



AFC200

Frequency Converter

0,37 – 3,0 kW, 230 V

AFC200 is an inexpensive frequency converter powered by 1-phase 230V 50 Hz, enclosed in a compact housing of small dimensions.

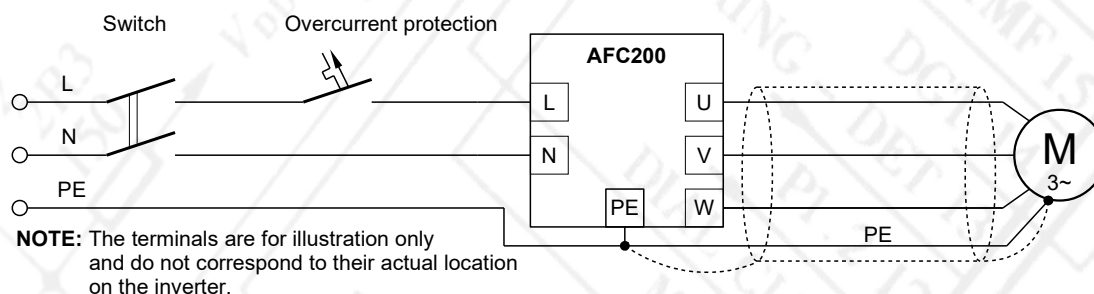
- Input: **1 x 230 V**, 45-66 Hz
- Output: 0 - 320 Hz, **3 x 230 V**
- Switching frequency: 4/8/16 kHz, SVPWM modulator
- Operating modes: U/f (linear, squared), Vector
- 2 analog inputs 0(2)...10 V, 0(4)...20 mA
- 1 analog output 0(4)...20 mA
- 6 fully separated digital inputs 0/(15...24) V
- 2 relays (250 V / 1 A , AC)
- Communication port RS-485 - ModBus RTU (9600/19200), remote control of unit operation and programming of all parameters of the frequency converter
- Internal PI regulator
- 7 constant frequencies: operation with constant frequencies, switching through digital inputs
- Band frequency elimination
- High-contrast LED control panel
- Motopotentiometer functions
- Programmable control structure (local/remote)
- Displayed parameters: output frequency, mechanical speed, reference frequency, heatsink temperature, DC link voltage
- Protection: undervoltage, overvoltage, overcurrent, short-circuit, from loosing RS-485 communication
- Build-in RFI filter

TECHNICAL DATA

Type	Constant Torque Load		Pump & Fan Load		Overcurrent 60 seconds every 10 minutes [A]	Dimensions (W x H x D) [mm]
	Rated motor power [kW]	Rated output current [A]	Rated motor power [kW]	Rated output current [A]		
AFC200-0,37kW	0,37	2,2	0,55	3,0	3,3	70x168x133
AFC200-0,55kW	0,55	3,0	0,75	4,0	4,5	70x168x133
AFC200-0,75kW	0,75	4,0	1,1	5,5	6,0	70x168x133
AFC200-1,1kW	1,1	5,5	1,5	7,0	8,3	70x168x133
AFC200-1,5kW	1,5	7,0	2,2	9,5	10,5	73x187x166
AFC200-2,2kW	2,2	9,5	3,0	13,0	14,5	73x187x166
AFC200-3,0kW	3,0	13,0	3,0	13,0	14,5	73x187x166

Power supply	Voltage U_N	1-phase: 230 V (-15%, +10%) / 45-66 Hz; other voltage levels are available on request
Output	Voltage / Frequency	0.. U_N [V]; 0,00-320,00 Hz – scalar operation mode; 0,00-90,00 Hz – vector operation mode
	Frequency resolution	0,01 Hz
Control system	Modulator	SVPWM
	Operation mode	U/f (linear, exponential), Vector (sensorless)
	Switching frequency	4, 8, 16 kHz
	Rotation speed setting	Analog inputs, control panel, motopotentiometer, PI-regulator, communication unit RS-485 and other possibilities. Resolution of 0.1% for analog inputs or 0.1 Hz / 1 rpm for the control panel i RS
Control inputs / outputs	Analog inputs	2 analog inputs (AI1 and AI2). Accuracy 0,5% of the full range. AI1: voltage mode 0(2)...10 V, $R_{in} \geq 470$ k Ω ; AI2: current mode 0(4)...20 mA, $R_{in} = 500$ k Ω
	Digital inputs	6 digital separated inputs 0/(15...24) V $R_{in} \geq 8$ k Ω
	Analog outputs	1 output 0(4)...20 mA – configuration by parameters and switches, accuracy: 0.5 % of the full range
	Digital outputs	2 relays (K1, K2) – breaking capacity: 250 V / 1 A AC
Communication	Connectors	RS-485 with optoisolation
	Communication protocol	MODBUS RTU. Function 3 (Read register); Function 6 (Write Register)
	Transmission speed	9600 or 19200 bit/s
	Application	Remote control of unit operation and programming of all parameters of the frequency converter.
Special functions	PI-regulator	Choice of referencing-unit signal source and feedback signal source, possibility of inverting polarity of an control error signal, output erasing on STOP signal, limitation of an output value
	Restore factory parameters	Ability to restore factory parameters of frequency inverter
Protections	Short-circuit protection	Short-circuit on unit output
	Overcurrent protection	Instantaneous value 3.5 I_N ; effective value 2.5 I_N
	Device thermal protection	Radiator's heat sensor
	Supervision of RS-485 communication	Established permissible time of connection absence
	Control of analog inputs	Check of absence of "living null" in modes 2...10 V and 4...20 mA

POWER CIRCUIT CONNECTION



For more information, please contact us!

We may make changes to specifications and product descriptions at any time, without any notice.

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