

# Base Load Installation Manual

Model: BL525C



## TIPS & TRAPS

### TIP # 1      **Solid State Outputs – DC only.**

The Solid State Outputs switch to battery negative and must be connected to slave relays. The other side of these relays is connected to battery positive.

### TIP # 2      **Engine OFF alarms.**

To give advance warning of faults and assist with fault finding, engine alarms are displayed when the engine is OFF as a 'Start Inhibit' alarm.

**The exception is 'High Temperature' which will NOT alarm when the engine is OFF.**

### TRAP # 1      The Low Battery alarm is only indicated on the optional Remote Alarms RA500.

# SETUP – BASE LOAD (Model BL525C)

The front panel Setup mode is a simple and quick way of viewing and changing the Base Load controller parameters.

The Setup mode is entered as follows:

1. Press and **HOLD** the OFF / RESET button.
2. Press and **HOLD** both the STOP **AND** RUN buttons.
3. Release the OFF / RESET button.
4. After 5 seconds the text “BL525C V2.X” is displayed.
5. Release the STOP **AND** RUN buttons.

The BL525C is now in the Setup mode and displaying the software version number. Press STOP to advance to the first parameter.

**RUN** – each press of this button changes the value of the current parameter.

**STOP** – each press of this button skips to the next parameter.

STOP can be pressed repeatedly to view the Setup for each parameter, or to skip to the parameter which needs to be changed.

Once the last parameter U-SPD has been viewed or changed and STOP is pressed all the message “Setup complete.. Press OFF/ RESET” is displayed. Press the OFF / RESET button for the changes to be updated.

## - Factory Default Settings

<b>1</b>	Single / 3 phase / NO ALTERNATOR  * PUMP ->	single phase
		3 phase
		NO ALTERNATOR
<b>2</b>	Low Gen. Volts & Start Detect Frequency	180-200V / 10.0Hz
		180-200V / 11.6Hz
		180-200V / 13,3Hz
		180-200V / 15,0Hz
		180-200V / 16,6Hz

**NORMAL = SET RUNNING WITH NO ALARMS. (NO=NORMALLY OPEN & NC=NORMALLY CLOSED)**

<b>3</b>	High Temp. NO/NC	N/O
		N/C
<b>4</b>	E-STOP NO/NC	N/O
		N/C
<b>5</b>	Low Oil NO/NC  NO OIL PRESSURE SENSOR ->	N/O
		N/C
		[NRS]= N/O
<b>6</b>	Charge / SPARE NO/NC  NO D+ ON CHARGING ALT. ->	N/O
		N/C
		SPARE – N/O

7	High Gen. Frequency	55.0Hz
		57.5Hz
		60.0Hz
8	Low Gen. Frequency	40.0Hz
		42.5Hz
		45.0Hz

**PRE-SET TIMERS**

CRANK TIME	10 seconds
RUN UP TIME	10 seconds
LOAD TRANSFER TIME	2.5 seconds
COOL DOWN TIME	30 seconds

FREQUENCY	RATED ENGINE RPM	
	1500RPM	3000RPM
10.0Hz	300RPM	600RPM
11.6Hz	350RPM	700RPM
13.3Hz	400RPM	800RPM
15.0Hz	450RPM	900RPM
16.6Hz	500RPM	1000RPM

\* **NO ALTERNATOR** – selected when the engine is driving a Pump and the engine MUST have a charging alternator with a D+ output as this is used as the only Start Detect signal.

# WIRING INFORMATION– BASE LOAD (Model BL525C)

## P1

Inputs switched to battery negative.

