

**Operation of keypad**

Example: P420.02

I/O Setting  
**GROUP 4**Fct. dig. outputs  
**P420.XX**DO1 function  
**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

Navigation in the menu  
Parameter alterationGo to Menu/Parameters  
Confirm parameter

Quit Menu/Parameters



Keypad control



Start motor



Change direction of rotation



Stop motor

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]

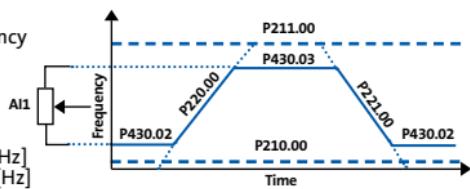
\*P211.00 Maximum frequency [Hz]

\*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:**

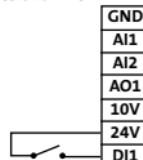
Reverse direction of rotation



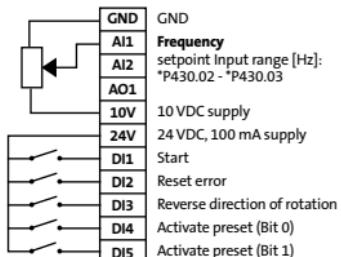
Change frequency setpoint



Start/stop motor

**Connection: I/O terminals**24 VDC, 100 mA supply,  
Start enabling**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:**

GND  
Frequency  
setpoint input range [Hz]:  
\*P430.02 - \*P430.03

10 VDC supply  
24 VDC, 100 mA supply

Start

Reset error

Reverse direction of rotation

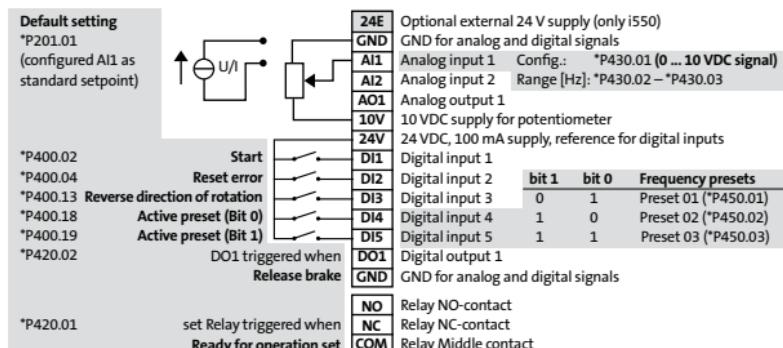
Activate preset (Bit 0)

Activate preset (Bit 1)

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

On = Saved

## Flexible I/O configuration



- 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	P125.01 Active control source
P102.00 Frequency setpoint [Hz]	P125.02 Active setpoint source
*P103.00 Current actual value	

RDY	ERR	Status/meaning
off	off	No supply voltage.
		Safe torque off (STO) active.
1 Hz		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	Oversupply DC bus/ Warning Oversupply 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 flexible I/O configuration *P200.01, Inverter enable *P400.01 or Start *P400.02 must have been assigned to an I/O. Do not use Start forwards/backwards and Run forwards/backwards at the same time.
.FF37	Automatic start inhibited.	Remove start enable signal