

# MASTERVOLT

APPENDIX / ANHANG / ANNEXE

## ALPHA ALTERNATOR

DIMENSIONS, INSTALLATION DRAWINGS AND CHARACTERISTICS



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## 1 DIMENSIONS

### 1.1 DIMENSIONS ALPHA ALTERNATOR MODEL 12/90

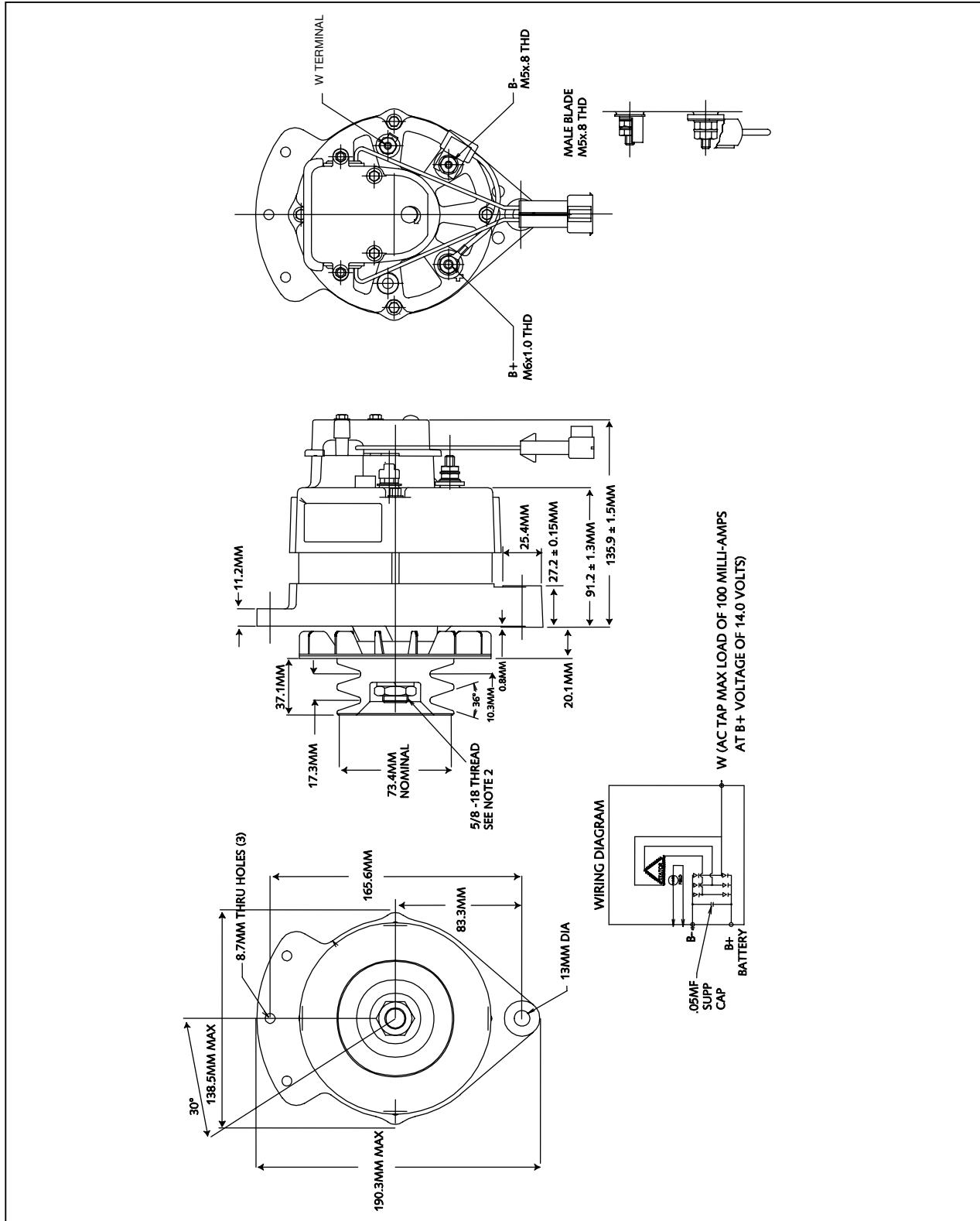


Figure A-1: dimensions Alpha alternator model 12/90 (enclosure A)

