

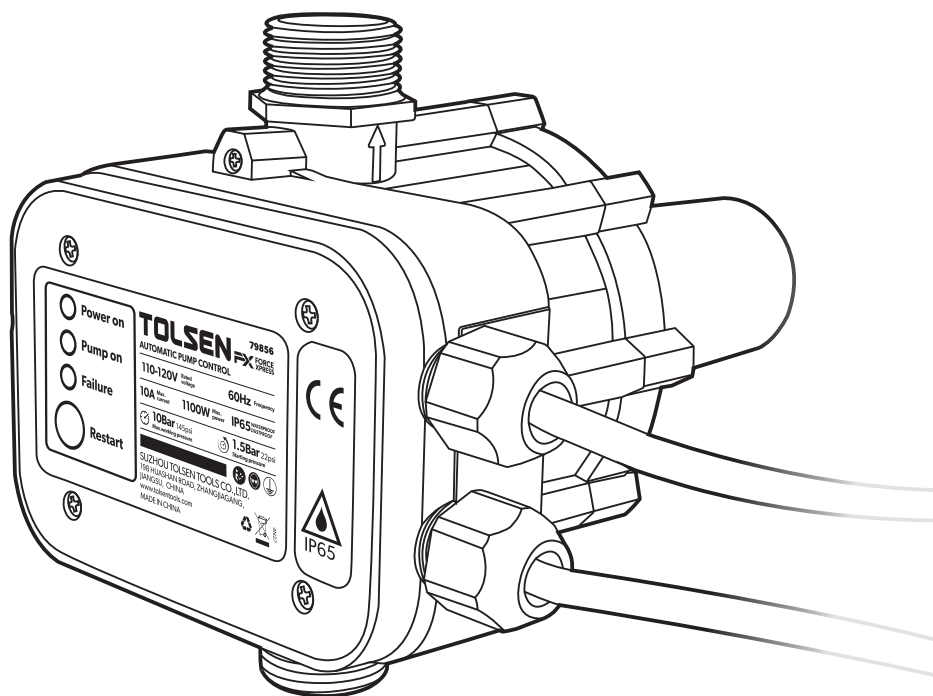
TOLSEN FORCE XPRESS

79856

AUTOMATIC PUMP CONTROL

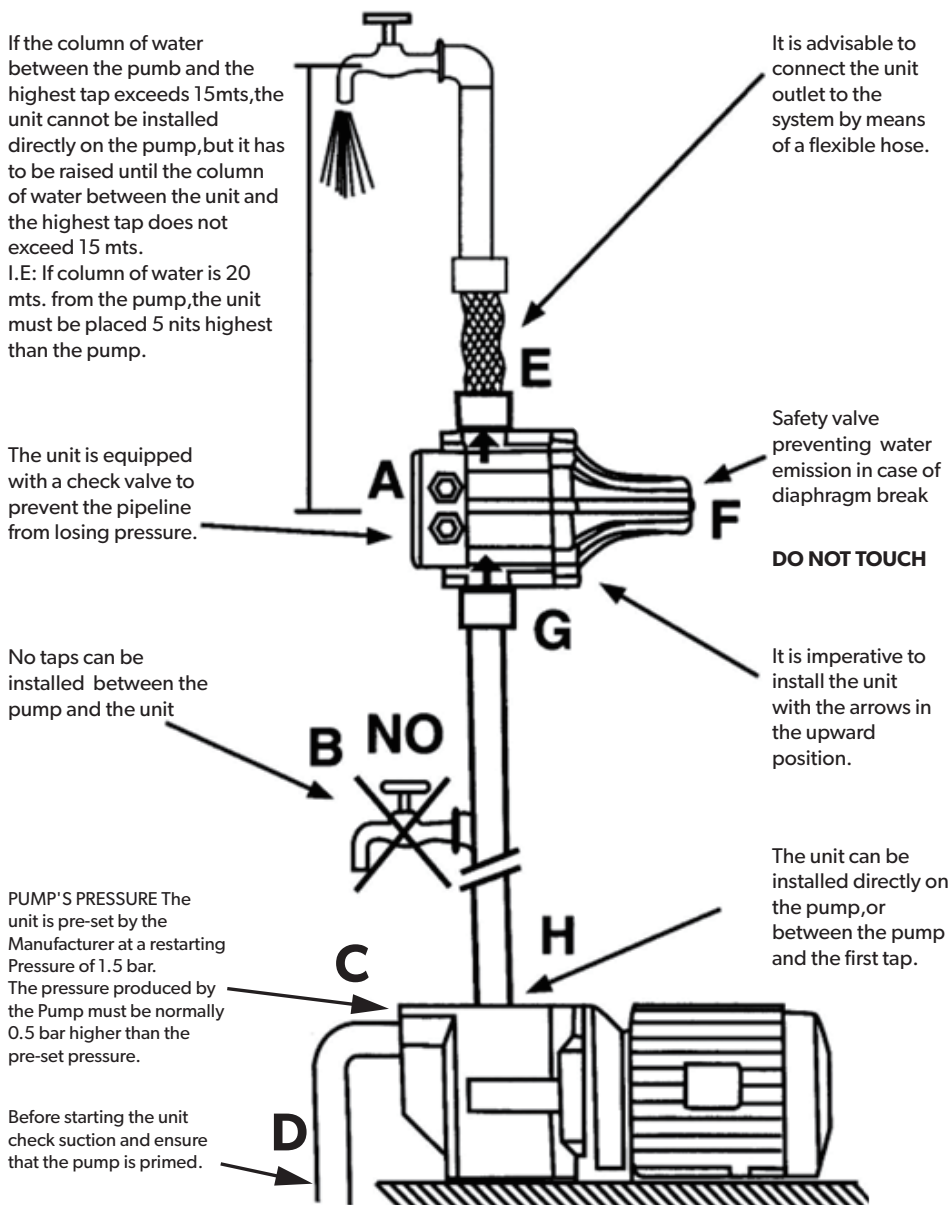
INSTRUCTION MANUAL

10A 1100W



SAVE THIS MANUAL !

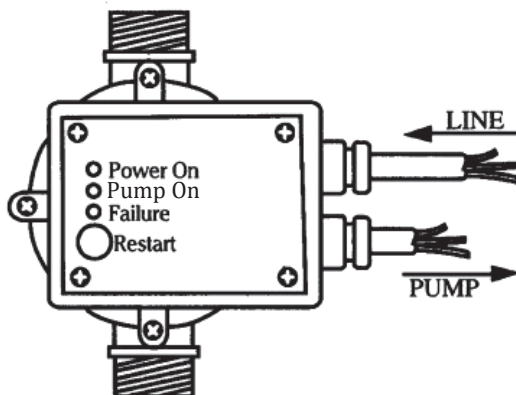
You will need this manual for safety instructions, operating procedures and warranty.
Put it and the original sales receipt in a safe dry place for future reference.

INSTRUCTIONS FOR CORRECT UNIT INSTALLATION

SPECIFICATIONS

Input voltage	110-120V
Frequency	60Hz
Max. current	10A
Max. power	1100W
Maximum working pressure	10Bar(145psi)
Starting pressure	1.5Bar(22psi)
Connection	1"male
Protection rating	IP65

UNIT STARTING AND WORKING



On the cover back and inside the terminal board, a drawing shows how to make connections correctly. The cable used should have 6mm min. and 9mm max. outside diameter, In order to guarantee the water tight enclosure of the box, the four screws on its box must be tightly screwed.

STARTING

When the unit is connected to the electrical network, the green led "Power On" lights up and the yellow led "Pump On" (pump in operation) indicates that the pump has been started.

