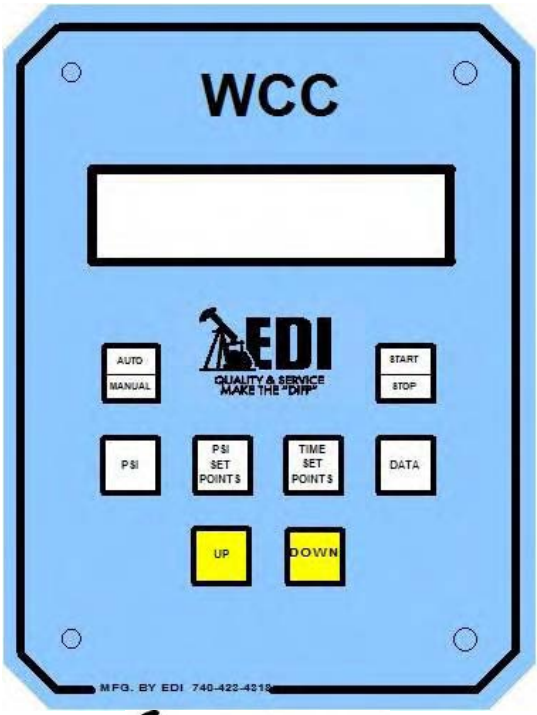
Wellhead Compressor Controller
(WCC)

Series 27A



EDI

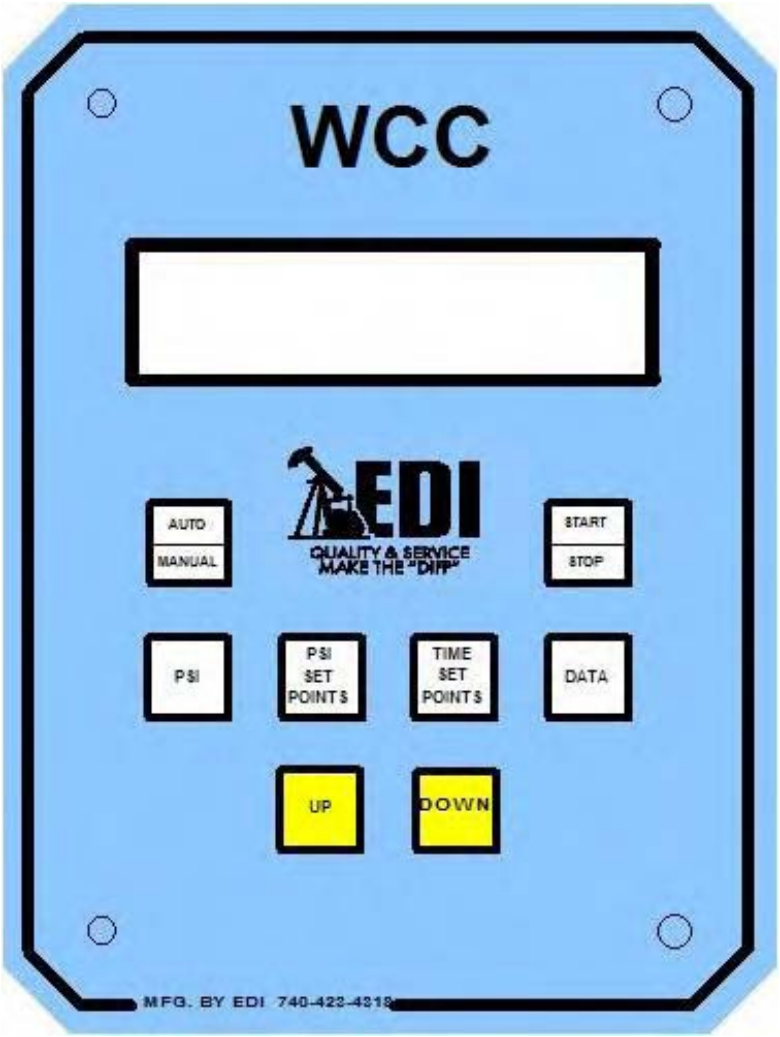
QUALITY & SERVICE
MAKE THE "DIFF"