**1.2 DIMENSIONS ALPHA ALTERNATOR MODELS 12/130, 24/75 AND 24/110**

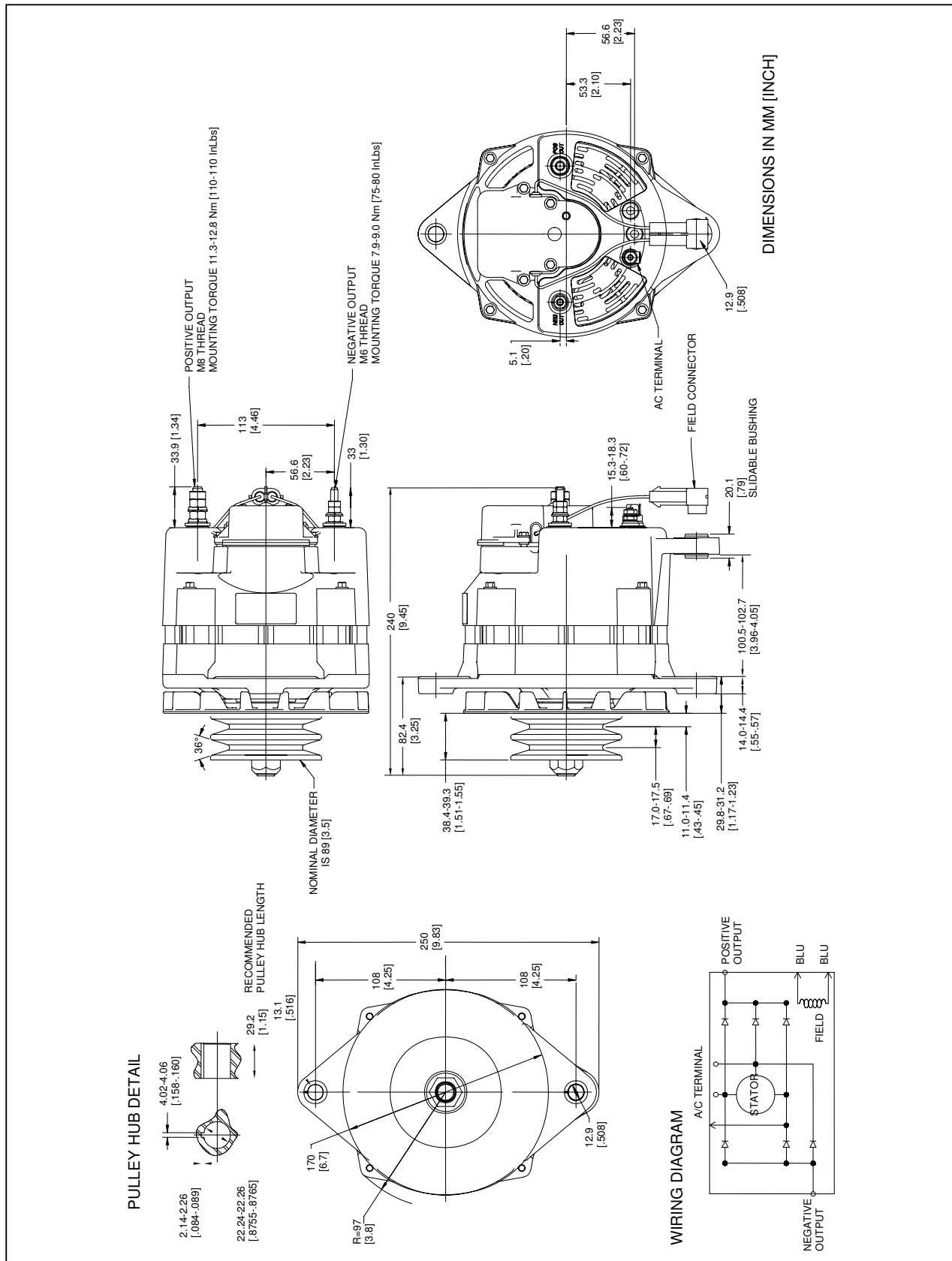


Figure A-2: dimensions Alpha alternator models 12/130, 24/75, 24/110 and 24/150 (enclosure B)

## 1.3 DIMENSIONS ALPHA ALTERNATOR MODEL 24/150

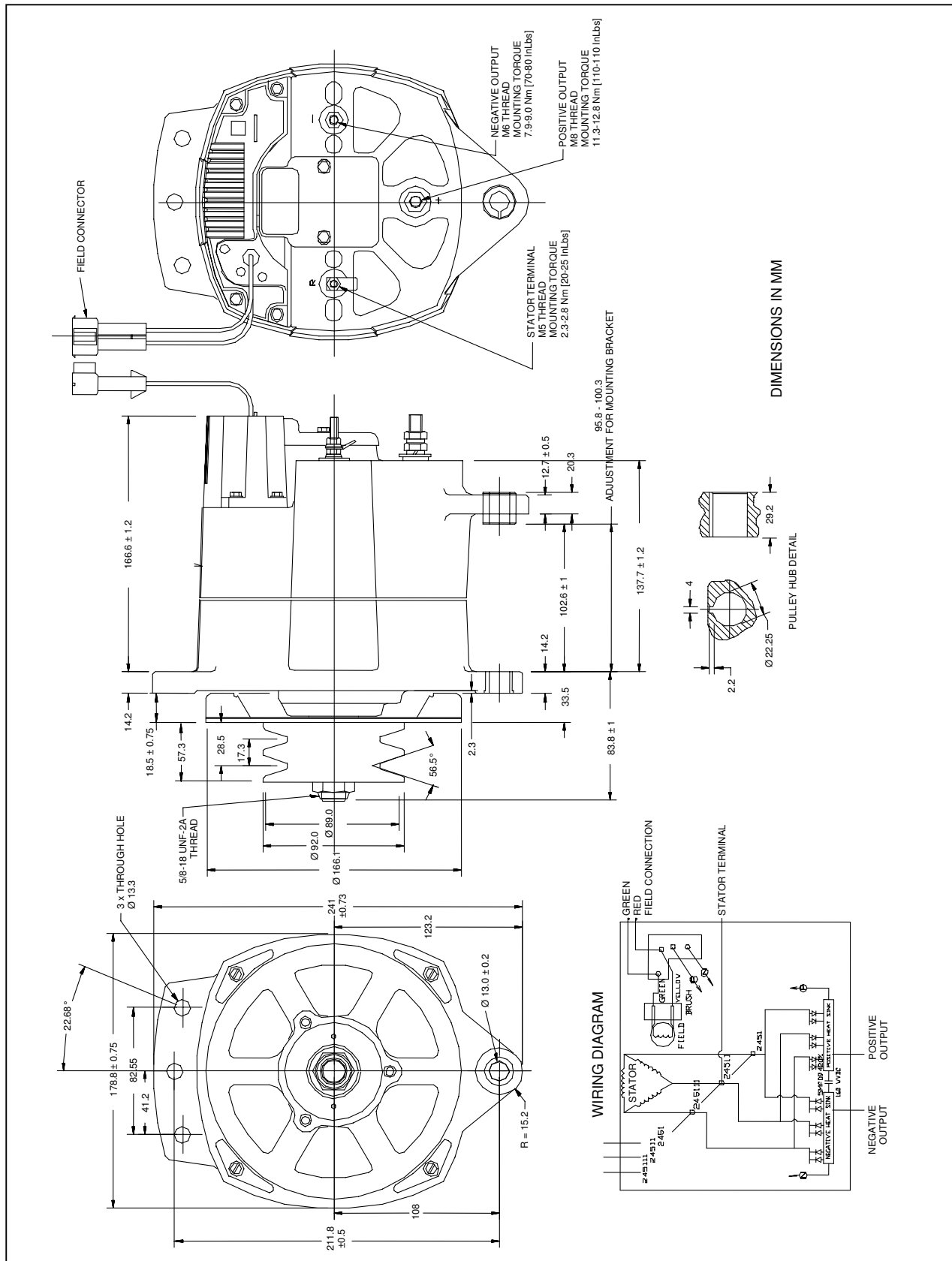


Figure A-3: dimensions Alpha alternator model 24/150 (enclosure C)

