



Lilium GmbH

Claude-Dornier-Str. 1, Geb. 335
82234 Weßling
Germany



Customer	
Project Description	Safety Panel Wind Test
Job Number	E_Safety_Panel
Lilium Patrimony Number	
Manufacturer (company) Lilium eAircraft GmbH	
Project name	Wind Tunnel Test
Power supply	
Input Voltage	400 V (including 230 V)
Frequency	
Control voltage	24V DC
Place of installation	
Responsible for project	Matheus
Edit date	26/05/2022
	by (short name) ENGMA
	Number of pages 22



			Date	25/05/2022	N°				= P1
			Ed.	ENGMA					+
			Appr.		Safety Panel Wind Test				
Modification	Date	Name	Original	Replacement of	Replaced by				Page 1 / 22
								E_Safety_Panel	Page 1 / 22



Cover
Lilium eAircraft GmbH



*SSY7663-7

-30F1
400 V 15kA, 3+N-pole, C, 63
SSY7663-7



*3LD5220-OTL13

30Q3
60A
3LD5220-OTK13

CAUTION!!!



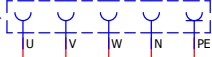
**Remains energized when
main switch is opened**

**#Level 1 Emergency Stop
Lockout and Tagout of the Main Disconnect Switch
(Location: At the Facility test building)**

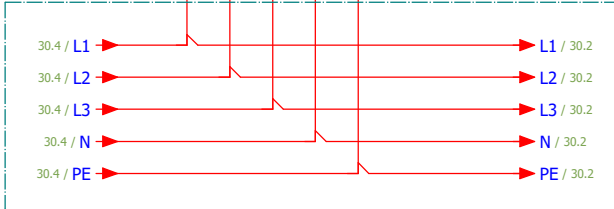
=PLUG



-X4



=TRANSMISSION LINE
+Building



U / 31.0
V / 31.0
W / 31.0
N / 31.0
PE / 39.0



*3RT2346-1NB30-4AA0

55K5
/32.5
/55.4
/55.5
AC-3, 95 A/45 kW/400 V
3RT2346-1NB30-4AA0

55K6
/32.8
/55.4
/55.6
AC-3, 95 A/45 kW/400 V
3RT2346-1NB30-4AA0

-55K5
/32.2

55K6
/32.2

32K5

32K6

32K7

32K8

1/L1 2/T1 /50.3
18 15 /55.4
16

1/L1 2/T1 /50.3
18 15 /55.4
16

1/L1 2/T1 /50.5
18 15 /55.4
16

1/L1 2/T1 /50.5
18 15 /55.4
16



		Date	25/05/2022	N°			Safety Distribution		= P1	
		Ed.	ENGMA	Safety Panel Wind Test			Lilium eAircraft GmbH		+	
Modification	Date	Name	Original	Replacement of	Replaced by				E_Safety_Panel	Page 32
									5 / 22	Page 32

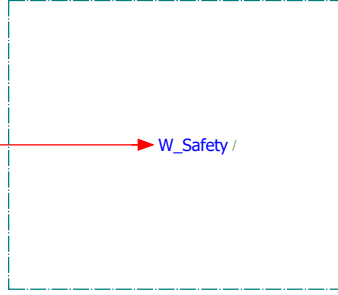
32.9 / W_Safety



-XW_S
PT 16 N
3212138



=Field



W_Safety /

XW.10 / 57.6

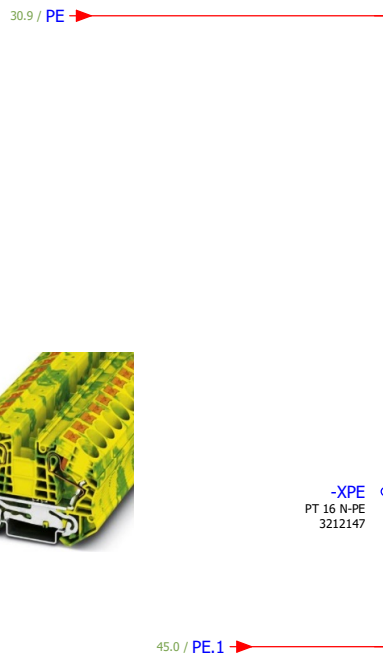
Modification	Date	Name	Original	Replacement of	Replaced by

Date	25/05/2022
Ed.	ENGMA
Appr.	
Safety Panel Wind Test	

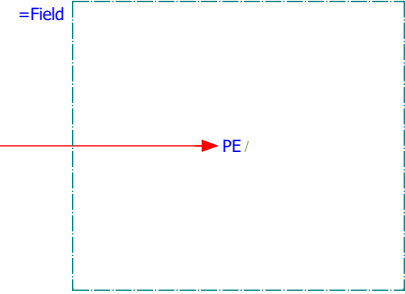
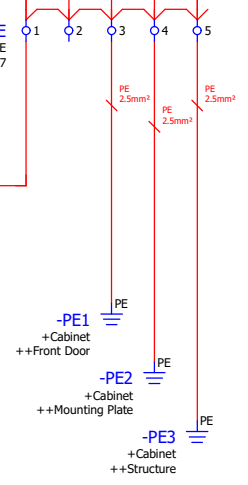


