



**APPENDIX / ANHANG / ANNEXE**

# **ALPHA ALTERNATOR**

DIMENSIONS, INSTALLATION DRAWINGS AND CHARACTERISTICS



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**1 DIMENSIONS**

**1.1 DIMENSIONS ALPHA ALTERNATOR MODEL 12/90**

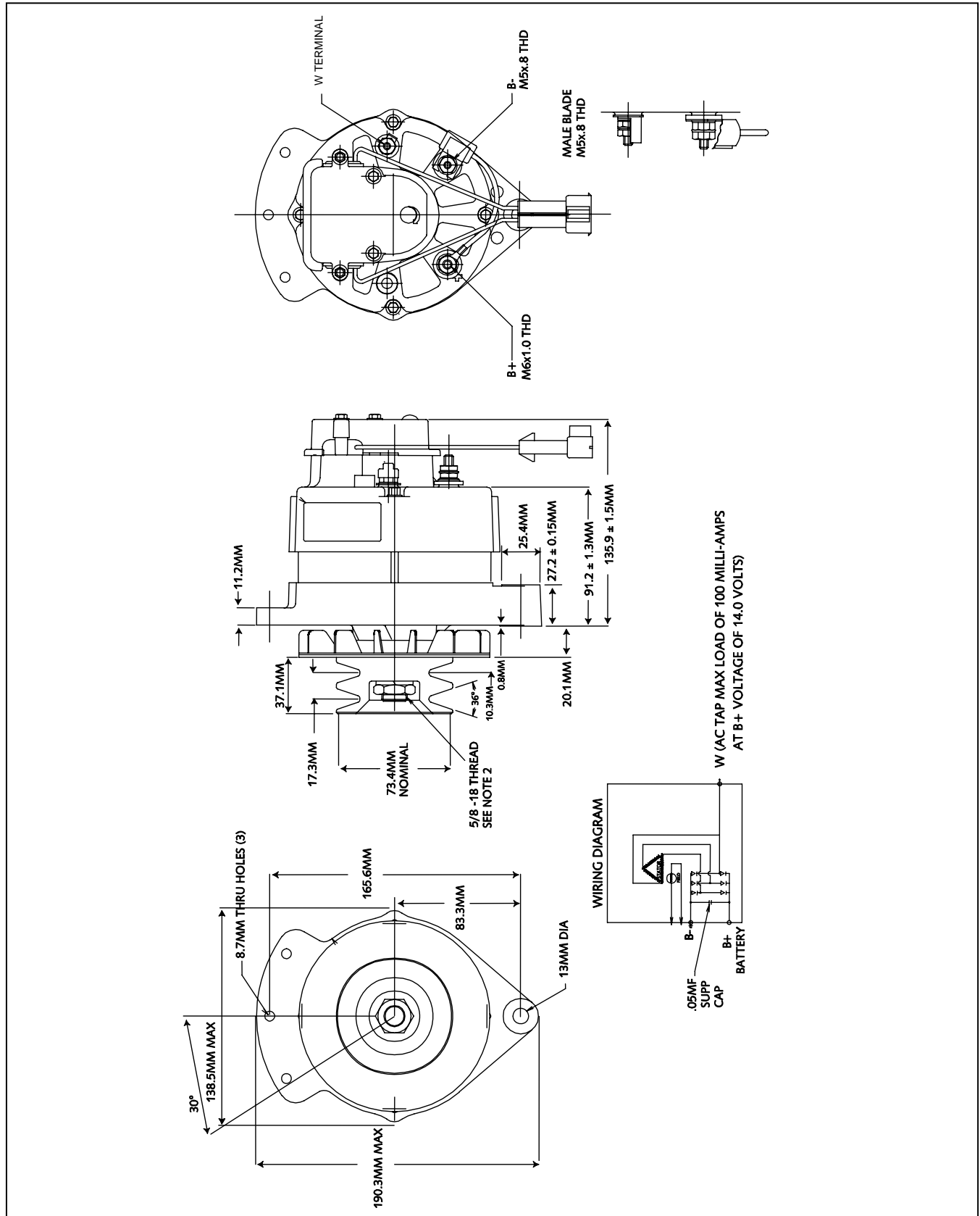


Figure A-1: dimensions Alpha alternator model 12/90 (enclosure A)

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

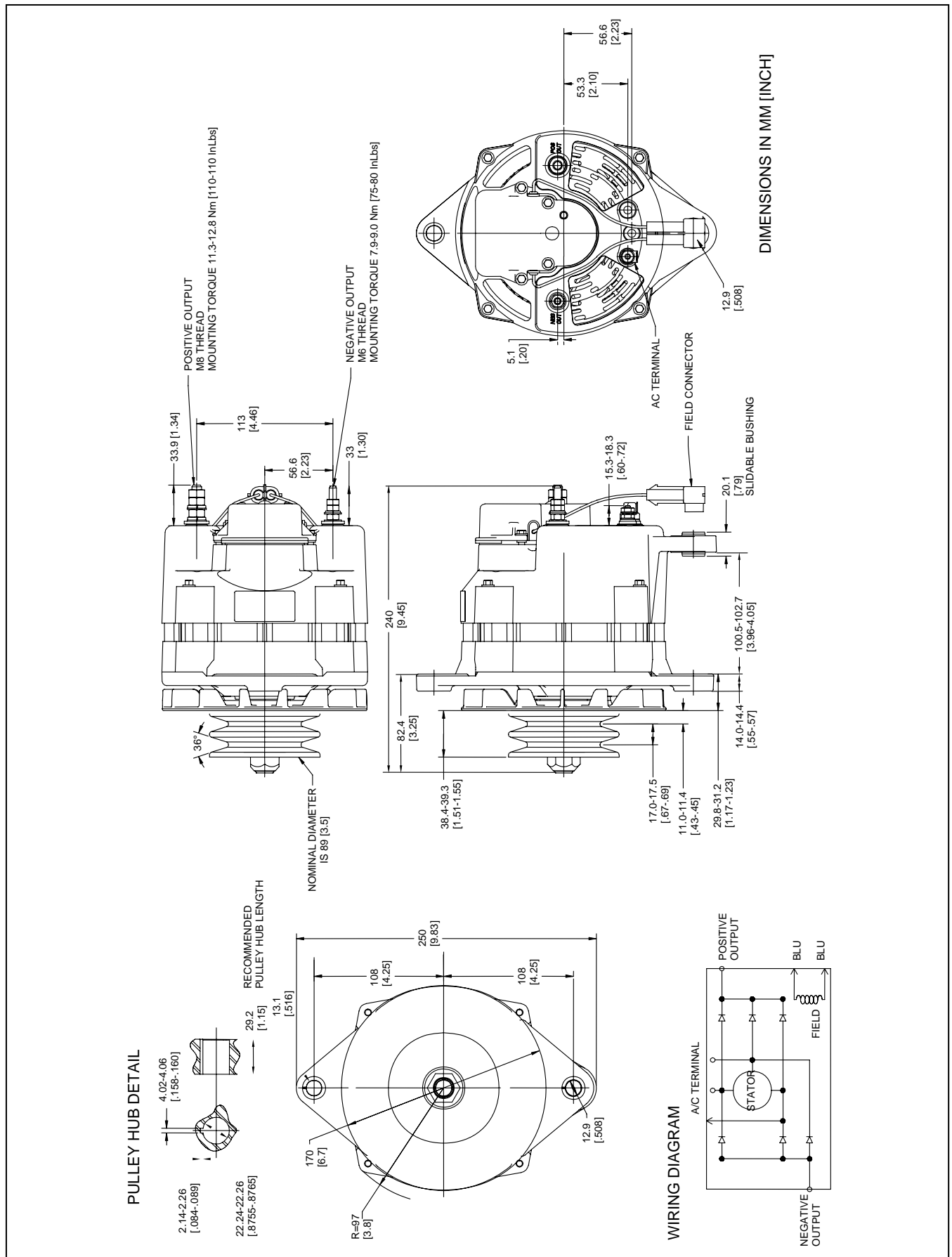


Figure A-2: dimensions Alpha alternator models 12/130, 24/75, 24/110 and 24/150 (enclosure B)



1.4 DIMENSIONS ALPHA ALTERNATOR MODEL 24/95C

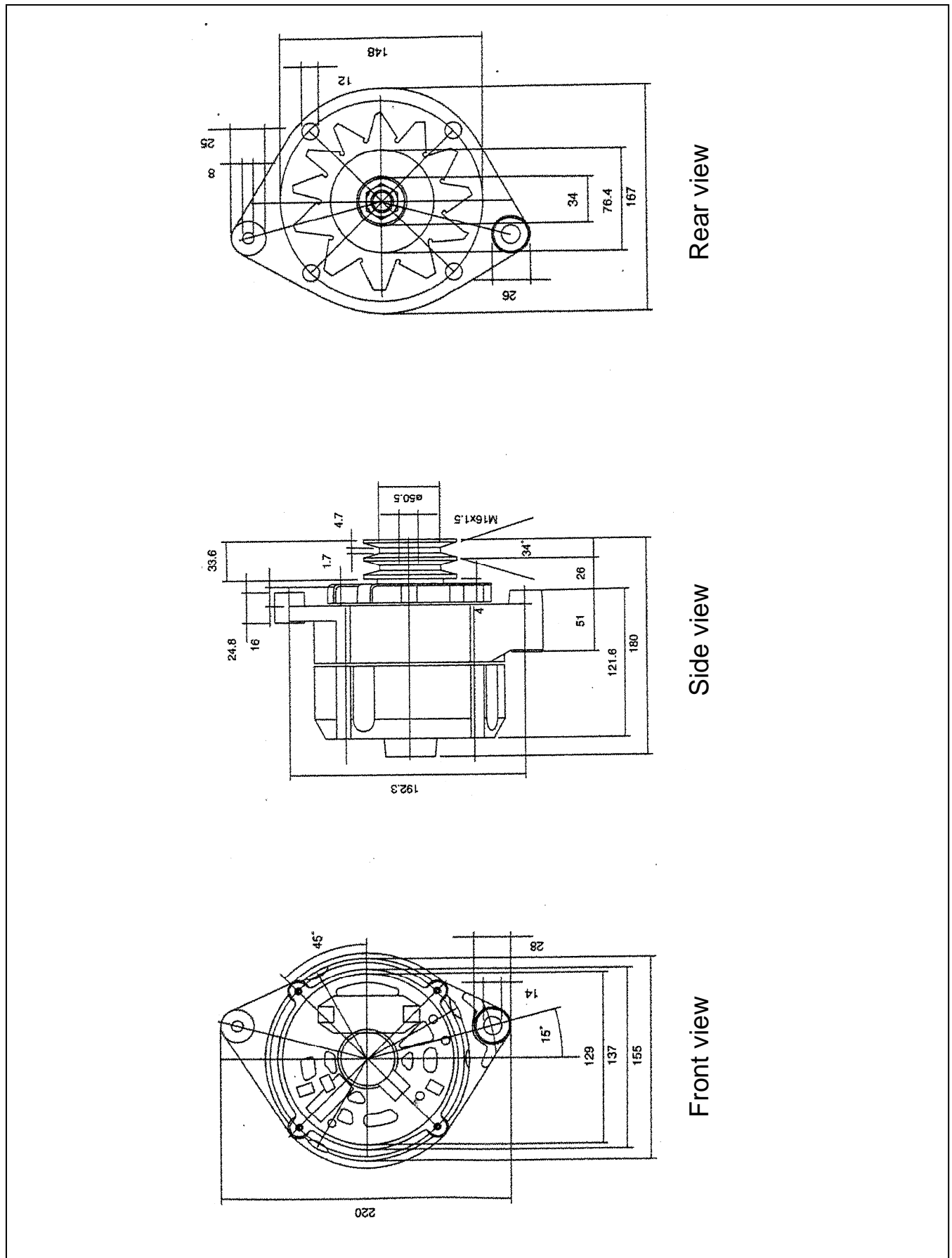


Figure A-4: dimensions Alpha alternator model 24/95C (enclosure D)

