

# Elektroplan Electric diagram

## AB 500-3 TV

**23.AB**  
Baureihe /  
Series

**0001 - XXXX**  
Seriennummer /  
Serial No

**28.07.2016**  
Ausgabedatum /  
Date of issue

(Blattkopfeinträge für ganzen Plan bei Baureihen / Individualoptionen)

<b>Drawing by:</b>	
date	
name	

<b>Valid for Serial No.:</b>	
from	to

**ESP\_23AB\_2242280\_02\_00\_01**  
Katalog Bestellnummer /  
Catalogue order No

### Schutzvermerk nach ISO 16016

Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet.

Zuwiderhandlungen verpflichten zum Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustereintragung vorbehalten.

### Protection Notice ISO 16016


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited.

Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.

Blatt / Sheet	Inhalt / Contents	Blatt / Sheet	Inhalt / Contents
1	Deckblatt cover sheet	18	CAN Bus CAN bus
2...3	Inhaltsverzeichnis contents	19	Bohle aus-/einfahren screed extend/retract
4...6	Topologie topology	20	Ausziehteil heben/senken extending screed raise/lower
7	Heizung , Ausziehbohle links heating , extending screed left hand	21	Dachprofilverstellung crown adjusting device
8	Heizung , Ausziehbohle rechts heating , extending screed right hand	22...23	Seitenschild linke Seite sideplate left hand
9	Heizung , Verbreiterungsteil 1,25m links heating , extension 1,25m left hand	24...25	Seitenschild rechte Seite sideplate right hand
10	Heizung , Verbreiterungsteil 1,25m rechts heating , extension 1,25m right hand	26	Sensoren sensors
11	Heizung , Verbreiterungsteil 0,75m links heating , extension 0,75m left hand	27	Breitenmessung width measurement
12	Heizung , Verbreiterungsteil 0,75m rechts heating , extension 0,75m right hand	28	Kabel , Fernbedienung cable , remote control unit
13	Heizung , Verbreiterungsteil 0,25m links heating , extension 0,25m left hand	29...39	Steckerverzeichnis table of connectors
14	Heizung , Verbreiterungsteil 0,25m rechts heating , extension 0,25m right hand	40	Erklärung Aufbau Betriebsmittelkennzeichen Explanation device designation layout
15	Kantenheizung edge heating	41	Erklärung Gerätekenbuchstaben, elektrisch Explanation device code letter, electric
16	Kantenheizung + Plattenheizung edge heating + plate heating	42	Erklärung hydr. BMK, Versorgungssp. explanation hydr. code letter, supply voltages
17	Spannungsversorgung Power supply	43	Erklärung SPS-Adressen / Symbole explanation SPS-addresses/symbols

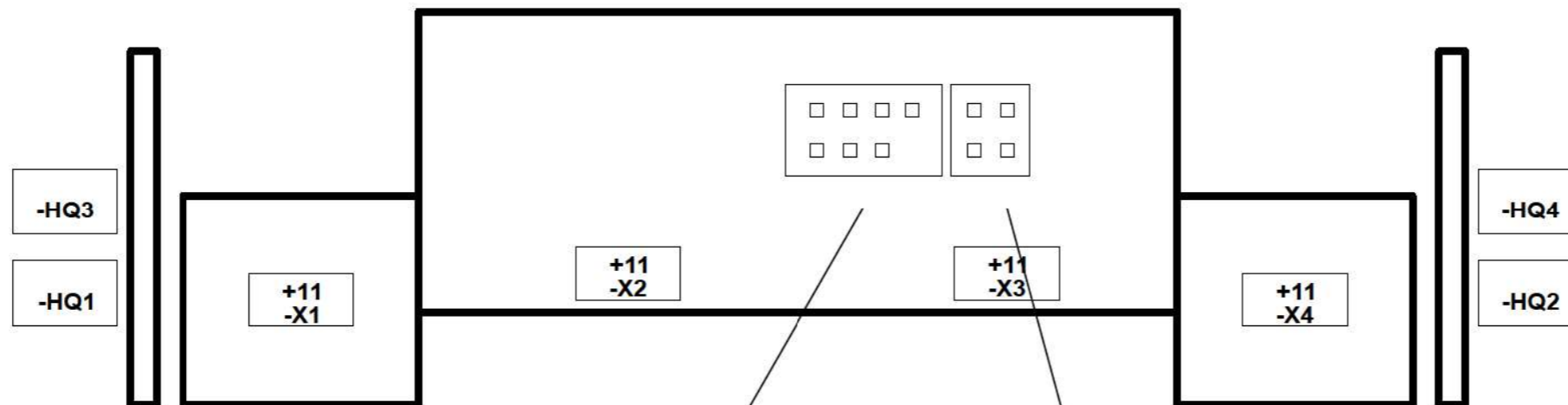
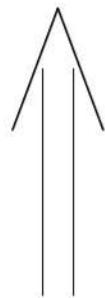
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Inhaltsverzeichnis contents Sheet <b>2</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release	2242280					
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.:		Series code: Valid for Serial No.:			
E - CAE		Document type:		Function group No.:			02_00_01		23.AB from 0001 to XXXX			
<b>ESP</b>									Sheet plant: Sheet Location:			

Blatt / Sheet	Inhalt / Contents	Blatt / Sheet	Inhalt / Contents
44	Erklärung Linienformate, Farbbezeichnungen explanation line formats, colour designation		
45	Erklärung Ortskennzeichen explanation Location designation		
46	Erklärung Bohle explanation screed		
47...49	Betriebsmittelliste device list		

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Inhaltsverzeichnis contents	Sheet 3 of 49 Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01		Sheet plant:			
E - CAE		Document type: ESP		Function group No.:				Sheet Location:					

**Topologie (Übersicht Ventile)**  
**topology (overview valves)**

Fahrtrichtung  
 advance direction



-HA1.HQ1 /19.6 /19.7	-HA1.HQ2 /19.2 /19.3	-HA1.HQ3 /21.2 /21.3	-HA1.HQ4 /21.5	-HA2.HQ1 /23.3 /23.4	-HA2.HQ2 /25.3 /25.4
einfahren retracting	einfahren retracting	positiv positive	ein on	senken lowering	senken lowering
.Ma	.Ma	.Ma	.Ma	.Ma	.Ma
.Mb	.Mb	.Mb	Druckschaltventil pressure activation valve Funktion function	.Mb	.Mb
ausfahren extending	ausfahren extending	negativ negative		heben raise	heben raise
Ausziehteil rechte Seite extending screed right hand	Ausziehteil linke Seite extending screed left hand	Dachprofilverstellung crown adjusting device		Seitenschild linke Seite sideplate left hand	Seitenschild rechte Seite sideplate right hand

Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
		<b>ESP</b>		<b>19</b>	

Status:  
**SF** AE=changable  
 PF=prototype release  
 SF=serial release

Material No.:  
 2242280  
 Revision No.:  
 02\_00\_01



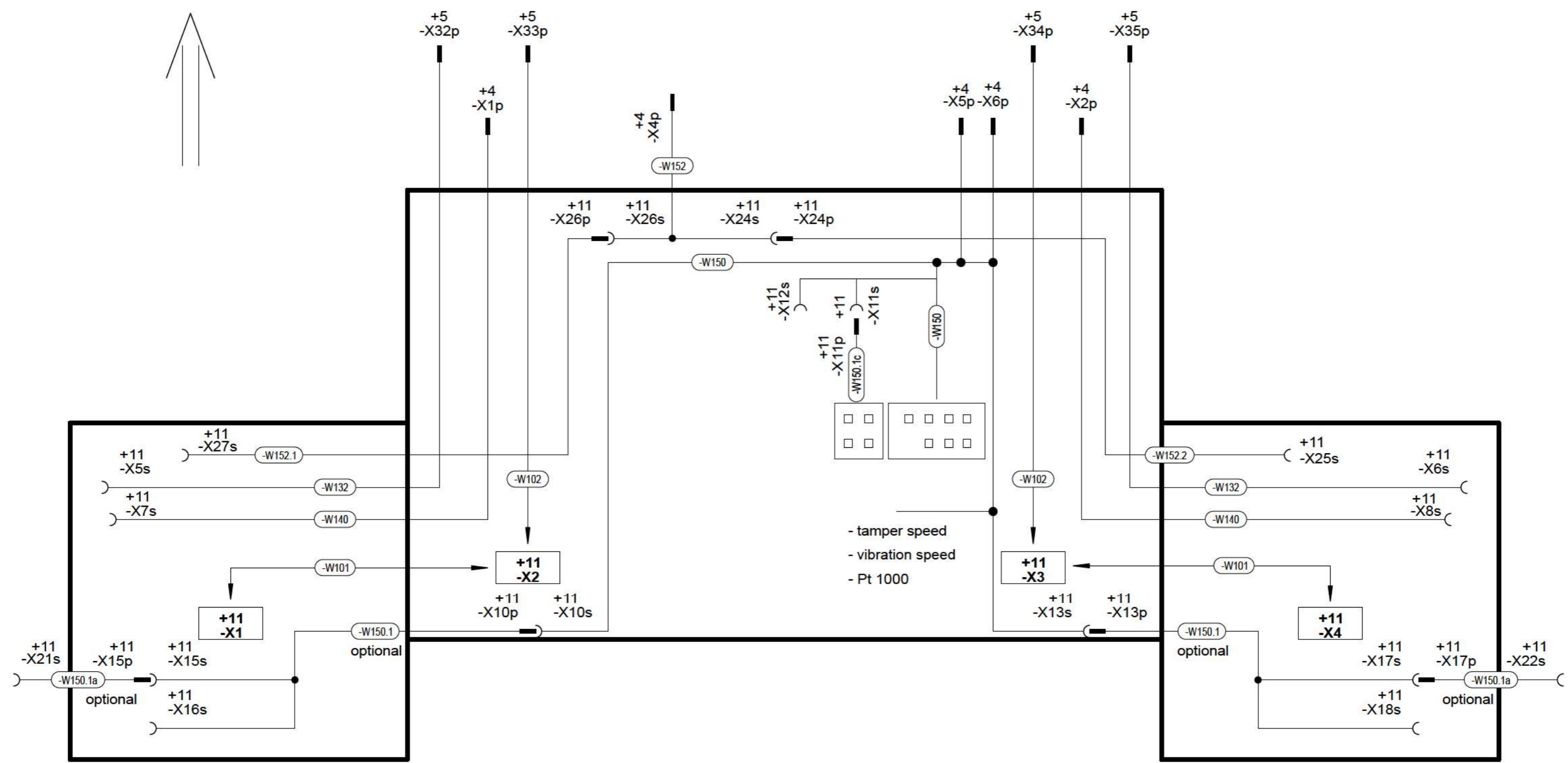
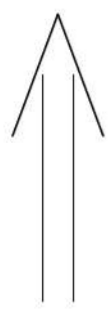
Document No.: Partial Document No.: Version No.:

Series code: 23.AB	Valid for Serial No.:
	from 0001 to XXXX
Sheet plant: Sheet Location:	

Topology  
 topology

Topologie  
topology

Fahrtrichtung  
advance direction



Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
ESP		19			

Status:  
**SF**  
AE = changable  
PF = prototype release  
SF = serial release

Material No.:  
2242280  
Revision No.:  
02\_00\_01



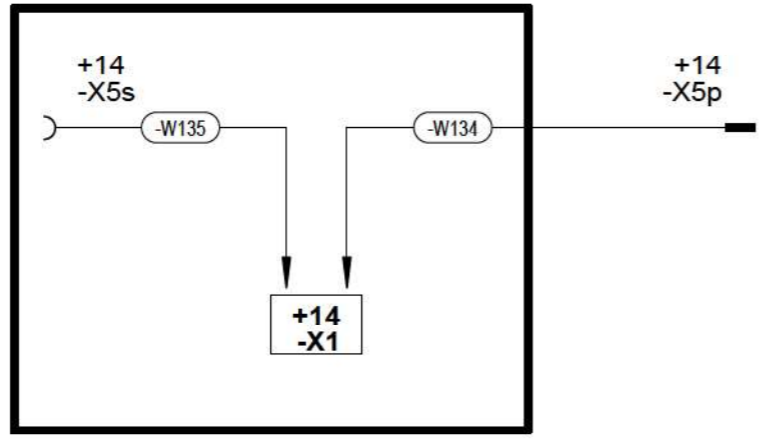
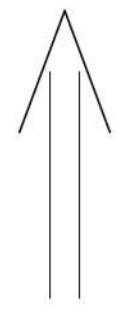
Document No.: Partial Document No.: Version No.:	
Series code: 23.AB	Valid for Serial No.: from 0001 to XXXX
Sheet plant: Sheet Location:	

Topologie  
topology

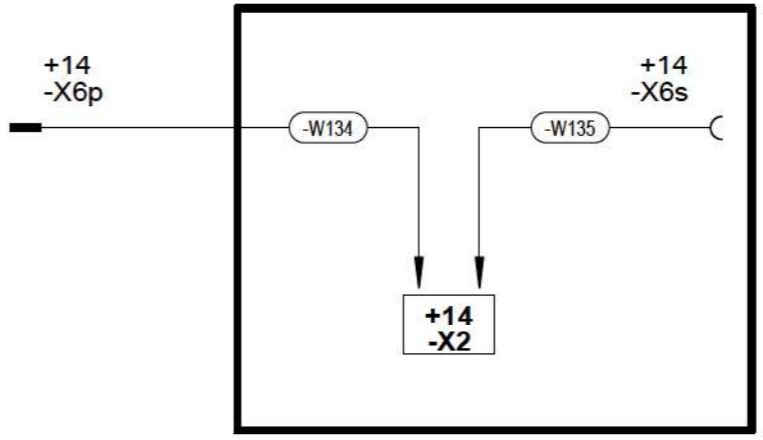
Sheet  
5  
of  
49  
Sheets

Topologie  
topology

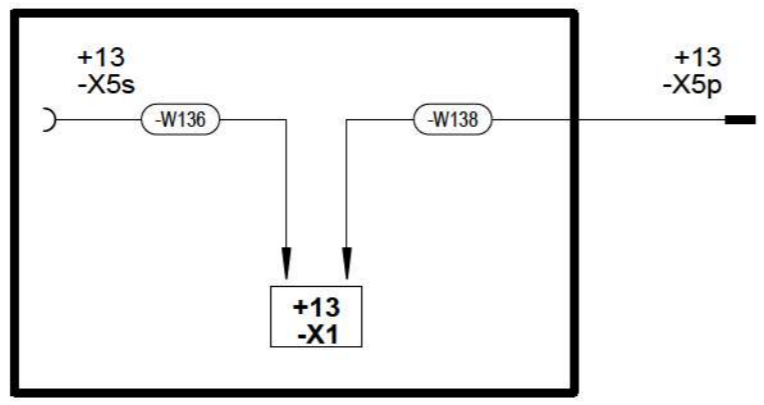
Fahrtrichtung  
advance direction



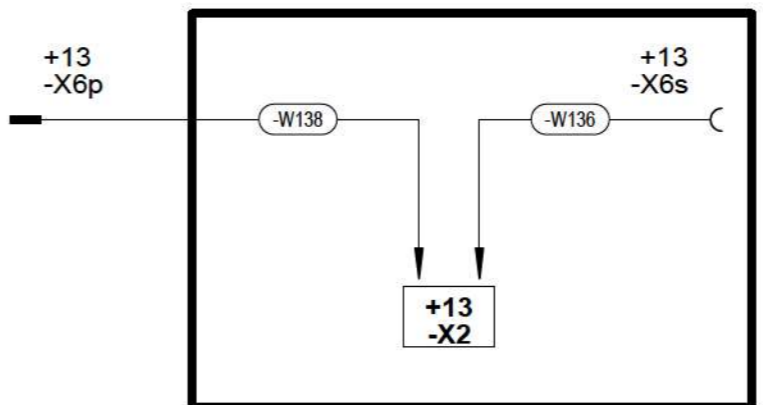
Verbreiterungsteil 0,25m  
extension 0,25m



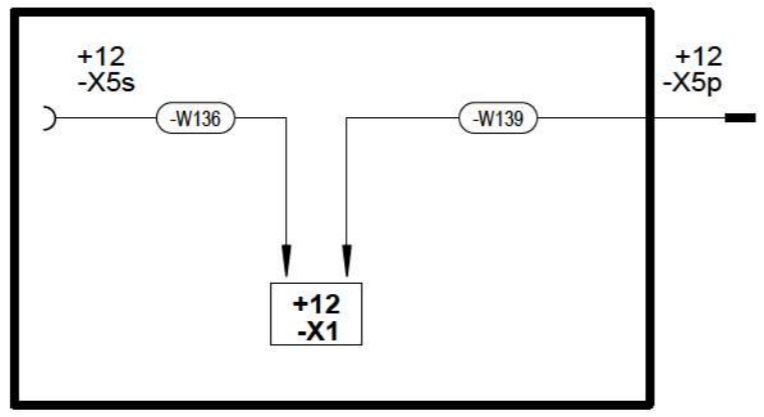
Verbreiterungsteil 0,25m  
extension 0,25m



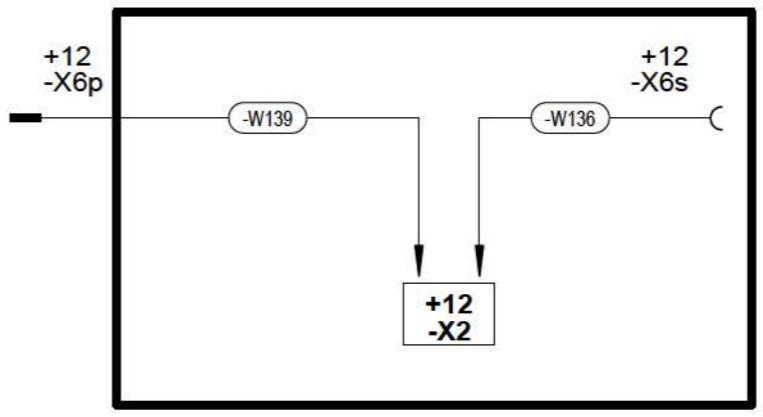
Verbreiterungsteil 0,75m  
extension 0,75m



Verbreiterungsteil 0,75m  
extension 0,75m



Verbreiterungsteil 1,25m  
extension 1,25m



Verbreiterungsteil 1,25m  
extension 1,25m

Refer to protection notice ISO 16016

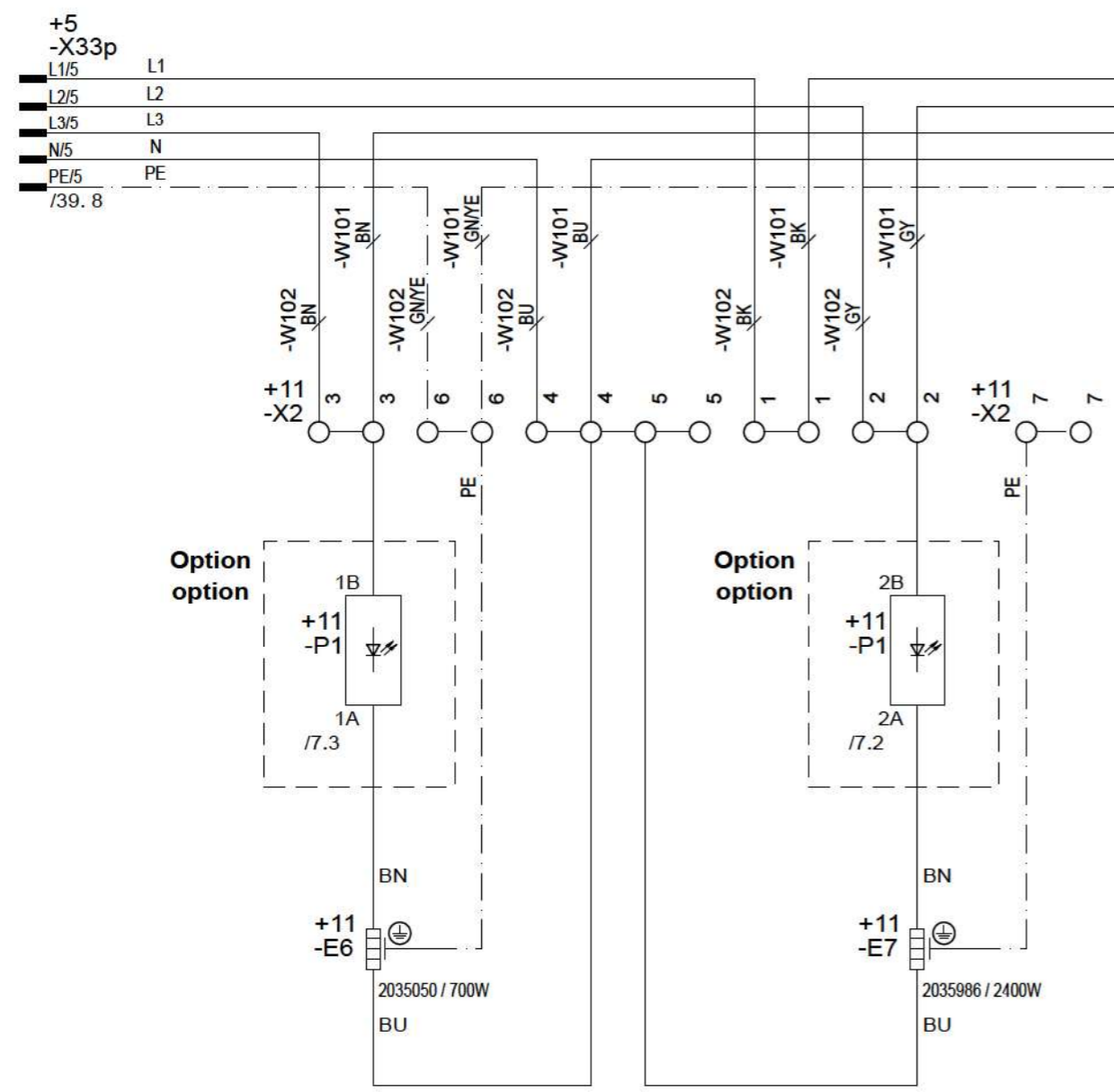
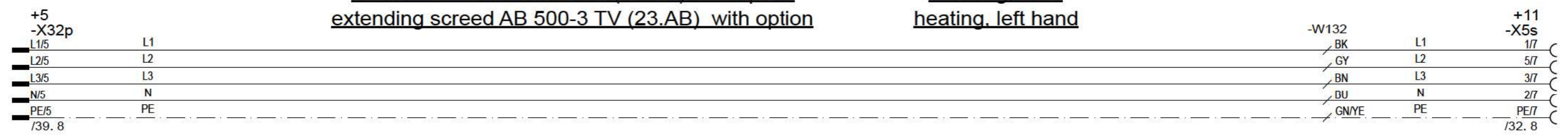
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX		6 of 49 Sheets	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: ESP		Function group No.: 19		<b>W</b> VÖGELE		Sheet plant: Sheet Location:		Topologie topology			

© 2012 by Joseph Vögele AG

Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

**Ausziehbohle AB 500-3 TV (23.AB) mit Option  
extending screed AB 500-3 TV (23.AB) with option**

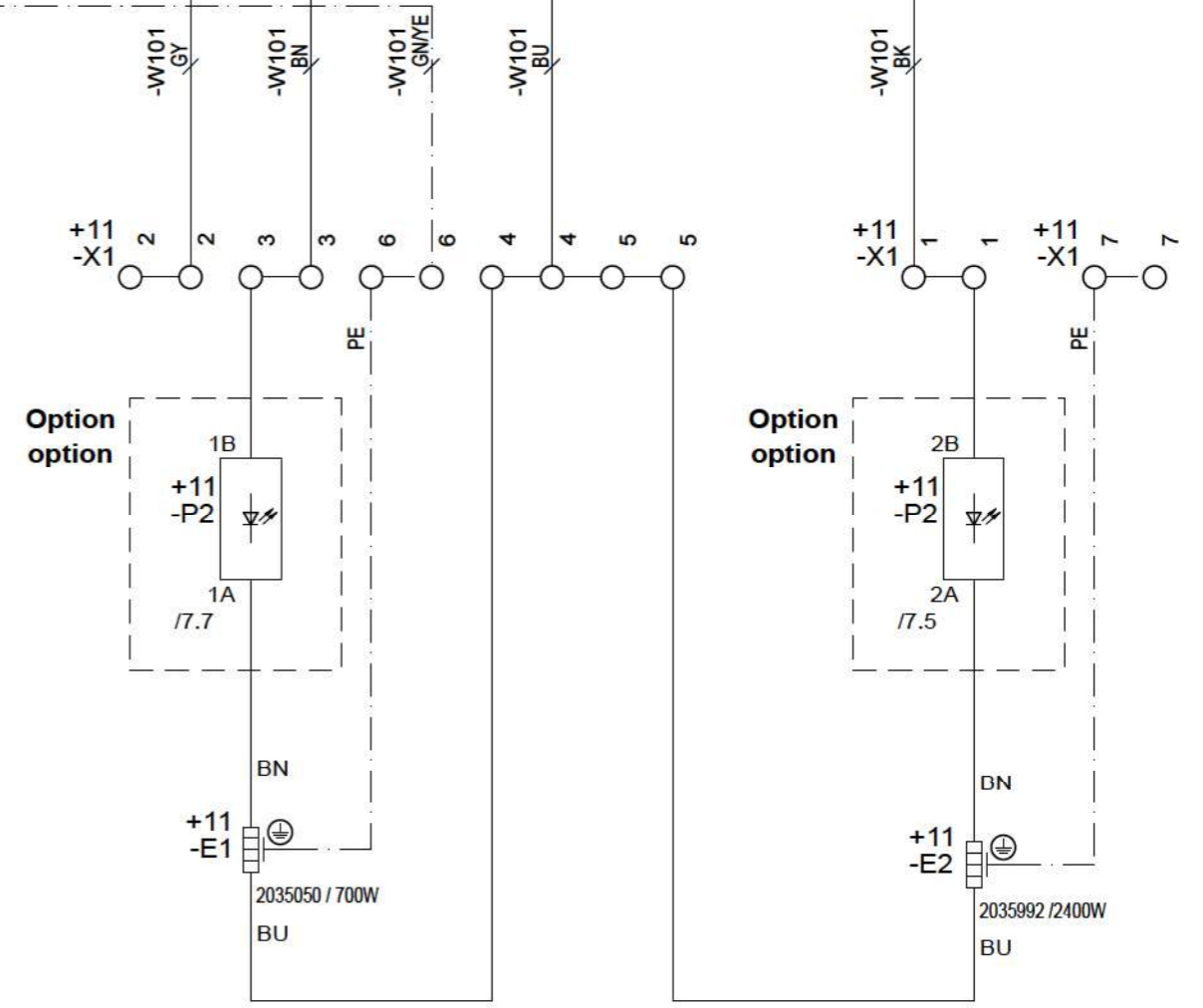
**Heizung, links  
heating, left hand**



**Tamper tamper**

**Glätter screed plate**

**Grundbohle links  
basic screed left**



**Tamper tamper**

**Glätter screed plate**

**Ausziehbohle links  
extending screed left hand**

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX		7 of 49 Sheets	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>		<b>VÖGELE</b>		Sheet plant: Sheet Location:		Heizung , Ausziehbohle links heating , extending screed left hand			

Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

**Ausziehbohle AB 500-3 TV (23.AB) mit Option**  
**extending screed AB 500-3 TV (23.AB) with option**

**Heizung, rechts**  
**heating, right hand**

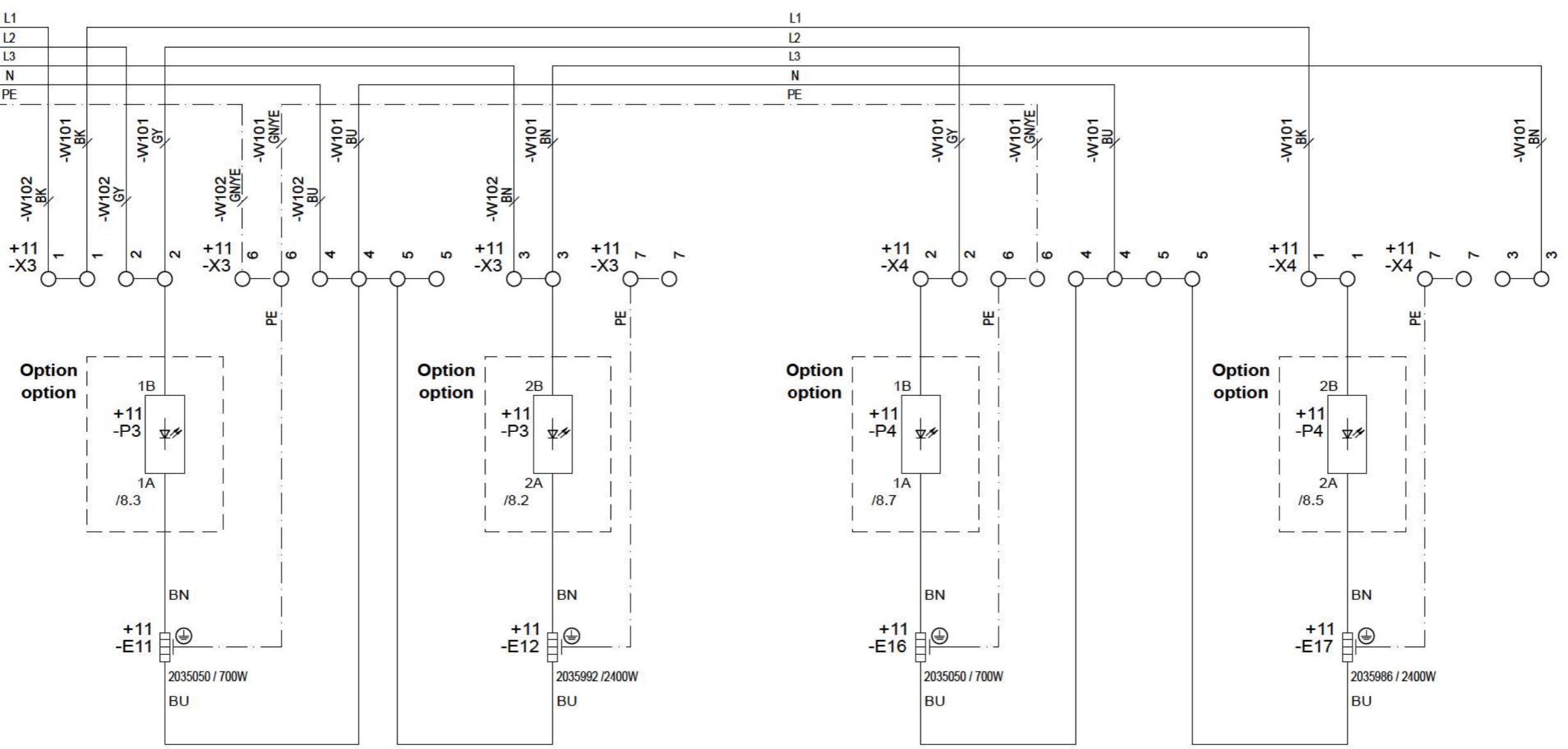
+5  
-X35p  
L1/5 L1  
L2/5 L2  
L3/5 L3  
N/5 N  
PE/5 PE  
/39. 8

-W132  
BK L1  
GY L2  
BN L3  
DU N  
GN/YE PE

+11  
-X6s  
1/7  
5/7  
3/7  
2/7  
PE/7  
/34. 2

+5  
-X34p  
L1/5 L1  
L2/5 L2  
L3/5 L3  
N/5 N  
PE/5 PE  
/39. 8

L1  
L2  
L3  
N  
PE



**Tamper tamper**

**Glätter screed plate**

**Tamper tamper**

**Glätter screed plate**

**Grundbohle rechts**  
**basic screed right**

**Ausziehbohle rechts**  
**extending screed right hand**

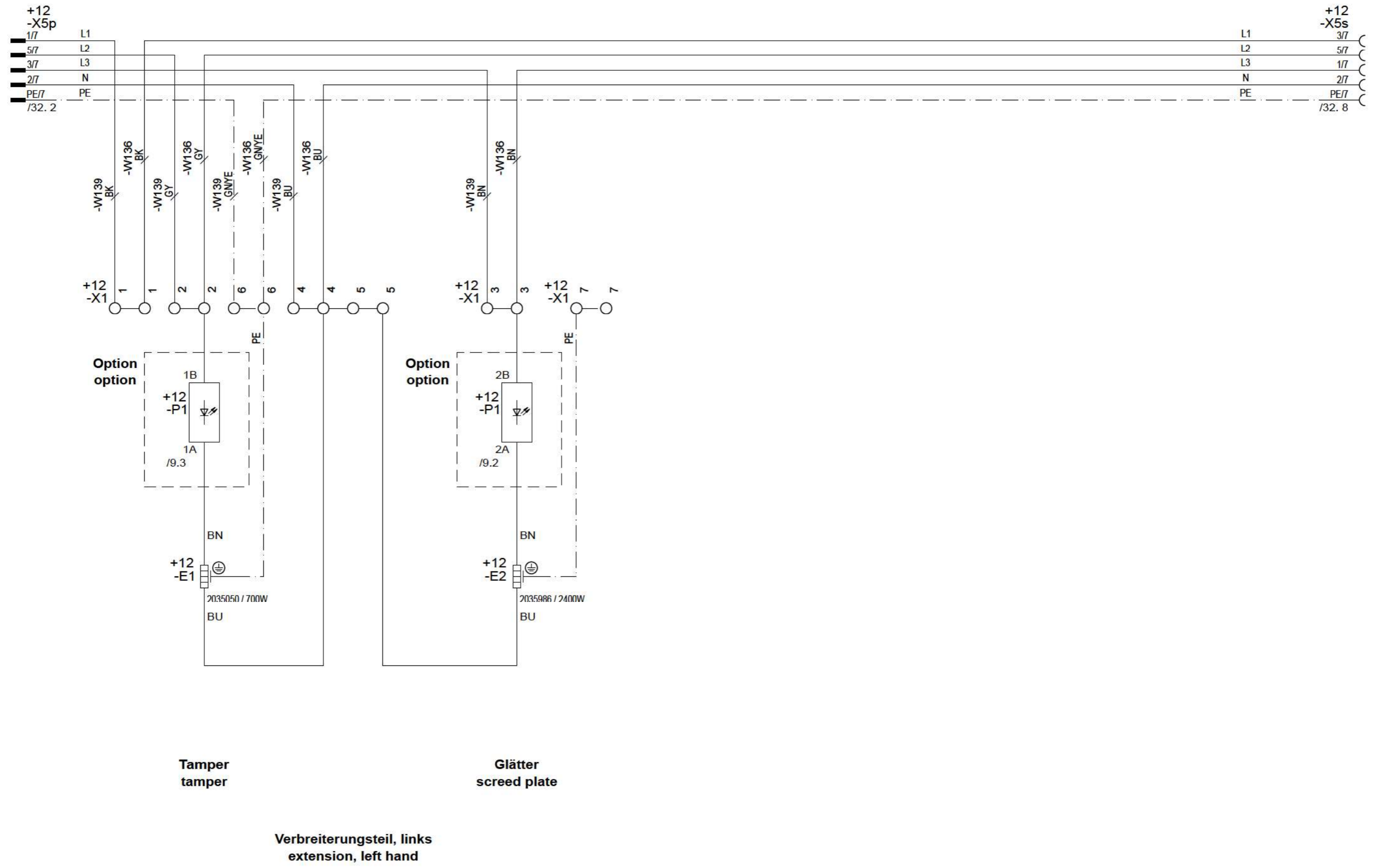
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heizung , Ausziehbohle rechts heating , extending screed right hand	Sheet <b>8</b> of <b>49</b> Sheets
date 15.08.2012		date 10.09.2012		date 28.07.2016		SF AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name Heindtel		name Berlinghof		name Heindtel		Revision No.: 02_00_01				Sheet plant:			
E - CAE		Document type: ESP		Function group No.: 19						Sheet Location:			



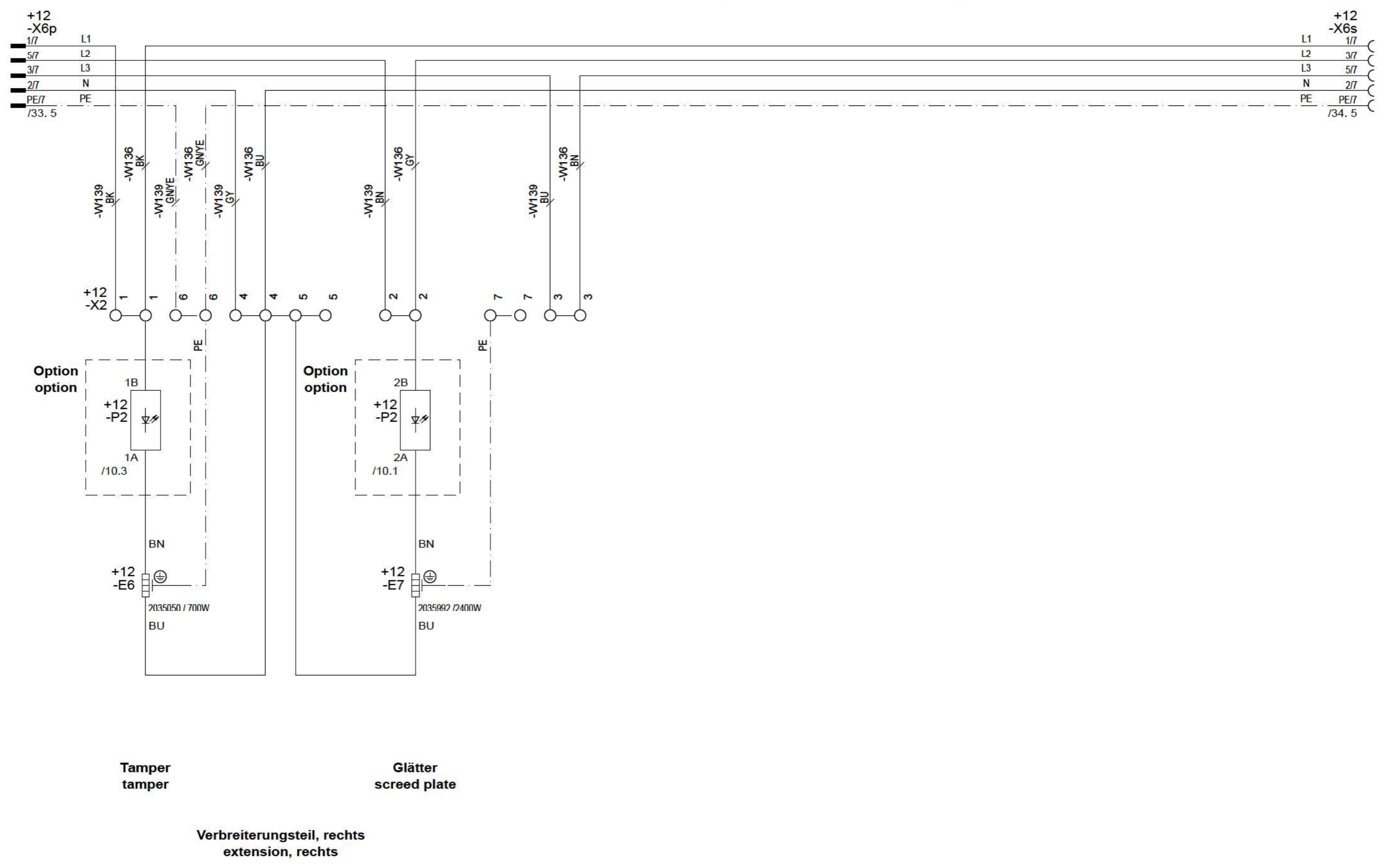
Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

Verbreiterungsteil (VB) 1.25m  
extension (VB) 1.25m

Heizung, links  
heating, left hand



Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heizung , Verbreiterungsteil 1,25m links heating , extension 1,25m left hand	Sheet <b>9</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX				
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.: 02_00_01		Sheet plant: Sheet Location:				
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>									



Schutzvermerk nach ISO 16016 beachten

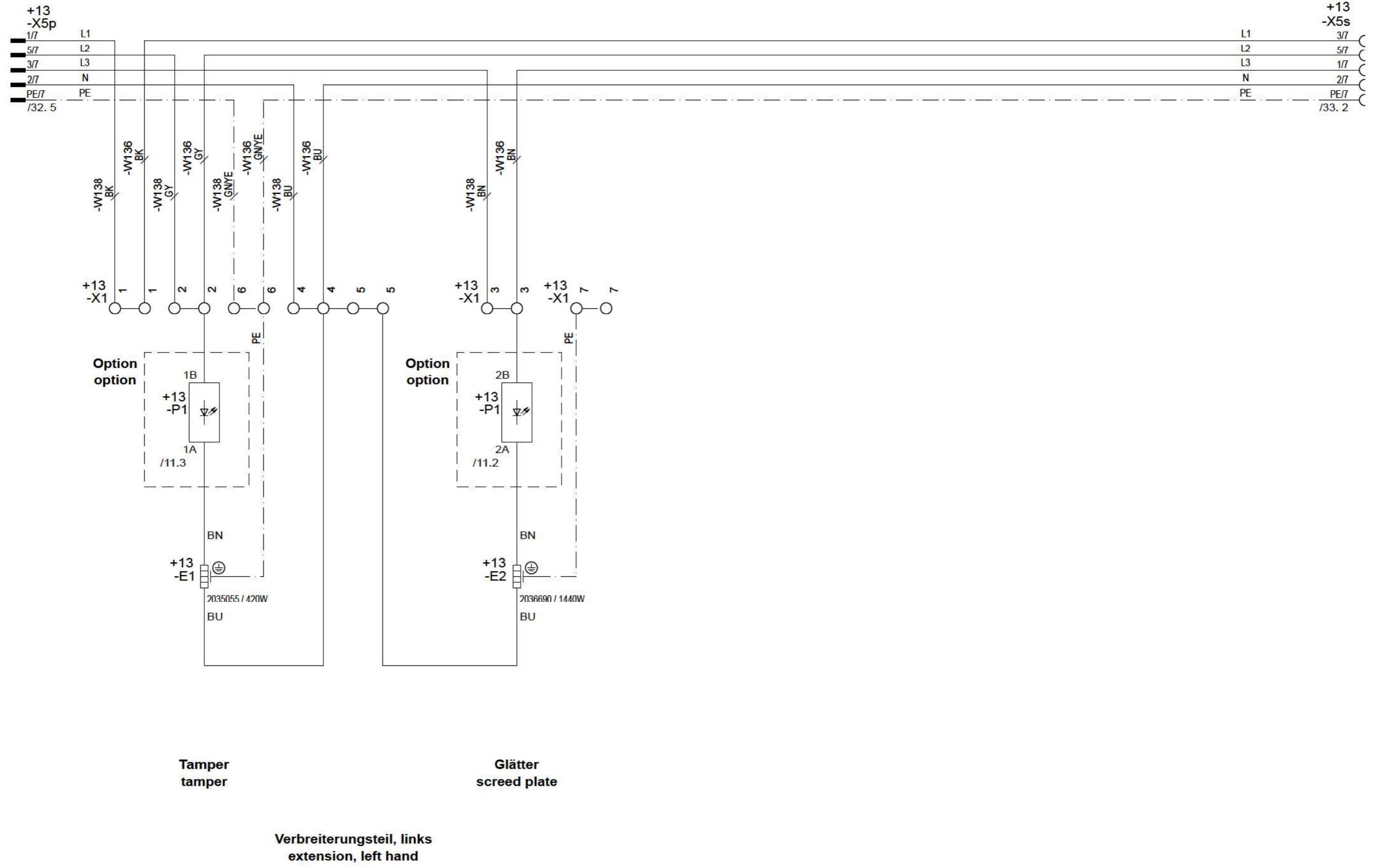
Refer to protection notice ISO 16016

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heating , Verbreiterungsteil 1,25m rechts heating , extension 1,25m right hand	Sheet <b>10</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX				
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.: 02_00_01		Sheet plant: Sheet Location:				
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>									

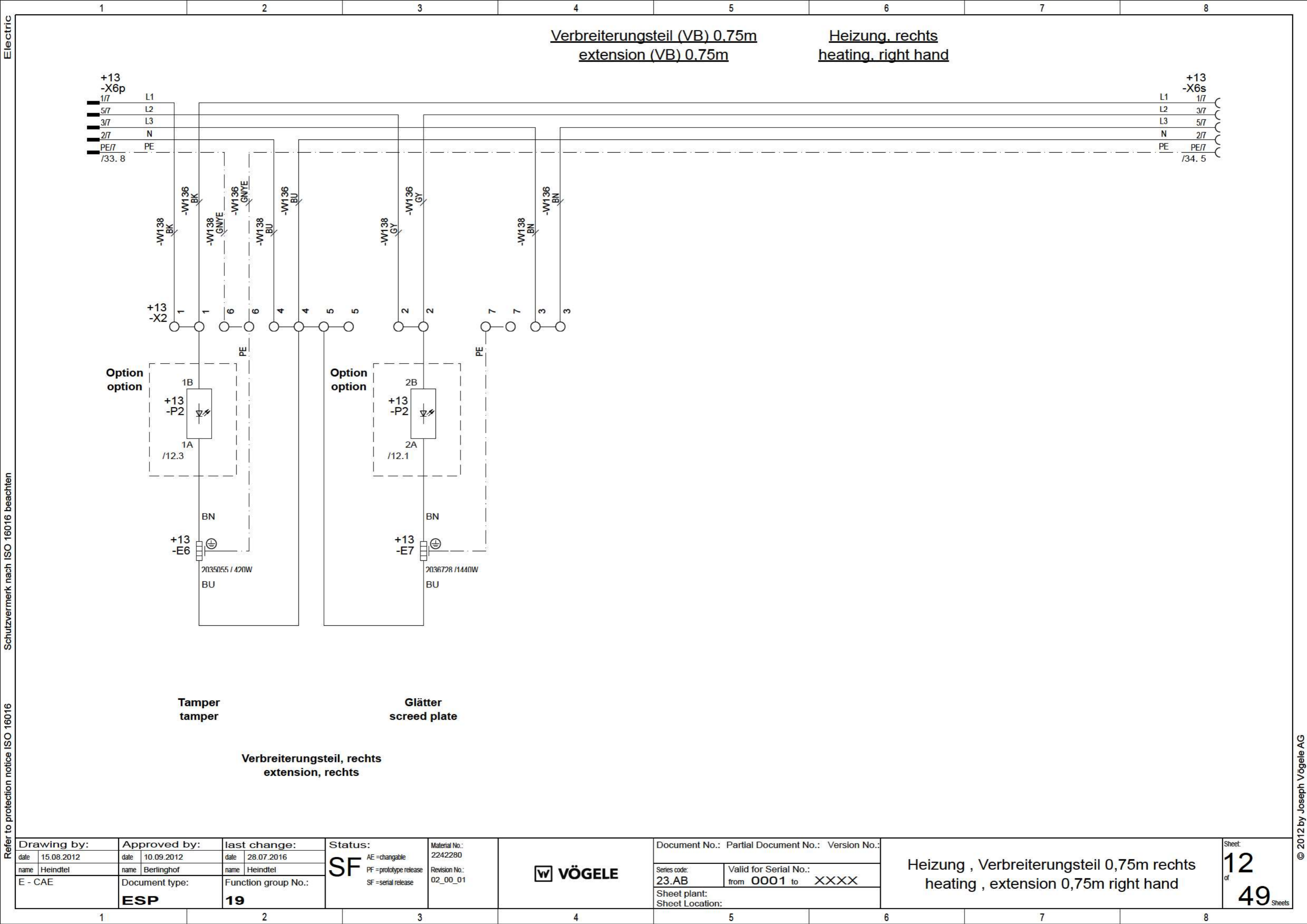
Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

Verbreiterungsteil (VB) 0.75m  
extension (VB) 0.75m

Heizung. links  
heating. left hand



Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heizung , Verbreiterungsteil 0,75m links heating , extension 0,75m left hand	Sheet <b>11</b> of <b>49</b> Sheets
date 15.08.2012		date 10.09.2012		date 28.07.2016		SF AE =changable PF =prototype release SF =serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name Heindtel		name Berlinghof		name Heindtel				Revision No.: 02_00_01		Sheet plant:			
E - CAE		Document type: ESP		Function group No.: 19						Sheet Location:			



Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

Verbreiterungsteil (VB) 0.75m  
extension (VB) 0.75m

Heizung, rechts  
heating, right hand

**Tamper  
tamper**

**Glätter  
screed plate**

**Verbreiterungsteil, rechts  
extension, rechts**

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heating , Verbreiterungsteil 0,75m rechts heating , extension 0,75m right hand	Sheet <b>12</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b>	AE =changable	2242280	Series code: 23.AB Valid for Serial No.: from 0001 to XXXX				
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01	Sheet plant:				
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>				Sheet Location:					