Phase W_Safety
Lilium eAircraft GmbH

= P1	
+	
E_Safety_Panel	Page 8 / 22
	Page 37



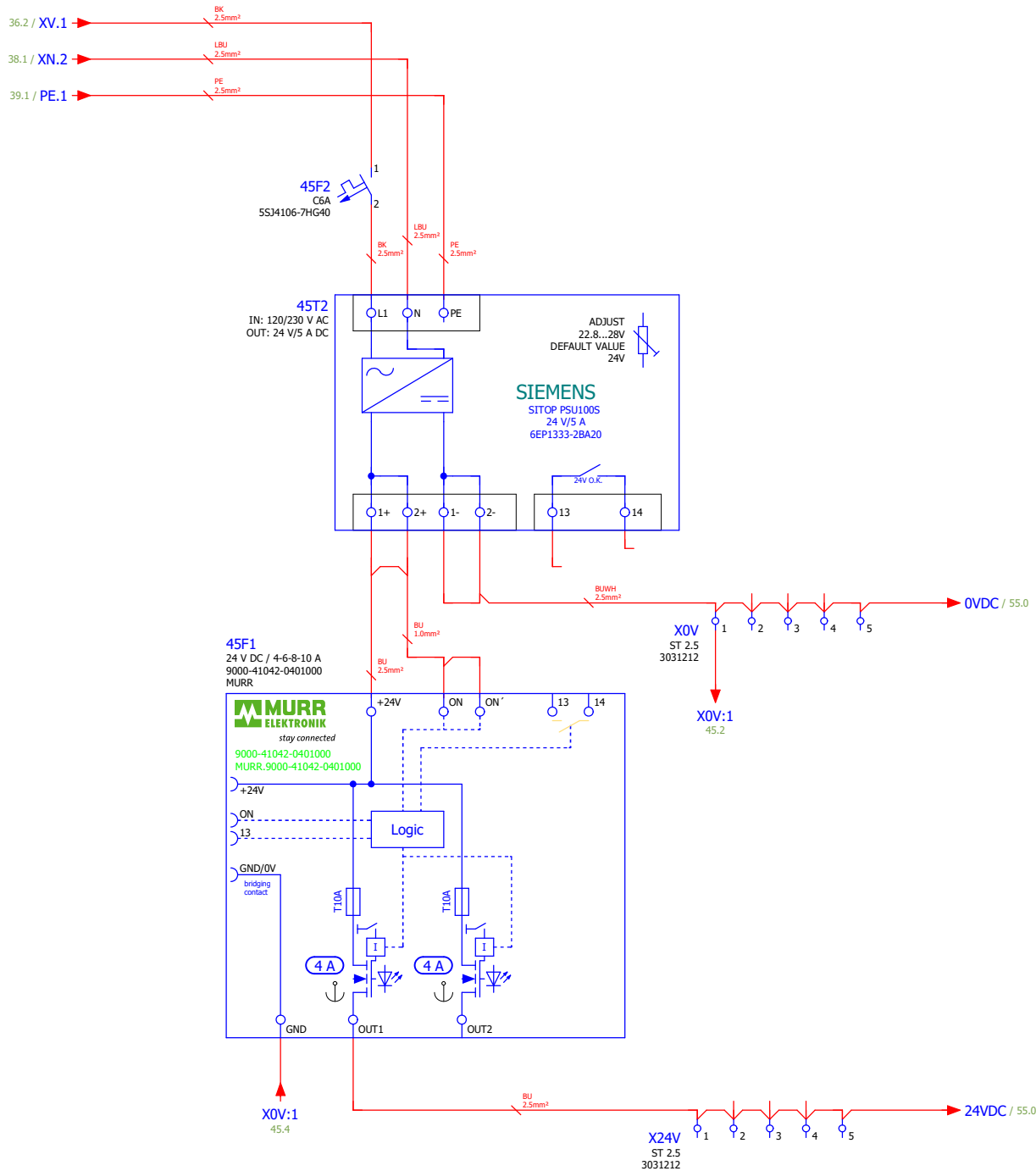
-XPE
PT 16 N-PE
3212147



			Date	25/05/2022	N°				= P1
			Ed.	ENGMA					+
			Appr.		Safety Panel Wind Test				
Modification	Date	Name	Original		Replacement of	Replaced by			
								E_Safety_Panel	Page 39
									Page 10 / 22



Distribution PE
Lilium eAircraft GmbH



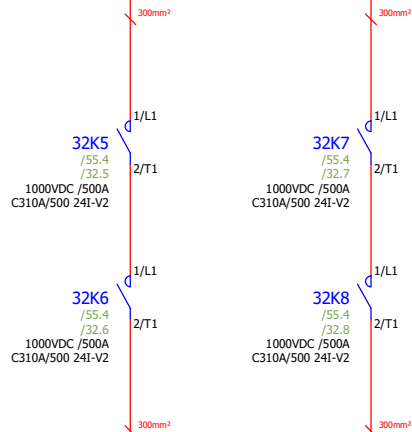
			Date	26/05/2022	N°		LILIUM	24VDC Power Supply	Lilium eAircraft GmbH	E_Safety_Panel	= P1 +
			Ed.	ENGMA							
			Appr.		Safety Panel Wind Test						Page 45
Modification	Date	Name	Original		Replacement of	Replaced by					Page 11 / 22

