GEKO
EISEMANN

Metallwarenfabrik Gemmingen GmbH
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Fax: +49 (0)7267 - 806 - 100
www.metallwarenfabrik.com

company
project Genset Series xxx10
drawing number
commission

general information

wiring coloring

bk	(black)	= power circuit
bl	(blue)	= neutral point
yegn	(yellow - green)	= protective conductor
gr	(gray)	= measurement wires
rd	(red)	= control circuit +
dbl	(dark blue)	= control circuit -

singel conductor label

Equipment identifying symbol / connection designation
e.g. -F1/1

create 12.01.2010
change 08.07.2010 from Foerch
number of pages 29

contents

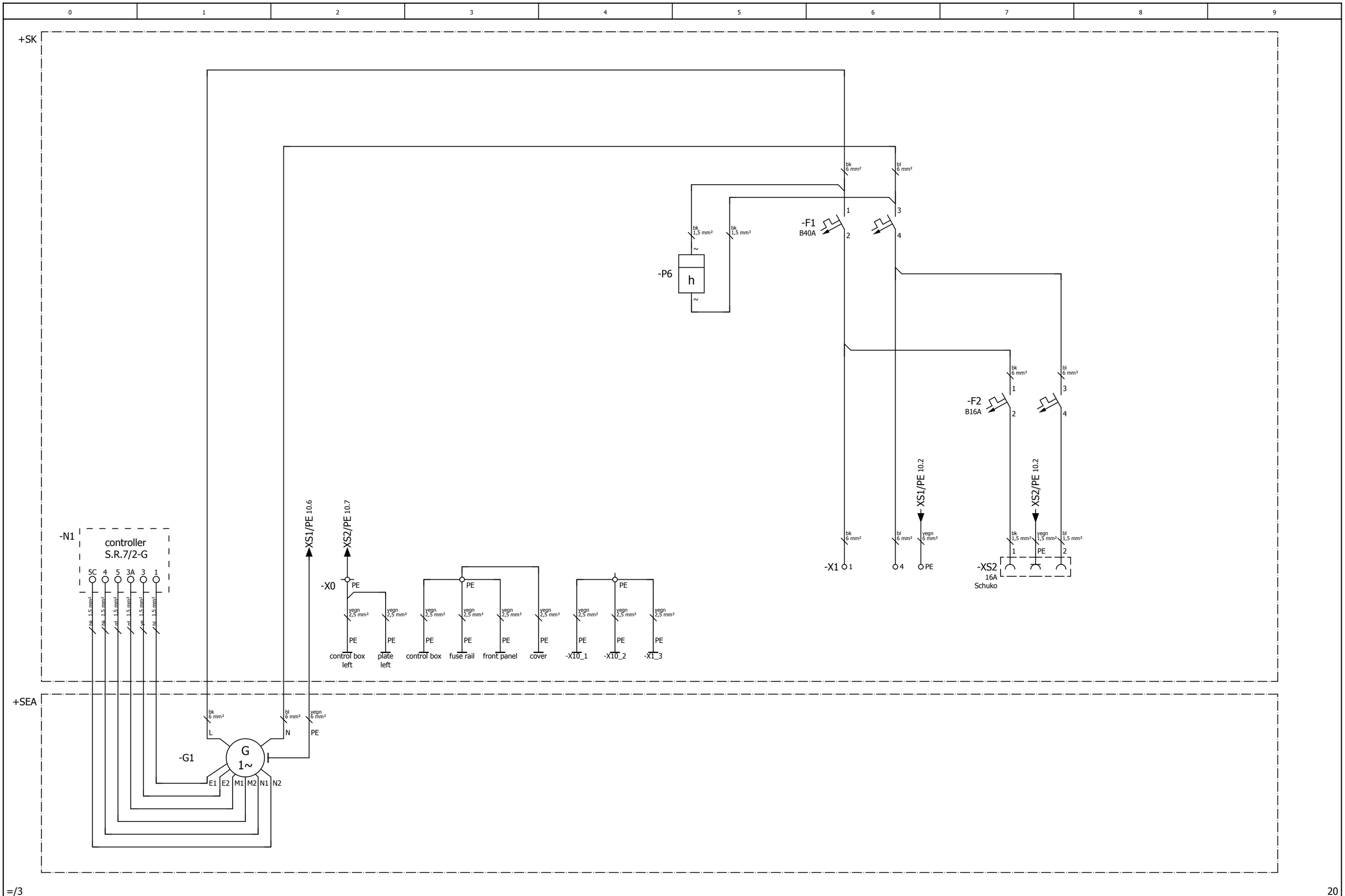
Spalte X: eine automatisch erzeugte Seite wurde manuell nachbearbeitet

GEKO_F06_001_en

page	page properties	page auxillary	date	editor	X
=+/1	cover		08.07.2010	Foerch	X
=+/2	contents		08.07.2010	Foerch	
=+/3	overview		08.07.2010	Foerch	
=11010_1+/10	power circuit 11010 (1~)		08.07.2010	Foerch	
=11010_1+/20	control circuit 11010 BLC200		08.07.2010	Foerch	
=11010_1+/99	picture		08.07.2010	Foerch	
=15010_1+/10	power circuit 15010 (1~)		08.07.2010	Foerch	
=15010_1+/20	control circuit 15010 BLC200		08.07.2010	Foerch	
=15010_1+/99	picture		08.07.2010	Foerch	
=11010_ABB_3+/10	power circuit 11010 (ABB 3~)		08.07.2010	Foerch	
=11010_ABB_3+/20	control circuit 11010 BLC200		08.07.2010	Foerch	
=11010_ABB_3+/99	picture		08.07.2010	Foerch	
=15010_ABB_3+/10	power circuit 15010 (ABB 3~)		08.07.2010	Foerch	
=15010_ABB_3+/20	control circuit 15010 BLC200		08.07.2010	Foerch	
=15010_ABB_3+/99	picture		08.07.2010	Foerch	
=20010_3+/1	terminal diagramm		08.07.2010	Foerch	
=20010_3+/2	terminal diagramm		08.07.2010	Foerch	
=20010_3+/3	terminal diagramm		08.07.2010	Foerch	
=20010_3+/4	terminal diagramm		08.07.2010	Foerch	
=20010_3+/10	power circuit 20010 ED-S/DEDA		08.07.2010	Foerch	
=20010_3+/20	control circuit 20010 ED-S/DEDA BLC200		08.07.2010	Foerch	
=20010_3+/99	picture		08.07.2010	Foerch	
=30010_3+/1	terminal diagramm		08.07.2010	Foerch	
=30010_3+/2	terminal diagramm		08.07.2010	Foerch	
=30010_3+/3	terminal diagramm		08.07.2010	Foerch	
=30010_3+/4	terminal diagramm		08.07.2010	Foerch	
=30010_3+/10	power circuit 30010 ED-S/DEDA		08.07.2010	Foerch	
=30010_3+/20	control circuit 30010 ED-S/DEDA BLC200		08.07.2010	Foerch	
=30010_3+/99	picture		08.07.2010	Foerch	

circuit diagramm	1~ single-phase
=11010_1	082106 - P11011DE, 11 kVA offen 1~ 082108 - T11011DE, 11 kVA SS 1~ 986810 - 11010 E -S/MEDA -offen 986812 - 11010 E -S/MEDA -SS
=15010_1	082110 - P15011DE, 15 kVA offen 1~ 082112 - T15011DE, 15 kVA SS 1~ 986814 - 15010 E -S/MEDA -offen 986817 - 15010 E-S/MEDA –SS

circuit diagramm	3~ three-phase
=11010_ABB_3	082105 - P11010DE, 11 kVA offen 3~ 082107 - T11010DE, 11 kVA SS 3~ 986811 - 11010 ED-S/MEDA –offen 986813 - 11010 ED-S/MEDA -SS
=15010_ABB_3	082109 - P15010DE, 15 kVA offen 3~ 082111 - T15010DE, 15 kVA SS 3~ 986815 - 15010 ED-S/MEDA -offen 986816 - 15010 ED-S/MEDA -SS
=20010_3	986801 - 20010 ED-S/MEDA -offen 986800 - 20010 ED-S/MEDA -SS
=30010_3	986803 - 30010 ED-S/MEDA -offen 986802 - 30010 ED-S/MEDA -SS