**1.4 DIMENSIONS ALPHA PRO II REGULATOR**

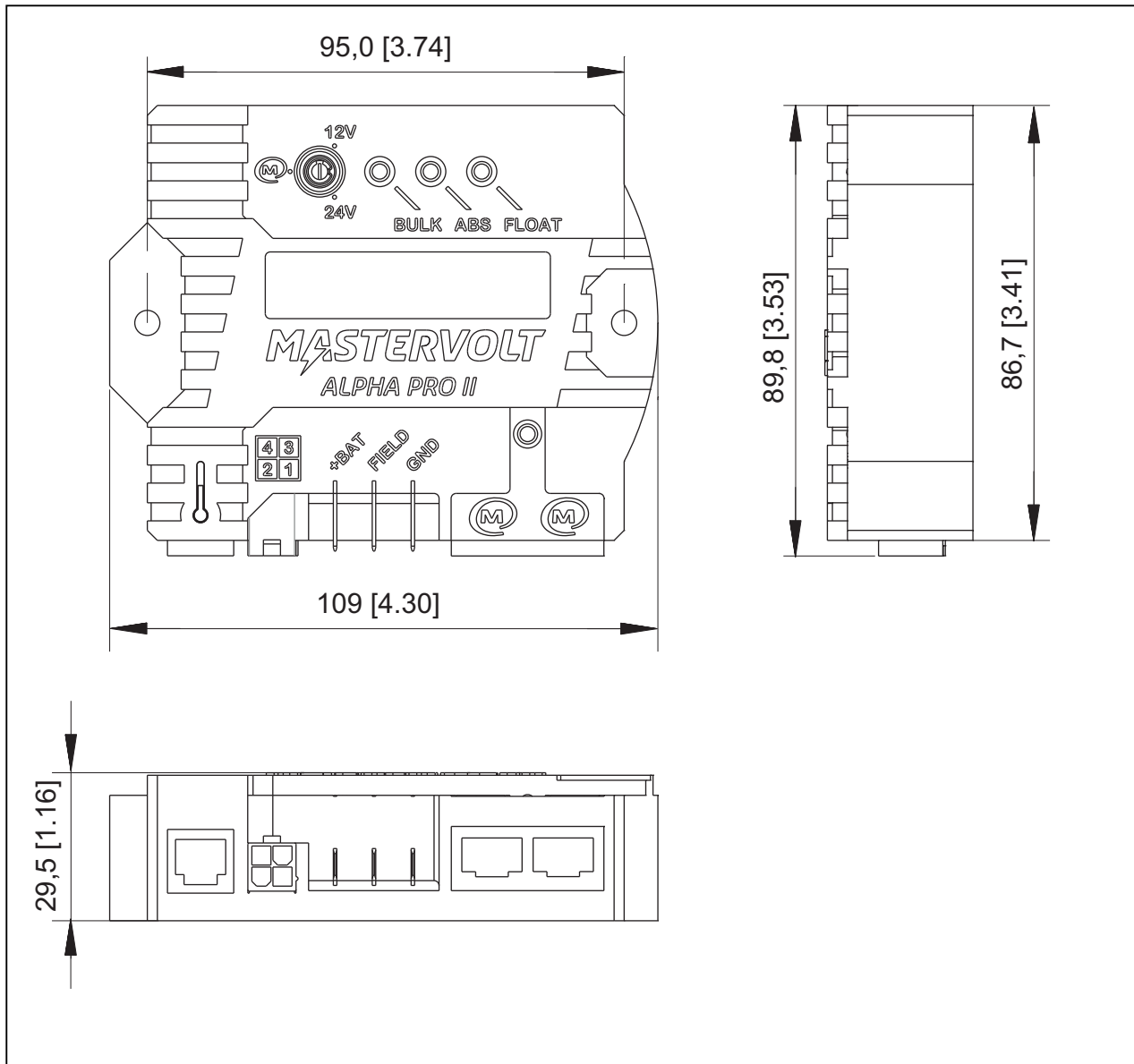


Figure A-5: dimensions of the Alpha Pro II regulator (all models)

