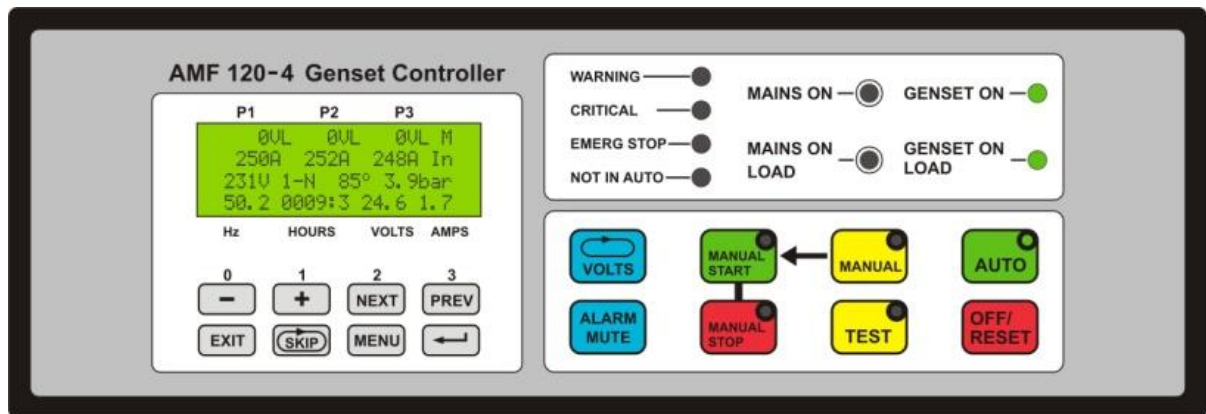


AMF120-4

Installation Manual



TIPS & TRAPS

TIP # 1 **Digital Inputs.**

The Digital inputs switch to battery negative.

TIP # 2 **Start Inhibit 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. For example Low Water and No Fuel.

TIP # 3 **Checking the Mains sensing.**

To check the Mains sensing, select Manual or engage the Emergency Stop before selecting AUTO.

Use the 'MAINS ON' led to check if the mains voltage is within limits and also if the wiring is correct.

The mains voltage for each phase is shown on the top line of the LCD display. An 'L' after the voltage indicates the voltage is low and an 'H' after the voltage indicates the voltage is high.

This is a simple way of avoiding repeated engine starts while fault finding.

TIP # 4 **Low Mains Return voltage = Mains Trip + 5 volts → trip = 190V & return = 195V**

High Mains Return voltage = Mains Trip - 5 volts → trip = 250V & return = 245V

TIP # 5 **The internal Mains on Load Relay is normally closed so turning the controller to OFF or disconnecting the batteries will keep the Mains on Load.**

TIP # 5 **On the Dual 44/244 suppressor connect the brown/ red wires across the AOL relay coil and the blue/ black wires across the MOL relay coil.**

TRAP# 1 **Do NOT over-tighten the nut on the base of the 3 Phase Transient Suppressor.**

TRAP# 2 **Do NOT extend the wires on the Dual 44/244 suppressor.**

TRAP# 3 **The rear panel labeling of double row connector P4 can be confusing – the arrows indicate which pin names are on the top row and those on the bottom row.**

SETUP

To change parameters in the Setup:

1. Press the **MENU** key
2. Press **NEXT** until the > is opposite **Setup**
3. Press **Enter**
4. The > is opposite 'View/ Change Setup' menu
5. Press **Enter**
6. Enter the **Code**: using the keys under the blue numbers **0 1 2 3**
7. Press the **NEXT** or **PREV** keys until the > is opposite the parameter to be changed
8. Press the **+** or **-** keys to increase or decrease the value
9. Press the **SKIP** key to skip to the next screen
10. Press the **EXIT** key to save the changes and return to the previous menu
11. Press the **EXIT** key to return to the main menu.

AMF120-4 WIRING INFORMATION

P1

RS-232 – connects to a portable printer and **USB** – connects to a PC.

