





EXTERNAL MAINTENANCE BYPASS

50kW, 3-SWITCHES

Product number: P-105000003-046

METRIC	 THIRD ANGLE PROJECTION	EATON CORPORATION			
DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994. SEE NOTES FOR TOLERANCES.					
DESCRIPTION: EXTERNAL MBS 50kW, 3-SWITCHES					
ORIGINATED: E5900113 /POK	30.07.2012	ECO:	NAME:	REVISION:	SIZE: A4
MODIFIED: E5900086/TS	31.12.2013	ECO-059028	P-105000003-046	1	NOT TO SCALE
CHECKED: E5900086/TS		DOCUMENT TYPE:		STATE:	SHEET:
SAFETY:		AUTOCAD DRAWING	Released	1 OF 9	
APPROVED: E5900108/Jm		Common sheet			

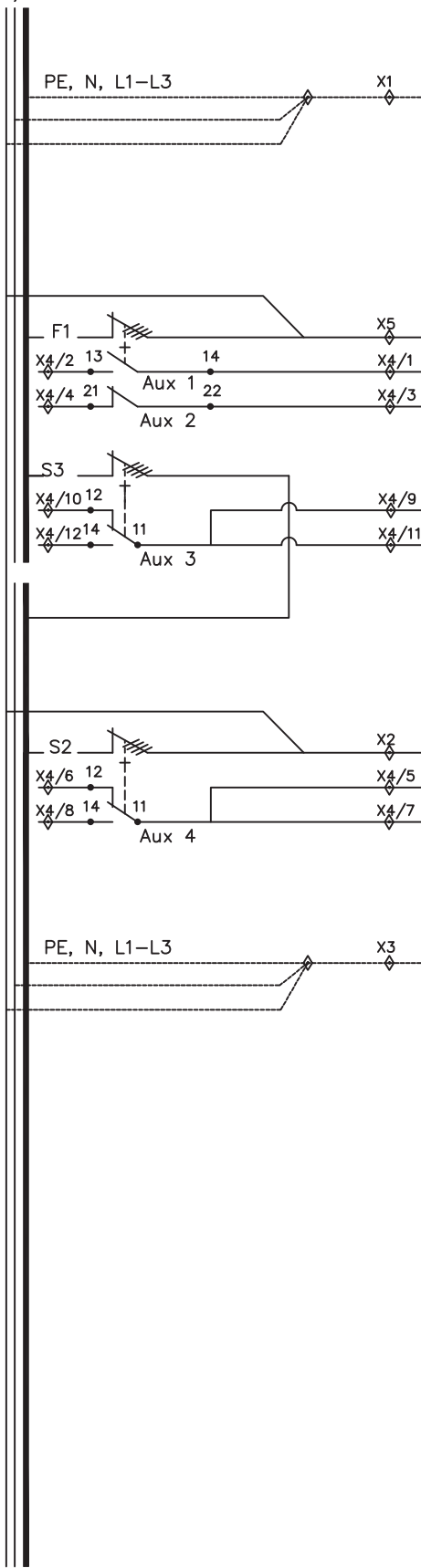
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PE, N, L1-L3

MAIN BUSBAR, 3P+N+PE 50Hz 400V, Icc 10kA



LAYOUT	NAME		TERMINAL
X1	" SYSTEM INPUT "		5x35mm2
	MAIN SWITCHGEAR SYSTEM INPUT	90 A	
X5	" TO UPS BYPASS INPUT "		5x35mm2
F1	BIB, BYPASS INPUT BREAKER MCB 3P+N	100 A	
X4/1-2	F1 Aux NO		2x1.5mm2
X4/3-4	F1 Aux NC		2x1.5mm2
S3	MBP, MAINTENANCE BYPASS SWITCH 4P	125 A	
X4/9-10	S3 Aux NC		2x1.5mm2
X4/11-12	S3 Aux NO		2x1.5mm2
X2	" FROM UPS OUTPUT "		5x35mm2
S2	MIS, MAINTENANCE INSULATION SWITCH 4P	125 A	
X4/5-6	S2 Aux NC		2x1.5mm2
X4/7-8	S2 Aux NO		2x1.5mm2
X3	" SYSTEM OUTPUT "		5x35mm2
	MAIN SWITCHGEAR SYSTEM OUTPUT	90 A	