## 2 INSTALLATION DRAWINGS

### 2.1 ALPHA ALTERNATOR MODEL 12/90

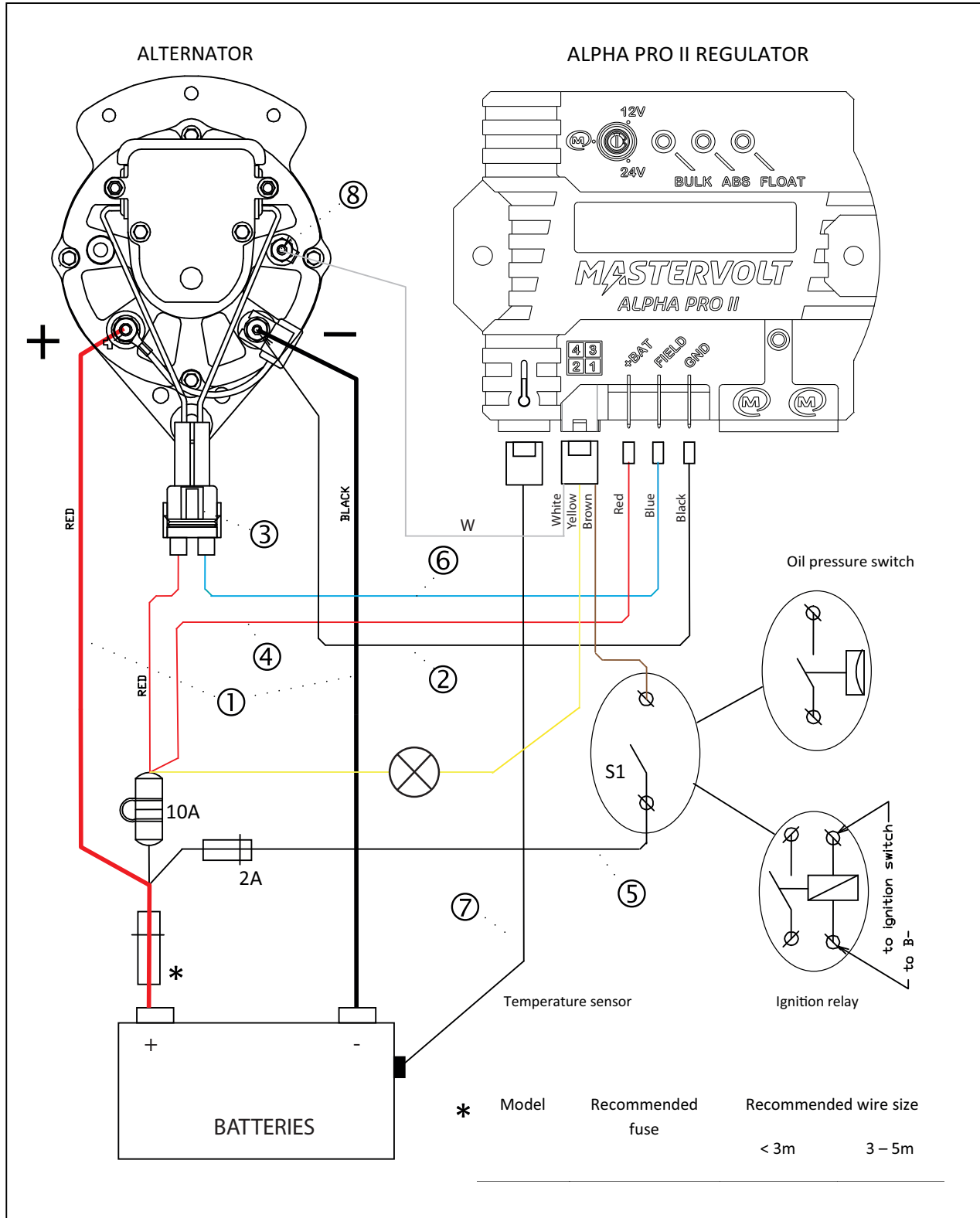


Figure A-6: Installation drawing Alpha alternator model 12/90

2.2 ALPHA ALTERNATOR MODELS 12/130, 24/75 AND 24/110

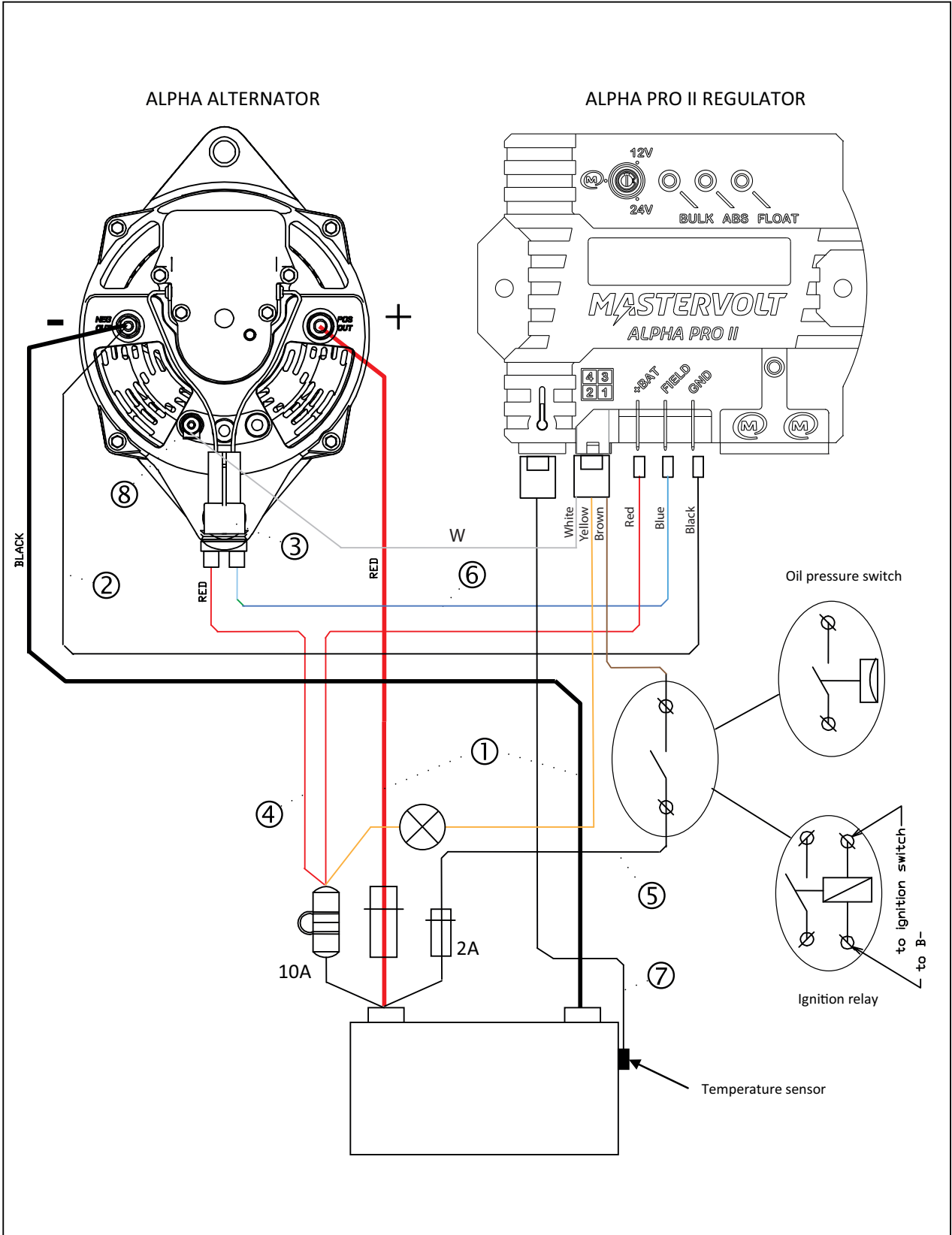


Figure A-7: Installation drawing Alpha alternator models 12/130, 24/75 and 24/110



