F26_ABB



ABB

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Company / customer : ABB

Project description: FUNCTION PACK DESIGN 2011

Document number: 3AEJ030401-000

Drawing version:

Manufacturer (company) ABB

Type

Type of installation

Control Cabinet FUNCTION PACK DESIGN 2011

Mains Voltage

Supply 400 V AC

Control Voltage 24 V Year of construction 2011

Project start 10/27/2011
Project Manager José Ruiz
Last revision 11/17/2011
Designed by Gaurav Rajore
Last revision 11/17/2011

Number of pages

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 Administrator

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	TITLE SHEET

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Structure identifier overview

F24_002

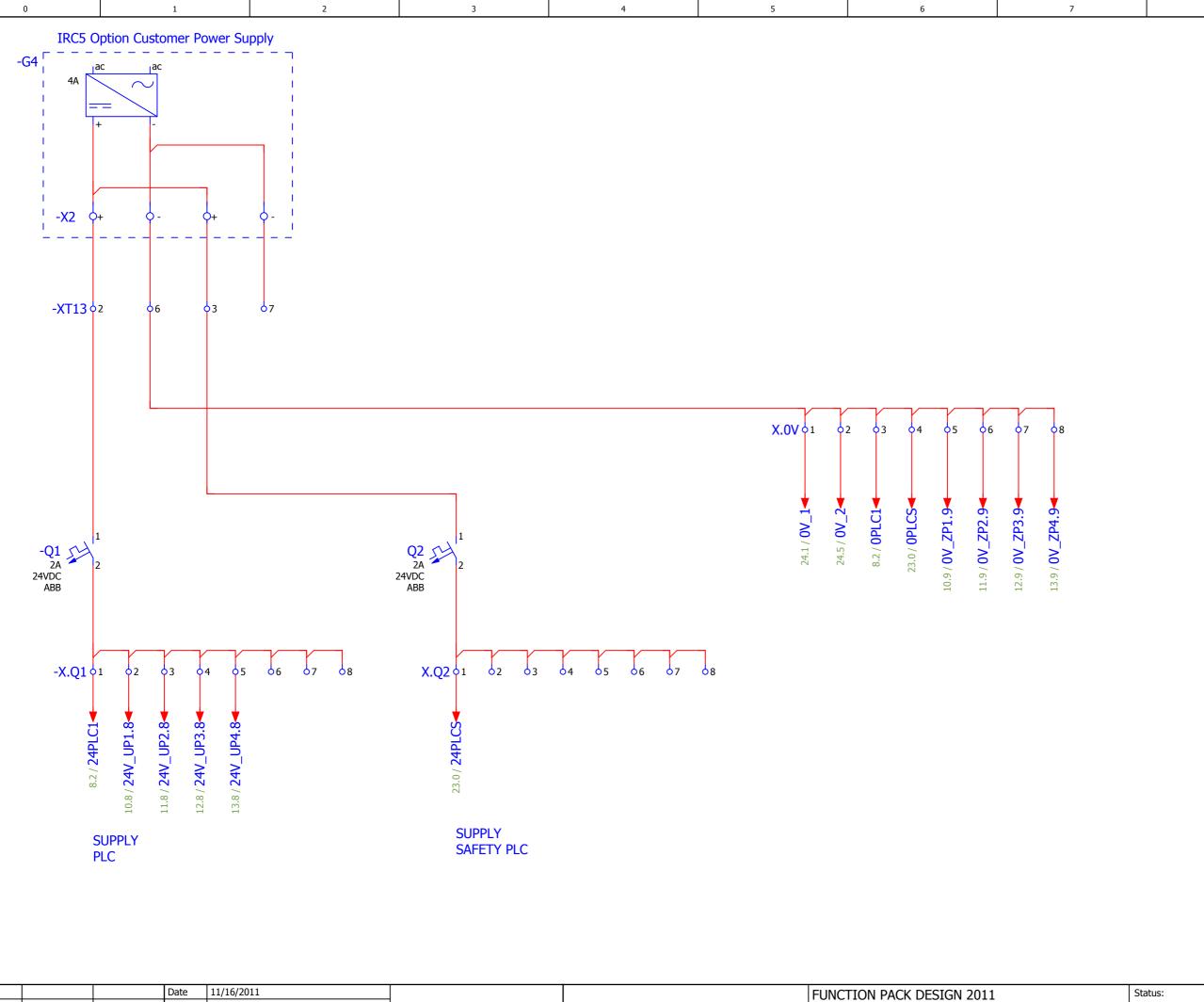
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+CONTROLLER	Mounting location	
+CMDB1	Mounting location	
+CMDB2	Mounting location	
+24V	Mounting location	

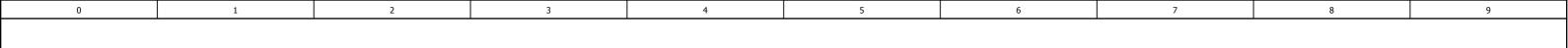
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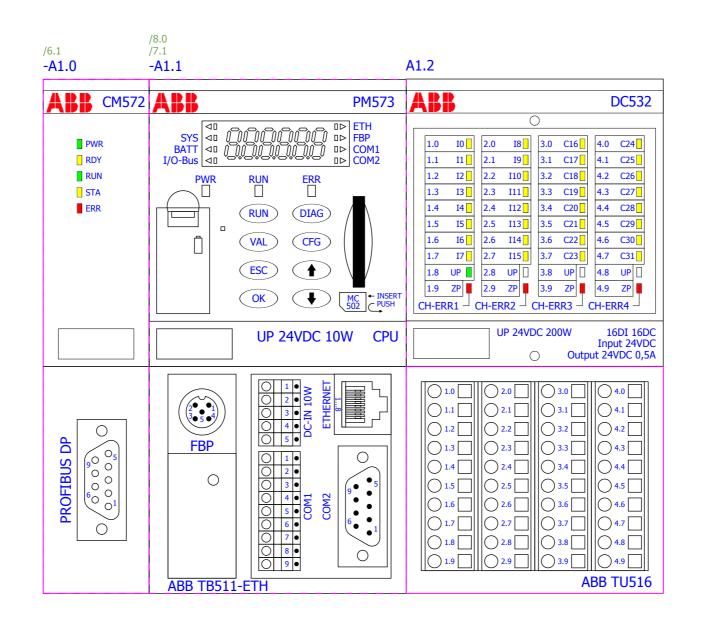


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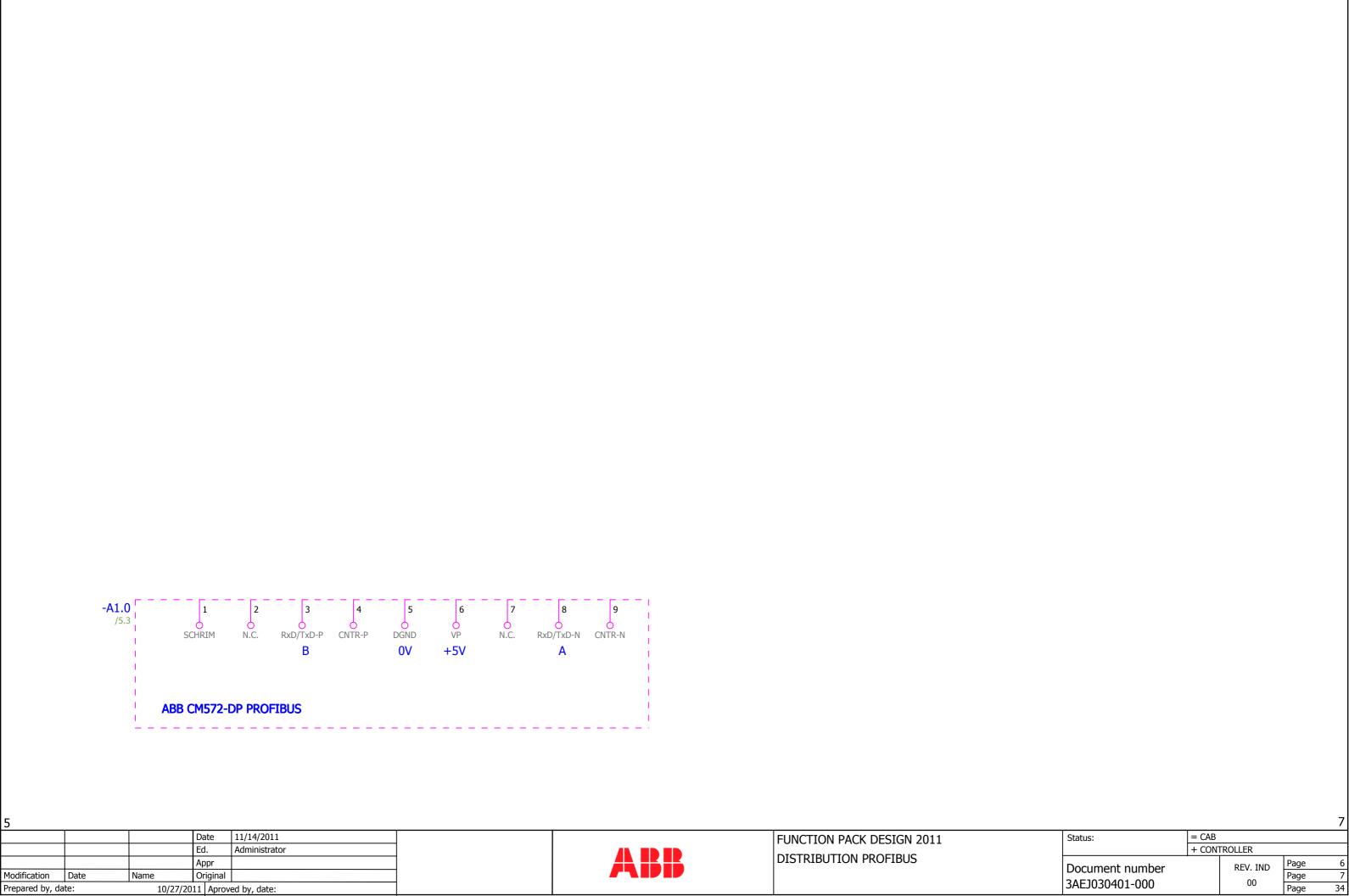








