

# SILCON BATTERY BREAKERBOX SPECIFICATION

## 1. SYSTEM MAINS SUPPLY RATING

Mains voltage : 2x400V DC  
Control Voltage : 230V at 50Hz  
Short-circuit current Icc : 10 kA

## 2. STANDARDS

The Service By-pass Panel is built according to : IEC 439-1

## 3. ENVIRONMENTS

The assembly is made for an ambient temperature of :  Max: +40°C and  Min : -5°C

## 4. ENCLOSURE

The enclosure of the assembly is : IP20 and Form 1  
The assembly material is : Steel

## 5. POSITIONING

The assembly is made for indoor installation on:  floor  
 wall

## 6. DIMENSIONS AND WEIGHTS

Height : 1055 mm  
Width : 850 mm  
Depth : 350 mm  
Weight : 100 kg

## 7. CABLE ENTRIES

Inlets for UPS:  
 Bottom

Outlets for Batteries:  
 Top

## 8. CONNECTIONS

Power Circuits :  
Input  Output   
 Terminals

Control Circuits :  
 Terminals

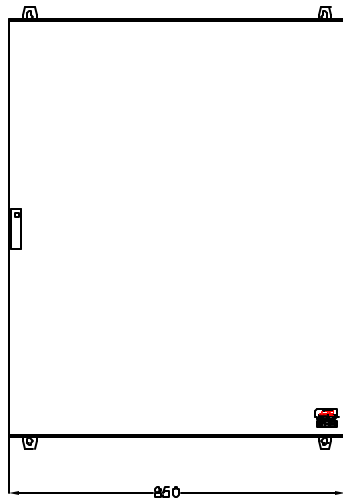
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TITLE: SILCON 480kW UPS  
BATTERY BREAKER BDX,  
SPECIFICATION SHEET  
480kW, 400V  
PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 8

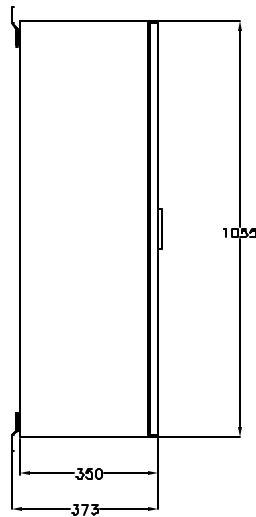
DWG NO: SBB480KH-SP  
DRAWN BY: W.ZON 13/08/03  
CHECKED BY: B.NIELSEN 13/08/03  
ENGINEER: CLARKE 13/08/03

REV. -  
PRODUCTION

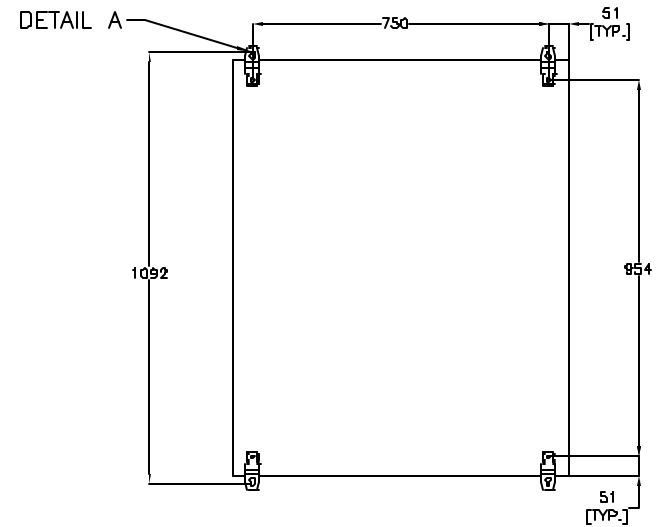
**APC**<sup>®</sup>  
AMERICAN POWER CONVERSION  
132 FAIRBOURNS RD  
WEST KINGSTON, RI 02892



