

# **HIGH STARTING TORQUE CONTROL BOX FOR SINGLE PHASE MOTOR Type BOOSTER**



**User's manual**



This symbol indicates a potential risk of electrical nature



This symbol indicates a subject of particular importance

## GENERAL INFORMATION

The BOOSTER series control panels are produced per single phase rated loads up to a maximum of 26A nominal (115 230V). BOOSTER in the standard version comes supplied with the following functions:  
Connection and disconnection directly in line (DOL)

Overload protection

Running capacitor

Starting capacitor

Directive 2006/95/CE

Standard EN 60204-1

## OPERATIONS

BOOSTER has been designed to operate connected to submerged and surface electric pumps, but may be used with any asynchronous electric motor.

The overload protection is done by a manual switch with the maximum operating current written on the BOOSTER cover.

The system may be connected to external automated systems such as pressure switches, floats through an electrically contact connected to the SW terminals on the main terminal board (living contact).



Should this possibility not be used, leave the short circuit jumper between the two SW terminals.

## STORAGE

Make sure that the unit has not undergone any damage during shipment and that is still in its original packaging without penetration of water or humidity. Store the unit in a dry and aerated place

## INSTALLATION



Check to make sure that the rating plate data (power/size and voltage) are correct as ordered and that they are compatible with the load/motor that the BOOSTER must control.



An appropriate knife switch that guarantees the visual opening /disconnection of the same from the power supply line, thereby guaranteeing the intervention of the operator on the panel in maximum safety. Before the BOOSTER has to be installed a Short-circuit protection

A BOOSTER should be installed, if possible, in the shade, as near as possible to the motor, in an upright position and making sure that the cable clamps are in the bottom position. The container is rated IP44, but protection is guaranteed only if installation is correct.

## ELECTRICAL CONNECTIONS

The electrical connection must be made exclusively by specialised technical personnel.



In the event of an existing system, make sure that the load connection is compatible with the BOOSTER connection.

In particular, make sure that the cable is of a suitable cross section for the motor breakaway starting current and in single-phase installations, that the capacitor is suitable for the motor to be installed.

A reduced cable section could cause dangerous overheating and, apart from dangerous voltage drops, damage to the actual system.

Make sure to make the ground connection carefully using a yellow-green cable of the same section as the cable used for the connection of the phases.

The failure to perform a correct ground connection can create serious risk to the operator.

The control box connection has to be made as per the diagram stuck inside the BOOSTER and verifying the the right capacitor is fitted for the motor.

