LTM 1090-4.1

(LTM 1080/2)

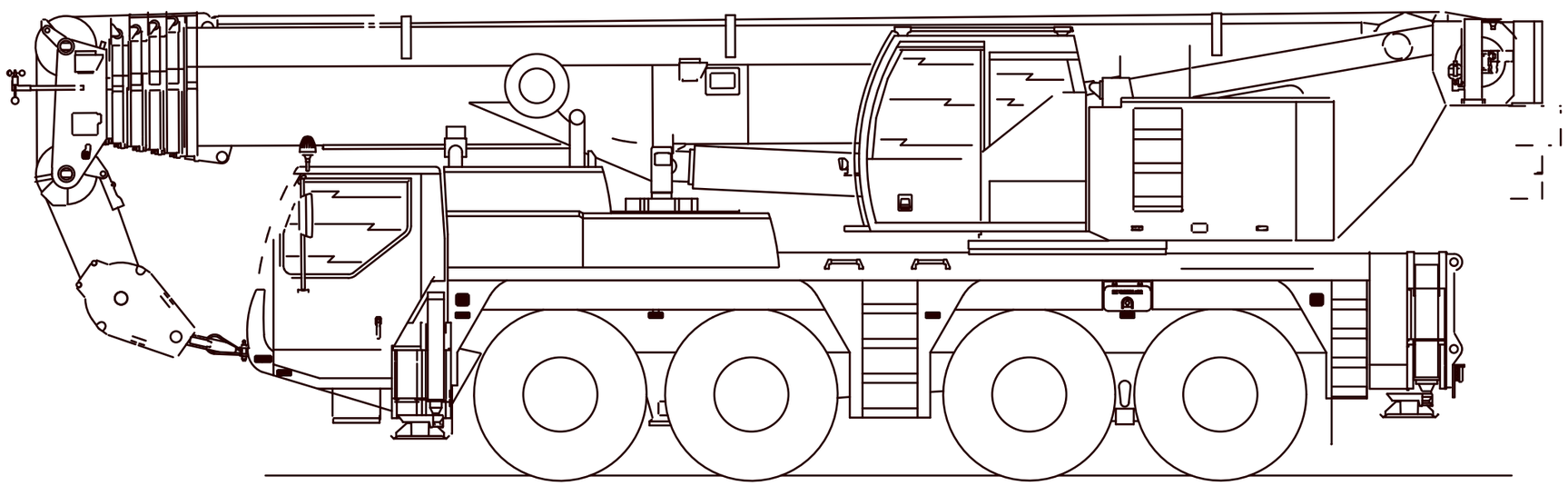
LTM 1100-4.1

(LTM 1090/3)

LIEBHERR-ENGINE
D 846 TI A5

ZF-TRANSMISSION
12 AS 2302

WITH INTARDER



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	CIRCUIT DIAGRAM	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1								ELECTR. SYSTEM VEHICLE	Zeich-Nr. 3272-920.06.01.000-002	Blatt 1
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

1	2	3	4	5	6	7	8

REGISTER OF SHEETS

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	REGISTER OF SHEETS	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

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von 153

1	2	3	4	5	6	7	8

REGISTER OF SHEETS	SHEET
PLUG GROUPING	138
PLUG GROUPING	139
POWER TRAIN FUNCTIONAL DIAGRAMM 6X8 (*8X8) ,	73
REAR AXLE STEERING	77
REAR AXLE STEERING	78
REAR AXLE STEERING	79
REAR AXLE STEERING	80
REAR MIRROR HEATING ,	96
REGISTER OF SHEETS	2
REGISTER OF SHEETS	3
SERIAL INTERFACE CAN	51
SERIAL INTERFACE LSB1	46
SERIAL INTERFACE SPI	47
SERIAL INTERFACE SPI	48
SERIAL INTERFACE SPI	49
SERIAL INTERFACE SPI	50
SERVICE BRAKE , PARKING BRAKE	71
SOCKET 24V ,	98
STARTER , GENERATOR ,	52
STEERING COLUMN SWITCH LEFT ,	85
STEERING PUMP , AUXILIAIRY STEERING PUMP ,	64
SUPPORTING CONTROL UNIT LEFT	31
SUPPORTING CONTROL UNIT RIGHT	30
SUPPORTING CONTROL UNIT RIGHT AND LEFT	32
SUSPENSION	76
SUSPENSION LOCKED / SUSPENSION ACTIVATED ,	75
TACHOGRAPH , TACHOGRAPH	65
TANK CONTENTS ,	63
TRANSFER CASE	68
TRANSMISSION ECU	34
TRANSMISSION ECU VOLTAGE SUPPLY ,	66
WHEEL SPEED	114
WINDOW LIFTER	97

REGISTER OF SHEETS	SHEET

A

B

C

E

F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	REGISTER OF SHEETS	Ident-Nr. 984583708	=	U
2										+	H
1				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	Blatt	3
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3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	GENERAL OUTLAY LSB/CAN
2				Ausgabe	03.02.06	lwerof0		
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Makro:ÜB_LSB_1090

* OPTION

* EMERGENCY OFF CABIN

BATTERY OW

BATTERY MASTER SWITCH -S1

-F62 50A

-F61 50A

-K1 CONTROL ON

-F43 10A

-F24 30A

IGNITION STARTER SWITCH SUPERSTRUCTURE -S104

-F7 5A

-F29 15A

-F44 7,5A

-F8 10A

-F13 5A

-F9 2A

-F.. 2A

-S84 *

-S324

-K15

D+ 30

ENGINE ECU FSAKL

-F32 7,5A

-F33 7,5A

-F34 7,5A

-F31 10A

ZE0

ZE1

ZE2

ST. EIN D+ D30 15

POWER PACK

ST.EIN

-K1

D30 15

MONITOR

SUPERSTRUCTURE (OW)

D+(OW) PREHEAT (OW) D30 VCCNT ENGINE STOP

I/O-MODULE 6

CHANGE OVER 15 OW

EP

LSB

PREHEAT (UW) D+(UW)

I/O-MODULE 6

PREHEAT D+(UW)

-F4 30A

-S103 IGNITION STARTER FAHRZEUG

-F60 61 D+ D-

D+ G B- B+ 3~ W 31

D+

D+(OW) PREHEAT

EXCESS PRESSURE (UW)

-S106 BATTERY UW MASTER SWITCH

-F80 80A

BATTERY UW

-S18 OW UW

-S17 IGNITION STARTER SWITCH OW

14 17 3(C) 2(B) 18 13 1/2

OW UW

FSAKL

ENGINE ECU

-F41 10A

-F49 10A

-F16 20A

-F18 20A

KEY BOARD UNIT

SPECIAL-FUNCTION 4X

-F48 10A

-F37 10A

-A71 87a 87

INCLINATION-SENSOR

PRESSURE TRANSDUCER 4X

LENGTH SENSOR 4X

LSB 500 OHM

PLUG FOR PROGRAMMING A2U0

A15 A16 A20 VCCBAT A17 A18 A19

LSB-B VCCNT LSB-B VCCNT LSB-B VCCNT

REAR AXLE STEERING ANGLE TRANSMITTER I-III

CODING + I/O-MODULE 4

I/O-MODULE 3

I/O-MODULE 5

ANALOG TANK SENSOR

DISPLAY UNIT

LSB-B VCCNT LSB-B VCCNT

I/O-MODULE 1 I/O-MODULE 2

D+

WORKING HOUR METER

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GENERAL OUTLAY LSB

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* WORKING PROJECTOR BOOM HEAD
=Z66+A5-E16 (42W)

LIGHTING JIB HEAD
LEFT =A+A5-E1 (5W) / *=A+A5-E1A (5W)
RIGHT =A+A5-E2 (5W) / *=A+A5-E2A (5W)
* USA =A+A5-E69/-E66/-E70/-E67/-E71/-E68
(3XYE 10W, 3XRD 10W)

*1 : WORKING PROJECTOR BASE SECTION
=Z66+A-E18 (42W) LEFT
=Z66+A-E17 (42W) RIGHT
*2 : WORKING PROJECTOR BASE SECTION
=Z38+A-E9 (70W)
[=Z38+A-E9A (70W)]
*3 : WORKING PROJECTOR BASE SECTION
=Z38+A-E15 (2x70W)

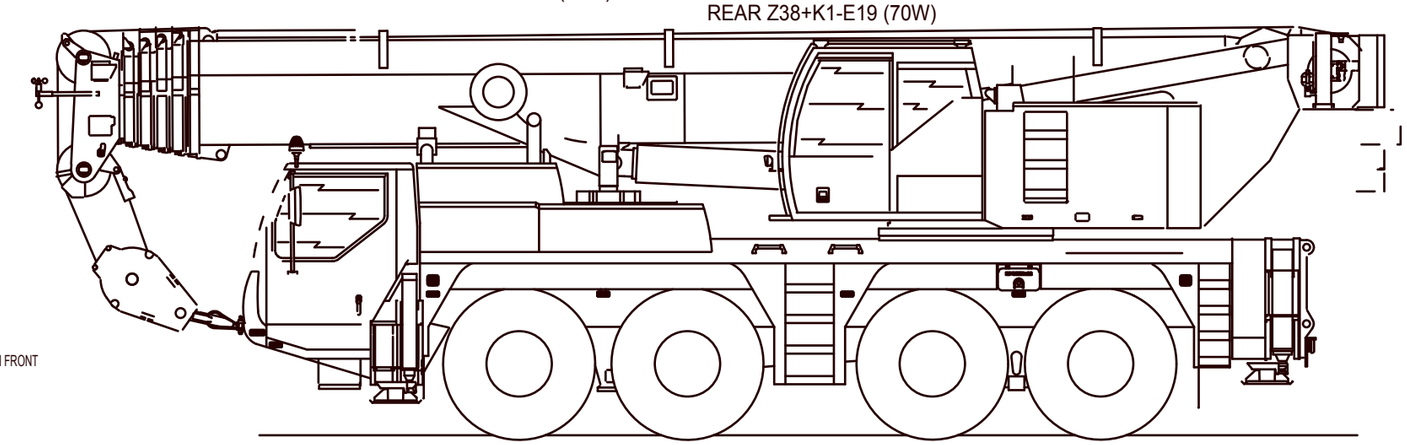
SUPERSTRUCTURE RIGHT
=D+D-E60 (70W)

HEADLIGHT SUPERSTRUCTURE REAR
LEFT =D+D2-E4 (70W)
RIGHT D+D2-E5 (70W)

HEADLIGHT WINCH
=D+D2-E14 (70W)

CABIN LEFT
=K+K1-E96 (70W)

HEADLIGHT CABIN ROOF
FRONT =Z38+K1-E8 (70W)
REAR Z38+K1-E19 (70W)



* LIGHTING HW2
=D+D2-E63 (70W)

* LIGHTING USA
=D+D2-E73/-E74/-E75 (RD 10W)

STEERING MOTOR
-M2

* SOCKET
RECOVERY WINCH FRONT
-X205

* SOCKET TRAILER 24V -X200
* SOCKET TRAILER ABV -X202
* SOCKET DOLLY -X203
* SOCKET RECOVERY WINCH REAR -X206/-S190
* SOCKET TRAILER 12V -X207

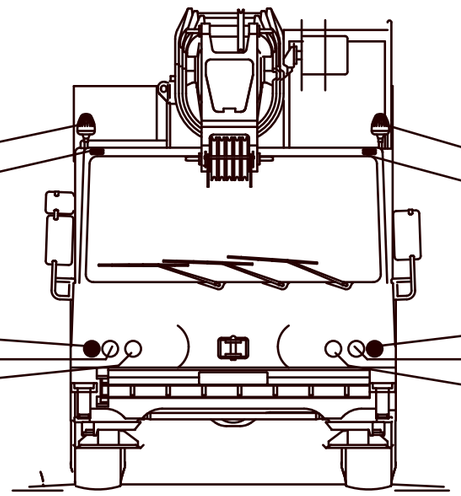
	INDICATOR SIDE	HOOTER	SIDE LAMPS	LIGHTING SLIDING BEAMS	SIDE LAMPS		* INDICATOR	SIDE LAMPS		LIGHTING SLIDING BEAMS
RIGHT :	-E41/*-E42 (21W)	-H51/-H52	-E60 (3W)	-E100 (70W)	-E61 (3W)	-E62 (3W)	-E43 (21W)	-E63 (3W)	* -E64 (3W)	-E102 (70W)
LEFT :	-E51/*-E52 (21W)		-E80 (3W)	-E101 (70W)	-E81 (3W)	-E82 (3W)	-E53 (21W)	-E83 (3W)	* -E84 (3W)	-E103 (70W)

VEHICLE LIGHTING FRONT

RIGHT

WARNING BEACON -E28 (70W)
CONTEUR LIGHT -E26 (5W)
* CONTEUR LIGHT -E34/-E35/-E36 (5W)

INDICATOR -E40 (21W)
LOW BEAM -E1 (70W)
PARKING LIGHT -E3 (5W)
HIGH BEAM -E5 (70W)
* FOG LAMP -E15 (70W)
* ADDITIONAL PROJECTOR -E11 (70W)



LEFT

WARNING BEACON -E27 (70W)
CONTEUR LIGHT -E25 (5W)
* CONTEUR LIGHT -E37/-E38/-E39 (5W)

INDICATOR -E50 (21W)
LOW BEAM -E2 (70W)
PARKING LIGHT -E4 (5W)
HIGH BEAM -E6 (70W)
* FOG LAMP -E14 (70W)
* ADDITIONAL PROJECTOR -E10 (70W)

VEHICLE LIGHTING REAR

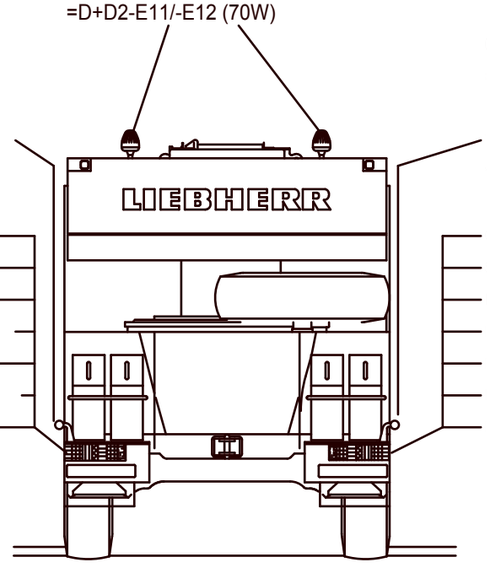
LEFT

CONTEUR LIGHT
=D+D-E6 (5W)

TRACKING LAMP -E95/-E95_X (5W)
* SIDE MARKER LAMP -E99 (5W)

CONTEUR LIGHT -E128_E1 (10W)
STOP LIGHT -E128_E3 (21W)
INDICATOR -E128_E2 (21W)
LICENCE PLATE LIGHT -E128_E4 (10W)
REAR LIGHT -E128_E5/E6 (2x5W)
FOG TAIL LAMP -E128_E7 (21W)
REVERSING LAMP -E128_E8 (21W)

WARNING BEACON
=D+D2-E11/-E12 (70W)



RIGHT

CONTEUR LIGHT
=D+D-E7 (5W)

TRACKING LAMP -E75/-75_X (5W)
* SIDE MARKER LAMP -E79 (5W)

CONTEUR LIGHT -E129_E1 (10W)
STOP LIGHT -E129_E3 (21W)
INDICATOR -E129_E2 (21W)
LICENCE PLATE LIGHT -E129_E4 (10W)
REAR LIGHT -E129_E5/E6 (2x5W)
FOG TAIL LAMP -E129_E7 (21W)
REVERSING LAMP -E129_E8 (21W)

* WARNING SIGNAL
DURING REVERSING -H53 / -X240

* OPTION

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2				Ausgabe	03.02.06	lwerof0	
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GENERAL OUTLAY LIGHTING

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Zeich-Nr. 3272-920.06.01.000-002

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A B C E F

ENGINE

-B31	-B36			-P30	-Y50
-B31_X	-B36_X			-P30_X	-Y53
-B32	-B37	-E230		-P31	-Y112
	-B37_X	-E231	-G7	-P31_X	-Y112_X
-B33	-B38	-E260	-G7_X	-R9	
-B33_X	-B47	-E261	-M1	-S117	
-B35	-B47_X			-S134	
-B35_X	-B47_Y1				

TRANSMISSION

-A61	-A69	-S64	-Y64
-X44	-A69_X	-S65	-Y65
-X45	-B26	-SPCAN.1	-Y66
-A68	-B27		
-A68_B1	-B29	-XM8.1	
-A68_Y1..2	-B29_X	-XM8.2	

OUTRIGGER BOXES,- LEFT

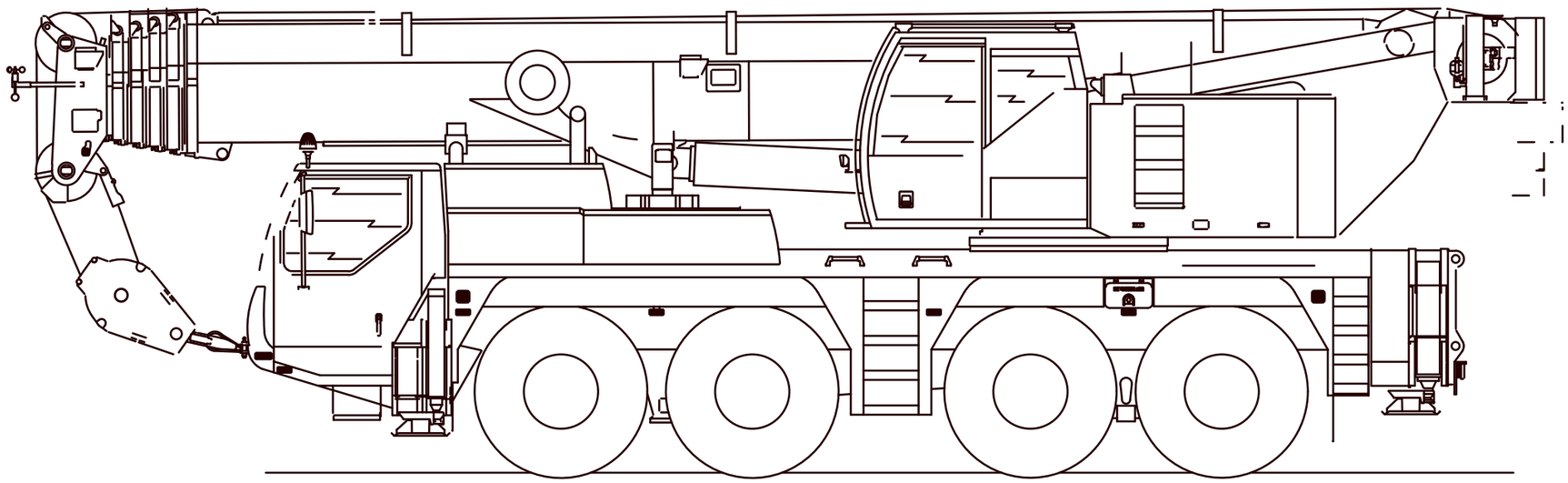
-A10	-A14	-X234	
-A10_X	-X641		
	-X642		
	-X643		
-A104	-X644		
-A104_X	-X645		-MSP14

OUTRIGGER BOXES,- RIGHT

-A9	-A13	-X235	-SPDREH.1
-A9_X	-X631	-X233	-SPDREH.2
	-X632		-SPDREH.3
	-X633		
-A103	-X634		
-A103_X	-X635		-MSP15

DRIVER'S CAB

-A130	-Y107
-A131	-Y107_X
-AF23	-Y108
-AF23_F1..2	-Y108_X
-AF24	-Y109
-AF24_F1..F2	-Y109_X
-AF25	
-AF25_F1..F2	
	-X229
-E263	-XM34.1
-S112	-XM34.2
	-XM34.3
	-XM34.4



DBW 2020

-A132
-A132_XA...XC
-A133
-K233
-M17
-M17_X
-M18
-X133
-Y150
-Y151

AIRTOP 5000

-A136
-A136_X2
-A137
-A137_M
-A137_R1..R2
-A137_X1..X5
-M36
-X136
-X137
-X138

-B14	-X214	-S118	-MSP18	-B50	-B28	-S189	-B51	-N1	-B52	-B121	-S50
-B14_X	-XM6.1	-XM6.7		-B50_X	-M19		-B51_X		-B52_X	-B121_X	-S63
-B122	-Y80a	-Y42		-B142	-S31		-B100		-B143	-B13	-XM6.11
-B122_X	-Y80b			-S41	-XM6.8		-B100_X		-B144	-B13_X	-XM6.13
	-Y81a			-S42	-XM6.14		-S43		-Y43	-X213	-Y18
	-Y81b			-S61	-Y9a		-S89		-Y44	-XM6.10	-Y19
				-XM6.16	-Y9b		-S90			-Y82a	
				-Y12	-Y20		-XM6.9			-Y82b	
				-Y13	-Y24		-Y220			-Y83a	
					-Y39		-Y221			-Y83b	
					-Y25		-Y222				
					-Y51		-Y226				
-B12	-S119				-Y52			-B70		-B11	
-B12_X	-X212			-B141				-B70_X		-B11_X	-MSP21
-B123	-XM6.2			-S30				-MSP22		-B124	-XM6.15
-B123_X	-Y5			-S51				-MSP23		-B124_X	-S62
	-Y41			-S60				-MSP24		-X211	-Y16
	-Y84a			-XM6.5				-S33		-XM6.12	-Y17
	-Y84b			-Y10				-S44		-Y86a	
	-Y85a							-Y40		-Y86b	
	-Y85b							-Y231		-Y87a	
	-Y225							-Y232		-Y87b	

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	GENERAL OUTLAY INSTALLATION DRIVER'S CAB	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
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-E20
-H5

-A110
-A110_A
-A110_B

-A111_X
-A112
-A112_X

-E22
-H4

-A150
-A150_E
-A150_M1
-A150_M2
-A150_X

-S12

-B30
-B30_X

-P11
-P11_XA...XD

-P10
-P10_XA...XD

-B5...-B9
-S50
-S51
-S114
-S116

-M9
-M9_X
-Y49
-Y102a
-Y102b

-M8
-M10

-A145
-A145_X

-M20
-M20_X
-M21
-M21_X
-S13
-S159

-A151
-A151_E
-A151_M1
-A151_M2
-A151_X
-E200
-E200_X
-E201

CENTER CONSOLE

-S4
-S4_X

-S5
-S5_X

-A1
-X711
-X712
-X713
-X714
-A5
-X721
-X724
-A11
-X611
-X612
-X613
-X614
-X615
-A12
-X621
-X622
-X623
-X624
-X625
-A15
-X651
-X652
-X653
-X654
-X655

-A51
-X271...275
-A60
-A62
-X46
-A70
-A71
-A73
-A99
-A99_X
-A100
-A100_R2,R3,V1
-AF1...12
-AF20
-B48
-E204
-E204_X
-G6
-H30
-K40
-K40_X

-K41
-K48..K56
-K61
-K70..79
-MSP7...10
-P14
-P15
-P15_X
-R25
-R66
-R66_X
-S17
-S19
-S22
-S23
-S24
-S25
-S25_X
-S201..205
-U1
-U1_X
-U2
-U2_X

-X1...49
-X50...99
-X94...-X97
-X100..117
-X130
-X130_B
-X131
-X133..X138
-X153
-X190
-X190_B
-X198
-X199
-X199_X
-X228

-XM1...6

-R16
-R16_X

-M11
-M11_X
-S16

-M12
-M12_X
-S14
-S15

-E202
-E202_E1
-E202_E2
-E202_S
-E202_X

-E203
-E203_E1
-E203_E2
-E203_S
-E203_X

-A134
-A134_X

-A135
-A135_X1..X8

-M35

FAHRTRICHTUNG

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	GENERAL OUTLAY INSTALLATION DRIVER'S CAB
2				Ausgabe	03.02.06	lwerof0		
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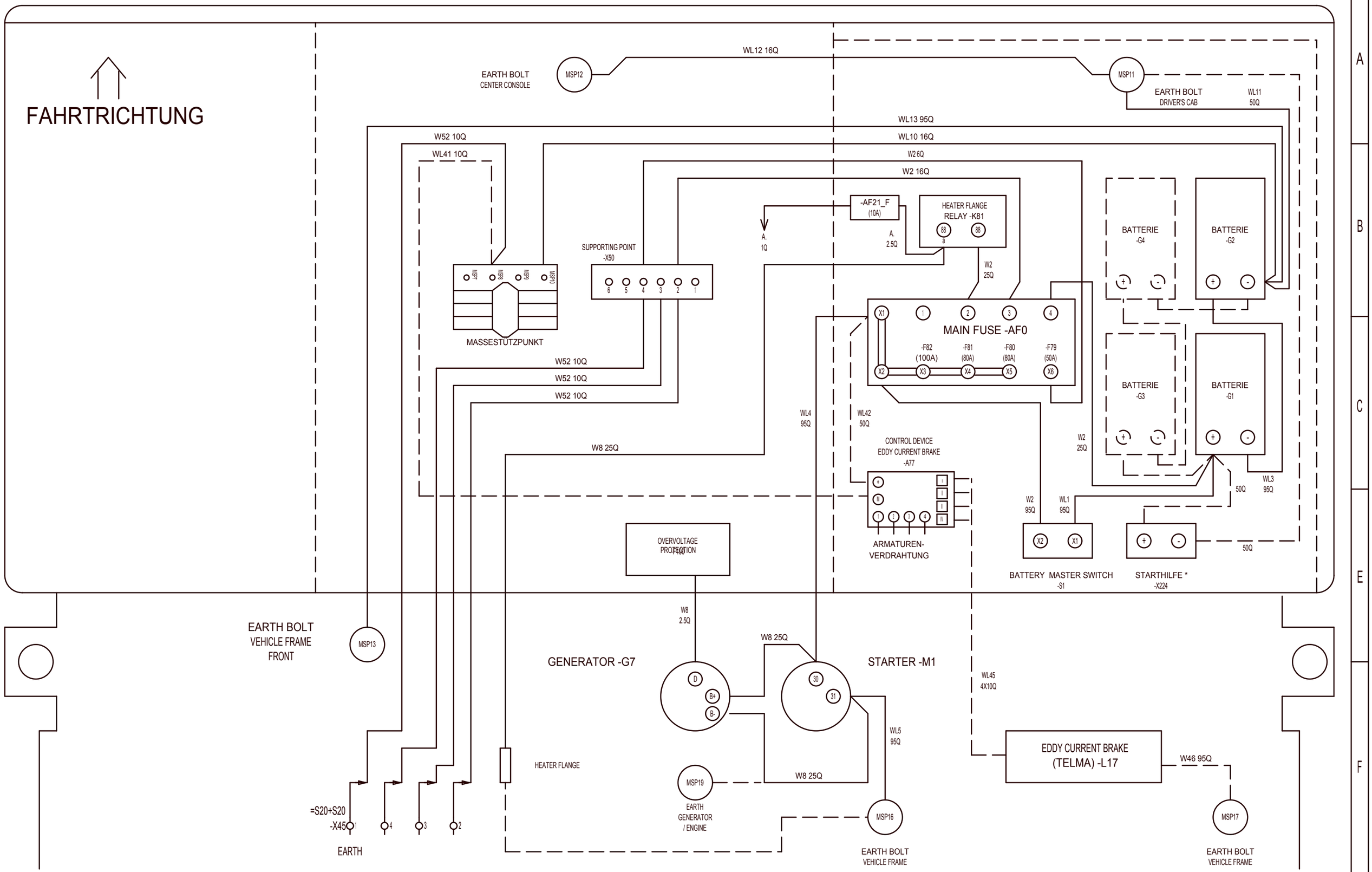

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	GENERAL OUTLAY INSTALLATION DRIVER'S CAB
2				Ausgabe	03.02.06	lwerof0		
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Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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FUSE		SHEET	FUNCTION	BMK
-F1 / 10A		39.1	PARKING LIGHT LEFT , HEADLAMP WASHING DEVICE	-AF1
-F2 / 10A		39.2	PARKING LIGHT RIGHT, DASHBOARD LIGHT.	-AF1
-F3 / 10A		39.2	MAIN BEAM LEFT	-AF1
-F4 / 10A		39.3	MAIN BEAM RIGHT	-AF1
-F5 / 10A		39.3	LOW BEAM LEFT	-AF1
-F6 / 10A		39.4	LOW BEAM RIGHT	-AF1
-F7 / 10A		39.1	IGNATION SWITCH 50 UW	-AF2
-F8 / 20A		39.2	REVERSING LAMPS, HORN , FOG TAIL LAMP , WARNING SIGNAL DURING REVERSING	-AF2
-F9 / 20A		39.2	HIGH BEAM , HEAD LAMP FLASHER, BLINKER/HAZARD WARNING LIGHT	-AF2
-F10 / 20A		39.3	WARNING BEACON	-AF2
-F11 / 10A		39.3	LIGHT LOW/MAIN BEAM	-AF2
-F12 / 20A		39.4	PARKING LIGHT , FOG LAMP	-AF2
-F13 / 15A		39.4	COMPLEMENTARY HEATING DBW 2020 , COMPLEMENTARY HEATING CIRCULATING PUMP	-AF3
-F14 / 10A		39.5	COMPLEMENTARY HEATING AIRTOP 2000	-AF3
-F15 / 15A		39.5	COMPLEMENTARY HEATING AIRTOP 5000	-AF3
-F16 / 20A		39.6	HEATING ACTUATORS , VENTILATOR (HEAT EXCHANGER), VOLAGE SUPPLY SPECIAL FUNCTION AUXILIARY HEATING ON	-AF3
-F17 / 10A		39.6	MIRROR ADJUSTMENT , INDOOR LIGHTING , CIGARETTE LIGHTER , FUSE TESTER	-AF3
-F18 / 20A		39.7	EA-MODUL 1,2 (POWER PACK), VOLAGE SUPPLY DISPLAY UNIT , WORKING HOUR METER , MIRROR HEATING, SEAT HEATING	-AF3
-F19 / 20A		39.4	ENGINE ECU	-AF4
-F20 / 10A		39.5	TRANSMISSION ECU , INTARDER	-AF4
-F21 / 20A		39.5	FUEL PREHEATING	-AF4
-F22 / 30A		39.6	FLAME GLOW PLUG	-AF4
-F23 / 20A		39.6	ENGINE START , CLEARING FUEL	-AF4
-F24 / 10A		39.7	ENGINE STARTER SIGNAL	-AF4
-F25 / 20A		40.1	AIR CONDITIONING EQUIPMENT COUPLING POINT COMPRESSOR , LIGHTING OUTRIGGER	-AF5
-F26 / 20A		40.2	SOCKET ON TRAILER 24V SOCKET 24V SOCKET ON TRAILER 12V , VOLTAGE SUPPLY OW	-AF5
-F27 / 10A		40.2	ADDITIONAL PROJECTOR , VENTILATION FLAP , GENERATOR	-AF5
-F28 / 10A		40.3	HEADLAMP WASHING DEVICE	-AF5
-F29 / 20A		40.3	ABV VEHICLE	-AF5
-F30 / 20A		40.4	ANTI-SKID SYSTEM TRAILER	-AF5

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FUSE		SHEET	FUNCTION	BMK
-F31 / 10A		40.1	RADIO (12V), MULTIMEDIA INTERFACE (12V)	-AF6
-F32 / 10A		40.2	RADIO (12V), SOCKET (12V)	-AF6
-F33 / 15A		40.2	DC-TORQUE CONVERTER (RADIO , MULTIMEDIA INTERFACE , RADIO)	-AF6
-F34 / 20A		40.3	COMPLEMENTARY HEATING	-AF6
-F35 / 10A		40.3	I/O-MODULE 1-5 , TACHOGRAPH , TACHOGRAPH , CHARGING SET (SENSOR), PRESELECTOR CLOCK , RECORDER UNIT	-AF6
-F36 / 20A		40.4	CHARGING SET	-AF6
-F37 / 10A		40.4	AIR DRIER , FUEL PREHEATING , INDOOR LIGHTING , TANK SENSOR , FUNCTION CHECK-BACK SIGNAL	-AF7
-F38 / 10A		40.5	WINDSCREEN WIPER , &EE721; , HOOTER ,TEMPOMAT	-AF7
-F39 / 10A		40.5	WINDOW LIFTER LEFT	-AF7
-F40 / 10A		40.6	WINDOW LIFTER RIGHT	-AF7
-F41 / 10A		40.6	ENGINE ECU TRANSMISSION ECU, TACHOGRAPH	-AF7
-F42 / 10A		40.7	INTARDER , DIAGNOSIS , EMERGENCY SHUTDOWN	-AF7
-F43 / 10A		40.4	I/O-MODULE 1 DIGITAL -/ ANALOG - OUTLETS	-AF8
-F44 / 10A		40.5	AXLE EQUALIZATION , SUSPENSION , ACKNOWLEDGEMENT : DIFFERENTIAL LOCKS	-AF8
-F45 / 10A		40.5	I/O-MODULE 5 DIGITAL -/ ANALOG - OUTLETS	-AF8
-F46 / 10A		40.6	I/O-MODULE 3/4 DIGITAL OUTLETS	-AF8
-F47 / 10A		40.6	I/O-MODULE 3/4 ANALOG OUTLETS	-AF8
-F48 / 10A		40.7	I/O-MODULE 3/4/5 POWER PACK , REAR AXLE STEERING , CODING , PROGRAMMING LSB	-AF8
-F49 / 10A		41.1	FUEL CONDENSATION REMOVAL , KEY BOARD UNIT COMPLEMENTARY HEATING , PRESELECTOR CLOCK , RECOVERY WINCH , APPARATUS RACK	-AF9
-F50 / 10A		41.2	VOLAGE SUPPLY ABV , SOCKET ON TRAILER ABV, RECORDER UNIT , NAVIGATION UNIT , DOLLY	-AF9
-F51 / 10A		41.2	I/O-MODULE 2 DIGITAL OUTLETS	-AF9
-F52 / 10A		41.3	I/O-MODULE 2 ANALOG OUTPUTS	-AF9
-F53 / 10A		41.3	I/O-MODULE 2 IGNITION ON SUPERSTR.	-AF9
-F54 / 10A		41.4	I/O-MODULE 2 IGNITION ON CARRIER	-AF9
-F55 / ..A		41.1	RESERVE	-AF10
-F56 / ..A		41.2	RESERVE	-AF10
-F57 / ..A		41.2	RESERVE	-AF10
-F58 / ..A		41.3	RESERVE	-AF10
-F59 / ..A		41.3	RESERVE	-AF10
-F60 / ..A		41.4	RESERVE	-AF10

FUSE	SHEET	FUNCTION	BMK	
-F61 / ..A	41.4	RESERVE	-AF11	
-F62 / ..A	41.5	RESERVE	-AF11	
-F63 / ..A	41.5	RESERVE	-AF11	
-F64 / ..A	41.6	RESERVE	-AF11	
-F65 / ..A	41.6	RESERVE	-AF11	
-F66 / ..A	41.7	RESERVE	-AF11	
-F67 / ..A	41.4	RESERVE	-AF12	
-F68 / ..A	41.5	RESERVE	-AF12	
-F69 / ..A	41.5	RESERVE	-AF12	
-F70 / ..A	41.6	RESERVE	-AF12	
-F71 / ..A	41.6	RESERVE	-AF12	
-F72 / ..A	41.7	RESERVE	-AF12	
-F99 / 7.5A	94.1	REAR LIGHT RIGHT *	-AF15	
-F100 / 7.5A	94.2	REAR LIGHT LEFT *	-AF15	
-F101 / 7.5A	94.2	STOP LIGHT *	-AF15	
-F102 / 7.5A	94.3	FOG TAIL LAMP *	-AF15	
-F103 / 7.5A	94.3	DIRECTION INDICATOR RIGHT *	-AF15	
-F104 / 7.5A	94.4	DIRECTION INDICATOR LEFT *	-AF15	

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E/I/A		SHEET	FUNCTION	TYPE	PLUG	
E.E1.0	76.6		SUSPENSION R.L. CHECK-BACK SIGNAL 1	E=0...10V,4...20mA	-X612:17	
E.E1.1	76.6		SUSPENSION R.L. CHECK-BACK SIGNAL 2	E=0...10V,4...20mA	-X612:15	
E.E1.2	76.7		SUSPENSION R.R. CHECK-BACK SIGNAL 1	E=0...10V,4...20mA	-X612:13	
E.E1.3	76.8		SUSPENSION R.R. CHECK-BACK SIGNAL 2	E=0...10V,4...20mA	-X612:11	
E.E1.4	72.5		BRAKE PRESSURE 1 SENSOR STOP LIGHT	E=0...10V	-X612:9	
E.E1.5	72.3		BRAKE PRESSURE 2 SENSOR STOP LIGHT	E=0...10V	-X612:7	
E.E1.6	75.7		SUSPENSION SUSPENSION ACTIVATED	E=0...10V	-X612:5	
E.E1.7				E=0...10V	-X612:3	
E.S1.4	72.6		BRAKE PRESSURE 1 SENSOR STOP LIGHT	A=10mA	-X612:10	
E.S1.5	72.4		BRAKE PRESSURE 2 SENSOR STOP LIGHT	A=10mA	-X612:8	
E.S1.6				A=10mA	-X612:6	
E.S1.7				A=10mA	-X612:4	
E.DE1.0	76.2		SUSPENSION F.L. CHECK-BACK SIGNAL 1	E=HIGH>4V/LOW<2V	-X612:18	
E.DE1.1	76.3		SUSPENSION F.L. CHECK-BACK SIGNAL 2	E=HIGH>4V/LOW<2V	-X612:16	
E.DE1.2	76.4		SUSPENSION F.R. CHECK-BACK SIGNAL 1	E=HIGH>4V/LOW<2V	-X612:14	
E.DE1.3	76.5		SUSPENSION F.R. CHECK-BACK SIGNAL 2	E=HIGH>4V/LOW<2V	-X612:12	
E.VCCEA1.1				-	-X611:11	
E.VCCEA1.2	44.2		E.DEA1.0 / 1 / 2 / 3 / 4 / 5 / 6 / 7	-	-X611:9	
E.DEA1.0	76.2		FILLING F.L. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:17	
E.DEA1.0	76.2		FILLING F.L. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:17	
E.DEA1.1	76.3		LOWERING F.L. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:15	
E.DEA1.2	76.4		FILLING F.R. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:13	
E.DEA1.3	76.5		LOWERING F.R. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:11	
E.DEA1.4	76.6		FILLING R.L. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:9	
E.DEA1.5	76.6		LOWERING R.L. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:7	
E.DEA1.6	76.7		FILLING R.R. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:5	
E.DEA1.7	76.8		LOWERING R.R. VALVE	E=HIGH>4V/LOW<2V(A=24V/2A)	-X613:3	
E.VCCA1.0	44.1		E.A1.0 / 1 / 2 / 3	-	-X611:1	
E.VCCA1.1				-	-X611:3	
E.VCCA1.2				-	-X611:5	
E.VCCA1.3				-	-X611:7	
E.A1.0	71.3		PARKING BRAKE VALVE	A=24V/8A	-X613:18	
E.A1.1	53.6		VENTILATION FLAP OPTION	A=24V/8A	-X613:16	
E.A1.2	92.2		STOP LIGHT	A=24V/8A	-X613:14	
E.A1.3				A=24V/8A	-X613:12	
E.GNDMESS1.1				E=0...10A	-X611:18	

E/I/A		SHEET	FUNCTION	TYPE	PLUG	
E.E2.0	38.3	IGNATION SWITCH 50 UW		E=0...10V,4...20mA	-X622:17	
E.E2.1	38.5	IGNATION SWITCH 50 OW		E=0...10V,4...20mA	-X622:15	
E.E2.2				E=0...10V,4...20mA	-X622:13	
E.E2.3				E=0...10V,4...20mA	-X622:11	
E.E2.4	72.1	COMPRESSED-AIR RESERVE I SENSOR		E=0...10V	-X622:9	
E.E2.5	72.3	COMPRESSED-AIR RESERVE II SENSOR		E=0...10V	-X622:7	
E.E2.6	72.5	COMPRESSED-AIR RESERVE III SENSOR		E=0...10V	-X622:5	
E.E2.7				E=0...10V	-X622:3	
E.S2.4	72.2	COMPRESSED-AIR RESERVE I SENSOR		A=10mA	-X622:10	
E.S2.5	72.4	COMPRESSED-AIR RESERVE II SENSOR		A=10mA	-X622:8	
E.S2.6	72.6	COMPRESSED-AIR RESERVE III SENSOR		A=10mA	-X622:6	
E.S2.7				A=10mA	-X622:4	
E.DE2.0	38.4	IGNATION SWITCH 15 UW / OW		E=HIGH>4V/LOW<2V	-X622:18	
E.DE2.1	38.1	IGNATION SWITCH 15 UW		E=HIGH>4V/LOW<2V	-X622:16	
E.DE2.2	38.6	IGNATION SWITCH 15 OW		E=HIGH>4V/LOW<2V	-X622:14	
E.DE2.3				E=HIGH>4V/LOW<2V	-X622:12	
E.VCCEA2.1				-	-X621:11	
E.VCCEA2.2	44.8	E.DEA2.0 / 1 / 2 / 3 / 4 / 5 / 6 / 7		-	-X621:9	
E.DEA2.0				E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:17	
E.DEA2.1	63.4	CHANGE-OVER VALVE CARRIER		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:15	
E.DEA2.2				E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:13	
E.DEA2.3	75.6	SUSPENSION LOCKED VALVE		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:11	
E.DEA2.4	75.7	SUSPENSION SUSPENSION ACTIVATED VALVE		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:9	
E.DEA2.5	74.4	TRANSVERSAL DIFF. AXLE 1/2		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:7	
E.DEA2.6	74.2	LONGITUDINAL DIFF. TRANSF. CASE VALVE		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:5	
E.DEA2.7	74.6	TRANSVERSAL DIFF. AXLE 3+4		E=HIGH>4V/LOW<2V(A=24V/2A)	-X623:3	
E.VCCA2.0	44.7	E.A2.0 / 1 / 2 / 3		-	-X621:1	
E.VCCA2.1				-	-X621:3	
E.VCCA2.2				-	-X621:5	
E.VCCA2.3				-	-X621:7	
E.A2.0	63.3	CHANGE-OVER VALVE SUPERSTRUCTURE		A=24V/8A	-X623:18	
E.A2.1				A=24V/8A	-X623:16	
E.A2.2	64.2	STEERING MOTOR LEFT SUPERSTRUCTURE		A=24V/8A	-X623:14	
E.A2.3	64.2	STEERING MOTOR RIGHT SUPERSTRUCTURE		A=24V/8A	-X623:12	
E.GNDMESS2.1	64.3	CURRENT MEASUREMENT		E=0...10A	-X621:18	

E/I/A	SHEET	FUNCTION	TYPE	PLUG	
E.E3.0	77.5	INITIAL TENSION CENTERING CYLINDER	E=0...10V,4...20mA	-X632:17	
E.E3.1			E=0...10V,4...20mA	-X632:15	
E.E3.2			E=0...10V,4...20mA	-X632:13	
E.E3.3			E=0...10V,4...20mA	-X632:11	
E.E3.4	79.1	ANGLE TRANSMITTER I AXLE 1	E=0...10V	-X632:9	
E.E3.5	79.3	ANGLE TRANSMITTER II AXLE 3	E=0...10V	-X632:7	
E.E3.6	79.4	ANGLE TRANSMITTER III AXLE 4	E=0...10V	-X632:5	
E.E3.7	77.7	CENTERING CIRCUIT REAR AXLE STEERING	E=0...10V	-X632:3	
E.S3.4	77.5	INITIAL TENSION CENTERING CYLINDER	A=10mA	-X632:10	
E.S3.5			A=10mA	-X632:8	
E.S3.6			A=10mA	-X632:6	
E.S3.7			A=10mA	-X632:4	
E.DE3.0	74.2	LONGITUDINAL DIFF. TRANSF. CASE AXLE 1/3	E=HIGH>4V/LOW<2V	-X632:18	
E.DE3.1	74.4	TRANSVERSAL DIFF. AXLE 1	E=HIGH>4V/LOW<2V	-X632:16	
E.DE3.2	74.6	TRANSVERSAL DIFF. AXLE 3+4	E=HIGH>4V/LOW<2V	-X632:14	
E.DE3.3	45.6	CODING CODE -	E=HIGH>4V/LOW<2V	-X632:12	
E.VCCEA3.1			-	-X631:11	
E.VCCEA3.2	44.2	E.DEA3.0 / 1 / 2 / 3 / 4 / 5 / 6 / 7	-	-X631:9	
E.DEA3.0	82.2	SLIDING BEAM F.R. EXTEND	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:17	
E.DEA3.1	82.3	SLIDING BEAM F.R. RETRACT	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:15	
E.DEA3.2	82.3	SUPPORT F.R. DOWN	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:13	
E.DEA3.3	82.4	SUPPORT F.R. UP	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:11	
E.DEA3.4	82.5	SLIDING BEAM R.R. EXTEND	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:9	
E.DEA3.5	82.6	SLIDING BEAM R.R. RETRACT	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:7	
E.DEA3.6	82.7	SUPPORT R.R. DOWN	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:5	
E.DEA3.7	82.7	SUPPORT R.R. UP	E=HIGH>4V/LOW<2V(A=24V/2A)	-X633:3	
E.VCCA3.0	44.3	E.A3.0 / 1 / 2 / 3	-	-X631:1	
E.VCCA3.1			-	-X631:3	
E.VCCA3.2			-	-X631:5	
E.VCCA3.3			-	-X631:7	
E.A3.0	77.3	REAR AXLE STEERING CENTERING VALVE	A=24V/8A	-X633:18	
E.A3.1	83.5	OIL SUPPLY SUSPENSION	A=24V/8A	-X633:16	
E.A3.2			A=24V/8A	-X633:14	
E.A3.3	77.6	BLOCKING VALVE AXLE 3,4	A=24V/8A	-X633:12	
E.GNDMESS3.1	77.4	REAR AXLE STEERING CURRENT MEASUREMENT	E=0...10A	-X631:18	

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E/I/A		SHEET	FUNCTION	TYPE	PLUG	
E.E4.0	64.5	STEERING PUMP		E=0...10V,4...20mA	-X642:17	
E.E4.1				E=0...10V,4...20mA	-X642:15	
E.E4.2				E=0...10V,4...20mA	-X642:13	
E.E4.3	64.7	AUXILIAIRY STEERING PUMP		E=0...10V,4...20mA	-X642:11	
E.E4.4	77.7	CENTERING CIRCUIT REAR AXLE STEERING		E=0...10V	-X642:9	
E.E4.5	80.5	ANGLE TRANSMITTER III AXLE 4		E=0...10V	-X642:7	
E.E4.6	80.6	ANGLE TRANSMITTER II AXLE 3		E=0...10V	-X642:5	
E.E4.7	80.7	ANGLE TRANSMITTER I AXLE 1		E=0...10V	-X642:3	
E.S4.4	64.5	STEERING PUMP		A=10mA	-X642:10	
E.S4.5				A=10mA	-X642:8	
E.S4.6				A=10mA	-X642:6	
E.S4.7	64.7	AUXILIAIRY STEERING PUMP		A=10mA	-X642:4	
E.DE4.0				E=HIGH>4V/LOW<2V	-X642:18	
E.DE4.1				E=HIGH>4V/LOW<2V	-X642:16	
E.DE4.2	102.5	COMPLEMENTARY HEATING DIAGNOSIS		E=HIGH>4V/LOW<2V	-X642:14	
E.DE4.3	45.5	CODING CODE +		E=HIGH>4V/LOW<2V	-X642:12	
E.VCCEA4.1				-	-X641:11	
E.VCCEA4.2	44.1	E.DEA4.0 / 1 / 2 / 3 / 4 / 5 / 6 / 7		-	-X641:9	
E.DEA4.0	81.2	SLIDING BEAM F.L. EXTENDED		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:17	
E.DEA4.1	81.3	SLIDING BEAM F.L. RETRACT		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:15	
E.DEA4.2	81.3	SUPPORT F.L. DOWN		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:13	
E.DEA4.3	81.4	SUPPORT F.L. UP		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:11	
E.DEA4.4	81.5	SLIDING BEAM R.L. EXTEND		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:9	
E.DEA4.5	81.6	SLIDING BEAM R.L. RETRACT		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:7	
E.DEA4.6	81.7	SUPPORT R.L. DOWN		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:5	
E.DEA4.7	81.7	SUPPORT R.L. UP		E=HIGH>4V/LOW<2V(A=24V/2A)	-X643:3	
E.VCCA4.0	44.4	E.A4.0 / 1 / 2 / 3		-	-X641:1	
E.VCCA4.1				-	-X641:3	
E.VCCA4.2				-	-X641:5	
E.VCCA4.3				-	-X641:7	
E.A4.0	77.6	BLOCKING VALVE AXLE 3,4		A=24V/8A	-X643:18	
E.A4.1	77.4	EMERGENCY SUPPLY CENTERING CYLINDER		A=24V/8A	-X643:16	
E.A4.2				A=24V/8A	-X643:14	
E.A4.3	77.2	REAR AXLE STEERING CENTERING VALVE		A=24V/8A	-X643:12	
E.GNDMESS4.1	77.1	REAR AXLE STEERING CURRENT MEASUREMENT		E=0...10A	-X641:18	