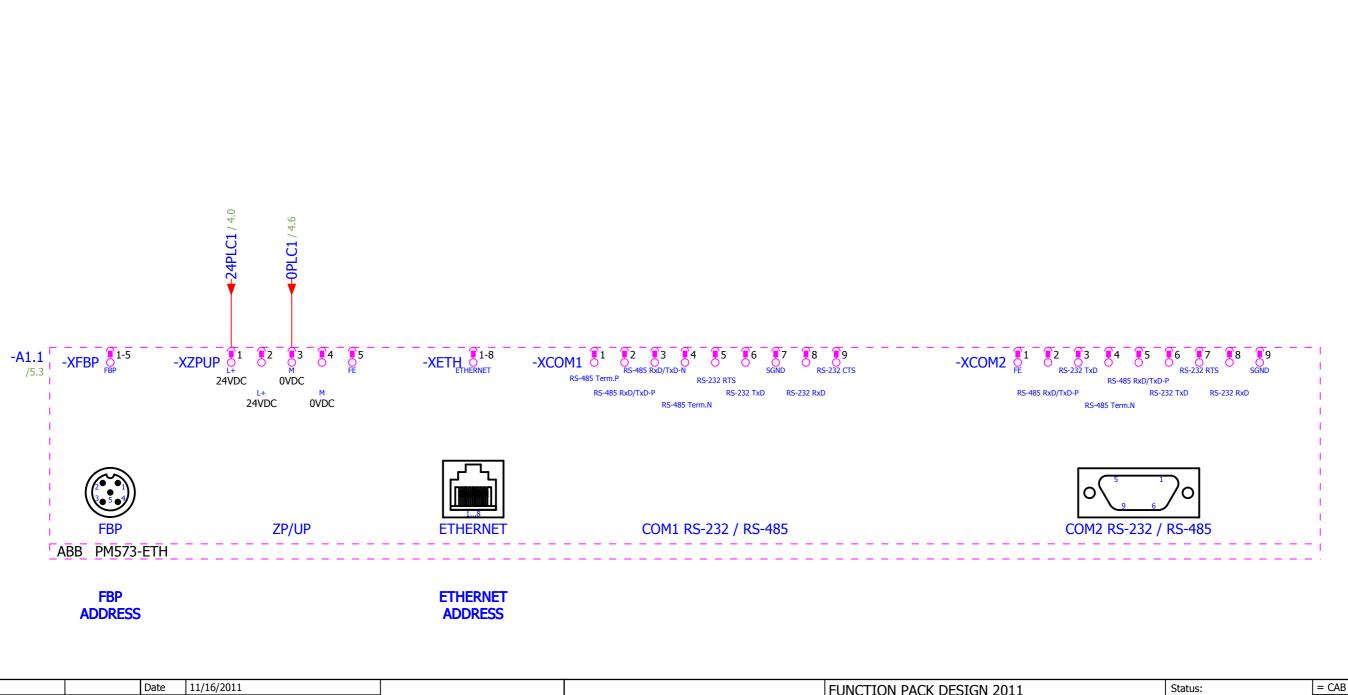
FUNCTION PACK DESIGN 2011 ABB MODULE CONTROL ROBOT



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FUNCTION PACK DESIGN 2011 SUMMARY MODULES PM573

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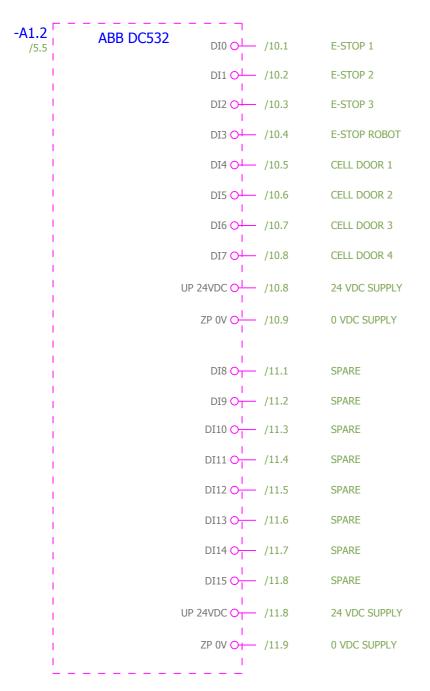
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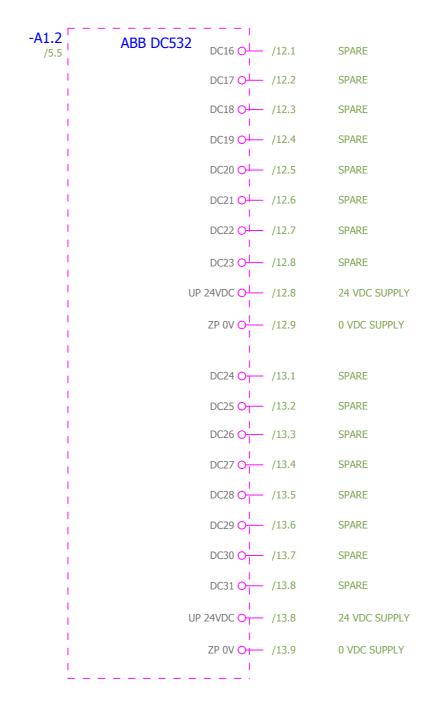
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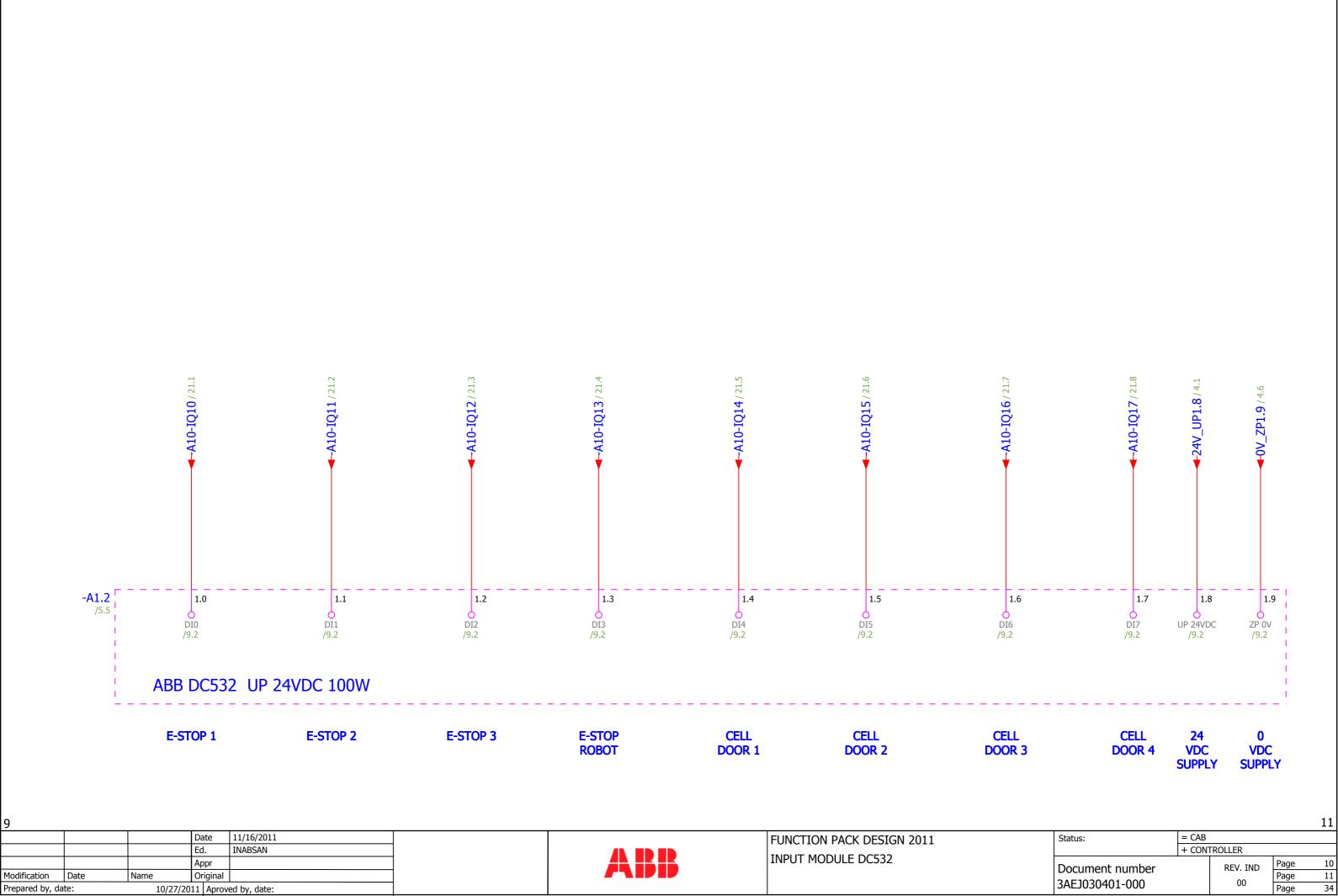