© 2012 by Joseph Vögele AG

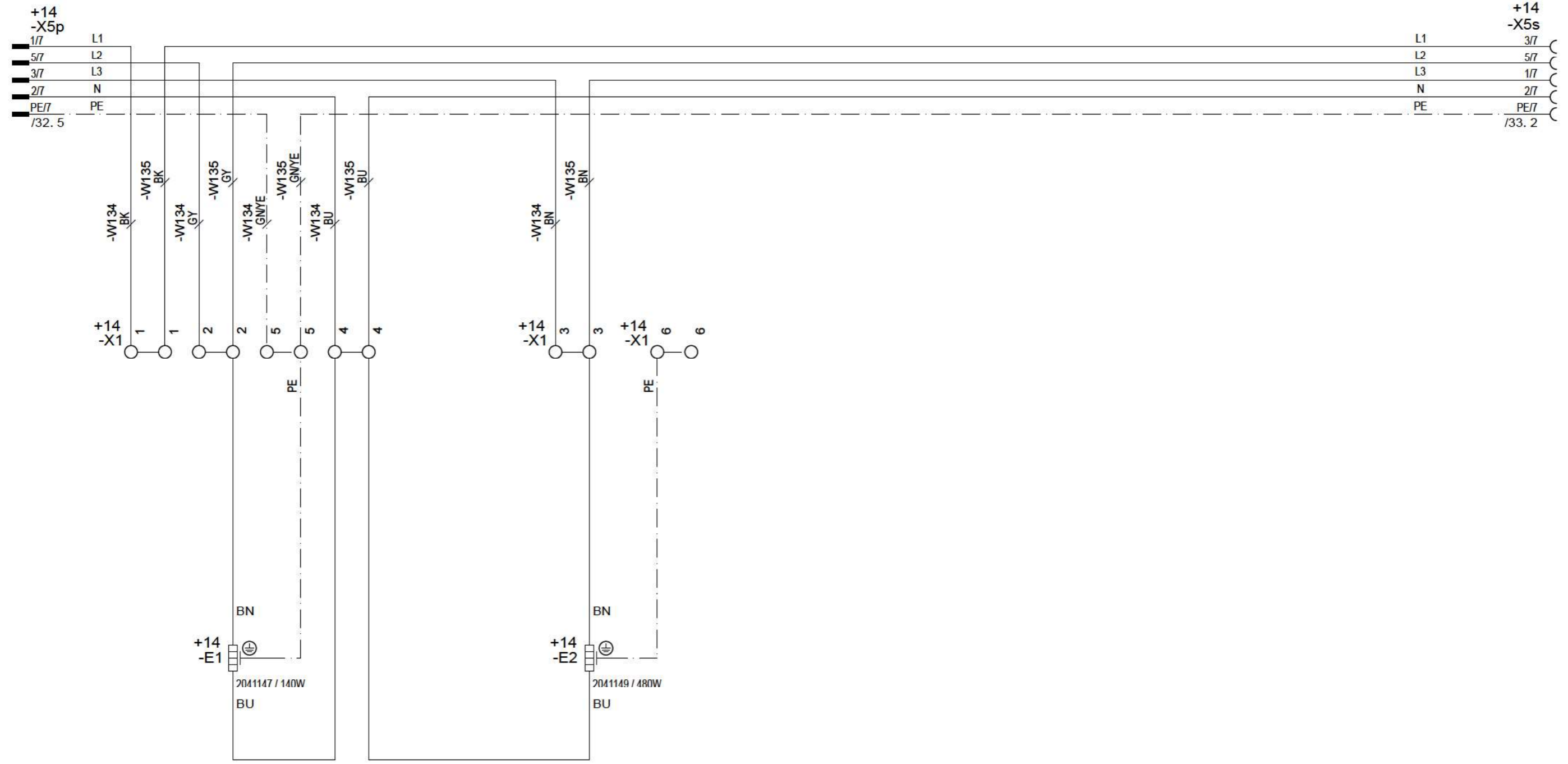
Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

Verbreiterungsteil (VB) 0,25m  
extension (VB) 0,25m

Heizung. links  
heating. left hand



**Tamper  
tamper**

**Glätter  
screed plate**

**Verbreiterungsteil, links  
extension, left hand**

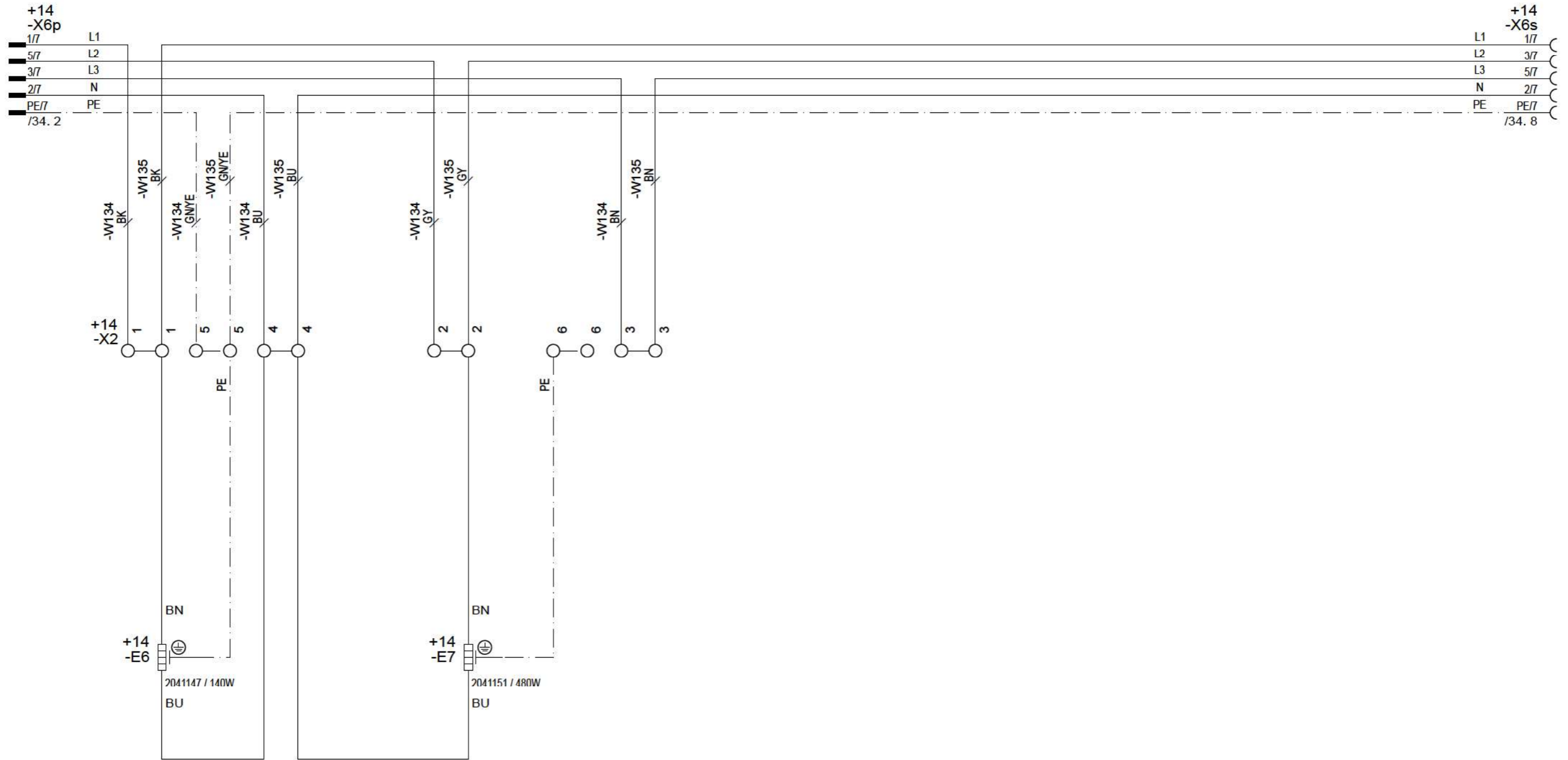
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heizung , Verbreiterungsteil 0,25m links heating , extension 0,25m left hand	Sheet <b>13</b> of <b>49</b> Sheets
date 15.08.2012		date 10.09.2012		date 28.07.2016		SF AE =changable PF =prototype release SF =serial release		2242280					
name Heindtel		name Berlinghof		name Heindtel				Revision No.: 02_00_01		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
E - CAE		Document type: ESP		Function group No.: 19						Sheet plant: Sheet Location:			

© 2012 by Joseph Vögele AG

Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

Verbreiterungsteil (VB) 0,25m  
extension (VB) 0,25m

Heizung, rechts  
heating, right hand



**Tamper  
tamper**

**Glätter  
screed plate**

**Verbreiterungsteil, rechts  
extension, rechts**

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Heating , Verbreiterungsteil 0,25m rechts heating , extension 0,25m right hand	Sheet <b>14</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b>	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01		Sheet plant:			
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>				Sheet Location:					

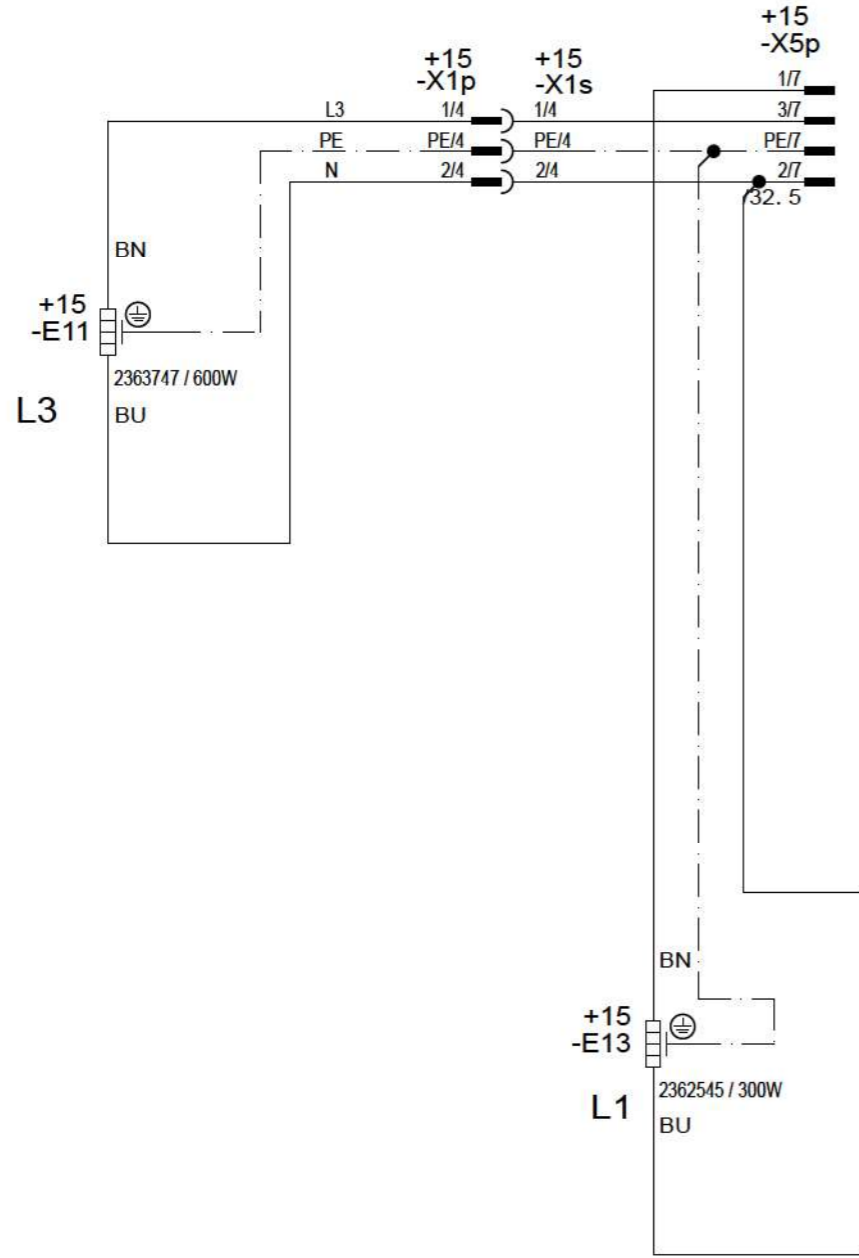


Electric

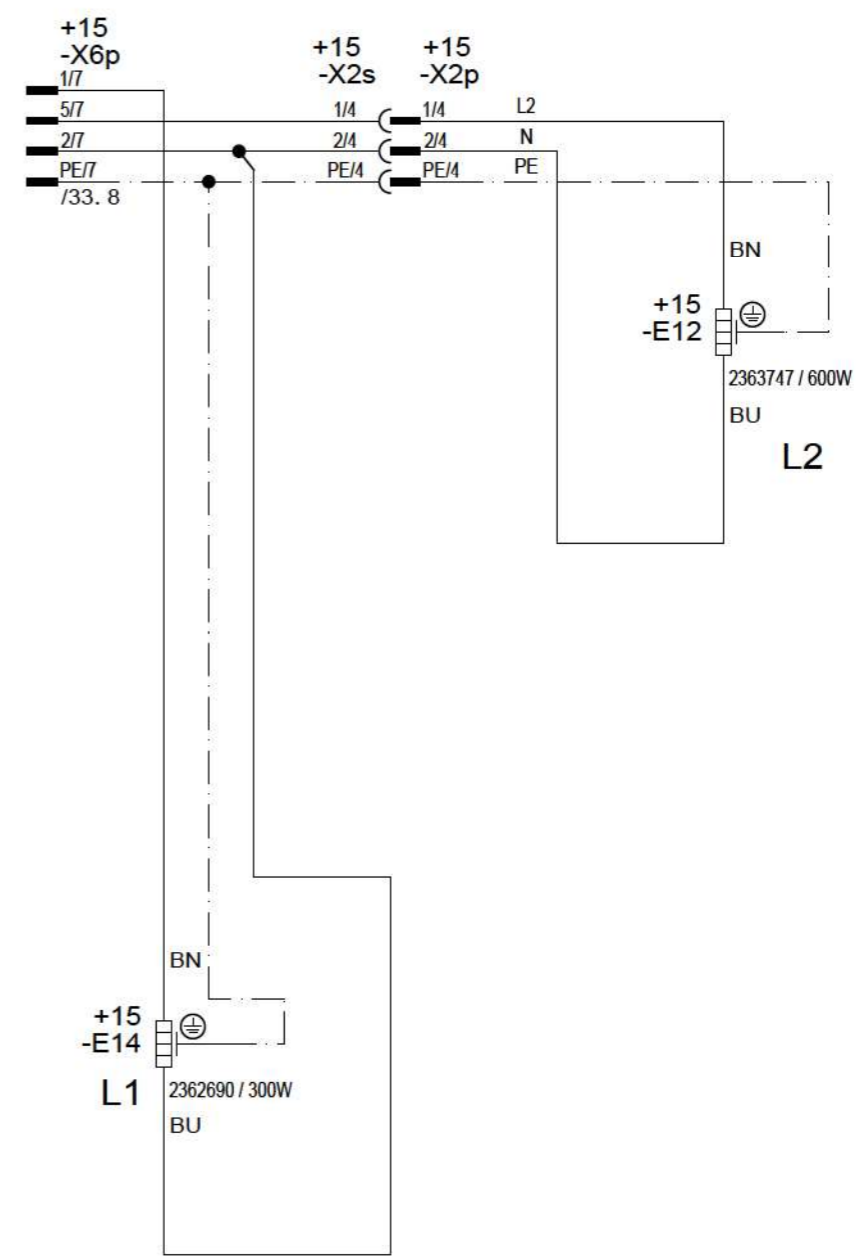
Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

Kantenheizung + Plattenheizung  
edge heating + plate heating



Linke Seite  
left hand



Rechte Seite  
right hand

Option  
option

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Kantenheizung + Plattenheizung edge heating + plate heating	Sheet <b>16</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01		Sheet plant:			
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>				Sheet Location:					

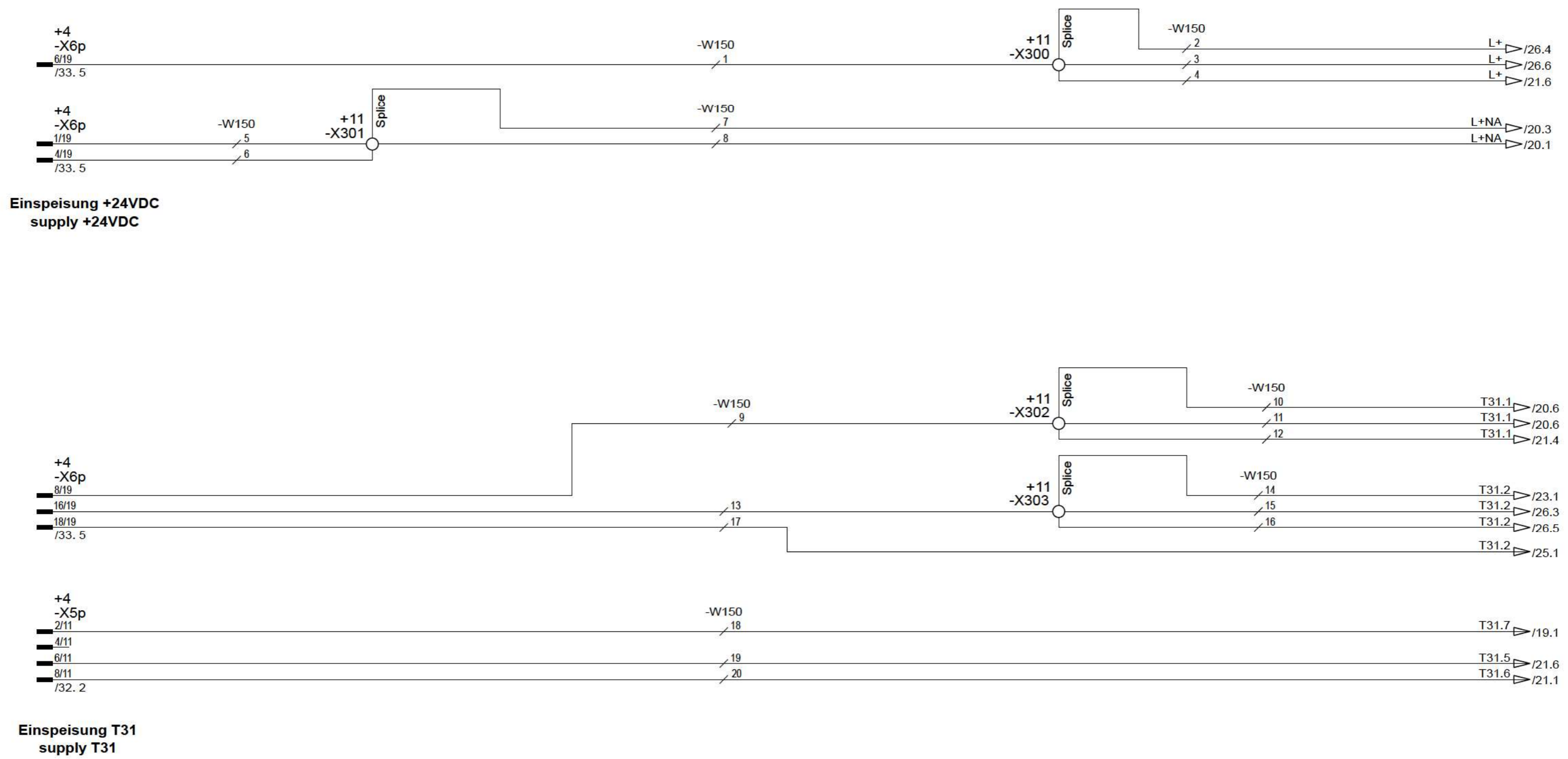
© 2012 by Joseph Vögele AG



Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016



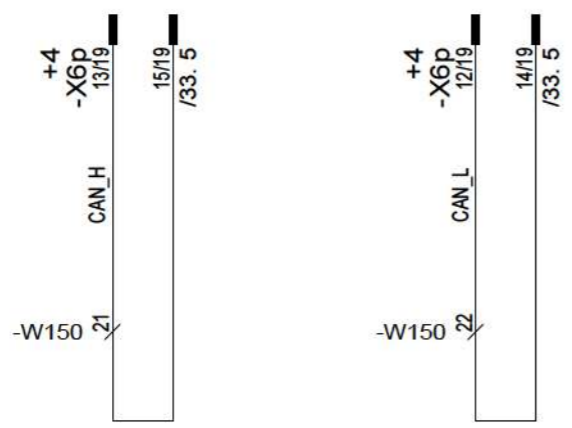
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release		2242280		Series code: <b>23.AB</b> Valid for Serial No.: from <b>0001</b> to <b>XXXX</b>		<b>17</b> of <b>49</b> Sheets	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>									
<b>VÖGELE</b>												Spannungsversorgung Power supply	

© 2012 by Joseph Vögele AG

Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016



Drawing by:		Approved by:		last change:		<b>SF</b> AE =changable PF =prototype release SF =serial release	Material No.: 2242280  Revision No.: 02_00_01		Document No.: Partial Document No.: Version No.:			CAN Bus CAN bus	Sheet
date	15.08.2012	date	10.09.2012	date	28.07.2016				Series code:	Valid for Serial No.:	18 of 49 <small>Sheets</small>		
name	Heindtel	name	Berlinghof	name	Heindtel				23.AB	from 0001 to XXXX			
E - CAE		Document type:	Function group No.:			Sheet plant: Sheet Location:							
		<b>ESP</b>		<b>19</b>									

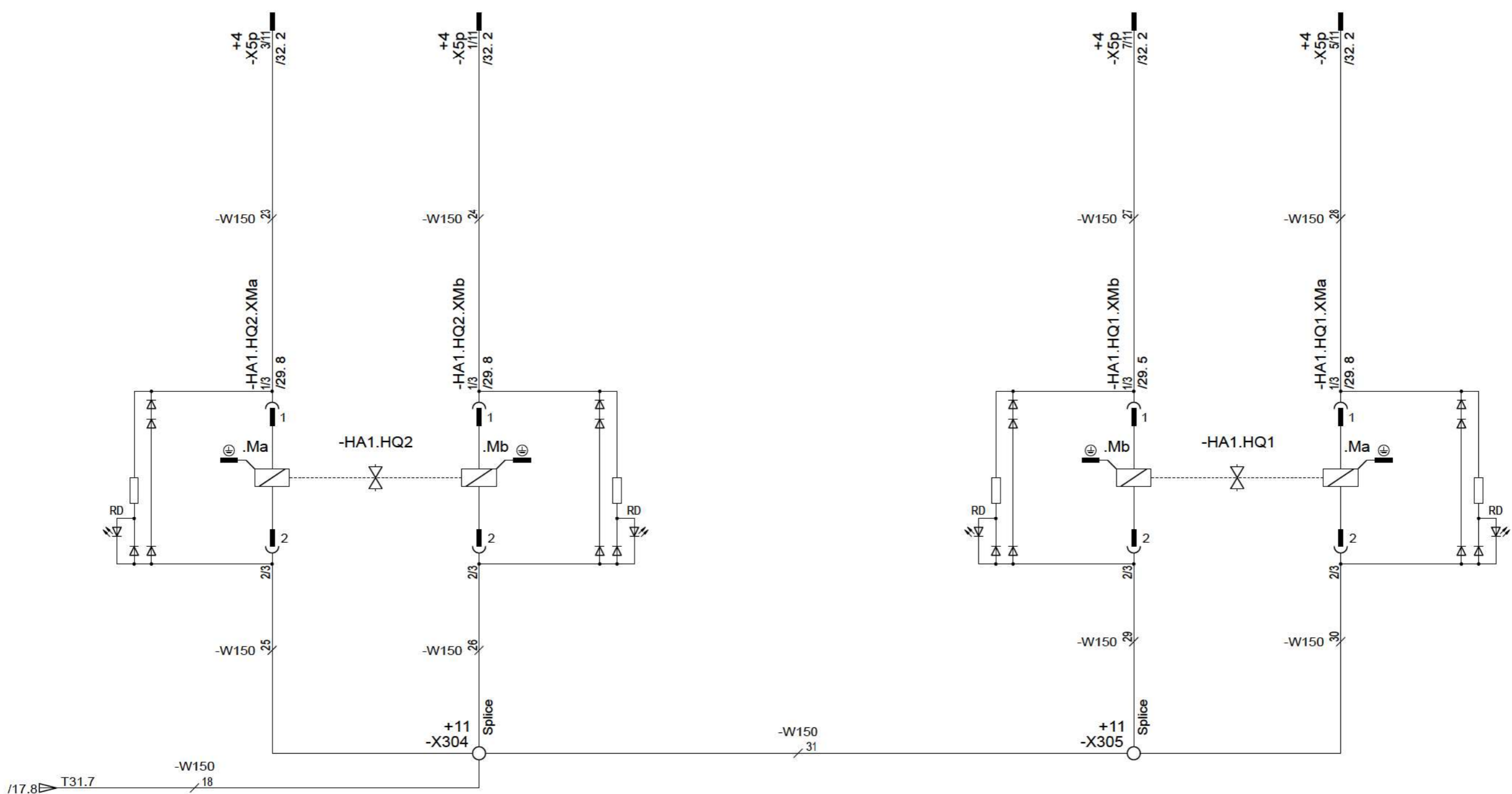
© 2012 by Joseph Vögele AG

Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

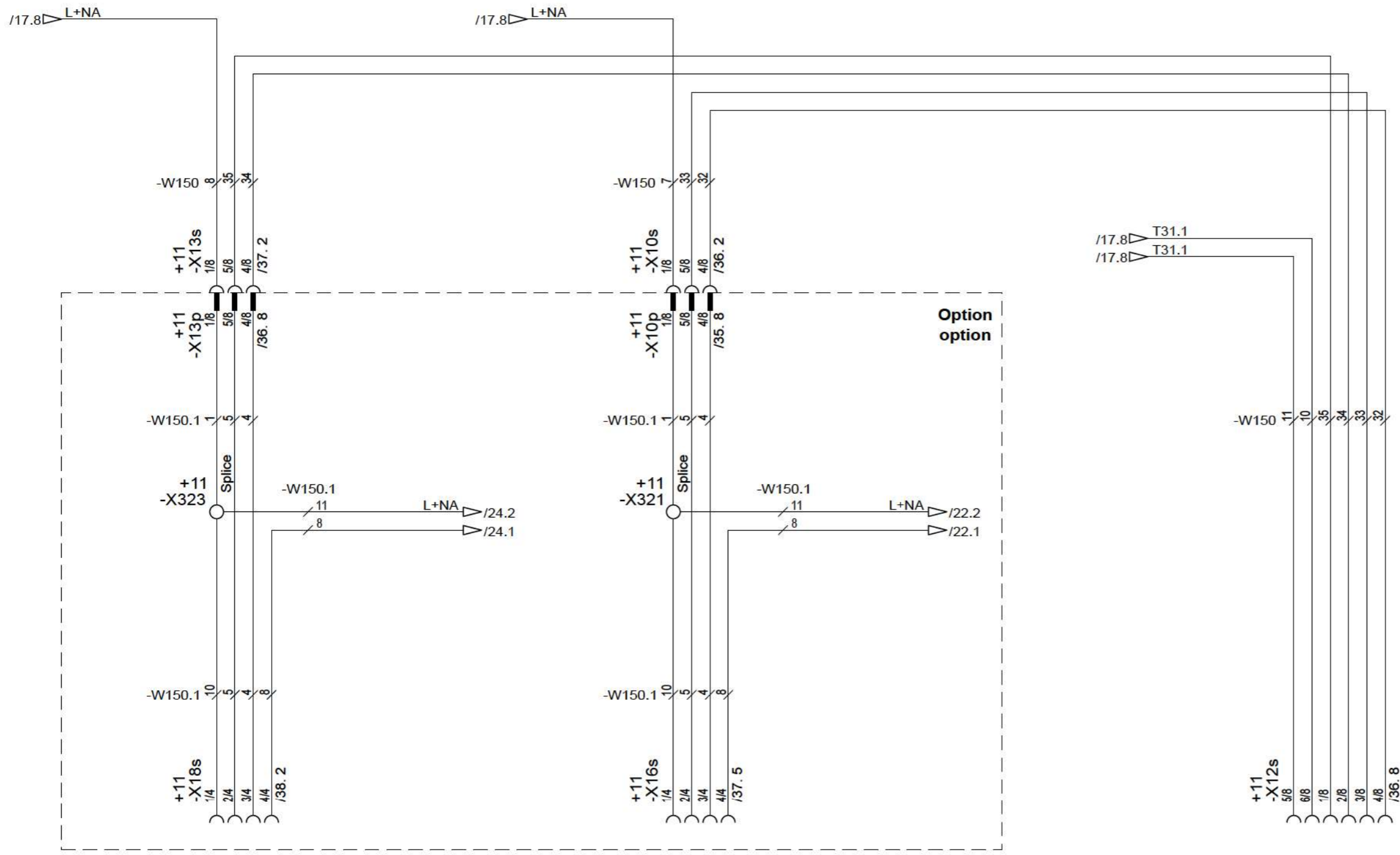
© 2012 by Joseph Vögele AG



**Ausziehteil linke Seite**  
**extending screed left hand**  
**einfahren**                      **ausfahren**  
**retracting**                      **extending**

**Ausziehteil rechte Seite**  
**extending screed right hand**  
**ausfahren**                      **einfahren**  
**extending**                      **retracting**

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release		2242280		Series code: 23.AB      Valid for Serial No.: from 0001 to XXXX		Bohle aus-/einfahren screed extend/retract	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>								49	



Schalter rechts, Ausziehteil heben/senken  
switch right hand, extending screed raise/lower

Schalter links, Ausziehteil heben/senken  
switch left hand, extending screed raise/lower

Ventile, Ausziehteil heben/senken  
valves, extending screed raise/lower

Individual-Option  
individual-option

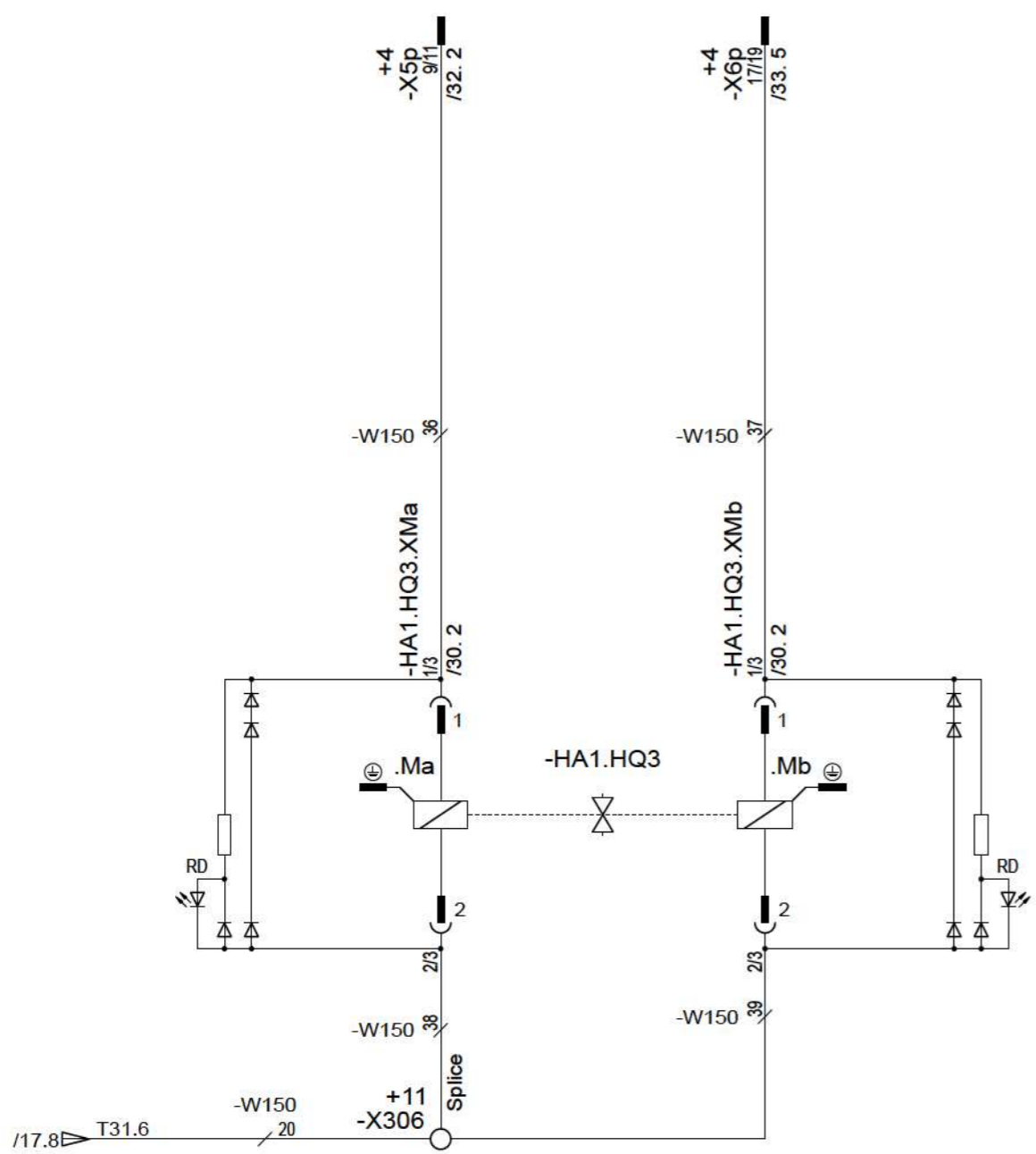
Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX		Ausziehteil heben/senken extending screed raise/lower	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: ESP		Function group No.: 19				<b>VÖGELE</b>					

Electric

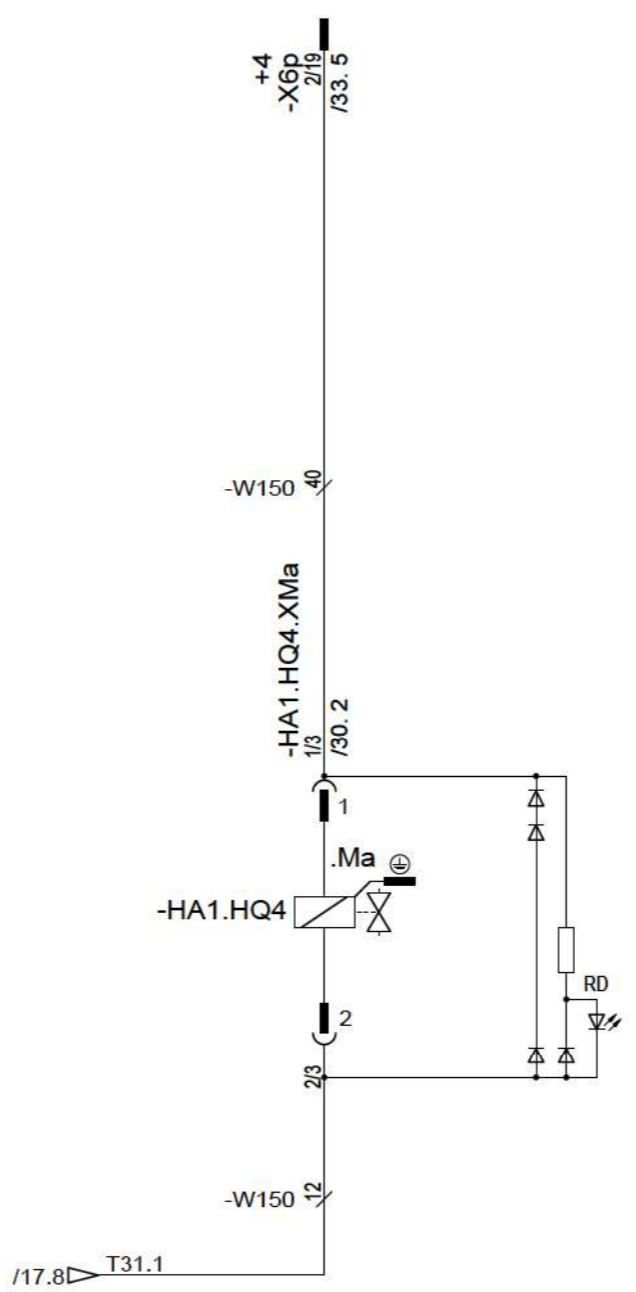
Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

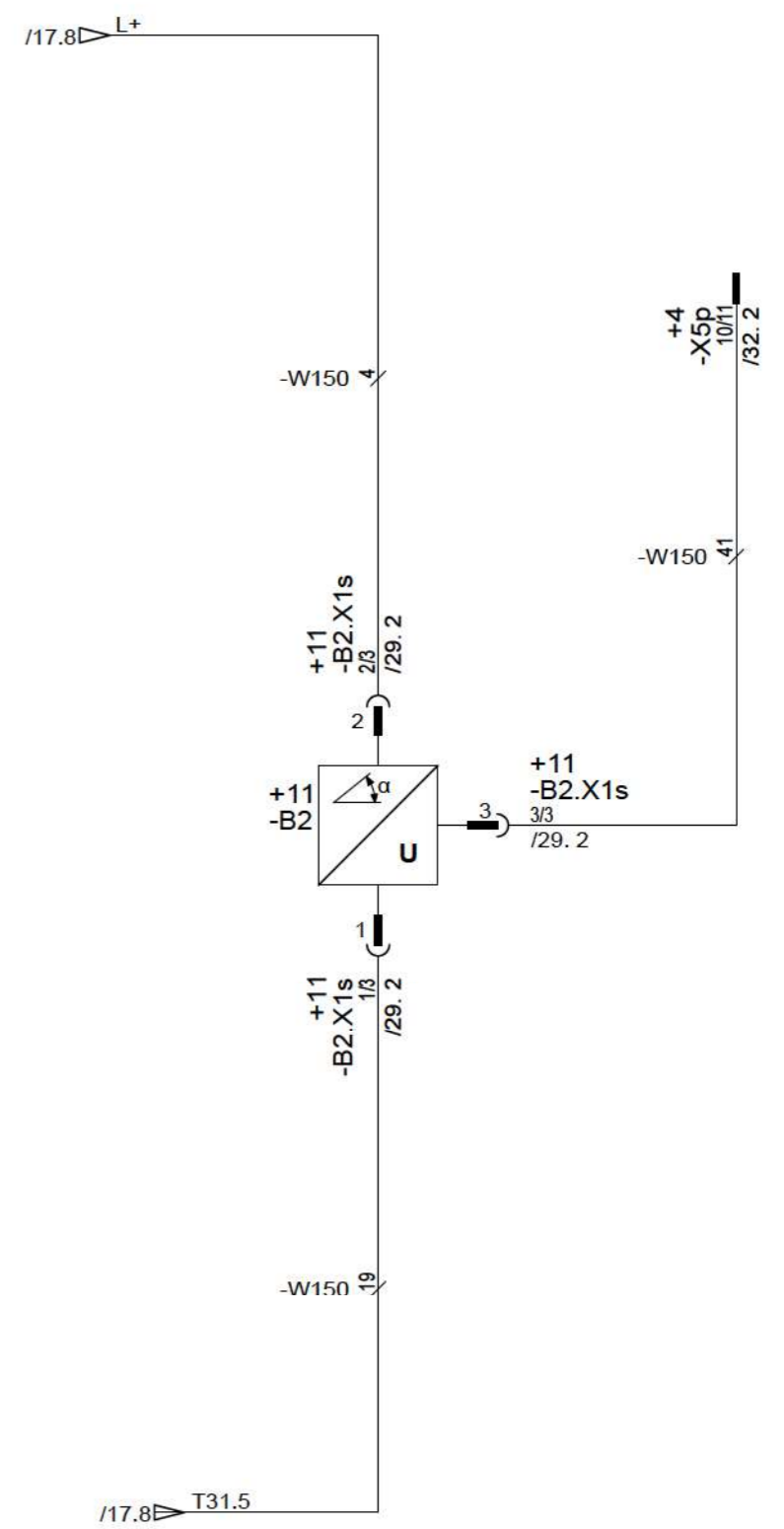
© 2012 by Joseph Vögele AG



**Dachprofilverstellung**  
**crown adjusting device**  
**positiv**  
**positive**  
**negativ**  
**negative**



**Druckzuschaltventil**  
**pressure activation valve**  
**Funktion**  
**function**  
**ein**  
**on**



**Sensor Dachprofilverstellung**  
**Sensor crown adjusting device**

Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
		<b>ESP</b>		<b>19</b>	

**Status:**  
**SF** AE=changable  
 PF=prototype release  
 SF=serial release

Material No.:  
 2242280  
 Revision No.:  
 02\_00\_01

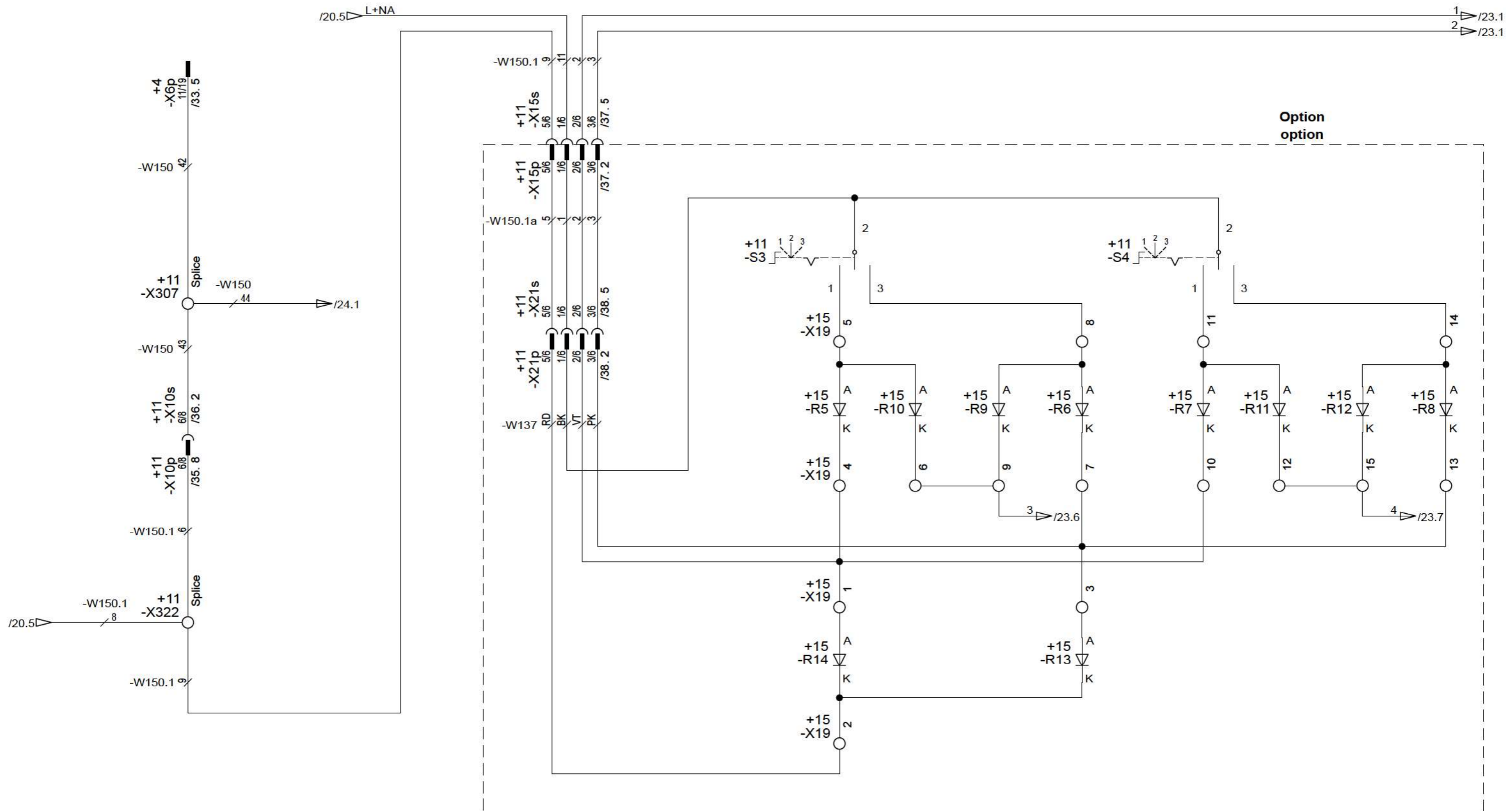


Document No.: Partial Document No.: Version No.:	
Series code: <b>23.AB</b>	Valid for Serial No.: from <b>0001</b> to <b>XXXX</b>
Sheet plant: Sheet Location:	

**Dachprofilverstellung**  
**crown adjusting device**

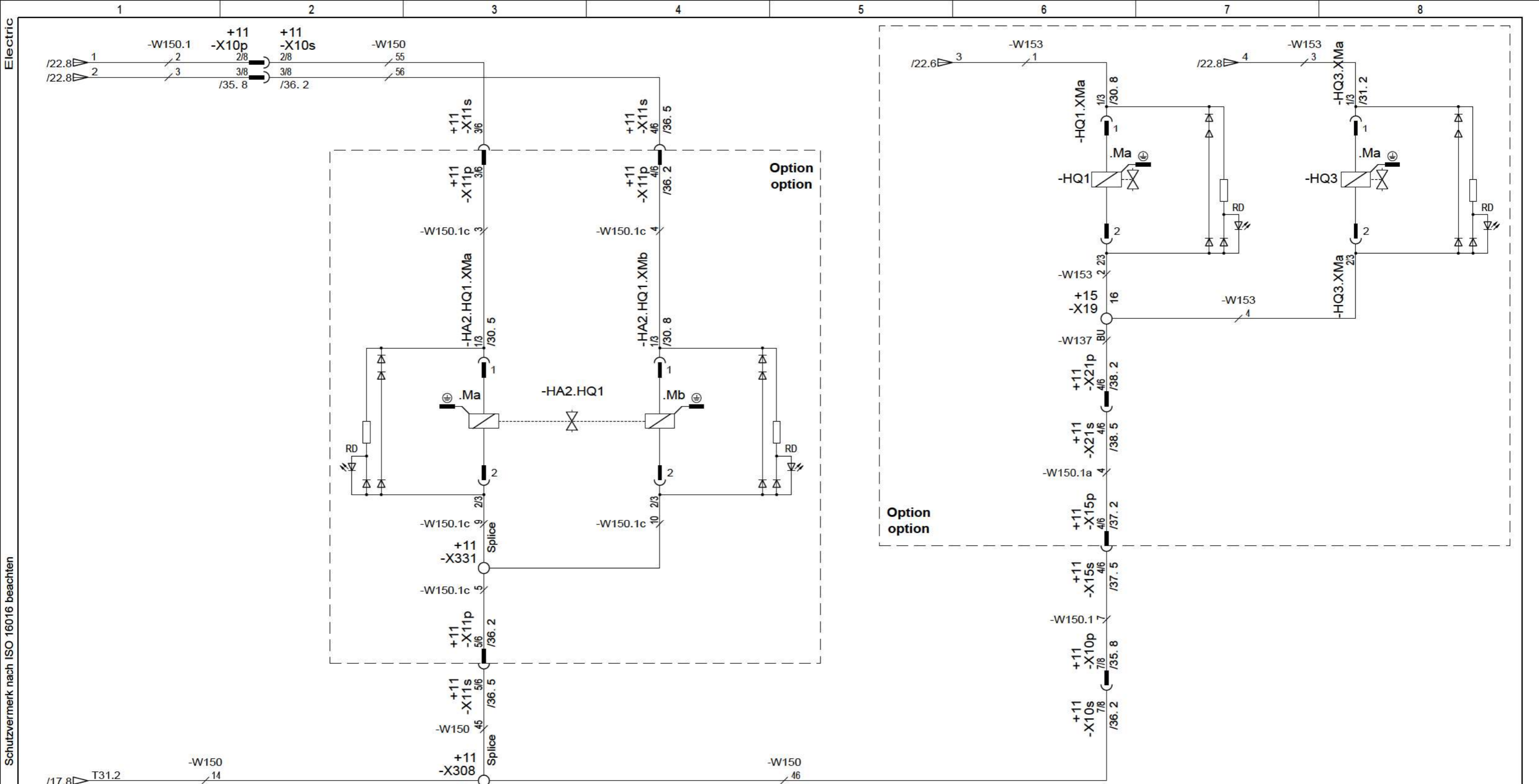
Sheet  
**21**  
 of  
**49** Sheets

Electric  
 Schutzvermerk nach ISO 16016 beachten  
 Refer to protection notice ISO 16016  
 © 2012 by Joseph Vögele AG



hinten rear      hinten rear      vorne front      vorne front  
 senken lower      heben raise      senken lower      heben raise

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX		22 of 49 Sheets	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01					
E - CAE		Document type: ESP		Function group No.: 19		<b>VÖGELE</b>		Seitenschild linke Seite sideplate left hand					



**Seitenschild linke Seite**  
**sideplate left hand**

**senken**  
**lowering**

**heben**  
**raise**

**Sitzventil**  
**seat valve**  
**öffnen**  
**opening**

**hinten**  
**rear**

**Sitzventil**  
**seat valve**  
**öffnen**  
**opening**

**vorne**  
**front**

Refer to protection notice ISO 16016

Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
		<b>ESP</b>		<b>19</b>	

**Status:**

**SF** AE=changable  
 PF=prototype release  
 SF=serial release

Material No.:  
2242280

Revision No.:  
02\_00\_01



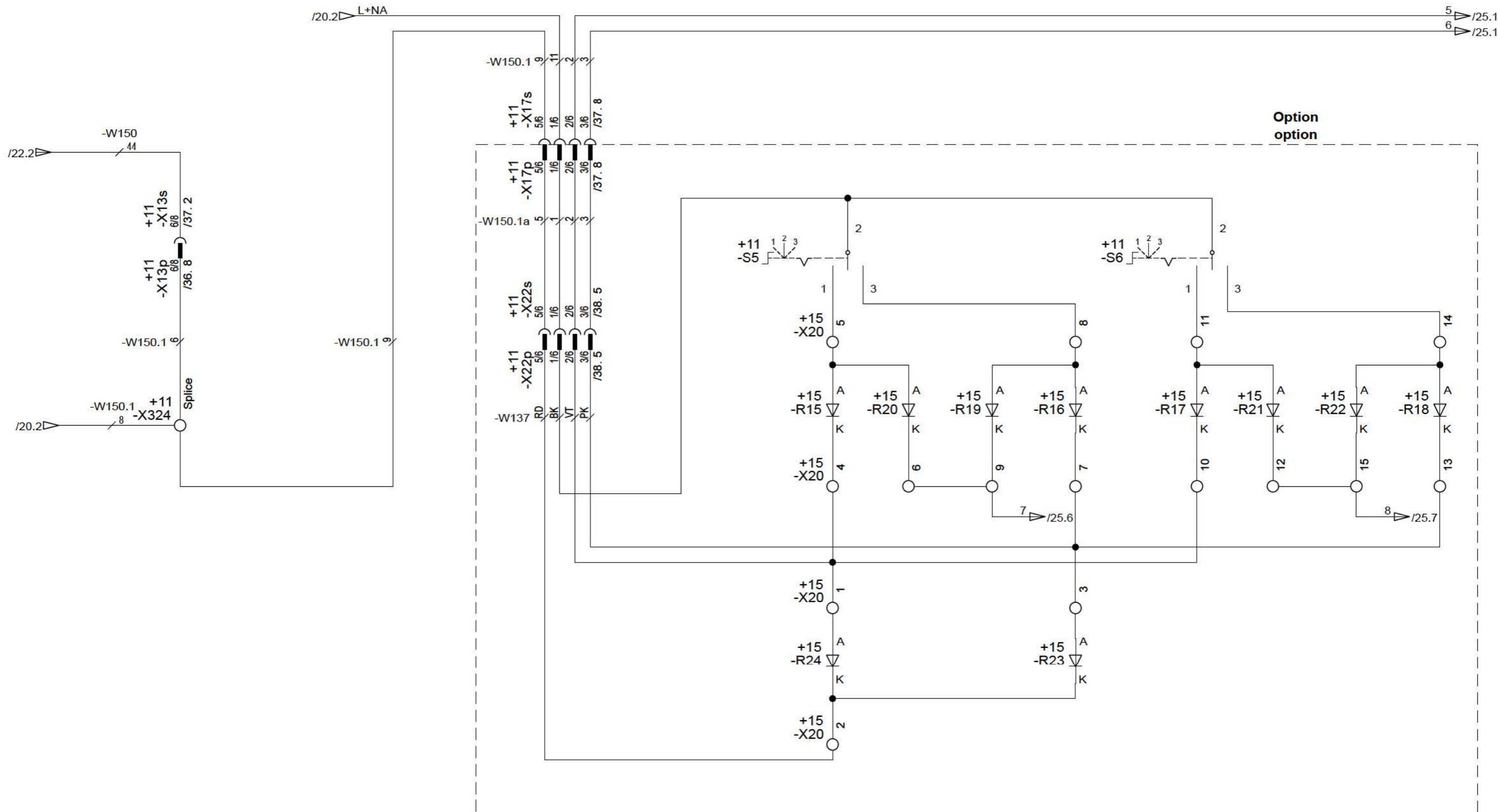
Document No.: Partial Document No.: Version No.:	
Series code: <b>23.AB</b>	Valid for Serial No.: from <b>0001</b> to <b>XXXX</b>
Sheet plant: Sheet Location:	

