

## Electronic control panels

# MULTIPLUS 2 RANGE 0,5÷20HP

**Direct starting electronic control panel 2 motors for pressure booster, clean water and sewage with display**

- Multi application control panel
- Motor's data auto learning
- Events and alarms data logger
- Remote control
- Single-phase version equipped with power relay for inductive loads (up to 31A)
- Motherboard protection



## GENERAL SPECIFICATIONS

- Operating voltage 230Vac +15/-20% 50/60Hz (SA694.xx)
- Operating voltage 400Vac +15/-20% 50/60Hz (SA697.xx)
- General disconnecting switch with door lock
- Button for automatic operation
- Button for manual operation (stable/unstable)
- Siren shut-off button
- Auxiliary circuit protection fuse
- Motors' protection fuse
- N°2 contactors (SA697.xx)
- External thermoplastic box
- Cable glands
- Protection degree IP65
- Operating temperature -5/+50°C
- Relative humidity 60% at 50°C (not condensed)

## 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

- Display LCD multilingua per la visualizzazione di:
  - 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, cosφ 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
- 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

**SINGLE-PHASE 230Vac +15/-20% 50/60Hz**

CODE	TYPE	POWER		OPERATING CURRENT [A]	DIMENSIONS mm			WEIGHT Kg	BOX
		kW	Hp		A-H	L-W	P-D		
SA694.00	MULTIPLUS 2 230	0,37÷2,2	0,5÷3	2x(2÷18)	285	245	140	2,4	03

**THREE-PHASE 400Vac +15/-20% 50/60Hz**

CODE	TYPE	POWER		OPERATING CURRENT [A]	DIMENSIONS mm			WEIGHT Kg	BOX
		kW	Hp		A-H	L-W	P-D		
SA697.02L	MULTIPLUS 2 400 10	0,37÷7,5	0,5÷10	2x(0,5÷16)	345	285	165	3,8	04
SA697.03L	MULTIPLUS 2 400 15	2,2÷11	3÷15	2x(4÷25)	380	300	150	5,3	05
SA697.04L	MULTIPLUS 2 400 20	7,5÷15	10÷20	2x(16÷32)	460	380	150	6,6	07

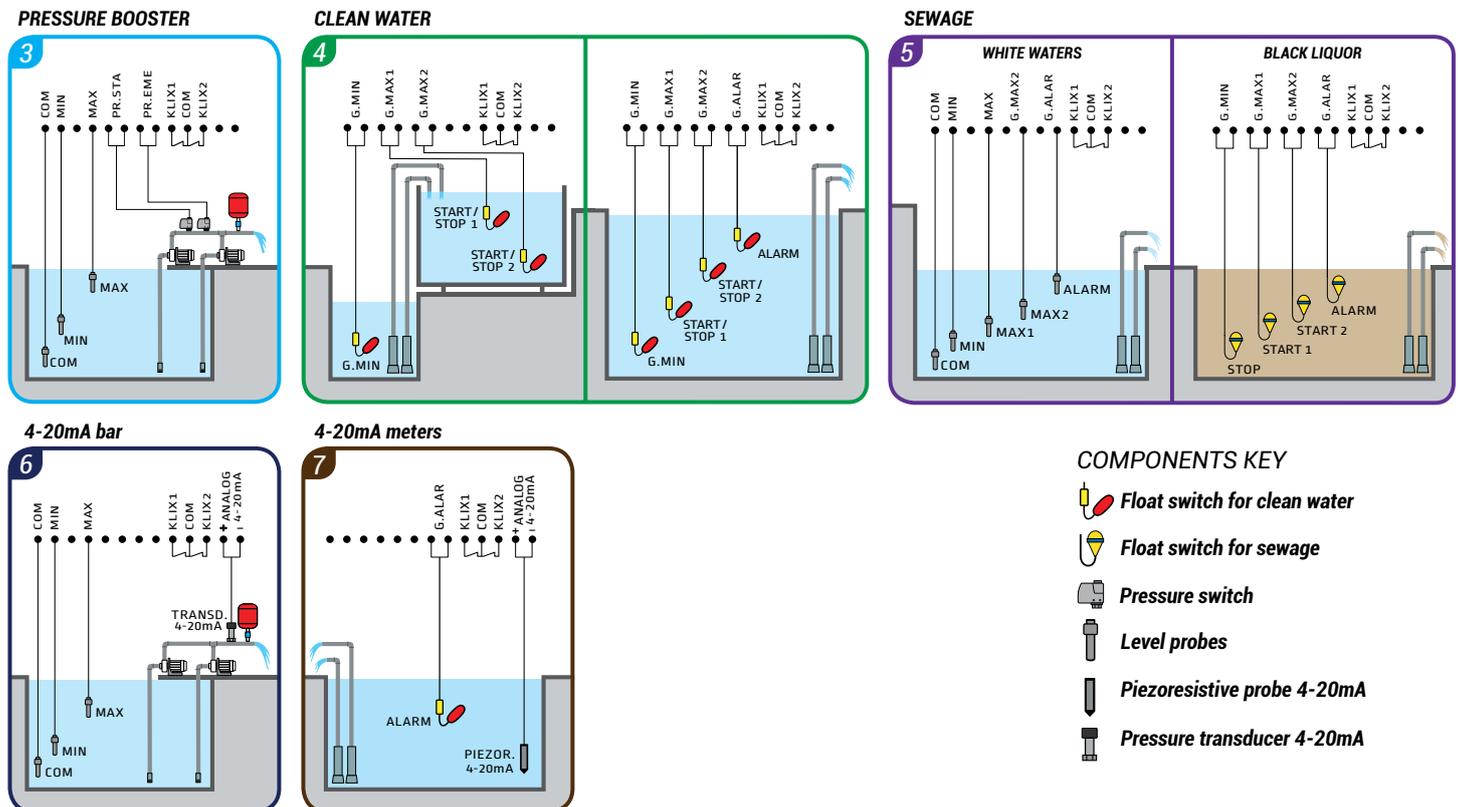
**OPTIONALS**

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	Wired single-phase surge arrester type 2
OP100.05/1	Wired three-phase surge arrester type 2
OP100.13/1/12	Wired siren 12Vdc
OP100.13/2/12L	Wired flashing Led lamp 12Vdc
SS100.00	Visual and acoustic alarm indicator (BASIC ALARM VA 012) <b>see page 20</b>
SS101.01	Visual and acoustic alarm indicator with buffer battery (TOP ALARM VAB 230) <b>see page 19</b>
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
OP00.10	Couple of brackets for collar (reference BOX 03-04)

For more optionals see page 78

**SPARE PARTS**

CODE	TYPE
AC100.22/1/30	Display electronic board with flat cable 20pin 30cm
SD694.20/1	Single-phase MULTIPLUS 2 electronic board
SD697.20/1	Three-phase MULTIPLUS 2 electronic board 20A
SD697.30-40/1	Three-phase MULTIPLUS 2 electronic board 30-40A



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