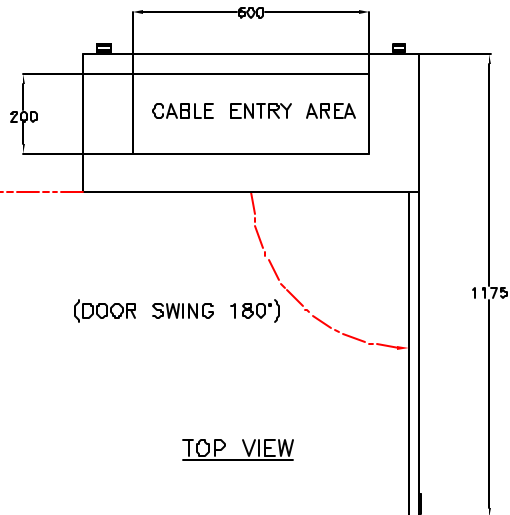
FRONT VIEW



LEFT SIDE VIEW

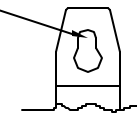


REAR VIEW  
(MOUNTING HOLE LOCATIONS)



TOP VIEW

4 x  $\varnothing 9$  MOUNTING HOLES



DETAIL A  
(ENLARGED VIEW)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. MINIMUM SERVICE CLEARANCE IS 914 FRONT AND RIGHT.
3. CONDUIT ENTRY IS TOP OR BOTTOM OF UNIT.
4. UNIT WEIGHT IS 100 kg.
5. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL AND LOCAL STANDARDS.

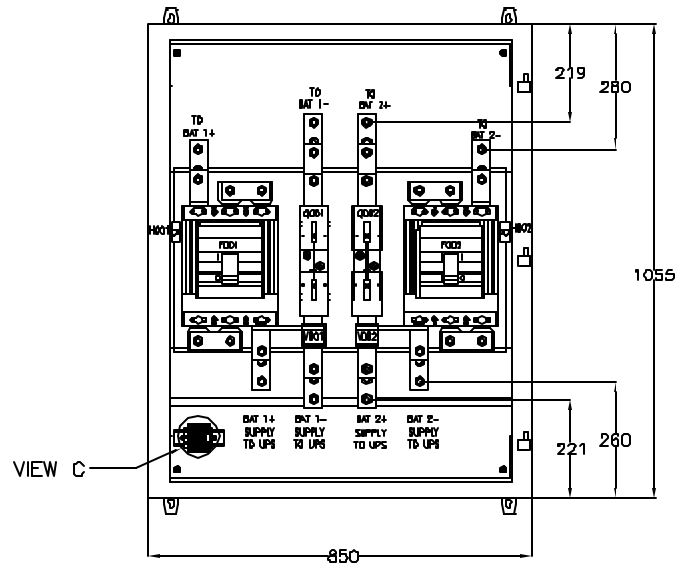
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TITLE: SILCON 480KW UPS BATTERY BREAKER BOX, MAIN MECHANICAL 480KW, 400V  
PROJECT: SUBMITAL DRAWINGS SHEET 2 OF 8

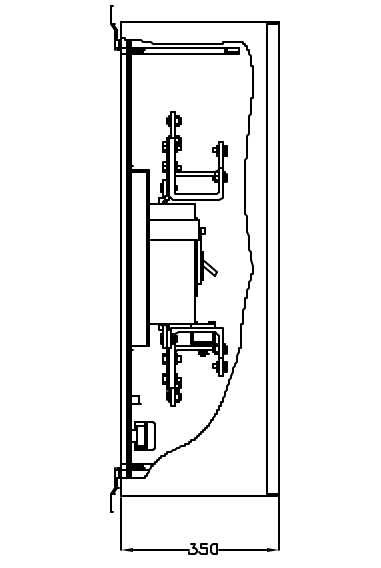
DWG NO: SBB480KH-MM  
DRAWN BY: MAZON 13/08/03  
CHECKED BY: BUNELSEN 13/08/03  
ENGINEER: CLARSEN 13/08/03