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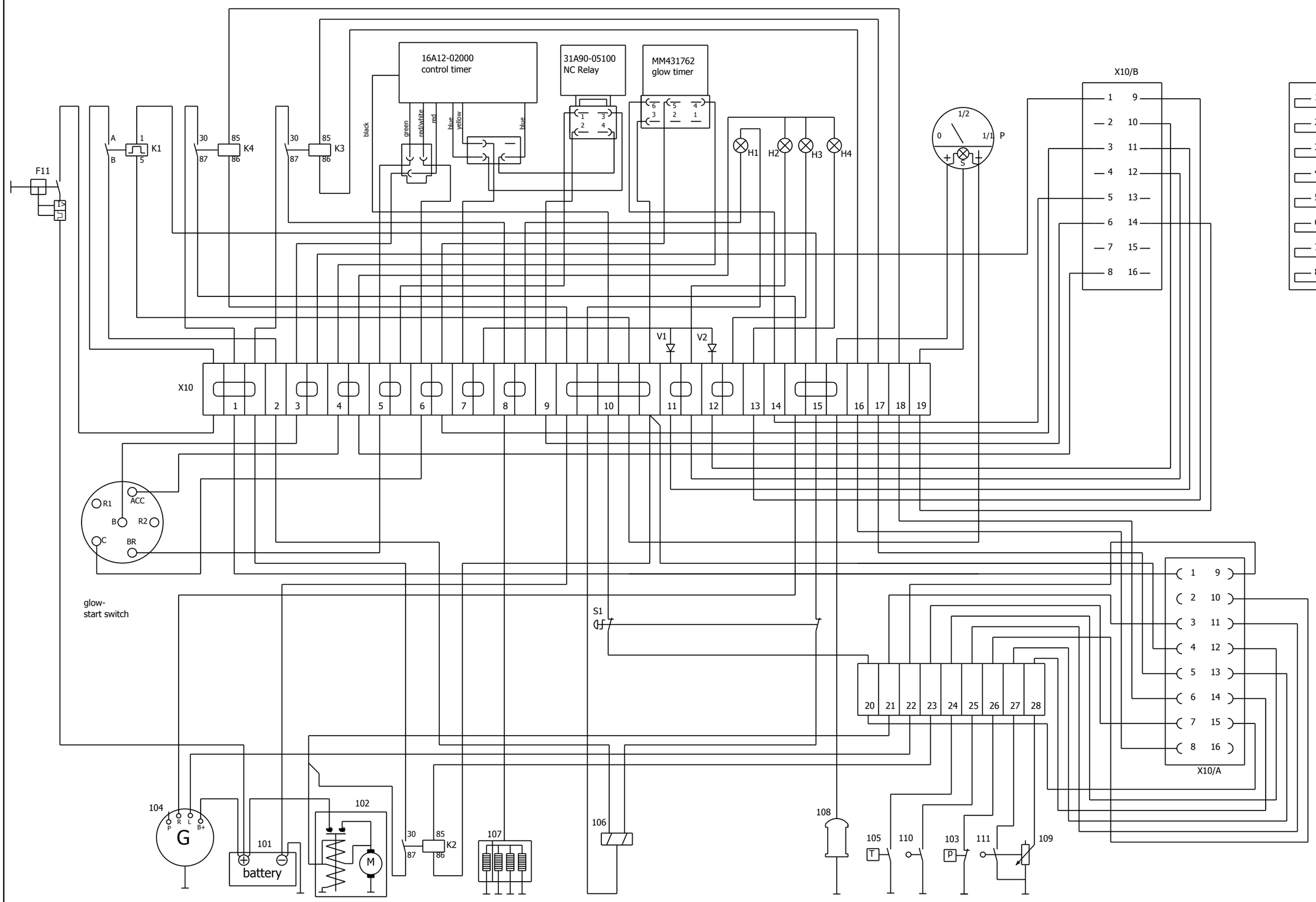
			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	power circuit 11010 (1~)		= 11010_1	
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 10
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



F11 - circuit breaker
H1 - preheat signal lamp
H2 - excess temperature or water in the fuel filter signal lamp
H3 - oil pressure signal lamp
H4 - battery charger signal lamp
P - fuel gauge
S1 - emergancy stop
V1, V2 - diode
X10/A - motorsignal female connect to X10/C
X10/B - control unit genset connect to X10/D
X10/C - motorsignal male
X10/D - control unit female
(connection for control unit genset or BLC200)

101 - battery
102 - crank
103 - oil pressure switch
104 - alternator
105 - excess temperature switch
106 - enabling solenoid
107 - glow plug
108 - fuel pump
109 - fuel sensor
110 - fuel filter switch
111 - fuel reserve warning

K1 - impulse relay (31A66-06100)
K2 - start relay
K3 - glow relay (MM43128201)
K4 - enabling relay

			Datum	08.07.2010	Genset Series xxx10		Metallwarenfabrik Gemmingen GmbH	control circuit 11010 BLC200	Sch.Pl. 200 121i.dwg	= 11010_1
			Bearb.	Foerch						+
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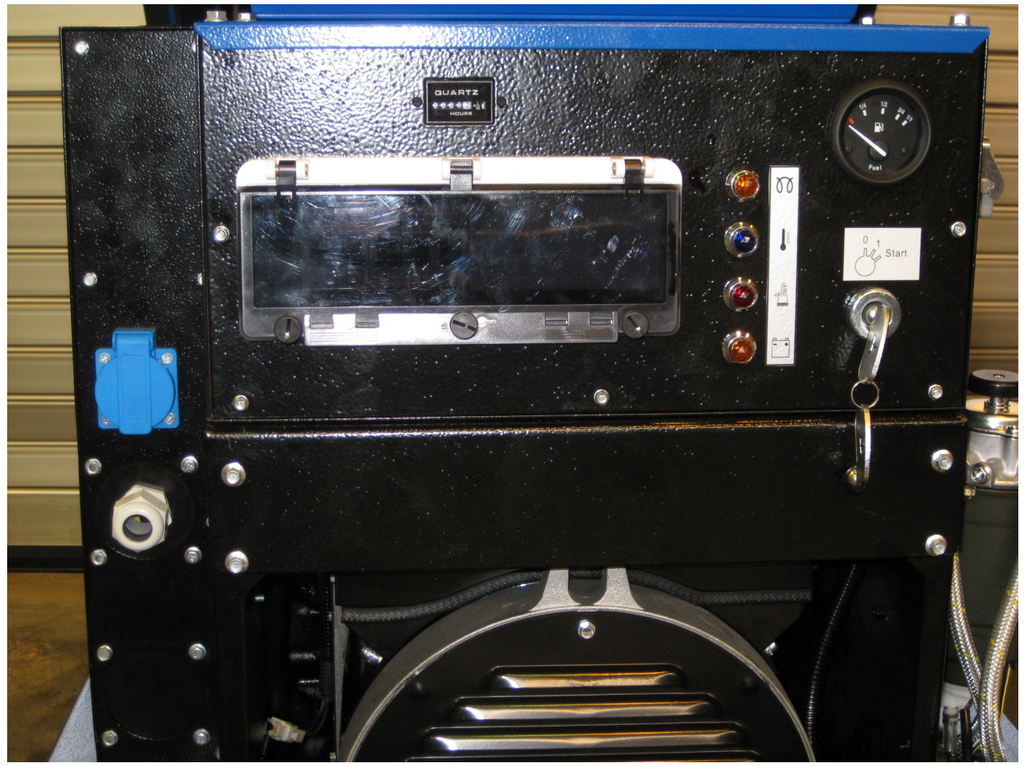
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29

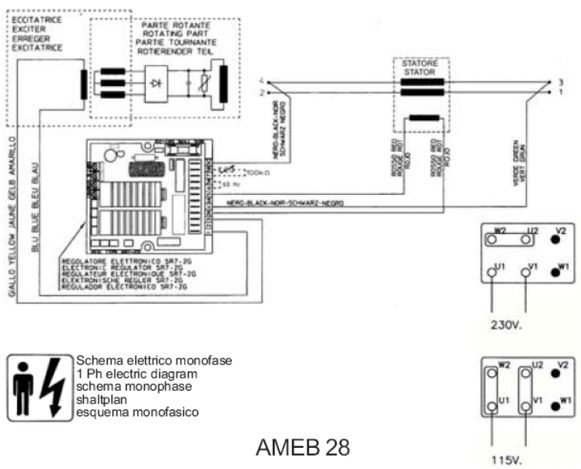
controller EVR-01



controller EVR-01

rd
rd
ye
bl
sw
sw

controller S.R.7/2-G



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=15010_1/10

			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com	picture		= 11010_1	
			Bearb.	Foerch					+	
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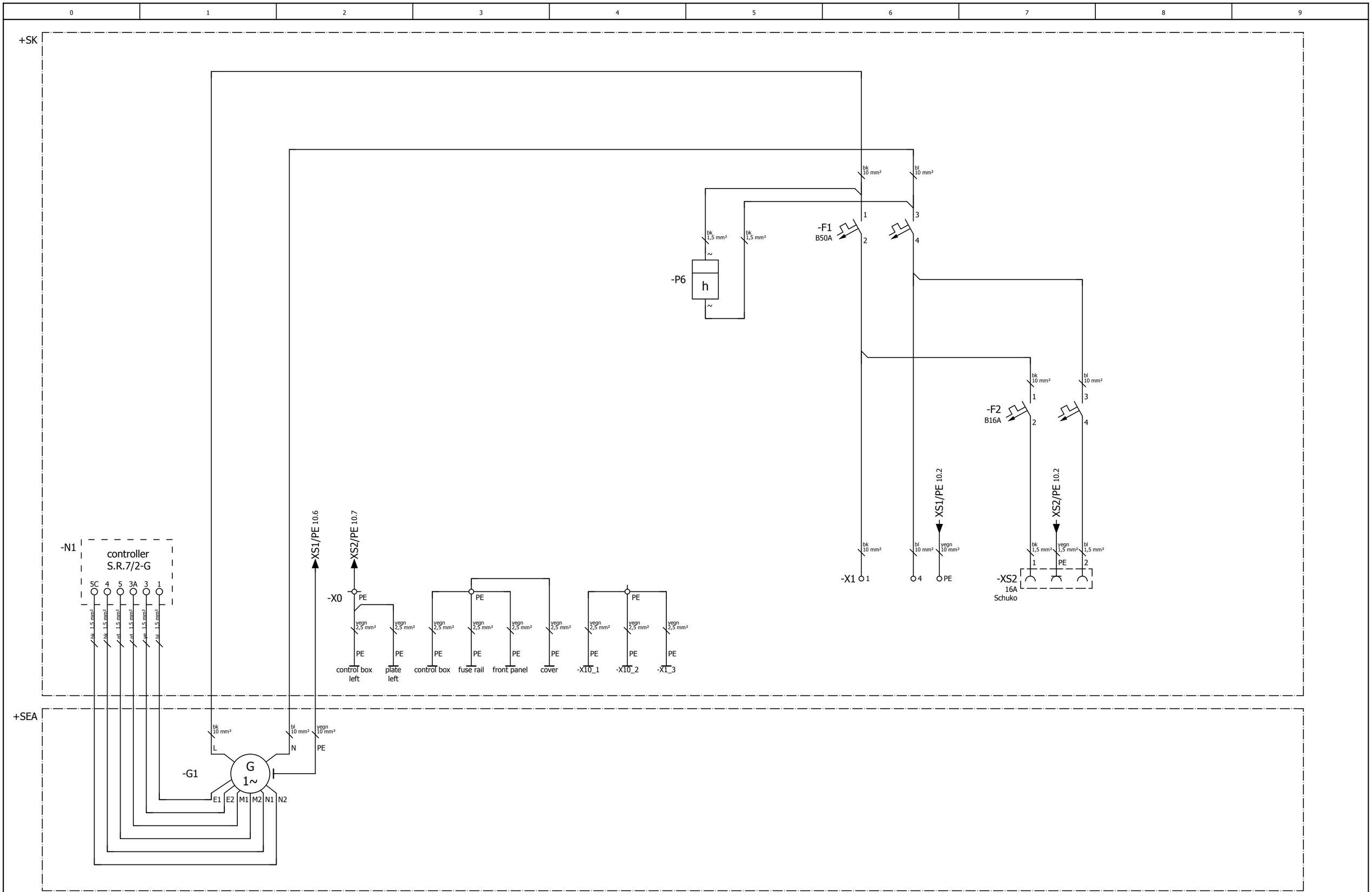
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch	GEKO EISEMANN			Blatt 29



=11010_1/99

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			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	power circuit 15010 (1~)		= 15010_1	
			Bearb.	Foerch					+	
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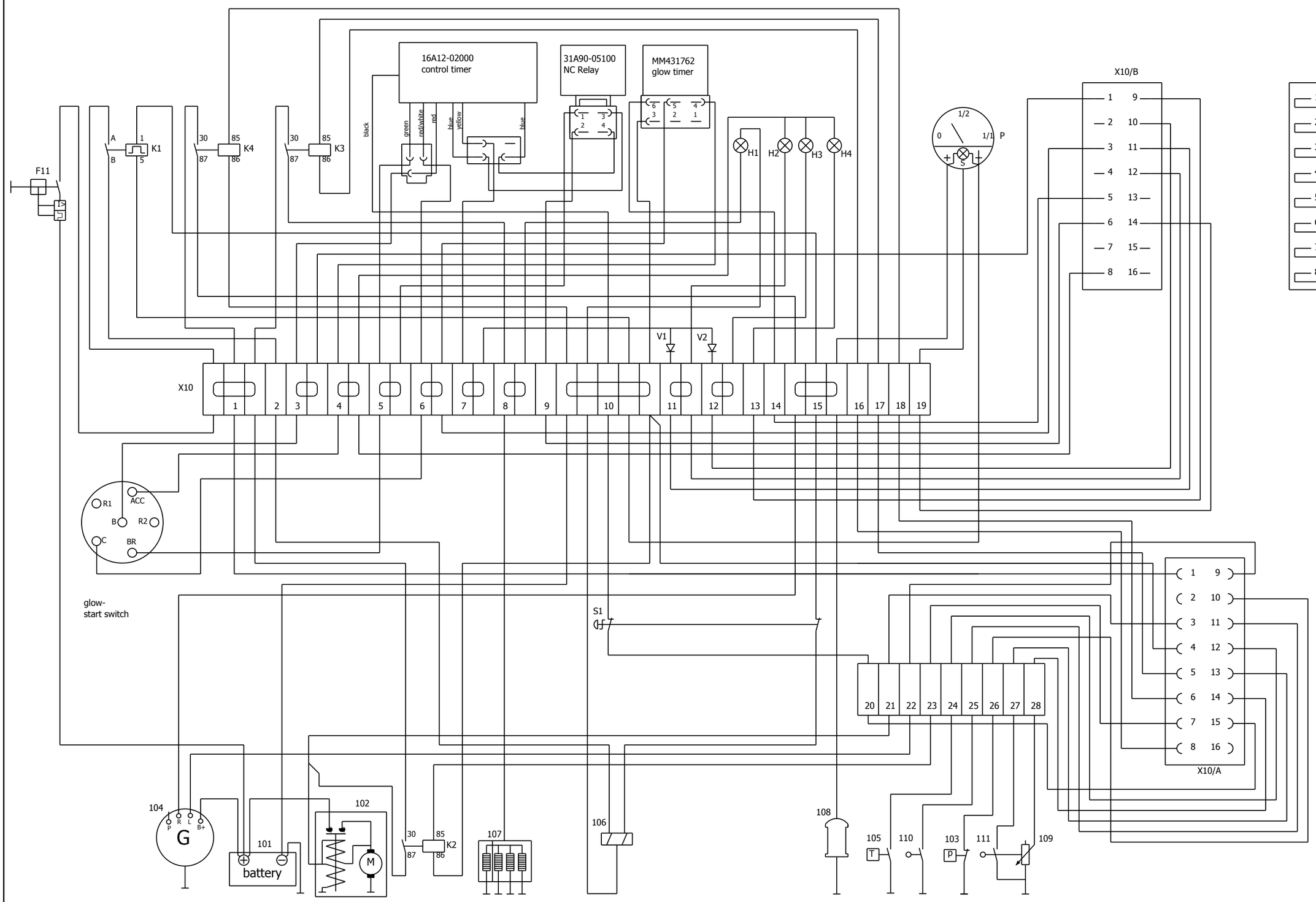
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



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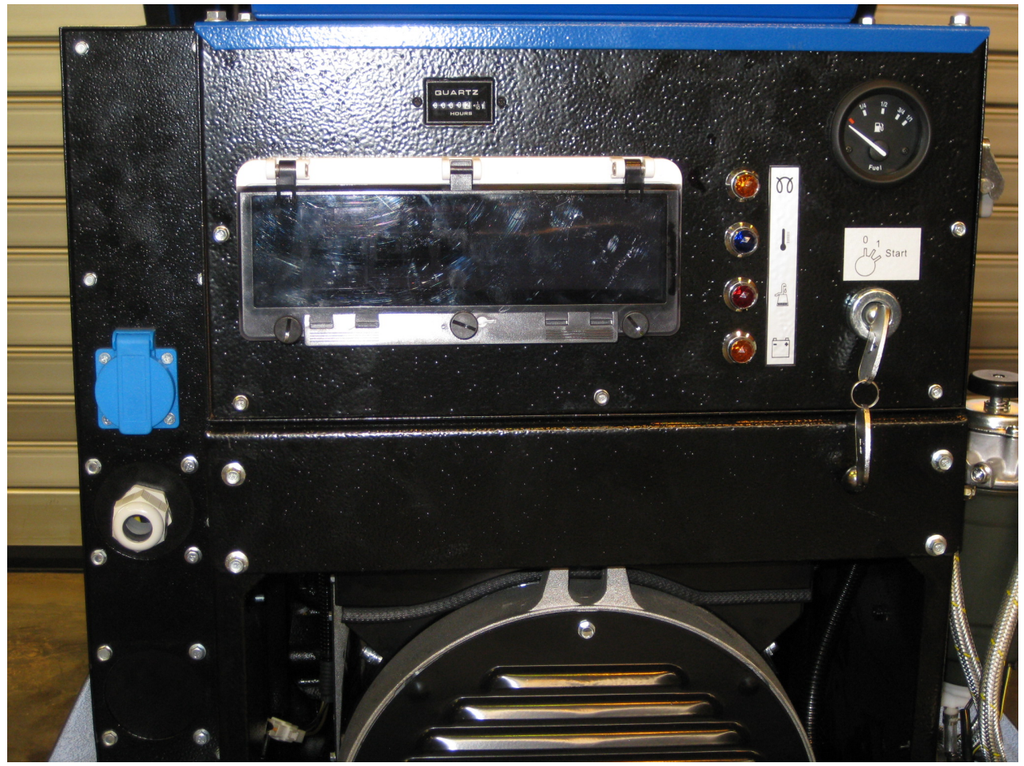
			Datum	08.07.2010	Genset Series xxx10		Metallwarenfabrik Gemmingen GmbH	control circuit 15010 BLC200	Sch.Pl. 200 121i.dwg	= 15010_1
			Bearb.	Foerch						+
			Gepr							Blatt 20
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29