**Seitenschild linke Seite**  
**sideplate left hand**

Sheet  
**23**  
 of  
**49** Sheets

© 2012 by Joseph Vögele AG

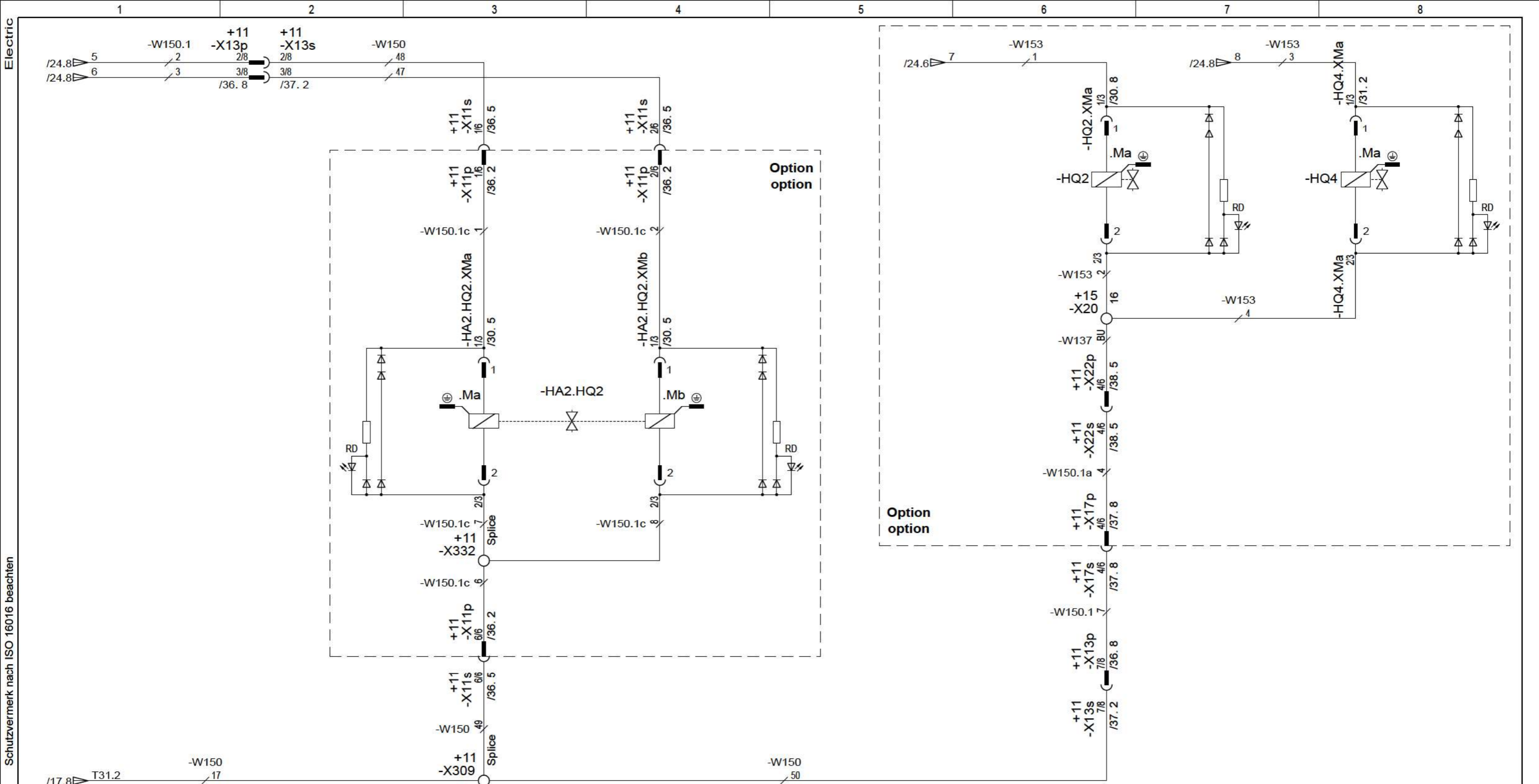
Electric  
 Schutzvermerk nach ISO 16016 beachten  
 Refer to protection notice ISO 16016  
 © 2012 by Joseph Vögele AG



hinten rear      hinten rear      vorne front      vorne front  
 senken lower      heben raise      senken lower      heben raise

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet		
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF AE=changable PF=prototype release SF=serial release		2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX		Seitenschild rechte Seite sideplate right hand		24
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.: 02_00_01						Sheet plant: Sheet Location:
E - CAE		Document type: ESP		Function group No.: 19										Sheets





**Seitenschild rechte Seite**  
**sideplate right hand**

**senken**      **heben**  
**lowering**      **raise**

**Sitzventil**  
**seat valve**

**öffnen**  
**opening**

**Sitzventil**  
**seat valve**

**öffnen**  
**opening**

**hinten**  
**rear**

**vorne**  
**front**

Refer to protection notice ISO 16016 beachten

<b>Drawing by:</b>		<b>Approved by:</b>		<b>last change:</b>	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		<b>Document type:</b>		<b>Function group No.:</b>	
		<b>ESP</b>		<b>19</b>	

**Status:**

**SF** AE=changable  
 PF=prototype release  
 SF=serial release

Material No.: 2242280  
 Revision No.: 02\_00\_01



Document No.: Partial Document No.: Version No.:

Series code: 23.AB      Valid for Serial No.: from 0001 to XXXX

Sheet plant:  
 Sheet Location:

**Seitenschild rechte Seite**  
**sideplate right hand**

Sheet  
**25**  
 of  
**49** Sheets

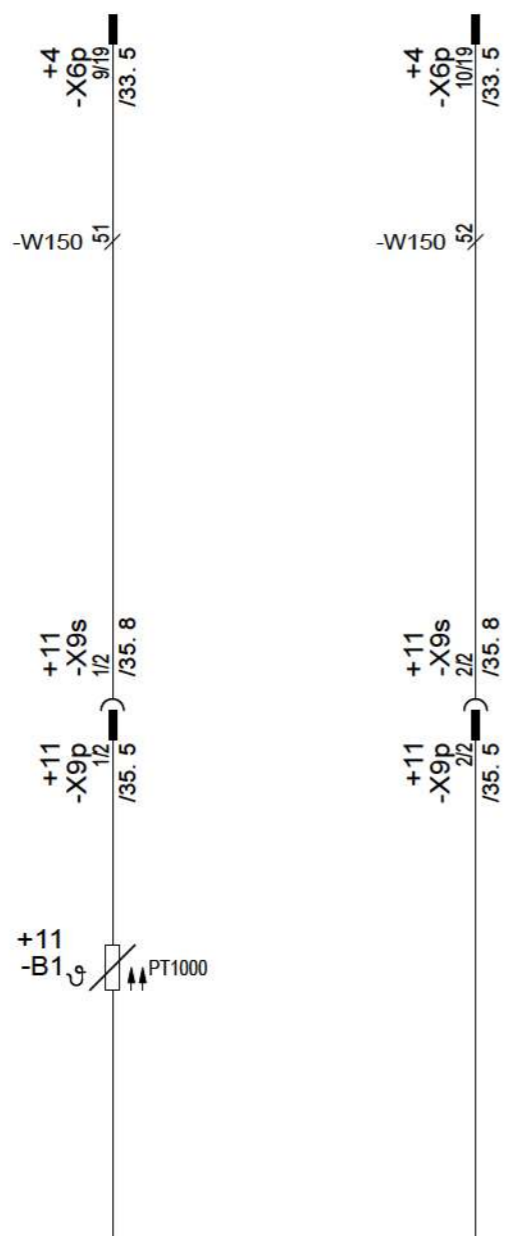
© 2012 by Joseph Vögele AG

Electric

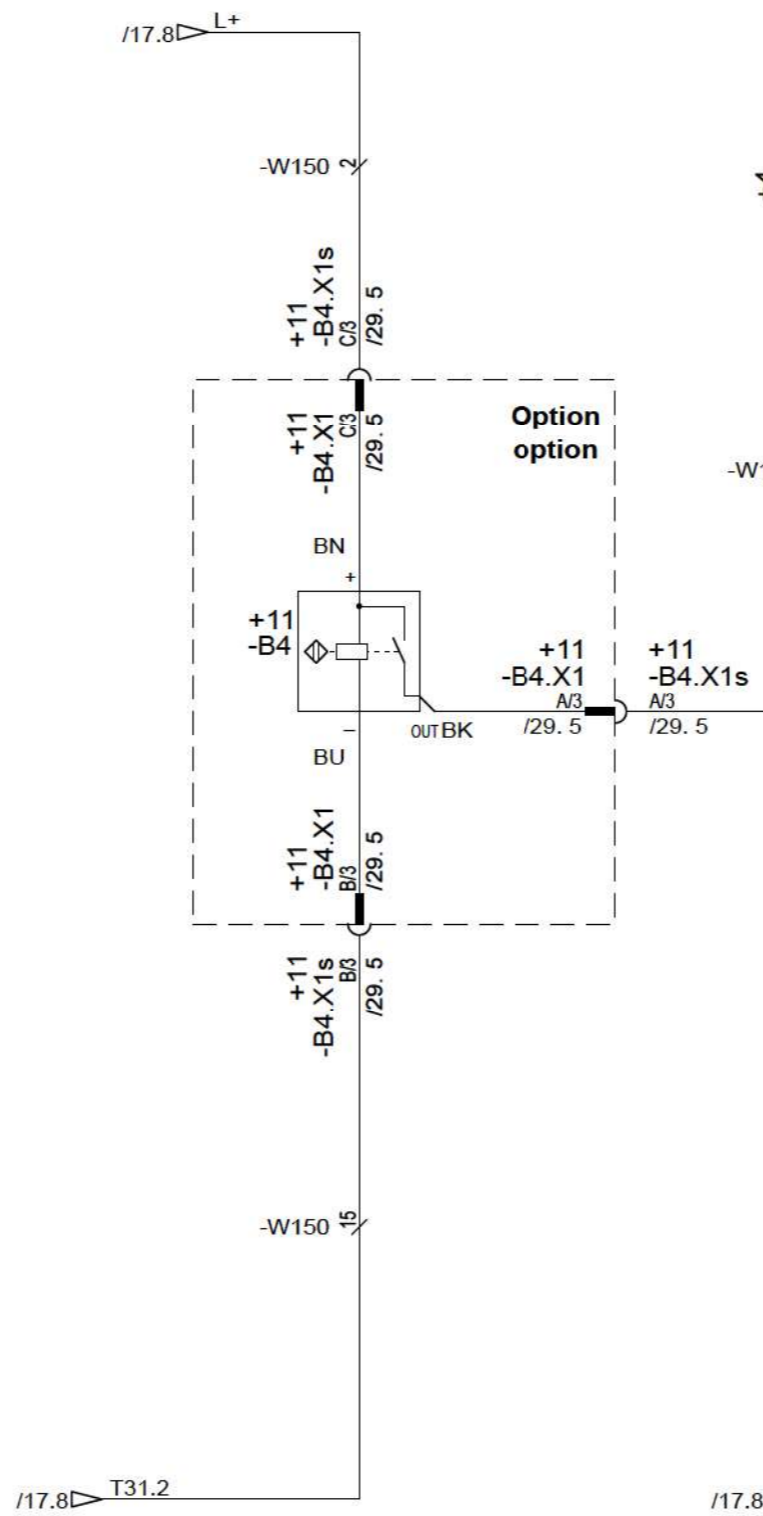
Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

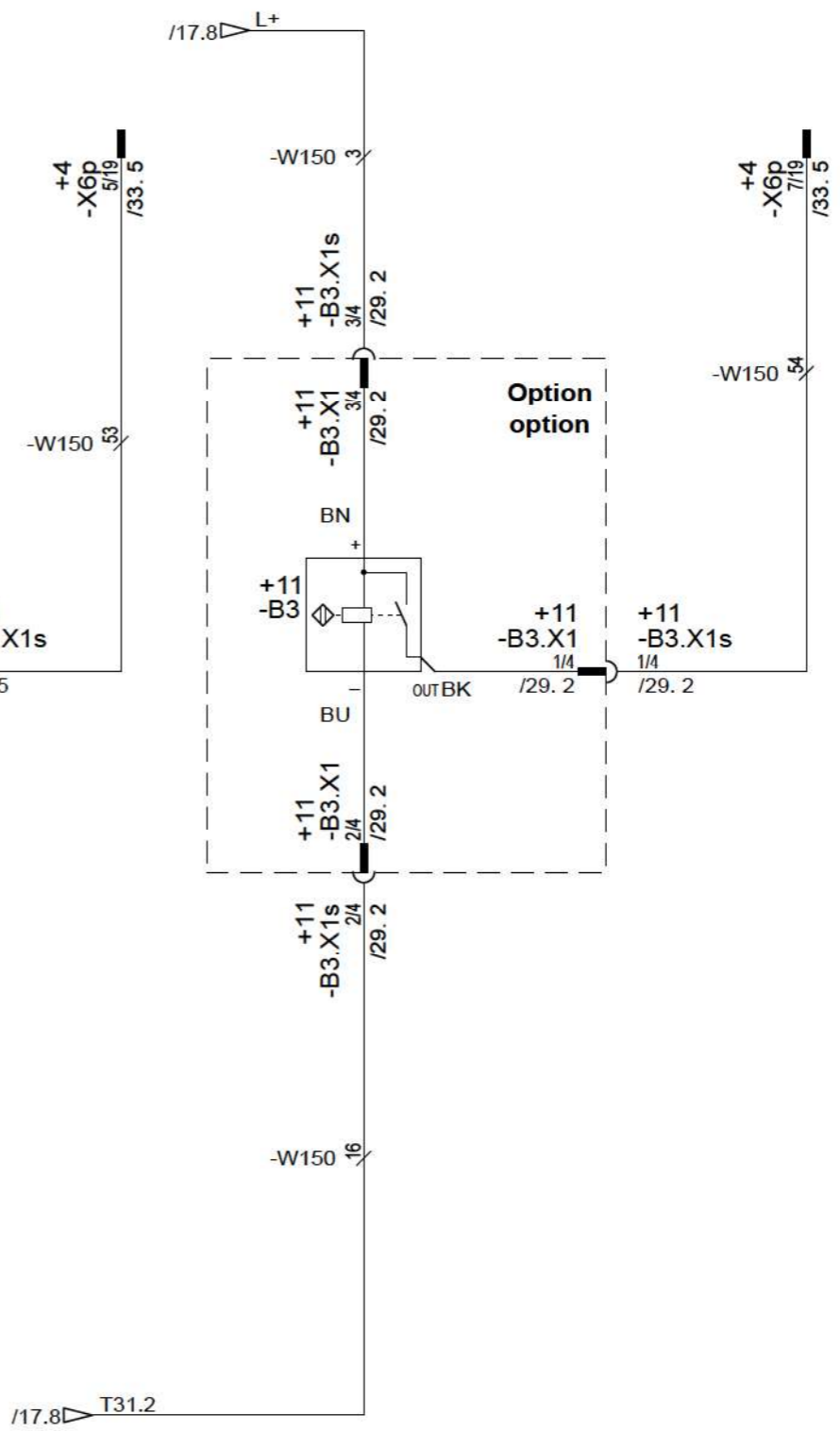
© 2012 by Joseph Vögele AG



**Geber Glättblechtemperatur  
transmitter: screed plate temperature**



**Drehzahl - Tamper  
RPM - tamper**



**Drehzahl - Vibration  
RPM - vibration**

Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
		<b>ESP</b>		<b>19</b>	

**Status:**  
**SF** AE=changable  
 PF=prototype release  
 SF=serial release

Material No.:  
2242280  
 Revision No.:  
02\_00\_01



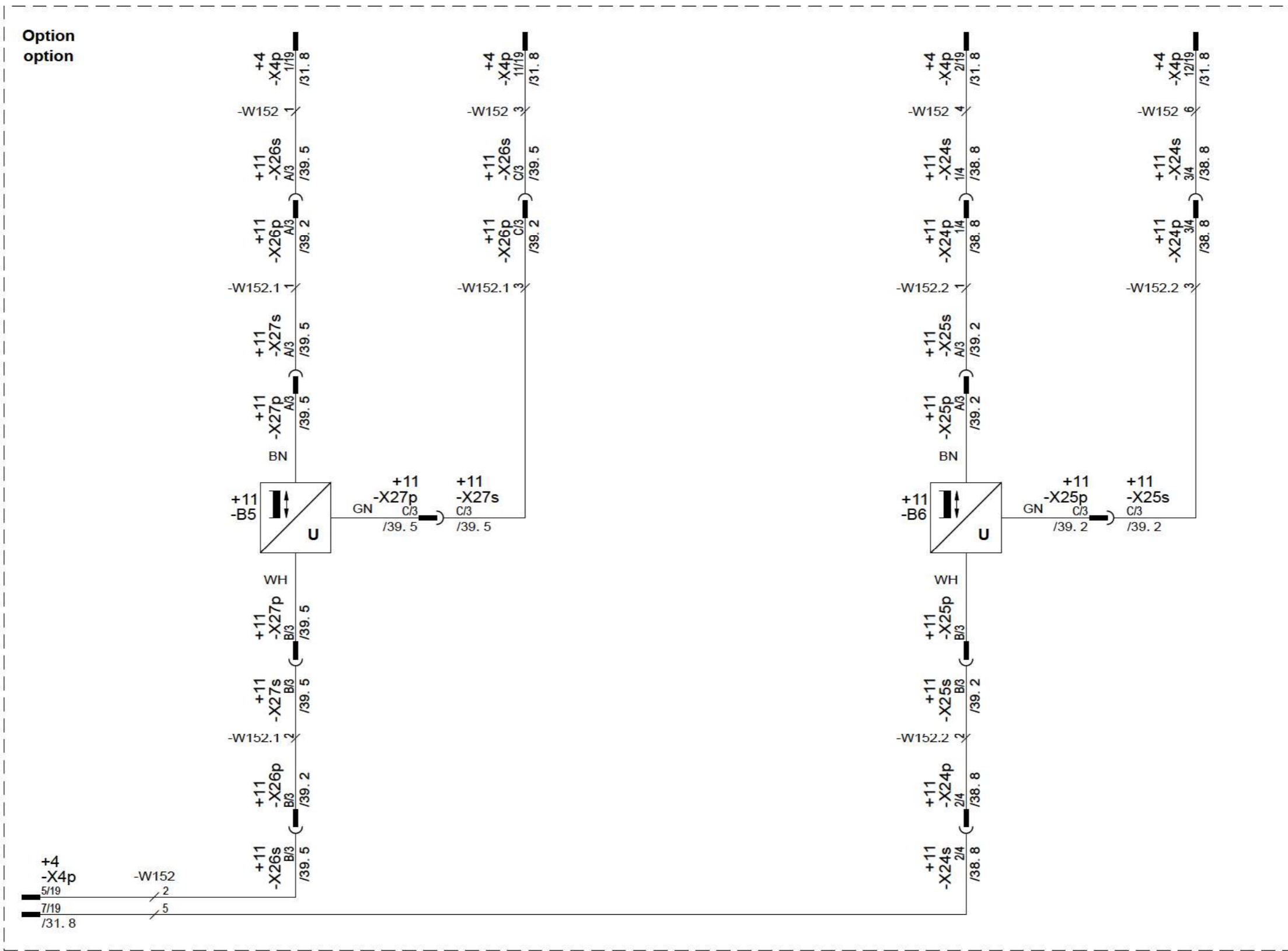
Document No.: Partial Document No.: Version No.:

Series code: **23.AB** Valid for Serial No.: from **0001** to **XXXX**

Sheet plant:  
Sheet Location:

**Sensoren  
sensors**

Sheet  
**26**  
of  
**49** Sheets



Breitenmessung - links  
width measurement - left hand

Breitenmessung - rechts  
width measurement - right hand

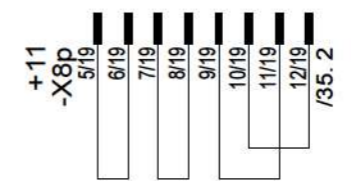
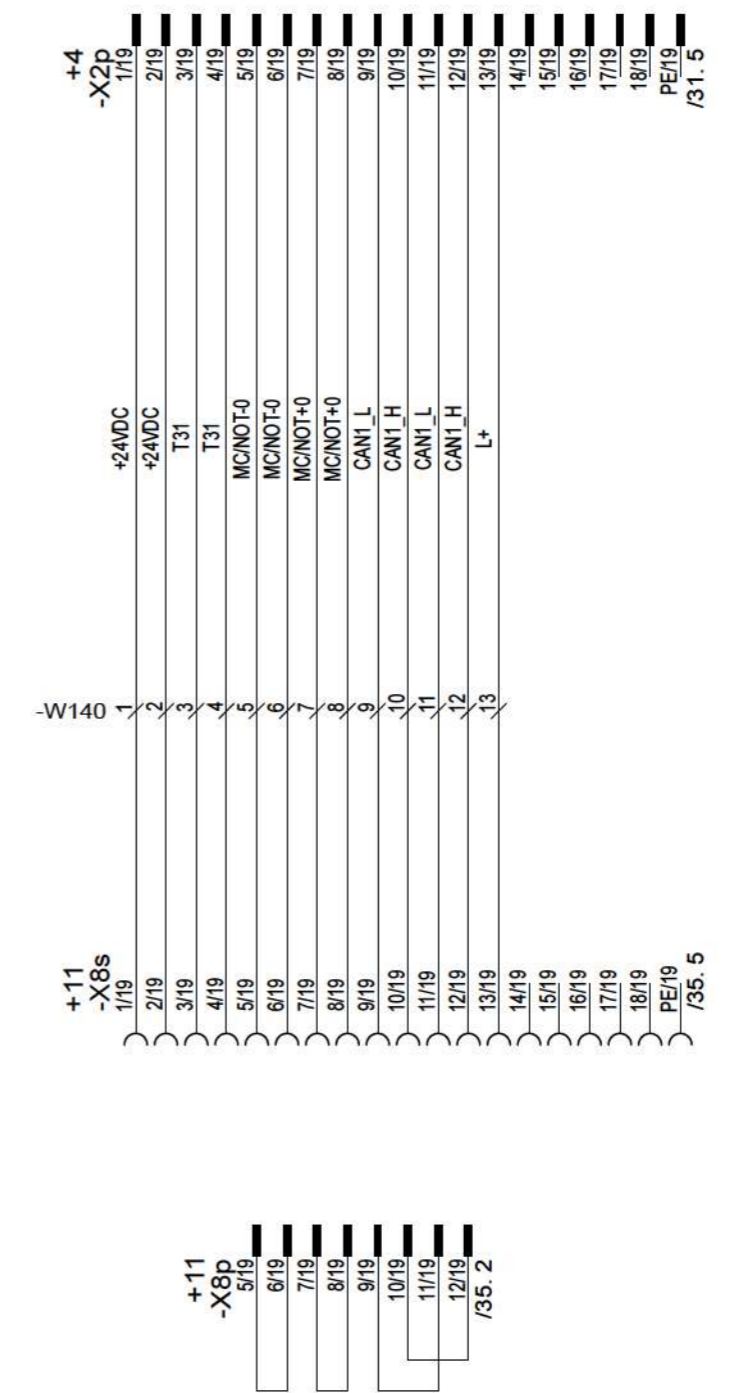
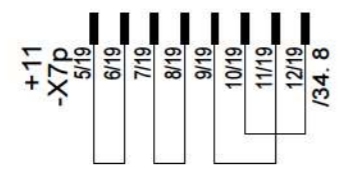
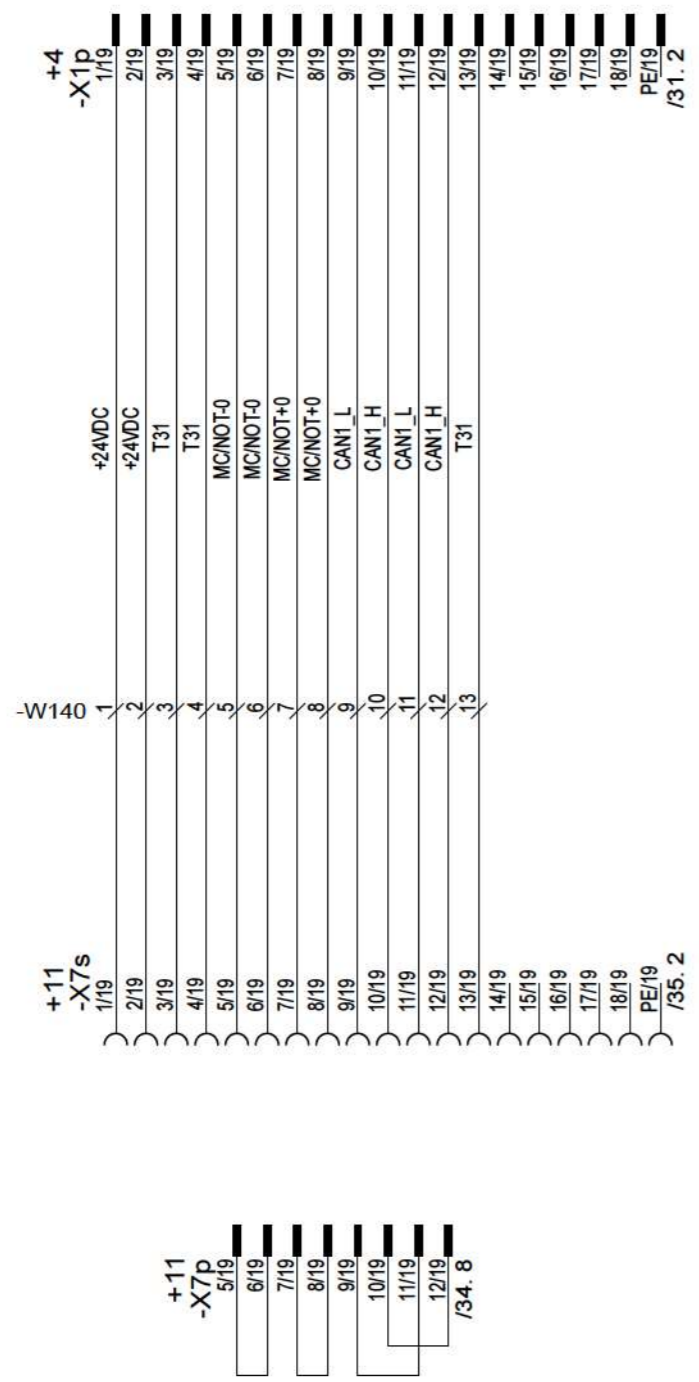
Drawing by:		Approved by:		last change:	
date	15.08.2012	date	10.09.2012	date	28.07.2016
name	Heindtel	name	Berlinghof	name	Heindtel
E - CAE		Document type:		Function group No.:	
		<b>ESP</b>		<b>19</b>	