REV: -  
PROJECTION

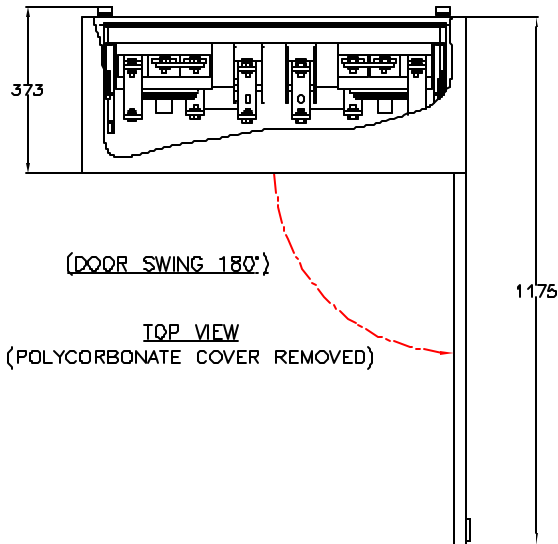




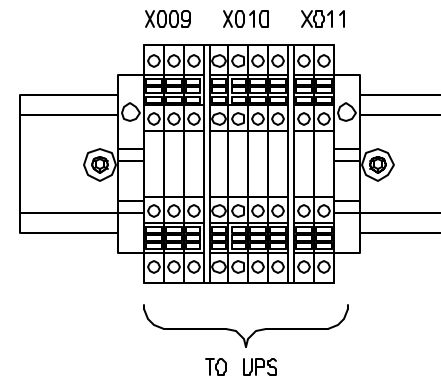
FRONT VIEW  
(DOOR AND POLYCARBONATE COVER REMOVED)



LEFT SIDE VIEW  
(POLYCARBONATE COVER REMOVED)



(DOOR SWING 180°)  
TOP VIEW  
(POLYCARBONATE COVER REMOVED)



VIEW C (ENLARGED)  
CONTROL WIRING

- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS.
  2. BATTERY CABLING VOLTAGE DROP SHOULD NOT EXCEED 1%.
  3. CIRCUIT BREAKERS FO01,FO02 ARE 800 AMP.
  4. WIRING CONFIGURATION SHOWN IS FOR REFERENCE ONLY.
  5. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL AND LOCAL CODES.

