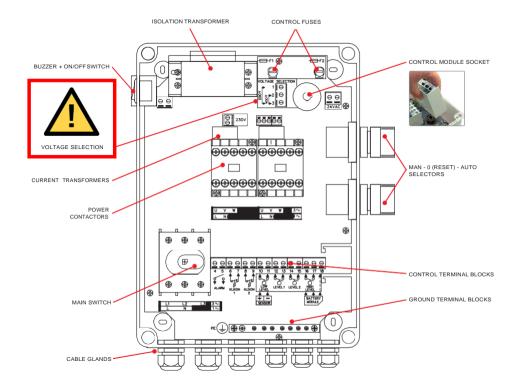
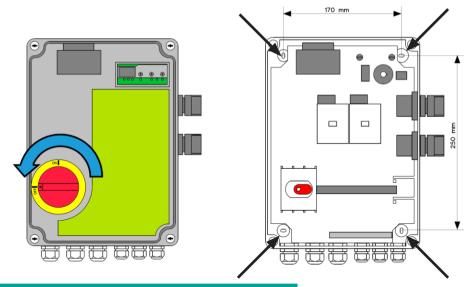
## Internal configuration



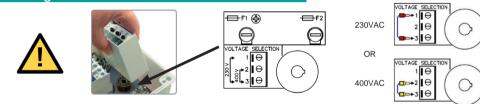
### Control module

LOW LEVEL SETTING (SENSOR ONLY)			(SENSOR ONLY) HIGH LEVEL SETTING		
	toscano	Vigilec ZERO	DOBLE SENSOR	CE	
DISPLAY SCREEN	·	Low	High	I max.	OVERLOAD SETTING
POWER ON	888				HIGH LEVEL ALARM
PUMP 1 ON		<b>1</b>	2		
PUMP 2 ON					INFRARED COMMUNICATION
PUMP 1 OVERLOAD / PHASE LOSS					PUMP 2 OVERLOAD / PHASE LOSS

