FMS\_E10A / 17.04.2000 / Cas



EPLAN VERSION: 5.60.3

# FMS Drehtechnik Schaffhausen AG, Switzerland

CH-8201 Schaffhausen

EQUIPMENT : ELECTRIC DRAWING NUMBER : 27049 E PLANT NUMBER : 27049 PROJECT · FMS DFMD 3 : Schaffhausen INCATION SUPPLY : 400V FUSF 200A CONTROL VOLTAGE : 247 YEAR OF MANUFACTURE : 2007 CONTROL TYPE : 840D MANUFACTURER : FMS Drehtechnik AG Amsler-Laffon-Str. 1 CH-8201 Schaffhausen MANUFACTURER REFERENCE : 370490 RESPONSIBLE FOR PROJECT : Casellas LAST MODIFIED : 01.12.09 / PHI

FILE NAME:

FMS Drehtechnik Schaffhausen AG CH-8201 Schaffhausen Masch. - Tvp NDM = 20 = 4Machine type Machine type Masch. - Nr. 27049 NO. machine Machine no. Retriehsspannung 4 0 0 V Tension du réseau Operating voltage Steuerspannung 24V Tension de commande Control voltage Frequenz 50Hz Frequence Frequency Nennstrom 183A Courant nom. Rated current Vorsicherung 200A Fusible d'entrée Prefuse Schaltplan-Nr. 27049 E Schéma de conn no Circuit diagram no. Inventar-Nr. No. d'invent. Inventory no. 568\_086\_018

> HIGHEST SHEET NUMBER: 1116 NUMBER OF SHEETS: 139

FMS DEMO 3

DESIGNED	08.07.03	Cas/3306			FMS Drehtechnik AG		EL ECTRIC	Deckblatt		
LAST REVISED	01.12.09	PHI	⊏ M ∩		Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC		= +	1
PLOT DATE	01.12.09	FILE NAME	EMO		CH-8201 Schaffhausen	PLANT NUMBER	27049	cover sheet	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E			2

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Side	Table of co	ontents			Spalte X: eine	automatisch erzeugte Seite w Additional field	Date	FMS_I02E	/25.02.199
1 1	Deckblatt					O Hoditional Field	01.12.09	Cas/3306	X
	cover sheet						01.12.03	C43/3300	
2	Inhaltsverzeichnis table of contents					1	01.12.09	PHI	
2 a	Inhaltsverzeichnis table of contents					2	01.12.09	PHI	
2 Ь	Inhaltsverzeichnis table of contents					3	01.12.09	PHI	
2 c	Inhaltsverzeichnis table of contents					4	01.12.09	PHI	
2 d	Inhaltsverzeichnis table of contents					5	01.12.09	PHI	
2 e	Inhaltsverzeichnis table of contents					6	01.12.09	PHI	
2 f	Inhaltsverzeichnis table of contents					7	01.12.09	PHI	
2 g	Inhaltsverzeichnis table of contents					8	01.12.09	PHI	
2 h	Inhaltsverzeichnis table of contents					9	01.12.09	PHI	
2i	Inhaltsverzeichnis table of contents					10	01.12.09	PHI	
3.1	Allgemeine Projektinf general project infor					11	01.12.09	CAS	
3.2	Allgemeine Projektinf general project infor					12	01.12.09	CAS	
3.3	Allgemeine Projektinf general project infor					13	01.12.09	CAS	
3.4	Allgemeine Projektinf general project infor					14	01.12.09	CAS	
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	Table of co	ntents			Spalte X: eine	automatisch erzeugte Seite w			/25.02.199
Side	Contens					Additional field	Date	Reviewer	X
4	Klemmen-/Steckerleiste terminal strip / edge					15	01.12.09	Cas/3306	
4.1	Steckerleisten connexion plug boards					16	01.12.09	PHI	
5	Schaltschrankaufbau enclosure design					17	01.12.09	CAS	
6	Schaltschrank enclosure					18	01.12.09	CAS	
6.1	Schaltschrank enclosure					19	01.12.09	CAS	
7	Bedienelemente operating components					20	01.12.09	CAS	
7.1	Bedienelemente operating components					21	01.12.09	Cas	
8	Lageplan lay out					22	01.12.09	CAS	
8.1	Lageplan lay out					23	01.12.09	CAS	
8.2	Lageplan lay out					2 4	01.12.09	CAS	
9	Verbindungsleitungen connection wire					25	01.12.09	CAS	
9.1	Verbindungsdosen connection boxes					26	01.12.09	CAS	
10	Einspeisung power feed					27	01.12.09	CAS	
11	Erdung earthing					28	01.12.09	CAS	
12	Schaltschrankbeleucht enclosure lighting	ıng				29	01.12.09	CAS	
	08.07.03 PHI		MANUFACTURER	FMS Drehtechnik AG					
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Side	Contens		Additional field	Date	Reviewer	Х
13	Schaltschrankkühlung enclosure cooling		30	01.12.09	Cas/3306	
<b>I</b>	Hydraulikpumpe hydraulic pump		31	01.12.09	Cas/3306	
	Rückkühlanlage Gegenspindel recooling equipment opposed spindle		3 2	01.12.09	CAS	
17	Kühlmittelpumpe coolant pump		33	01.12.09	Cas/3306	
20	Späneförderer chip conveyor		3 4	01.12.09	Cas/3306	
26	Lüfter zu SIMODRIVE-Module fan to SIMODRIVE modules		35	01.12.09	CAS	
30	Impulsschmierung pulse lubrication		36	01.12.09	Cas/3306	
32	Absaugvorrichtung exhauster		37	01.12.09	Cas/3306	
45	SIMODRIVE 611D Anordnung SIMODRIVE 611D LAYOUT		38	01.12.09	CAS	
50	Ein-/Rückspeisemodul feed/recovery module		39	01.12.09	Cas/3306	
51	HAUPTSPINDEL C1 MAIN SPINDLE C1		40	01.12.09	Cas/3306	
57	Überwachungsmodul monitoring module		41	01.12.09	Cas/3306	
60	System oben rechts, Achse X system top right, axis X		42	01.12.09	Cas/3306	
61	System oben rechts, Achse Z system top right, axis Z		43	01.12.09	Cas/3306	
62	System oben links, Achse X system top left, axis X		44	01.12.09	Cas/3306	
	08.07.03 PHI MANUF	ACTURER FMS Drehtechnik AG		T. 1. 2		1
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	Table of contents			Spalte X: eine	automatisch erzeugte Seite	wurde manuell nachbearbeitet	FMS_I02E	/25.02.19
Side	Contens				Additional field	Date	Reviewer	)
63	System oben links, Achse Z system top left, axis Z				45	01.12.09	Cas/3306	
64	System oben rechts, Revolver system top right, turret				46	01.12.09	Cas/3306	
65	System oben links, Revolver system top left, turret				47	01.12.09	PHI	
66	Reitstock, Achse W				48	01.12.09	Cas/3306	
100	Spannungsversorgung 230VAC power supply 230VAC				49	01.12.09	CAS	
130	Spannungsversorgung 24VDC power supply 24VDC				50	01.12.09	Cas/3306	
131	24VDC Schrank 24VDC enclosure				51	01.12.09	Cas/3306	
132	24VDC Schrank 24VDC enclosure				5 2	01.12.09	Cas/3306	
133	24VDC Maschine 24VDC machine				53	01.12.09	Cas/3306	
134	24VDC Maschine 24VDC machine				54	01.12.09	Cas/3306	
135	24VDC Ausgabemodule 24VDC output-modules				55	01.12.09	Cas/3306	
142	Not-Aus emergency stop				56	01.12.09	CAS	
145	Wasserschutztüre geschlossen splash guard closed				57	01.12.09	CAS	
147	Zustimmung permission				5 8	01.12.09	Cas/3306	
149	Fussschalter Reitstock foot switch to tailstock				59	01.12.09	PHI	
		MANUFACTURER	FMS Drehtechnik AG		ELECTRIC	Inhaltsverzeichnis		
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Side	Contens			Spalte X: eine	automatisch erzeugte Seite Additional field	wurde manuell nachbearbeitet  Date	FMS_I02E/	25. 02. 19
150	Antriebsfreigabe feed drives release				60	01.12.09	Cas/3306	
155	Lüfter fan				61	01.12.09	cas/3306	
400	NCU-Baugruppe NCU module				6 2	01.12.09	Cas/3306	
420	Bedientafel operator panel				63	01.12.09	Cas/3306	
421	Maschinensteuertafel machine control panel				64	01.12.09	Cas/3306	
430	Schnittstellen Bedienkasten interfaces operating panel				65	01.12.09	Cas/3306	
445	Hilfkontakte Überstromauslöser				66	01.12.09	Cas	
450	SPS-Übersicht PLC overview				67	01.12.09	CAS	
451	SPS-Übersicht PLC overview				6.8	01.12.09	CAS	
500	PLC Ausgänge PLC Outputs				69	01.12.09	Cas/3306	
501	PLC Ausgänge PLC Outputs				7 0	01.12.09	Cas/3306	
502	PLC Ausgänge PLC Outputs				71	01.12.09	Cas/3306	
503	PLC Ausgänge PLC Outputs				7 2	01.12.09	Cas/3306	
504	PLC Ausgänge PLC Outputs				7 3	01.12.09	CAS	
505	PLC Ausgänge PLC Outputs				74	01.12.09	CAS	
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	lable	of c	ontents			Spalte X: eine	automatisch erzeugte Sei	te wurde manuell nachbearbeitet	FMS_I02E/	25.02.1999
Side	Contens						Additional fiel	.d Date	Reviewer	Х
508	PLC Ausgäi PLC Outpu						75	01.12.09	CAS	
510	PLC Ausgäi PLC Outpu						7 6	01.12.09	CAS	
511	PLC Ausgäi PLC Outpu						77	01.12.09	CAS	
512	PLC Ausgäi PLC Outpu						7 8	01.12.09	PHI	
700	PLC Eingä PLC input:						79	01.12.09	Cas/3306	
701	PLC Eingä PLC input:						80	01.12.09	Cas/3306	
702	PLC Eingä PLC input						81	01.12.09	Cas/3306	
703	PLC Eingä PLC input:						8 2	01.12.09	Cas/3306	
704	PLC Eingä PLC input:						83	01.12.09	Cas/3306	
705	PLC Eingä PLC input:						8 4	01.12.09	Cas/3306	
706	PLC Eingä PLC input:						85	01.12.09	Cas/3306	
707	PLC Eingä PLC input:						86	01.12.09	Cas/3306	
712	PLC Eingä PLC input:						87	01.12.09	Cas/3306	
713	PLC Eingä PLC input:						8 8	01.12.09	PHI	
714	PLC Eingä PLC input:						8 9	01.12.09	PHI	
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G N E D	08.07.03	PHI		MANUFACTURER	FMS Drehtechnik AG	CONTRMENT	ELECTRIC	Inhaltsverzeichn	i s	
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	Table of contents			Spalte X: eine	automatisch erzeugte Seite	wurde manuell nachbearbeitet	FMS_IO2E/	/25.02.1999
Side	Contens				Additional field	Date	Reviewer	Х
715	PLC Eingänge PLC inputs				90	01.12.09	PHI	
800	PLC-Eingänge analog PLC inputs analog				91	01.12.09	CAS	
900	Reserveklemmen reserve terminals				9 2	01.12.09	ніт	
901	Reserveklemmen reserve terminals				93	01.12.09	ніт	
1000	XO Erdschiene Schaltschrank XO earth bar enclosure				9 4	01.12.09	PHI	
1000.1	XO Erdschiene Schaltschrank XO earth bar enclosure				95	01.12.09	PHI	
1001	X2 Externe Geräte OV X2 external devices OV				96	01.12.09	PHI	
1002	X3 Externe Geräte 24V+ X3 external devices 24V+				97	01.12.09	PHI	
1003	X6 Ein-/Ausgabebaugruppen X6 in/out moduls				9 8	01.12.09	PHI	
1004	X7 Analogbaugruppe X7 analog modul				99	01.12.09	PHI	
1005	X00 Erdschiene Bedienkasten X00: earth bar operator panel				100	01.12.09	PHI	
1006	X 0 2				101	01.12.09	PHI	
1007	X16 230VAC-Verteilung X16 230VAC distribution				102	01.12.09	PHI	
1008	X20 Spannngsversorgung OV X20 power supply OV				103	01.12.09	PHI	
1009	X22 Spannngsverteilung OV				104	01.12.09	PHI	
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GNED	08.07.03 PHI	MANUFACTURER	FMS Drehtechnik AG	COULDWENT	ELECTRIC	Inhaltsverzeichnis		$\top$
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	Table	of c	ontents			Snalte X. eine	automatisch erzeu	nto Seito wurde	manuell nachbearbeitet	FMS_I02E/2	25. 02. 1999
Side	Contens					Sparte X. Eine	Additional		Date	Reviewer	Х
1010	X23 Spannu X23 power						105		01.12.09	PHI	
1011	X35 Steckd X35 socket						106		01.12.09	PHI	
1012	X36 24VDC- X36 24VDC						107		01.12.09	PHI	
1013	X152 Hydra X152 hydra						108		01.12.09	PHI	
1014	X172 Kühlm X172 cooli						109		01.12.09	PHI	
1015	X202 Späne X202 chip						110		01.12.09	PHI	
1016	•		chaltelemente ontrol element	S			111		01.12.09	PHI	
1017	X302 Schmi X302 lubri		P				112		01.12.09	PHI	
1018	X1332 Lumb X1332 conn		er				113		01.12.09	PHI	
1019	X1333 Lumb X1333 conn		er				114		01.12.09	PHI	
1020	X1334 Lumb X1334 conn		er				115		01.12.09	PHI	
1021	X1338 Schl	itten oben	rechts				116		01.12.09	PHI	
1021.1	X1338 Schl	itten oben	rechts				117		01.12.09	PHI	
1022	X1339 Schl	itten oben	links				118		01.12.09	PHI	
1022.1	X1339 Schl	itten oben	links				119		01.12.09	PHI	
DESIGNED		PHI		MANUFACTURER	FMS Drehtechnik AG	EQUIPMENT	ELECTRIC		Inhaltsverzeichnis		2
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1023	X1342 Küh]	lmittel					120		01.12.09	PHI	
	X1342 cool	lant									
1023.1	X1342 Küh]	lmittel					121		01.12.09	PHI	
	X1342 cool	lant									
1100	Stückliste						122		01.12.09	Cas	
	parts list	t 									
1101	Stückliste						123		01.12.09	Cas	
	parts list	<u> </u>									
1102	Stückliste parts list						124		01.12.09	Cas	
1103	Stückliste parts list						125		01.12.09	Cas	
1104	Stückliste parts list						126		01.12.09	Cas	
4405							4.2.7		04 43 00		
1105	Stückliste parts list						127		01.12.09	Cas	
1106	Stückliste						128		01.12.09	Cas	
1100	parts list						120		01.12.03		
1107	Stückliste						129		01.12.09	Cas	
	parts list										
1108	Stückliste	2					130		01.12.09	Cas	
	parts list	t									
1109	Stückliste	2					131		01.12.09	Cas	
	parts list	t									
1110	Stückliste						132		01.12.09	Cas	
	parts list	t 									
1111	Stückliste						133		01.12.09	Cas	
	parts list										
1112	Stückliste parts list						134		01.12.09	Cas	
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Side	Contens					Additional field	Date	Reviewer	Х
1113						135	01.12.09	Cas	
	parts list								
1114	Stückliste parts list					136	01.12.09	Cas	
1115	Stückliste parts list					137	01.12.09	Cas	
1116	Stückliste parts list					138	01.12.09	Cas	
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## Verdrahtung wiring

Draht-/Klemmen-Numerierungart im Schaltschrank: wire/terminal marking inside enclosure:

- gleiches Potential --> gleiche Nummer
- same potential --> same number
- an den einzelnen Geräten: mit Anschluss-PIN-Nummer
- on components: like terminal pin-number
- an Klemmen: nach Klemmen-Nummern
- on terminals acc. to terminal numbers

Drahtnummerierung ausserhalb des Schaltschrankes: wire marking outside enclosure:

- nach Klemmen-Nummern
- like terminal number

Beschriftung der einzelnen Geräte im Schaltschrank: marking of components in enclosure:

- Bezeichnungsschild auf und neben dem Gerät
- marking on components and mounting plate

Beschriftung ausserhalb des Schaltschrankes: marking outsites enclosure:

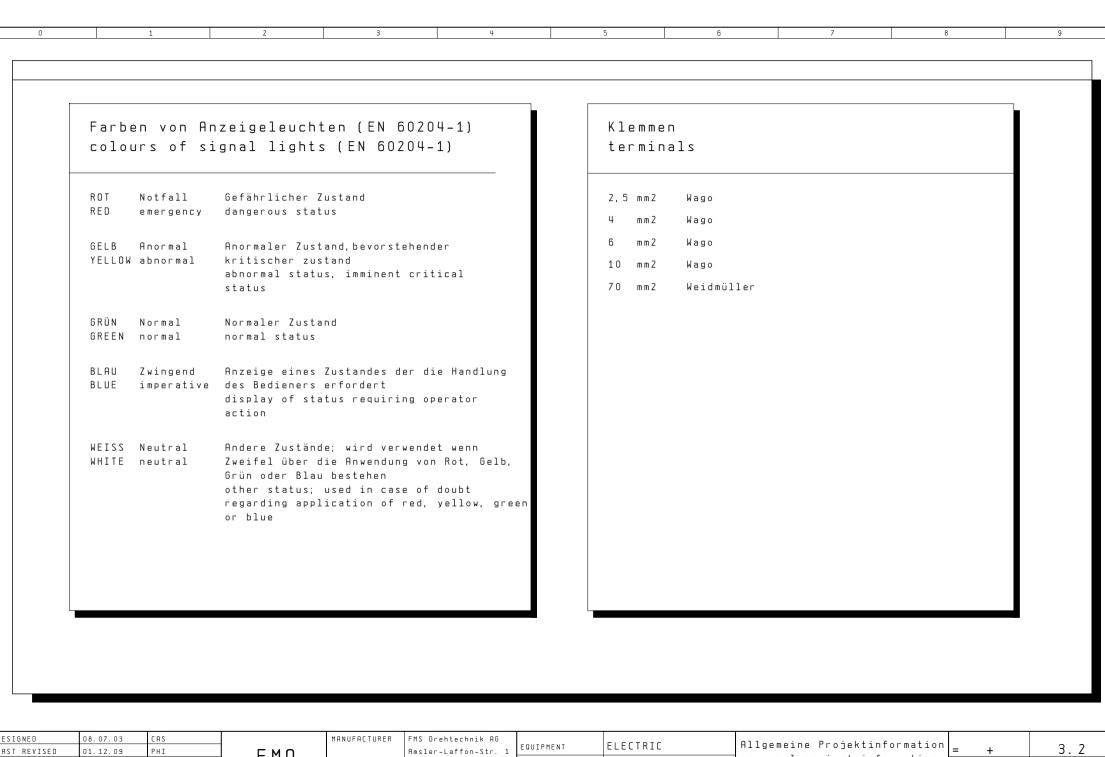
- Bezeichnungsschild neben dem Gerät
- marking on mounting plate
- Bezeichnungsschild am Gerätekabel
- marking on components

Leiterfarben (EN 60204-1) wire coulors (EN 60204-1)

	FARBE COLOUR	MIN. QUERSCHNITT SMALLEST AREA
Hauptstromkreis AC main circuit AC	schwarz black	1,5 mm2
Hauptstromkreis DC main circuit DC	schwarz black	1,5 mm2
Neutralleiter neutral conductor	hellblau light blue	1,0 mm2
Potentialerde potential equalisation Schutzerde protection earth	gelb/grün yellow/green gelb/grün yellow/green	6,0 mm2 1,5 mm2
Wechselspannung 230VAC voltage 230VAC	schwarz black	1,0 mm2
Steuerstromkreis DC control circuit DC	dunkelblau dark blue	1,0 mm2
Fremdspannung foreign voltage	orange	1,5 mm2
Vor Hauptschalter bevor main switch	schwarz black	1,5 mm2
PLC-Eingang PLC input	dunkelblau dark blue	0,5 mm2
PLC-Ausgang PLC output	dunkelblau dark blue	0,5 mm2

Bei mehradrigen Kabeln: Ader schwarz mit weissen Ziffern multiplex wires cable: wire black with white numeral

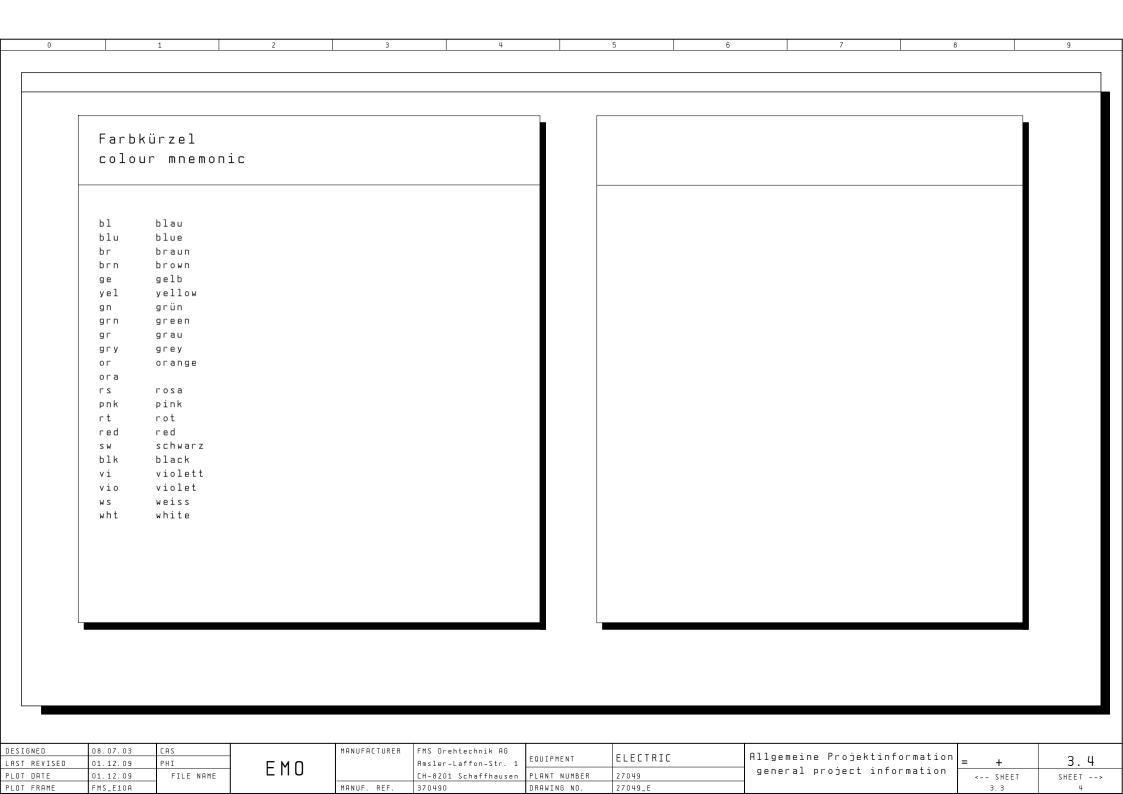
DESIGNED	08.07.03	CAS		MANUFACTURER	FMS Drehtechnik AG		EL ECTRIC	011	'	
LAST REVISED	01.12.09	PHI	l EMN		Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC	Allgemeine Projektinformation	- +	3.1
PLOT DATE	01.12.09	FILE NAME	EMO		CH-8201 Schaffhausen	PLANT NUMBER	27049	general project information	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E		2i	3.2



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PLOT DATE	01.12.09	FILE NAME	LIIU		CH-8201 Schaffhausen	PLANT NUMBER	27049	general project information	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E		3.1	3.3

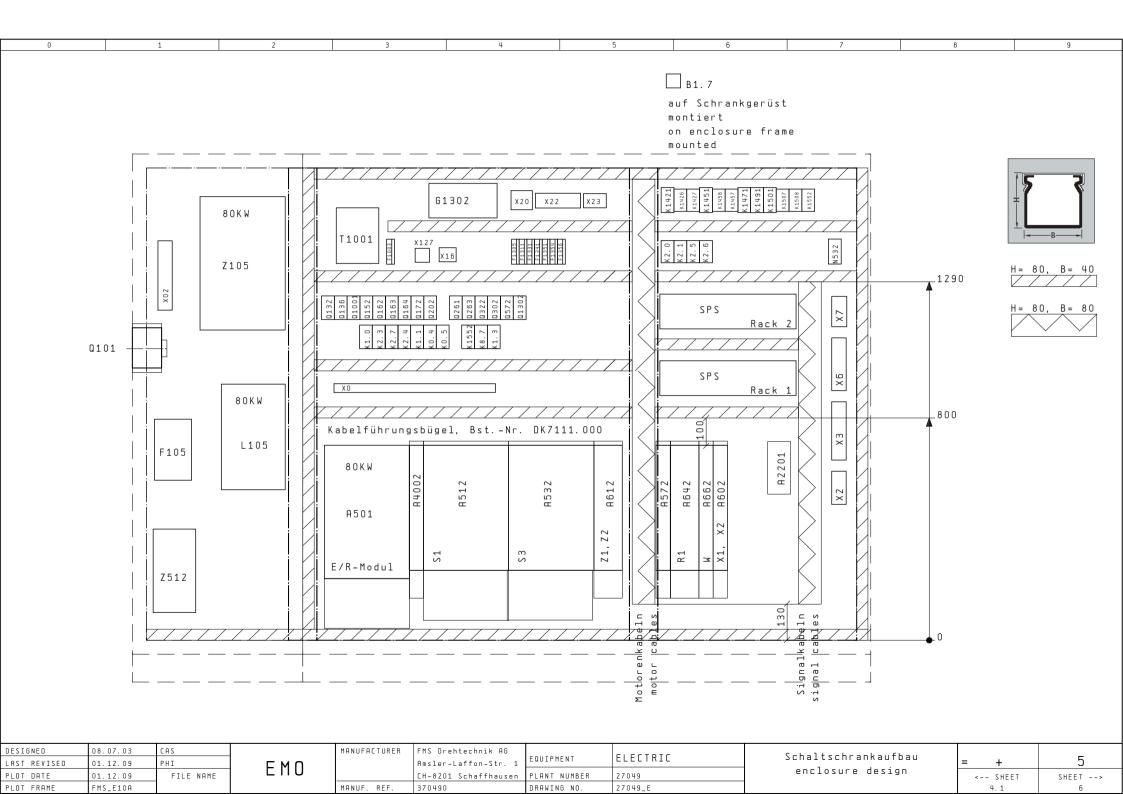
Gerätebezeichnungen Gerätebezeichnungen designation of devices designation of devices A., Baugruppe, Gerät N.. Regler. Verstärker module. device N.. controller, amplifyer B.. Umsetzer nicht elektrisch --> elektrisch P.. Meßgeräte, Prüfeinrichtungen, Zähler B.. converter not electrical to electrical P., instruments, check devices, counters C.. Kondensatoren Q.. Starkstromschaltgeräte C.. condensers Q. power current switches D.. Binäre Elemente R.. Widerstände R.. resistors D.. binary elements S.. Schalter, Taster E.. Hilfsgeräte E.. auxiliary device S.. switches, touch button F.. Sicherungseinrichtungen T.. Transformatoren T.. transformers F.. safety devices G.. Generatoren U.. Funktionseinheiten G.. generators U.. Function units H.. Signalgeräte (Lampen. Hupen..) V. Halbleiter H.. signal devices (lamps.horns..) V.. semi conductor W.. Kabel J.. Sonstige Einrichtungen W.. cable J. other devices K.. Schütz X.. Stecker, Klemmen K.. contactor X.. plugs, terminals Y.. elektrisch betätigte Mechanik ( Ventile ) L.. Drosseln L.. throttles Y.. el. actuated mechanism ( valves ) Z.. Filter, Entzerrer M. Motoren M.. motors filter, equalizer rns MANUFACTURER EMS Drabtachnik AG DESTRNED N8 N7 N3

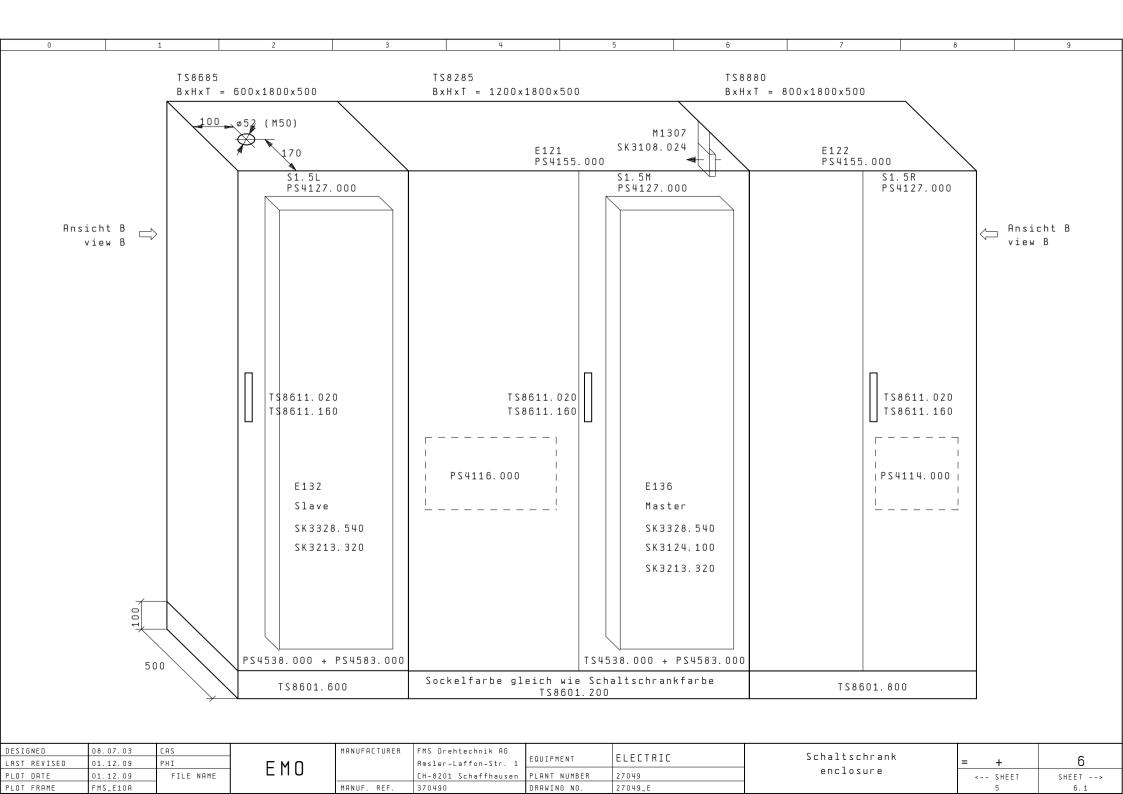
DESTONED	00.07.03	LHS		IIIINUI ALIUNLI	LIN2 DIENTECHNIK HO	1	FLECTOTC	011		
LAST REVISED	01.12.09	PHI	EMO		Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC	Allgemeine Projektinformation	= +	3.3
PLOT DATE	01.12.09	FILE NAME			CH-8201 Schaffhausen	PLANT NUMBER	27049	general project information	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E		3.2	3.4

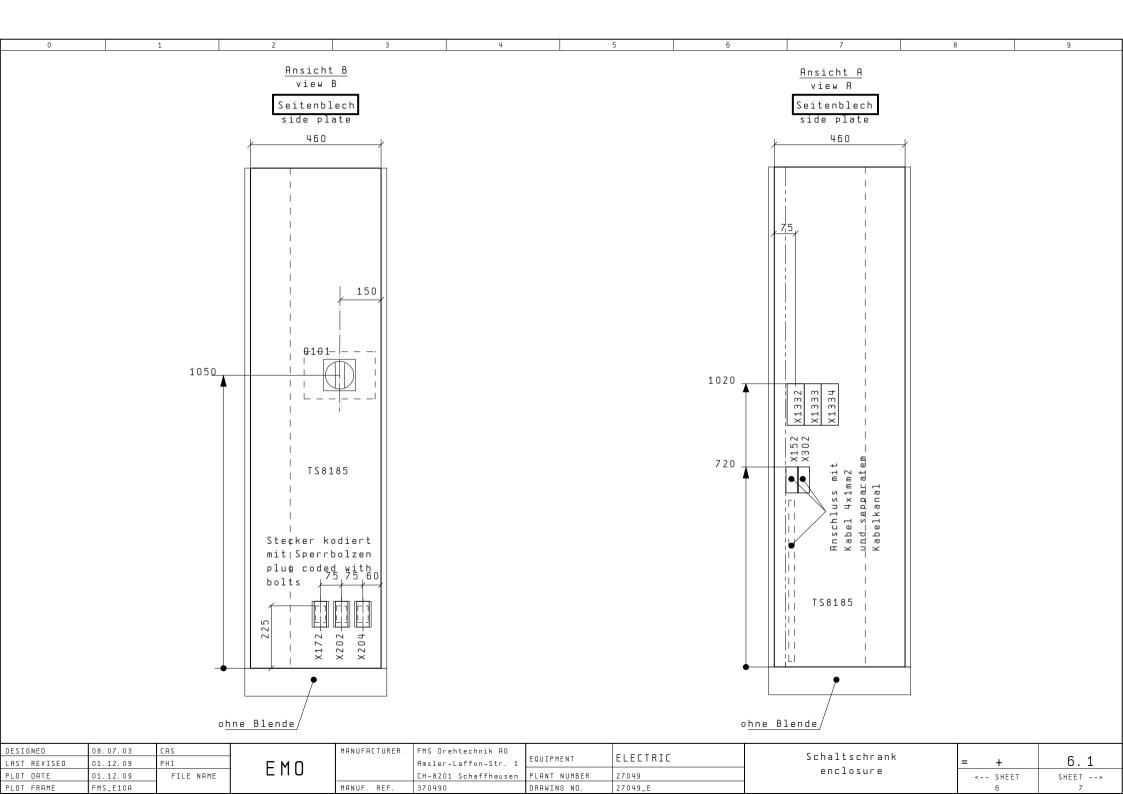


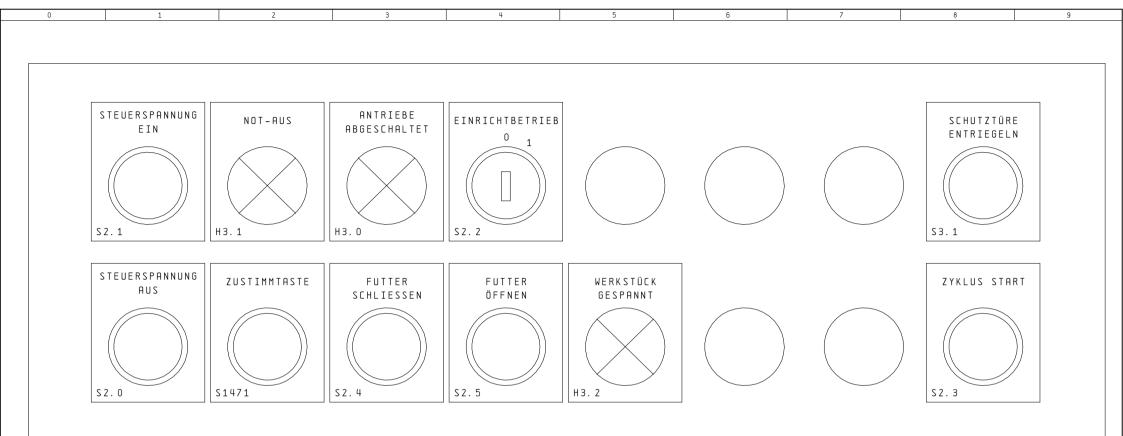
KLEMMLEISTENÜBERSICHT SCHALTSCHRANK TERMINAL OVERVIEW EL.CONTROL ENCLOSUR	KLEMMLEISTENÜBERSICHT BEDIENKASTEN TERMINAL OVERVIEW CONTROL CONSOLE	KLEMMLEISTENÜBERSICHT SUMMARY OF TERMINAL BARS
X0=X0 Erdschiene Schaltschrank	X00=X00 Erdschiene Bedienkasten	
XO earth bar enclosure  X2=X2 Externe Geräte OV  X2 external devices OV	X00: earth bar operator panel  X35=X35 Steckdose 230VAC  X35 socket 230VAC	
X3=X3 Externe Geräte 24V+ X3 external devices 24V+	X36=X36 24VDC-Verteilung X36 24VDC distribution	
X6=X6 Ein-/Ausgabebaugruppen X6 in/out moduls		
X7=X7 Analogbaugruppe X7 analog modul		
X16=X16 230VAC-Verteilung X16 230VAC distribution		
X20=X20 Spannngsversorgung OV X20 power supply OV		
X22=X22 Spannngsverteilung OV		
X23=X23 Spannungsverteilung 24V+ X23 power supply 24V+		

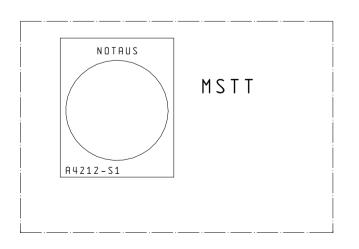
STECKERÜBERSICHT MASCHINE PLUGS SUMMARY OF MACHINE	ANSCHLUSSVERTEILI MULTIPLE SOCKED I		STECKERÜBERSICHT SCHALTSCHRANK PLUGS SUMMARY OF ENCLOSURE
			X152=X152 Hydraulikpumpe
			X152 hydraulic pump X172=X172 Kühlmittelpumpe X172 cooling pump
			X202=X202 Späneförderer Motor X202 chip conveyor motor
			X204=X204 Späneförderer Schaltelemente X204 chip conveyor control elements
	X1338=X1338 Sch1:	itten oben rechts	X302=X302 Schmierpumpe X302 lubrication pump
	X1339=X1339 Schl:	itten oben links	X1332=X1332 Lumbergverteiler X1332 connector box
			X1333=X1333 Lumbergverteiler X1333 connector box
	X1342=X1342 Kühlı X1342 coolant	mittel	X1334=X1334 Lumbergverteiler X1334 connector box
	·		







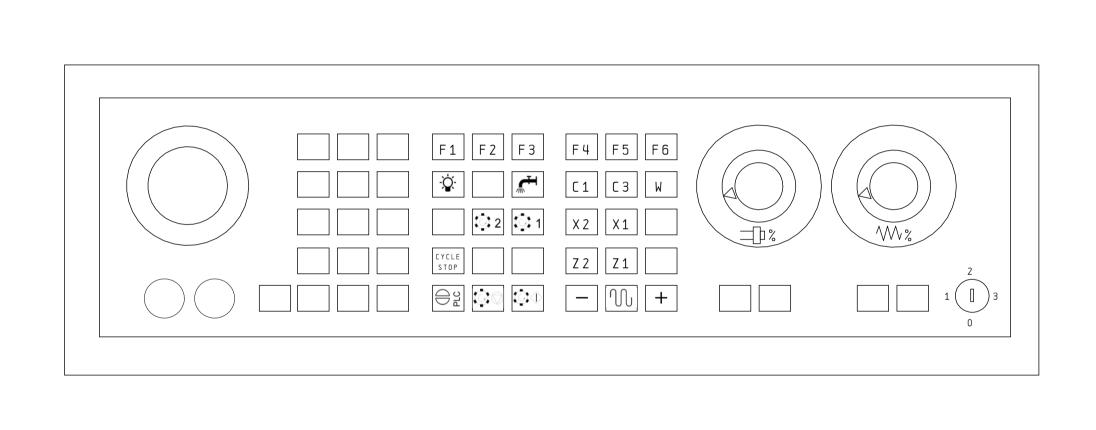




# Bedientableau operating panel

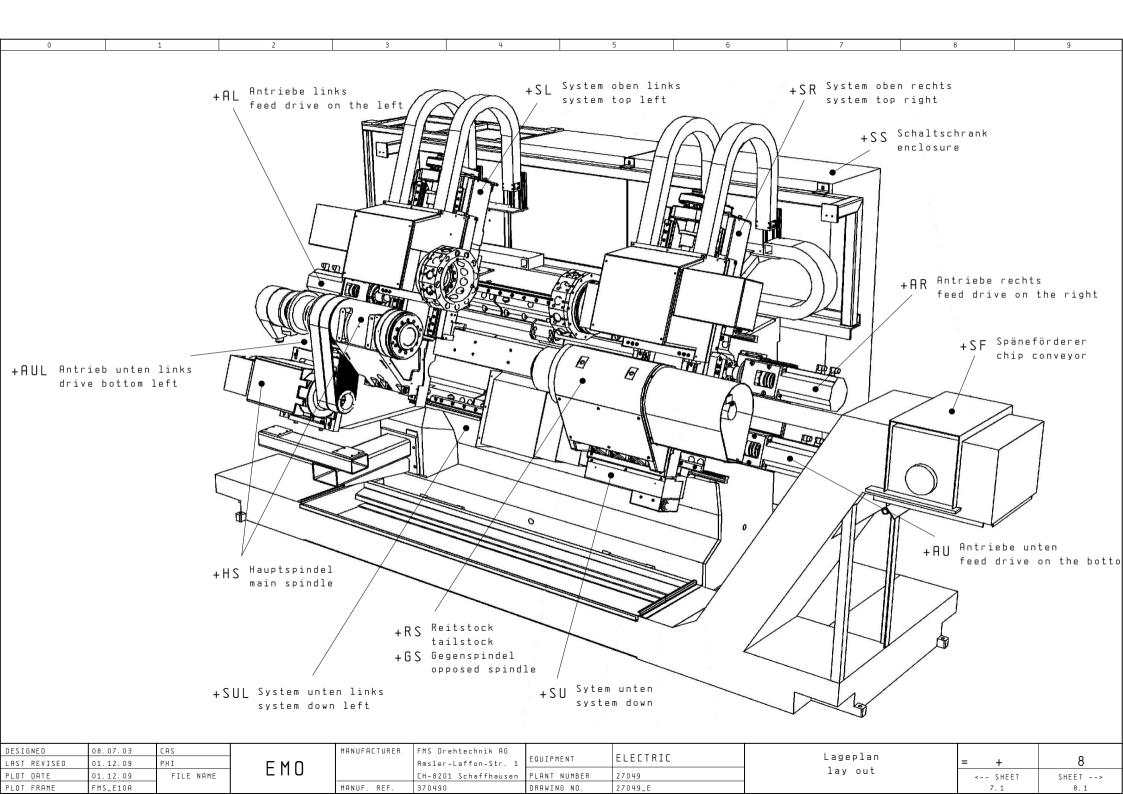
H3. 0 H3. 1 H3. 2 S2. 0 S2. 1 S2. 2 S2. 3 S2. 4 S2. 5	$\begin{array}{c} 568 - 043 - 060 \\ 568 - 043 - 057 \\ 568 - 043 - 061 \\ 568 - 016 - 040 \\ 568 - 016 - 042 \\ 568 - 016 - 042 \\ 568 - 016 - 039 \\ 568 - 016 - 039 \\ \\ 568 - 016 - 039 \\ \end{array}$	+	568-016-045
S1471	568-016-041	+	568-016-045

