



FlexLink®

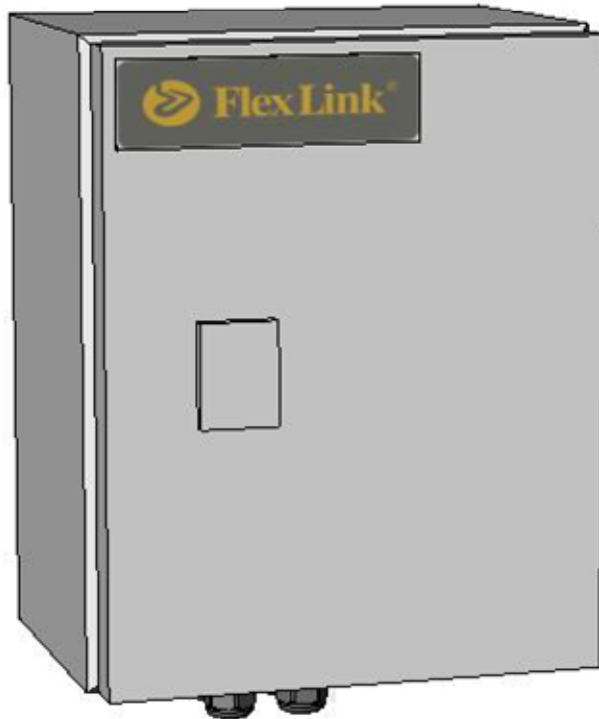
Power box

5058150

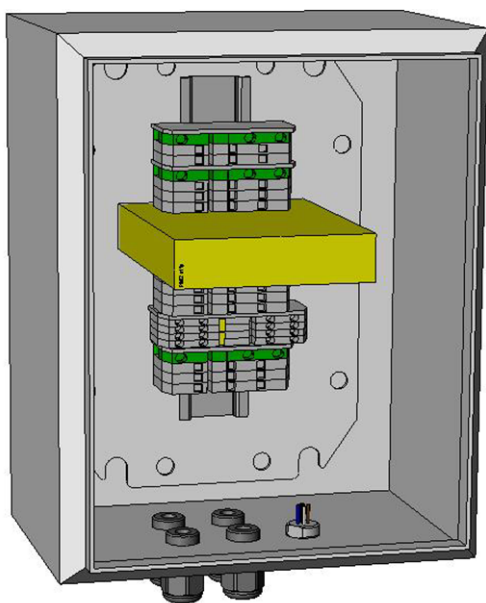
User documentation ver 1.0

Power box

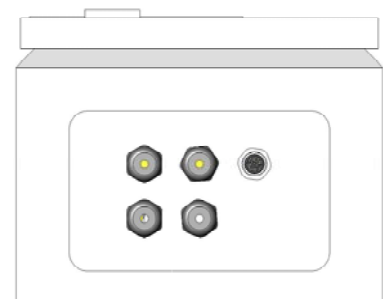
Views



Exterior view



Interior view



Bottom view

Power box

Electrical supply

Voltage	24 VDC
Current	4 A maximum
Short-circuit capacity	10 kA
Electrical diagram	5058150-01

Physical dimension

Height	250 mm (enclosure) + 50 mm (glands)
Width	200 mm
Depth	155 mm
Weight	10 kg

Distance between wall fixing holes = 210 mm (vertically)
and 160 mm (horizontally).