=DC Power Supply

/ DC-
/ DC+



*C310A/500 24I-V2



=Field

DC- /
DC+ /

Commute
DC+ Safety Circuit

Commute
DC+ Safety Circuit

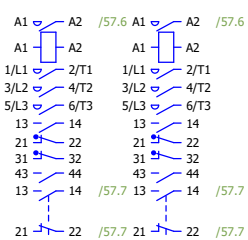
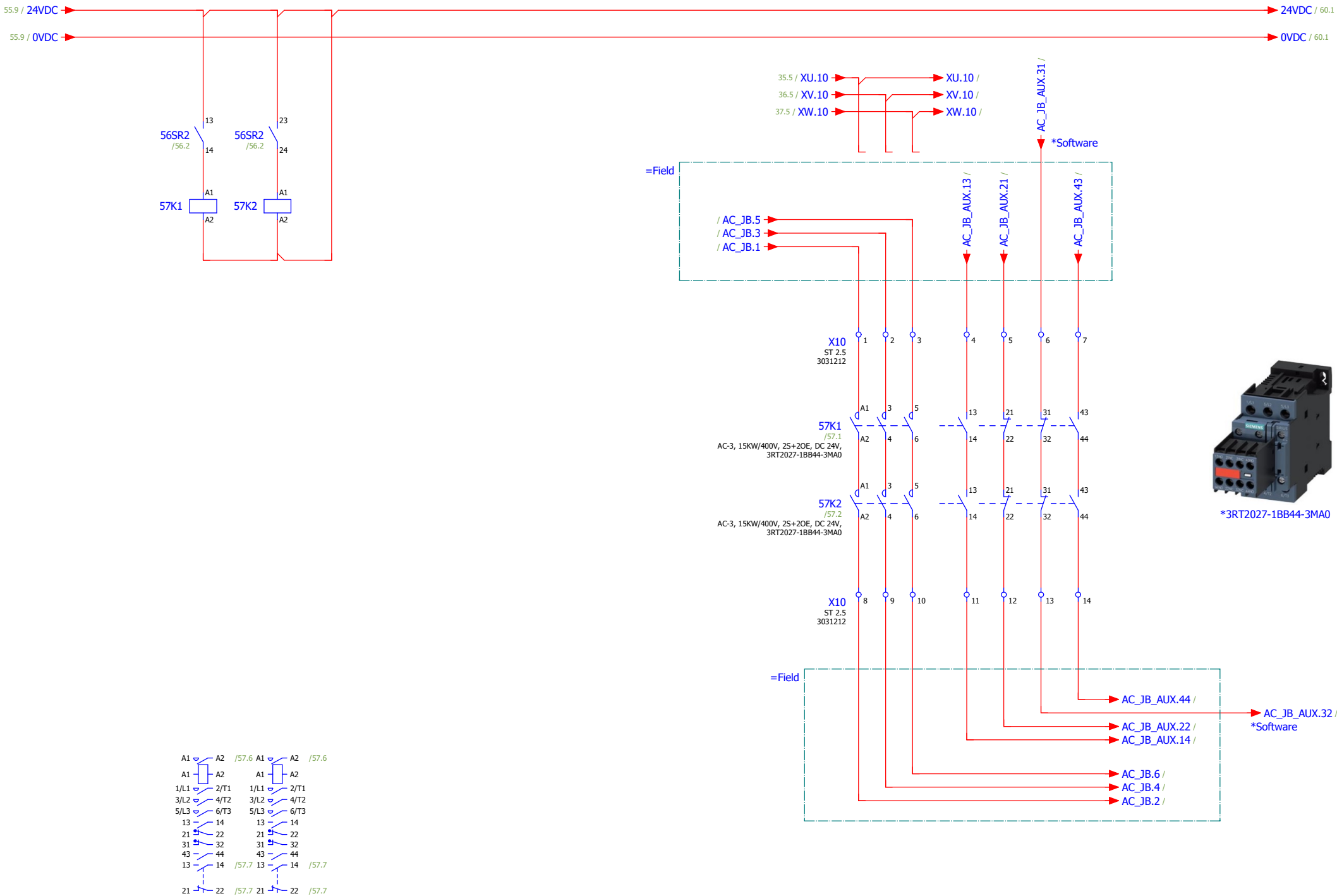
			Date	25/05/2022	N°	
			Ed.	ENGMA		
			Appr.			
Modification	Date	Name	Original		Replacement of	Replaced by

