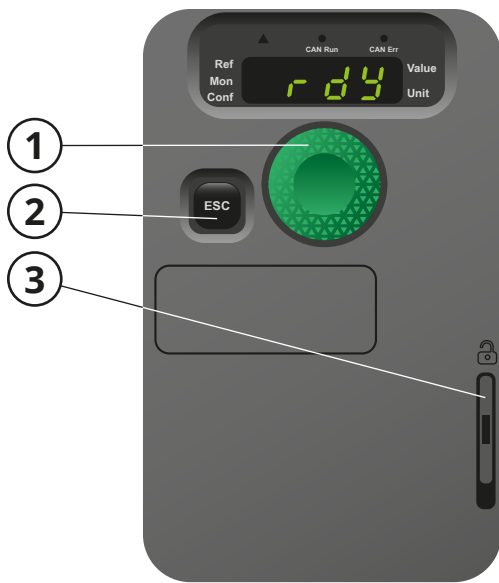


Fig. 1

Parameter choice

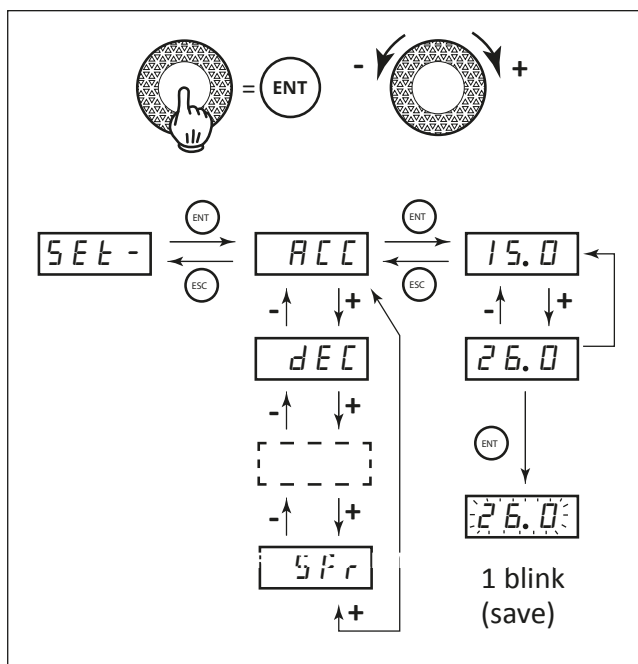


Fig. 2

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 from the rotary system is wired between DI1, DI3 and +24 at terminal (8).