Power box

Features

Communication

- Terminal group for hardwired communication for controlling and supervising safety system
- M12-connector for optional Reset Maneuver box

Safety

- One safety group: safety relay disconnecting 24VDC power supply for pneumatic on/off valves

Power box

Interfaces

Power supply connection

24V_{DC} power supply X301-3

Rated cable area connection: 2.5 mm²

Safety relay connections

Safety outputs X330-1

Rated cable area connection: 2.5 mm²

Safety loop X340-1

Rated cable area connection: 2.5 mm²

Control box communication

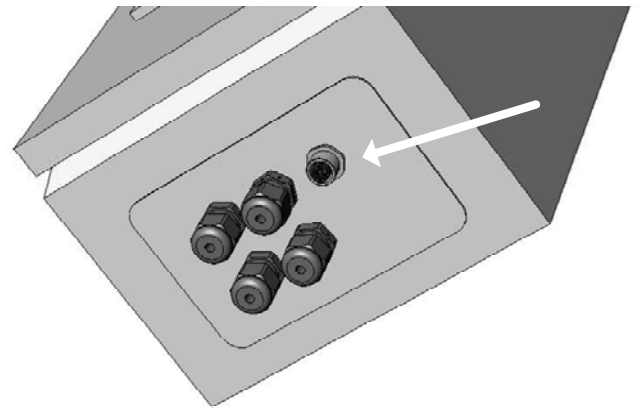
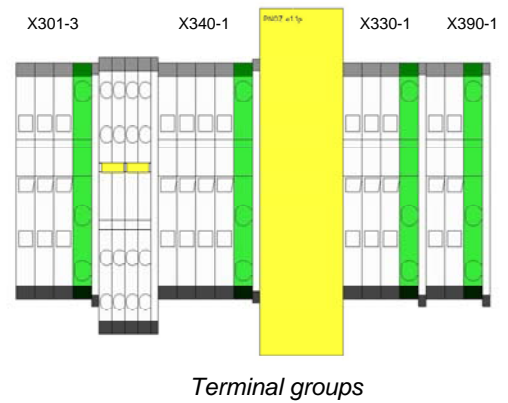
Fieldbus interface communication X390-1

Cross-section: Max. 2.5 mm² (with/without ferrule)

Maneuver box communication

Maneuver unit connections

Connector: M12, 4-pin, male, A-code

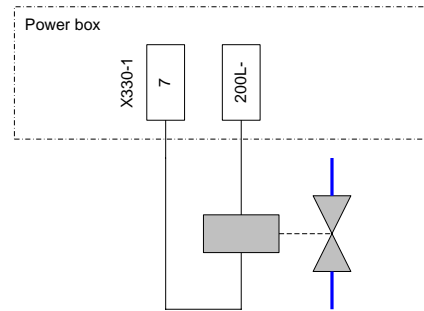


Power box

Applications

Connecting air supply valve

Connect terminals X330-1:7 (or X330-1:8) and 200L- to air supply valve. See image.



Connecting air supply valve

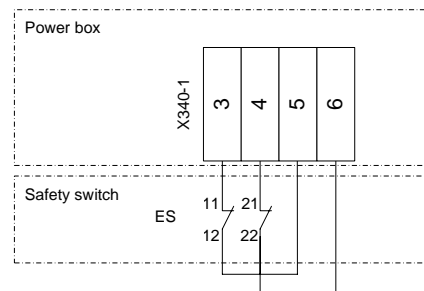
Connecting safety switch

Safety switch examples: gate switch, emergency switch, etcetera

The switch must have two NC-contacts.

Connect X340-1:3 to connection 11 of safety switch and X340-1:5 to connection 12 of safety switch.

Connect X340-1:4 to connection 21 of safety switch and X340-1:5 to connection 22 of safety switch.

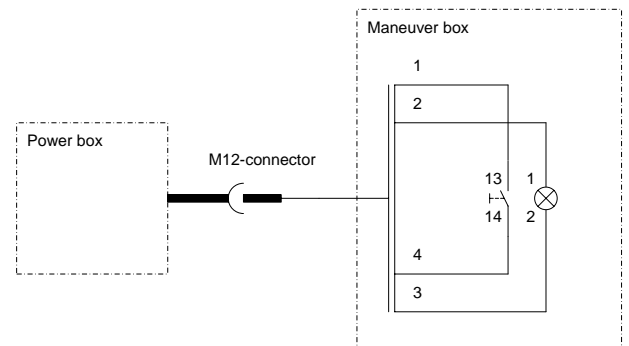


Connecting safety switch

Connecting Maneuver box

Instruction if the safety relay should be reset by Maneuver box:

- Connect sensor cable's M12-connector to Power box.
- Connect cable's part 1 to pushbutton connection 13.
- Connect cable's part 2 to lamp connection 1.
- Connect cable's part 3 to lamp connection 2.
- Connect cable's part 4 to pushbutton connection 14.