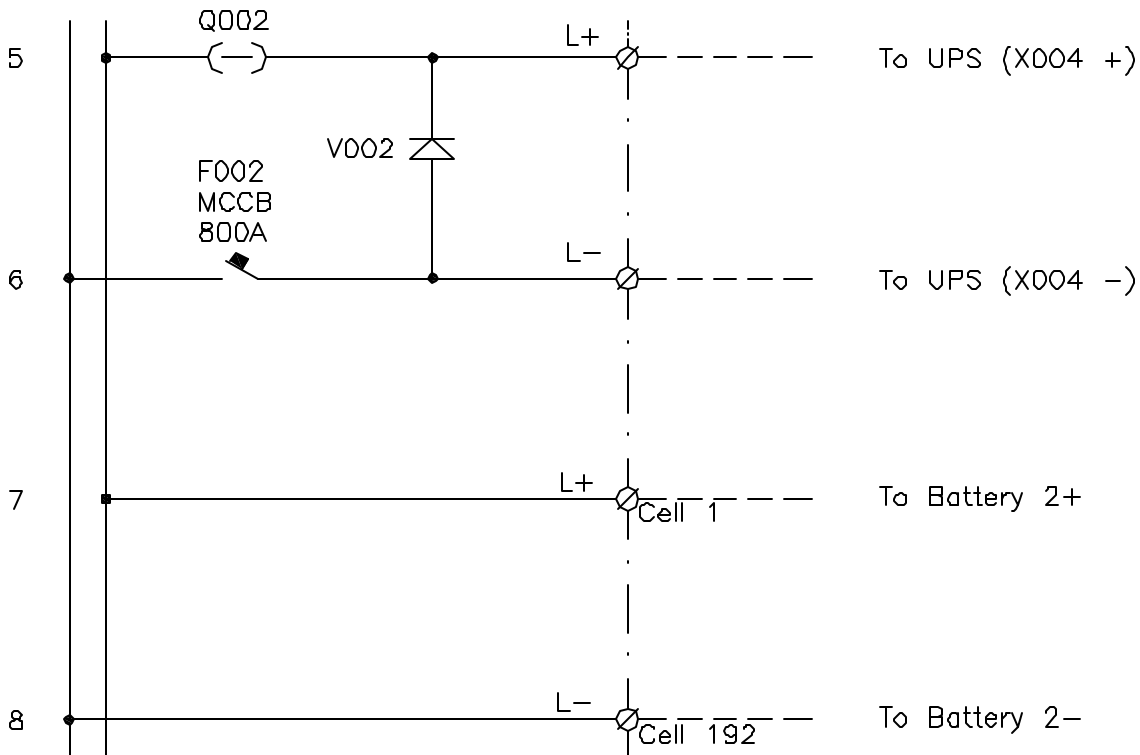
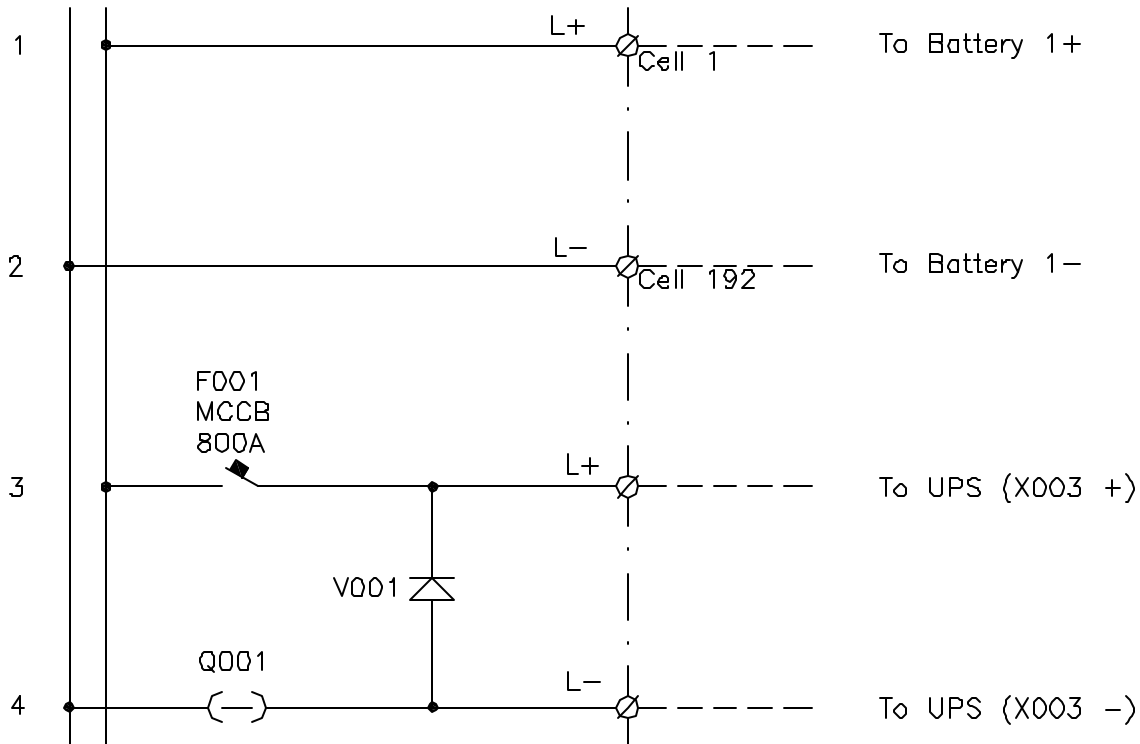
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TITLE: SILICON 480kW UPS  
BATTERY BREAKER BOX,  
ELECTROMECHANICAL  
480kW, 400V  
PROJECT: SUBMITAL DRAWINGS SHEET 3 OF 4

DWG NO: SBB480KH-ME  
REV: —  
DRAWN BY: M.ZION 13/08/03  
CHECKED BY: BNIELSEN 13/08/03  
ENGINEER: CLARSEN 13/08/03

PROTECTION  
AMERICAN POWER CONVERSION  
132 PARKWAY RD  
WEST KINGSTON, RI 02892

880V DC  
 In=800A  
 L-L+



NOTES:

1. DASHED (---) LINES OUTSIDE OF SBB UNIT, REPRESENT CABLING PROVIDED BY OTHERS.

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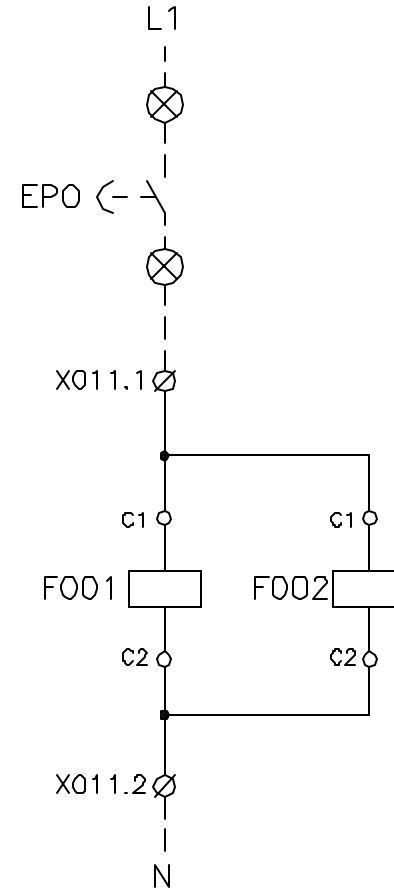
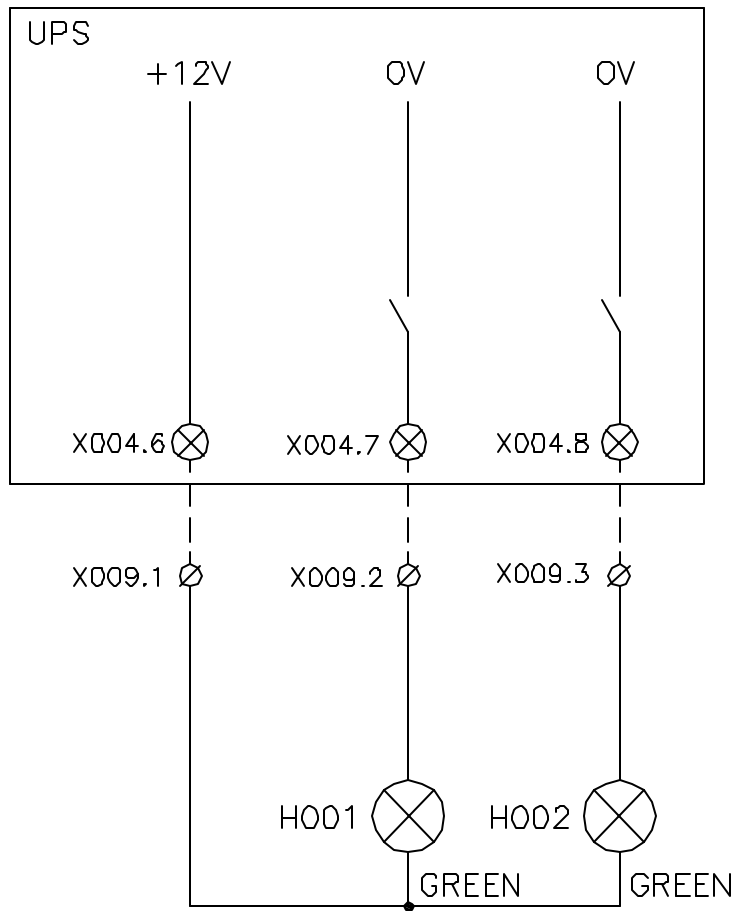
TITLE: SILCON 480kW UPS BATTERY BREAKER BOX, POWER CIRCUIT 480kW, 400V  
 PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 8

DWG NO: SBB480KH-ES  
 DRAWN BY: M.ZDN 07/01/04  
 CHECKED BY: ENIELSEN 07/01/04  
 ENGINEER: CLARSEN 07/01/04

REV. 1  
 PROJECTION



CONTROL CIRCUIT



1                      2                      3                      4                      5                      6                      7                      8                      9                      10

OK FOR  
OPERATING  
THE F002

OK FOR  
OPERATING  
THE F001

TRIP FOR  
EMERGENCY TRIP  
(220-240V AC)

NOTES:

- X004 terminals located in UPS.
- X009 terminals located in SBB.
- Dashed (- -) lines outside of MCCB unit, represent cabling provided by others.