## 1.5 DIMENSIONS ALPHA PRO REGULATOR

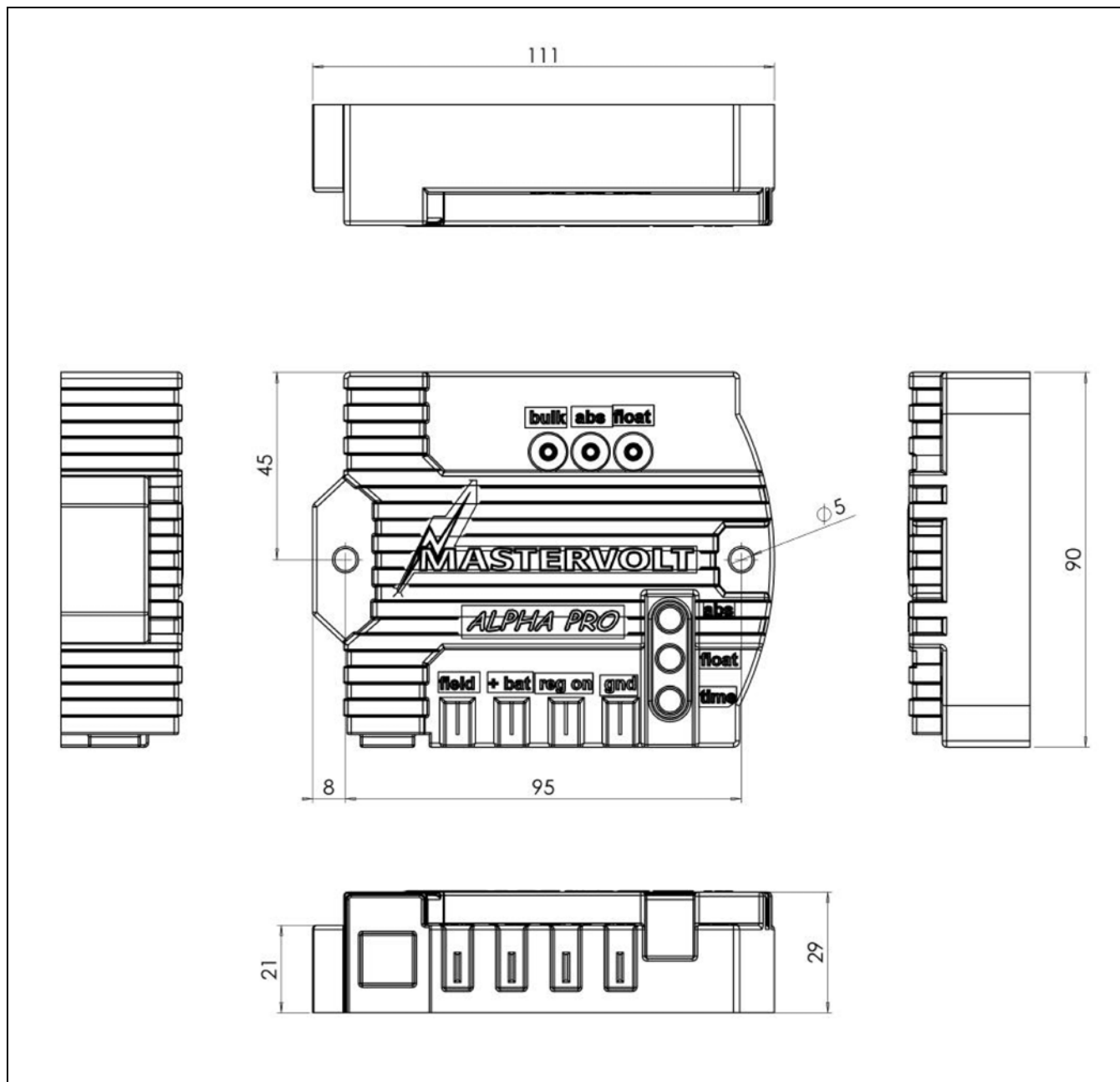


Figure A-5: dimensions of the Alpha Pro regulator (all models)

