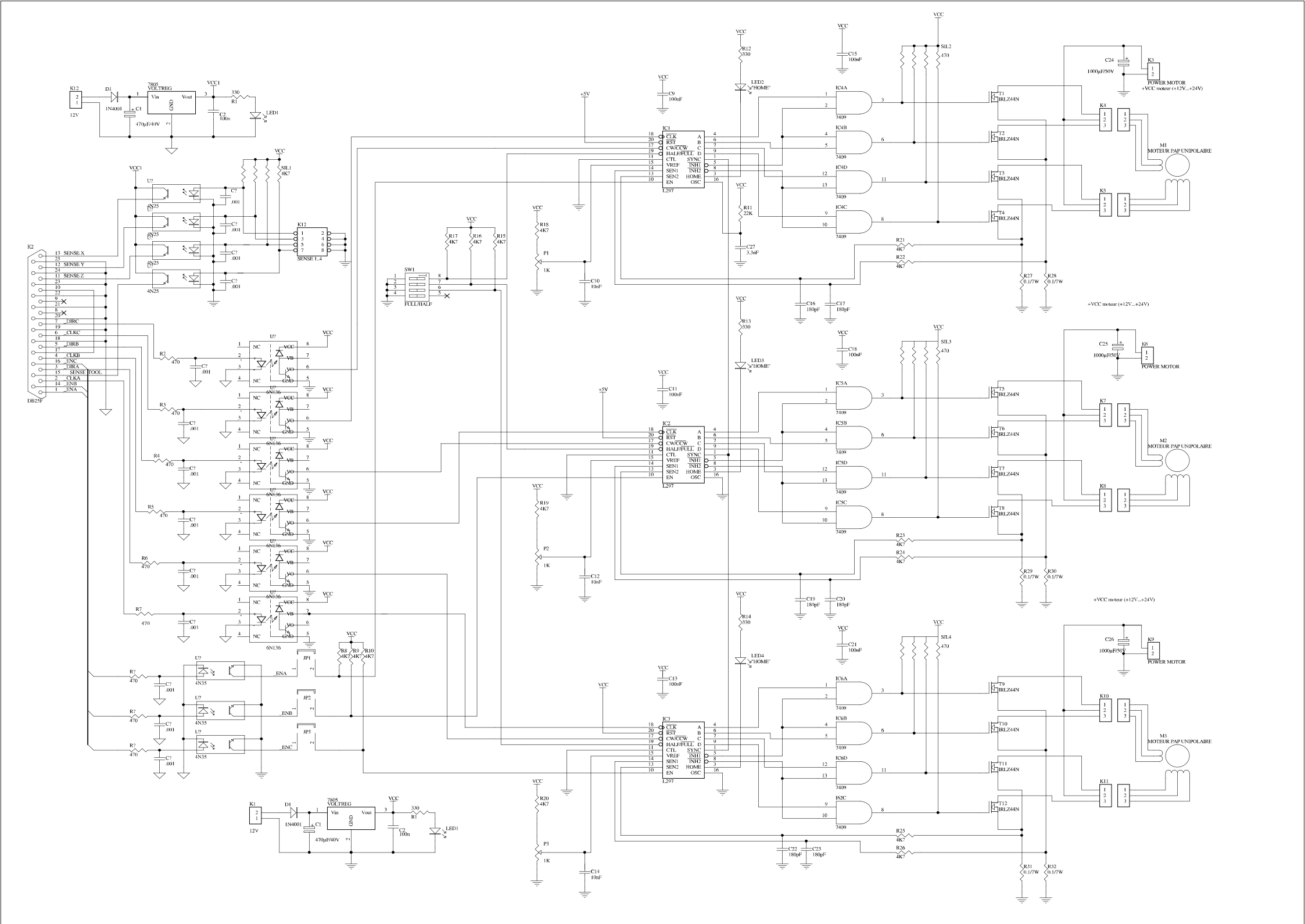
K12
12V
D1
1N4001
7805
VOLTREG
Vin
GND
Vout
C1
470µF/40V
C2
100n
VCC1
330
R1
LED1
VCC
SIL1
4K7
U?
4N25
C?
.001
SENSE 1..4
K2
DB25F
13 SENSE X
12 SENSE Y
11 SENSE Z
7 _DIRC
6 _CLKC
5 _DIRB
4 _CLKB
16 _ENC
3 _DIRA
15 _SENSE TOOL
2 _CLKA
14 _ENB
1 _ENA
R2
R3
R4
R5
R6
R7
470
6N136
4N35
_ENA
_ENB
_ENC
JP1
JP2
JP3
R8
R9
R10
4K7
SW1
FULL/HALF
R17
R16
R15
R18
R13
R14
P1
P2
P3
1K
C9
C11
C13
100nF
C10
C12
C14
10nF
+5V
IC1
IC2
IC3
L297
CLK
RST
CW/CCW
HALF/FULL
CTL
VREF
SEN1
SEN2
EN
SYNC
INH1
INH2
HOME
OSC
R12
R11
22K
R20
C27
3,3nF
LED2
"HOME"
LED3
LED4
C15
C18
C21
C16
C17
C19
C20
C22
C23
180pF
IC4A
IC4B
IC4D
IC4C
IC5A
IC5B
IC5D
IC5C
IC6A
IC6B
I62C
IC6D
74/09
R21
R22
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
0.1/7W
SIL2
SIL3
SIL4
470
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
IRLZ44N
C24
C25
C26
1000µF/50V
K3
K4
K5
K6
K7
K8
K9
K10
K11
POWER MOTOR
+VCC moteur (+12V...+24V)
M1
MOTEUR PAP UNIPOLAIRE
M2
M3