

ADVANCED LUBRICATION CONTROLLER with Quick Remote Configuration INSTRUCTION AND PRODUCT DATA SHEET

1. DESCRIPTION:

This high performance/low cost Advanced Lubrication Controller has been designed to control and monitor most small to medium size lubrication systems.

The configuration parameters are all electronically stored, in two separate menus, eliminating the need to set DIP switches or jumpers.

The Operator Menu - is used to adjust pause and cycle intervals.

The Factory/System Menu - is used to configure the type of pump and lubrication system to which the controller is connected.

In addition the controller incorporates a scanner located under the remote control symbol on the front panel. When used with the Transmitter Module, the configuration can be downloaded and stored simply by positioning the module over the symbol and pressing the transmit button.

This allows for a considerable time saving for OEM's, who use the system on a production line, eliminating the need to individually configure each controller.



2. SPECIFICATION:

INPUT CONTACTS:

Power:

110V/230V, 220V Single Phase
and 380V - 50Hz. and 500V - 50Hz. Three Phase
24V DC.

Power Consumption:

20 Watts.

Operating Temperature:

-20°C. to +55°C.

Control Input:

12V Max.
N.O. Pressure Switch.
Micro/Reed Switch.
Proximity (NPN/PNP) Autodetection.

Oil Level:

12V Max.
Make on Low Level.

Impulse Counter:

Max. Switching Frequency;
10Hz. at 25%

OUTPUTS:

Pump/Drive Line:

110V/230V 5A 50/60Hz. or 24V

Alarm Output:

Voltage Free Contact. Max. 250V, 1A.

ENCLOSURE:

External Dimensions:

(Refer to Fig's. 2, 3, 4 and 5.)

Fixing Dimensions:

(Refer to Fig's. 2, 3, 4 and 5.)

Protection Grade:

IP55.

3. INSTALLATION/OPERATION:

MENU OPERATION: (Refer to table on page 2.)

ELECTRICAL CONNECTIONS AND CIRCUIT DETAILS:

(Refer to Fig. 1.)

Note: When using the pause timer it is possible to suspend the timer by closing contacts 14 and 15.

4. TEST PROCEDURES:

The Controller will self-diagnose on power-on and will display any errors on the 4-digit display.

MENU OPERATION:

System Menu

The System Menu is used to configure the type of pump and Lubrication System that is connected to the Controller



To access the *System Menu* press the **UP** and **DOWN** buttons together and hold for two seconds.

Parameter	Screen Display	Description	Operation	
Pump Type.	PNU	The Pump receives a 4 second ON and a 4 second OFF pulse		Press the UP button to switch between the two options.
	ELE	The Pump receives a constant signal.		
Press the MODE button to go to the next option.				
Lubrication System Type	SEP	Progressive System - Monitors switch on progressive divider.		Press the UP button to switch between the three options.
	PSI	Monitors a pressure switch on Single Line Systems.		
	CLOC	No monitoring, just timer.		
Press the MODE button to go to the next option.				
Pause Interval Selection	TI	The Pause between the <i>Pump ON</i> cycle is determined by a timer.		Press the UP button to switch between the three options.
	CYCL	The Pause between Pump cycles is determined by the cycle switch input connected to pulse		

Operator Menu:

The *Operator Menu* is used to adjust the *Pump ON* cycle and the (timer/impulse) pause interval.



To access the *Operator Menu* press and hold the **MODE** button for two seconds.

Parameters	Screen Display	Description	Operation	
Pump On Time	00:55	Indicates the Minimum <i>Pump ON</i> time.	 	Use the UP and DOWN buttons to adjust the setting.
		Exit and go the next option.		Press the MODE button and hold for two seconds.
Pause Timer or Impulse Counter	HH:MM 1320	Indicates <i>Pause Interval</i> . Indicates number of impulses between cycles.	 	Use the UP and DOWN buttons to adjust the setting.
Press the MODE button and hold for two seconds.		Return to normal operating mode.		