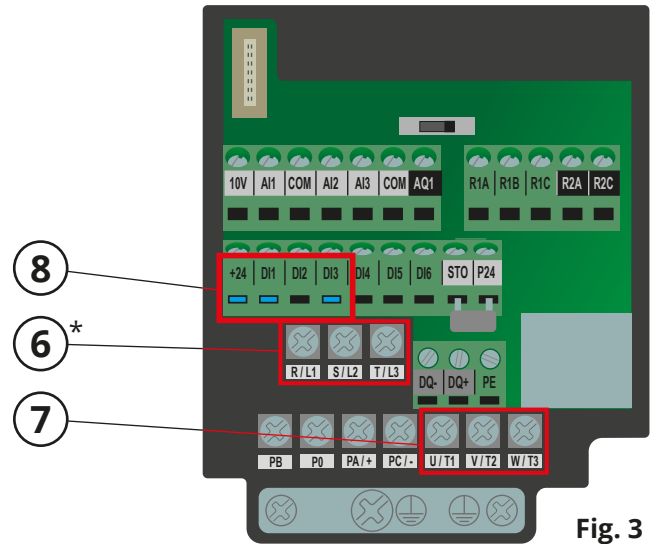
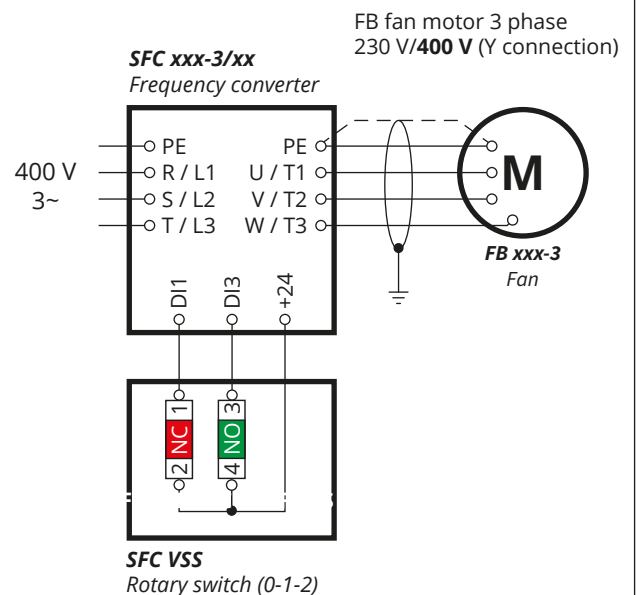
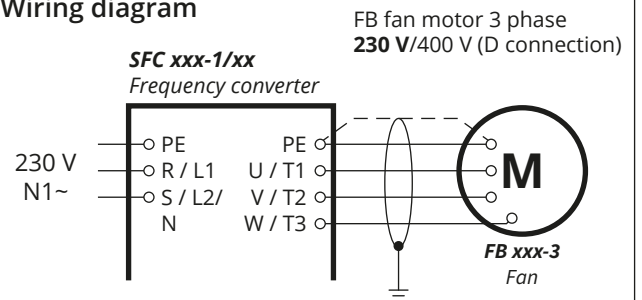


Fig. 3

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

When the supply 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, DI3 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. The blue parameter "LSP" indicates selected lowest frequency (step 1), and parameter "SP2" indicates selected maximum frequency (step 2).

PROGRAMMING GUIDE						
Menu	Submenu	Parameter	Function	Factory settings	Recommended value	Chosen value
CONF	FULL		Access to configuration	-	-	
drC-	CEt		Variable torque	Std	UF9	
SIN-		bFr	Motor frequency (Hz)	50	Varies	
SIN-		UnS	Nominal motor voltage (V)	-	Varies	
SIN-		FrS	Nominal motor frequency (Hz)	500	Varies	
SIN-		nCr	Nominal motor current (A)	-	Varies	
SIN-		nSP	Nominal motor speed (rpm)	1400	Varies	
SIN-		ACC	Acceleration (s)	30	50	
SIN-		dEC	Retardation (s)	30	50	
SIN-		LSP	Min. frequency (Hz), N.B.! Not lower than 15	00	150 - 500	
SIN-		HSP	Max. frequency (Hz)	500	500	
SIN-		IEH	Thermal motor protection (A) = motor current	-	Varies	
FUn-	P55-	PS2	Activates logical input LI3 = Terminal DI3	n0	L13	
FUn-	P55-	SP2	Pre-set speed, N.B.! Not lower than LSP	100	400	
drC-	R54-	PPC	Motor parameter choice	nPr	CO5	
drC-	R54-	CO5	Motor's Cos Phi	-	Varies	
drC-		SFr	Switch frequency (kHz)**	40	16	
I_D-		EEt	2 wire type	Ern	LEL	
FUn-	SEt-	SEt	Stop type	SEt	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 *FL5-*. Change the value from *FL51* to *Fr4-*, confirm with **ENT**. Change *ALL* to *ALL'* by pressing **ENT**. Go back one step in the menu with **ESC** and change from *Fr4-* to *BF5*. Press **ENT** and change *n0* to *4E5* by pressing and holding **ENT** for 5 s.

The frequency converter 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 trouble shooting guide before contacting FUMEX.

TROUBLESHOOTING GUIDE		
Symptom	Probable cause	Recommended measure
1. Programming failure.	DI1 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.