The pump continues to operate for a few seconds enabling the system to fill in the pipes and to reach the required pressure.

If this lapse is insufficient, the red LED "Failure" lights up. In this event, keep the "Restart" button pressed and wait, with a tap opened, until the red led is off.

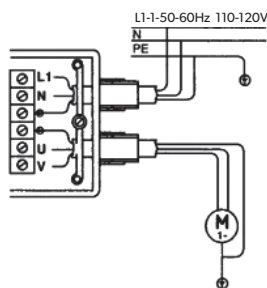
Once released the button and closed the tap, the unit stops the pump at its maximum pressure.

FUNCTIONING

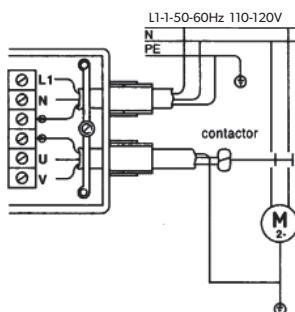
The starting operation archived, the unit is programmed to perform all the pump control operations automatically.

When particular operational breakdowns occur, such as water failure, obstruction of the suction pipe etc., the unit recognizes the breakdown and the red led "Failure" lights up; at the same time a stop signal is sent to the pump to prevent damages caused by its working in the absence of water. Rectification of the failures that have caused the blockage, allows the system to be restarted by pressing the "Restart" button.

