

Jockey Fire Pump Controller

AS2941—2013

Technical & Operation Manual



Overview

This jockey fire pump controller has been designed to monitor and control a 240V Single phase 3kW Jockey fire pump motor. The controller is fitted with overload and short circuit protection to protect both the cabling within the enclosure and to the motor as well as the motor windings. The current protection is fitted to allow 120% of the normal operating current of the motor.

Auto Start

The panel will start the pump automatically once the main pressure switch contacts are closed. The pump will continue to run until the pressure setpoint is reached and the switch contacts reopen.

The panel is fitted with a spring return to auto selector switch, to switch between manual starting and normal automatic mode.

Indication

The panel is fitted with LED indication for the following;

- ❖ Power On (GREEN) — Indicates that 240V supply is present within the controller.
- ❖ Pump Running (RED) — Indicates that the JC contactor has closed and 240V is supplied to the motor windings.
- ❖ Pump Fault (RED) — Indicates an overload on the jockey pump motor windings.

Components Listing

Main Isolator—415V, 20A

rated JC Contactor—415V,

20A rated

CB1—6A rating fitted for protection and isolation of the 240V control

circuits. CB2—10A rating fitted for protection of the cabling to the

pump motor

TOL—Thermal overload relay fitted to the JC contactor, overload current range selectable from 2- 15A.

PRC—Pump run indicator for indication of the amount of time the pump has started, this value is non resettable.

Troubleshooting

The Pump will not start.

- Ensure the 240V supply is present within the controller indicated by the power on indicator. If this LED is not lit check that circuit breaker CB1 and CB2 are ON (as shown below).
- Ensure the TOL (Thermal Overload Relay) is in a healthy state this is indicated by the pump fault LED not being lit, if the Pump fault LED is lit reset the TOL relay via the reset button located on the relay (as shown below).



Ensure CB1 and CB2 are both ON, Tab should be facing upwards.

TOL Reset Button

- Ensure the Auto/Manual selector has not been damaged and that there is a connection between wires A4 and A5 when the switch is in the automatic state.

Check the pressure switch is wired to the N/O contacts and that it is wired correctly to the panel (connections shown below).

Terminal Connections

Main 240V Incoming Supply

The 240V supply is to be wired to the bottom side of the terminals as follows:

- Active Connection — Terminal 1
- Neutral Connection — Terminal 2
- Main Earth Connection —

Terminal 3 240V Jockey Pump

Connections

The 240V supply to the jockey pump motor is to be wired to the bottom side of the terminals as follows:

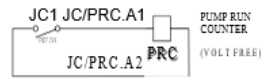
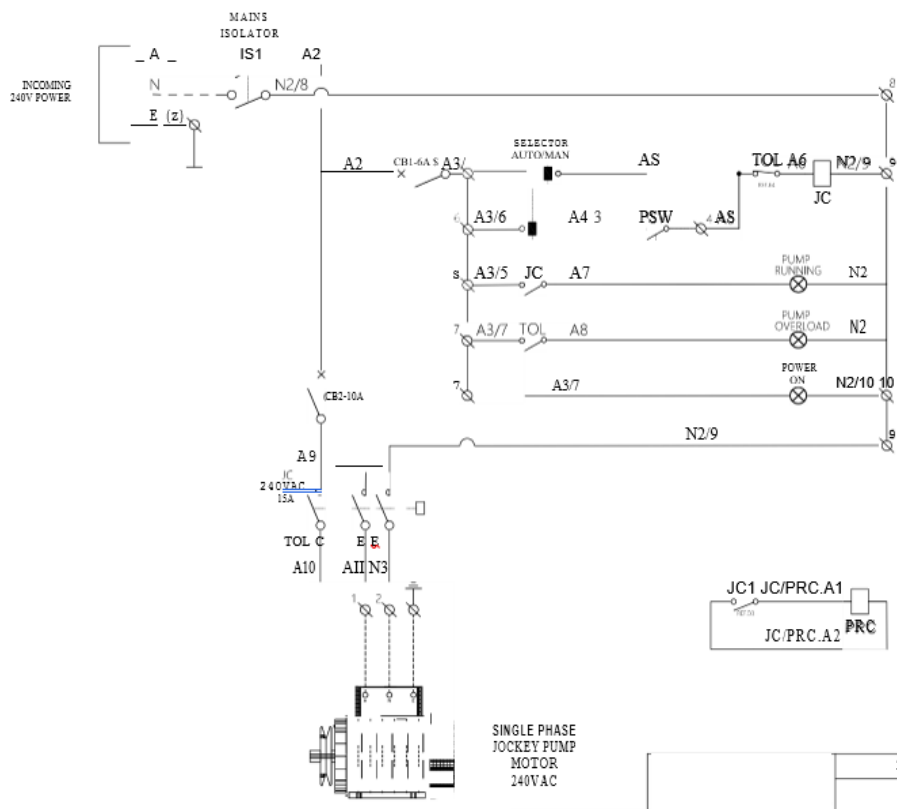
- Active Connection — Terminal 6
- Neutral Connection — Terminal 7
- Main Earth Connection — Terminal 8

240V Main Pressure Switch Connections

The 240V switched supply from the main pressure switch is to be wired to the bottom side of the terminals as follows:

- Switch Common — Terminal 4
- Switch N/O Contact — Terminal 5

Rev/No	Revision note	Date	Signature	Checked
B	ASBULT	27/10/2016		L.C



SINGLE PHASE
JOCKEY PUMP
MOTOR
240V AC

NOTES:
1. Check for correct polarity when not advised.
2. The manufacturer's instructions should be followed.
3. The controller should be installed in a dry, well-ventilated area.
4. The controller should be protected from physical damage.
5. The controller should be protected from dust and dirt.

240V JOCKEY PUMP CONTROLLER		WIRING DIAGRAM	
DESIGN: L.C	FILE: 170330	REV: 1	SCALE: A3 NTS
DRAWN: L.C	DATE: 07/04/2015	NO. OF SHEETS: 1/1	
APPD: [Signature]	DATE: [Signature]	PROJECT NO: 170330	