## 2 INSTALLATION DRAWINGS

### 2.1 ALPHA ALTERNATOR MODEL 12/90

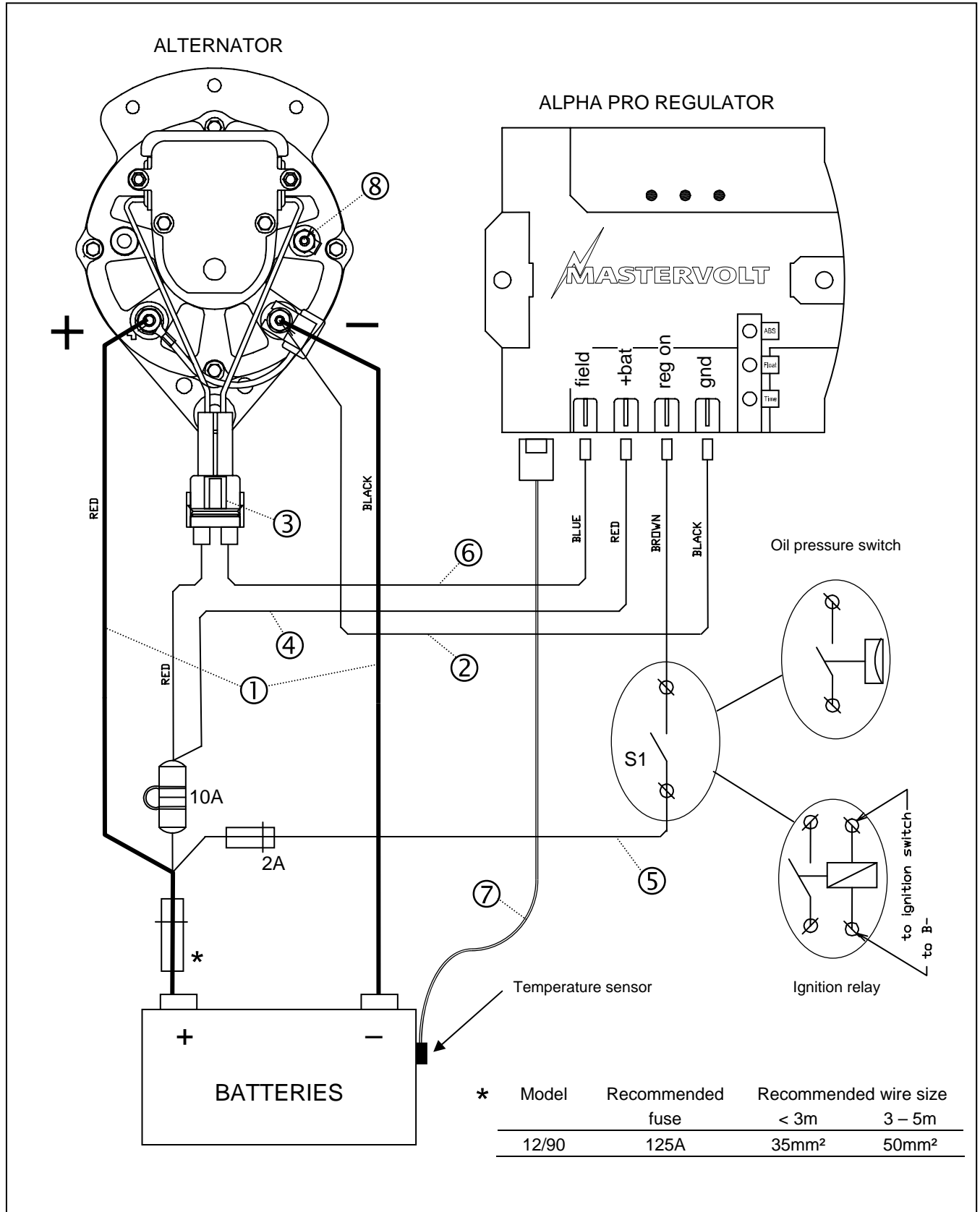


Figure A-6: Installation drawing Alpha alternator model 12/90



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

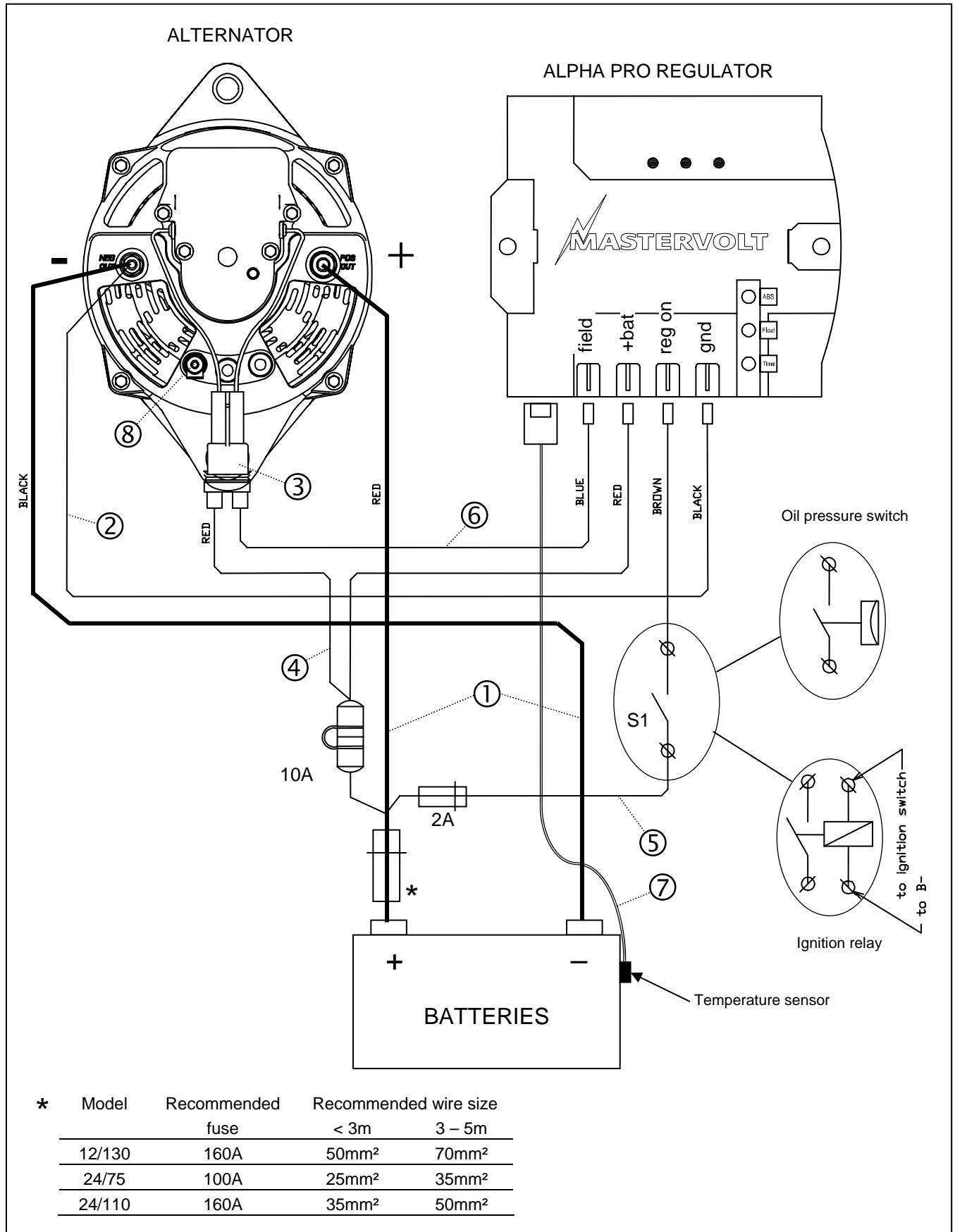


Figure A-7: Installation drawing Alpha alternator models 12/130, 24/75 and 24/110