## 2.3 ALPHA ALTERNATOR MODEL 24/150

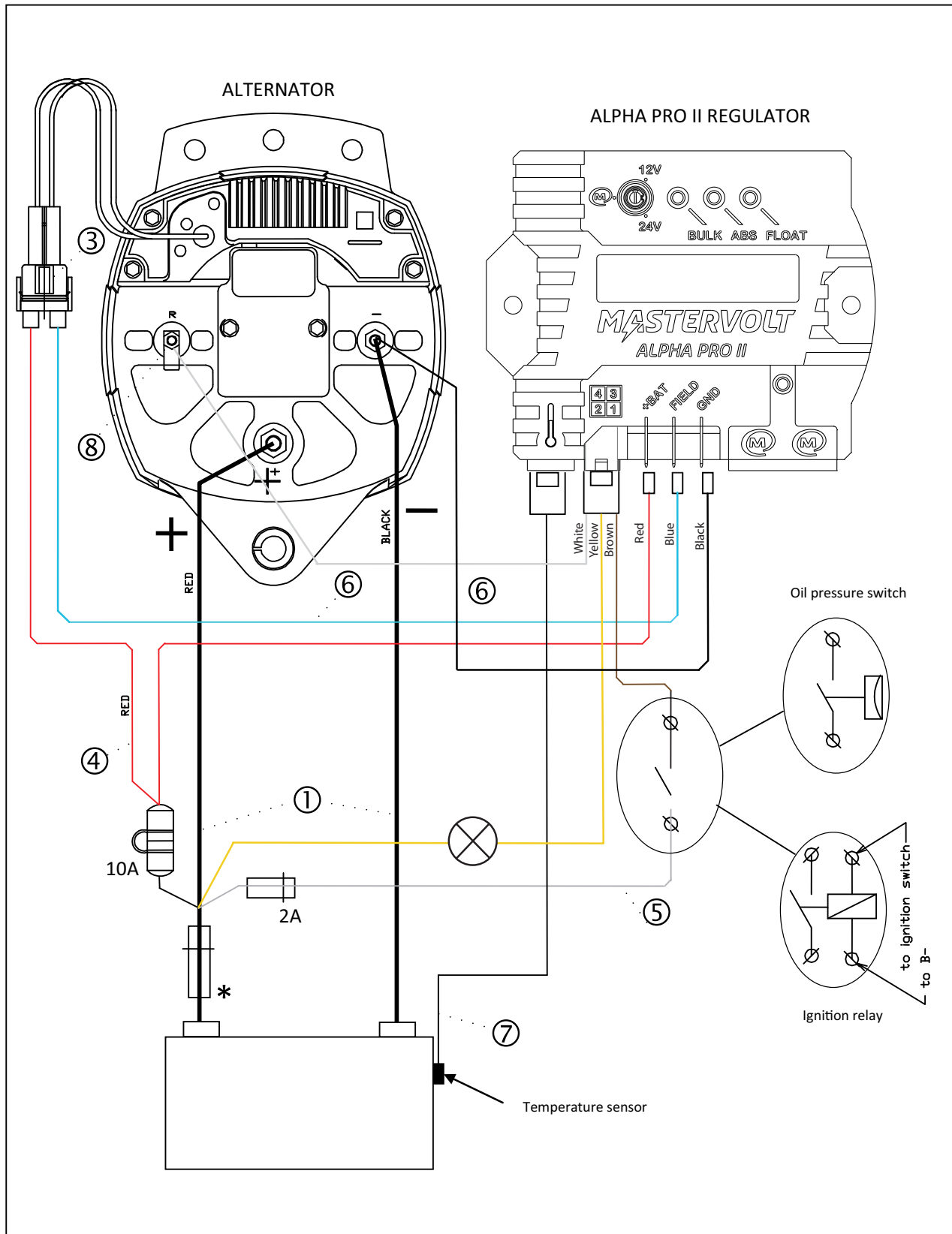


Figure A-8: Installation drawing Alpha alternator model 24/150

**2.4 STANDARD BOSCH ALTERNATOR**

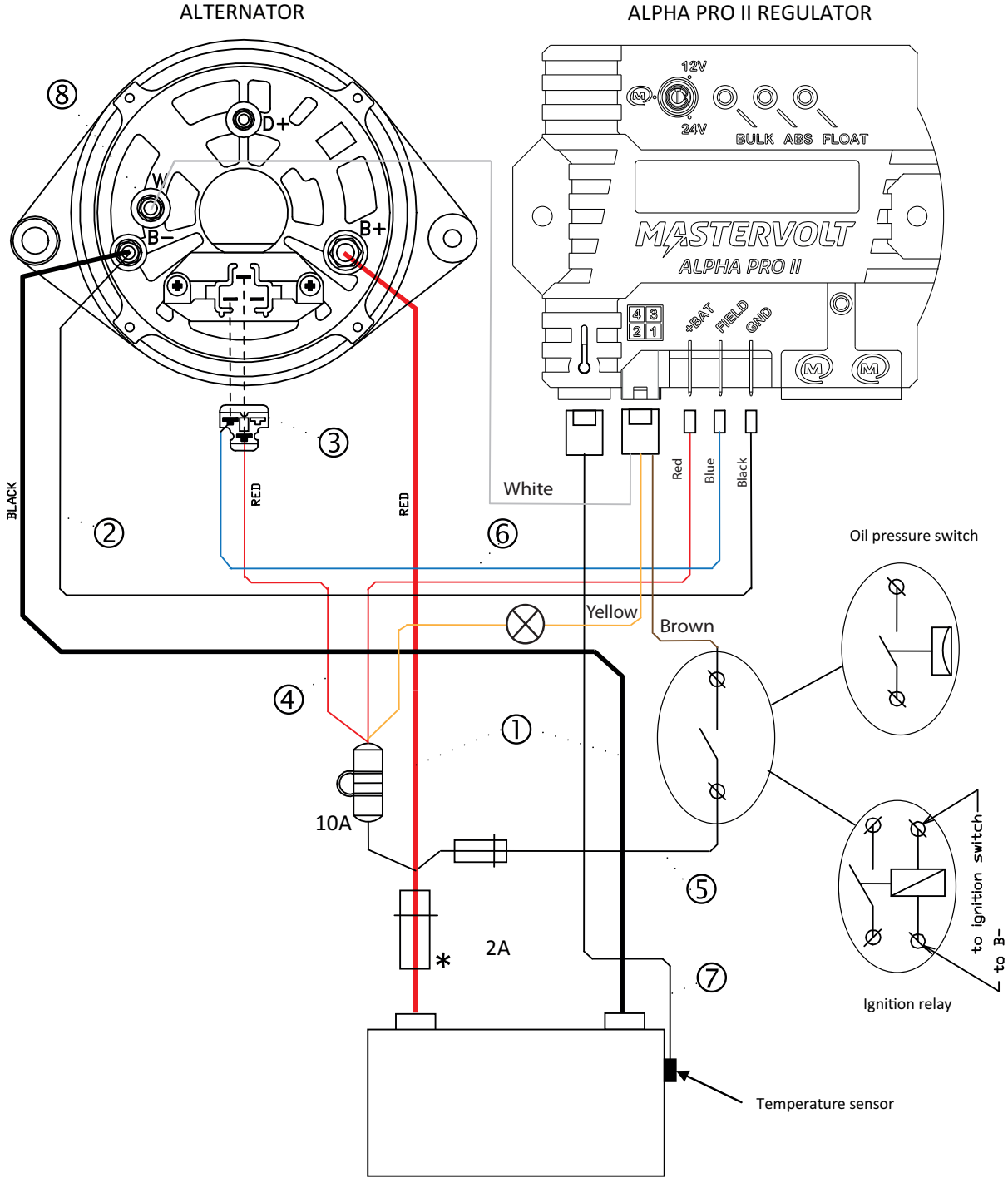


Figure A-9: Installation drawing standard Bosch alternator

## 2.5 INSTRUCTION FOR MODIFICATION OF STANDARD BOSCH ALTERNATORS

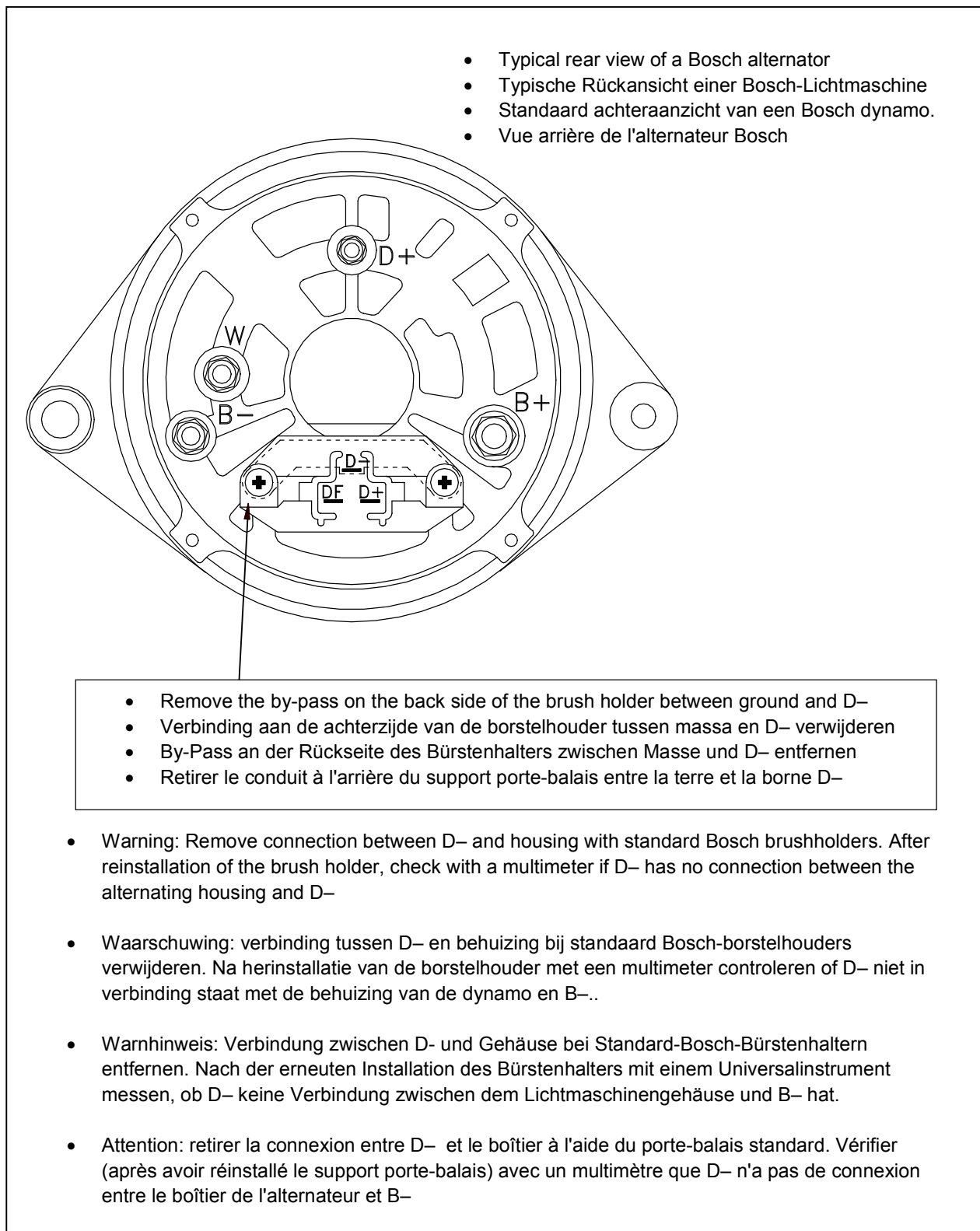