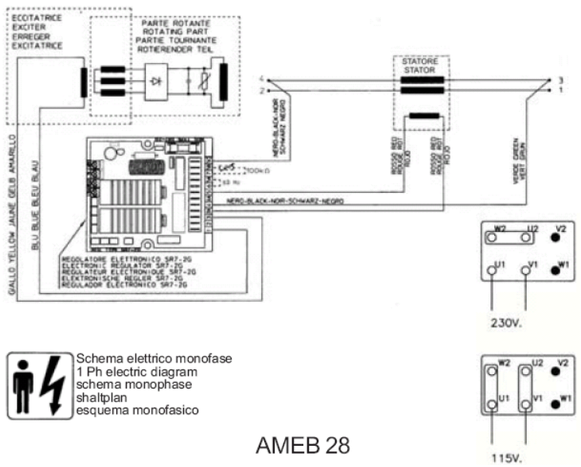
controller EVR-01



controller EVR-01

rd
rd
ye
bl
sw
sw

controller S.R.7/2-G



=11010_ABB_3/10

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			Bearb.	Foerch					+	
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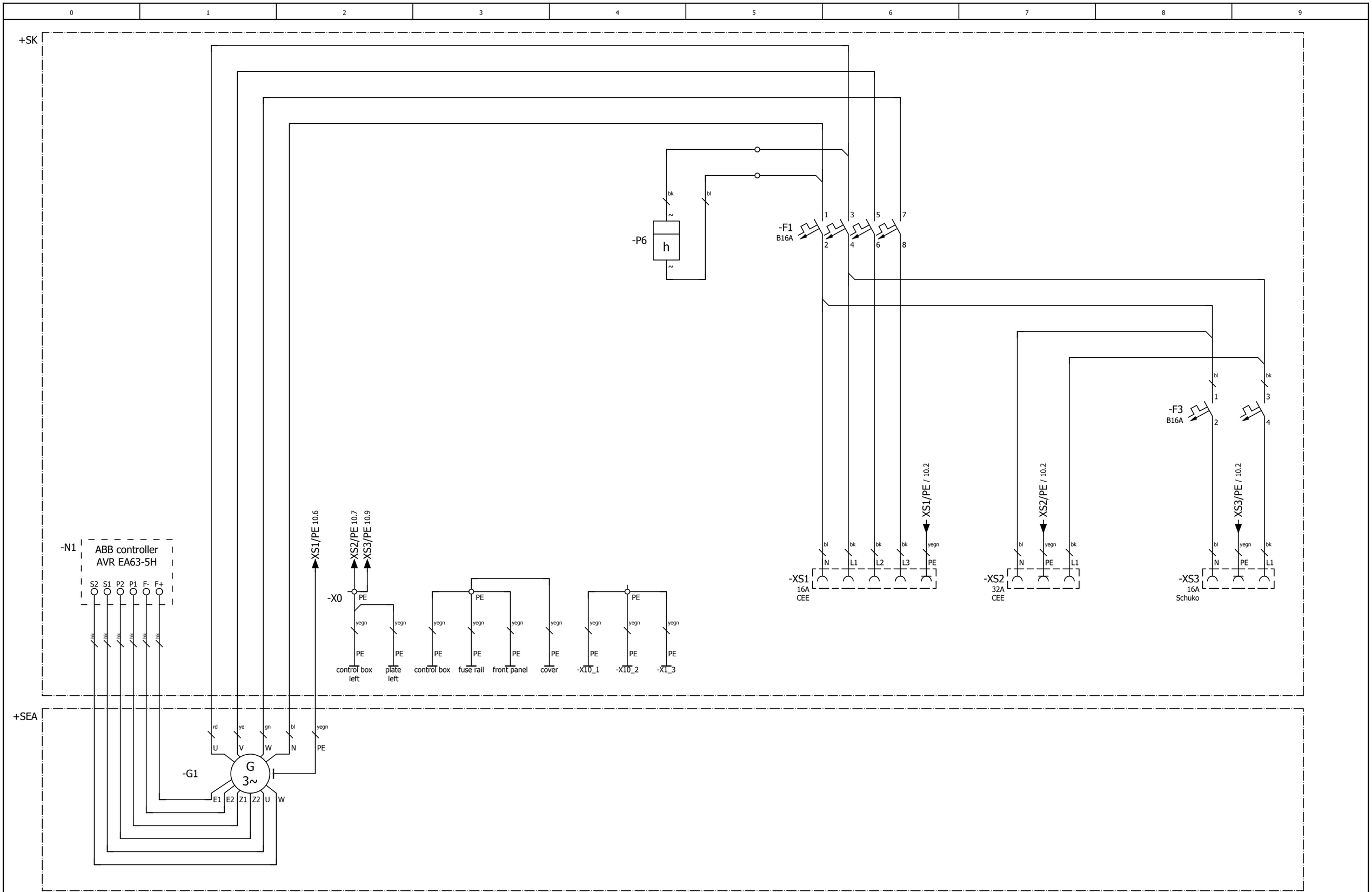
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch	GEKO EISEMANN			Blatt 29



=15010_1/99

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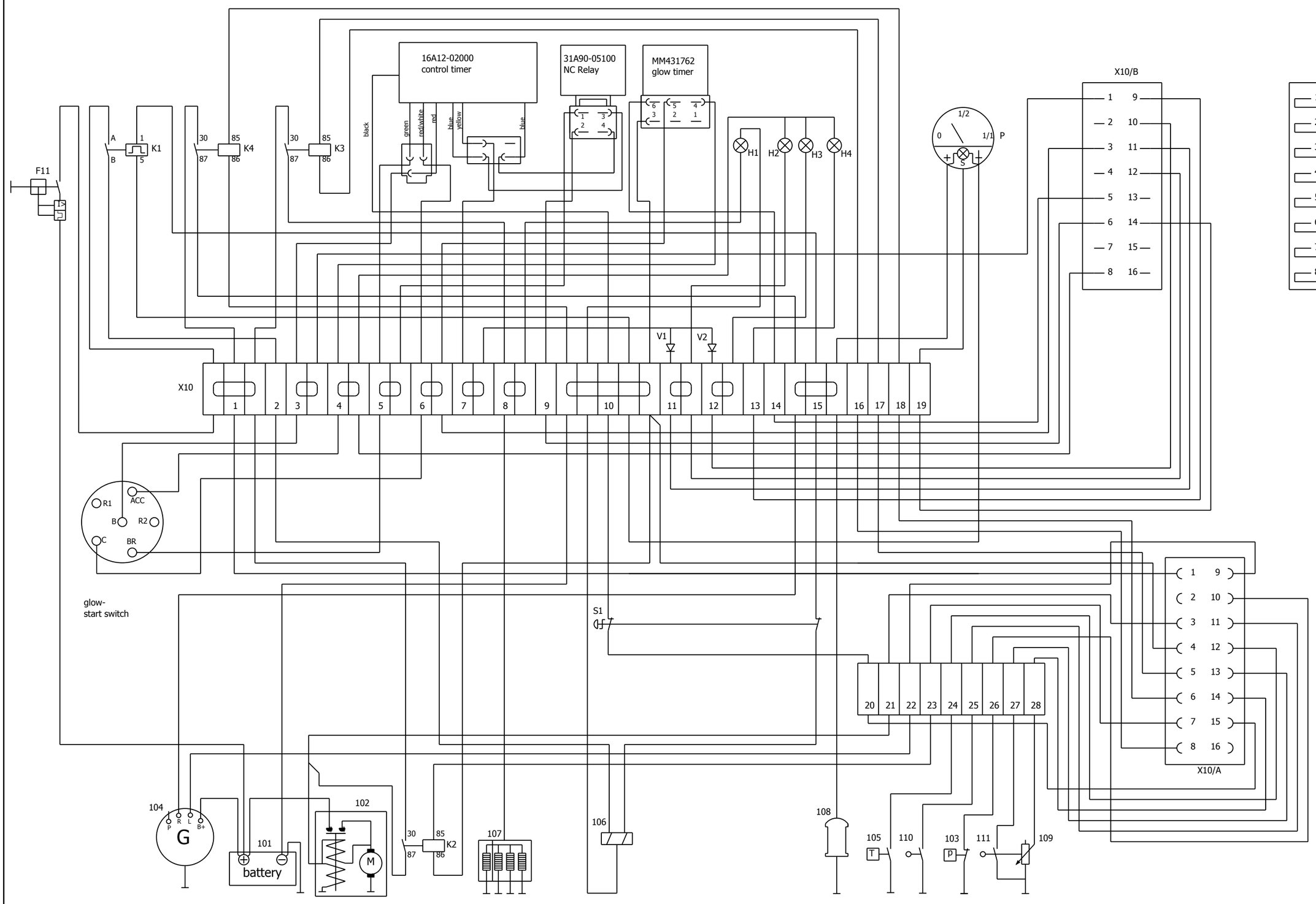
			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	power circuit 11010 (ABB 3~)		= 11010_ABB_3	
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 10
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