Electronic Design for Industry

100 Ayers Blvd. Belpre, OH 45714
Ph: 740.401.4000 · Fax: 740.401.4005

www.ediplungerlift.com

Table of Contents


WCC
AUTO
MANUAL
EDI
QUALITY & SERVICE
MAKE THE "DIFF"
START
STOP
PSI
PSI
SET
POINTS
TIME
SET
POINTS
DATA
UP
DOWN
MFG. BY EDI 740-423-4315

Overview

The system is looking for the Hi Suction Set Point. Once the Hi Suction Set Point is reached, the engine will start and run through a warm-up period. After the warm-up period, the clutch will engage and initialize the compressor. The compressor will remain loaded until the Lo Suction Set Point is reached. When the Lo Suction Set Point is reached, the compressor will unload and a Lo Suction Delay time period will start. If the pressure reaches the Hi Suction Set Point before the time period runs out, the compressor will load and the time period will be dismissed, until the Lo Suction Set Point is reached again. If the time period times out, the system will shut down and wait for Hi Suction Set Point to restart the engine.

Note: If the Lo Suction Delay time period is set to zero, the system will shut down when the Lo Suction Set Point is reached. No Lo Suction Delay time period is necessary for operation.

When the Hi Discharge Set Points and the Lo Discharge Set Points are active, and a high or low set point is reached, the system will shut down and activate the Discharge Delay time period. The Discharge Delay time period will not start timing until the actual line pressure (PSI) falls below the Hi Discharge Set Point or rises above the Lo Discharge Set Point. Once the actual PSI and the set point PSI separate, the time period will time out and the system will be allowed to resume normal operation. If no Discharge Delay time period is set, the system will switch to manual mode. Once the system has switched to manual mode, the LCD will read Hi Discharge or Lo Discharge, indicating the problem. After the high or low discharge problem has been solved, you must push the Manual/Auto button to clear the message from the LCD and resume normal operation.

Operation

The Start/Stop Button:
See Pages 7 and 8 for further explanation

The Data Button:

- Engine Starts: Counts the number of times the engine is started and can be reset to zero by using the Up/Down button while reading the engine start count.
- Service Meter: Counts the number of hours the system has been in service and can be reset to zero by using the Up/Down button while reading the service meter count. (i.e. like the trip meter on your vehicle.) The service meter is often used to track oil changes and routine maintenance.
- Engine RPM: Reads revolutions per minute of the engine.
- Hi Suction CNT: Counts the number of times the high suction set point has been reached and can be reset to zero by using the Up/Down button while reading the Hi Suction CNT.
- Lo Suction CNT: Counts the number of times the low suction set point has been reached and can be reset to zero by using the Up/Down button while reading the Lo Suction CNT.
- Hi Discharge CNT: Counts the number of times the high discharge set point has been reached and can be reset to zero by using the Up/Down button while reading the Hi Discharge CNT.
- Lo Discharge CNT: Counts the number of times the low discharge set point has been reached and can be reset to zero by using the Up/Down button while reading the Lo Discharge CNT.
- Total Hour Meter: Counts the total hours the system has been in service and cannot be reset. (i.e. like the odometer on your vehicle.)

The Data Button (cont'd):

- Engine Battery: Reads the actual battery voltage. If a low battery is detected, the system will switch to manual mode.

Engine Stalls: Counts the number of times the engine has failed to start. After 5 failed start attempts, the system will switch to manual mode. This can be reset to zero by using the Up/Down button while reading engine stalls count.