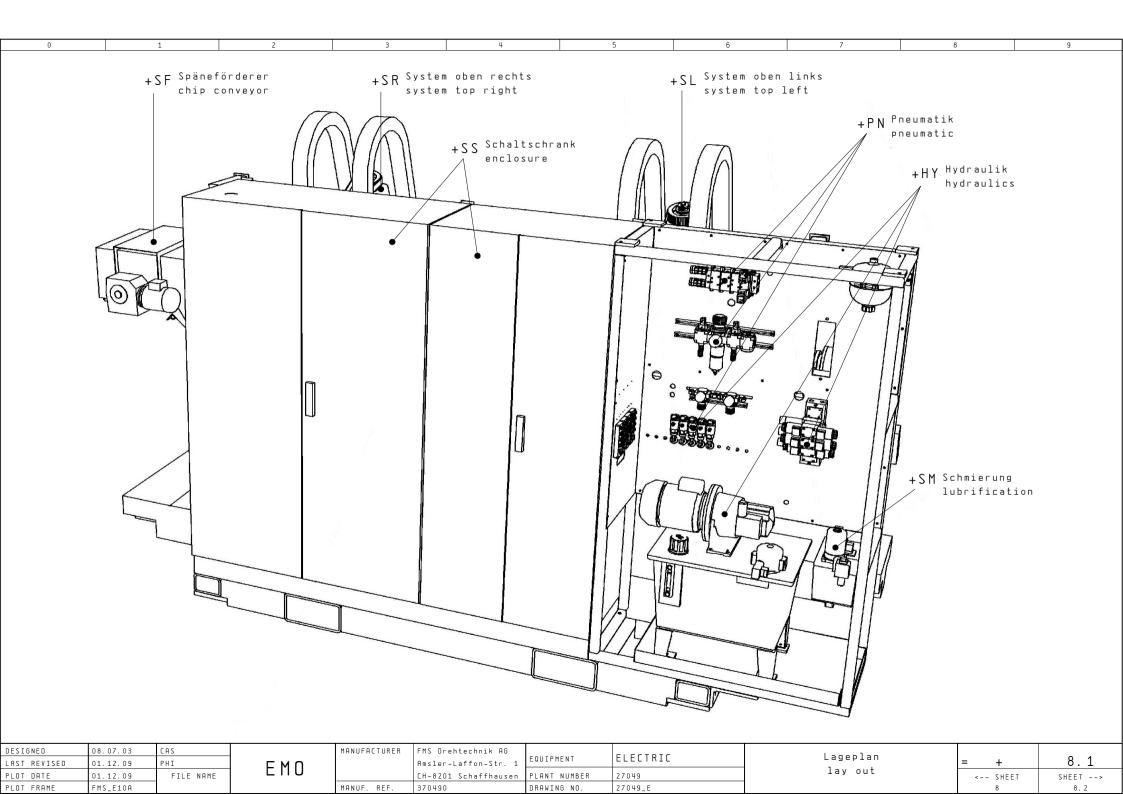
DESIGNED	08.07.03	CAS		MANUFACTURER	FMS Drehtechnik AG		EL ECTRIC	Bedienelemente		
LAST REVISED	01.12.09	PHI			Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC		= +	7
PLOT DATE	01.12.09	FILE NAME	EMO		CH-8201 Schaffhausen	PLANT NUMBER	27049	operating components	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E		6. 1	7.1

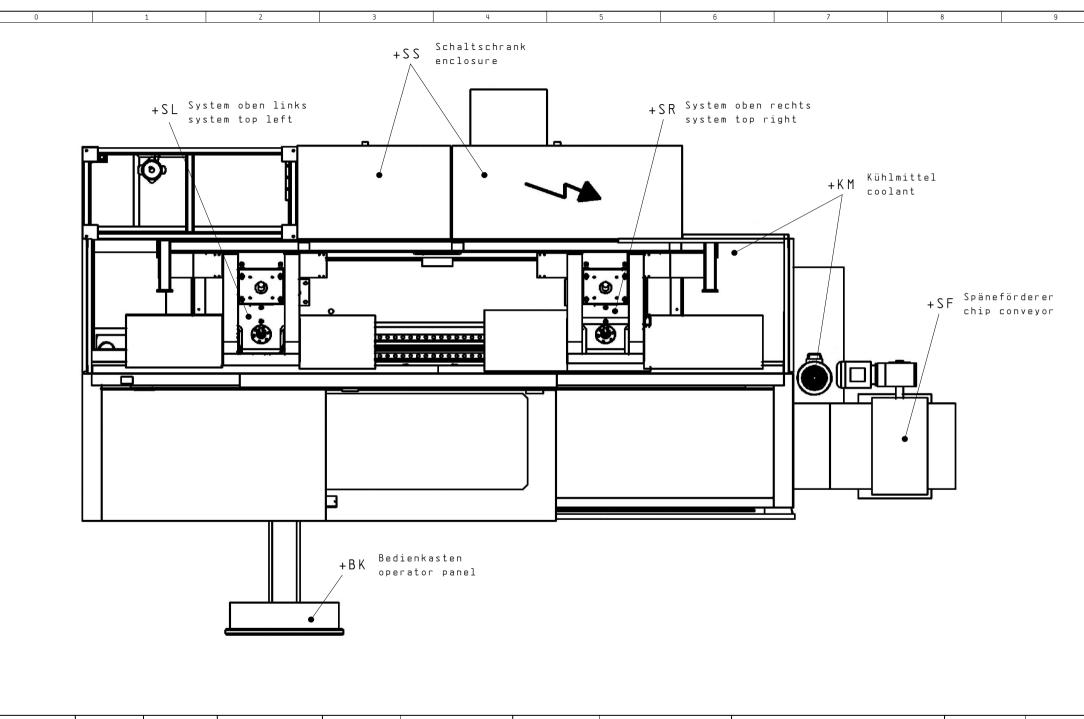


DESIGNED 08.07.03 MANUFACTURER FMS Drehtechnik AG Bedienelemente ELECTRIC EQUIPMENT LAST REVISED 01.12.09 PHI EMOAmsler-Laffon-Str. 1 operating components PLOT DATE 01.12.09 FILE NAME CH-8201 Schaffhausen PLANT NUMBER 27049 <-- SHEET PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E

SHEET -->

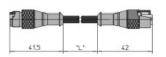






DESIGNED 08.07.03 MANUFACTURER FMS Drehtechnik AG Lageplan ELECTRIC EQUIPMENT 01.12.09 LAST REVISED EMOAmsler-Laffon-Str. 1 lay out PLOT DATE 01.12.09 FILE NAME CH-8201 Schaffhausen PLANT NUMBER <-- SHEET SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E

#### RST 4-RKT 4

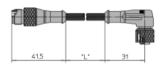


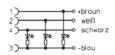




568 - 081 - 055 L = 2,0 m

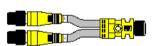
#### RST - RKWT/LED



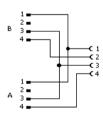


568-081-040 L = 0,6 m 568-081-041 L = 1,0 m 568-081-043 L = 2,0 m

BG15794/C150







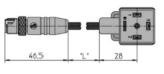
#### TASD41-4.048-FS5K/S330

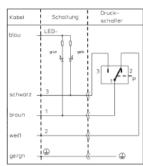




568-081-060

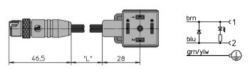
#### RST 5-VAD 3C-4-1





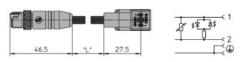
568-081-051 L = 0,6 m 568-081-052 L = 1,0 m 568-081-054 L = 2,0 m

#### RST 5-3-VAD 1A-1-3 DIN 43650/A



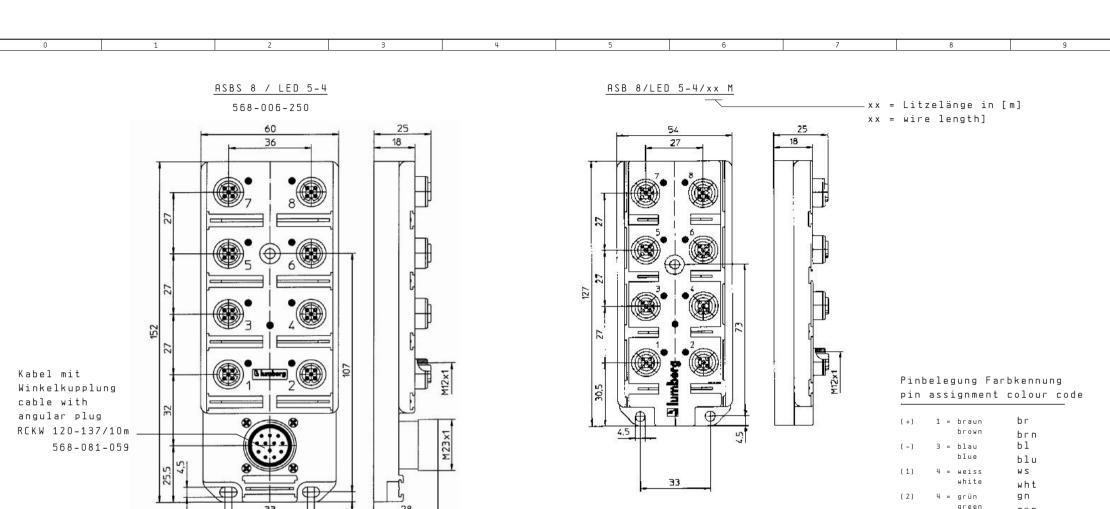
568-081-044 L = 0,6 m 568-081-045 L = 1,0 m 568-081-046 L = 2,0 m

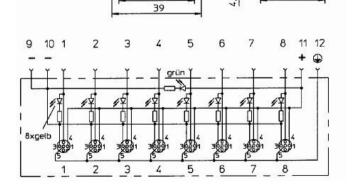
### RST 5-3-VCD 1A-1-3 DIN 43650/C

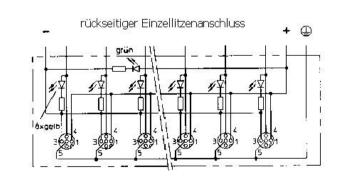


568-081-042 L = 1,5 m

DESIGNED	08.07.03	CAS		MANUFACTURER	FMS Drehtechnik AG		EL ECTRIC	Vanhiaduagalaituaga	1	
LAST REVISED	01.12.09	PHI	EMO		Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC	Verbindungsleitungen 	= +	9
PLOT DATE	01.12.09	FILE NAME			CH-8201 Schaffhausen	PLANT NUMBER	27049	connection wire	< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E		8.2	9.1







( +)	1	=	braun	br
			brown	brn
( - )	3	=	blau	Ь1
			blue	blu
(1)	4	=	weiss	WS
			white	wht
(2)	4	=	grün	gn
			green	grn
(3)	4	=	gelb	ge
			yellow	yel
(4)	4	=	grau	gr
			grey	gry
(5)	4	=	гоѕа	rs
			pink	pnk
(6)	4	=	rot	rt
			red	red
(7)	4	=	schwarz	SW
			black	blk
(8)	4	=	violett	νi
			violet	vio
(PE)	5	=	grün/gelb	gn/ge
			green/yello	⊎grn/yel

DESIGNED	08.07.03	CH2
LAST REVISED	01.12.09	PHI
PLOT DATE	01.12.09	FILE NAME
PLOT ERAME	EMS E10B	

EMO

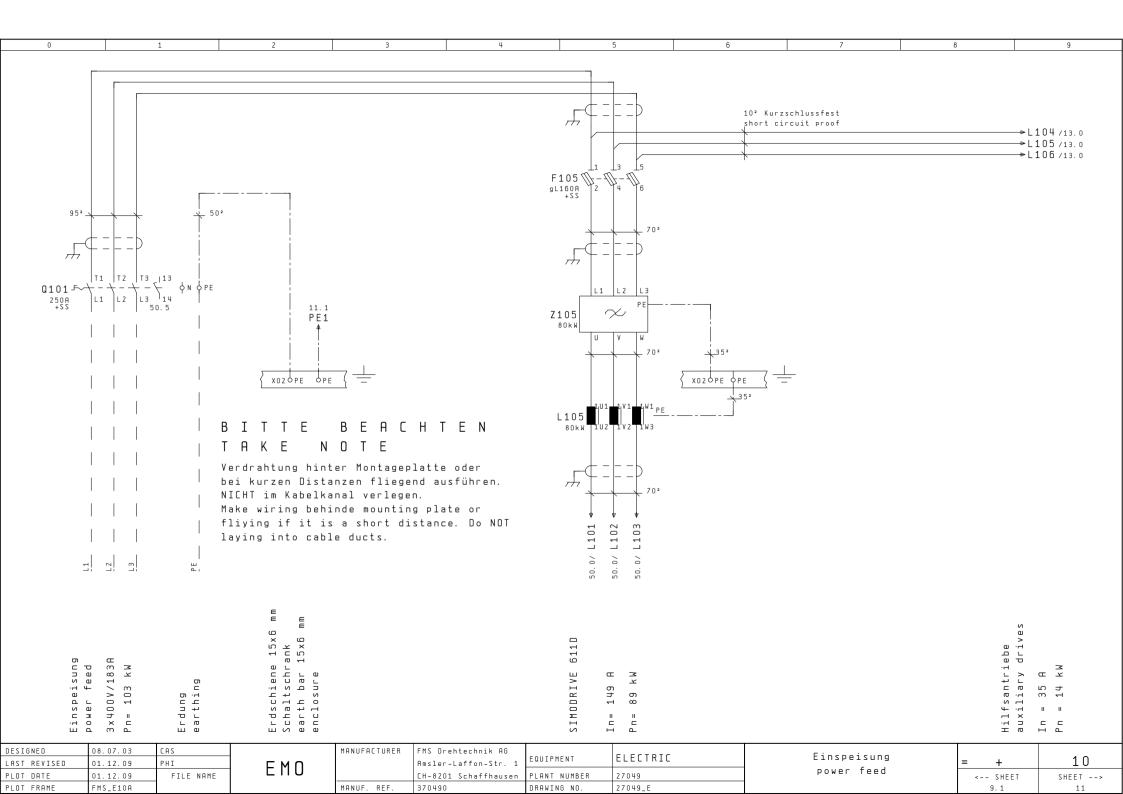
MANUFACTURER

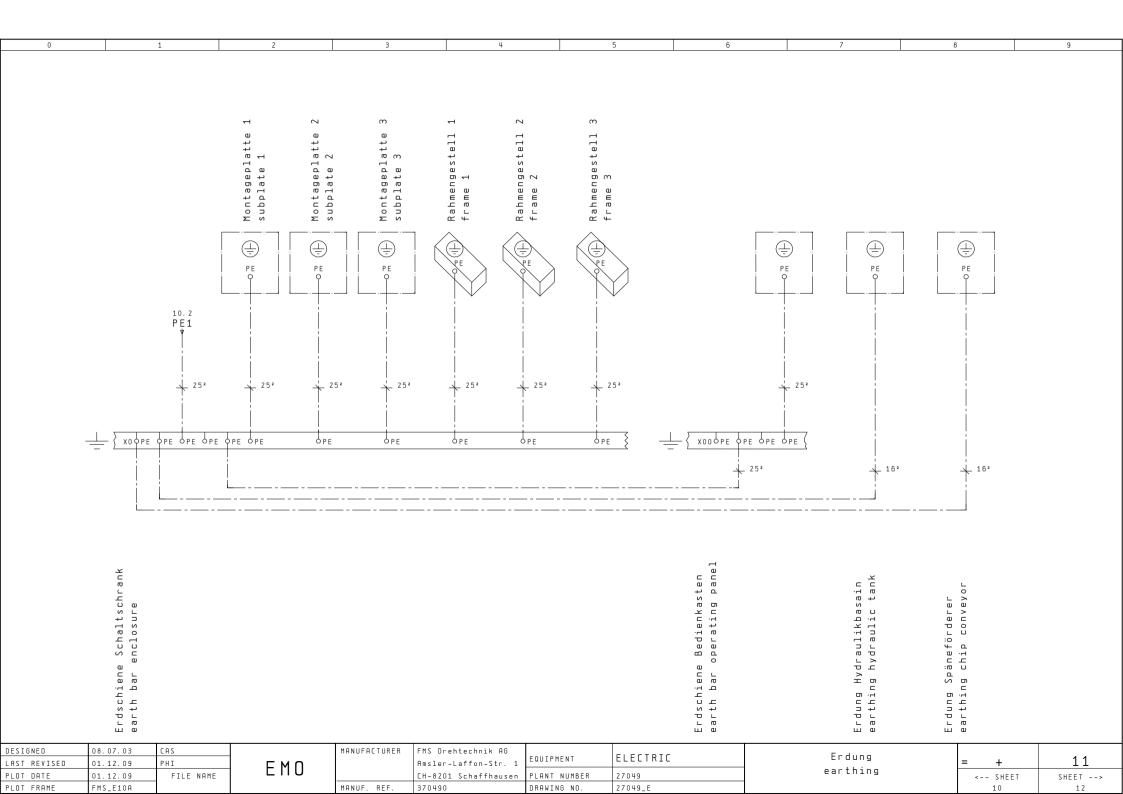
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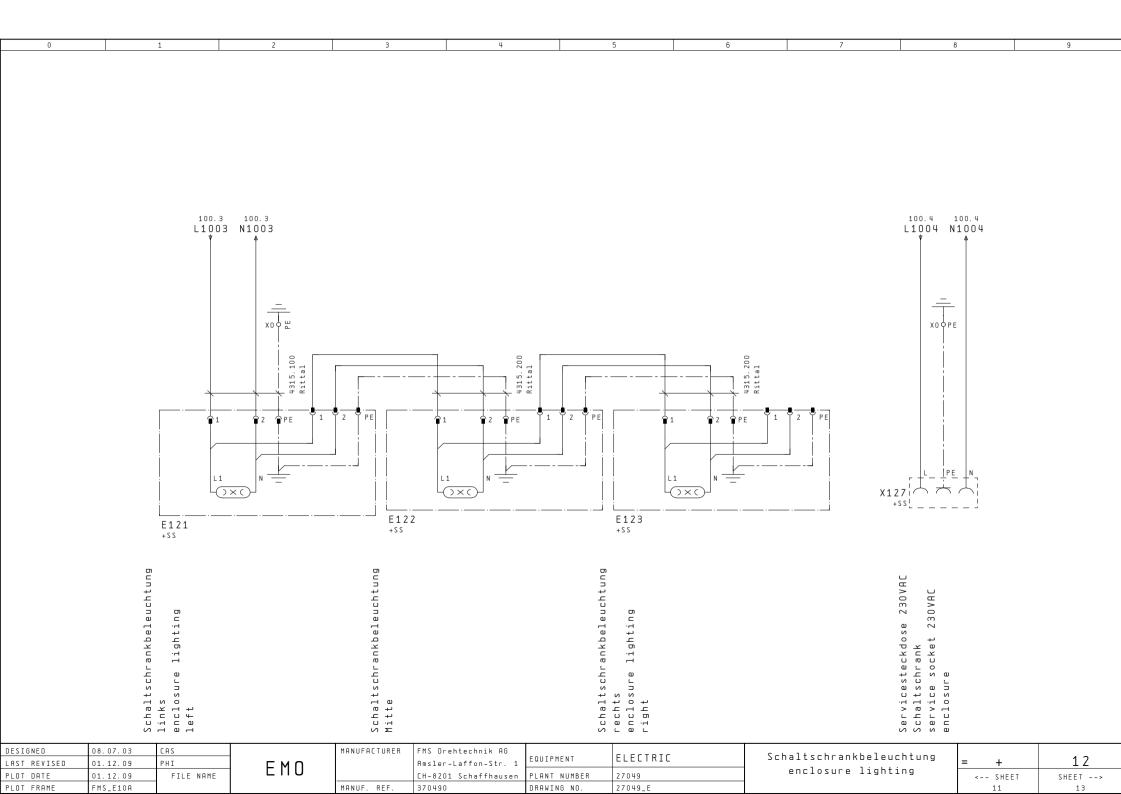
R FMS Drehtechnik A6 Amsler-Laffon-Str. 1 CH-8201 Schaffhausen 370490

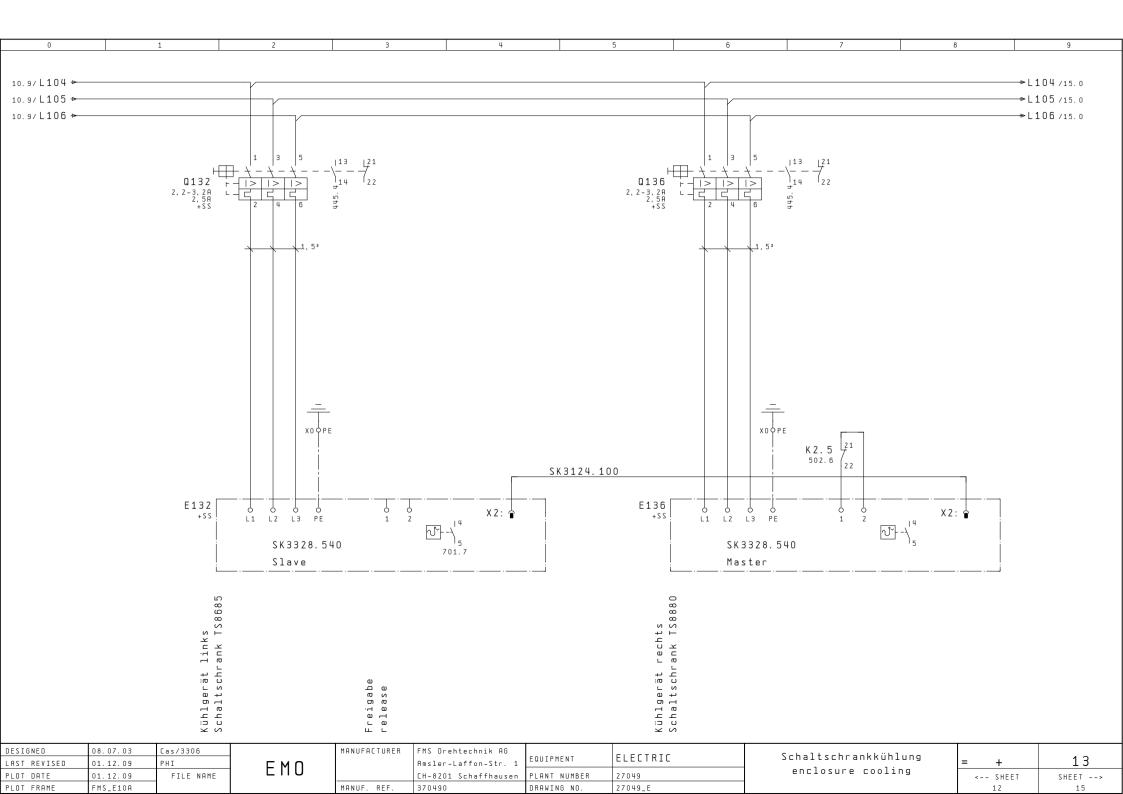
EQUIPMENT ELECTRIC
PLANT NUMBER 27049
DRAWING NO. 27049\_E

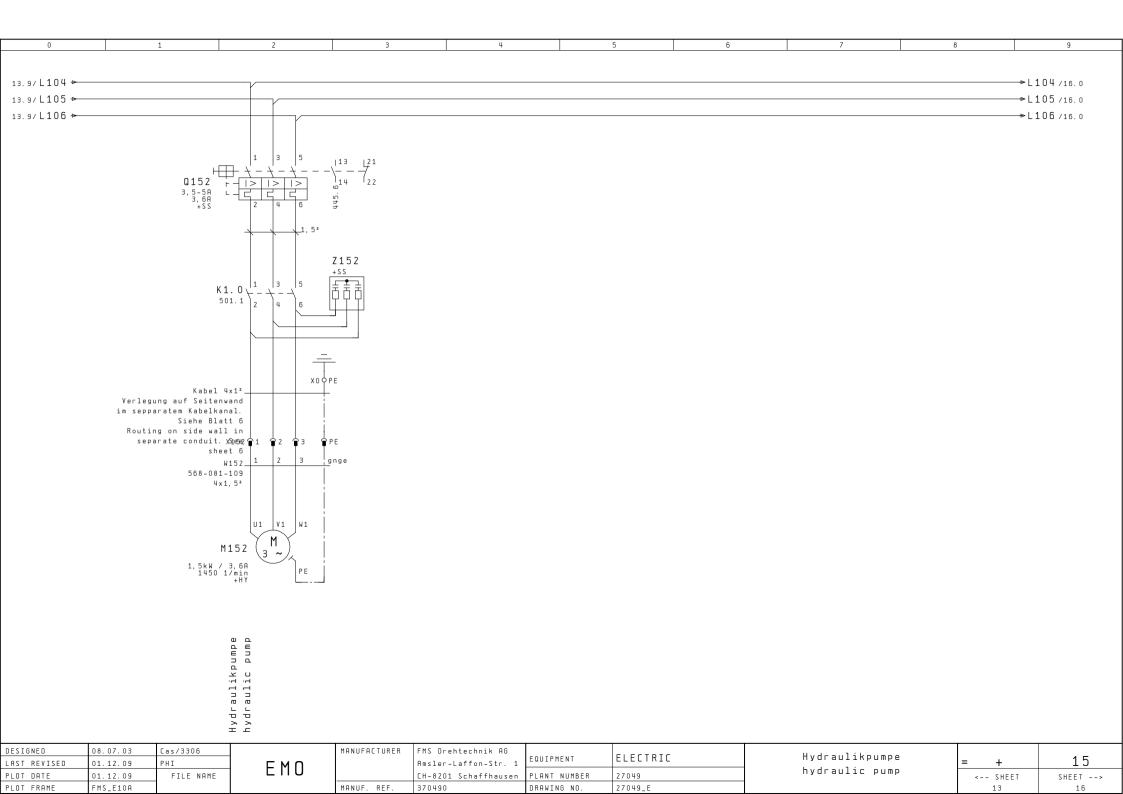
Verbindungsdosen connection boxes + 9.1 --- SHEET SHEET --->