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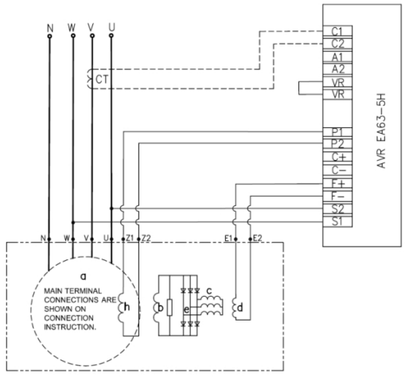
			Datum	08.07.2010	Genset Series xxx10		Metallwarenfabrik Gemmingen GmbH	control circuit 11010 BLC200	Sch.Pl. 200 121i.dwg	= 11010_ABB_3
			Bearb.	Foerch						+
			Gepr							Blatt 20
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29

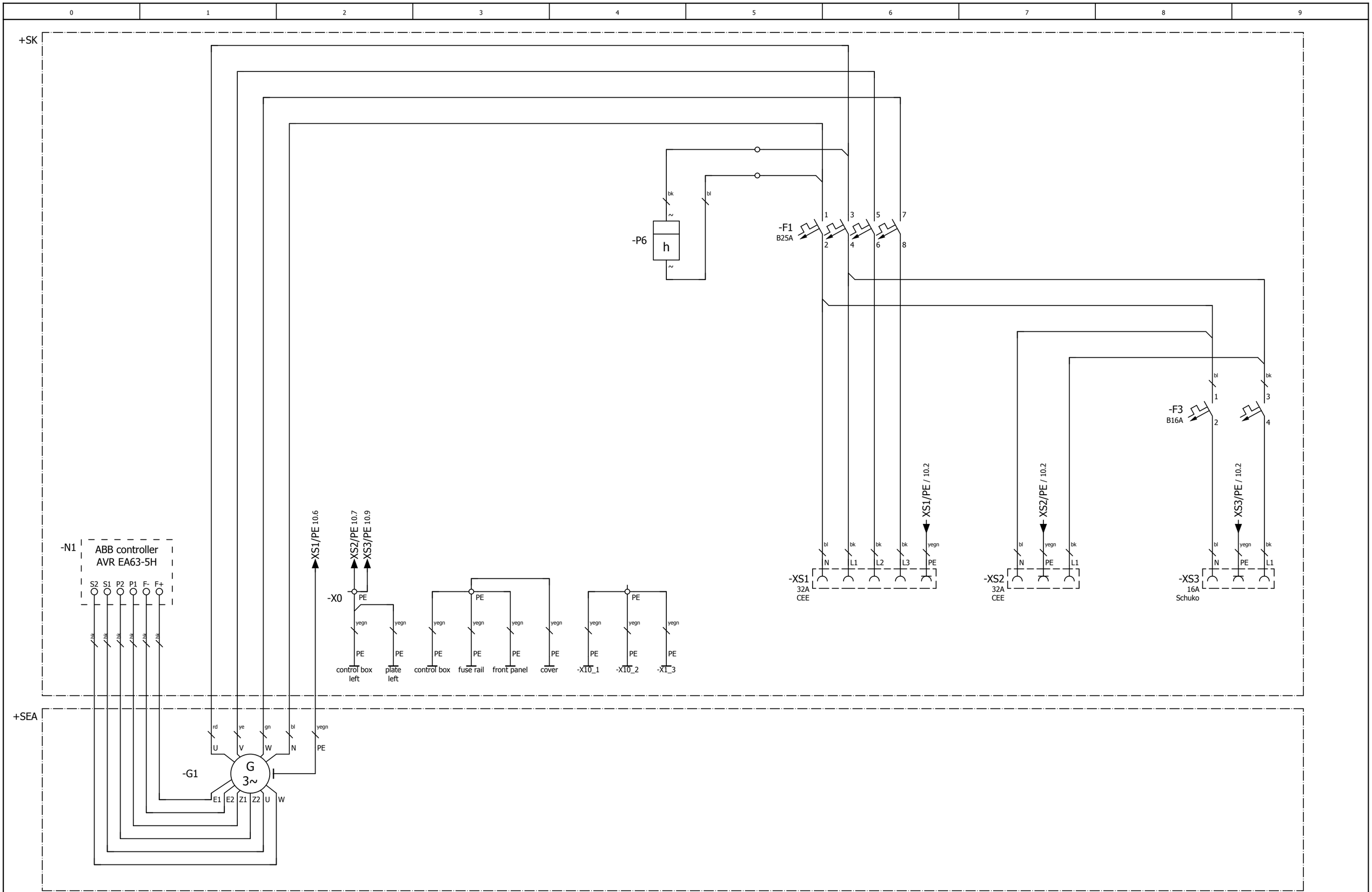
0	1	2	3	4	5	6	7	8	9

ABB controller AVR EA63-5H



a. MAIN STATOR WINDING
h. AUXILIARY WINDING
b. MAIN ROTOR WINDING
c. EXCITER ROTOR WINDING
d. EXCITER STATOR WINDING
e. ROTATING RECTIFIER
CT. CURRENT TRANSFORMER FOR PARALLEL OPERATION(*/1A)(OPTIONAL)

NOTE: THE NEUTRAL LINE 'N' IS ONLY AVAILABLE FOR STAR CONNECTION.



=11010_ABB_3/99

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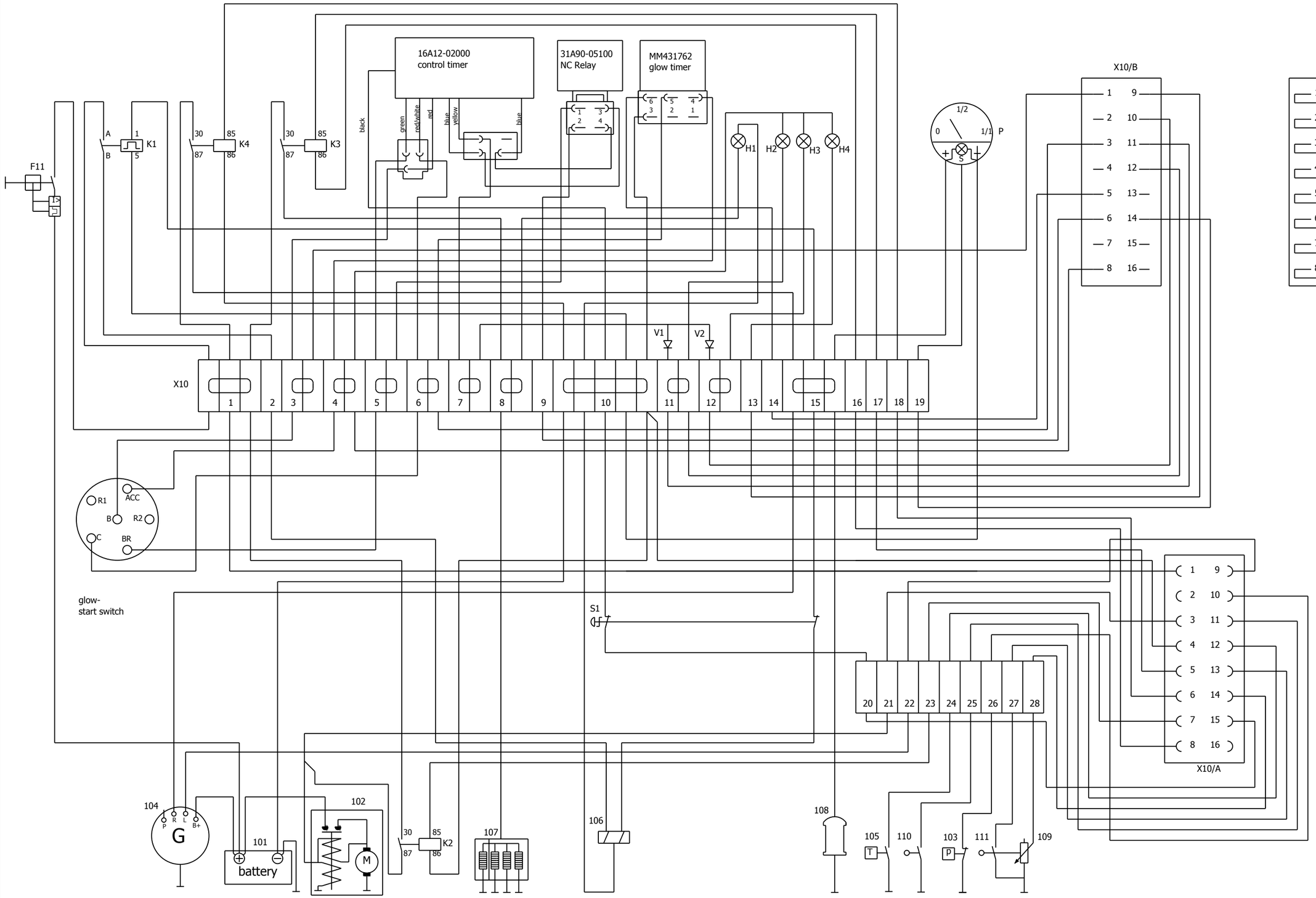
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 10
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