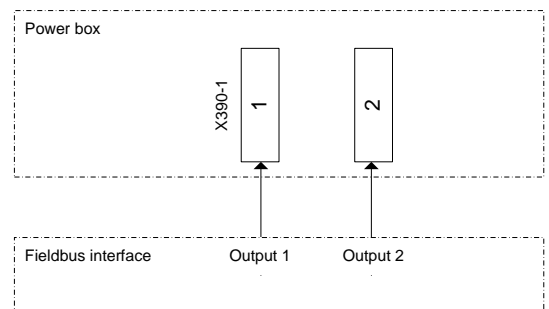
Connecting Maneuver box

Connecting fieldbus interface

Instruction if the safety relay should be reset fieldbus interface:

- Connect output directly to terminal 1.
- Connect output directly to terminal 2.

(Condition: Power supply of fieldbus interface are of same potentials as power supply of Power box.)



Connecting fieldbus interface

Spare parts list

Product: 5058150-01

Standard name	Des.	Manufacturer	Type	Order number	FlexLink ID
Safety relay	A330-1	Pilz		PNOZ e1.1p	5059678

FILENAME	FILEDATE	TIME	SH	DWGDESC
100	2007-07-03	12:49:24	100	List of sheets
101	2007-07-03	12:21:43	101	Exterior
102	2007-07-03	12:21:48	102	Interior
111	2007-07-03	12:19:22	111	Internal, Exterior
112	2007-07-03	12:21:25	112	Internal, Interior
113	2007-07-03	12:40:16	113	Internal, Assembly plate
114	2007-07-03	12:40:25	114	Internal, Assy plate prep
116	2007-07-03	12:45:55	116	Internal, Earthing
117	2007-07-03	12:01:09	117	Internal, Gland plate
120	2007-07-03	12:50:04	120	Internal, Terminal groups
301	2007-07-03	12:01:17	301	Incoming power supply
302	2007-06-29	16:08:08	302	Enclosure earthing
310	2007-07-03	12:48:27	310	Power
330	2007-07-03	12:03:40	330	Safety relay
340	2007-07-03	12:48:07	340	Safety loop
390	2007-06-29	16:17:03	390	Fieldbus communication
391	2007-07-03	12:05:17	391	Maneuver communication



Document type

Project number 7220367

By Date

Drawn

Check

Power box

List of sheets

Function

Location

Drawing number

5058150-01

Sheets 017

8

7

6

5

4

3

2

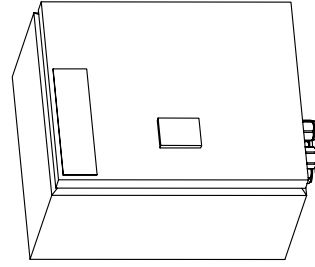
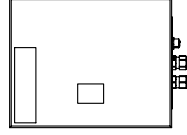
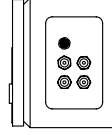
1

Rev. Date Change By

- 00.
- 01.
- 02.
- 03. X301-3
- 04.
- 05.
- 06.
- 07.
- 08.
- 09. X310-3

- 10. A330-1
- 11.
- 12.
- 13. X330-1
- 14. X340-1
- 15.
- 16.