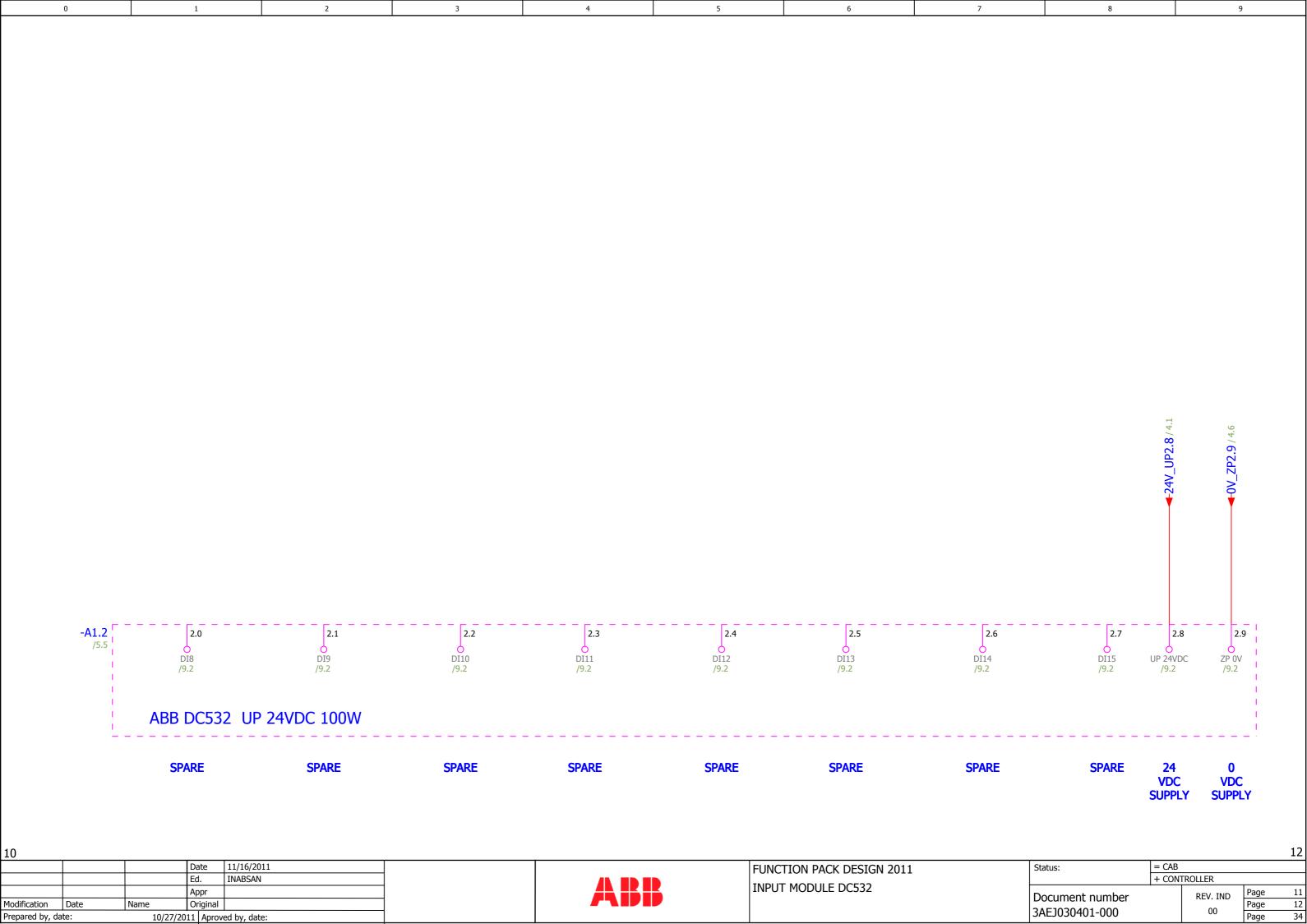
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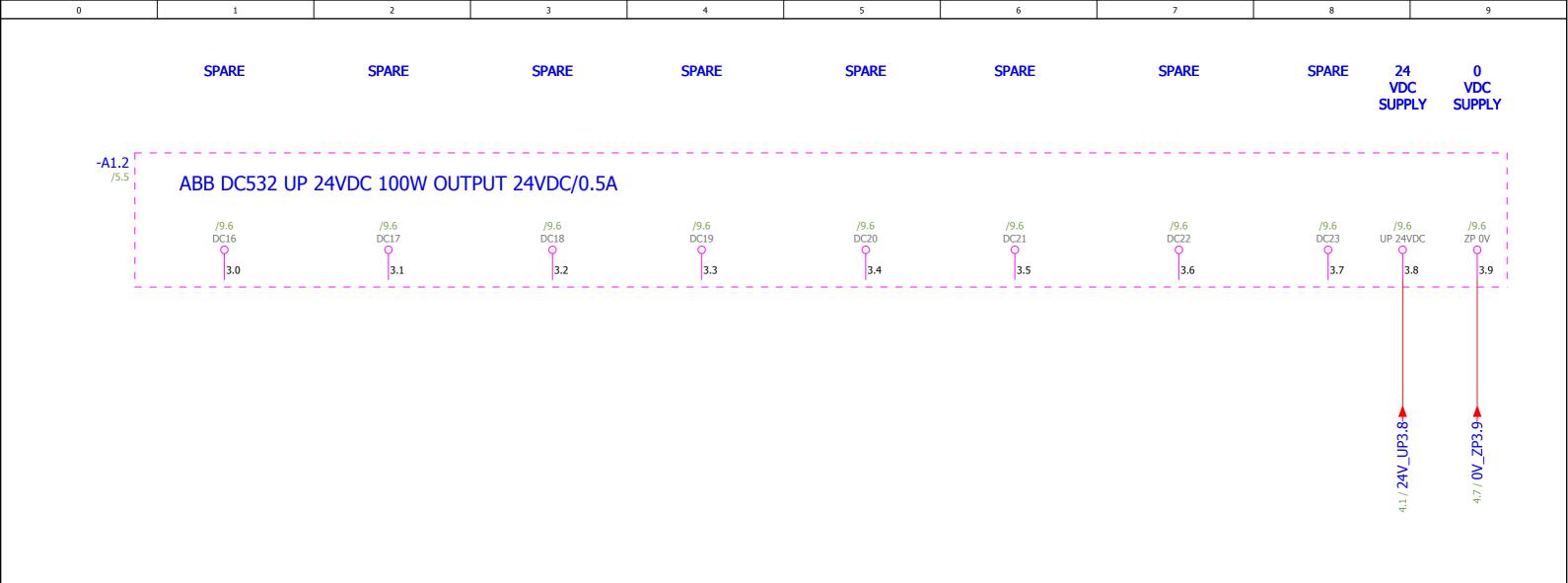