Figure A-10: standard Bosch alternator (not applicable for Mastervolt alternators)

**2.6 INSTALLATION EXAMPLES FOR ALPHA ALTERNATOR MODEL 12/90**

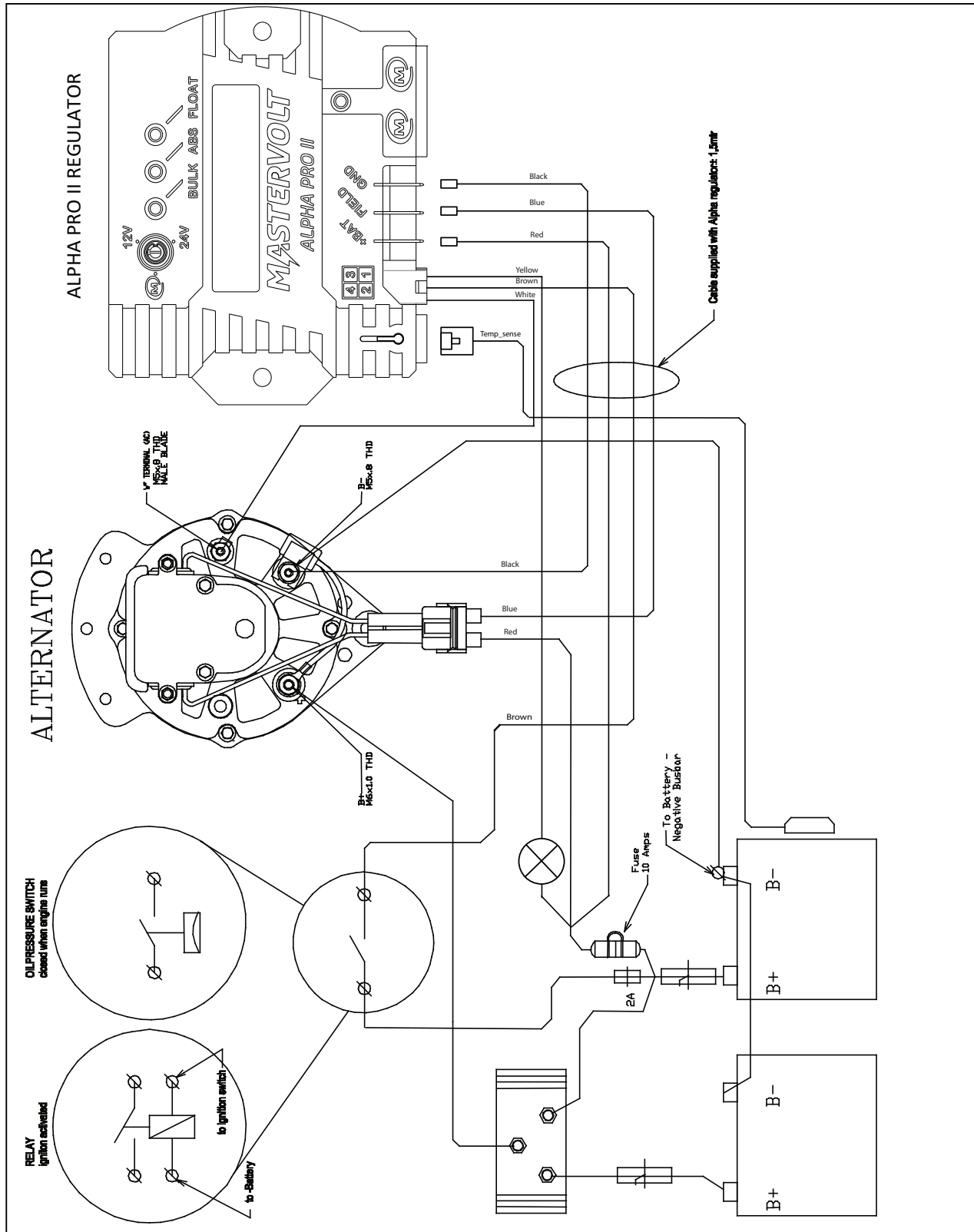


Figure A-11: This drawing shows the installation of the Alpha alternator 12/90 in combination with a battery isolator to charge two battery banks simultaneously