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E/I/A		SHEET	FUNCTION	TYPE	PLUG	
E.E5.0	61.7	SET-		E=0...10V,4...20mA	-X652:17	
E.E5.1	61.6	SET+		E=0...10V,4...20mA	-X652:15	
E.E5.2	61.8	AUS		E=0...10V,4...20mA	-X652:13	
E.E5.3	61.7	QUIT		E=0...10V,4...20mA	-X652:11	
E.E5.4	68.4	ACKNOWLEDGEMENT ROAD GEAR		E=0...10V	-X652:9	
E.E5.5	68.5	ACKNOWLEDGEMENT OFF- ROAD GEAR		E=0...10V	-X652:7	
E.E5.6	68.8	TRANSFER CASE NEUTRAL		E=0...10V	-X652:5	
E.E5.7	63.7	TANK CONTENTS SIGNAL		E=0...10V	-X652:3	
E.S5.4				A=10mA	-X652:10	
E.S5.5				A=10mA	-X652:8	
E.S5.6				A=10mA	-X652:6	
E.S5.7	63.8	TANK CONTENTS SUPPLY		A=10mA	-X652:4	
E.DE5.0				E=HIGH>4V/LOW<2V	-X652:18	
E.DE5.1				E=HIGH>4V/LOW<2V	-X652:16	
E.DE5.2				E=HIGH>4V/LOW<2V	-X652:14	
E.DE5.3				E=HIGH>4V/LOW<2V	-X652:12	
E.VCCEA5.1				-	-X651:11	
E.VCCEA5.2	44.4	E.DEA5.0 / 1 / 2 / 3 / 4 / 5 / 6 / 7		-	-X651:9	
E.DEA5.0				E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:17	
E.DEA5.1				E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:15	
E.DEA5.2				E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:13	
E.DEA5.3	68.6	TRANSFER CASE OFF- ROAD GEAR		E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:11	
E.DEA5.4	68.6	TRANSFER CASE ROAD GEAR		E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:9	
E.DEA5.5	61.5	TEMPOSET		E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:7	
E.DEA5.6	71.8	PARKING BRAKE		E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:5	
E.DEA5.7	71.7	SERVICE BRAKE STOP LIGHT		E=HIGH>4V/LOW<2V(A=24V/2A)	-X653:3	
E.VCCA5.0	44.3	E.A5.0 / 1 / 2 / 3		-	-X651:1	
E.VCCA5.1				-	-X651:3	
E.VCCA5.2				-	-X651:5	
E.VCCA5.3				-	-X651:7	
E.A5.0	61.2	STEERING COLUMN SWITCH RIGHT		A=24V/8A	-X653:18	
E.A5.1	61.5	ENGINE BRAKE VALVE		A=24V/8A	-X653:16	
E.A5.2				A=24V/8A	-X653:14	
E.A5.3				A=24V/8A	-X653:12	
E.GNDMESS5.1				E=0...10A	-X651:18	

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	I/O-MODULE 5 DISPOSITION	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 17
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

E/I/A	SHEET	FUNCTION	TYPE	PLUG	
B.E1.0	102.3	AUXILIARY HEATING ON CHECK-BACK SINGAL	E=24V	-X711:9	
B.E1.1	102.6	AUXILIARY HEATING VENTILATOR AFTER-RUNNING	E=24V	-X711:7	
B.E1.2			E=24V	-X711:5	
B.E1.3	101.5	AUXILIARY HEATING PRESETTING DIAL	E=24V	-X711:3	
B.E1.4	111.4	AIR-CONDITIONER PUSH-BUTTON	E=24V	-X712:8	
B.E1.5	85.8	HOOTER	E=24V	-X712:6	
B.E1.6	75.6	SUSPENSION LOCKED	E=24V	-X712:4	
B.30F1.10	43.6	B.A1.0/1/2/3/4/5/ 7/11	24V	-X713:4	
B.A1.0	100.4	HEATING CIRCULATING/FRESH AIR	A=1A	-X711:18	
B.A1.1	100.4	HEATING CIRCULATING/FRESH AIR	A=1A	-X711:16	
B.A1.2	100.5	HEATING FOOT SPACE/ FRONT PANE	A=1A	-X711:14	
B.A1.3	100.6	HEATING FOOT SPACE/ FRONT PANE	A=1A	-X711:12	
B.A1.4	100.7	HEATING ENGINE/DRIVING CAB	A=1A	-X711:10	
B.A1.5	100.8	HEATING ENGINE/DRIVING CAB	A=1A	-X711:8	
B.A1.6			A=1A	-X711:6	
B.A1.7	102.1	COMPLEMENTARY HEATING CIRCULATING PUMP	A=1A	-X711:4	
B.A1.11	102.3	AUXILIARY HEATING ON	A=2A	-X711:11	
B.15F1.1	43.5	B.A1.12 / 13 / 14	24V	-X712:1	
B.A1.12	111.6	AIR-CONDITIONER COUPLING COMPRESS.	A=2A	-X712:18	
B.A1.14			A=2A	-X712:14	
B.15F1.12	43.8	B.A1.15 / 16 / 20	24V	-X713:1	
B.A1.15			A=2A	-X712:12	
B.A1.16			A=1A	-X712:10	
B.A1.20	102.3	AUXILIARY HEATING VALVE MOTOR	A=1A	-X712:11	
B.30F1.11	43.7	B.A1.17 / 18 / 19 / VCCBAT1.1	24V	-X713:3	
B.A1.17	96.6	MIRROR HEATING	A=8A	-X712:17	
B.A1.18	116.3	HEATING DRIVER'S SEAT	A=8A	-X712:15	
B.A1.19	116.5	HEAT. CO-DRIVER'S SEAT	A=8A	-X712:13	
B.VCCBAT1.1	43.3	SPECIAL FUNCTION BATTERY +	A=2A	-X711:1	

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	KEY BOARD UNIT DISPOSITION TYPE C
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
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Blatt 18
von 153

1	2	3	4	5	6	7	8

E/I/A		SHEET	FUNCTION	TYPE	PLUG	
B.30F1.2	43.4	B.A1.21 / 22 / 23		24V	-X712:3	
B.A1.21				A=15A	-X712:9	
B.A1.22	92.5	REVERSING LAMPS WARNING SIGNAL		A=15A	-X712:7	
B.A1.23	85.8	HOOTER		A=15A	-X712:5	
B.30F1.9	100.8	B.A1.8 / 9 / 10		24V	-X713:6	
B.A1.8	100.1	VENTILATOR STEP 1		A=15A	-X711:17	
B.A1.9	100.2	VENTILATOR STEP 2		A=15A	-X711:15	
B.A1.10	100.3	VENTILATOR STEP 3		A=15A	-X711:13	
B.15F1.1	43.5	B.A1.12 / 13 / 14		24V	-X712:1	
B.A1.13	95.5	LIGHTING SLIDING BEAMS		A=15A	-X712:16	
B.15F1.3	84.6	LIGHT		24V	-X713:18	
B.A1.24	84.6	LIGHT		A=15A	-X713:17	
B.30F1.4	84.6	PARKING LIGHT		24V	-X713:16	
B.A1.25	84.6	PARKING LIGHT		A=15A	-X713:15	
B.15F1.5	87.4	FOG LAMP		24V	-X713:14	
B.A1.26	87.4	FOG LAMP		A=15A	-X713:13	
B.15F1.6	92.3	REAR FOG LAMP		24V	-X713:12	
B.A1.27	92.3	REAR FOG LAMP		A=15A	-X713:11	
B.30F1.7	88.3	WARNING BEACON		24V	-X713:10	
B.A1.28	88.3	WARNING BEACON		A=15A	-X713:9	
B.30F1.8	85.3	B.A1.29 / 30		24V	-X713:8	
B.A1.29	85.4	DIRECTION INDICATOR LEFT		A=15A	-X713:7	
B.A1.30	85.4	DIRECTION INDICATOR RIGHT		A=15A	-X713:5	

A B C E F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	KEY BOARD UNIT DISPOSITION TYPE C
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

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Zeich-Nr. 3272-920.06.01.000-002

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+ H
Blatt 19
von 153

E/I/A		SHEET	FUNCTION	TYPE	PLUG	
B.15F2.1	43.1		VOLTAGE SUPPLY	24V	-X721:1	
B.E2.0	84.3		LIGHT	E=24V,H=24V	-X721:18	
B.E2.1	84.2		MAIN BEAM	E=24V,H=24V	-X721:16	
B.E2.2	102.4		AUXILIARY HEATING ON CHECK-BACK SINGAL	E=24V,H=24V	-X721:14	
B.E2.3	121.8		RECOVERY WINCH	E=24V,H=24V	-X721:12	
B.E2.4	121.7		SWITCH ON SUPPORTING SHIELD, REAR	E=24V,H=24V	-X721:10	
B.E2.5	115.7		ANTI-SKID SYSTEM TRAILER CHECK-BAKC SIGNAL	E=24V,H=24V	-X721:8	
B.E2.11				E=24V,H=24V	-X721:11	
B.E2.12				E=24V,H=24V	-X721:9	
B.E2.13	124.2		DOLLY OPERATION	E=24V,H=24V	-X721:7	
B.E2.6				E=24V	-X721:6	
B.E2.7	59.5		AIR FILTER	E=24V	-X721:4	
B.E2.8	85.4		DIRECTION INDICATOR LEFT	E=24V	-X721:17	
B.E2.9	85.4		DIRECTION INDICATOR RIGHT	E=24V	-X721:15	
B.E2.10	100.6		ACTUATING DRIVE DIAGNOSIS	E=24V	-X721:13	
B.E2.14	52.5		GENERATOR D+ INPUT	E=24V	-X721:5	
B.A2.0	52.5		GENERATOR D+ OUTPUT	A=2A	-X721:3	

A
B
C
E
F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DISPLAY UNIT DISPOSITION
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
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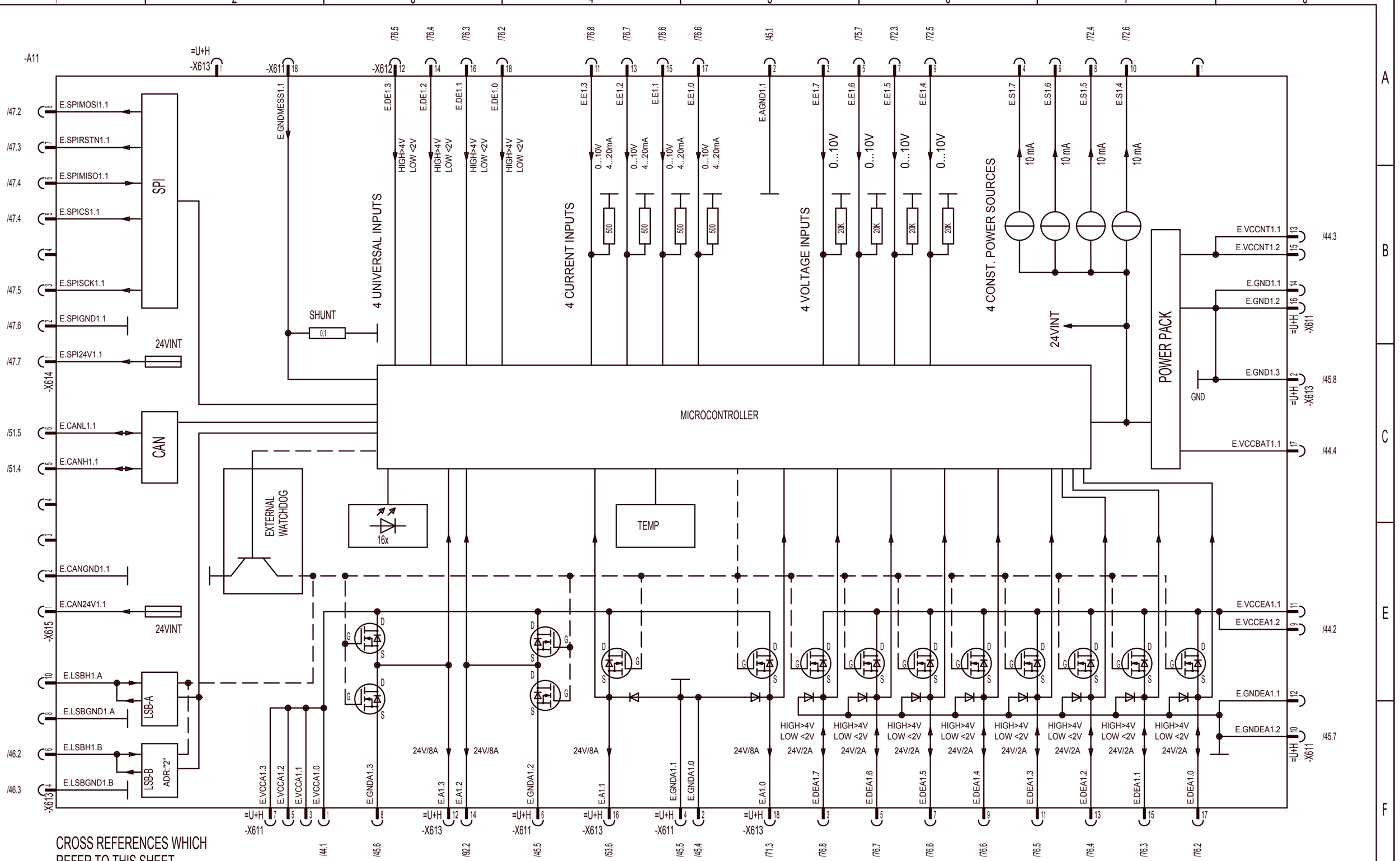
Blatt 20
von 153



CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

I/O-MODULE 1

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

=	U
+	H
Blatt	21
von	153

-A12

=U+H -X623

-X621

-X622

E.GNDMESS2.1

SHUNT 0,1

4 UNIVERSAL INPUTS

4 CURRENT INPUTS

4 VOLTAGE INPUTS

4 CONST. POWER SOURCES

SPI

E.SPIMOSI2.1 /48.2

E.SPIRSTN2.1 /48.3

E.SPIMISO2.1 /48.4

E.SPICS2.1 /48.4

E.SPISCK2.1 /48.5

E.SPIGND2.1 /48.6

E.SPI24V2.1 /48.7

24VINT

-X624

CAN

E.CANL2.1 /51.3

E.CANH2.1 /51.3

E.CANGND2.1

E.CAN24V2.1

24VINT

-X625

LSB-A

E.LSBH2.A

E.LSBGND2.A

LSB-B ADR:"3"

E.LSBH2.B /46.4

E.LSBGND2.B /46.5

-X623

MICROCONTROLLER

EXTERNAL WATCHDOG

16x

TEMP

24V/8A

24V/2A

HIGH>4V LOW <2V

0...10V 4...20mA

0...10V

10 mA

500

20K

24VINT

POWER PACK

E.VCCNT2.1 /44.6

E.VCCNT2.2

E.GND2.1

E.GND2.2

=U+H -X621

E.GND2.3 /45.4

GND

=U+H -X623

E.VCCBAT2.1 /44.5

E.VCCEA2.1

E.VCCEA2.2 /44.8

E.GNDEA2.1

E.GNDEA2.2 /45.3

=U+H -X621

CROSS REFERENCES WHICH REFER TO THIS SHEET ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

I/O-MODULE 2

Ident-Nr. 984583708

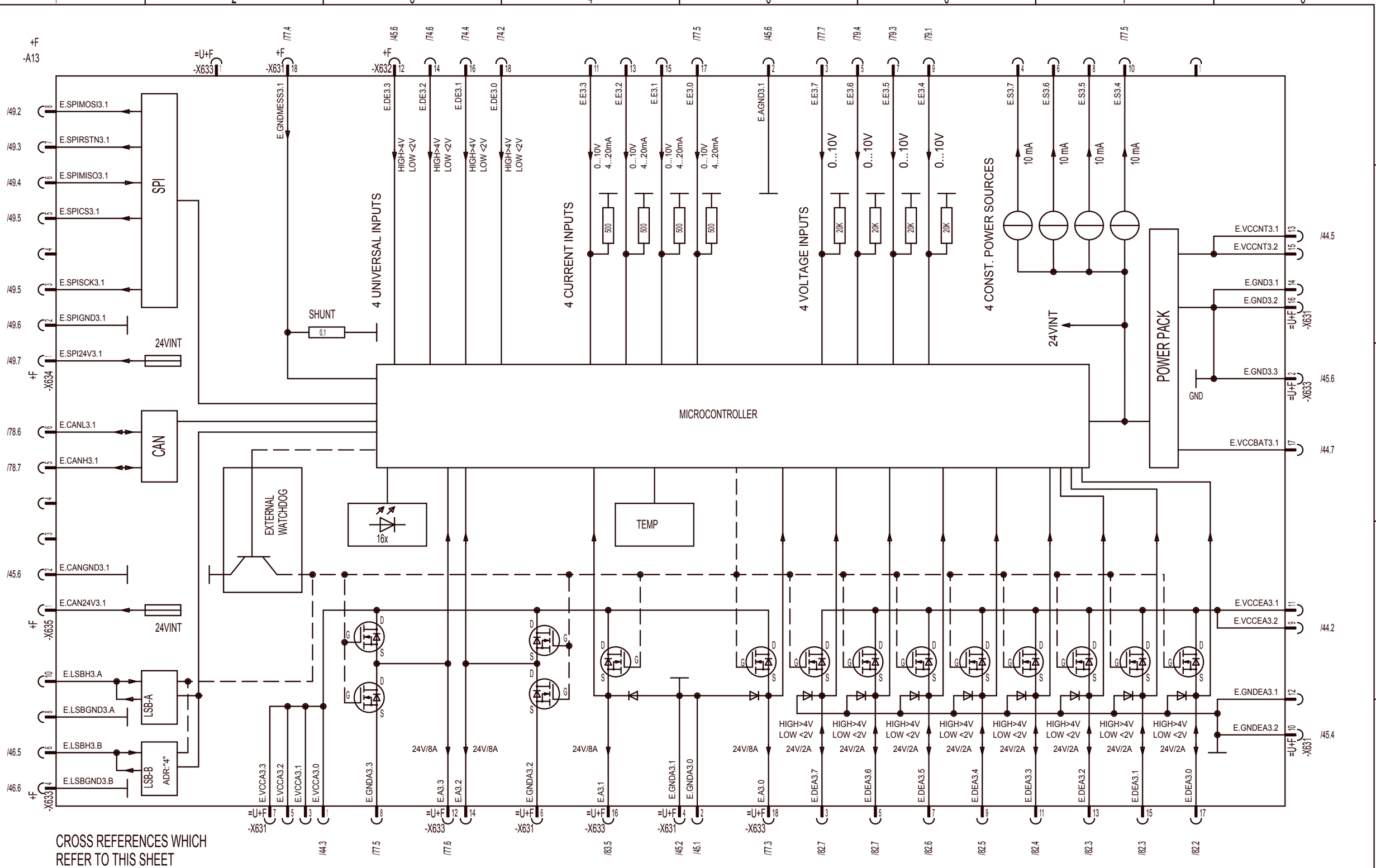
Zeich-Nr. 3272-920.06.01.000-002

= U

+ H

Blatt 22

von 153

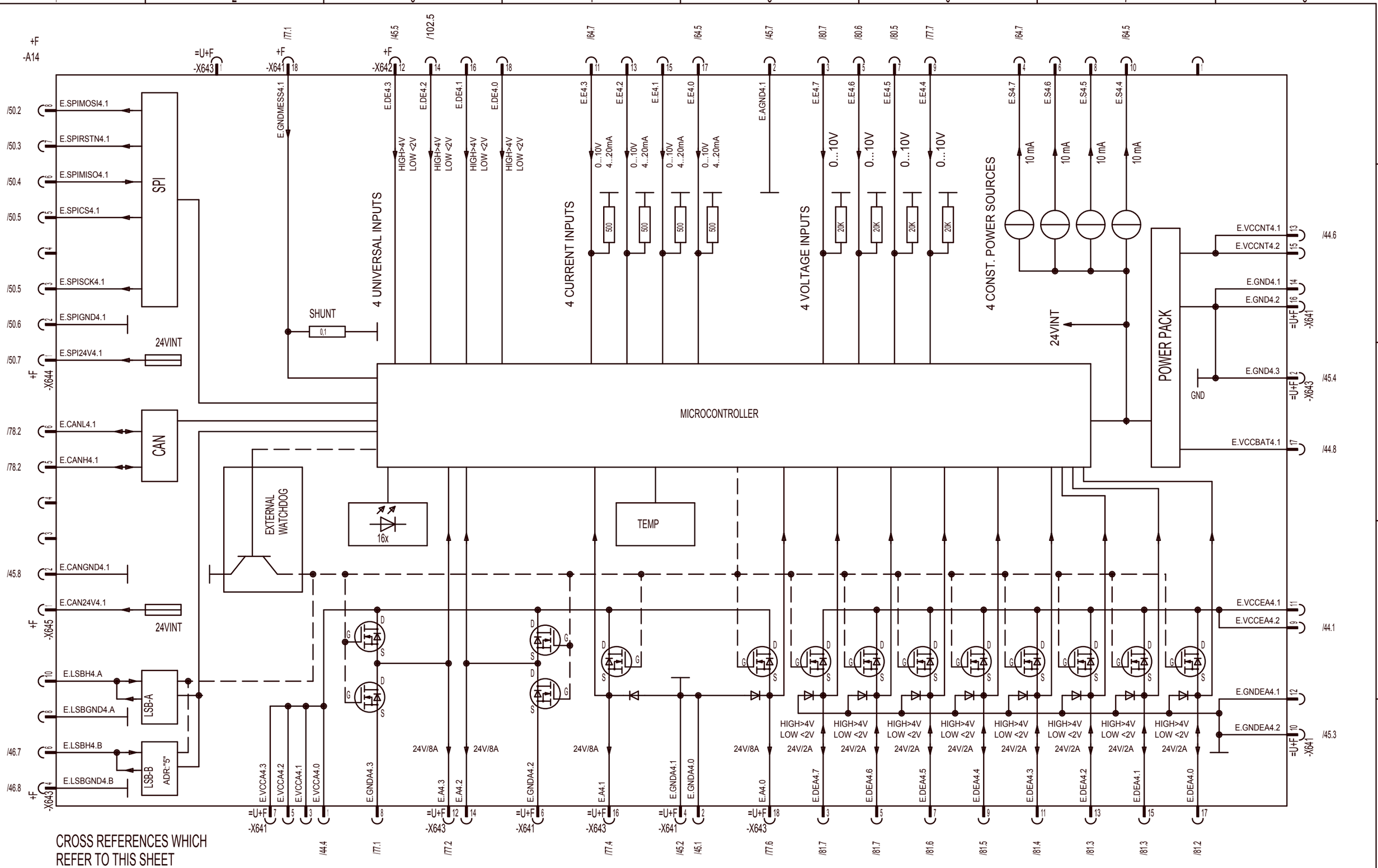


CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3			Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	I/O-MODULE 3
2			Ausgabe	03.02.06	lwerof0		
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	23
von	153



CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	I/O-MODULE 4	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

=	U
+	H
Blatt	24
von	153

-A15

=U+H -X653

-X651

-X652

E.SPIMOSI5.1
E.SPIRSTN5.1
E.SPIMISO5.1
E.SPICS5.1
E.SPISCK5.1
E.SPIGND5.1
E.SPI24V5.1
-X654

SPI

24VINT

E.GNDMESS5.1

SHUNT 0,1

4 UNIVERSAL INPUTS

E.DE5.3 HIGH>4V LOW <2V
E.DE5.2 HIGH>4V LOW <2V
E.DE5.1 HIGH>4V LOW <2V
E.DE5.0 HIGH>4V LOW <2V

4 CURRENT INPUTS

/61.7 /61.8 /61.6 /61.7

E.E5.3 E.E5.2 E.E5.1 E.E5.0
0...10V 4...20mA
500

E.AGND5.1

4 VOLTAGE INPUTS

/45.3 /63.7 /68.8 /68.5 /68.4

E.E5.7 E.E5.6 E.E5.5 E.E5.4
0...10V
20K

4 CONST. POWER SOURCES

/63.8

E.S5.7 E.S5.6 E.S5.5 E.S5.4
10 mA

24VINT

POWER PACK

E.VCCNT5.1
E.VCCNT5.2
E.GND5.1
E.GND5.2
=U+H -X651
E.GND5.3
GND
=U+H -X653
E.VCCBAT5.1
/44.5
/45.7
/44.6

MICROCONTROLLER

/51.2 E.CANL5.1
/51.1 E.CANH5.1
E.CANGND5.1
E.CAN24V5.1
-X655

CAN

EXTERNAL WATCHDOG

16x

TEMP

E.LSBH5.A
E.LSBGND5.A
/46.5 E.LSBH5.B
/46.6 E.LSBGND5.B
-X653

LSB-A

LSB-B ADR:"6"

E.VCCEA5.1
E.VCCEA5.2
/44.4

E.GNDEA5.1
E.GNDEA5.2
=U+H -X651
/45.6

24V/8A

HIGH>4V LOW <2V
24V/2A

E.VCCA5.3 E.VCCA5.2 E.VCCA5.1 E.VCCA5.0
E.GNDA5.3
E.A5.3 E.A5.2
E.GNDA5.2
E.A5.1
E.GNDA5.1 E.GNDA5.0
E.A5.0
E.DEA5.7 E.DEA5.6 E.DEA5.5 E.DEA5.4 E.DEA5.3 E.DEA5.2 E.DEA5.1 E.DEA5.0

=U+H -X651 /44.3
=U+H -X653 /61.5
=U+H -X651 /45.5 /45.5
=U+H -X653 /61.2
/71.7 /71.8 /61.5 /68.6 /68.6

CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

I/O-MODULE 5

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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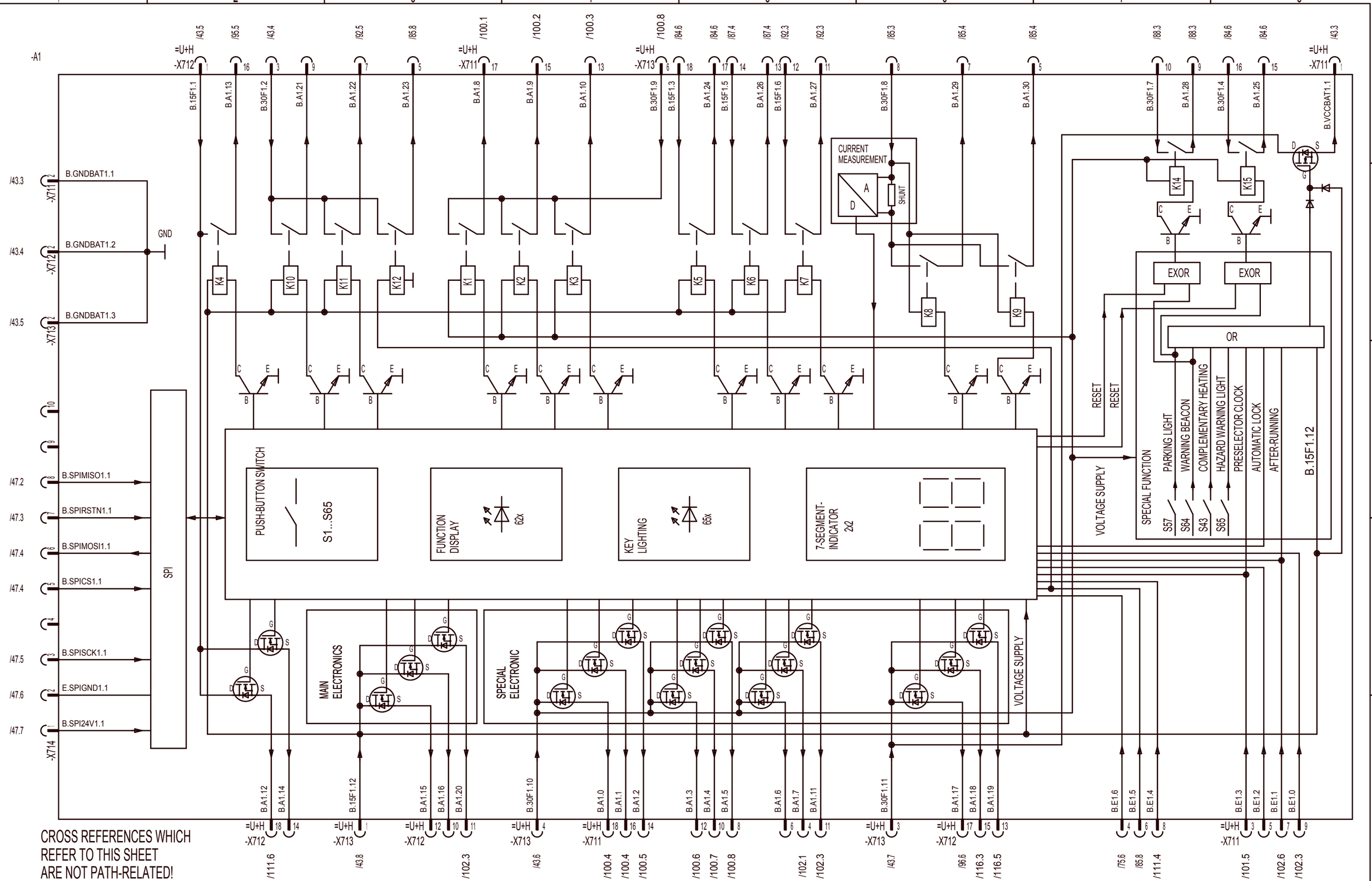

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	KEY BOARD UNIT DRIVER'S CAB TYPE C
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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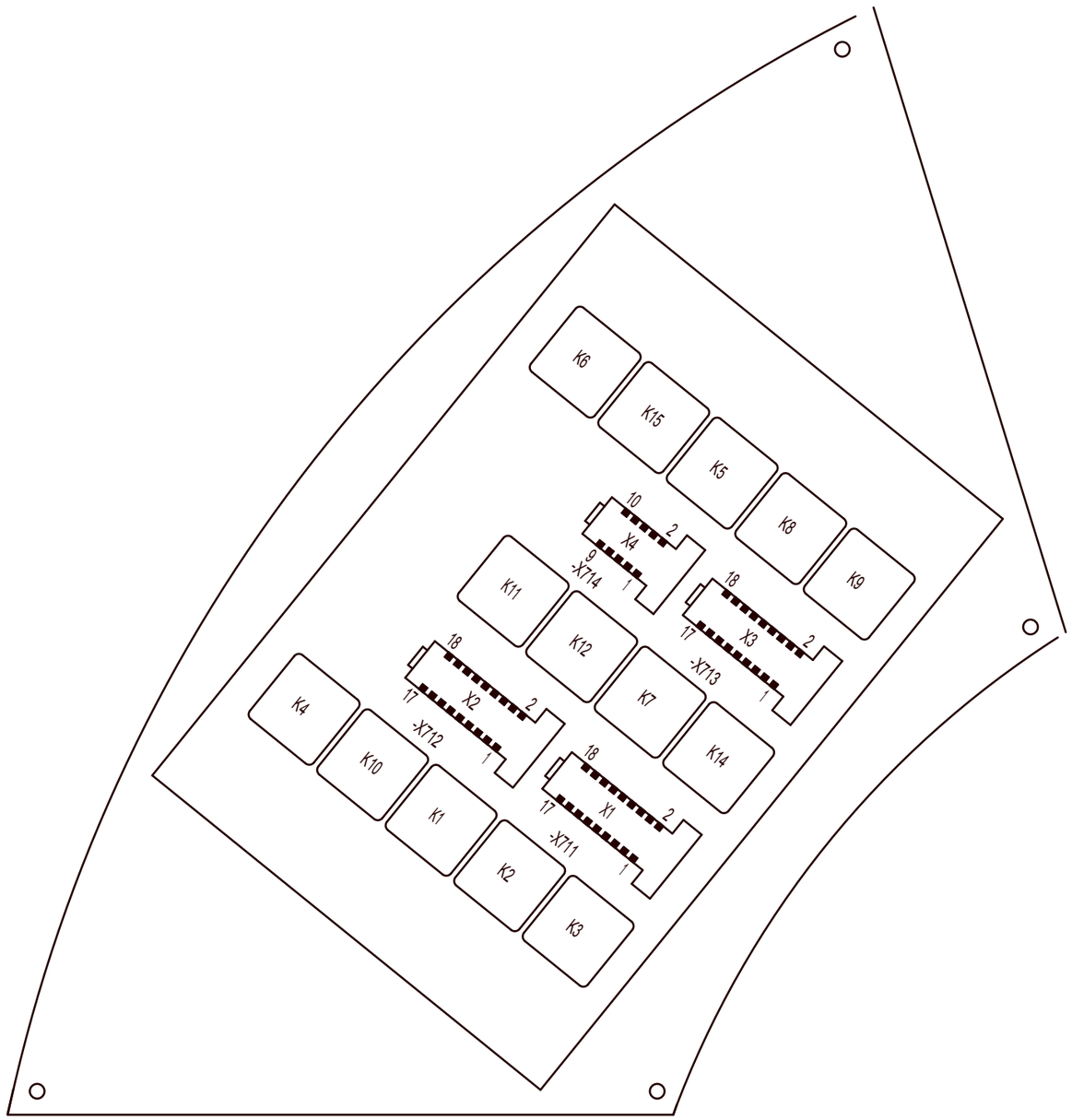
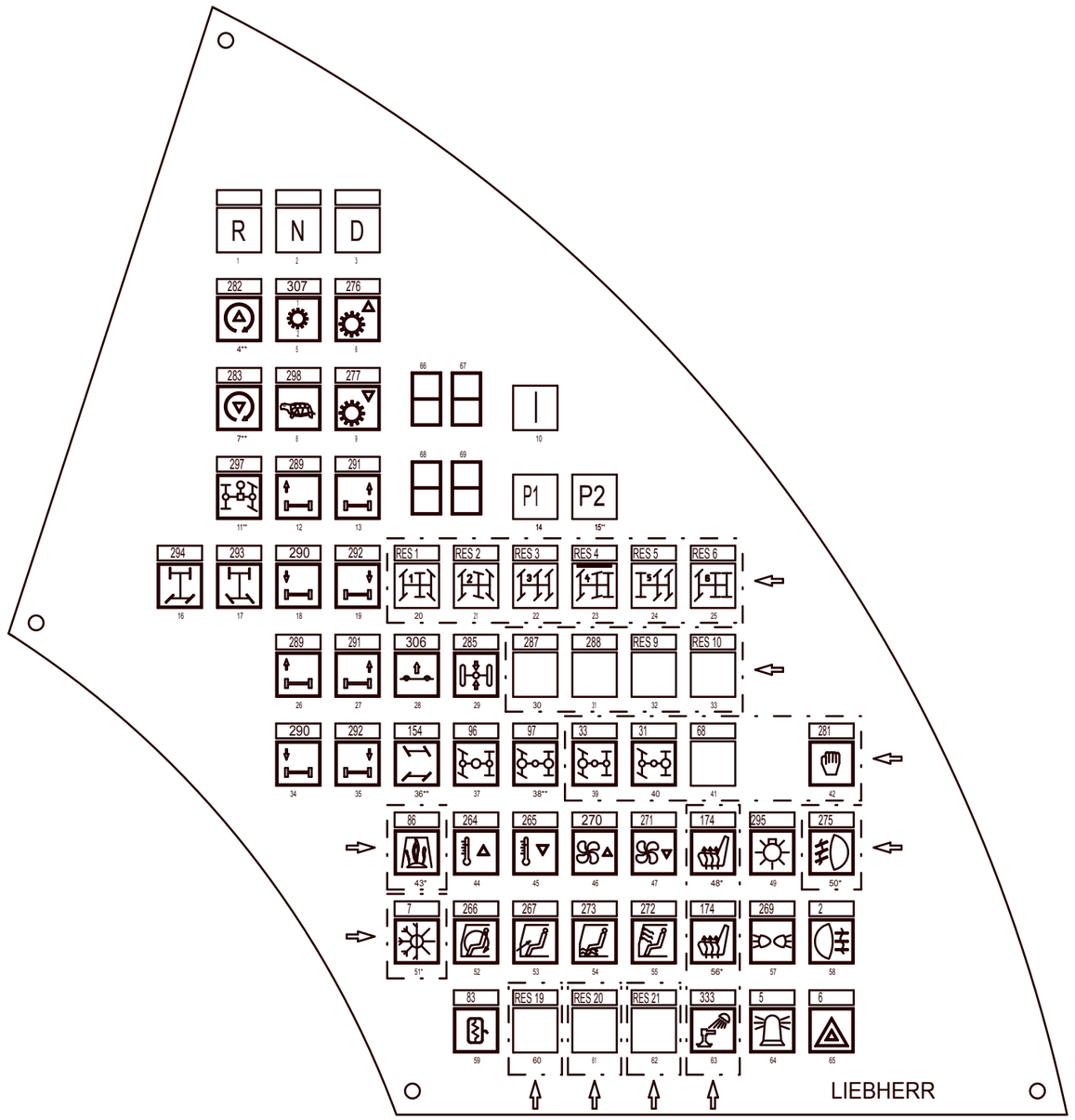
+	H
Blatt	26
von	153



REAR VIEW



* OPTION
** WITHOUT FUNCTION

FRONT VIEW

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

KEY BOARD UNIT DRIVER'S CAB

TYPE C

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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Blatt	27
von	153

-A5

/48.2 E.SPIMISO2.1
/48.3 E.SPIRSTN2.1
/48.4 E.SPIMOSI2.1
/48.4 E.SPICS2.1
/48.5 E.SPISCK2.1
/48.6 E.SPIGND2.1
/48.7 E.SPI24V2.1
-X724

SPI

DISPLAY BAR GRAPH 10x
40x
7-SEGMENT-INDICATOR 3x4

VOLAGE SUPPLY

DIRECT CONTROL

113 112 111 128 127 126 101 116 117

FERNLICHT

CHARACTERISTIC FEATURE D+
CHARGE CONTROL BATTERY

200 5W
16-18V

D
G
S
8A

D+

B.GNDBAT2.1 -X721 /43.1
B.E2.10 /100.6
B.E2.9 /85.4
B.E2.8 /85.4
B.E2.7 /59.5
B.E2.6
B.E2.13 /124.2
B.E2.12
B.E2.11 /115.7
B.E2.5
B.E2.4 /121.7
B.E2.3 /121.8
B.E2.2 /102.4
B.E2.1 /84.2
B.E2.0 /84.3
B.15F2.1 /43.1
B.E2.14 /52.5
B.A2.0 /52.5

CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

DISPLAY UNIT DRIVER'S CAB

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

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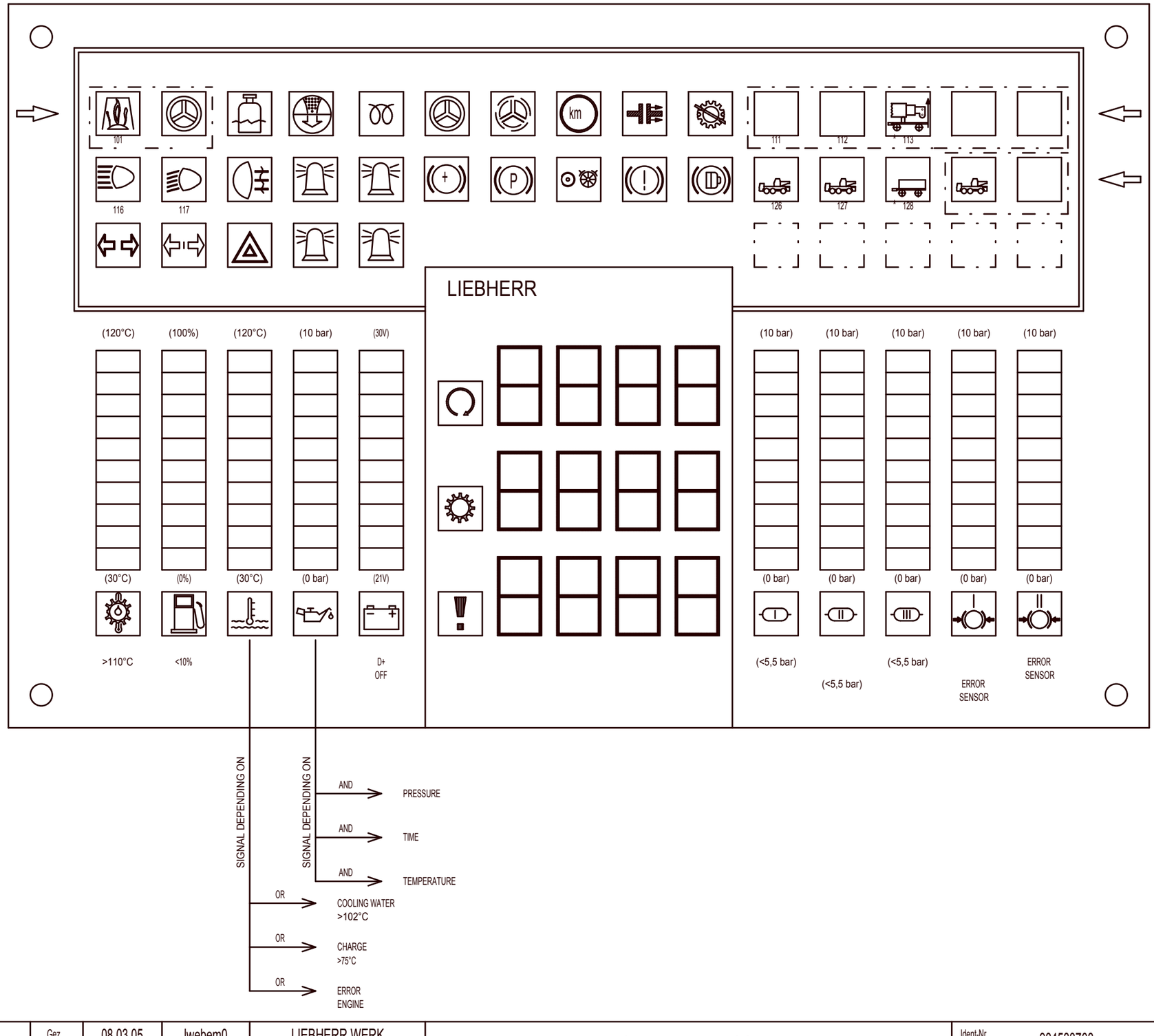
von 153

A B C E F

Makro:ANZEIGEEINHEIT



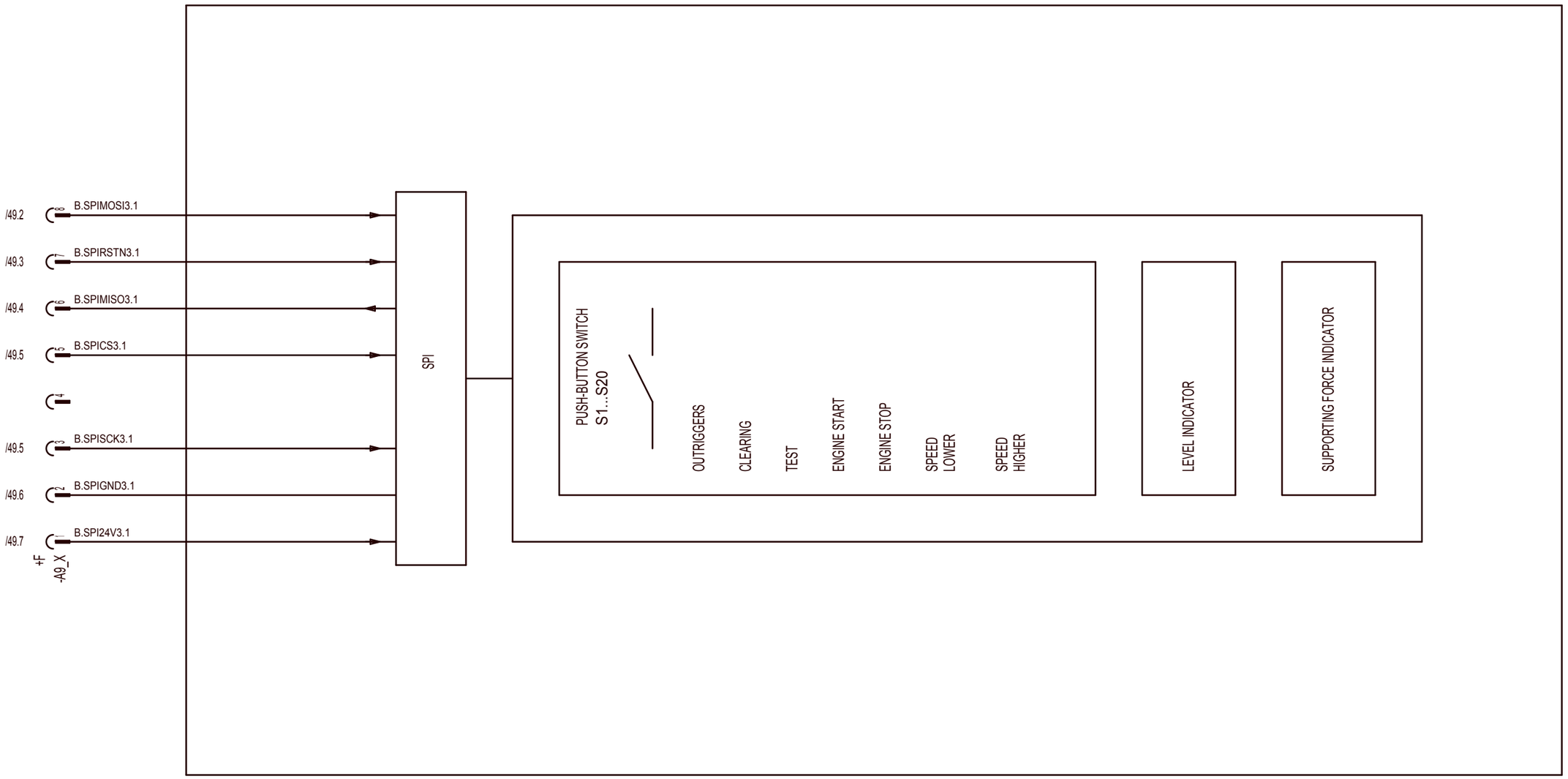
* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DISPLAY UNIT DRIVER'S CAB
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	29
von	153

+F
-A9



CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SUPPORTING CONTROL UNIT RIGHT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	30
von	153

+F
-A10

/50.2 B.SPIMOSI4.1
/50.3 B.SPIRSTN4.1
/50.4 B.SPIMISO4.1
/50.5 B.SPICS4.1
/50.5 B.SPISCK4.1
/50.6 B.SPIGND4.1
/50.7 B.SPI24V4.1
+F -A10_X

SPI

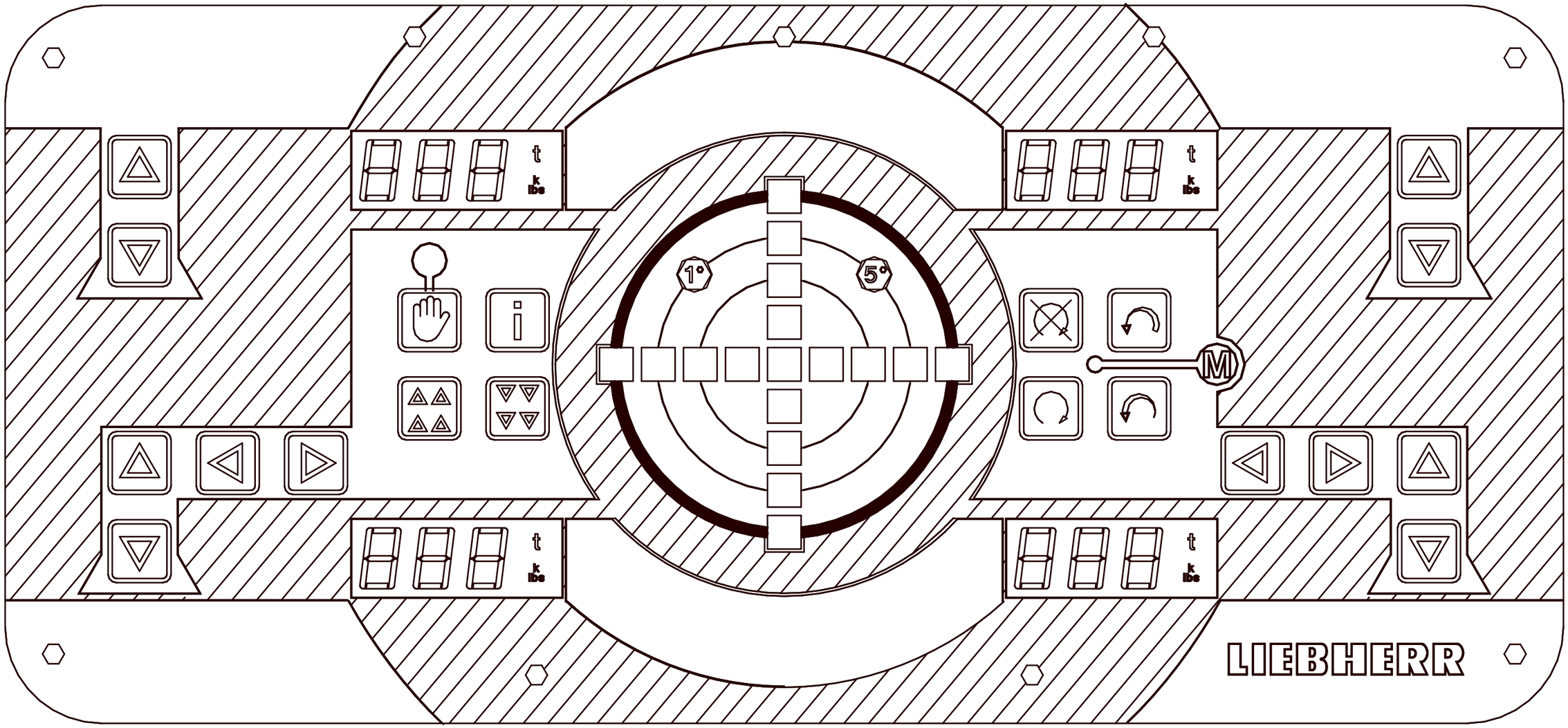
PUSH-BUTTON SWITCH S1...S20

OUTRIGGERS
CLEARING
TEST
ENGINE START
ENGINE STOP
SPEED LOWER
SPEED HIGHER

LEVEL INDICATOR

SUPPORTING FORCE INDICATOR

CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

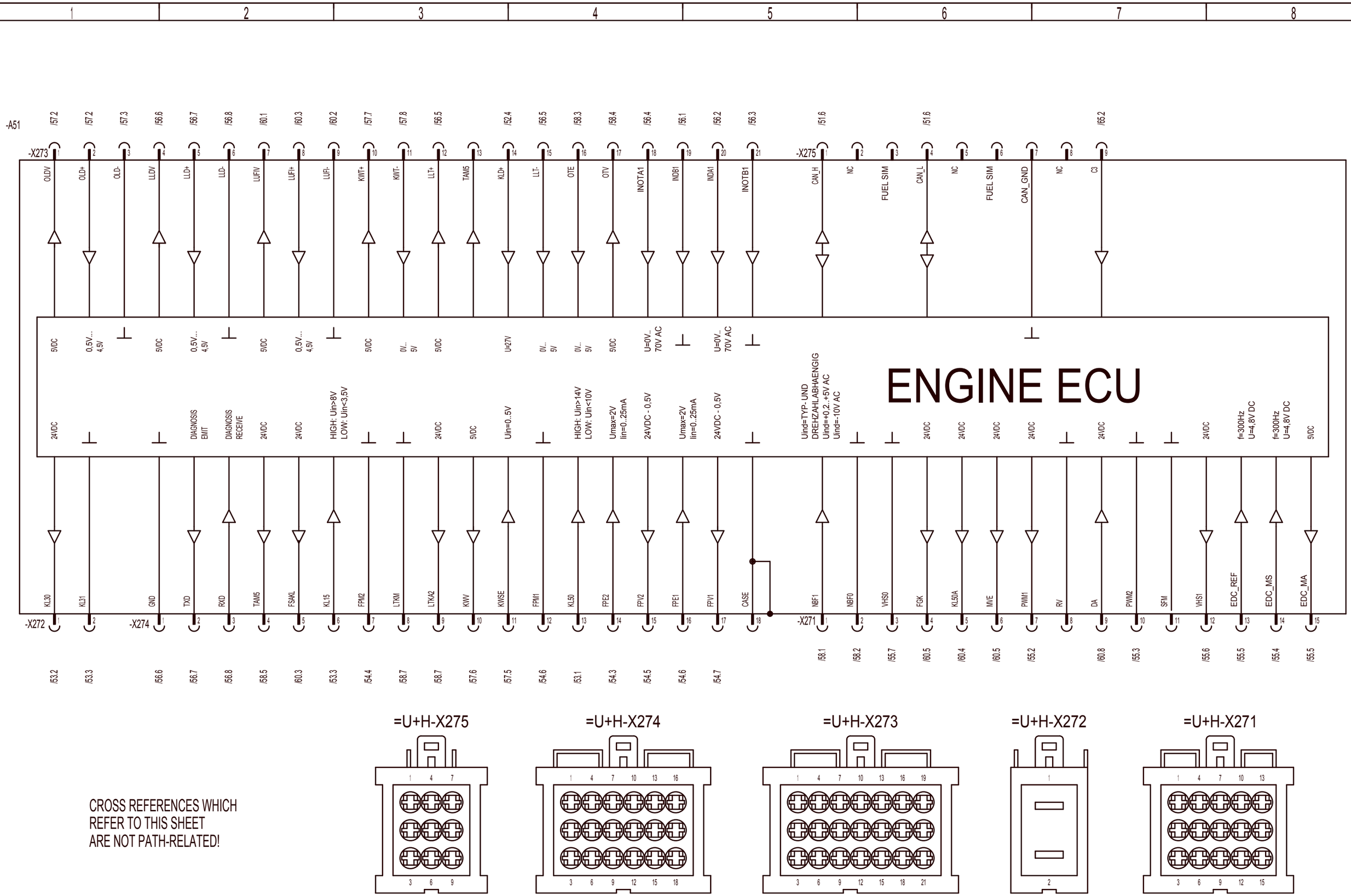


TYP B1

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SUPPORTING CONTROL UNIT RIGHT AND LEFT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	32
von	153



CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

=U+H-X275

=U+H-X274

=U+H-X273

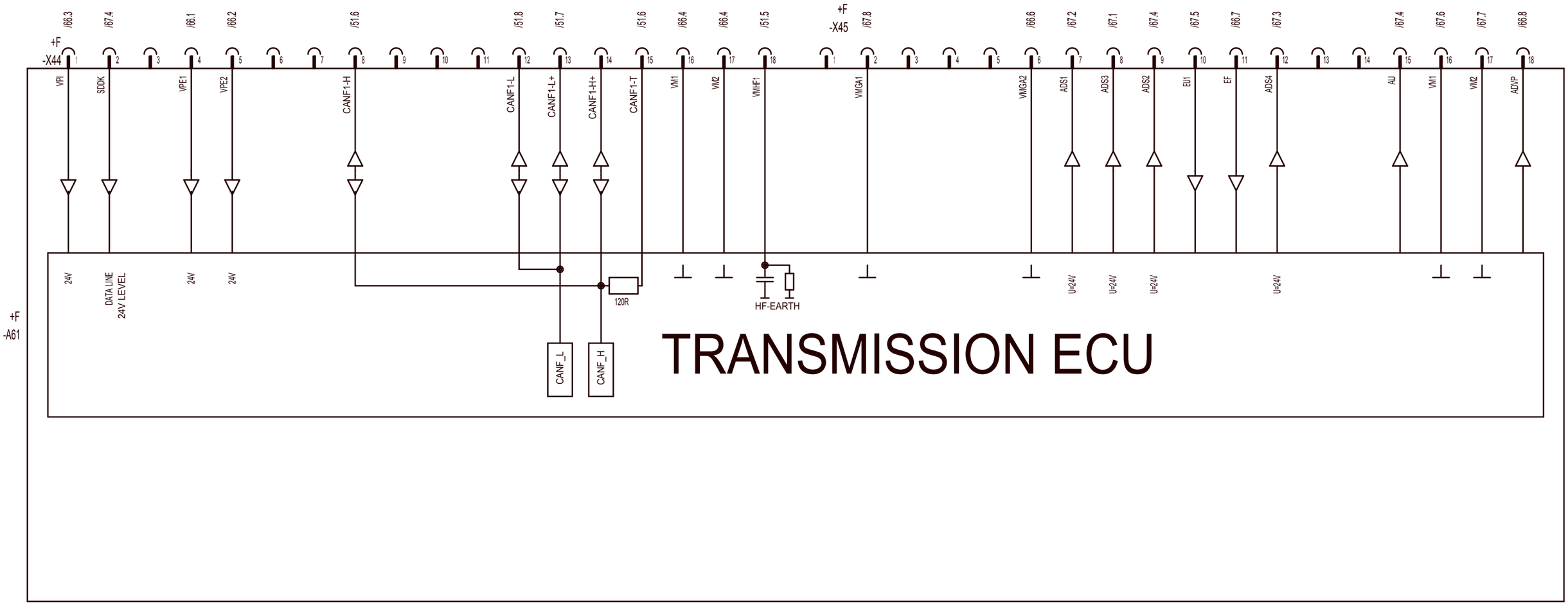
=U+H-X272

=U+H-X271

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE ECU
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

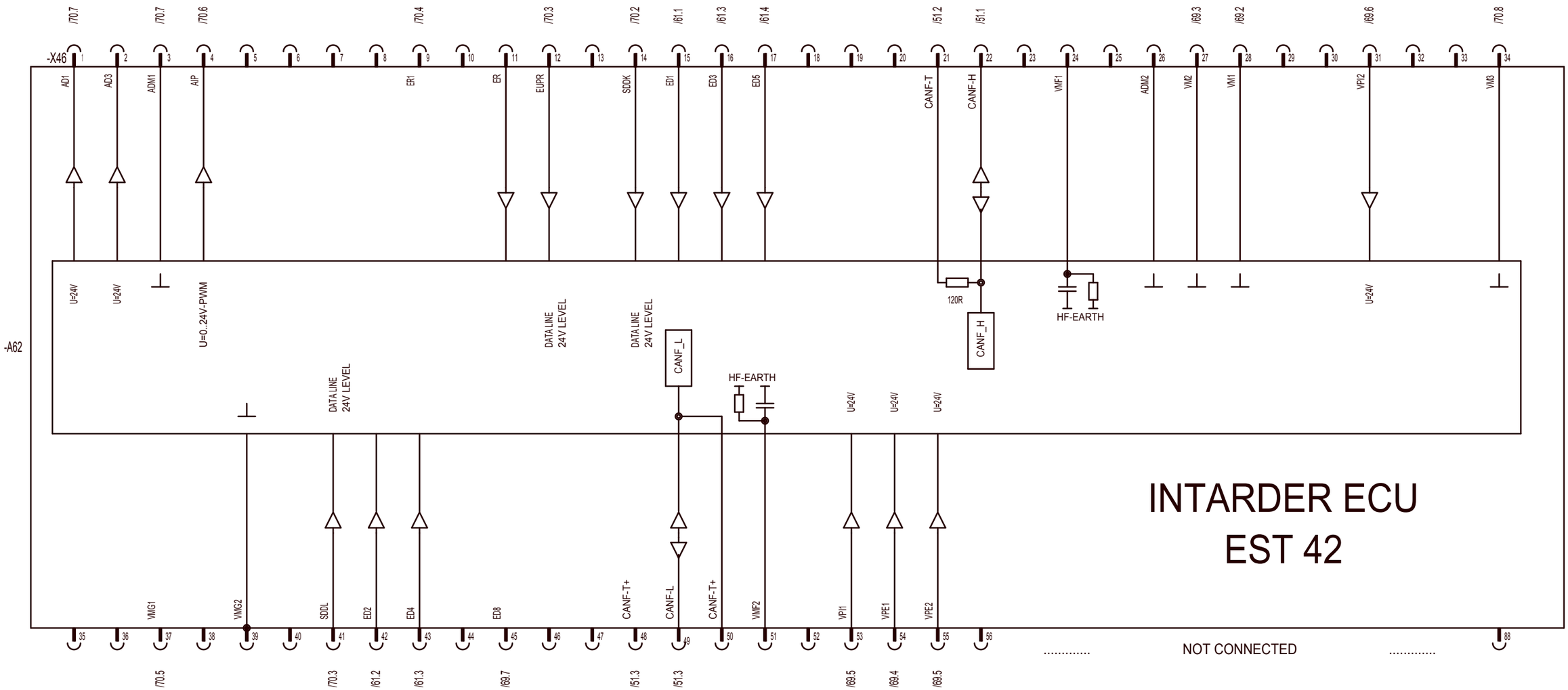
=	U
+	H
Blatt	33
von	153



=U+F-X44

CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	TRANSMISSION ECU	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 34
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



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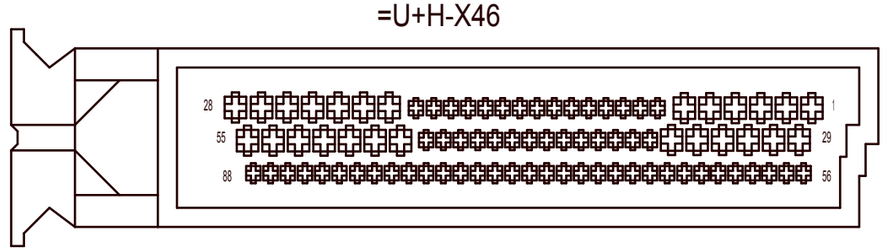
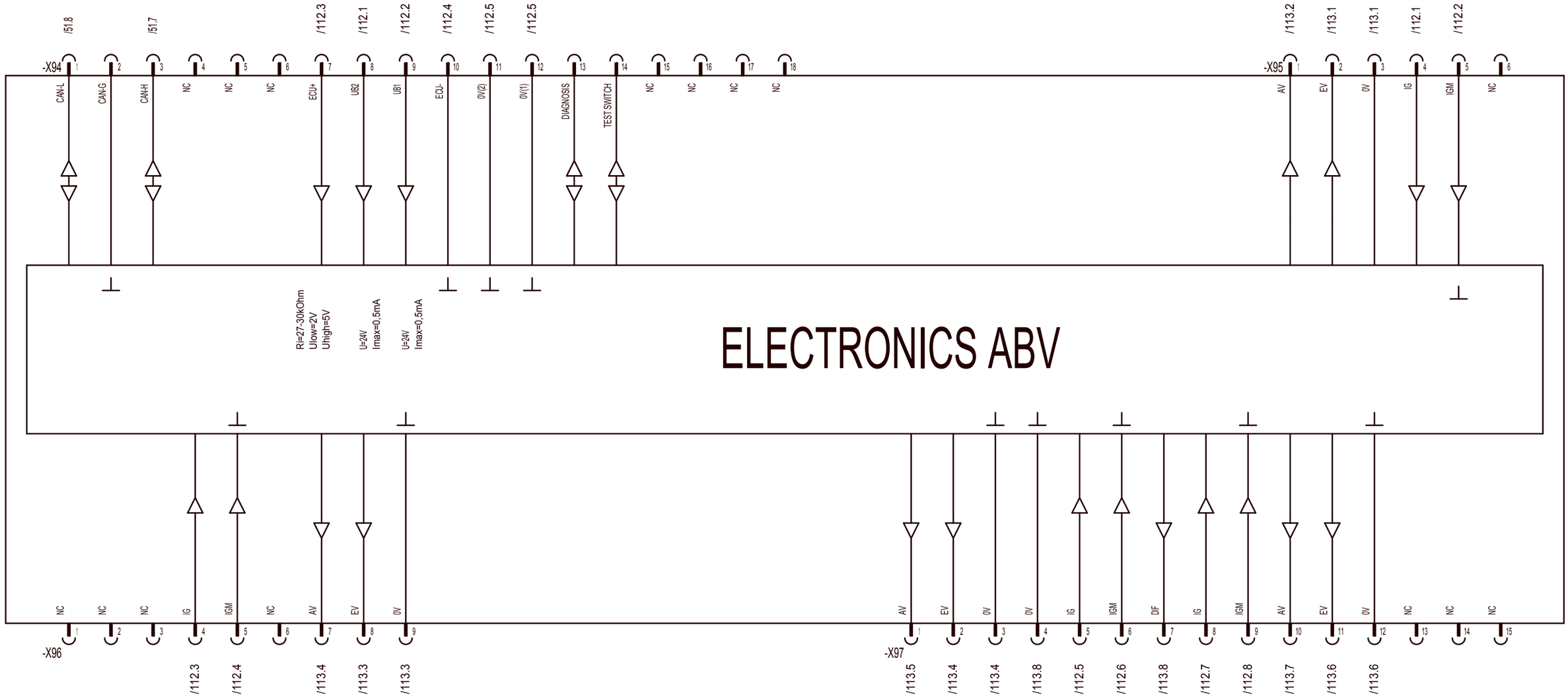


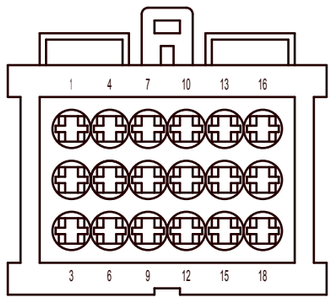
CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	INTARDER ECU EST 42	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 35
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

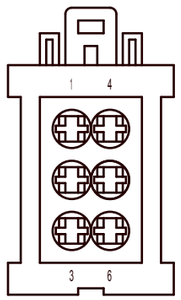


CROSS REFERENCES WHICH
REFER TO THIS SHEET
ARE NOT PATH-RELATED!

=U+H-X94



=U+H-X95



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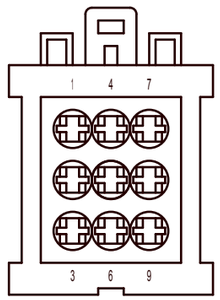

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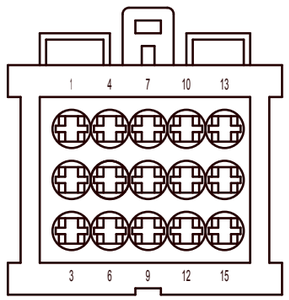
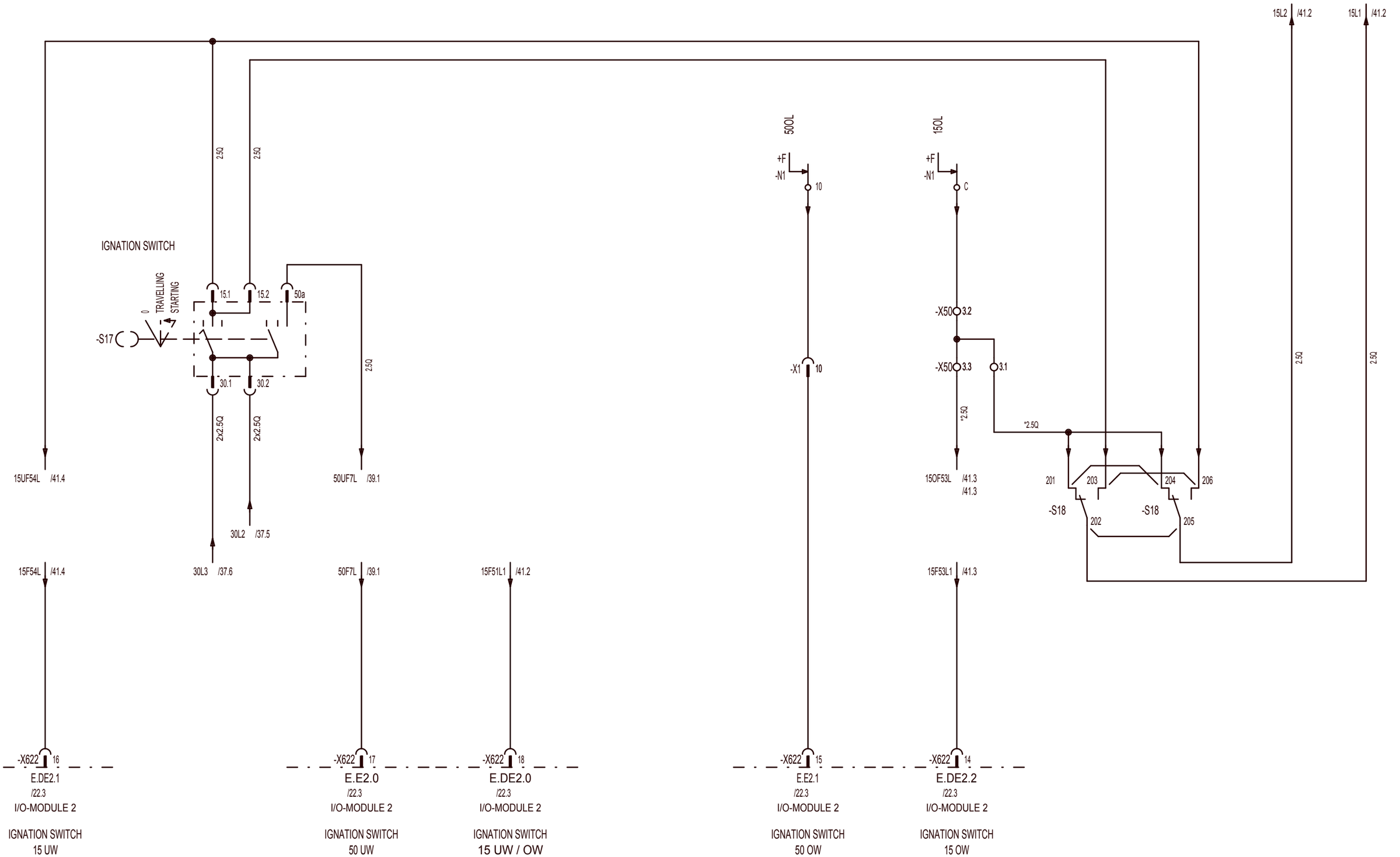


3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	4 CHANNEL ABV	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 36
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

IGNATION SWITCH

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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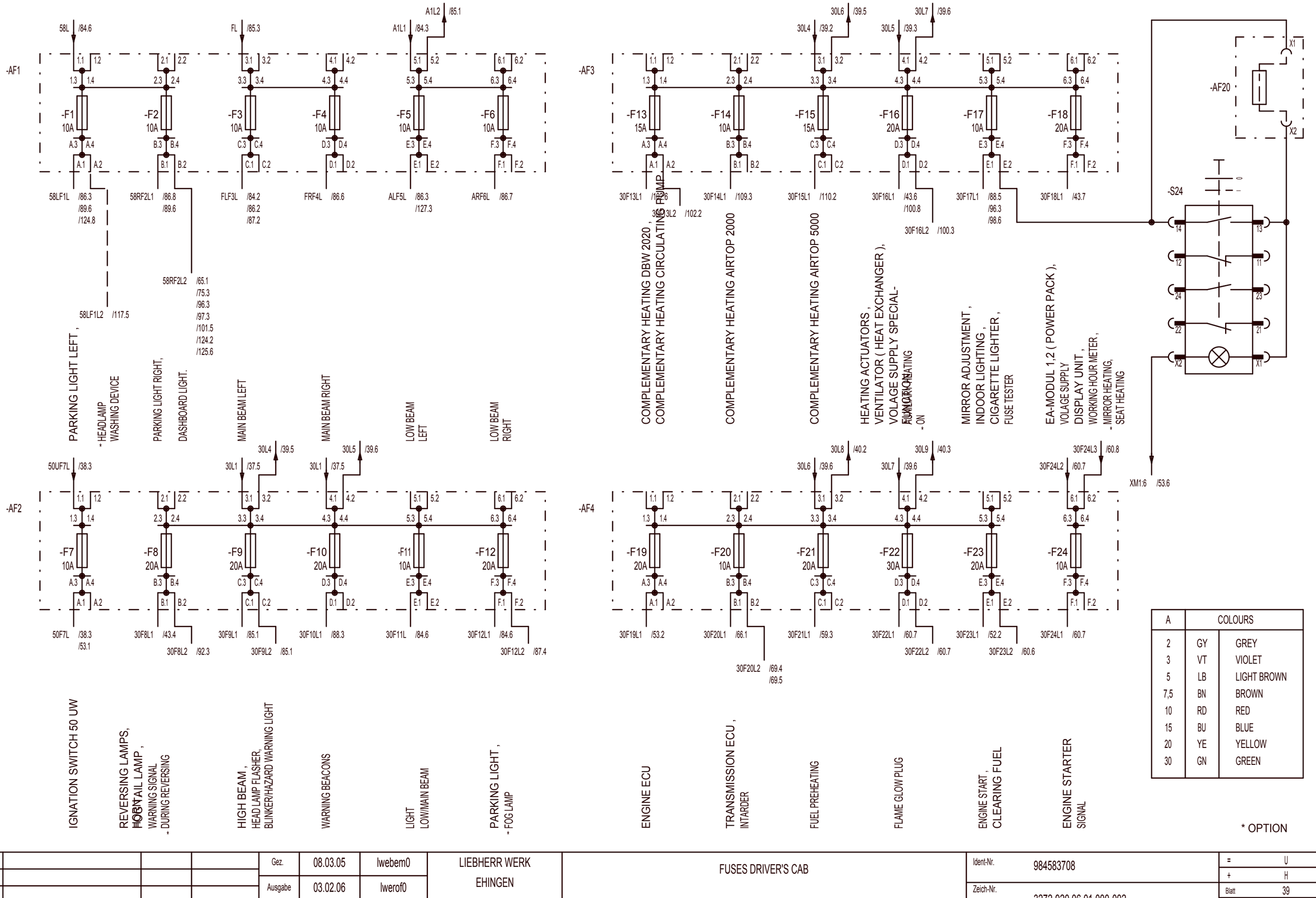
+	H
Blatt	38
von	153



A	COLOURS	
2	GY	GREY
3	VT	VIOLET
5	LB	LIGHT BROWN
7,5	BN	BROWN
10	RD	RED
15	BU	BLUE
20	YE	YELLOW
30	GN	GREEN

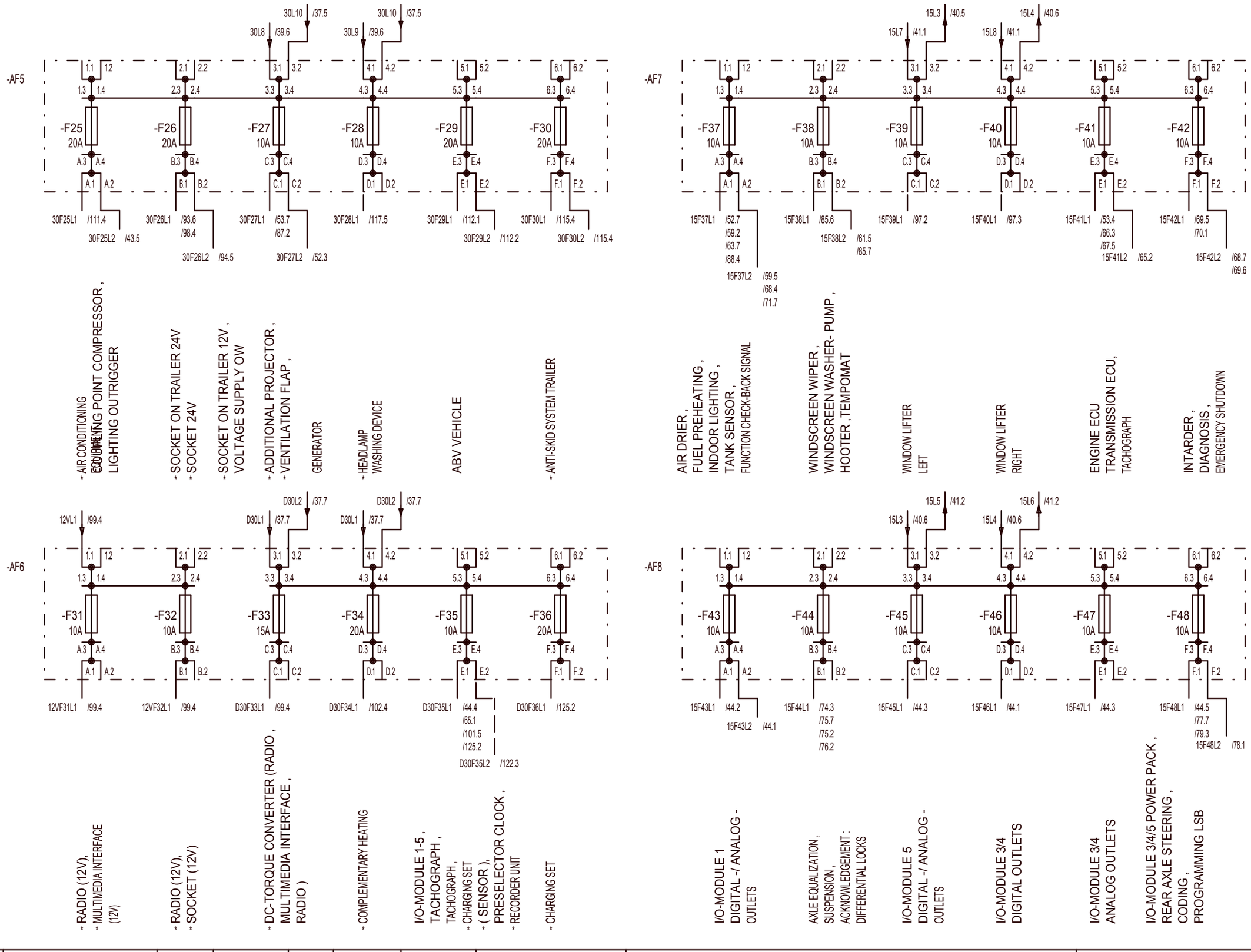
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

FUSES DRIVER'S CAB

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 39
von 153



A	COLOURS	
2	GY	GREY
3	VT	VIOLET
5	LB	LIGHT BROWN
7,5	BN	BROWN
10	RD	RED
15	BU	BLUE
20	YE	YELLOW
30	GN	GREEN

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

FUSES DRIVER'S CAB

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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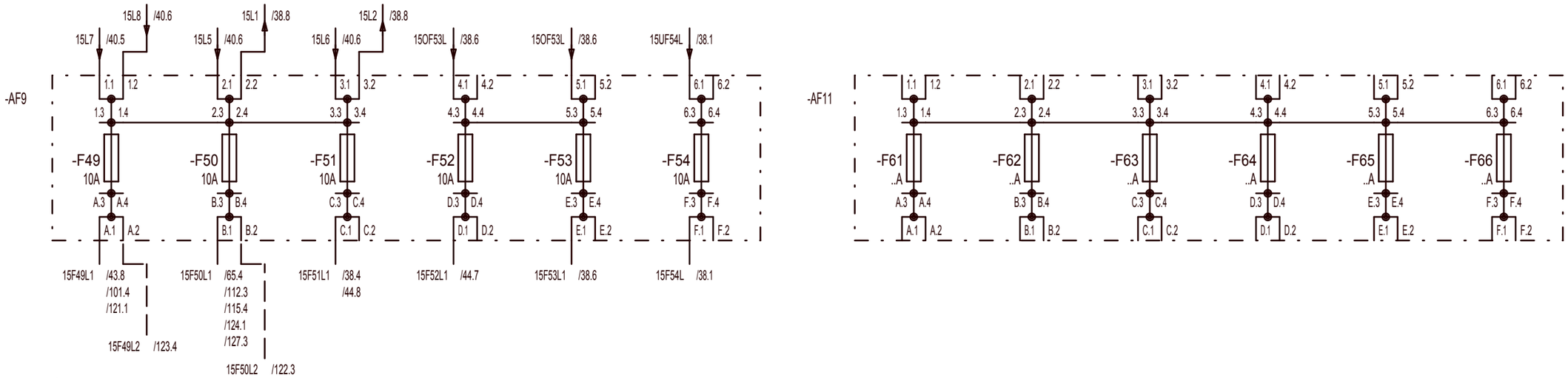
+ H

Blatt 40

von 153



* FUEL CONDENSATION REMOVAL ,
KEY BOARD UNIT
* COMPLEMENTARY HEATING ,
* PRESELECTOR CLOCK ,
* RECOVERY WINCH ,
* APPARATUS RACK

VOLAGE SUPPLY ABV ,
* SOCKET ON TRAILER ABV,
* RECORDER UNIT ,
* NAVIGATION UNIT ,
* DOLLY

I/O-MODULE 2
DIGITAL OUTLETS

I/O-MODULE 2
ANALOG OUTPUTS

I/O-MODULE 2
IGNITION ON SUPERSTR.

I/O-MODULE 2
IGNITION ON CARRIER

RESERVE

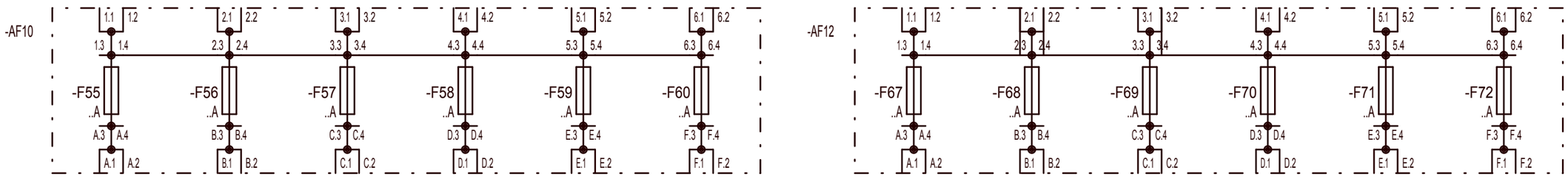
RESERVE

RESERVE

RESERVE

RESERVE

RESERVE



RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

RESERVE

A	COLOURS	
2	GY	GREY
3	VT	VIOLET
5	LB	LIGHT BROWN
7,5	BN	BROWN
10	RD	RED
15	BU	BLUE
20	YE	YELLOW
30	GN	GREEN

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	FUSES DRIVER'S CAB
2				Ausgabe	03.02.06	lwerof0		
1	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

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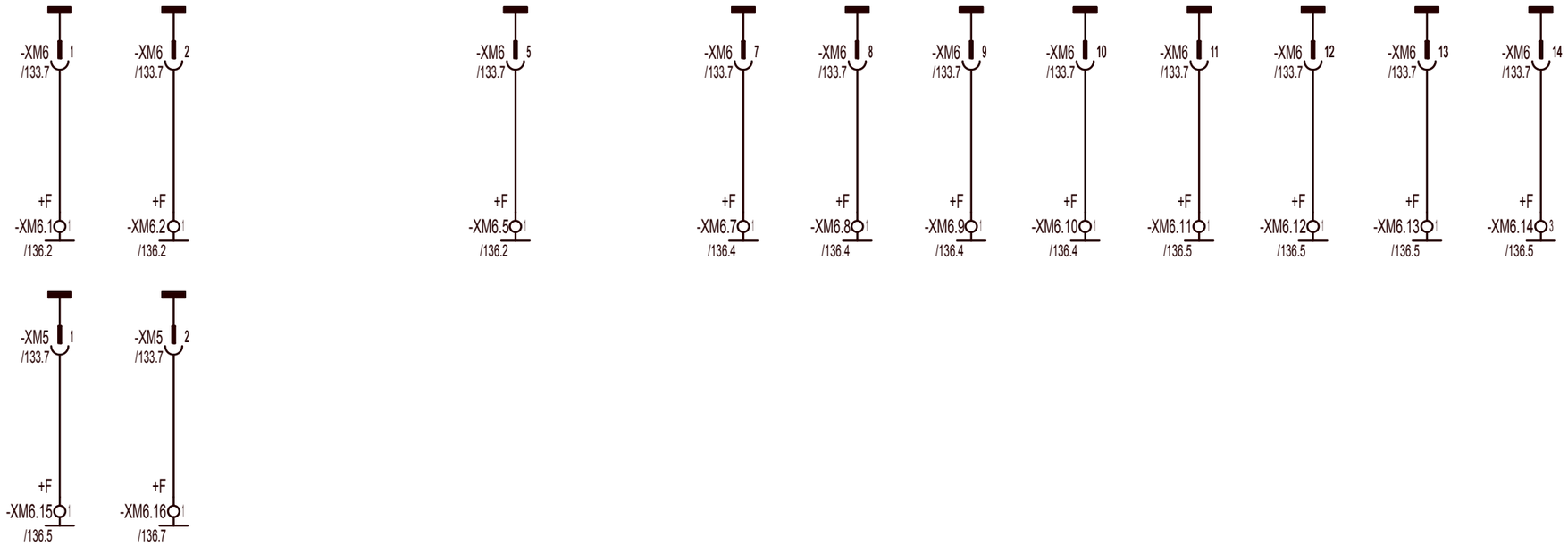
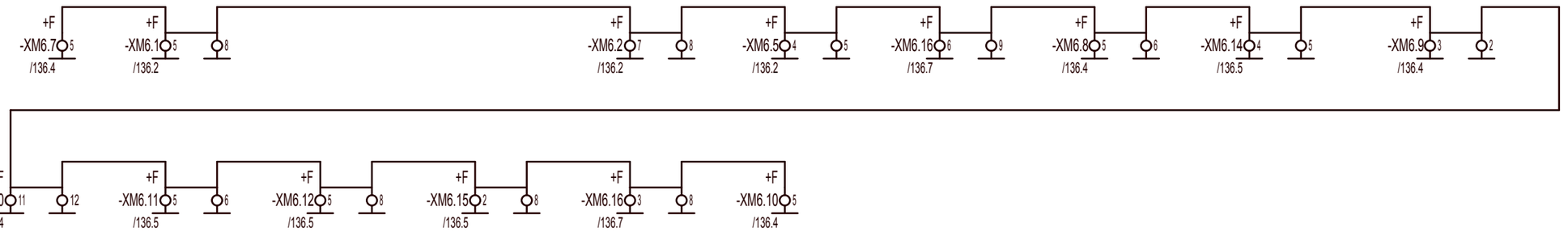
+ H
Blatt 41
von 153

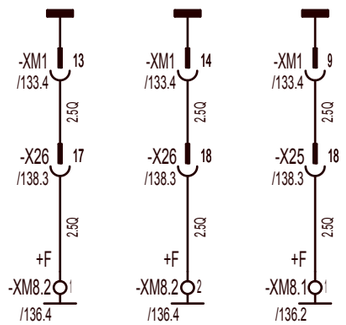
MASS DISTRIBUTION W6

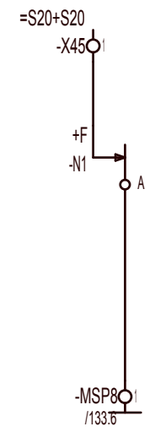


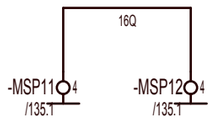
MASSEKNOTEN IM W6



MASS DISTRIBUTION W8







MASS DISTRIBUTION W34

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	MASS DISTRIBUTION
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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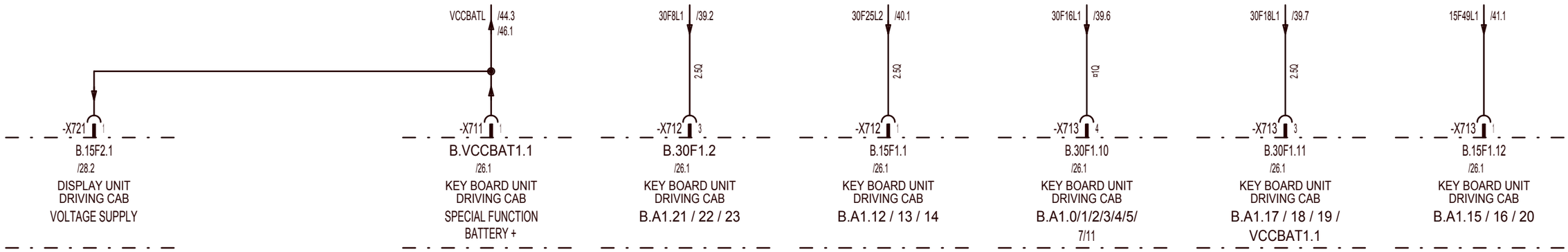
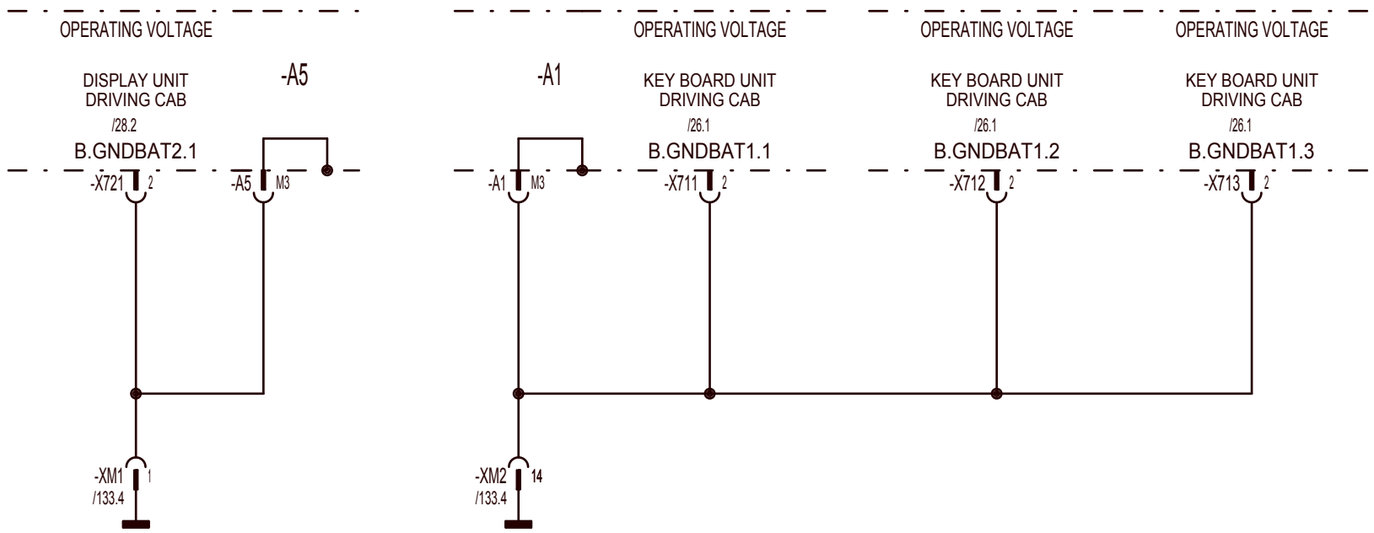
Blatt	42
von	153





3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DISPLAY UNIT VOLTAGE SUPPLY , KEY BOARD UNIT VOLTAGE SUPPLY
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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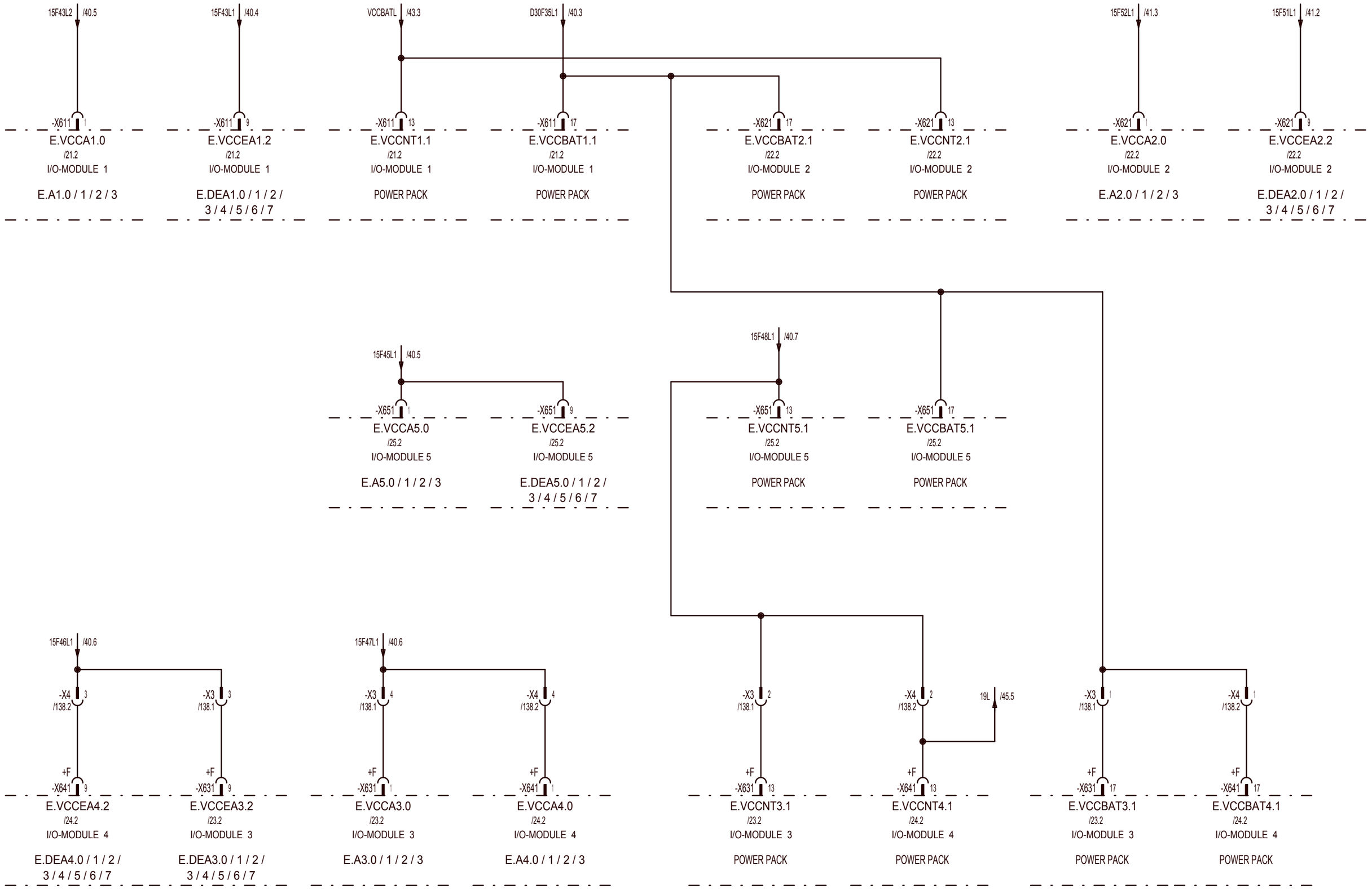
Blatt	43
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	I/O-MODULE VOLTAGE SUPPLY
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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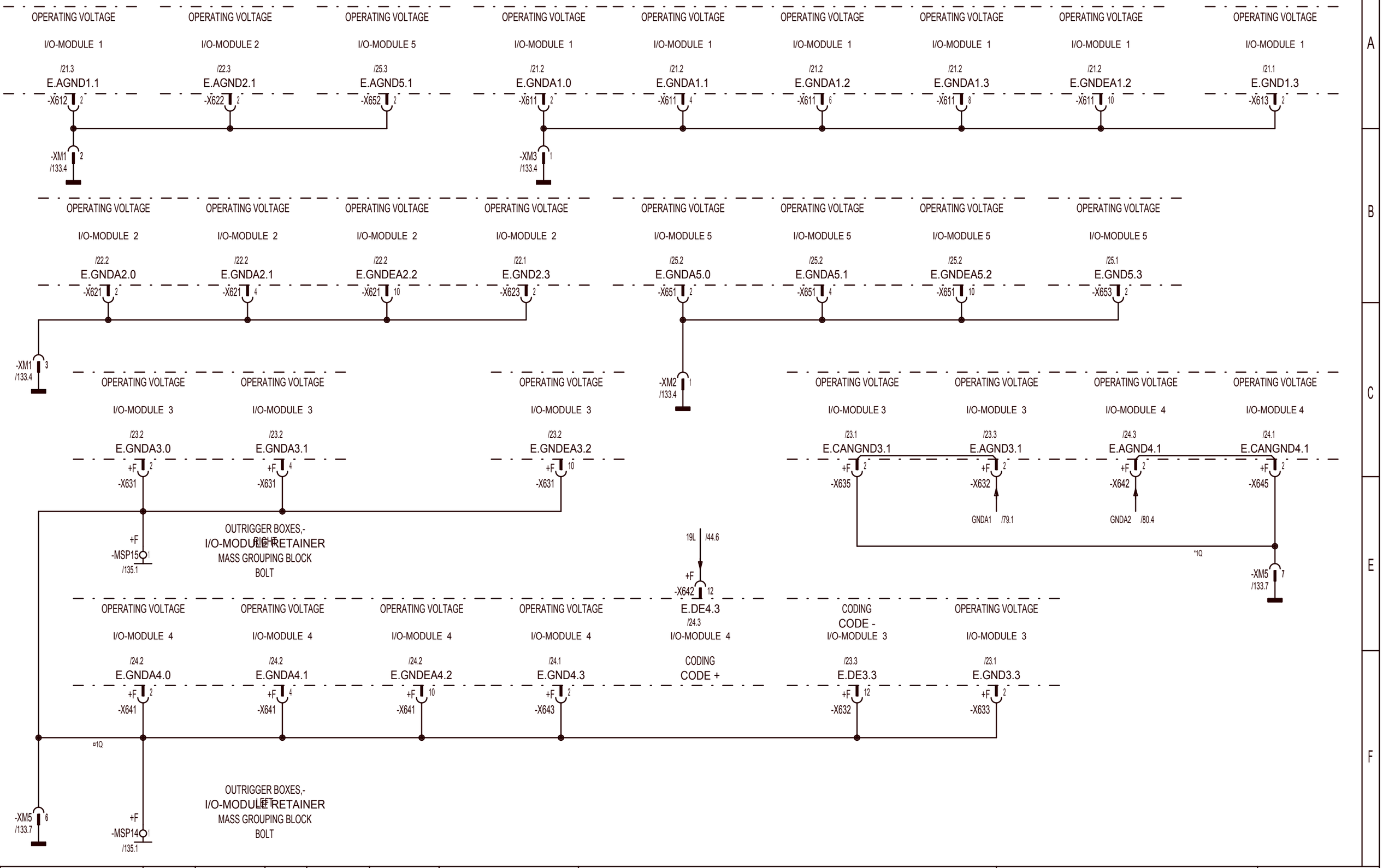
Blatt 44

von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	I/O-MODULE VOLTAGE SUPPLY I/O-MODULE 3/4 CODING
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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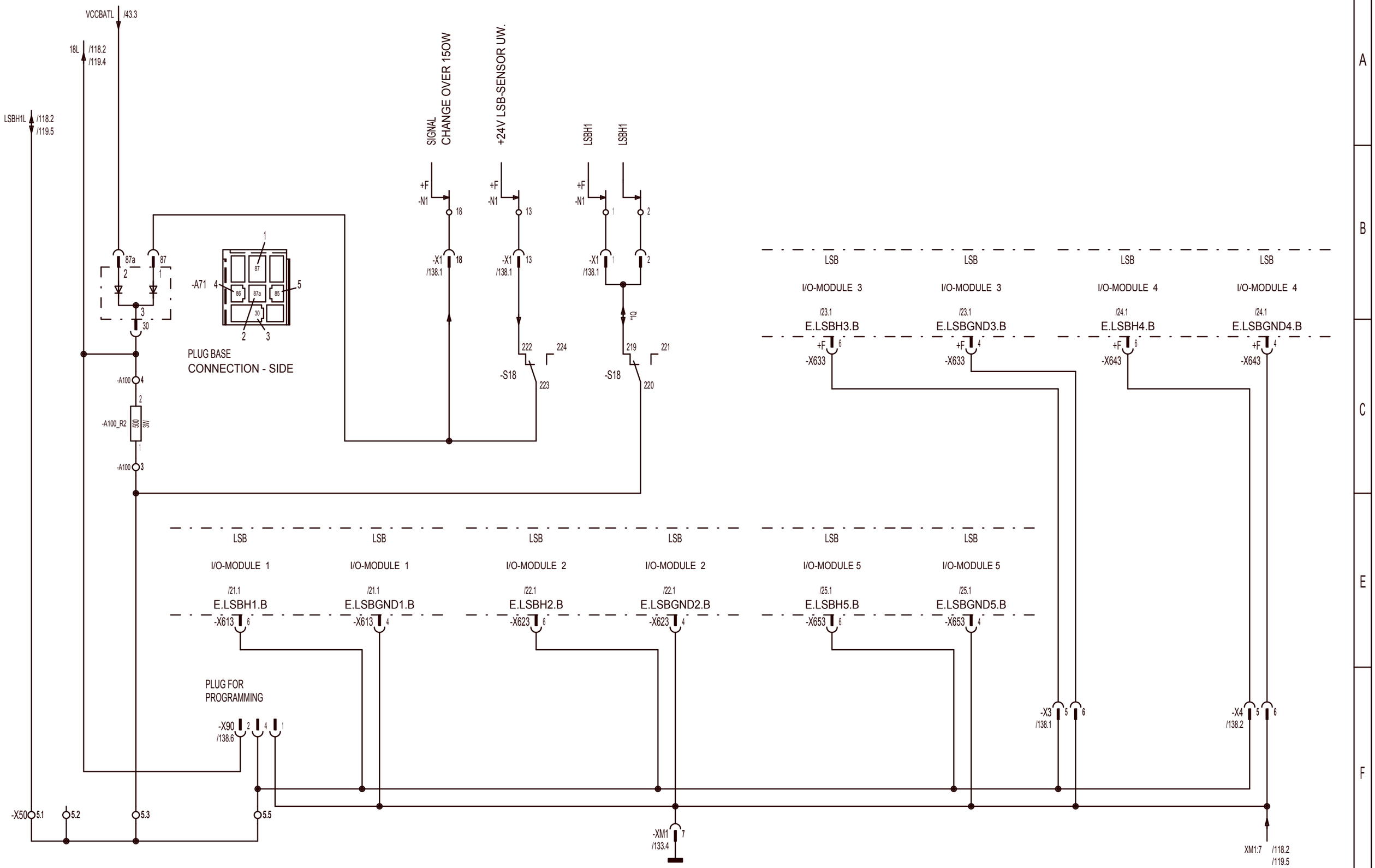
Blatt	45
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SERIAL INTERFACE LSB1	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