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SUMMARY MODULE
DC532

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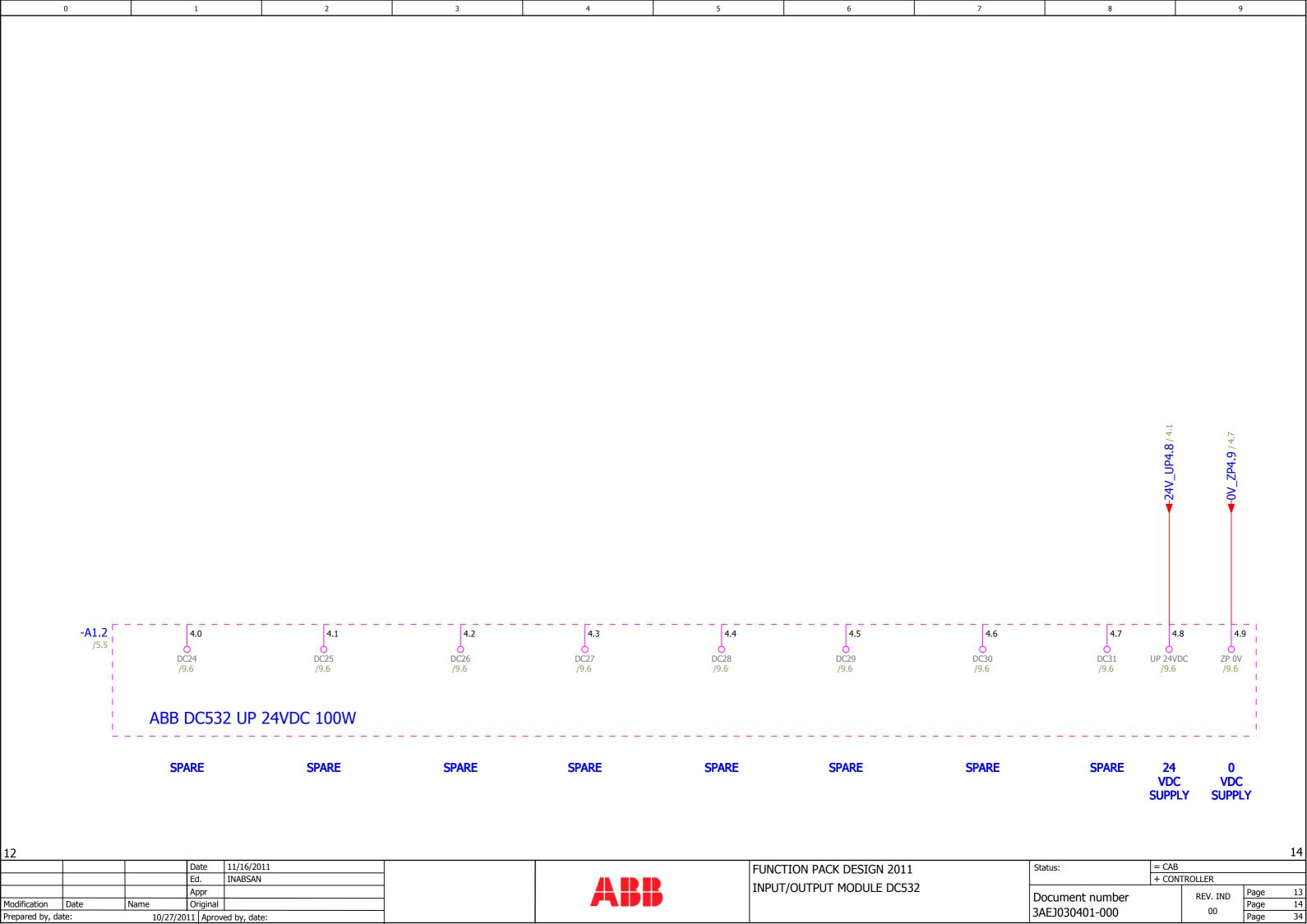
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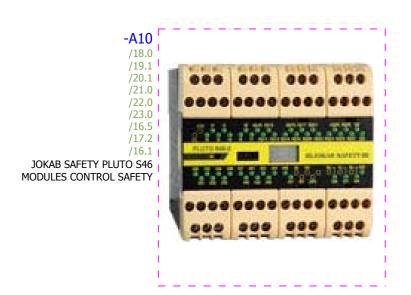


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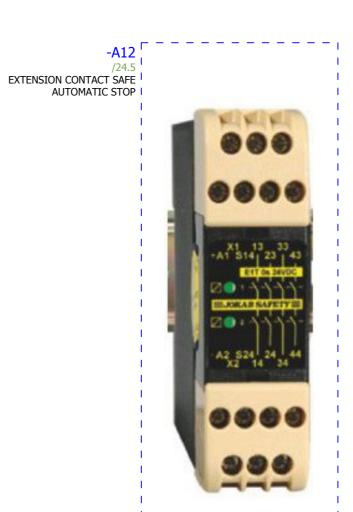
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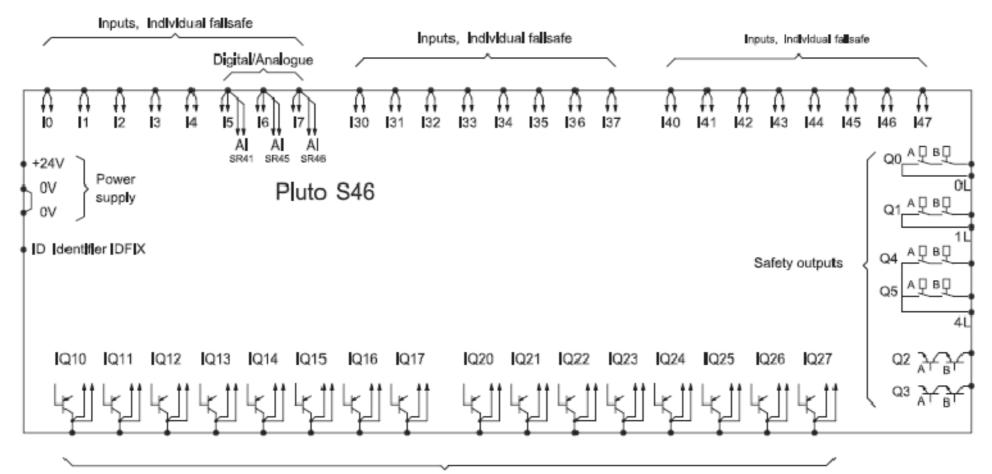


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Fallsafe Inputs / Outputs (not fallsafe) / Dynamic outputs

- ID: Connection for identifier, which has a unique ID number that can be read by the system.
- I.. Safety inputs (24 VDC) that are individually secure. This means that the highest level of safety can be achieved with only one input if ABB Jokab Safety dynamic safety components are used.
 Otherwise two inputs are required for each safety function.
- IQ.. I/O that can be used for safety inputs or signal outputs, e.g. to indicate or control functions that are not safety-related. For IQ.. as safety inputs, refer to I..
- Q0, Q1: Failsafe relay outputs that are individually failsafe and individually programmable.
- Q2, Q3: Failsafe transistor outputs (-24 VDC) that are individually failsafe and individually programmable. Intended for electro-mechanical components such as contactors and valves.
- Q4, Q5 Failsafe relay outputs with common potential that are individually failsafe and individually programmable.

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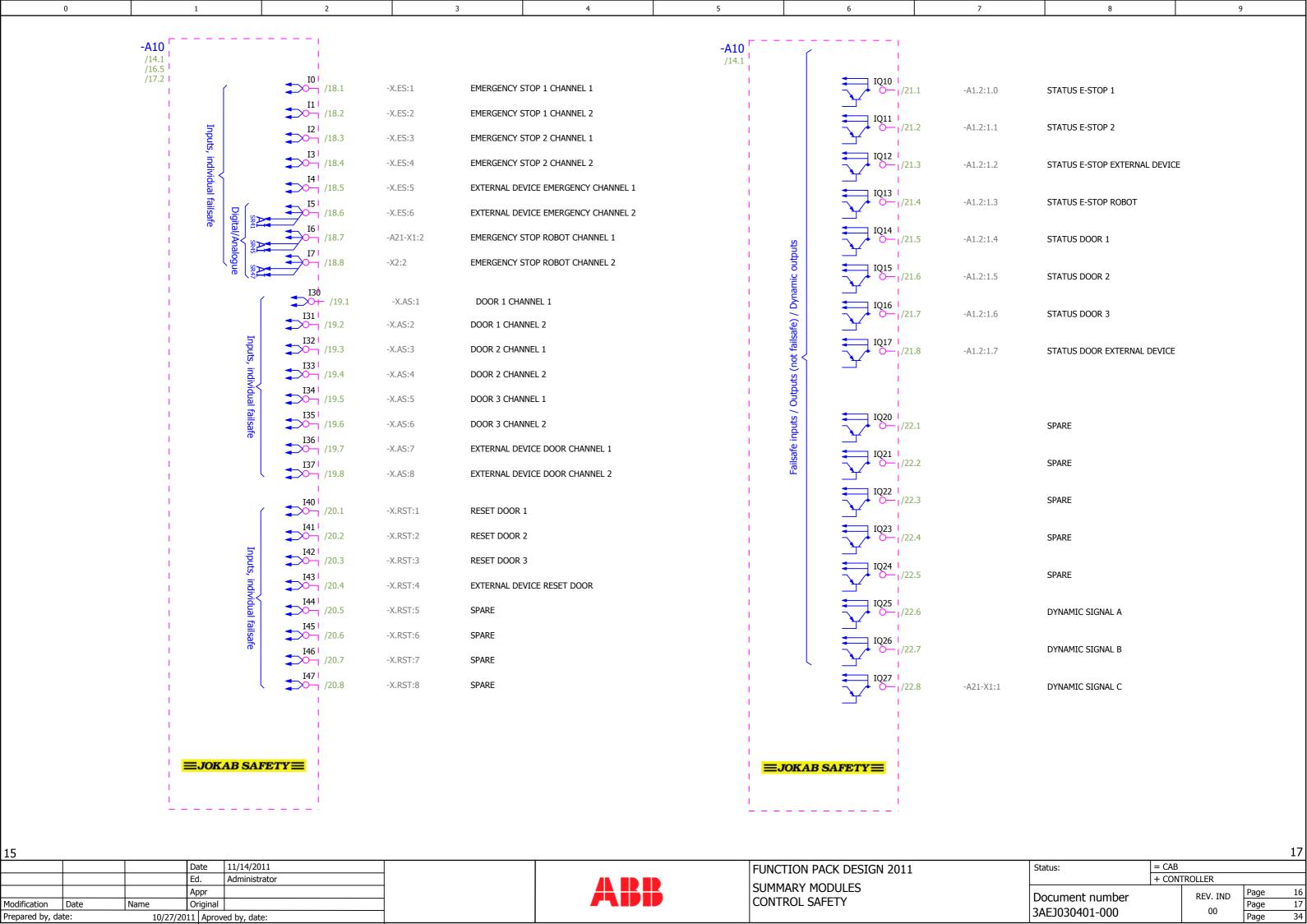
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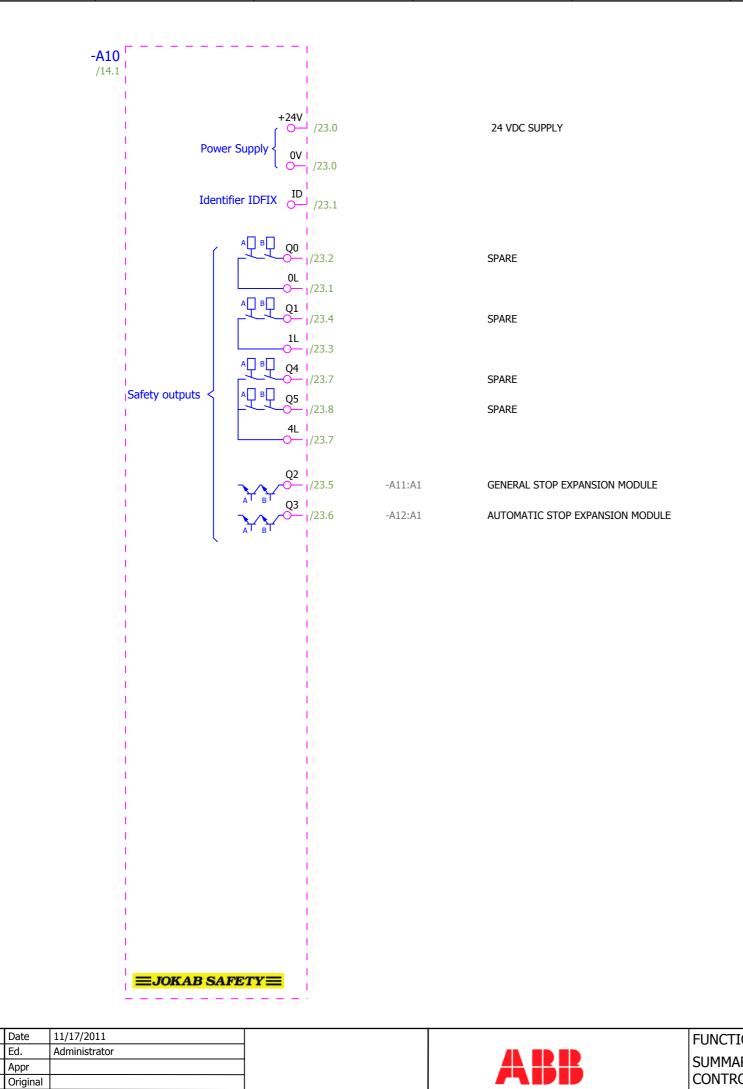
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SUMMARY MODULES

