

# stardelta PRO

## EASY INSTALLATION



## USER INTERFACE



## EXPANDABILITY



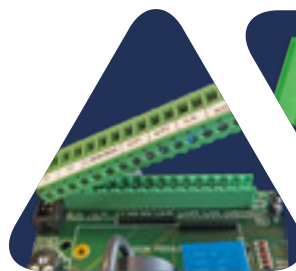
## VERSATILITY



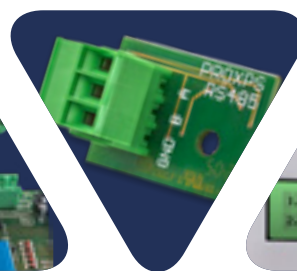
## Power and control? stardelta PRO

Star-delta start is the main feature distinguishing **STARDELTA PRO**, Elentek new control panel adding the reduction of start currents and mechanical stress to completeness, versatility and handiness.

With the same simple and immediate user interface distinguishing the entire Elentek range, Stardelta Pro has **6 preset operating modes**, additional connectivity options, control and expandability.



TERMINAL BLOCK  
REMOVABLE



RS485  
(Optional)



HISTORICAL  
ALARMS



## MAXIMUM CONTROL

Integrate the most complete system protections

## FLEXIBILITY

Multiple inputs available for several applications

## ALWAYS PRESENT

Every operation is shown on the multilingual display

## RELIABLE IN ANY CONDITION

Accurate motor current reading (even in extreme ambient conditions)

## APPLICATIONS

✓ PRESSURISATION

✓ FILLING

✓ EMPTYING

✓ DRAINAGE

## CONNECTIVITY

BMS FREE VOLTAGE CONTACTS MODULE

BLUETOOTH WI-FI MODULE FOR APP

WATER IN OIL CHAMBER MODULE

BUFFER BATTERY MODULE

RS485 MODBUS MODULE

LEVEL PROBES MODULE

## TECHNICAL FEATURES

### FUNCTIONS

- LCD display for displaying and programming: voltage, current, cos-fi, hours of operation, number of starts, motor status, alarms, analogue signal and thresholds
- Selector AUTOMATIC - 0 (standby) - MANUAL operation
- Language settings (Italian, English, French, Spanish, German)
- Anti-seize autotest (programmable)
- Dry running protection with: level probes/ floats/ pressure switches and minimum current
- Up to 2 control inputs: float/pressure switches
- Input for 4-20 mA or 0-10V analogue signal
- Unit of measurement analogue signal cm - m - bar
- Emergency start and stop inputs with analogue signal operation mode (can be disabled)
- Clicson thermal pad inputs with automatic reset (can be disabled)
- Inversion of inputs (from normally open to normally closed)
- Automatic reset due to minimum current alarm with 4 programmable times
- Activation delay from mains return (can be disabled)
- Manual button operation (fixed or pulse)
- Settable star-delta timer

### VERSIONS

- Power supply 3phase 310-450Vac 50/60Hz

### CONTROLS

- Electronic minimum and maximum voltage control
- Electronic control of maximum motor current
- Minimum motor current control
- Failure or incorrect phase sequence control on power supply input (can be disabled)

### ALARMS

- Alarms reported: voltage status, levels, motor overload, minimum current, motor clicson
- Alarm history
- Starts / hour alarm (settable)
- Alarm output contacts

### PROTECTIONS

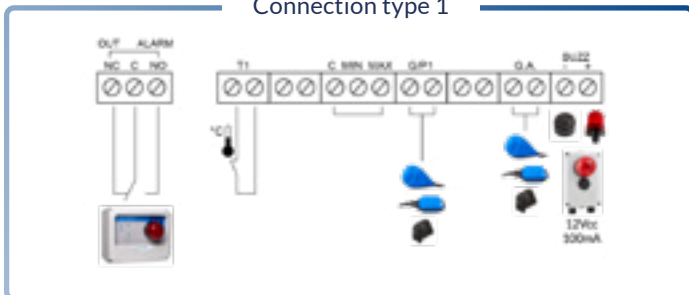
- Auxiliary and motor protection fuses
- Isolator (except for NB code)
- Metallic box, IP55