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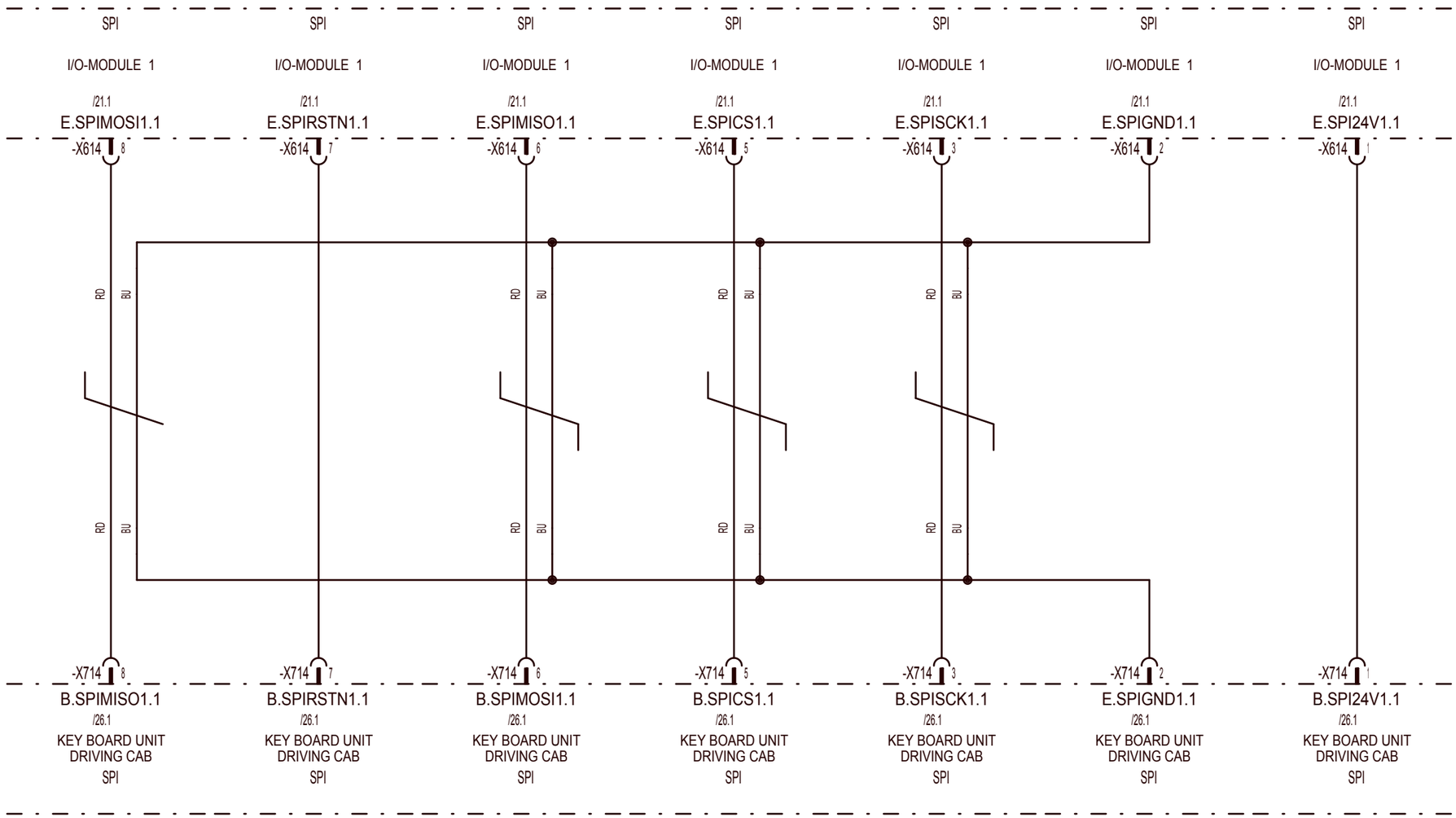
Blatt	46
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

SERIAL INTERFACE SPI

KEY BOARD UNIT

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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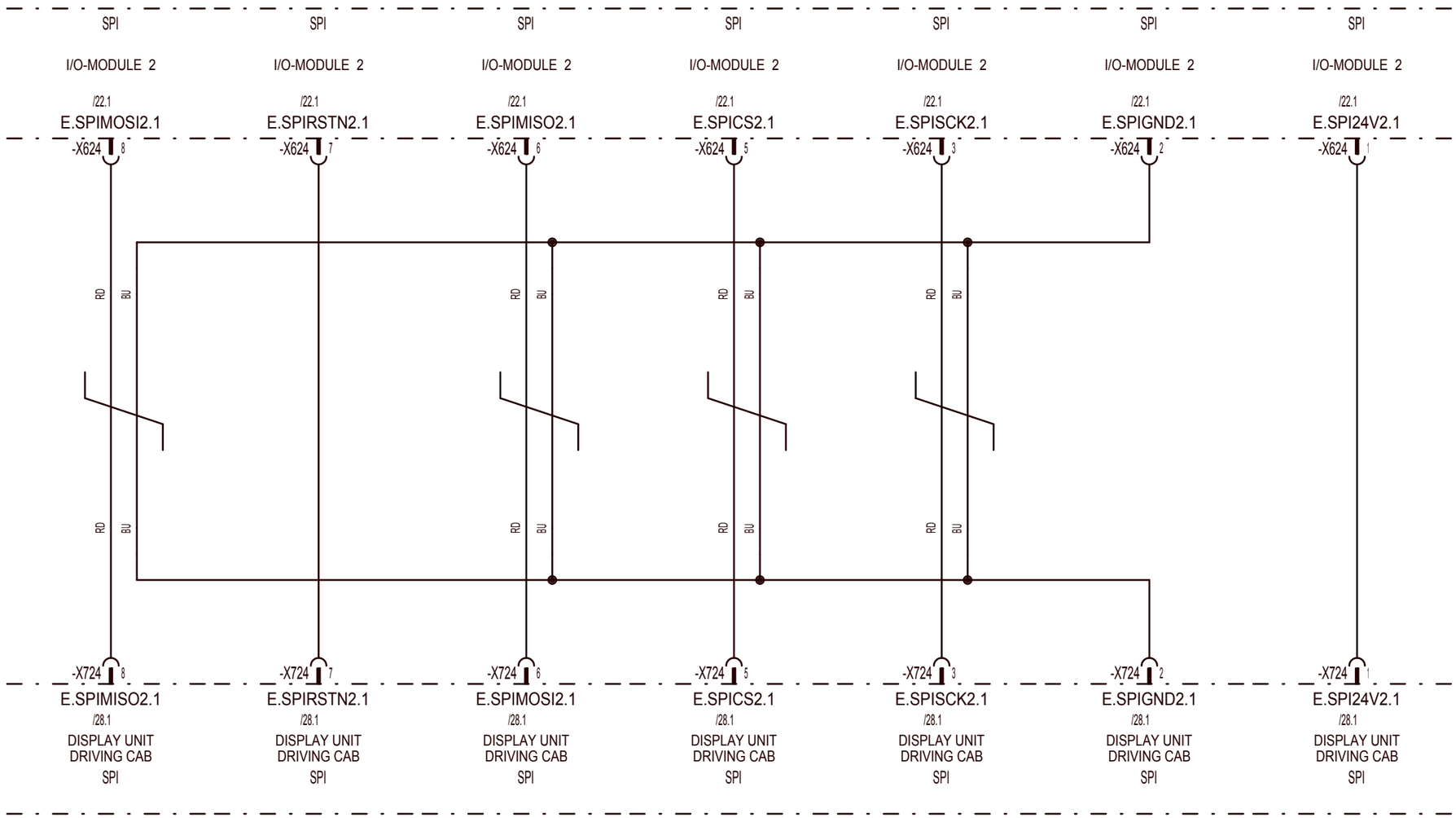
+	H
Blatt	47
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SERIAL INTERFACE SPI DISPLAY UNIT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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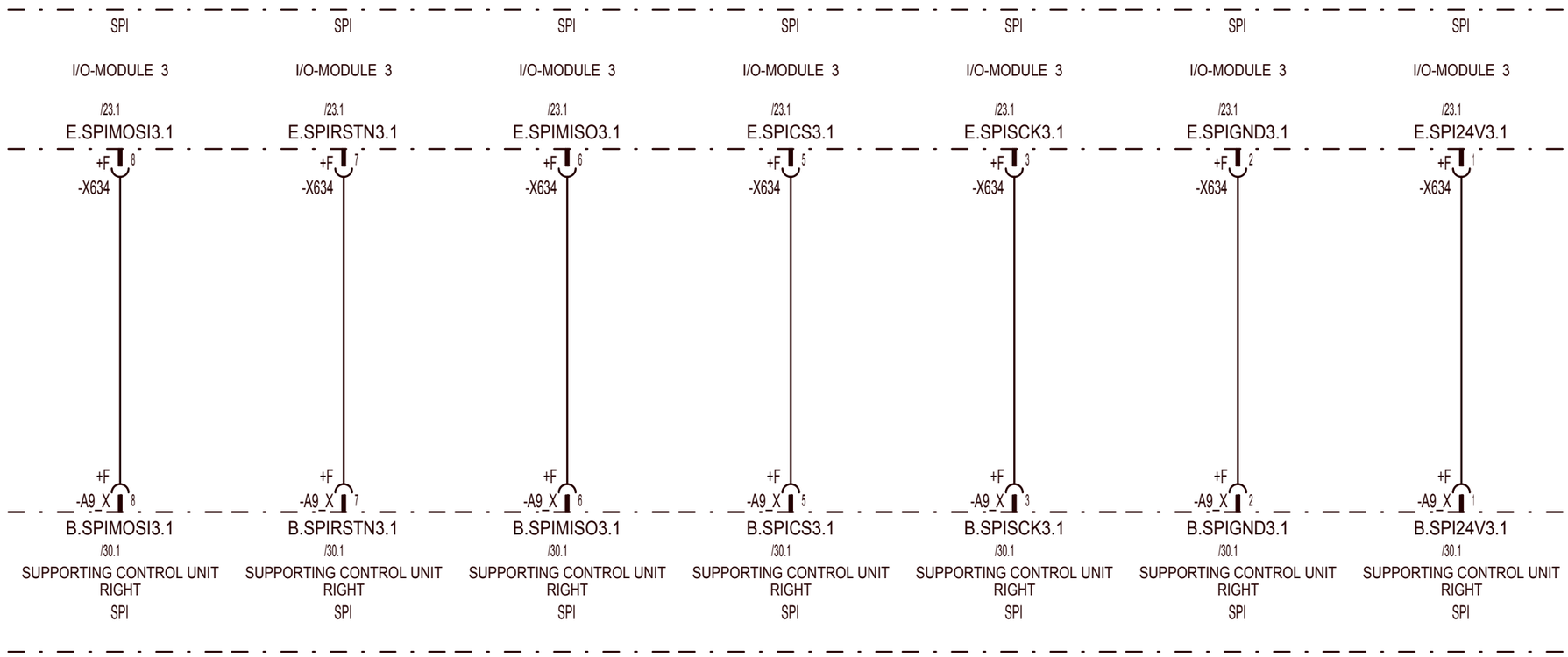
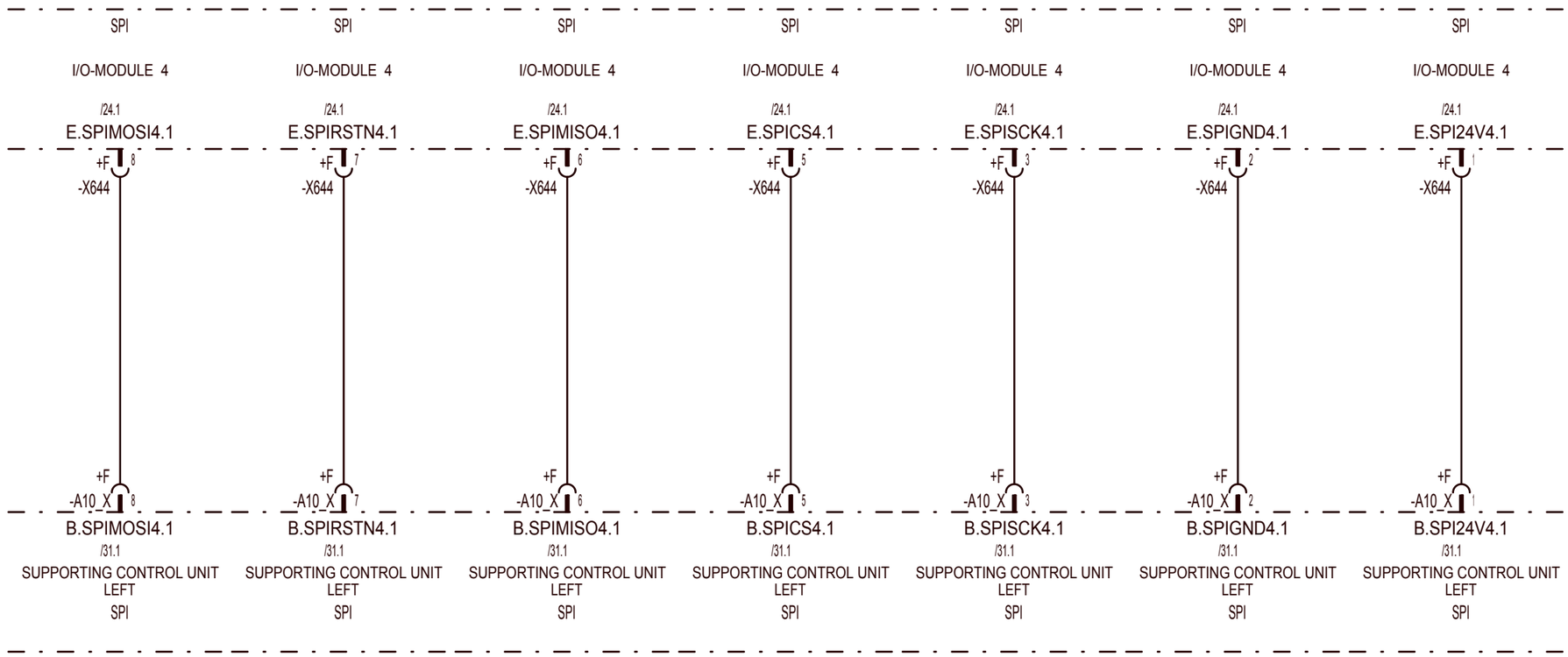
Blatt	48
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SERIAL INTERFACE SPI SUPPORTING CONTROL UNIT RIGHT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

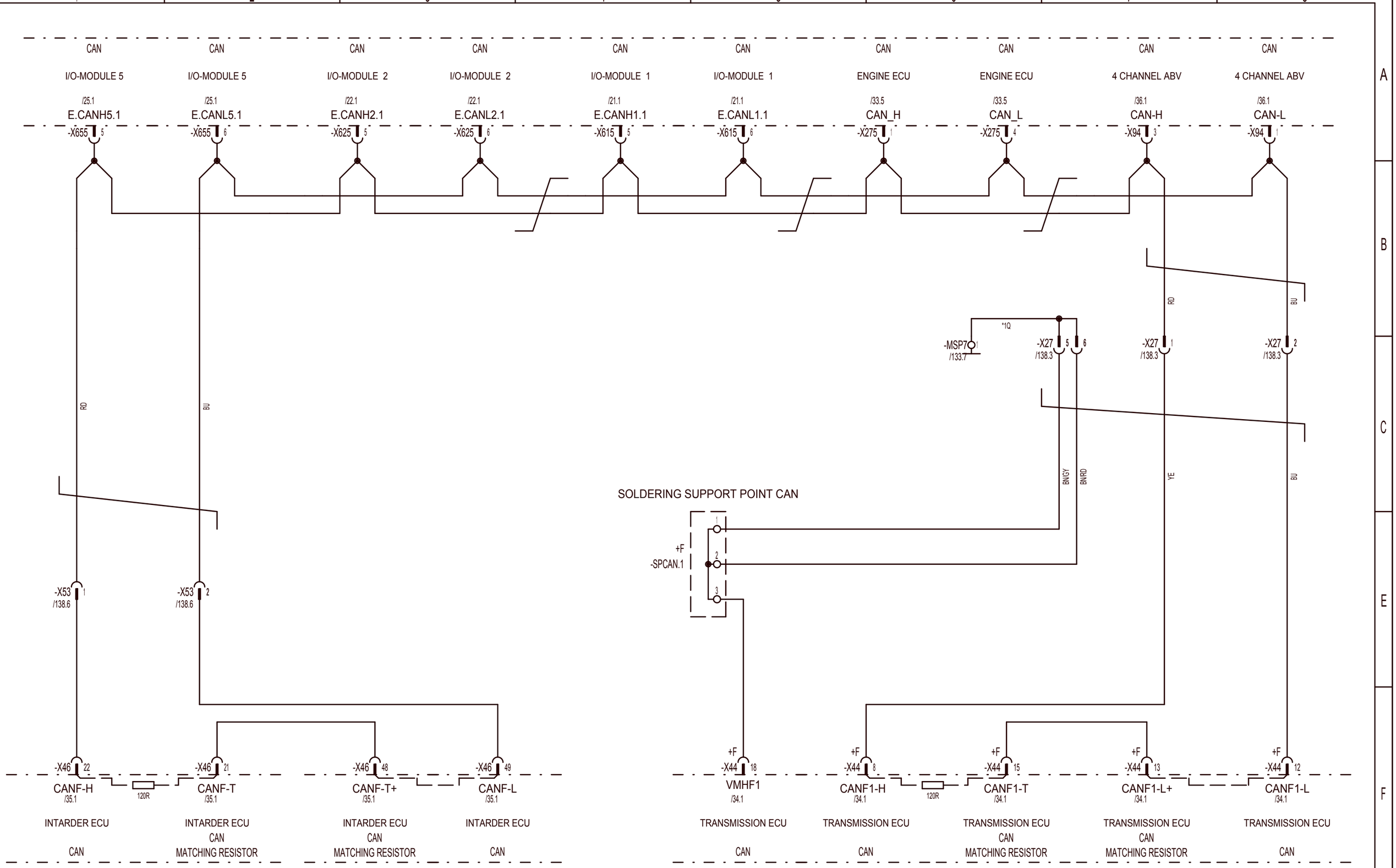
= U
+ H
Blatt 49
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SERIAL INTERFACE SPI SUPPORTING CONTROL UNIT LEFT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

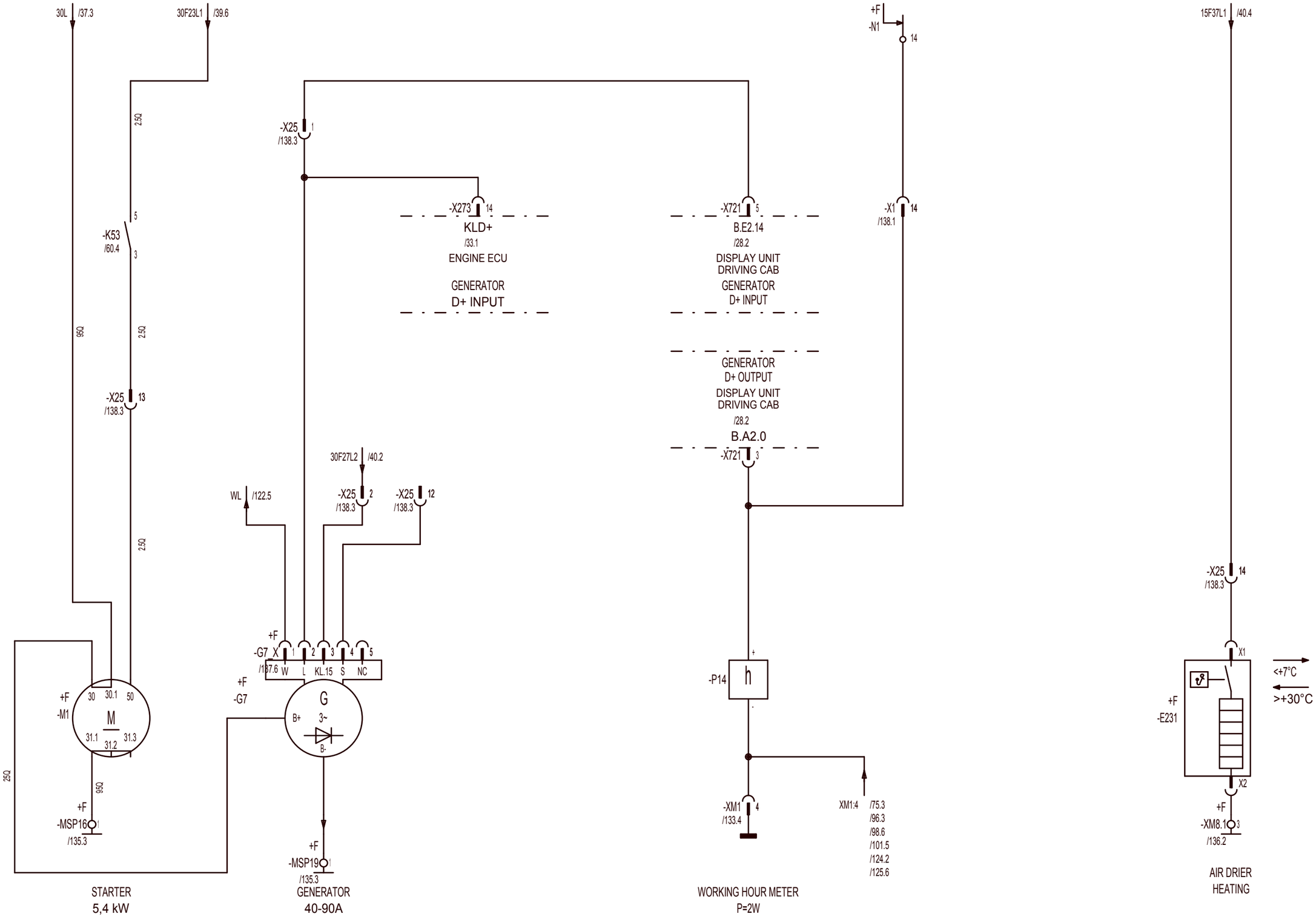
= U
+ H
Blatt 50
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

SERIAL INTERFACE CAN

Ident-Nr.	984583708	=	U
		+	H
Zeich-Nr.	3272-920.06.01.000-002	Blatt	51
		von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

STARTER , GENERATOR ,

AIR DRIER HEATING , WORKING HOUR METER

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	52
von	153

50F7L /39.1

30F19L1 /39.4

2.5Q

15F41L1 /40.6

EMERGENCY OFF
OPTION

-X190 5
/133.1

-X190_B 5
/133.1

REMOVE BRIDGE
FOR INSTALLATION EMERGENCY STOP

-X190 6
/133.1

-X190_B 6
/133.1

30F27L1 /40.2

VENTILATION FLAP
OPTION
I/O-MODULE 1

/21.1
E.A1.1
-X613 16

87a 87
-K51
.4
30

15 30

-K50

31 87 87a

-X274 13 HIGH: Uin>14V
LOW: Uin<10V
KL50
/33.2
ENGINE ECU
IGNITION SWITCH

-X272 1 UBAT+=24V
KL30
/33.1
ENGINE ECU
OPERATING VOLTAGE

OPERATING VOLTAGE
ENGINE ECU
/33.1
KL31
-X272 2
UBAT-=0V
2.5Q
-XM1 5
/133.4

-X274 6 HIGH: Uin>8V
LOW: Uin<3,5V
KL15
/33.2
ENGINE ECU
OPERATING VOLTAGE

86+
-K51
85-
-XM1 6
/133.4
87
87a 30 .6

XM1:6 /39.7
/60.4
/65.4
/87.2
/88.4
/102.1
/102.5
/124.2
/124.6

-X10 1
/138.1
X1
+F
-Y51 X2
+F
-XM6.14 1
/136.5

* VENTILATION FLAP

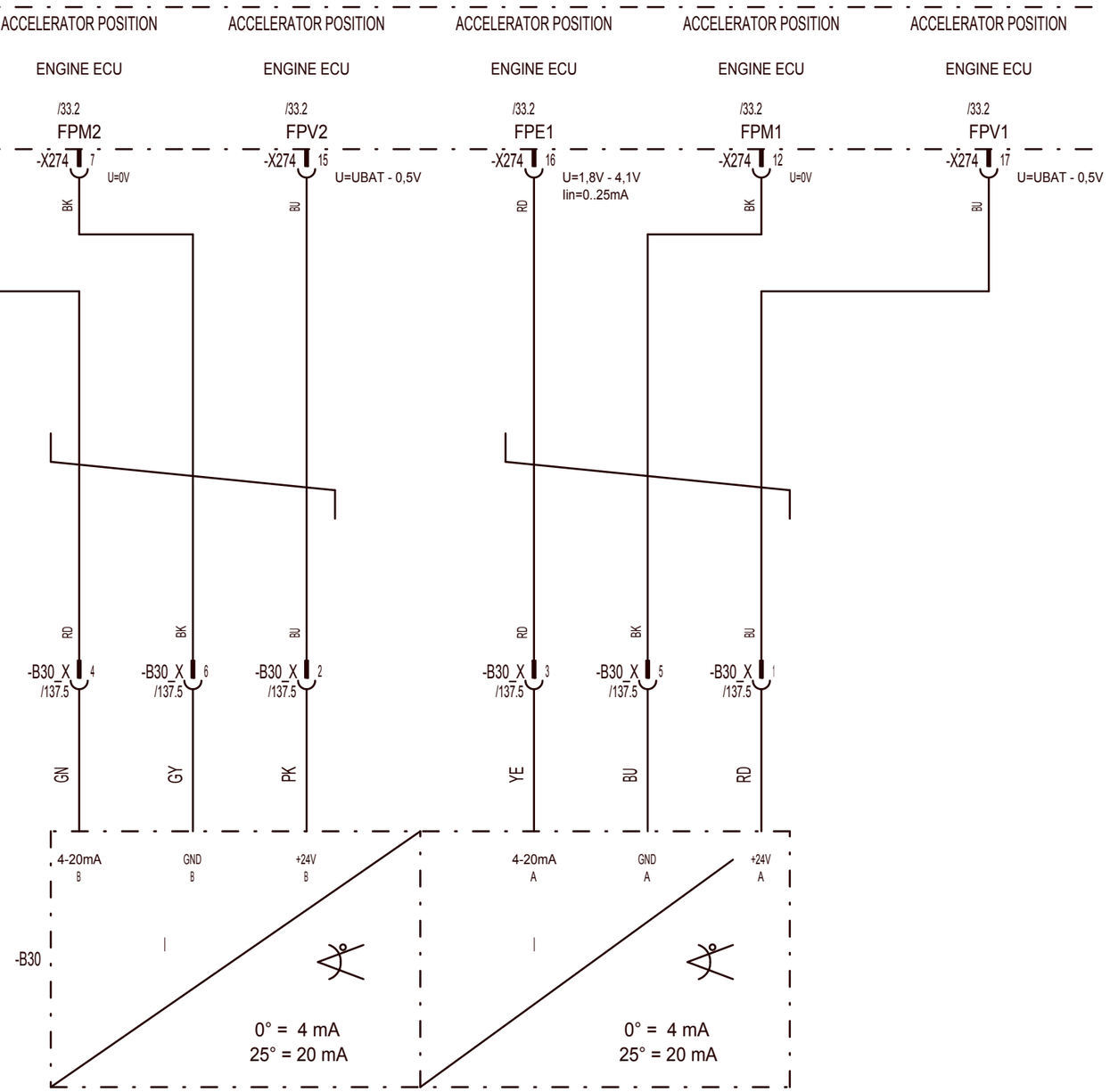
1 = OPERN
0 = CLOSED

87
15 87a 31
30

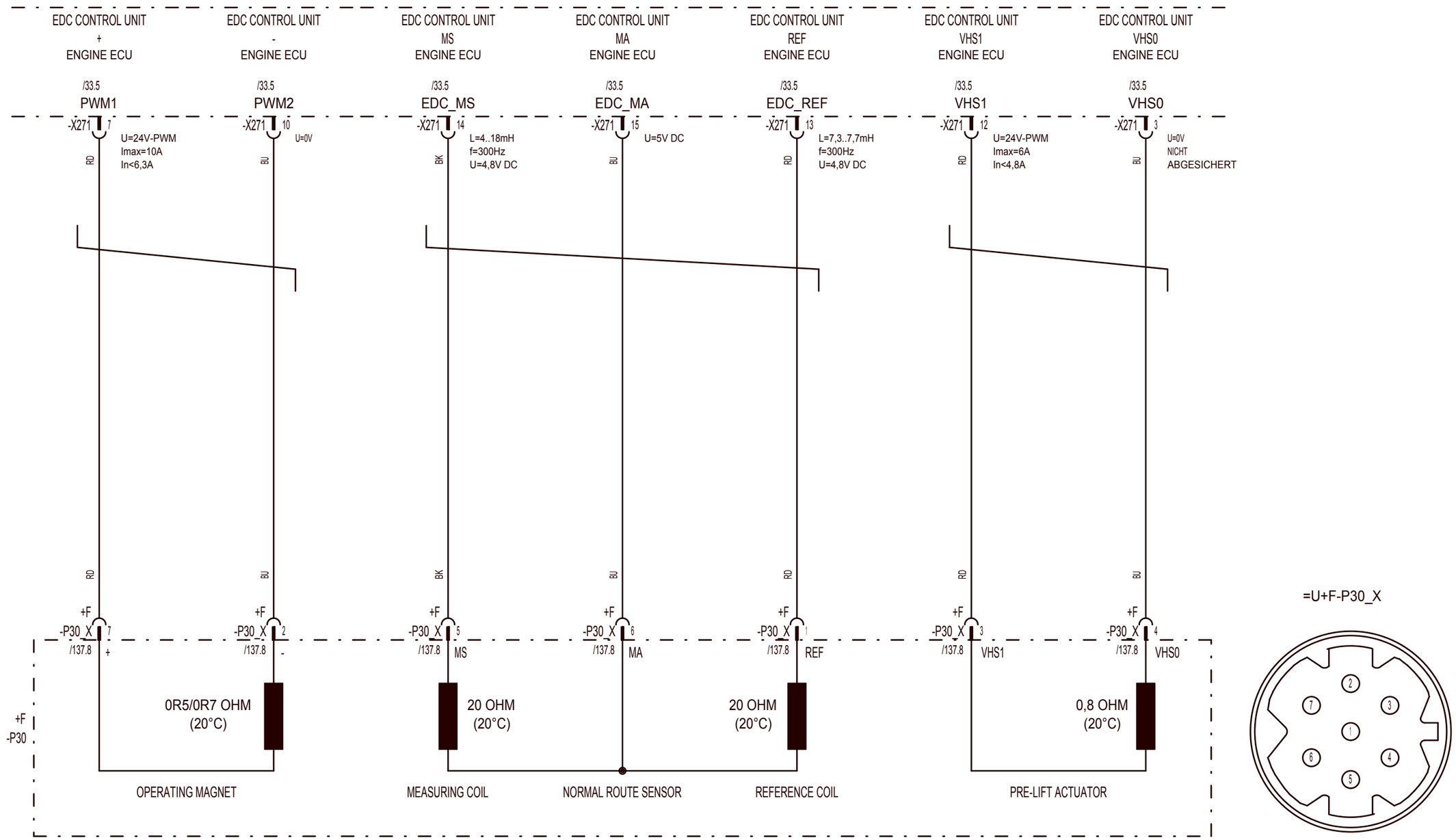
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE ELECTRONICS SUPPLY , * EMERGENCY OFF , * VENTILATION FLAP
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 53
von 153



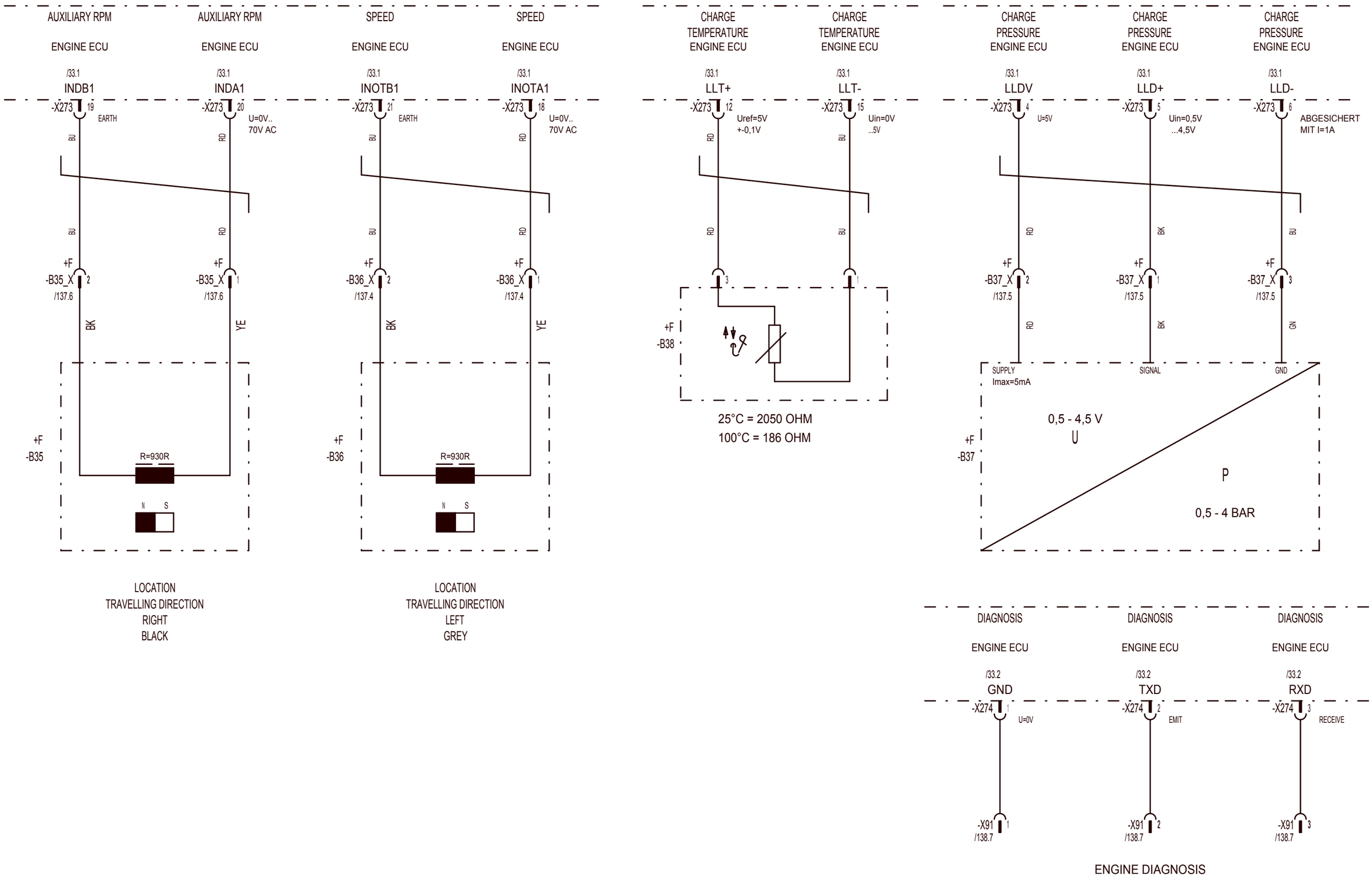
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE ACCELERATOR	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 54
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE EDC CONTROL UNIT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	55
von	153



ENGINE DIAGNOSIS

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

ENGINE REVOLUTION DETECTION , ENGINE CHARGE ,

ENGINE DIAGNOSIS

Ident-Nr. 984583708

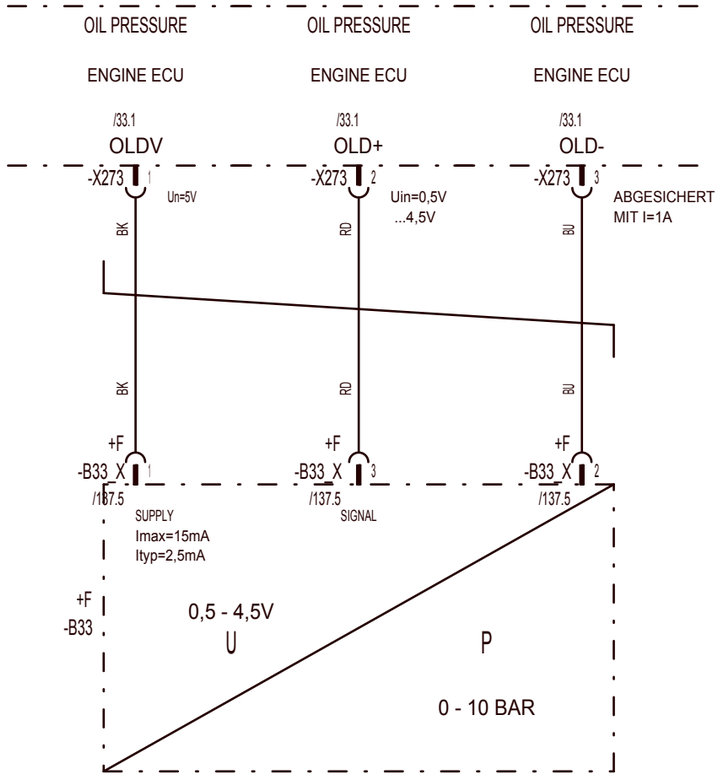
Zeich-Nr. 3272-920.06.01.000-002

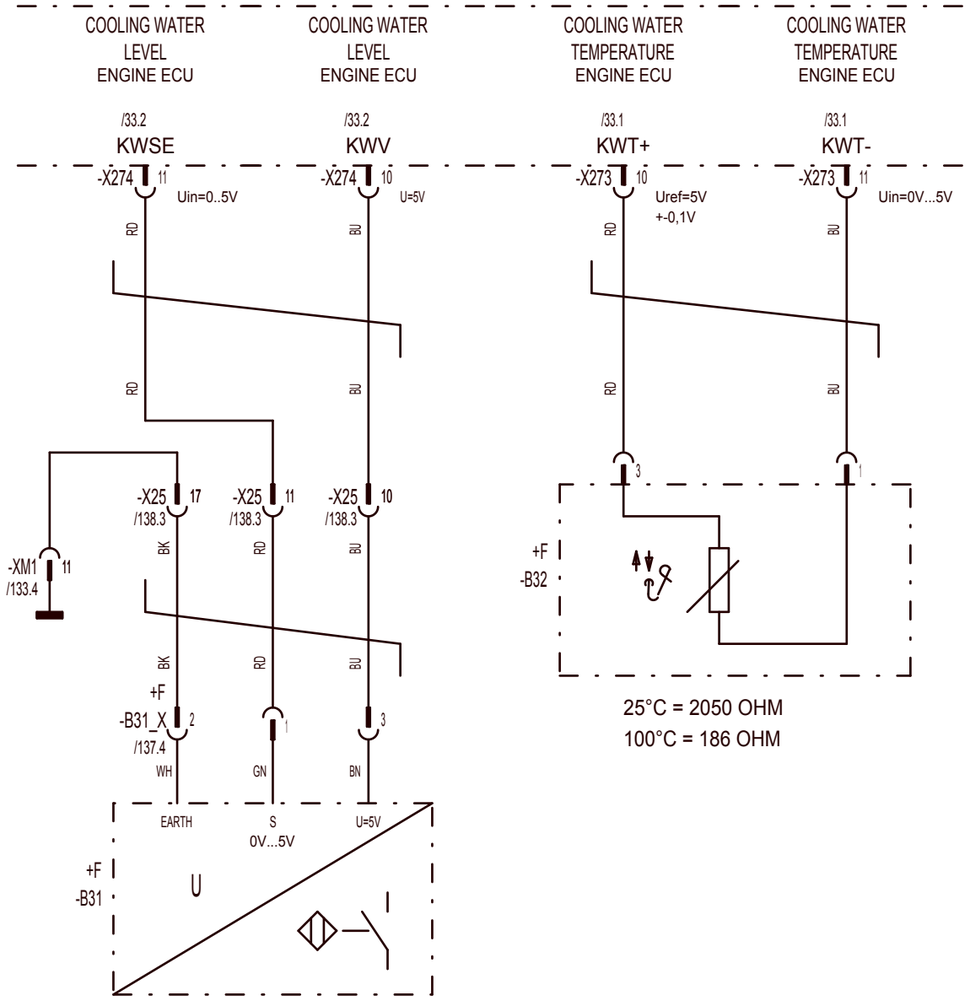
= U

+ H

Blatt 56

von 153





WITHOUT MEDIUM	Us=5,000V
IN MEDIUM	Us=4,184V
WIRE BREAK : SIGNAL	Us=1,250V
SHORT CIRCUIT : SIGNAL - EARTH	Us=0,079V
WIRE BREAK : +	Us=1,250V
WIRE BREAK : EARTH	Us=1,250V

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

ENGINE OIL PRESSURE , ENGINE OIL TEMPERATURE ,

ENGINE COOLING WATER

Ident-Nr. 984583708

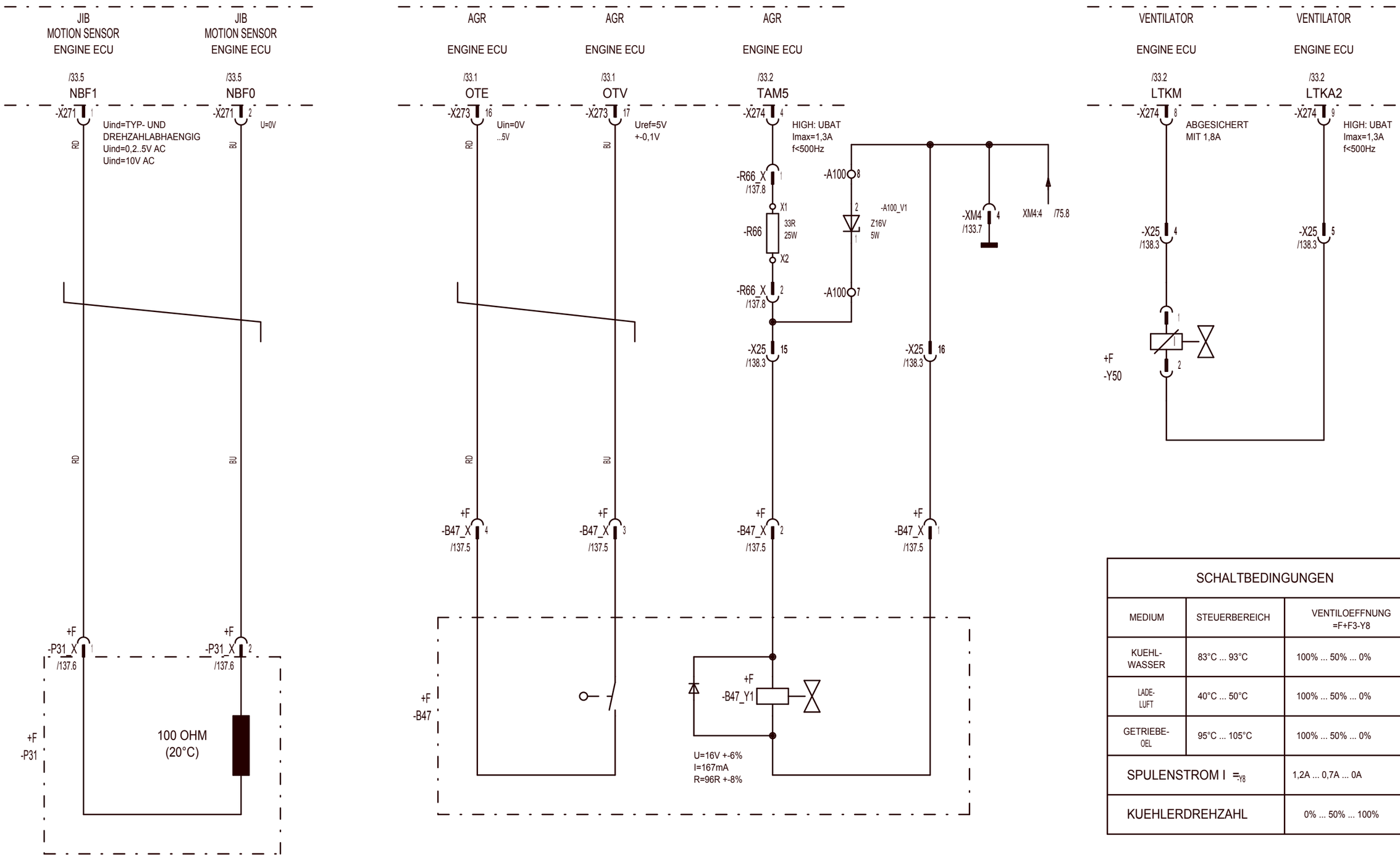
Zeich-Nr. 3272-920.06.01.000-002

= U

+ H

Blatt 57

von 153



SCHALTBEDINGUNGEN		
MEDIUM	STEUERBEREICH	VENTILOEFFNUNG =F+F3-Y8
KUEHL-WASSER	83°C ... 93°C	100% ... 50% ... 0%
LADE-LUFT	40°C ... 50°C	100% ... 50% ... 0%
GETRIEBE-OEL	95°C ... 105°C	100% ... 50% ... 0%
SPULENSTROM I $=_{Y8}$		1,2A ... 0,7A ... 0A
KUEHLERDREHZAHL		0% ... 50% ... 100%

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE JIB MOTION SENSOR , ENGINE VENTILATOR , EXHAUST RETURN AGB	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	+ H
1										Blatt 58
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

RELAY 130A/20A
63 01 051 08

15F37L1 /40.4

1

-K54

Rs=305R

2

-X25 7
/138.3

30F21L1 /39.5

2.5Ω

5 (87)

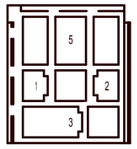
-K54
.2

3 (30)

2.5Ω

-X25 6
/138.3

RELAY 130A/20A
63 01 051 08



PLUG BASE
CONNECTION - SIDE

15F37L2 /40.5

-X25 8
/138.3

+F
-S117 P

X1

X2

AIR FILTER
IN ORDER

-X25 9
/138.3

-X721 4

B.E2.7
/28.2
DISPLAY UNIT
DRIVING CAB
AIR FILTER

2 3 1

+F
-E230

SHIFT POINT :
ON -1°C (+/-3°C)
OFF +6°C (+/-2°C)

4

STARTING CURRENT : I<=30A
(tmax=5se./U=30V)
NOMINAL CURRENT : I<=23A

T °C	25	50	80
R NENN	1,8R	1,48R	1,26R
R min	1,62R	1,33R	1,13R
R max	2,34R	1,92R	1,63R