CONTROL SAFETY

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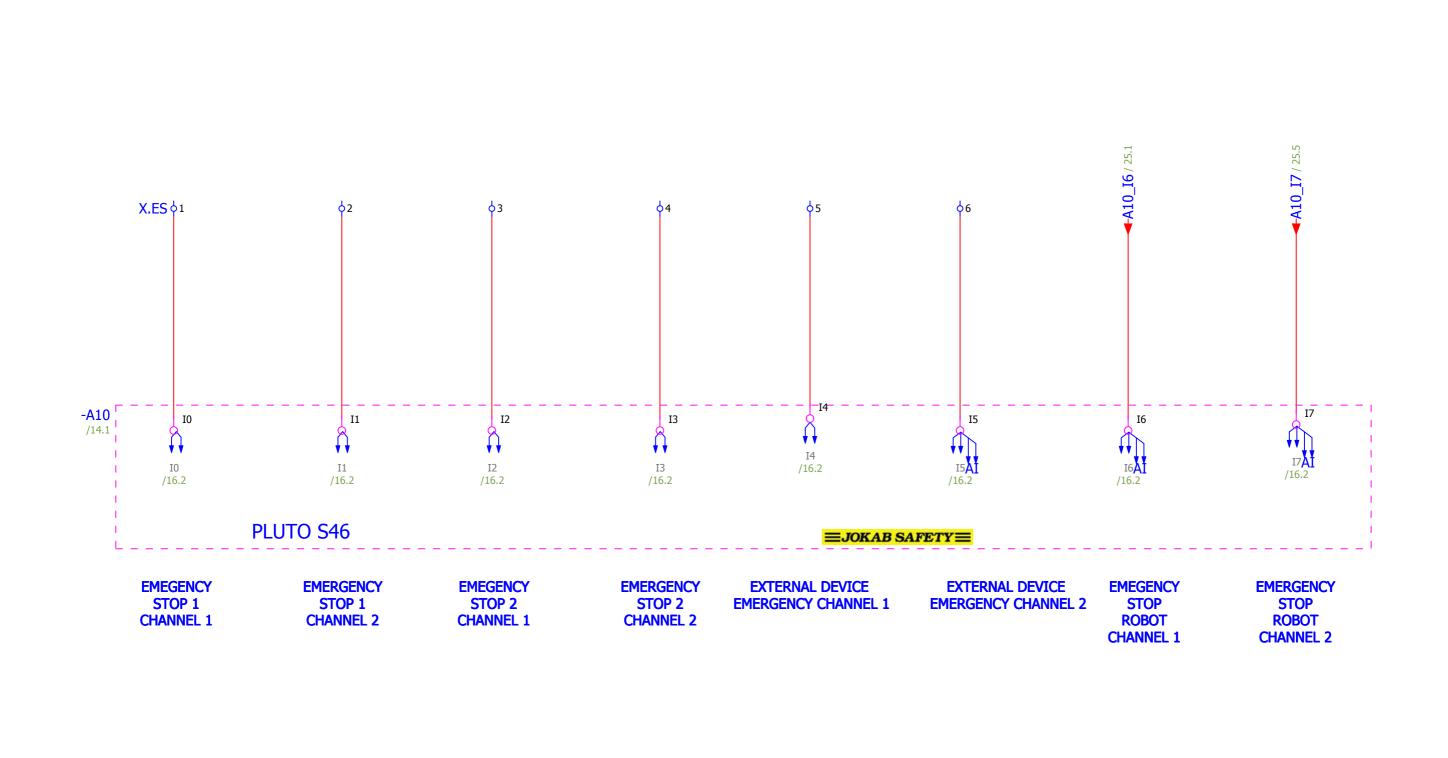
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17 18 34