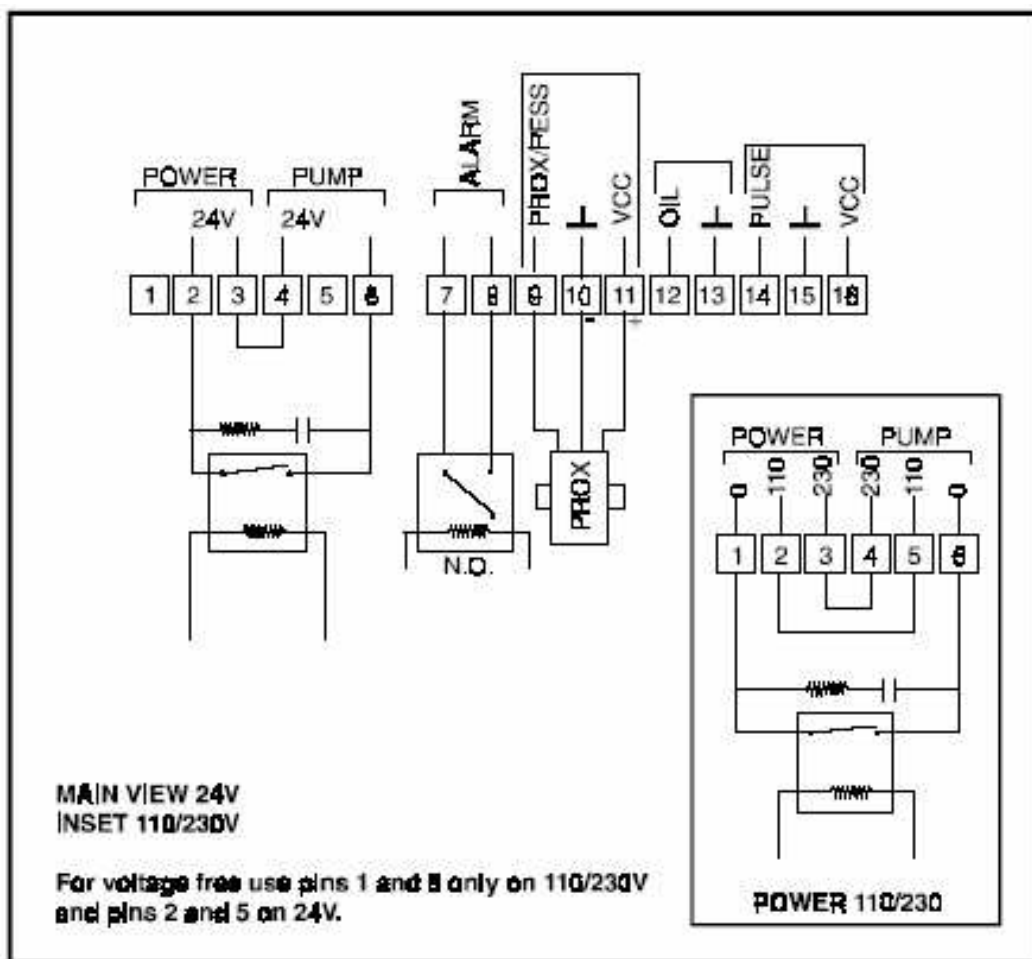


Fig. 1. Connection Details.