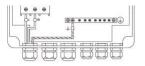
# Installation

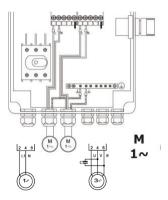


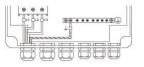
Voltage selection

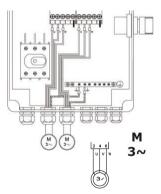


### Power connections

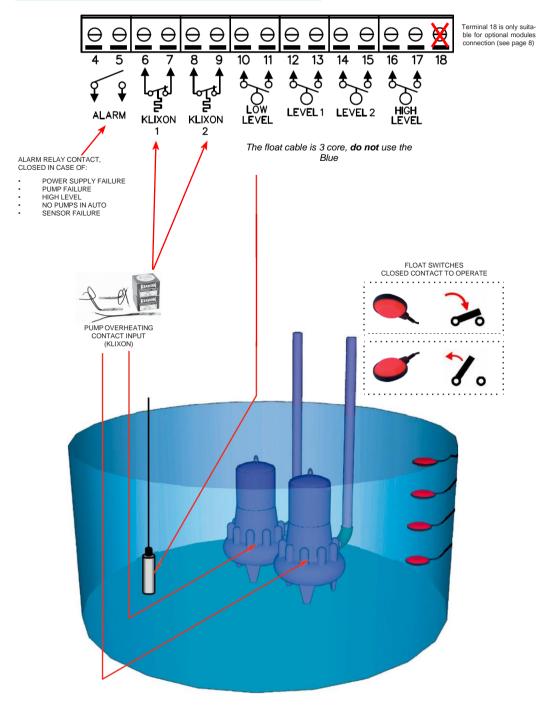




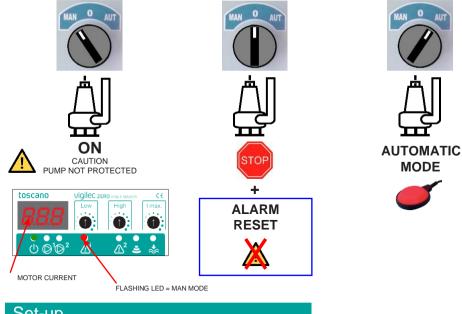




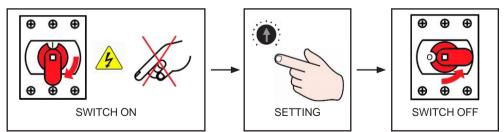
### **Control** connections



### Selectors

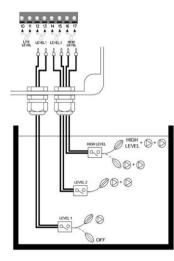


# Set-up

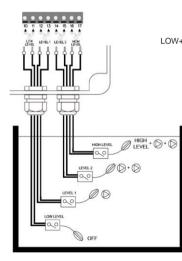


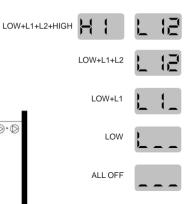


#### **3 FLOAT SWITCHES**

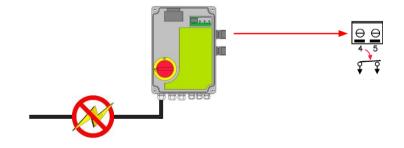


#### **4 FLOAT SWITCHES**

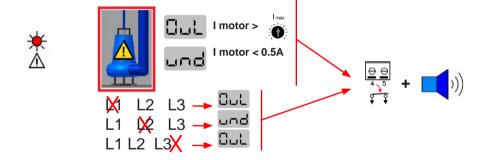




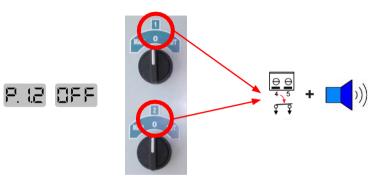
### Supply failure



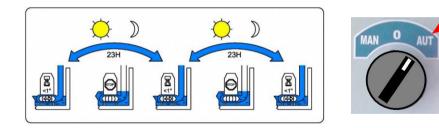
### Pump phase failure Alarm



### No pumps are in AUTO ALARM



# Jammed / Seize impeller preventive system



### Other functions / additional options

- Pump alternation with delayed start and stop for pumps.
- Automatic pump commutation in case of failure or deactivation of one of them.
- Additional options: main circuit breaker, bimetallic overload relay or phase sequence relay.

# Optional modules (direct installation on control terminal blocks)

I I I

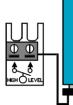
i Î.

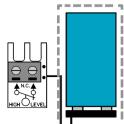
İ.

I

I

.





N.O. Battery module

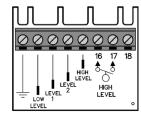


HIGH LEVEL

N.C. module (optional battery)

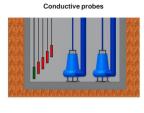


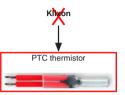
HIGH LEVEL





PTC motor protection





()