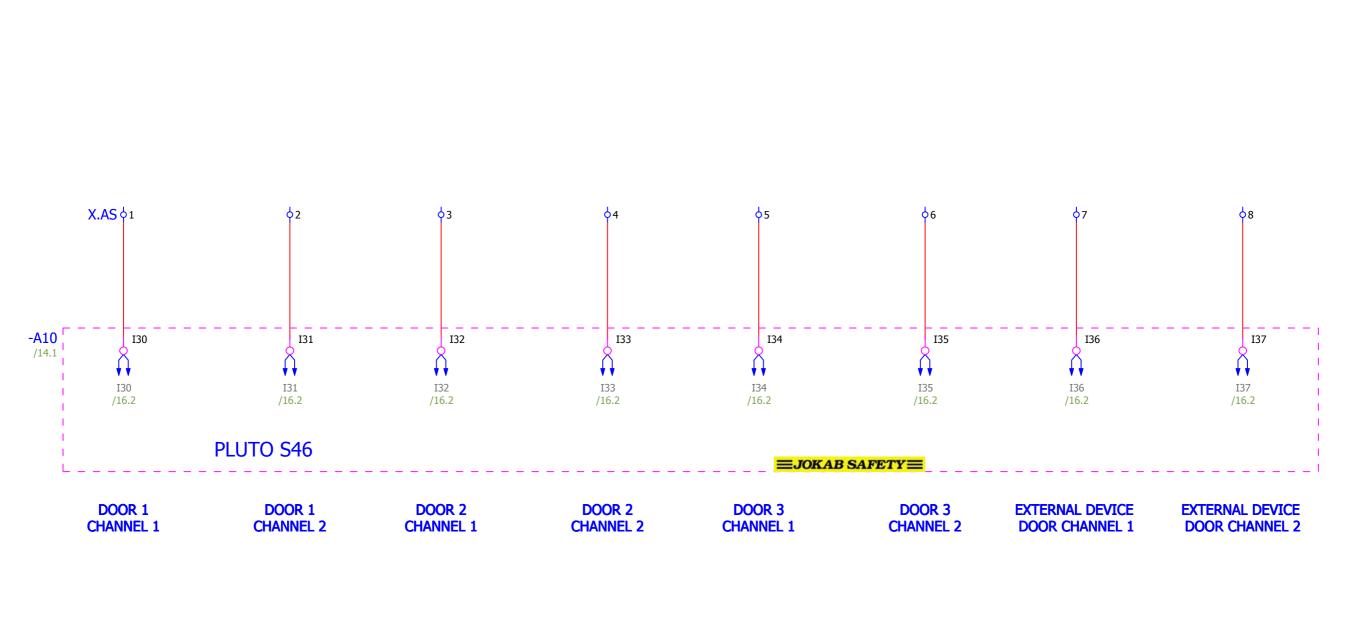
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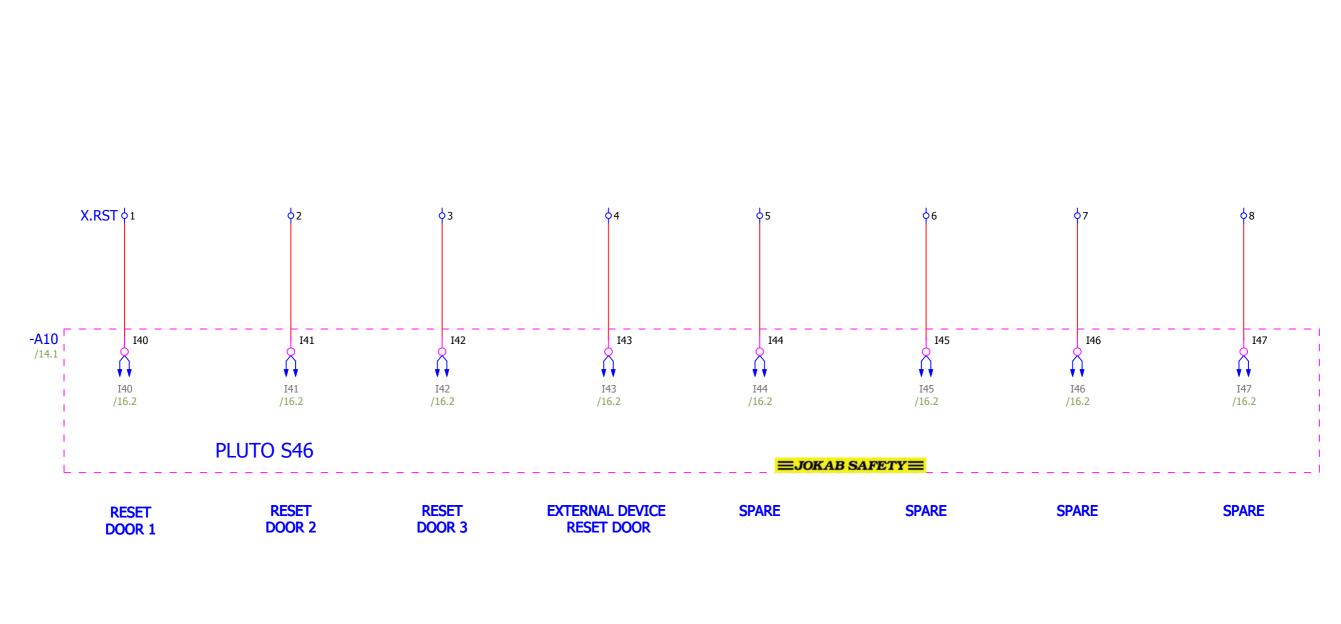
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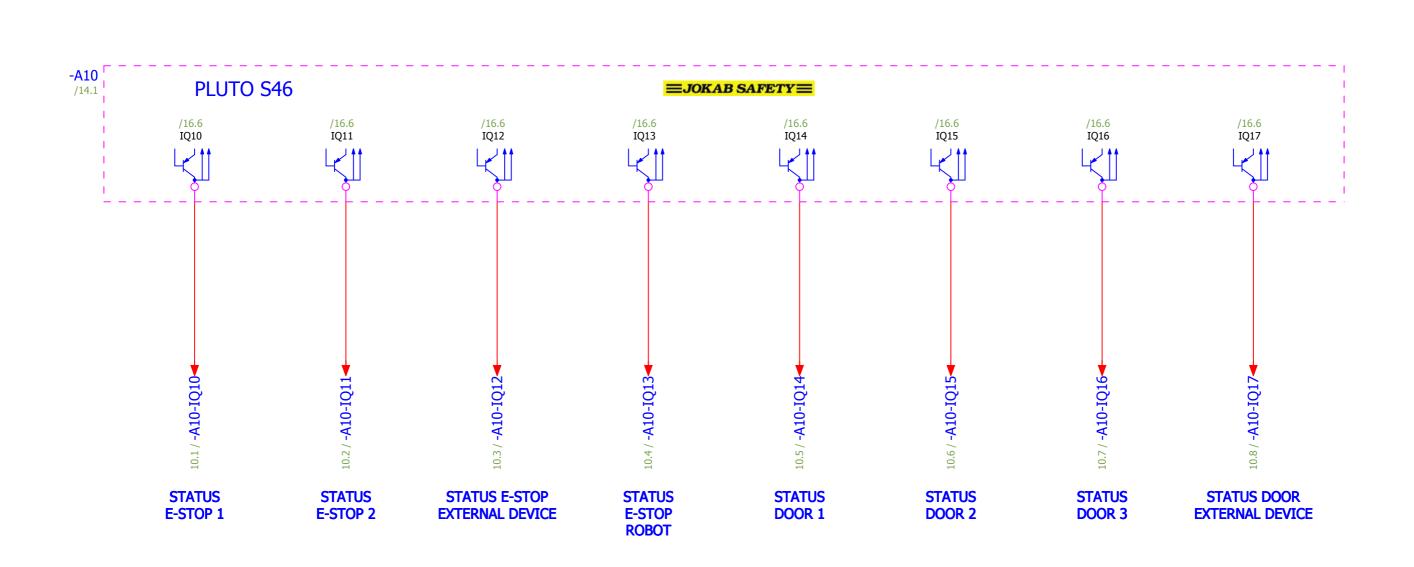
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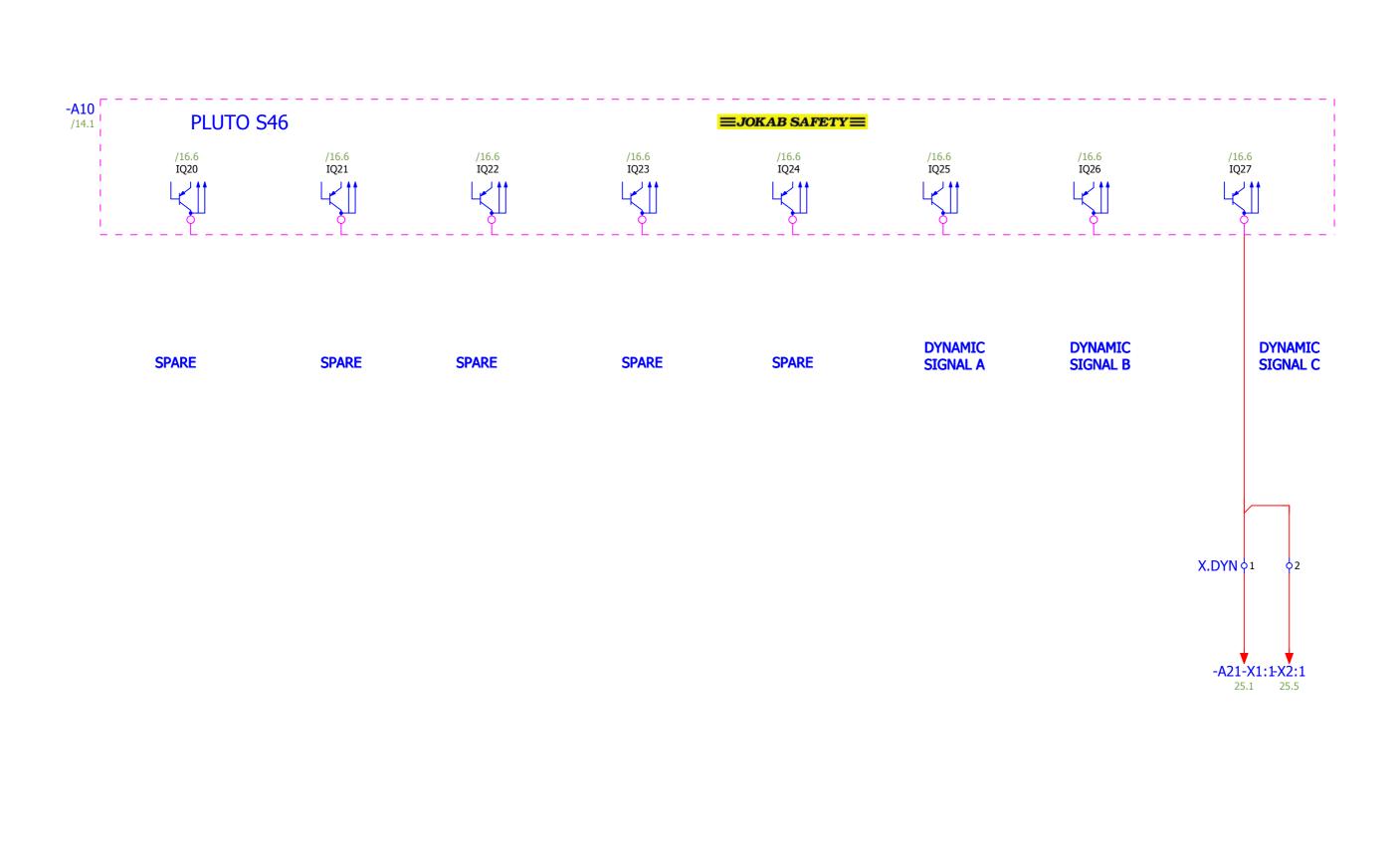
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INPUTS MODULE SAFE / OUTPUTS MODULE NON SAFE