SF	Status:	Material No.:
	AE = changable	2242280
	PF = prototype release	Revision No.:
	SF = serial release	02_00_01




Document No.: Partial Document No.: Version No.:	
Series code:	Valid for Serial No.:
23.AB	from 0001 to XXXX
Sheet plant:	
Sheet Location:	

Breitenmessung  
width measurement



Drawing by:		Approved by:		last change:		Status:		Material No.:	
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF AE =changable PF =prototype release SF =serial release		2242280	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.:	
E - CAE		Document type:		Function group No.:					
		ESP		19					



Document No.:		Partial Document No.:		Version No.:	
Series code:		Valid for Serial No.:			
23.AB		from 0001 to XXXX			
Sheet plant:					
Sheet Location:					

Kabel , Fernbedienung  
cable , remote control unit

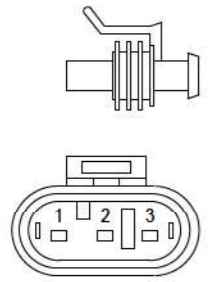
Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

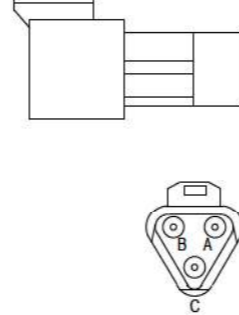
**+11  
-B2.X1s**  
Dachprofilverstellung  
crown adjusting device

Anschluss Pin	Signal signal	Querverweis cross-reference
1	T31.5	/21.7
2	L+	/21.7
3	signal sensor crown	/21.7



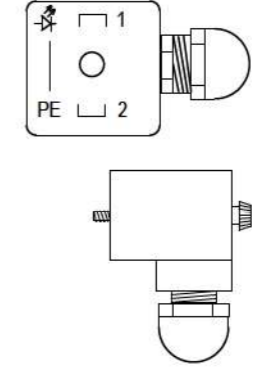
**+11  
-B4.X1**

Anschluss Pin	Signal signal	Querverweis cross-reference
A	RPM-Tamper	/26.5
B	T31.2	/26.4
C	L+	/26.4



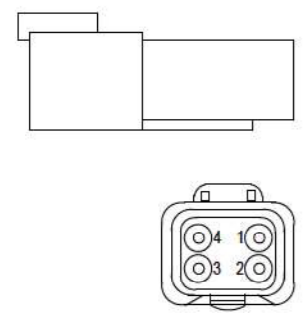
**-HA1.HQ1.XMa**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	QPWM2	/19.7
2	T31.7	/19.7
PE		



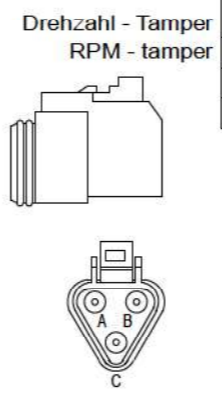
**+11  
-B3.X1**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	RPM-Vibration	/26.6
2	T31.2	/26.6
3	L+	/26.6
4		



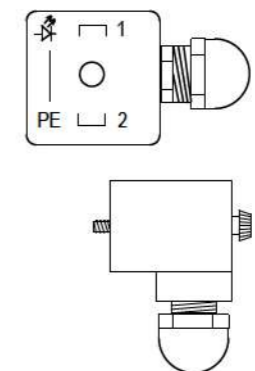
**+11  
-B4.X1s**

Anschluss Pin	Signal signal	Querverweis cross-reference
A	RPM-Tamper	/26.5
B	T31.2	/26.4
C	L+	/26.4



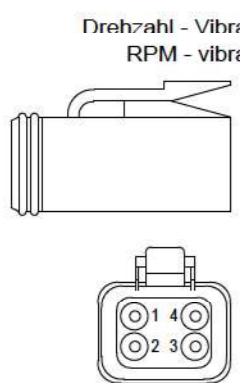
**-HA1.HQ2.XMa**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	QPWM3	/19.2
2	T31.7	/19.2
PE		



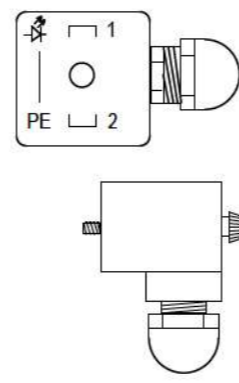
**+11  
-B3.X1s**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	RPM-Vibration	/26.7
2	T31.2	/26.6
3	L+	/26.6
4		



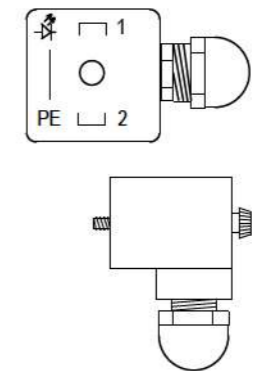
**-HA1.HQ1.XMb**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	QPWM1	/19.6
2	T31.7	/19.6
PE		



**-HA1.HQ2.XMb**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	QPWM4	/19.3
2	T31.7	/19.3
PE		



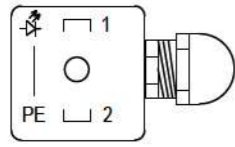
<b>Drawing by:</b> date 15.08.2012 name Heindtel E - CAE	<b>Approved by:</b> date 10.09.2012 name Berlinghof Document type: <b>ESP</b>	<b>last change:</b> date 28.07.2016 name Heindtel Function group No.: <b>19</b>
---	---	---

<b>Status:</b> <b>SF</b> AE =changable PF =prototype release SF =serial release	Material No.: 2242280 Revision No.: 02_00_01
---	---

	Document No.: Partial Document No.: Version No.:
	Series code: Valid for Serial No.:
	23.AB from 0001 to XXXX
	Sheet plant: Sheet Location:

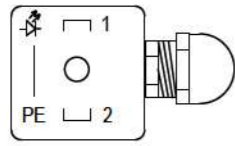
<b>Steckerverzeichnis table of connectors</b>
---

-HA1.HQ3.XMa



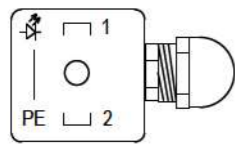
Anschluss Pin	Signal signal	Querverweis cross-reference
1	crown adjusting p.	/21.2
2	T31.6	/21.2
PE		

-HA1.HQ3.XMb



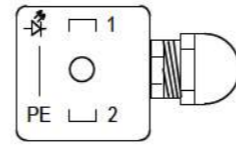
Anschluss Pin	Signal signal	Querverweis cross-reference
1	crown adjusting n.	/21.3
2	T31.6	/21.3
PE		

-HA1.HQ4.XMa



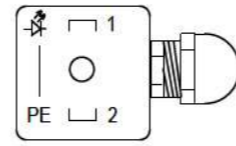
Anschluss Pin	Signal signal	Querverweis cross-reference
1	pressure valve on	/21.5
2	T31.1	/21.5
PE		

-HA2.HQ2.XMa



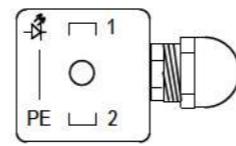
Anschluss Pin	Signal signal	Querverweis cross-reference
1	5	/25.3
2	T31.2	/25.3
PE		

-HA2.HQ2.XMb



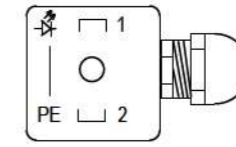
Anschluss Pin	Signal signal	Querverweis cross-reference
1	6	/25.4
2	T31.2	/25.4
PE		

-HA2.HQ1.XMa



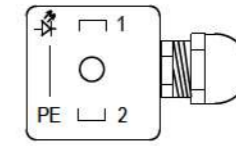
Anschluss Pin	Signal signal	Querverweis cross-reference
1	1	/23.3
2	T31.2	/23.3
PE		

-HA2.HQ1.XMb



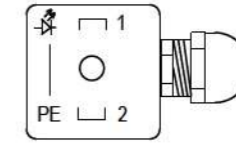
Anschluss Pin	Signal signal	Querverweis cross-reference
1	2	/23.4
2	T31.2	/23.4
PE		

-HQ1.XMa



Anschluss Pin	Signal signal	Querverweis cross-reference
1	3	/23.6
2	T31.2	/23.6
PE		

-HQ2.XMa



Anschluss Pin	Signal signal	Querverweis cross-reference
1	7	/25.6
2	T31.2	/25.6
PE		

<b>Drawing by:</b>	<b>Approved by:</b>	<b>last change:</b>	<b>Status:</b>	Material No.: 2242280 Revision No.: 02_00_01
date 15.08.2012	date 10.09.2012	date 28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release	
name Heindtel	name Berlinghof	name Heindtel		
E - CAE	Document type: <b>ESP</b>	Function group No.: <b>19</b>		

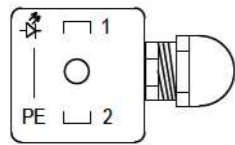
Document No.: Partial Document No.: Version No.:
Series code: 23.AB Valid for Serial No.: from 0001 to XXXX
Sheet plant: Sheet Location:

**VÖGELE**

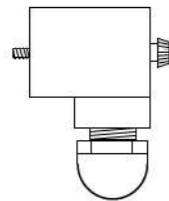
Steckerverzeichnis  
table of connectors

Refer to protection notice ISO 16016

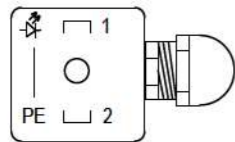
**-HQ3.XMa**



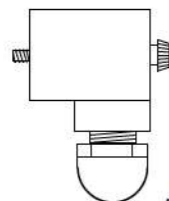
Anschluss Pin	Signal signal	Querverweis cross-reference
1	4	/23.8
2	T31.2	/23.8
PE		



**-HQ4.XMa**

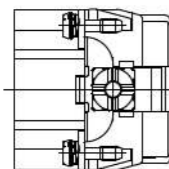


Anschluss Pin	Signal signal	Querverweis cross-reference
1	8	/25.8
2	T31.2	/25.8
PE		



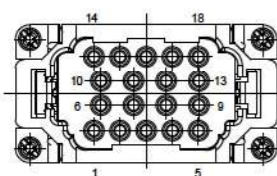
**+4 -X1p**

Aussensteuerstand links  
screed control left hand

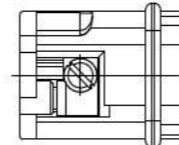


Anschluss Pin	Signal signal	Querverweis cross-reference
1	+24VDC	/28.2
2	+24VDC	/28.2
3	T31	/28.2
4	T31	/28.2
5	MC/NOT-0	/28.2
6	MC/NOT-0	/28.2
7	MC/NOT+0	/28.2
8	MC/NOT+0	/28.2
9	CAN1_L	/28.2
10	CAN1_H	/28.2
11	CAN1_L	/28.3
12	CAN1_H	/28.3
13	T31	/28.3
14		/28.3
15		/28.3
16		/28.3
17		/28.3
18		/28.3
PE		/28.3

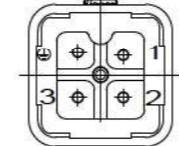
Codierung 1/18  
coding 1/18



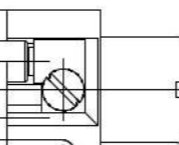
**+15 -X1p**



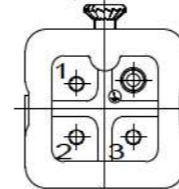
Anschluss Pin	Signal signal	Querverweis cross-reference
1	L3	/16.2
2	N	/16.2
3		
PE	PE	/16.2



**+15 -X1s**

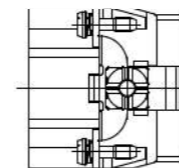


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L3	/16.3
2	N	/16.3
3		
PE	PE	/16.3



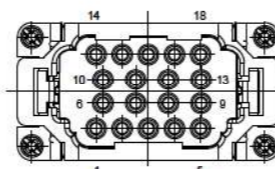
**+4 -X2p**

Aussensteuerstand rechts  
screed control right hand

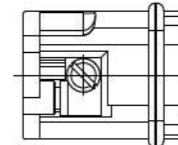


Anschluss Pin	Signal signal	Querverweis cross-reference
1	+24VDC	/28.6
2	+24VDC	/28.6
3	T31	/28.6
4	T31	/28.6
5	MC/NOT-0	/28.6
6	MC/NOT-0	/28.6
7	MC/NOT+0	/28.6
8	MC/NOT+0	/28.6
9	CAN1_L	/28.6
10	CAN1_H	/28.6
11	CAN1_L	/28.7
12	CAN1_H	/28.7
13	L+	/28.7
14		/28.7
15		/28.7
16		/28.7
17		/28.7
18		/28.7
PE		/28.7

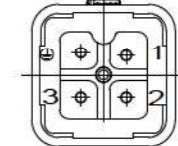
Codierung 1/18  
coding 1/18



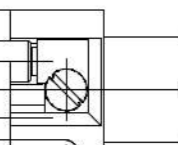
**+15 -X2p**



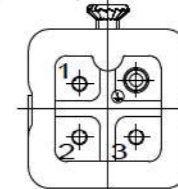
Anschluss Pin	Signal signal	Querverweis cross-reference
1	L2	/16.7
2	N	/16.7
3		
PE	PE	/16.7



**+15 -X2s**

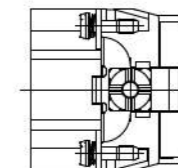


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L2	/16.6
2	N	/16.6
3		
PE	PE	/16.6



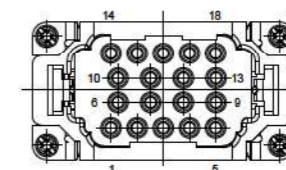
**+4 -X4p**

Funktionen -3 Bohle  
functions -3 screed



Anschluss Pin	Signal signal	Querverweis cross-reference
1	I+	/27.3
2	L+	/27.6
3		
4		
5	T31.2	/27.2
6		
7	T31.5	/27.2
8		
9		
10		
11	L+	/27.4
12	L+	/27.7
13		
14		
15		
16		
17		
18		
PE		

Codierung 14/18  
coding 14/18



<b>Drawing by:</b> date 15.08.2012 name Heindtel E - CAE	<b>Approved by:</b> date 10.09.2012 name Berlinghof Document type: <b>ESP</b>	<b>last change:</b> date 28.07.2016 name Heindtel Function group No.: <b>19</b>
---	---	---

<b>Status:</b> SF AE =changable PF =prototype release SF =serial release	Material No.: 2242280 Revision No.: 02_00_01
---	---

<b>W VÖGELE</b>	Document No.: Partial Document No.: Version No.:
	Series code: 23.AB Valid for Serial No.: from 0001 to XXXX
	Sheet plant: Sheet Location:

Steckerverzeichnis table of connectors	Sheet of <b>31</b> of <b>49</b> Sheets
---	--

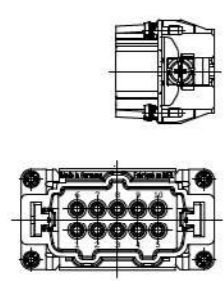
© 2012 by Joseph Vögele AG

Refer to protection notice ISO 16016

Schutzvermerk nach ISO 16016 beachten

Electric

**+4  
-X5p**

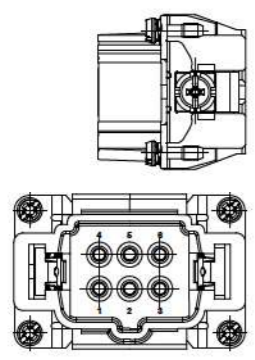


Anschluss Pin	Signal signal	Querverweis cross-reference
1	QPWM4	/19.3
2	T31.7	/17.1
3	QPWM3	/19.2
4		/17.1
5	QPWM2	/19.7
6	T31.5	/17.1
7	QPWM1	/19.6
8	T31.6	/17.1
9	crown adjusting p.	/21.2
10	signal sensor crown	/21.8
PE		

Codierung 5/10  
coding 5/10

**+12  
-X5p**

Versorgung links, Verbreiterungsteil 1,25m  
power supply left hand, extension 1,25m

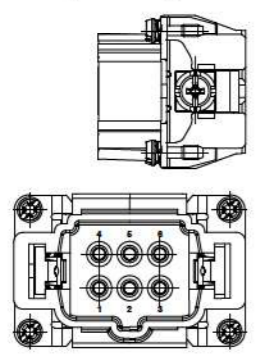


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/9.1
2	N	/9.1
3	L3	/9.1
4		
5	L2	/9.1
6		
PE	PE	/9.1

Codierung 3/6  
coding 3/6

**+15  
-X5p**

Kantenheizung links  
edge heating left hand

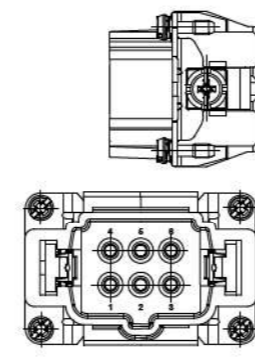


Anschluss Pin	Signal signal	Querverweis cross-reference
1		
2	N	/15.3
3	L3	/15.3
4		
5		
6		
PE	PE	/15.3

Codierung 3/6  
coding 3/6

**+15  
-X5p**

Kantenheizung links  
edge heating left hand

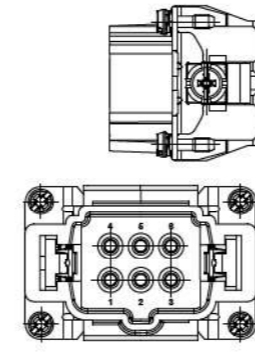


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/16.3
2	N	/16.3
3	L3	/16.3
4		
5		
6		
PE	PE	/16.3

Codierung 3/6  
coding 3/6

**+13  
-X5p**

Versorgung links, Verbreiterungsteil 0,75m  
power supply left hand, extension 0,75m

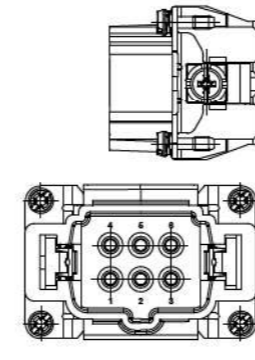


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/11.1
2	N	/11.1
3	L3	/11.1
4		
5	L2	/11.1
6		
PE	PE	/11.1

Codierung 3/6  
coding 3/6

**+14  
-X5p**

Versorgung links, Verbreiterungsteil 0,25m  
power supply left hand, extension 0,25m

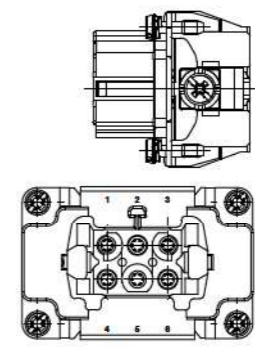


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/13.1
2	N	/13.1
3	L3	/13.1
4		
5	L2	/13.1
6		
PE	PE	/13.1

Codierung 3/6  
coding 3/6

**+11  
-X5s**

Abgang links, Ausziehbohle  
outlet left hand, extending screed

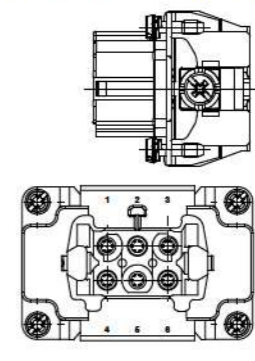


Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/7.8
2	N	/7.8
3	L3	/7.8
4		
5	L2	/7.8
6		
PE	PE	/7.8

Codierung 1/4  
coding 1/4

**+12  
-X5s**

Abgang links, Verbreiterungsteil 1,25m  
outlet left hand, extension 1,25m



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L3	/9.8
2	N	/9.8
3	L1	/9.8
4		
5	L2	/9.8
6		
PE	PE	/9.8

Codierung 1/4  
coding 1/4

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date 15.08.2012		date 10.09.2012		date 28.07.2016		SF AE=changable		2242280				32	
name Heindtel		name Berlinghof		name Heindtel		PF=prototype release		Revision No.:		Series code: 23.AB		Valid for Serial No.:	
E - CAE		Document type: ESP		Function group No.: 19		SF=serial release		02_00_01		from 0001 to XXXX		table of connectors	
										Sheet plant:		49	
										Sheet Location:		Sheets	

© 2012 by Joseph Vögele AG



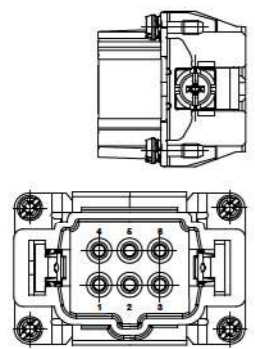


Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

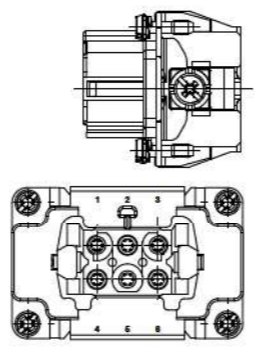
**+14  
-X6p**  
Versorgung rechts, Verbreiterungsteil 0,25m  
power supply right hand, extension 0,25m



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/14.1
2	N	/14.1
3	L3	/14.1
4		
5	L2	/14.1
6		
PE	PE	/14.1

Codierung 3/6  
coding 3/6

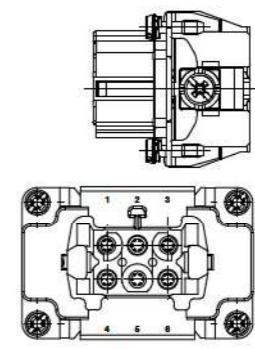
**+12  
-X6s**  
Abgang rechts, Verbreiterungsteil 1,25m  
outlet right hand, extension 1,25m



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/10.8
2	N	/10.8
3	L2	/10.8
4		
5	L3	/10.8
6		
PE	PE	/10.8

Codierung 1/4  
coding 1/4

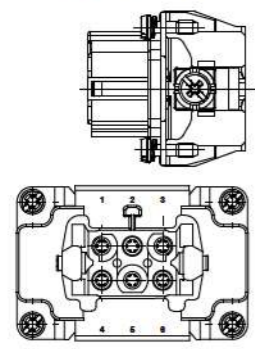
**+14  
-X6s**  
Abgang rechts, Verbreiterungsteil 0,25m  
outlet right hand, extension 0,25m



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/14.8
2	N	/14.8
3	L2	/14.8
4		
5	L3	/14.8
6		
PE	PE	/14.8

Codierung 1/4  
coding 1/4

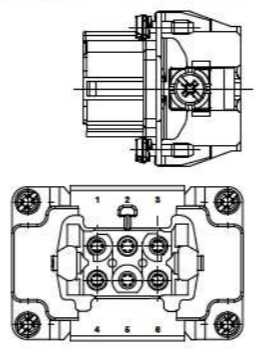
**+11  
-X6s**  
Abgang rechts, Ausziehbohle  
outlet right hand, extending screed



