

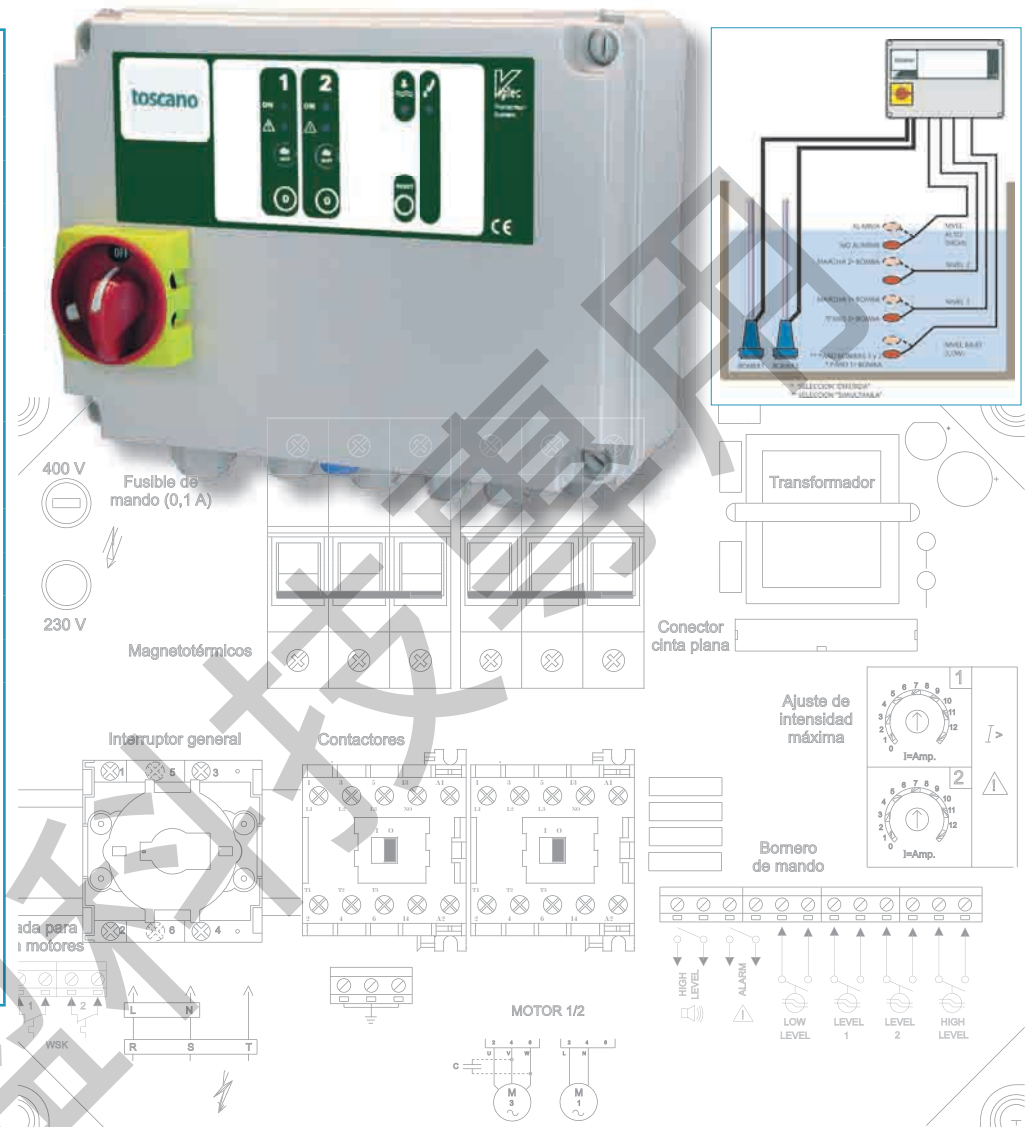
Drainage & sewage 1-2 Pumps

1-2 Three/single phase pumps control up to 5,5 kW
(direct-on-line starting -DOL-), by Float switches

VB

- Control and protection unit for two alternating pumps (up to 5,5kW 400V) in drainage & sewage stations. Control by 2, 3 or 4 float or level switches.
- Three / single-phase. Direct-on-line starting (DOL).
- Dual power supply 230/400V AC.
- Phase failure protection.
- Pump wiring failure protection.
- Overvoltage protection.
- Overload protection.
- Dry running protection by float.
- Connection failures protection warranted.
- Jammed impeller protection for long resting periods (only in AUTO mode).
- Safety system for float failure.
- Secured operation of a pump on failure of other one.
- Klixon input.
- Overload electronic relays, adjustable for each pump.
- Start/Stop in cascade for each pump.
- Automatic pump alternation in case of failure or deactivation of one of them.
- High level sound alarm (90 dB).
- Selectable operation mode (simultaneous or deferred stop).
- All controls are low voltage.
- Pump alarm and high level output contacts.
- MANUAL-OFF-AUTO push buttons for each pump.
- Main switch-disconnector.
- Power circuit breaker for each pump.
- Power contactors.
- VOLTAGE and HIGH LEVEL pilot lights.
- ON/OFF and OVERLOAD pilot lights for each pump.
- Overload alarm reset push button.
- High protection and wide diameter cable glands.