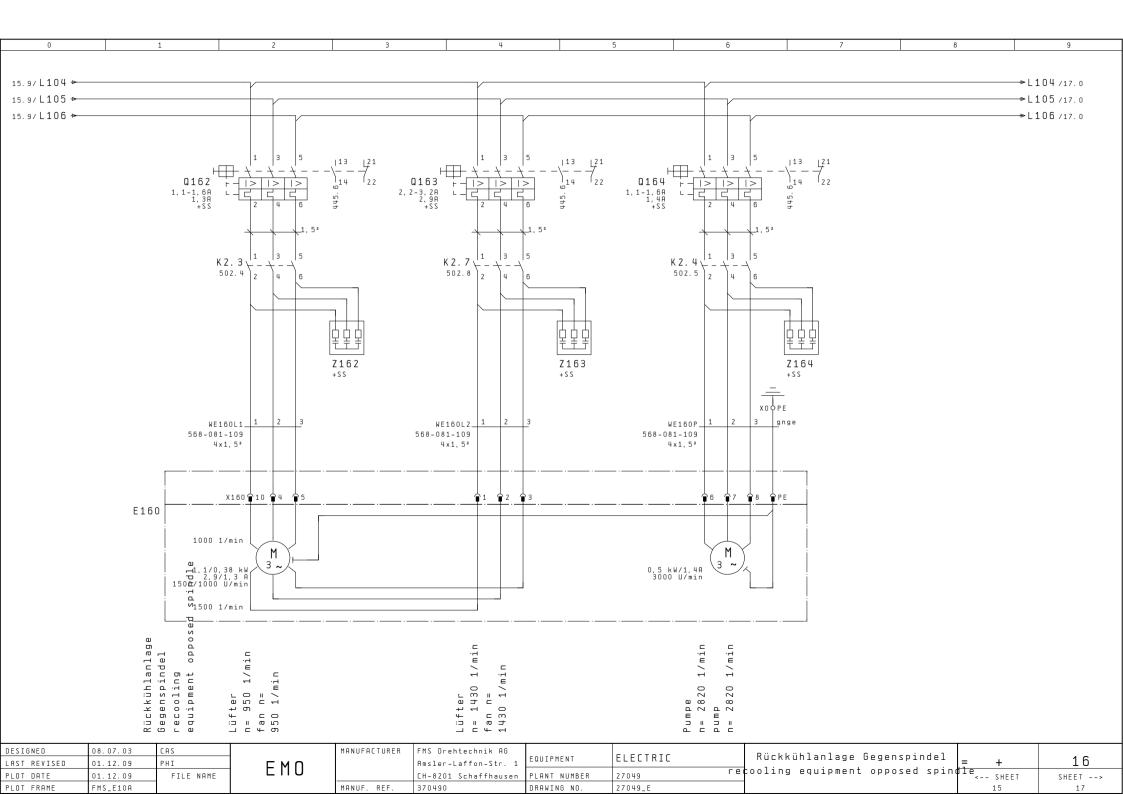


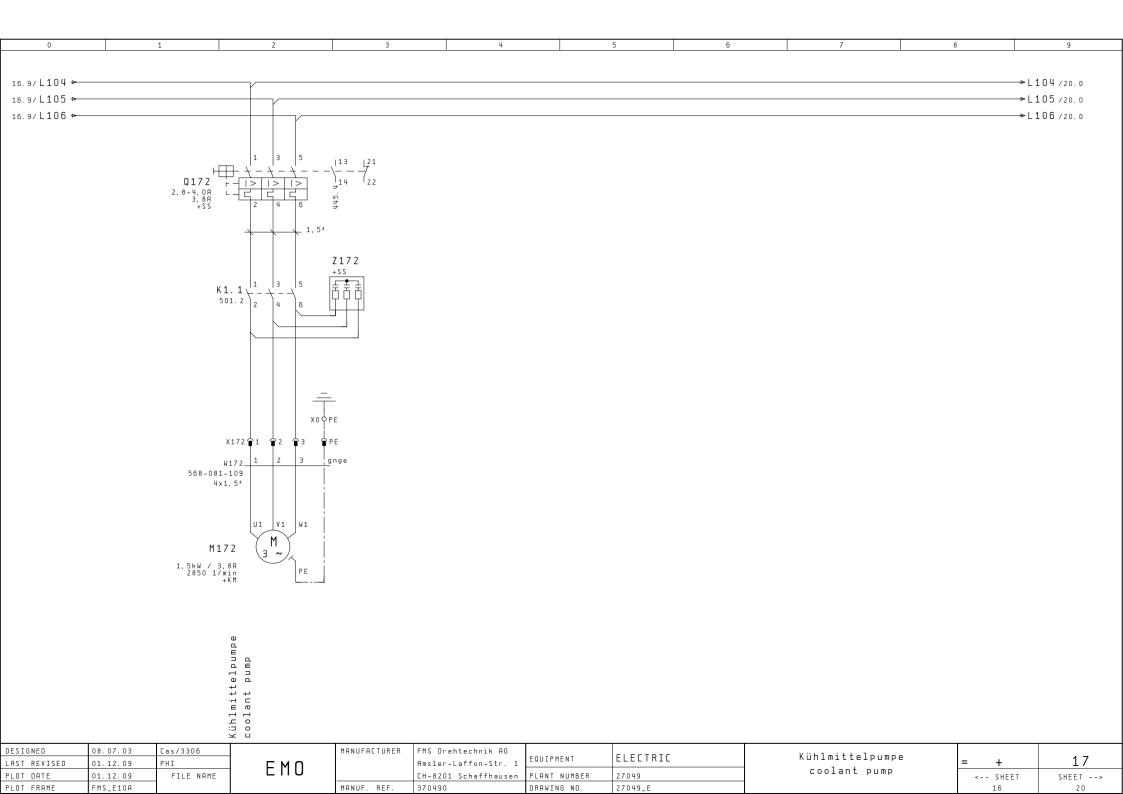


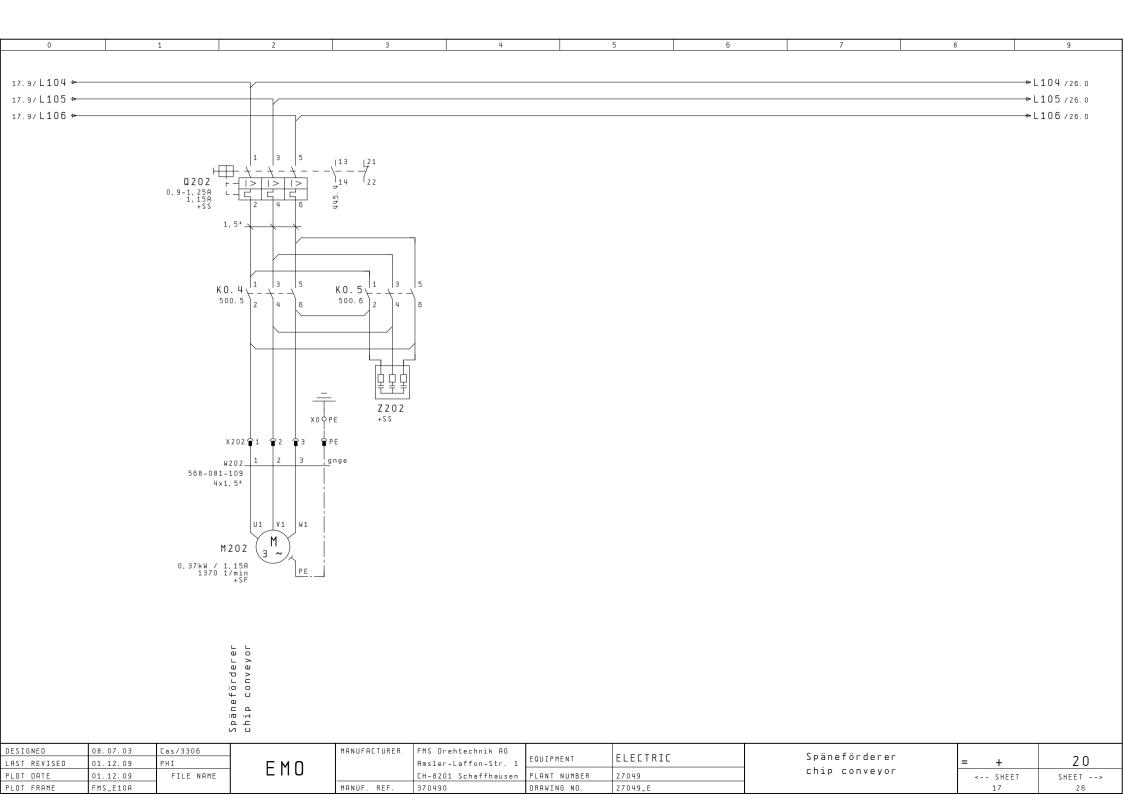


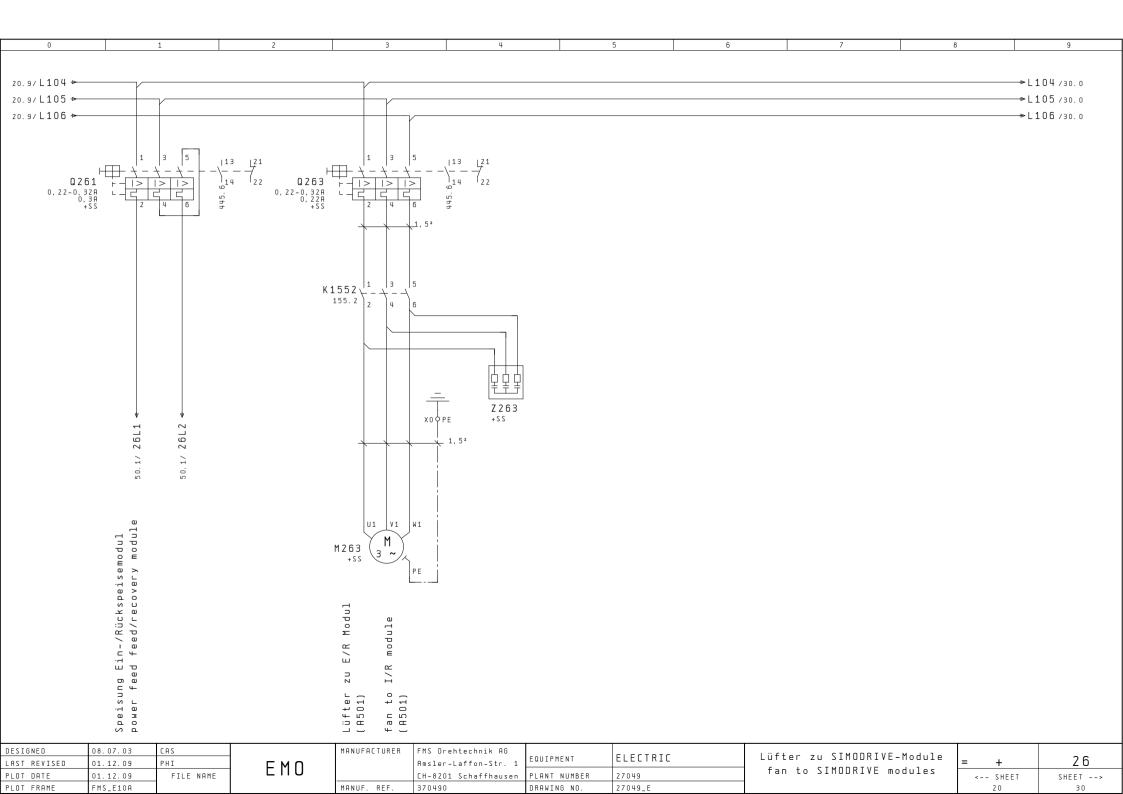


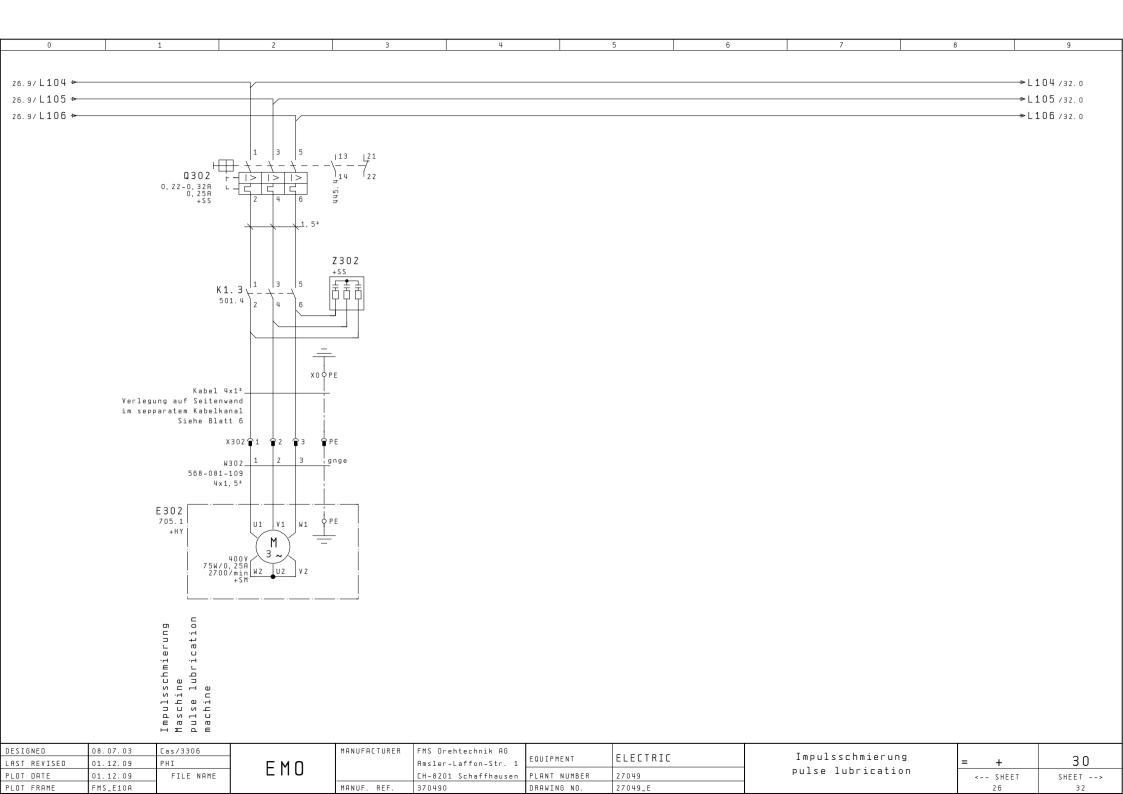


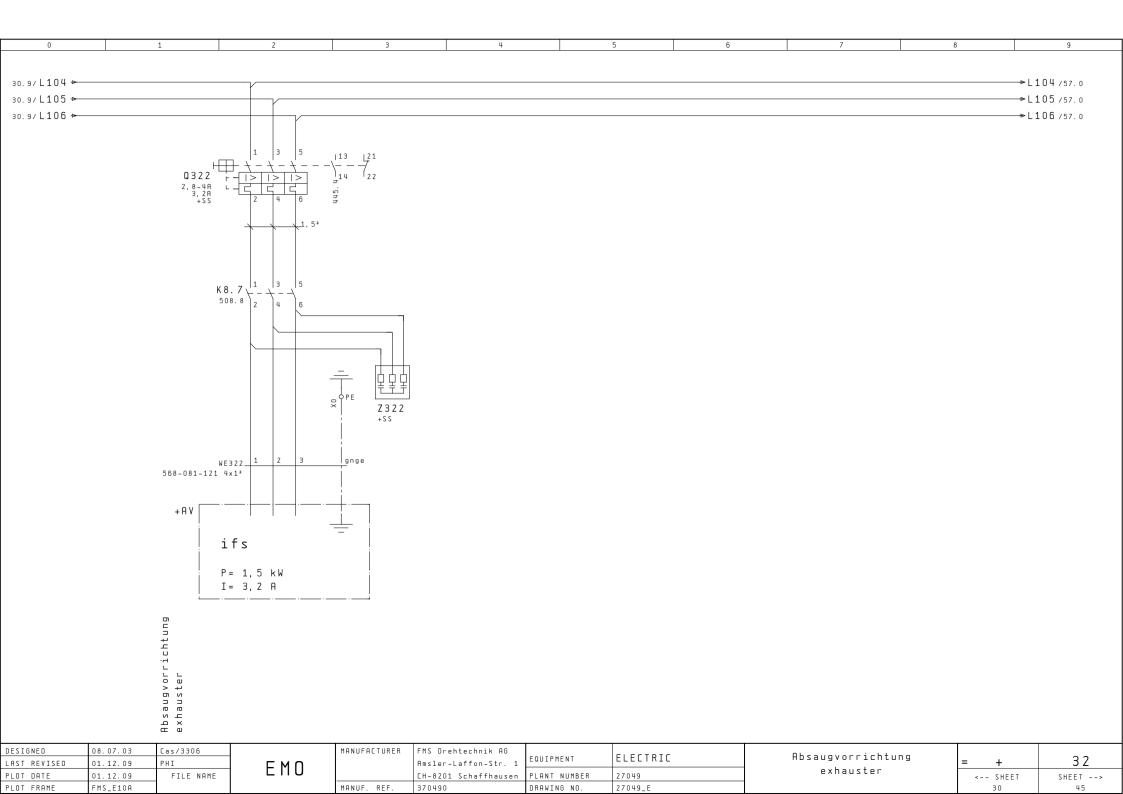


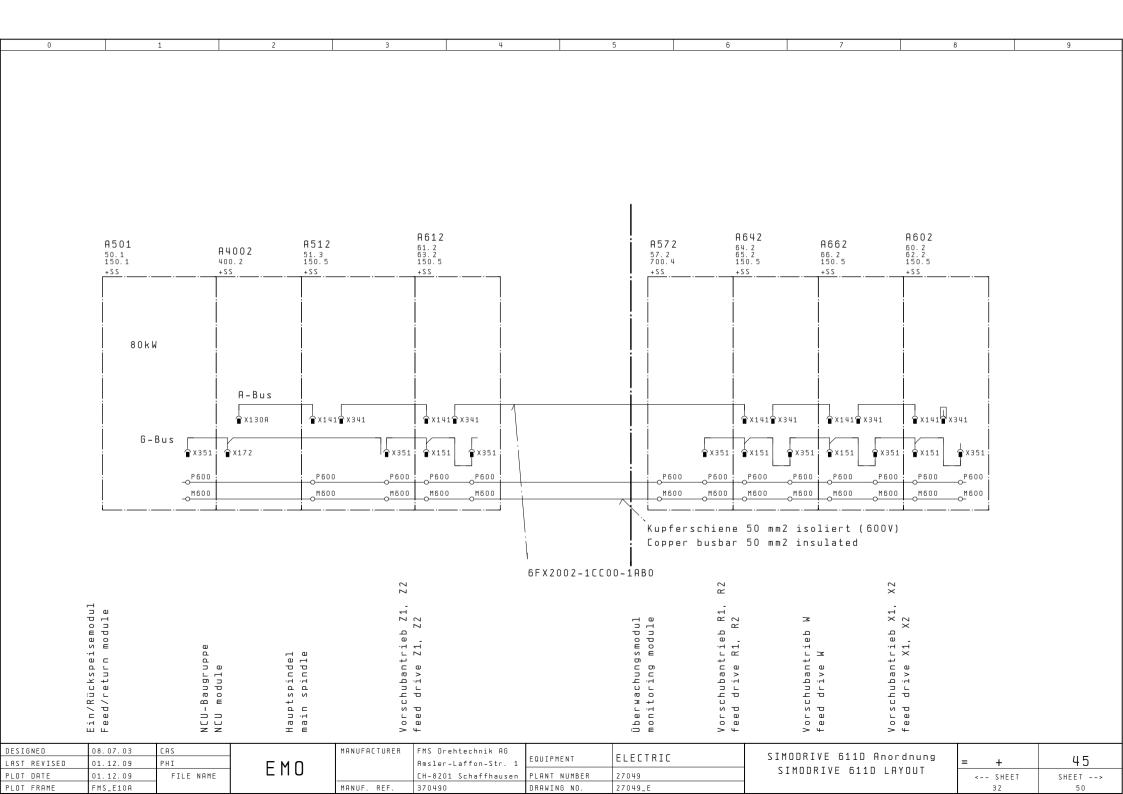


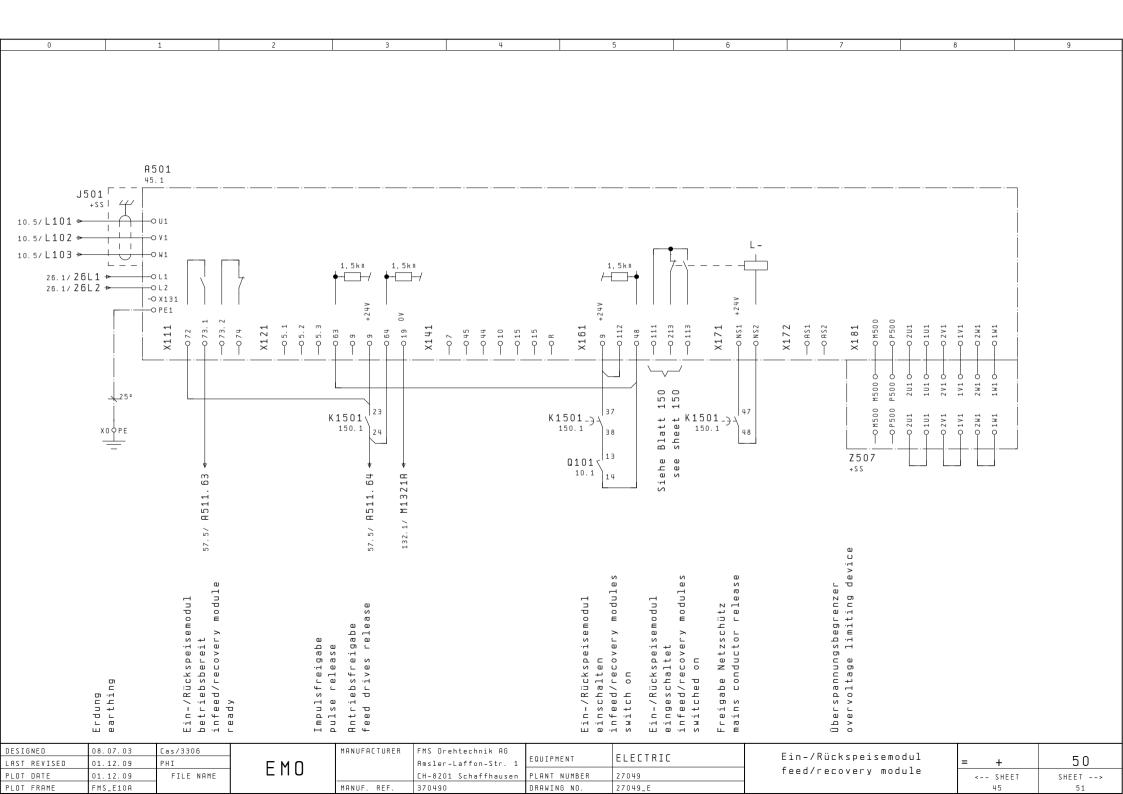


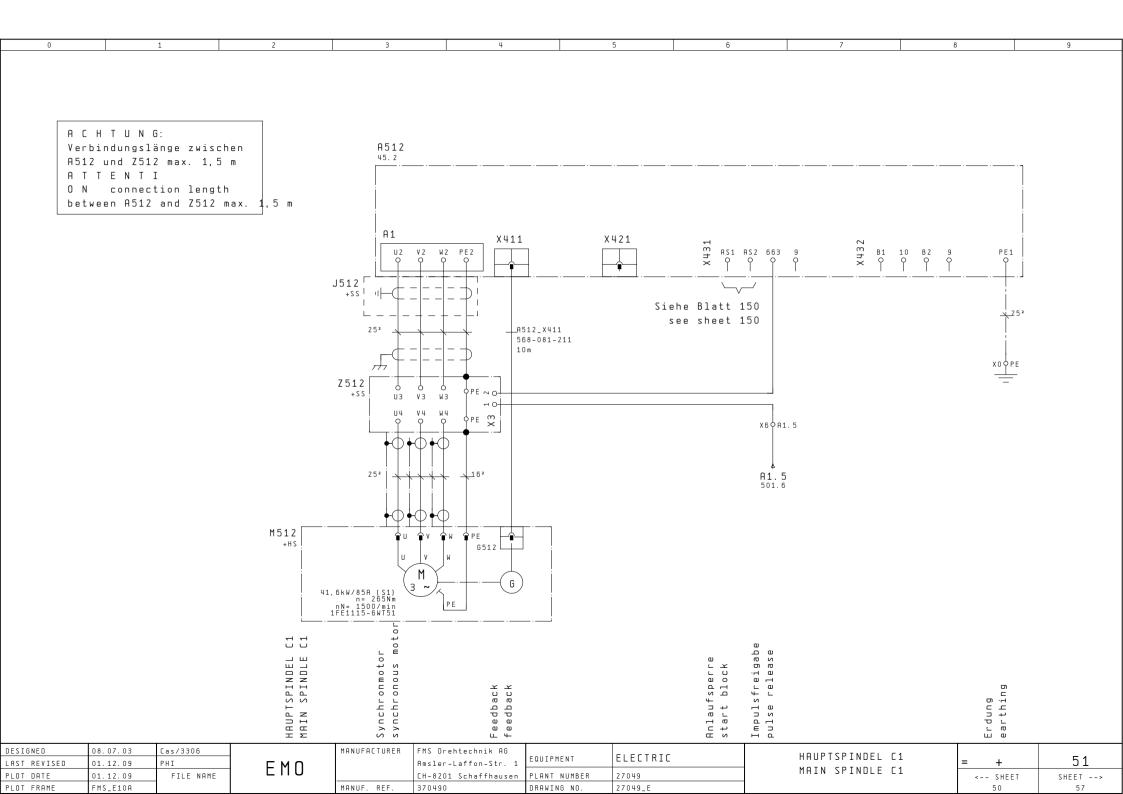


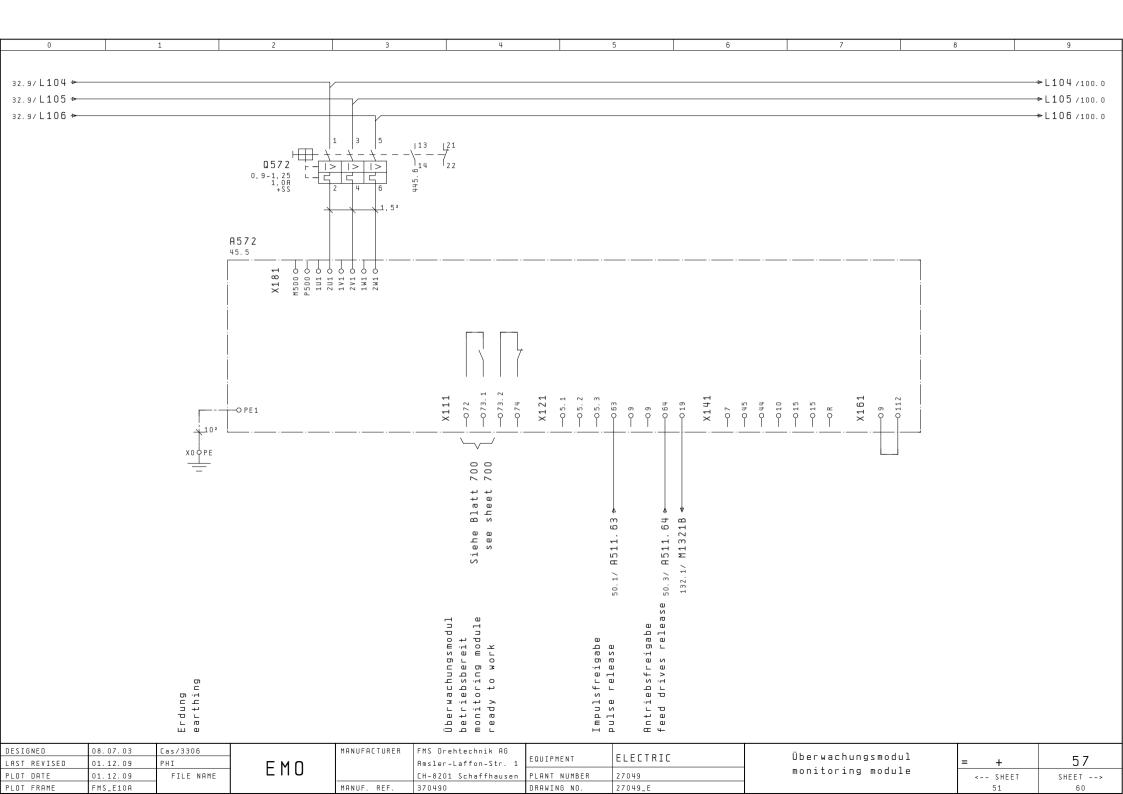


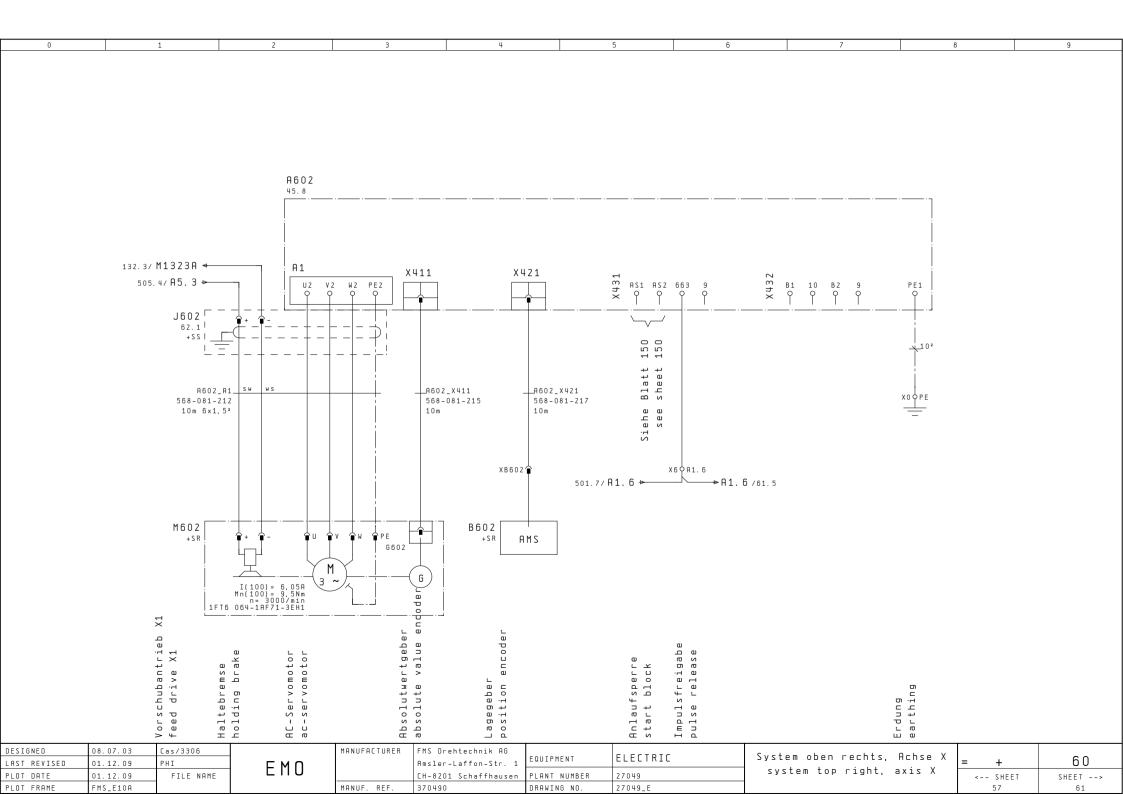


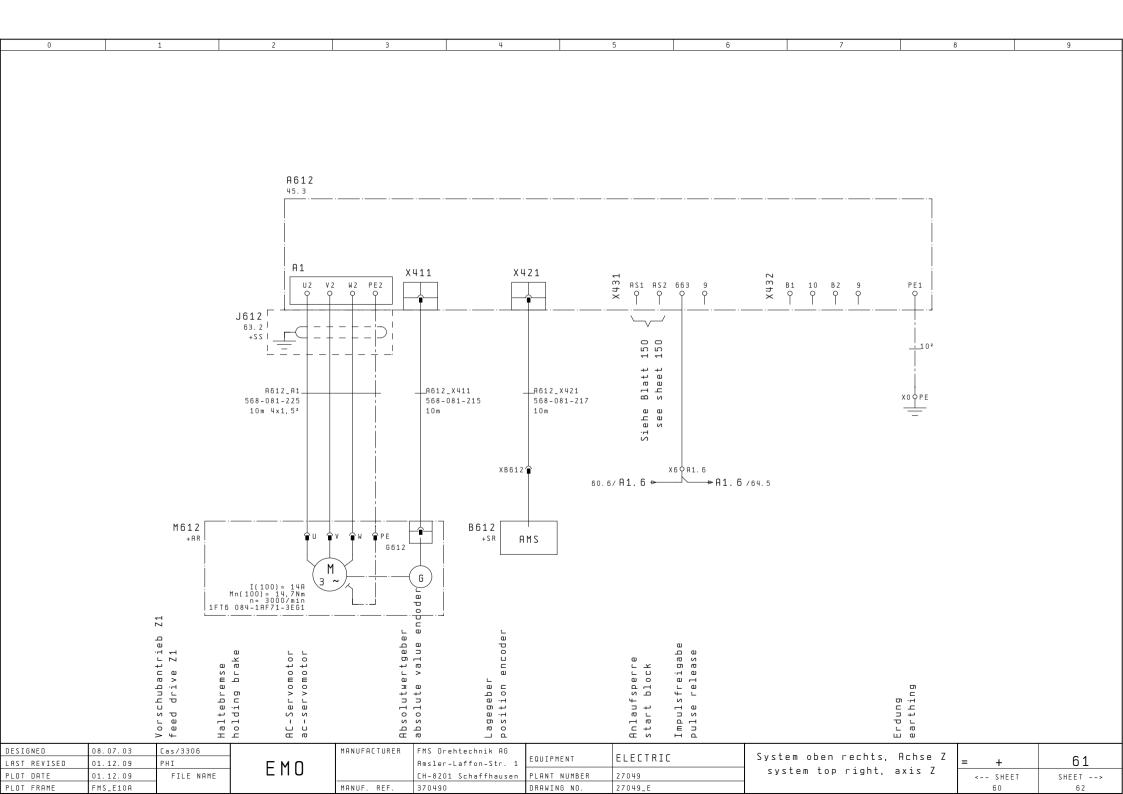


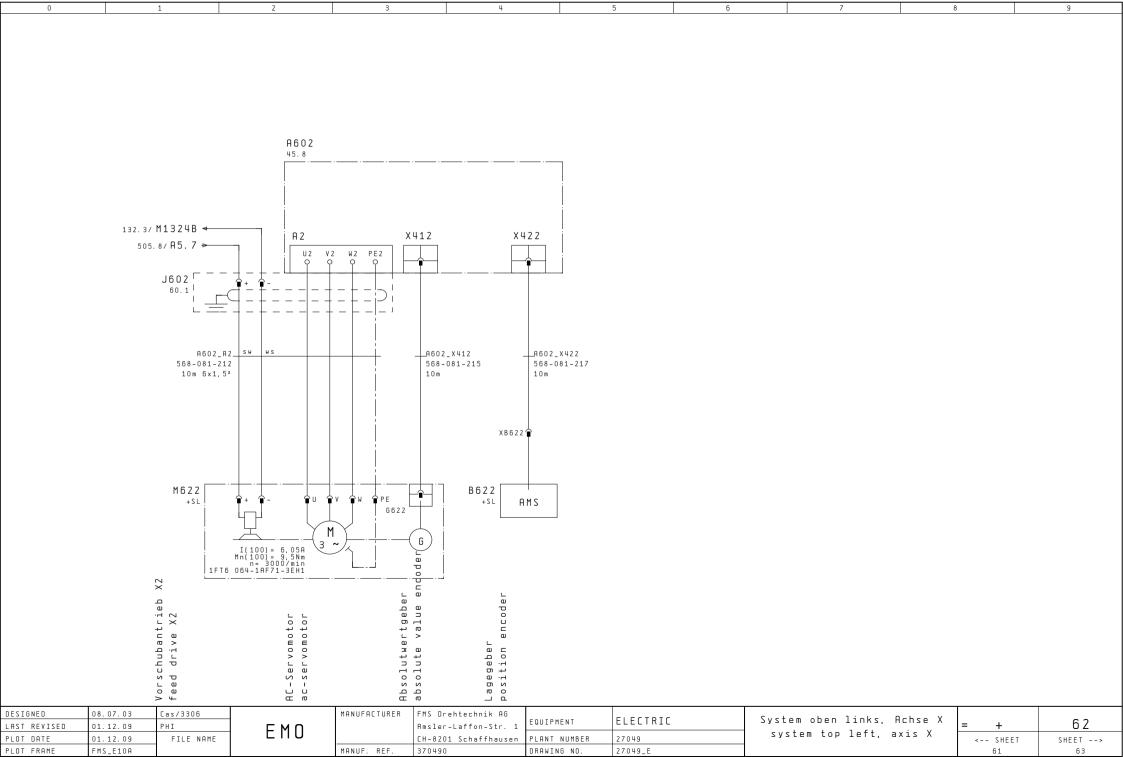


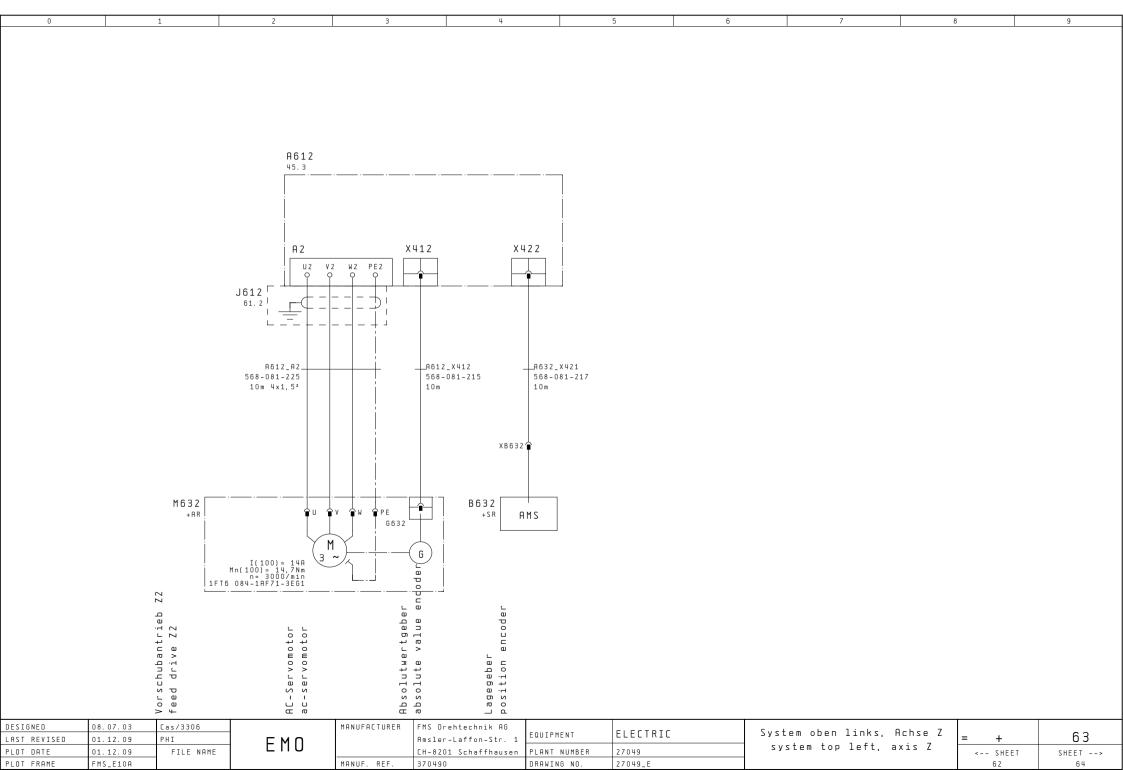


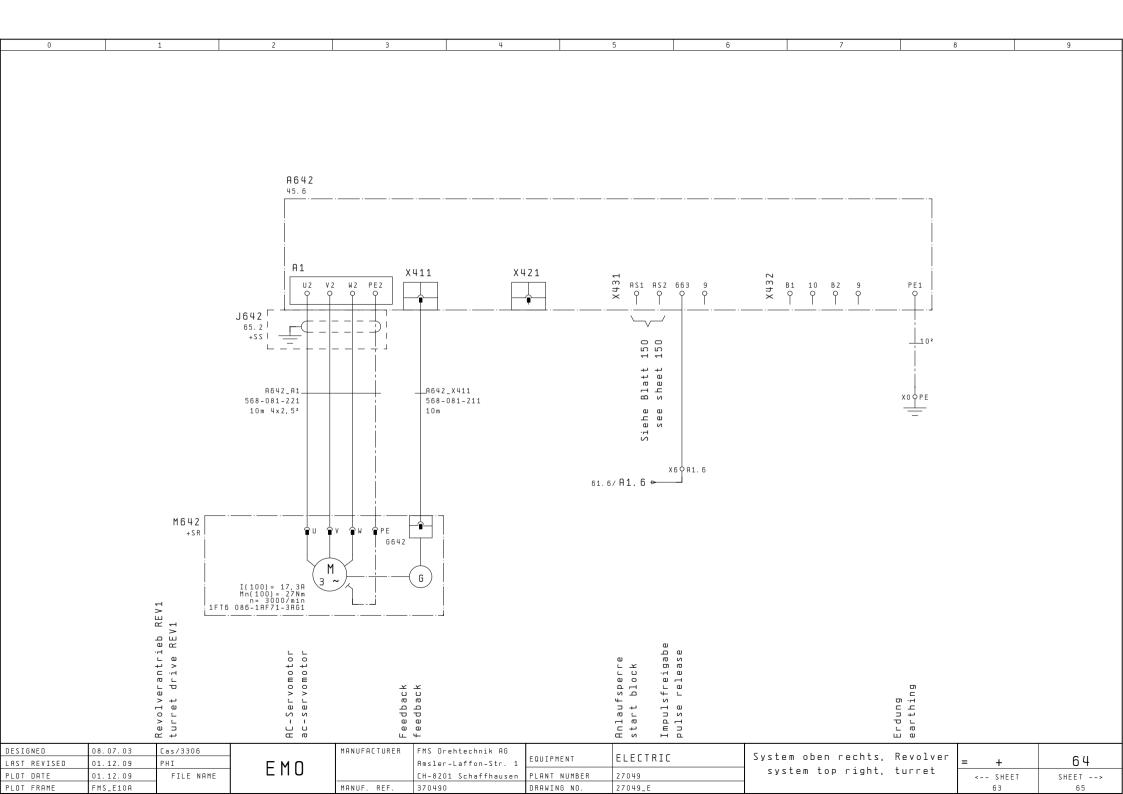


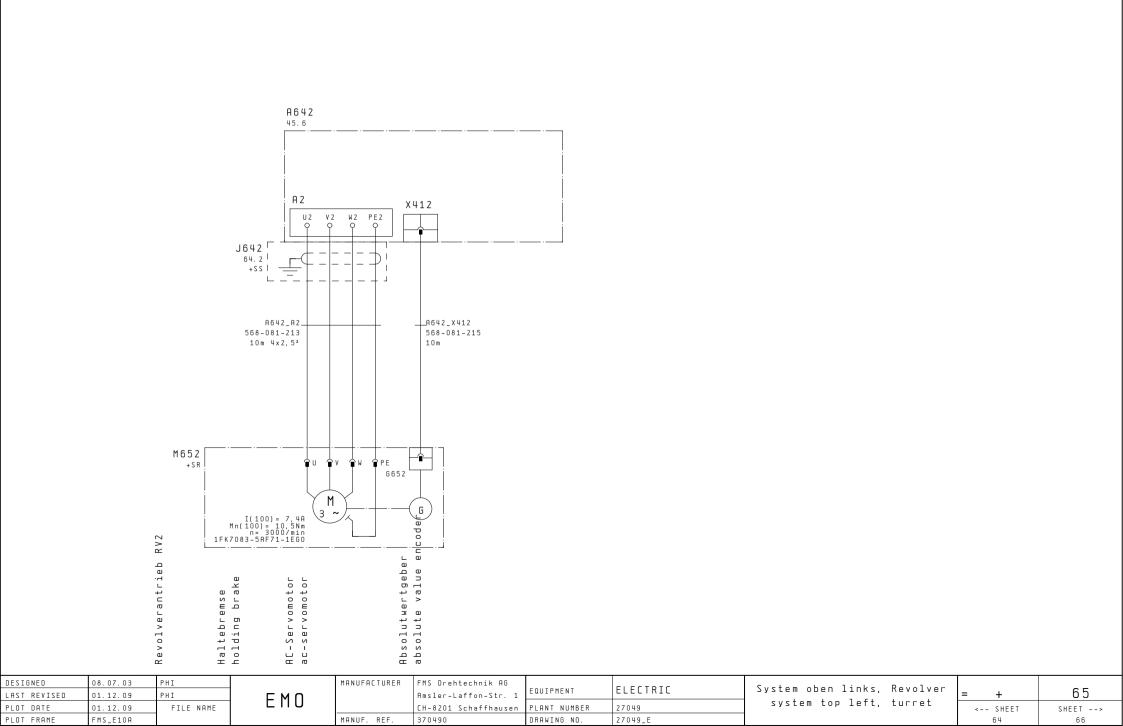


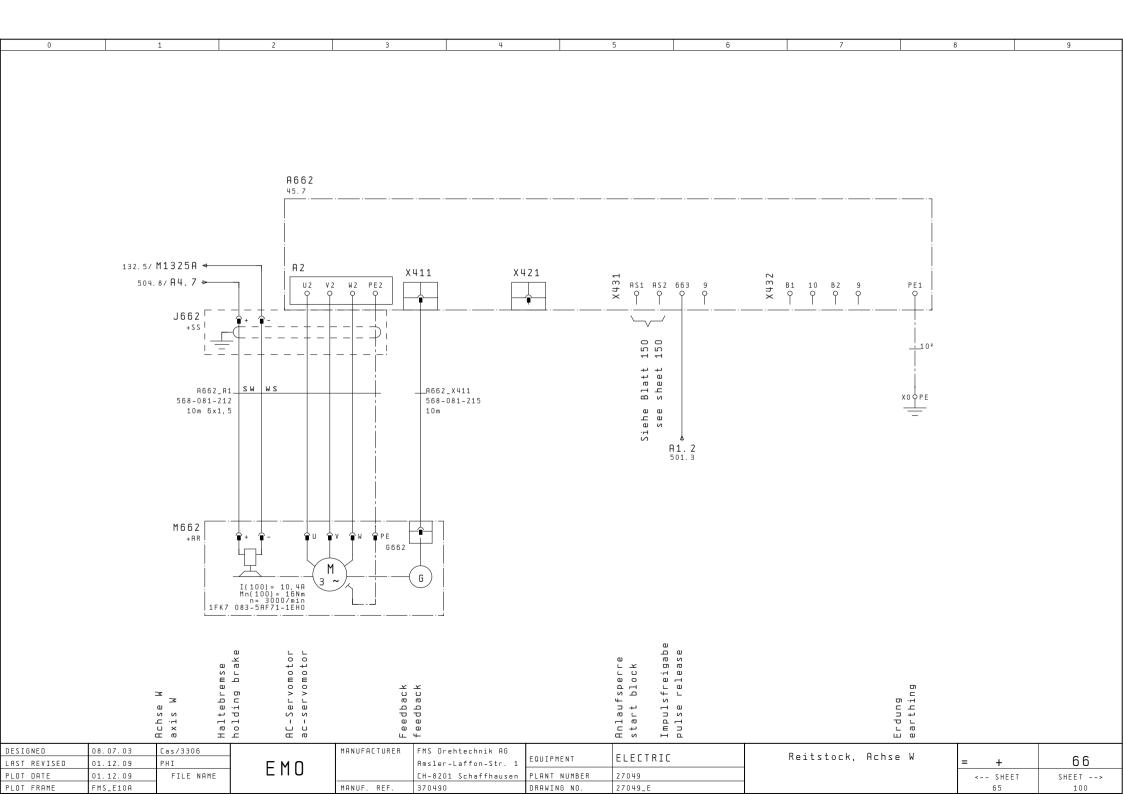


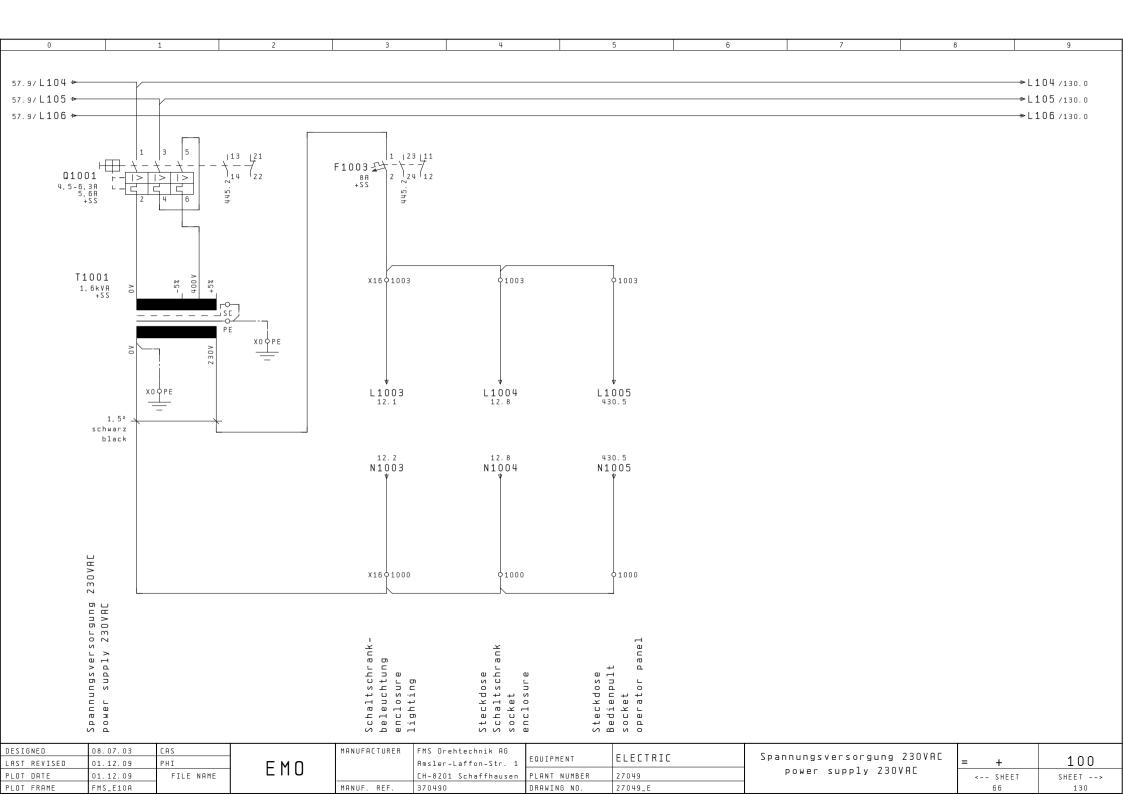


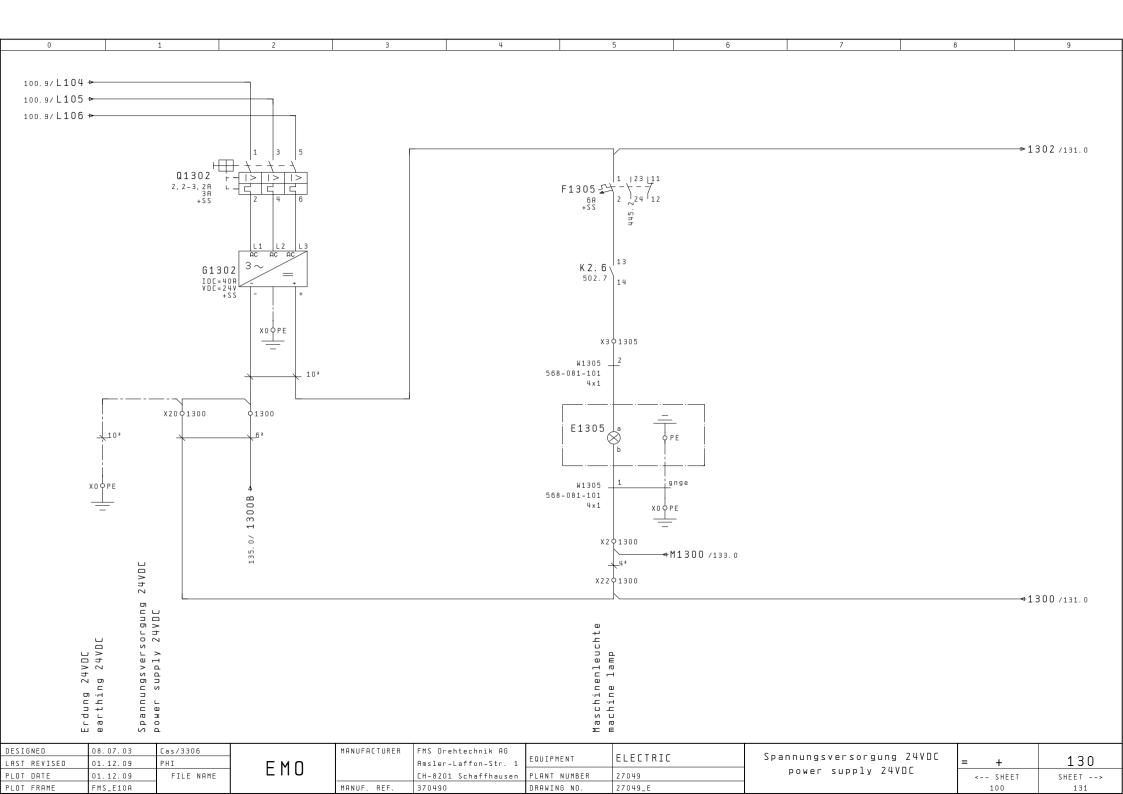


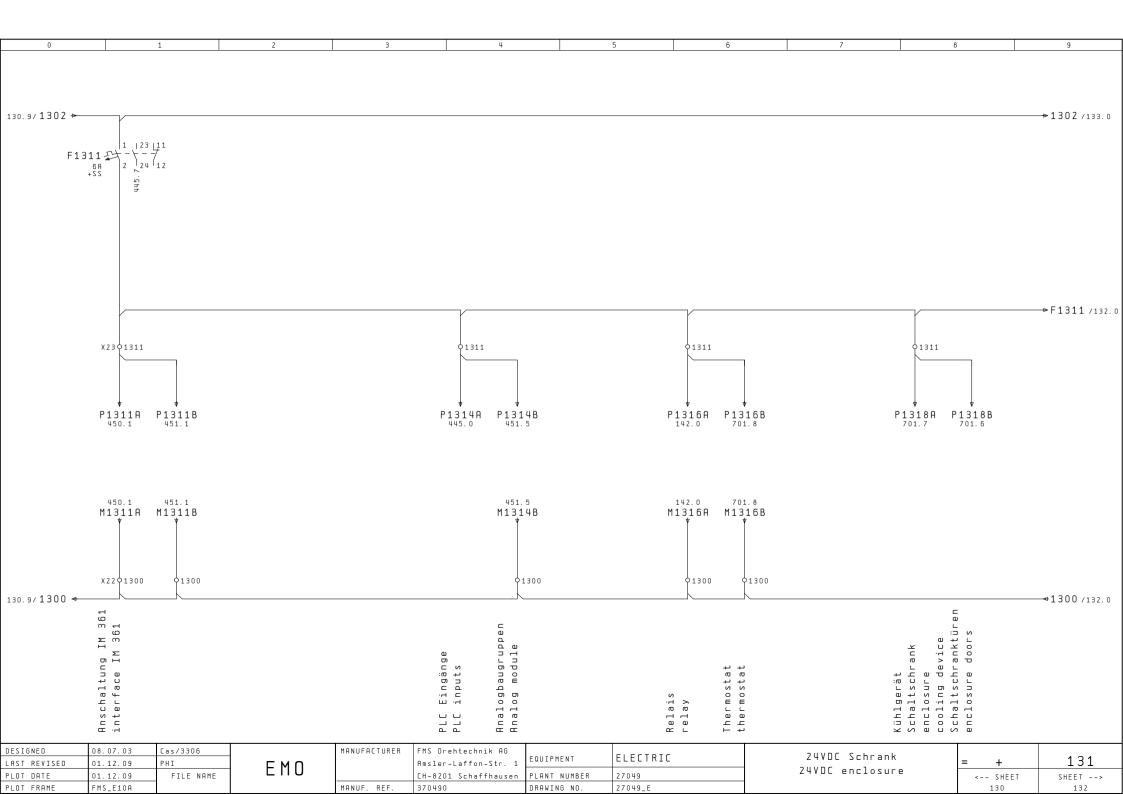


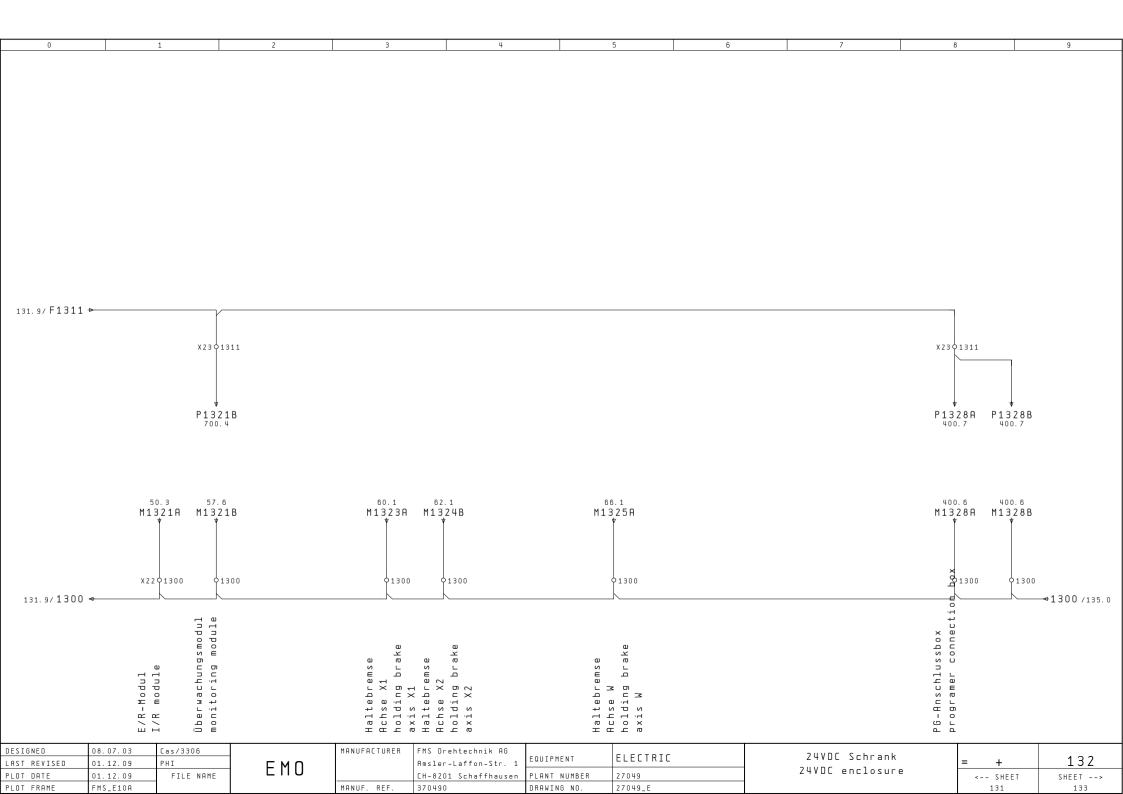


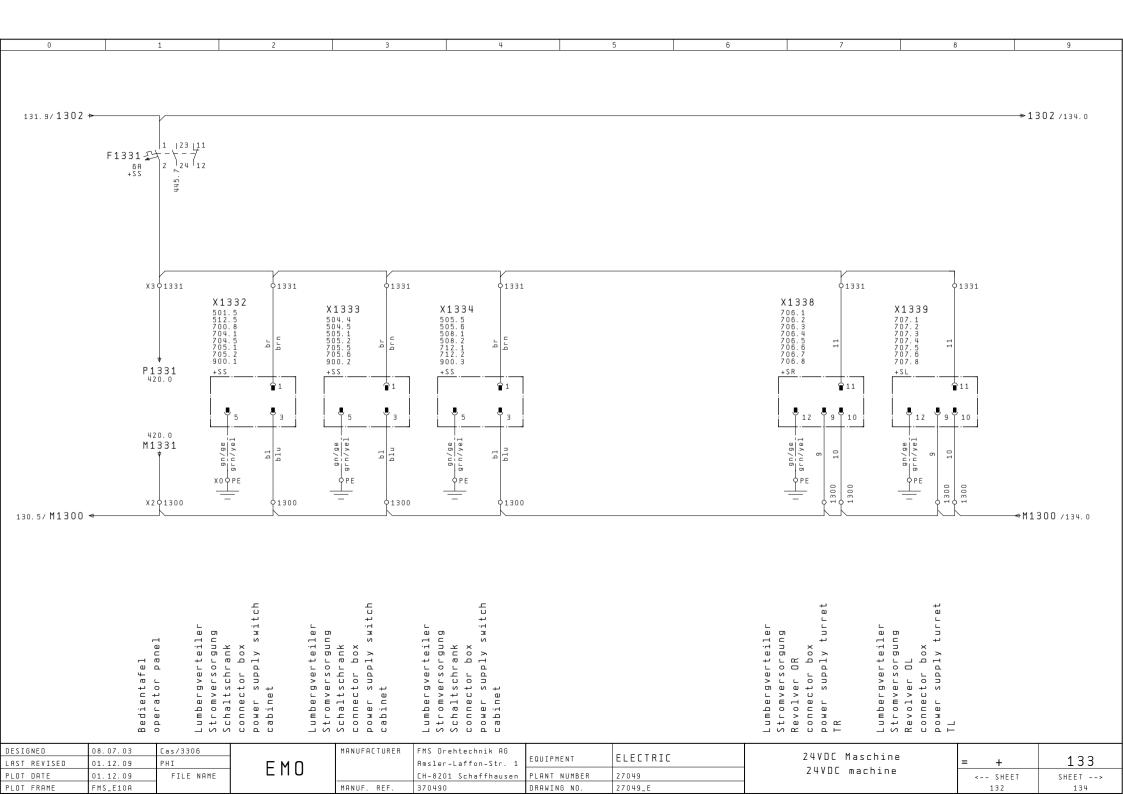


