

General

This manual is a quick aid for easy programming of the frequency converter together with the pressure transmitter ST 300 and shall not be seen as a complete product manual.

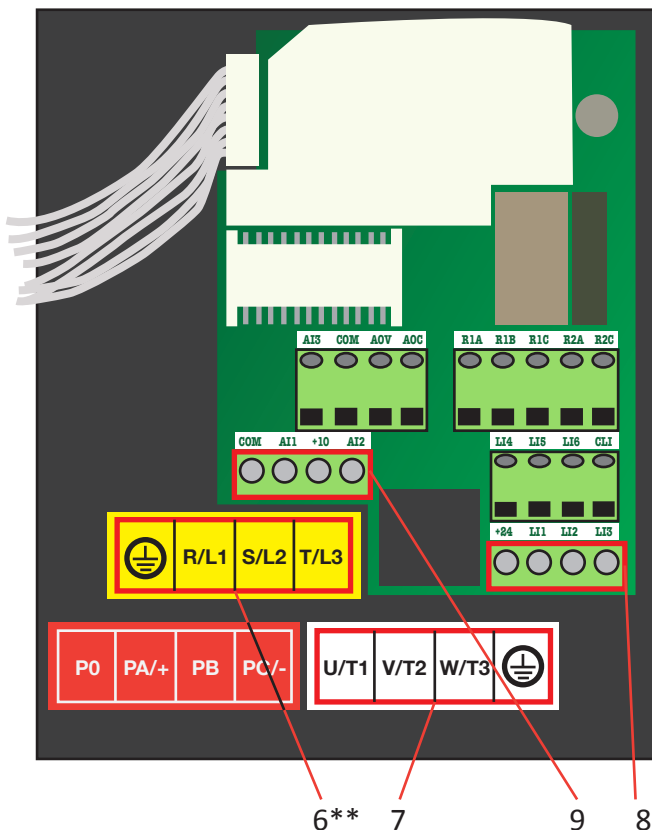
Function

All programming is executed on the keys at the front display (see picture right). MODE key (1) switches between the REMOTE/ LOCAL configurations*. The jog dial (2) is used for navigating the menus and to select or confirm information. The ESC key (3) quits a menu/ parameter or clears and reverts the value. the STOP/RESET key (4) enables detected fault to be reset*. The RUN key (5) controls the start of the motor in LOCAL configuration*.



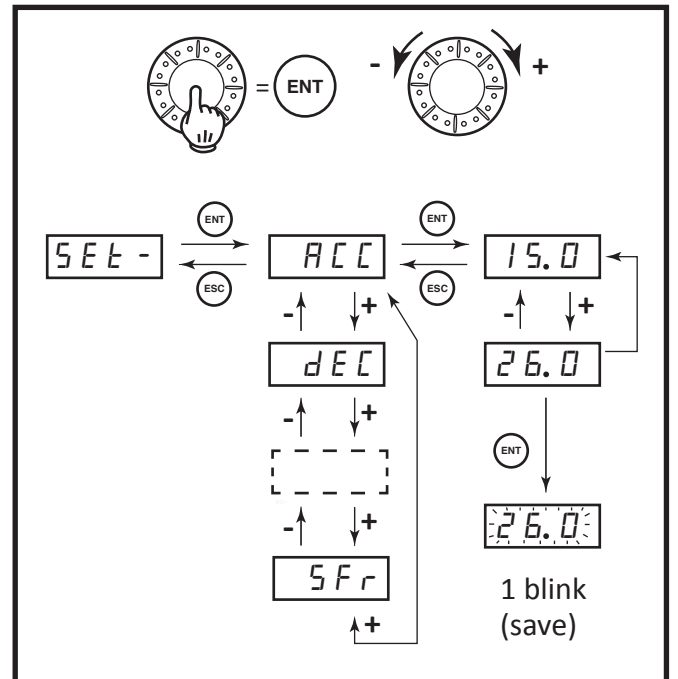
Electrical wiring

The feeding cable is connected to the yellow terminal (6). The feeding cable to the motor is connected to the white terminal (7). The start signal is wired between LI1 and +24 at terminal (8). The signal from the pressure transmitter is wired between COM, AI1 and +24 at the terminal (8, 9).



Parameter choice

For parameter choice, see below.



*For complete information, see the product manual attached.

**This terminal doesn't have the connection "T/L3" when it's a 1-phase feed.

Programming

Program all parameters as list below. Start from the top and go down through all parameters chronologically. During the programming, the fan mustn't receive start signal. This means that LI1 and +24 (8) can't be closed.

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

The blue parameter "rPI" indicates percent of the value that has been set on the ST 300.

Menu	Submenu	Parameter	Function	Rek. value	Chosen val.
drC-		bFr	Motor frequency (Hz)	?	
drC-		Un5	Nominal motor voltage (V)	?	
drC-		Fr5	Nominal motor frequency (Hz)	?	
drC-		nCr	Nominal motor current (A)	?	
drC-		nSP	Nominal motor speed (rpm)	?	
drC-		CO5	Motor Cos Phi	?	
drC-		SFr	Switch frequency (kHz)*	2-16	
drC-		UFE	Voltage-/ frequency type	P	
I-D-		EEE	Restart in actual on/ off position	LEE	
FUn-	SRI -	SRI2	Addition inlet 2	n0	
FUn-	P55 -	P52	2 pre-set speeds	n0	
FUn-	P55 -	P54	4 pre-set speeds	n0	
FUn-	StC -	StE	Stop type	nSt	
FUn-	PI -	PIF	Regulation feedback	RII	
FUn-	PI -	PII	Internal PI-reference	YES	
SEt-		rPI	Internal desired value for PI-regulator (0-100%)	50	
SEt-		ACC	Acceleration (s)	5	
SEt-		DEC	Retardation (s)	5	
SEt-		LSP	Min. frequency (Hz)	15	
SEt-		HSP	Max. frequency (Hz)	50	
SEt-		IEH	Thermal motor protection (A) =motor current	?	
SEt-		rPB	PI proportional amplifier	185	
SEt-		rIB	PI integral amplifier	0.2	

*Only to be changed where there are disturbing noise from the engine.

Troubleshooting

If the system doesn't work, please check:

- that LI1 and +24 are not wired during the programming.
- that the parameters are programmed chronologically.
- that the wiring is made according to attached wiring diagram.
- that the rotation of the fan wheel is correct.

Default reset

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

If the display doesn't show rdy, push ESC until it does. Enter the menu drC- and choose FL5. Change the value from n0 to lnl, then press and hold ENT until the display shows n0. Unplug the feeding voltage and wait until the display has switched off, then replug. The frequency converter will now have the initial factory settings and is ready for programming again.