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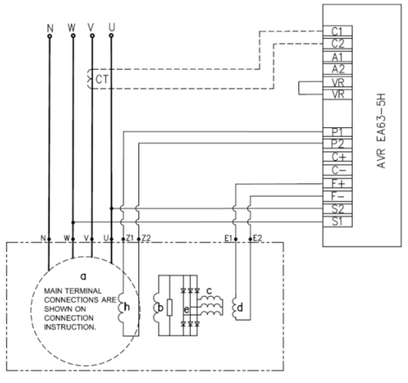
			Datum	08.07.2010	Genset Series xxx10		Metallwarenfabrik Gemmingen GmbH	control circuit 15010 BLC200	Sch.Pl. 200 121i.dwg	= 15010_ABB_3
			Bearb.	Foerch						+
			Gepr							Blatt 20
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29

0	1	2	3	4	5	6	7	8	9

ABB controller AVR EA63-5H



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h. AUXILIARY WINDING
b. MAIN ROTOR WINDING
c. EXCITER ROTOR WINDING
d. EXCITER STATOR WINDING
e. ROTATING RECTIFIER
CT. CURRENT TRANSFORMER FOR PARALLEL OPERATION(*/1A)(OPTIONAL)

NOTE: THE NEUTRAL LINE 'N' IS ONLY AVAILABLE FOR STAR CONNECTION.

terminal diagramm

GEKO_F13_006_en

connection	destination	terminal	destination	connection
=20010_3+SK-X0				
U	+SEA-G1	1	-F1	1
			-X1	1
V	+SEA-G1	2	-F1	3
			-X1	2
W	+SEA-G1	3	-F1	5
			-X1	3
N	+SEA-G1	4	-F1	7
			-X1	4
PE	+SEA-G1	PE	-XS2	PE
PE	-XS1		-XS3	PE
PE		PE		PE
x2	-L1			
PE		PE		PE
PE				PE

terminal diagramm

GEKO_F13_006_en

connection	destination	terminal	destination	connection
=20010_3+SK-X1				
L1	-P4	1	-X0	1
10	-A1			
L2	-P4	2	-X0	2
L3	-P4	3	-X0	3
N	-P4	4	-X0	4
11	-A1			

terminal diagramm

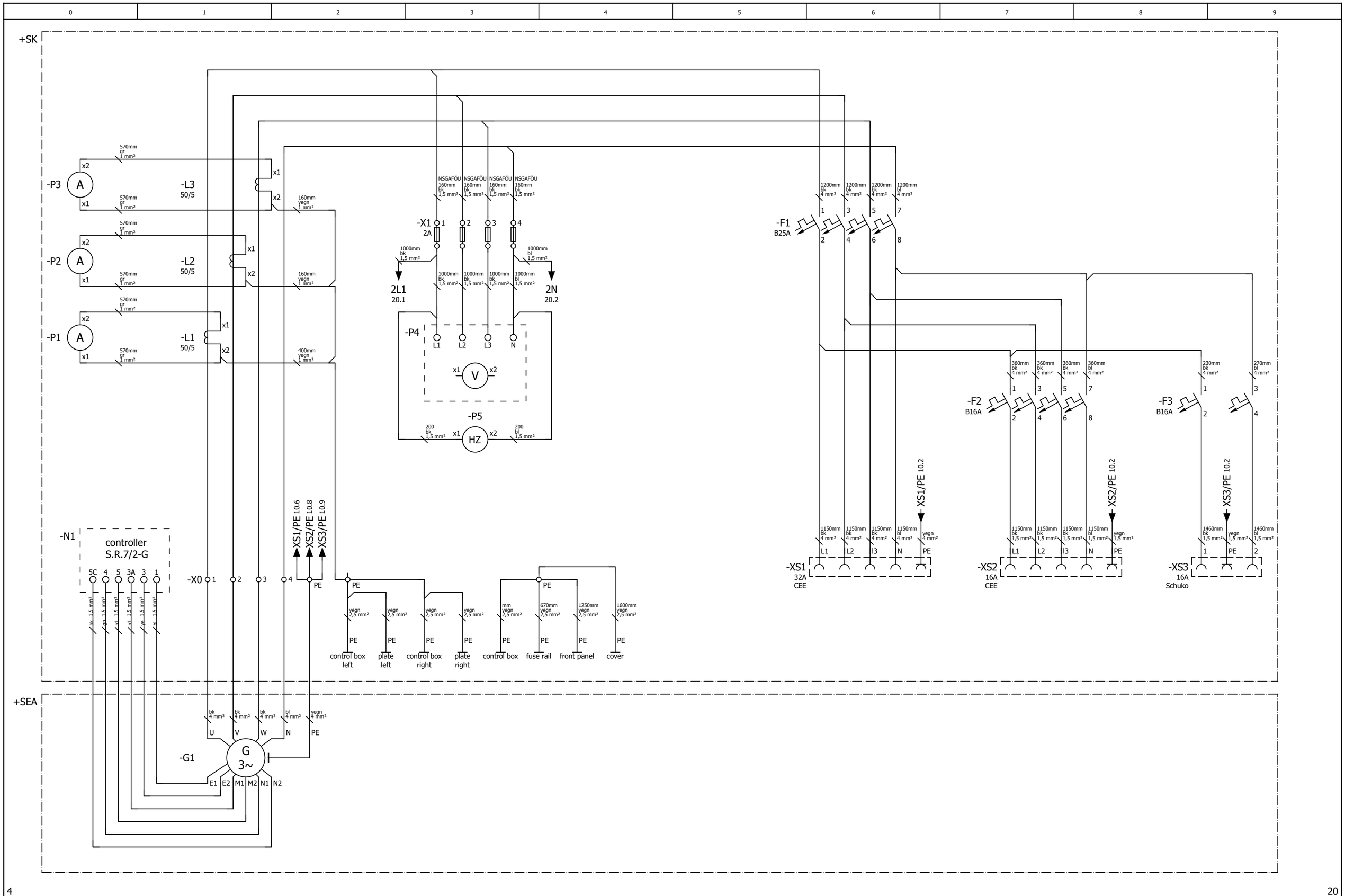
GEKO_F13_006_en

connection	destination	terminal	destination	connection
=20010_3+SK-X11				
1	-F11	1	-A1	2
11	+SEA-S1	1		
1	-X100			
		4	-A1	1
4	-X100			
x2	-H2	4	-H1	P-
			-K15	A2
21	+SEA-S1	4	-P10	1(-)
8	+SEA-X10		-U13	6
85	+SEA-U14-K14	5	-A1	5
5	-X100			
6	-X100	6	-K2	A1
			-A1	3
85	+SEA-K1	7	-A1	4
7	-X100			
2	+SEA-X10	9	-A1	7
9	-X100			
6	+SEA-X10	10	-A1	8
10	-X100			
11	-X100	11	-X12	4
			-U13	7
4	+SEA-X10	12	-A1	9
12	-X100			
	+SEA-X8	13	-X12	3
13	-X100			
	+SEA-X8	14	-K15	11
14	-X100			
22	+SEA-S1	15		
15	-X100			
16	-X100	16	-K15	A1
5	-U13	20	-K15	22
7	+SEA-X10		-K2	14
PE	-X100	PE		

terminal diagramm

GEKO_F13_006_en

connection	destination	terminal	destination	connection
=20010_3+SK-X12				
x1	-H2	1	-A1	12
2	-X12			
+	-H1	2	-K6	14
1	-X12			
13:a	-X11	3	-K6	A2
11:a	-X11	4	-A1	6
			+SEA-S1	34