- 20.
- 21. X390-1
- 22. X391-1



Rev.		Date	Change	By	Project number 7220367		Document type		Drawing number	
					By		Date		5058150-01	
					Drawn				Sheets 017	
					Check				Sheet 101	
					Power box		Location		8	
					Exterior				7	
					Function				6	

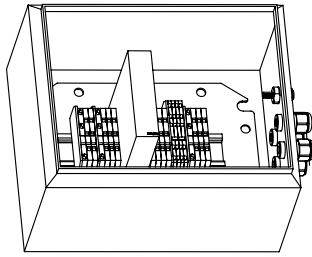
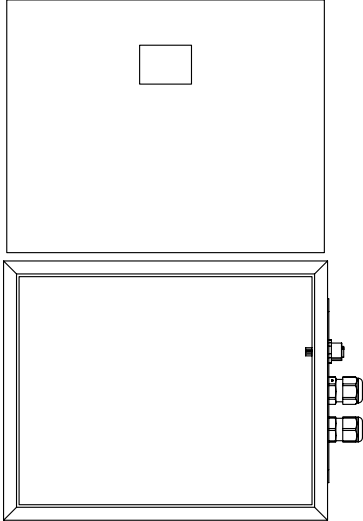
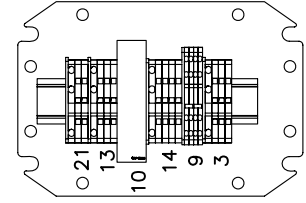


FlexLink

- 00.
- 01.
- 02.
- 03. X301-3
- 04.
- 05.
- 06.
- 07.
- 08.
- 09. X310-3

- 10. A330-1
- 11.
- 12.
- 13. X330-1
- 14. X340-1
- 15.
- 16.

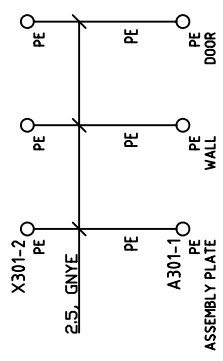
- 20.
- 21. X390-1
- 22. X391-1




Rev.		Date	Change	1	2	3	4	5	6	7	8
By											
FlexLink											
Document type											
Project number 7220367											
Drawn		By	Date								
Check											
Function										Location	
Power box										Interior	
Drawing number										5058150-01	
Sheets										017	
										Sheet 102	

A B C D E F

1 2 3 4 5 6 7 8



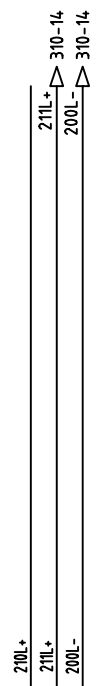
Rev.		Date	Change	By
				
Document type		Project number 7220367		
Drawn	By	Date		
Check				
		Maneuver box		
		Enclosure earthing		
		Function	Location	
		Drawing number		
		5058150-01		
		Sheets 018	Sheet 302	

A B C D E F

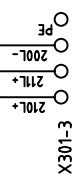
1 2 3 4 5 6 7 8

A B C D E F

1 2 3 4 5 6 7 8



1.5 BU



Incoming supply:
210L+; 24 VDC Safe
211L+; 24 VDC Permanent
200L-; 0 VDC
PE



Document type		Project number 7220367		Drawing number	
Drawn	By	Date		Power box	5058150-01
Check				Incoming power supply	
				Function	Sheets 017
				Location	Sheet 301