P2 (numbers start from the left)

- 1 - NO CONNECTION
- 2 - Mains phase 1
- 3 - Mains phase 2
- 4 - Mains phase 3
- 5 - Mains NEUTRAL
- 6 - NO CONNECTION
- 7 - Alternator phase 1
- 8 - Alternator phase 2
- 9 - Alternator phase 3
- 10 - ALTERNATOR NEUTRAL

A 3 PHASE TRANSIENT SUPPRESSOR - Type AMF-SUP3 - MUST BE CONNECTED ACROSS THE MAINS PHASES & NEUTRAL AT THE CONTROLLER. EACH OF THE MAINS PHASES MUST HAVE IT'S OWN 5A MCB.

P3 (numbers start from the left)

Potential free contacts inside the AMF120-4 rated at 250VAC/ 5A and 50VDC/ 5A.

- 1 - Alternator on Load
- 2 - Alternator on Load
- 3 - Mains on Load
- 4 - Mains on Load
- 5 - Alarm
- 6 - Alarm
- 7 - Spare/ Preheat
- 8 - Spare/ Preheat
- 9 - Crank
- 10 - Crank
- 11 - Fuel
- 12 - Fuel

MAINS AND ALTERNATOR SWITCHGEAR MUST BE ELECTRICALLY AND MECHANICALLY INTERLOCKED !

P4 (bottom) (numbers start from the left)

Inputs switched to battery negative.

- 1 - BATTERY NEGATIVE
- 2 - BATTERY POSITIVE
- 3 - Charging Alternator D+
- 4 - NO Fuel
- 5 - High Temperature
- 6 - Manual Stop (optional)
- 7 - Low Oil Pressure
- 8 - NO CONNECTION
- 9 - Manual Start (optional)
- 10 - Low Bulk Tank - Warning

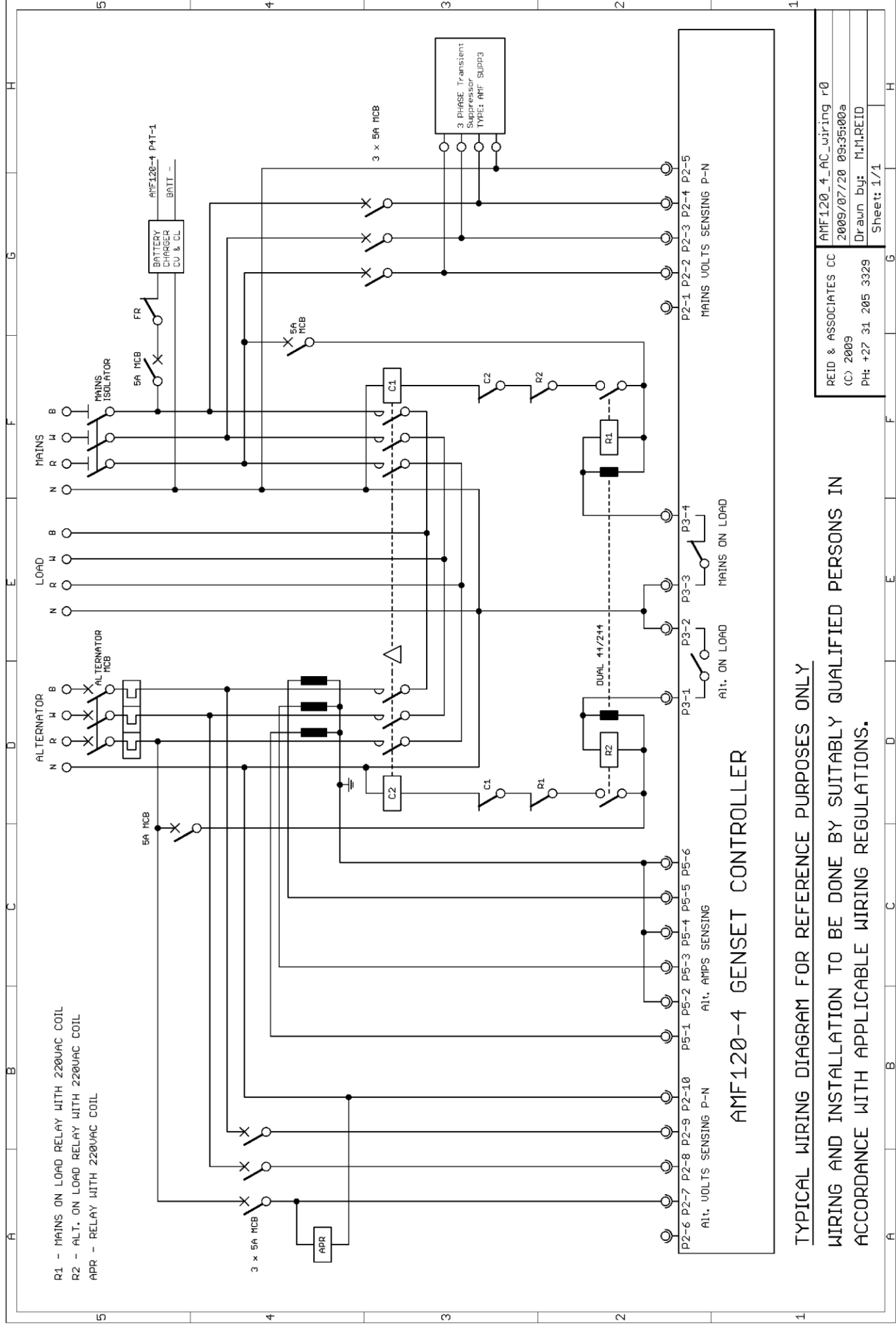
P4 (top) (numbers start from the left)