Safety Panel Wind Test	
Replacement of	Replaced by



DC Safety Circuit
Lilium eAircraft GmbH

	= P1	
	+	
E_Safety_Panel		Page 50
		Page 12 / 22



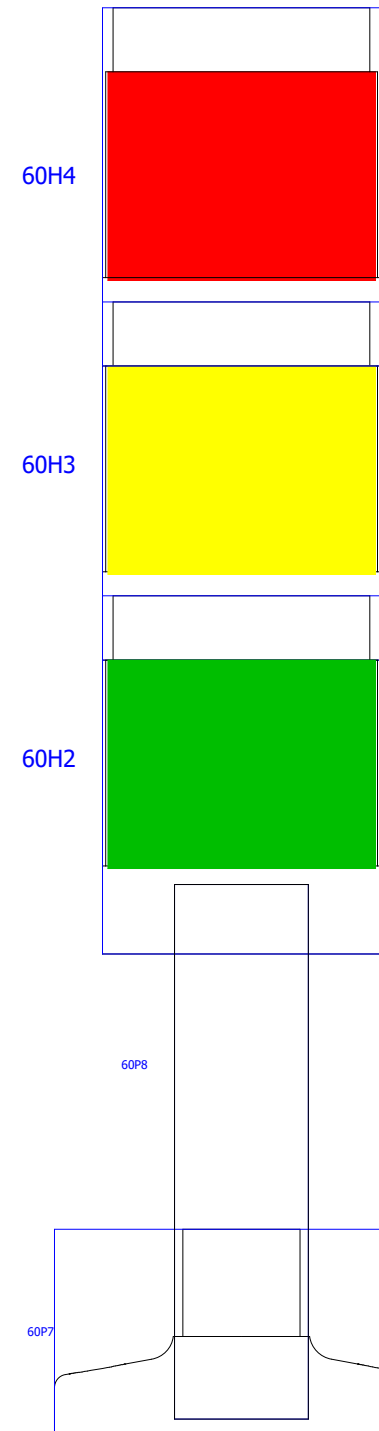
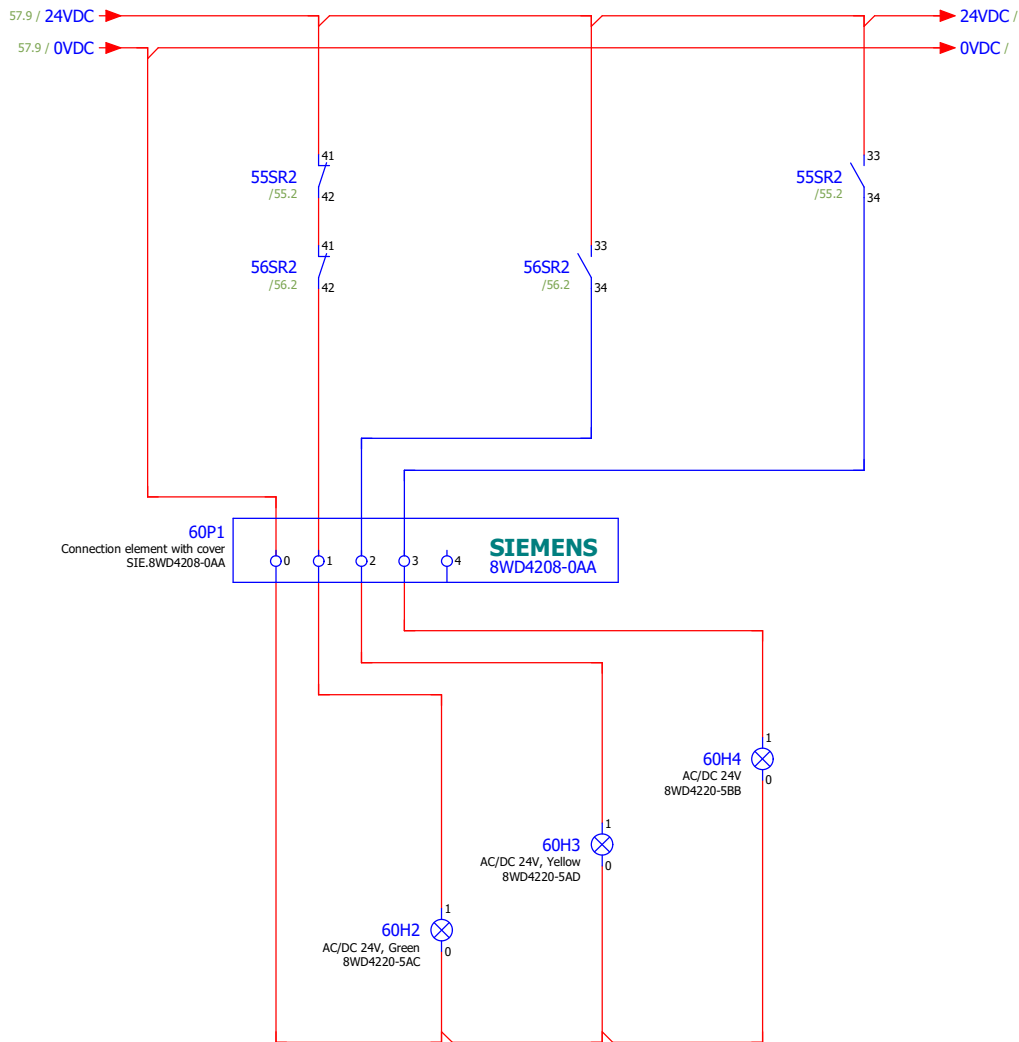
Modification	Date	Name	Original	Replacement of	Replaced by
	26/05/2022	ENGMA	57.7 31	Nº	57.7
			44 /57.7 43	Safety Panel Wind Test	