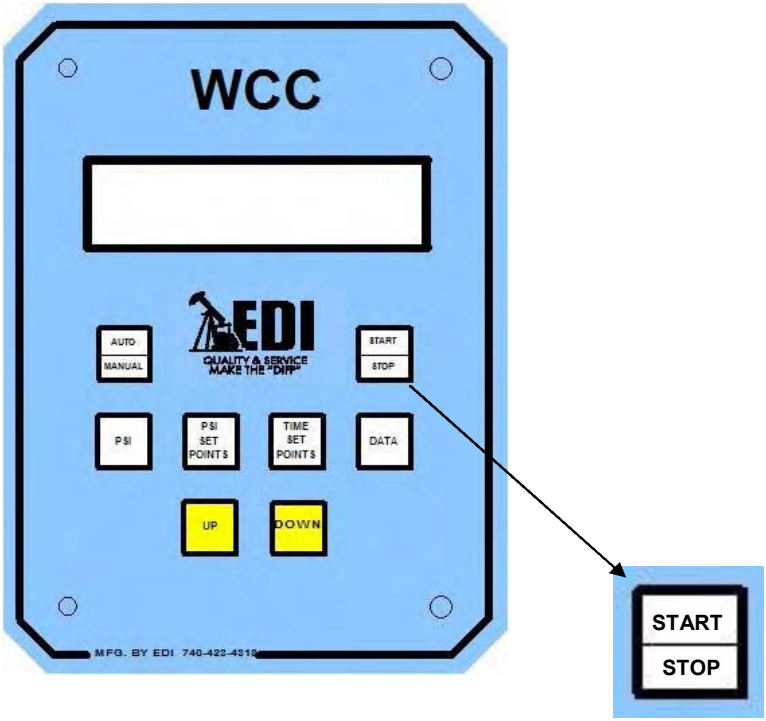
PSI Set Points Button:
Is used to set the Hi Suction PSI Set Point, Lo Suction PSI Set Point, Hi Discharge PSI Set Point, and Lo Discharge PSI Set Point. You can scroll through the PSI set point button until the desired set point appears on the screen. While reading the desired set point, use the Up/Down button to change the set point.

Auto/Manual Button:
Press and hold the Auto/Manual button to see the current mode. To change modes, press the Up/Down button.

Note: In Manual mode, the Discharge Delay time and the Lo Suction Delay time are inactive. All other set points follow normal operation. The engine/motor will remain running.

Time Set Point Button:
Allows the operator to set a Discharge Delay time and a Lo Suction Delay time. To change time, press the Up/ Down button.

Blue wording indicates LCD readout on controller.



Note

The Start/Stop button functions differently depending on the engine type. Please see explanation on the next page.

Start/Stop Button Explanation

The Start/Stop Button:
Single Cylinder & Twin Cylinder Air Cooled Engines
The start/stop button can be used to manually start and stop the engine. The controller must be in manual. To start or stop the engine, press the start/stop button. If the controller is in the automatic mode, the start/stop button will stop the engine and place itself in the manual mode.

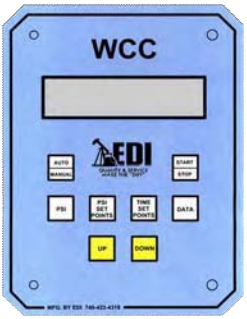
Note: When starting the engine with the key switch, the Lo and Hi Discharge Set Points are inactive. All other set points follow normal operation.

The Start/Stop Button:
Three, Four, and Six Cylinder Water-Cooled Engines
The start/stop button can be used to manually start and stop the engine. The controller must be in manual. To start or stop the engine, press the start/stop button. If the controller is in the automatic mode, the start/stop button will stop the engine and place itself in the manual mode. There is no key switch with these engines.

Compressors

Blackmer
Quincy
Corken
Guided Rotor

Others available
upon request



WCC Controller

EDI's Wellhead Compressor Controller (WCC) is user-friendly; Developed with leading edge technology. The digital inputs (transducers) are extremely reliable and accurate. *No more analog inputs!*

Standard Features Include:

- User defined set points
- Automatic or Manual operation
- Operate from suction pressure
- Protection for high/low discharge pressure
- Protection for low oil pressure
- Motor overload protection
- Engine over-rev protection
- Service Hour Meter
- Total Hour Meter
- Engine battery voltage
- Heavy duty steel skid

Many other options available such as: belt guard, oil controllers, vibration shutdown, pulsation damping, oxygen sensor, by-pass valves, safety guarded housing, etc.

Distributed By:

Electronic Design for Industry

100 Ayers Blvd. Belpre, OH 45714
Ph: 740.401.4000 · Fax: 740.401.4005

www.ediplungerlift.com