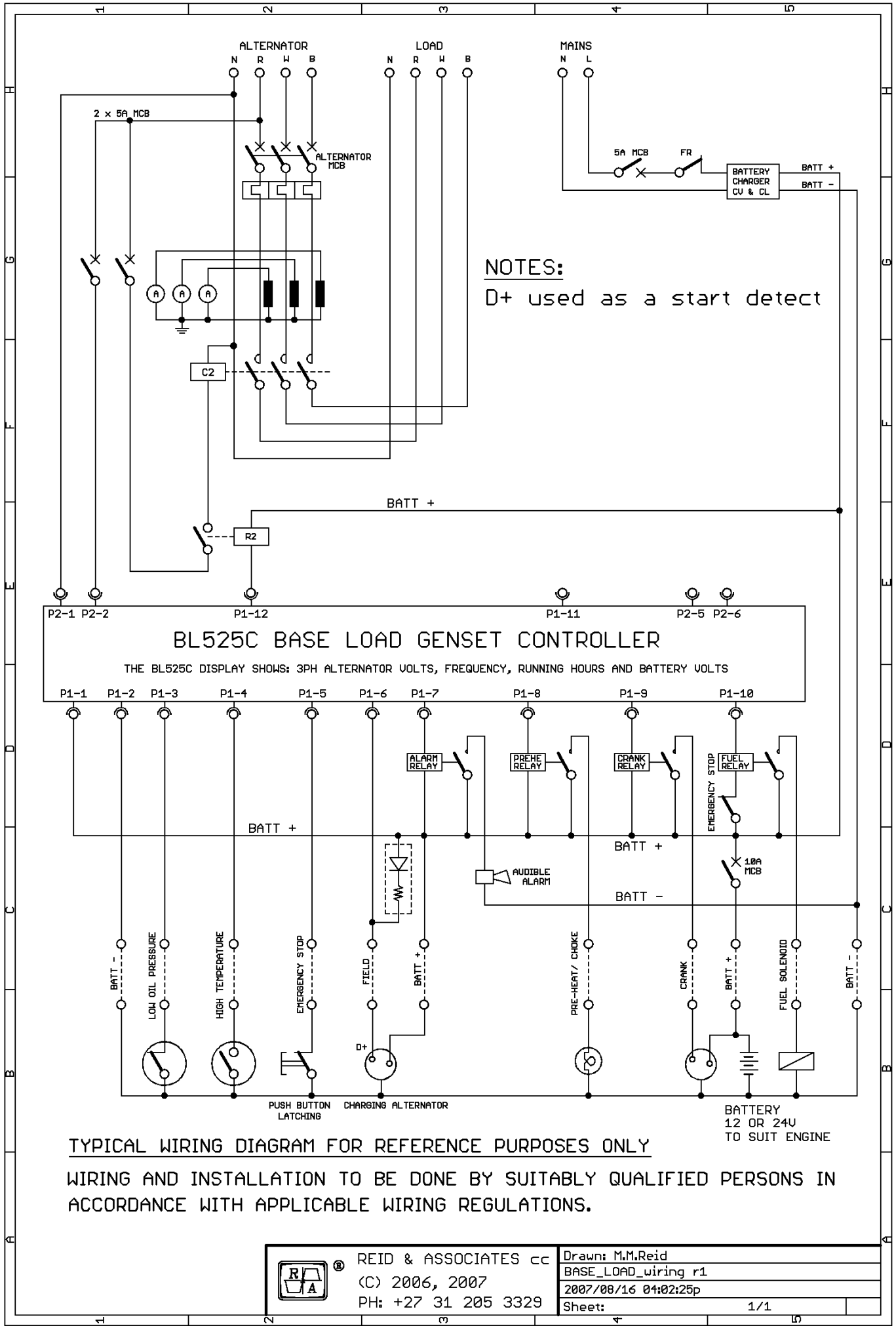
- 1 - BATTERY POSITIVE
- 2 - BATTERY NEGATIVE
- 3 - INPUT - LOW OIL PRESSURE
- 4 - INPUT - HIGH TEMPERATURE
- 5 - INPUT - EMERGENCY STOP (NORMALLY CLOSED - OPEN TO STOP ENGINE - FAIL SAFE).  
Second pole also normally closed in series with the Fuel Solenoid.
- 6 - INPUT - CHARGING ALTERNATOR D+
- 7 - OUTPUT - AUDIBLE ALARM
- 8 - OUTPUT - CHOKE / PREHEAT
- 9 - OUTPUT - CRANK
- 10 - OUTPUT - FUEL SOLENOID HOLD
- 11 - OUTPUT - FUEL SOLENOID PULL (Pulses for 0.5 seconds at the start of cranking)
- 12 - OUTPUT - ALTERNATOR ON LOAD

## P2

Outputs switch to battery negative, **slave relay** common's to battery positive.