2.5Ω

+F
-XM8.1 6
/136.2

+F
-XM8.1 5
/136.2

5 3 .3

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

ENGINE FUEL PREHEATING ,

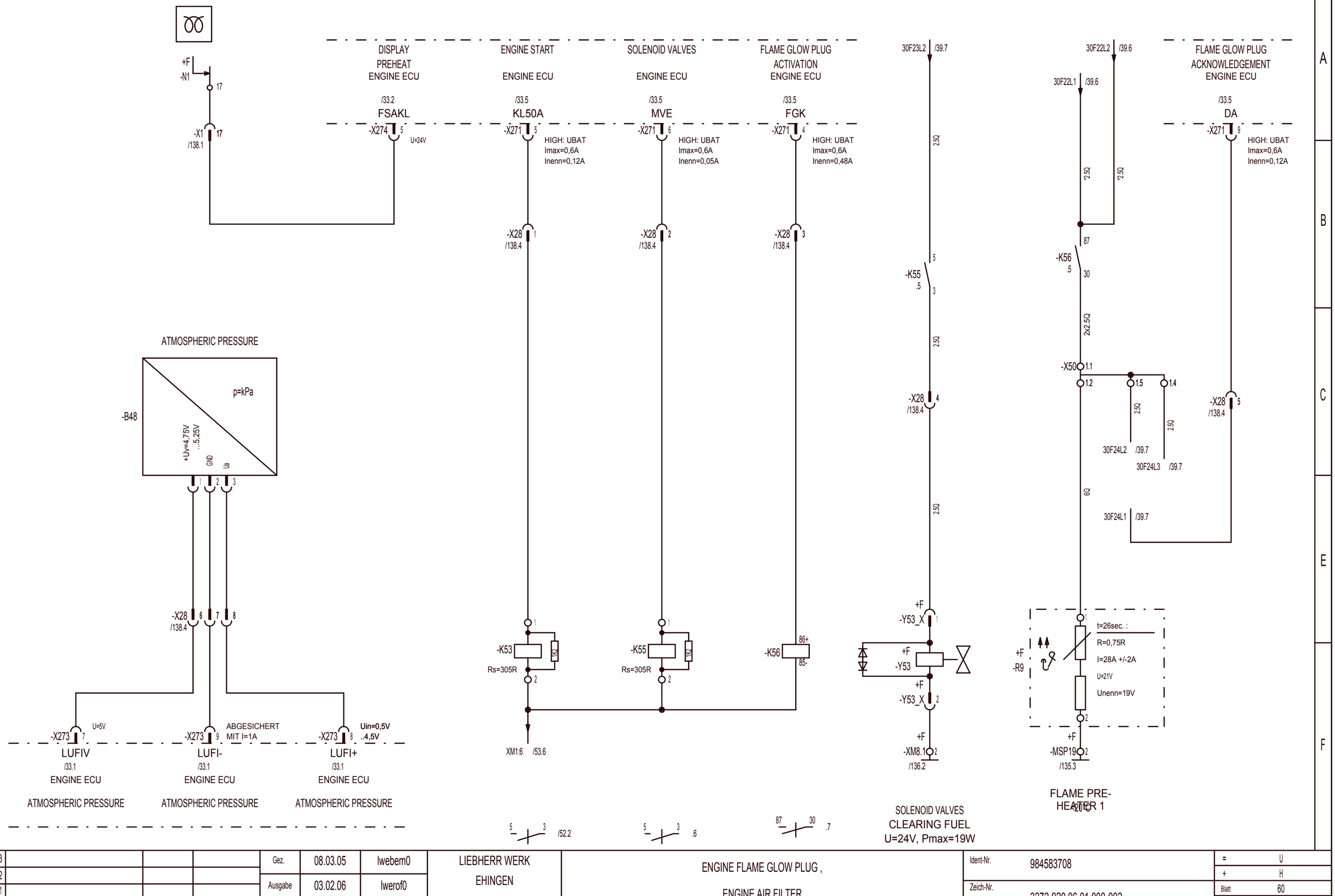
AIR FILTER

Ident-Nr. 984583708

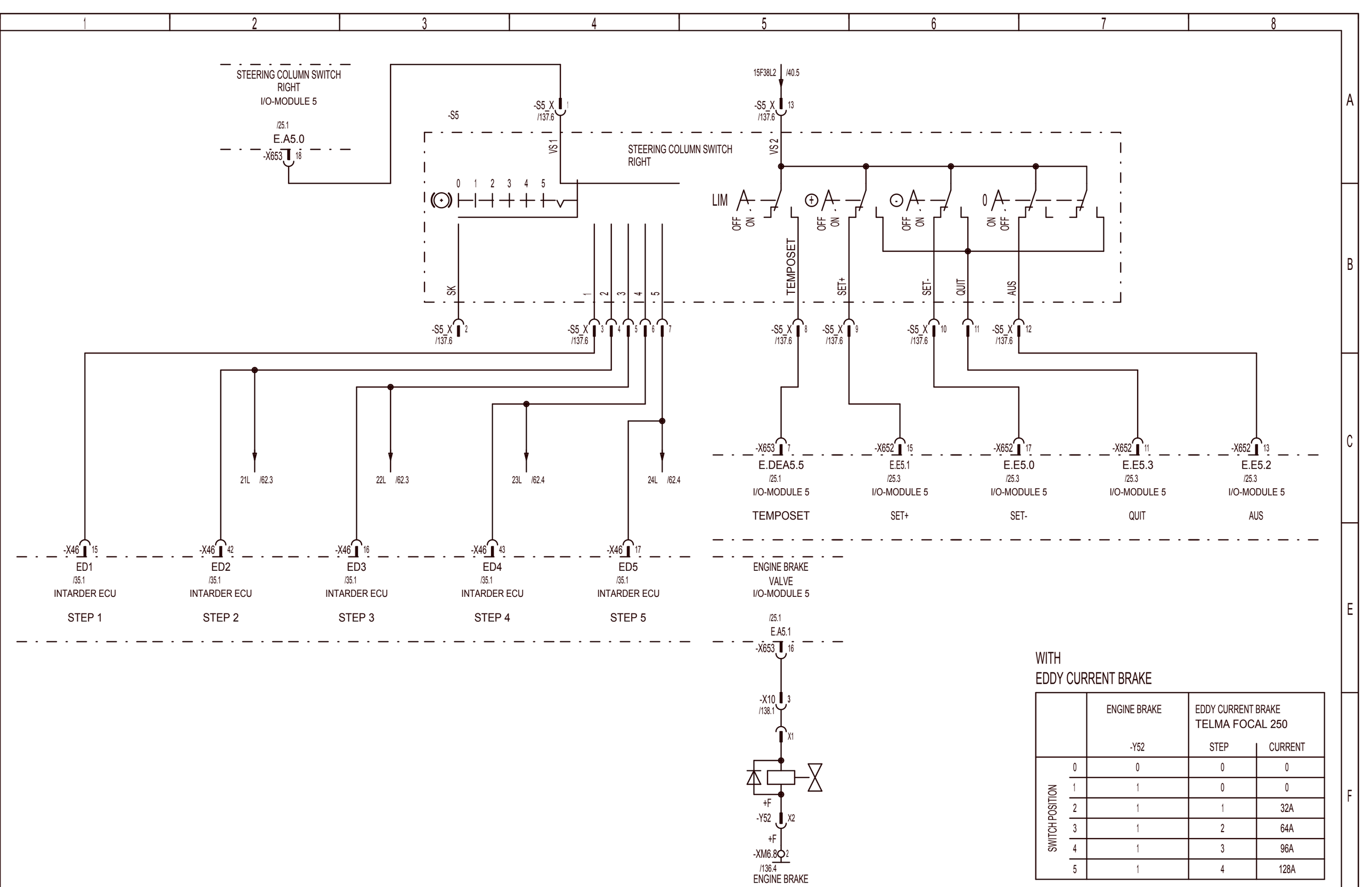
Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 59
von 153

A B C E F



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE FLAME GLOW PLUG , ENGINE AIR FILTER	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	+ H
1										Blatt 60
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



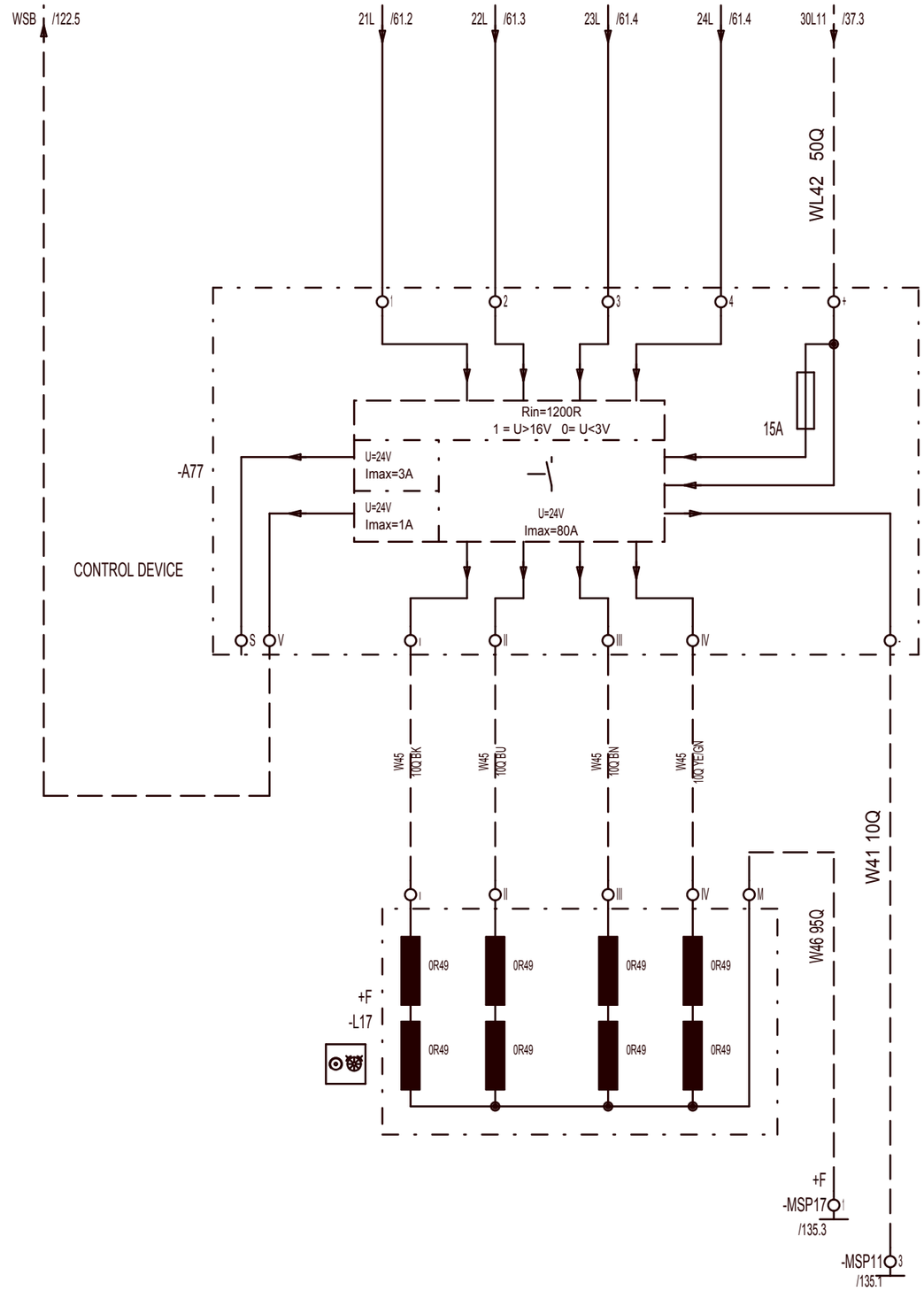
WITH
EDDY CURRENT BRAKE

		ENGINE BRAKE	EDDY CURRENT BRAKE TELMA FOCAL 250	
		-Y52	STEP	CURRENT
SWITCH POSITION	0	0	0	0
	1	1	0	0
	2	1	1	32A
	3	1	2	64A
	4	1	3	96A
	5	1	4	128A

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	ENGINE BRAKE , STEERING COLUMN SWITCH RIGHT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

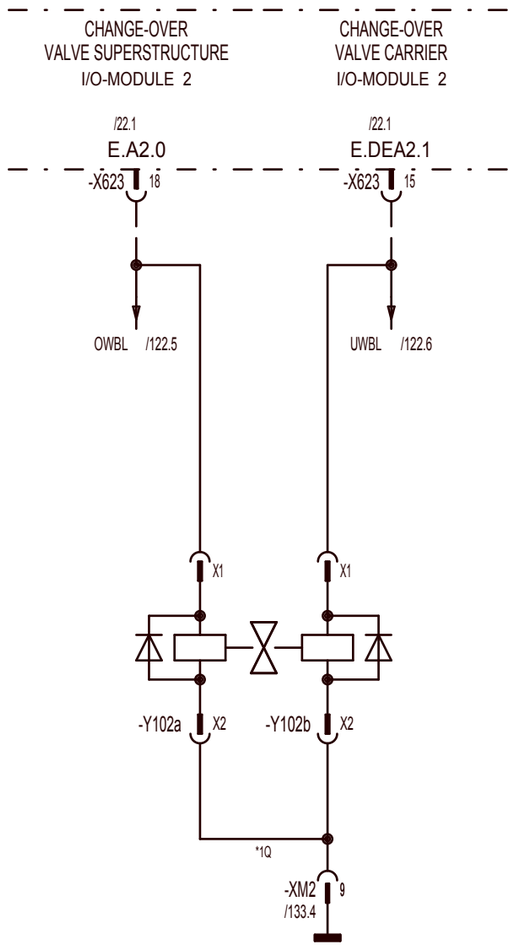
= U
+ H
Blatt 61
von 153

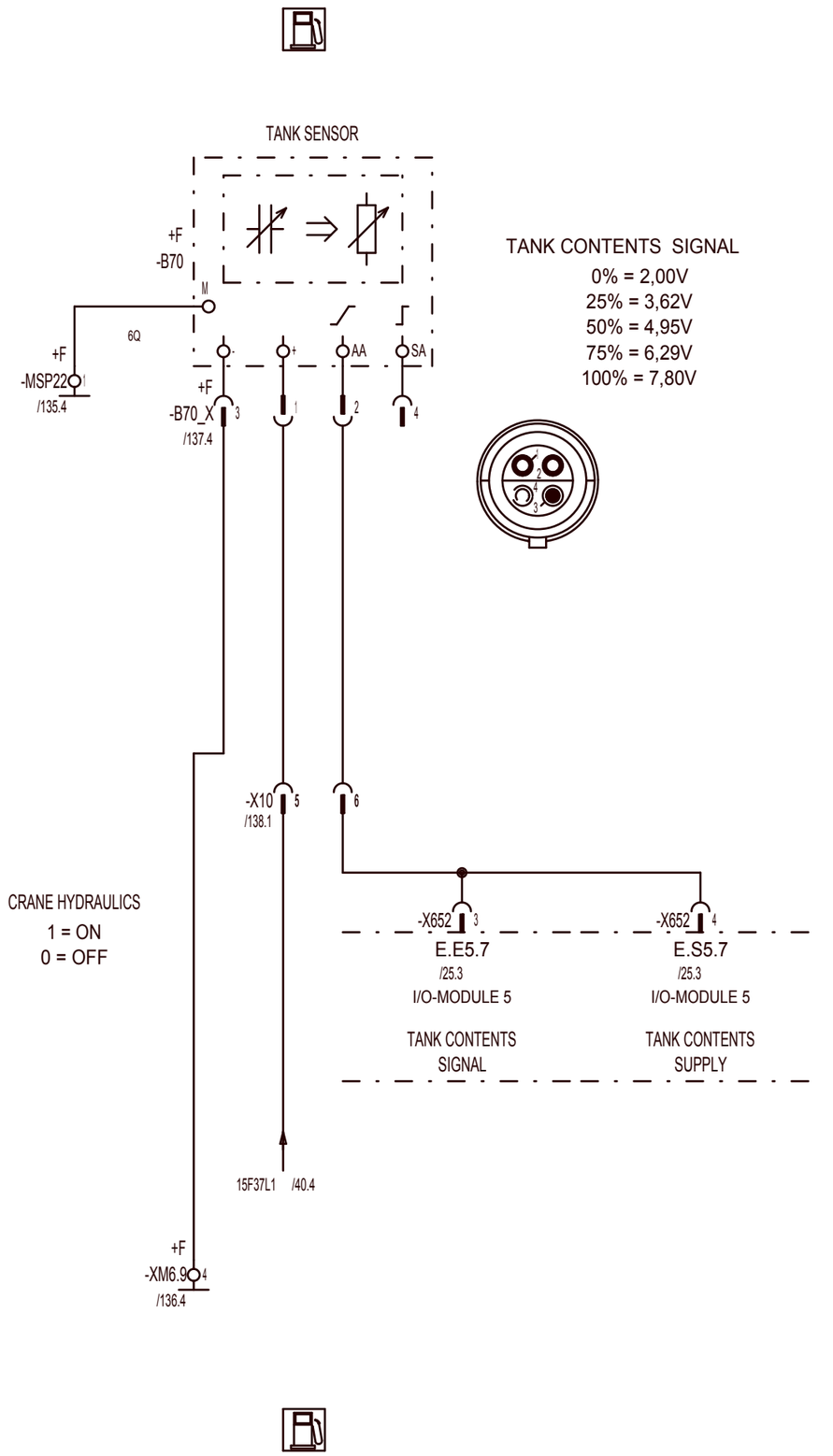


INPUT 1 = U>16V 0= U<3V				OUTLET					
1	2	3	4	I	II	III	IV	V	S
0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0
0	0	1	0	0	0	1	0	1	0
0	0	1	1	0	0	1	1	1	0
0	1	0	0	0	1	0	0	1	0
0	1	0	1	0	1	0	1	1	0
0	1	1	0	0	1	1	0	1	0
0	1	1	1	0	1	1	1	1	0
1	0	0	0	1	0	0	0	1	1
1	0	0	1	1	0	0	1	1	1
1	0	1	0	1	0	1	0	1	1
1	0	1	1	1	0	1	1	1	1
1	1	0	0	1	1	0	0	1	1
1	1	0	1	1	1	0	1	1	1
1	1	1	0	1	1	1	0	1	1
1	1	1	1	1	1	1	1	1	1

		ENGINE BRAKE -Y52	EDDY CURRENT BRAKE TELMA FOCAL 250 STEP	CURRENT +-5%
SWITCH POSITION	0	0	0	0
	1	1	0	0
	2	1	1	32A
	3	1	2	64A
	4	1	3	96A
	5	1	4	128A

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* EDDY CURRENT BRAKE	Ident-Nr. 984583708	= U
2										+ H
1				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	Blatt 62
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

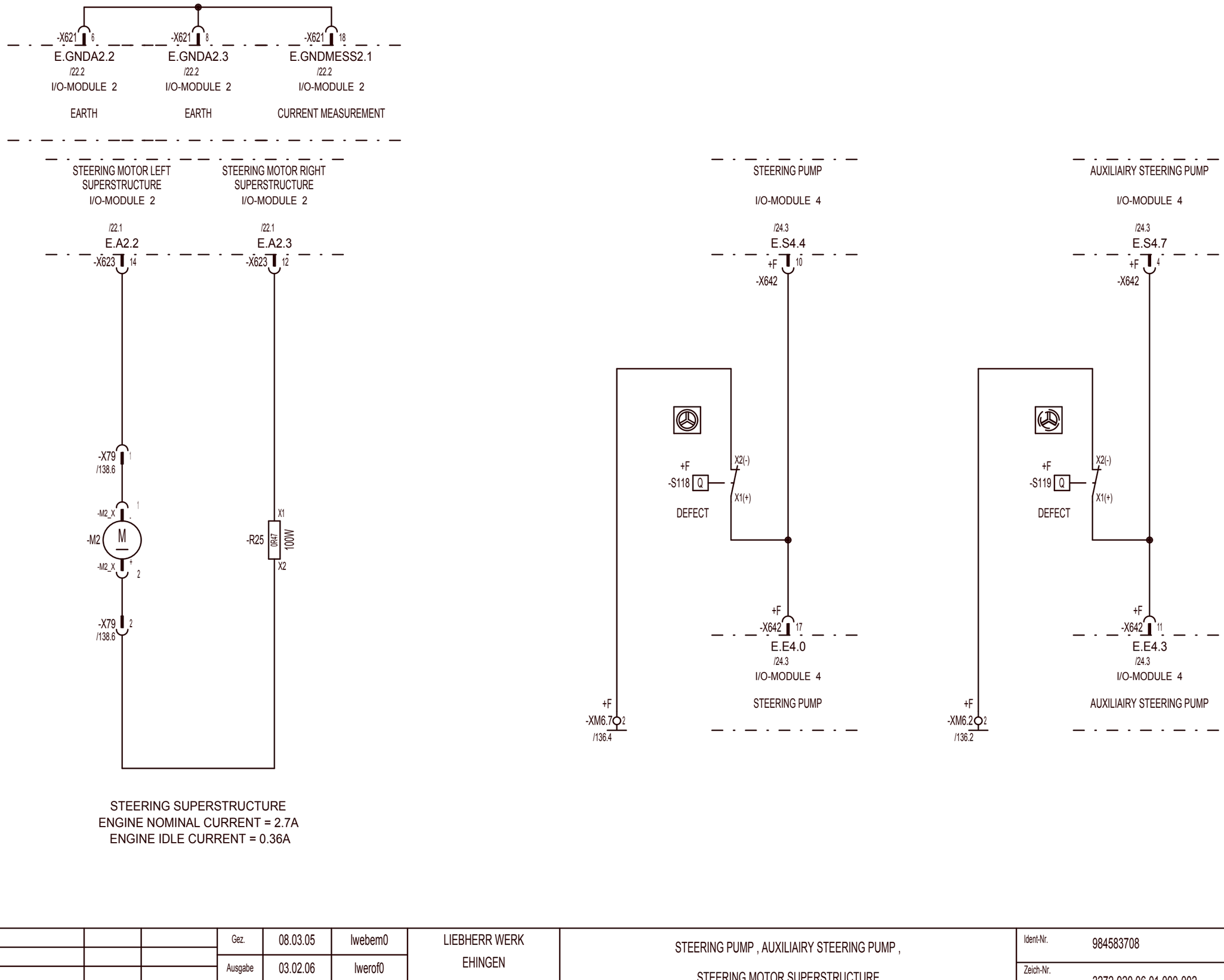




3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	TANK CONTENTS , CHANGE OVER OW/UW
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

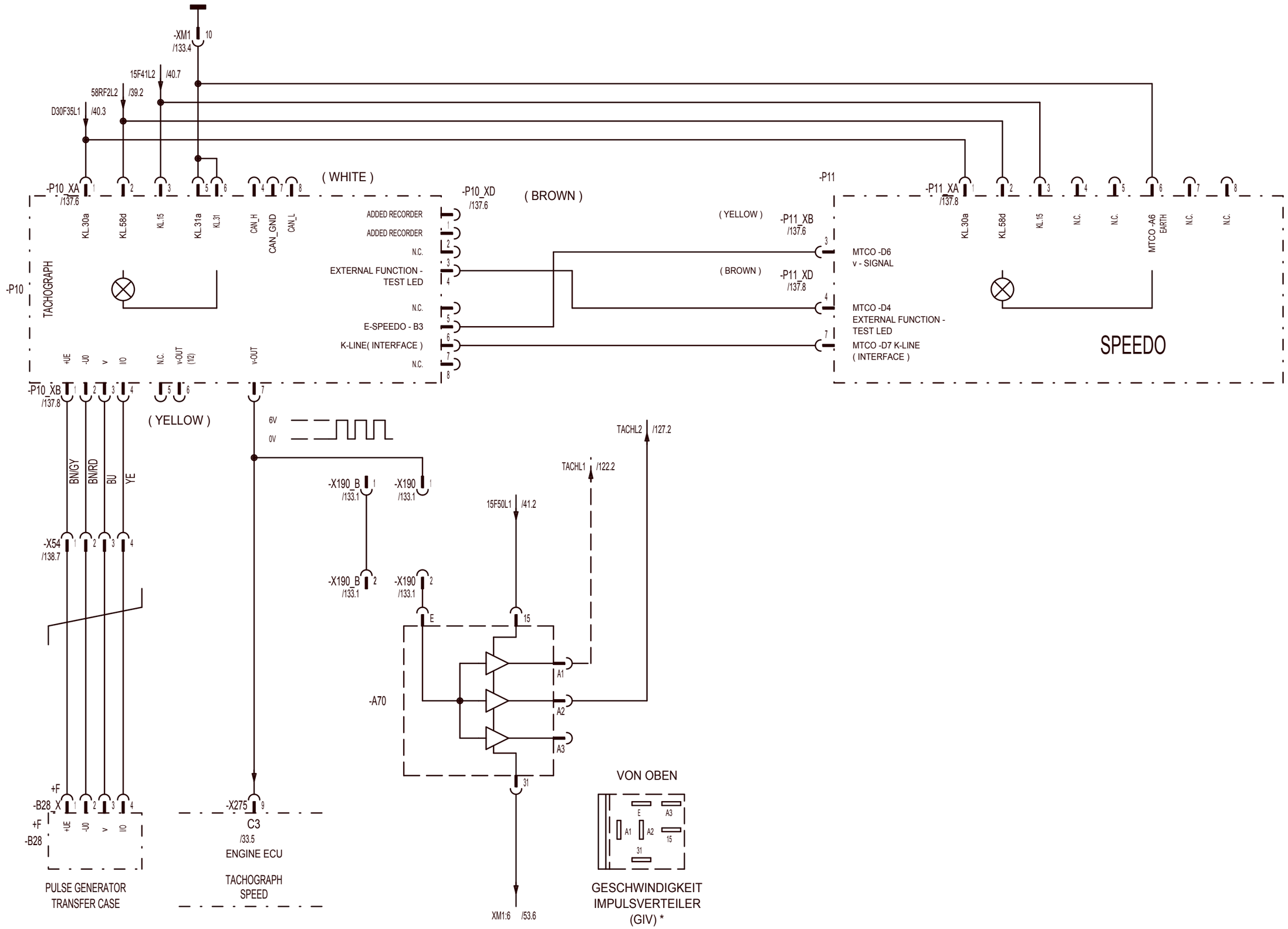
=	U
+	H
Blatt	63
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	STEERING PUMP , AUXILIAIRY STEERING PUMP , STEERING MOTOR SUPERSTRUCTURE
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	64
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	TACHOGRAPH , TACHOGRAPH
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	65
von	153

30F20L1 /39.5

-X26 /138.3 1

-X26 /138.3 2

15F41L1 /40.6

-X26 /138.3 3

+F -XM8.2 /136.4 4

+F -XM8.2 /136.4 5

1Q / 10 cm

1Q / 10 cm

+F -X44 4 U=24V

+F -X44 5 U=24V

+F -X44 1 U=24V

+F -X44 16 U=0V

+F -X44 17 U=0V

VPE1 /34.1 TRANSMISSION ECU OPERATING VOLTAGE

VPE2 /34.1 TRANSMISSION ECU OPERATING VOLTAGE

VPI /34.1 TRANSMISSION ECU OPERATING VOLTAGE

VM1 /34.1 TRANSMISSION ECU OPERATING VOLTAGE

VM2 /34.1 TRANSMISSION ECU OPERATING VOLTAGE

INDUCTIVE SENSOR DRIVE TRANSMISSION ECU

INDUCTIVE SENSOR DRIVE TRANSMISSION ECU

INDUCTIVE SENSOR DRIVE TRANSMISSION ECU

/34.5 VMGA2

/34.5 EF

/34.5 ADVP

+F -X45 6 U=0V

+F -X45 11 U=DREHZAHL-ABHAENGIG

+F -X45 18 U=5V

+F -B29_X /137.5 2

3

1

U0

A1

UE

+F -B29

SPEED

A

B

C

E

F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	TRANSMISSION ECU VOLTAGE SUPPLY , TRANSMISSION INDUCTIVE TRANSMITTER OUTPUT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708

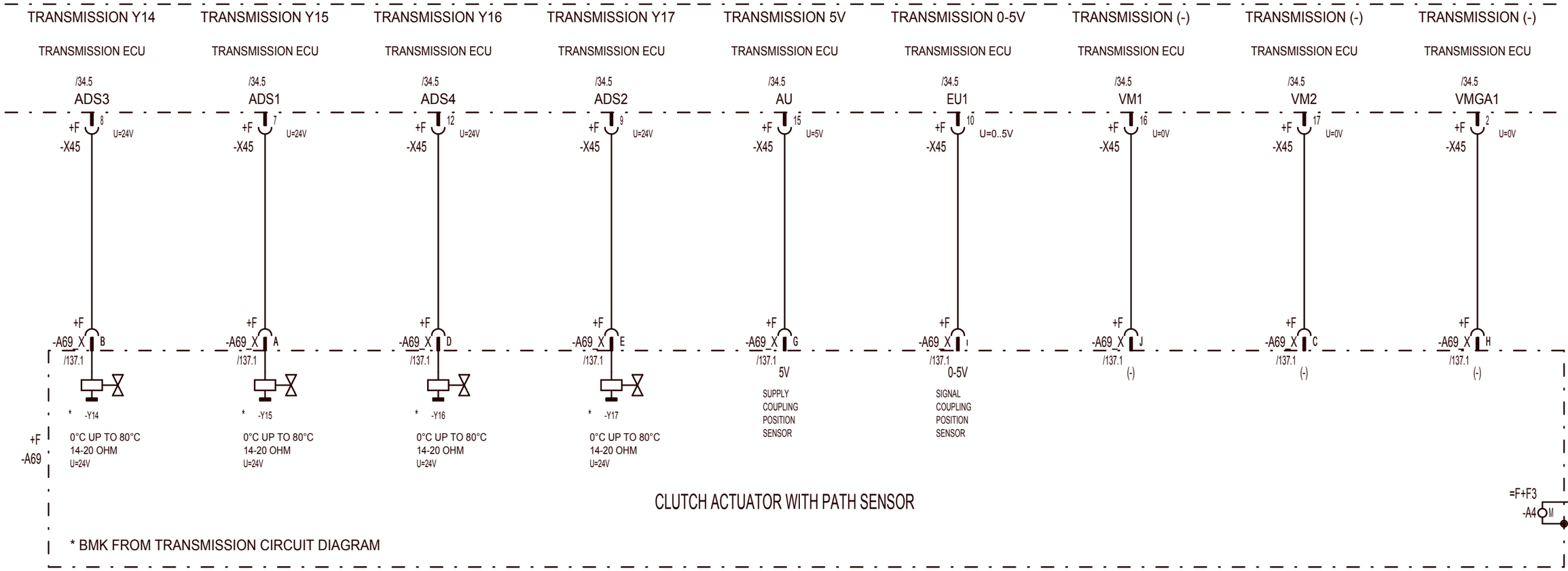
Zeich-Nr. 3272-920.06.01.000-002

= U

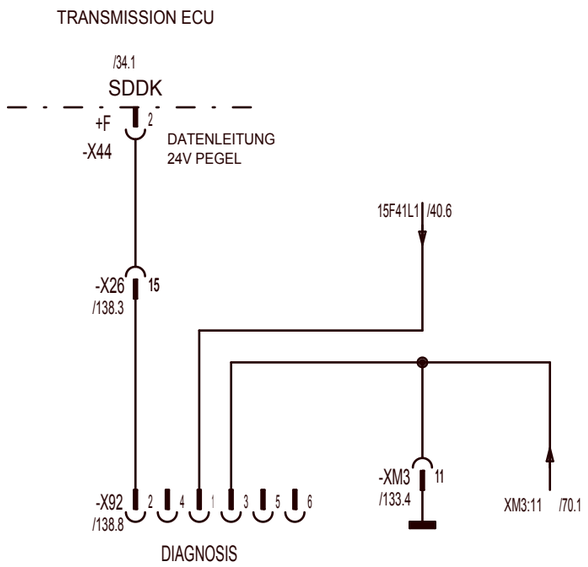
+ H

Blatt 66

von 153



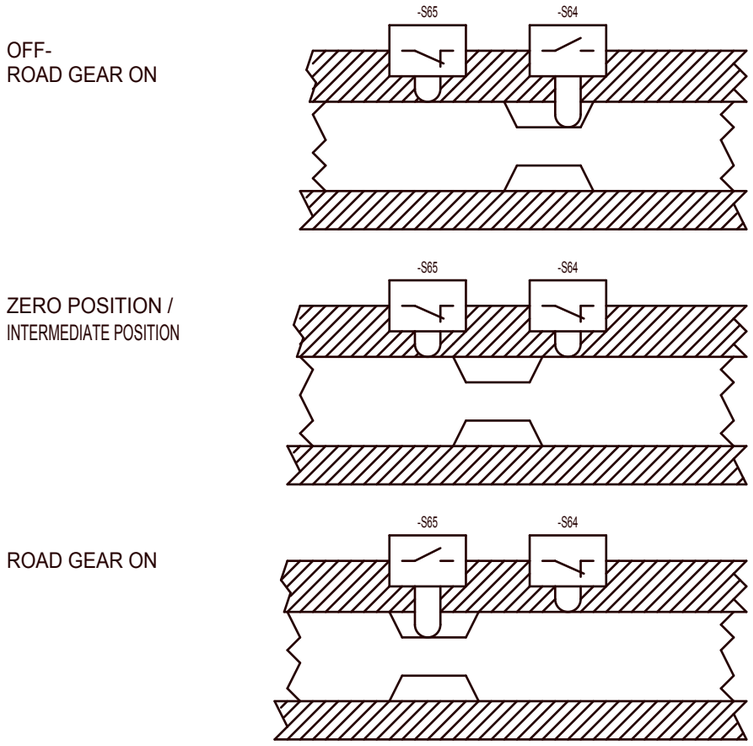
TRANSMISSION DIAGNOSIS



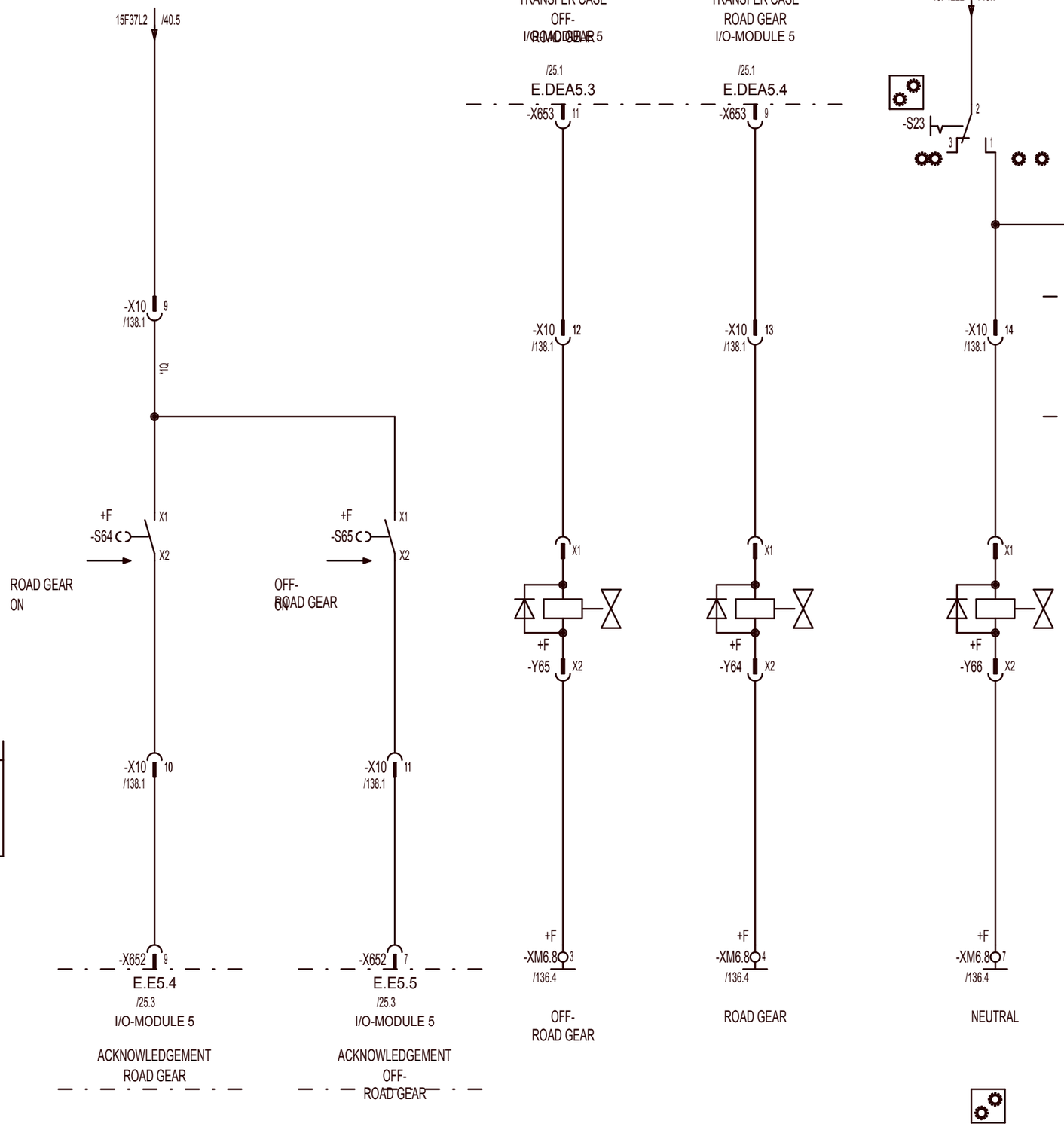
FUNCTION CLUTCH ACTUATOR

VALVE	FUNCTION
-Y14	QUICK CLOSING
-Y15	SLOWLY CLOSING
-Y16	QUICK OPEN
-Y17	SLOWLY OPEN

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	CLUTCH ACTUATOR , TRANSMISSION DIAGNOSIS	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	+ H
1										Blatt 67
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



-S23	-S64	-S65	OPERATING MODES	ACKNOWLEDGEMENT
0	0	0	ERROR	FLASHING
0	0	1	OFF-	ON
0	1	0	**ROAD GEAR ON**	OFF
1	1	1	ZERO POSITION	FLASHING QUICK
0	1	1	INTERMEDIATE POSITION	FLASHING



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

TRANSFER CASE

Ident-Nr. 984583708

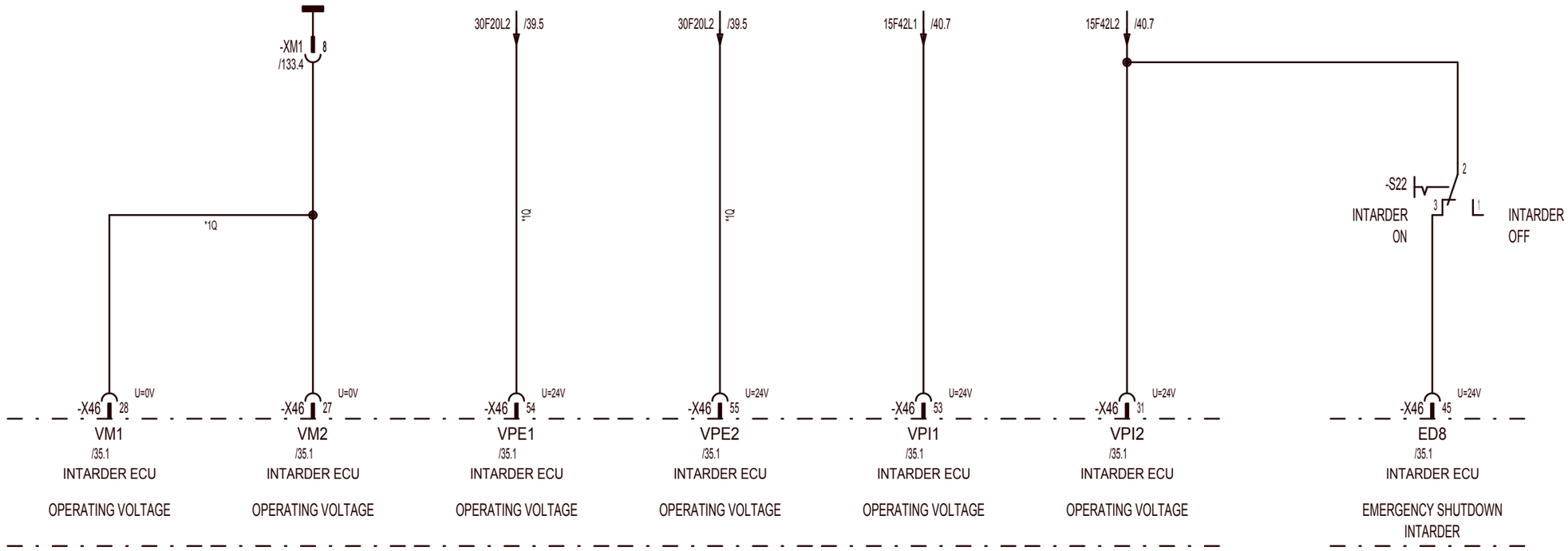
Zeich-Nr. 3272-920.06.01.000-002

= U

\+ H

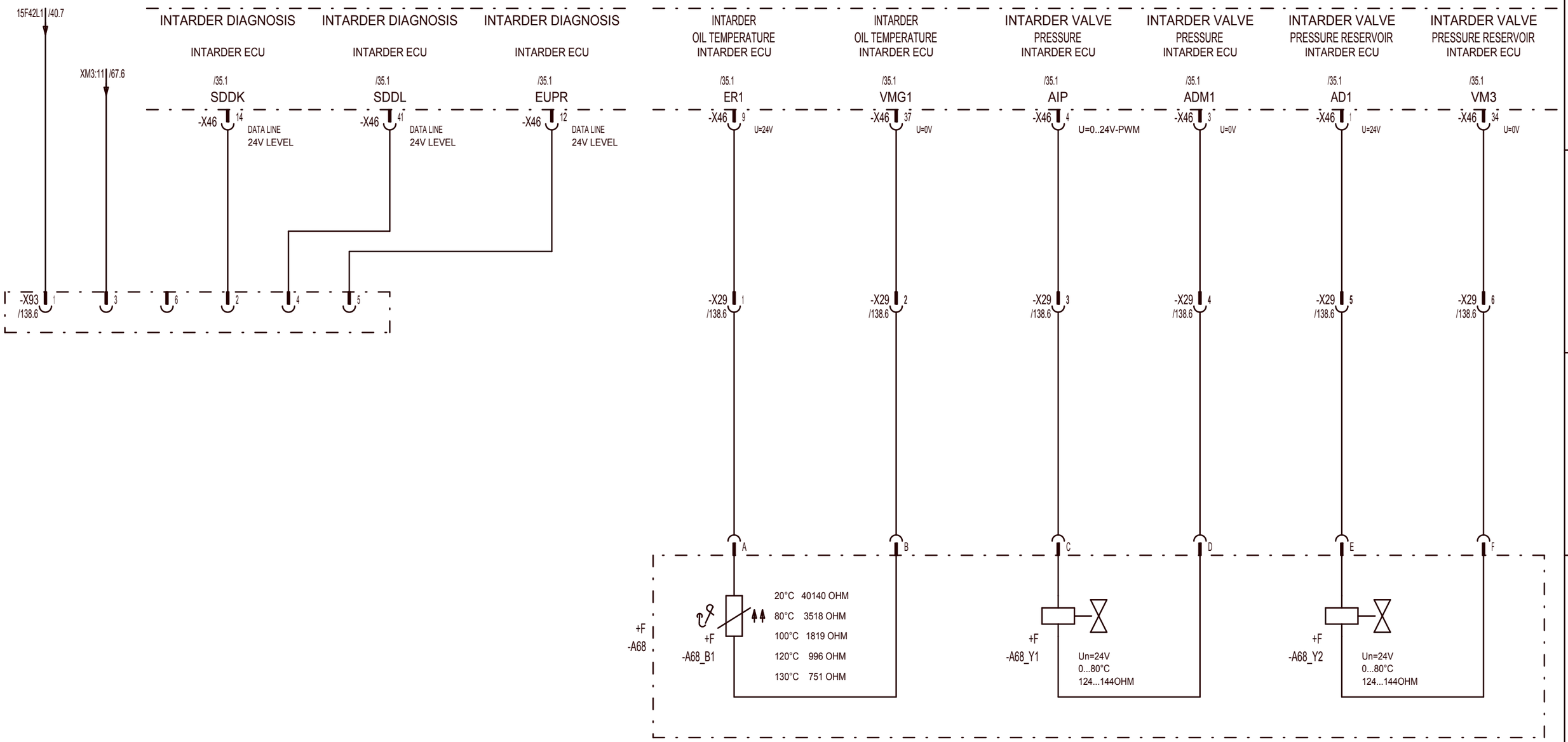
Blatt 68

von 153



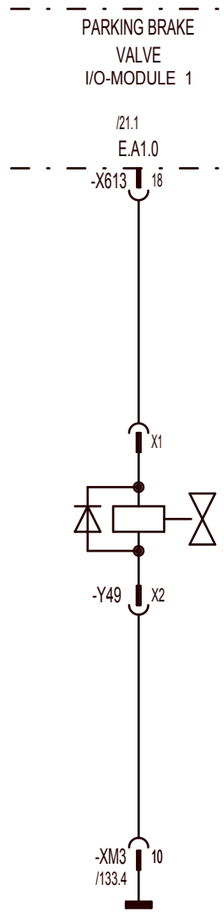
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	INTARDER ECU VOLTAGE SUPPLY , INTARDER EMERGENCY SWITCH	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

=	U
+	H
Blatt	69
von	153



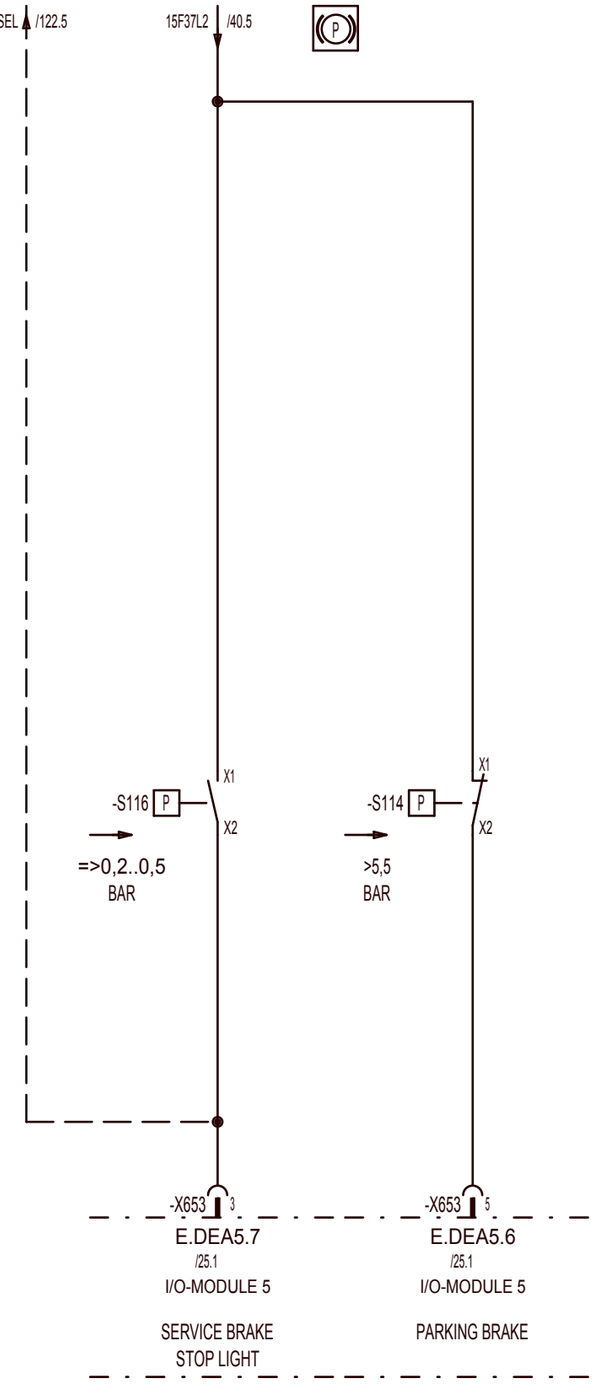
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	INTARDER DIAGNOSIS , INTARDER VALVES , INTARDER TEMPERATURE SENSOR	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	+ H
1										Blatt 70
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

	CHANGE OVER SUPERSTRUCTURE / EXCESS PRESSURE	VALVE PARKING BRAKE SUPERSTRUCTURE	IGNITION EXCESS PRESSURE	IGNITION SUPERSTRUCTURE	ENGINE D+	LICCON SLI	SWITCH PARKING BRAKE OPERATOR'S CAB	SWITCH TRAVELLING DIRECTION
PARKING BRAKE SUPERSTRUCTURE = OPERN	SUPERSTRUCTURE	LEFT	OFF	ON	ON	ON	ON	FORWARD OR BACKWARDS
PARKING BRAKE SUPERSTRUCTURE = OPERN	EXCESS PRESSURE	WITHOUT FUNCTION						



1 = OPERN

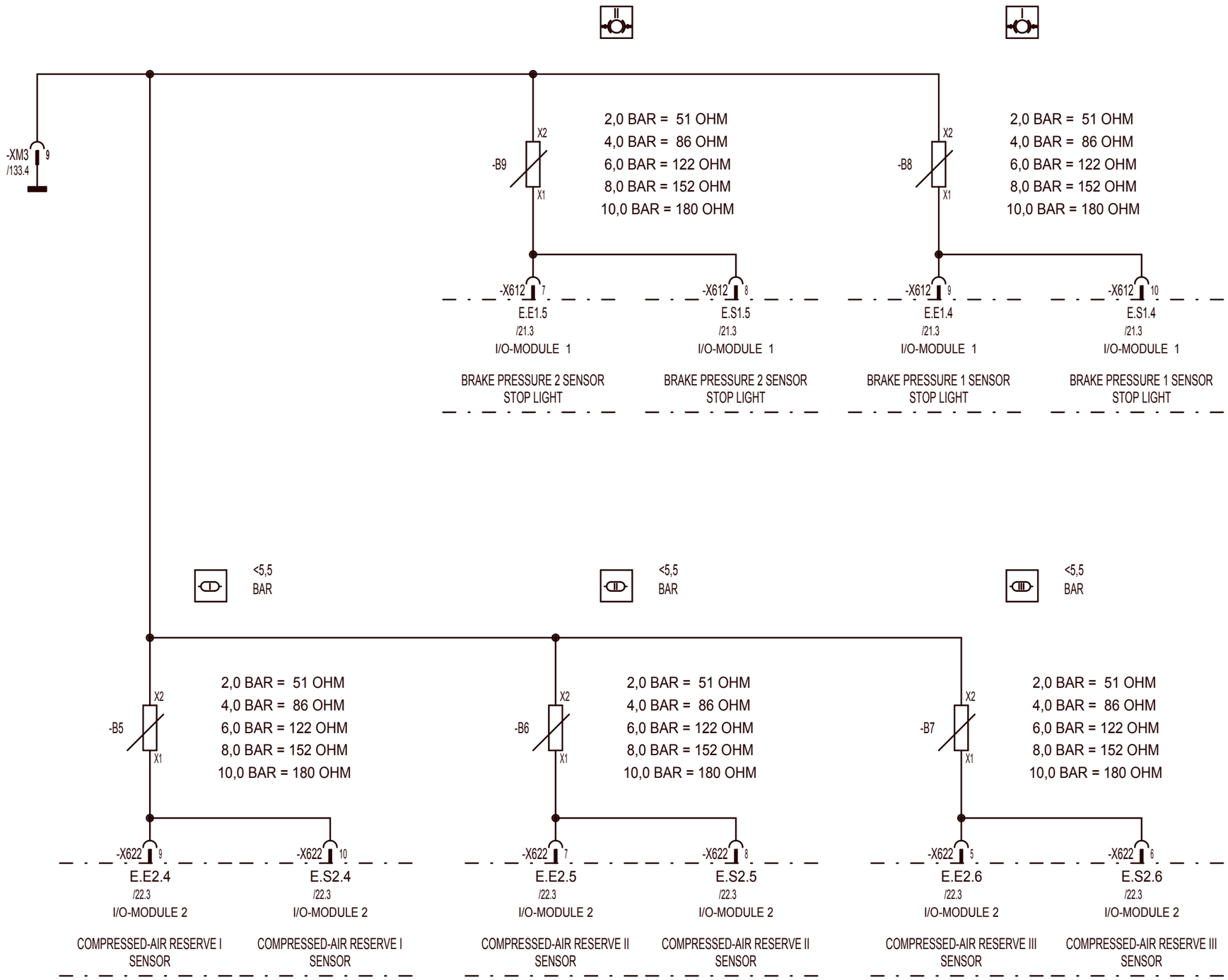
0 = CLOSED



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SERVICE BRAKE , PARKING BRAKE
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	71
von	153