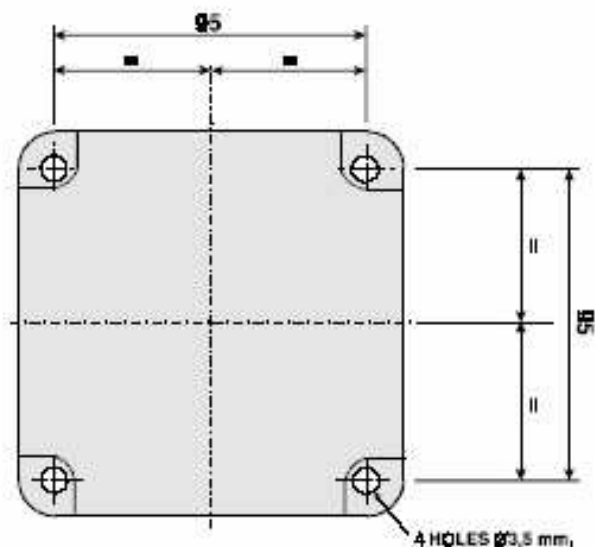


Fig. 2. Part No. 1639076/1639077

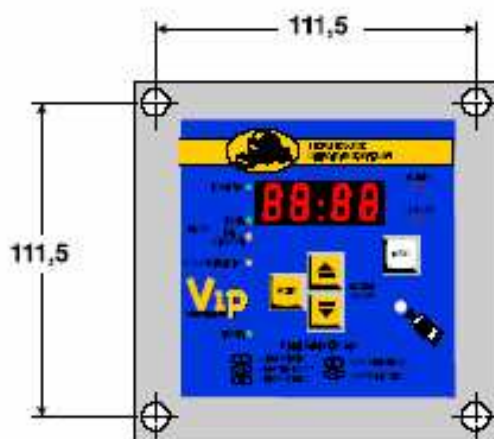


Fig. 3. Part No. 1639080/1639084

5. ORDERING INFORMATION:

Part No.	Description
1639076	VIP Controller 24V Box Version.
1639077	VIP Controller 110/230V Box Version.
1639080	VIP Controller 24V DC, Panel Mounted Version.
1639084	VIP Controller 110/230V Panel Mounted Version.
1639088	Remote Transmit Module.
1639081	VIP Controller 220V Single Phase in Steel Enclosure.
1639087	VIP Controller 380V - 50Hz. Three Phase in Steel Enclosure.
1639089	VIP Controller 500V - 50Hz. Three Phase in Steel Enclosure.
3056205	VIP Controller 115/230V 50/60Hz. with built in 50W 24V transformer

6. SPARES

No user serviceable parts inside.

7. SAFETY REQUIREMENTS

These Controllers must be installed and operated in accordance with the requirements of this Instruction Sheet and should not be used for any purpose than that specified without the agreement of the suppliers.

In addition to the need to observe general safety requirements the following specific hazards apply:

Before installing or removing Advanced Lubrication Controllers from the system disconnect and isolate all power supplies.

8. OPERATING ENVIRONMENT

Controllers must not be operated in excessively corrosive or aggressive environments. If in doubt, please contact our Technical Office.

9. DIAGNOSTIC TABLE:

ALARM CODES	DESCRIPTION OF FAULT	ACTION
AO1	No parameters set.	Set parameters.
AO2	Low Level alarm.	Add lubricant to the system
AO3	The change-over contact (in SEP mode) has not cycled within the specified 'Pump ON' times.	Check for loose fittings and blockages in progressive system and rectify.
AO4	PS Mode: Pressure was already high before the start of the cycle.	Check pressure switch and replace if necessary.
AO5	PS Mode: The system did not achieve pressure during the specified cycle times.	Check for leakage from loose fitting and rectify.



