

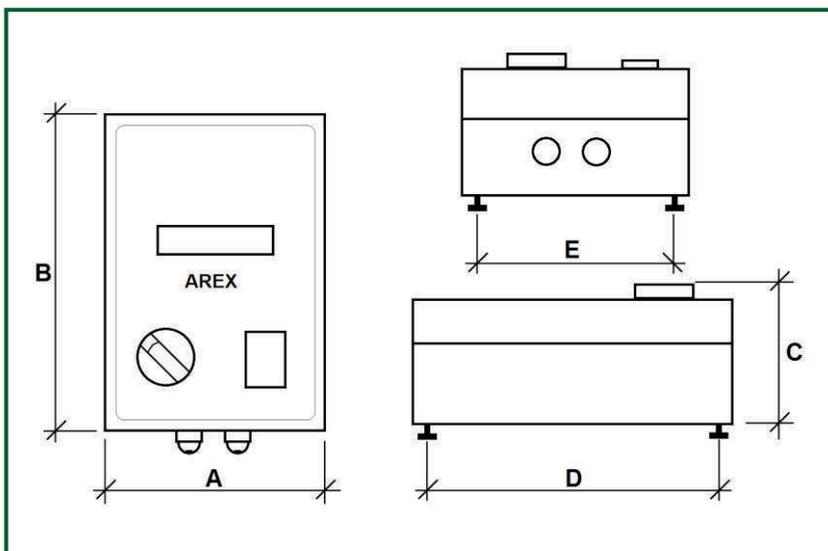
# Single-phase, electronic fan speed controller

# AREX

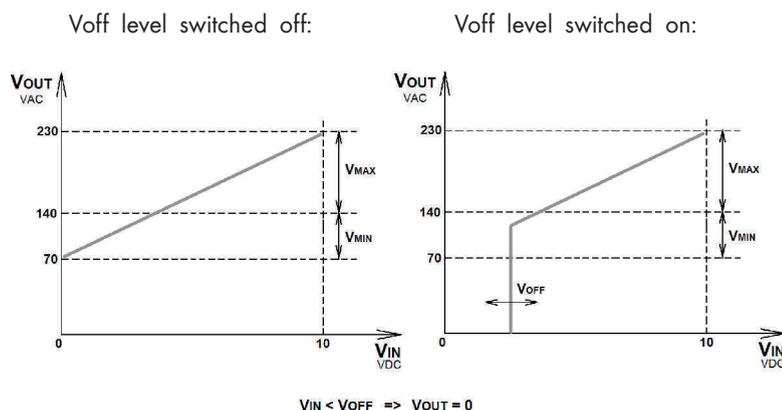
AREX is an electronic fan speed controller based on microprocessor for alternative current motors. Output voltage is controlled automatically by 0-10VDC or 0-20mA signal or manually by an external potentiometer ("Control" switch). KickStart option, that gives full output power for 10 seconds after switching on, helps the motor to start up ("KickStart switch"). Three-position main power switch provides Boost option that gives full output power by shorting input and output without any electronic controll. Vmin, Vmax and Voff trimmers creates output voltage response according to diagrams below. OK and ALARM LED diodes inform about devices working status (KickStart option switched on, Vmin, Vmax, Voff levels overstepped, motor overheated - thermal contacts output power cut off). Two additional output voltages: 230VAC (2A) and 12VDC available. Actual level of steering voltage and other messages for user are presented on LCD display. Choice of different performance versions from standard to full-option is provided (see Tab.1).



Power supply : 230VAC 50Hz  
 Output current : 5A, 10A  
 Control : automatic control by 0-10VDC lub 0-20mA signal  
           manual control by potentiometer (additional option)



Type	Max output current [A]	Dimensions [mm]					Mounting	Weight [kg]
		A	B	C	D	E		
AREX 5	5	130	180	115	165	115	M3	0,90
AREX 10	10	130	180	115	165	115	M3	1,00



Controller performance versions::

A	Standard performance (without LCD and potentiometer on housing user panel)
B	LCD display fixed on housing user panel
C	Potentiometer for manual control fixed on housing user panel
D	LCD display and manual potentiometer fixed on housing user panel

Tab.1



Because of the constant development of product construction and changes concerning technical requirements, Breve-Tufvassons Company reserves the right to change the parameters mentioned above.

# Single-phase, electronic fan speed controller

# AREX

### Connections:

- 1-2-3 Power supply 230VAC
- 4-5 Additional unregulated voltage output 230VAC 2A
- 6-7-8 Regulated voltage output for motor
- 9-10 Motor thermal contact sensor inlet (short if unused)
- 11 Additional voltage output +12VDC (max 125mA)
- 12 External control signal inlet
- 13 Grounding for external control signal, external potentiometer and +12VDC voltage
- 14-15 External control potentiometer contacts (47kΩ)
- 16-17 Remote on/off switch for control electronic (short if unused)

### Pre-settings options:

- KickStart Switch KickStart option on/off
- VOFF Switch Off level on/off
- Control Switch Switching between manual control (potentiometer) and automatic control (external signal)
- Signal Switch Choosing external control signal type: 0-10VDC / 0-20mA
- VOFF Potentiometer Off level settings
- VMIN Potentiometer Minimum output level settings
- VMAX Potentiometer Maximum output level settings
- LCD Potentiometer LCD contrast adjust

### Signal diodes:

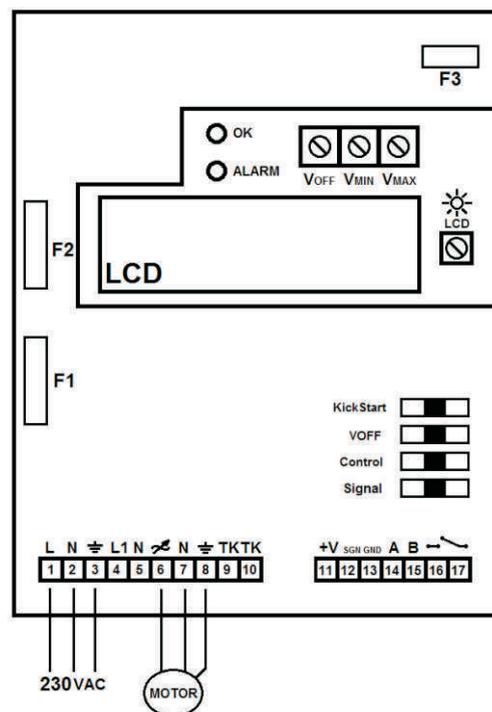
- OK Constant light: normal operation  
Indicating light: KickStart option (Rozruch) in progress
- ALARM Constant light: motor overheated and motor output disconnected or Vin signal smaller than Voff level

### Main switch positions:

- Position I Regulated voltage output for motor enabled (ON)
- Position 0 Output disabled (OFF)
- Position II Unregulated 230VAC output for motor (BOOST option)

### Fuse specification:

- F1 Main fuse: F 12,5A
- F2 Additional unregulated output fuse: T 2,0A
- F3 Control electronic fuse: T 160mA



Because of the constant development of product construction and changes concerning technical requirements, Breve-Tufvassons Company reserves the right to change the parameters mentioned above.