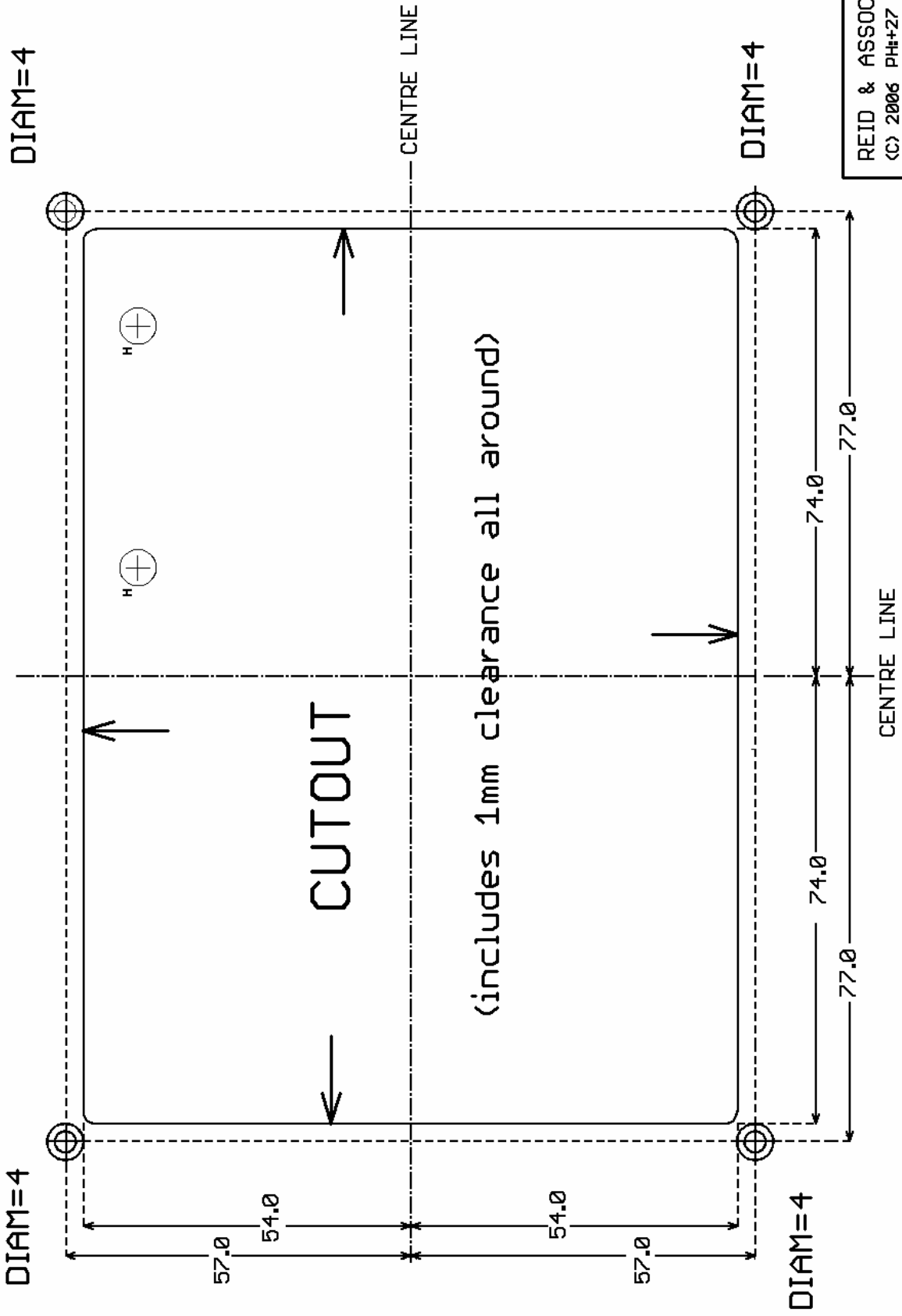
- 1 - ALTERNATOR NEUTRAL
- 2 - ALTERNATOR PHASE 1
- 3 - NO CONNECTION
- 4 - ALTERNATOR PHASE 2
- 5 - NO CONNECTION
- 6 - ALTERNATOR PHASE 3

**FOR SINGLE PHASE ALTERNATORS – CONNECT PHASE1, PHASE 2 AND PHASE3 IN PARALLEL**



**NOTES:**  
 D+ used as a start detect

**TYPICAL WIRING DIAGRAM FOR REFERENCE PURPOSES ONLY**  
 WIRING AND INSTALLATION TO BE DONE BY SUITABLY QUALIFIED PERSONS IN ACCORDANCE WITH APPLICABLE WIRING REGULATIONS.



REID & ASSOCIATES CC (C) 2006 PH#27 31 206 3329 DIMENSIONS IN MM SCALE: 1:1	AMF mini & BL525 BASE LOAD PANEL CUTOUT Rev: 0 DATE: 30/05/2006
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M3 SCREWS USED SO DIAM=4 ALLOWS CLEARANCE FOR  
POWDER COATING

## WARRANTY

Reid & Associates CC warrants each new product manufactured and sold to be free from defects in material, workmanship and construction and that when installed in accordance with this Installation Manual and used in accordance with the Operation Manual will perform to applicable specifications for a period of one year after original delivery.

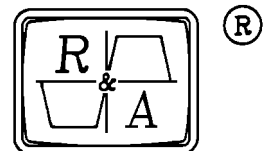
If examination by Reid & Associates CC discloses that the product has been defective, then our obligation is limited to repair or replacement, at our option, of the defective unit or its components.

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Products must be returned to Reid & Associates CC properly packed with transport charges prepaid to Reid & Associates CC, return transport charges will be F.O.B. Reid & Associates CC.

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