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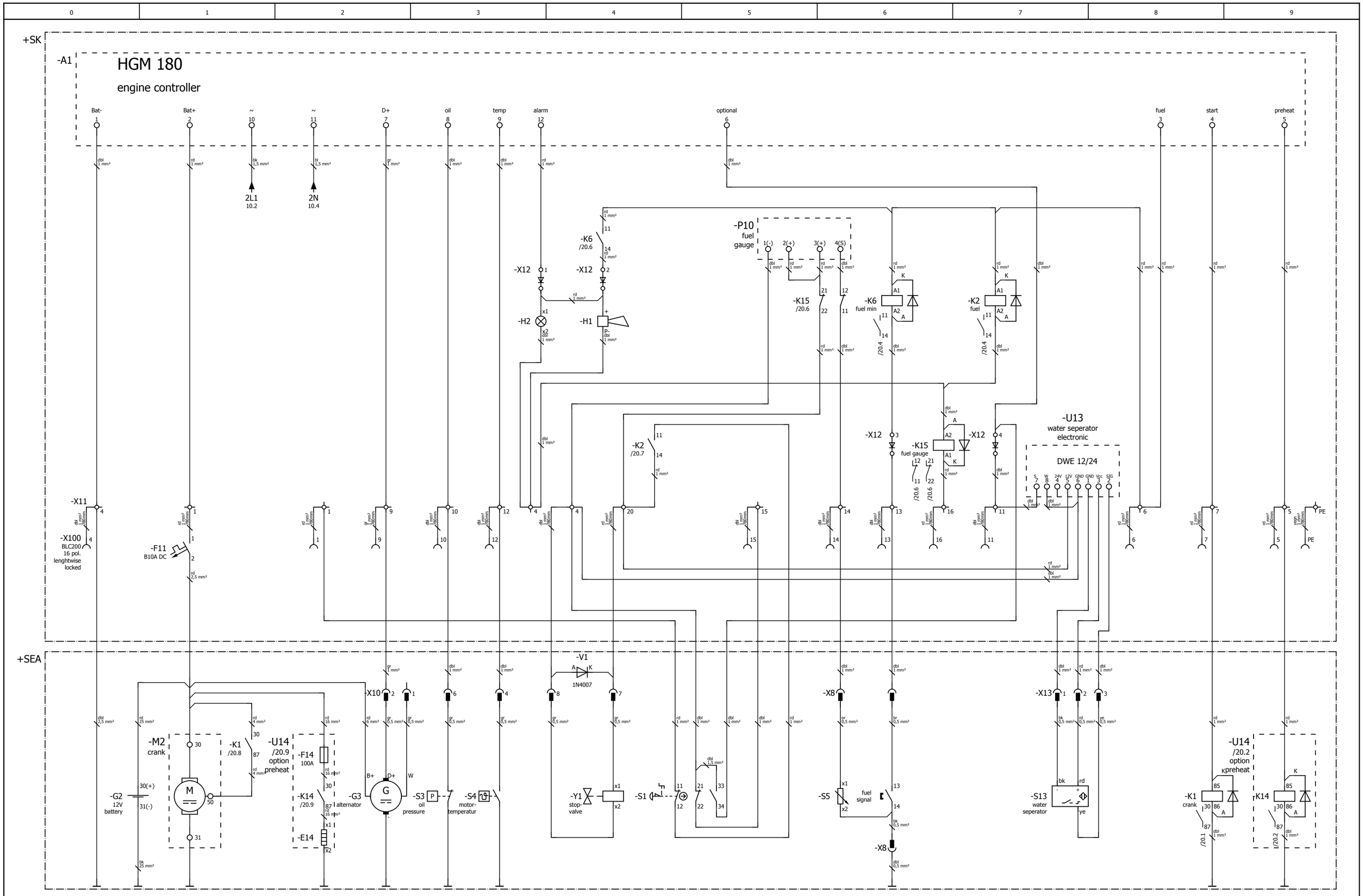
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 10
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



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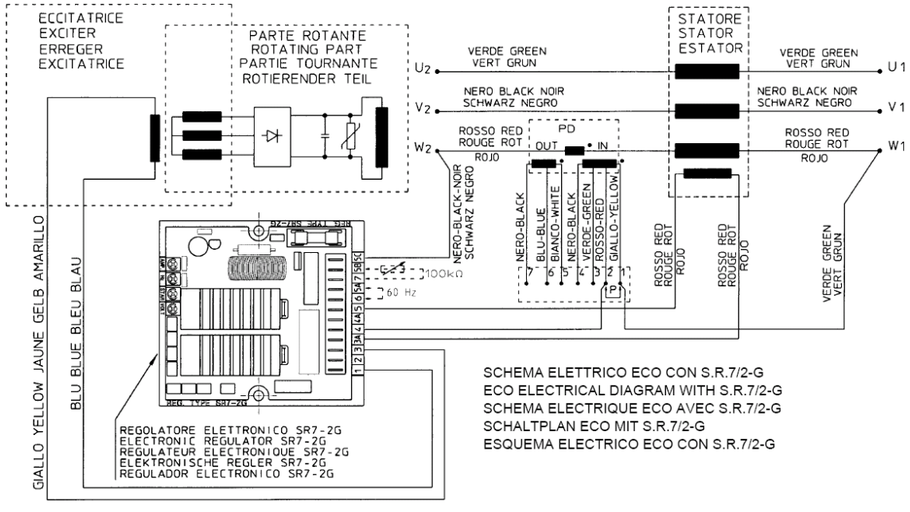
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10				Blatt	20
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch			Blatt	29

0	1	2	3	4	5	6	7	8	9

controller S.R.7/2-G



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			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 99
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29

terminal diagramm

GEKO_F13_006_en

connection	destination	terminal	destination	connection
=30010_3+SK-X0				
U	+SEA-G1	1	-F1	1
			-X1	1
V	+SEA-G1	2	-F1	3
			-X1	2
W	+SEA-G1	3	-F1	5
			-X1	3
N	+SEA-G1	4	-F1	7
			-X1	4
PE	+SEA-G1	PE	-XS2	PE
PE	-XS1		-XS3	PE
PE		PE		PE
x2	-L1			
PE		PE		PE
PE				PE

terminal diagramm

GEKO_F13_006_en

connection	destination	terminal	destination	connection
=30010_3+SK-X1				
L1	-P4	1	-X0	1
10	-A1			
L2	-P4	2	-X0	2
L3	-P4	3	-X0	3
N	-P4	4	-X0	4
11	-A1			

