



FlexLink®

Control box

5059416

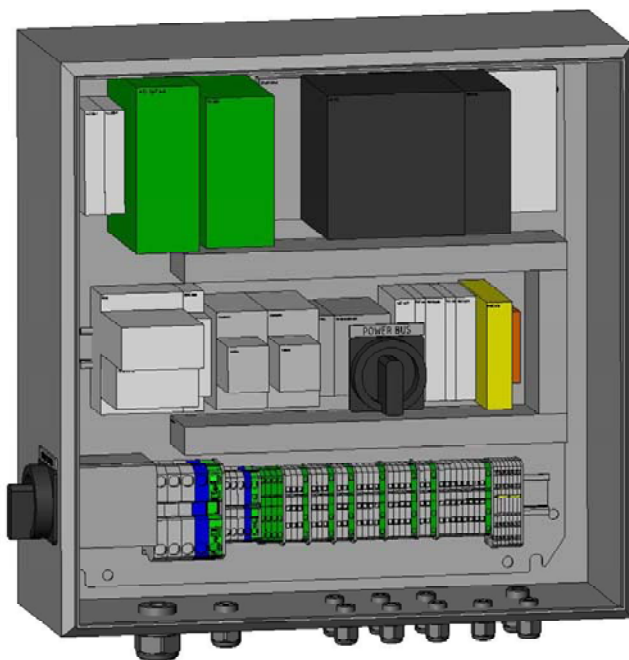
User documentation ver 1.0

Control box

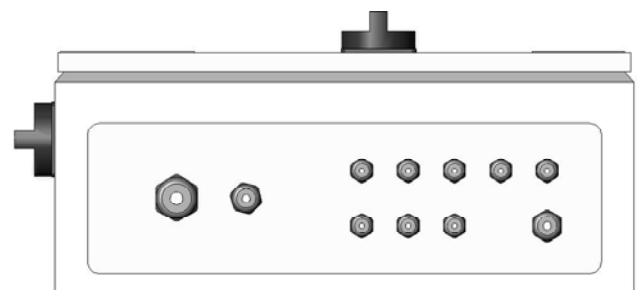
Views



Exterior view



Interior view



Bottom view

Control box

Electrical supply

Voltage	400 VAC
Phases	3
Frequency	50 Hz
Current	25 A maximum
Short-circuit capacity	10 kA
Electrical diagram	5059416-01

Physical dimension

Height	500 mm
Width	500 mm (enclosure) + 35 mm (switch)
Depth	210 mm (enclosure) + 35 mm (switch)

Weight 35 kg

Distance between wall fixing holes = 495 mm (vertically and horizontally).

Control box

Features

Incoming power

- Large terminals for incoming power supply (16 mm²)
- Main switch

System power supply

- Power bus: 400V/16A, 3Ph+N+ PE (4mm²)
 - Advanced circuit breaker for long distance bus
 - Lockable maintenance switch
- 24VDC power supply, 10 A divided in two terminal groups of 4 A: 24V safe, 24V permanent and 0V
- Asi power supply, 2.4 A

Controller

- Siemens S7-313 -2DP
- Space for adding up to 3 modules, e.g. Ethernet
- Bus cable shield earthing

Communication

- ASi-communication
- Terminal group for hardwired communication with Maneuver unit

Safety

- One safety group: safety relay/double contactors disconnecting Power bus and 24VDC safe power supply
- Relay providing safe stop triggered by software

Spare parts list

Product: 5059416-01

Standard name	Des.	Manufacturer	Type	Order number	FlexLink ID
Main switch	Q301-1	Moeller		048365	5057526
Neutral pole		Moeller		000651	5057258
Circuit breaker	Q310-1	Moeller		026606	5059711
Trip block		Moeller		059828	5059712
Auxiliary contacts		Moeller		093050	5059713
Miniature circuit breaker	Q310-2	Moeller		278553	5057277
Auxiliary contacts		Moeller		286054	5110013
Miniature circuit breaker	Q310-3	Moeller		278553	5057277
Auxiliary contacts		Moeller		286054	5110013
Main switch	Q310-4	Moeller		050738	5059677
Shaft extension		Moeller		027044	5057229
Neutral pole		Moeller		000652	5110218
Miniature circuit breaker	Q320-1	Moeller		278531	5059710
Power supply	G320-1	Phoenix contact		2866323	5110018
Miniature circuit breaker	Q320-2	Moeller		278553	5057277
Miniature circuit breaker	Q321-1	Moeller		278531	5059710
Power supply	G321-1	Phoenix contact		2736686	5110509
Controller	A325-1	Siemens	6ES7313-6CF03-0AB0		5059596
Front connector		Siemens	6ES7392-1AM00-0AA0		5110014
Asi master	A326-1	Siemens	6GK7343-2AH10-0XA0		5059591
Front connector		Siemens	6ES7392-1AJ00-0AA0		5110115
Safety relay	A330-1	Pilz		PNOZ e1.1p	5059678
Contacteur	K330-1	Moeller		277050	5110021
Auxiliary contacts		Moeller		276422	5110022
Contacteur	K330-2	Moeller		277050	5110021
Auxiliary contacts		Moeller		276422	5110022
Relay	K440-1	Weimüller		7940006157	5110086

FILENAME	FILEDATE	TIME	SH	DWGDESC
100	2007-04-03	15:12:53	100	List of sheets
101	2007-04-03	14:44:37	101	Interior
102	2007-04-03	14:44:39	102	Exterior
111	2007-04-03	14:44:43	111	Internal, Exterior
112	2007-04-03	14:44:48	112	Internal, Interior
113	2007-04-03	14:44:52	113	Internal, Assembly plate
114	2007-04-03	14:44:55	114	Internal, Assy plate preparation
115	2007-04-03	14:44:58	115	Internal, Making of holes
116	2007-04-03	14:45:03	116	Internal, Earthing
117	2007-04-03	14:45:07	117	Internal, Gland plate
118	2007-04-03	14:45:11	118	Internal, Making of holes
120	2007-04-03	14:45:14	120	Terminal marking
301	2007-04-03	14:45:18	301	Incoming power supply
302	2007-04-03	14:45:22	302	Enclosure earthing
310	2007-04-03	14:45:27	310	Zone supply
320	2007-04-03	14:45:30	320	24VDC power supply
321	2007-04-03	14:45:33	321	ASI power supply
325	2007-04-03	14:42:06	325	Controller
326	2007-04-03	14:42:13	326	ASI Master
330	2007-04-03	14:42:25	330	Safety relay
340	2007-04-03	14:42:44	340	Safety loop
385	2007-04-03	14:43:09	385	MCB-loop
400	2007-04-03	14:44:29	400	Inputs
401	2007-04-03	14:43:39	401	Inputs
440	2007-04-03	14:43:46	440	Outputs
441	2007-04-03	14:44:00	441	Outputs



Rev.	Date	Change	By

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By	Date
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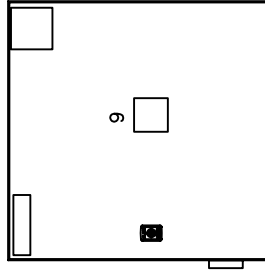
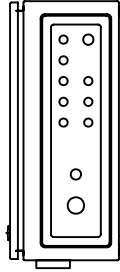
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Project number	5059416-01
Function	Control box
Location	
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- 00. X301-1
- 01. X301-2
- 02. Q301-1
- 03. Q310-1
- 04. Q310-2
- 05. Q310-3
- 06. X310-1
- 07. X310-2
- 08. X310-3
- 09. Q310-4

- 10. Q320-1
- 11. G320-1
- 12. Q320-2
- 13. X320-1
- 14. A325-1
- 15. A330-1
- 16. K330-1
- 17. K330-2
- 18. X330-1

- 20. X340-1
- 21. X340-2
- 22. Q320-1
- 23. Q321-1
- 24. G321-1
- 25. A326-1
- 26.

- 30. X400-1
- 31. X400-2
- 32. K440-1



Document type	
Project number	7220367
By	Date
Drawn	
Check	

Control box	Function	Location
Exterior		

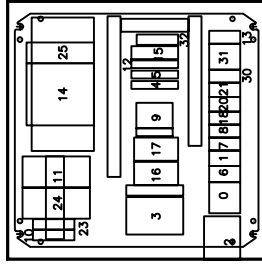
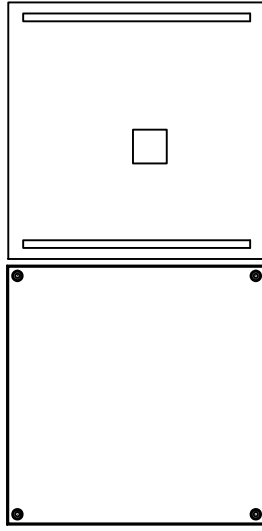
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- 00. X301-1
- 01. X301-2
- 02. Q301-1
- 03. Q310-1
- 04. Q310-2
- 05. Q310-3
- 06. X310-1
- 07. X310-2
- 08. X310-3
- 09. Q310-4

- 10. Q320-1
- 11. G320-1
- 12. Q320-2
- 13. X320-1
- 14. A325-1
- 15. A330-1
- 16. K330-1
- 17. K330-2
- 18. X330-1

- 20. X340-1
- 21. X340-2
- 22. Q321-1
- 23. Q321-1
- 24. G321-1
- 25. A326-1
- 26.

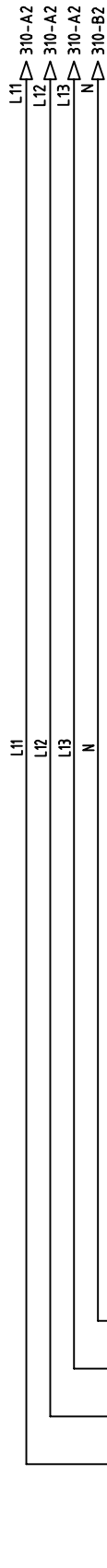
- 30. X400-1
- 31. X400-2
- 32. K440-1



Assembly plate

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					Project number 7220367		5059416-01	
					By		Control box	
					Date		Interior	
					Drawn		Function	
					Check		Location	
							Sheets 026	
							Sheet 102	





Incoming supply:
 L1: 400 VAC
 L2: 400 VAC
 L3: 400 VAC
 N
 PE



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By	Date	Control box	5059416-01		
Drawn		Incoming power supply	Sheets	026	8
Check		Function	Location		

A B C D E F

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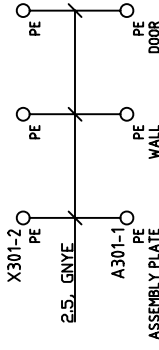
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FlexLink				
Document type				
Project number 7220367				
Drawn	By	Date	Control box	
Check			Enclosure earthing	
			Function	Location
Drawing number			5059416-01	
Sheets			026	8

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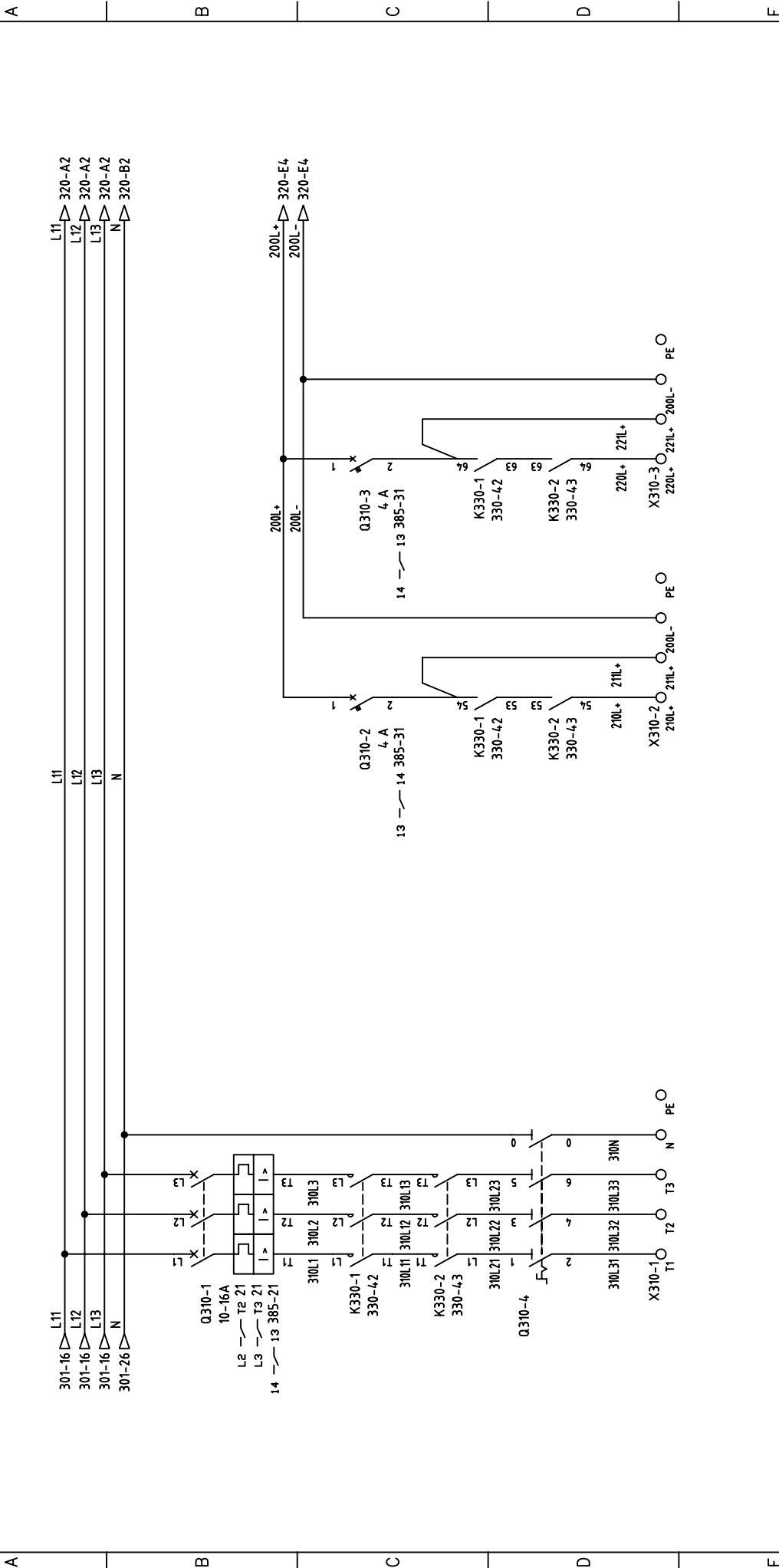
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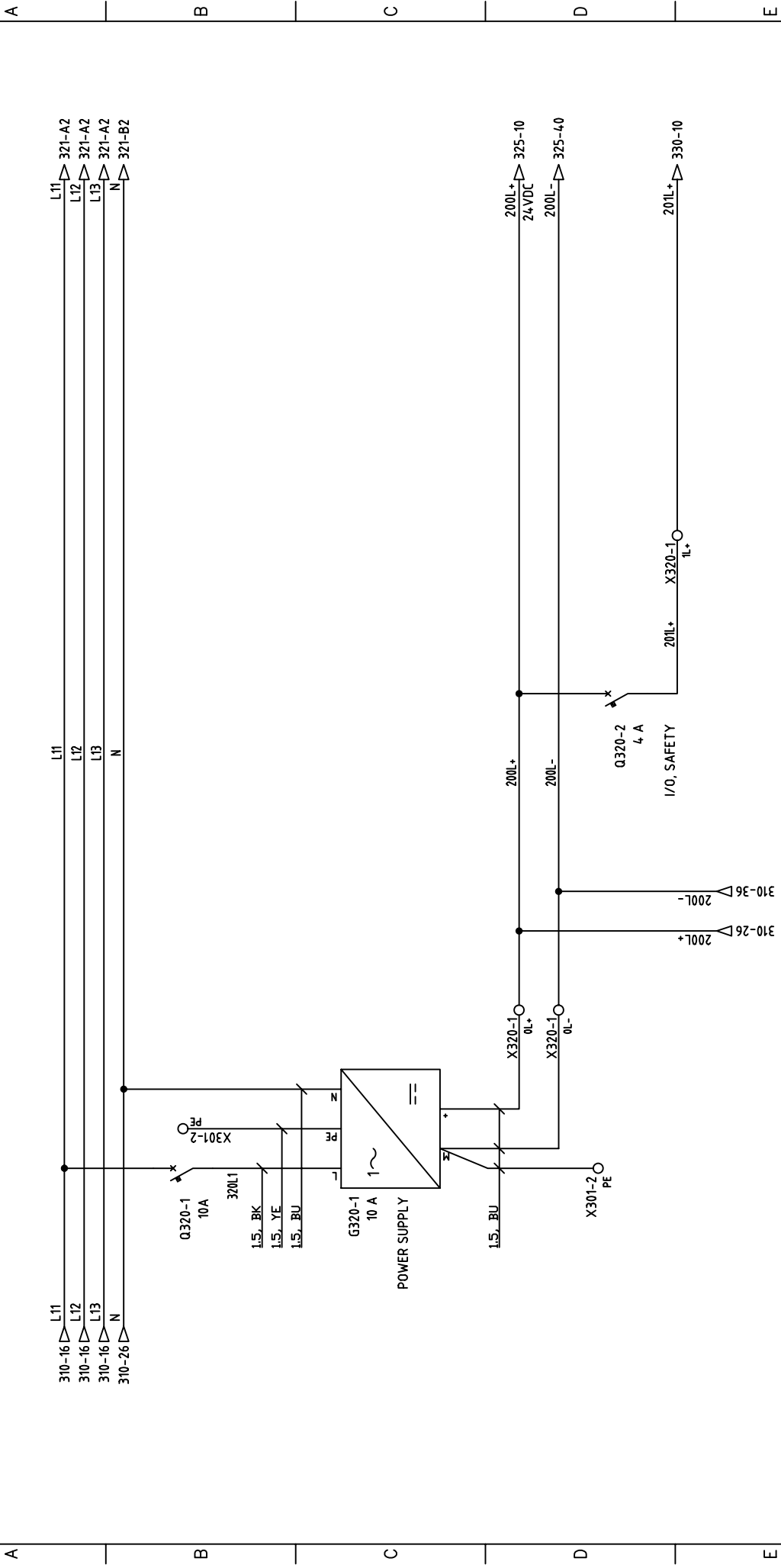
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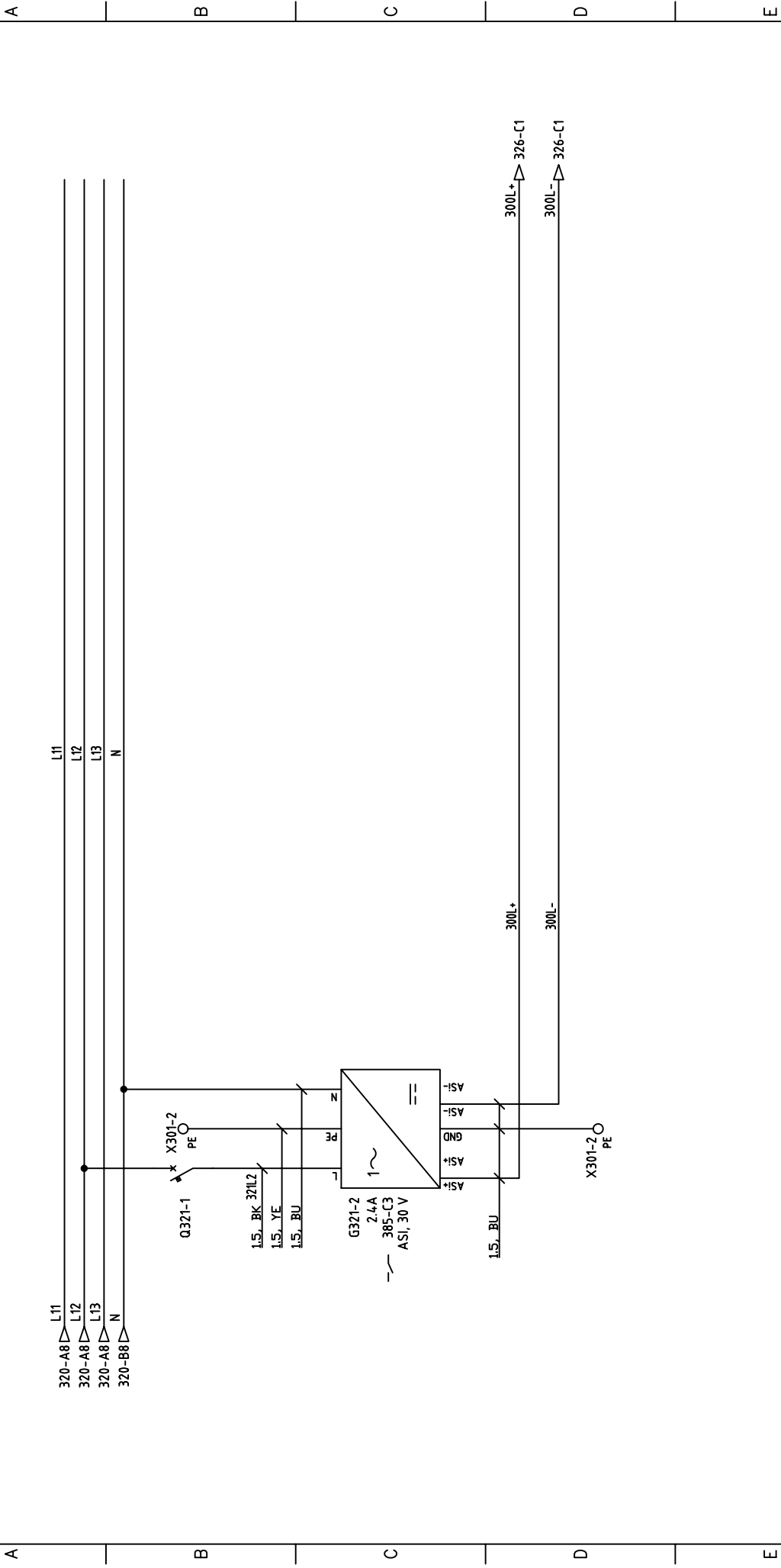


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By	Date	Control box	Drawing number
Drawn		Zone supply	5059416-01
Check		Function	Sheets 026
		Location	Sheet 310

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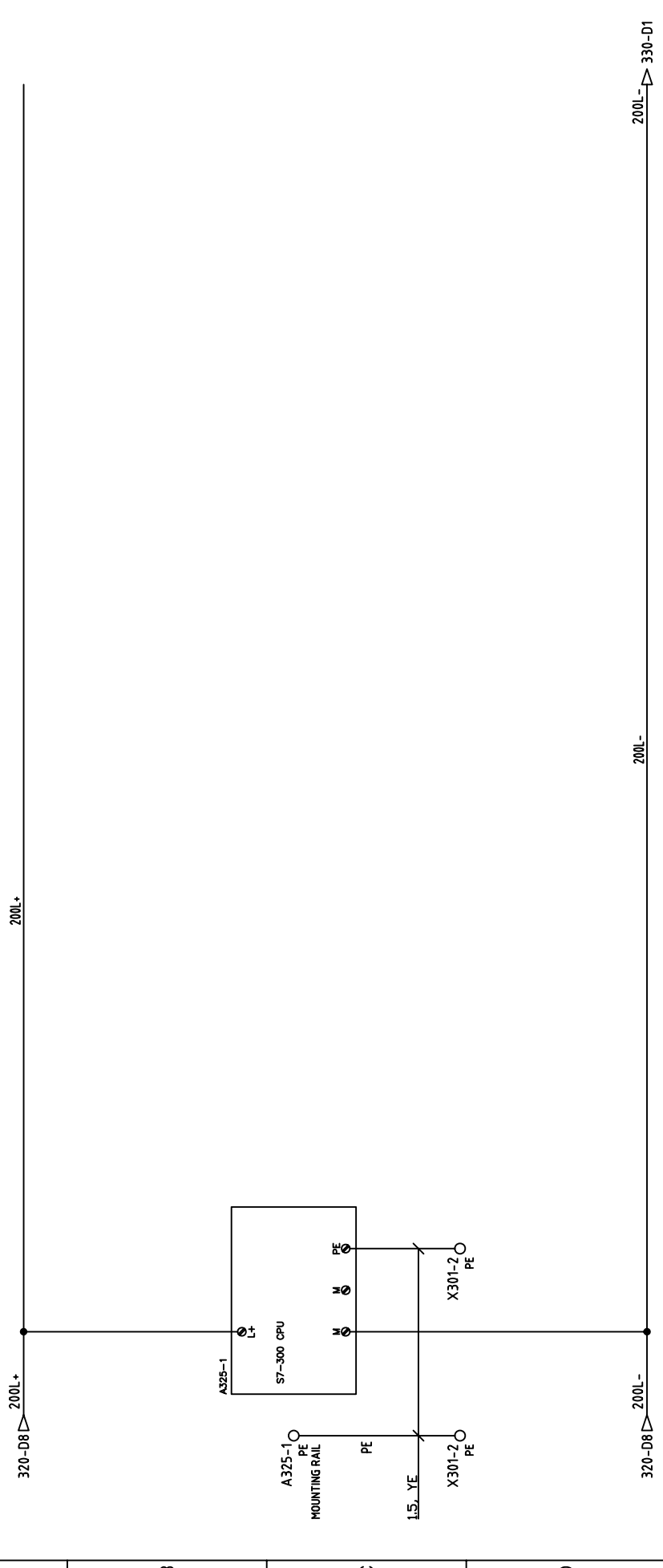
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Document type		Project number 7220367		
Drawn	By	Date	Control box	
Check			24VDC power supply	
			Function	Location
Drawing number		5059416-01		
			Sheets 026	Sheet 320




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Document type		Project number 7220367		
Drawn	By	Date	Control box	
Check			ASI power supply	
			Function	Location
Drawing number		5059416-01		
			Sheets 026	Sheet 321

A B C D E F

1 2 3 4 5 6 7 8



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Check				
Function		Control box		
Location		Controller		
Drawing number		5059416-01		
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F

1 2 3 4 5 6 7 8

A B C D E F

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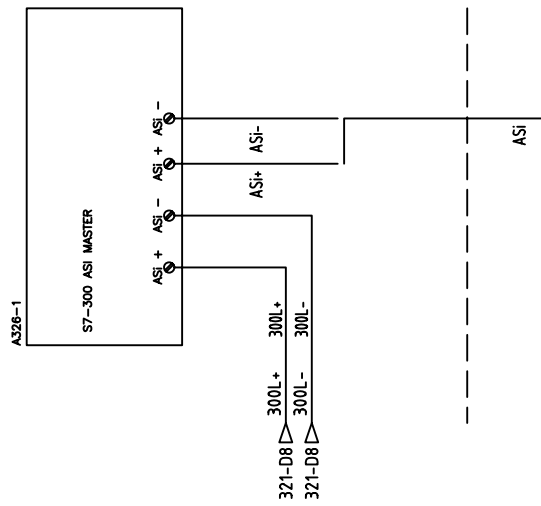
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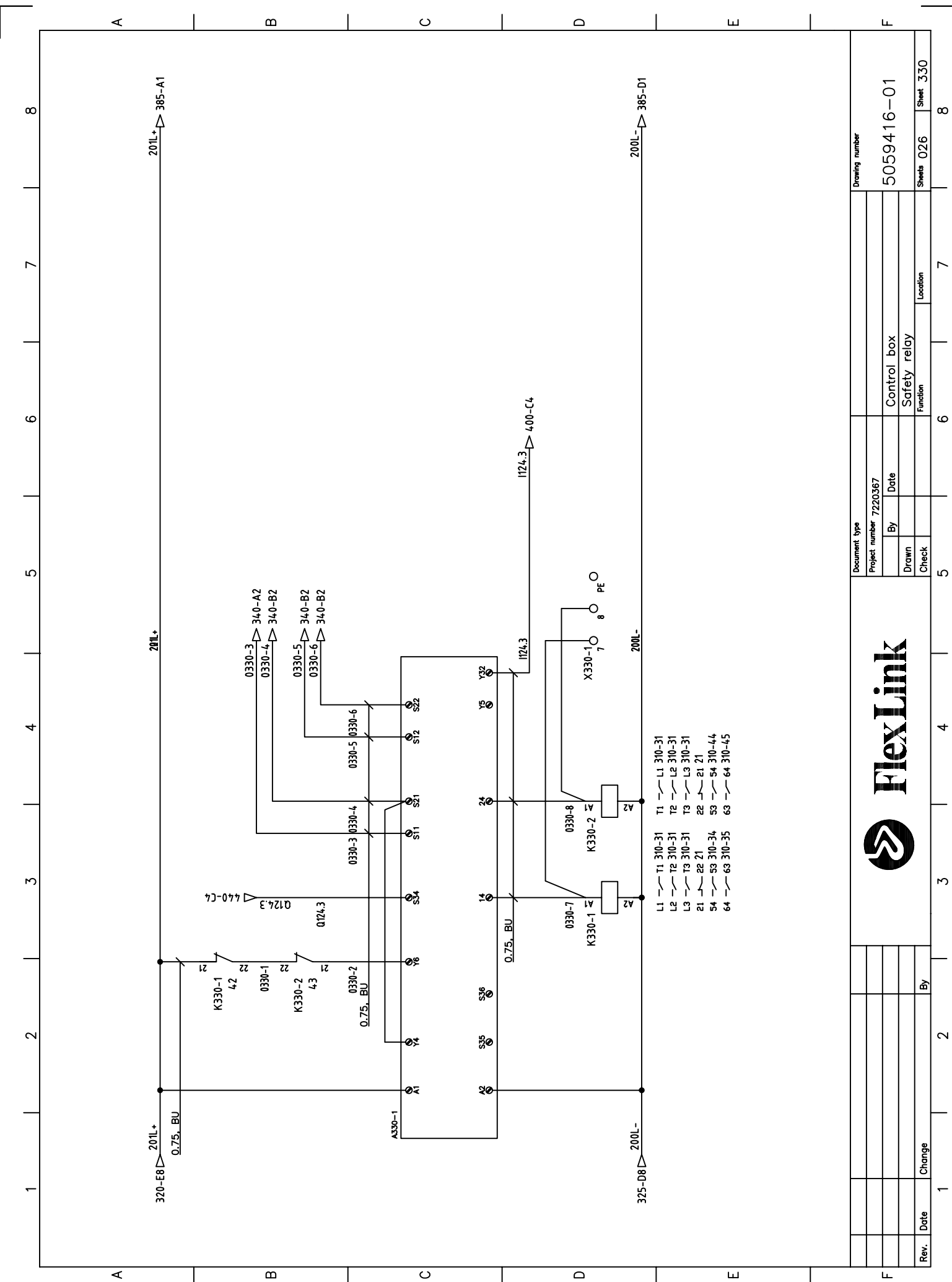
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Document type		Project number 7220367		Drawing number	
By	Date	Control box	5059416-01		Sheets 026 Sheet 326
Drawn		ASI Master			
Check		Function	Location		
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Rev.		Date	Change	By
				
Document type		Project number 7220367		
By	Date	Control box		
Drawn		Safety relay		
Check		Function	Location	
Drawing number		5059416-01		
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A B C D E F

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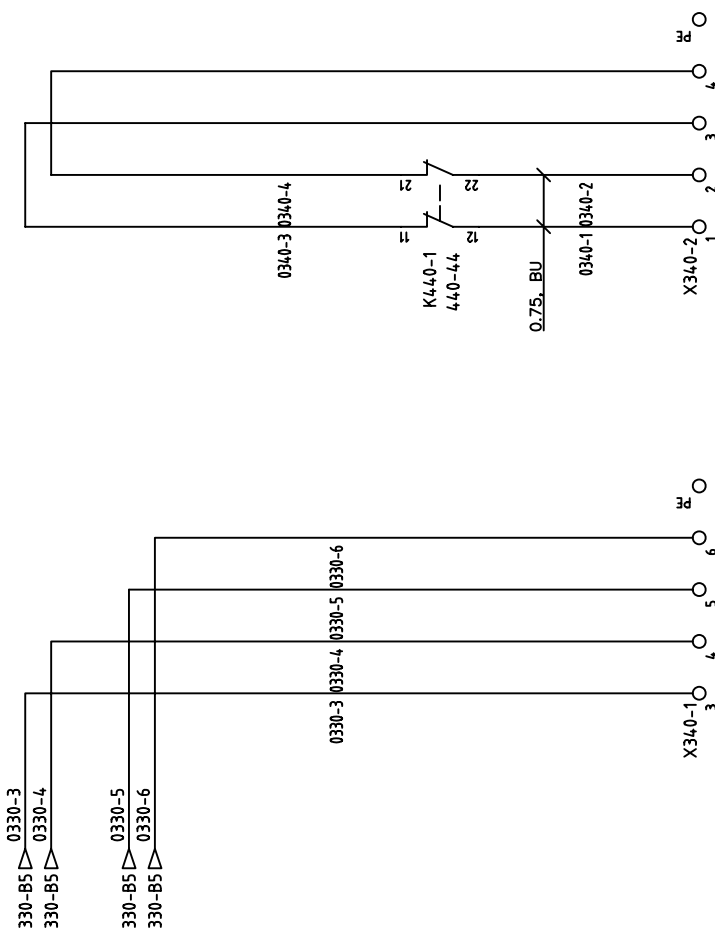
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Rev.		Date	Change	By
				
Document type		Project number 7220367		
Drawn	By	Date	Control box	
Check			Safety loop	
			Function	Location
Drawing number		5059416-01		
Sheets	026	7	8	Sheet 340

A B C D E F

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1

201L+ 400-A1

201L+

201L+

330-A8

0.75. BU

0.310-1
310-21

0.385-1

0.310-2
310-34

0.385-2

0.310-3
310-35

0.385-3

G321-2
321-C2
ASI, 30 V

1124.4

400-C5
1124.4

200L- 400-A1

200L-

200L-

330-D8

A B C D E F

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1

Document type		Project number 7220367		Drawing number	
By	Date	Drawn	Check	Control box	5059416-01
				MCB-loop	
				Function	Sheets 026
				Location	Sheet 385

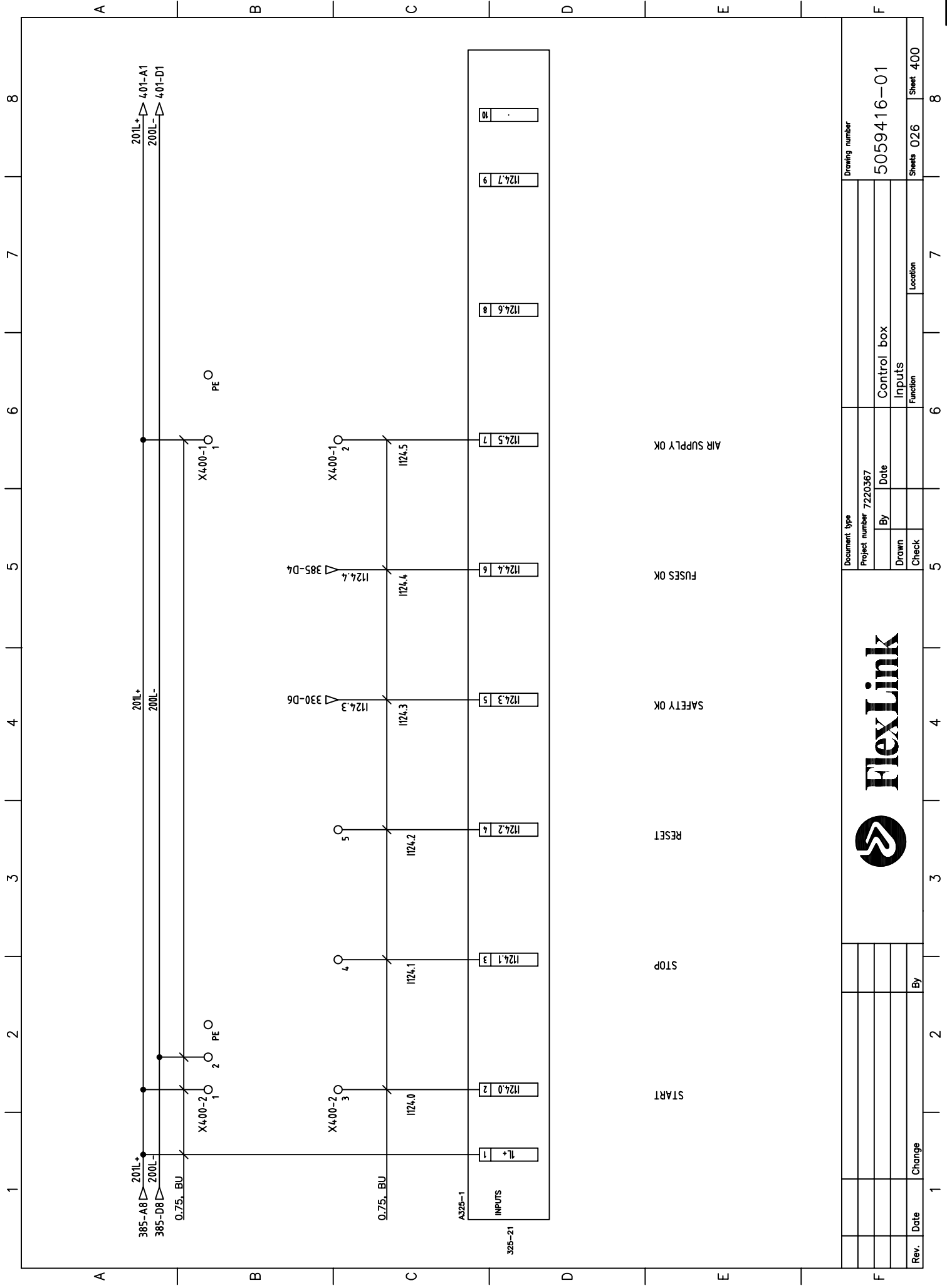



By

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Date

Rev.



		FlexLink	
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By	Date	Control box	
Drawn	Check	Inputs	
		Function	Location
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		Sheets 026	Sheet 400

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

4.00-A8 \triangleleft 201L+ 201L+ \triangleleft 4.40-A1




A325-1

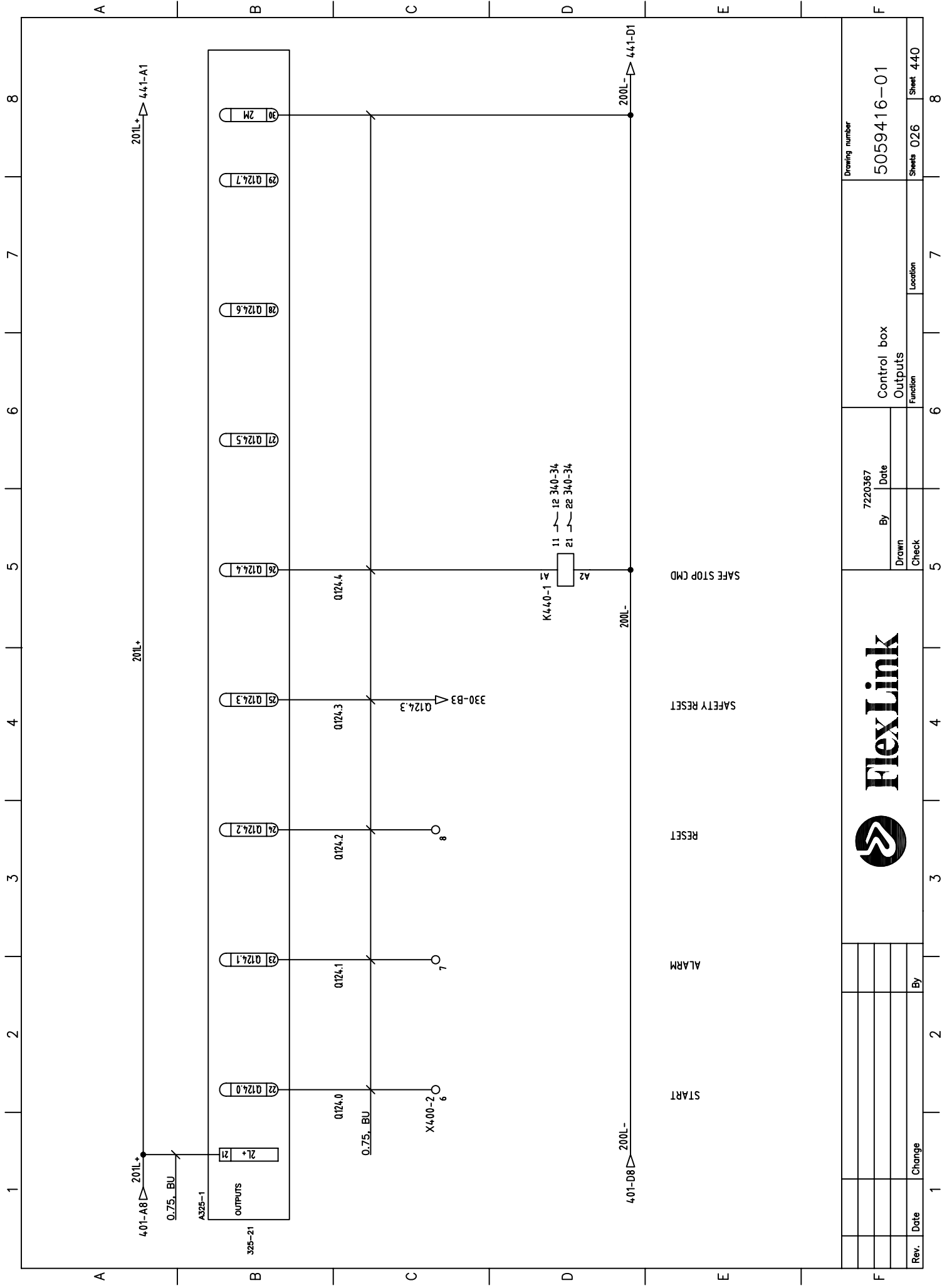
INPUTS


325-21

4.00-A8 \triangleleft 200L- 200L- \triangleleft 4.40-D1

0.75. BU

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Check			Inputs	
			Function	Location
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				7220367 By _____ Date _____ Drawn _____ Check _____		Control box Outputs Function		Drawing number 5059416-01	
				Location		Sheets 026		Sheet 440	
				6		7		8	

A

B

C

D

E

F

1 2 3 4 5 6 7 8

440-A8 200L+ 200L+

0.75. BU

A325-1

OUTPUTS

325-21

3L+ 3L

92 Q125.0

93 Q125.1

94 Q125.2

95 Q125.3

96 Q125.4

97 Q125.5

98 Q125.6

99 Q125.7

99 3M

0.75. BU

440-D8 200L-

200L-

200L- 440-D1



Document type

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Drawn

Check

Control box

Outputs

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Location

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