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/8.8
2	N	/8.8
3	L3	/8.8
4		
5	L2	/8.8
6		
PE	PE	/8.8

Codierung 1/4  
coding 1/4

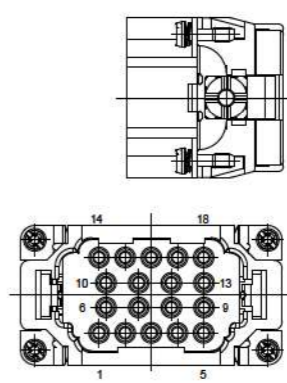
**+13  
-X6s**  
Abgang rechts, Verbreiterungsteil 0,75m  
outlet right hand, extension 0,75m



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L1	/12.8
2	N	/12.8
3	L2	/12.8
4		
5	L3	/12.8
6		
PE	PE	/12.8

Codierung 1/4  
coding 1/4

**+11  
-X7p**



Anschluss Pin	Signal signal	Querverweis cross-reference
1		
2		
3		
4		
5	MC/NOT-0	/28.2
6	MC/NOT-0	/28.2
7	MC/NOT+0	/28.2
8	MC/NOT+0	/28.2
9	#52	/28.2
10	#53	/28.2
11	#52	/28.3
12	#53	/28.3
13		
14		
15		
16		
17		
18		
PE		

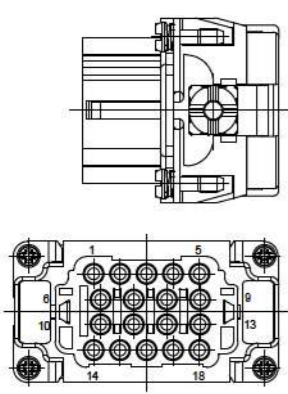
Codierung 1/18  
coding 1/18

<b>Drawing by:</b> date 15.08.2012 name Heindtel E - CAE	<b>Approved by:</b> date 10.09.2012 name Berlinghof Document type: <b>ESP</b>	<b>last change:</b> date 28.07.2016 name Heindtel Function group No.: <b>19</b>	<b>Status:</b> SF AE=changable PF=prototype release SF=serial release	Material No.: 2242280 Revision No.: 02_00_01		Document No.: Partial Document No.: Version No.: Series code: 23.AB Valid for Serial No.: from 0001 to XXXX Sheet plant: Sheet Location:	Steckerverzeichnis table of connectors	Sheet <b>34</b> of <b>49</b> Sheets
---	---	---	--	---	--	---	---	--

© 2012 by Joseph Vögele AG

Refer to protection notice ISO 16016

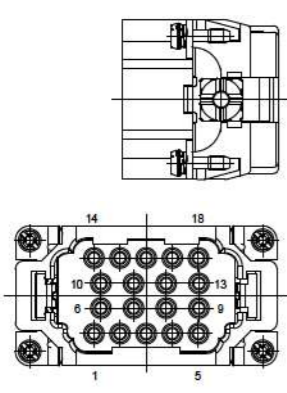
+11  
-X7s



Anschluss Pin	Signal signal	Querverweis cross-reference
1	+24VDC	/28.2
2	+24VDC	/28.2
3	T31	/28.2
4	T31	/28.2
5	MC/NOT-0	/28.2
6	MC/NOT-0	/28.2
7	MC/NOT+0	/28.2
8	MC/NOT+0	/28.2
9	CAN1_L	/28.2
10	CAN1_H	/28.2
11	CAN1_L	/28.3
12	CAN1_H	/28.3
13	T31	/28.3
14		/28.3
15		/28.3
16		/28.3
17		/28.3
18		/28.3
PE		/28.3

Codierung 5/14  
coding 5/14

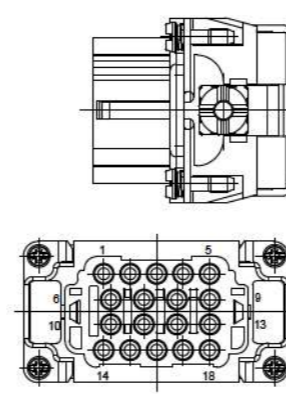
+11  
-X8p



Anschluss Pin	Signal signal	Querverweis cross-reference
1		
2		
3		
4		
5	MC/NOT-0	/28.6
6	MC/NOT-0	/28.6
7	MC/NOT+0	/28.6
8	MC/NOT+0	/28.6
9	#50	/28.6
10	#51	/28.6
11	#50	/28.7
12	#51	/28.7
13		
14		
15		
16		
17		
18		
PE		

Codierung 1/18  
coding 1/18

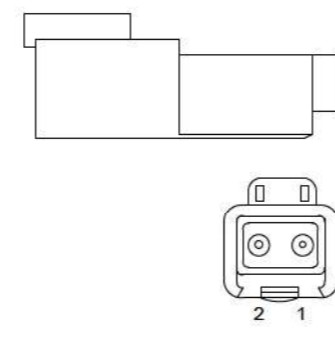
+11  
-X8s



Anschluss Pin	Signal signal	Querverweis cross-reference
1	+24VDC	/28.6
2	+24VDC	/28.6
3	T31	/28.6
4	T31	/28.6
5	MC/NOT-0	/28.6
6	MC/NOT-0	/28.6
7	MC/NOT+0	/28.6
8	MC/NOT+0	/28.6
9	CAN1_L	/28.6
10	CAN1_H	/28.6
11	CAN1_L	/28.7
12	CAN1_H	/28.7
13	L+	/28.7
14		/28.7
15		/28.7
16		/28.7
17		/28.7
18		/28.7
PE		/28.7

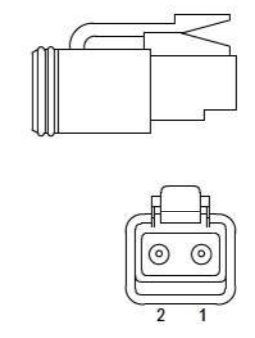
Codierung 5/14  
coding 5/14

+11  
-X9p



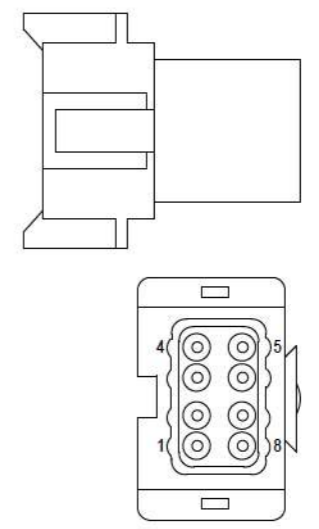
Anschluss Pin	Signal signal	Querverweis cross-reference
1	screed plate sensor	/26.2
2	screed plate sensor	/26.3

+11  
-X9s



Anschluss Pin	Signal signal	Querverweis cross-reference
1	screed plate sensor	/26.2
2	screed plate sensor	/26.3

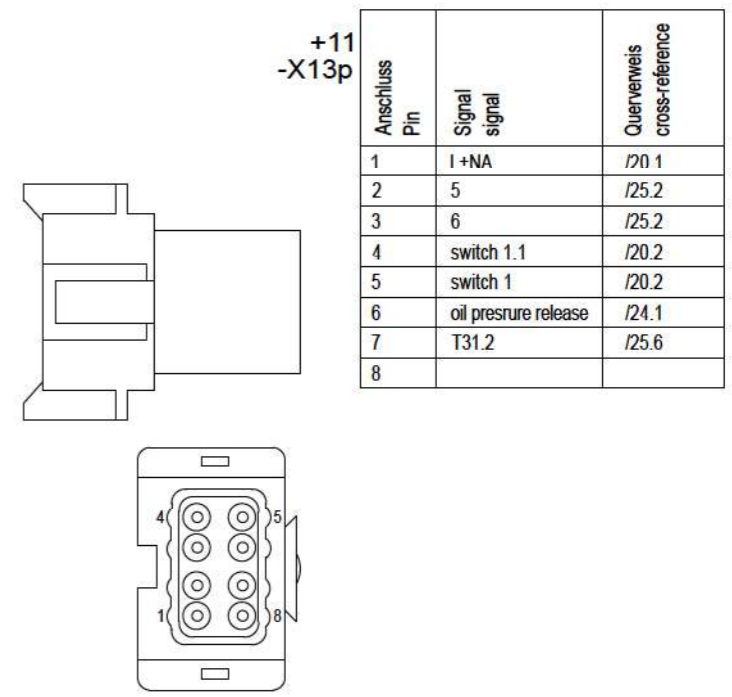
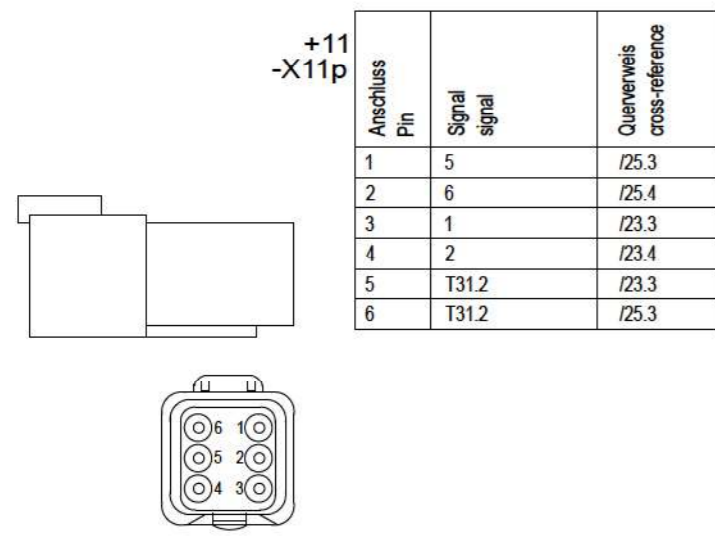
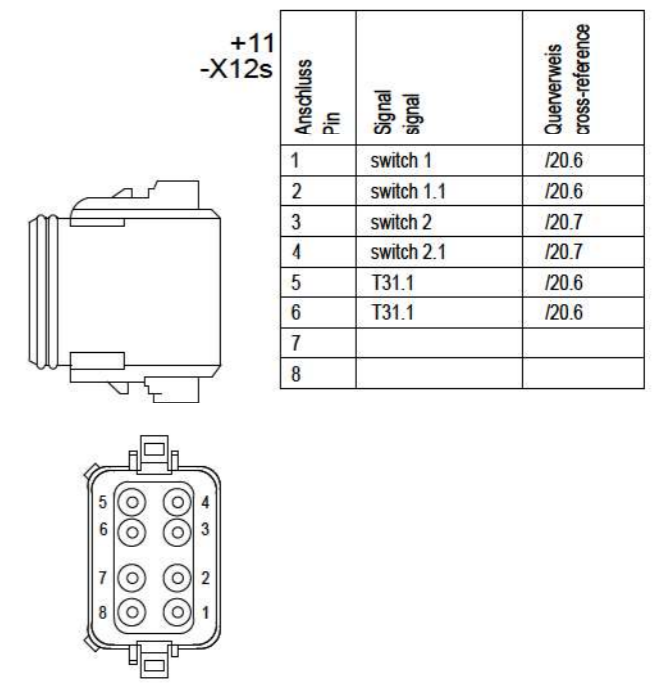
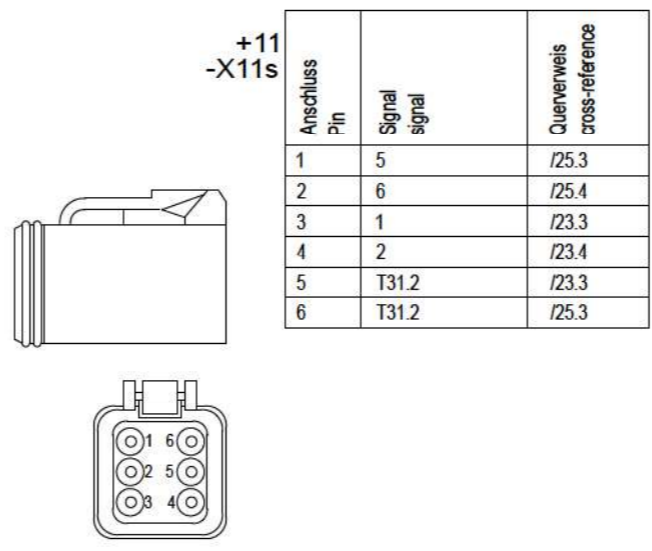
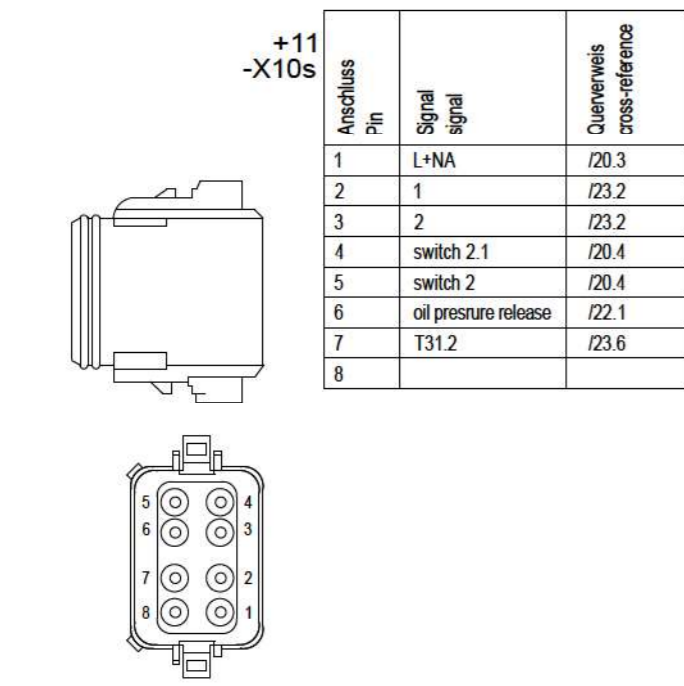
+11  
-X10p



Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/20.3
2	1	/23.2
3	2	/23.2
4	switch 2.1	/20.4
5	switch 2	/20.4
6	oil pressure release	/22.1
7	T31.2	/23.6
8		

<b>Drawing by:</b> date 15.08.2012 name Heindtel E - CAE	<b>Approved by:</b> date 10.09.2012 name Berlinghof <b>ESP</b>	<b>last change:</b> date 28.07.2016 name Heindtel <b>19</b>	<b>Status:</b> <b>SF</b> AE =changable PF =prototype release SF =serial release	Material No.: 2242280 Revision No.: 02_00_01		Document No.: Partial Document No.: Version No.: Series code: 23.AB Valid for Serial No.: from 0001 to XXXX Sheet plant: Sheet Location:	<b>Steckerverzeichnis</b> <b>table of connectors</b>	Sheet <b>35</b> of <b>49</b> Sheets
---	---	--	--	---	--	---	---	--

© 2012 by Joseph Vögele AG

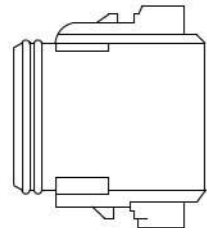


<b>Drawing by:</b> date 15.08.2012 name Heindtel E - CAE	<b>Approved by:</b> date 10.09.2012 name Berlinghof Document type: <b>ESP</b>	<b>last change:</b> date 28.07.2016 name Heindtel Function group No.: <b>19</b>
---	---	---

<b>Status:</b> <b>SF</b> AE =changable PF =prototype release SF =serial release	Material No.: 2242280 Revision No.: 02_00_01
---	---

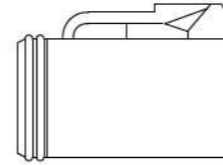
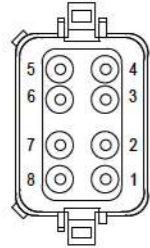
	Document No.: Partial Document No.: Version No.:
	Series code: 23.AB Valid for Serial No.: from 0001 to XXXX
	Sheet plant:
	Sheet Location:

<b>Steckerverzeichnis table of connectors</b>
---



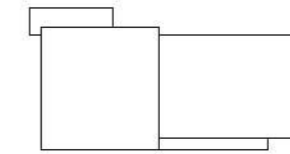
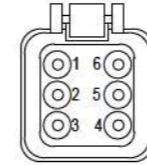
+11  
-X13s

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/20.1
2	5	/25.2
3	6	/25.2
4	switch 1.1	/20.2
5	switch 1	/20.2
6	oil presrure release	/24.1
7	T31.2	/25.6
8		



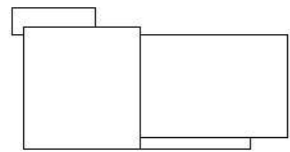
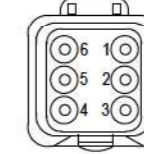
+11  
-X15s

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/22.3
2	1	/22.4
3	2	/22.4
4	T31.2	/23.6
5	oil presrure release	/22.3
6		



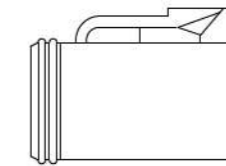
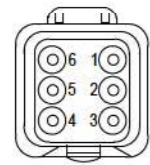
+11  
-X17p

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/24.3
2	5	/24.4
3	6	/24.4
4	T31.2	/25.6
5	oil presrure release	/24.3
6		



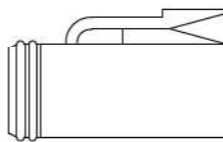
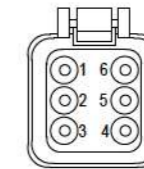
+11  
-X15p

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/22.3
2	1	/22.4
3	2	/22.4
4	T31.2	/23.6
5	oil presrure release	/22.3
6		



+11  
-X17s

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/24.3
2	5	/24.4
3	6	/24.4
4	T31.2	/25.6
5	oil presrure release	/24.3
6		



+11  
-X16s

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/20.3
2	switch 2	/20.4
3	switch 2.1	/20.4
4	oil presrure release	/20.4



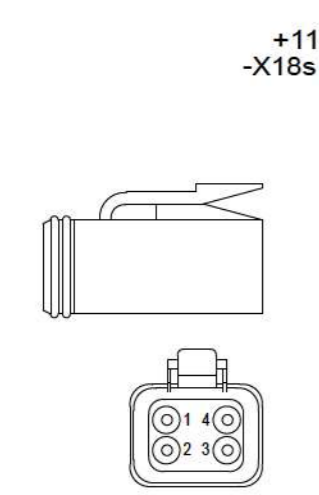
Drawing by:		Approved by:		last change:		Status:		Material No.:	
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release		2242280	
name	Heindtel	name	Berlinghof	name	Heindtel			Revision No.:	
E - CAE		Document type:		Function group No.:					
		<b>ESP</b>		<b>19</b>					

Document No.:		Partial Document No.:		Version No.:	
Series code:		Valid for Serial No.:			
23.AB		from 0001 to XXXX			
Sheet plant:					
Sheet Location:					



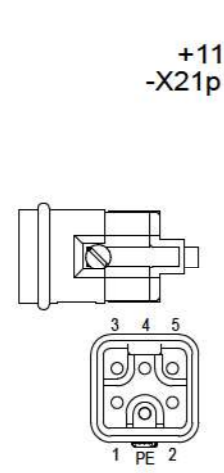
Document No.:		Partial Document No.:		Version No.:	
Series code:		Valid for Serial No.:			
23.AB		from 0001 to XXXX			
Sheet plant:					
Sheet Location:					

Steckerverzeichnis		table of connectors	
--------------------	--	---------------------	--



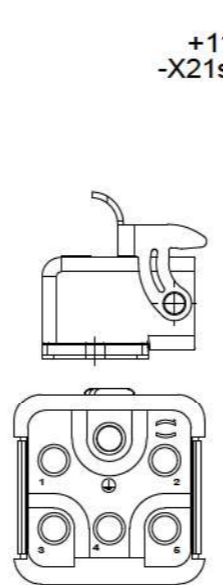
**+11  
-X18s**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/20.1
2	switch 1	/20.2
3	switch 1.1	/20.2
4	oil presrure release	/20.2



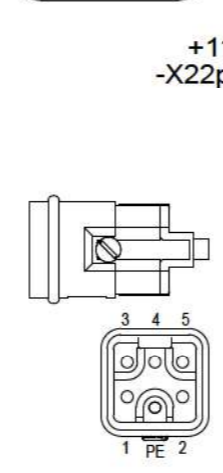
**+11  
-X21p**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/22.3
2	1	/22.4
3	2	/22.4
4	T31.2	/23.6
5	oil presrure release	/22.3
PE		



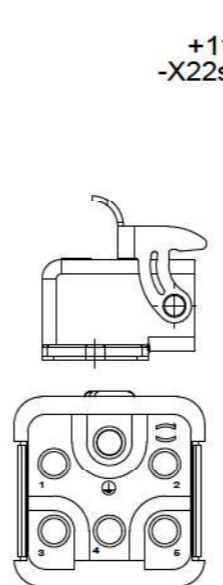
**+11  
-X21s**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/22.3
2	1	/22.4
3	2	/22.4
4	T31.2	/23.6
5	oil presrure release	/22.3
PE		



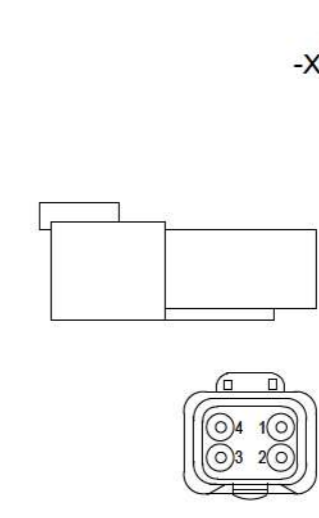
**+11  
-X22p**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/24.3
2	5	/24.4
3	6	/24.4
4	T31.2	/25.6
5	oil presrure release	/24.3
PE		



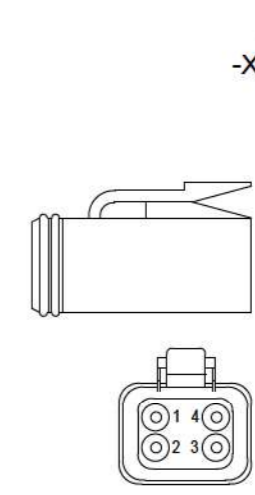
**+11  
-X22s**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+NA	/24.3
2	5	/24.4
3	6	/24.4
4	T31.2	/25.6
5	oil presrure release	/24.3
PE		



**+11  
-X24p**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+	/27.6
2	T31.5	/27.6
3	L+	/27.7
4		



**+11  
-X24s**

Anschluss Pin	Signal signal	Querverweis cross-reference
1	L+	/27.6
2	T31.5	/27.6
3	L+	/27.7
4		

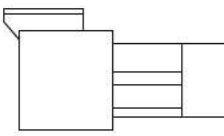
<b>Drawing by:</b>	<b>Approved by:</b>	<b>last change:</b>	<b>Status:</b>	<b>Material No.:</b>	<b>Document No.:</b> Partial Document No.: Version No.:	<b>Steckerverzeichnis table of connectors</b>	Sheet
date 15.08.2012	date 10.09.2012	date 28.07.2016	<b>SF</b> AE =changable PF =prototype release SF =serial release	2242280	Series code: Valid for Serial No.:		<b>38</b> of
name Heindtel	name Berlinghof	name Heindtel		Revision No.: 02_00_01	23.AB from 0001 to XXXX		
E - CAE	Document type: <b>ESP</b>	Function group No.: <b>19</b>		Sheet plant: Sheet Location:			

Electric

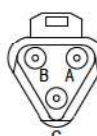
Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

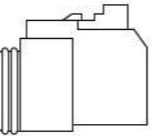
**+11  
-X25p**



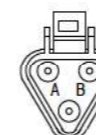
Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.6
B	T31.5	/27.6
C	L+	/27.6



**+11  
-X26s**




Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.3
B	T31.2	/27.3
C	L+	/27.4

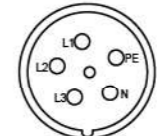


**+5  
-X32p**

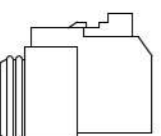
Bohlenheizung linke Seite  
screed heating, left hand



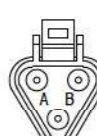
Anschluss Pin	Signal signal	Querverweis cross-reference
L1	L1	/7.1
L2	L2	/7.1
L3	L3	/7.1
N	N	/7.1
PE	PE	/7.1



**+11  
-X25s**

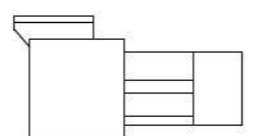


Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.6
B	T31.5	/27.6
C	L+	/27.7

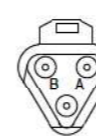


**+11  
-X27p**

Breitenmessung, links  
width measurement, left hand

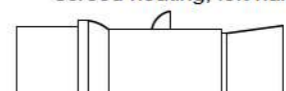


Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.3
B	T31.2	/27.3
C	L+	/27.3




**+5  
-X33p**

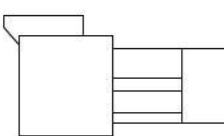
Bohlenheizung linke Seite  
screed heating, left hand



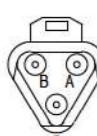
Anschluss Pin	Signal signal	Querverweis cross-reference
L1	L1	/7.1
L2	L2	/7.1
L3	L3	/7.1
N	N	/7.1
PE	PE	/7.1