2.3 ALPHA ALTERNATOR MODEL 24/150

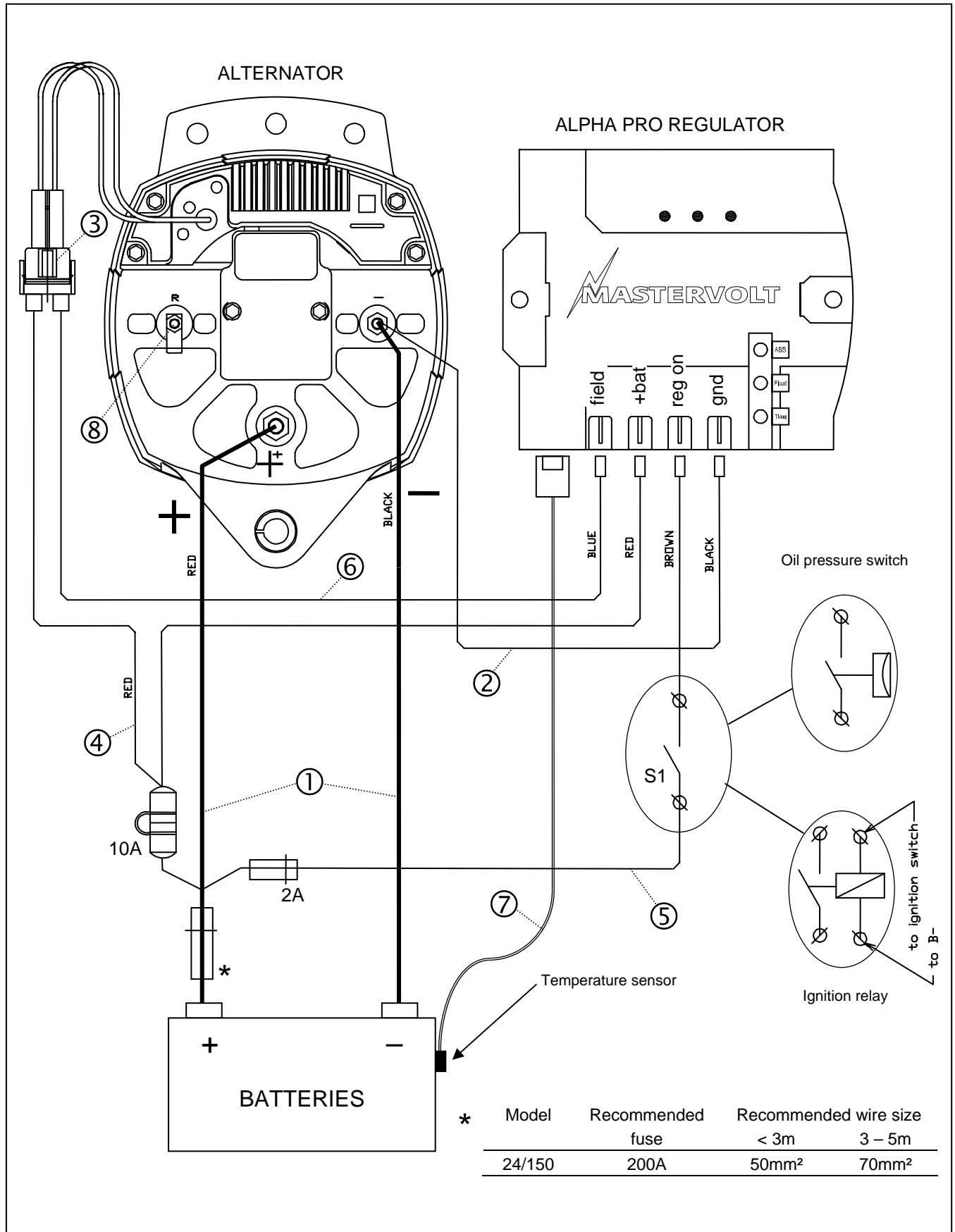


Figure A-8: Installation drawing Alpha alternator model 24/150

## 2.4 ALPHA ALTERNATOR MODEL 24/95C

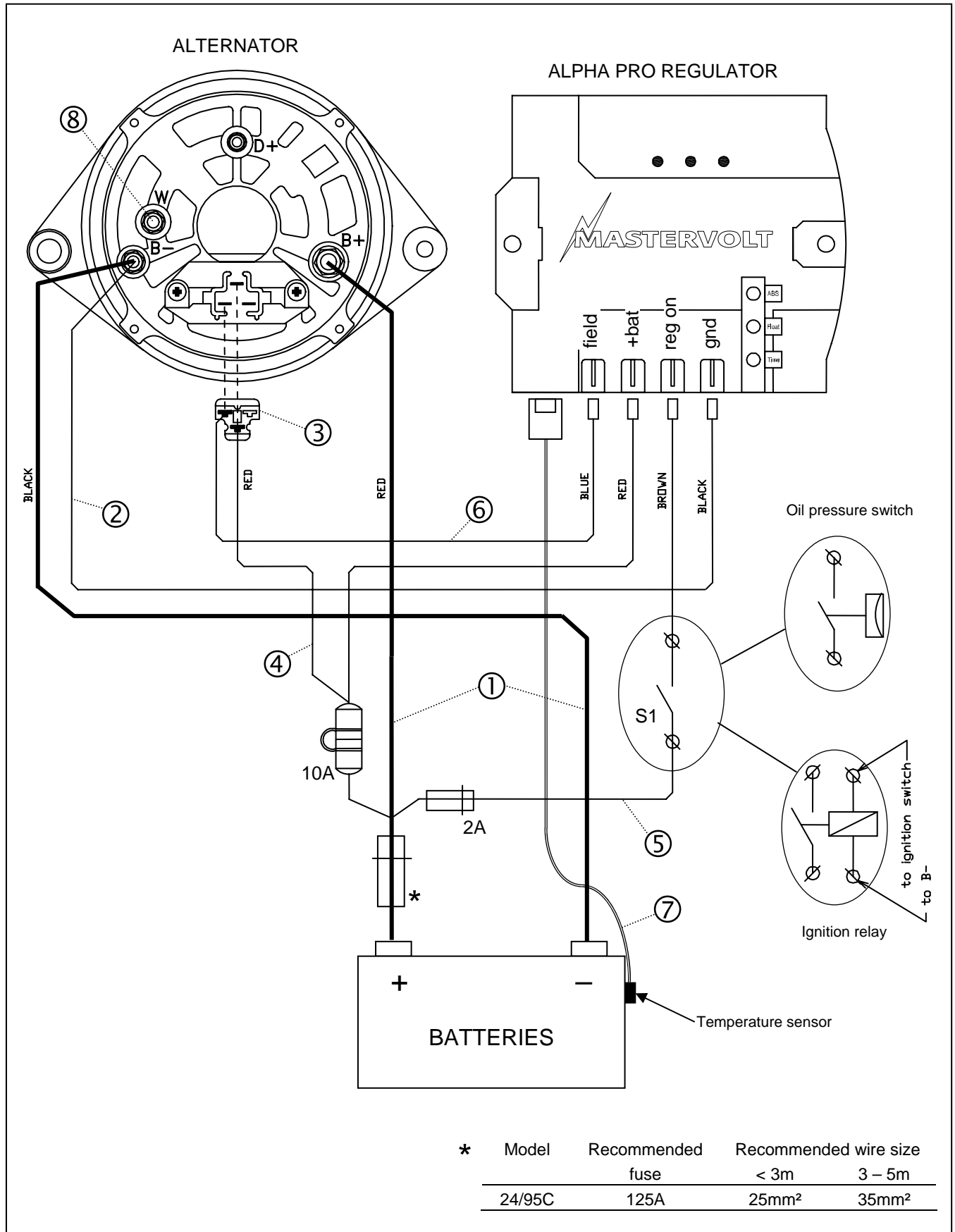