F

1 2 3 4 5 6 7 8

A B C D E F

8

7

6

5

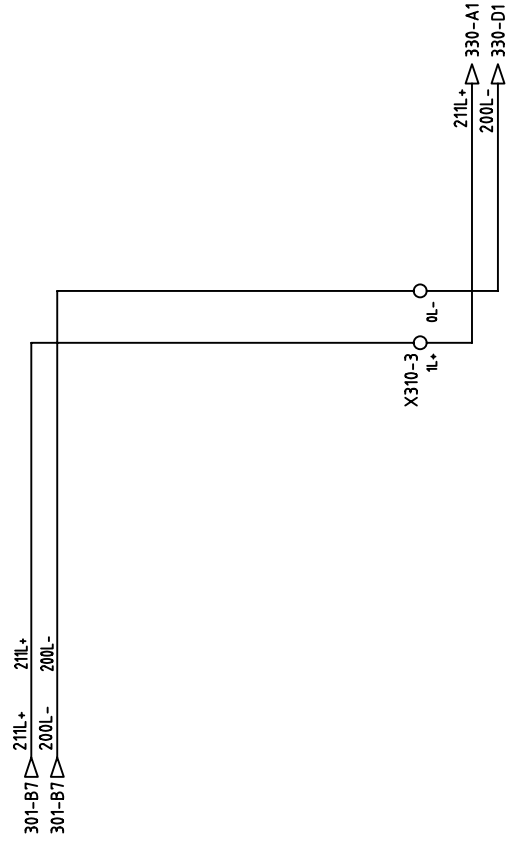
4

3

2

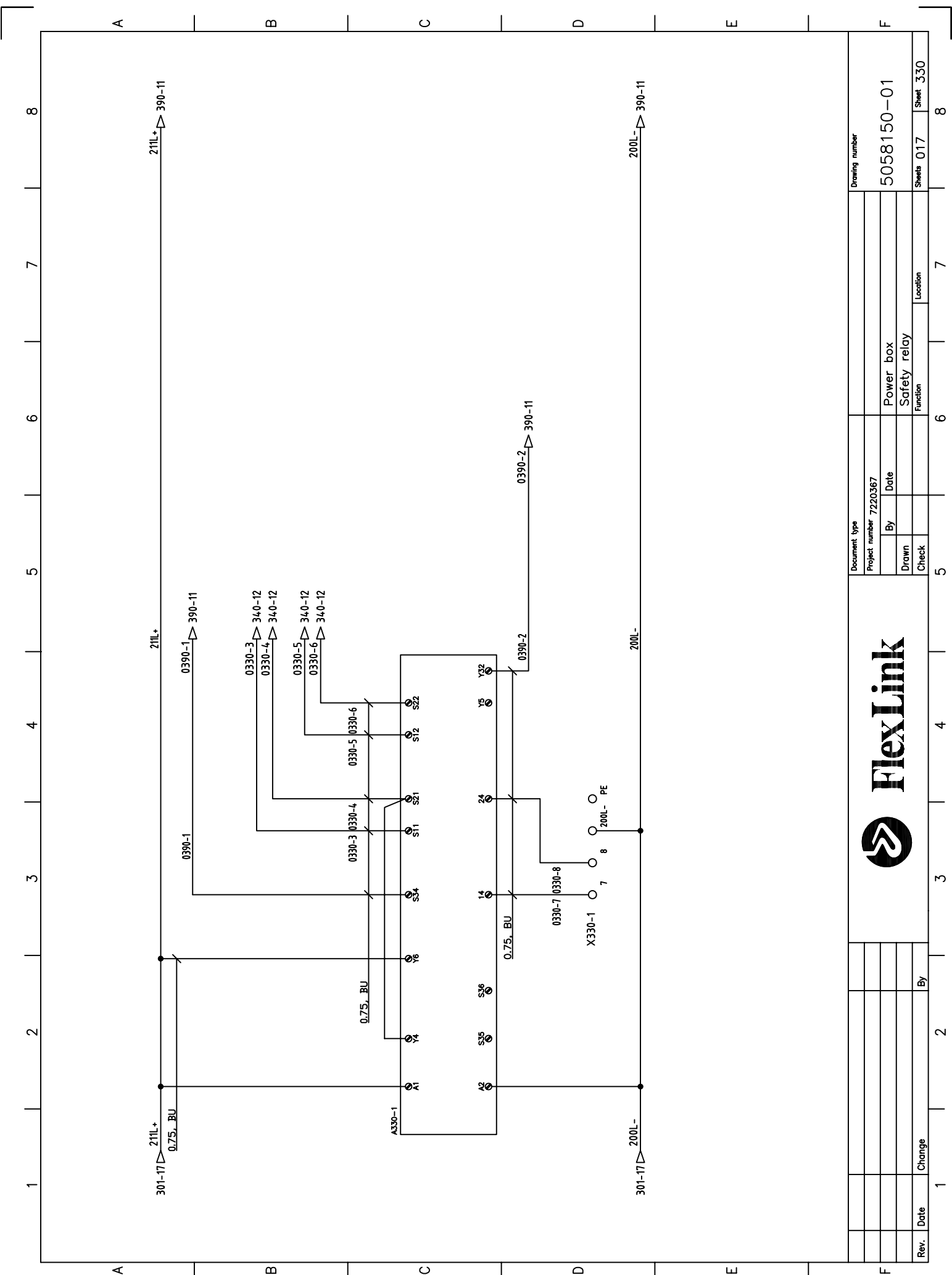
1

A B C D E F



Rev.		Date	Change	By	Document type		Drawing number	
					Project number 7220367		5058150-01	
					By	Date	Power box	
					Drawn		Function	
					Check		Location	
							Sheets 017	
							Sheet 310	
							8	





Dema ritning Er Flexlink egendom. Skyddat enligt GILLANDE lag.
 This drawing is the property of Flexlink. Protected in accordance with prevailing law.



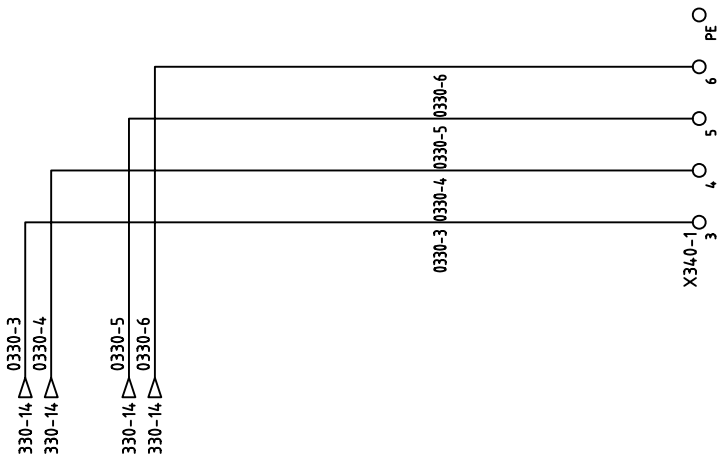
Document type		Drawing number	
Project number	7220367	Project number	5058150-01
By	Date	Power box	Function
Drawn		Safety relay	
Check		Location	Location
		Sheets	017
			8

Rev.	Date	Change	By
1			

A B C D E F

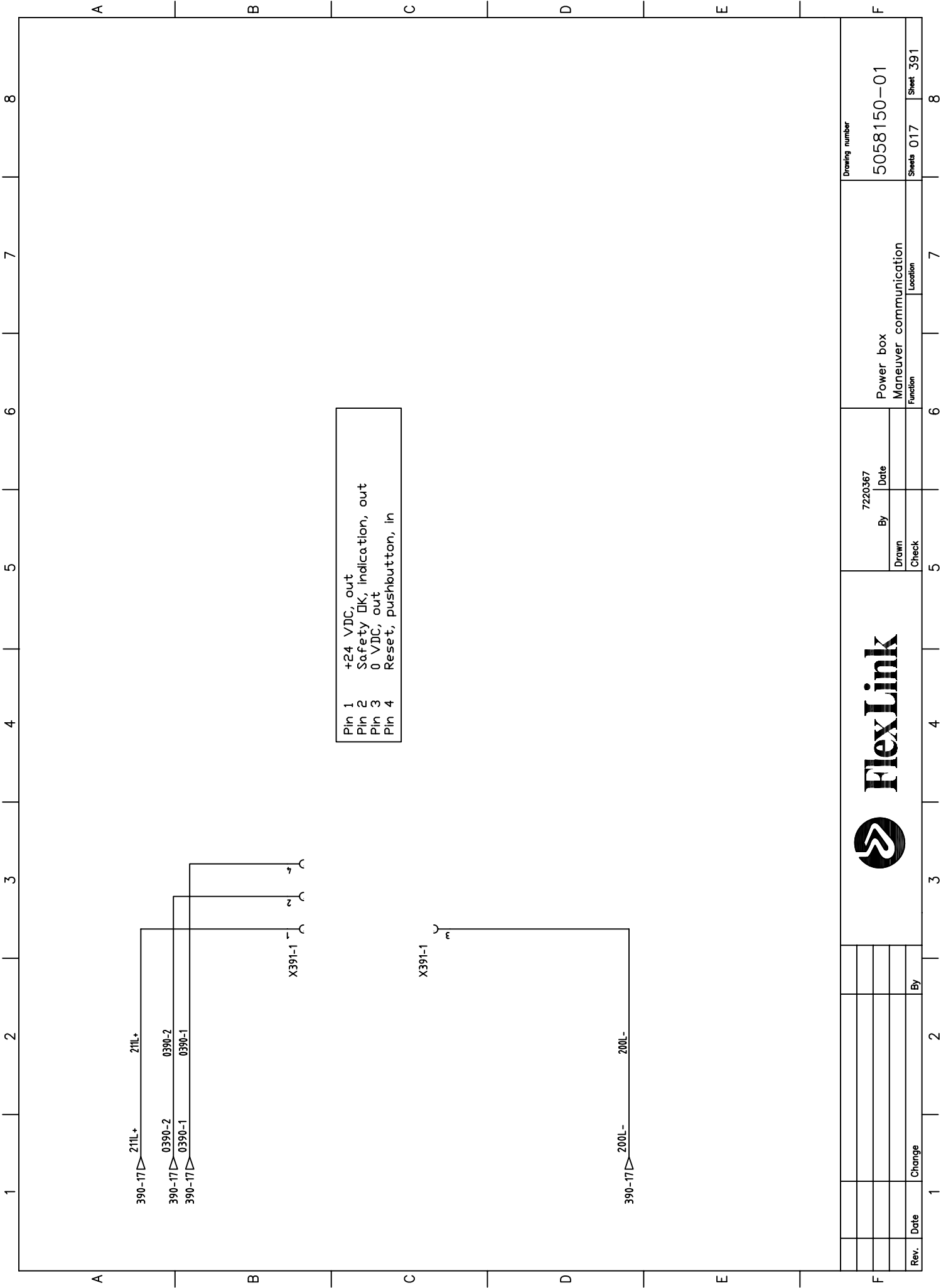
1 2 3 4 5 6 7 8

A B C D E F




Rev.	Date	Change	By	Document type		Drawing number	
				Project number 7220367		5058150-01	
				By	Date	Power box	Sheets 017
				Drawn		Safety loop	Sheet 340
				Check		Function	Location



