



## SubTronicSC® Single Phase Motor Protection

The SubTronicSC® range covers all PSC motors from 0.25kW to 2.2kW for all voltages. Ergonomic design, attention to detail and unique features make the SubTronicSC® motor starter range your first choice when considering submersible motor protection. In conjunction with Franklin Electric submersible motors you now have an tangible water system advantage resulting in ease of installation and reliable protection.

### Product features:

- Attention to detail – every aspect engineered for the application
- The complete package – The device is 100% compatible with the motor characteristics
- All in one name – Reliability backed by the leader in submersible motors

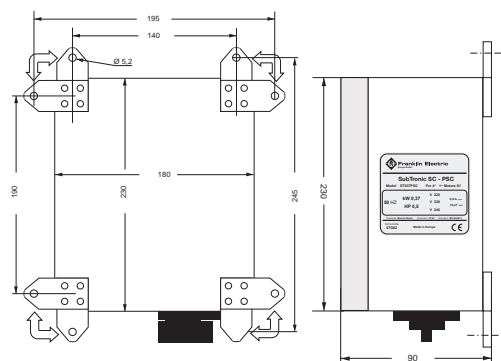


Ergonomically designed	
Mounting	Easy wall mounting offering various options without destroying the protection rating of the enclosure.
Wiring	Reliable connectors are provided for ease of wiring.
Motor compatible design	
Matching range	The SubTronicSC® Protector range was designed to match the Franklin Electric range of PSC motors.
Wide range of operation	Compatibility with motor design allows for a wide range of operation resulting in minimized nuisance tripping.
Intelligent Protection and Management features	
Dry-run detection (without probes)	Prevents motor and pump damage due to running the pump without water based on a proprietary reliable detection method.
Dry-run auto- reset	Automatic dry-run reset time is based on a proprietary search algorithm to find the best operating point for weak wells. Reset time 6 to 60 minutes.
Over & Under voltage	Prevents motor damage that may be caused by abnormal voltage conditions without limiting the range of operation, made possible by matching the design of the SubTronicSC® Protector with the motor. Reset time approximately 3 minutes.
Over current protection	Prevents operation under conditions where motor current may exceed safe levels due to bound pump or other fault condition. Detection is based on current heating capacity measurement to prevent unnecessary nuisance tripping. Reset time approximately 10 minutes.
Faulty Start Protection	Prevents system damage due to factors such as faulty contacts or switch. Contact failure detection reacts fast and will prevent damage to system components.
Rapid Cycle Protection	Prevents system damage due to factors such as continuous rapid cycling and excessive motor thermal cycling caused by waterlogged tank, faulty contacts or faulty pressure switch.
Indicators	
Status	Indication shows normal operation or other condition.
Voltage	Faulty voltage condition is indicated.
Fault conditions	Dry-run, Over current, Rapid Cycling, and Faulty start are indicated.

Technical Specifications	
Mechanical	
Protection level	IP54
External dimensions	290 x 230 x 95mm
Weight	0,6 - 1,0 kg
Mounting	Wall mounting (with options)
Temperature	-5°C - +50°C
Humidity	50% at 55°C (without condensation)
Electrical	
Voltage	220 - 240V; ± 10 %; 50Hz single phase
Current	16 A
Power	0,25 - 2,2 kW
Standards	
IEC 60439-1 when supplied with suitably fused supply.	

SubTronic SC Motor Protection Specifications					
Part Number	Type	Motor rating (kW)	Nominal Current (A)	Maximal expected current (A)	Capacitor (µF) 450V ac
284 623 3511	ST025PSC	0,25	2,4	9,4	12,5
284 624 3511	ST037PSC	0,37	3,3	12,6	16
284 625 3511	ST055PSC	0,55	4,3	17,7	20
284 626 3511	ST075PSC	0,75	5,7	22,7	35
284 627 3511	ST110PSC	1,10	8,4	33,9	40
284 628 3511	ST150PSC	1,50	10,7	41,7	50
284 629 3511	ST220PSC	2,20	14,7	61,8	70

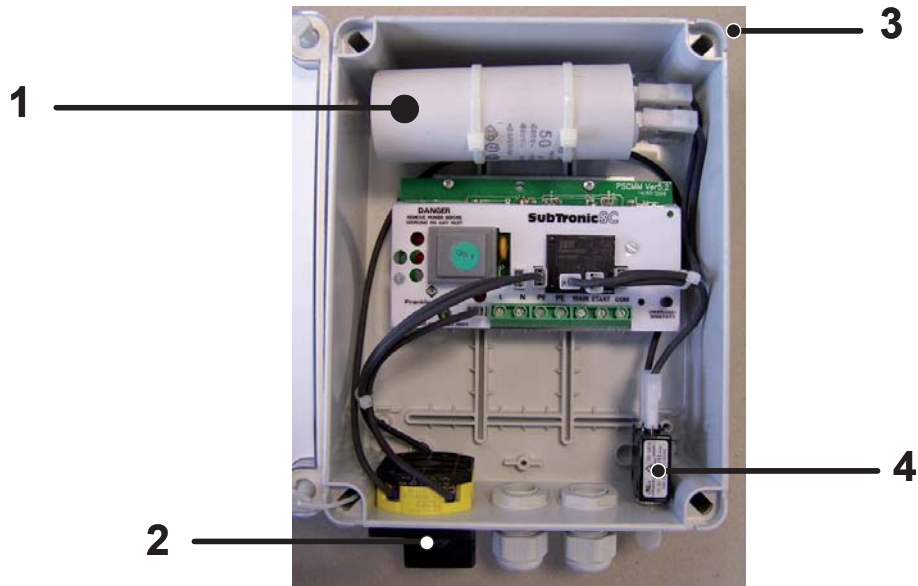
### Dimensions





# Motor Control

## SubTronicSC® Spare Parts



**Part: 1 Capacitor - Kit**

Rating [kw]	Mod. Nb.		μF
0,25	308 005 801	-	12,5
0,37	308 005 802	-	16
0,55	308 005 803	-	20
0,75	308 005 804	-	35
1,1	308 005 805	-	40
1,5	308 005 806	-	50
2,2	308 005 807	-	70

**Part: 4 Overload - Kit**

Rating [kw]	Mod. Nb.		Amp
0,25	308 005 811	-	3
0,37	308 005 812	-	5
0,55	308 005 813	-	6
0,75	308 005 814	-	8
1,1	308 005 815	-	10
1,5	308 005 816	-	13
2,2	308 005 817	-	18



**Part: 2 Rotary - Switch - Kit**

Mod. Nb.
308 005 822

**Part: 3 Rocker - Switch - Kit**

Mod. Nb.
308 005 821