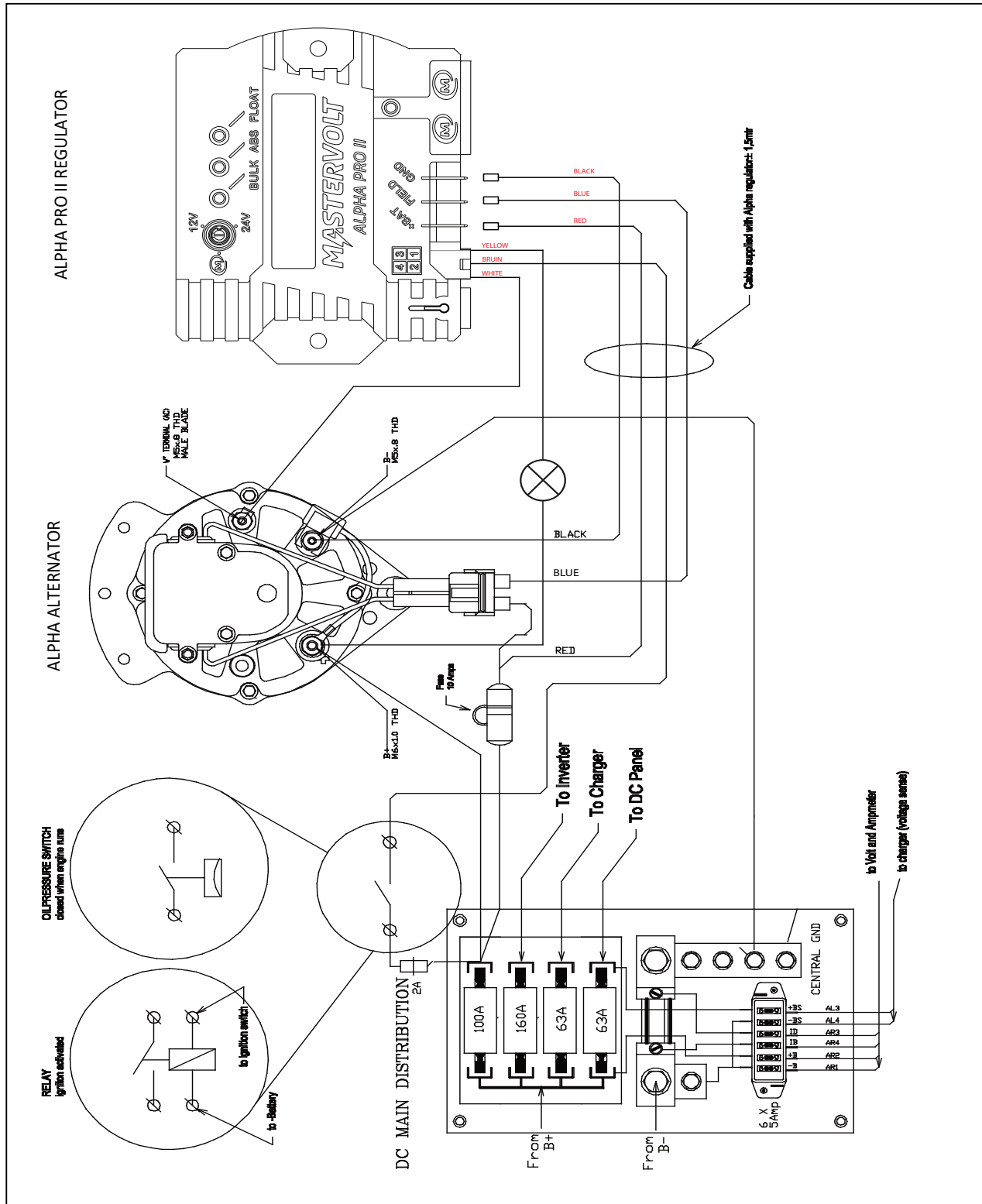


Figure A-12: Here the installation of the Alpha alternator 12/90 in combination with a Mastervolt DC distribution system is shown. The Mastervolt DC distribution systems are easy-to-install installation kits for central connection of the DC-sources (such as the alternator and the battery charger), the batteries and the DC loads (such as the inverter, the anchor winch or the bowthruster). These DC-distribution systems are standard pre-wired for connection of a battery monitor. See [www.mastervolt.com](http://www.mastervolt.com) for details.

**2.7 INSTALLATION EXAMPLES FOR ALPHA ALTERNATOR MODELS 12/130, 24/75 AND 24/110**

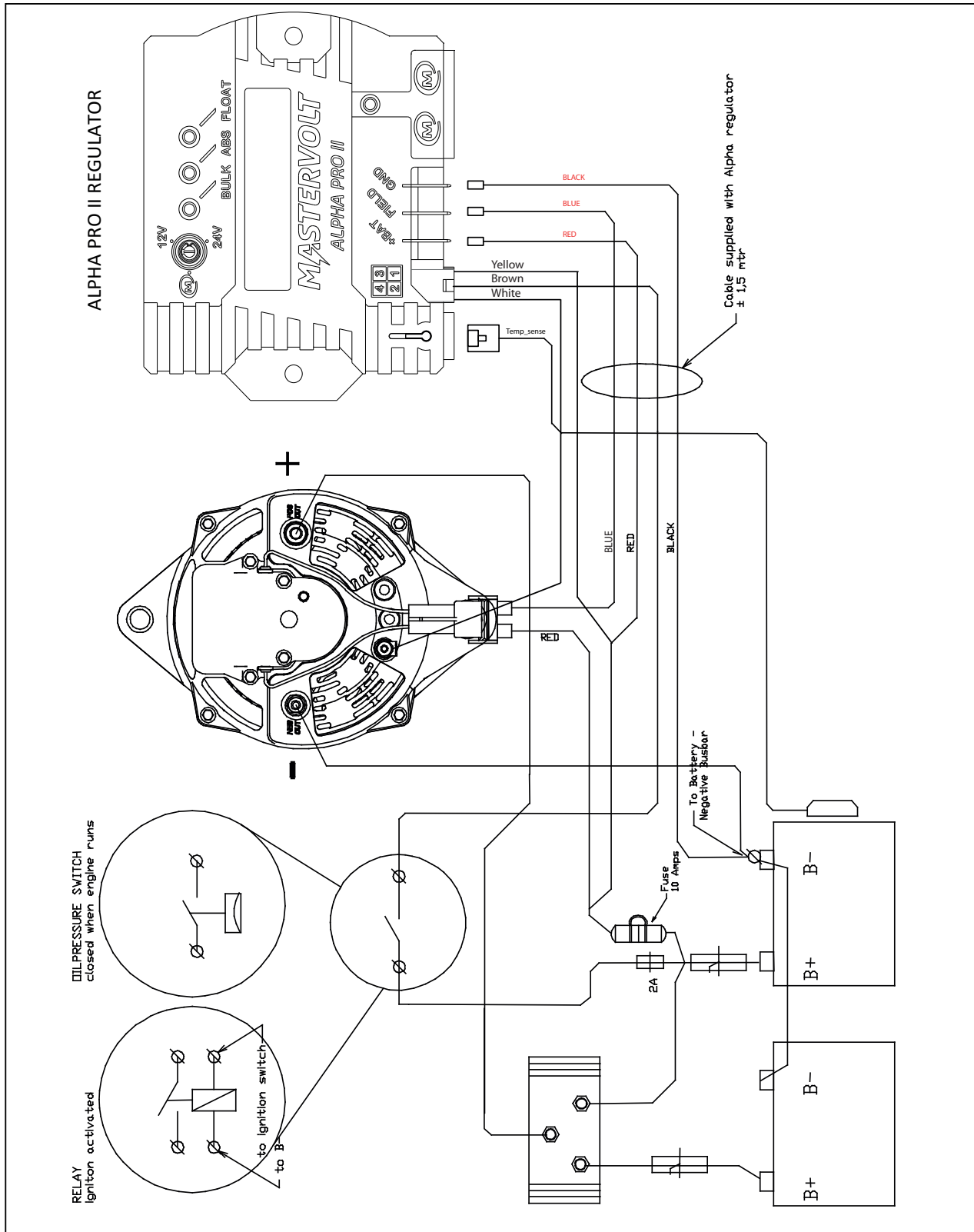
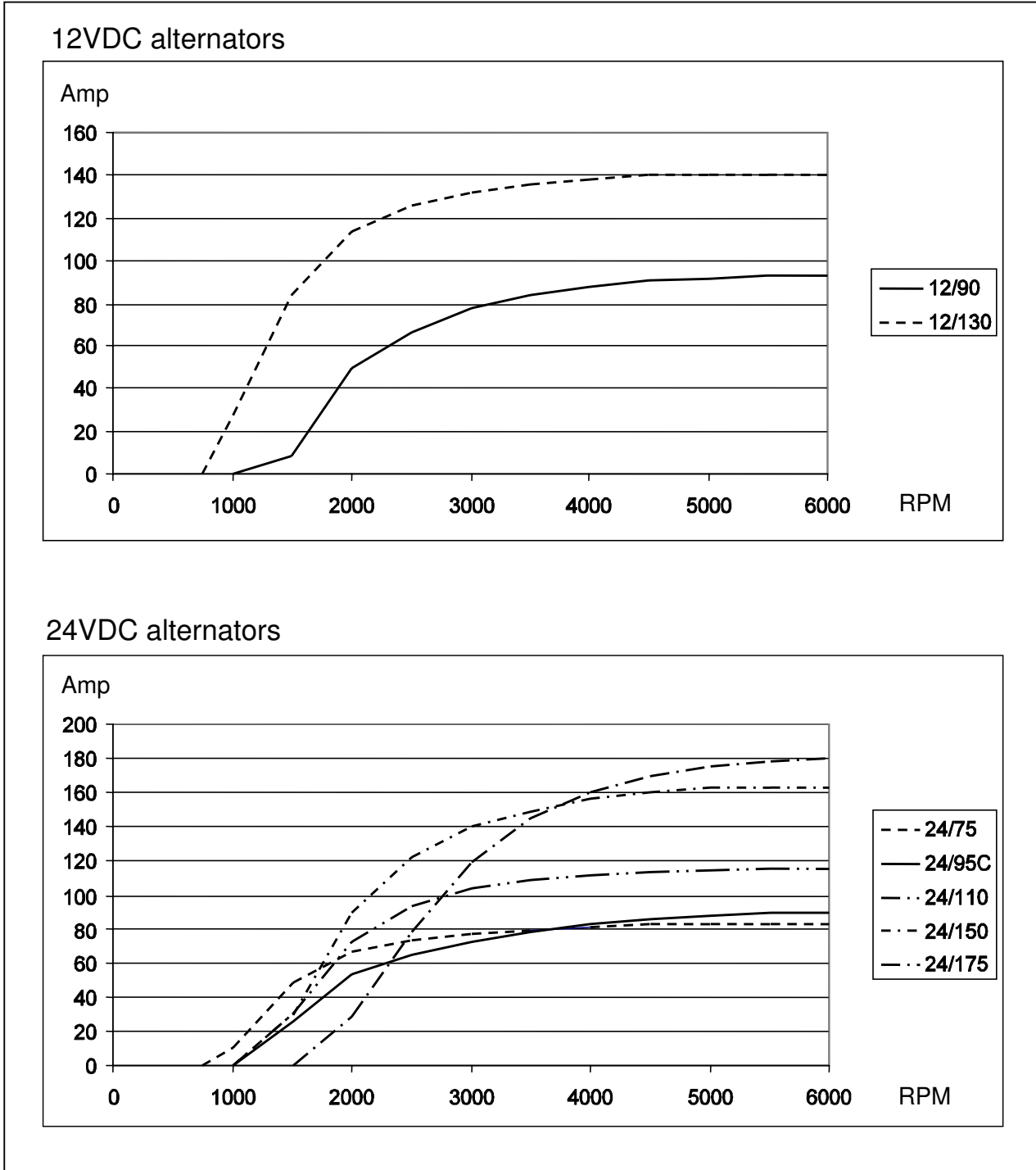