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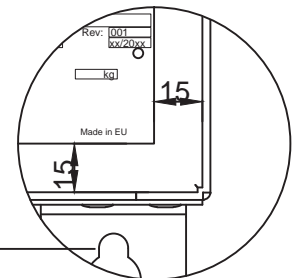
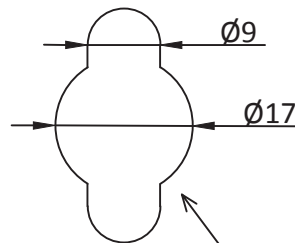
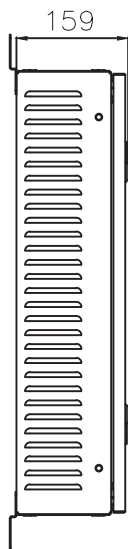
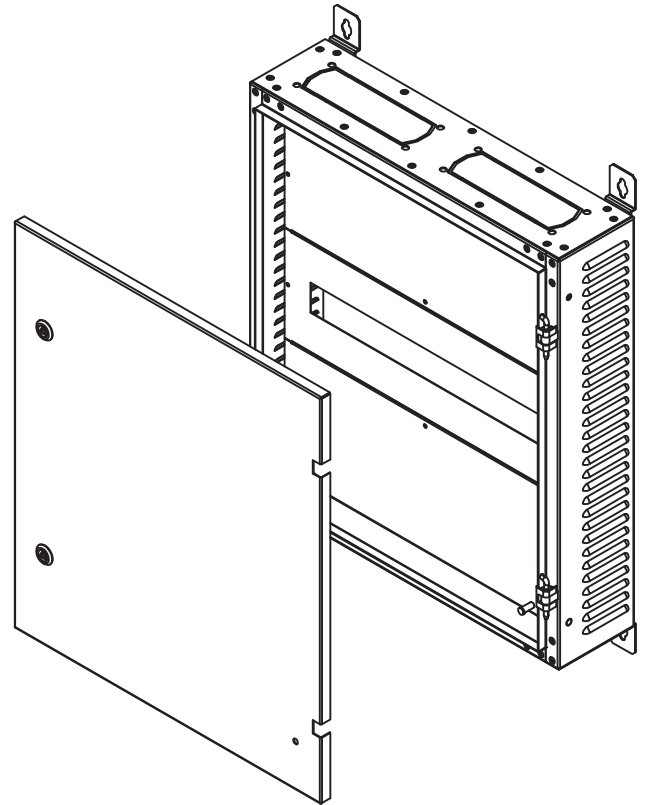
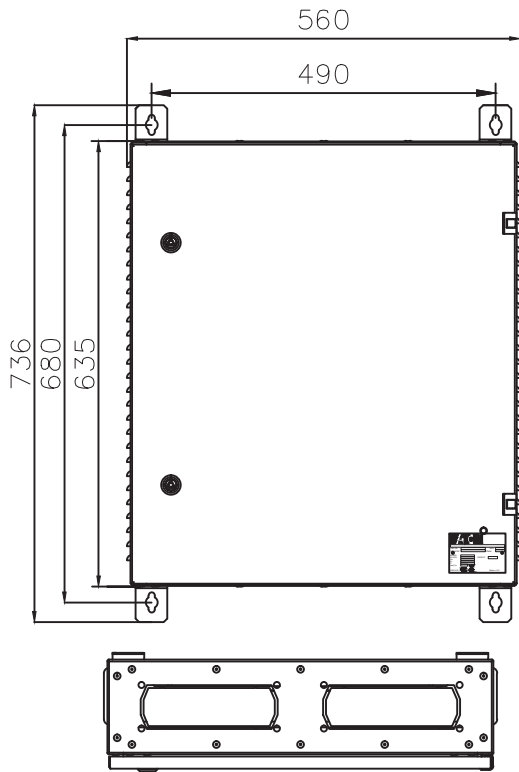
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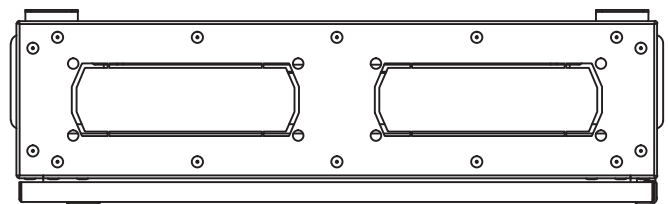
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APPROVED: E5900108/Jm		Switchgear diagram			2 OF 9