WIRING DIAGRAMS FOR CONNECTING THE UNIT TO DIFFERENT KINDE OF PUMP'S MOTORS



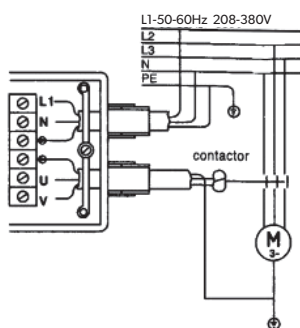
Wiring diagram for connection of single-phase 110-120V pumps up to 3.0 Kw.



Wiring diagram for connection of single phase 110-120V pumps over 1.1 Kw. through remote control switch.

SPECIFICATIONS FOR REMOTE CONTROL SWITCH

Minimum contacts capacity of 4 Kw or 5.5 HP approx. 110-120V



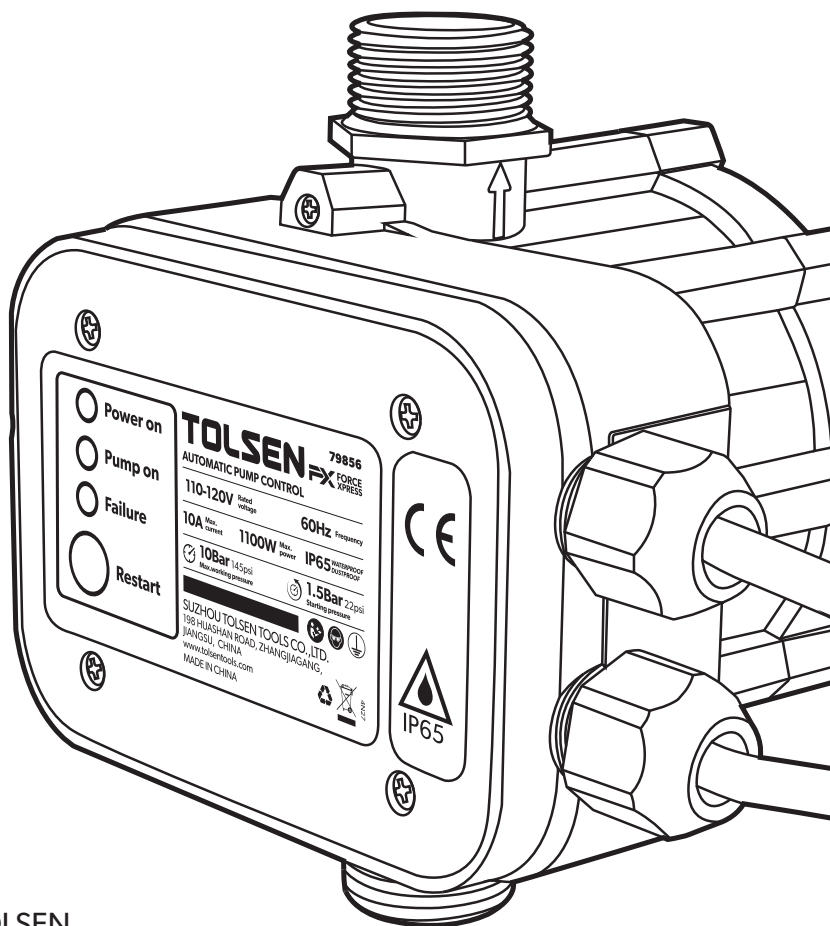
Wiring diagram for connection of three phase 380V motor pumps through remote control switch.

SPECIFICATIONS FOR REMOTE CONTROL SWITCH

Minimum contacts capacity of 4 Kw or 5.5 HP approx. 120V 110-120V

POSSIBLE WORKING DEFECTS

TYPE OF DEFECT	CAUSES DEPENDING ON THE UNIT	CAUSES NOT DEPENDING ON THE UNIT
• The pump does not start	• The electronic card is broken	• Voltage failure • Pump jammed • Electric cables inverted(Line,/motor)
• The pump does not stop	• The electronic card is broken • The flow detector is blocked in the upper position • The reset button is blocked	• Presence of leaks which are higher than the minimum flow 0.6 l/min
• Intermittent pump working	• The electronic card is broken • The pump does not provide sufficient pressure	• Presence of leaks which are lower than the minimum flow 0.6 l/min
• The pump is jammed	• The electronic card is broken • The pump provides a pressure which is lower than • The restarting pressure	• Water failure • Suction problems



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