LILIUM

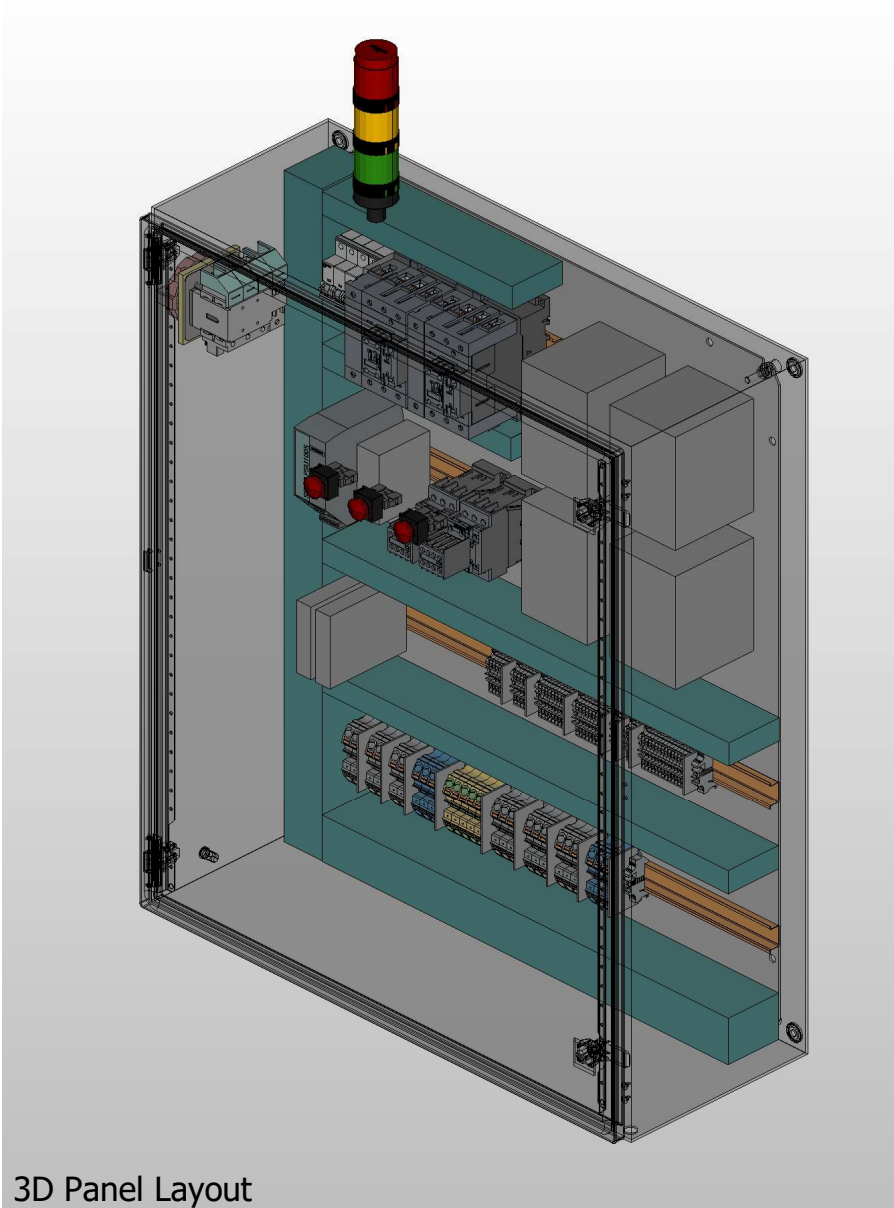
E-Stop (Level 3 - Contactors)