Inputs switched to battery negative.

- 1 - BATTERY CHARGER POSITIVE
- 2 - RA500
- 3 - NO CONNECTION
- 4 - Temperature Analog – VDO 801/5/1
- 5 - Oil Pressure Analog – VDO 11.06 29/12 0-10bar
- 6 - NO CONNECTION
- 7 - Low Water
- 8 - Emergency Stop
- 9 - Low Fuel - Warning
- 10 - Remote Run/ Stop – connect to Battery negative to stop

P5 (CT 0-5A) (numbers start from the left)

- 1 - Alternator amps phase 1 CT
- 2 - Alternator amps phase 1 CT
- 3 - Alternator amps phase 2 CT
- 4 - Alternator amps phase 2 CT
- 5 - Alternator amps phase 3 CT
- 6 - Alternator amps phase 3 CT

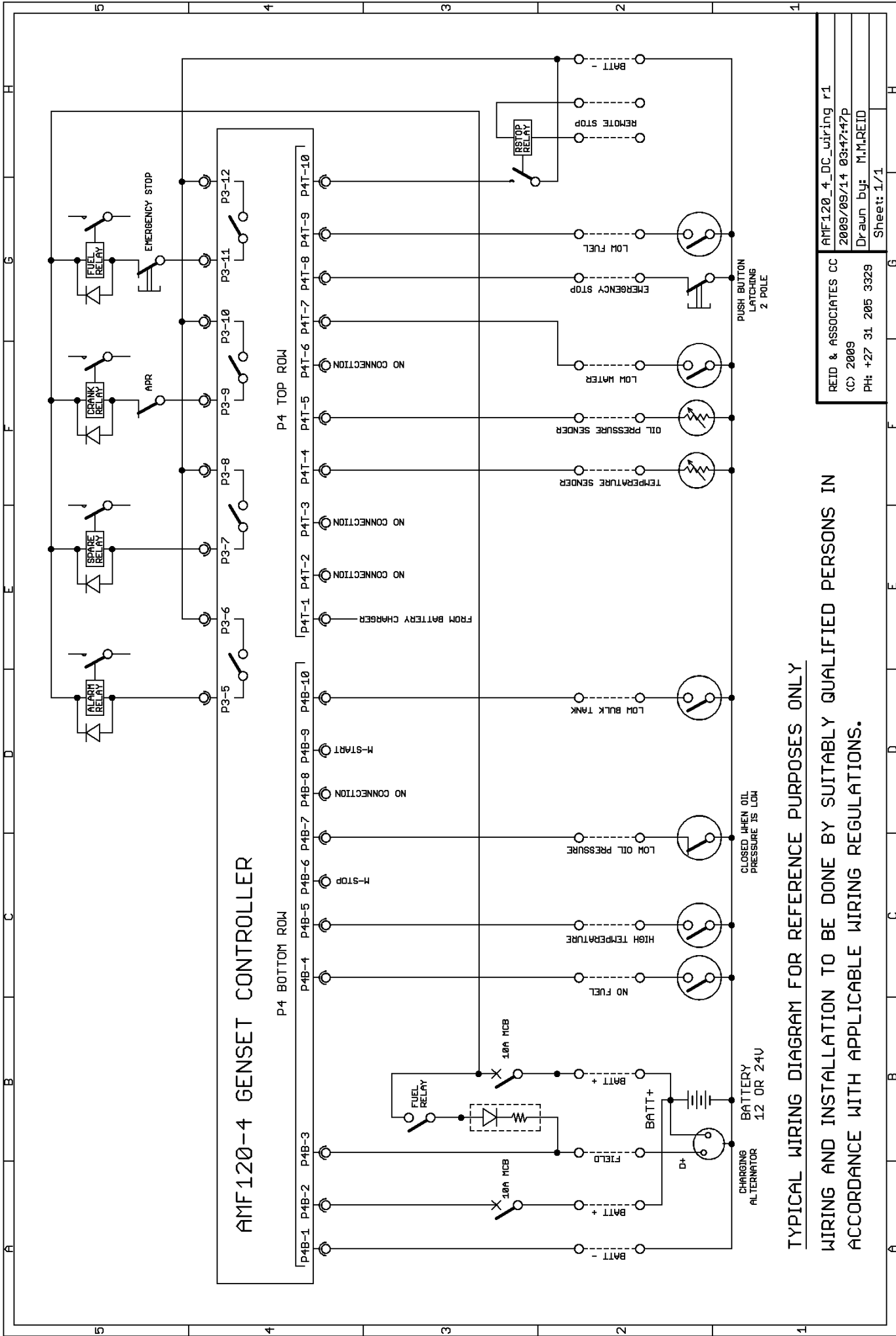


R1 - MAINS ON LOAD RELAY WITH 220VAC COIL
 R2 - ALT. ON LOAD RELAY WITH 220VAC COIL
 APR - RELAY WITH 220VAC COIL

AMF120-4 GENSET CONTROLLER