**+11  
-X26p**

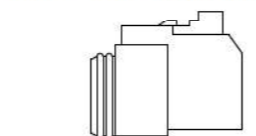


Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.3
B	T31.2	/27.3
C	L+	/27.4

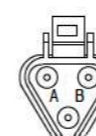


**+11  
-X27s**

Breitenmessung, links  
width measurement, left hand




Anschluss Pin	Signal signal	Querverweis cross-reference
A	L+	/27.3
B	T31.2	/27.3
C	L+	/27.4




**+5  
-X34p**

Bohlenheizung rechte Seite  
screed heating, right hand




Anschluss Pin	Signal signal	Querverweis cross-reference
L1	L1	/8.1
L2	L2	/8.1
L3	L3	/8.1
N	N	/8.1
PE	PE	/8.1

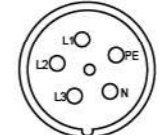



**+5  
-X35p**

Bohlenheizung rechte Seite  
screed heating, right hand



Anschluss Pin	Signal signal	Querverweis cross-reference
L1	L1	/8.1
L2	L2	/8.1
L3	L3	/8.1
N	N	/8.1
PE	PE	/8.1



Drawing by: date 15.08.2012 name Heindtel E - CAE		Approved by: date 10.09.2012 name Berlinghof Document type: <b>ESP</b>		last change: date 28.07.2016 name Heindtel Function group No.:		Status: <b>SF</b> AE =changable PF =prototype release SF =serial release		Material No.: 2242280 Revision No.: 02_00_01				Document No.: Partial Document No.: Version No.:		Series code: <b>23.AB</b> Valid for Serial No.: from <b>0001</b> to <b>XXXX</b>		Sheet plant: Sheet Location:		Sheet <b>39</b> of <b>49</b> Sheets	
--	--	--	--	---	--	---	--	---	--	---	--	--	--	--	--	---------------------------------	--	--	--

© 2012 by Joseph Vögele AG

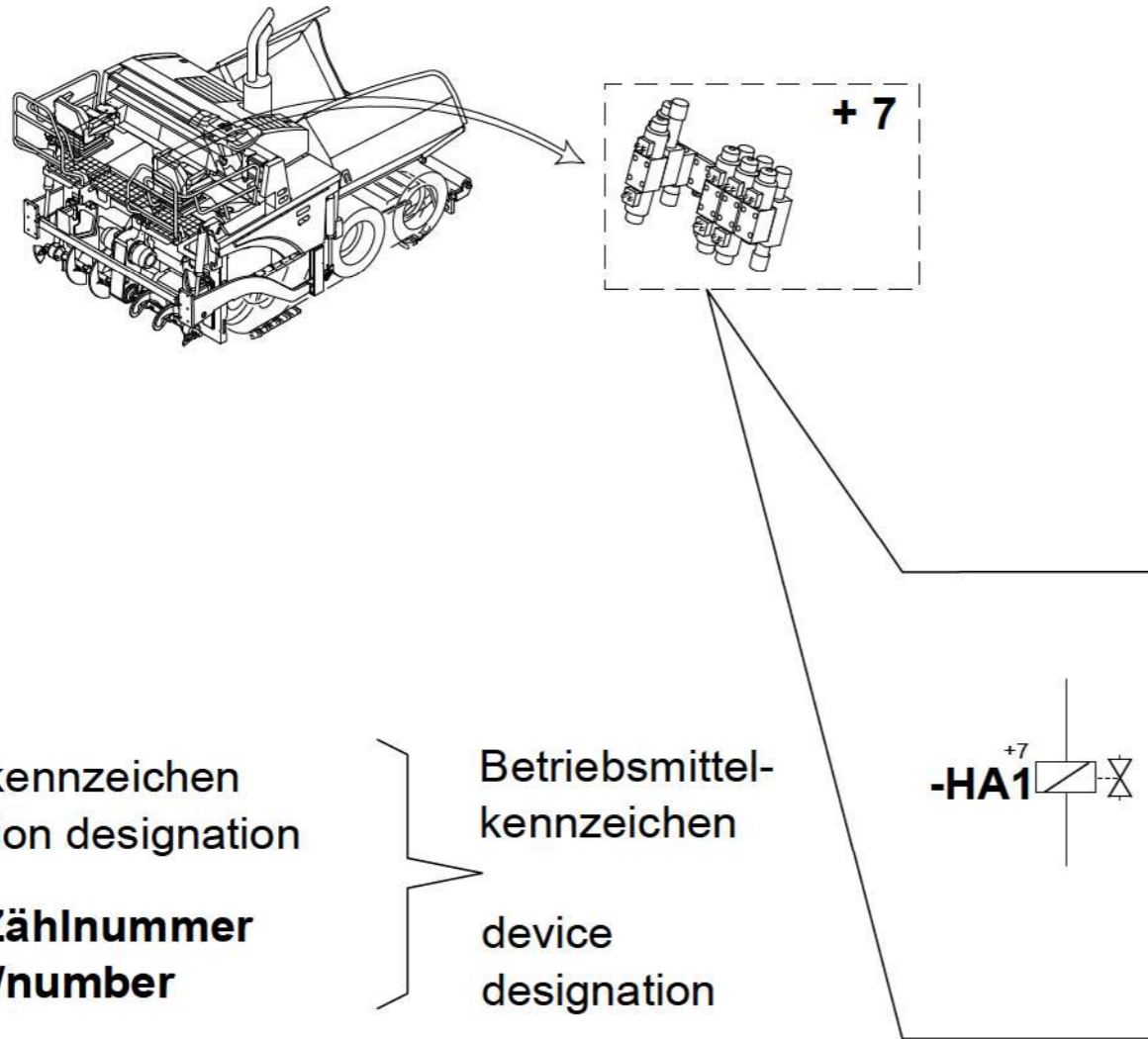
Electric

Schutzvermerk nach ISO 16016 beachten

Refer to protection notice ISO 16016

## Aufbau Betriebsmittelkennzeichen / device designation configuration

## Bezeichnungserklärungen / designation explanations



+ Ortskennzeichen  
location designation

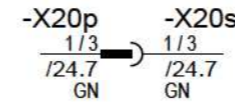
- Art/Zählnummer  
type/number

Betriebsmittel-  
kennzeichen

device  
designation

- Minimales Betriebsmittelkennzeichen: Nur Art/Zählnummer  
minimal device designation: type/number only
- Maximales Betriebsmittelkennzeichen: Ortskennzeichen und Art/Zählnummer  
maximum device designation: location designation and type/number
- **Ortskennzeichen und Art/Zählnummer sind nur IN KOMBINATION eindeutig!**  
location designation and type/number are only explicitly **IN COMBINATION!**

### Stecker zu Stecker Verbindung / connector to connector connection



-X20p  
-X20s  
1/3  
/24.7  
GN

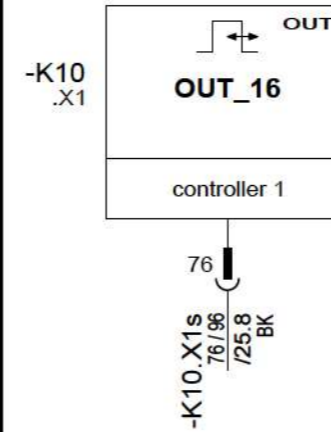
### Deutsch

p = Stiftkontakt  
s = Buchsenkontakt  
Kontakt 1 von 3 Kontakten  
Steckermaster auf Blatt 24,  
Strompfad 7  
Gehäusefarbe Stecker = Grün

### English

p = pin contact  
s = socket contact  
contact 1 of 3 contacts  
connector master on sheet 24,  
current path 7  
connector housing colour = green

### Gerät zu Stecker Verbindung / device to connector connection



-K10  
.X1  
OUT  
OUT\_16  
controller 1  
76  
-K10.X1s

Art/Zählnummer Gerät  
Anschlussstecker X1 am Gerät  
Schnittstellentyp  
Schnittstellename  
Gerätename  
Kontakt des Anschlusssteckers

type/number device  
connector plug X1 on device  
interface type  
interface name  
device name  
contact of connector plug

Art/Zählnummer Gegenstecker  
(Stecker erbt zusätzlich zur  
eigenen Art/Zählnummer, die  
Art/Zählnummer des Gerätes  
an dem er angeschlossen ist.  
Dadurch ist eine eindeutige  
Zuordnung von Gerät und  
zugehörigem Stecker möglich)

type/number mating connector  
(connector inherits additionally to  
its own type/number, the  
type/number of the device it is  
connected to.  
Thus permits a clear allocation of  
device and appendant mating  
connector )

© 2012 by Joseph Vögele AG

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Erklärung Aufbau Betriebsmittelkennzeichen Explanation device designation layout	Sheet 40 of 49 Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code:	Valid for Serial No.:		
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.:		23.AB	from 0001 to XXXX		
E - CAE		Document type:		Function group No.:		SF =serial release	02_00_01		Sheet plant:				
ESP		19						Sheet Location:					



## Gerätekenbuchstaben, elektrisch (beispielhaft) / device code letter, electric (exemplified)

<u>Gerätekenbuchstabe / device code letter</u>	<u>Deutsch</u>	<u>English</u>	<u>Gerätekenbuchstabe / device code letter</u>	<u>Deutsch</u>	<u>English</u>
- A	Bauteile mit zwei oder mehr Aufgaben Dieselmotor Radio	devices with two or more tasks diesel engine radio	- P	Hupe Leuchtdiode Signallampe Fahrtenschreiber anzeigendes Messgerät	horn light emitting diode signal lamp tachograph displaying measuring instrument
- B	Sensor Näherungsschalter Messwandler	sensor proximity switch measuring transformer	- R	Diode Widerstand	diode resistor
- C	Kondensator	capacitor	- S	Schalter	switch
- E	Heizung Lampe Leuchte	heating lamp light	- T	Gleichrichter Verstärker Transformator Frequenzwandler	rectifier amplifier transformer frequency converter
- F	Sicherung Leitungsschutzschalter Motorschutzschalter	fuse circuit breaker motor protection switch	- W	Kabel Elektrische Leitung Sammelschiene	cable wire bus bar
- G	Batterie Generator	battery generator	- X	Klemme Klemmenleiste Steckdose	terminal terminal strip outlet
- K	Relais Schütz Regler Prozessrechner SPS-Steuerung	relay contactor controller process computer programmable logic controller (PLC)			
- M	Elektromotor Betätigungsspule	electric motor coil			














Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Erklärung Gerätekenbuchstaben, elektrisch Explanation device code letter, electric	Sheet 41 of 49 Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280	Series code:	Valid for Serial No.:	from 0001 to XXXX		
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.:	02_00_01	23.AB				
E - CAE		Document type:		Function group No.:				Sheet plant:		Sheet Location:			
ESP		19											

Gerätebuchstaben, hydraulisch (beispielhaft) / device code letter, hydraulic (exemplified)			Bezeichnungen Versorgungsspannungen / designations supply voltages		
<u>Gerätebuchstabe / device code letter</u>	<u>Deutsch</u>	<u>English</u>	<u>Versorgungssp. / supply voltages</u>	<u>Deutsch</u>	<u>English</u>
- HA	Ventilblock	valve-block	UB	Dauerversorgungsspannung	supply, continuous-voltage
			US	Versorgung, allgemein	supply, general
- HG	Hydraulikpumpe	hydraulic pump	UL	Logikversorgung	supply logic
			UI	Zündung	supply ignition
- HK	Mengenteiler Prioritätsventil Stromregelventil hydraulisch	flow divider priority valve hydraulic flow control valve	UR	Analogversorgung, (Referenzspannung)	supply analog, (reference voltage)
			UP	Leistungsversorgung	supply, power
- HM	Hydraulikmotor Hydraulikzylinder	hydraulic motor hydraulic cylinder	GND	Masse	ground
			AGND	Masse, analog	ground, analog
- HQ	Bremsventil Kugelhahn Lenkeinheit Wegeventil	braking valve ball valve steering unit direction control valve			
- HV	Hydraulikfilter	hydraulic filter			
- Ma	Ventil Magnetspule a	valve coil a			
- Mb	Ventil Magnetspule b	valve coil b			

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Erklärung Gerätebuchstaben, hydraulisch Explanation device code letter, hydraulic	Sheet of 42 49 Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.:	02_00_01		Sheet plant: Sheet Location:			
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>									

### Symbolerklärungen \* / symbol explanations \*






### Erklärung SPS-Adressen / explanation SPS-addresses

<u>Symbol / symbol</u>	<u>Bedeutung / standing</u>	<u>Symbol / symbol</u>	<u>Bedeutung / standing</u>	<u>Gerätebuchstabe / device code letter</u>	<u>Deutsch</u>	<u>English</u>	
SUPPLY 24V DC	Spannungsversorgung power supply	 OUT	Rechteckgenerator square-wave generator	ID	digitaler Eingang	digital input	
 SUPPLY	Masse ground	 ECU	Anschluss Motorsteuergerät connection to engine control unit	IU	Spannungseingang	voltage input	
SUPPLY PE	Schutzleiter protection earth	*Standardsymbole sind von DIN EN 60671 abgeleitet Standard symbols are derived from DIN EN 60617		II	Stromeingang	current input	
COM CAN bus	CAN Busleitung CAN bus line			IC	Zähleingang	counter input	
 COM	Abschlusswiderstand terminating resistor			IF	Frequenzeingang	frequency input	
COM RS 232	RS 232 Schnittstellenleitung RS 232 interface circuit			ID_Test	Testeingang, digital	test input, digital	
 IN	Digitaleingang (allgemein) digital input (in general)			QD	digitaler Ausgang	digital input	
 IN	Pulseingang pulse input			QU	Spannungsausgang	voltage output	
 IN	Zählereingang counter input			QI	Stromausgang	current output	
 IN	Spannungseingang voltage input			QPWM	Pulsweitenmodulation	pulse-width-modulation-output	
 IN	Stromeingang current input			QD_Error	Fehlerausgang, digital	fault output, digital	
 IN	Widerstandseingang resistance input						
 IN	Frequenzeingang frequency input						
 OUT	Digitalausgang digital output						
 OUT	Pulsweitenmodulationsausgang pulse width modulation output						
OUT 0...20mA	analoge Stromquelle analogue current supply						

Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016

© 2012 by Joseph Vögele AG

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Symbolerklärung Funktionseinheiten Symbol explanation of functional units	Sheet <b>43</b> of <b>49</b> Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01		Sheet plant: Sheet Location:			
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>									

Linienformate / line formats			Farbbezeichnungen / colour designations		
<u>Linienart / line type</u>	<u>Linienstärke / Grafik / line thickness / graphic</u>	<u>Bedeutung / standing</u>	<u>Abkürzungen Farbbezeichnungen / colour abbreviations</u>	<u>Deutsch</u>	<u>English</u>
Volllinie / solid line	 0,25mm	Standard / standard	BU	blau	blue
			BN	braun	brown
Strichpunktlinie / dash-dotted line	 0,25mm	PE (Schutzerde) / PE (protecting earth)	YE	gelb	yellow
			GN	grün	green
Strichlinie / dashed line	 0,25mm	Bauteilumrandung, bzw. Zusammengehörigkeit / component border, togetherness	GY	grau	grey
			OG	orange	orange
Strichlinie / dashed line	 0,25mm	Optionen / options	PK	rosa	pink
			RD	rot	red
Punktlinie / dotted line	 0,75mm	Leiterbahnverbindungen einer Platine (nicht als Drahtleitung ausgeführte Verbindung) / conductor line of a edge board	BK	schwarz	black
			TQ	türkis	turquoise
			VT	violett	violet
			WH	weiss	white

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Erklärung Linienformate, Farbbezeichnungen explanation line formats, colour designation	Sheet of 44 49 Sheets
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280		Series code: 23.AB Valid for Serial No.: from 0001 to XXXX			
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.: 02_00_01		Sheet plant:			
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>						Sheet Location:			

Ort / location	Beschreibung / description	Ort / location	Beschreibung / description
4	Bohlensteuerungs-/Nivellierschnittstelle screed control- /levelling system- interface		
5	Heizungskasten screed heating box		
11	Grundbohle basic screed		
12	Verbreiterungsteil 1,25m extension 1,25m		
13	Verbreiterungsteil 0,75m extension 0,75m		
14	Verbreiterungsteil 0,25m extension 0,25m		
15	Kantenheizung edge heating		

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Übersicht Ortskennzeichen overview locations		Sheet		
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b>	AE =changable	2242280	Series code:	Valid for Serial No.:	from 0001 to XXXX			45		
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.:	02_00_01	Sheet plant:				49		
E - CAE		Document type:		Function group No.:				Sheet Location:						Sheets		
<b>ESP</b>		<b>19</b>														

Electric  
Schutzvermerk nach ISO 16016 beachten  
Refer to protection notice ISO 16016  
© 2012 by Joseph Vögele AG

1 2 3 4 5 6 7 8

Erklärung

explanation

Anschluss Drehstromleitungen

connection three-phase wires

L1 = schwarz  
L2 = grau  
L3 = braun


L1 = black  
L2 = grey  
L3 = brown

Codierung Stecker

coding connector

Zugang Anbauteil - Sperrbolzen bei Pin 3 und 6  
Abgang Anbauteil - Sperrbolzen bei Pin 1 und 4

input widening - locking at pin 3 and 6  
output widening - locking at pin 1 and 4

Drawing by:		Approved by:		last change:		Status: <b>SF</b> AE =changable PF =prototype release SF =serial release	Material No.: 2242280 Revision No.: 02_00_01		Document No.: Partial Document No.: Version No.:			Erklärung Bohle explanation screed	Sheet
date	15.08.2012	date	10.09.2012	date	28.07.2016				Series code:	Valid for Serial No.:			of
name	Heindtel	name	Berlinghof	name	Heindtel				23.AB	from 0001 to XXXX			46
E - CAE		Document type: <b>ESP</b>		Function group No.: <b>19</b>		Sheet plant: Sheet Location:			49 Sheets				

1 2 3 4 5 6 7 8

Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet
-HA1.HQ1	/19.6	-HQ4	/25.8	+11 -E6	/7.2
-HA1.HQ1	/19.7	-HQ4.XMa	/31.2	+11 -E7	/7.3
-HA1.HQ1.XMa	/29.8	+4 -X1p	/31.2	+11 -P1	/7.2
-HA1.HQ1.XMb	/29.5	+4 -X2p	/31.5	+11 -P2	/7.5
-HA1.HQ2	/19.2	+4 -X4p	/31.8	+11 -P3	/8.2
-HA1.HQ2	/19.3	+4 -X5p	/32.2	+11 -P4	/8.5
-HA1.HQ2.XMa	/29.8	+4 -X6p	/33.5	+11 -S3	/22.5
-HA1.HQ2.XMb	/29.8	+5 -X32p	/39.8	+11 -S4	/22.7
-HA1.HQ3	/21.2	+5 -X33p	/39.8	+11 -S5	/24.5
-HA1.HQ3	/21.3	+5 -X34p	/39.8	+11 -S6	/24.7
-HA1.HQ3.XMa	/30.2	+5 -X35p	/39.8	+11 -X10p	/35.8
-HA1.HQ3.XMb	/30.2	+11 -B1	/26.2	+11 -X10s	/36.2
-HA1.HQ4	/21.5	+11 -B2	/21.7	+11 -X11p	/36.2
-HA1.HQ4.XMa	/30.2	+11 -B2.X1s	/29.2	+11 -X11s	/36.5
-HA2.HQ1	/23.3	+11 -B3	/26.6	+11 -X12s	/36.8
-HA2.HQ1	/23.4	+11 -B3.X1	/29.2	+11 -X13p	/36.8
-HA2.HQ1.XMa	/30.5	+11 -B3.X1s	/29.2	+11 -X13s	/37.2
-HA2.HQ1.XMb	/30.8	+11 -B4	/26.4	+11 -X15p	/37.2
-HA2.HQ2	/25.3	+11 -B4.X1	/29.5	+11 -X15s	/37.5
-HA2.HQ2	/25.4	+11 -B4.X1s	/29.5	+11 -X16s	/37.5
-HA2.HQ2.XMa	/30.5	+11 -B5	/27.3	+11 -X17p	/37.8
-HA2.HQ2.XMb	/30.5	+11 -B6	/27.6	+11 -X17s	/37.8
-HQ1	/23.6	+11 -E1	/7.5	+11 -X18s	/38.2
-HQ1.XMa	/30.8	+11 -E11	/8.2	+11 -X21p	/38.2
-HQ2	/25.6	+11 -E12	/8.3	+11 -X21s	/38.5
-HQ2.XMa	/30.8	+11 -E16	/8.5	+11 -X22p	/38.5
-HQ3	/23.8	+11 -E17	/8.7	+11 -X22s	/38.5
-HQ3.XMa	/31.2	+11 -E2	/7.7	+11 -X24p	/38.8

Refer to protection notice ISO 16016

Schutzvermerk nach ISO 16016 beachten

© 2012 by Joseph Vögele AG

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Betriebsmittelliste device list		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	<b>SF</b> AE=changable PF=prototype release SF=serial release	2242280				47 of 49 Sheets				
name	Heindtel	name	Berlinghof	name	Heindtel		Revision No.:		Series code: Valid for Serial No.:						
E - CAE		Document type:		Function group No.:			02_00_01		23.AB from 0001 to XXXX						
<b>ESP</b>									Sheet plant: Sheet Location:						

Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet
+11 -X24s	/38.8	+11 -X8s	/35.5	+14 -X5s	/33.2
+11 -X25p	/39.2	+11 -X9p	/35.5	+14 -X6p	/34.2
+11 -X25s	/39.2	+11 -X9s	/35.8	+14 -X6s	/34.8
+11 -X26p	/39.2	+12 -E1	/9.2	+15 -E11	/15.2
+11 -X26s	/39.5	+12 -E2	/9.4	+15 -E11	/16.1
+11 -X27p	/39.5	+12 -E6	/10.2	+15 -E12	/15.7
+11 -X27s	/39.5	+12 -E7	/10.3	+15 -E12	/16.7
+11 -X300 :Splice	/17.6	+12 -P1	/9.2	+15 -E13	/16.3
+11 -X301 :Splice	/17.3	+12 -P2	/10.2	+15 -E14	/16.6
+11 -X302 :Splice	/17.6	+12 -X5p	/32.2	+15 -R10	/22.5
+11 -X303 :Splice	/17.6	+12 -X5s	/32.8	+15 -R11	/22.7
+11 -X304 :Splice	/19.3	+12 -X6p	/33.5	+15 -R12	/22.8
+11 -X305 :Splice	/19.6	+12 -X6s	/34.5	+15 -R13	/22.6
+11 -X306 :Splice	/21.2	+13 -E1	/11.2	+15 -R14	/22.5
+11 -X307 :Splice	/22.1	+13 -E2	/11.4	+15 -R15	/24.5
+11 -X308 :Splice	/23.3	+13 -E6	/12.2	+15 -R16	/24.6
+11 -X309 :Splice	/25.3	+13 -E7	/12.3	+15 -R17	/24.7
+11 -X321 :Splice	/20.3	+13 -P1	/11.2	+15 -R18	/24.8
+11 -X322 :Splice	/22.1	+13 -P2	/12.2	+15 -R19	/24.6
+11 -X323 :Splice	/20.1	+13 -X5p	/32.5	+15 -R20	/24.5
+11 -X324 :Splice	/24.1	+13 -X5s	/33.2	+15 -R21	/24.7
+11 -X331 :Splice	/23.3	+13 -X6p	/33.8	+15 -R22	/24.8
+11 -X332 :Splice	/25.3	+13 -X6s	/34.5	+15 -R23	/24.6
+11 -X5s	/32.8	+14 -E1	/13.2	+15 -R24	/24.5
+11 -X6s	/34.2	+14 -E2	/13.4	+15 -R5	/22.5
+11 -X7p	/34.8	+14 -E6	/14.2	+15 -R6	/22.6
+11 -X7s	/35.2	+14 -E7	/14.3	+15 -R7	/22.7
+11 -X8p	/35.2	+14 -X5p	/32.5	+15 -R8	/22.8

Refer to protection notice ISO 16016


Schutzvermerk nach ISO 16016 beachten

© 2012 by Joseph Vögele AG

Drawing by:		Approved by:		last change:		<b>SF</b> AE=changable PF=prototype release SF=serial release	Material No.: 2242280 Revision No.: 02_00_01		Document No.: Partial Document No.: Version No.:			Betriebsmittelliste device list	Sheet
date	15.08.2012	date	10.09.2012	date	28.07.2016				Series code:	Valid for Serial No.:			48
name	Heindtel	name	Berlinghof	name	Heindtel				23.AB	from 0001 to XXXX			
E - CAE		Document type:		Function group No.:		Sheet plant: Sheet Location:			49	Sheets			
ESP													



Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet	Betriebsmittelkennzeichen / Device designation	Blatt / Sheet
+15 -R9	/22.6				
+15 -X1p	/31.5				
+15 -X1s	/31.5				
+15 -X2p	/31.8				
+15 -X2s	/31.8				
+15 -X5p	/32.2				
+15 -X5p	/32.5				
+15 -X6p	/33.8				
+15 -X6p	/33.8				

Drawing by:		Approved by:		last change:		Status:		Material No.:		Document No.: Partial Document No.: Version No.:		Sheet	
date	15.08.2012	date	10.09.2012	date	28.07.2016	SF	AE =changable	2242280				49	
name	Heindtel	name	Berlinghof	name	Heindtel		PF =prototype release	Revision No.:				of	
E - CAE		Document type:		Function group No.:			SF =serial release	02_00_01				49	
<b>ESP</b>												Betriebsmittelliste device list	
												Sheets	