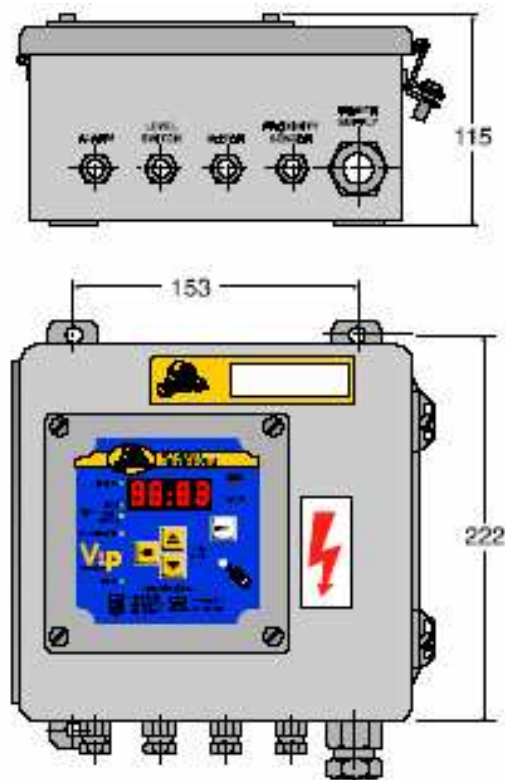


Fig. 4. Part No. 1639081/1639087/1639089

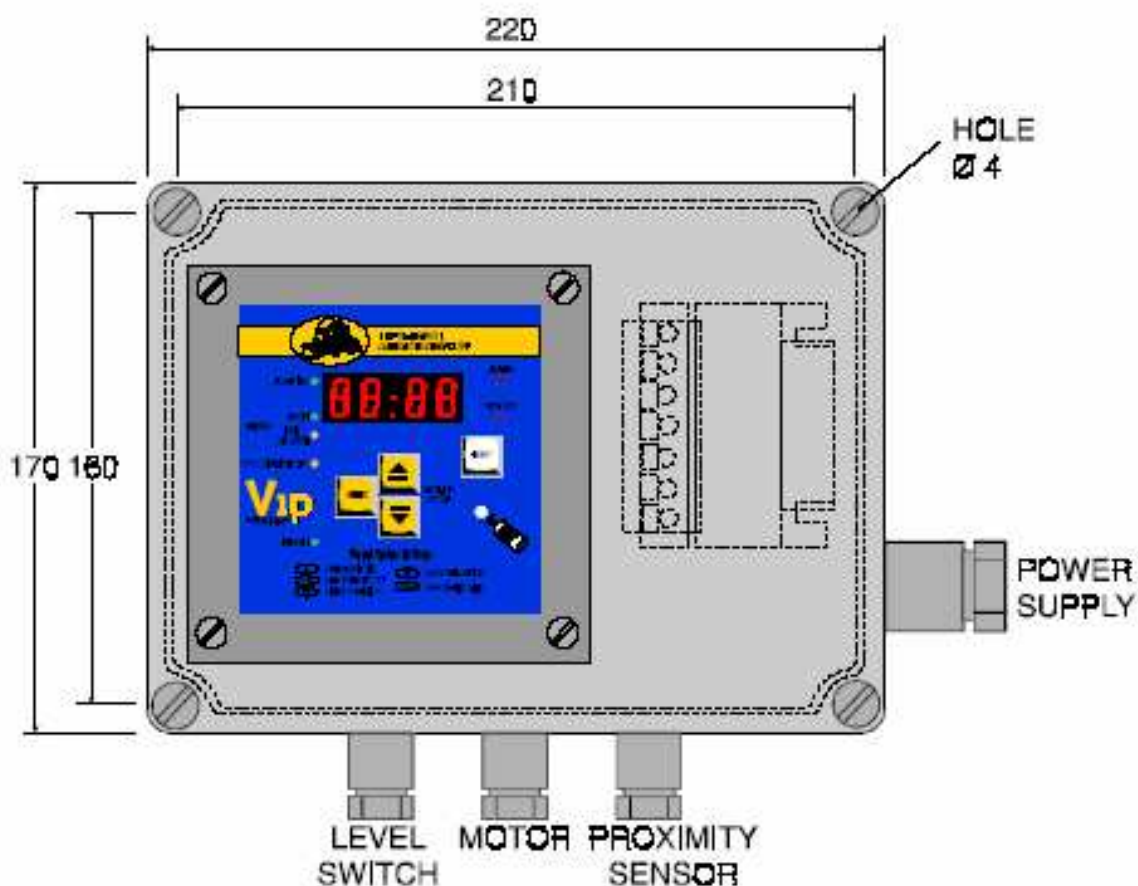


Fig. 5. Part No. 3056205