

Operation of keypad Example: P420.02			
		Group 0 – Favourites	
		Group 1 – Diagnostics	
		Group 2 – Basic setting	
		Group 3 – Motor control	
		Group 4 – I/O setting	
		Group 5 – Network setting	
		Group 6 – Process controller	
		Group 7 – Additional functions	
		Group 8 – Sequencer	

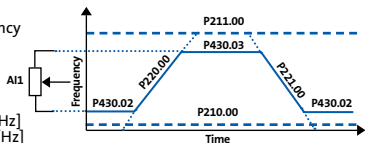
Group 0 - Favourites: Quick access to most important parameters (\*)

### Procedure during commissioning

1. Load default setting: Set P700.01 = 1
2. Select language: P705.00 1 = English; 2 = German
3. Basic setting V/f characteristic control:

- \*P208.01 Set mains voltage
- \*P303.01 Basic voltage = Rated motor voltage
- \*P303.02 Basic frequency = Rated motor frequency

- \*P210.00 Minimum frequency [Hz]
- \*P211.00 Maximum frequency [Hz]
- \*P220.00 Acceleration time [s]
- \*P221.00 Deceleration time [s]
- \*P430.02 Analog input 1: Min frequency value [Hz]
- \*P430.03 Analog input 1: Max frequency value [Hz]



### Control of inverter by means of keypad

#### Set parameters:

- \*P200.00 = 1 (Keypad as control source)
- \*P201.01 = 1 (Keypad as setpoint source) or

#### Operation:



Reverse direction of rotation

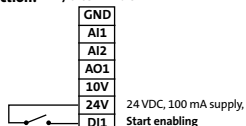


Change frequency setpoint



Start/stop motor

#### Connection: I/O terminals

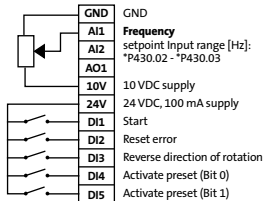


### Control of inverter by means of terminals (default setting)

#### Set parameters:

- \*P450.01 Frequency setpoint presets: Freq. preset 1 [Hz]
- \*P450.02 Frequency setpoint presets: Freq. preset 2 [Hz]
- \*P450.03 Frequency setpoint presets: Freq. preset 3 [Hz]

#### Connection:



Save parameter: > 3 **SET** Flashes = Not saved On = Saved

## Flexible I/O configuration

## Default setting

\*P201.01  
(configured AI1 as  
standard setpoint)

\*P400.02

\*P400.04

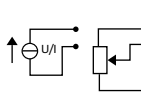
\*P400.13 Reverse direction of rotation

\*P400.18 Active preset (Bit 0)

\*P400.19 Active preset (Bit 1)

\*P420.02

\*P420.01



Start

Reset error

Reverse direction of rotation

Active preset (Bit 0)

Active preset (Bit 1)

DO1 triggered when

Release brake

set Relay triggered when

Ready for operation set

24E

GND

AI1

AI2

AO1

10V

24V

DI1

DI2

DI3

DI4

DI5

DO1

GND

NO

COM

NC

Optional external 24 V supply (only i550)

GND for analog and digital signals

Analog input 1 Config.: \*P430.01 (0 ... 10 VDC signal)

Analog input 2 Range [Hz]: \*P430.02 – \*P430.03

Analog output 1

10 VDC supply for potentiometer

24 VDC, 100 mA supply, reference for digital inputs

Digital input 1

Digital input 2

Digital input 3

Digital input 4

Digital input 5

Digital output 1

GND for analog and digital signals

Relay NO-contact

Relay Middle contact

Relay NC-contact

bit 1 bit 0 Frequency presets

0 1 Preset 01 (\*P450.01)

1 0 Preset 02 (\*P450.02)

1 1 Preset 03 (\*P450.03)

- **Set standard setpoint source** \*P201.01. Run forwards/backwards (static), Start forwards/backwards (edge)
- **Activate quick stop** \*P400.03: Bring motor to a standstill in shortest time possible.
- **Jog forwards** \*P400.10 (Preset 05) and **Jog backwards** \*P400.11 (Preset 06): Initiate status-controlled motor rotation with setpoint preset.
- **Reverse direction of rotation** \*P400.13: Invert frequency setpoint.

## Diagnostics

\*P100.00 Output frequency

\*P102.00 Frequency setpoint [Hz]

\*P103.00 Current actual value

P125.01 Active control source

P125.02 Active setpoint source

RDY	ERR	Status/meaning
off	off	No supply voltage.
		Safe torque off (STO) active.
		Safe torque off (STO) active, warning active.
		Inverter inhibited.
		Inverter inhibited, no DC-bus voltage.
		Inverter inhibited, warning active.
		Inverter inhibited, error active.
		Inverter enabled and motor rotating or quick stop is active.
		Inverter enabled and motor rotating, warning signalled.
		Inverter enabled, quick stop as response to fault active.

Error message	Cause (W. = Warning, T. = Fault, F. = Error)	Remedy
.2382/.2383	Ixt error/Ixt warning.	Reduce load, adapt ramps
.3210/.3211	Overvoltage DC bus/ Warning Overvoltage DC bus.	Ramp time too short or motor is running in generator mode
.3220/.3221	Undervoltage DC bus/ Warning Undervoltage DC bus.	Check supply
.3222	DC-bus voltage to low for switch-on.	Check supply
.4310	Motor overtemperature problem (PTC).	Check ambient temperature and motor load
.6280	Trigger/functions incorrectly connected.	In the case of <b>flexible I/O configuration</b> *P200.01, <b>Inverter enable</b> *P400.01 or <b>Start</b> *P400.02 must have been assigned to an I/O. Do not use <b>Start forwards/backwards</b> and <b>Run forwards/backwards</b> at the same time.
.FF37	Automatic start inhibited.	Remove start enable signal