- General Features
- Protections
- Functionality
- Equipment



Specifications

Reference	V1B (1 pump)	V2B (2 pumps)
Motor current	1 x 12A AC3	2 x 12A AC3
Maximum power rating (400V AC)	5,5 kW	5,5 kW
Supply Voltage	230/400V AC, 50/60Hz, +10% - 15%, Auto trigger-off after that + 30%	
Overload adjustment	1-13A adjustable for each pump	1-13A adjustable for each pump
Underload adjustment	<0,5A	<0,5A
Float voltage	12V DC / 50mA, 2-3 floats control	12V DC / 50mA, 3-4 floats control
Alarm	Maximum level alarm (90dB)	Maximum level alarm (90dB)
Alarm contact	Voltage-free contact	Voltage-free contact
Remote control connection	Contact or Voltage 6 to 400V AC/DC	Contact or Voltage 6 to 400V AC/DC
Terminal block connection	4 mm ² , 1 x PG16 (9-14 mm ²), 4 x PG9 (4,5-8 mm ²)	4 mm ² , 1 x PG16 (9-14 mm ²), 4 x PG9 (4,5-8 mm ²)
Fixing	Clevis wall mounting	Clevis wall mounting
Weight and Size	3.000 g, 220 x 300 x 120 mm	3.000 g, 220 x 300 x 120 mm
Protection	IP56	IP56
Operating temperature	-10° C + 55° C	-10° C + 55° C

pump controllers

Drainage & sewage 1-2 Pumps

1-2 Three/single phase pumps control up to 5,5 kW (direct-on-line starting -DOL-), by external Level sensor or embedded Pressure sensor

ii NEW !!

V10-DRAIN

- Pump control and protection unit with automatic alternation by 4-20 mA external level sensor or embedded pressure sensor.
- Three / single-phase. Direct-on-line starting (DOL).
- Dual power supply 230/400V AC.
- Phase failure, overload and overvoltage protection.
- Wrong wiring protection input (up to 400V).
- Jammed impeller protection for long resting periods.
- Dry running protection by float.
- Minimum intake pressure switch.
- Klixon input.
- Easy interactive adjustment by single buttons and display.
- Overload electronic relay, adjustable for each pump.
- Start/Stop in cascade for each pump.
- Automatic pump alternation in case of failure or deactivation of one of them.
- All controls are low voltage.
- Selectable operation mode (simultaneous or deferred stop).
- Adjustable last pump running delay.
- Redundant entry for high level float.
- Adjustment of all levels by only one control knob.
- All levels adjust automatically in equal parts by selecting alarm level.
- General alarm output relay (pump failure, high level or sensor failure) and external siren.
- High level sound alarm (90 dB).
- 3 digit LED display for level current value and the other adjustments.
- VOLTAGE and HIGH LEVEL pilot lights.
- ON/OFF and OVERLOAD pilot lights for each pump.
- Main switch-disconnector.
- Power circuit breaker for each pump.
- 24V AC Power contactors.
- MANUAL-OFF-AUTO push buttons for each pump.
- High protection and wide diameter cable glands.

- General Features
- Funcionalidad
- Protections
- Equipment



DIRECT LEVEL DISPLAY

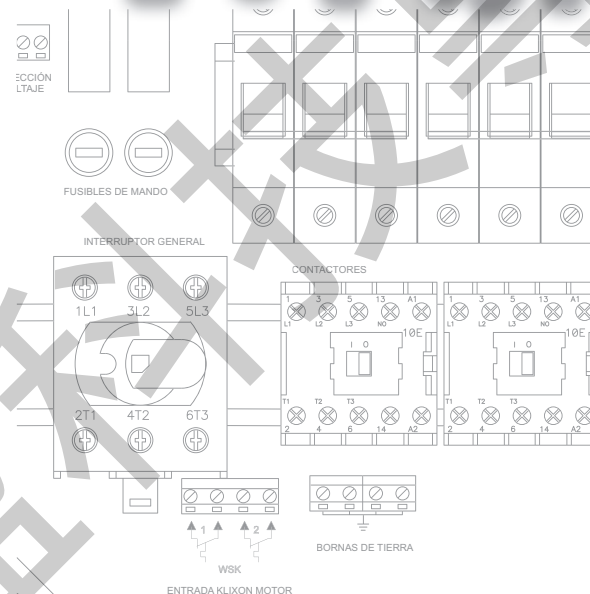


SENSORS (OPTIONAL)

Piezometric probe (external sensor)



Hydrostatic Bell (embedded sensor)



Specifications

Reference	V10-DRAIN (external sensor)	V10-DRAIN (embedded sensor)	SN420
Motor current	12A x pump AC3	12A x pump AC3	Size range: 0-2 ó 0-5 mts. water column
Maximum power rating (400V AC)	5,5 kW	5,5 kW	Output Signal: 4-20 mA
Supply Voltage	230/400V AC, 50/60Hz, +10% - 15%, Auto trigger-off after that +30%		Supply: 24V DC
Overload adjustment	1-13A adjustable for each pump	1-13A adjustable for each pump	Used factor: 100% ED
Underload adjustment	<0,5A	<0,5A	Operating position: Any position
Input connection (power supply)	Direct to switch	Direct to switch	Operating temperature: -10° a +60° C
Output connection (motor)	4 mm ² , direct to contactor	4 mm ² , direct to contactor	Consumption: 1 VA maximum
Sensor	Type 4-20mA in two wires	Internal	Stainless steel case.
Sensor range	0...2,3,4,5,6,7,8,9 y 10 mts (selectable)	0...10 mts	Protection (EN 60529): IP68
Accuracy	±1 cm for sensor 2m y ±10cm >2 m	±1 cm for range up to 2m y ±10cm >2 m	
Fixing	Clevis wall mounting	Clevis wall mounting	
Weight and Size	3.500 g, 220 x 300 x 120 mm	3.500 g, 220 x 300 x 120 mm	
Protection	IP56	IP56	
Operating temperature	-10° C +55° C	-10° C +55° C	