SFC

Fixed frequency
0,37-7,5 kW

FUMEX

PURE ADVANTAGE
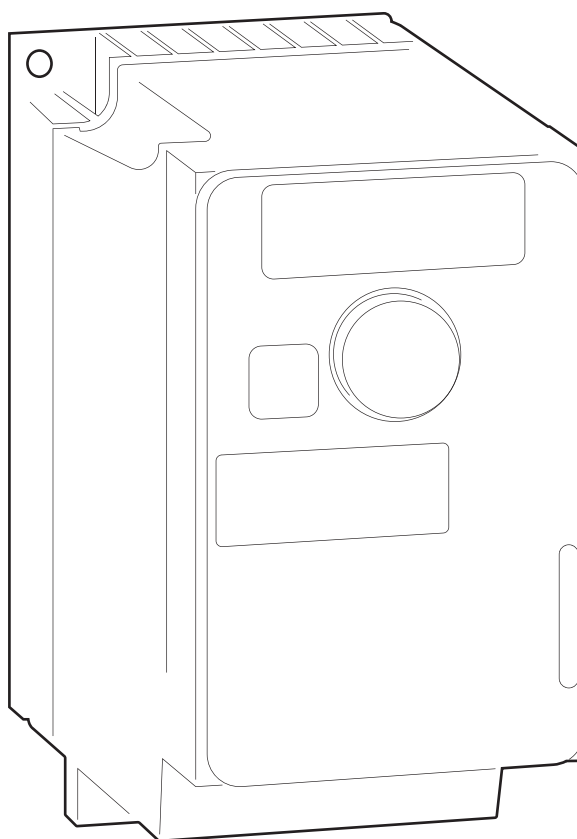
General

This manual is a quick aid for easy programming of the frequency converter for fixed frequency and shall not be seen as a complete product manual. For complete information, see the included 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).
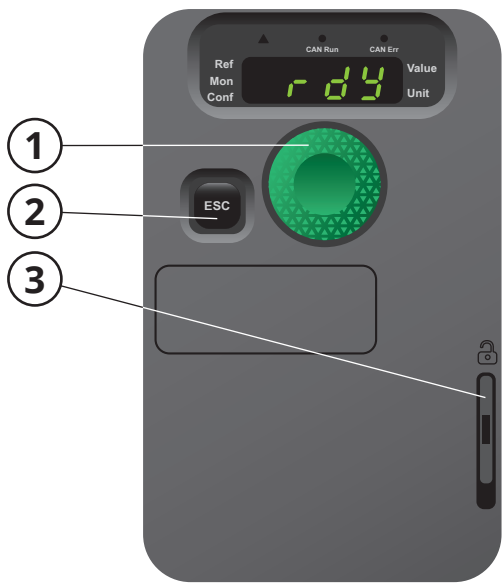

