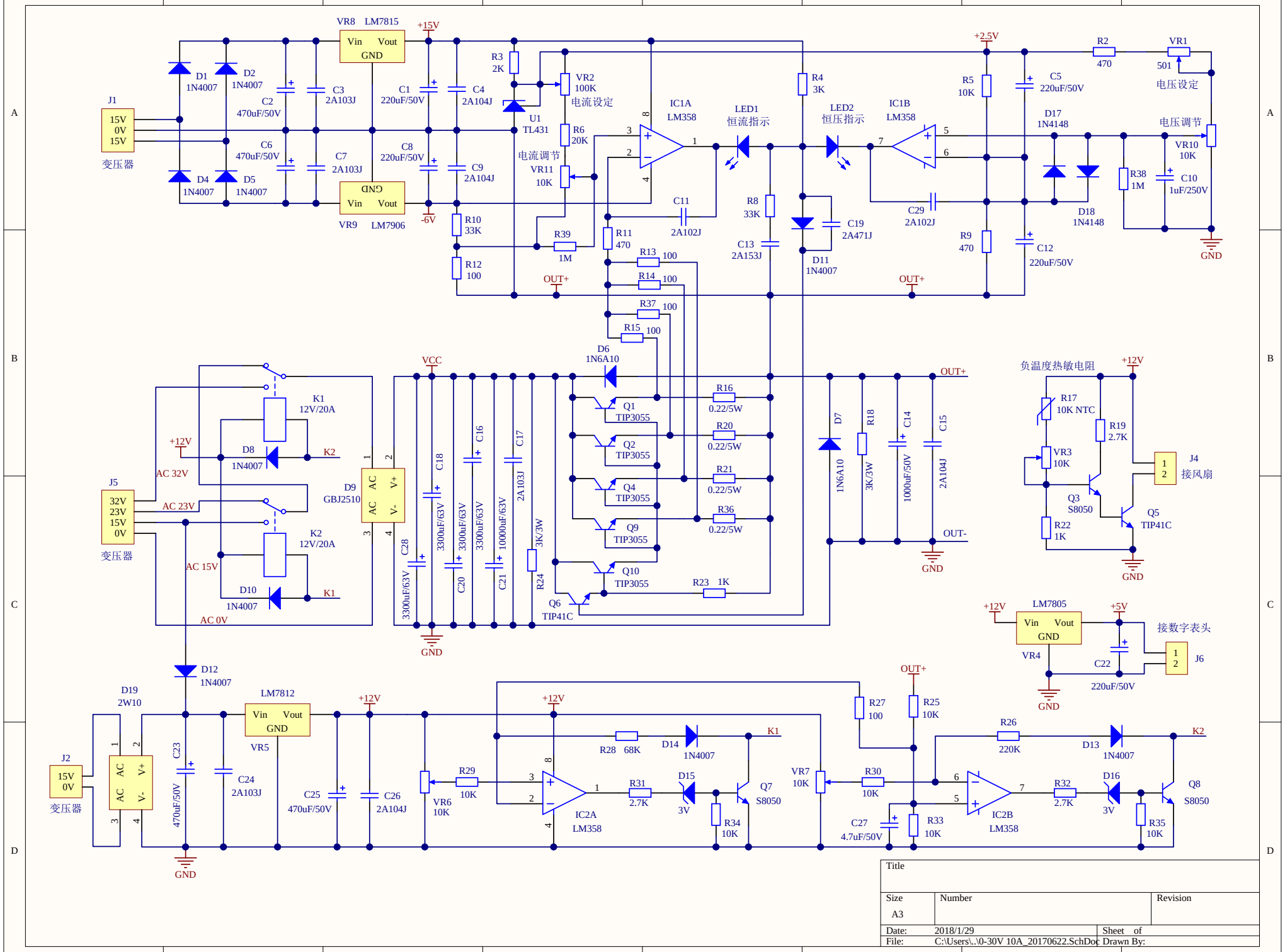
VR8 LM7815
Vin Vout
GND
+15V
VR9 LM7906
-6V
J1
15V
0V
15V
变压器
D1 1N4007
D2 1N4007
D4 1N4007
D5 1N4007
C1 220uF/50V
C2 470uF/50V
C3 2A103J
C4 2A104J
C6 470uF/50V
C7 2A103J
C8 220uF/50V
C9 2A104J
R3 2K
VR2 100K
电流设定
U1 TL431
R6 20K
电流调节
VR11 10K
R10 33K
R12 100
R39 1M
R11 470
R13 100
R14 100
R37 100
R15 100
IC1A LM358
C11 2A102J
LED1 恒流指示
LED2 恒压指示
IC1B LM358
R4 3K
R5 10K
R8 33K
C13 2A153J
C19 2A471J
D11 1N4007
C29 2A102J
R9 470
C12 220uF/50V
+2.5V
R2 470
VR1 501
电压设定
C5 220uF/50V
D17 1N4148
D18 1N4148
R38 1M
VR10 10K
电压调节
C10 1uF/250V
GND
OUT+
OUT-
D6 1N6A10
VCC
K1 12V/20A
K2 12V/20A
D8 1N4007
D10 1N4007
+12V
J5
32V
23V
15V
0V
AC 32V
AC 23V
AC 15V
AC 0V
变压器
D9 GBJ2510
C28 3300uF/63V
C18 3300uF/63V
C20 3300uF/63V
C16 3300uF/63V
C21 10000uF/63V
C17 2A103J
R24 3K/3W
Q1 TIP3055
Q2 TIP3055
Q4 TIP3055
Q9 TIP3055
Q10 TIP3055
Q6 TIP41C
R16 0.22/5W
R20 0.22/5W
R21 0.22/5W
R36 0.22/5W
R23 1K
D7 1N6A10
R18 3K/3W
C14 1000uF/50V
C15 2A104J
负温度热敏电阻
R17 10K NTC
R19 2.7K
VR3 10K
Q3 S8050
Q5 TIP41C
R22 1K
J4
接风扇
D12 1N4007
D19 2W10
J2
15V
0V
变压器
LM7812
VR5
C23 470uF/50V
C24 2A103J
C25 470uF/50V
C26 2A104J
VR6 10K
R29 10K
R28 68K
D14 1N4007
K1
IC2A LM358
R31 2.7K
D15 3V
Q7 S8050
R34 10K
R27 100
R25 10K
VR7 10K
R30 10K
C27 4.7uF/50V
R33 10K
R26 220K
D13 1N4007
K2
IC2B LM358
R32 2.7K
D16 3V
Q8 S8050
R35 10K
LM7805
VR4
C22 220uF/50V
+5V
接数字表头
J6
Title
Size A3
Number
Revision
Date: 2018/1/29
Sheet of
File: C:\Users\..\0-30V 10A_20170622.SchDoc
Drawn By: