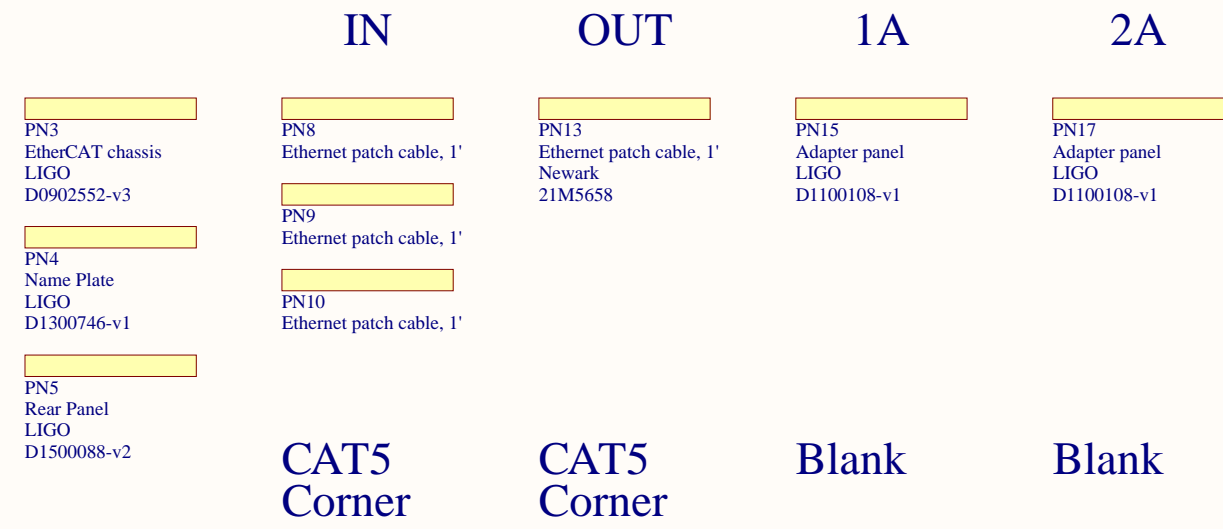


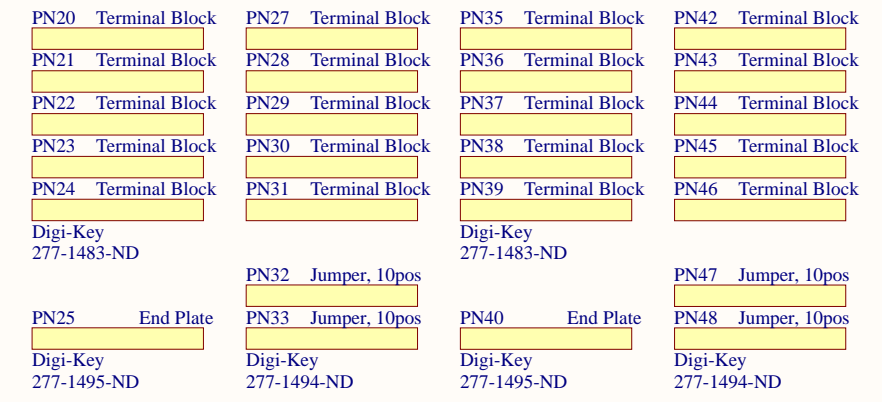
Mount the terminal block on spare DIN rail space.
Use the terminal block to distribute the 24V supply.

This EtherCAT chassis uses copper only.
Mount the modular adapters to the front panel.
Using CAT5 patch cables:
- Connect the front panel input to the first coupler (left rail).
- Connect the output of the first coupler to the input of the second one (middle rail).
- Connect the output of the second coupler to the input of the third one.
- Connect the front panel output to the output of the third coupler (right rail).

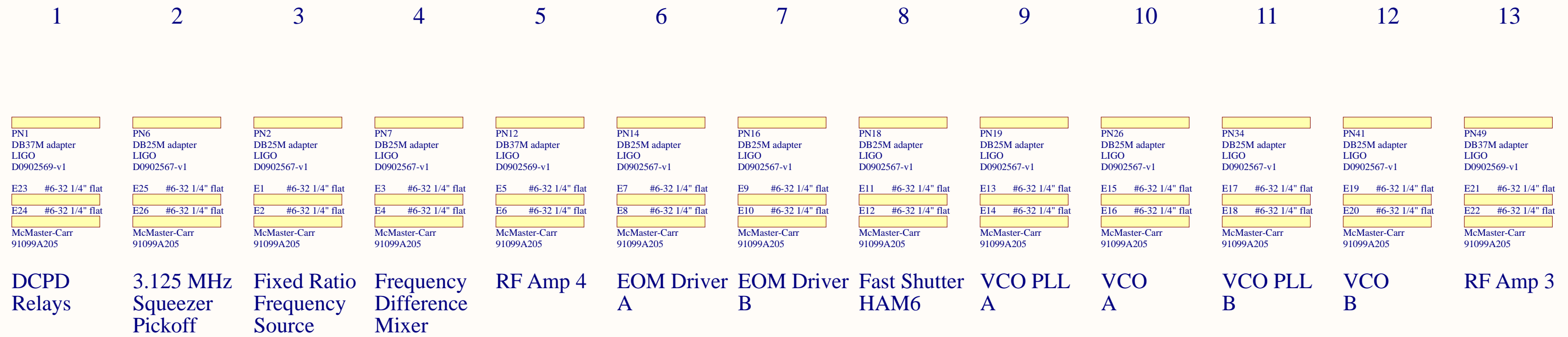
Ports



TBLOCK



Slots



Title			EtherCAT Corner 6		
Size	Number	Revision			
B	D1300745			6	
Date:	1/14/2022	Sheet 1 of 4			
File:	C:\Users\...\EtherCATCornerF1.SchDoc	Drawn By: Daniel Sigg			

B1
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B2
EK1101
EtherCAT coupler w/ ID switch

B3
EL3104
4-channel analog input terminals, differential, 16 bits

B4
EL3104
4-channel analog input terminals, differential, 16 bits

B5
EL3104
4-channel analog input terminals, differential, 16 bits

B6
EL1124
4-channel digital input terminals, 5V

B7
EL1124
4-channel digital input terminals, 5V

B8
EL1124
4-channel digital input terminals, 5V

B9
EL9410
Power supply terminals for E-bus, diagnostics

B10
EL3104
4-channel analog input terminals, differential, 16 bits

B11
EL3104
4-channel analog input terminals, differential, 16 bits

B12
EL4132
2-channel analog output terminals, differential, 16 bits

B13
EL1124
4-channel digital input terminals, 5V

B14
EL2124
4-channel digital output terminals, 5V

B15
EL2124
4-channel digital output terminals, 5V

B16
EL2124
4-channel digital output terminals, 5V

B17
EL2124
4-channel digital output terminals, 5V

B18
EL2124
4-channel digital output terminals, 5V

B19
EL9410
Power supply terminals for E-bus, diagnostics

B20
EL3104
4-channel analog input terminals, differential, 16 bits

B21
EL3104
4-channel analog input terminals, differential, 16 bits

B22
EL4132
2-channel analog output terminals, differential, 16 bits

B23
EL1124
4-channel digital input terminals, 5V

B24
EL2124
4-channel digital output terminals, 5V

B25
EL2124
4-channel digital output terminals, 5V

B26
EL2124
4-channel digital output terminals, 5V

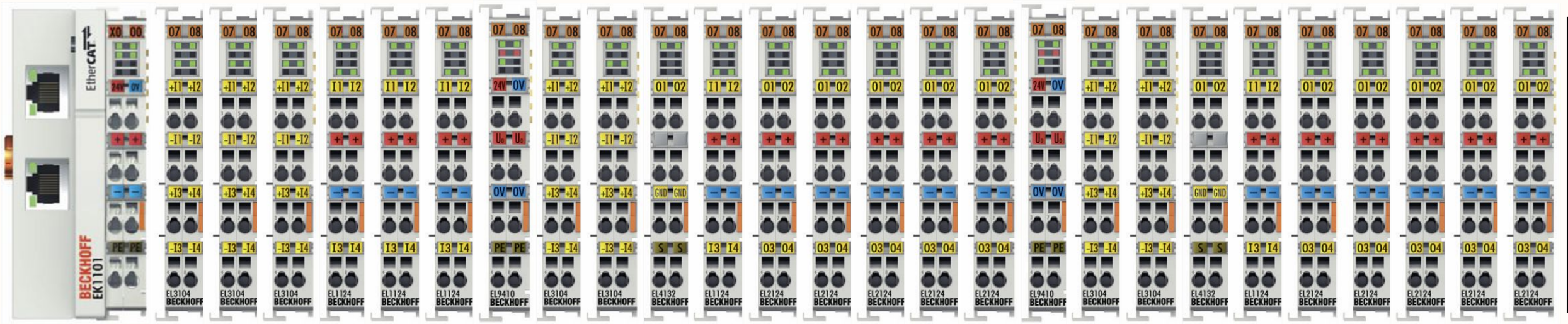
B27
EL2124
4-channel digital output terminals, 5V

B28
EL2124
4-channel digital output terminals, 5V

B29
EL9011
End cap

B30
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B31
5V/0.6A isolated DC-DC converter, Omron S82S-7305



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Ebus 24V
Power contacts 5V

24V
5V

24V
5V

24V
5V

DC_1

RF Amps C

Low Noise VCO w/ PLL
B

Low Noise VCO w/ PLL
A

DC_2
DC_3

Power budget:
EL3104: 0.130 A (3x)
EL4134: 0.265 A (0x)
EL1124: 0.090 A (3x)
EL2124: 0.130 A (0x)

0.660 A

Power budget:
EL3104: 0.130 A (2x)
EL4134: 0.265 A (1x)
EL1124: 0.090 A (1x)
EL2124: 0.130 A (5x)

1.265 A

Power budget:
EL3104: 0.130 A (2x)
EL4134: 0.265 A (1x)
EL1124: 0.090 A (1x)
EL2124: 0.130 A (5x)

1.265 A

Title EtherCAT Corner 6: Left Rail		
Size B	Number D1300745	Revision 6
Date: 1/14/2022	Sheet 2of 4	
File: C:\Users\...\EtherCATCornerF2.SchDoc	Drawn By: Daniel Sigg	

B52
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B33
EK1100
Beckhoff EtherCAT coupler

B34
EL1098
8-channel digital input terminals, 24V

B35
EL2004
4-channel digital output terminals, 24V

B36
EL9190
Feed terminal, arbitrary voltage

B37
EL3104
4-channel analog input terminals, differential, 16 bits

B38
EL1124
4-channel digital input terminals, 5V

B39
EL2124
4-channel digital output terminals, 5V

B40
EL2124
4-channel digital output terminals, 5V

B41
EL2124
4-channel digital output terminals, 5V

B42
EL9410
Power supply terminals for E-bus, diagnostics

B43
EL3104
4-channel analog input terminals, differential, 16 bits

B44
EL1124
4-channel digital input terminals, 5V

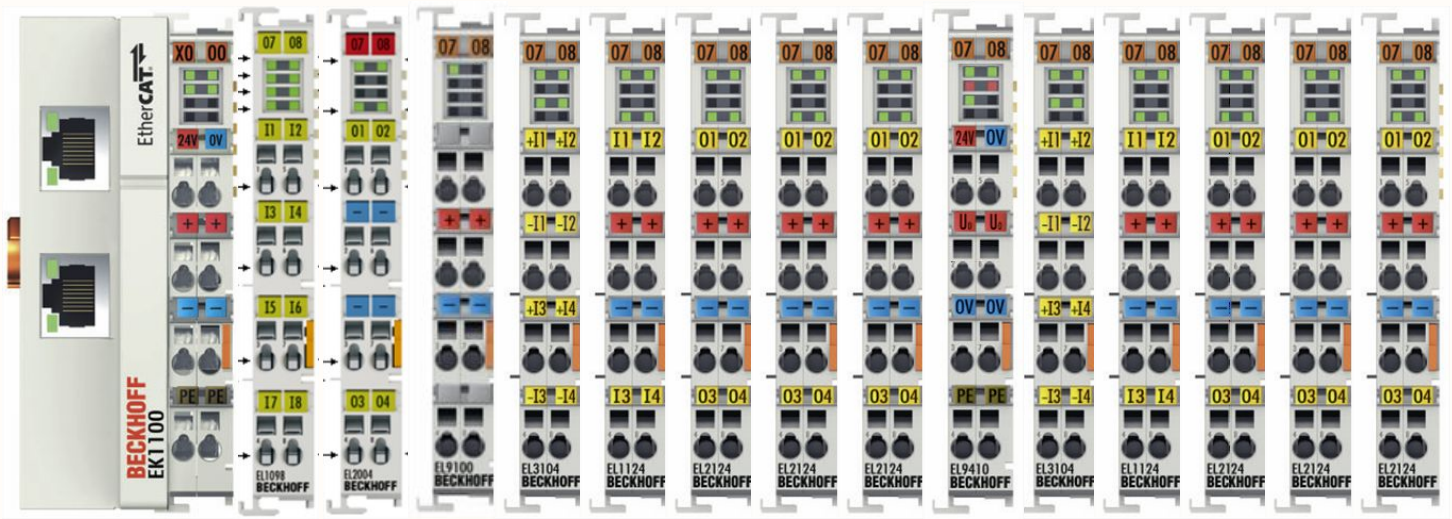
B45
EL2124
4-channel digital output terminals, 5V

B46
EL2124
4-channel digital output terminals, 5V

B47
EL2124
4-channel digital output terminals, 5V

B48
EL9011
End cap

B49
5V/0.6A isolated DC-DC converter, Omron S82S-7305



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Ebus 24V — 24V
Power contacts 24V 5V 5V

DC_4 Fast Shutter EOM Driver B EOM Driver A DC_5

Power budget:
EL1908: 0.090 A (1x)
EL2004: 0.100 A (1x)
EL3104: 0.130 A (1x)
EL1124: 0.090 A (1x)
EL2124: 0.130 A (3x)

0.800 A

Power budget:
EL3104: 0.130 A (1x)
EL1124: 0.090 A (1x)
EL2124: 0.130 A (3x)

0.610 A

Title EtherCAT Corner 6: Middle Rail		
Size B	Number D1300745	Revision 6
Date: 1/14/2022	Sheet 3 of 4	
File: C:\Users\...\EtherCATCornerF3.SchDoc	Drawn By: Daniel Sigg	

B50
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B51
EK1100
Beckhoff EtherCAT coupler

B52
EL3104
4-channel analog input terminals, differential, 16 bits

B53
EL3104
4-channel analog input terminals, differential, 16 bits

B54
EL3104
4-channel analog input terminals, differential, 16 bits

B55
EL1124
4-channel digital input terminals, 5V

B56
EL1124
4-channel digital input terminals, 5V

B57
EL1124
4-channel digital input terminals, 5V

B58
EL9190
Feed terminal, arbitrary voltage

B59
EL3104
4-channel analog input terminals, differential, 16 bits

B60
EL1124
4-channel digital input terminals, 5V

B61
EL9410
Power supply terminals for E-bus, diagnostics

B62
EL3104
4-channel analog input terminals, differential, 16 bits

B63
EL1124
4-channel digital input terminals, 5V

B64
EL9190
Feed terminal, arbitrary voltage

B65
EL3104
4-channel analog input terminals, differential, 16 bits

B66
EL1124
4-channel digital input terminals, 5V

B67
EL9190
Feed terminal, arbitrary voltage

B68
EL2004
4-channel digital output terminals, 24V

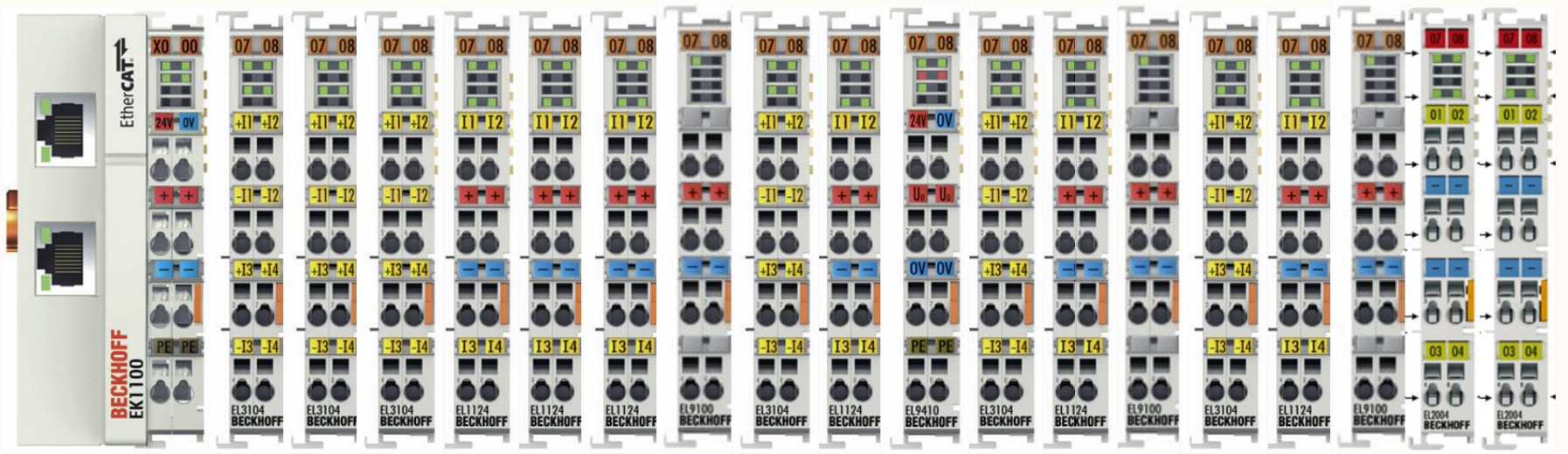
B69
EL2004
4-channel digital output terminals, 24V

B70
EL9011
End cap

B71
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B72
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B73
5V/0.6A isolated DC-DC converter, Omron S82S-7305



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Ebus 24V — 24V —
Power contacts 5V 5V 5V 24V

DC_6 RF Amps D RF Frequency Difference Mixer 3.125 MHz Squeezer Pickoff DC_7 DC_8 DC_9

Power budget:
EL1124: 0.090 A (4x)
EL3104: 0.130 A (4x)

0.880 A

Power budget:
EL1124: 0.090 A (2x)
EL2004: 0.100 A (2x)
EL3104: 0.130 A (2x)

0.640 A

Fixed Ratio Frequency Source
DCPD Relays

Title			EtherCAT Corner 6: Right Rail		
Size	Number	Revision			
B	D1300745	6			
Date:	1/14/2022	Sheet 4 of 4			
File:	C:\Users\...\EtherCATCornerF4.SchDoc	Drawn By: Daniel Sigg			