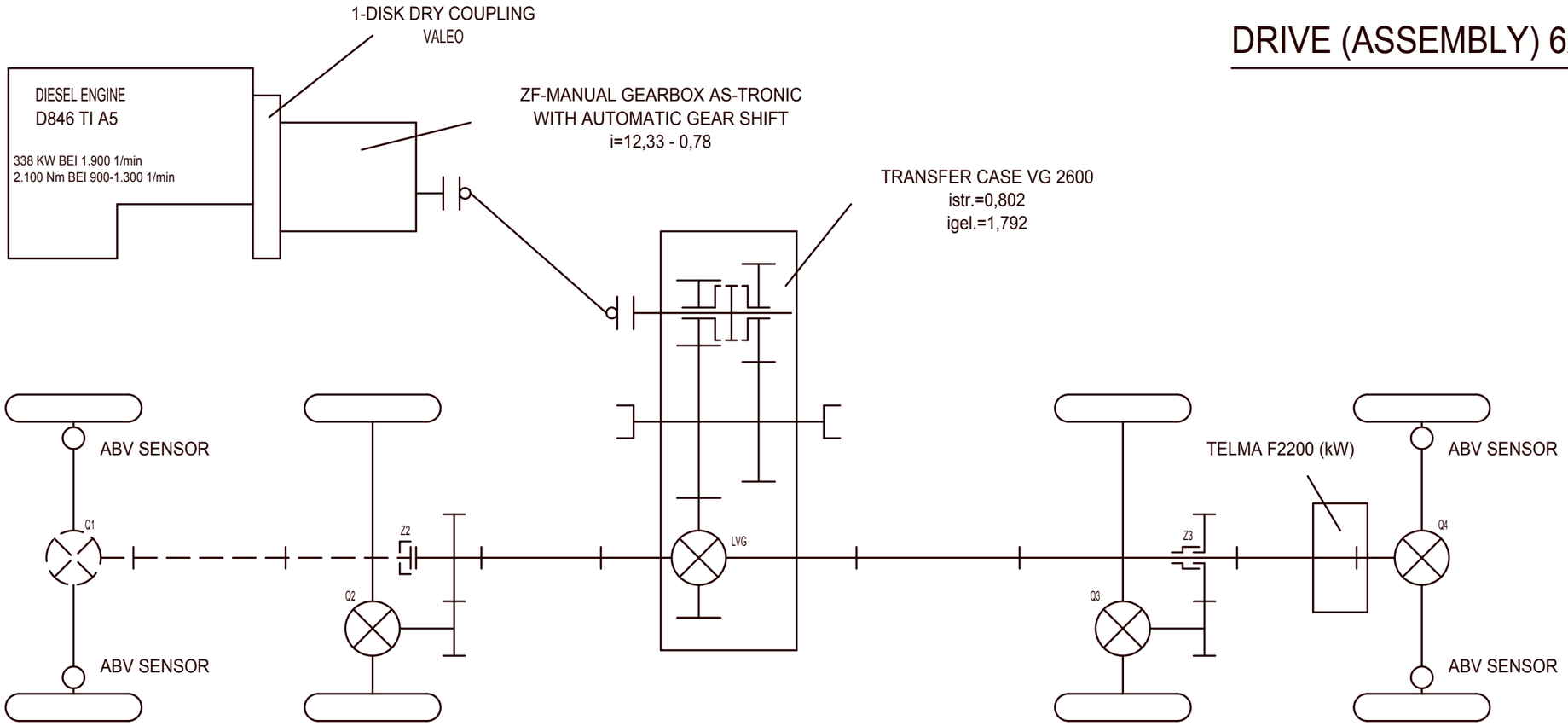


3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	AIR PRESSURE RESERVE , BRAKE PRESSURE
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	72
von	153

DRIVE (ASSEMBLY) 6X8 / * 8X8



GEAR SHIFT ROAD-
OFF-

ROAD GEAR (TRANSFER CASE VG), FRONT AXLE AND TRANSVERSAL DIFFERENTIAL PAWL

PREREQUISITE : ROAD- SPEED max. 1km/h AND
OFF- MANUAL GEARBOX ZERO POSITION
ROAD GEAR =
DIFFERENTIAL LOCKS = SPEED max. 1km/h

ORDER :

1. LONGITUDINAL DIFFERENTIAL PAWL LVG - *ACTIVATION AXLE 1 (Z2) - ACTIVATION AXLE 3 (Z3)

2. TRANSVERSAL DIFFERENTIAL PAWL AXLE 3 (Q3) - AXLE 4 (Q4)

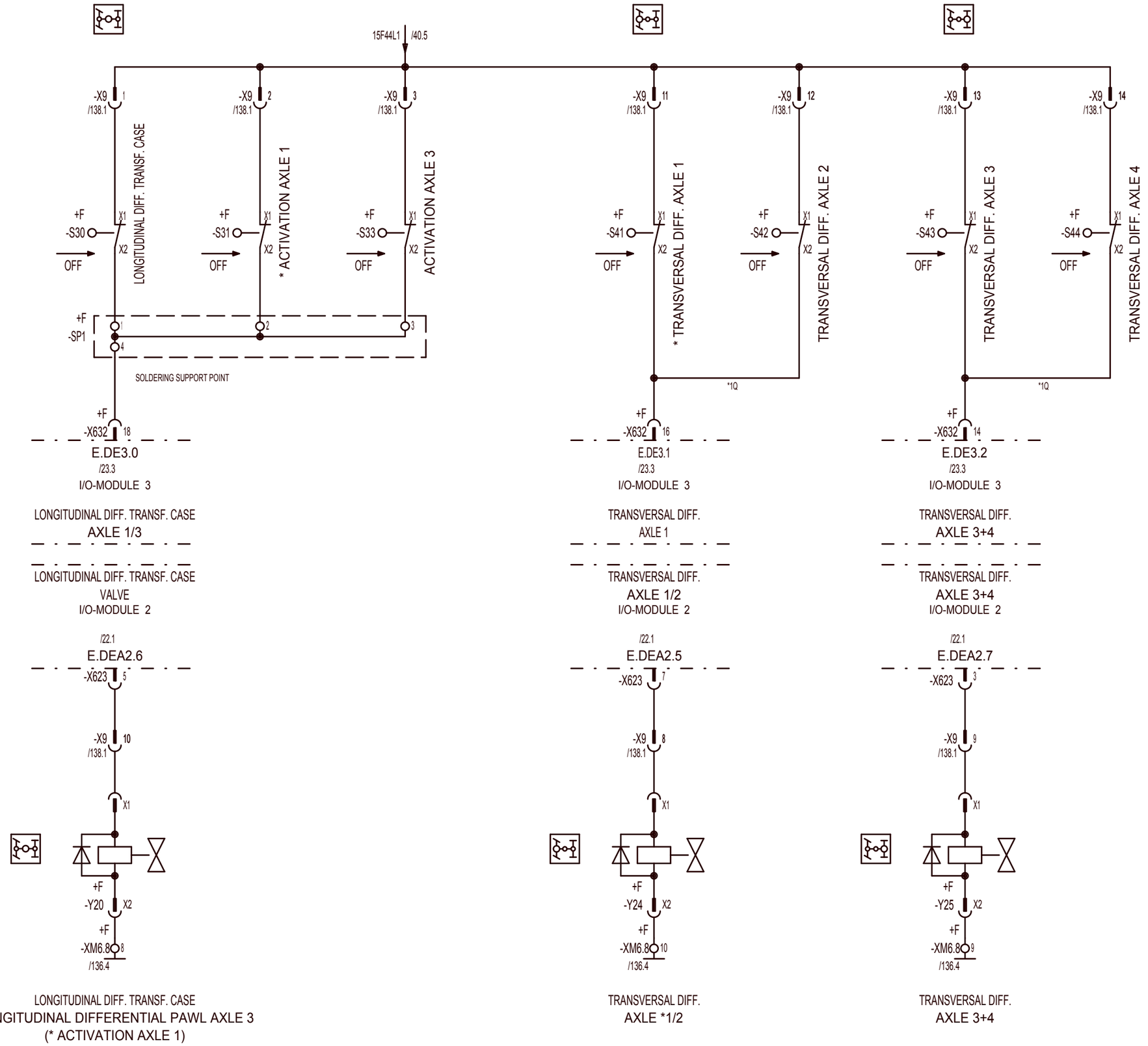
3. TRANSVERSAL DIFFERENTIAL PAWL *AXLE 1 (Q1) - AXLE 2 (Q2) => ONLY IN DRIVER'S CAB POSSIBLE

AT COMPLETED SHIFT ,LIMITER SPEED UP max. 40 km/h
OFF-
ROAD GEAR IN TRANSFER CASE VG => SHIFT MODE " MANUALLY "

* OPTION DRIVE (ASSEMBLY) 8X8

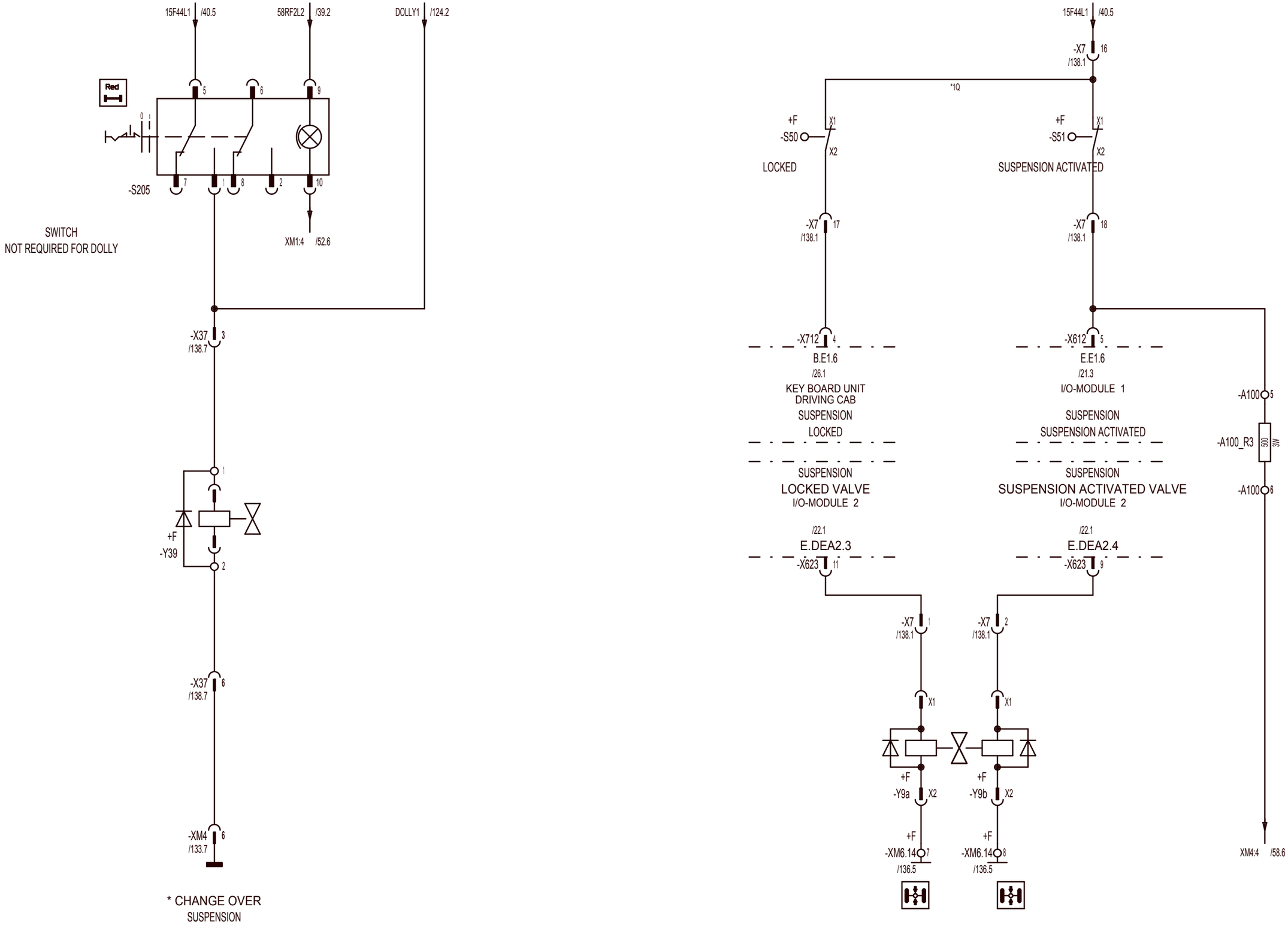
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	POWER TRAIN FUNCTIONAL DIAGRAMM 6X8 (*8X8) , DIFFERENTIAL LOCKS FUNCTIONAL DIAGRAMM
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
+ H
Blatt 73
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DIFFERENTIAL LOCKS	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

=	U
+	H
Blatt	74
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

SUSPENSION LOCKED / SUSPENSION ACTIVATED ,

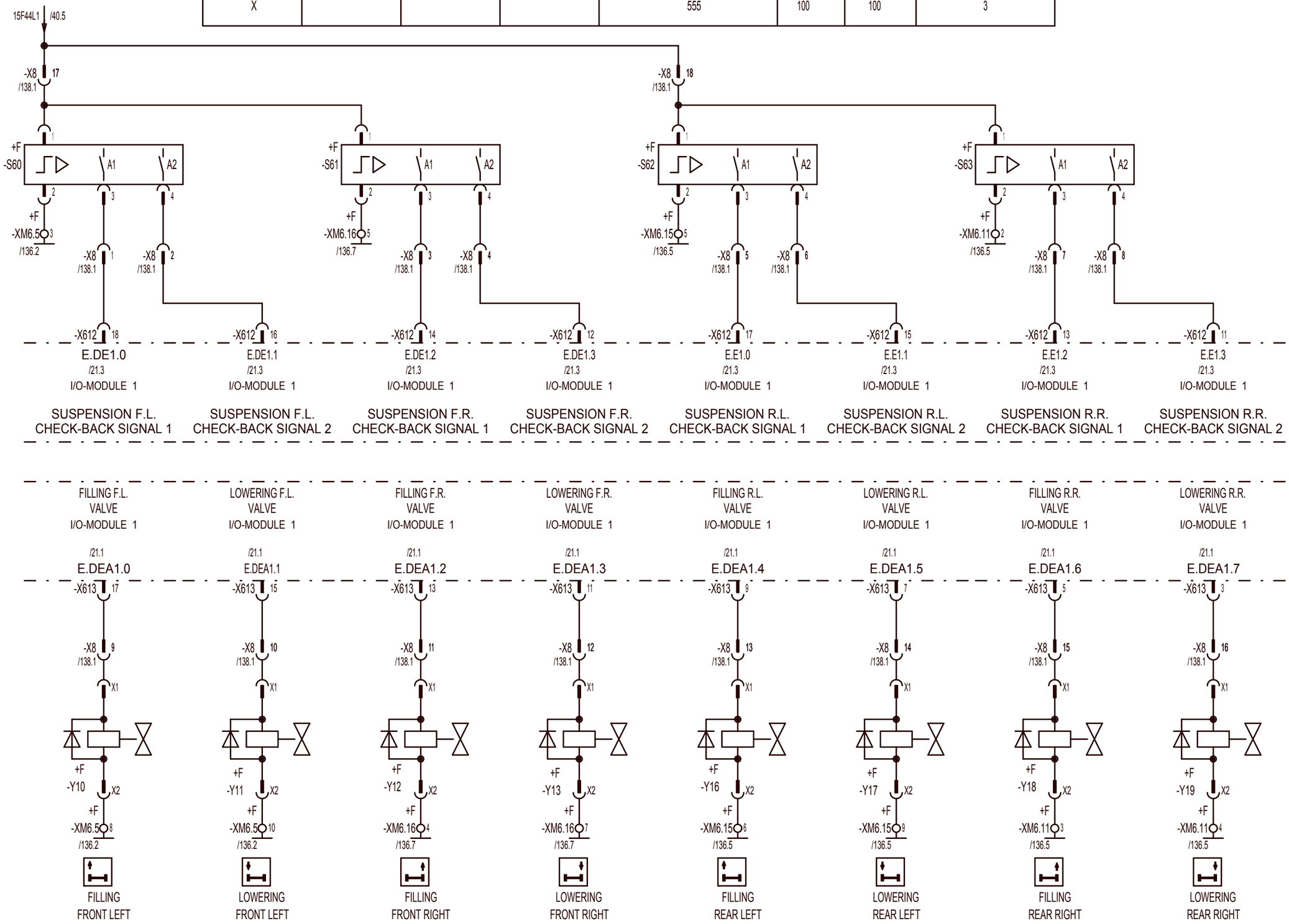
* CHANGE OVER SUSPENSION

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

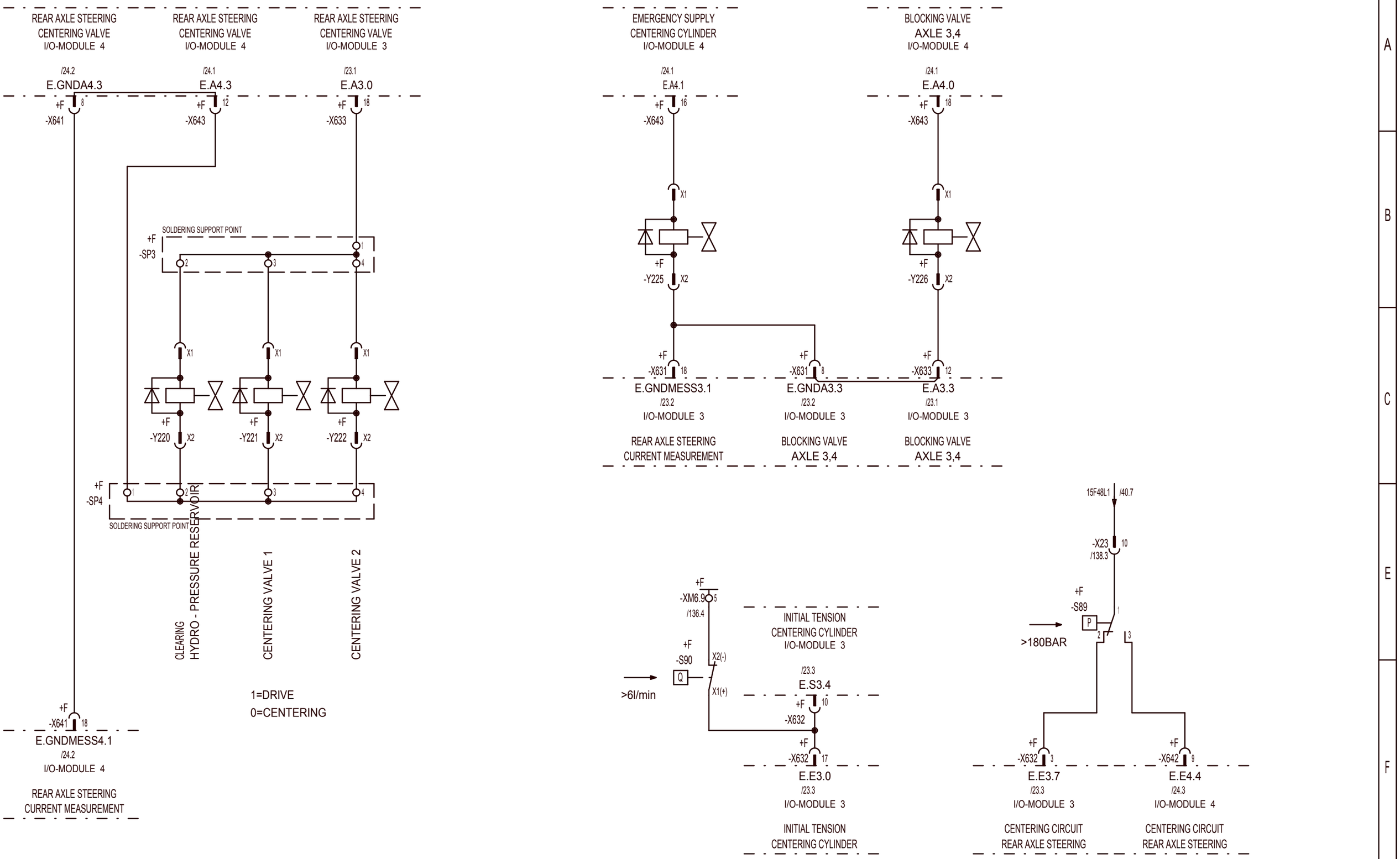
=	U
+	H
Blatt	75
von	153

TYRE EQUIPMENT				RAM LENGTH [mm]	SPRING EXCURSION [mm]		POSITION
14.00 R25	16.00 R25	17.5 R25	20.5 R25	LEVEL	ON	OFF	LEVEL SWITCH
X				555	100	100	3

A2	0	1	0	1
A1	0	0	1	1
	VEHICLE RAISED / LEVEL ==> LOWERING	VEHICLE LEVEL	ERROR	VEHICLE LOWERED / LEVEL ==> RAISING



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SUSPENSION	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 76
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

REAR AXLE STEERING

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	77
von	153

15F48L2 /40.7

CAN B
I/O-MODULE 4
/24.1
E.CANL4.1
+F
-X645
6
+F
-A104_X
1
/137.1
-A104
4
1
120R
2
7

CAN B
I/O-MODULE 4
/24.1
E.CANH4.1
+F
-X645
5
+F
-A104_X
2
/137.1

CAN B
I/O-MODULE 3
/23.1
E.CANL3.1
+F
-X635
6
+F
-A103_X
1
/137.2
-A103
4
1
120R
2
7

CAN B
I/O-MODULE 3
/23.1
E.CANH3.1
+F
-X635
5
+F
-A103_X
2
/137.2

-A104
RESISTOR MODULE
CONNECTION - SIDE

-A103
RESISTOR MODULE
CONNECTION - SIDE

SOLDERING SUPPORT POINT

+F
-SPCAN.2
1 4 2 3

+F
-SPCAN.3
1 4 2 3

-X23
/138.3
2
15

-X23
/138.3
3
16

+F
-Y231_X
2 3 1 4
CAN-L
CAN-H
UB 24V
GND
+F
-Y231

+F
-Y232_X
2 3 1 4
CAN-L
CAN-H
UB 24V
GND
+F
-Y232

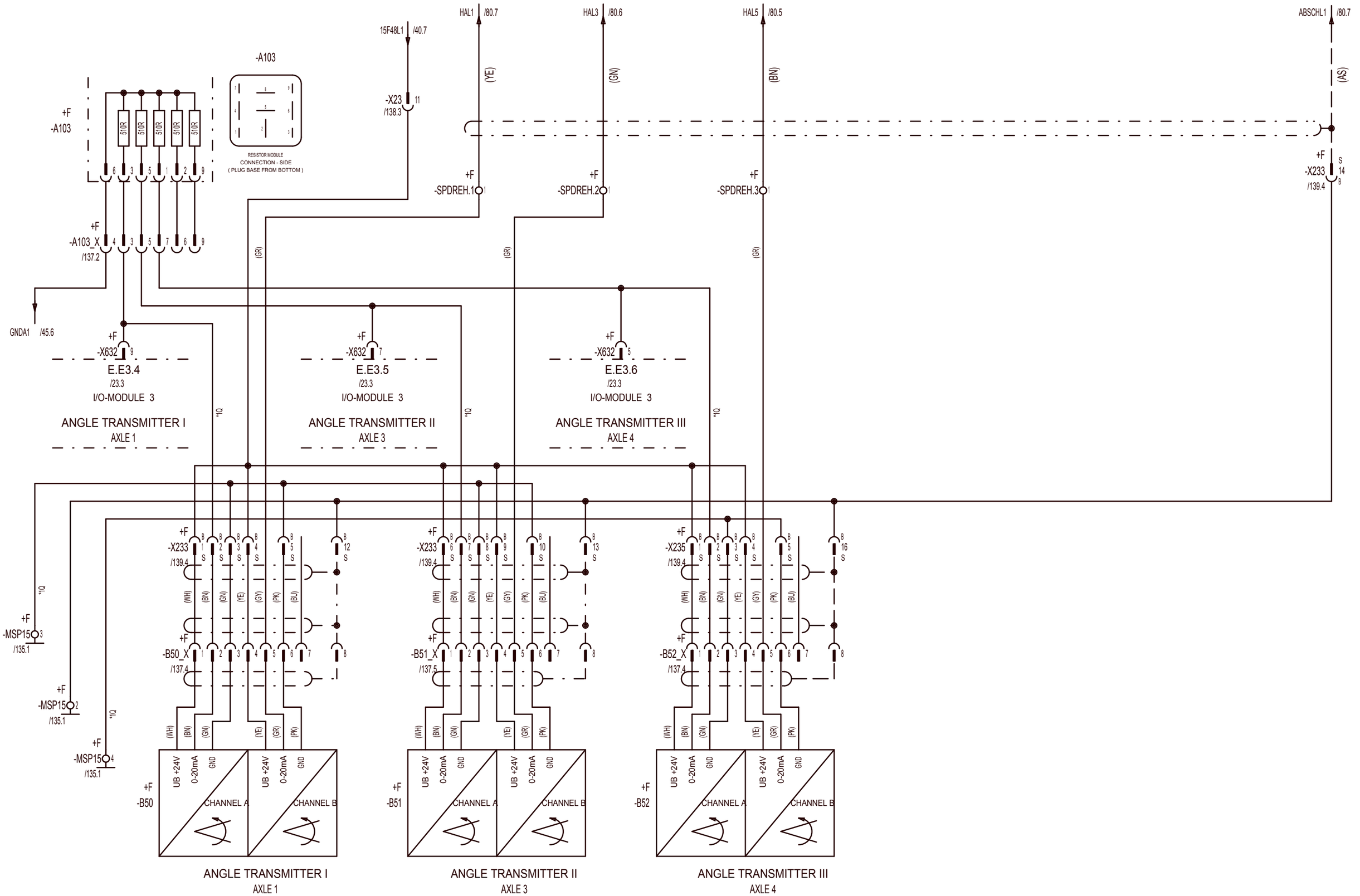
-XM3
/133.4
2

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

REAR AXLE STEERING

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

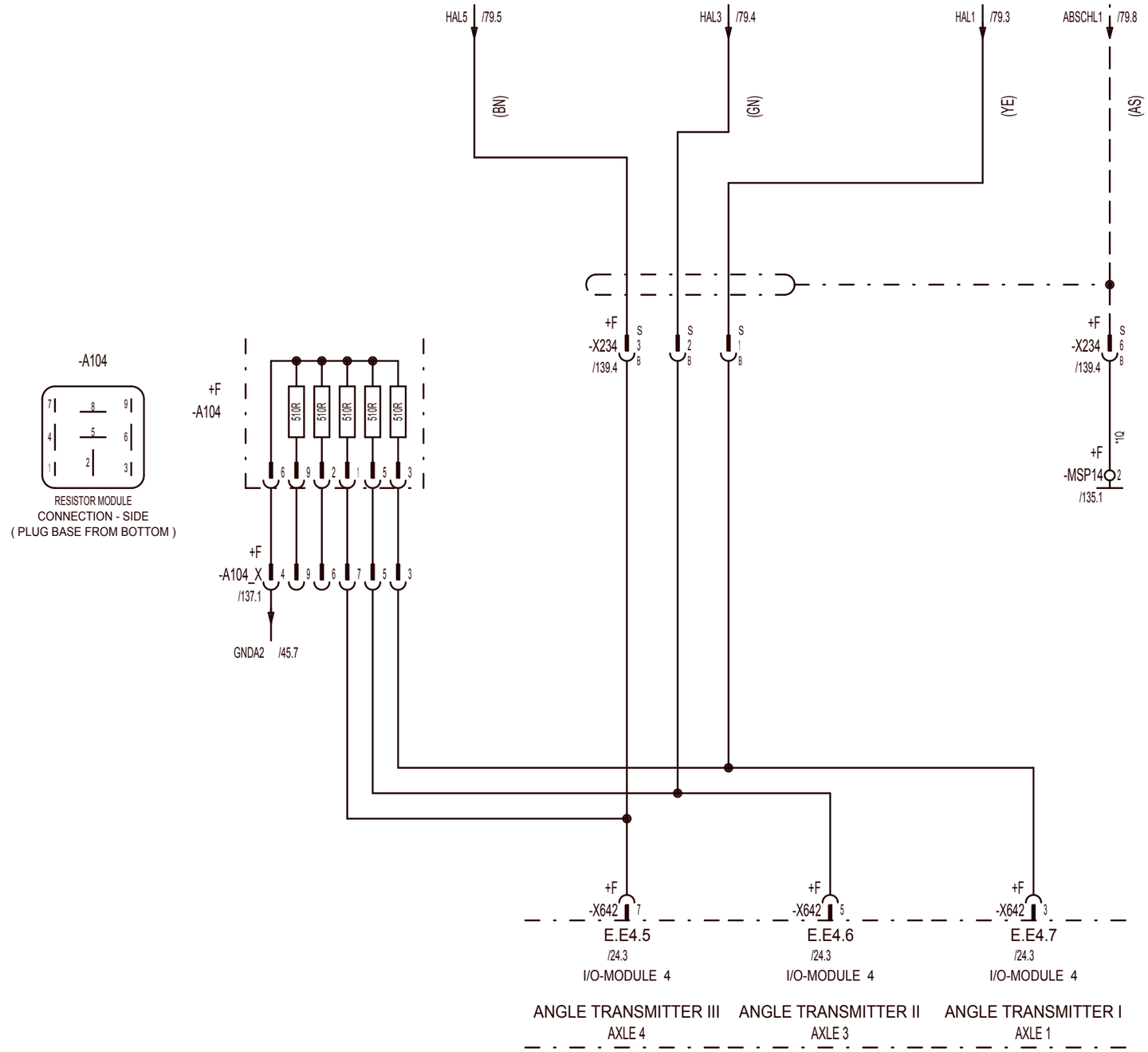
= U
+ H
Blatt 78
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	REAR AXLE STEERING
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	79
von	153

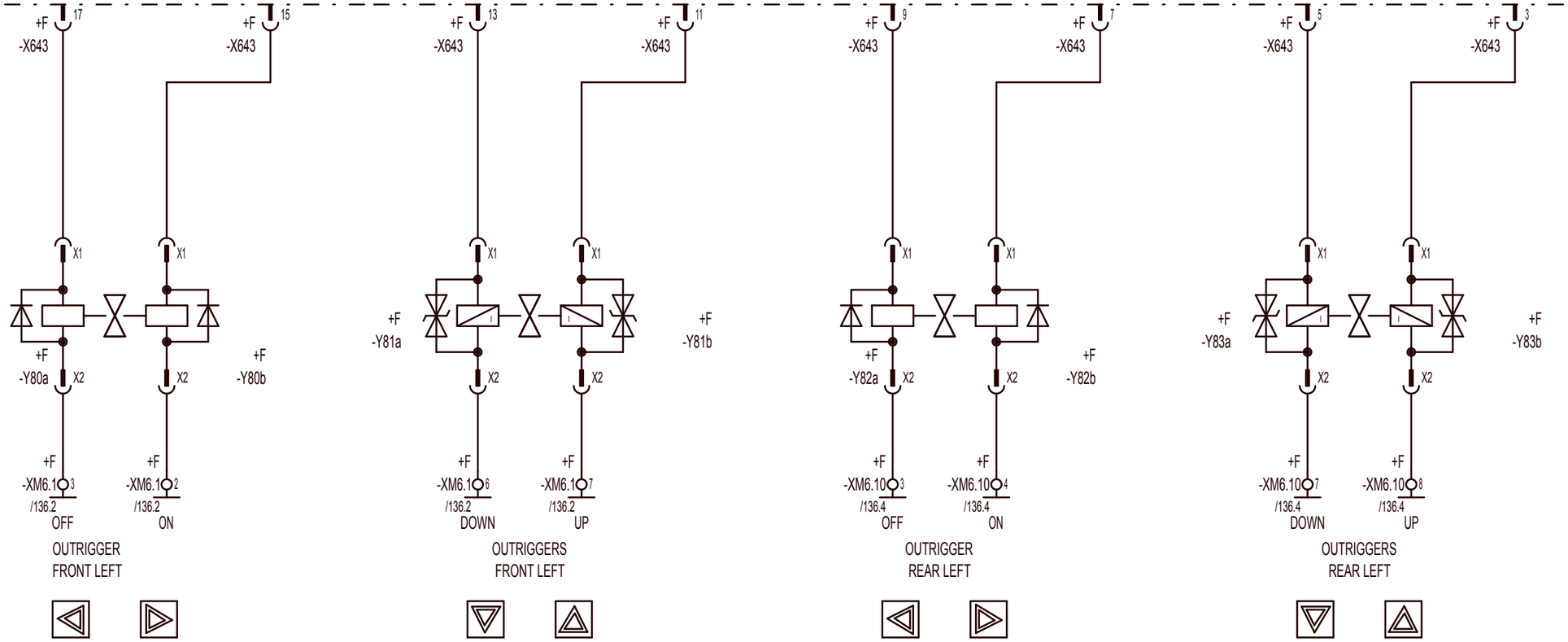


3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	REAR AXLE STEERING
2				Ausgabe	03.02.06	lwerof0		
1	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	80
von	153

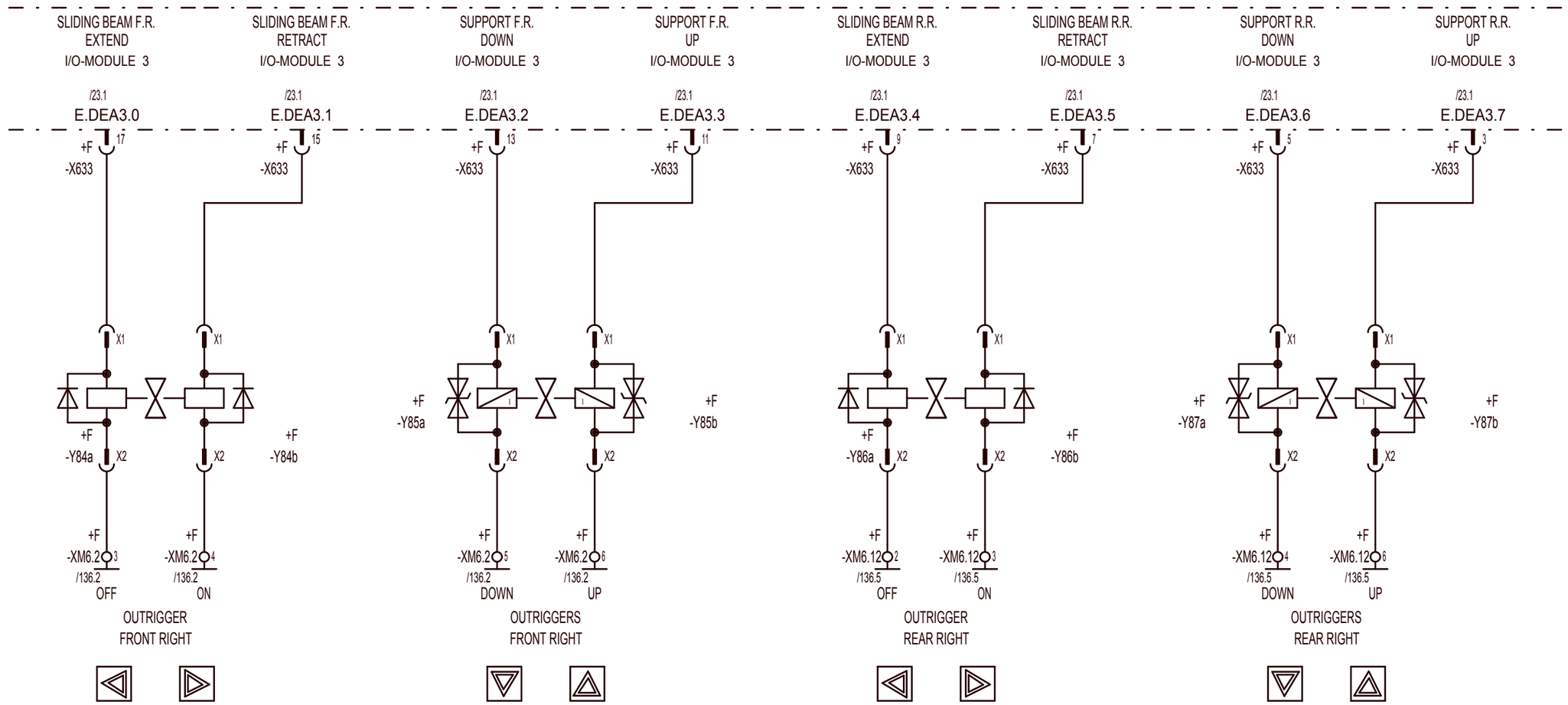
SLIDING BEAM F.L. EXTENDED I/O-MODULE 4 — /24.1 E.DEA4.0 — +F -X643 17
SLIDING BEAM F.L. RETRACT I/O-MODULE 4 — /24.1 E.DEA4.1 — +F -X643 15
SUPPORT F.L. DOWN I/O-MODULE 4 — /24.1 E.DEA4.2 — +F -X643 13
SUPPORT F.L. UP I/O-MODULE 4 — /24.1 E.DEA4.3 — +F -X643 11
SLIDING BEAM R.L. EXTEND I/O-MODULE 4 — /24.1 E.DEA4.4 — +F -X643 9
SLIDING BEAM R.L. RETRACT I/O-MODULE 4 — /24.1 E.DEA4.5 — +F -X643 7
SUPPORT R.L. DOWN I/O-MODULE 4 — /24.1 E.DEA4.6 — +F -X643 5
SUPPORT R.L. UP I/O-MODULE 4 — /24.1 E.DEA4.7 — +F -X643 3



OUTRIGGER FRONT LEFT
OUTRIGGERS FRONT LEFT
OUTRIGGER REAR LEFT
OUTRIGGERS REAR LEFT

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OUTRIGGERS LEFT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
+ H
Blatt 81
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OUTRIGGERS RIGHT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
+ H
Blatt 82
von 153

OIL SUPPLY
SUSPENSION
I/O-MODULE 3

/23.1
E.A3.1
+F 16
-X633

1
+F
-Y5
2

+F
-XM6.2 9
/136.2

OIL SUPPLY
SUSPENSION

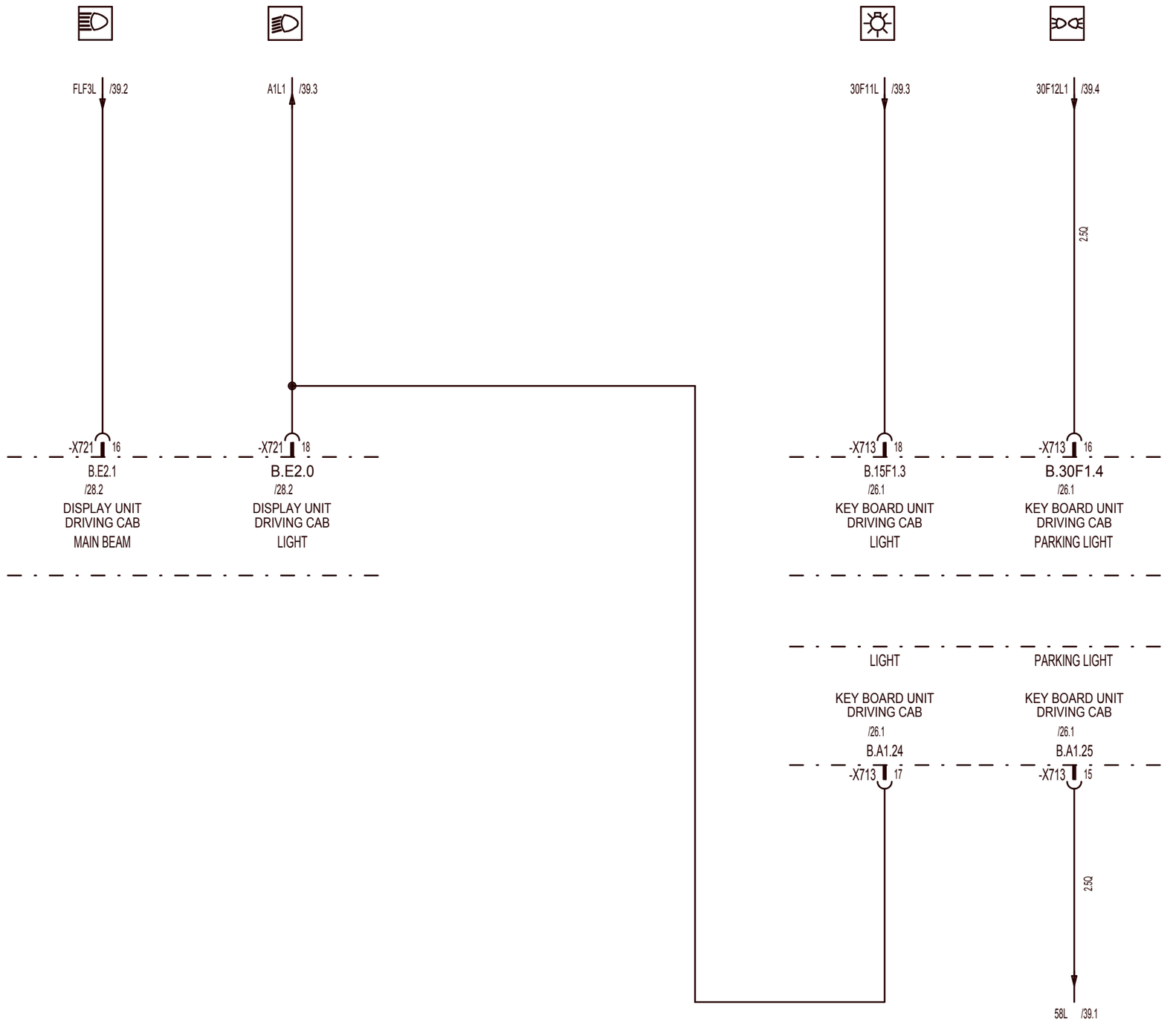
VALVE	Y5
SUSPENSION OUTRIGGERS	X

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

OIL SUPPLY SUSPENSION / OUTRIGGERS

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

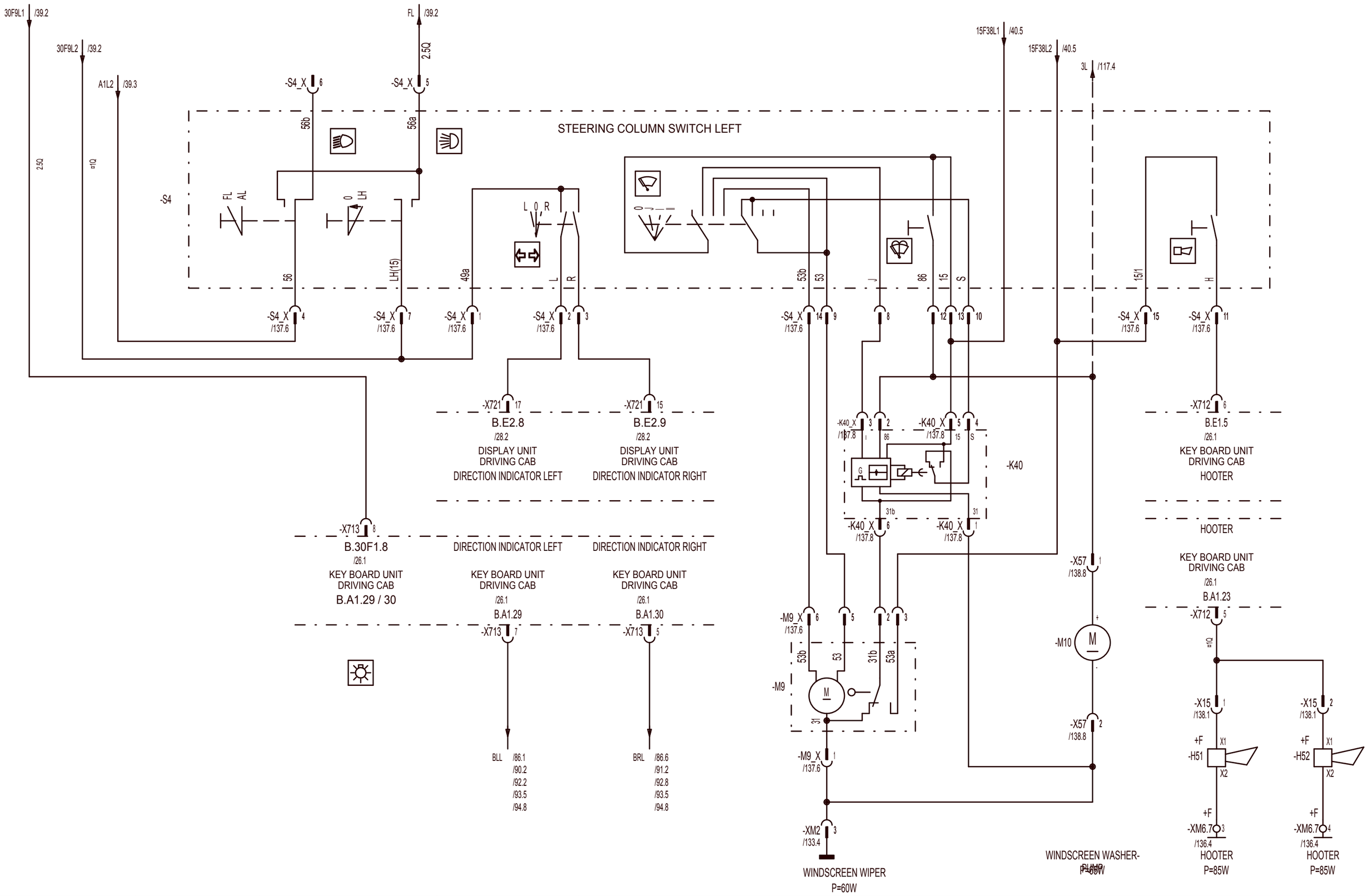
= U
+ H
Blatt 83
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	LIGHTING
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

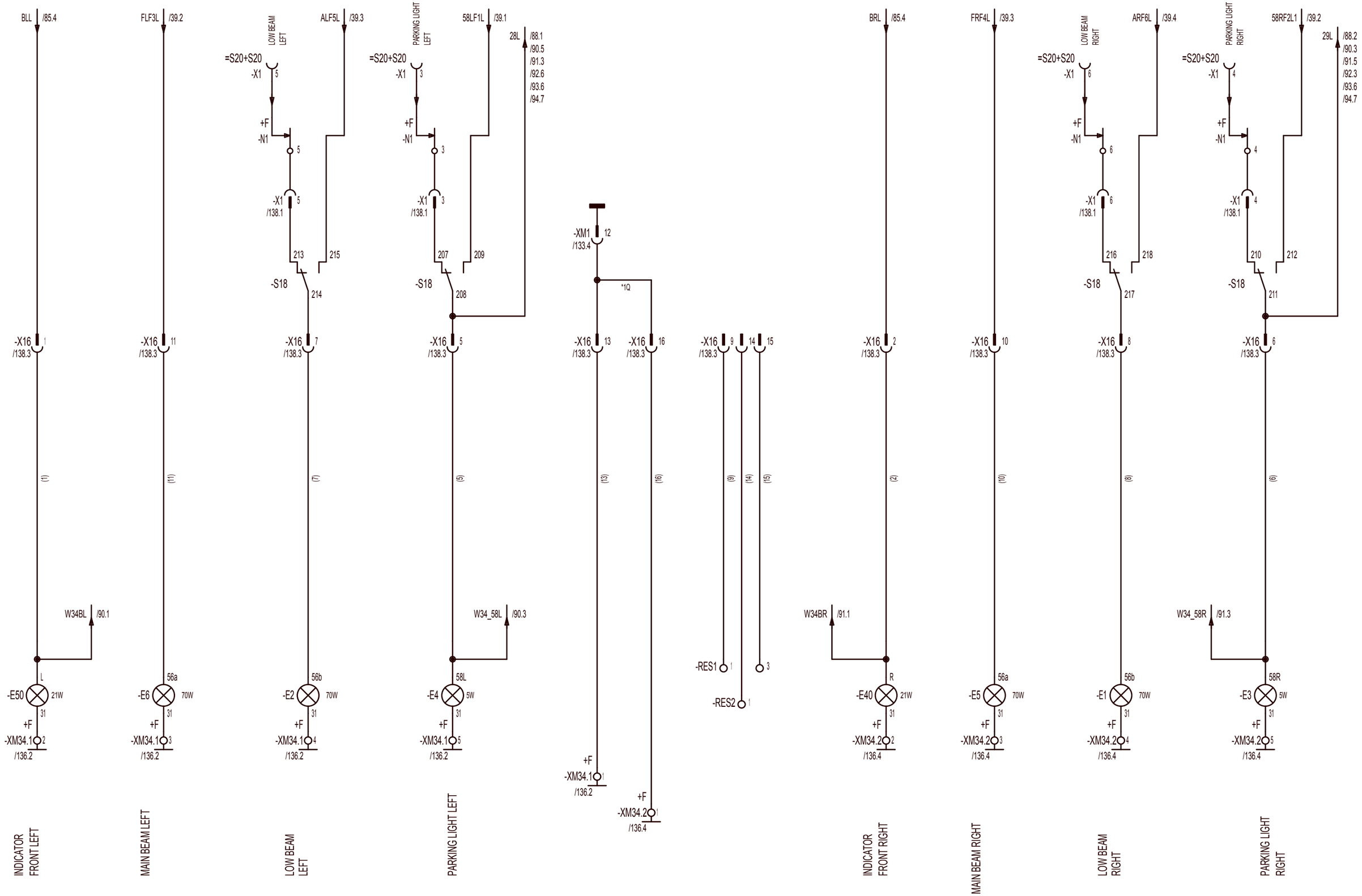
=	U
+	H
Blatt	84
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	STEERING COLUMN SWITCH LEFT , WINDSCREEN WIPER , HOOTER
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	85
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