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* Fixing hole



* Flange type : FL21

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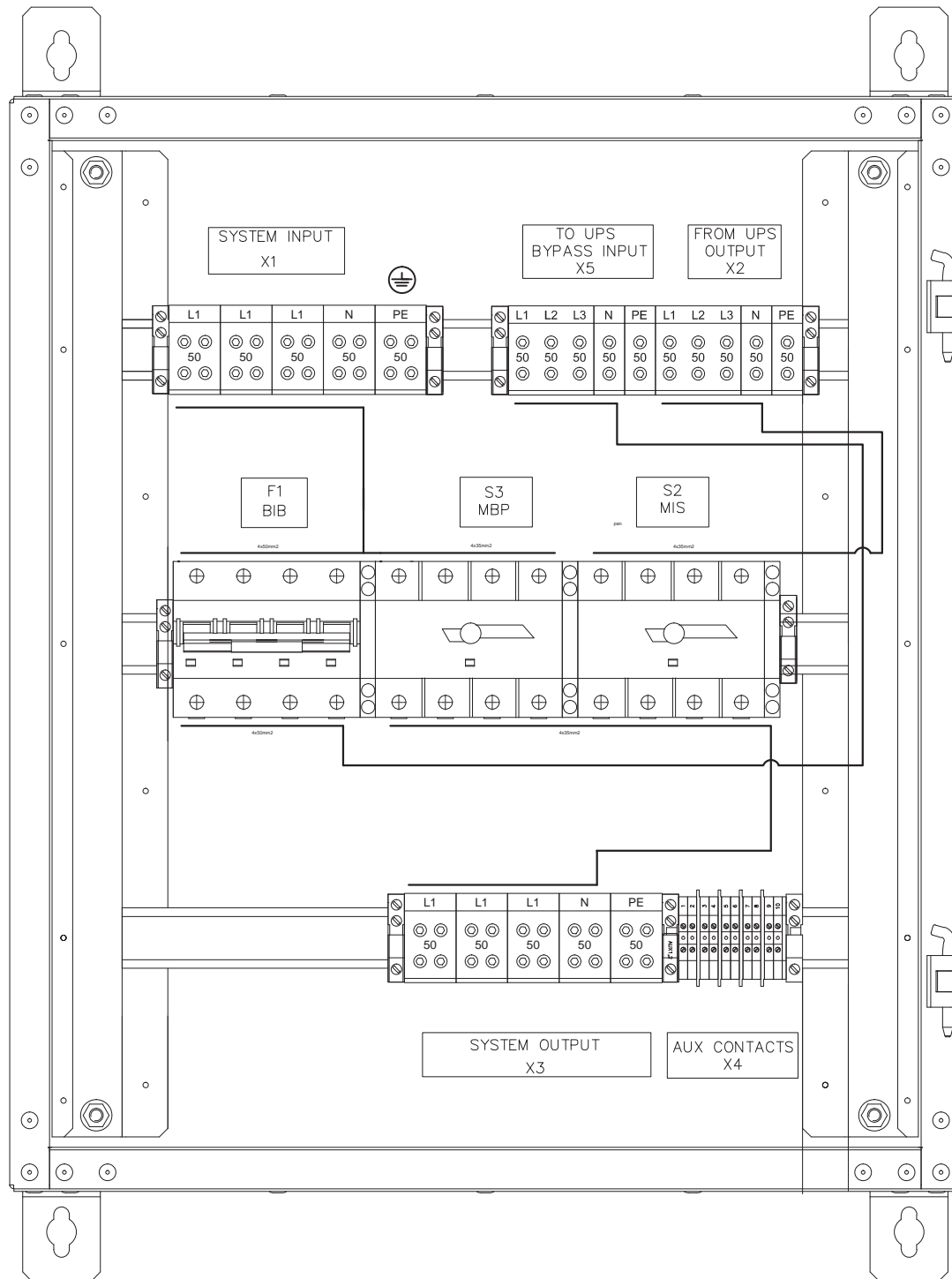
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A TECHNICAL SPECIFICATION