Figure A-9: Installation drawing Alpha alternator model 24/95

## 2.5 INSTRUCTION FOR MODIFICATION OF STANDARD BOSCH ALTERNATORS

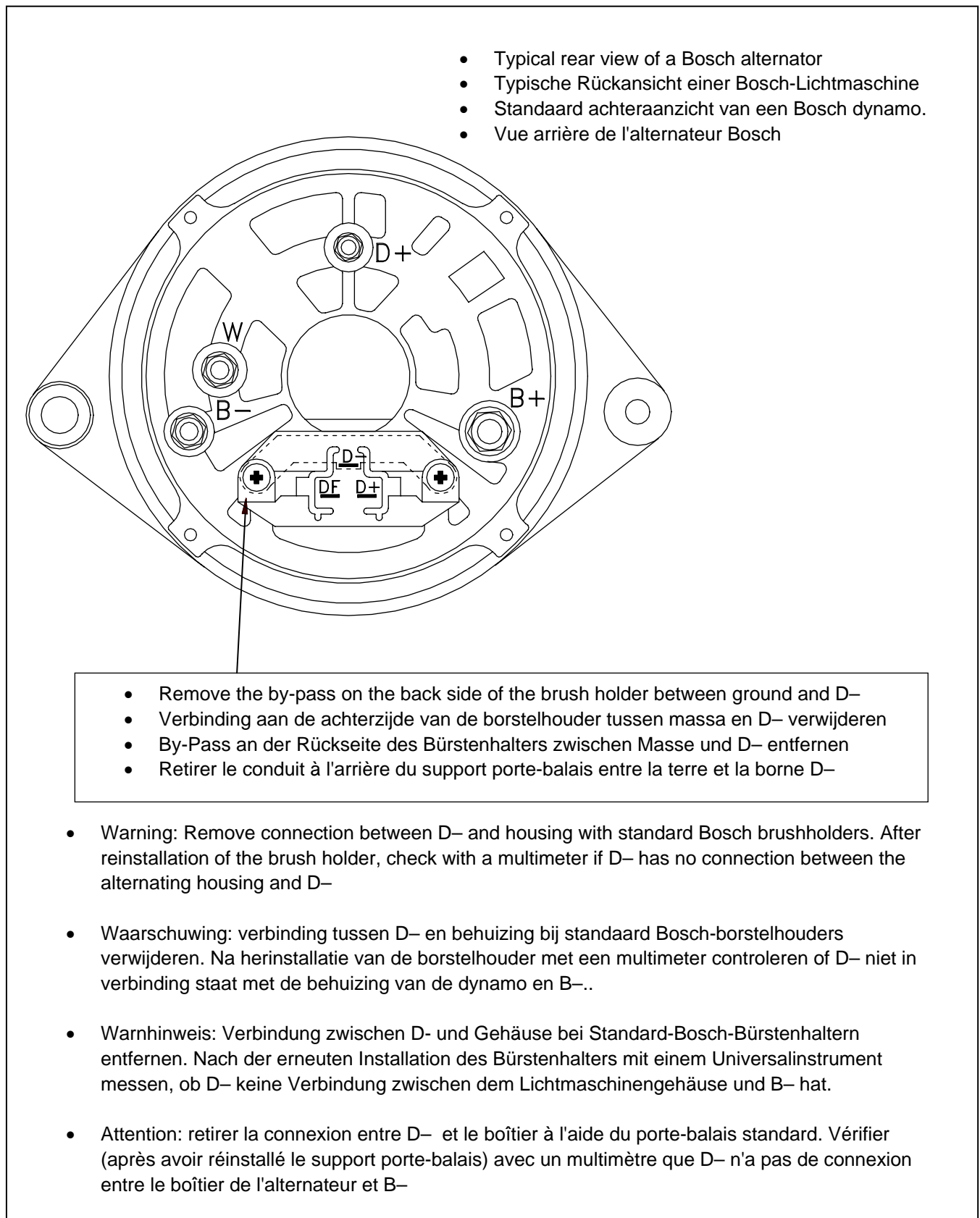


Figure A-10: standard Bosch alternator (not applicable for Mastervolt alternators)