Figure A-13: This drawing shows the installation of the Alpha alternator models 12/130, 24/75 and 24/110 in combination with a battery isolator to charge two battery banks simultaneously.

## 3 CHARACTERISTICS

### 3.1 CHARGE CURRENT VERSUS RPM



Output power is measured in combination with Alpha Pro II regulator at nominal voltage (25°C)

Figure A-15: Characteristics for Mastervolt alternators: charge current versus RPM

## 4 ORDERING INFORMATION

### 4.1 ACCESSOIRES

Part number	Description
83007021	Battery isolator BI 702 for two battery banks. For alternators up to 70 Amps,
83007030	Battery isolator BI 703 for three battery banks. For alternators up to 70 Amps,
83012021	Battery isolator BI 1202 for two battery banks. For alternators up to 120 Amps,
83012031	Battery isolator BI 1203 for three battery banks. For alternators up to 120 Amps,
83116025	Battery Mate 1602-IG, low voltage drop battery isolator for two battery banks. For alternators up to 160 Amps
83116035	Battery Mate 1603-IG, low voltage drop battery isolator for three battery banks. For alternators up to 160 Amps
6384010000	Industrial DC fuse 100A DIN 00
6384012500	Industrial DC fuse 125A DIN 00
6384016000	Industrial DC fuse 160A DIN 00
6384510000	Industrial DC fuse 100A DIN 1
6384512500	Industrial DC fuse 125A DIN 1
6384516000	Industrial DC fuse 160A DIN 1
6384520000	Industrial DC fuse 200A DIN 1
6381001000	Fuse base DIN 0 (max. 160A)
6381002000	Fuse base DIN 1 (max. 250A)

Mastervolt can offer a wide range of products for your electrical installation, including battery chargers, AGM- and Gel batteries, DC-switches, battery monitoring panels and DC distribution kits

See our website [www.mastervolt.com](http://www.mastervolt.com) for an extensive overview of all our products

### 4.2 SPARE PARTS

These parts are for after-sales applications only:

Part number	Description
45512000	Alpha Pro II regulator for alternators models 12/90 and 12/130, 24/75, 24/110, 24/150, Bosch 12V and 24V alternators
41500500	Battery temperature sensor
48400110	Brush holder for alternator models 12/90 12/130, 24/75 and 24/110
48400150	Brush holder for alternator model 24/150
48400010	Pulley for two belts, for alternators model 12/90
48400020	Pulley for two belts, for alternators models 12/130, 24/75and 24/110



## 5 EC DECLARATION OF CONFORMITY

We,



Manufacturer                      Mastervolt  
Address                              Snijdersbergweg 93  
   1105 AN Amsterdam  
   The Netherlands

Declare under our sole responsibility that

Product                      :              Alpha Pro II

Is in conformity with the provisions of the following EC directives:

2006/95/EC (Safety directive); the following harmonized standards have been applied:

- EN 60950-1:2001+ A11:2004 (LVD)

2004/108/EC (EMC directive); the following harmonized standards have been applied:

- EN 61000-6-3: 2007              Emission standard for residential, commercial and light-industrial environments
- EN 61000-6-2: 2005              Immunity for industrial environments
- EN 61000-4-2                      Electrostatic discharge immunity test
- EN 61000-4-4                      Electrical fast transient/ burst immunity test

2011/65/EU (RoHs Directive)

Amsterdam, 18/12/2012  
Mastervolt international B.V.

A handwritten signature in black ink, appearing to read 'D. Hobbelen', is written over a horizontal line.

Daan Hobbelen, Product development manager Marine & Mobile







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