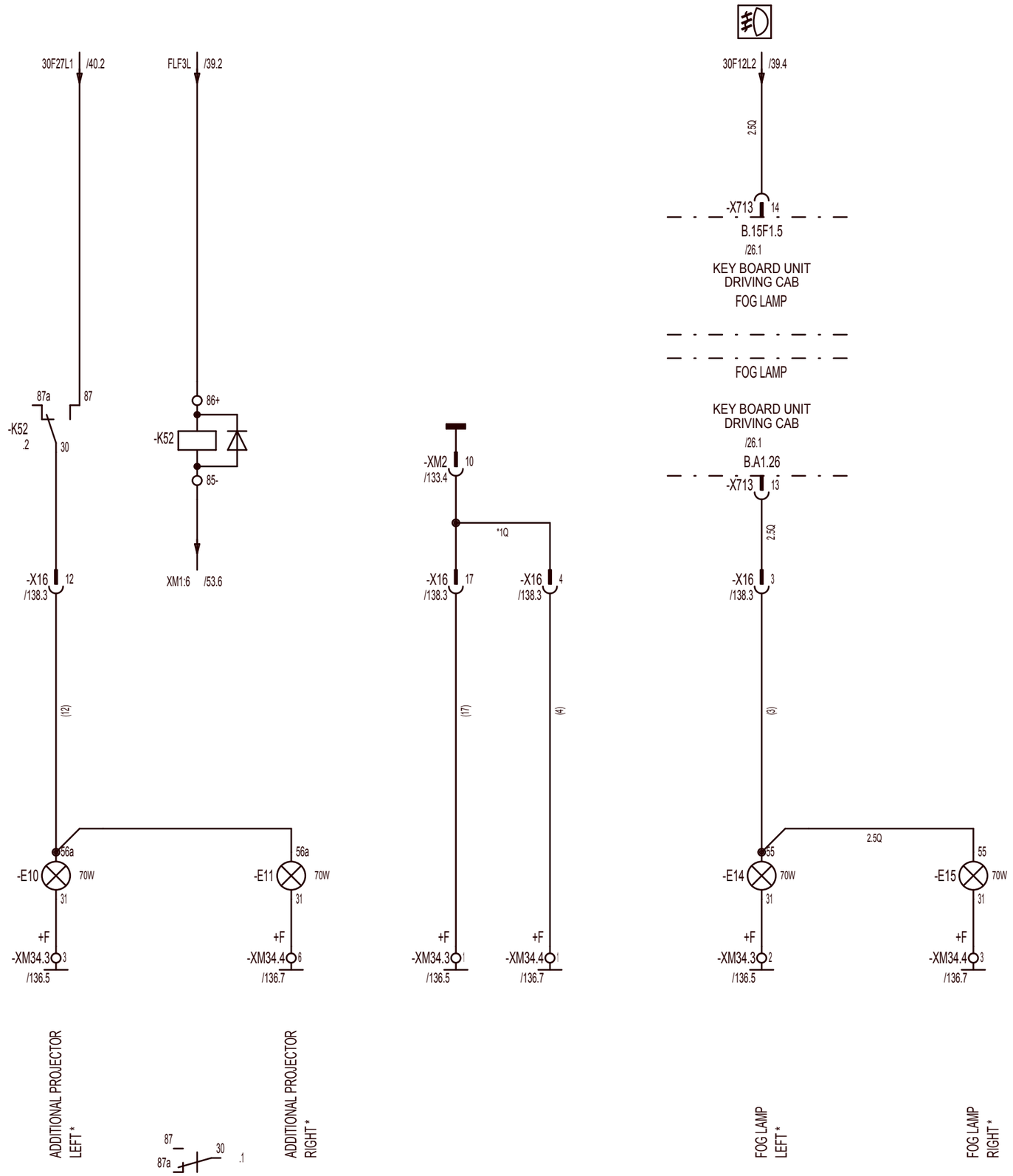
LIGHTING

FRONT

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

=	U
+	H
Blatt	86
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* LIGHTING FRONT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

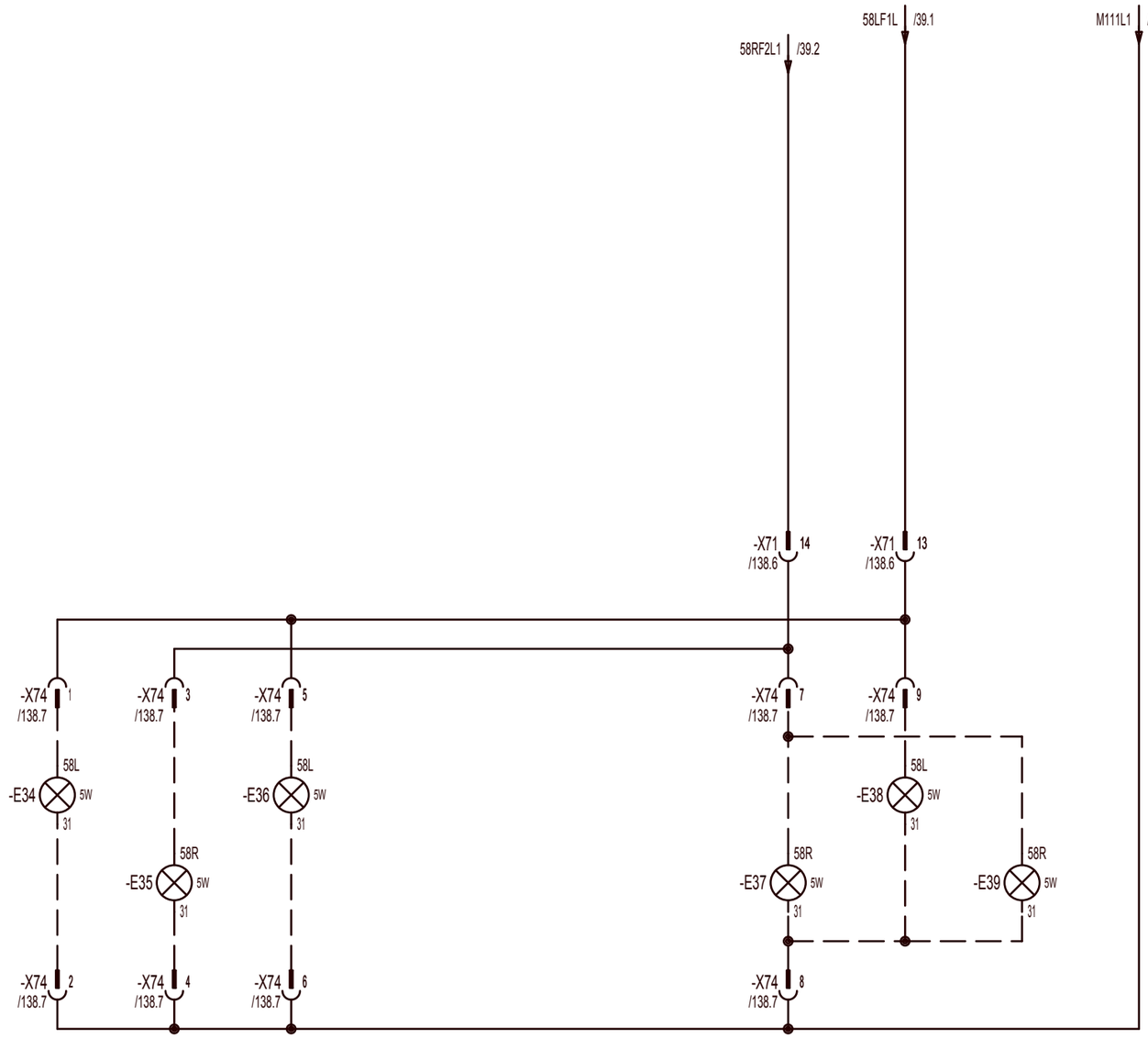
=	U
+	H
Blatt	87
von	153

28L /86.4
29L /86.8
WARNING BEACONS
=S20+S20
-X1 9
+F
-N1 9
-X1 /138.1 9
30F10L1 /39.3
2.5Q
-X713 10
B.30F1.7
/26.1
KEY BOARD UNIT
DRIVING CAB
WARNING BEACONS
WARNING BEACONS
KEY BOARD UNIT
DRIVING CAB
/26.1
B.A1.28
-X713 9
8L /124.8
¤1Q
15F37L1 /40.4
30F17L1 /39.6
M111L1 /89.7
15
30
-K49
31
TK
A
XM1:6 /53.6
31
87
15
86
87a
85
A
30
TK 30
PLUG BASE
CONNECTION - SIDE
-X71 /138.6 1
-X71 /138.6 2
-X71 /138.6 3
-X71 /138.6 4
-X71 /138.6 6
5
-X75 /138.6 12
11
-X82 /138.7 5
4
-X80 /138.7 4
5
X1
-S12
X2
DOOR OPEN
X2
-S13
X1
DOOR OPEN
TRAVELLING DIRECTION
21W X2 10W
TK
X3 X1 X4
-X68 /138.7 1
72
-E28 70W
31
-X68 /138.7 2
-X67 /138.7 1
72
-E27 70W
31
-X67 /138.7 2
58L
-E25 5W
31
58R
-E26 5W
31
¤1Q
-X71 /138.6 7
8
*1Q
-XM2 /133.4 5
DOOR CONTACT SWITCH
LEFT
DOOR CONTACT SWITCH
RIGHT
INDOOR LIGHTING DRIVER'S CAB
ARRANGEMENT CONNECTIONS
X3 X1 X2 X4
TK
-E20
21W 10W
READING LAMP
INDOOR LIGHTING
DRIVER'S CAB LEFT
X3 X1 X2 X4
TK
-E22
21W 10W
READING LAMP
INDOOR LIGHTING
DRIVER'S CAB RIGHT
-X71 /138.6 9
10
*1Q
-XM2 /133.4 4
CONTEUR LIGHT FRONT LEFT
CONTEUR LIGHT FRONT RIGHT
WARNING BEACONS RIGHT
WARNING BEACONS LEFT

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	LIGHTING DRIVER'S CAB , WARNING BEACONS , DOOR CONTACT SWITCH
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 88
von 153

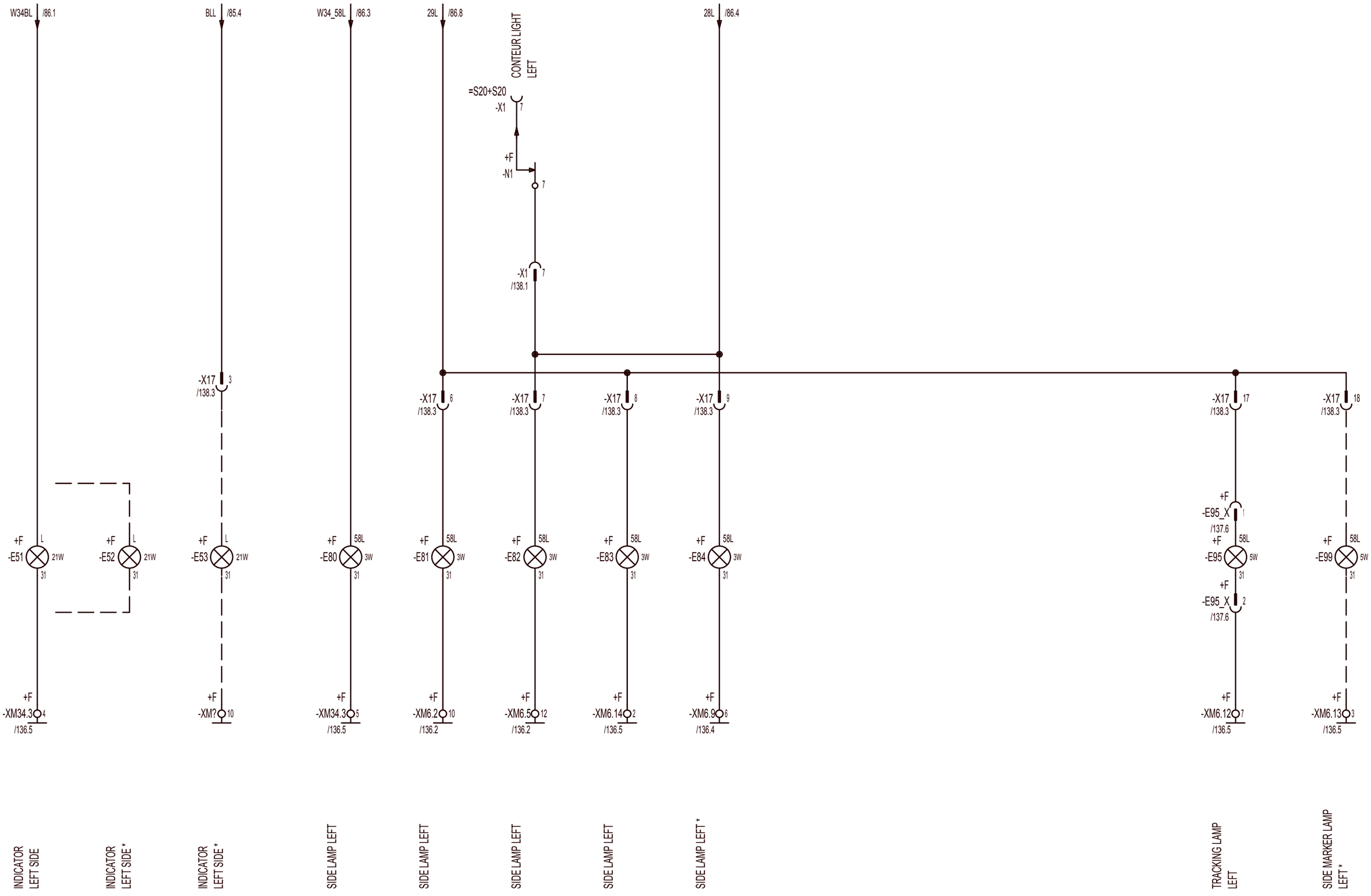


YE YE YE
CONTEUR LIGHT
ROOF CENTRAL
OPTION USA

GN YE YE
CONTEUR LIGHT
TRAVELLING DIRECTION
ROOF RIGHT
OPTION KOREA

YE YE GN
CONTEUR LIGHT
TRAVELLING DIRECTION
ROOF LEFT
OPTION KOREA

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* LIGHTING DRIVER'S CAB	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 89
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



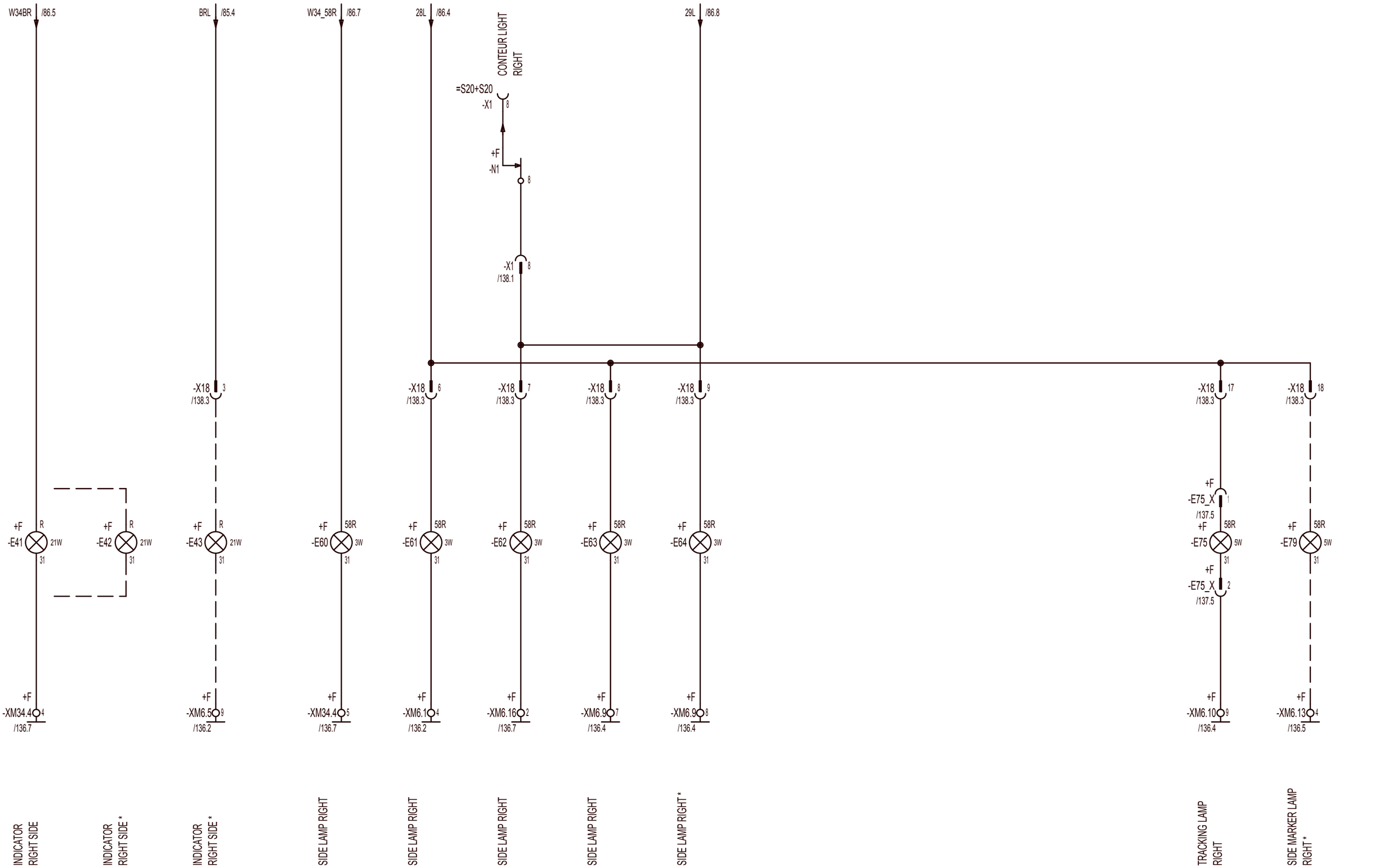
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

LIGHTING

LEFT SIDE

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	90
von	153



* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

LIGHTING

RIGHT SIDE

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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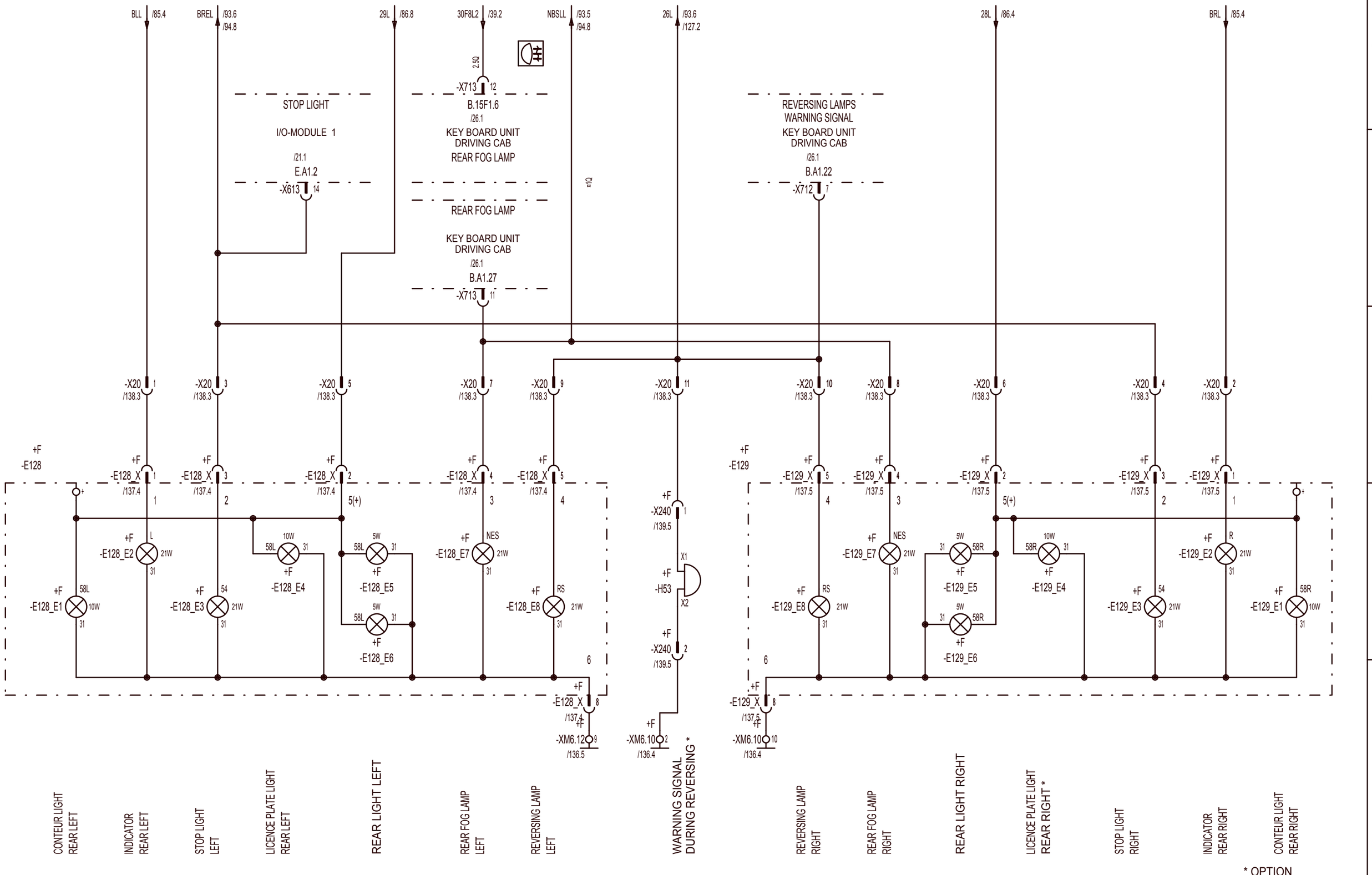
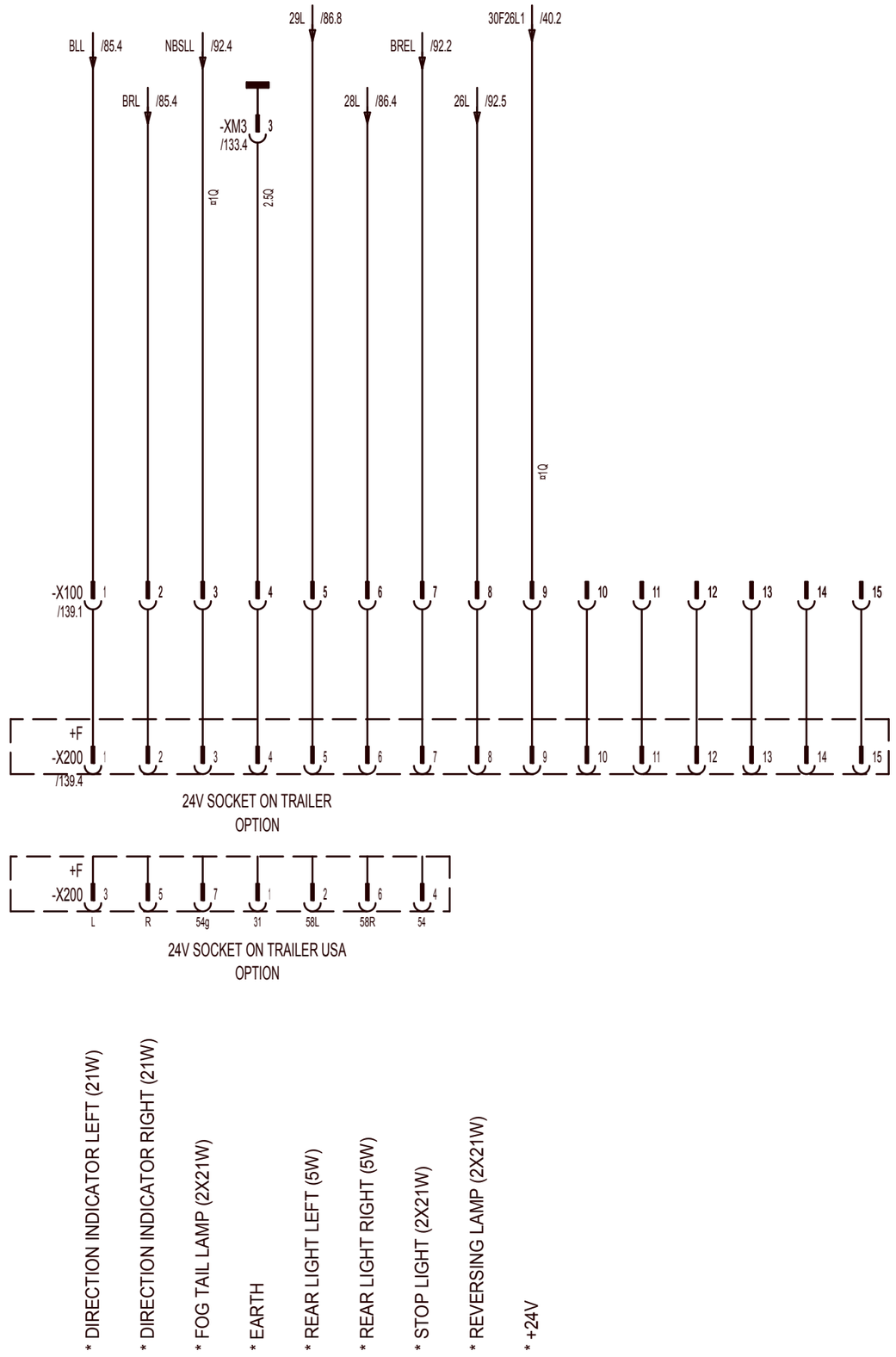
\+ H

Blatt 91

von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	LIGHTING REAR	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 92
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

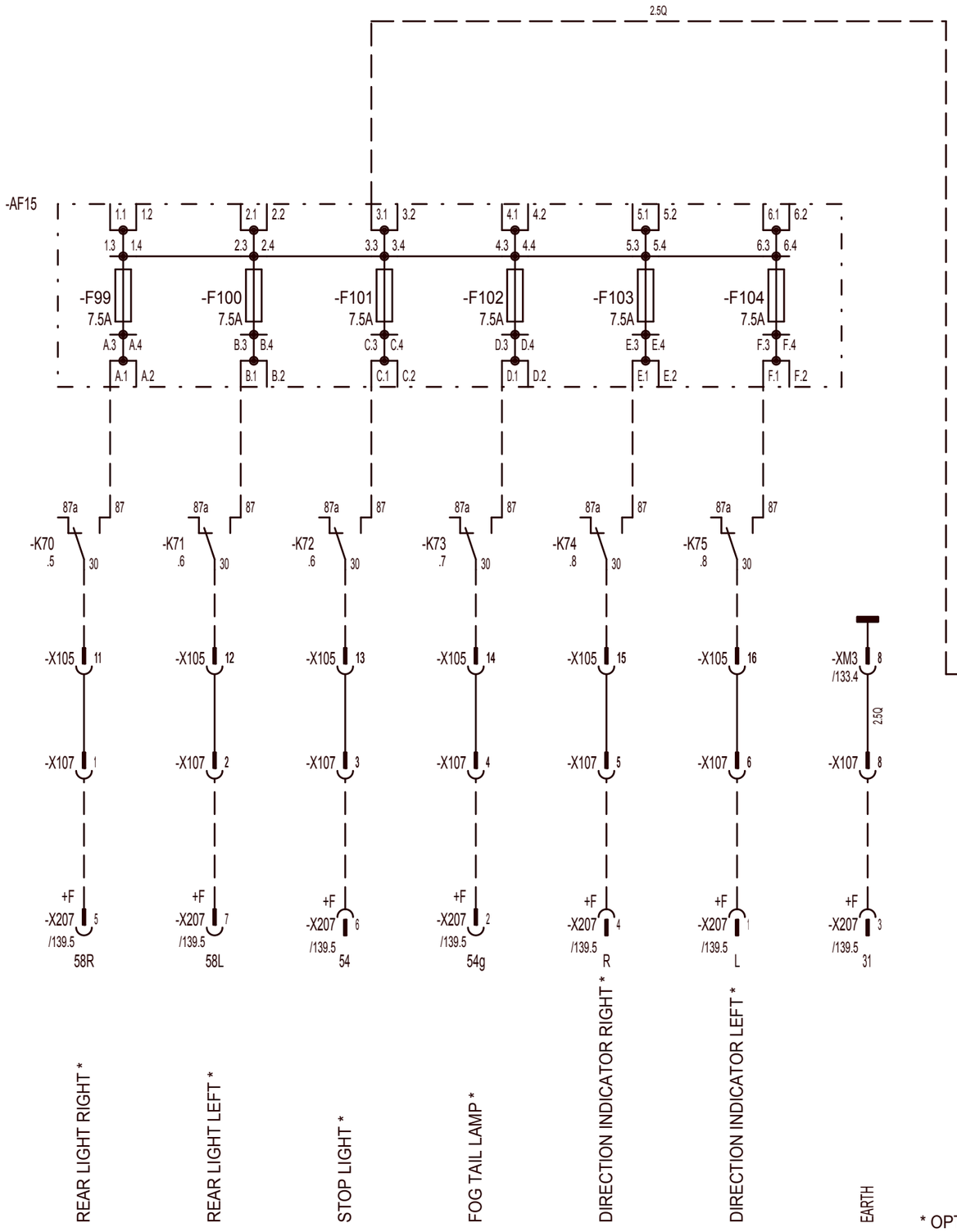
* SOCKET ON TRAILER 24V

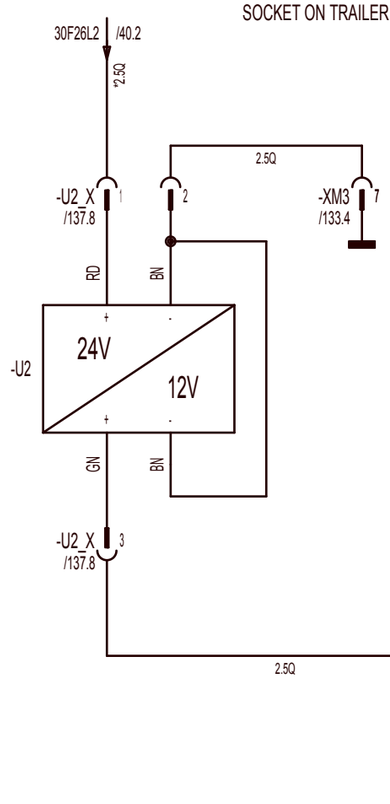
Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

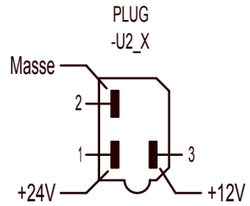
=	U
+	H
Blatt	93
von	153

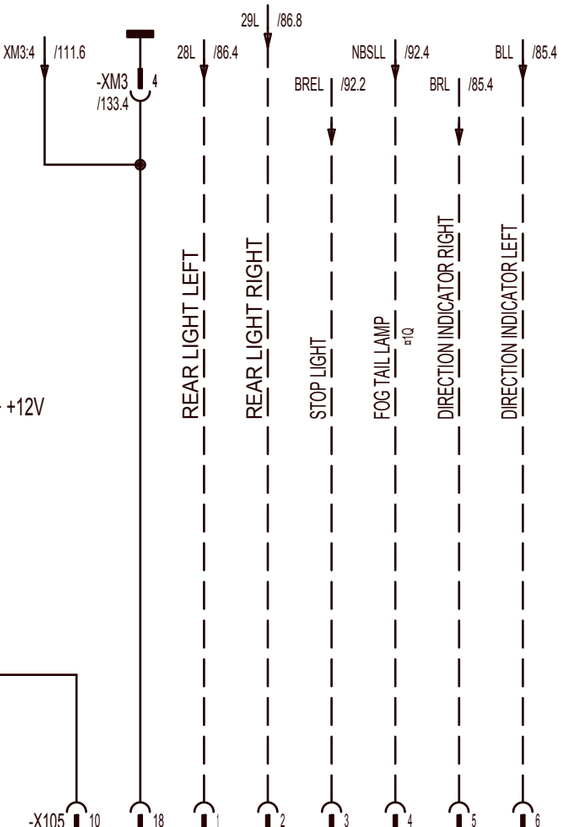
Makro:12V_AH_STECKD

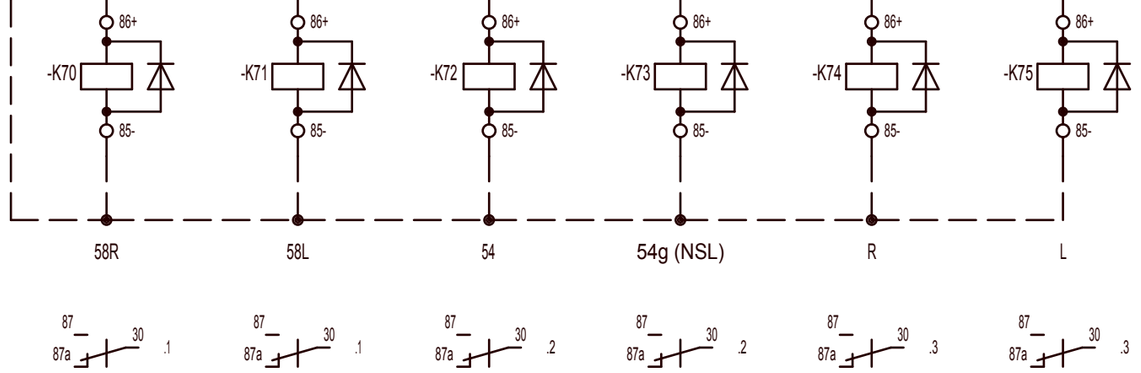
VOLTAGE CONVERTER 24A
SOCKET ON TRAILER 12V











* OPTION

* SOCKET ON TRAILER 12V

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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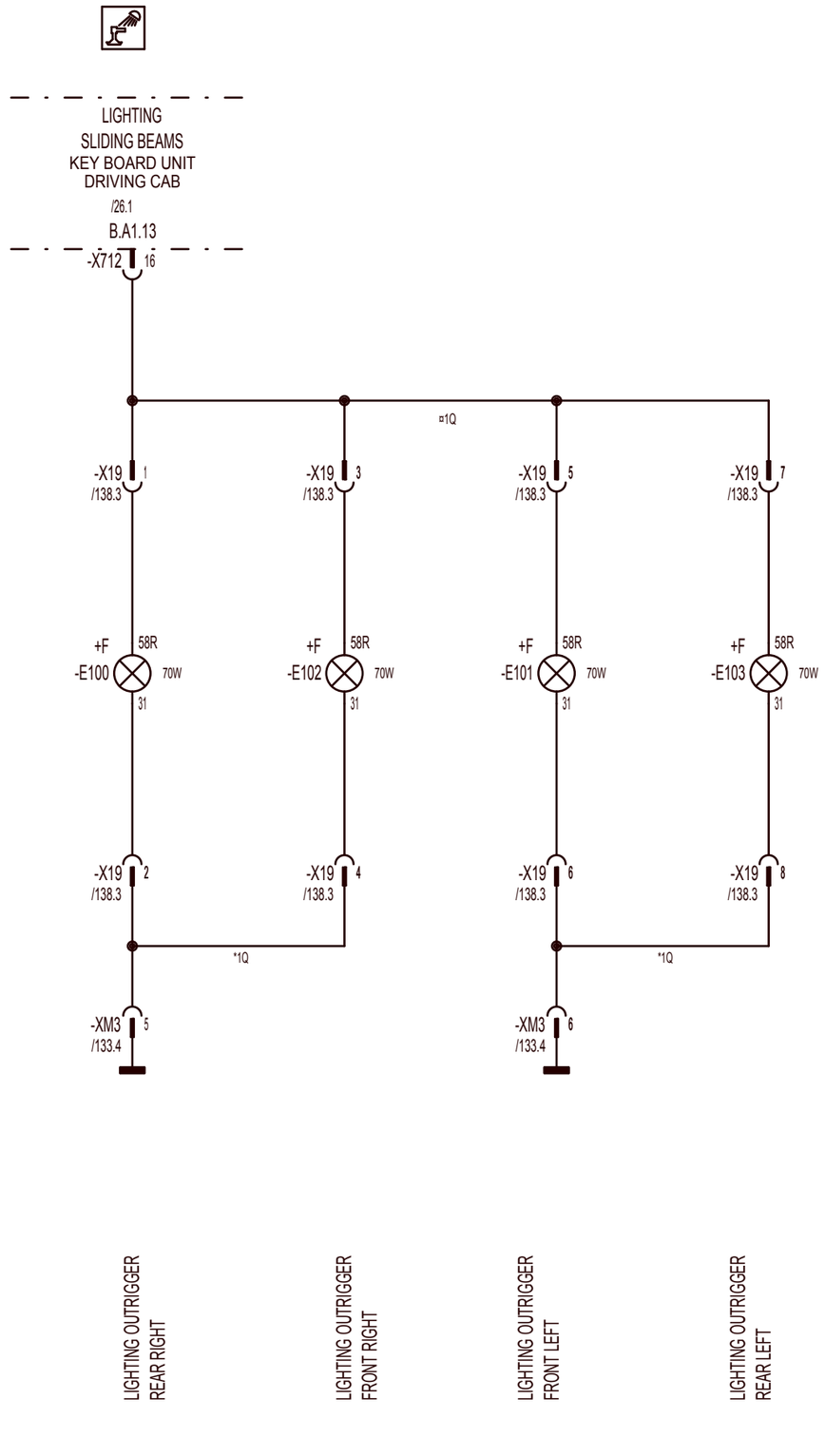
Blatt 94
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	LIGHTING OUTRIGGER
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

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Zeich-Nr.	3272-920.06.01.000-002

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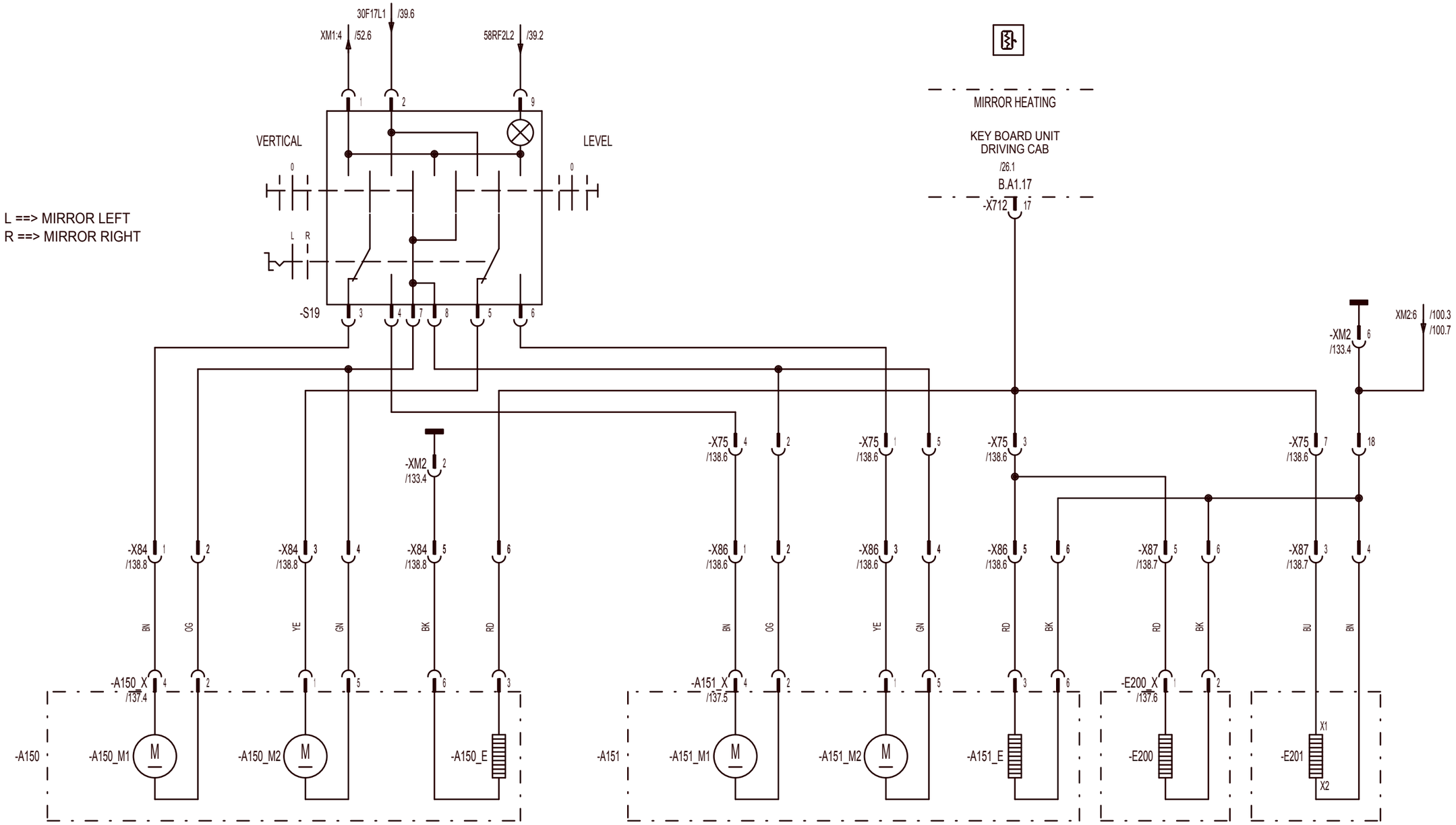
+	H
Blatt	95
von	153

L ==> MIRROR LEFT
R ==> MIRROR RIGHT



MIRROR LEFT ENGINE VERTICAL

MIRROR LEFT ENGINE LEVEL

REAR MIRROR HEATING LEFT 40W

MIRROR RIGHT ENGINE VERTICAL

MIRROR RIGHT ENGINE LEVEL

REAR MIRROR HEATING RIGHT 40W

WIDE ANGLE MIRROR-HEATING

RAMP MIRROR HEATING

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

REAR MIRROR HEATING ,
MIRROR ADJUSTMENT

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

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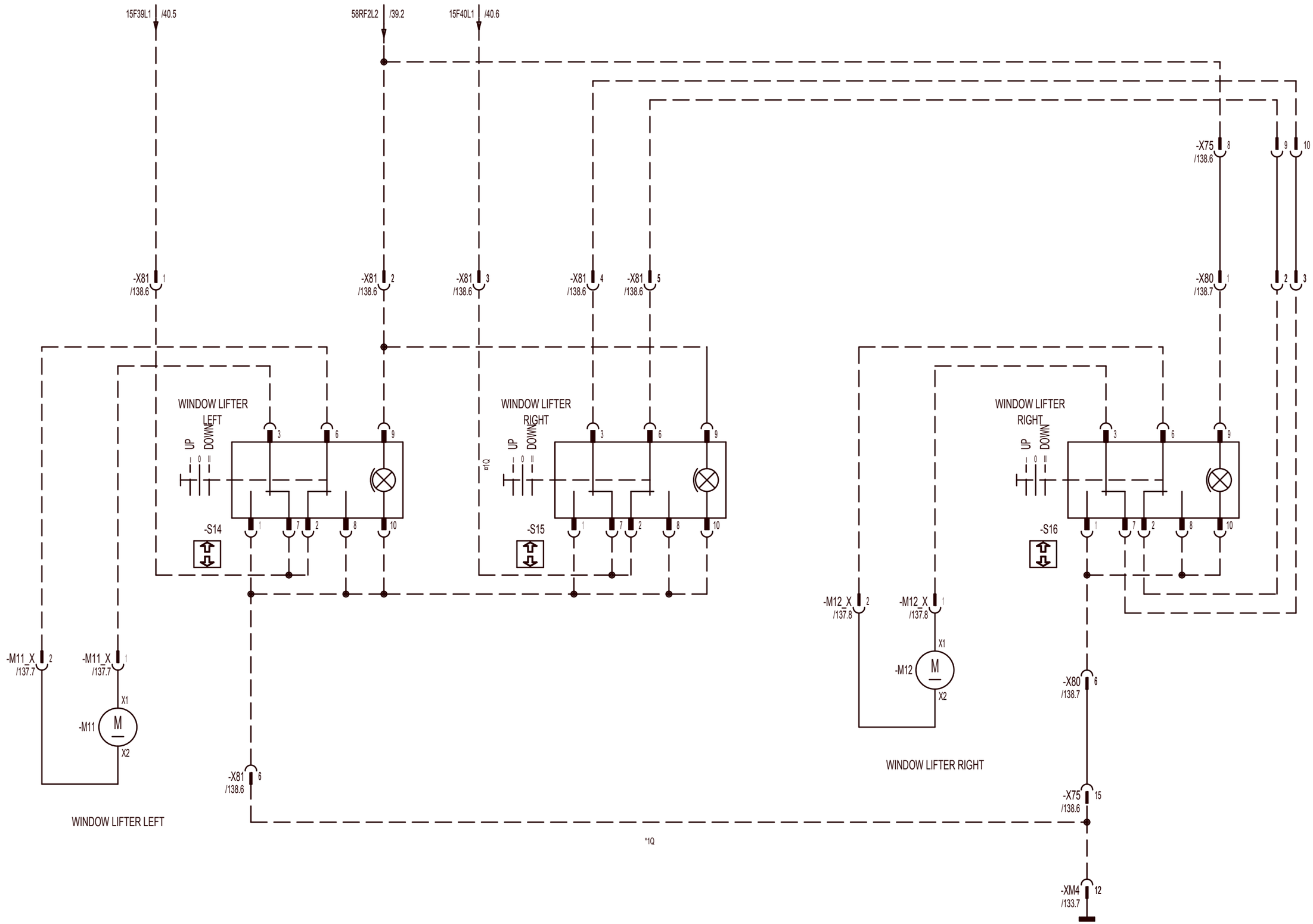
+ H
Blatt 96
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	WINDOW LIFTER
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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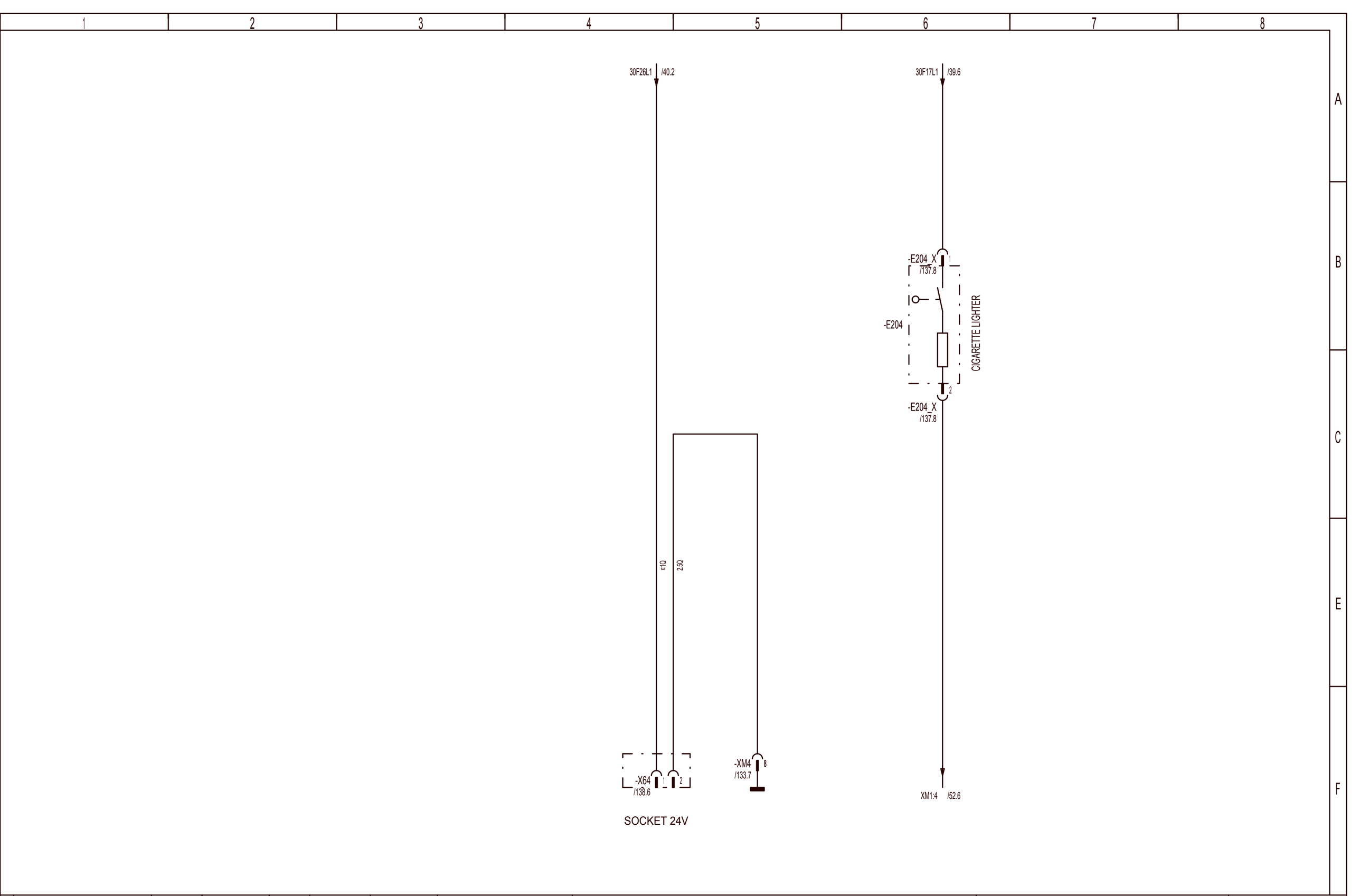
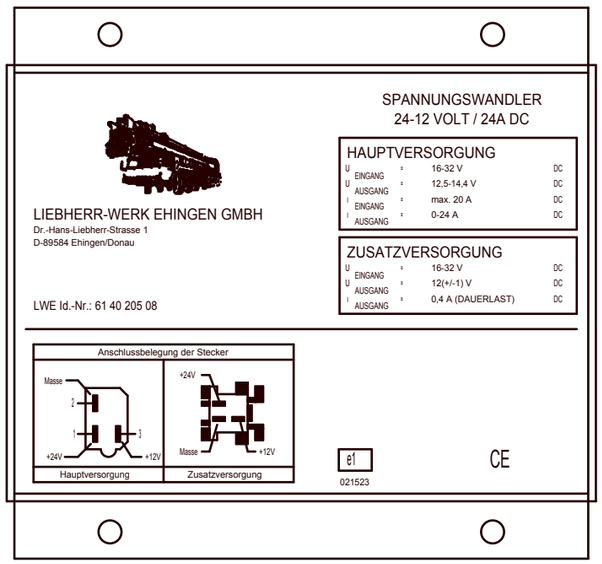
+	H
Blatt	97
von	153