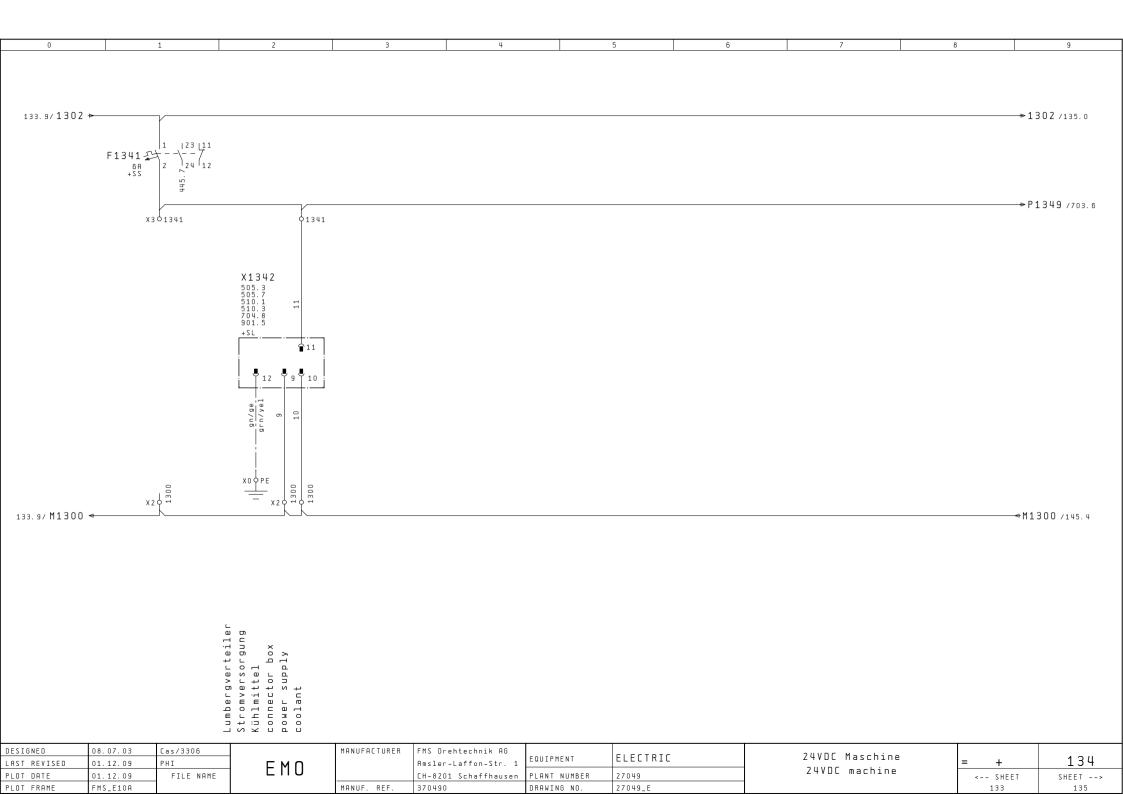


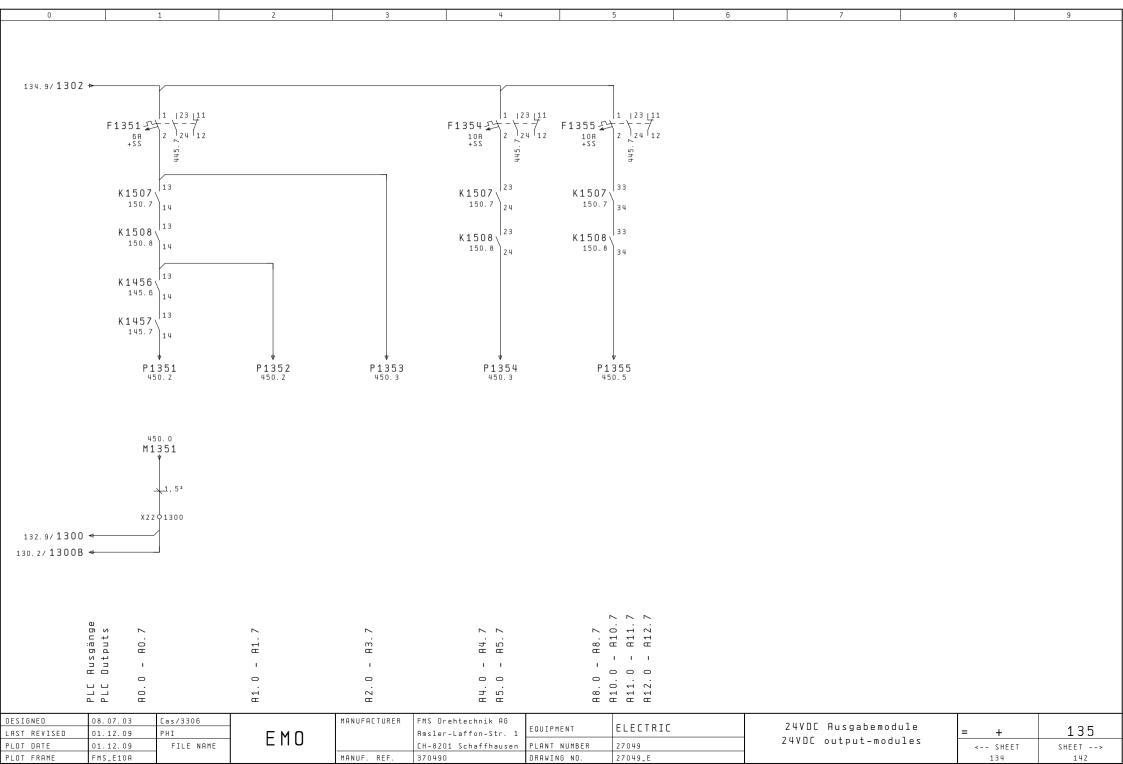


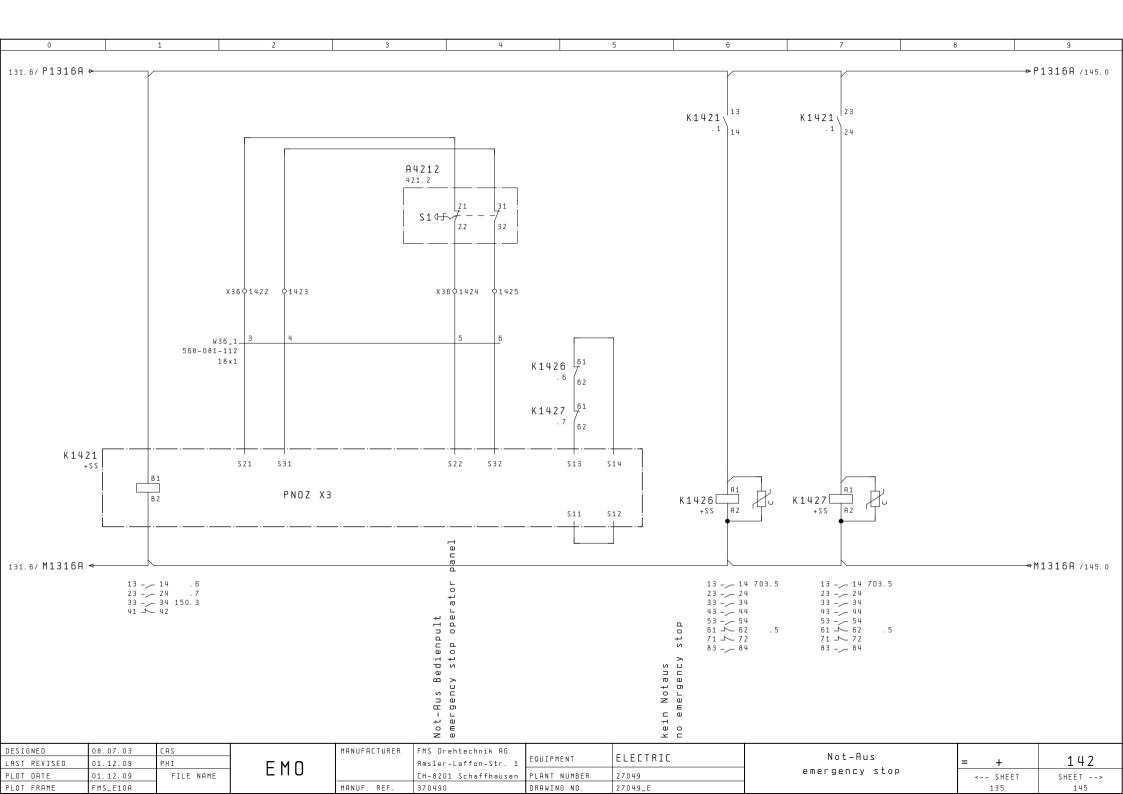


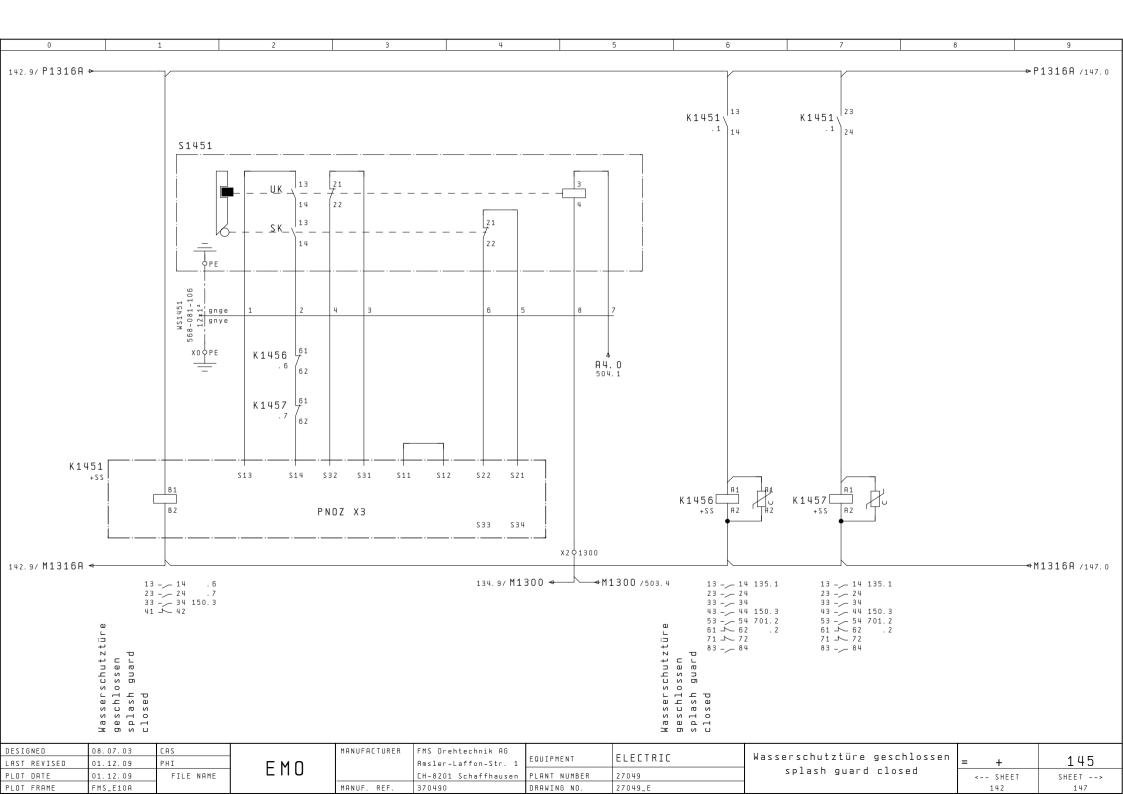


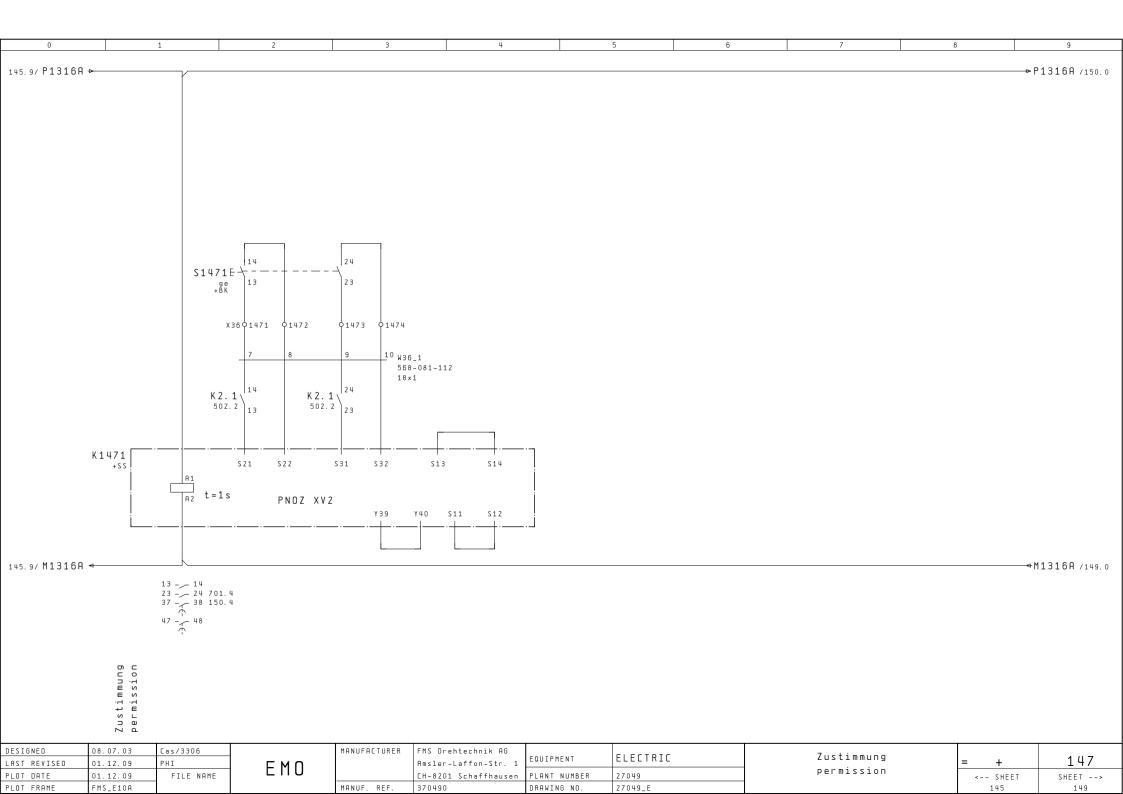


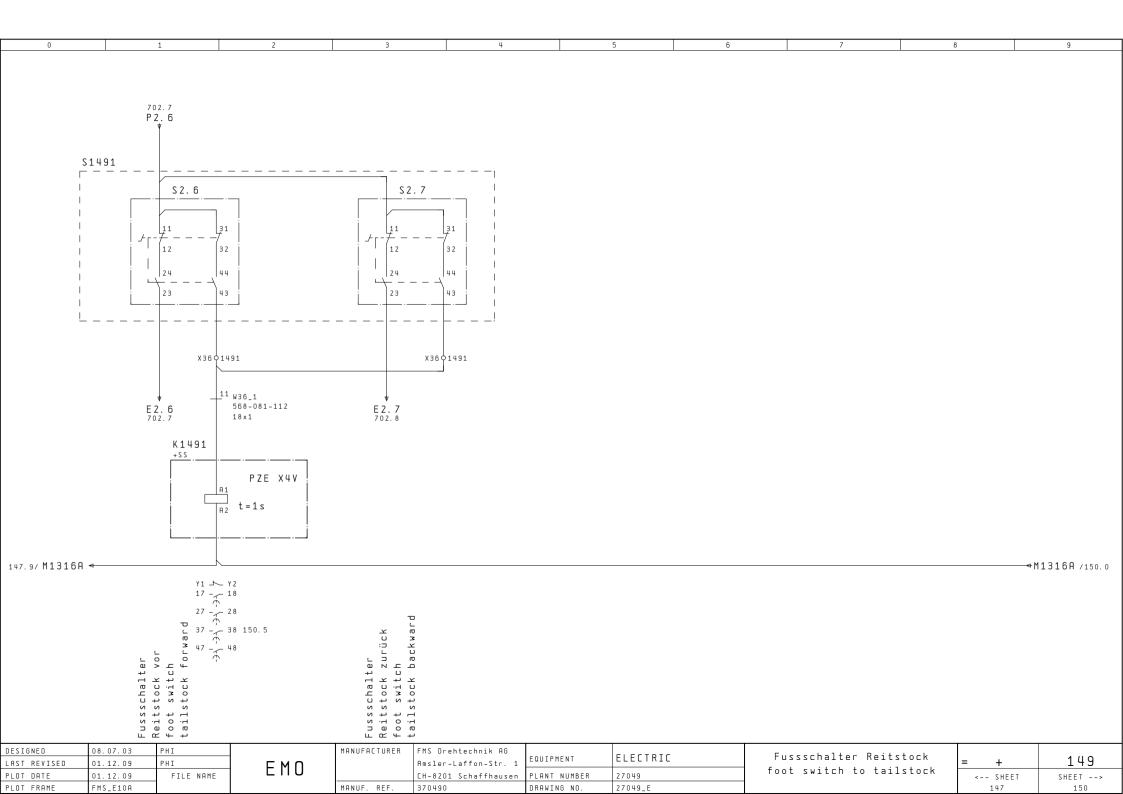


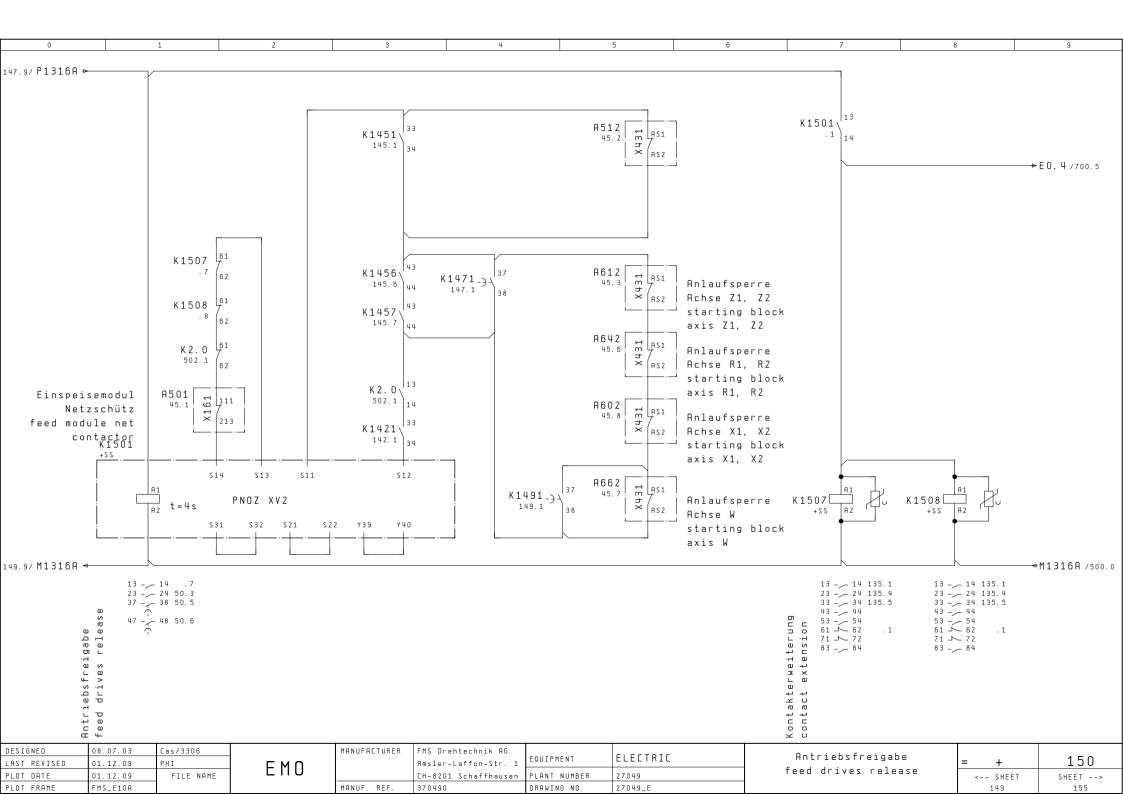


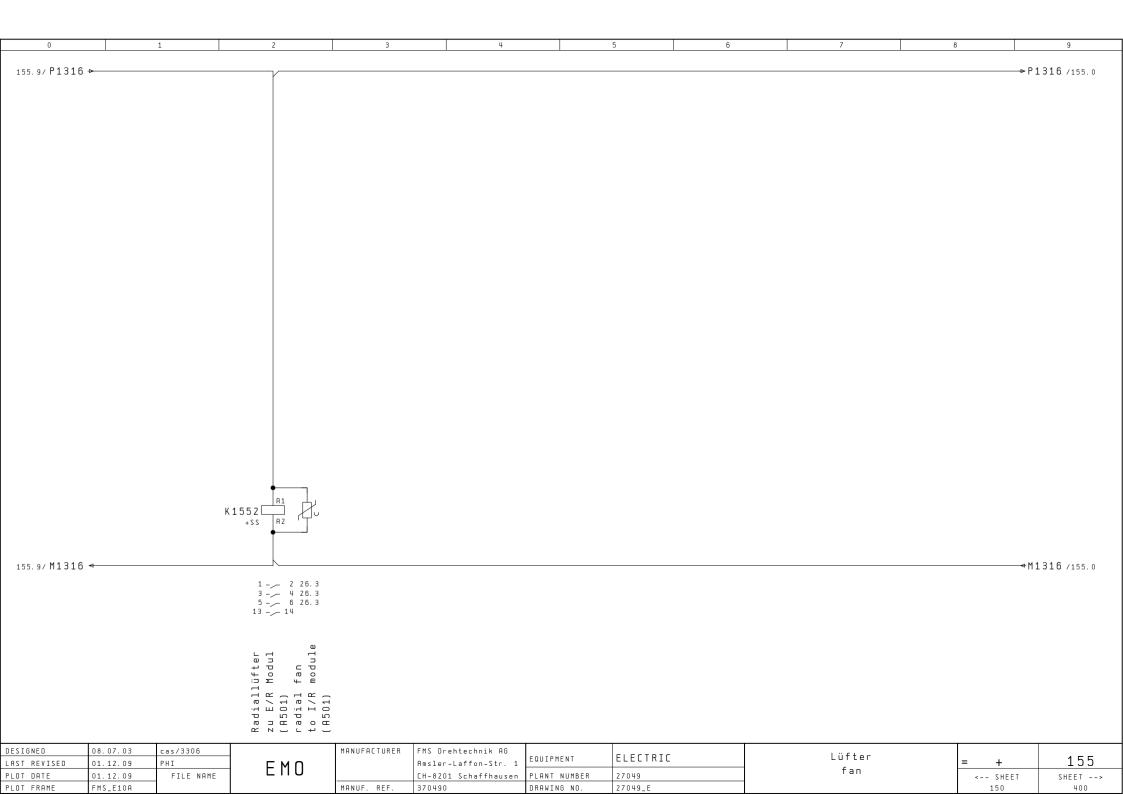


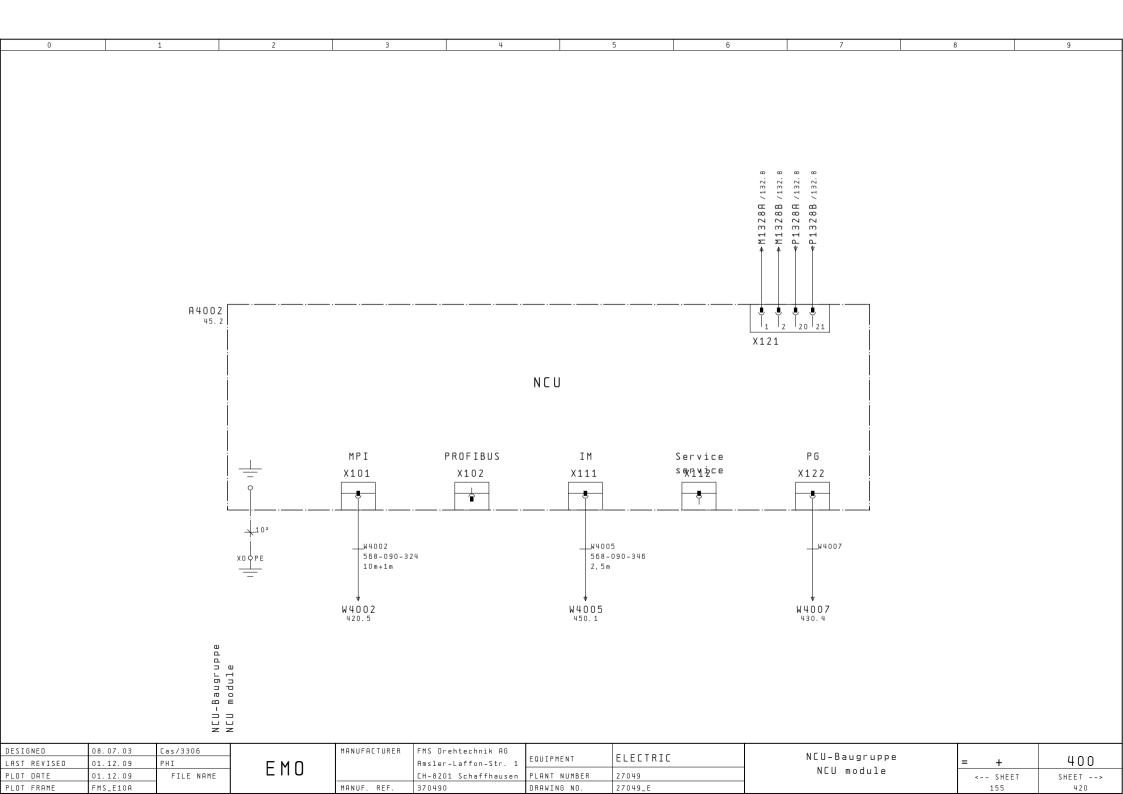


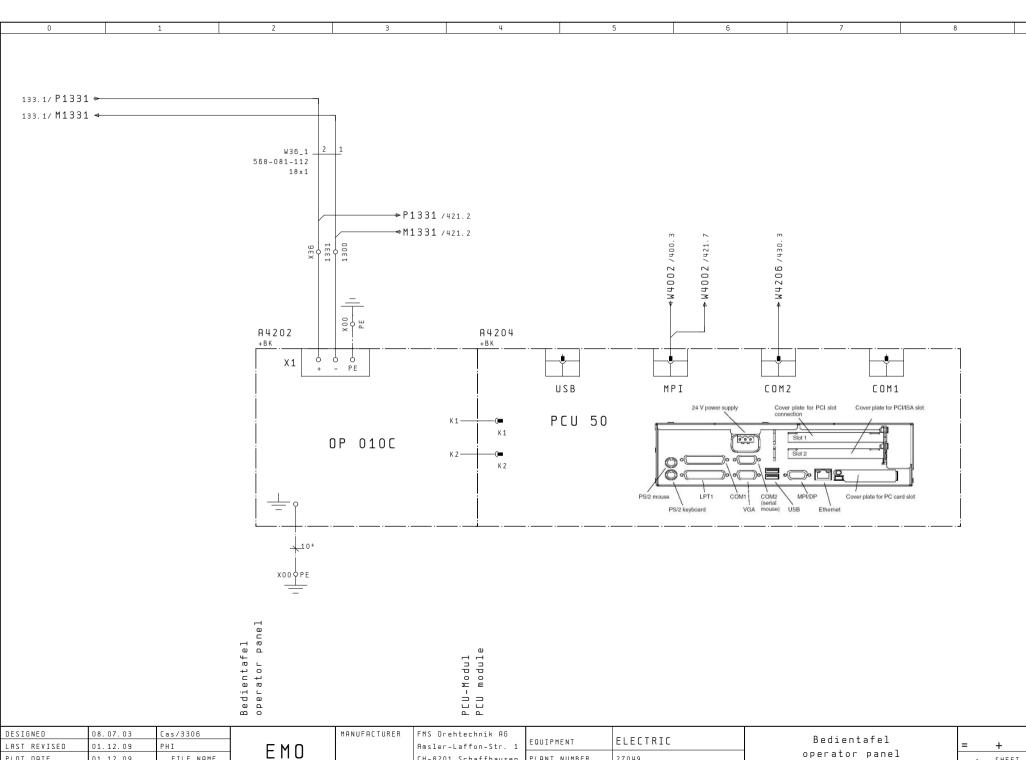




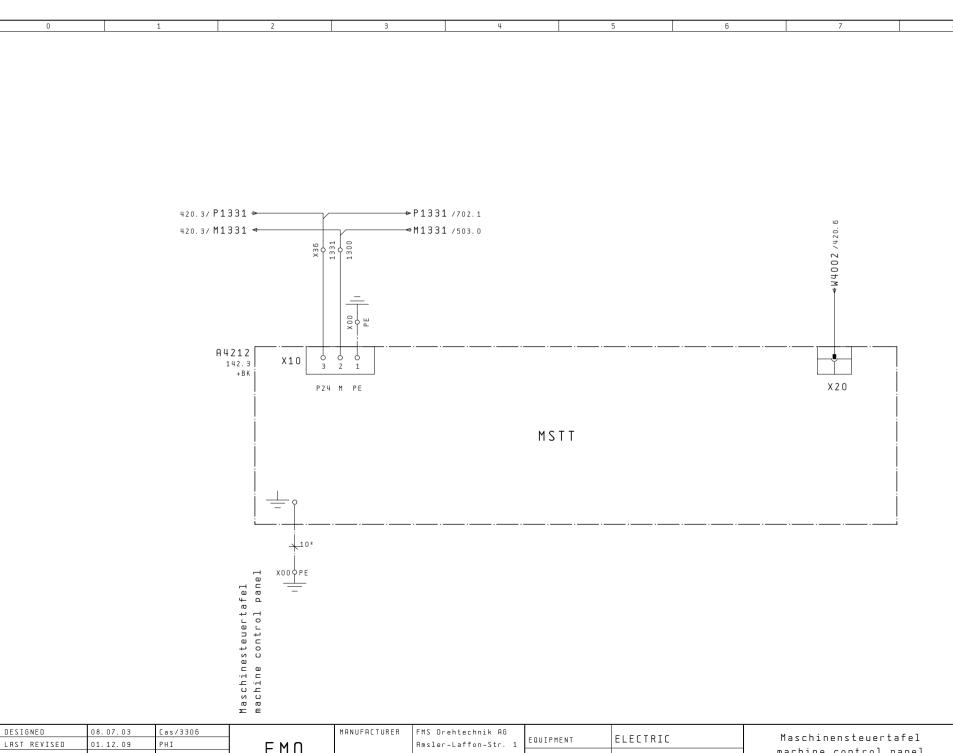




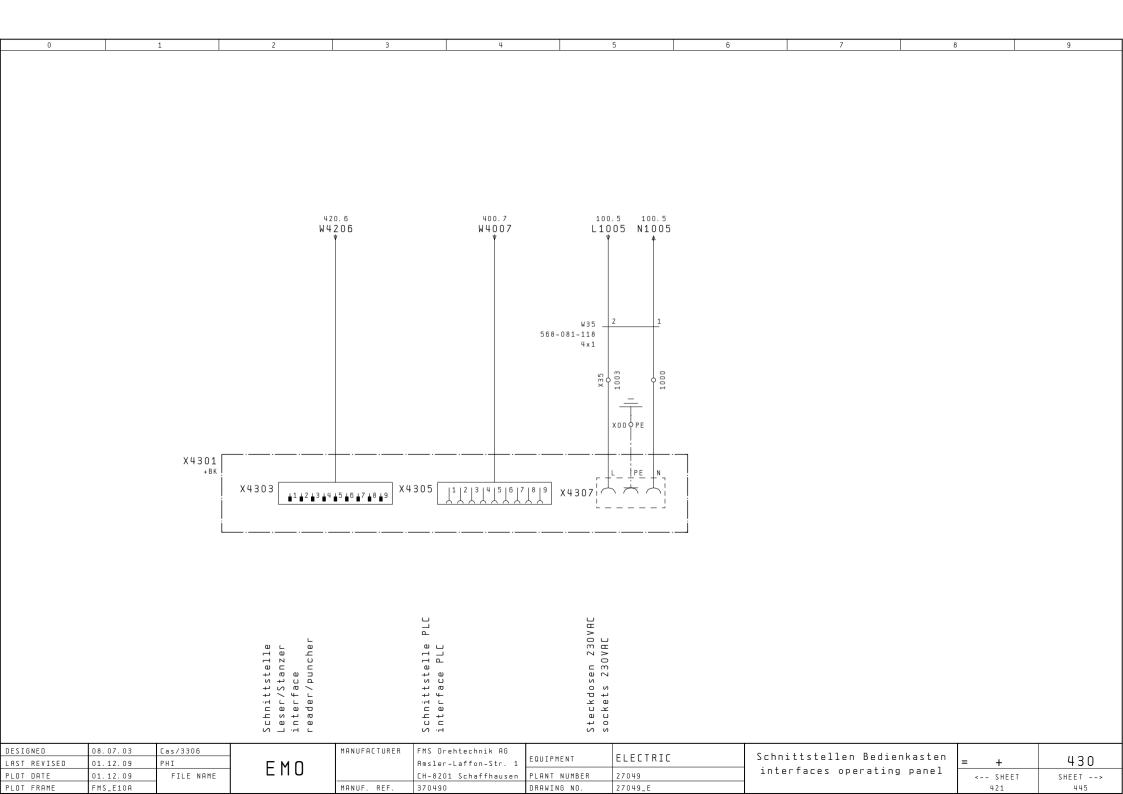


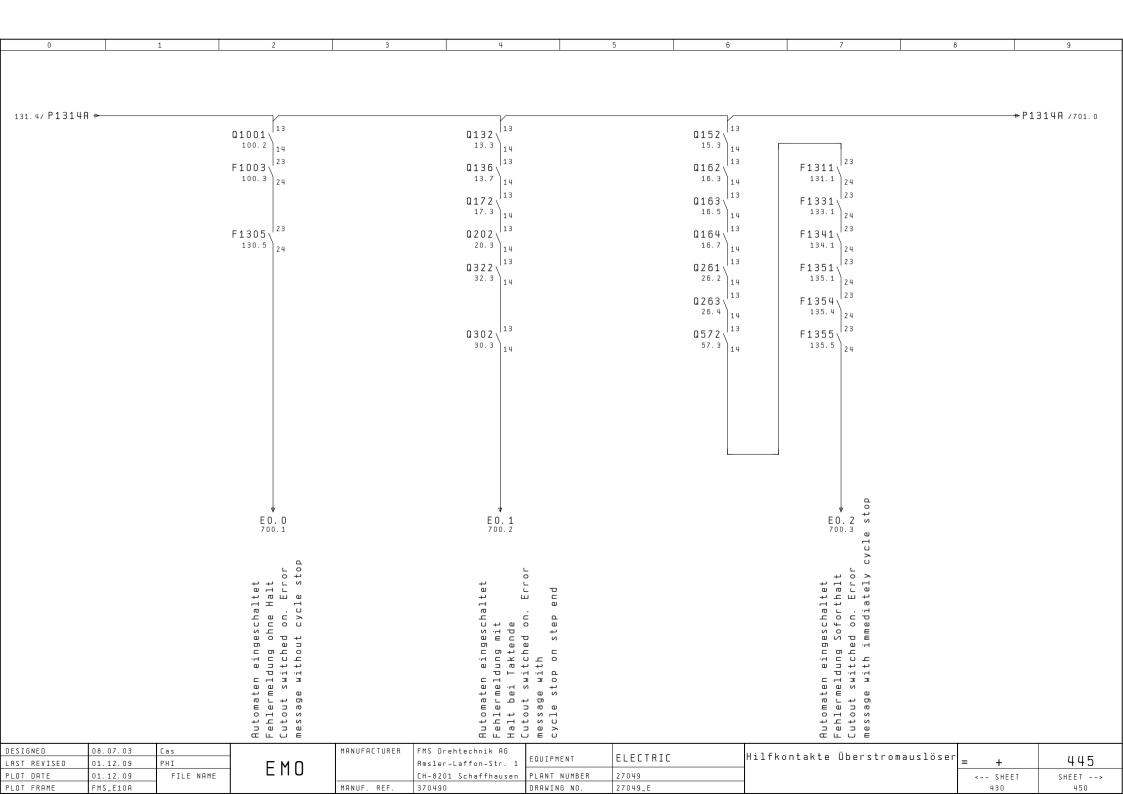


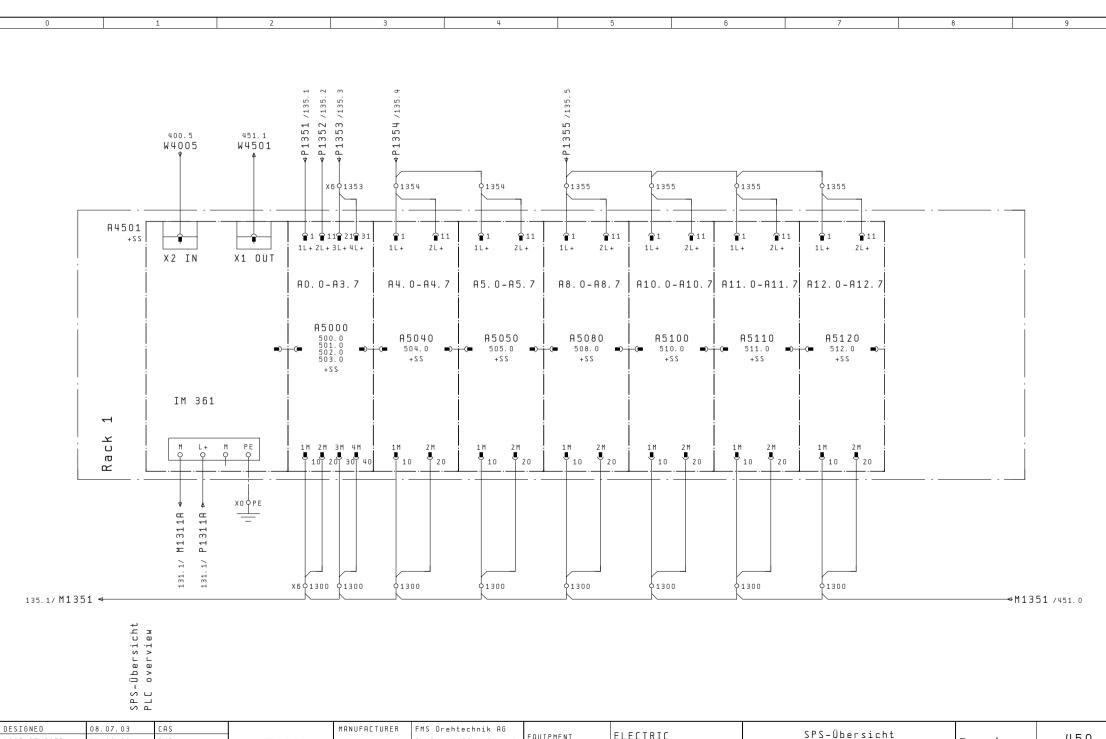
420 PLOT DATE 01.12.09 FILE NAME CH-8201 Schaffhausen PLANT NUMBER <-- SHEET SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E 400 421



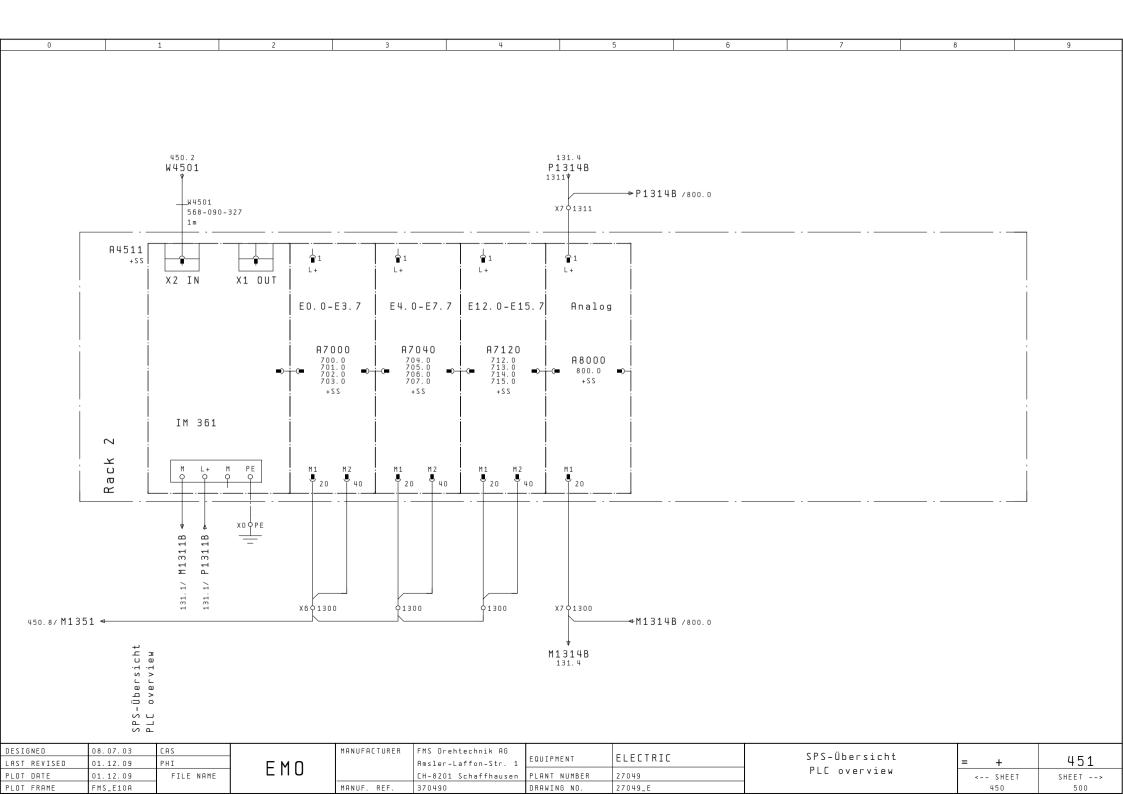
421 EMOmachine control panel PLOT DATE <-- SHEET 01.12.09 FILE NAME CH-8201 Schaffhausen PLANT NUMBER 27049 SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E 420 430