Lilium eAircraft GmbH

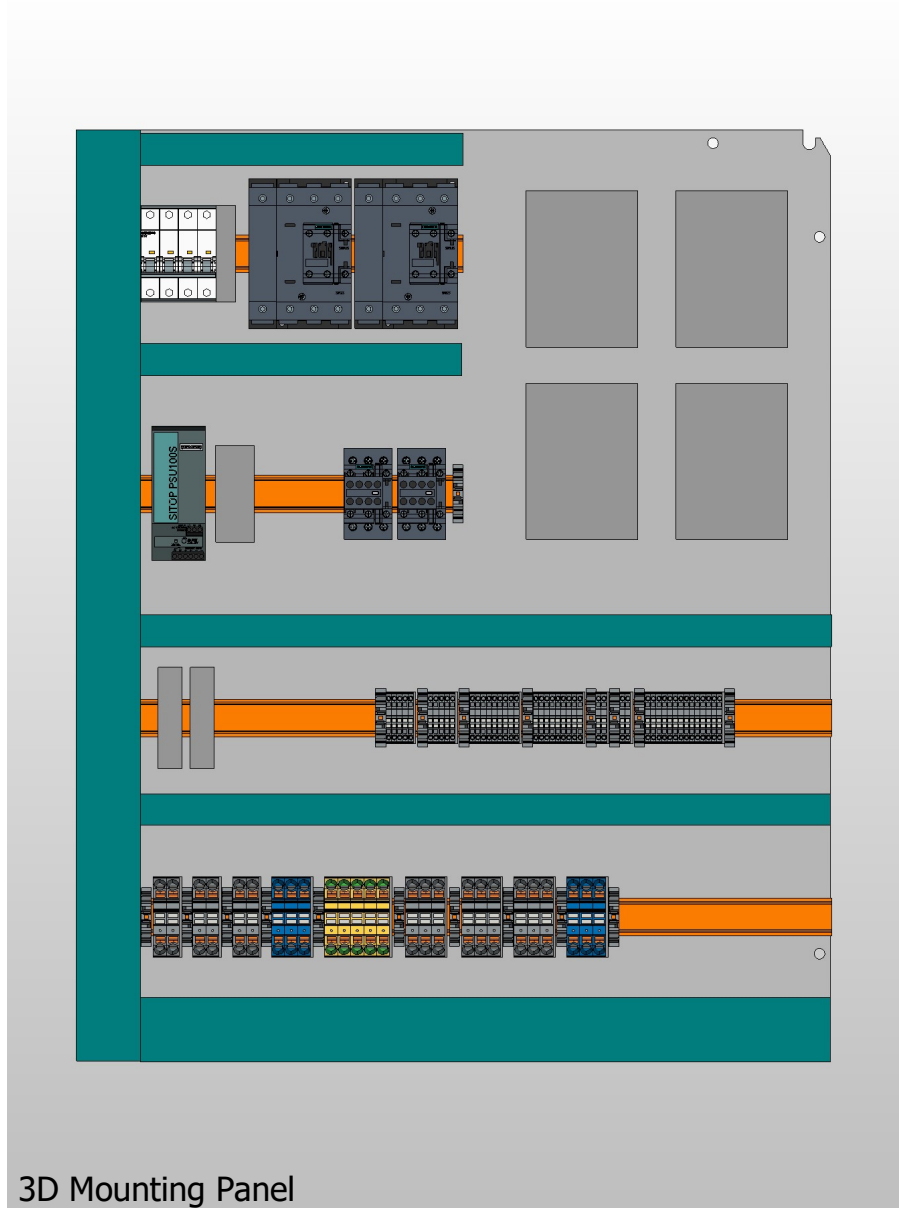
= P1	Page 57
+	Page 15 / 22



Red = All system On (Level 2)
 Orange = Servo (Level 3)
 Green = Safe



3D Panel Layout



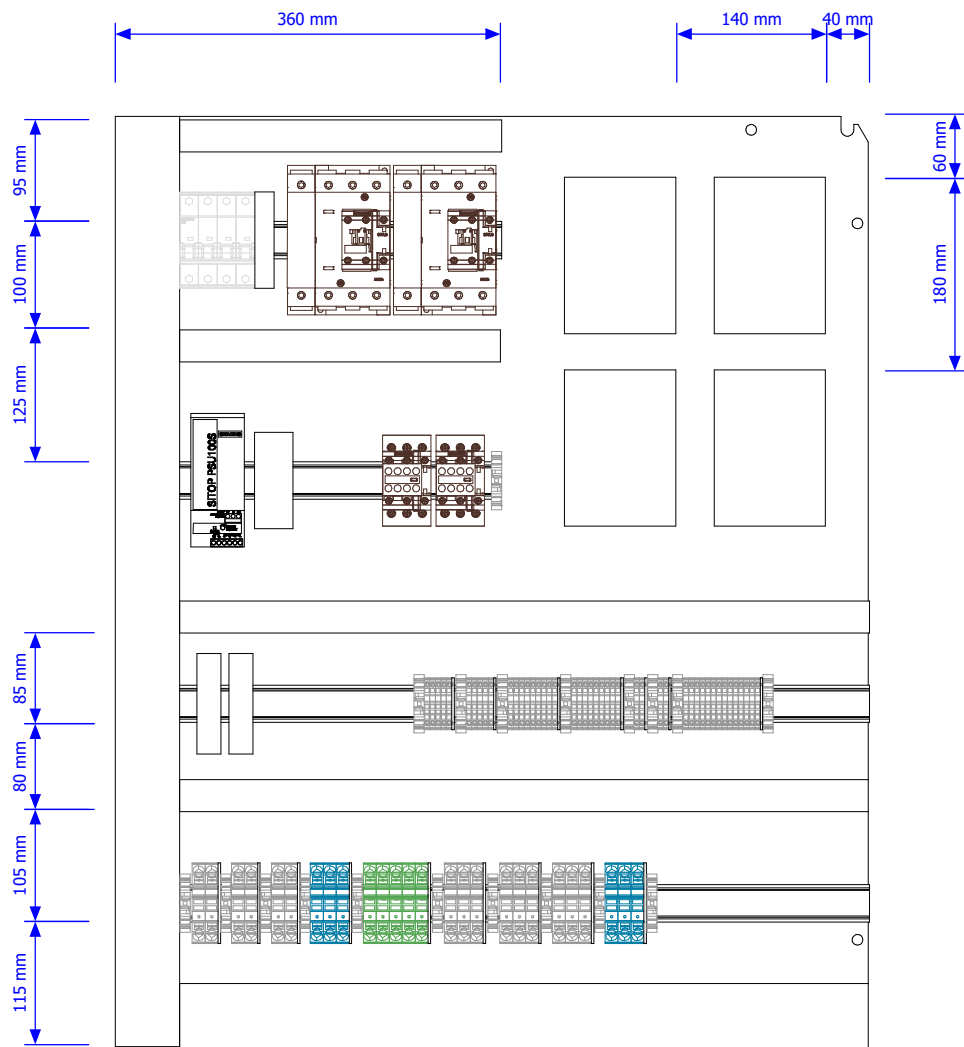
3D Mounting Panel

			Date	26/05/2022	N°	
			Ed.	ENGMA		
			Appr.		Safety Panel Wind Test	
Modification	Date	Name	Original		Replacement of	Replaced by