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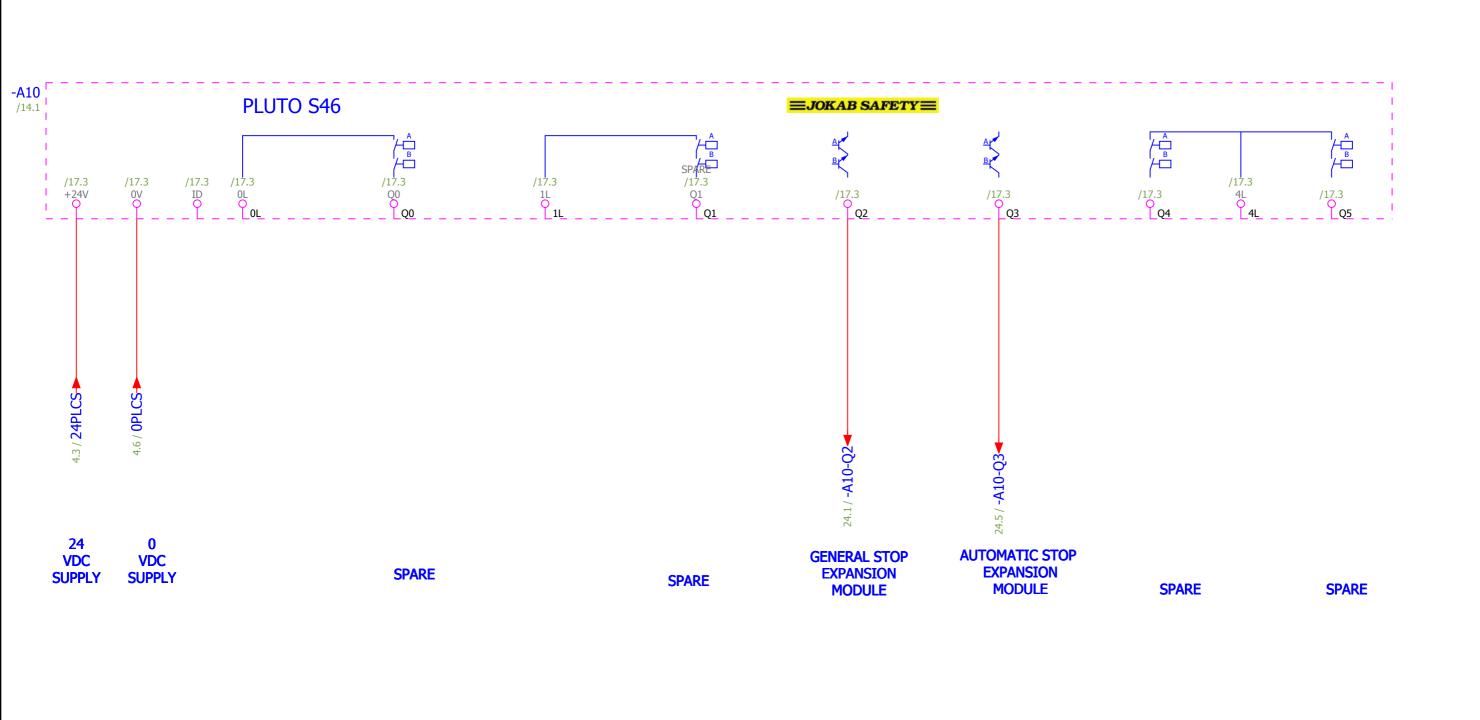
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INPUTS MODULE SAFE / OUTPUTS MODULE NON SAFE

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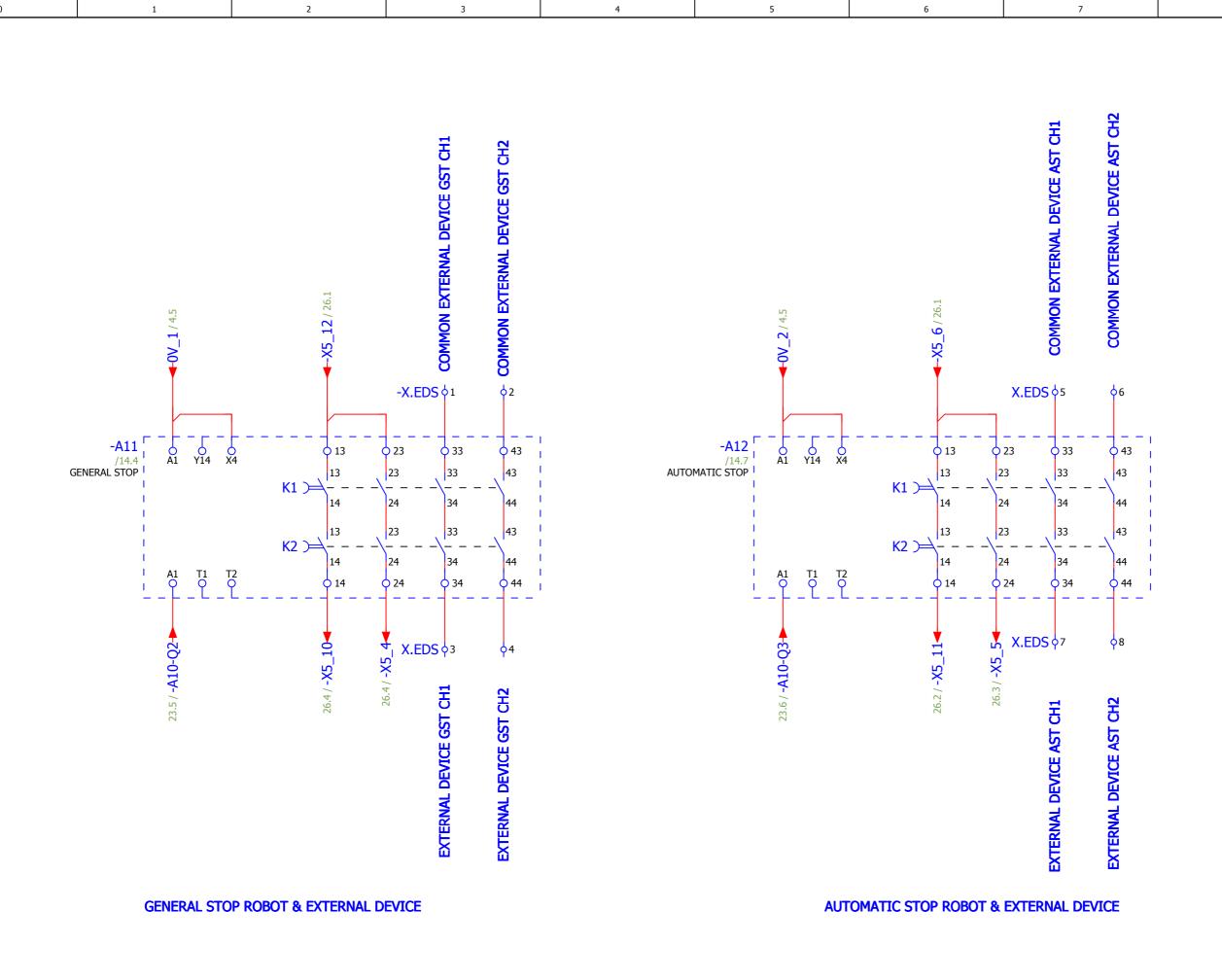
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FUNCTION PACK DESIGN 2011 OUTPUTS MODULE SAFE

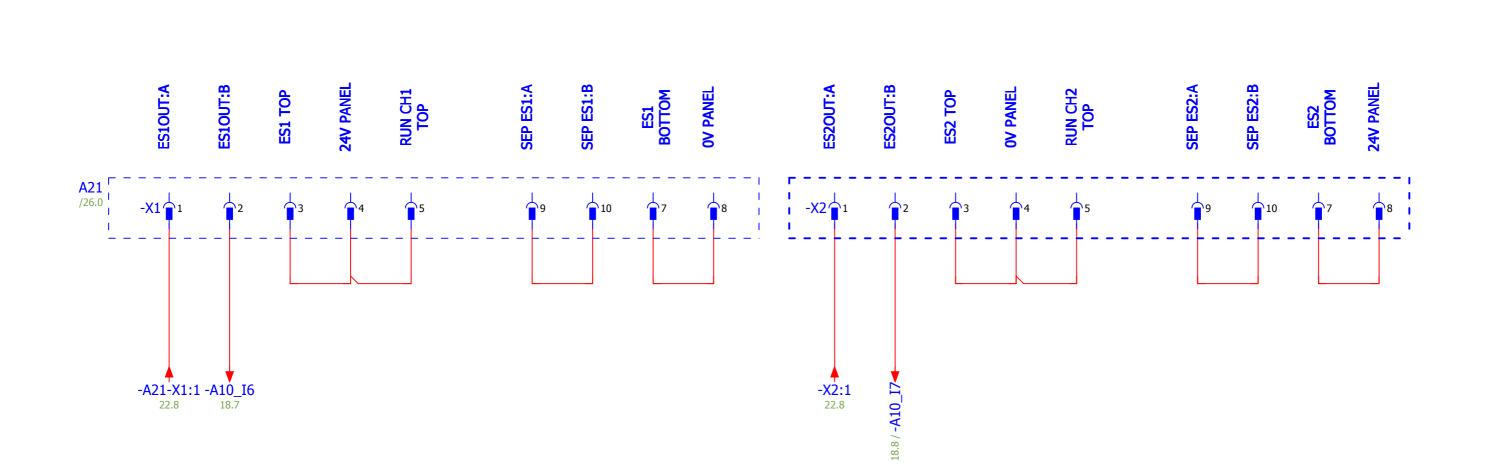
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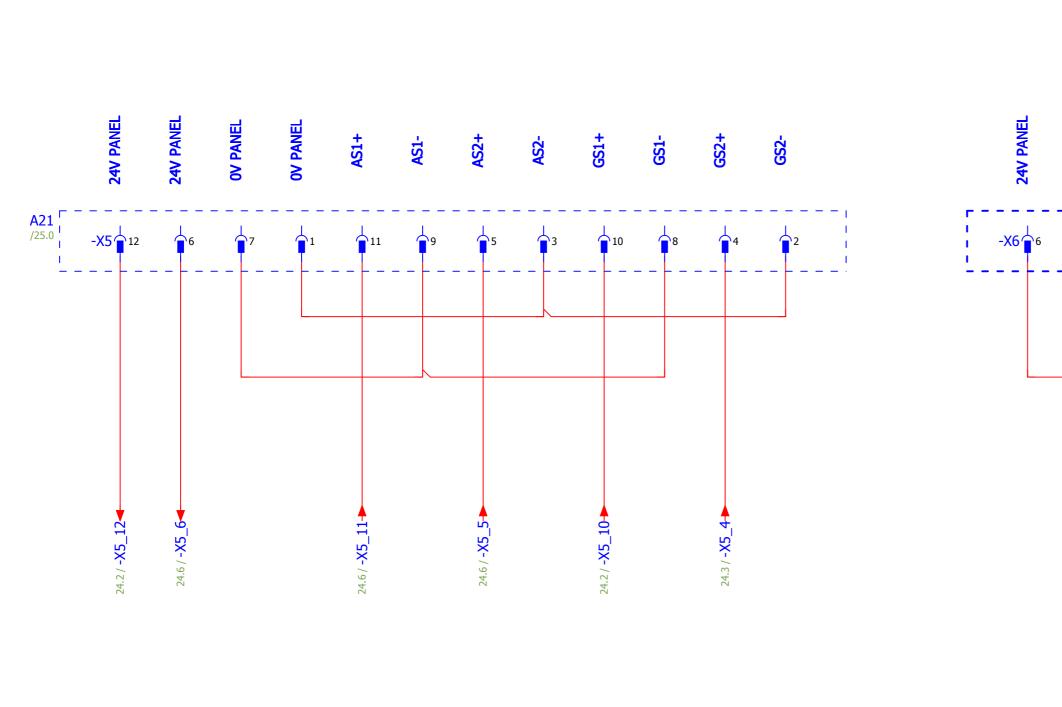


