

## Electronic control panels

# SOFT START PLUS 2 RANGE 3÷100HP

Quadro elettronico avviamento soft start 2 motori per PRESSURE BOOSTER, clean water e reflue con display

- Multi application control panel
- Motor's data auto learning
- Adjustable acceleration and deceleration ramp
- Events and alarms data logger
- Motors maintenance data logger
- Remote control
- Motherboard protection



## GENERAL SPECIFICATIONS

- Operating voltage 400Vac  $\pm 10\%$  50/60Hz
- General disconnecting switch with door lock
- Button for automatic operation
- Button for manual operation (stable/unstable)
- Siren shut-off button
- Auxiliary circuit protection fuse
- Protection fuse for each motor
- N°2 soft start with by-pass contacts
- Forced ventilation with filters (from 25Hp)
- Thermostat for fan
- Connection terminal board
- External metal box
- Protection degree IP55
- Operating temperature  $-5/+40^{\circ}\text{C}$

## INPUTS / OUTPUTS

- N°4 very low voltage inputs
- Input 4-20mA
- N°2 very low voltage inputs for motor klixon
- N°2 alarm outputs 12Vdc max 200mA for siren and flashing Led lamp
- Alarm output max 5A NC-COM-NO (pure contact)

## ADVANTAGES

- Multilingual Display LCD to visualize:
  - Operating voltage
  - Current for each motor
  - Hour counter for each motor
  - Pressure switches status
  - Level status
  - System pressure with pressure transducer
  - Tank level in meters with piezoresistive probe
  - All information concerning the operation of the motors
- Maximum and minimum current auto learning for each motor
- Adjustable maximum number of starts per hour
- Adjustable motor start test (24-48-72-96h)
- Dry running with level control and minimum current
- Adjustable probe sensitivity
- Deactivable alternance of the 2 motors
- 3s delay between the starting of the 2 motors
- Automatic switching in case of motor failure
- Loss of pressure control
- Adjustable supply mains waiting
- Siren shut-off
- Adjustable acceleration and deceleration ramp by trimmer
- Adjustable starting voltage by trimmer
- Operation with pressure switches, float switches, probes, pressure transducer and piezoresistive probe 4-20mA

## PROTECTIONS

- Maximum and minimum current protection for each motor with alarm
- Lack and sequence of phases protection with automatic reset and alarm
- Minimum and maximum voltage protection with automatic reset and alarm
- Klixon protection for each motor with automatic reset and alarm

**THREE-PHASE 400Vac ±10% 50/60Hz**

CODE	TYPE	POWER		OPERATING CURRENT [A]	DIMENSIONS mm			WEIGHT Kg	BOX
		kW	Hp		A-H	L-W	P-D		
SQ697.00/SS	SOFT START PLUS 2 400 5,5	2,2÷4	3÷5,5	2x(5÷12,5)	600	400	230	18	60
SQ697.01/SS	SOFT START PLUS 2 400 12,5	5,5÷9,2	7,5÷12,5	2x(10÷25)	600	400	230	18	60
SQ697.02/SS	SOFT START PLUS 2 400 17,5	11÷13	15÷17,5	2x(17÷32)	600	400	230	18	60
SQ697.03/SS	SOFT START PLUS 2 400 20	15	20	2x(23÷38)	700	500	290	23	71
SQ697.04/SS	SOFT START PLUS 2 400 25	18,5	25	2x(22,5÷45)	800	600	290	27	80
SQ697.05/SS	SOFT START PLUS 2 400 35	22÷26	30÷35	2x(25,5÷63)	800	600	290	27	80
SQ697.06/SS	SOFT START PLUS 2 400 40	30	40	2x(34,5÷72)	800	600	290	29	80
SQ697.07/SS	SOFT START PLUS 2 400 50	37	50	2x(46÷106)	1000	600	370	33	101
SQ697.08/SS	SOFT START PLUS 2 400 60	45	60	2x(46÷106)	1000	600	370	41	101
SQ697.09/SS	SOFT START PLUS 2 400 70	51,5	70	2x(46÷106)	1000	600	370	42	101
SQ697.10/SS	SOFT START PLUS 2 400 80	60	80	2x(59÷134)	1200	800	370	72	122
SQ697.11/SS	SOFT START PLUS 2 400 90	66	90	2x(59÷134)	1200	800	370	73	122
SQ697.12/SS	SOFT START PLUS 2 400 100	75	100	2x(87÷162)	1200	800	370	75	122