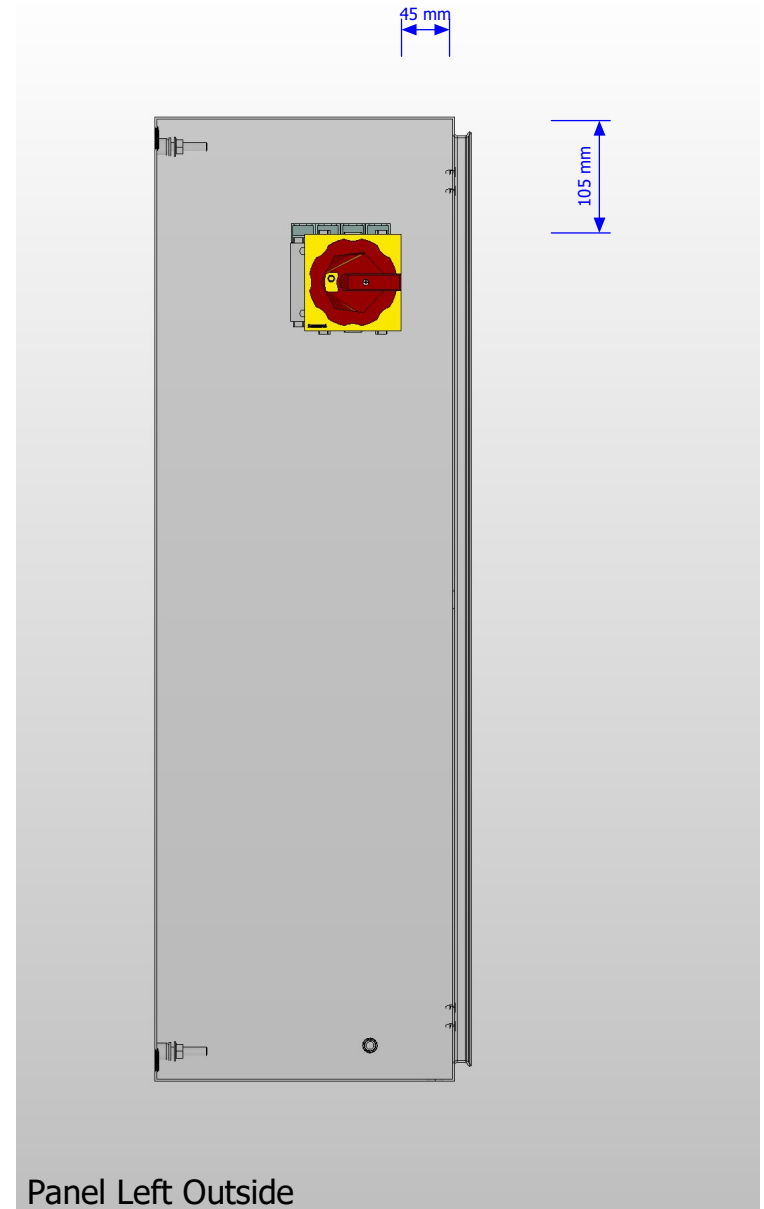


Panel Layout 3D
Lilium eAircraft GmbH

		= P1
		+
	E_Safety_Panel	Page 100
		Page 17 / 22



Mounting Panel



Panel Left Outside

			Date	26/05/2022	N°	
			Ed.	ENGMA	Safety Panel Wind Test	
			Appr.		Replacement of	Replaced by
Modification	Date	Name	Original			



