

FRANKLIN AID



Franklin Electric



Franklin Application/Installation Data *Europe*

No.02 /2018

SubStartSC and SubTronicSC More than meets the eye

**Franklin Electric's control boxes for 4" submersible motors
– the underestimated champion**

When it comes to submersible motor start and control, professionals in the water business have quite a variety of products to choose from. From the outside, control boxes all look pretty much the same, so often their features are also considered equal.

This bulletin will show you why Franklin Electric's range of 4" motor control boxes are substantially different from the rest, and how this can actually make a difference to your business.

The primary function of a starter box is to allow connection of the submersible motor to the grid, offering motor and drop cable short circuit protection.

More sophisticated designs will protect against additional dangers such as motor overload, transient overvoltage and pump dry run and will offer a certain degree of automation.

However, it is important to understand just how exactly these functions are technically implemented.

Why the Franklin Electric boxes are substantially different from the rest, and how this can actually make a difference to your business

SubStartSC



Basic version: *SubStartSC*

Let us first have a look at the "basic" version of the control box, the so-called *SubStartSC*. With attention to detail, this Franklin Electric design helps installers achieve true IP54 installations at the wink of an eye, while generous space around the terminal blocks results in effortless connection of motor and power wires. A choice of quality components from audited suppliers ensures years of trouble-free operation avoiding customer calls for warranty-period service.

Premium Control SubTronicSC

Our *SubTronicSC* line of premium controls takes this concept to the next level: in addition to all the features described above, we have developed a proprietary control and automation concept specifically adapted to the needs of the submersible borehole application. While most similar products on the market merely use power factor for motor load monitoring and dry run protection, the *SubTronicSC* electronic board allows real-time power measurement and monitoring.

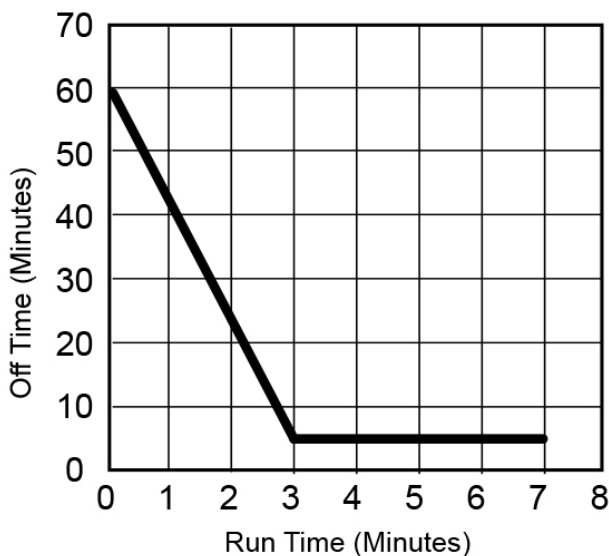
Instantaneous voltage and current data are fed into the microprocessor where a complex algorithm is used to determine working conditions and take appropriate decisions.



Premium version: SubTronicSC

This approach actually allows Franklin Electric submersible pumps to be operated outside the nominal limits of incoming voltage, where other protection devices will cut out pumps and seize water delivery.

Following the same philosophy of maximizing water extraction from weak wells, an intelligent, self-resetting sliding rule dry run protection algorithm has also been invented. Using this, off-time between automatic restarts after a dry run-induced stop will automatically adjust to best match the well recovery time. In other words, customers will not be forced to wait on water if well recovery is fast.



Smart Reset Well Recovery Time

Overvoltage, undervoltage and rapid cycle protection complete the list of functions adding safety against virtually all imaginable mishaps.

So; be sure to understand why Franklin Electric Control Boxes are more than meets the eye! Well explained to the end-user, they will make the difference! Do not hesitate to ask your Area Sales Manager or Field Service Engineer for additional information on this great product range.

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As 2018 is coming to an end, we take the opportunity to thank all of our business partners for their continued support.

Best wishes for a healthy and prosperous 2019

Your Franklin Electric Field Service Team