terminal diagramm

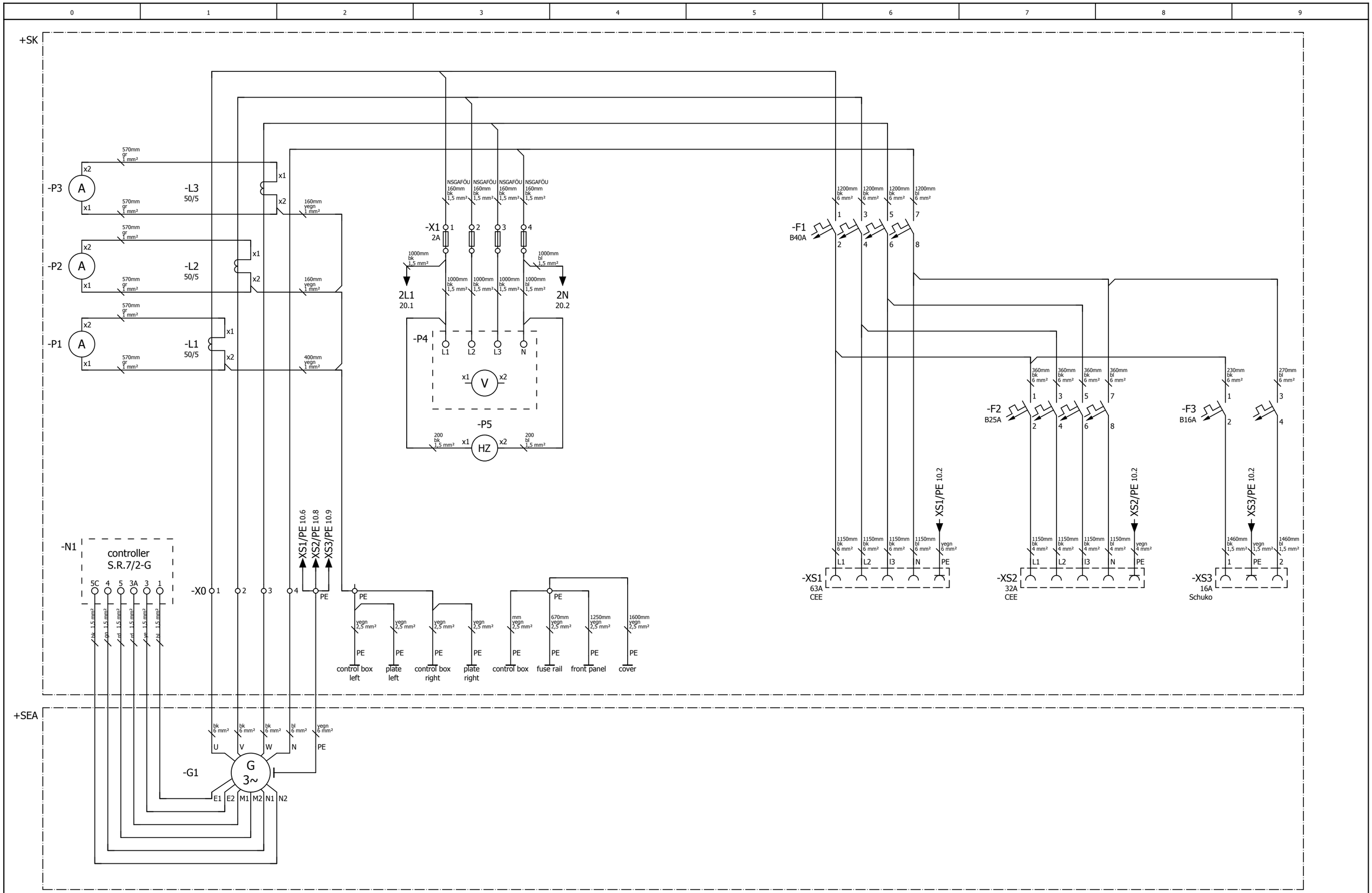
GEKO_F13_006_en

connection	destination	terminal	destination	connection
=30010_3+SK-X11				
1	-F11	1	-A1	2
11	+SEA-S1	1		
1	-X100			
		4	-A1	1
4	-X100			
x2	-H2	4	-H1	P-
			-K15	A2
21	+SEA-S1	4	-P10	1(-)
8	+SEA-X10		-U13	6
85	+SEA-U14-K14	5	-A1	5
5	-X100			
6	-X100	6	-K2	A1
			-A1	3
85	+SEA-K1	7	-A1	4
7	-X100			
2	+SEA-X10	9	-A1	7
9	-X100			
6	+SEA-X10	10	-A1	8
10	-X100			
11	-X100	11	-X12	4
			-U13	7
4	+SEA-X10	12	-A1	9
12	-X100			
	+SEA-X8	13	-X12	3
13	-X100			
	+SEA-X8	14	-K15	11
14	-X100			
22	+SEA-S1	15		
15	-X100			
16	-X100	16	-K15	A1
5	-U13	20	-K15	22
7	+SEA-X10		-K2	14
PE	-X100	PE		

terminal diagramm

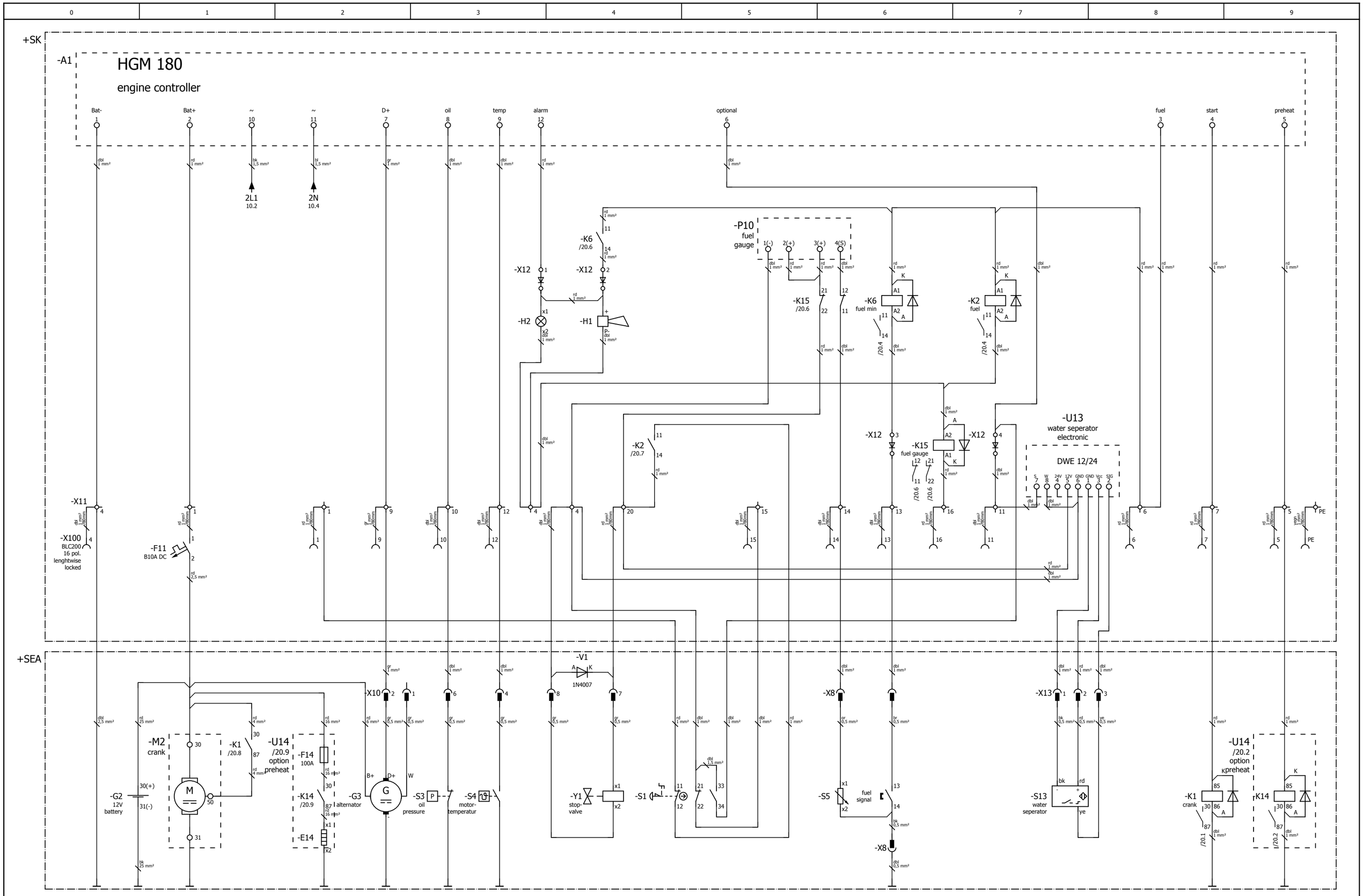
GEKO_F13_006_en

connection	destination	terminal	destination	connection
=30010_3+SK-X12				
x1	-H2	1	-A1	12
2	-X12			
+	-H1	2	-K6	14
1	-X12			
13:a	-X11	3	-K6	A2
11:a	-X11	4	-A1	6
			+SEA-S1	34



4 20

			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	power circuit 30010 ED-S/DEDA		= 30010_3	
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 10
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29



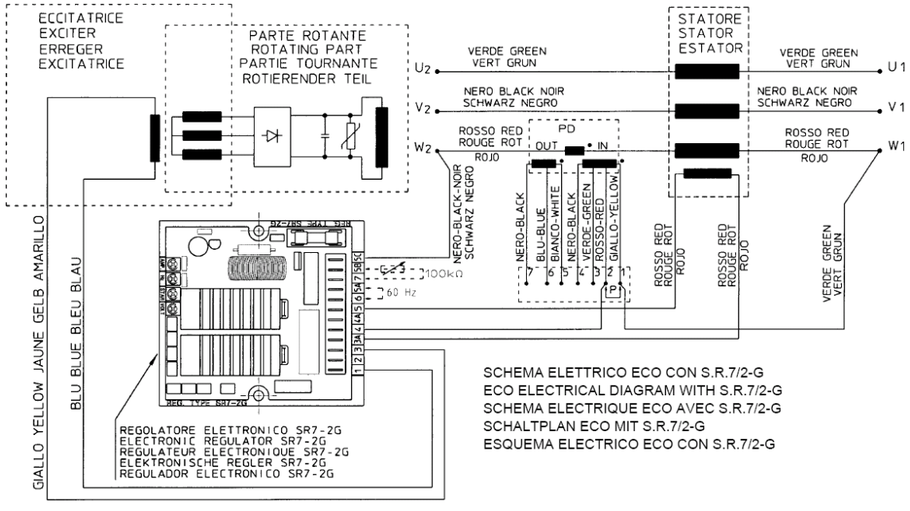
10

99

			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	control circuit 30010 ED-S/DEDA BLC200	= 30010_3	
			Bearb.	Foerch				+	
			Gepr		Genset Series xxx10				Blatt 20
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch			Blatt 29

0	1	2	3	4	5	6	7	8	9

controller S.R.7/2-G



SCHEMA ELETTRICO ECO CON S.R.7/2-G
ECO ELECTRICAL DIAGRAM WITH S.R.7/2-G
SCHEMA ELECTRIQUE ECO AVEC S.R.7/2-G
SCHALTPLAN ECO MIT S.R.7/2-G
ESQUEMA ELECTRICO ECO CON S.R.7/2-G

			Datum	08.07.2010		Metallwarenfabrik Gemmingen GmbH www.metallwarenfabrik.com GEKO EISEMANN	picture		= 30010_3	
			Bearb.	Foerch					+	
			Gepr		Genset Series xxx10					Blatt 99
Änderung	Datum	Name	Urspr		Ersatz von	Ersetzt durch				Blatt 29