Application I/O PT

Application I/O PT	Order ref.	E82ZAFAC010
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The function module provides the inverter with digital input and outputs for complex applications. A plug-in spring-clamp terminal (PT version) enables cable cross-sections of up to 1.5 mm^2 to be connected quickly and easily without the need for ferrules. Due to the plugged-on spring-clamp terminal strip, the function module juts out approx. 13 mm of the front panel of the frequency inverter. The module is also available in a basic version without plug-in terminal.

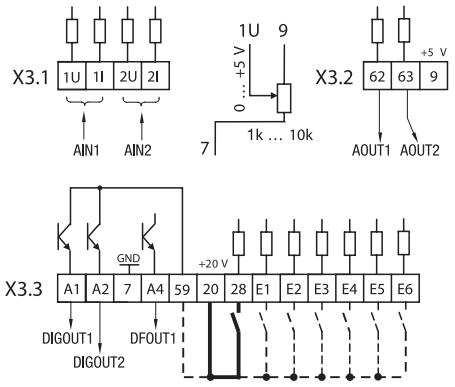
Available input and output terminals

Analog IN	Analog OUT	Digital IN	Digital OUT	Frequenz OUT
2	2	6 [1)]	2	1

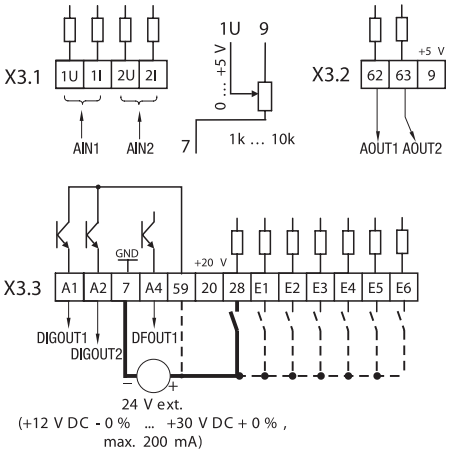
[1)] Can include 1 frequency input (0...102.4 kHz, single-track or two-track)

Terminal assignment

Internal voltage supply



External voltage supply

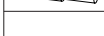


Minimum wiring required for operation

Application I/O PT

X3	Signal type	Function (bold = Lenze setting)	Level			Technical data
1U/ 2U	Analog inputs	Actual or setpoint value inputs (master reference voltage)	0 ... +5 V **0 ... +10 V** -10 V... +10 V			Resolution: 10-bit Linearity error: ±0.5%
1I/2I		Actual or setpoint value inputs (master reference current)	0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (monitored for open circuit)			Input resistance – Voltage signal: > 50 kΩ – Current signal: 250 Ω
62	Analog outputs	**Output frequency**	**0... +10 V** 0 ... +20 mA +4 ... +20 mA			Resolution: 10-bit Linearity error: ±0.5% Temp. sensitivity: 0.6% (0 ... +60°C)
63		**Motor current**				Load capacity: (0...+10 V): max. 2 mA RL (0/4...20 mA) ≤ 500 Ω
28		Controller inhibit	1 = START			
E1 [1]	Digital inputs	**Activation of fixed frequencies (JOG)**		E1	E2	
E2 [1]		**JOG1 = 20 Hz**	JOG1	1	0	Input resistance: 3.2 kΩ
		JOG2 = 30 Hz	JOG2	0	1	1 = HIGH (+12…+30 V)
		JOG3 = 40 Hz	JOG3	1	1	0 = LOW (0…+3 V)
E3		**DC brake (DCB)**	1 = DCB active			
E4		**Reversal of direction of rotation Clock./counter-clock. rotation (CW/CCW)**		E4		(PLC level, HTL)
			CW	0		
			CCW	1		
E5		**Not pre-configured**	–			
E6		**Not pre-configured**	–			
A1	Digital outputs	**Ready for operation**	0/+20 V with internal DC 0/+24 V with external DC			Load capacity: 10 mA 50 mA
A2		**Not pre-configured**				
A4	Frequency output	**DC bus voltage**	HIGH: +18 V... +24 V (HTL) LOW: 0 V			0.05 kHz...10 kHz Load capacity: max. 8 mA
9	–	Internal, stabilised DC supply for setpoint value potentiometer	+5.2 V			Load capacity: max. 5 mA
20	–	Internal DC supply for actuation of the digital inputs and outputs	+20 V ±10%			Load capacity: max. 60 mA
59	–	DC supply for X3/A1 and X3/A2	+20 V (internal, bridge to X3/20) +24 V (external)			
7	–	GND, reference potential	–			

[1] Optional 0…102.4 kHz frequency input, single-track or two-track

Electrical connection	Push-on terminal strip with spring-clamp connection		
Connection options		Rigid: 1.5 mm² (AWG 16)	
		Flexible:	
		1.5 mm² (AWG 16)	without ferrules
		1.5 mm² (AWG 16)	with ferrules without plastic sleeve
		0.5 mm² (AWG 20)	with ferrules with plastic sleeve

Tip:
Lenze three-phase AC motors and Lenze geared motors can be supplied with the Lenze pulse encoder ITD21 (512/2048 increments, HTL output signals). This enables two-track rotational speed feedback (tracks A and B) to be set up for the application I/O function module.