STANDARD IEC/EN 61439-2

MAINS TN-S, 5W/3P+N+PE, 230/400VAC 3~

- 1. Nominal Voltage U_n 230/400 V
- 2. Nominal Current I_n 90 A
- 3. Nominal Frequency f_n 50/60 Hz
- 4. Operating Temperature T max +40 °C
- 5. Current capability
 - Thermal I_{cc} 10 kA *)
 - Dynamical I_{pk} kA
- 6. Power dissipation P W
- 7. Electrical Wiring AC
 - L1
 - L2
 - L3
 - N
 - PE
 - PEN

TYPE PLATE, SAMPLE

EATON		80	56
EXTERNAL MBS 50kW, 3-SWITCHES			
Part Nr:	<u>P-105000003-046</u>	Rev:	<u>001</u>
Serial Nr:	<u>00001</u>	Date:	<u>01/2013</u>
MAINS:	<u>TN-S</u>	WEIGHT:	<u>26 kg</u>
CLASS:	<u>IP22</u>		
U_n	<u>230/400</u> V		
I_n	<u>90</u> A		
f_n	<u>50/60</u> Hz		
I_{cc}	<u>10</u> kA		
IEC61439-2		Made in EU	

B CONSTRUCTION OF SWITCHGEAR

- 1. Enclosure Class IP 22
 - Outfield location
 - Interior location
- 2. Installation
 - Surficial
 - Wall mounting
 - Floor mounting
- 3. Additional door
 - Lock-up
- 4. Color
 - Common color RAL7035
 - Custom color Eaton dwg
- 5. Cabling entry 164700509-001
 - Top entry
 - Bottom entry
 - Conduit flange of cable
- 6. Material specification
 - Cable material 90°C, H07V2-K
 - Cable U/Uo 450/750
 - Cover material
 - Other demand
- 7. Handle location DoorHandle
 -
 -
 -
 -

Note !

- 1.*) Back-up fuse required for system
- input 100A gG
- 2.
- 3.
- 4.
- 5.

C CUSTOMER ELECTRICAL INFORMATION

- 1. MAINS
 - TN-C-S
 - TN-S
 - IT
- 2. LOAD POWER
 - S kVA
 - P kW
 - p.f.

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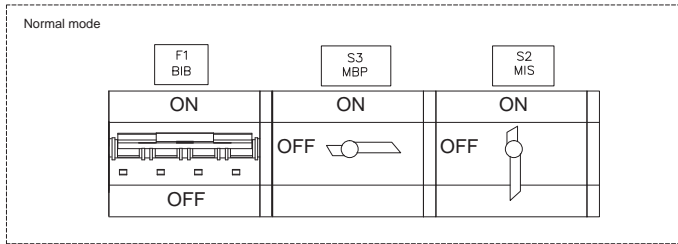
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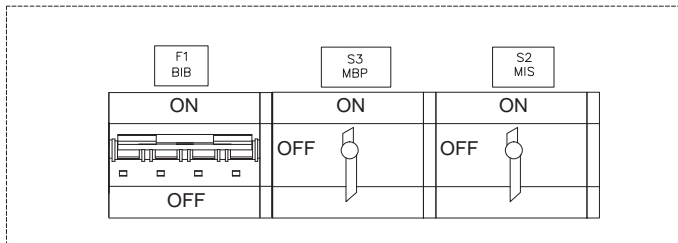
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Turn UPS from NORMAL MODE to MECHANICAL BYPASS

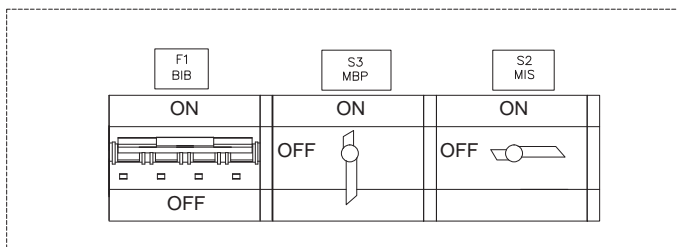
1. The start position is following:



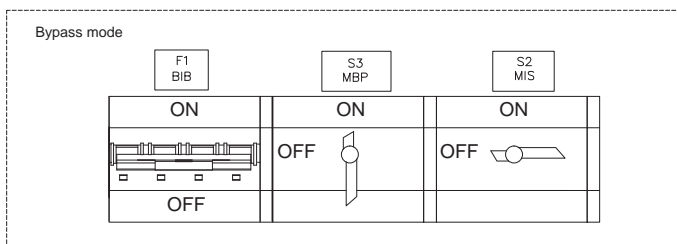
2. Use UPS display to turn the UPS on internal static bypass mode. Remember to verify the transfer before proceeding the next step.
3. Turn ON the MBP (S3) to bypass UPS:



4. Use UPS display to turn UPS OFF.
5. Turn OFF the MIS (S2) to disconnect UPS output:



6. Turn the UPS Battery Breaker (CB1) if not automatically tripped and UPS Rectifier Input Switch (S1) to OFF position.
7. Turn OFF the BIB (F1) to disconnect UPS from bypass input:



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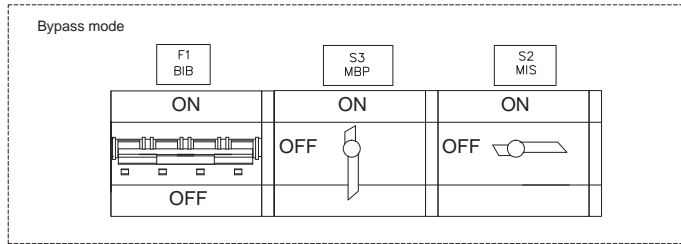
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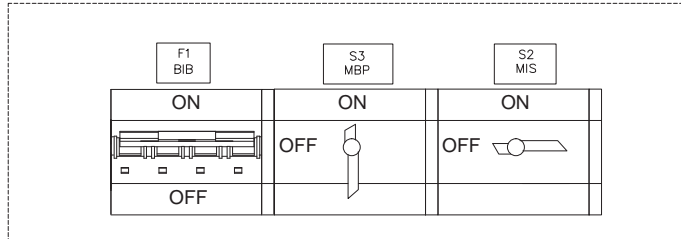
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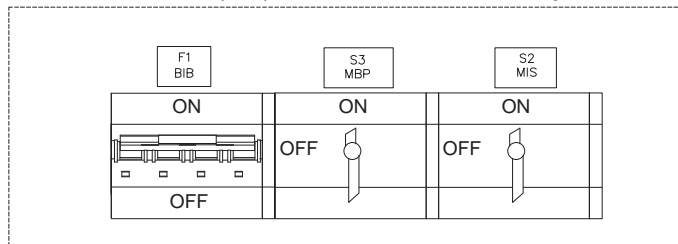


2. Turn ON the BIB (F1) to connect Bypass input to UPS.



3. Turn the UPS Battery Breaker (CB1) and UPS Rectifier Input Switch (S1) to ON position.

4. Turn ON the MIS (S2) to connect UPS output to load:

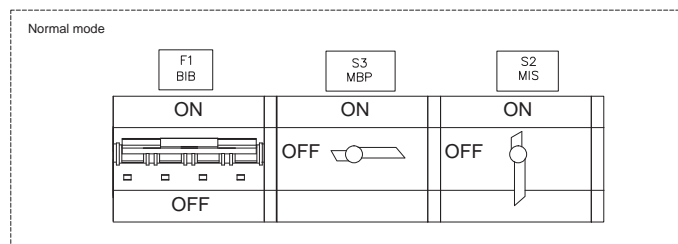


5. Use UPS display to Transfer the UPS to static bypass and give "Start Module" command to start the UPS(s) to "ready"-state.

-Make sure the UPS is not displaying any alarms or notices.

-You may verify the output voltage from the meters screen of the display.

6. Turn OFF the MBP (S3) to disconnect bypass output:



7. Use UPS display to transfer the UPS to normal mode (Give "Go Online"- command in the "Controls"-menu). Verify the UPS is running in "Normal"-mode, green LED is lit, status is displayed "Online" and no alarms are present.

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