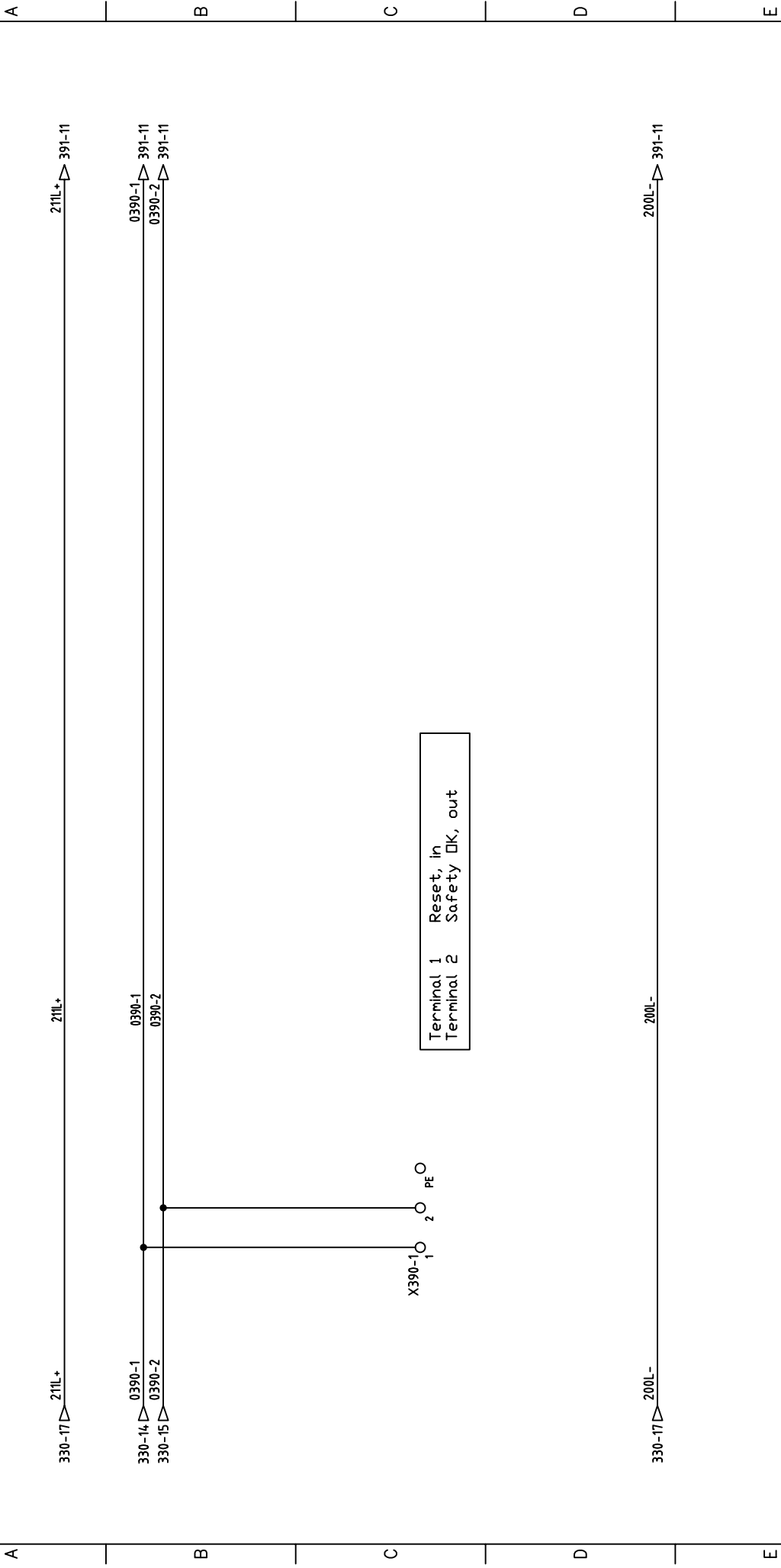


Pin 1	+24 VDC, out
Pin 2	Safety DK, indication, out
Pin 3	0 VDC, out
Pin 4	Reset, pushbutton, in


Rev.	Date	Change	By	 FlexLink	Drawn	7220367	Power box Maneuver communication <small>Function Location</small>	Drawing number 5058150-01	
					By	Date			
					Check				
								Sheets 017	8

A B C D E F

1 2 3 4 5 6 7 8



Terminal 1 Reset, in
Terminal 2 Safety OK, out

Rev.	Date	Change	By			Document type Project number 7220367		Drawing number 5058150-01	
						Drawn Check	By Date	Power box Fieldbus communication Function Location	Sheets 017 Sheet 390