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

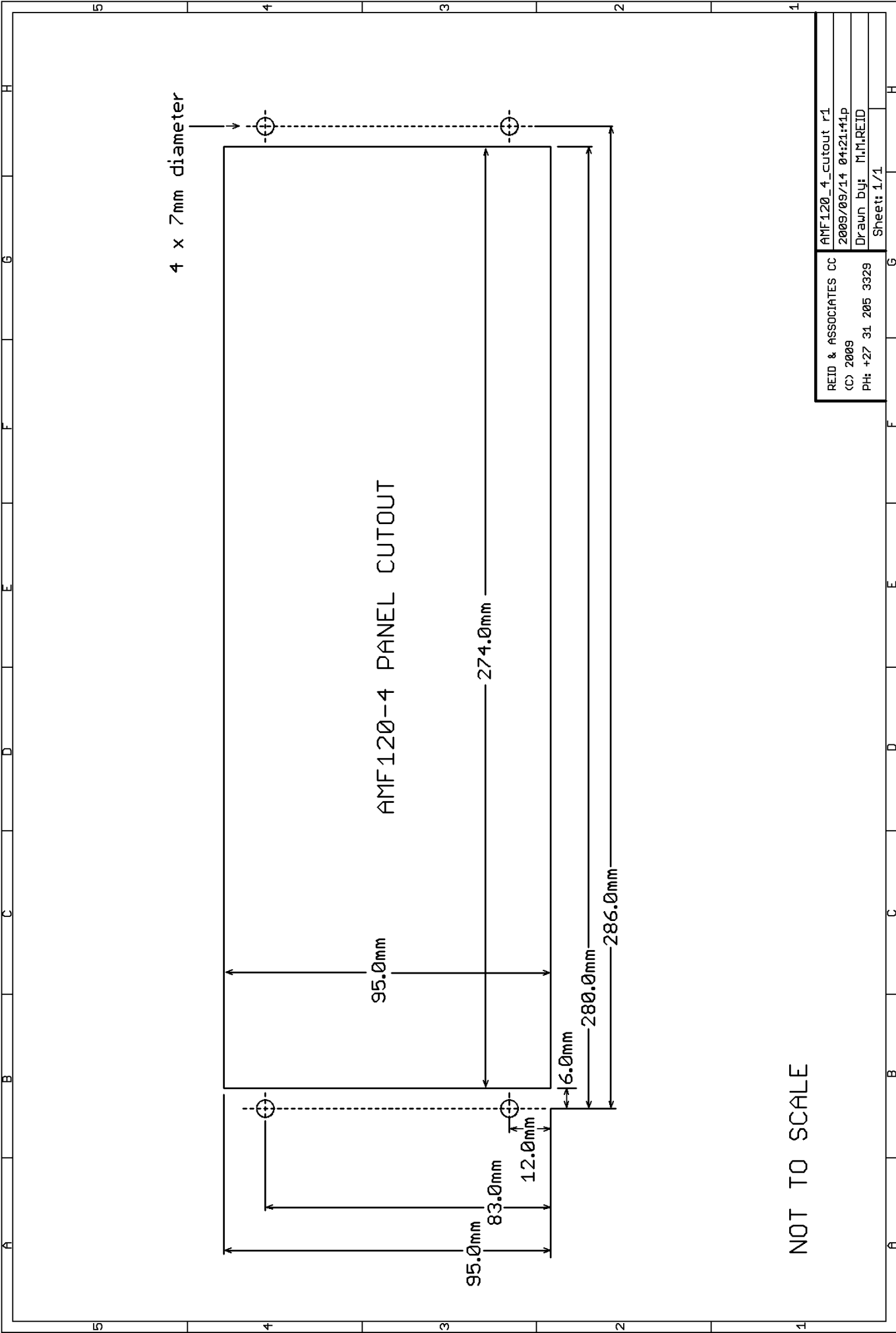
REID & ASSOCIATES CC (C) 2009 PH: +27 31 205 3329	AMF120-4_AC_wiring r0 2009/07/20 09:35:00a Drawn by: M.M. REID Sheet: 1/1
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AMF120-4 GENSET CONTROLLER

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

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(C) 2009	2009/09/14 03:47:47P
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	Sheet: 1/1



NOT TO SCALE

REID & ASSOCIATES CC (C) 2009 PH: +27 31 205 3329	AMF120_4_cutout r1 2009/09/14 04:21:41P Drawn by: M.H.REID Sheet: 1/1
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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.

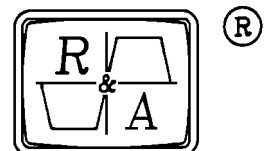
If examination by Reid & Associates CC discloses that the product has been defective, then our obligation is limited to repair or replacement, at our option, of the defective unit or its components.

Reid & Associates CC is not responsible for products which have been subject to misuse, alteration, accident or repairs not performed by Reid & Associates CC.

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.

The foregoing warranty constitutes Reid & Associates CC sole liability, and is in lieu of any other warranty, of merchantability or fitness. Reid & Associates CC shall not be responsible for any incidental or consequential damages arising from any breach of warranty.

Reid & Associates CC



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