2.6 INSTALLATION EXAMPLES FOR ALPHA ALTERNATOR MODEL 12/90

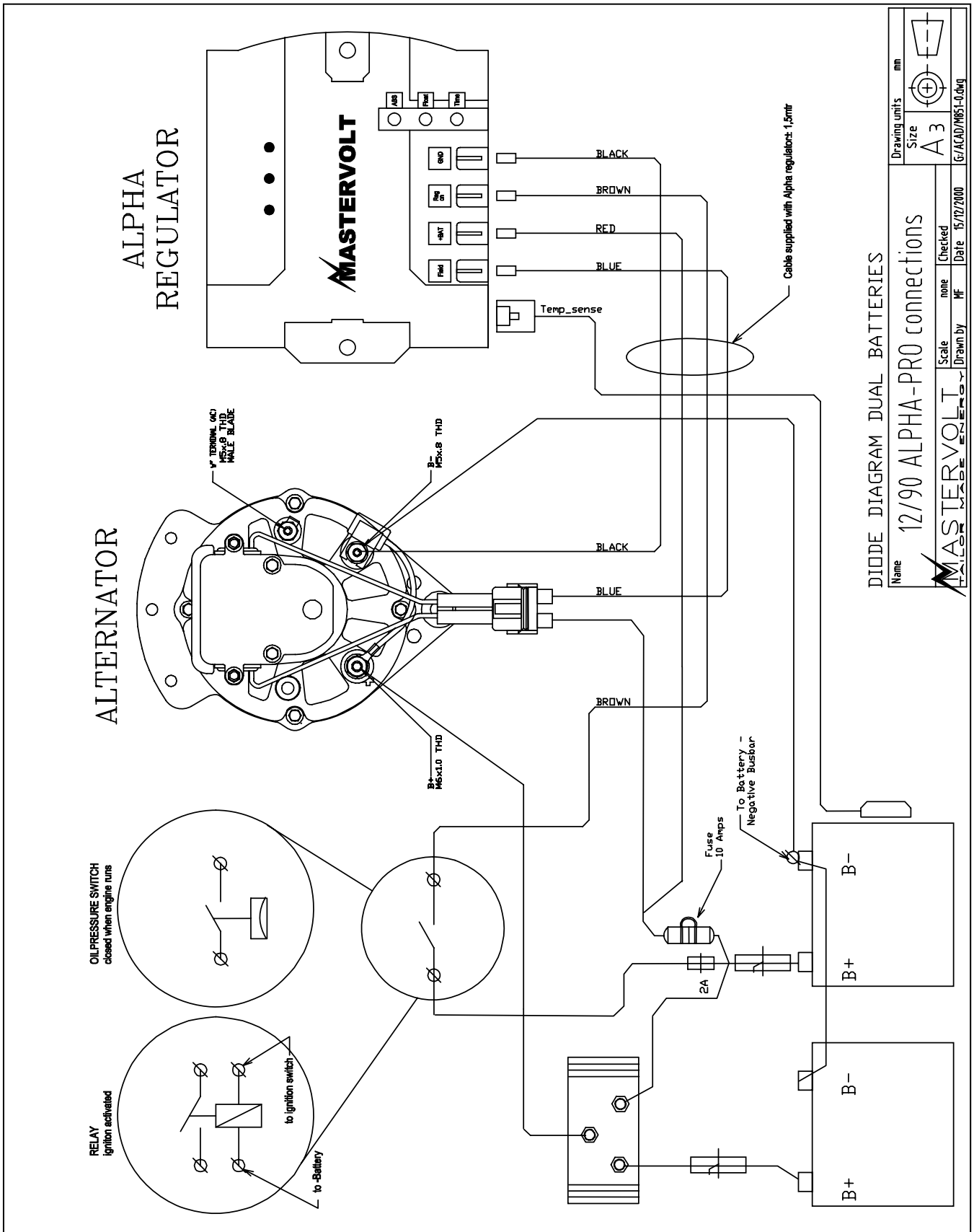


Figure A-11: This drawing shows the installation of the Alpha alternator 12/90 in combination with a battery isolator to charge two battery banks simultaneously.



