BN 50.030 Index 03

Broetje-Automation Company Standard Electrical Design of Lifting Platforms



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Release:

This company standard is valid and released only on the intranet of Broetje-automation. Prints and copies are stored locally to test. They are not subject to the amendment service.

The website www.broetje-automation.de serves as an additional source for company standards for External .



1 General

1.1 Guidelines

Electrical documentation and installation complies with:

- 1. current standards
- 2. end customer's guidelines (in consultation)
- 3. this guideline
- 4. Broetje Company Standard 50.020 Electrical Installations
- 5. Refer to the appendix of BA Company Standard BN50.010 for a list of approved electrical materials

Please inform the responsible department at Broetje-Automation in case of any conflicts.

1.2 Scope

The following documents are to be supplied:

- After order placement and prior to assembling the machine, the contractor must deliver the risk analysis, risk assessment including the resulting protective measures and the operating instruction.
- 2. Circuit diagrams including cover sheets, table of contents, general charts, terminal and cable diagrams and part lists must be provided in German and in the customer's native language.
- 3. V+V documentation
- 4. Safety function calculations using Sistema software.
- 5. CE Declaration of Conformity
- 6. Software, passwords, software specifications (e.g. flow charts) for the PLC, if installed.

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2 Supply and Signal Exchange with the Machine

Cables fort he machine's mobile control unit must be laid in the platform by the manufacturer oft he platform, if necessary.

The platform must be fitted with a service socket – voltage and type as agreed.

2.1 Connector Assignment - Supply

6-pole Wieland connector - supply

1	L1	Supply	400V
2	L2	Supply	400V
3	L3	Supply	400V
4	N		N (if required)
5	L	Service socket	(Customer network) as agreed
6	N	Service socket	(customer network) as agreed
PE	PE		PE

6-pole Wieland connector – supply

Connector wall duct or outside terminal box!

Compatible with Wieland connectors 70.350.0635.0 and 70.500.0653.0

The interface must be agreed with the electrical design department of BA.

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2.2 Connector Assignment – Control/Signal Exchange

24-pole Wieland connector - signals

		-	
1	Emergency stop channel 1	Emergency stop	To Broetje systems
	->	button	
2	Emergency stop channel 1	Emergency stop	To Broetje systems
	<-	button	
3	Emergency stop channel 2	Emergency stop	To Broetje systems
	->	button	
4	Emergency stop channel 2	Emergency stop	To Broetje systems
	<-	button	
5	Emergency stop response 1	EMERGENCY STOP	To platform
	->		
6	Emergency stop response 1	EMERGENCY STOP	To platform
	<-		
7	Emergency stop response 2	EMERGENCY STOP	To platform
	->		
8	Emergency stop response 2	EMERGENCY STOP	To platform
	<-		
9	Buttom platform 1 ->	Buttom platform	To Broetje systems
10	Buttom platform 1 <-	Buttom platform	To Broetje systems
11	Buttom platform 2 ->	Buttom platform	To Broetje systems
12	Buttom platform 2 <-	Buttom platform	To Broetje systems
13	Safety strips 1 ->	Optional	
14	Safety strips 1 <-	Optional	
15	Safety strips 2 ->	Optional	
16	Safety strips 2 <-	Optional	
17	Optional		
18	Optional		
19	Optional		
20	Optional		
21	Optional		
22	Optional		
23	Optional		
24	Optional		
PE	PE		

24-pole Wieland connector – signal exchange (emergency stop) Connector wall duct or outside terminal box! Compatible with Wieland connectors 70.350.2435.0 and 70.500.2453.0

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3 EMERGENCY STOP

An emergency stop triggered from the platform will affect the entire machine which will return the signal to the bridge and effect a safe torque off state.

The emergency stop will be acknowledged on the machine.

Unless otherwise specified, all safety-related signals to and from the Broetje machine must comply with performance level: D.

3.1 Sample drawing: EMERGENCY STOP

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