Ŕ

### **Technical specifications**

Supply voltage   230Vac I/III or 400Vac III (selectable) -20%+30% - 50/60Hz     Control transformer   230-400Vac / 24Vac, primary fuse: 0.2A (F1), secondary fuse: 0.8A (F2)     Pump current range   112A (V2ZBS) / 516A (V2ZBS-E) / 522A (V2ZBS-F) - AC3     Overload setting (Imax)   1.113A (V2ZBS) / 5.130A (V2ZBS-E/F) / alarm trip in 7 seconds     Control mode   Float switches and/or 4-20mA level sensor or conductive probe (+optional module)     Control input voltage   24Vdc (float switches)     4-20mA sensor supply voltage   24Vdc     Sensor range   Im, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)     Sensor failure detection   Open circuit and short circuit     Low level setting   10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 2 setting   Nutratic setting: 1/3 (high level - low level)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB   Module identifraction number, counte						
Pump current range 112A (V2ZBS) / 516A (V2ZBS-E) / 522A (V2ZBS-F) - AC3   Overload setting (Imax) 1.113A (V2ZBS) / 5.130A (V2ZBS-E) / 522A (V2ZBS-F) - AC3   Control mode Float switches and/or 4-20mA level sensor or conductive probe (+optional module)   Control input voltage 24Vdc (float switches)   4-20mA sensor supply voltage 24Vdc   Sensor range 1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)   Sensor failure detection Open circuit and short circuit   Low level setting 10cmsensor range   High level setting Low level + 10cmsensor range   Level 2 setting Automatic setting: 2/3 (high level - low level)   Level 2 setting Automatic setting: 1/3 (high level - low level)   Terminal block wiring size 10mm² (power supply) Amm² (control)   Protections Overload, phase failure and pump overheating (Klixon contacts)   Alarm contact 5A 250Vac   Alarm contact 5A 250Vac   Alarm contact 5A 250Vac   Alarm Contact activation Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Acoustic alarm 12Vdc - 90dB   Records (PUMPCHECK) Module identification number, counters resets, pumps running ho	Supply voltage	230Vac I/III or 400Vac III (selectable) -20%+30% - 50/60Hz				
Overload setting (Imax) 1.113A (V2ZBS) / 5.130A (V2ZBS-E/F) / alarm trip in 7 seconds   Control mode Float switches and/or 4-20mA level sensor or conductive probe (+optional module)   Control input voltage 24Vdc (float switches)   4-20mA sensor supply voltage 24Vdc   Sensor range 1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)   Sensor failure detection Open circuit and short circuit   Low level setting 10cmsensor range   High level setting Low level + 10cmsensor range   Level 2 setting Automatic setting: 2/3 (high level - low level)   Level 3 setting 24 vorteload, phase failure and pump overheating (Klixon contacts)   Protections Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Alarm contact activation Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Accoustic alarm 12Vdc - 90dB   Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Control transformer	230-400Vac / 24Vac, primary fuse: 0.2A (F1), secondary fuse: 0.8A (F2)				
Control mode   Float switches and/or 4-20mA level sensor or conductive probe (+optional module)     Control input voltage   24Vdc (float switches)     4-20mA sensor supply voltage   24Vdc     Sensor range   1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)     Sensor failure detection   Open circuit and short circuit     Low level setting   10cmsensor range     High level setting   Low level + 10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 2 setting   Automatic setting: 1/3 (high level - low level)     Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Accoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Pump current range	112A (V2ZBS) / 516A (V2ZBS-E) / 522A (V2ZBS-F) - AC3				
Control input voltage   24Vdc (float switches)     4-20mA sensor supply voltage   24Vdc     Sensor range   1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)     Sensor failure detection   Open circuit and short circuit     Low level setting   10cmsensor range     High level setting   Low level + 10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 1 setting   Automatic setting: 1/3 (high level - low level)     Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Accoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Overload setting (Imax)	1.113A (V2ZBS) / 5.130A (V2ZBS-E/F) / alarm trip in 7 seconds				
4-20mA sensor supply voltage 24Vdc   Sensor range 1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)   Sensor failure detection Open circuit and short circuit   Low level setting 10cmsensor range   High level setting Low level + 10cmsensor range   Level 2 setting Automatic setting: 2/3 (high level - low level)   Level 1 setting Automatic setting: 1/3 (high level - low level)   Terminal block wiring size 10mm² (control)   Protections Overload, phase failure and pump overheating (Klixon contacts)   Alarm contact 5A 250Vac   Alarm contact activation Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Acoustic alarm 12Vdc - 90dB   Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Control mode	Float switches and/or 4-20mA level sensor or conductive probe (+optional module)				
Sensor range   Im, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)     Sensor failure detection   Open circuit and short circuit     Low level setting   10cmsensor range     High level setting   Low level + 10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 1 setting   Automatic setting: 1/3 (high level - low level)     Terminal block wiring size   10mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact cativation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Control input voltage	24Vdc (float switches)				
Sensor failure detection   Open circuit and short circuit     Low level setting   10cmsensor range     High level setting   Low level + 10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 1 setting   Automatic setting: 2/3 (high level - low level)     Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	4-20mA sensor supply voltage	24Vdc				
Low level setting   10cmsensor range     High level setting   Low level + 10cmsensor range     Level 2 setting   Automatic setting: 2/3 (high level - low level)     Level 1 setting   Automatic setting: 2/3 (high level - low level)     Level 1 setting   Automatic setting: 1/3 (high level - low level)     Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact cativation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Sensor range	1m, 1.5m, 2m, 2.5m, 3m, 4m ou 5m (selectable)				
High level setting Low level + 10cmsensor range   Level 2 setting Automatic setting: 2/3 (high level - low level)   Level 1 setting Automatic setting: 1/3 (high level - low level)   Terminal block wiring size 10mm² (power supply) 4mm² (control)   Protections Overload, phase failure and pump overheating (Klixon contacts)   Alarm contact 5A 250Vac   Alarm contact activation Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Acoustic alarm 12Vdc - 90dB   Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Sensor failure detection	Open circuit and short circuit				
Level 2 setting Automatic setting: 2/3 (high level - low level)   Level 1 setting Automatic setting: 1/3 (high level - low level)   Terminal block wiring size 10mm² (power supply) 4mm² (control)   Protections Overload, phase failure and pump overheating (Klixon contacts)   Alarm contact 5A 250Vac   Alarm contact activation Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure   Acoustic alarm 12Vdc - 90dB   Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Low level setting	10cmsensor range				
Level 1 setting   Automatic setting: 1/3 (high level - low level)     Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	High level setting	Low level + 10cmsensor range				
Terminal block wiring size   10mm² (power supply) 4mm² (control)     Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Level 2 setting	Automatic setting: 2/3 (high level - low level)				
Protections   Overload, phase failure and pump overheating (Klixon contacts)     Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Level 1 setting	Automatic setting: 1/3 (high level - low level)				
Alarm contact   5A 250Vac     Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12Vdc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Terminal block wiring size	10mm <sup>2</sup> (power supply) 4mm <sup>2</sup> (control)				
Alarm contact activation   Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure     Acoustic alarm   12/dc - 90dB     Records (PUMPCHECK)   Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Protections	Overload, phase failure and pump overheating (Klixon contacts)				
Acoustic alarm 12Vdc - 90dB Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Alarm contact	5A 250Vac				
Records (PUMPCHECK) Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms	Alarm contact activation	Overload, phase failure, sensor failure, high level, no pumps in AUTO and power supply failure				
	Acoustic alarm	12Vdc - 90dB				
and last alarm tripping current	Records (PUMPCHECK)	Module identification number, counters resets, pumps running hours, pumps starts, pumps alarms and last alarm tripping current				
Size / Weight / IP / Temperature 300 (h) x 220 (w) x 120 (d) mm / 3550g / IP65 / -10º+55° C	Size / Weight / IP / Temperature	300 (h) x 220 (w) x 120 (d) mm / 3550g / IP65 / -10°+55° C				
Cable gland configuration 1xM25 (main supply) / 2xM20 (motors) / 6xM16 (controls)	Cable gland configuration	1xM25 (main supply) / 2xM20 (motors) / 6xM16 (controls)				