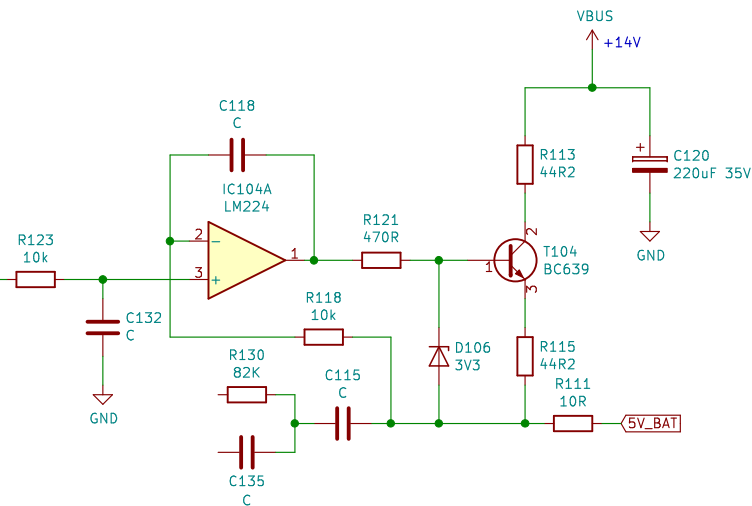
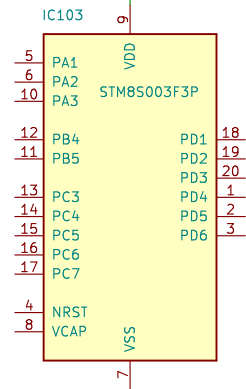
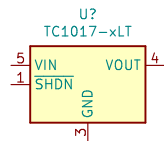
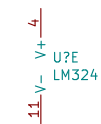
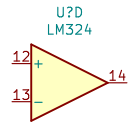
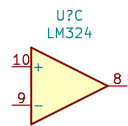
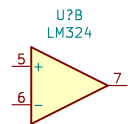




Sheet: Primary circuit

File: Primary_01.sch

Sheet: /
File: Bosch_Battery_Charger_01.sch

Title:

Size: A4
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Date:

Rev:
Id: 1/2

Schematic primary part startup/auxilliary power suply with controller MLX02367A

Note:
Data sheet controller MLX02367A could not be found on Internet

2020-09-26:
1. R46 replaced
2. IC11 replaced
=> Supply back functional!!!

Legend:
1=Vin
2=SW
3=GND
4=
5=
6=LIM

The schematic shows the primary auxiliary power supply circuit. It starts with AC input (AC_L) connected through a bridge rectifier (D11 GBU4A) to a common rail. This rail feeds several components: three large electrolytic capacitors (C14, C16, C29), a network of resistors (R25, R29, R39, R31, R32, R40, R41, R42, R43, R44, R46), diodes (D15, D17, D18), transistors (T12 BCW66, T14 BC846, T15 BC846), and a transformer (W12 TRANSF6). The core component is the MLX02367A controller (IC11), which has pins labeled VIN, VDD, HV, FB, GND, and DRAIN. A feedback loop is formed by R41 and R42. A 50V capacitor (C30) is connected to the HV pin. The output of the transformer is connected to a full-wave bridge rectifier (IC12 EL817) followed by a filter capacitor (C27). The rectified output is connected to the positive terminal of a battery pack (L6599) via a diode (D16). The battery pack also includes a sense resistor (R7) and a feedback network (R2, R3, R4, R5, R6, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100).

[illegible]

Schematic primary part startup/auxiliary power supply with controller MLX02367A

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File: Primary_01.sch

Title: Bosch battery charger 36-4/230 Model: 0 275 007 907

Size: A4 Date: 2020-09-26
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Rev: 2/2

Schematic primary part startup/auxiliary power supply with controller MLX02367A

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Size: A4 Date: 2020-09-26
KiCad E.D.A. kicad (5.0.2)-1 Rev: Id: 2/2

Schematic primary part startup/auxilliary power suply with controller MLX02367A

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KiCad E.D.A. kicad (5.0.2)-1	Rev: Id: 2/2

Schematic primary part startup/auxilliary power suply with controller MLX02367A

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The schematic shows the primary auxiliary power supply circuit. It starts with AC input (AC_L) connected through a bridge rectifier (D11 GBU4A) to a common rail. This rail feeds several components: three large electrolytic capacitors (C14, C16, C29), a network of resistors (R25, R29, R39, R31, R32, R40, R41, R42, R43, R44, R46), diodes (D15, D17, D18), and transistors (T12 BCW66, T14 BC846, T15 BC846). The central component is the MLX02367A controller (IC11), which has pins labeled VIN, VDD, HV, FB, GND, and DRAIN. A transformer (W12 TRANSF6) provides secondary power to the circuit. Other integrated circuits include two EL817 optocouplers (IC?, IC12) and an L6599 (IC10). Various passive components like resistors (R7, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100) and capacitors (C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100) are used throughout the circuit.

Schematic primary part startup/auxiliary power supply with controller MLX02367A

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Title: Bosch battery charger 36-4/230 Model: 0 275 007 907

Size: A4 Date: 2020-09-26
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Rev: 2/2

Schematic primary part startup/auxilliary power suply with controller MLX02367A

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