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TITLE: SILICON 480KW UPS BATTERY BREAKER BOX, CONTROL CIRCUIT 480KW, 400V

PROJECT: SUBMITAL DRAWING SHEET 5 OF 6

DWG NO: SBB480KH-ES

DESIGN BY: MZDN

CHECKED BY: BNIJSEN

ENGINEER: CLJSEN

REV. -

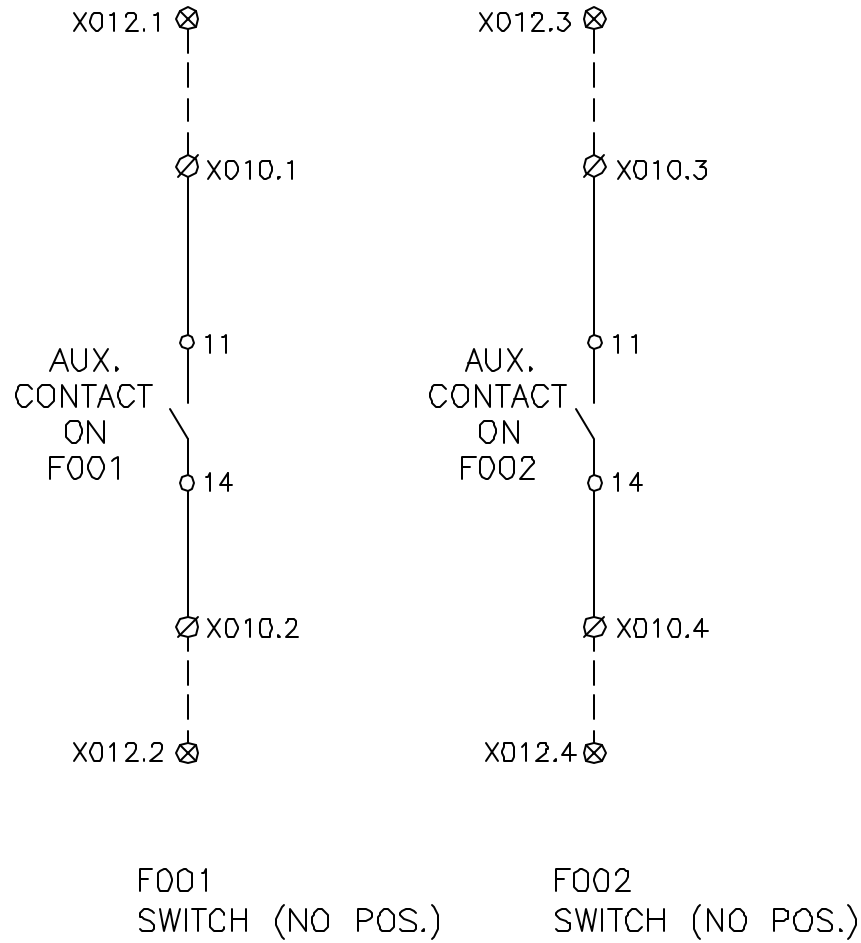
13/08/03

13/08/03

13/08/03



## CONTROL CIRCUIT



**NOTES:**

1. X012 ⊗ TERMINALS LOCATED IN UPS.
2. X010 ⊕ TERMINALS LOCATED IN SBB.
3. DASHED (---) LINES OUTSIDE OF MCCB UNIT, REPRESENT CABLING PROVIDED BY OTHERS.