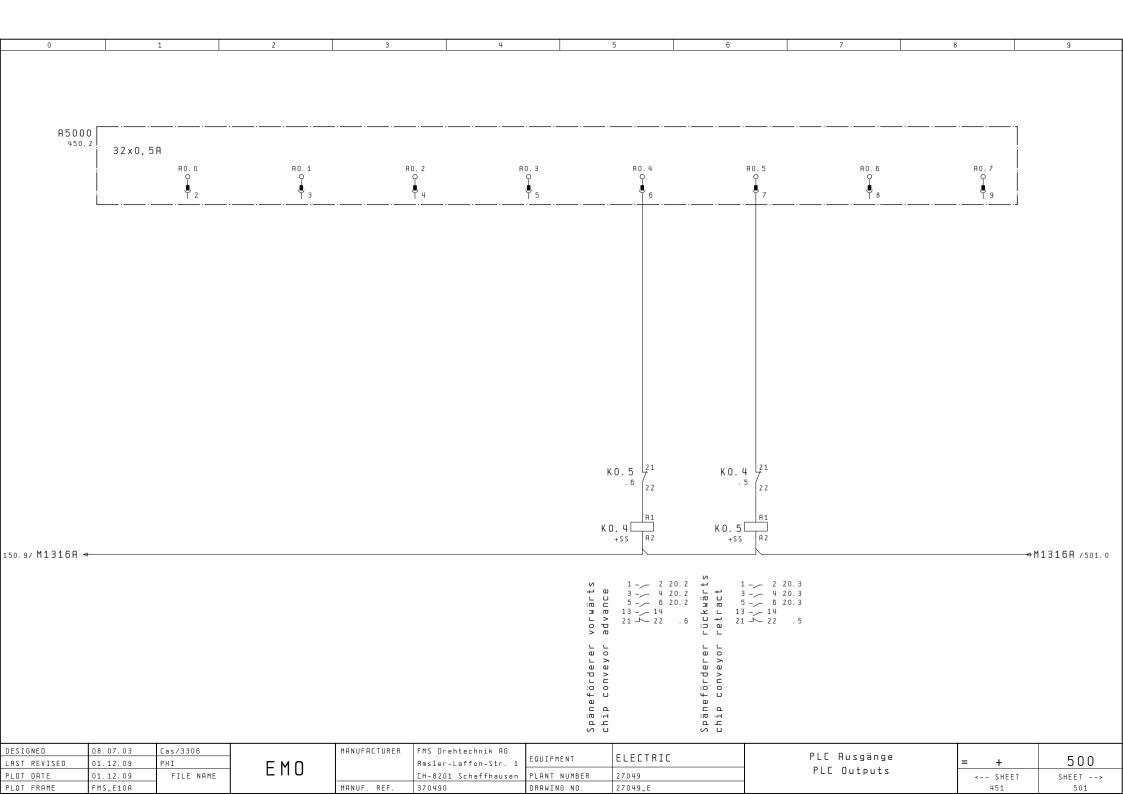


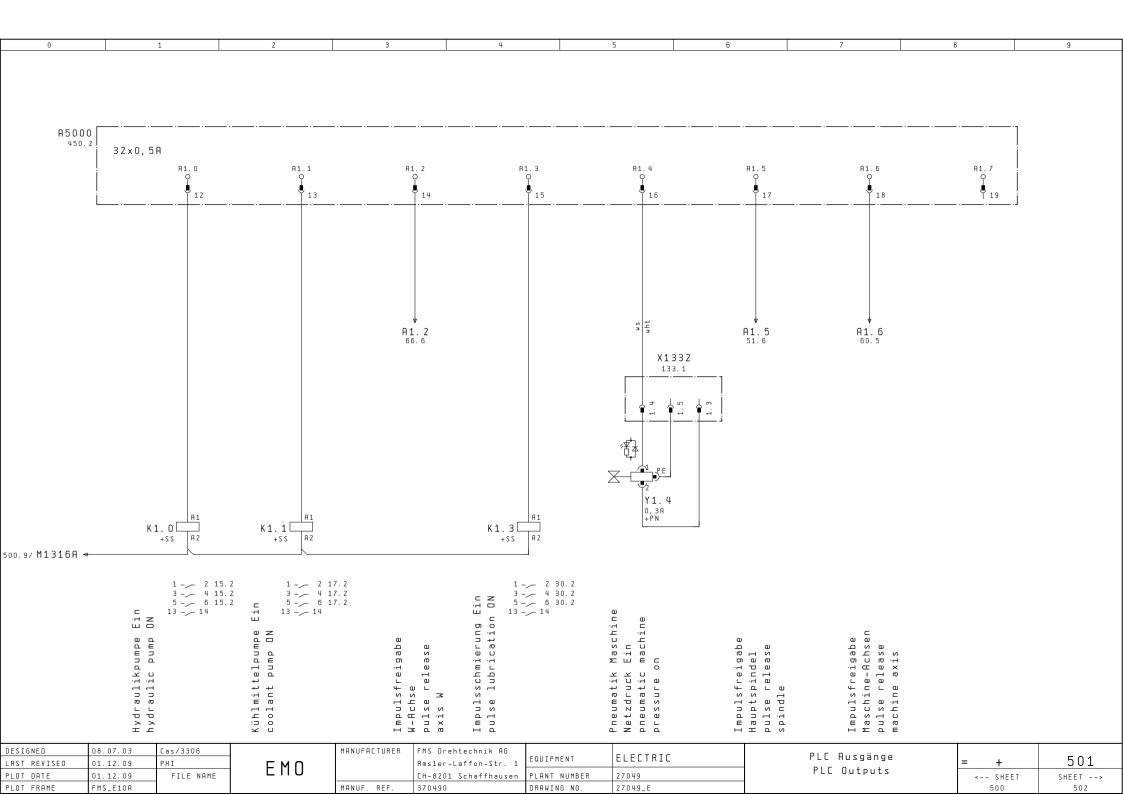


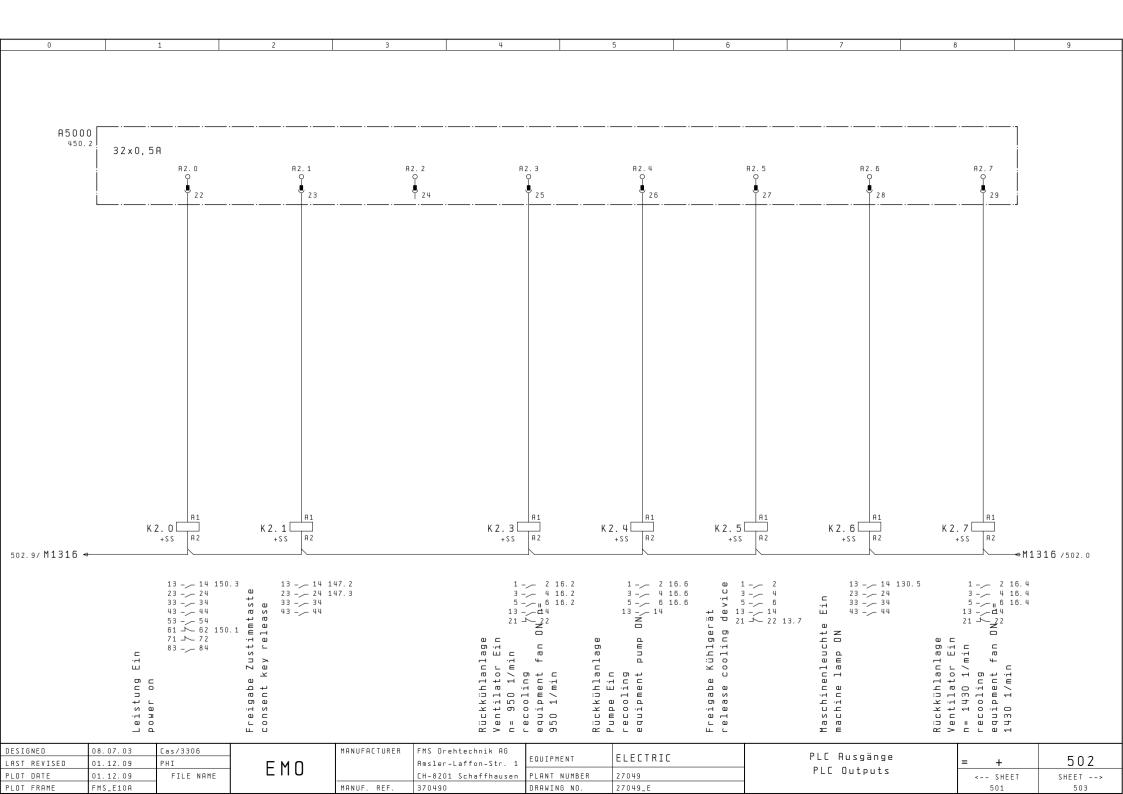


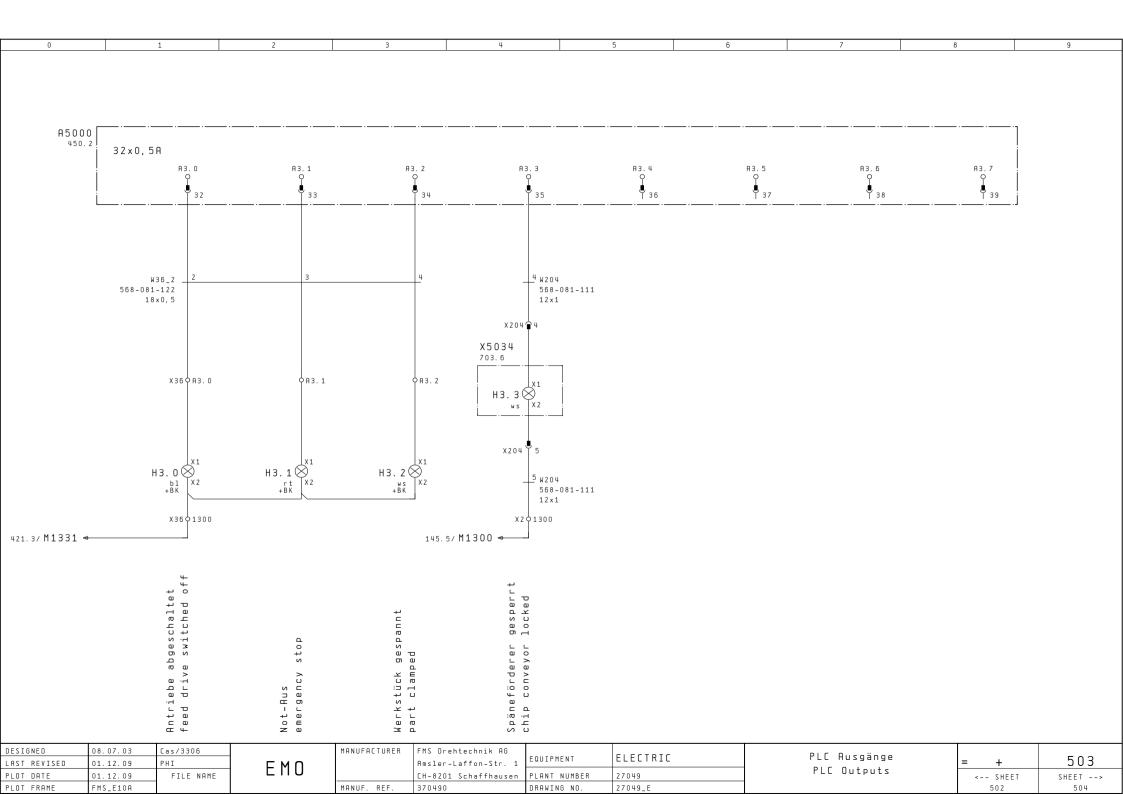
ELECTRIC EQUIPMENT 450 LAST REVISED 01.12.09 PHI Amsler-Laffon-Str. 1 EMOPLC overview PLOT DATE 01.12.09 CH-8201 Schaffhausen <-- SHEET FILE NAME SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E 445 451

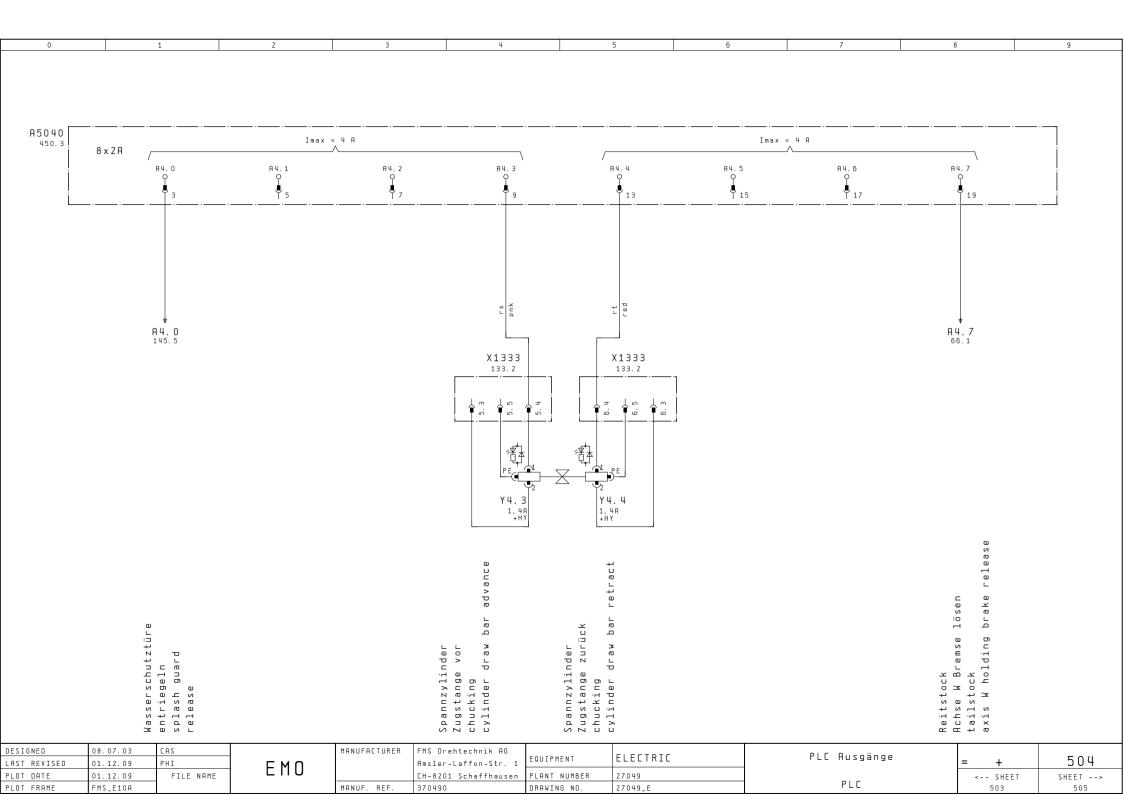


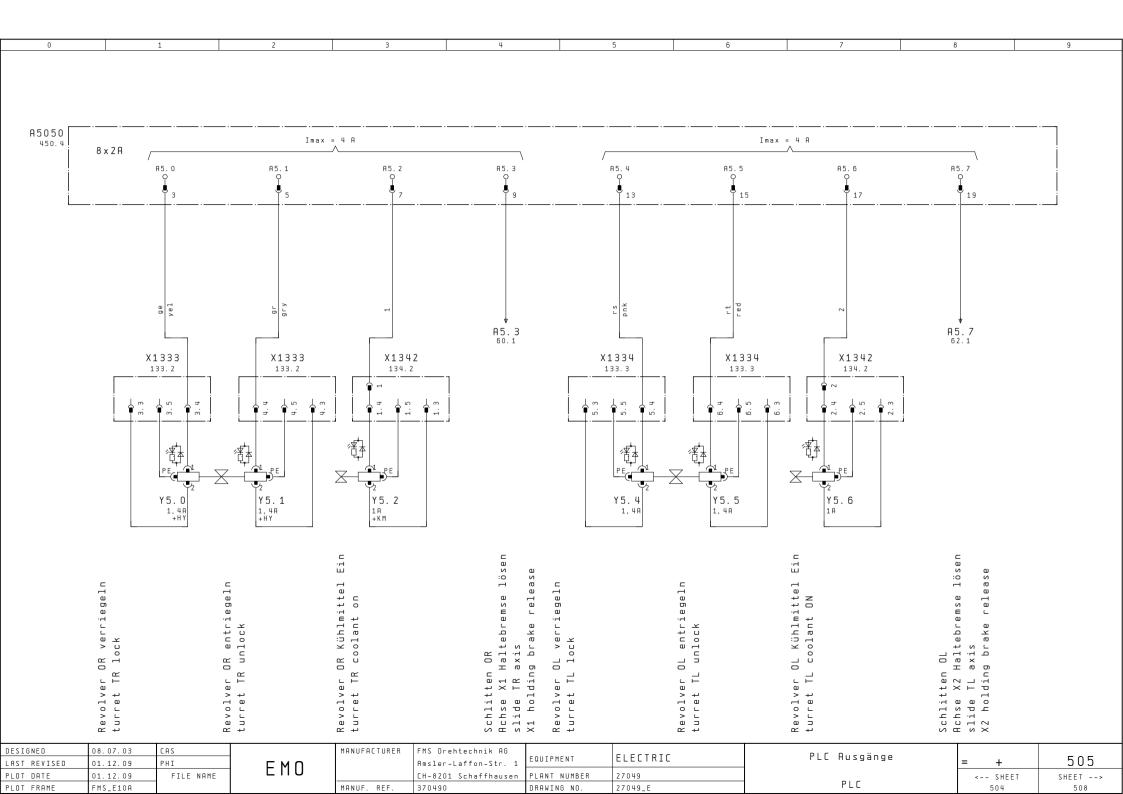


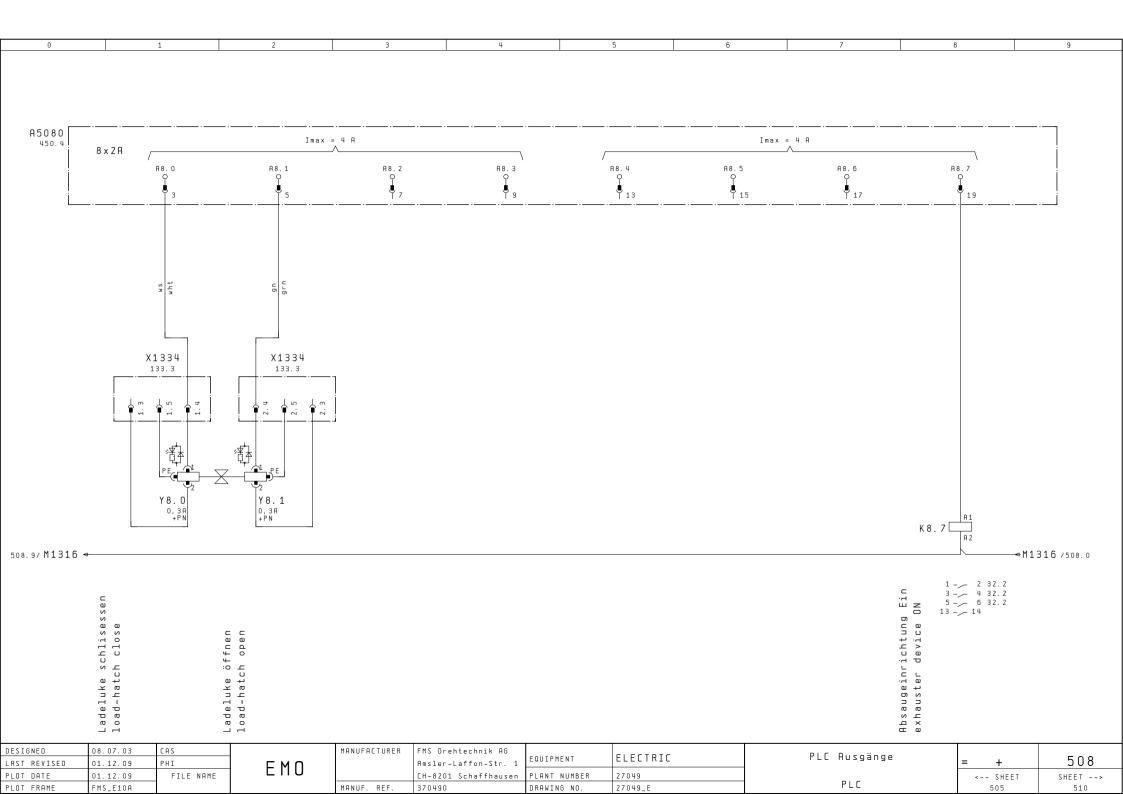


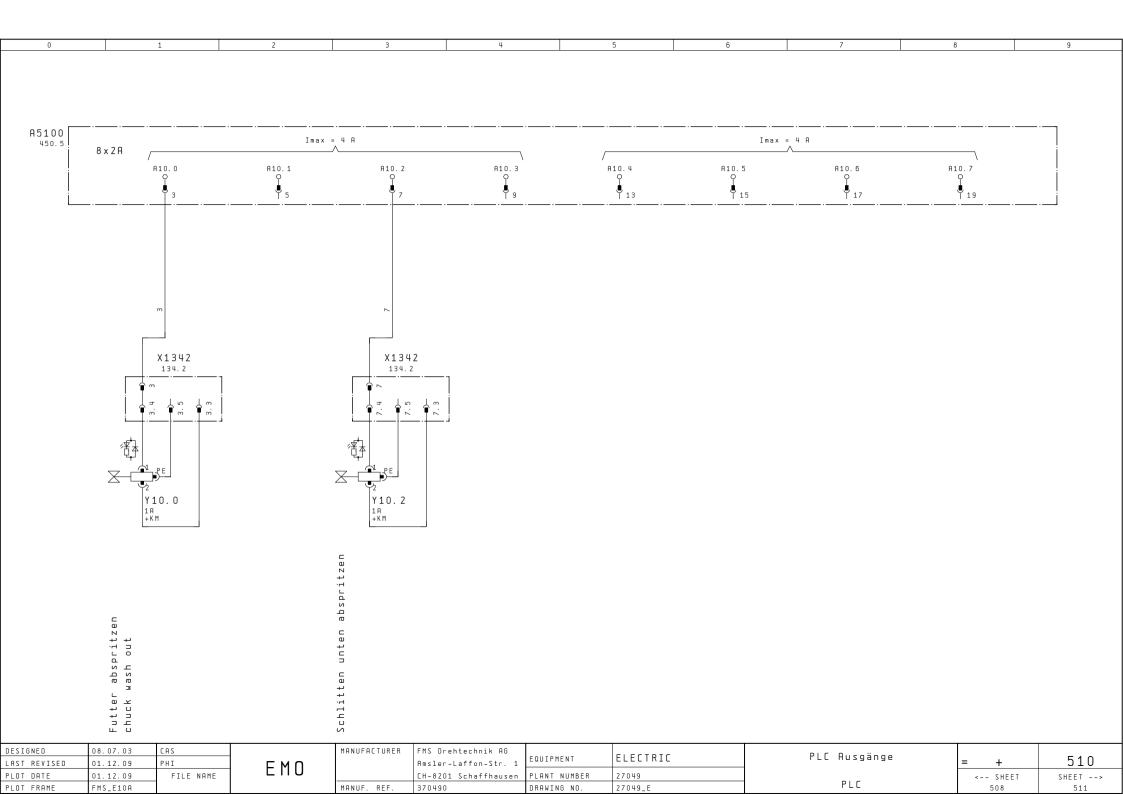


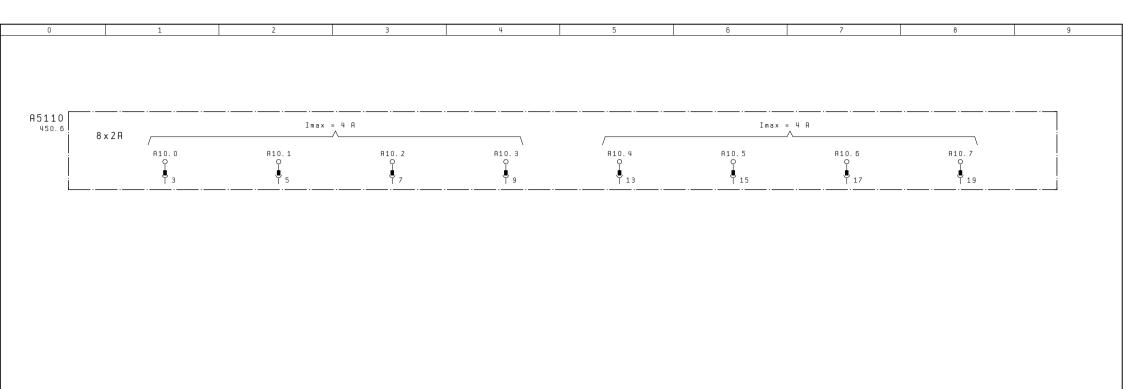




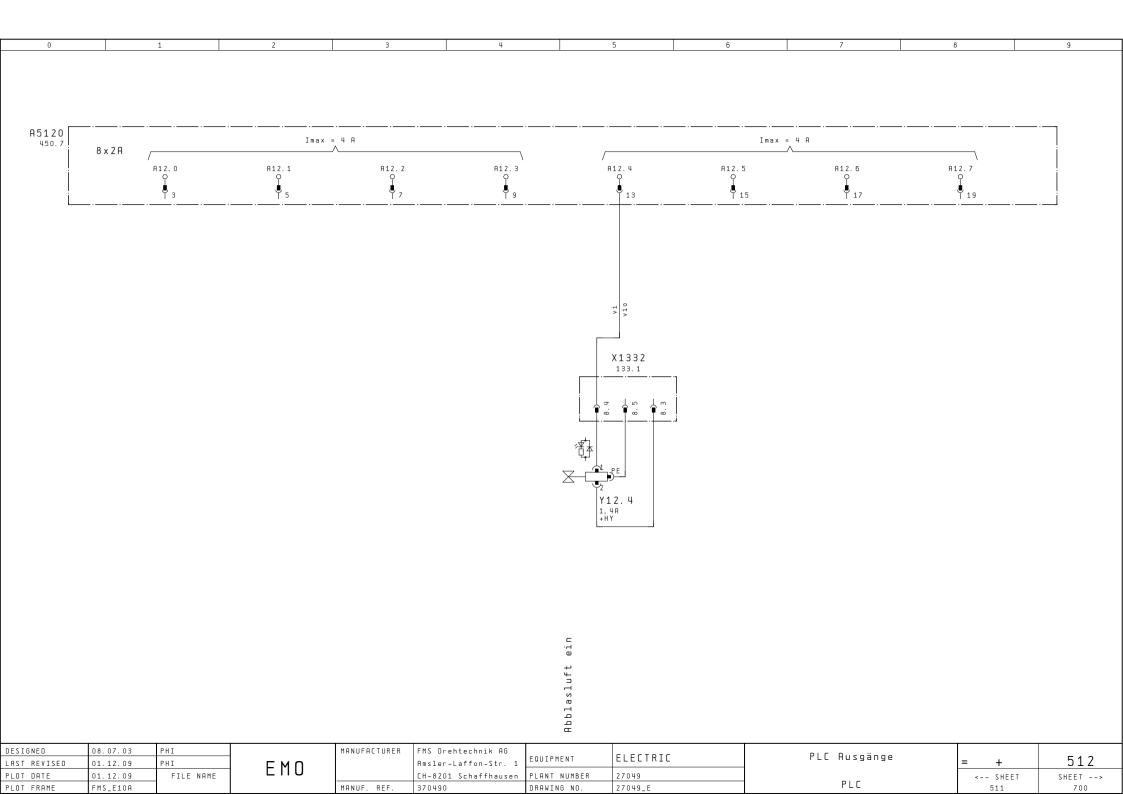


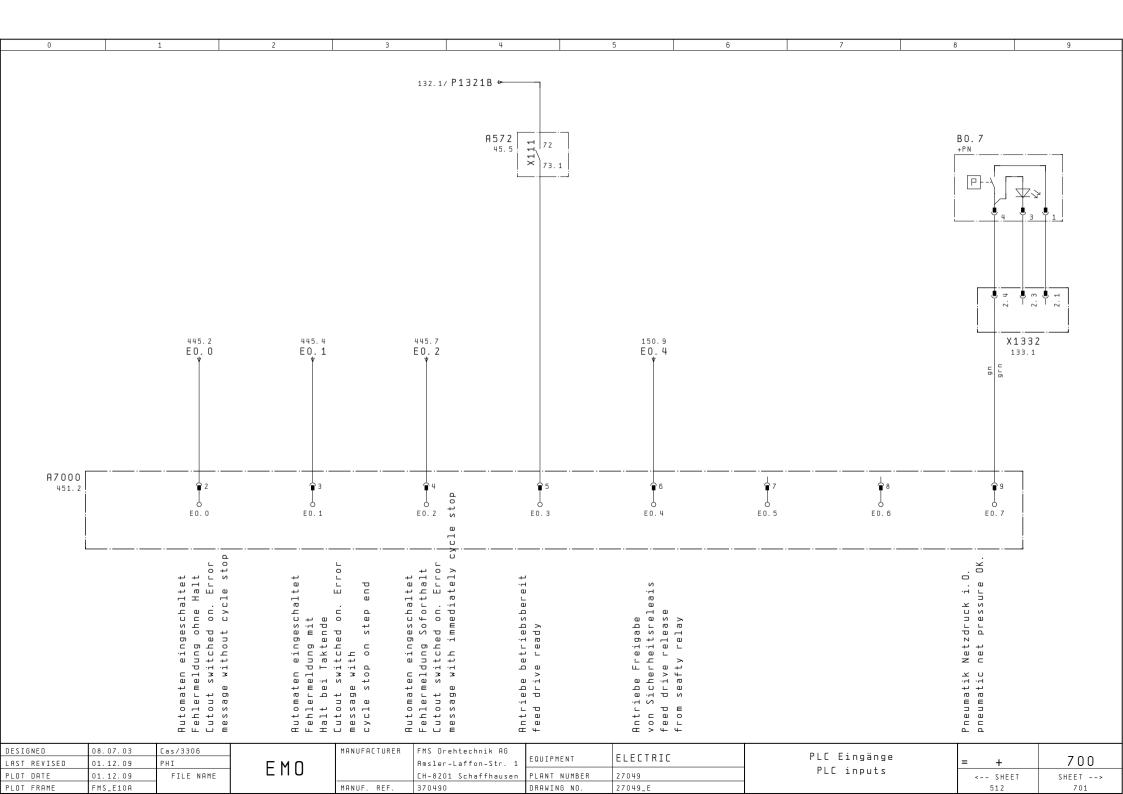


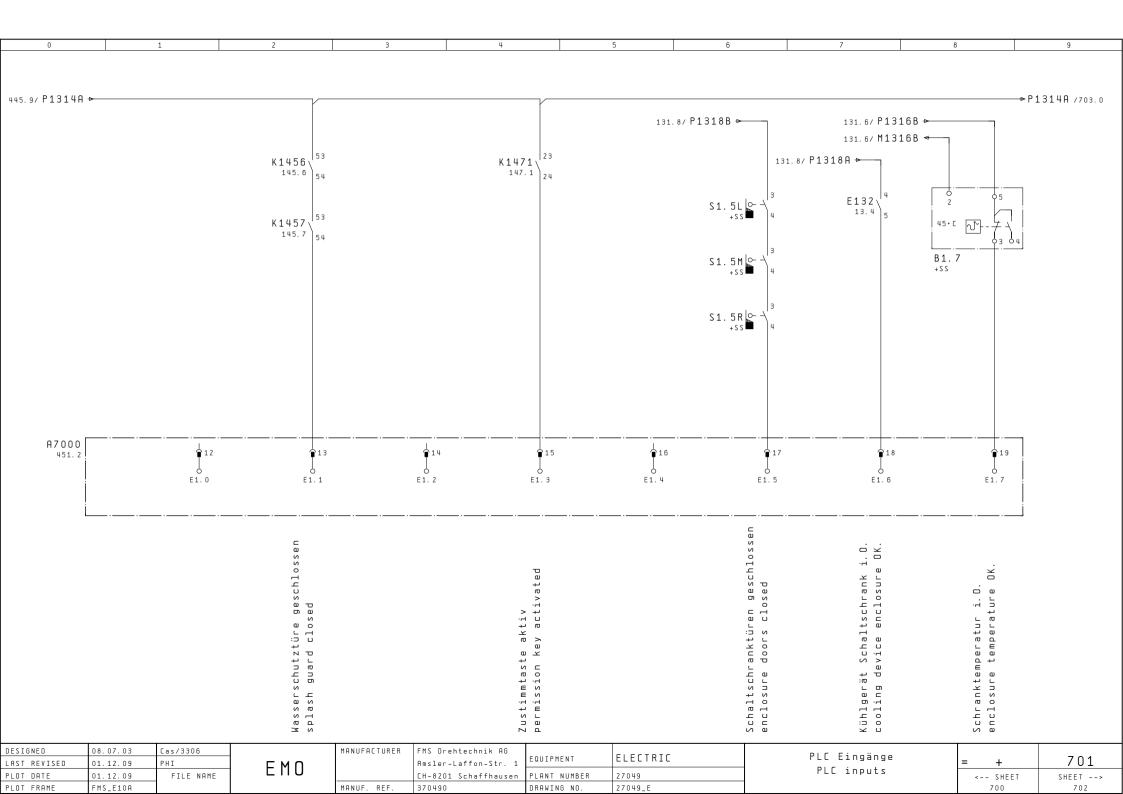


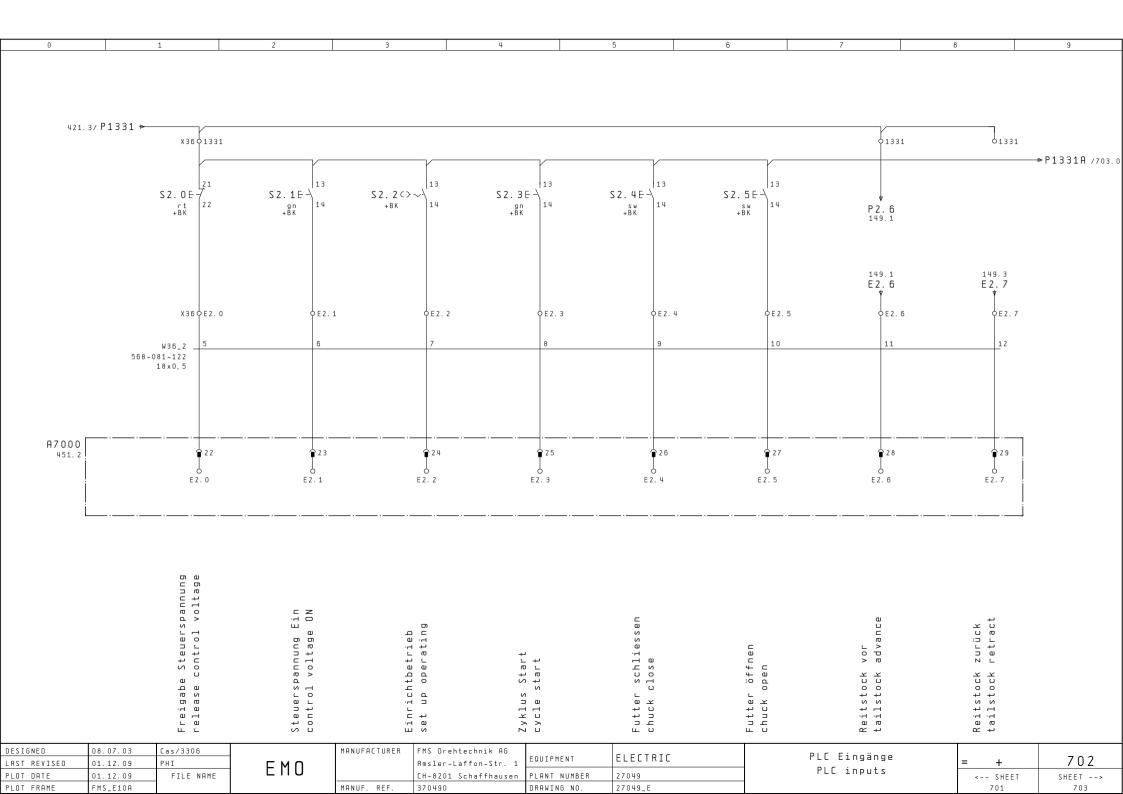


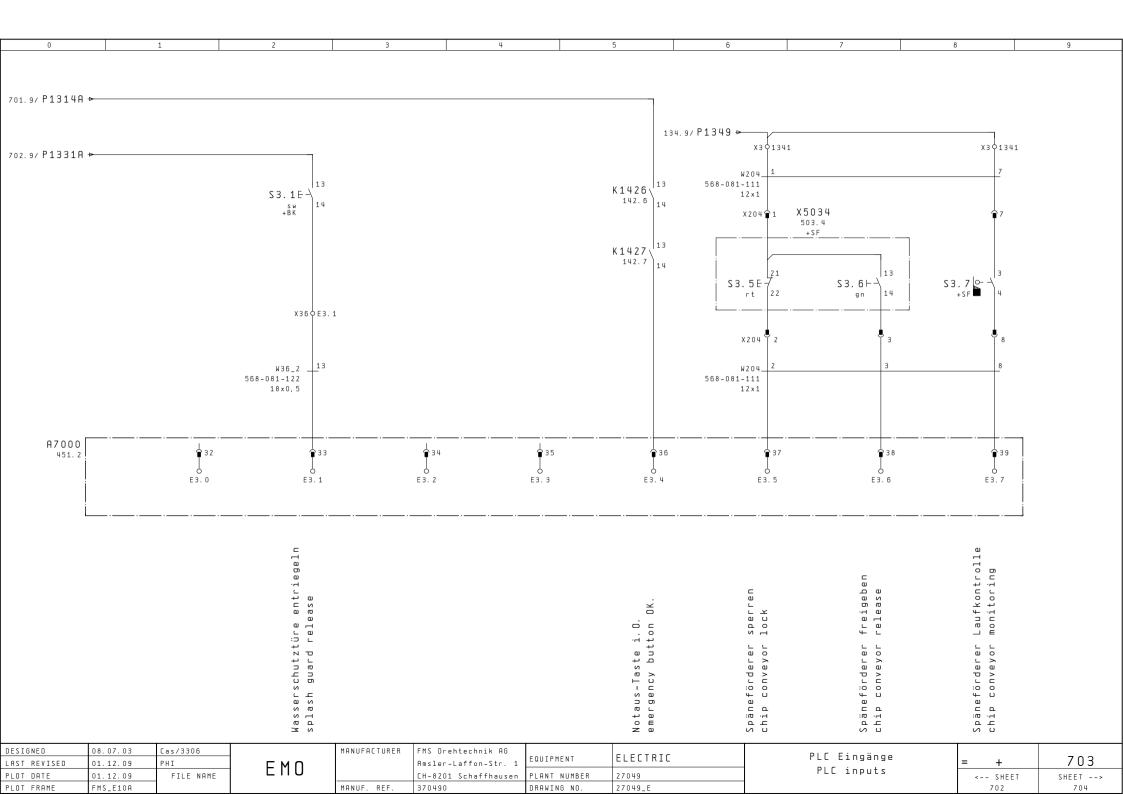
DESIGNED	08.07.03	CAS		MANUFACTURER	FMS Drehtechnik AG		EL ECTRIC	PLC Ouesässe		
LAST REVISED	01.12.09	PHI	□ M ∩		Amsler-Laffon-Str. 1	EQUIPMENT	ELECTRIC	PLC Ausgänge	= +	511
PLOT DATE	01.12.09	FILE NAME	EIIU		CH-8201 Schaffhausen	PLANT NUMBER	27049		< SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	DRAWING NO.	27049_E	PLC	510	512