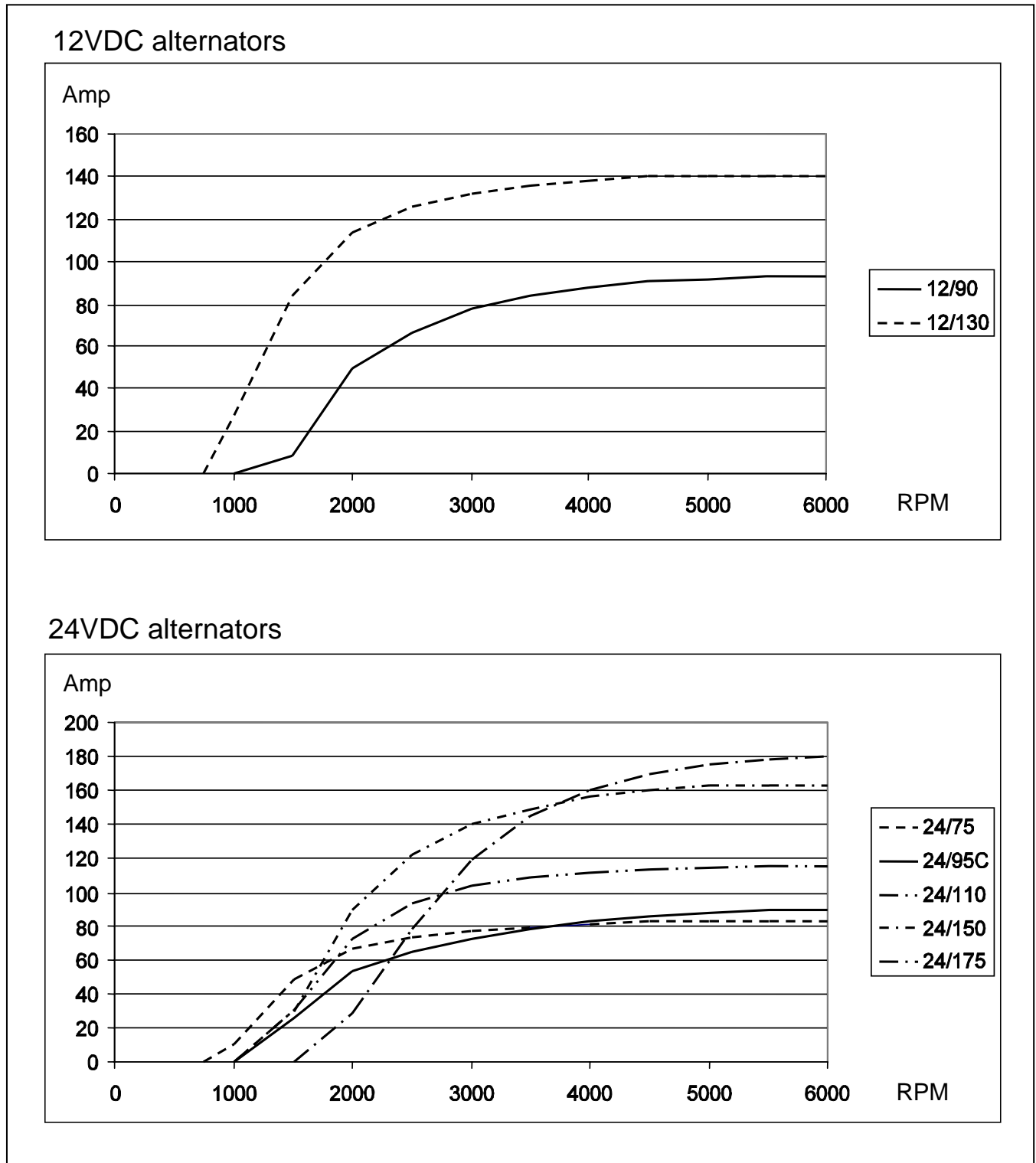






### 3 CHARACTERISTICS

#### 3.1 CHARGE CURRENT VERSUS RPM



Output power is measured in combination with Alpha Pro 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
79008000	Alternator warning light simulator, model EM1224 A solid-state relay that can be used to simulate the charge lamp terminal (D+) of any 12V or 24V alternator.
83007020	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,
83012020	Battery isolator BI 1202 for two battery banks. For alternators up to 120 Amps,
83012030	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
45511000	Alpha Pro regulator 12V for alternators models 12/90 and 12/130
45511200	Alpha Pro regulator 24V for alternators model 24/75, 24/110, 24/150
45511400	Alpha Pro B regulator 12V for Bosch 12V alternators
45511600	Alpha Pro B regulator 24V for alternator model 24/95-C and Bosch 24V alternators
45510200	Wiring loom for Alpha Pro regulators 45511000 and 45511200
45510300	Wiring loom for Alpha Pro B regulators 45511400 and 45511600
41500300	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
46030050	Brush holder for alternator model 24/95C
48400010	Pulley for two belts, for alternators model 12/90
48400020	Pulley for two belts, for alternators models 12/130, 24/75, 24/95 and 24/110

## 5 EC DECLARATION OF CONFIRMITY

Manufacturer Mastervolt  
Address Snijdersbergweg 93  
1105 AN Amsterdam  
The Netherlands



Herewith declares that:

Product:

48012090 Alpha alternator 12/90, incl Alpha Pro 12V regulator (45511000)  
48012130 Alpha alternator 12/130, incl Alpha Pro 12V regulator (45511000)  
48024075 Alpha alternator 24/75, incl Alpha Pro 24V regulator (45511200)  
48020950 Alpha alternator 24/95 Compact, incl Alpha Pro-B 24V regulator (45511600)  
48024110 Alpha alternator 24/110, incl Alpha Pro 24V regulator (45511200)  
48024150 Alpha alternator 24/150, incl Alpha Pro 24V regulator (45511200)  
45511000 Alpha Pro 12V regulator  
45511200 Alpha Pro 24V regulator  
45511400 Alpha Pro 12V-B regulator  
45511600 Alpha Pro 24V-B regulator

Is in conformity with the provision of the EC, EMC directive 89/336/EEC and amendments 92/31/EEC, 93/68/EEC

The following harmonized standards have been applied:

Generic emission standard EN 50081-1:1992,  
Generic immunity standard EN 50082-1:1997,

And the safety directive 73/23/EEC and amendment 93/68/EEC, with the following standard:

Low voltage standard EN 60950:2000,

Amsterdam,



R.J. ter Heide,  
General Manager MASTERVOLT  
General Manager MASTERVOLT



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