**N.B.:** When ordering, check the power and the rated current of the motor

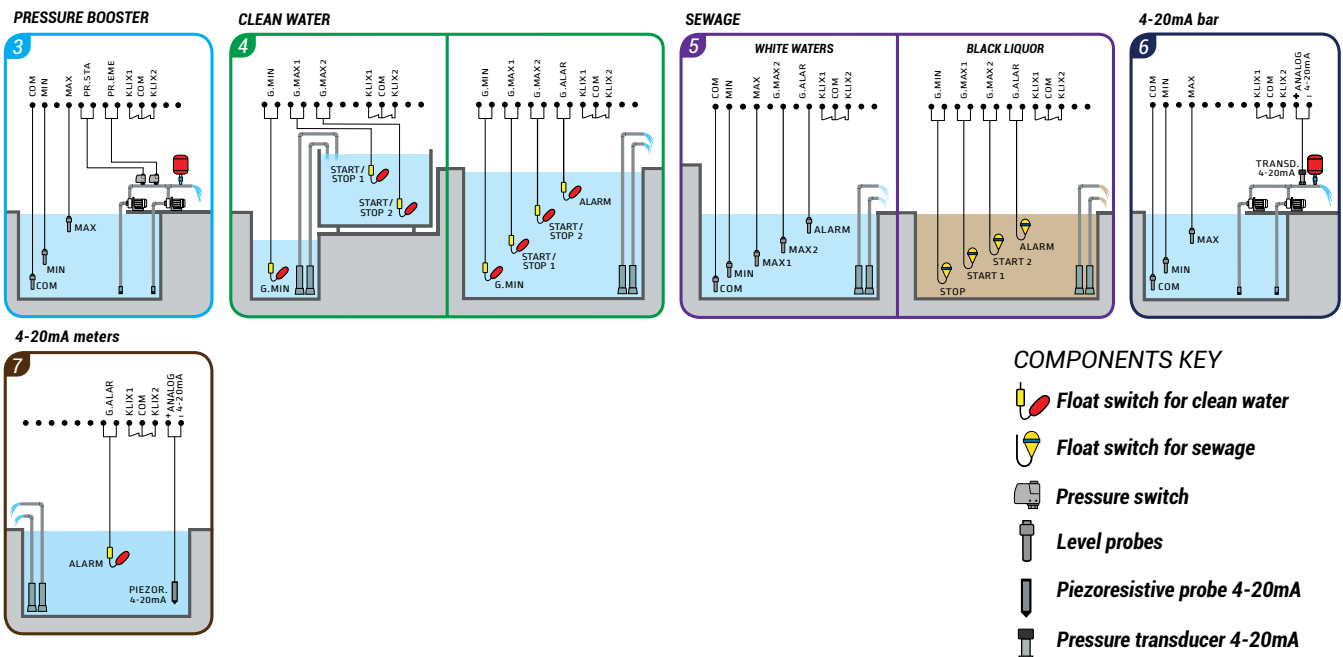
**OPTIONALS**

CODE	TYPE
OP100.29/B	On board GPRS expansion
OP100.49/B	On board MODBUS RS-485 expansion
OP100.59/B	On board Ethernet - WiFi expansion
OP100.69/B	On board BMS expansion up to 3 motors
OP100.99/B	On board expansion to detect water in the oil chamber up to 3 motors
OP100.01	3 level probes kit
OP100.05/1	Wired three-phase surge arrester type 2
SS100.00	Visual and acoustic alarm indicator (BASIC ALARM VA 012) <a href="#">see page 20</a>
SS101.01	Visual and acoustic alarm indicator with buffer battery (TOP ALARM VAB 230) <a href="#">see page 19</a>
AC300.11.10-004.20	Pressure transducer 0-10bar 4-20mA with 4m cable
AC300.11.16-004.20	Pressure transducer 0-16bar 4-20mA with 4m cable
AC300.11.25-004.20	Pressure transducer 0-25bar 4-20mA with 4m cable
AC300.20.01-005.31	Piezoresistive probe 4-20mA with 5m cable
AC300.20.01-010.31	Piezoresistive probe 4-20mA with 10m cable
AC300.20.02-010.20	Piezoresistive probe 4-20mA with 10m cable per SEWAGE

For more optionals see page 78

**SPARE PARTS**

CODE	TYPE
AC100.22/1/50	Scheda elettronica display con cavo flat 20pin 50cm
AC100.22/1/80	Scheda elettronica display con cavo flat 20pin 80cm
AC100.22/1/100	Scheda elettronica display con cavo flat 20pin 100cm
SD697.20/1	Scheda elettronica MULTIPLUS 2 trifase 20A
SD697.30-40/1	Scheda elettronica MULTIPLUS 2 trifase 30-40A
SD697.60/1	Scheda elettronica MULTIPLUS 2 trifase 60A
SD697.100/1	Scheda elettronica MULTIPLUS 2 trifase 100A
SD697.200/1	Scheda elettronica MULTIPLUS 2 trifase 200A



The addition of some optionals can imply changes on the size of the control panel. For further details please contact our technical/commercial department.