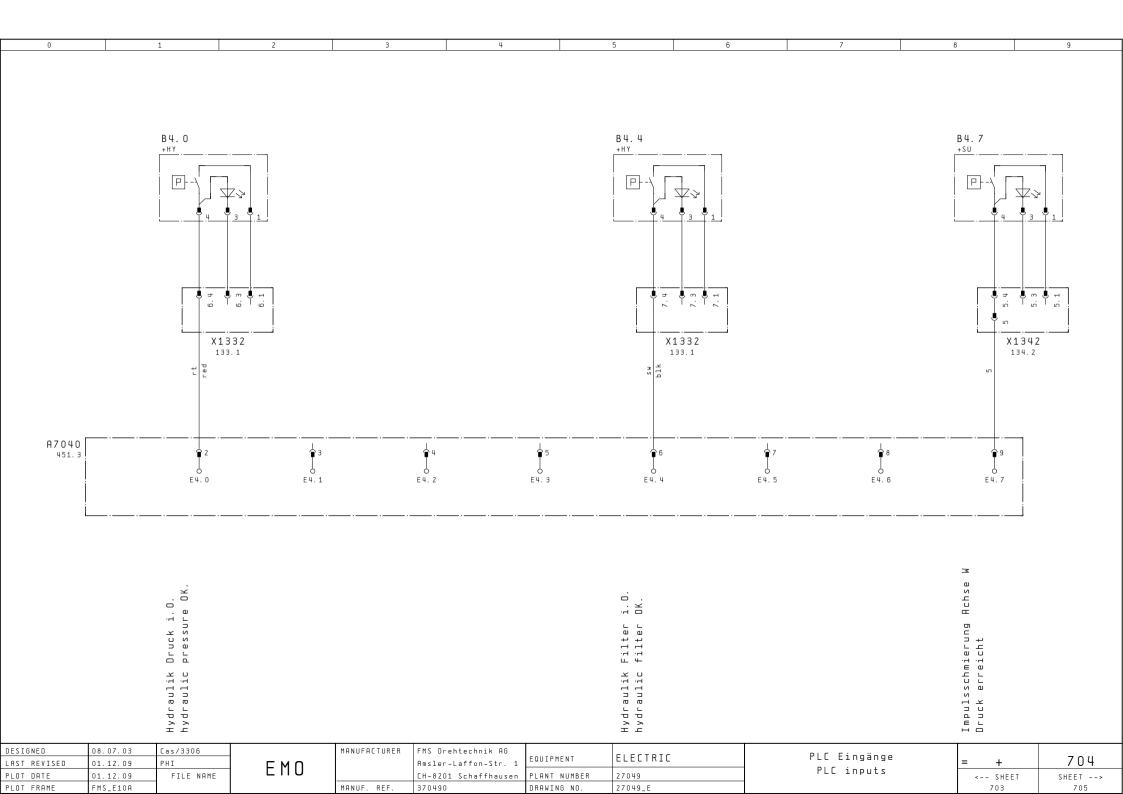


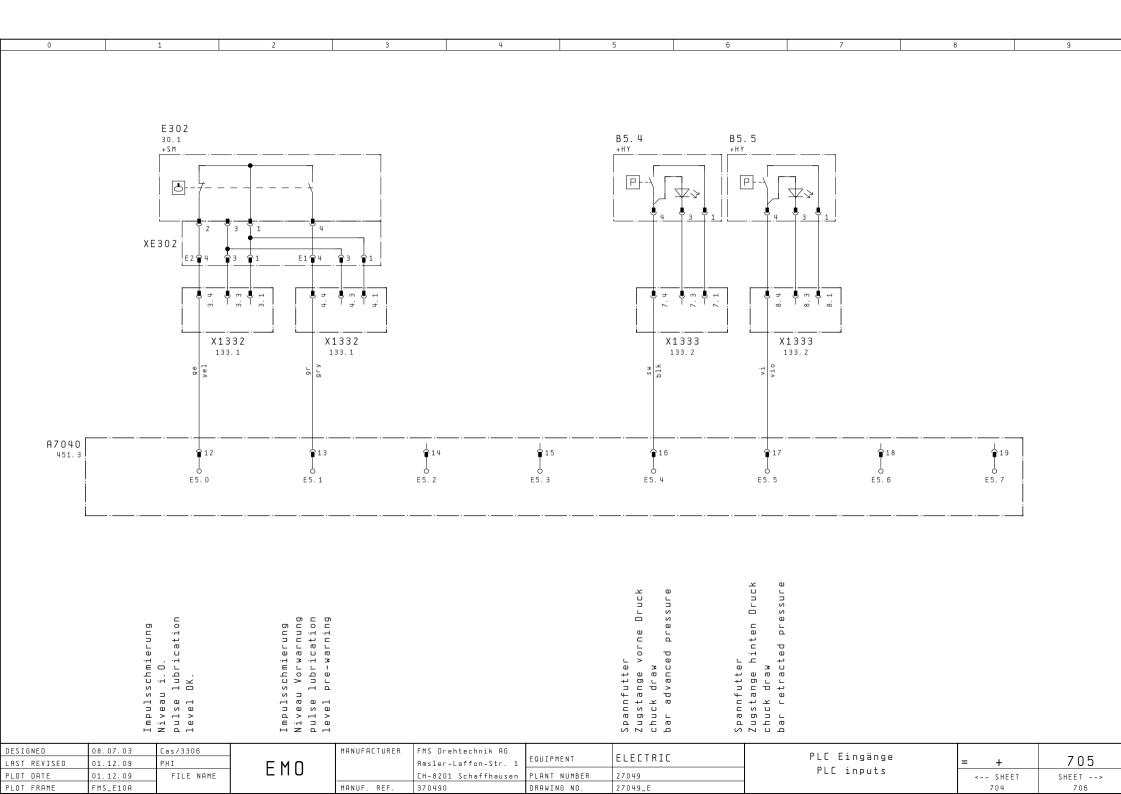


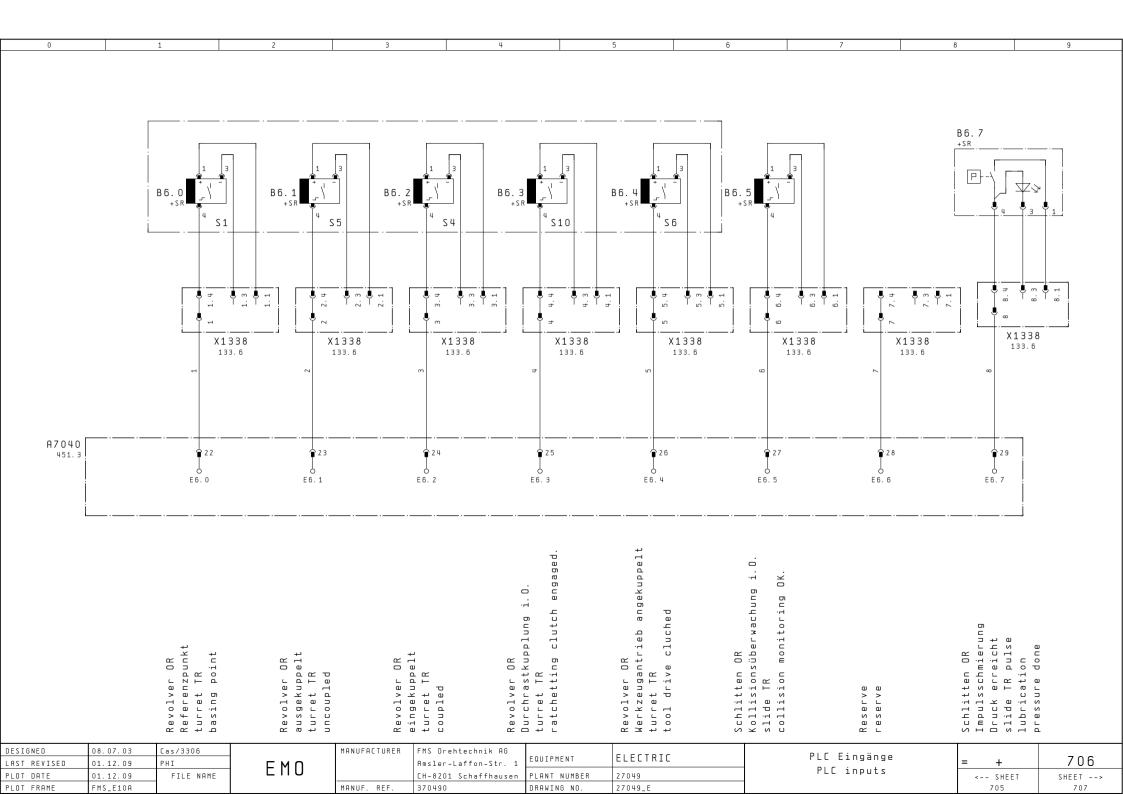


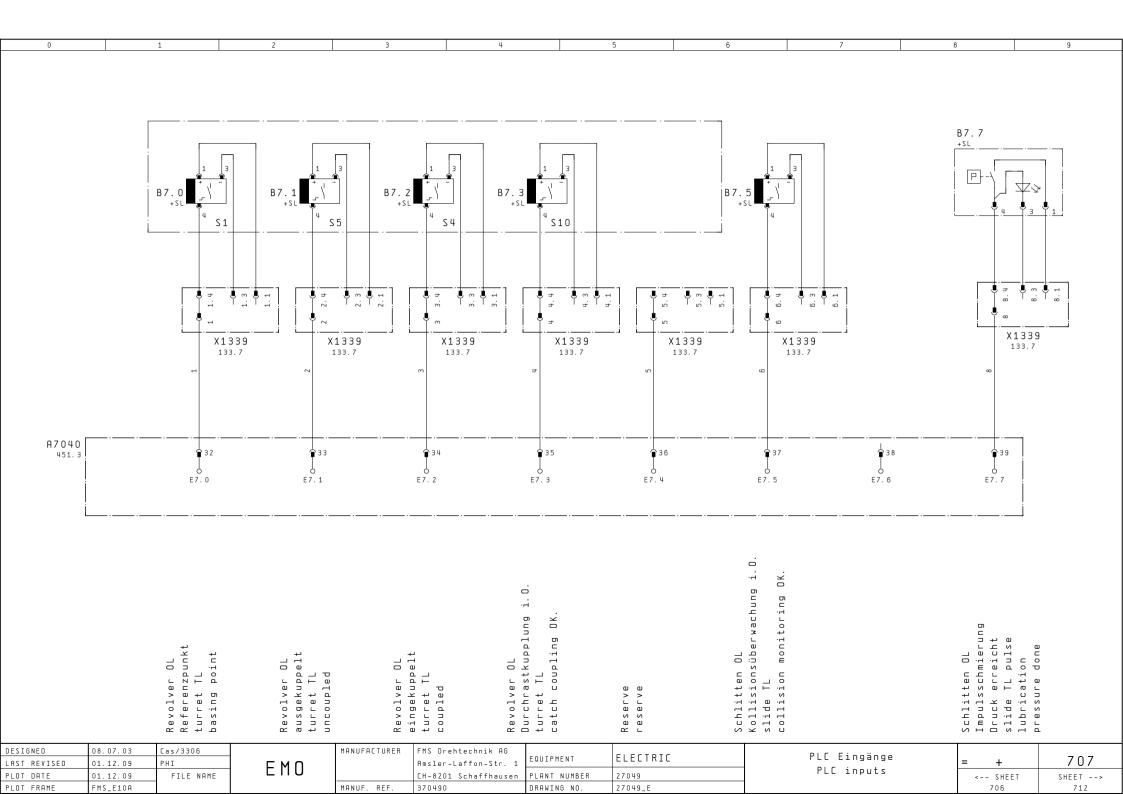


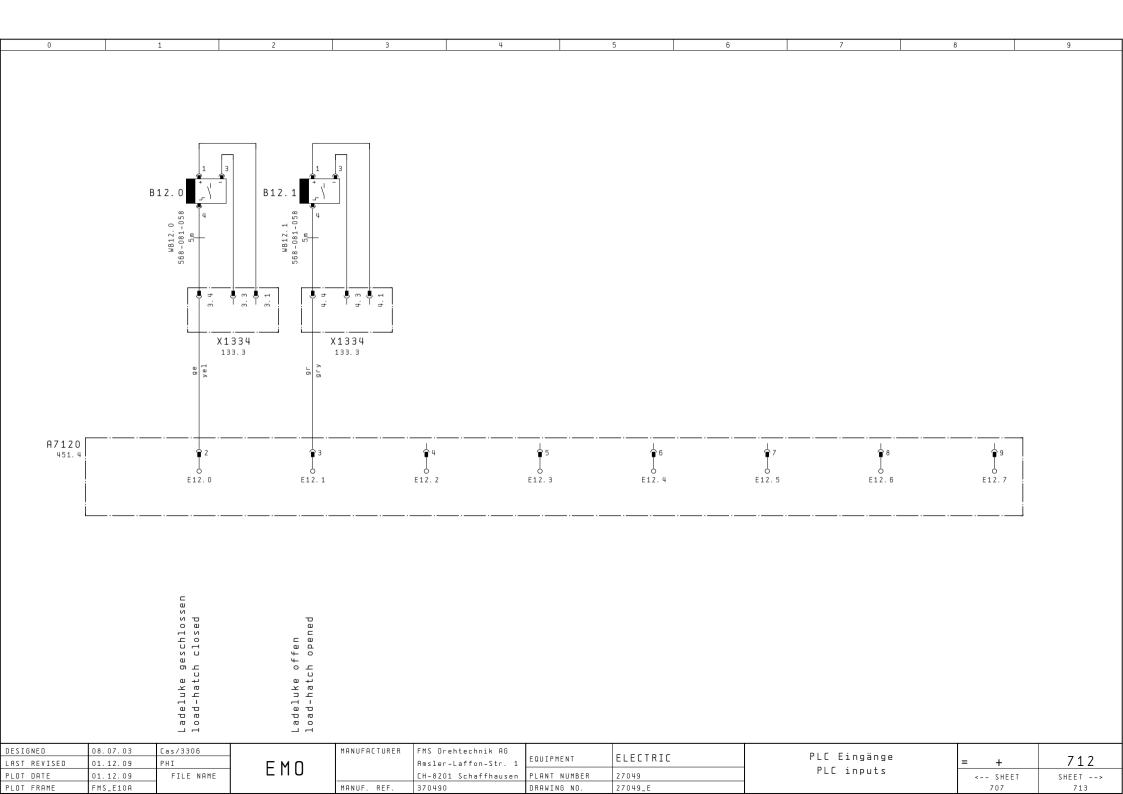


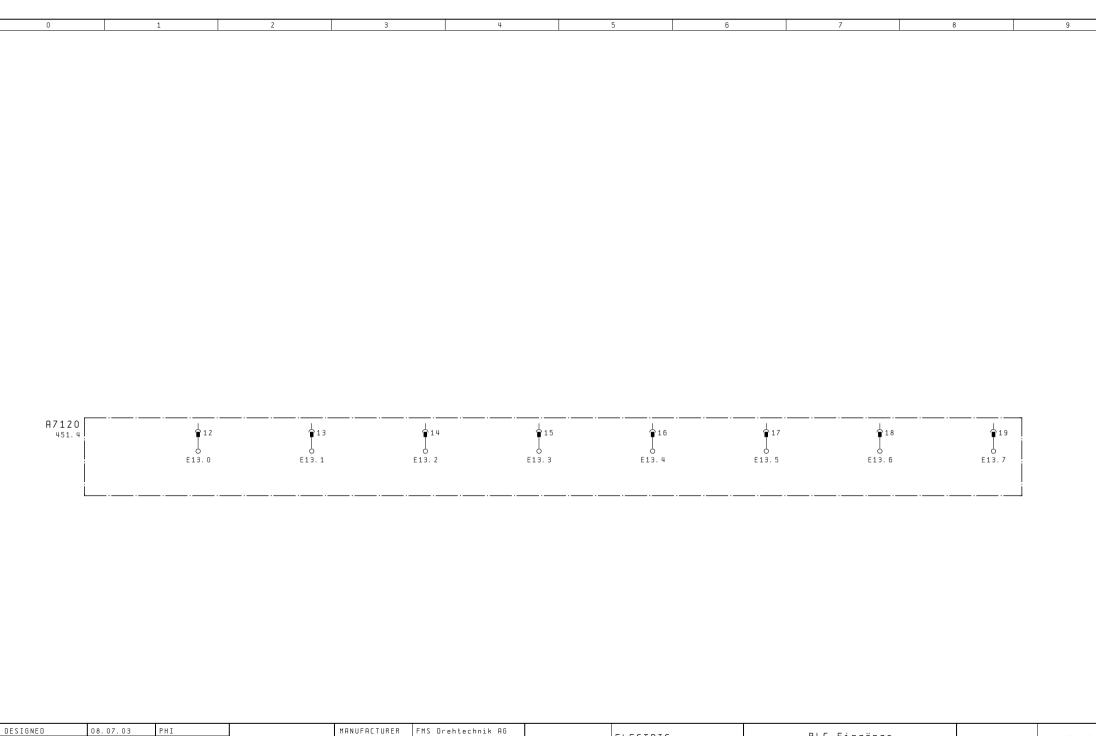




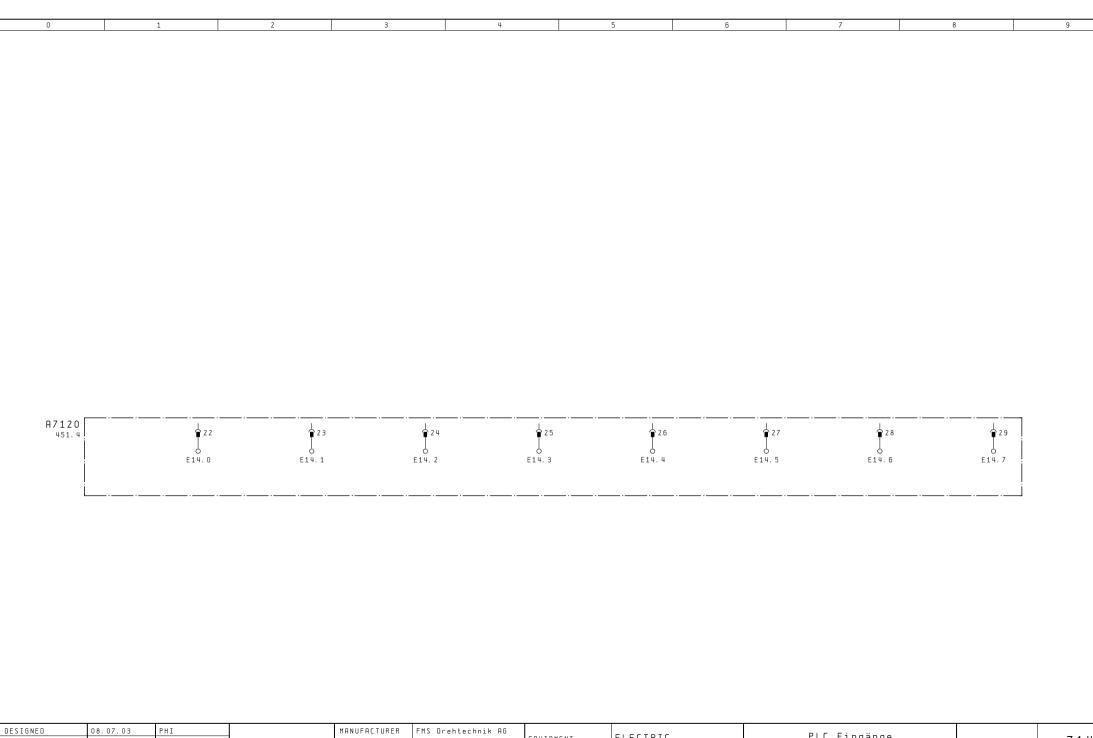




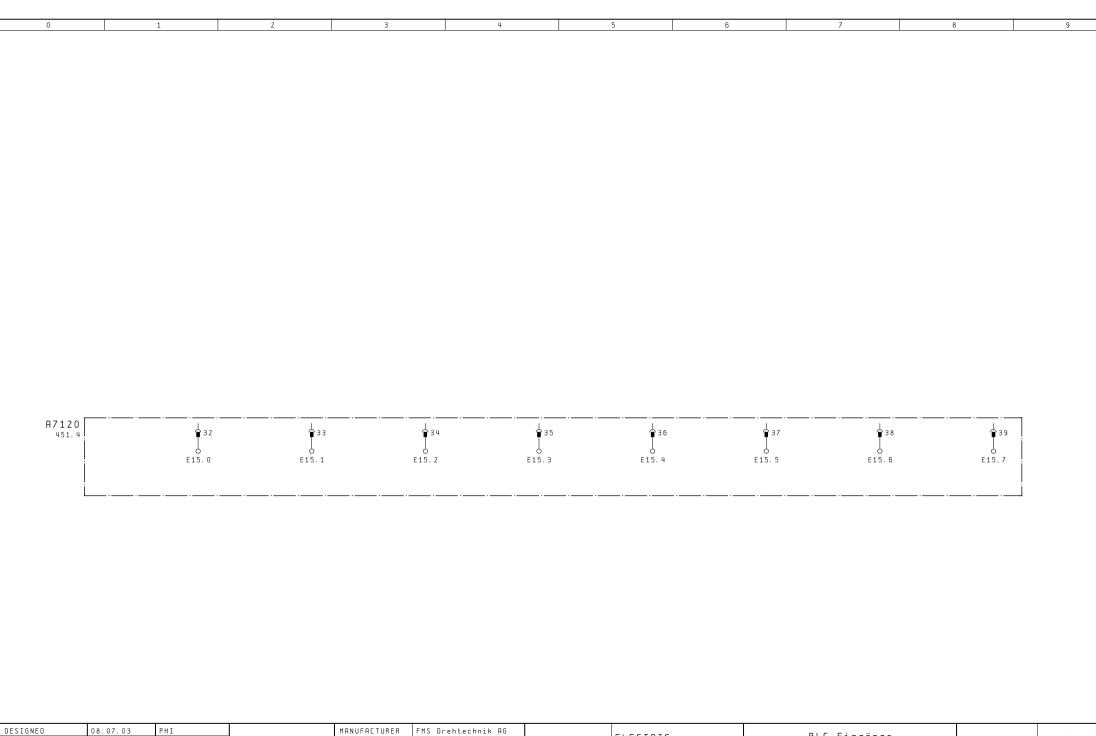




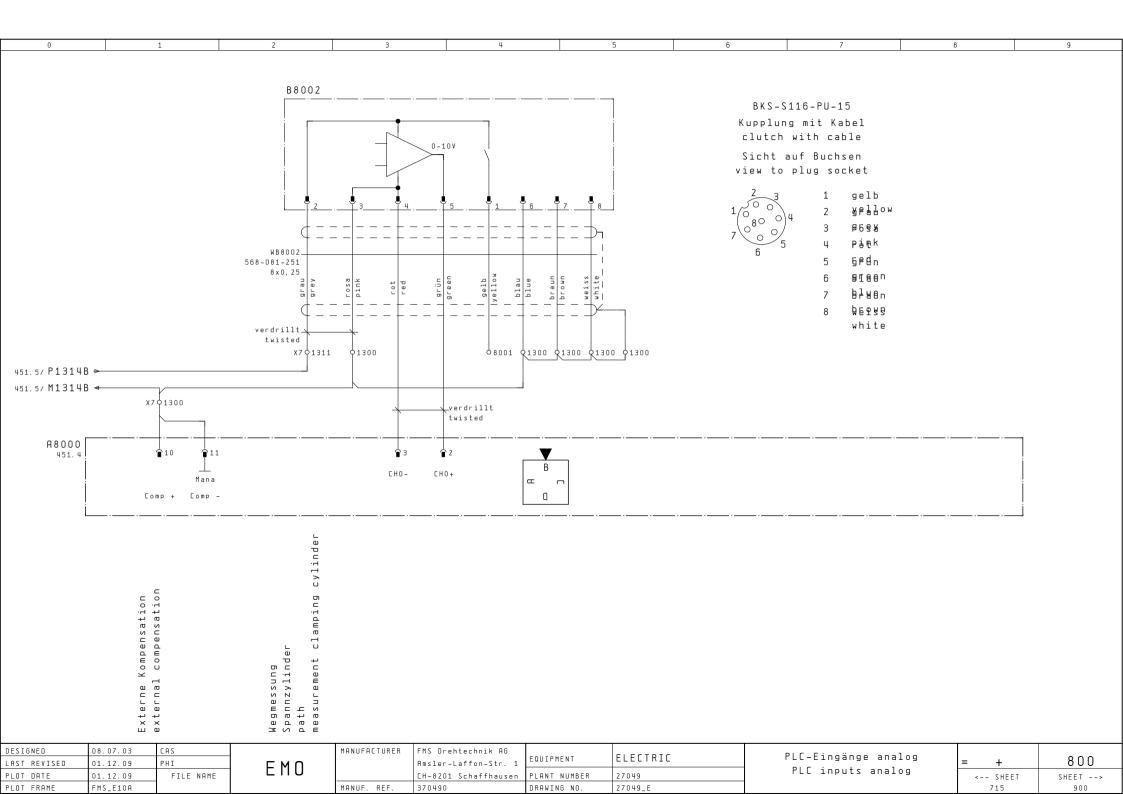
ELECTRIC PLC Eingänge EQUIPMENT 713 LAST REVISED 01.12.09 PHI EMOAmsler-Laffon-Str. 1 PLC inputs PLOT DATE 01.12.09 CH-8201 Schaffhausen PLANT NUMBER 27049 <-- SHEET SHEET --> FILE NAME PLOT FRAME DRAWING NO. 27049\_E FMS\_E10A MANUF. REF. 370490 712 714

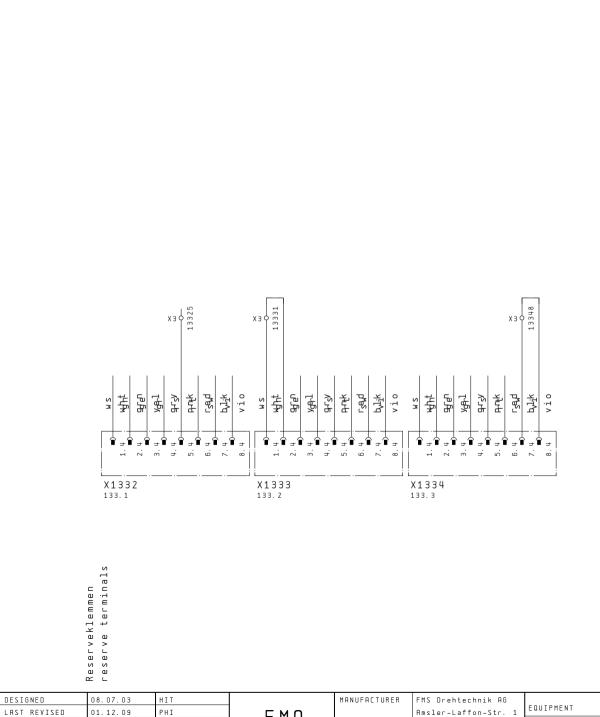


ELECTRIC PLC Eingänge EQUIPMENT 714 LAST REVISED 01.12.09 PHI EMOAmsler-Laffon-Str. 1 PLC inputs PLOT DATE 01.12.09 CH-8201 Schaffhausen PLANT NUMBER 27049 <-- SHEET SHEET --> FILE NAME PLOT FRAME DRAWING NO. 27049\_E FMS\_E10A MANUF. REF. 370490 713 715



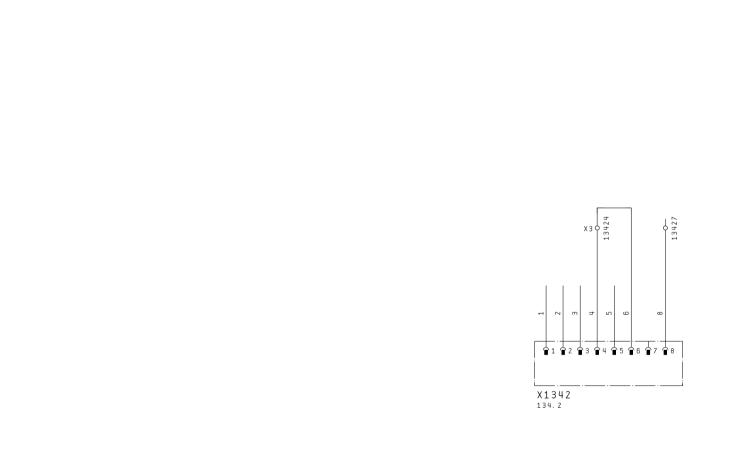
ELECTRIC PLC Eingänge EQUIPMENT 715 LAST REVISED 01.12.09 PHI EMOAmsler-Laffon-Str. 1 PLC inputs PLOT DATE 01.12.09 CH-8201 Schaffhausen PLANT NUMBER 27049 <-- SHEET SHEET --> FILE NAME PLOT FRAME DRAWING NO. 27049\_E 800 FMS\_E10A MANUF. REF. 370490 714





Reserveklemmen ELECTRIC 900 01.12.09 PHI EMOAmsler-Laffon-Str. 1 reserve terminals PLOT DATE CH-82<u>01</u> Schaffhausen <-- SHEET 01.12.09 FILE NAME PLANT NUMBER 27049 SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E 800 901

4



Reserveklemmen reserve terminals DESIGNED 08.07.03 HIT MANUFACTURER FMS Drehtechnik AG ELECTRIC Reserveklemmen EQUIPMENT 901 LAST REVISED 01.12.09 PHI Amsler-Laffon-Str. 1 EMOreserve terminals PLOT DATE 01.12.09 CH-8201 Schaffhausen PLANT NUMBER 27049 <-- SHEET SHEET --> FILE NAME PLOT FRAME FMS\_E10A MANUF. REF. 370490 DRAWING NO. 27049\_E 900 1000

0		1	2	3		4		5		6	7			3		9
term:	inals	/plugs	5						Х О							
						con- nexion	targe A		termi- :	joint	target B	con- nexion			page	2
Erdschiene	Schaltsch	rank						Р	'E		PE				11.1	
earth bar e								Р	'E		PE				11.1	
=								Р	'E		X 0 2	PE			11.1	
=								Р	'E						11.1	
=								Р	'E		X 0 0	PE			11.2	
=								Р	'E		PE				11.2	
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=								Р	'E		PE				11.4	
=								P	'E		PE				11.4	
=									'E		PE				11.5	
Schaltschra	ankbeleuch	tung links						Р	'E		E121	PE			12.2	
Seclibs ested	ît ki d b t ie n g 3 D	<b>⊌A£</b> Schalts	chrank					Р	'E		X127	PE			12.8	
Këhlgeeätod	d ki e k s 2 <b>3</b> 0 M 8	[teobileakrē	\$8685						'E		E132	PE			13.2	
Kühlgerät r	rechts Sch	altschrank	08882T					P	'E		E136	PΕ			13.6	
Hydraulikpu	umpe								'E						15.2	
Rydpeubi±c2£	820p1/min							Р	'E		X160	PΕ			16.6	
Kühpmitt28£	20m⊈émin							P	'E		X172	PE			17.2	
&päða en för den	mer							P	'E		X 2 0 2	PE			20.2	
b ti f the co z we b	∉øR Modul	(A501)						P	'E		M263	PΕ			26.3	
fmpulos&KRi	imodogeM68	581)ne						Р	'E		X302	PΕ			30.2	
Ab‱aeglobri	ichtüng ma	chine						Р	'E		+ A V				32.3	
Exdoogter									'E		A501	PE1			50.1	
earthing								Р	'E		A512	PE1			51.8	
=								Р	'E		A572	PE1			57.1	
=									'E		A602	PE1			60.8	
=								Р	'E		A612	PE1			61.8	
=								Р	'E		A 6 4 2	PE1			64.8	
=									'E		A 6 6 2	PE1			66.8	
Spannungsve	ersorgung	230VAC							'E		T1001	0 V			100.	1
power suppl	ly 230VAC							Р	'E		T1001	PE			100.	2
Erdung 24VD	D C								'E		X 2 0	1300			130.	0
Spenthings 2 t	⊎∦B6rgung .	2 4 V D C							'E		G1302				130.	
⊭a⊠ehi⊠ep⊉d									'E		PE				130.	
bambèngvèan	beiler Str	omversorgun	g Schaltschran	k				1 '	'E		X1332	5			133.	
∈onnector b	box power	supply swit	ch cabinet						'E		X1333	5			133.	3
=									'E		X1334	5			133.	
Lumbergvert	teiler Str	omversorgun	g Revolver OR						'E		X1338	12			133.	
bombec <b>g</b> øert	bexleow&tr	embayostanu	gtRēRolver OL						'E		X1339	12			133.	
bombectvert	bexlpow&tr	e m b b g z e g a u	gtKublmittel						'E		X1342	12			134.	
Massectohut	b z k ü p e w g e s	sbþpłyenool	ant					Р	'E		\$1451	PΕ			145.	1
N D Waßbugner								Р	'E	]	A4002				400.	2
F NSC 10 0 3 n 6 1 d u 0 7 e 2	2000							,								
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Dreh	technik AG		1			V0 F : ::	6 1 3 1 .				
LAST REVISED	EVISED 01.12.09 PHI FM O Amsler-					affon-Str. 1	EQUIPMENT	ELECTR:	I C		XO Erdschien			= 4	.	1000
PLOT DATE	01.12.09	1.12.09 FILE NAME CH-8201					PLANT NUMBER	27049			XO earth b	ar enclosu	re	< S		SHEET>
PLOT FRAME	01:12:03						DRAWING NO.	27049_E						90		1000.1

termi		2	3		4	5			6	7			8		9
termi		5			I I						-				
	+	terminals/plugs						ХС	)						
	+				con- nexion	target A		ermi- al No	joint	target B	con- nexion			pag	е
SPS-Übersich							PI	E		A4501	PE			450	
PLC overview							PI	E		A4511	PE			451	. 2
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FMS_K03E/11.07.200	0.0					<u> </u>				<u> </u>					
DESIGNED 08	8.07.03 PHI		MANUFACTURER		technik AG		F. F			XO Erdschiene	C-b-11- !	hne-'			
LAST REVISED 01	1.12.09 PHI	EMO		Amsler-L	affon-Str. 1		ELECTRI	L		XU Erdschiene XO earth ba				+	1000.1
PLOT DATE 01 PLOT FRAME FN	1.12.09 FILE NAME MS_E10A	CH-8201 Schaf MANUF. REF. 370490					27049 27049_E			VO EGITII DE	cc.1020		<	SHEET 1000	SHEET> 1001

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l term:	inals	/pluc	1 S						X 2					
							1 1			4 4				
						C O N -	target A		termi- joint	target B	c o n -		F	page
м						nexion			nal No		nexion			20.5
Maschinenle						b	E1305 X36		1300	X 2 2	1300			30.5
Bedbeneafed			ung Schaltschran	. 1.		1300	X1332		1300					33. 1 33. 2
				1 K		3	X1332 X1333		1300					33. 2
	ox power	SUPPLY SW	itch cabinet			3	X1333		1300					33. 4
=	tailan Str	0.000000000	ung Revolver OR			9	X1334 X1338		1300					33.7
eonnector b						10	X1338		1300					33.7
			ung Revolver OL			9	X1339		1300					33.8
eonnector b						10	X1333		1300					33.8
eomiector L	TOY HOMEL	20bbil rn	IICL IL			10	VI333		1300					34.1
Lumberavert	teiler Str	OMVERSORA	ung Kühlmittel			9	X1342		1300					34. 2
eonnector b						10	X1342		1300					34. 2
Wasserschut			oldiit			4	S1451-UK		1300					45.5
Spänshögder						5	X204		1300					03.4
chip convey							7,201						+ + -	
CHIP CONVE	y or locked													
														-
FMS_K03E/11.07.2	2000													
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Drehte		500700555	ELECTO	T.C.	Y2 Extens	e Geräte OV			4.5.5.
LAST REVISED	01.12.09	PHI	FMN		Amsler-Laf	fon-Str. 1	EQUIPMENT	ELECTR	1 L		1 devices NV	=	+	1001

PLOT DATE

PLOT FRAME

01.12.09

FMS\_E10A

EMO

FILE NAME

MANUF. REF.

370490

CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. 27049 27049\_E

X2 external devices OV

<-- SHEET SHEET --> 1000.1 1002

0		1		2	3		4		5		6	7		8		9
∐ term:	inals	/plu	2 D I							X 3	3					
3 3 1 111 1		, ,						<u> </u>								
							con-	targe			joint	target	con-			page
							nexion			nal No		В	nexion			
Maschinenle							a	E1305		1305		K 2. 6	14			130.5
Bredbienta fed				0 1 71 1			1331	X36		1331	•	F1331	2			133.1
				Schaltschran	k		1	X1332		1331	+					133. 2
eonnector b	box power	supply s	switch	h cabinet			1	X1333		1331	+					133.3
= 				Revolver OR			1 1 1	X1334 X1338		L331 L331	+					L33. 4 L33. 7
							11			1331	+					133.7
				tRēRolver OL			11	X1339			•	E4 2 // 4				
connector b							1.1	V12/12		1341	1	F1341	2			134.1
Lumbergvert &päneföodet							11	X1342 X204		L341 L341	+					134.2 703.6
Spanecobdet				II L			7	X 2 0 4		1341	1					703.8
Spapeconde, Sbiercekle							/	7204		1341	•	X1332	5.4			03.8
reserve ter	-	ı IIIY					2.4	X1333		13323		X1332 X1333	1.4			300.1
= FEZEL VE LEI	I III III II Z						8.4	X1333		13331		X1333	7.4			300. 4
=							6	X1342		13424		X1342	4			901.5
=							0	XIJ4Z		13427		X1342	8			901.6
_										13427		X1342			+ + '	301.0
FMS_K03E/11.07.2	2000						<u> </u>		<u> </u>							
DESIGNED	08.07.03	PHI			MANUFACTURER	FMS Drehte	echnik AG									
LAST REVISED	01.12.09	PHI		FMN			ffon-Str. 1	EQUIPMENT	ELECTR	IC			Geräte 24V+	=	+	1002
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PLOT DATE

PLOT FRAME

01.12.09

FMS\_E10A

FILE NAME

EMO

MANUF. REF.

CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO.

27049 27049\_E

X3 external devices 24V+

									_				
0		1	2	3		4	5		6	7		8	9
term	inals	/plug	] S						X 6				
						con- nexion	target A		rmi- joint l No	target B	con- nexion		page
Impulsfrei	gabe					1	Z512	A1		A5000	17		51.6
pulse rele	ease					663	A602	A1		A5000	18		60.6
=						663	A612	A1	. 6				61.6
=						663	A 6 4 2	A1	. 6				64.6
SPS-Übersi	cht					1300	X 2 2	13	00	A5000	10		450.2
₽LC overvi	Lew							13	0 0	A5000	30		450.3
=								13	00	A5040	10		450.3
=								13	0.0	A5050	10		450.4
=								13		A5080	10		450.5
=			·					13		A5100	10		450.5
=								13		A5110	10		450.6
=								13	0.0	A5120	10		450.7
=								13		A7000	20		451.2
=			·					13		A7040	20		451.3
=								13	0 0	A7120	20		451.4
=						13	K1507	13		A5000	21		450.3
=						2 4	K1508	13		A5040	1		450.3
=								13	54	A5050	1		450.4
=						3 4	K1508	13	55	A5080	1		450.5
=								13		A5100	1		450.5
=								13		A5110	1		450.6
=								13	55	A5120	1		450.7
FMS_K03E/11.07.	. 2000												
		1		1			1						
DESIGNED	08.07.03	PHI	$\dashv$	MANUFACTURER	FMS Drehted		QUIPMENT E	ELECTRIC		X6 Ein-/Aus	gabebaugrup	pen	. 4002
LAST REVISED	01.12.09	PHI	⊣ FM∩		Amsler-Laft	fon-Str. 1 📙	USIT IIEM				3.9	'Pen  = .	+ 1003

01.12.09 EMOAmsler-Laffon-Str. 1 LAST REVISED X6 in/out moduls FILE NAME CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. PLOT DATE 01.12.09 27049 <-- SHEET SHEET --> FMS\_E10A MANUF. REF. 370490 27049\_E PLOT FRAME 1002 1004

0		1	2	3		4		5		6	7		8			9
term	inals	/plug:	S						Χ	7						
		<i>,</i>	<u> </u>				1				11					
						con-	target A		termi- nal No		target B	con-			page	
SPS-Übersi	- 4. 4					nexion 1300	X 2 2		1300		A8000	nexion 20			451.5	
Ektermer Kin						1300	X Z Z		1300		A8000	10			800.1	
Medeesing						3	B 8 0 0 2		1300	<b>├ †</b>	ноооо	10			800.3	
path measu			nder			6	B8002		1300						800.4	
=	Tement Cla	Imping Cylli	1001			7	B8002		1300	⊢ <b>i</b> ⊢					800.4	
=						8	B8002		1300	I					800.5	
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SPS-Übersi	cht.					1311	X 2 3		1311		A8000	1			451.5	
Яьбшехепый		nder				2	B8002		1311			_			800.2	
path measu			nder			1	B8002		8001						800.4	
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FMS_K03E/11.07.	2000						1					ı				
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LAST REVISED	08.07.03 01.12.09	PHI		MANUFACTURER	FMS Drehted Amsler-Laff		EQUIPMENT	ELECTE	RIC			gbaugruppe		= 4	.	1004
FUST WEATSER	101.12.03	1 11 1	∮ FMN		Tumzier-rali	011-3 LF. 1		+			¥7 ana	loa modul	-			

EMO

FILE NAME

01.12.09

FMS\_E10A

PLOT DATE

PLOT FRAME

I O

Ams1 CH-8 MANUF. REF. 3704

Amsler-Laffon-Str. 1

CH-8201 Schaffhausen PLANT NUMBER

370490 DRAWING NO.

OUIPMENT ELECTF

LANT NUMBER 27049

RAWING NO. 27049\_E

X/ Hnalogbaugruppe X7 analog modul + 1004
<-- SHEET SHEET -->
1003 1005

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termi	inals	/plugs	•						X O O						
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l						nexion	А		1 No	В	nexion	+	$\rightarrow$		
Erdschiene							V 0	PE				4  -	+		1.6
earth bar o	perating	panel				PE	X 0	PE				4 +	+		1.6
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eperator pa						PE	A4202	PE		+		++	+		20. 2
Maschineste						1	A4212	PE				1	<del></del>		21. 2
Machine con		1				1	A4212-X10	PE				7	+		21. 3
Steckdosen						PE	X4301-X4307					<u> </u>			30.5
sockets 230												]			
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FMS_K03E/11.07.2	000						1								
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Deak	technik AG									
		PHI	ГМО	VOT HE FUNER		affon-Str. 1	DUIPMENT	LECTRIC		X00 Erdschie				+	1005
PLOT DATE	01.12.09	FILE NAME	EMO			Schaffhausen PL		7049		X00: earth ba	ar operato	r par	1 <del></del>	< SHEET	SHEET>
	FMS_E10A			MANUF. REF.	370490			7049_E						1004	1006

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termin	als/plug	] S						Х О	2						
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	x6 mm Schaltschr	ank				PE		PΕ						10.	
earth bar 15x6	ô mm enclosure				PE	X 0		PΕ				_		10.	
SIMODRIVE 611D	]					PE		PE				-		10.	
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FMS_K03E/11.07.2000															
	07.03 PHI		MANUFACTURER	FMS Dreh	technik AG	OUT DMENT	ELECT	DIC			02				4.0.0.0
LAST REVISED 01.1	12.09 PHI	⊢ EMO			111011-311. 1	DUIPMENT		NIC		^			=	+	1006
PLOT DATE 01.1	12.09 FILE NAME		MONUE SEE	CH-8201	Schaffhausen Pl	ANT NUMBER	27049						<	SHEET	SHEET>
PLOT FRAME FMS_	_E10A		MANUF. REF.	370490	DI	RAWING NO.	27049_E							1005	1007

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term	inals	/plugs	S						X 1	L 6						
						con- nexion		et	termi- nal No	,	В	con- nexion			page	
Schaltschr						2	E121		1000	1	T1001	0 V			100.3	
Sheithdose :						N	X127		1000						100.4	
§ p ∈ p p q q o e e c l						1000	X35		1000						100.5	
<b>Sobbatsope</b>						1	E121		1003		F1003	2			100.3	
Sheithdose :						L	X127		1003	$\bot$					100.4	
Speppq quenci						1003	X35		1003						100.5	
socket ope	rator pane	1														
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FMS_K03E/11.07.2	2000															
1 113_NU3E/11. U/	2000															
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Drehtec	hnik og				ı						
LAST REVISED	01.12.09	PHI	FMN		Amsler-Laff		EQUIPMENT	ELECT	RIC			C-Verteilung		= +	.   1	.007
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EMO

FILE NAME

01.12.09

FMS\_E10A

PLOT DATE

PLOT FRAME

MANUF. REF.

CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. 370490

27049 27049\_E

X16 230VAC distribution

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0		1	2	3		4		5		6	7			8		9
termi	nals	/plugs	;						X 2	0						
						con- nexion	targe A	t	termi- nal No	joint	target B	con- nexion			P	a g e
Spannungsver	sorgung 2	2 4 V D C				1300	X 2 2		1300	•	X 0	PE				30.1
power supply	24VDC					1300	X 2 2		1300	l l	G1302	-			13	30.2
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FMS_K03E/11.07.200	0 0						<u> </u>									
DESIGNED 08	8.07.03	PHI		MANUFACTURER	FMS Dreh	technik AG					V22 5					
LAST REVISED 0:	1.12.09	PHI	EMO	affon-Str. 1	QUIPMENT	ELECT	RIC		X20 Spannngs			=		1008		
PLOT DATE 0:	1.12.09	FILE NAME	CH-8201 Schaf			Schaffhausen P	LANT NUMBER	27049			X20 power	. Znbbīà (	۷ ر		< SHEET	SHEET>
LOT FRAME FI	E FMS_E10A MANUF. REF. 370490				370490	D	RAWING NO.	27049_E							1007	1009

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term	inals	/ n l 11 c	7.5						X 2 2					
C C 1 111	111013	, b i a s	<u> </u>											
						con-	target		termi- join		con-		ра	ge
						nexion			nal No	В	nexion			
Maschinenl						1300	X 2		1300	X 2 0	1300		130	
Aasbbaètwa						M	A4501		1300				131	
interface						M	A4511		1300				131	
Analogbaug						1300	X 7		1300				131	
Realais mod	ule					B 2	K1421		1300				131	
<b>ifbèa</b> nostat						2	B1.7		1300				131	
E M & r M o d to a t						19	A501-X121		1300				132	
Ü∀ឱrໝadbile:						19	A572		1300				132	
Habiebremg						-	J602		1300	<b>_</b>		$\perp$	132	
Haldebgebs						-	J602		1300	1		$\perp$	132	
Haldebgebs						-	J662		1300	1			132	
R6l8maghBa						_ 1			1300	-		1	132	
<b>p</b> rogramer	<u>connection</u> -	ьох				_ 3	1		1300	1		+	132	
AO.O - AO.Z	7					1300	X 6		1300	X20	1300		135	5. 1
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FMS_K03E/11.07.2	2000						1		ı		1	1 1	1 1	
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LAST REVISED	01.12.09	.07.03 PHI MANUFACTURER FMS Drehtec .12.09 PHI FM N				EQUIPMENT	ELECTR	l C	X22 Spannng	sverteilung OV	=	+	1009	
	1-1-12-03	+	— ⊢MII		12261 - 201					<b>⊣</b>		<u> </u>	•	

PLOT DATE 01.12.09

PLOT FRAME

FMS\_E10A

FILE NAME

EMO

MANUF. REF.

CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. 370490

27049 27049\_E

0		1	2	3		Ч		5		6	7	7	8		9
terminals/plugs									X 2	23					
						con- nexion		t	termi- nal No		В	con- nexion			page
Anschaltun						L+	A4501		1311	•	F1311	2			131.1
PbteEfagën;	<b>₫월</b> 361					13	Q1001		1311						131.4
ReCaimputs						B 1	K1421		1311						131.6
K <b>ëbag</b> erät :						4	E132		1311						131.8
Übeit waahen:		vice				7 2			1311	$\perp$					132.1
M6AAbocbbg:						_ 5			1311						132.8
programer	<u>connection</u>	ьох													
FMS_K03E/11.07.	2000						1			1		1	1 1		
DESIGNED					FMS Drehted		EQUIPMENT	ELECT			X23 Spannungs	24V+ _	: +	101	
LAST REVISED	01.12.09	PHI	FMN	1	Amsler-Laff	on-Str. 1					Y23 DOWER	supply 24V	. 1	+	101

EMO

PLOT DATE

PLOT FRAME

01.12.09

FMS\_E10A

FILE NAME

MANUF. REF.