Parts list



F01_001_Lilium_v2

No	Device tag	Page	Qty	Description	Type number	Supplier	Part number
1		60	0				
2	-45F1	45	1	IN: 24 V DC OUT: 24 V /4-6-8-10 A	9000-41042-0401000	MURR	MURR.9000-41042-0401000
3	-55SR2	55	1	Emergency stop relay 24-240V AC/DC 3n/o 1n/c	PNOZ X2.7P 24-240VAC/DC	PILZ	PILZ.777306
4	-56SR2	56	1	Emergency stop relay 24-240V AC/DC 3n/o 1n/c	PNOZ X2.7P 24-240VAC/DC	PILZ	PILZ.777306
5	-U32		1	TS Cable duct for mounting plate, WHD: 30x2000x80 mm	TS.8800750	RIT	RIT.8800750
6	-U35		1	SZ Support rail to EN 60 715, version TS 35/15, L: 2000 mm	SZ.2313150	RIT	RIT.2313150
7	-U38		1	SZ Support rail to EN 60 715, version TS 35/15, L: 2000 mm	SZ.2313150	RIT	RIT.2313150
8	-U39		1	TS Cable duct for mounting plate, WHD: 30x2000x80 mm	TS.8800750	RIT	RIT.8800750
9	-U40		1	SZ Support rail to EN 60 715, version TS 35/15, L: 2000 mm	SZ.2313150	RIT	RIT.2313150
10	-U41		1	SZ Support rail to EN 60 715, version TS 35/15, L: 2000 mm	SZ.2313150	RIT	RIT.2313150
11	-U42		1	Compact enclosures WM	WM.8017579		RIT.8017579
12	-U43		1	TS Cable duct for mounting plate, WHD: 30x2000x80 mm	TS.8800750	RIT	RIT.8800750
13	-U44		1	TS Cable duct for mounting plate, WHD: 60x2000x80 mm	TS.8800752	RIT	RIT.8800752
14	-U45		1	TS Cable duct for mounting plate, WHD: 60x2000x80 mm	TS.8800752	RIT	RIT.8800752
15	-U46		1	TS Cable duct for mounting plate, WHD: 30x2000x80 mm	TS.8800750	RIT	RIT.8800750
16	=Enclosure 4 command-55EM8	55	1	Harmony XB4, Emergency stop switching off, metal, red	XB4BS84441	SE	SE.XB4BS84441
17	=Enclosure 4 command-55EM8	55	1	Harmony XB4, Padlocking kit for Ø22 emergency stop	ZBZ3605	SE	SE.ZBZ3605
18	=Enclosure 4 command-56EM7	56	1	Harmony XB5, black Ø 40 mushroom pushbutton	ZB5AS12	SE	SE.ZB5AS12
19	=Enclosure 4 command-56EM7	56	2	1 NC, Harmony XB4, Single contact block	ZBE1029	SE	SE.ZBE1029
20	=Enclosure 4 command-55S3	55	1	illuminated push button, blue, 1 NO + 1 NC 24 V AC/DC	XB4BW36B5	SE	SE.XB4BW36B5
21	=Enclosure 4 command-56S3	56	1	Harmony XB4, Push button, metal, flush, green, 1 NO	XB4BA31	SE	SE.XB4BA31
22	-32K5	50	1	1 poleAC and bi-directional DC NO contactors	C310A/500 24I-V2	SHTB	SHTB.C310A/500 24I-V2
23	-32K6	50	1	1 poleAC and bi-directional DC NO contactors	C310A/500 24I-V2	SHTB	SHTB.C310A/500 24I-V2
24	-32K7	50	1	1 poleAC and bi-directional DC NO contactors	C310A/500 24I-V2	SHTB	SHTB.C310A/500 24I-V2
25	-32K8	50	1	1 poleAC and bi-directional DC NO contactors	C310A/500 24I-V2	SHTB	SHTB.C310A/500 24I-V2
26	-30F1	30	1	SETRON Miniature circuit breaker	SSY7663-7		SIE.SSY7663-7
27	-31H2	31	1	22MM PLASTIC ROUND COMPLETE UNIT - LED 230V AC	3SB3252-6AA20	SIE	SIE.3SB3252-6AA20
28	-31H3	31	1	22MM PLASTIC ROUND COMPLETE UNIT - LED 230V AC	3SB3252-6AA20	SIE	SIE.3SB3252-6AA20
29	-31H4	31	1	22MM PLASTIC ROUND COMPLETE UNIT - LED 230V AC	3SB3252-6AA20	SIE	SIE.3SB3252-6AA20
30	-60H2	60	1	SIRIUS Continuous light element including light sources	8WD4220-5AC		SIE.8WD4220-5AC
31	-60H3	60	1	SIRIUS Continuous light element including light sources	8WD4220-5AD		SIE.8WD4220-5AD
32	-60H4	60	1	SIRIUS Continuous light element including light sources	8WD4220-5AB	SIE	SIE.8WD4220-5AB
33	-55K5	32	1	4NO CONTACTOR, AC3:XXXW, 20-33VAC/DC	3RT2346-1NB30-4AA0		SIE.3RT2346-1NB30-4AA0
34	-55K6	32	1	4NO CONTACTOR, AC3:XXXW, 20-33VAC/DC	3RT2346-1NB30-4AA0		SIE.3RT2346-1NB30-4AA0
35	-57K1	57	1	CONTACTOR,AC3:15KW 2NO+2NC DC24V	3RT2027-1BB44-3MA0	SIE	SIE.3RT2027-1BB44-3MA0
36	-57K2	57	1	CONTACTOR,AC3:15KW 2NO+2NC DC24V	3RT2027-1BB44-3MA0	SIE	SIE.3RT2027-1BB44-3MA0
37	-60P1	60	1	SIRIUS Connection element for mounting on pipes, floors and angles	8WD4208-0AA		SIE.8WD4208-0AA
38	-60P7	60	1	SIRIUS Foot for mounting on pipes	8WD4308-0DB		SIE.8WD4308-0DB
39	-60P8	60	1	SIRIUS Pipe	8WD4208-0EF		SIE.8WD4208-0EF
40	-30Q3	30	1	UL: 60A,SCCR 50KA at 480VAC	3LD5220-0TL13	SIE	SIE.3LD5220-0TL13
41	=Enclosure 4 command-55EM8	55	1	ENCLOSURE PLASTIC, 4 COMMAND POINTS	3SU1804-0AA00-0AB1	SIE	SIE.3SU1804-0AA00-0AB1
42	-45F2	45	1	CIRCUIT BREAKER 240V 14KA, 1-POLE, C, 6A, D=70MM	5S34106-7HG40	Siemens AG	5S34106-7HG40
43	-45T2	45	1	SITOP PSU100S	6EP1333-2BA20	Siemens AG	SIE.6EP1333-2BA20

Date	26/05/2022	N°	Lilium eAircraft GmbH	Parts list : - SIE.6EP1333-2BA20	= P1
Ed.	ENGMA				+
Appr.		Safety Panel Wind Test			
Original		Replacement of			E_Safety_Panel
Modification	Date	Name	Original	Replaced by	Page 1000
					Page 21 / 22