Fig. 1

Parameter choice

Fig. 2

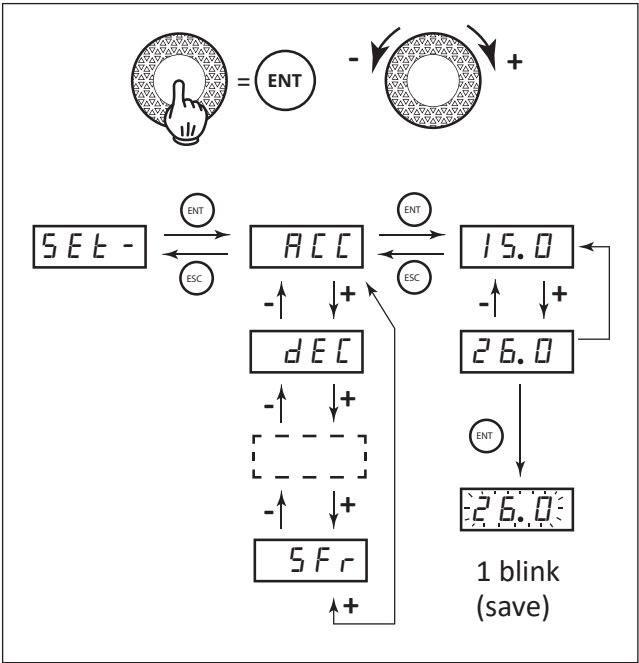## Electrical wiring

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).
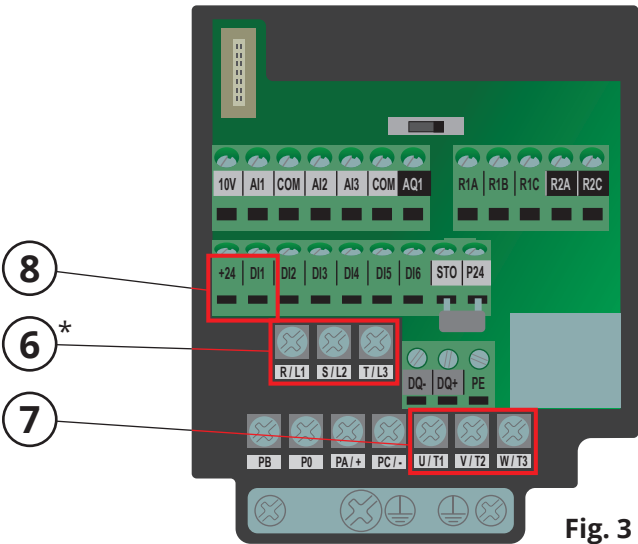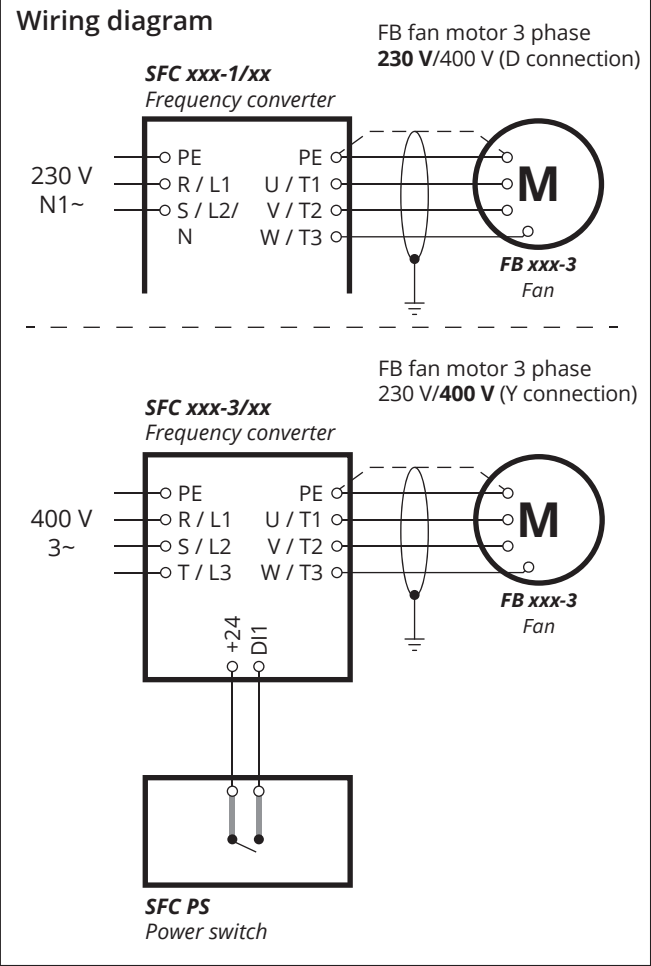

Fig. 3

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. The blue parameter "LSP" indicates selected frequency (15-50 Hz).

			PROGRAMMING GUIDE			
Menu	**Submenu**	**Parameter**	**Function**	**Factory settings**	**Recommended value**	**Chosen value**
ConF	FULL	-	Access to configuration	-	-	
drC-	Ctt	-	Variable torque	Std	UF9	
SIM-	-	bFr	Motor frequency (Hz)	50	Varies	
SIM-	-	UnS	Nominal motor voltage (V)	-	Varies	
SIM-	-	FrS	Nominal motor frequency (Hz)	50.0	Varies	
SIM-	-	nCr	Nominal motor current (A)	-	Varies	
SIM-	-	nSP	Nominal motor speed (rpm)	1400	Varies	
SIM-	-	ACC	Acceleration (s)	3.0	5.0	
SIM-	-	dEC	Retardation (s)	3.0	5.0	
SIM-	-	LSP	Min. frequency (Hz), N.B.! Not lower than 15	0.0	15.0 - 50.0	
SIM-	-	HSP	Max. frequency (Hz)	50.0	50.0	
SIM-	-	ItH	Thermal motor protection (A) = motor current	-	Varies	
drC-	ASY-	MPC	Motor parameter choice	nPr	COS	
drC-	ASY-	COS	Motor's Cos Phi	-	Varies	
drC-	-	SFr	Switch frequency (kHz)**	4.0	16	
I_O-	-	tCt	2 wire type	trn	LEL	
FUn-	Stt-	Stt	Stop type	Stt	nSt	
FLt-	FLr-	FLr	Soft restart	nO	YES	

** 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 FCS-. Change the value from FCSI 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 bFS. Press **ENT** and change nO to YES 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.	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.