CH-8201 Schaffhausen PLANT NUMBER 370490

27049 DRAWING NO. 27049\_E

X23 power supply 24V+

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0 1 2	3		4	5		6	1	7		3	_	9
terminals/plugs						X35						
			con- nexion	target A		mi- joir L No	target B	con- nexion			page	
Steckdosen 230VAC			N	X4301-X4307			X16	1000			430.	
sockets 230VAC			L	X4301-X4307	7 100	3	X16	1003			430.	5
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FMS_K03E/11.07.2000												
ESIGNED 08.07.03 PHI	MANUFACTURE	EMC D .	technik AG	Ι			1			1		
		Amsler-L	affon-Str. 1	QUIPMENT [	ELECTRIC			kdose 230VAC		= -	+	1011
PLOT DATE 01.12.09 FILE NAME CITU		CH-8201	Schaffhausen P	ANT NUMBER 2	27049		X35 soc	< SHEET		SHEET>		
PLOT FRAME FMS_E10A	MANUF. REF.	370490	D	RAWING NO. 2	27049_E				1010		1012	

												<u>,                                      </u>	<u>,                                      </u>				
0		1		2	3		4		5		6	7		8		9	
terminals/plugs									X36								
lerm.	Tugtz	<u>/ PIU</u>	y s								U						
							con- nexion	target A		termi- nal No	joint	target B	con- nexion		ра	g e	
Antriebe al	haeschalte	+					X1	H3. 0		A3.0		A5000	32		5.0	3.1	
MetedAdsive							X1	H3. 1		<del>п3. 0</del> ЯЗ. 1		A5000	33			3. 2	
Manek geöck		011					X1	H3. 2		<u>пз. 1</u> АЗ. 2		A5000	34		503.3		
Faeigabem Se							2 2	S 2. 0		E 2. 0		A7000	22			2.1	
							14	S 2. 1		E 2. 1		A7000	23				
Sèèeesepeo: Eòntiobtbe		age					14	S 2 . 1		E 2 . 1		A7000	24			2. 2 2. 3	
							14	S 2 . 3		E 2 . 3		A7000	25			2. 4	
Zyklup Spei							14	S 2 . 4				A7000	26				
Eytlerstah								_		E 2. 4						2.5	
Eb to							14	\$2.5		E 2.5		A7000	27			2.6	
R b i i t k t o p k n							23	S 2 . 6		E 2. 6		A7000	2.8			2.7	
Reilstock							23	S 2 . 7		E 2. 7		A7000	29			2.8	
Mażżetocku:							14	\$3.1		E3.1		A7000	33			3. 2	
Bedashtgdei							-	A4202-X1		1300	<b>├१</b>	X 2	1300			0.3	
Mperator pa							2	A4212-X10		1300	<b>│</b>					1.3	
Antriebe al							X 2	H3.0		1300	<b>-</b>					3.1	
Beddedt a fe		off					+	A4202-X1		1331	<b>├</b> •	Х3	1331			0.2	
B@#rator pa							3	A4212-X10		1331	<b>— •</b> —					1. 2	
Freigabe S							21	S 2. 0		1331	<b>— •</b> —					2.1	
Releatecko		age					11	S 2. 6		1331						2.7	
Reilstock	adväoke									1331						2.8	
tailstock	retract									1422		K1421	S 2 1			2. 2	
									:	1423		K1421	\$31		14	2. 2	
Not-Aus Be	dienpult									1424		K1421	S 2 2		14	2.4	
emergency :	stop opera	tor pane	1						:	1425		K1421	S 3 2		14	2.4	
Zustimmung							13	S1471	:	1471		K2.1	14		14	7.2	
permission							14	S1471		1472		K1471	S 2 2		14	7.2	
=							23	S1471		1473		K2.1	2 4		14	7.3	
=							2 4	S1471	:	1474		K1471	S 3 2		14	7.3	
Fussschalt	er Reitsto	ck vor					43	S2.6		1491		K1491	A1		14	9.1	
Footschalt	brtBèlssbo	kkføowäc	: ki				43	S 2. 7	:	1491					14	9.3	
foot switch	h tailstoc	k backwa	ırd														
FMS_K03E/11.07.2	2000						I				·		'				
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DECTONED	00.07.00	DUT			MANUFACTURER	EMC D 1:	L : L 22		T		ı			ı			
DESIGNED LAST REVISED	08.07.03	PHI PHI	-	E 14 0	HNUFHLIUKER	FMS Drehte	echnik Hö ffon-Str. 1	EQUIPMENT	ELECTR	RIC		X36 24VDC	=	+	1012		
EUSI NETTOED	U1. 14. U3	1.11.4		FΜN	I	Lumater - rai	1011-311. 1					V26 211VDC	distribution	. =		+	

EMOX36 24VDC distribution FILE NAME CH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. PLOT DATE 01.12.09 27049 <-- SHEET SHEET --> PLOT FRAME FMS\_E10A MANUF. REF. 370490 27049\_E 1011 1013

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terminals/plugs					,		X15		,					
				con- nexion	target A		termi-		target B	con- nexion			pag	2
Hydraulikpumpe				U1	M152	1	1		K1.0	2			15.	2
hydraulic pump				V 1	M152	2	2		K1.0	4			15.	
=				W1	M152	3	3		K1.0	6			15.	
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LAST REVISED 01.12.09 PHI	EMO			atton-str. 1 📙		ELECTR	ıL			raulikpumpe raulic pump		=	+	1013
PLOT DATE 01.12.09 FILE NAME	LIIU			Schaffhausen Pl	ANT NUMBER	27049			VID7 UAQ	I GUTTC DAWD			SHEET	SHEET>
LOT FRAME FMS_E10A		MANUF. REF.	370490	DI	RAWING NO.	27049_E						1	012	1014

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terminals/plugs			,				X 1 7							
. 5				con- nexion	target A		termi- nal No		В	con- nexion			pag	9
Kühlmittelpumpe				U1	M172		1		K1.1	2			17.2	
eoolant pump				V 1	M172		2		K1.1	4			17.2	
=				W 1	M172		3		K1.1	6			17.2	
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		OT HE LUNEN		effon-Str. 1	DUIPMENT	ELECTR	RIC			lmittelpumpe		=	+	1014
LOT DATE 01.12.09 FILE NAME	E M O			Schaffhausen Pl	ANT NUMBER	27049			Х172 со	oling pump			SHEET	SHEET>
LOT FRAME FMS_E10A		MANUF. REF.	370490	DI	RAWING NO.	27049_E							013	1015

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Con-   Target   Caral   Dills   Dill			_ 7				1		<u>'</u>		V 2 (			1					
	term	ınaıs/	plugs								٨٧١	JZ							
1										t		joint						pag	е
#1 702 3 8 8.0.4 6 8 2 0 2 2 2 2 3 8 8.0.4 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Späneförder	rer						U1			1			2					
	ehip convey	yor												4					
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9 N N PE											•				1				
PE M202 PE X0 PE X0 PE																			
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ESIGNED 08.07.03 PHI AST REVISED 01.12.09 PHI FMO MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1																			
ESIGNED 08.07.03 PHI AST REVISED 01.12.09 PHI FMO MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1																			
ESIGNED 08.07.03 PHI AST REVISED 01.12.09 PHI FMO MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															_  [				
ESIGNED 08.07.03 PHI AST REVISED 01.12.09 PHI FMO MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															4	_	$\perp$		
ESIGNED 08.07.03 PHI OST REVISED 01.12.09 PHI FMO MANUFACTURER Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															+	_	+		
SSIGNED 08.07.03 PHI OST REVISED 01.12.09 PHI FMO HANUFACTURER Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															$\dashv$ $\dagger$	+	+		
SSIGNED 08.07.03 PHI OST REVISED 01.12.09 PHI FMO HANUFACTURER Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															$\dashv$	-			
ESIGNED 08.07.03 PHI AST REVISED 01.12.09 PHI FMO MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1  EQUIPMENT ELECTRIC X202 Späneförderer Motor = + 1															1 1				
AST REVISED 01.12.09 PHI FMO Amsler-Laffon-Str. 1 EQUIPMENT ELELIKIL X202 Spanerorderer notor = + 1	MS_K03E/11.07.2	2000						1						1					
Hmsler-Laffon-Str. 1 Y202 chic conveyor pater   - + 1		08.07.03 PH	I			MANUFACTURER			DUTDMENT	ELECT	P T C		X2N2 Spanef	örderer	Motor				4015
THE BOLD TO BE THE NAME I - TO I ITHE STATE OF THE STATE				FMN				alion-2 Lr. 1			NIL								1015
3 SILCE SILCE	LUÍ DATÉ LOT FRAMF	U1.12.09	FILE NAME	5	_	MANUE REF		Schaffhausen Pl	HNT NUMBER	27049 27049 F				,					SHEET> 1016

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term	ninals	:/plugs	S						X 2 0 4							
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Späneförde	erer sperr	e n				21	X5034-S3.		1	Х3		1341			703.	6
ehip conve						2 2	X5034-S3.	. 5	2	A7000		37			703.	
Späneförde						1 4	X5034-S3.		3	A7000		3 8			703.	
	eyer gestpe					X 1	X5034-H3.		4	A5000		35			503.	
ehip conve	eyor locke	d				X 2	X5034-H3.	. 3	5	X 2		1300			503.	4
									6							
	erer Laufk					3	\$3.7		7	Х3		1341			703.	
ehip conve	eyor monit	oring				4	\$3.7		8	A7000		39			703.	8
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FMS_K03E/11.07	7. 2000					<u>'</u>			·	•		•			'	
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Drehte	chnik AG										
LAST REVISED	01.12.09	PHI	ГМО	I IIII O II C I ONEN	Amsler-Laf		EQUIPMENT	ELECT	RIC	X204 Sp	äneförde	rer Schalte or control	lement	≗	+	1016
PLOT DATE	01.12.09	FILE NAME	EMO				PLANT NUMBER	27049	;	(2 <b>0</b> 4 chi	p convey	or control	elemer	nts	SHEET	SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF.	370490		DRAWING NO.	27049_E						10	15	1017

EMOCH-8201 Schaffhausen PLANT NUMBER 370490 DRAWING NO. PLOT DATE 01.12.09 FILE NAME 27049 PLOT FRAME FMS\_E10A MANUF. REF. 27049\_E

SHEET --> 1015 1017

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terminals/plugs	S						X 3 (	02						
				con- nexion	target A		termi- nal No	joint	target B	con- nexion			pag	е
Impulsschmierung Maschine				U1	E302	1	L		K1.3	2			30.	
pulse lubrication machine				V 1	E302	2			K1.3	4			30.	
=				W1	E302	3			K1.3	6			30.	2
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FMS_K03E/11.07.2000									<u> </u>					
ESIGNED 08.07.03 PHI		MANUFACTURER	FMS Dreb	technik AG	T									
LAST REVISED 01.12.09 PHI	EMO		Amsler-L	affon-Str. 1		ELECTR	IC			hmierpumpe		=	+	1017
PLOT DATE 01.12.09 FILE NAME	LIIU			Schaffhausen Pl	ANT NUMBER	27049			X3UZ lubr	ication pu	mР		- SHEET	SHEET>
LOT FRAME FMS_E10A		MANUF. REF.	370490	DI	RAWING NO.	27049_E							1016	1018

0 1 2 3	4	5	6	7		8	9
terminals/plugs			X1332				
	con- nexion	target A	termi- joint nal No	target B	con- nexion		page
Lumbergverteiler Stromversorgung Schaltschrank			1	Х3	1331		133.2
connector box power supply switch cabinet			3	X 2	1300		133.2
=			5	Х0	PE		133.2
			1.1				
Pneumatik Maschine Netzdruck Ein	2	Y1.4	1.3				501.6
pneumatic machine pressure on	1	Y1.4	1.4	A5000	16		501.5
=	PΕ	Y1.4	1.5				501.5
Pneumatik Netzdruck i.O.	1	B 0.7	2.1				700.9
pneumatic net pressure OK.	3	B0.7	2.3				700.9
=	4	B 0 . 7	2.4	A7000	9		700.8
			2.5				
Impulsschmierung Niveau i.O.	1	XE302-E2	3.1				705.2
pulse lubrication level OK.	3	XE302-E2	3.3				705.2
=	4	XE302-E2	3.4	A7040	12		705.1
			3.5				
Impulsschmierung Niveau Vorwarnung	1	XE302-E1	4.1				705.3
pulse lubrication level pre-warning	3	XE302-E1	4.3				705.3
=	4	XE302-E1	4.4	A7040	13		705.2
			4.5				
			5.1				
			5. 3				
Reserveklemmen	13325	Х3	5.4				900.1
reserve terminals			5.5				
Hydraulik Druck i.O.	1	B4.0	6. 1				704.2
hydraulic pressure OK.	3	B4. 0	6.3				704.2
=	4	B4. 0	6.4	A7040	2		704.1
			6.5				
Hydraulik Filter i.O.	1	B 4. 4	7.1				704.6
hydraulic filter OK.	3	B4. 4	7.3				704.6
=	4	B 4. 4	7.4	A7040	6		704.5
			7.5				
			8.1				
Abblasluft ein	2	Y12.4	8.3				512.5
=	1	Y12. 4	8.4	A5120	13		512.5
=	PE	Y12.4	8.5				512.5
					<del>                                     </del>		
FMS_K03E/11.07.2000	1	1	ļ '	<u>.                                    </u>	1	1 1 1	
DESIGNED 08.07.03 PHI MANUFACTURER FMS Drehtec	I =	OUTDMENT	LECTRIC	X1337 Lumb	ergverteiler		4040
LAST REVISED 01.12.09 PHI E MO Amsler-Laff	on-31r. 1				nnector box	= +	1018
1201 8112 01.12.03 1122 11112	affhausen P		7049	71332 60	HINGCOOL DOX	< SHE	
PLOT FRAME FMS_E10A MANUF. REF. 370490	D	RAWING NO. 2	7049_E			1017	1019

0 1 2 3	4	5	6	7		8	9
terminals/plugs			X1333				
	con- nexion	target A	termi- joint	target B	con- nexion		page
Lumbergverteiler Stromversorgung Schaltschrank			1	Х3	1331		133.3
eonnector box power supply switch cabinet			3	X 2	1300		133.3
=			5	X O	PE		133.3
			1.1				
			1.3				
Reserveklemmen	13331	Х3	1.4				900.2
reserve terminals			1.5				
			2.1				
			2.3				
=	13331	Х3	2.4				900.2
			2.5				
			3.1				
Revolver OR verriegeln	2	Y5.0	3.3				505.1
ŧurret TR lock	1	Y5.0	3.4	A5050	3		505.1
=	PE	Y5.0	3.5				505.1
			4.1				
Revolver OR entriegeln	2	Y5.1	4.3				505.2
ŧurret TR unlock	1	Y5.1	4.4	A5050	5		505.2
=	PE	Y5.1	4.5				505.2
			5.1				
Spannzylinder Zugstange vor	2	Y4.3	5.3				504.4
ehucking cylinder draw bar advance	1	Y4.3	5.4	A5040	9		504.4
=	PE	Y4.3	5.5				504.4
			6.1				
Spannzylinder Zugstange zurück	2	Y4.4	6.3				504.5
ehucking cylinder draw bar retract	1	Y 4. 4	6.4	A5040	13		504.5
=	PE	Y4.4	6.5				504.5
Spannfutter Zugstange vorne Druck	1	B5.4	7.1				705.6
ehuck draw bar advanced pressure	3	B5.4	7.3				705.6
=	4	B5.4	7.4	A7040	16		705.5
			7.5				
Spannfutter Zugstange hinten Druck	1	B5.5	8.1				705.7
ehuck draw bar retracted pressure	3	B5.5	8.3				705.7
=	4	B5.5	8.4	A7040	17		705.6
			8.5				
FMS_K03E/11.07.2000		•		•			•
DESIGNED 08.07.03 PHI MANUFACTURER FMS Drehtect	hnik AG						
		QUIPMENT E	LECTRIC		ergverteiler	= +	1019
	affhausen P	LANT NUMBER 2	7 0 4 9	Х1333 со	nnector box	< SHI	
PLOT FRAME FMS_E10A MANUF. REF. 370490			7 0 4 9 _ E			1018	l l

0 1 2 3	4	5	6	7		8 9
				7		
terminals/plugs			X1334			
		T		_		
	con-	target	termi- joir		con-	page
	nexion	А	nal No	В	nexion	1 1 1 1 2 2 11
Lumbergverteiler Stromversorgung Schaltschrank	+		1	X3 X2	1331	133.4
eonnector box power supply switch cabinet	1		5	X 2 X 0	1300 PE	133.4
	1		1.1		1 -	155.4
Ladeluke schlisessen	1	+	1. 3		+	508.1
dad-hatch close	1	Y 8. 0	1.4	A5080	3	508.1
=	PE	Y 8. 0	1.5			508.1
			2.1			
Ladeluke öffnen	2	Y 8. 1	2.3			508.2
≟oad-hatch open	1	Y 8. 1	2.4	A5080	5	508.2
=	PE	Y 8 . 1	2.5			508.2
Ladeluke geschlossen	1	B12.0	3.1			712. 2
≟oad-hatch closed	3	B12.0	3.3		+	712.2
=	4	B12.0	3.4	A7120	2	712.1
	+ +	D42.4	3.5		+	742 2
Ladeluke offen	1 2	B12.1	4.1	_	+	712.3
ighthat it is a second in the	3	B12.1 B12.1	4.3	A7120	3	712.3
=	+ + +	D12. 1	4. 4	n/14U	+	/ 1 \( \) \( \)
	+ +	<del> </del>	5.1		+	+ + + +
Revolver OL verriegeln			5. 3	Y5. 4	2	505.5
turret TL lock	13	A5050	5. 4	Y5. 4	1	505.5
=	1		5. 5	Y5. 4	PE	505.5
			6. 1			
Revolver OL entriegeln			6.3	Y5.5	2	505.6
ŧurret TL unlock	15	A5050	6.4	Y5.5	1	505.6
=			6.5	Y5.5	PE	505.6
			7.1			
	1		7.3			
Reserveklemmen	13348	Х3	7.4	+	+	900.4
reserve terminals	+		7.5		+	+ + + -
	+ +		8.1		+	+ + +
=	13348	Х3	8.3	+	+ +	900.4
-	13348	1 1 2	8.4	+	+	300.4
	+ +	+	10.0	+	+	
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FMS_K03E/11.07.2000				-		
DESIGNED 08.07.03 PHI MANUFACTURER FMS Dreh	technik AG			V.1.2.2		
	affon-Str. 1	QUIPMENT ELEC	I R I C		ergverteiler	= + 102
PLOT DATE 01.12.09 FILE NAME CH-8201	Schaffhausen P	LANT NUMBER 27049		X1334 con	nector box	< SHEET SHEET -
PLOT FRAME FMS_E10A MANUF. REF. 370490	D	RAWING NO. 27049_	.E			1019 1021

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ll tormi	inale	/plug	c						X133	3 8 I					
	T 11 G T 2	/ PIU9	3						<u> </u>						
						con-	target	t I	termi- j	joint	target	con-			page
						nexion	А	Г	nal No		В	nexion			Pugc
Revolver OR	Referenz	punkt				2 2	A7040	1			X1338	1.4			706.1
RevolteifROB	Вавшь де ро́р	pelt				23	A7040	2			X1338	2.4			706.2
RevolteFROB	ane io o g 2 k d p	pelt				2 4	A7040	3			X1338	3.4			706.3
RevolteFROB	Ro <b>Dpiteti</b> nas	tkupplung :	i. O.			25	A7040	4			X1338	4.4			706.4
RevolteFROR	Ratlehteteing	gntìtù ebhae	ggkgppelt			26	A7040	5			X1338	5.4			706.5
SahitetteR C	BoKoddisis sė	o <b>o ŝ ü b e e d</b> a c	hung i.O.			27	A7040	6	i		X1338	6.4			706.6
Reidever co	ollision m	onitoring	OK.			28	A7040	7	'		X1338	7.4			706.7
			Druck erreicht			29	A7040	8			X1338	8.4			706.8
			nguRevddmer OR			1300	X 2	9							133.7
€onnector b	ox power	supply tur	ret TR			1300	X 2		.0						133.7
=						1331	Х3		. 1						133.7
=						PE	X 0		. 2						133.7
Revolver OR		•				1	B6.0		. 1						706. 2
ŧurret TR b	asing poi	Πτ				3	B6.0		3		V4.2.2.0	1			706.2
=						4	B6.0		. 4		X1338	1			706.1
Revolver OR	2	1+				1	B6.1		. 5						706.3
turret TR u		beir				3	B6. 1		. 3					-	706.3
=	niconbien					4	B6. 1		. 4		X1338	2			706. 2
=						4	BU. 1		. 5		V1220				700. Z
Revolver OR	2 einaekun	nel+				1	B 6. 2		. 1						706.4
turret TR c		PEIC				3	B 6 . 2		. 3					-	706.4
=	COUPICU					4	B 6 . 2		. 4		X1338	3			706.3
						'	B G . Z		. 5		X1550				700.5
Revolver OR	R Durchras	tkuppluna :	i. Ω.			1	B6.3		. 1						706.5
ŧurret TR r						3	B6. 3		. 3						706.5
=		<u> </u>				4	B6.3		. 4		X1338	4			706.4
									. 5						
Revolver OR	R Werkzeug	antrieb an	gekuppelt			1	B6.4	5	. 1						706.6
ŧurret TR t						3	B6.4		. 3						706.6
=						4	B6.4	5	. 4		X1338	5			706.5
								5	. 5						
Schlitten O	OR Kollisi	onsüberwac	hung i.O.			1	B6.5	6	i. 1						706.7
slide TR co	ollision m	onitoring	O K .			3	B6.5		i. 3						706.7
=						4	B6.5		i. 4		X1338	6			706.6
									5. 5						
Reserve									. 1						706.8
reserve									. 3						706.8
=									. 4		X1338	7			706.7
							1		. 5						
			Druck erreicht			1	B6.7		. 1						706.9
slide TR pu		cation pre	ssure done			3	B6.7	8	. 3						706.9
FMS_K03E/11.07.2	1000														
DESIGNED	08.07.03	PHI		MANUFACTURER	FMS Drehtech	nnik AG		EL EST.	T. C.		V1330 C-L1''	t a a b ·			
LAST REVISED	01.12.09	PHI	EMO		Amsler-Laffo	on-Str. 1	QUIPMENT	ELECTR:	I L		X1338 Schlit	ten oben re	chts =	+	1021
	01.12.09	FILE NAME	110		CH-8201 Scha			27049						< SHE	
PLOT FRAME	FMS_E10A			MANUF. REF.	370490	D	RAWING NO.	27049_E						1020	1021.1

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term	inals/	plugs							X13	38						
						con- nexion	targe <sup>.</sup> A		termi- nal No		В	con- nexion				a g e
Schlitten (	OR Impulssch	hmierung Dr	ruck erreicht			4	B6.7		8.4	<del></del>	X1338	8	1 T	$+$ $\overline{1}$	70	06.8
slide TR po	ulse lubrica	ation press	ure done						8.5	1	<del></del>		1  -	++		
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MS_K03E/11.07.2	2000								-	1	<u>.</u>					
SIGNED	08.07.03 PI	HI		MANUFACTURER	FMS Dreh	technik AG	QUIPMENT	ELECT	RTC		X1338 Schlitt	ten ohen r	-echte	,		4001
AST REVISED		HI ETLE NOME	EMO			allon-2 rr. 1		_			.1330 301111	2011 00011			+	1021.
LOT DATE	01.12.09 FMS_E10A	FILE NAME	5	MANUF. REF.	370490	Schaffhausen PL DR	RAWING NO.	27049 27049_E			4				< SHEET 1021	SHEET> 1022

0		1	2	3		4		5	6		7	8		9
term:	inals	/plugs	5					X	L339					
						con- nexion	target A	term nal	ni- joint	target B	con- nexion		P	a g e
Revolver OL	Referenz	nunkt				32	A7040	1		X1339	1. 4		7	07.1
Revolver		•				33	A7040	2		X1333	2.4			07.2
RevoluteitLOL						34	A7040	3		X1333	3. 4			07.3
RevolterLO		•	n			35	A7040			X1333	4. 4			07.4
ReserveTL			. 0.			36	A7040	5		X1333	5. 4			07.5
Sebèiten C			una i N			37	A7040	6		X1333	6.4			07.6
slide TL co						37	117 0 40	7		X1333	О. т		<del>                                     </del>	07.0
			ruck erreicht			39	A7040	8		X1339	8.4		7	07.8
			guRevdamer OL			1300	X 2	9		X1333	О. т			33.8
eonnector b						1300	X 2	10						33.8
=	SON POWEL	SUPPLY LUIT	OC IL			1331	X3	11						33.8
=						PE	XO	12						33.8
Revolver OL	Referenz	nunkt				1	B7.0	1.1						07.2
ŧurret TL b		•				3	B7.0	1. 3						07.2
=	dasing por	11.6				4	B7.0	1.4		X1339	1			07.1
_						Т	B7.0	1.5		X1333	1		+ + '	07.1
Revolver OL	ausnekun	nelt				1	B7.1	2.1					7	07.3
ŧurret TL u		PCIC				3	B7. 1	2.3						07.3
=	ancoupica					4	B7.1	2.4		X1339	2			07.2
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Revolver OL	einaekun	nelt				1	B7.2	3.1					7	07.4
ŧurret TL d		P C I C				3	B7. 2	3.3						07.4
=						4	B7. 2	3.4		X1339	3			07.3
						'	B7.2	3.5		X1333			+ + + '	07.5
Revolver OL	Durchras	tkunnluna i	n			1	B7.3	4.1					7	07.5
ŧurret TL d						3	B7.3	4.3						07.5
=	edeen coup	IIIIg OK.				4	B7.3	4. 4		X1339	4			07.4
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slide TL co						3	B7.5	6.3						07.7
=			***			4	B7.5	6.4		X1339	6			07.6
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slide TL pu						3	B7.7	8.3						07.9
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PLOT FRAME	FMS_E10A			MANUF. REF.	370490	D	RAWING NO.	27049_E					1021.1	1022.1

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terminals/plugs			X1342				
	con- nexion	target A	termi- join	t target B	con- nexion	p a g	е
Reserveklemmen			7			901	. 6
Resentvert@RmKöblmittel Ein	7	A5050	1	X1342	1.4	505	. 3
RevoètefROboKübadnionel Ein	17	A5050	2	X1342	2.4	505	. 7
Euttet abspoblaen ON	3	A5100	3	X1342	3.4	510	. 1
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Reserveklemmen	13424	Х3	6			901	. 5
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Reserveklemmen	13427	Х3	8			901	
tembergvæetmidelsStromversorgung Kühlmittel	1300	X 2	9			134	. 2
connector box power supply coolant	1300	X 2	10			134	. 2
=	1341	Х3	11			134	. 2
=	PE	X 0	12			134	. 2
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Revolver OR Kühlmittel Ein	2	Y5.2	1.3			505	. 3
ŧurret TR coolant on	1	Y 5. 2	1.4	X1342	1	505	. 3
=	PE	Y 5. 2	1.5			505	. 3
			2.1				
Revolver OL Kühlmittel Ein	2	Y5.6	2.3			505	. 7
ŧurret TL coolant ON	1	Y5.6	2.4	X1342	2	505	. 7
=	PE	Y5.6	2.5			505	. 7
			3.1				
Futter abspritzen	2	Y10.0	3.3			510	. 1
ehuck wash out	1	Y10.0	3.4	X1342	3	510	. 1
=	PE	Y10.0	3.5			510	. 1
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			4.5				
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=	1	Y10.2	7.4	X1342	7	510	
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Part	ts list					FMS_S04E	/10.01.2002
CNo	Qty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
A501	1 Ein-/Rückspeisemodul 80 kW feed/recovery module 80kW	6SN11 45-1BB00-0EA1	Siemens	6SN11 45-1BB00-0EA1	Siemens	568-069-622	45.
A501	1 Anbaulüfter mounted ventilator	6SN11 62-0BA02-0AA2	Siemens	6SN11 62-0BA02-0AA2	Siemens	568-069-644	45.
A512	1 Leistungsmodul 1-Achs power module 1-axis	6SN11 23-1AA01-0FA1	Siemens	6SN11 23-1AA01-0FA1	Siemens	568-069-604	45. 2
A512	1 Regelungseinschub controller drawer	6SN11 18-0DJ21-0AA1	Siemens	6SN11 18-0DJ21-0AA1	Siemens	568-069-650	45. 2
A512	1 Antriebsbus B=350 rund drive bus b=350 round	6SN11 61-1CA00-0EA1	Siemens	6SN11 61-1CA00-0EA1	Siemens	568-081-065	45. 2
A512_X411	1 Feedbackkabel, 10 m feedback cable, 10 m	6FX8 002-2CA31-1BA0	Siemens	6FX8 002-2CA31-1BA0	Siemens	568-081-211	51.
A572	1 Überwachungsmodul monitoring module	6SN11 12-1AC01-0AA1	Siemens	6SN11 12-1AC01-0AA1	Siemens	568-069-597	45.
A 6 0 2	1 Leistungsmodul 2-Achs	6SN11 23-1AB00-0BA1	Siemens	6SN11 23-1AB00-0BA1	Siemens	568-069-588	45. 8
A 6 0 2	1 Regelungsmodul controller	6SN11 18-0DK23-0AA1	Siemens	6SN11 18-0DK23-0AA1	Siemens	568-069-651	45. 8
A602_A1	1 Motorenkabel, 10 m motor cable, 10 m	6FX8 002-5DA01-1BA0	Siemens	6FX8 002-5DA01-1BA0	Siemens	568-081-212	60.
A 6 0 2 _ A 2	1 Motorenkabel, 10 m motor cable, 10 m	6FX8 002-5DA01-1BA0	Siemens	6FX8 002-5DA01-1BA0	Siemens	568-081-212	62.
A602_X411	1 Feedbackkabel, 10 m feedback cable, 10 m	6FX8 002-2EQ10-1BA0	Siemens	6FX8 002-2EQ10-1BA0	Siemens	568-081-215	60.
A602_X412	1 Feedbackkabel, 10 m feedback cable, 10 m	6FX8 002-2EQ10-1BA0	Siemens	6FX8 002-2EQ10-1BA0	Siemens	568-081-215	62.
A602_X421	1 Geberkabel, 10 m transmitter cable 10 m	6FX2 002-2CA11-1BA0	Siemens	6FX2 002-2CA11-1BA0	Siemens	568-081-217	60.
A602_X422	1 Geberkabel, 10 m transmitter cable 10 m	6FX8 002-2CA11-1BA0	Siemens	6FX8 002-2CA11-1BA0	Siemens	568-081-217	62.
A612	1 Leistungsmodul 2-Achs power module 2-axis	6SN11 23-1AB00-0CA2	Siemens	6SN11 23-1AB00-0CA2	Siemens	568-069-659	45.
A612	1 Regelungsmodul controller	6SN11 18-0DK23-0AA1	Siemens	6SN11 18-0DK23-0AA1	Siemens	568-069-651	45.
A612	1 Antriebsbus B=350 rund drive bus b=350 round	6SN11 61-1CA00-0EA1	Siemens	6SN11 61-1CA00-0EA1	Siemens	568-081-065	45.
A612_A1	1 Motorenkabel, 10 m motor cable, 10 m	6FX8 002-5CA21-1BA0	Siemens	6FX8 002-5CA21-1BA0	Siemens	568-081-225	61.
A612_A2	1 Motorenkabel, 10 m motor cable, 10 m	6FX8 002-5CA21-1BA0	Siemens	6FX8 002-5CA21-1BA0	Siemens	568-081-225	63.
A612_X411	1 Feedbackkabel, 10 m feedback cable, 10 m	6FX8 002-2EQ10-1BA0	Siemens	6FX8 002-2EQ10-1BA0	Siemens	568-081-215	61.
DESIGNED	08.07.03 Cas	MANUFACTURER FMS Drehtechnik AG	EQUIDMENT FIE	CTRIC Stüc	kliste		4400
LAST REVISED PLOT DATE	01. 12. 09 PHI E M O FILE NAME	Amsler-Laffon-Str. 1 CH-8201 Schaffhausen	PLANT NUMBER 27049	part	s list	< SHEET	1100 SHEET>
PLOT FRAME	FMS_E10A	MANUF. REF. 370490	DRAWING NO. 27049	9_E		1023.1	1101

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Part	L S	list								FMS_S04	₩E/10.01.2002
СМо	Qty	Specificatio	ns	Model	number	Producer	Requisit	ion number	Supplier	FMS-Number	Page
A612_X412	1	Feedbackkabel, 10	m			Siemens			Siemens		63.
A612_X421	1	feedback cable, 1 Geberkabel, 10 m transmitter cable			- 2EQ10-1BA0 - 2CA11-1BA0	Siemens	6FX8 002-2E		Siemens	568-081-215 568-081-217	61.
A632_X421	1	Geberkabel, 10 m transmitter cable			-2CA11-1BA0	Siemens	6FX8 002-2C		Siemens	568-081-217	63. <sup>L</sup>
A 6 4 2	1	Leistungsmodul 2- power module 2-ax	Achs		-1AB00-0CA2	Siemens	6SN11 23-1A		Siemens	568-069-659	45. 6
A 6 4 2	1	Regelungsmodul	12	USNII ZS	-11000-0012	Siemens	U3N11 23-1H	D00-0CH2	Siemens	300-003-033	45. 6
	-	controller		6SN11 18	-ODM31-OAA1		6SN11 18-0D	M31-0AA1		568-069-652	
A 6 4 2	1	Antriebsbus B=100		6CN11 61	- 1 C A O O - O B A 1	Siemens	6 S N 1 1 6 1 - 1 C I	000 0001	Siemens	568-081-063	45. 6
A642_A1	1	drive bus b=100 r Motorenkabel, 10		02111 01	-16400-0041	Siemens	021111 01-10	HUU-UDHI	Siemens	200-001-002	64. 2
110 12 _111	-	motor cable, 10 m		6FX2 002	-5CA31-1BA0	310 110 113	6FX2 002-5C	A31-1BA0	310 1113	568-081-221	
A642_A2	1	Motorenkabel, 10 motor cable, 10 m		6FX8 002	-5CA01-1BA0	Siemens	6FX8 002-5C	A01-1BA0	Siemens	568-081-213	65. 2
A642_X411	1	Feedbackkabel, 10 feedback cable, 1		6FX8 002	- 2 C A 3 1 - 1 B A O	Siemens	6FX8 002-2C	A31-1BA0	Siemens	568-081-211	64. 3
A642_X412	1	Feedbackkabel, 10 feedback cable, 1		6FX8 002	- 2 E Q 1 O - 1 B A O	Siemens	6FX8 002-2E	Q10-1BA0	Siemens	568-081-215	65. 3
A 6 6 2	1	Leistungsmodul 1- power module 1-ax	Achs	6SN11 23	-18800-0081	Siemens	6 S N 1 1 2 3 - 1 A I	A O O - O C A 1	Siemens	568-069-548	45. 7
A 6 6 2	1	Regelungsmodul controller			- O D M 3 1 - O A A 1	Siemens	6SN11 18-0D		Siemens	568-069-652	45. 7
A 6 6 2	1	Antriebsbus B=50 drive bus b=50 ro			-1CA00-0AA1	Siemens	6SN11 61-1C		Siemens	568-081-062	45. 7
A662_A1	1	Motorenkabel, 10	m		-5DA01-1BA0	Siemens	6FX8 002-5D		Siemens	568-081-212	66. 2
A662_X411	1	motor cable, 10 m Feedbackkabel, 10	m			Siemens			Siemens		66. 3
A 4 0 0 2	1	feedback cable, 1 NCU-Box	U M		<u>-2EQ10-1BA0</u>	Siemens	6FX8 002-2E		Siemens	568-081-215	45. 2
0.11.0.0.2	1	0/10D NEW 572 5		6FC5 247	-08800-0883	C ÷	6FC5 247-0A	A00-0AA3	C :	568-090-314	45. 2
A 4 0 0 2		840D NCU-572.5		6FC5 357	- OBB25-OAAO	Siemens	6FC5 357-0B	B 2 5 - O A A O	Siemens	568-090-396	
A4002	1	Software für NCU software for NCU		6FC5 250	- OAY30-OAHO	Siemens	6FC5 250-0A	A 3 U = U B H U	Siemens	568-090-388	45. 2
A 4 0 0 2	1	Stecker		01 (3 230	-011130-01110	Siemens			Siemens		45. 2
0.11.0.0.0		plug		6FC9 341	-1FH		6FC9 341-1FI	H		568-006-161	
A 4 0 0 2	1	Antriebsbus B=50 drive bus b=50 ro		6SN11 61	-1CAOO-OAA1	Siemens	6SN11 61-1C	A00-0AA1	Siemens	568-081-062	45. 2
A4002	1	PLC-Toolbox			- O A X 2 1 - O A B O	Siemens	6FC5 252-0A		Siemens	568-090-322	45. 2
	•	•		'			,		+	'	'
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LAST REVISED PLOT DATE	_	2.09 PHI 2.09 FILE NAME	EMO		Amsler-Laffon-Str. 1 CH-8201 Schaffhausen		7049		s list	= + < SHEET	SHEET>
PLOT FRAME	_	E10A		MANUF. REF.	370490		7049_E			1100	1102

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Part	ts list					FMS_S04E	/10.01.2002
СМо	Qty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
A4002	3 Software software	6FC5 251-0AR04-0AR0	Siemens	6FC5 251-0AA04-0AA0	Siemens	568-090-323	45. 2
A 4 0 0 2	1 Software	6FC5 251-0AA07-0AA0	Siemens	6FC5 251-0AA07-0AA0	Siemens	568-090-331	45. 2
A 4 2 0 2	1 Bedientafel OP 010C, operator panel OP 010	TFT 10.4"	Siemens	6FC5 203-0AF01-0AA0	Siemens	568-090-362	420.
A 4 2 0 4	1 PCU 50-Modul 1, 2 GHz,	512 MB, XP 6FC5 210-0DF25-2AA0	Siemens	6FC5 210-0DF25-2AA0	Siemens	568-090-408	420.
A 4 2 0 4	1 Software HMI-PCU50	6FC5 253-0BX10-0AG0	Siemens	6FC5 253-0BX10-0AG0	Siemens	568-090-364	420.
A 4 2 0 4	1 Software software	6FC5 263-6AY00-0AB0	Siemens	6FC5 263-6AY00-0AB0	Siemens	568-090-211	420.
A 4 2 0 4	1 Montagewinkel mounting angle	6FC5 248-0AF20-2AA0	Siemens	6FC5 248-0AF20-2AA0	Siemens	568-090-368	420.
A4212	1 Maschinensteuertafel machine control panel	6FC5 203-0AF22-0AA2	Siemens	6FC5 203-0AF22-0AA2	Siemens	568-090-377	421.
A4501	1 Anschaltungsbaugruppe interface module	6ES7 361-3CA01-0AA0	Siemens	6ES7 361-3CA01-0AA0	Siemens	568-090-315	450.
A4501	1 Profilschiene 482 mm profile iron 482 mm	6ES7 390-1AE80-0AA0	Siemens	6ES7 390-1AE80-0AA0	Siemens	568-090-321	450.
A4511	1 Anschaltungsbaugruppe interface module	6ES7 361-3CA01-0AA0	Siemens	6ES7 361-3CA01-0AA0	Siemens	568-090-315	451.
A4511	1 Profilschiene 482 mm profile iron 482 mm	6ES7 390-1AE80-0AA0	Siemens	6ES7 390-1AE80-0AA0	Siemens	568-090-321	451.
A5000	1 Digitalausgabebaugrup digital output module		Siemens	6ES7 322-1BL00-0AA0	Siemens	568-090-317	450.
A5000	1 Frontstecker 32 E/A front plug 32 I/O	6ES7 392-1BM01-0AA0	Siemens	6ES7 392-1BM01-0AA0	Siemens	568-090-367	450.
A5040	1 Digitalausgabebaugrup digital output module		Siemens	6ES7 322-1BF01-0AA0	Siemens	568-090-318	450.
A5040	1 Frontstecker 8 A front plug 8 O	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	Siemens	568-090-366	450.
A5050	1 Digitalausgabebaugrup digital output module	•	Siemens	6ES7 322-1BF01-0AA0	Siemens	568-090-318	450.
A5050	1 Frontstecker 8 A front plug 8 O	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	Siemens	568-090-366	450.
A5080	1 Digitalausgabebaugrup digital output module		Siemens	6ES7 322-1BF01-0AA0	Siemens	568-090-318	450.
A5080	1 Frontstecker 8 A front plug 8 O	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	Siemens	568-090-366	450.
A5100	1 Digitalausgabebaugrup digital output module		Siemens	6ES7 322-1BF01-0AA0	Siemens	568-090-318	450.
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PLOT DATE	01.12.09 PHI 01.12.09 FILE NAME	EMO  Amsler-Laffon-Str  CH-8201 Schaffhau	usen PLANT NUMBER 2704	9 part	s list	< SHEET S	1102 SHEET>
PLOT FRAME	FMS_E10A	MANUF. REF. 370490	DRAWING NO. 2704	9_E		1101	1103

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Part	ts list					FMS_S04E	/10.01.2002
CNo	aty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
A5100	1 Frontstecker 8 A	CFC7 202 4 D 100 0000	Siemens	CEC7 202 40 100 0000	Siemens	F.C.O. 0.00, 3.C.C.	450.
A5110	front plug 8 0  1 Digitalausgabebaugruppe	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	Siemens	568-090-366	450.
HJIIO	digital output module	6ES7 322-1BF01-0AA0	216116112	6ES7 322-1BF01-0AA0	216    6112	568-090-318	430.
A5110	1 Frontstecker 8 A front plug 8 O	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	Siemens	568-090-366	450.
A5120	1 Digitalausgabebaugruppe digital output module	6ES7 322-1BF01-0AA0	Siemens	6ES7 322-1BF01-0AA0	Siemens	568-090-318	450.
A5120	1 Frontstecker 8 A	5237 322 IBI 61 611116	Siemens	023, 322 181 01 01110	Siemens	300 030 310	450.
	front plug 8 O	6ES7 392-1BJ00-0AA0		6ES7 392-1BJ00-0AA0		568-090-366	
A7000	1 Digitaleingabebaugruppe		Siemens		Siemens		451.
	digital input module	6ES7 321-1BL00-0AA0		6ES7 321-1BL00-0AA0		568-090-316	
A7000	1 Frontstecker 32 E/A	2527 222 45424 2222	Siemens		Siemens	500 000 007	451.
A7040	front plug 32 I/O	6ES7 392-1BM01-0AA0	C:	6ES7 392-1BM01-0AA0	Siemens	568-090-367	451.
H / U 4 U	1 Digitaleingabebaugruppe digital input module	6ES7 321-1BL00-0AA0	Siemens	6ES7 321-1BL00-0AA0	216    6112	568-090-316	431.
A 7 0 4 0	1 Frontstecker 32 E/A	0037 321-1800-011110	Siemens	0237 321-10200-011110	Siemens	300-030-310	451.
	front plug 32 I/O	6ES7 392-1BM01-0AA0		6ES7 392-1BM01-0AA0		568-090-367	
A7120	1 Digitaleingabebaugruppe		Siemens		Siemens		451.
	digital input module	6ES7 321-1BL00-0AA0		6ES7 321-1BL00-0AA0		568-090-316	
A7120	1 Frontstecker 32 E/A		Siemens		Siemens		451.
	front plug 32 I/O	6ES7 392-1BM01-0AA0		6ES7 392-1BM01-0AA0		568-090-367	
A 8 O O O	1 Analogeingabebaugruppe	CEC7 224 74002 0000	Siemens	CEC7 224 7KD02 00D0	Siemens	ECO 000 30E	451.
A 8 0 0 0	analog input module  1 Frontstecker 8 A	6ES7 331-7KB02-0AB0	2:0000	6ES7 331-7KB02-0AB0	Siemens	568-090-365	451.
нвооо	front plug 8 0	6ES7 392-1BJ00-0AA0	Siemens	6ES7 392-1BJ00-0AA0	216    6112	568-090-366	431.
A 8 O O O	1 Schirmauflage-Element	0237 332 18300 011110	Siemens	0237 332 18300 011110	Siemens	300 030 300	451.
		6ES7390-5AA00-0AA0		6ES7390-5AA00-0AA0			
A 8 0 0 0	1 Schirmanschlussklemme		Siemens		Siemens		451.
	screen connection terminal	1 6ES7390-5CA00-0AA0		6ES7390-5CA00-0AA0			
B0.7	1 siehe Pneumatikschema						700.
	see pneumatic diagram		D		D: 1.1. 2		7.0.4
B1.7	1 Thermostat	SK3110000	Rittal	SK3110000	Rittal	568-034-013	701.
B4.0	thermostat 1 siehe Hydraulikschema	27211000		383110000		300-034-013	704.
	see hydraulic diagram						, , , ,
B4.4	1 siehe Hydraulikschema						704.
	see hydraulic diagram						
B4.7	1 siehe Schmierungsschema						704.
	see lubrication diagram						
B5.4	1 siehe Hydraulikschema						705.
	see hydraulic diagram						
DESIGNED	08.07.03 Cas	MANUFACTURER FMS Drehtechnik AG					
LAST REVISED	01. 12. 09 PHI E M		1 EQUIPMENT ELE		kliste	= +	1103
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PLOT FRAME	FMS_E10A	MANUF. REF. 370490	DRAWING NO. 2704	9_E		1102	1104

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Part	ts list					FMS_S04E	/10.01.2002
CNo	Oty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
B5.5	1 siehe Hydraulikschema see hydraulic diagram						705.
B6.0	1 Annäherungsschalter proximity switch	BES 516-324-E0-C-01	Balluff	BES 516-324-E0-C-01	Balluff		706.
B6.1	1 Annäherungsschalter proximity switch	BES 516-324-E4-C-01	Balluff	BES 516-324-E4-C-01	Balluff		706.
B6.2	1 Annäherungsschalter proximity switch	BES 516-324-E4-C-01	Balluff	BES 516-324-E4-C-01	Balluff		706.
B6.3	1 Annäherungsschalter proximity switch	BES 516-324-E0-C-01	Balluff	BES 516-324-E0-C-01	Balluff		706.
B6.4	1 Annäherungsschalter proximity switch	BES 516-324-E0-C-01	Balluff	BES 516-324-E0-C-01	Balluff		706.
B6.5	1 Annäherungsschalter proximity switch	BES 516-324-SA44-C-03	Balluff	BES 516-324-SA44-C-03	Balluff	568-012-053	706.
B6.7	1 siehe Schmierungsschema						706.
B7.0	1 Annäherungsschalter proximity switch	BES 516-324-E0-C-01	Balluff	BES 516-324-E0-C-01	Balluff		707.
B7.1	1 Annäherungsschalter proximity switch	BES 516-324-E4-C-01	Balluff	BES 516-324-E4-C-01	Balluff		707.
B7.2	1 Annäherungsschalter proximity switch	BES 516-324-E4-C-01	Balluff	BES 516-324-E4-C-01	Balluff		707.
B7.3	1 Annäherungsschalter proximity switch	BES 516-324-E0-C-01	Balluff	BES 516-324-E0-C-01	Balluff		707.
B7.7	1 siehe Schmierungsschema see lubrication diagram						707.
B12.0	1 Zylinderschalter cylinder switch	SME-8-S-LED-24	Festo	150 857	Festo	568-441-173	712.
B12.1	1 Zylinderschalter cylinder switch	SME-8-S-LED-24	Festo	150 857	Festo	568-441-173	712.
B 6 0 2	1 Messkopf gauging head	AMS3A-RUC	Schneeberger AG	AMS3A-RUC	Schneeberger AG	568-249-141	60.
B612	1 Messkopf gauging head	AMS3A-RUC	Schneeberger AG	AMS3A-RUC	Schneeberger AG	568-249-141	61.
B 6 2 2	1 Messkopf gauging head	AMS3A-RUC	Schneeberger AG	AMS3A-RUC	Schneeberger AG	568-249-141	62.
B 6 3 2	1 Lesekopf read head	AW24-34	Schneeberger AG	AMSA-3A-35-K-MU	Schneeberger AG	568-037-006	63.
B 8 0 0 2	1 Laser-Reflextaster laser refex sensor	YP11MGVL 80	Wenglor	YP11MGVL 80	Wenglor	568-040-103	800.
B 8 0 0 2	1 Kabel mit Stecker 15m cable with plug 15m	BKS-S116-PU-15	Balluff	BKS-S33M-15	Balluff	568-081-251	800.
DESIGNED	08.07.03 Cas	MANUFACTURER FMS Drehtechnik AG					
LAST REVISED	01.12.09 PHI F M N	Amsler-Laffon-Str. 1	EQUIPMENT ELECTI	. – –	kliste s list		1104
PLOT DATE PLOT FRAME	01.12.09 FILE NAME LITU	CH-8201 Schaffhausen MANUF. REF. 370490	PLANT NUMBER 27049 DRAWING NO. 27049_E			< SHEET :	SHEET> 1105