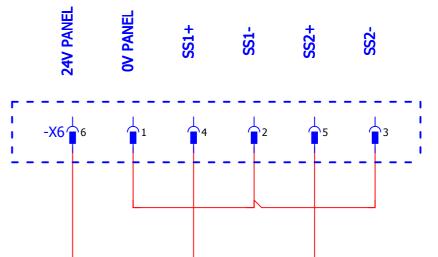
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FUNCTION PACK DESIGN 2011 SECURITY EMERGENCY STOP





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function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column			
	=CAB+CONTROLLER-X.0V								
	-A11	A1	1	-XT13	6	/4.5			
	-A12	A1	2			/4.5			
	-A1.1	-XZPUP:3	3			/4.6			
	-A10		4			/4.6			
0 VDC SUPPLY	-A1.2	1.9	5			/4.6			
=	-A1.2	2.9	6			/4.6			
=	-A1.2	3.9	7			/4.7			
=	-A1.2	4.9	8			/4.7			

function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=C/	AB+COI	NTROLL	ER-X.AS		
DOOR 1 CHANNEL 1	-A10	130	1			/19.1
DOOR 1 CHANNEL 2	-A10	I31	2			/19.2
DOOR 2 CHANNEL 1	-A10	I32	3			/19.3
DOOR 2 CHANNEL 2	-A10	133	4			/19.4
DOOR 3 CHANNEL 1	-A10	I34	5			/19.5
DOOR 3 CHANNEL 2	-A10	135	6			/19.6
EXTERNAL DEVICE DOOR CHANNEL 1	-A10	136	7			/19.7
EXTERNAL DEVICE DOOR CHANNEL 2	-A10	137	8			/19.8

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FUNCTION PACK DESIGN 2011 Terminal Diagram

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function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=CA	B+CON	TROLLI	ER-X.DYN		
ES1OUT:A	-A21-X1	1	1	-A10	IQ27	/22.8
=	-X2	1	2			/22.8

function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=CA	B+CON	ITROLL	ER-X.EDS		
EXTERNAL DEVICE GST CH1	-A11	33	1			/24.3
EXTERNAL DEVICE GST CH2	-A11	43	2			/24.3
			3	-A11		/24.3
			4	-A11		/24.3
EXTERNAL DEVICE AST CH1	-A12	33	5			/24.7
EXTERNAL DEVICE AST CH2	-A12	43	6			/24.7
			7	-A12		/24.7
			8	-A12		/24.7

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function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=C/	AB+COI	NTROLL	ER-X.ES		
EMERGENCY STOP 1 CHANNEL 1	-A10	10	1			/18.1
EMERGENCY STOP 1 CHANNEL 2	-A10	I1	2			/18.2
EMERGENCY STOP 2 CHANNEL 1	-A10	I2	3			/18.3
EMERGENCY STOP 2 CHANNEL 2	-A10	13	4			/18.4
EXTERNAL DEVICE EMERGENCY CHANNEL 1	-A10	I4	5			/18.5
EXTERNAL DEVICE EMERGENCY CHANNEL 2	-A10	15	6			/18.6

function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=C/	AB+CON	NTROLL	ER-X.Q1		
	-A1.1	-XZPUP:1	1	-Q1	2	/4.0
24 VDC SUPPLY	-A1.2	1.8	2			/4.1
=	-A1.2	2.8	3			/4.1
=	-A1.2	3.8	4			/4.1
=	-A1.2	4.8	5			/4.1
			6			/4.2
			7			/4.2
			8			/4.2

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FUNCTION PACK DESIGN 2011 Terminal Diagram

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function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=C/	AB+COI	NTROLL	ER-X.Q2		
24 VDC SUPPLY	-A10		1	-Q2	2	/4.3
			2			/4.3
			3			/4.3
			4			/4.4
			5			/4.4
			6			/4.4
			7			/4.4
			8			/4.5

function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=CA	AB+CON	ITROLL	ER-X.RST		
RESET DOOR 1	-A10	I40	1			/20.1
RESET DOOR 2	-A10	I41	2			/20.2
RESET DOOR 3	-A10	I42	3			/20.3
EXTERNAL DEVICE RESET DOOR	-A10	I43	4			/20.4
SPARE	-A10	I44	5			/20.5
=	-A10	I45	6			/20.6
=	-A10	I46	7			/20.7
=	-A10	I47	8			/20.8

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FUNCTION PACK DESIGN 201
Terminal Diagram

Terminal diagram

function text	Target designation to	Connection point	terminal	Target designation to	Connection point	Page / column
	=CA	AB+CON	NTROLL	ER-XT13		
SUPPLY PLC	-Q1	1	2	-G4-X2		/4.0
SUPPLY SAFETY PLC	-Q2	1	3	-G4-X2		/4.1
=	-X.0V	1:1	6	-G4-X2		/4.1
			7	-G4-X2		/4.2

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FUNCTION PACK DESIGN 2013
Terminal Diagram

Plug diagram

Plug	Plug target	contact	Female pin target	Page / column
=CAB+CONTROLLER-A21-X1				
	-X.DYN:1	1		/25.1
	-A10:I6	2		/25.1
	-A21-X1:4	3		/25.1
	-A21-X1:3;-A21-X1:5	4		/25.2
	-A21-X1:4	5		/25.2
	-A21-X1:8	7		/25.4
	-A21-X1:7	8		/25.4
	-A21-X1:10	9		/25.3
	-A21-X1:9	10		/25.3
Plug	Plug target	contact	Female pin target	Page / column
=CAB+CONTROLLER-A21-X5				•
	-A21-X5:3	1		/26.2
	-A21-X5:3	2		/26.5
	-A21-X5:1;-A21-X5:2	3		/26.3
	-A11	4		/26.4
	-A12	5		/26.3
	-A12:13	6		/26.1
	-A21-X5:9	7		/26.1
	-A21-X5:9	8		/26.4
	-A21-X5:7;-A21-X5:8	9		/26.3
	-A11	10		/26.4
	-A12	11		/26.2
	-A11:13	12		/26.1
Plug	Plug target	contact	Female pin target	Page / column
=CAB+CONTROLLER-X2		l		
	-X.DYN:2	1		/25.5
	-A10:I7	2		/25.5
	-X2:4	3		/25.6

 Modification
 Date
 11/17/2011

 Modification
 Date
 Name
 Original

 Prepared by, date:
 11/17/2011
 Aproved by, date:

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FUNCTION PACK DESIGN 2011	Status:	= CAB + CONTROLLER			
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Plug diagram

Plug	Plug target	contact	Female pin target	Page / column	
=CAB+CONTROLLER-X2					
	-X2:3;-X2:5	4		/25.6	
	-X2:4	5		/25.6	
	-X2:8	7		/25.8	
	-X2:7	8		/25.8	
	-X2:10	9		/25.7	
	-X2:9	10		/25.8	
Plug	Plug target	contact	Female pin target	Page / column	
=CAB+CONTROLLER-X6					
	-X6:2	1		/26.7	
	-X6:1;-X6:3	2		/26.8	
	-X6:2	3		/26.8	
	-X6:6;-X6:5	4		/26.7	
	-X6:4	5		/26.8	
	-X6:4	6		/26.6	

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			Date	11/17/2011
			Ed.	Administrator
			Appr	
Modification	Date	Name	Original	
Prepared by, date: 11/17/		11/17/20	11 Aprov	ed by, date:



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