



elektrosistem



# ACI3



## HIGH FREQUENCY CONTROLLER FOR AC INDUCTION MOTORS

ACI3 is a bidirectional high frequency controller designed to control AC asynchronous three-phase motors (induction motors). The main advantage coming from the use of a similar equipment is the absence of running contactors resulting in a very simple maintenance. The controller features a three-phase inverter inverting the battery DC voltage into the AC voltage required by the motor.

The system must be equipped with a main contactor to guarantee insulation of the controller from the battery in emergency situations to meet the safety requirements in force.

The controller also features regenerative braking acting when the running control is released and during reversing. Operation parameters can be modified by programmer or PC and serial interface.

### FEATURES

- Controller for AC induction motors
- MOSFET technology and high frequency operation to control the three phases
- DSP 16 bit microcontroller with self test of control circuitry
- Handheld programmer to modify operation parameters
- PC interface to set parameters
- Regenerative braking acting when the running control is released and during reversing
- Control by 5K 3-wire potentiometer
- Control by central 0 potentiometer
- Protection against potentiometer failure
- Protection against MOSFETs short circuit
- Over-temperature protection
- Protection for potentiometer not in neutral position at start-up
- Over-voltage and under-voltage protection
- 5 outputs to control main contactor, timed power steering, electromagnetic brake or other functions.
  - 2 24V contactors with short circuit and coil protection
  - 3 24V contactors with coil protection
- 6 inputs for auxiliary functions
- On-board fault code status LED
- Advanced communication protocol for integration into other control systems and displays
- Operation with or without encoder

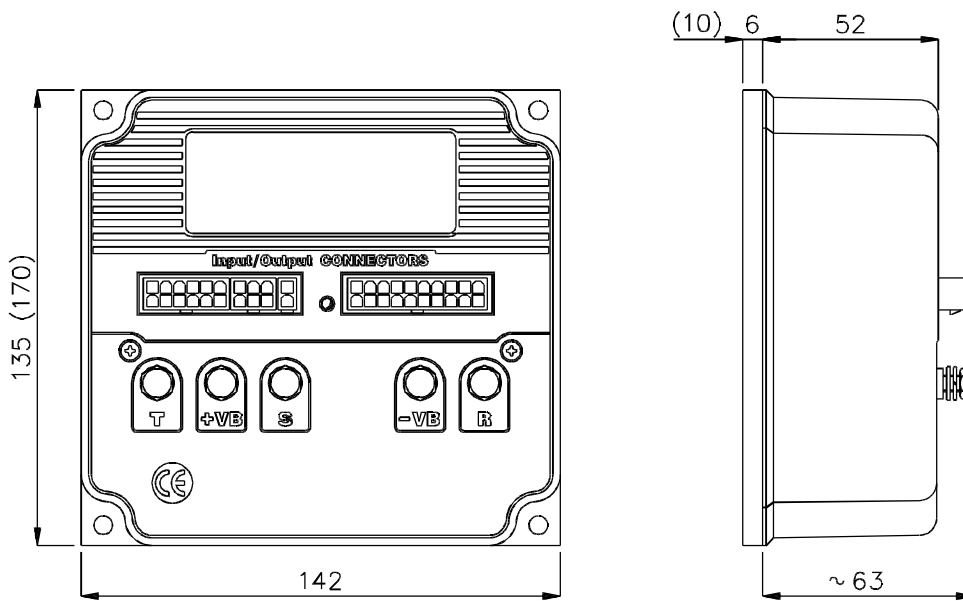
### TECHNICAL SPECIFICATIONS

- Rated voltage ..... from 24 to 48V
- Continuous output power ..... 1700W for motors up to 2 Kw
- Operating temperature ..... -20°C/+40°C
- Thermal protection ..... from 70 to 80°C

~~NEWS~~

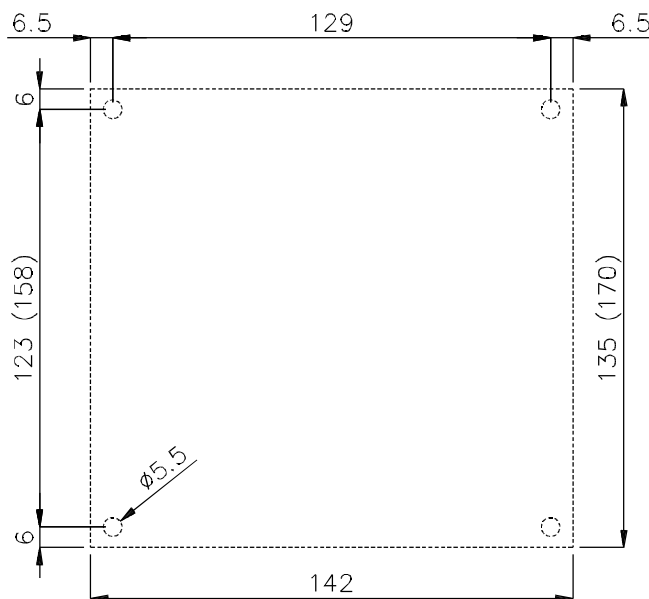
MODELS AND DIMENSIONS

MODEL	PHASE CURRENT	CONTINUOUS POWER	VOLTAGE
ACI3 - 10	100A RMS	850W for max 1KW motors	24-48V
ACI3 - 20	200A RMS	1700W for max 2KW motors	24-48V



ACI3

Weight 1500g



Fixing holes

*N.B. Dimensions in brackets are referred to the ACI3-20 model  
Specifications subject to change without notice*