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**TITLE:** SILICON 480KW UPS  
BATTERY BREAKER BOX,  
CONTROL CIRCUIT  
480KW, 400V

**PROJECT:** SUBMITTAL DRAWINGS    **SHEET #** OF #

**DWG NO:** SBB480KH-ES

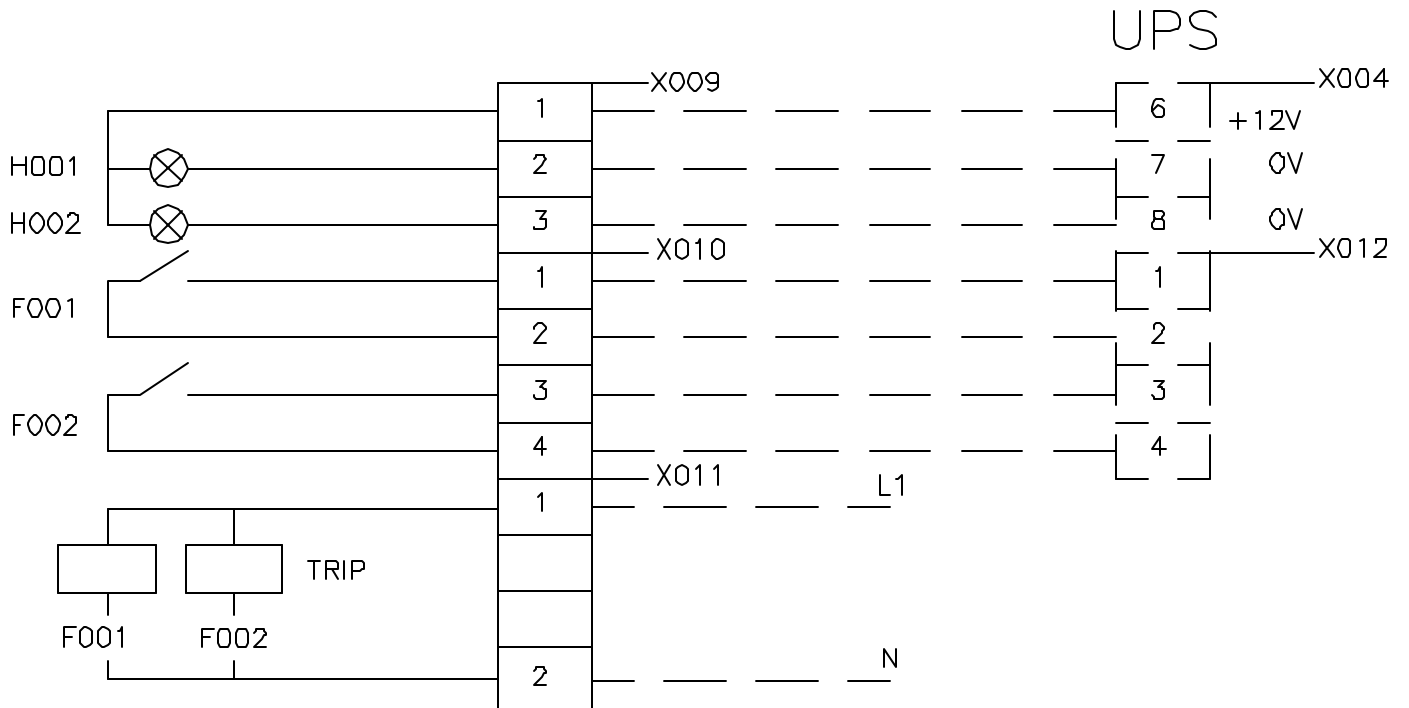
<b>DESIGNED BY:</b> M.ZION	<b>DATE:</b> 13/08/03
<b>CHECKED BY:</b> B.NIELSEN	<b>DATE:</b> 13/08/03
<b>ENGINEER:</b> G.JARSEN	<b>DATE:</b> 13/08/03

**REV.** —

**PROMOTION**



# CONTROL CIRCUIT



**NOTES:**

1. DASHED ( - - - ) LINES OUTSIDE OF SBB UNIT, REPRESENT CABLING PROVIDED BY OTHERS.

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TITLE: SILCON 480KW UPS  
BATTERY BREAKER BOX,  
CONTROL CIRCUIT  
480KW, 400V

PROJECT: SUBMITTAL DRAWINGS SHEET 7 OF 8

DWG NO: SBB480KH-ES

DRAWN BY: MLDW	1.3/08/03
CHECKED BY: EBENSEN	1.3/08/03
ENGINEER: CLARSEN	1.3/08/03

REV. -

PROJECTION



