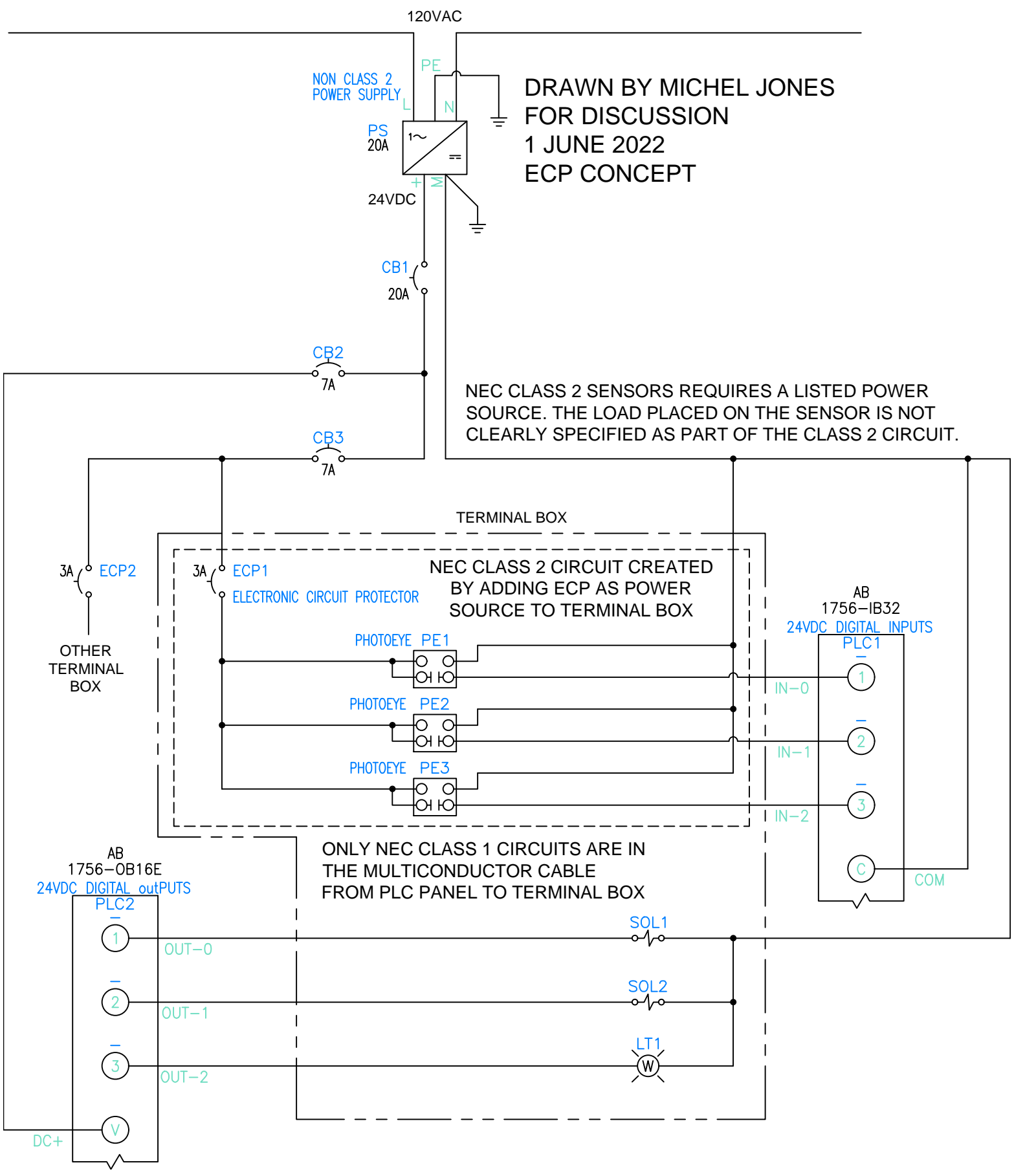


DRAWN BY MICHEL JONES  
FOR DISCUSSION  
1 JUNE 2022  
ECP CONCEPT

NEC CLASS 2 SENSORS REQUIRES A LISTED POWER SOURCE. THE LOAD PLACED ON THE SENSOR IS NOT CLEARLY SPECIFIED AS PART OF THE CLASS 2 CIRCUIT.



TERMINAL BOX

NEC CLASS 2 CIRCUIT CREATED  
BY ADDING ECP AS POWER  
SOURCE TO TERMINAL BOX

ONLY NEC CLASS 1 CIRCUITS ARE IN  
THE MULTICONDUCTOR CABLE  
FROM PLC PANEL TO TERMINAL BOX

NON CLASS 2  
POWER SUPPLY

PS  
20A

24VDC

CB1  
20A

CB2  
7A

CB3  
7A

ECP2

OTHER  
TERMINAL  
BOX

ECP1  
ELECTRONIC CIRCUIT PROTECTOR

PHOTOEYE PE1

PHOTOEYE PE2

PHOTOEYE PE3

AB  
1756-IB32  
24VDC DIGITAL INPUTS

PLC1

IN-0

IN-1

IN-2

COM

AB  
1756-OB16E  
24VDC DIGITAL outPUTS

PLC2

OUT-0

OUT-1

OUT-2

DC+

SOL1

SOL2

LT1