# MODELS AND CONNECTION DIAGRAMS

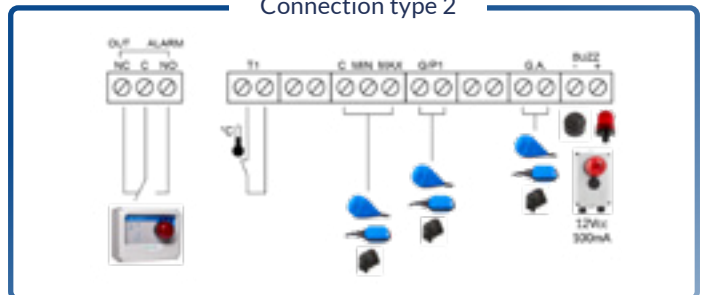
## stardelta PRO 1

Code	Model	Voltage	Max power		Current		Box		Weight
			Kw	Hp	Range	Max	Mod.	Material	Kg.
11054	STARDELTA PRO 1/11	3~400 V	11	15	16-25 A	25 A	M1	Metallic	16
11055	STARDELTA PRO 1/15	3~400 V	15	20	16-32 A	32 A	M1	Metallic	16
11056	STARDELTA PRO 1/18,5	3~400 V	18,5	25	30-38A	38 A	M2	Metallic	16
11057	STARDELTA PRO 1/22	3~400 V	22	30	30-50A	50 A	M2	Metallic	16
11058	STARDELTA PRO 1/30	3~400 V	30	40	30-60A	60 A	M2	Metallic	20
11059	STARDELTA PRO 1/37	3~400 V	37	50	45-75A	75 A	M3	Metallic	30
11060	STARDELTA PRO 1/45	3~400 V	45	60	45-100A	100 A	M3	Metallic	30

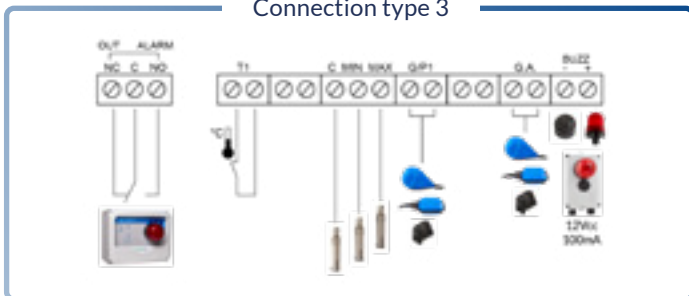
Connection type 1



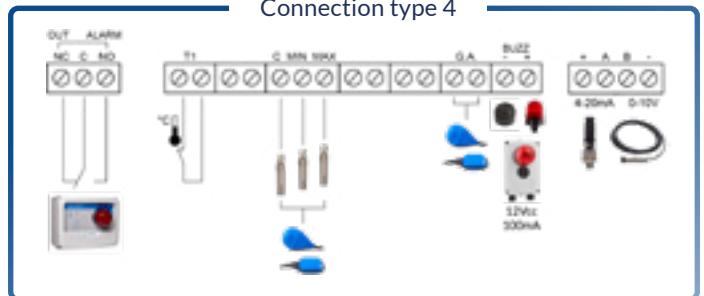
Connection type 2



Connection type 3



Connection type 4



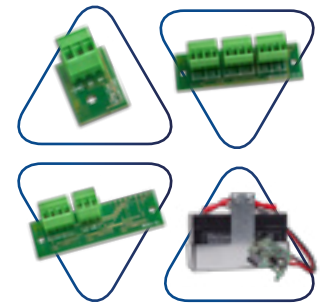
## ACCESSORIES

Code	Model	Description
98007	K3SL	Kit of 3 level probes (electrodes)
99050	PM/5	Pressure switch 1-5 bar
99051	PM/12	Pressure switch 3-12 bar
98003.012	AA-12Vdc	Acoustic alarm 90 dB 12Vdc
98004.012	LL-12Vac/dc	Flashing alarm 12V AC/DC
98022	FE	Emergency pushbutton
98029	DT	Daily timer with switch-riders
98030	WT	Weekly digital timer
98032	TPL	Pause/work timer
98033	CI24Vac	External 24Vac input for activation/deactivation of the motor
98033A	CI230Vac	External 230Vac input for activation/deactivation of the motor



## EXPANSIONS

Code	Model	Description
98102	PRO-XPS	PROXPS RS485 Modbus module
98103	PRO-SL	PRO-SL level probe module
98104	PRO-H2O	PRO-SL H2O Oil Chamber Water Presence Module
98105	PRO-6DO	BMS dry contacts module
98106	PRO-DBT	PRODBT buffer battery module
98107	PRO-WiFi	Bluetooth wi-fi module for App PROXPS-WiFi / BT



## RELATED PRODUCTS

Code	Model	Description
99034	FLO 10	Float switch with neoprene cable length 10 m
99036	DROP 10	Variable float switch with neoprene cable length 10 m
99039	SHELL	Counterweight
01503	FLASH 12	Acoustic/visual alarm panel
01500	UNIT ALARM 1	Acoustic alarm panel with buffer battery
01501	UNIT ALARM 2	Acoustic/visual alarm panel with buffer battery
01502	UNIT ALARM GSM	Acoustic/visual alarm panel with buffer battery and GSM kit
98044	TP010B	Pressure transducer 0-10Bar 4-20mA
98045	TP016B	Pressure transducer 0-16Bar 4-20mA
pag. 54	MANIFOLD	Stainless steel manifolds
97007	E-KIOSK	Polyethylene panel column
99009	BASE FULL	Base for horizontal and vertical 2-pump booster kits



## MODELS