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Part	L S	list			_		FMS_S04E/	/10.01.2002
CNo	Qty	Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
E121		Langfeldleuchte lamp	PS 4155.000	Rittal	4155.000	Rittal		12. 1
E121	1	Anschlussleitung Einspeisung feed connection line	4315.100	Rittal	4315.100	Rittal		12. 1
E122		Langfeldleuchte lamp	PS 4155.000	Rittal	4155.000	Rittal		12. 3
E122	1	Anschlussleitung Durchgang feed-through for connection line	4315.200	Rittal	4315. 200	Rittal		12. 3
E123	1	Langfeldleuchte	PS 4155.000	Rittal	4155.000	Rittal		12. 5
E123	1	Anschlussleitung Durchgang feed-through for connection line		Rittal	4315. 200	Rittal		12. 5
E132		Wandanbau-Kühlgerät cooling device	SK3328.540	Rittal	SK3328.540	Rittal	568-190-500	13. 2
E136		Wandanbau-Kühlgerät cooling device	SK3328.540	Rittal	SK3328.540	Rittal	568-190-500	13. 6
E136	1	Interfacekabel	SK 3124.100	Rittal	SK 3124.100	Rittal		13. 6
E160		Kühlsystem cooling system	FLKS-340SL/2.0/W/TP/400-50	FLUTEC /1/0	FLKS-340SL/2.0/W/TP/400-50	FLUTEC 0/1/0	568-190-340	16. 1
E302		Impuls-Schmieraggregat pulse lubrication aggregate	MFE5-KW6-S64	Vogel	MFE5-KW6-S64+XXX-0	Vogel	568-190-560	30. 1
E1305		Maschinenleuchte machine lamp	EBLCE136/24VDC	Waldmann	112300000	Waldmann		130.
F105		Lasttrennschalter circuit breaker	3NP4070-0CA01	Siemens	3NP4070-0CA01	Siemens		10. 5
F105		Isolierstoffblende insulator faceplate	3NY7 200	Siemens	3NY7 200	Siemens		10. 5
F105		NH-Sicherungseinsatz HRC fuse link	3NA3 836	Siemens	3NA3 836	Siemens		10. 5
F1003		Sicherungsautomat circuit breaker	5SX2 108-7	Siemens	5SX2 108-7	Siemens		100.
F1003		Hilfsstromschalter (HS) independent circuit switch	5SX9 100	Siemens	55X9 100	Siemens	568-032-012	100.
F1305		Sicherungsautomat circuit breaker	5SX2 106-7	Siemens	5SX2 106-7	Siemens	568-028-044	130.
F1305		Hilfsstromschalter (HS) independent circuit switch	55X9 100	Siemens	5SX9 100	Siemens	568-032-012	130.
F1311	1	Sicherungsautomat circuit breaker	5SX2 106-7	Siemens	5SX2 106-7	Siemens	568-028-044	131.
F1311	1	Hilfsstromschalter (HS) independent circuit switch	5SX9 100	Siemens	5SX9 100	Siemens	568-032-012	131.
DESIGNED	08.0	7.03 Cas MF	ANUFACTURER FMS Drehtechnik AG					
LAST REVISED	01.1	2.09 PHI F M N	Amsler-Laffon-Str. 1	QUIPMENT ELECTR		kliste s list		1105
PLOT DATE PLOT FRAME	01.1: FMS_I	2.03	CH-8201 Schaffhausen P NUF. REF. 370490 D	LANT NUMBER         27049           RAWING NO.         27049_E	Pare		< SHEET S	SHEET> 1106

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F1331	list								FMS_S04E/	/10.01.2002
	Specification	ı S	Model n	umber	Produce	r Requi	sition number	Supplier	FMS-Number	Page
F1331	1 Sicherungsautomat				Siemens			Siemens		133.
F1331	circuit breaker	( 11 6 )	5SX2 106-7		6 :	5 S X 2 1 0 6	<u> </u>	6.	568-028-044	4.2.2
	1 Hilfsstromschalter independent circui		5SX9 100		Siemens	5SX9 100	)	Siemens	568-032-012	133.
F1341	1 Sicherungsautomat circuit breaker		5SX2 106-7		Siemens	5SX2 106	6 <b>-</b> 7	Siemens	568-028-044	134.
F1341	1 Hilfsstromschalter independent circui		5SX9 100		Siemens	5 S X 9 10 C	n	Siemens	568-032-012	134.
F1351	1 Sicherungsautomat	r 2MILLII	33 7 3 1 0 0		Siemens	33/3 100	J	Siemens	300-032-012	135.
1 1 3 5 1	circuit breaker		5SX2 106-7		310 1113	5SX2 106	ô <b>-</b> 7	310 1113	568-028-044	133.
F1351	1 Hilfsstromschalter	(HS)			Siemens			Siemens		135.
	independent circui	t switch	5SX9 100			5SX9 100	)		568-032-012	
F1354	1 Sicherungsautomat				Siemens			Siemens		135.
E4.2E#	circuit breaker	(    ( )	5SX2 110-7		6.	5SX2 110	0 - 7	6.	568-028-045	4.2.5
F1354	1 Hilfsstromschalter independent circuit		5SX9 100		Siemens	5SX9 100	n	Siemens	568-032-012	135.
F1355	1 Sicherungsautomat	t SWITCH	22 7 3 100		Siemens	22.43 100	J	Siemens	300-032-012	135.
11333	circuit breaker		5SX2 110-7		310 1113	5SX2 110	0 - 7	3101113	568-028-045	155.
F1355	1 Hilfsstromschalter	(HS)			Siemens		<u> </u>	Siemens		135.
	independent circui	t switch	5SX9 100			5SX9 100	)		568-032-012	
G1302	1 Netzgerät 24VDC/40				Siemens			Siemens		130.
	power supply unit	24VDC/40A	6EP14 37-3	B A O O		6EP14 37	7-38800			
H3.0	1 Meldeleuchte blau		26022 47 6	0.0.5.0	Siemens	260224	7	Siemens	568-043-060	503.
H3. 0	signal lamp blue  1 Glühlampe		3SB32 17-6	ннэо	Siemens	3SB32 17	/ - OHHOU	Siemens	308-043-000	503.
113.0	electric light bul	h	3SB19 02-2	A F	216 116112	3SB19 02	2 <b>-</b> 2 A F	316 113	012-1163-002	303.
H3.1	1 Meldeleuchte rot		00010 02 2		Siemens	00010 01		Siemens	012 1100 002	503.
	signal lamp red		3SB32 17-6	A A 2 O		3SB32 17	7-68820		568-043-057	
H3.1	1 Glühlampe				Siemens			Siemens		503.
	electric light bul		3SB19 02-2	A F		3SB19 02	2 <b>-</b> 2 A F		012-1163-002	
H3.2	1 Meldeleuchte weiss		26022 47 6	0.0.0.0	Siemens	260224	7	Siemens	ECO 0112 064	503.
H3. 2	signal lamp white  1 Glühlampe		3SB32 17-6	ннои	Siemens	3 S B 3 2 1 7	/ - UHHOU	Siemens	568-043-061	503.
113. 2	electric light bul	Ь	3SB19 02-2	AF	316 116113	3SB19 02	2 - 2 A F	3101113	012-1163-002	303.
J501	1 Schirmanschlussble	ch 300mm			Siemens			Siemens		50.
	screen connection		6SN11 62-0	E A O O – O K A O		6SN11 62	2 - 0 E A O O - O K A O		568-069-626	
J512	1 Schirmanschlussble				Siemens			Siemens		51.
1000	screen connection		6SN11 62-0	E A O O - O D A O		6SN11 62	2 - O E A O O - O D A O		568-069-601	0.5
J602	1 Schirmanschlussble		65N11 62 0	E000 0000	Siemens	6 C N 4 4 C 2	2 05000 0000	Siemens	E60 060 E00	60.
J612	screen connection  1 Schirmanschlussble		6SN11 62-0	EHUU-UHHU	Siemens		2 <b>-</b> 0 E A 0 0 <b>-</b> 0 A A 0	Siemens	568-069-590	61.
3012	screen connection		6SN11 62-0	FA00-0AA0	216 116112	6SN11 62	2 - O E A O O - O A A O	316 113	568-069-590	01.
	JOHN COMMITTEE TON		5511 52 0	55 510		031111 02			222 223 230	
	8.07.03 Cas			IS Drehtechnik AG	EQUIPMENT	ELECTRIC	Stür	kliste		1100
	1.12.09 PHI	EMO		nsler-Laffon-Str. 1				s list		1106
	1.12.09 FILE NAME MS_E10A	•		I-8201 Schaffhausen '0490		27049 27049_E			< SHEET SI 1105	HEET> 1107

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Part	ts list					FMS_S04E	/10.01.2002
CNo	aty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
J642	1 Schirmanschlussblech screen connection sheet	6SN11 62-0EA00-0AA0	Siemens	6SN11 62-0EA00-0AA0	Siemens	568-069-590	64. 2
J662	1 Schirmanschlussblech screen connection sheet	6SN11 62-0ER00-0RR0	Siemens	6SN11 62-0EA00-0AA0	Siemens	568-069-590	66. 1
KO. 4	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	500.
KO. 4	1 Hilfsschalteblock 1Ö aux. switch block 1nc	3RH19 11-1HA01	Siemens	3RH19 11-1HA01	Siemens	568-028-083	500.
KO.5	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	500.
K0.5	1 Hilfsschalteblock 1Ö aux. switch block 1nc	3RH19 11-1HA01	Siemens	3RH19 11-1HA01	Siemens	568-028-083	500.
K1.0	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	501.
K1.1	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	501.
K1.3	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	501.
K 2. 0	1 Hilfsschütz 4S contactor relay	3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	502.
K2.0	1 Hilfsschalterblock 2S+2Ö aux. switch block 2no+2nc	3RH19 11-1GA22	Siemens	3RH19 11-16A22	Siemens	568-028-081	502.
K 2. 1	1 Hilfsschütz 4S contactor relay	3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	502.
K 2. 3	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	502.
K 2. 4	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	502.
K 2. 5	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	502.
K 2. 5	1 Hilfsschalteblock 1Ö aux. switch block 1nc	3RH19 11-1HA01	Siemens	3RH19 11-1HA01	Siemens	568-028-083	502.
K 2 . 6	1 Hilfsschütz 4S contactor relay	3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	502.
K2.7	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	502.
K8.7	1 Schütz 4kW/400V contactor 4kW/400V	3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	508.
K1421	1 Not-Aus Schaltgerät emergency stop device	PNOZ X3 24VDC	Pilz GmbH & Co.	774 310	Spälti	568-075-003	142.
K1426	1 Hilfsschütz 4S contactor relay	3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	142.
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DESIGNED LAST REVISED	08.07.03	MANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str.	1 EQUIPMENT ELEC	TRIC Stüc	kliste	= +	1107
PLOT DATE PLOT FRAME	01.12.09 PHI 01.12.09 FILE NAME EMO	Hmsler-Laffon-Str.  CH-8201 Schaffhause  MANUF. REF. 370490	1	part	s list		TTU/ SHEET> 1108

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Part	ts list						FMS_S04E/	10.01.2002
CNo	Qty Specificati	ons	Model numbe	r Producer	Requisition num	nber Supplier	FMS-Number	Page
K1426	1 Hilfsschalterblo aux. switch bloc		3RH19 11-1GA22	Siemens	3RH19 11-1GA22	Siemens	568-028-081	142.
K1427	1 Hilfsschütz 4S	.K 2110+211C		Siemens		Siemens		142.
K 1 4 2 7	contactor relay  1 Hilfsschalterblo		3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	142.
K1451	aux. switch bloc 1 Not-Aus Schaltge	rät	3RH19 11-16A22	Pilz GmbH & Co		Spälti	568-028-081	145.
K1456	emergency stop d  1 Hilfsschütz 4S	levice	PNOZ X3 24VDC	Siemens	774 310	Siemens	568-075-003	145.
K1456	contactor relay  1 Hilfsschalterblo		3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	145.
K 1 4 5 7	aux. switch bloc	:k Zno+Znc	3RH19 11-1GA22	Siemens	3RH19 11-16A22	Siemens	568-028-081	145.
K1457	contactor relay  1 Hilfsschalterblo		3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	145.
K 1 4 7 1	aux. switch bloc  1 Not-Aus Schaltge	rät	3RH19 11-16A22	Pilz GmbH & Co	3RH19 11-1GA22 774500	Spälti	568-028-081	147.
K1471	emergency stop d  1 Abdeckhaube P-93 cover P-93 box		PNOZ XV2/30 24VD	Pilz GmbH & Co		Spälti	3379-2532/003	147.
K1491	1 Kontakterweiteru	=	PZE X4V	Pilz GmbH & Co		Pilz GmbH & Co.	33/3-2332/003	149.
K1491	1 Abdeckhaube P-93		IZL XIV	Pilz GmbH & Co		Spälti	3379-2532/003	149.
K1501	1 Not-Aus Schaltge		PN0Z XV2/30 24VD	Pilz GmbH & Co		Spälti	33,3 2032,003	150.
K1501	1 Abdeckhaube P-93		11102 1112	Pilz GmbH & Co		Spälti	3379-2532/003	150.
K1507	1 Hilfsschütz 4S		3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	150.
K1507	1 Hilfsschalterblo		3RH19 11-1GA22	Siemens	3RH19 11-16A22	Siemens	568-028-081	150.
K1507	1 Überspannungsbeg	renzer	3RT19 16-1BB00	Siemens	3RT19 16-1BB00	Siemens	568-073-006	150.
K1508	1 Hilfsschütz 4S contactor relay		3RH11 40-1BB40	Siemens	3RH11 40-1BB40	Siemens	568-028-079	150.
K1508	1 Hilfsschalterblo		3RH19 11-1GA22	Siemens	3RH19 11-16A22	Siemens	568-028-081	150.
K 1 5 0 8	1 Überspannungsbeg	renzer	3RT19 16-1BB00	Siemens	3RT19 16-1BB00	Siemens	568-073-006	150.
K1552	1 Schütz 4kW/400V contactor 4kW/40		3RT10 16-1BB41	Siemens	3RT10 16-1BB41	Siemens	568-028-072	155.
DESIGNED	08.07.03 Cas	1	MANUFACTURER FMS Dreht	echnik AG			<u> </u>	
LAST REVISED	01.12.09 PHI	EMO	Amsler-La	ffon-Str. 1 EQUIPMENT ELEC	CTRIC	Stückliste parts list		1108
PLOT DATE PLOT FRAME	01.12.09 FILE NAME FMS_E10A		CH-8201 S MANUF. REF. 370490	chaffhausen PLANT NUMBER 27049 DRAWING NO. 27049			< SHEET SI	HEET> 1109

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Par	t s	list								FMS_S	S04E/10.01.2002
СМо	Qty	Specificati	ons	Model	number	Producer	Requisit	ion number	Supplier	FMS-Numbe	r Page
K1552	1	Überspannungsbeg	renzer			Siemens			Siemens		155.
		overvoltage limi	ting device	3RT19 16	-18800		3RT19 16-1B	B 0 0		568-073-00	
L105	1	Drossel 80kW				Siemens		00.4500	Siemens	500 000 00	10. 5
M152	1	throttle 80kW	_	65N1111.	0AA00-1EA0		6SN1111.0AA	00-1EHU		568-069-62	15. 2
N 1 3 Z	1	siehe Hydrauliks see hydraulic di									15. 2
M172	1	Siehe Leistungss									17. 2
		see motor shield									
M 2 O 2	1	Siehe Leistungss									20. 2
		see motor shield									
M512	1	Hauptspindelmoto		1FE1 115	CUTE 1	Siemens	1551 115 611	T = 4	Siemens	E60 110 E1	51. 2
M 6 0 2	1	main spindle mot Servomotor mit B		11111111	- DM I D I	Siemens	1FE1 115-6W	121	Siemens	568-110-51	60. 1
11002	1	servo motor with		1FT6 064	-1AF71-3EH1	216 116112	1FT6 064-1A	F71-3FH1	216116112	568-110-43	
M612	1	Servomotor ohne		11.10.00.	111171 01111	Siemens	11.10.001.11	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Siemens	000 110 10	61. 1
		servo motor with	out brake	1FT6 084	-1AF71-3EG1		1FT6 084-1A	F71-3EG1		568-110-35	
M622	1	Servomotor mit B				Siemens			Siemens		62. 1
		servo motor with		1FT6 064	-1AF71-3EH1		1FT6 064-1A	F71-3EH1		568-110-43	
M632	1	Servomotor ohne		1576 000	10571 2561	Siemens	1516 004 10	E74 2EC4	Siemens	E60 110 3E	63. 1
M 6 4 2	1	servo motor with Servomotor	out brake	1710 084	-1AF71-3EG1	Siemens	1FT6 084-1A	F/1-3EU1	Siemens	568-110-35	64. 1
110 42	1	servo motor		1FT6 086	-1AF71-3AG1	316 116113	1FT6 086-1A	F71-3AG1	3161113	568-110-17	
M652	1	Servomotor ohne	Bremse			Siemens			Siemens		65. 1
		servo motor with	out brake	1FK7 083	-5AF71-1EG0		1FK7 083-5A	F71-1EG0		568-110-36	
M662	1	Servomotor mit B				Siemens			Siemens		66. 1
04.04		servo motor with		1FK7 083	-5AF71-1EH0		1FK7 083-5A	F71-1EH0		568-110-37	
Q101		Ausschalter 3-po		V G 25 O T 1	05/D-A014E	Kraus & Naime	KG250 T105/	D 001/JE	Kraus & Naimer		10. 0
Q132	1	main switch 3 x Leistungsschalte		KU230 11	03/0-80146	Siemens	KUZJU 11037	D-H014L	Siemens		13. 2
Q132	-	power switch for		3RV14 21	-1DA10	310 1113	3RV14 21-1D	A10	310 1110	568-028-11	
Q132	1	Hilfsschalter ob	enauf 1S+1Ö			Siemens			Siemens		13. 2
		auxiliary switch	on top 1no+1nc	3RV19.01	-1E		3RV19.01-1E			568-028-10	
Q136	1	Leistungsschalte				Siemens			Siemens		13. 6
0136	1	power switch for		3RV14 21	-10810	C:	3RV14 21-1D	H10	C:	568-028-11	
Q136	1	Hilfsschalter ob auxiliary switch		3RV19.01	_1 F	Siemens	3RV19.01-1E		Siemens	568-028-10	13. 6
Q152	1	Motorschutzschal	<u>`</u>	3NV13.01	-16	Siemens	JN V 1 3. 01 - 1 L		Siemens	300-020-10	15. 2
		motor circuit br		3RV10 11	-1FA10	0 2 0 0 11 0	3RV10 11-1F	A10		568-028-10	
Q152	1	Hilfsschalter ob				Siemens			Siemens		15. 2
		auxiliary switch		3RV19.01	-1E		3RV19.01-1E			568-028-10	
Q152	1	Verbindungsbaust	ein		40000	Siemens			Siemens		15. 2
				3RA19 11	-1HHUU		3RA19 11-1A	нии		568-082-21	. 1
i											
DESIGNED	08.0	7.03 Cas		MANUFACTURER	FMS Drehtechnik AG			2	1.3.1		
LAST REVISED	01.1	2.09 PHI	EMO		Amsler-Laffon-Str. 1	·	ECTRIC		:kliste .s list	= +	1109
PLOT DATE		2.09 FILE NAME		WONNE	CH-8201 Schaffhauser			Part	.5 1151	< SHEET	SHEET>
PLOT FRAME	FMS_	E10A		MANUF. REF.	370490	DRAWING NO. 270	49_E			1108	1110

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Part	ts_list					FMS_S04E	/10.01.2002
CNo	aty Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
Q162	1 Motorschutzschalter motor circuit breaker	20V40 44 40040	Siemens	30,40,44,40,040	Siemens	F60 030 007	16. 2
Q162	1 Hilfsschalter obenauf 1S+1Ö	3RV10 11-1AA10	Siemens	3RV10 11-1AA10	Siemens	568-028-097	16. 2
Q102	auxiliary switch on top 1no+1no	3RV19.01-1E	316 113	3RV19.01-1E	310 110113	568-028-108	10. 2
Q163	1 Motorschutzschalter motor circuit breaker	3RV10 11-1DA10	Siemens	3RV10 11-1DA10	Siemens	568-028-100	16.
Q163	1 Hilfsschalter obenauf 1S+1Ö	3RV19.01-1E	Siemens	3RV19.01-1E	Siemens	568-028-108	16.
Q164	auxiliary switch on top 1no+1no  1 Motorschutzschalter	3KV19.01-1E	Siemens	3KV19. U1-1E	Siemens	300-020-100	16. 6
Q I O T	motor circuit breaker	3RV10 11-1AA10	316 113	3RV10 11-1AA10	316 116113	568-028-097	10.
Q164	1 Hilfsschalter obenauf 1S+1Ö	0.0.10 11 110	Siemens	011111111111111111111111111111111111111	Siemens	000 010 007	16.
	auxiliary switch on top 1no+1no	3RV19.01-1E		3RV19.01-1E		568-028-108	
Q172	1 Motorschutzschalter		Siemens		Siemens		17. 2
	motor circuit breaker	3RV10 21-1EA10		3RV10 21-1EA10			
Q172	1 Hilfsschalter obenauf 1S+1Ö	0.004.00	Siemens	000400045	Siemens	500 000 100	17. 2
Q 2 O 2	auxiliary switch on top 1no+1no	3RV19.01-1E	C :	3RV19.01-1E	Siemens	568-028-108	20. 2
U Z U Z	1 Motorschutzschalter   motor circuit breaker	3RV10 11-0KA10	Siemens	3RV10 11-0KA10	216    6112	568-028-096	20.
Q 2 O 2	1 Hilfsschalter obenauf 1S+1Ö	31(10 11-01110	Siemens	SKV10 11-0KH10	Siemens	300-020-030	20. 2
4232	auxiliary switch on top 1no+1no	3RV19.01-1E	0100115	3RV19.01-1E		568-028-108	
Q 2 6 1	1 Motorschutzschalter		Siemens		Siemens		26. 1
	motor circuit breaker	3RV10 11-0DA10		3RV10 11-0DA10		568-028-090	
Q261	1 Hilfsschalter obenauf 1S+1Ö		Siemens		Siemens		26. 1
	auxiliary switch on top 1no+1no	3RV19.01-1E		3RV19.01-1E	6 :	568-028-108	2.0
Q 2 6 3	1 Motorschutzschalter   motor circuit breaker	3RV10 11-0DA10	Siemens	3RV10 11-0DA10	Siemens Siemens	568-028-090	26.
Q 2 6 3	1 Hilfsschalter obenauf 1S+1Ö	SKVIO II-ODHIO	Siemens	SKVIO II-UDHIO		300-020-090	26. 3
4203	auxiliary switch on top 1no+1no	3RV19.01-1E	310 110 113	3RV19.01-1E	310 110113	568-028-108	
Q302	1 Motorschutzschalter		Siemens		Siemens		30. 2
	motor circuit breaker	3RV10 11-0DA10		3RV10 11-0DA10		568-028-090	
Q302	1 Hilfsschalter obenauf 1S+1Ö		Siemens		Siemens		30. 2
	auxiliary switch on top 1no+1no	3RV19.01-1E		3RV19.01-1E		568-028-108	
Q322	1 Motorschutzschalter	3RV10 11-1EA10	Siemens	3RV10 11-1EA10	Siemens	568-028-101	32. 2
Q322	motor circuit breaker  1 Hilfsschalter obenauf 1S+1Ö	SKVIU II-IEHIU	Siemens	SKVIU II-IEHIU	Siemens	300-020-101	32. 2
Q J L L	auxiliary switch on top 1no+1no	3RV19.01-1E	215 112	3RV19.01-1E	216 112	568-028-108	
Q572	1 Motorschutzschalter	23.32.12	Siemens		Siemens	333 323 130	57. 2
	motor circuit breaker	3RV10 11-0KA10		3RV10 11-0KA10		568-028-096	
Q572	1 Hilfsschalter obenauf 1S+1Ö		Siemens		Siemens		57. 2
	auxiliary switch on top 1no+1no	3RV19.01-1E		3RV19.01-1E		568-028-108	100
Q1001	1 Leistungsschalter f. Trafo	201411 24 40040	Siemens	201411 24 40040	Siemens	E60 030 110	100.
	power switch for transformer	3RV14 21-1GA10		3RV14 21-16A10		568-028-118	
l							
DESIGNED	08.07.03 Cas	MANUFACTURER FMS Drehtechnik AG	G	STRIC	Jeliata		
LAST REVISED	01. 12. 09 PHI E M O	Amsler-Laffon-Str.	1	nart	kliste s list		1110
PLOT DATE	01.12.03	CH-8201 Schaffhaus		1	3 113 L		SHEET>
PLOT FRAME	FMS_E10A	MANUF. REF. 370490	DRAWING NO. 27049	J_E		1109	1111

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Part	S	list					FMS_S04E	/10.01.2002
CNo	Qty	Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
Q1001		Hilfsschalter obenauf 1S+1Ö auxiliary switch on top 1no+1nc	3RV19.01-1E	Siemens	3RV19.01-1E	Siemens	568-028-108	100.
Q1302	1 1	Motorschutzschalter motor circuit breaker	3RV10 21-1DA10	Siemens	3RV10 21-1DA10	Siemens	330 323 133	130.
S1.5L	1 1	Türpositionsschalter door position switch	PS 4127.000	Rittal	4127.000	Rittal		701.
S1.5M	1 1	Türpositionsschalter door position switch	PS 4127.000	Rittal	4127.000	Rittal		701.
S1.5R	1 1	Türpositionsschalter door position switch	PS 4127.000	Rittal	4127.000	Rittal		701.
S2.0	1 [	Drucktaster rot, 22mm push button red, 22mm	3SB30 00-0AA24	Siemens	3SB30 00-0AA24	Siemens	568-016-062	702.
S2.0	1 9	Schaltelement mit 1 Öffner circuit element with 1 n.c.	3SB34 00-0C	Siemens	3SB34 00-0C	Siemens	568-016-046	702.
S2.1	1 [	Drucktaster grün, 22mm push button green, 22mm	3SB32 02-0AA41	Siemens	3SB32 02-0AA41	Siemens	568-016-042	702.
S2.2	1 9	Schlüsselschalter key switch	3SB30 00-4LD01	Siemens	3SB30 00-4LD01	Siemens	568-008-107	702.
S2.2	1 9	Schaltelement mit 1 Schliesser circuit element with 1 n.o.	3SB34 00-0B	Siemens	3SB34 00-0B	Siemens	568-016-045	702.
S2.3	1 [	Drucktaster grün, 22mm push button green, 22mm	3SB32 02-0AA41	Siemens	3SB32 02-0AA41	Siemens	568-016-042	702.
S2.4	1 [	Drucktaster schwarz, 22mm push button black, 22mm	3SB32 02-0AA11	Siemens	3SB32 02-0AA11	Siemens	568-016-039	702.
S2.5	1 [	Drucktaster schwarz, 22mm push button black, 22mm	3SB32 02-0AA11	Siemens	3SB32 02-0AA11	Siemens	568-016-039	702.
S3. 1		Drucktaster schwarz, 22mm push button black, 22mm	3SB32 02-0AA11	Siemens	3SB32 02-0AA11	Siemens	568-016-039	703.
S1451	1 9	Sicherheitsschalter safety switch	TZ1RE 024 M	Euchner	082051	Euchner	568-018-153	145.
S1471		Drucktaster gelb komplett push button yellow complete	XB4-BA51	Telemecanique	XB4-BA51	Telemecanique	568-016-075	147.
S1471	1 9	Schaltelement switch element	ZB4-BZ101	Telemecanique	ZB4-BZ101	Telemecanique	568-016-064	147.
S1491	1 F	Fussschalter foot switch	FD K2R/K2R-GU	Elektra Tailfingen 3199 0860		Disa Elektro AG	568-010-046	149.
T1001	1 1	Transformator 1,6 kVA transformer 1.6 kVA	4AM6142-5AT10-1FA0	Siemens	4AM6142-5AT10-1FA0	Siemens		100.
W4002	1 E	Buskabel, 10 m bus cable, 10 m	6FX2 002-4EA04-1BA0	Siemens	6FX2 002-4EA04-1BA0	Siemens	568-090-324	400.
W4005	1 F	Peripheriekabel, 2,5 m periphery cable, 2,5 m	6ES7 368-3BC51-0AA0	Siemens	6ES7 368-3BC51-0AA0	Siemens	568-090-346	400.
DESIGNED	08.07	. 03 Cas M	ANUFACTURER FMS Drehtechnik AG	I				
LAST REVISED PLOT DATE	01.12	O9 PHI FMN	Amsler-Laffon-Str. 1 EQUIPMENT ELECTR			ckliste ts list		1111
PLOT DHIE PLOT FRAME	01.12. FMS_E	. 03		PLANT NUMBER         27049           DRAWING NO.         27049_E	·		< SHEET S	SHEET> 1112

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Part	. S	list					FMS_S04E/	10.01.2002
CNo	Qty	Specifications	Model number	Producer	Requisition number	er Supplier	FMS-Number	Page
W4501		Peripheriekabel, 1 m periphery cable, 1 m	6ES7 368-3BB01-0AA0	Siemens	6ES7 368-3BB01-0AA0	Siemens	568-090-327	451.
WB12.0	_	Verbindungskabel connection cable	  SIM-M8-3GD-5-PU	Festo	159 421	Festo	568-081-058	712.
WB12.1	1	Verbindungskabel connection cable	  SIM-M8-3GD-5-PU	Festo	159 421	Festo	568-081-058	712.
WB8002		Kabel mit Stecker 15m cable with plug 15m	BKS-S116-PU-15	Balluff	BKS-S33M-15	Balluff	568-081-251	800.
X 0	9	Zugbügel pull bow	ZB 16K GN/GE	Weidmüller	0502860000	Weidmüller	000 001 201	11. 1
X 0	11	Zugbügel	ZB 35K GN/GE	Weidmüller	0502660000	Weidmüller		11. 1
X 0		Pull bow Zugbügel		Weidmüller	0475360000	Weidmüller		11. 1
X 0 0		pull bow Zugbügel	ZB 4K GN/GE ZB 4K GN/GE	Weidmüller		Weidmüller		11. 6
X 0 0		pull bow Zugbügel		Weidmüller	0475360000	Weidmüller		11. 6
X 2		pull bow  Durchgangsklemme 4,0/2-Leiter	ZB 35K GN/GE	Wago Contact SA	0502660000	Wago Contact SA		130.
Х3		thruline terminal 4,0/2-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	281-601	Wago Contact SA		130.
X 6		thruline terminal 2,5/3-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	51. 6
X7	10	thruline terminal 2,5/3-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	451.
X16	6	thruline terminal 2,5/3-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	100.
X 2 0	2	thruline terminal 2,5/3-conductor Durchgangsklemme 10,0/2-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	130.
X 2 2		thruline terminal 10,0/2-conducto Durchgangsklemme 6,0/2-Leiter		Wago Contact SA	284-601	Wago Contact SA		130.
X 2 3	6	thruline terminal 6,0/2-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	282-601	Wago Contact SA		131.
X35		thruline terminal 2,5/3-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	430.
X36		thruline terminal 2,5/3-conductor Durchgangsklemme 2,5/3-Leiter		Wago Contact SA	280-641	Wago Contact SA	011-2320-010	142.
X127		thruline terminal 2,5/3-conductor Schukosteckdose		Murrelektronik	280-641	Murrelektronik	011-2320-010	12. 8
X152		service socket Stifteinsatz	MSVD	Harting	67901	Harting		4.1.
		inset male	HAN 6 E		0933 006 2601		010-5503-000	
						· · · · · · · · · · · · · · · · · · ·		
DESIGNED LAST REVISED		7.03 Cas 2.09 PHI E MO	ANUFACTURER FMS Drehtechnik AG Amsler-Laffon-Str. 1	QUIPMENT ELECTR	. = =	ückliste	= +	1112
PLOT DATE PLOT FRAME	01.1 FMS_	2.03		LANT NUMBER 27049 RAWING NO. 27049_E		rts list	< SHEET SI	HEET> 1113

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Part	ts lis	t							FMS_S04E.	/10.01.2002
CNo	Qty Spec:	ification	ıs	Model number	Producer	Requisit	ion number	Supplier	FMS-Number	Page
X152	1 Buchser	neinsatz			Harting			Harting		4.1.
	inset	female		HAN 6 E		0933 006 270	01		010-5502-000	
X152	1 Tülleng	gehäuse			Harting			Harting		4.1.
	bush ca			HAN 6 B		0930 006 154	10		010-5501-000	
X152	1 Anbauge				Harting			Harting		4.1.
V4.7.2		ary casing		HAN 6 B		0930 006 030	02		010-5500-015	
X172	1 Anbauge	enause ary casing		HAN 10 B	Harting	0930 010 030	n 1	Harting	010-5500-001	4.1.
X172	1 Tüllen			IIAN 10 B	Harting	0330 010 030	71	Harting	010-3300-001	4.1.
X1/ Z	bush ca			HAN 10 B	lidi tilig	0930 010 152	7 1	nar cing	010-5501-001	7. 1.
X172	1 Stifte:			11111 10 2	Harting	0330 010 131	<u> </u>	Harting	010 0001 001	4.1.
	inset			HAN 10 E		0933 010 260	01		010-5503-001	
X172	1 Buchser	neinsatz			Harting			Harting		4.1.
	inset	female		HAN 10 E		0933 010 270	01		010-5502-001	
X172	4 Sperrbo				Harting			Harting		4.1.
	barring			09 30 000 9901		09 30 000 99	901			
X 2 0 2	1 Anbauge				Harting			Harting		4.1.
V202		ary casing		HAN 10 B		0930 010 030	01		010-5500-001	
X 2 0 2	1 Tülleng			HAN 10 B	Harting	0930 010 152	2.1	Harting	010-5501-001	4.1.
X 2 0 2	bush ca			IIAN 10 B	Harting	0330 010 132	<u> </u>	Harting	010-3301-001	4.1.
X 2 0 2	inset			HAN 10 E	liai tilig	0933 010 260	11	nai cing	010-5503-001	7. 1.
X 2 0 2	1 Buchser			11111 10 2	Harting	0333 010 200	<u>, , , , , , , , , , , , , , , , , , , </u>	Harting	010 0000 001	4.1.
	inset			HAN 10 E		0933 010 270	01		010-5502-001	=
X 2 0 2	4 Sperrbo	olzen			Harting			Harting		4.1.
	barring	g bolt		09 30 000 9901		09 30 000 99	901			
X 2 0 4	1 Anbauge	e h ä u s e			Harting			Harting		4.1.
		ary casing		HAN 10 B		0930 010 030	01		010-5500-001	
X 2 0 4	1 Tülleng				Harting			Harting		4.1.
X 2 0 4	bush ca			HAN 10 B	U 1 ·	0930 010 152	21		010-5501-001	11 4
X Z U 4	1 Stifte:			HAN 10 E	Harting	0933 010 260	n 1	Harting	010-5503-001	4.1.
X 2 0 4	1 Buchser			HHN IO E	Harting	0955 010 200	J I	Harting	010-3303-001	4.1.
A 2 0 4	inset			HAN 10 E	lidi tilig	0933 010 270	01	ndi ting	010-5502-001	'
X 2 0 4	4 Sperrbo			20 2	Harting	3333 010 270	<del></del>	Harting	323 3302 301	4. 1.
	barring			09 30 000 9901		09 30 000 99	901			
X302	1 Anbauge				Harting			Harting		4.1.
		ary casing		HAN 10 B		0930 010 030	01		010-5500-001	
X302	1 Tülleng				Harting			Harting		4.1.
V 0 0 0	bush ca			HAN 10 B		0930 010 152	21		010-5501-001	
X302	1 Stifte:			110N 40 F	Harting	0000 040 06	2.4	Harting	040 5503 004	4.1.
	inset	male		HAN 10 E		0933 010 260	T T		010-5503-001	
DESIGNED	08.07.03	Cas		MANUFACTURER FMS Drehtechnik	AG					
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PLOT DATE	01.12.09	FILE NAME	EMO	CH-8201 Schaffh	ausen PLANT NUMBER 27049		part	s list		SHEET>
PLOT FRAME	FMS_E10A			MANUF. REF. 370490	DRAWING NO. 27049	.E			1112	1114

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Part	S	list					FMS_S04E/	10.01.2002
СМо	Qty	Specifications	Model number	Producer	Requisition number	Supplier	FMS-Number	Page
X302	1	Buchseneinsatz inset female	HAN 10 E	Harting	0933 010 2701	Harting	010-5502-001	4.1.
X302		Sperrbolzen barring bolt	09 30 000 9901	Harting	09 30 000 9901	Harting	010-3302-001	4.1.
X1332	1	Aktor-Sensor-Box 8-fach actuator-sensor-box, 8-fold	ASB 8/LED - 5-4/XXM	Lumberg GmbH & Co	ASB 8/LED - 5-4/xxM	Lumberg GmbH & Co	).	133.
X1333	1	Aktor-Sensor-Box 8-fach	ASB 8/LED - 5-4/XXM	Lumberg GmbH & Co		Lumberg GmbH & Co	).	133.
X1334	1	Aktor-Sensor-Box 8-fach actuator-sensor-box, 8-fold	ASB 8/LED - 5-4/XXM	Lumberg GmbH & Co		Lumberg GmbH & Co	).	133.
X1338		Aktor-Sensor-Box 8-fach actuator-sensor-box, 8-fold	ASBS 8/LED - 5-4	Lumberg GmbH & Co		Lumberg GmbH & Co	568-006-250	133.
X1338		Kabel mit Winkelkupplung (10m) cable with angular plug (10m)	RKCW 120-137/10M	Lumberg GmbH & Co		Lumberg GmbH & Co	568-081-059	133.
X1339	1	Aktor-Sensor-Box 8-fach actuator-sensor-box, 8-fold	ASBS 8/LED - 5-4	Lumberg GmbH & Co		Lumberg GmbH & Co	568-006-250	133.
X1339	1	Kabel mit Winkelkupplung (10m) cable with angular plug (10m)	RKCW 120-137/10M	Lumberg GmbH & Co	RKCW 120-137/10M	Lumberg GmbH & Co	568-081-059	133.
X1342	1	Aktor-Sensor-Box 8-fach actuator-sensor-box, 8-fold	ASBS 8/LED - 5-4	Lumberg GmbH & Co		Lumberg GmbH & Co	568-006-250	134.
X1342	1	Kabel mit Winkelkupplung (10m) cable with angular plug (10m)	RKCW 120-137/10M	Lumberg GmbH & Co	RKCW 120-137/10M	Lumberg GmbH & Co	568-081-059	134.
X4301	1	Frontplattenschnittstelle front plate interface	MSDD	Murrelektronik	4000-68123-0000000	Murrelektronik	568-006-252	430.
X4301	1	Frontplattenschnittstelle front plate interface	MSDD	Murrelektronik	4000-68000-0010000	Murrelektronik	568-006-253	430.
X4301	1	Frontplattenschnittstelle front plate interface	MSDD	Murrelektronik	4000-68000-0200000	Murrelektronik	568-006-254	430.
X4301		Sub-D Kabel sub-D cable	SUB-D KABEL	ARP Datacon	104172-6	ARP Datacon	568-081-066	430.
X4301		Sub-D Kabel sub-D cable	SUB-D KABEL	ARP Datacon	104179-6	ARP Datacon	568-081-067	430.
X5034-H3.3	1	Meldeleuchte weiss signal lamp white	3SB32 17-6AA60	Siemens	3SB32 17-6AA60	Siemens	568-043-061	503.
X5034-H3.3		Glühlampe electric light bulb	3SB19 02-2AF	Siemens	3SB19 02-2AF	Siemens	012-1163-002	503.
X5034-S3.5	1	Drucktaster rot, 22mm push button red, 22mm	3SB32 03-0AA21	Siemens	3SB32 03-0AA21	Siemens	568-016-040	703.
X5034-S3.6		Drucktaster grün, 22mm push button green, 22mm	3SB32 02-0AA41	Siemens	3SB32 02-0AA41	Siemens	568-016-042	703.
XE302	1	Y-Verteiler Y-junction	MB-FSM5-2FKM5.4	Escha Anschlusste	chnik 334.000363	Dietrich & Blum f	568-081-061	705.
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Part	ts :	list							FMS_S04E	/10.01.2002
СМо	Qty S	Specifications	Mode	l number	Producer	Requis	ition number	Supplier	FMS-Number	Page
Y1.4		iehe Pneumatikschema ee pneumatic diagram								501.
Y4.3	1 s	iehe Hydraulikschema ee hydraulic diagram								504.
Y4.4	1 s	iehe Hydraulikschema								504.
Y5.0	1 s	ee hydraulic diagram iehe Hydraulikschema								505.
Y5.1	1 s	ee hydraulic diagram iehe Hydraulikschema								505.
Y5. 2	1 s	ee hydraulic diagram iehe Kühlmittelschema								505.
Y5. 4	1 s	ee coolant diagram iehe Hydraulikschema ee hydraulic diagram								505.
Y5.5	1 s	iehe Hydraulikschema ee hydraulic diagram								505.
Y5.6	1 s	iehe Kühlmittelschema ee coolant diagram								505.
Y8.0	1 s	iehe Pneumatikschema ee pneumatic diagram								508.
Y8.1	1 s	iehe Kühlmittelschema ee coolant diagram								508.
Y10.0	1 s	iehe Kühlmittelschema ee coolant diagram								510.
Y10.2	1 s	iehe Kühlmittelschema ee coolant diagram								510.
Y12.4	1 s	iehe Kühlmittelschema ee coolant diagram								512.
Z105	1 N	etzfilter 80 kW ains filter 80kW	651300	)O-OBE28-OAAO	Siemens	6 S L 3 0 0 0 - 0	BF 28 - 0 9 9 0	Siemens		10. 5
Z152	1 E	ntstörmodul für Motor 5,5 k nterference module for moto	c W		Murrelektror		5E20 011110	Murrelektronik	568-054-003	15. 3
Z 1 6 2	1 E	ntstörmodul für Motor 5,5 k nterference module for moto	c W		Murrelektror			Murrelektronik	568-054-003	16. 3
Z163	1 E	ntstörmodul für Motor 5,5 k nterference module for moto	k W		Murrelektror			Murrelektronik	568-054-003	16. 5
Z164	1 E	ntstörmodul für Motor 5,5 k nterference module for moto	k W		Murrelektror			Murrelektronik	568-054-003	16. 7
Z 1 7 2	1 E	ntstörmodul für Motor 4 kW nterference module for moto			Murrelektror			Murrelektronik	568-054-002	17. 3
Z172	1 A	ufschnappadapter ounting plate	RC 3 E		Murrelektror			Murrelektronik	568-095-029	17. 3
				· -		23300			333 333 323	
DESIGNED LAST REVISED	08.07.	O9 PHI FMO	MANUFACTUR	Amsler-Laffon-Str. 1		LECTRIC		kliste s list		1115
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Part	S	list							FMS_S04E	/10.01.2002
СМо	Qty	Specifications	Model	number	Producer	Requisit	ion number	Supplier	FMS-Number	Page
Z 2 0 2		Entstörmodul für Motor 5,5 kW interference module for motor 5,	SLAT 3 BIID		Murrelektroni	k 236082		Murrelektronik	568-054-003	20. 3
Z 2 6 3	1	Entstörmodul für Motor 5,5 kW			Murrelektroni	k		Murrelektronik	568-054-003	26. 4
Z 3 0 2	1	interference module for motor 5, Entstörmodul für Motor 4 kW			Murrelektroni			Murrelektronik		30. 3
Z 3 0 2	1	interference module for motor 4 Aufschnappadapter			Murrelektroni			Murrelektronik	568-054-002	30. 3
Z322	1	mounting plate Entstörmodul für Motor 5,5 kW	RC 3 BU		Murrelektroni	20900		Murrelektronik	568-095-029	32. 3
		interference module for motor 5,	5 kRVC 3 BUR			236082			568-054-003	32. 3
Z507		Überspannungsbegrenzer overvoltage limiting device	6SN11 11	- 0 A B O O - O A A O	Siemens	6SN11 11-0A	B O O - O A A O	Siemens	568-069-586	50. 7
Z512	1	Voltage Protection Modul voltage protection modul	65N11 13	-18800-1J81	Siemens	6SN11 13-1A	900_1 191	Siemens	568-069-649	51. 3
		voitage protection modal	03111113	1111100 13111		03111113111	100 1011		300 003 013	
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PLOT FRAME	FMS_E	108	MANUF. REF.	370490	DRAWING NO. 270	49_E			1115	