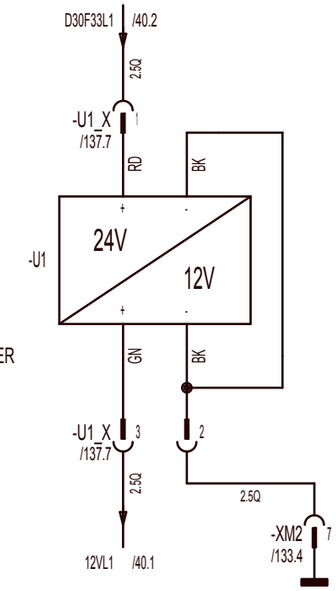
SOCKET 24V

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	SOCKET 24V , CIGARETTE LIGHTER	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 98
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

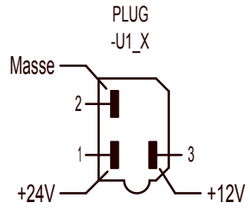


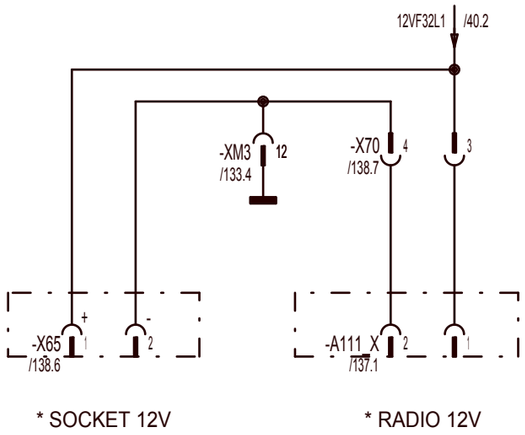
* VOLTAGE CONVERTER 24A

=U+H
-U1



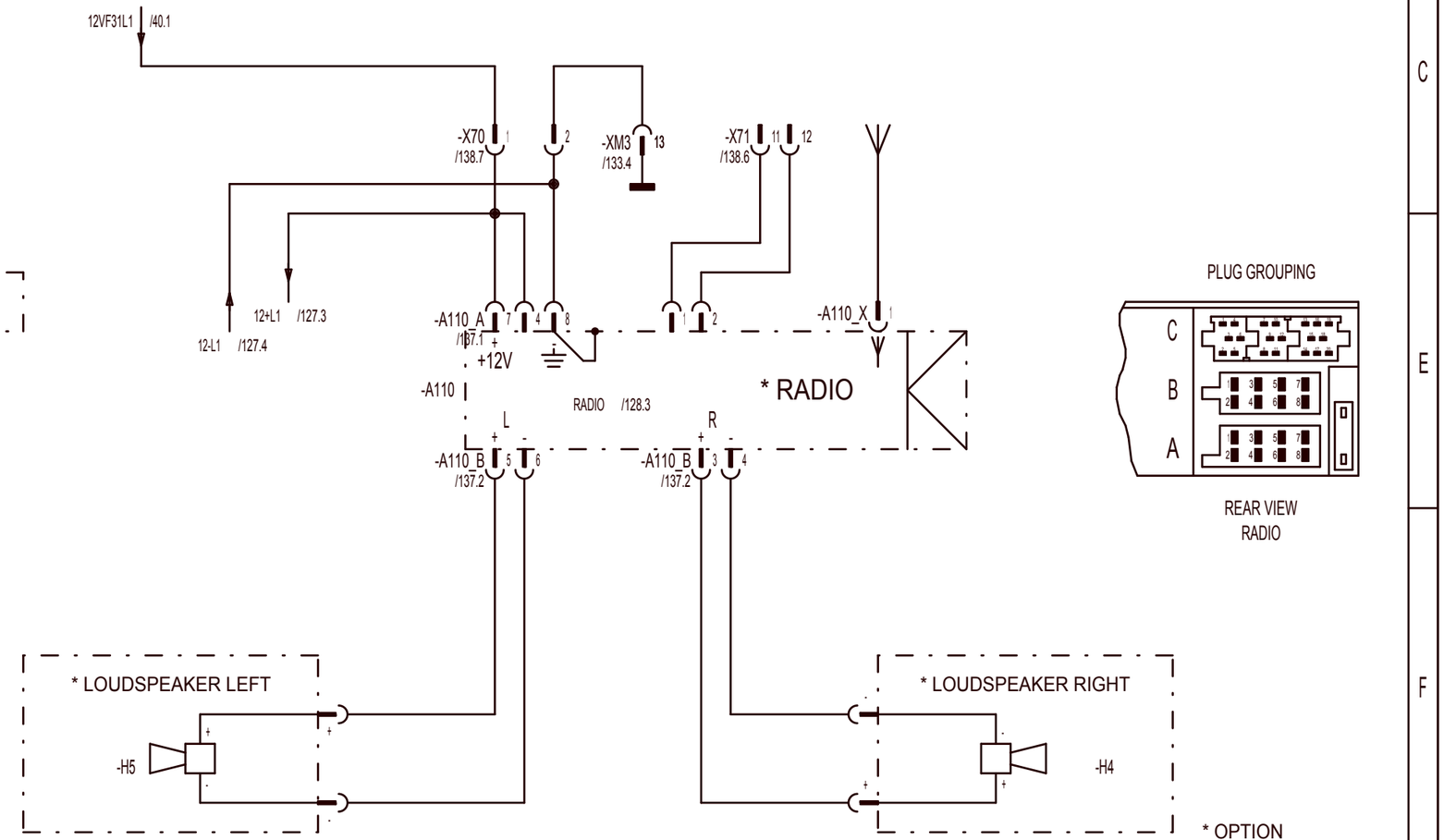
* VOLTAGE CONVERTER
RADIO 3A





* SOCKET 12V

* RADIO 12V



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* RADIO , * RADIO , * SOCKET 12V
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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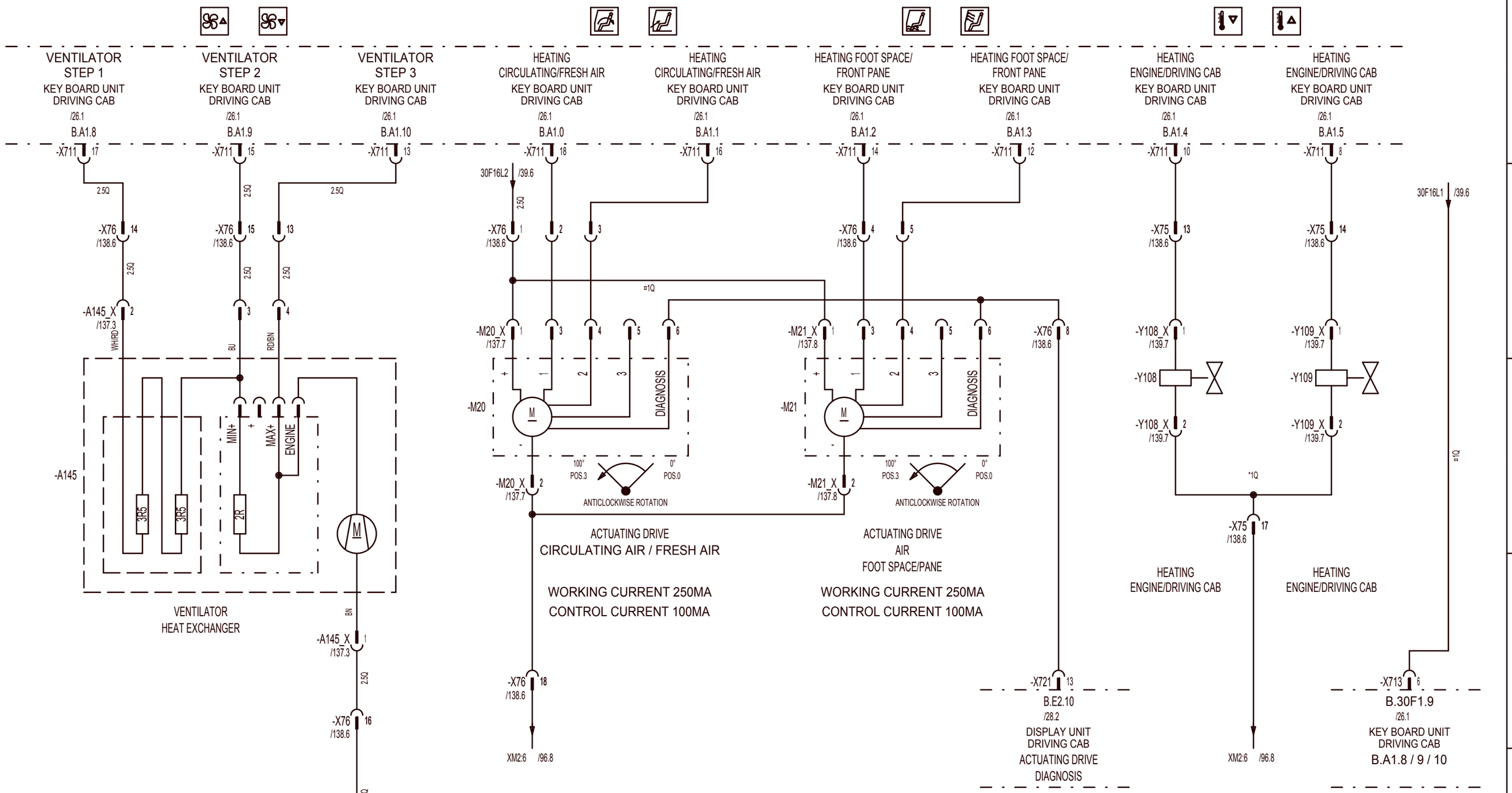
Blatt	99
von	153



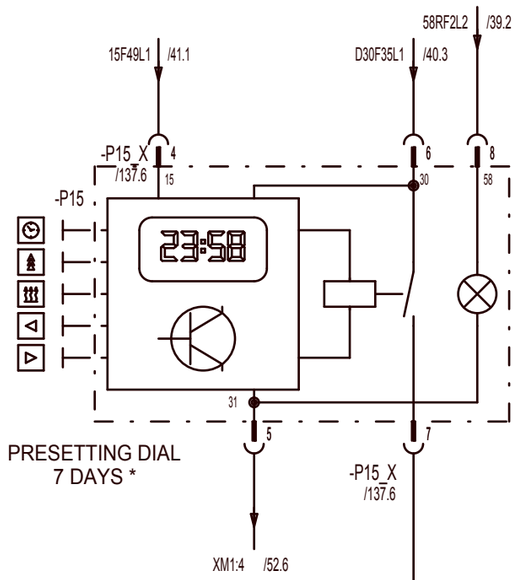
STEP	PLUG	DROP RESISTOR / CURRENT CONSUMPTION
1	-X57:1	9,0 OHM / 2,2 A
2	-X57:2	2,0 OHM / 5,8 A
3	-X57:3	0 OHM / 11,2 A

POSITION	KEY BOARD		ANGLE	DIGITAL INPUTS 1 2 3	CIRCULATING AIR / FRESH AIR
0	0	1	0	0 0 0	0/100 %
1	0	0	14,3	1 0 0	30/ 70 %
2	1	1	28,6	0 1 0	70/ 30 %
3	1	0	42,9	1 1 0	90/ 10 %

POSITION	KEY BOARD		ANGLE	DIGITAL INPUTS 1 2 3	FOOT SPACE / DISQUE
0	0	1	0	0 0 0	0/100 %
1	0	0	14,3	1 0 0	30/ 70 %
2	1	1	28,6	0 1 0	70/ 30 %
3	1	0	42,9	1 1 0	100/ 0 %

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	HEATING
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002
= U
+ H
Blatt 100
von 153



-X711 3

B.E1.3

/26.1

KEY BOARD UNIT
DRIVING CAB

AUXILIARY HEATING
PRESETTING DIAL

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* AUXILIARY HEATING PRESETTING DIAL
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708

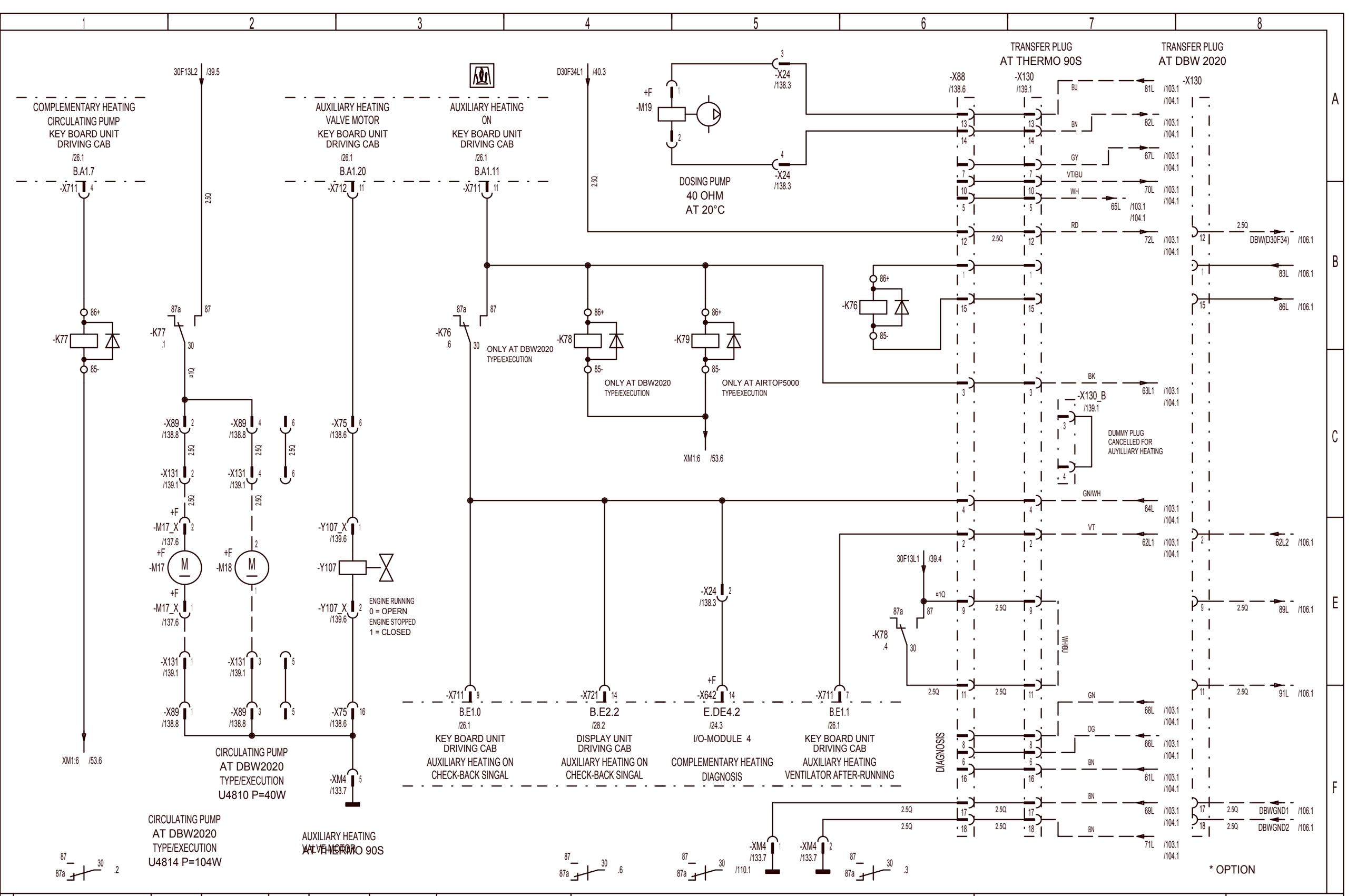
Zeich-Nr. 3272-920.06.01.000-002

= U

+ H

Blatt 101

von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

* COMPLEMENTARY HEATING

Ident-Nr.	984583708
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+	H
Blatt	102
von	153

TS = TEMPERATURE SENSOR
BM = BURNER MOTOR
WP = WATERPUMP
GS = GLOW PIN
WS = WATER SENSOR
FW = FLAME MONITOR

DOSING PUMP

-XST2 -A130 -XST3 -XST1 -XST4 -A131

81L /102.7 BU
82L /102.7 BN
65L /102.7 WH
72L /102.7 RD
70L /102.7 VT/BU
63L1 /102.7 BK
67L /102.7 GY
62L1 /102.7 VT
64L /102.7 GN/WH
68L /102.7 GN
66L /102.7 OG
61L /102.7 BN
69L /102.7 BN
71L /102.7 BN

NA, HS, FG, BK, +UB, D+, DP-, DP+, GNDDIAG, -UB, K-LTG., L-LTG.

T103, T104, T100, T101, T970, T980, T900, T901, T920, T921, T940, T941, T600, T610

IC200, IC700, IC201, IC600

PB5, PD5/AN5, PB4, PD0/AN0, PD2/AN2, PB3, PD4/AN4, PD3/AN3, PB2, TDO, TCAP2, PC0, RDI, PB0, PC6, PB1, PC7, PC1, PLMA, PC2/ECLK, PLMB, PD7/AN7, PB6, PD6/AN6, PA4, PA5, PA6, PA7, PD1/AN1

VBB, VIN, VOUT, GND, VDD, VSS, UB1, UB2, GND1, GND2, GND4, GND7, 30

TS- VT/BU
TS+ VT
BM+ BU
BM- WH/BU
WP+ BK
WP- BN
GS+ YE
GS- RD
WS+ GN
WS- OG
FW+ GY
FW- OG

-A131_S
-A131_M1
-A131_M2
-A131_E
-A131_B2
-A131_B1

TEMPERATURE LIMITER
(TEMPERATURE SENSOR)
OPERATION 0 OHM
FAILURE >1 MOHM
AT 105°C

COMBUSTION AIR BLOWER
(BURNER MOTOR)
5 - 50 OHM
AT 25°C

CIRCULATING PUMP
(WATERPUMP)
3 - 250 OHM
AT 25°C

GLOW PIN
SELECTION
SYNCHRONIZED
1,2 - 1,6 OHM

TEMPERATURE SENSOR
(WATER SENSOR)
990 - 1010 OHM
AT 25°C

FLAME MONITOR
2.6 - 3,4 OHM
AT 25°C

FG = VEHICLE VENTILATOR
BK = OPERATING CONTROL
NA = POWER TAKE-OFF
DP = DOSING PUMP
HS = HEATING SWITCH

ST3 ST2 ST1

CONTROL DEVICE SG 1577

HEATER THERMO 90S
HEATING CAPACITY 1,8KW - 9,1KW
POWER CONSUMPTION 37W-87W

* COMPLEMENTARY HEATING THERMO 90S

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

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Zeich-Nr. 3272-920.06.01.000-002

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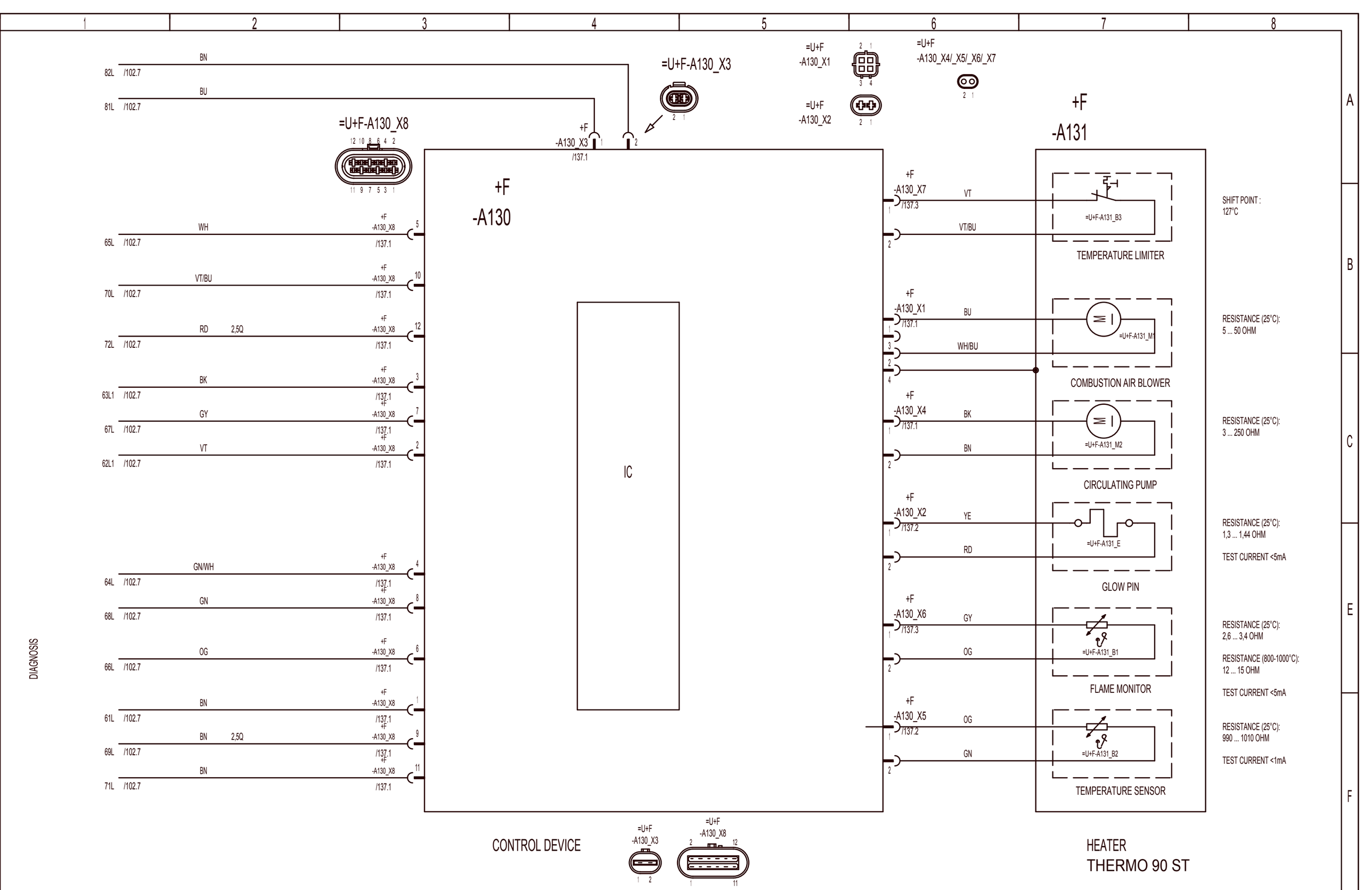
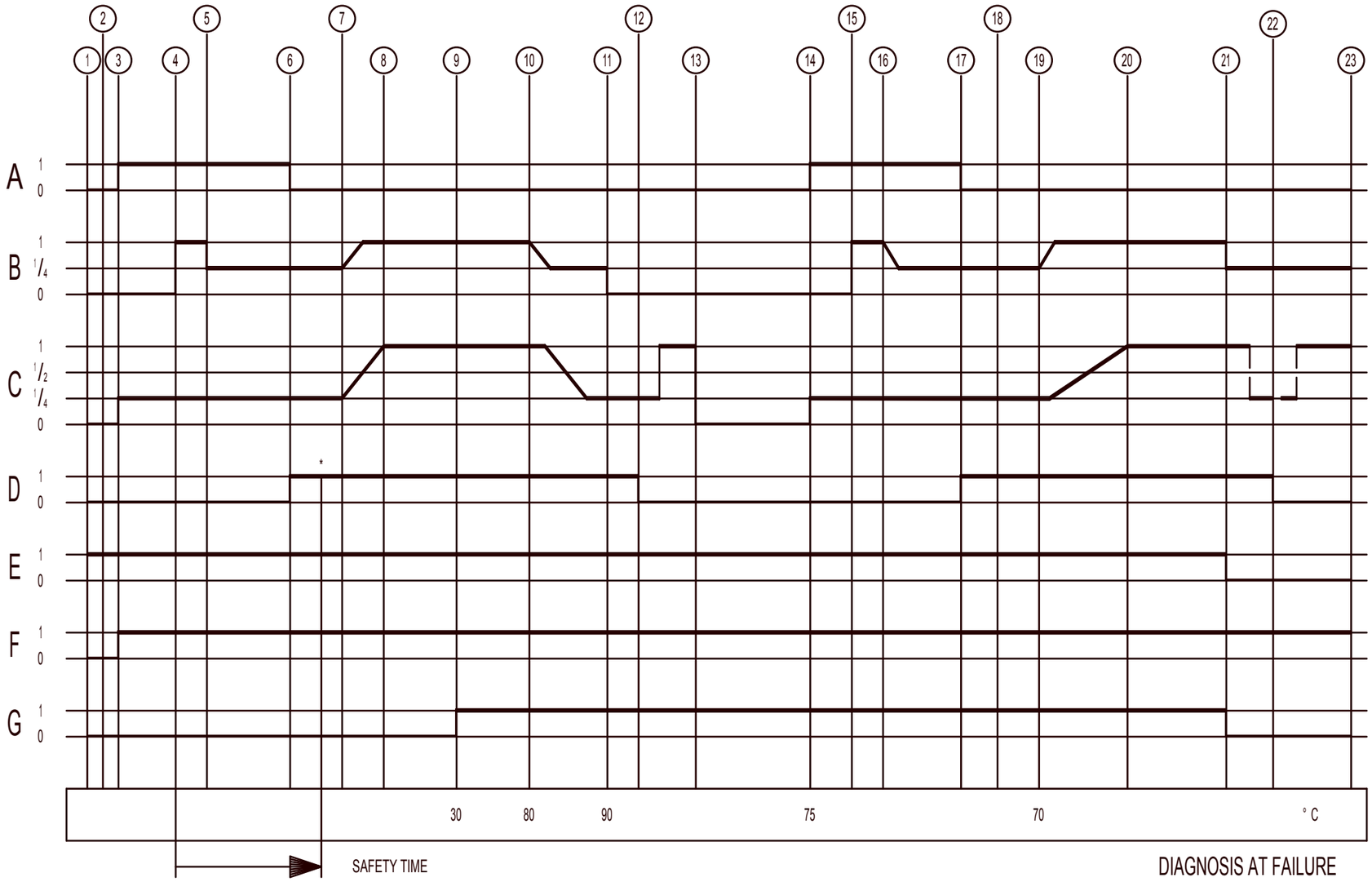
Blatt 103
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* COMPLEMENTARY HEATING THERMO 90ST	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1	Änderung	Datum	Name		Datum	Name	Copyright (c)		Zeich-Nr. 3272-920.06.01.000-002	Blatt 104
										von 153



* NON EMITTANCE OF A FLAME RESULTS IN AUTOMATIC RESTARTING (20 sec. SYNCHRONIZED PREHEAT , 90 sec. SAFETY TIME)

A GLOW PIN

B DOSING PUMP

C COMBUSTION AIR BLOWER

D FLAME MONITOR

E INDICATING LAMP OPERATION

F CIRCULATING PUMP

G FAN VEHICLE

BLINKER CODE AT AFTER-RUNNING !!

FUNCTIONAL DIAGRAMM FOR THERMO 90 S / ST

1. SWITCH ON
2. POLLING OF COMPONENTS
3. PREHEAT 40 sec. (SYNCHRONIZED)
4. DOSING PUMP ADVANCE 5 - 7 sec. (1)
5. DOSING PUMP / PARTIAL LOAD OPERATION (1/4)
6. TRANSFER OF FLAME CONTROL DEVICE
7. STABILIZING TIME
8. FULL LOAD RANGE
9. FAN VEHICLE >> ON <<
10. RANGE OF ADJUSTMENT
11. INTERVAL PEROID ADJUSTMENT
12. FLAME MONITOR >> COLD << (0)
13. AFTER-RUNNING TERMINATED
14. PREHEAT 15 - 20 sec. (SYNCHRONIZED)
15. DOSING PUMP ADVANCE 5 - 7 sec. (1)
16. DOSING PUMP / PARTIAL LOAD OPERATION (1/4)
17. TRANSFER OF FLAME CONTROL DEVICE
18. STABILIZING TIME
19. COOLANT TEMPERATURE DROPPED
20. FULL LOAD RANGE
21. SHUT OFF (AFTER-RUNNING)
22. FLAME MONITOR >> COLD << (0)
23. AFTER-RUNNING TERMINATED

DIAGNOSIS AT FAILURE

AT FAILURE => BLINKER CODE INDICATING LAMP -H628 AT AFTER-RUNNING !!

COUNTING NUMBER BLINKER CODE

1x	INEFFECTIVE START
2x	FLAME BLOW-OFF DURING CUTTING OPERATION
3x	UNDERVOLTAGE OR OVERVOLTAGE
4x	EARLY FLAME RECOGNITION
5x	FLAME MONITOR (INTERRUPTION OR SHORT CIRCUIT)
6x	TEMPERATURE SENSOR (INTERRUPTION OR SHORT CIRCUIT)
7x	DOSING PUMP (INTERRUPTION OR SHORT CIRCUIT)
8x	COMBUSTION AIR BLOWER (INTERRUPTION OR SHORT CIRCUIT OR SPEED ERROR)
9x	GLOW PIN (INTERRUPTION OR SHORT CIRCUIT)
10x	OVERHEATING
11x	CIRCULATING PUMP (INTERRUPTION OR SHORT CIRCUIT)

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

* COMPLEMENTARY HEATING THERMO 90 S / ST

FUNCTIONAL DIAGRAMM

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

=	U
+	H
Blatt	105
von	153

+F
-A132

CONTROL DEVICE SG 1553

HEATER DBW 2020.32

V24
K5
V22
V18
K4
K3
K2
V4
V25
V5
K1
V6

+F -A132_XC /137.1
+F -A132_XB /137.3
+F -A132_XA /137.2
+F -A132_XB /137.3
+F -A132_XB /137.3
+F -A132_XB /137.3
+F -A132_XB /137.3
+F -A132_XB /137.3
+F -A132_XA /137.2

DBW(D30F34) /102.8
91L /102.8
DBWGND1 /102.8
83L /102.8
86L /102.8
62L2 /102.8
89L /102.8
DBWGND2 /102.8

+F -Y150_X X1
+F -Y150
+F -Y150_X X2
+F -Y151_X X1
+F -Y151
+F -Y151_X X2

+F -K233 87a 87 .6 30
+F -X133 /139.2
+F -K233 86+ 85-
+F -X133 /139.2
87 87a 30 .5

+F
-A133

Y1
TEMPERATURE SAFETY DEVICE
INITIATING ELECTRODES
FLAME MONITOR
M2
HEATING DEVICE MOTOR
100W
INJECTOR CONNECTION HEATING
THERMOSTAT
(INJECTOR CONNECTION HEATING)

* SCOPE OF DELIVERY :
IS FROM
FA. WEBASTO
COMPLETE
CONNECTED

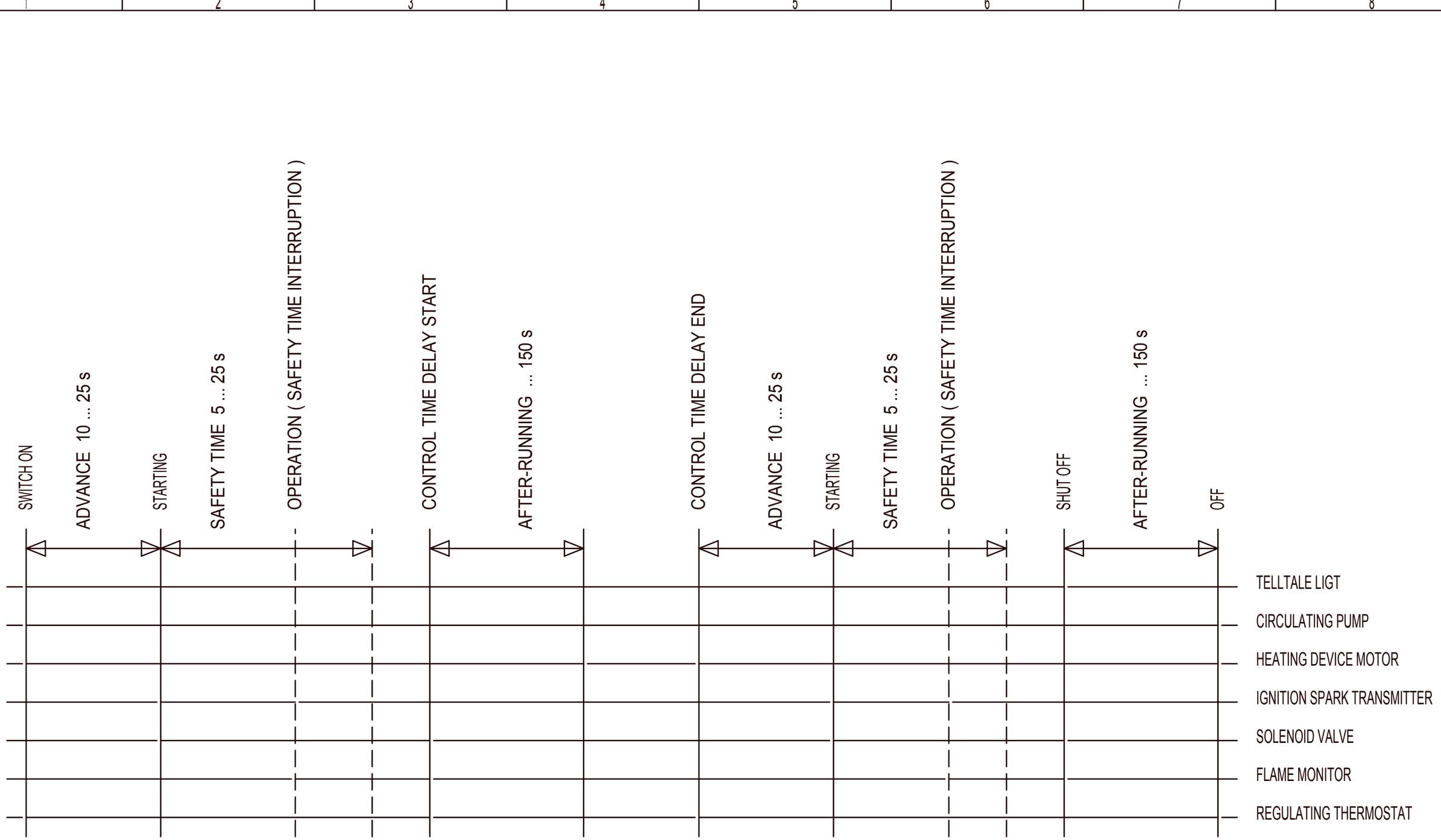
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

* COMPLEMENTARY HEATING DBW 2020

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 106
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

* COMPLEMENTARY HEATING DBW 2020

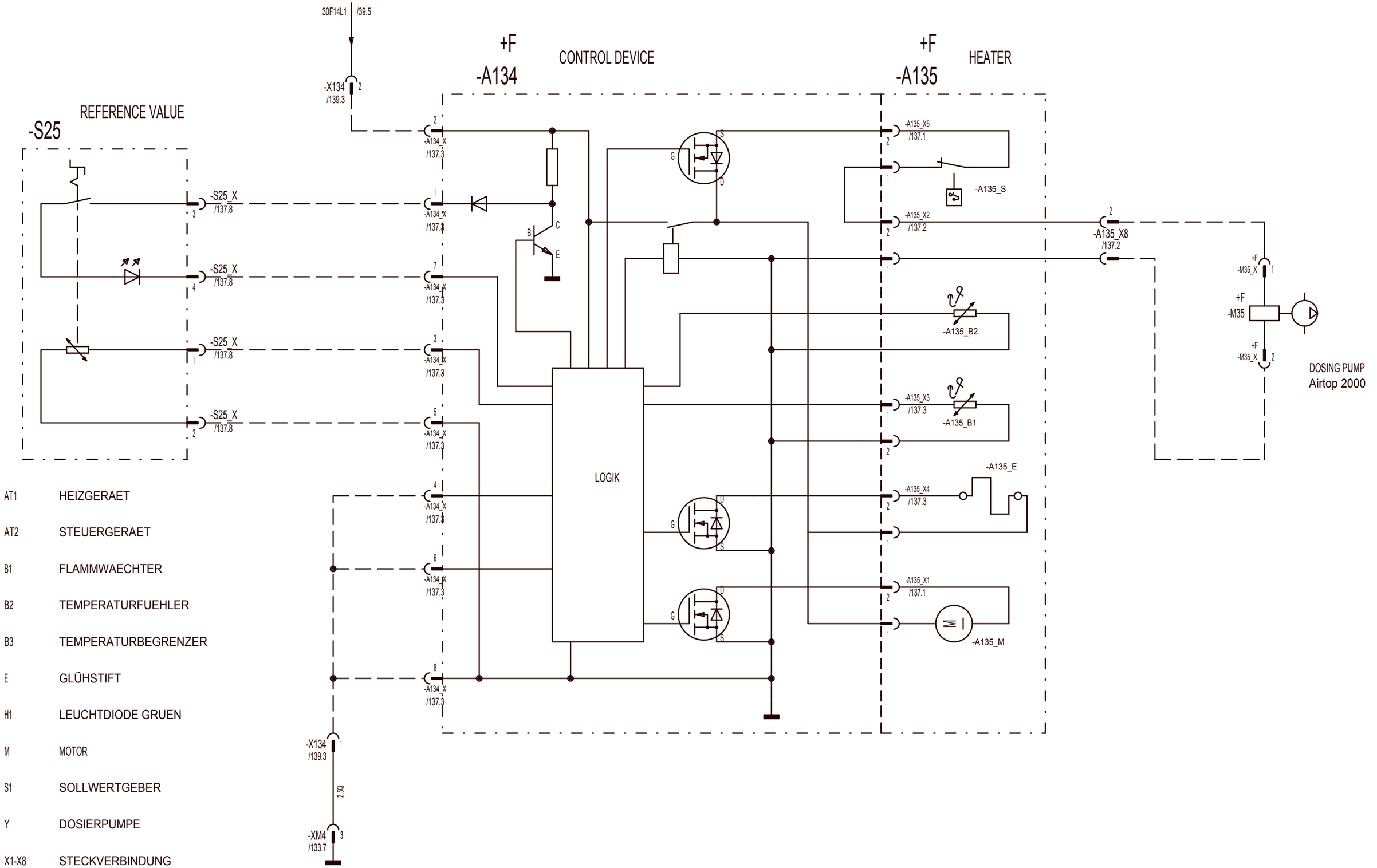
FUNCTIONAL DIAGRAMM

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	107
von	153

COMPLEMENTARY HEATING SWITCH KEY BOARD UNIT		ACTUATING DRIVE WATER CIRCULATION DRIVER'S CAB PUSH-BUTTON SWITCH KEY BOARD UNIT		DIESEL ENGINE		WEBASTO-HEATING		INJECTOR CONNECTION HEATING		CIRCULATING PUMP U4810 / U4814	
ON	OFF	WARM	COLD	ON	OFF	ON	OFF	ON	OFF	ON	OFF
X		X			X	X		X		X	
X		X		X		X		X		X	
X			X		X	X		X		X	
X			X	X		X		X		X	
	X	X			X		X		X		X
	X	X		X			X		X	X	
	X		X		X		X		X		X
	X		X	X			X		X		X

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* COMPLEMENTARY HEATING DBW 2020 FUNCTIONAL DIAGRAMM	Ident-Nr. 984583708	=	U
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	+	H
1										Blatt	108
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von	153



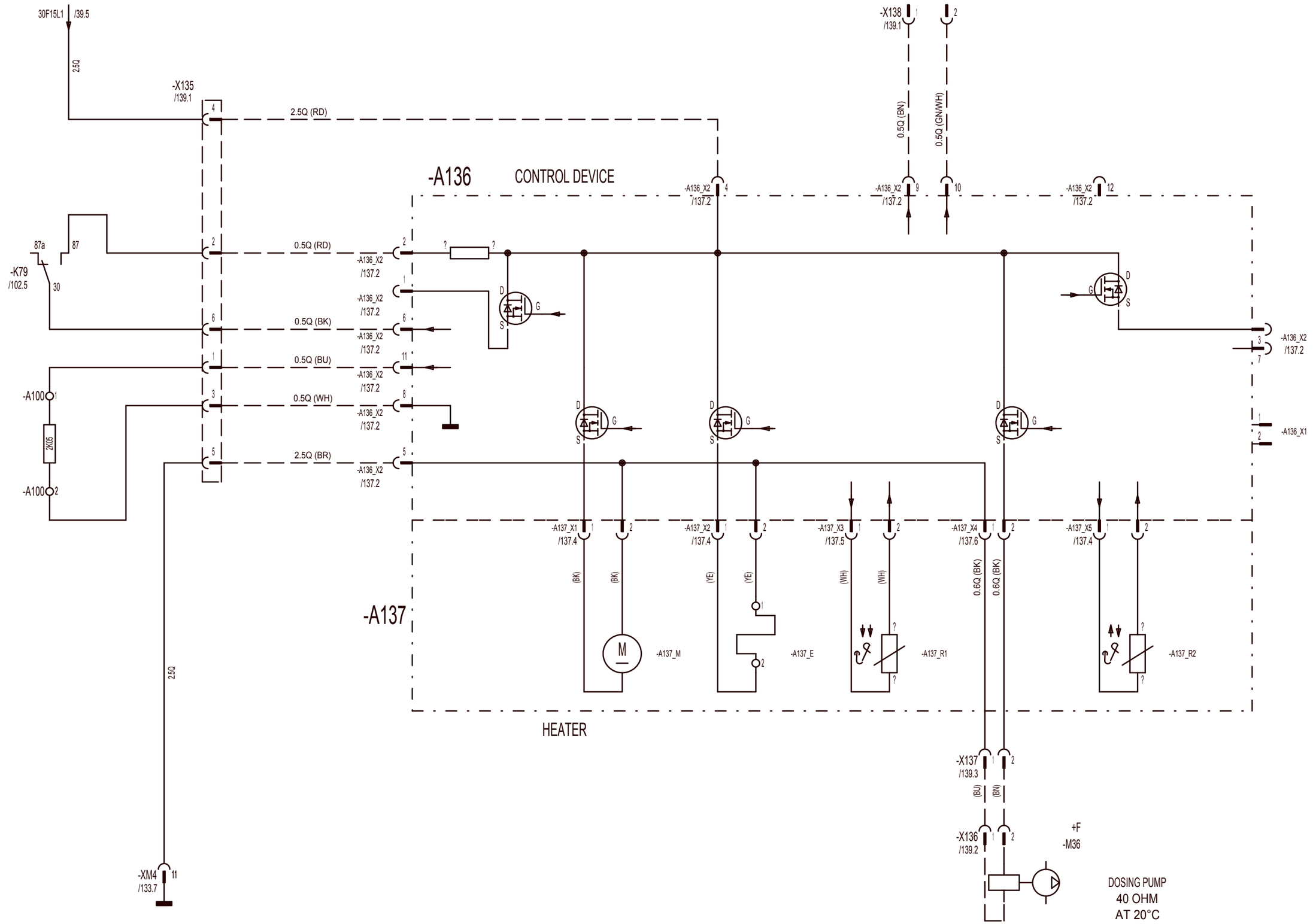
AT1	HEIZGERAET
AT2	STEUERGERAET
B1	FLAMMWAECHTER
B2	TEMPERATURFUEHLER
B3	TEMPERATURBEGRENZER
E	GLÜHSTIFT
H1	LEUCHTDIODE GRUEN
M	MOTOR
S1	SOLLWERTGEBER
Y	DOSIERPUMPE
X1-X8	STECKVERBINDUNG

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

* COMPLEMENTARY HEATING AIRTOP 2000

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

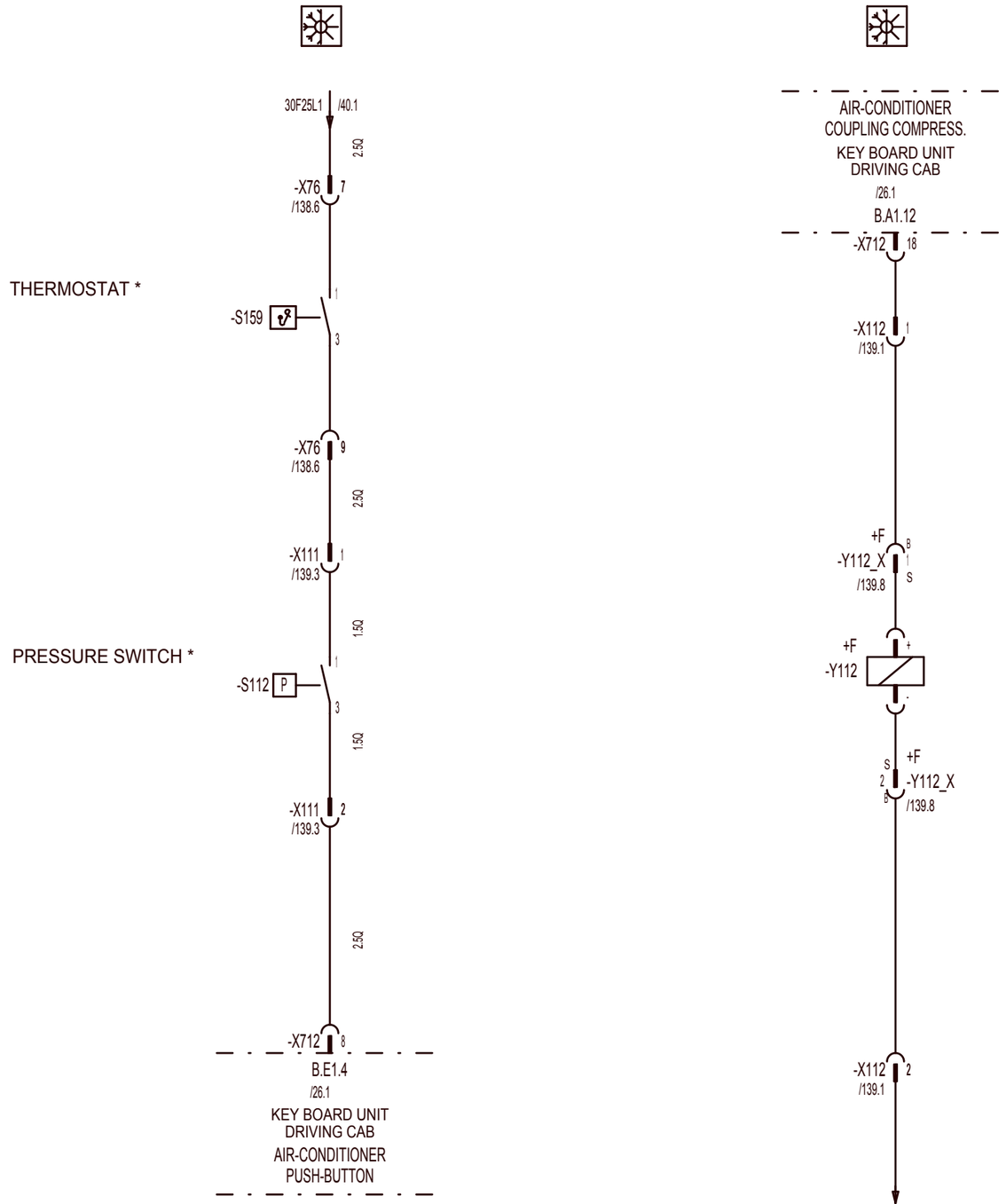
=	U
+	H
Blatt	109
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* COMPLEMENTARY HEATING AIRTOP 5000
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	110
von	153

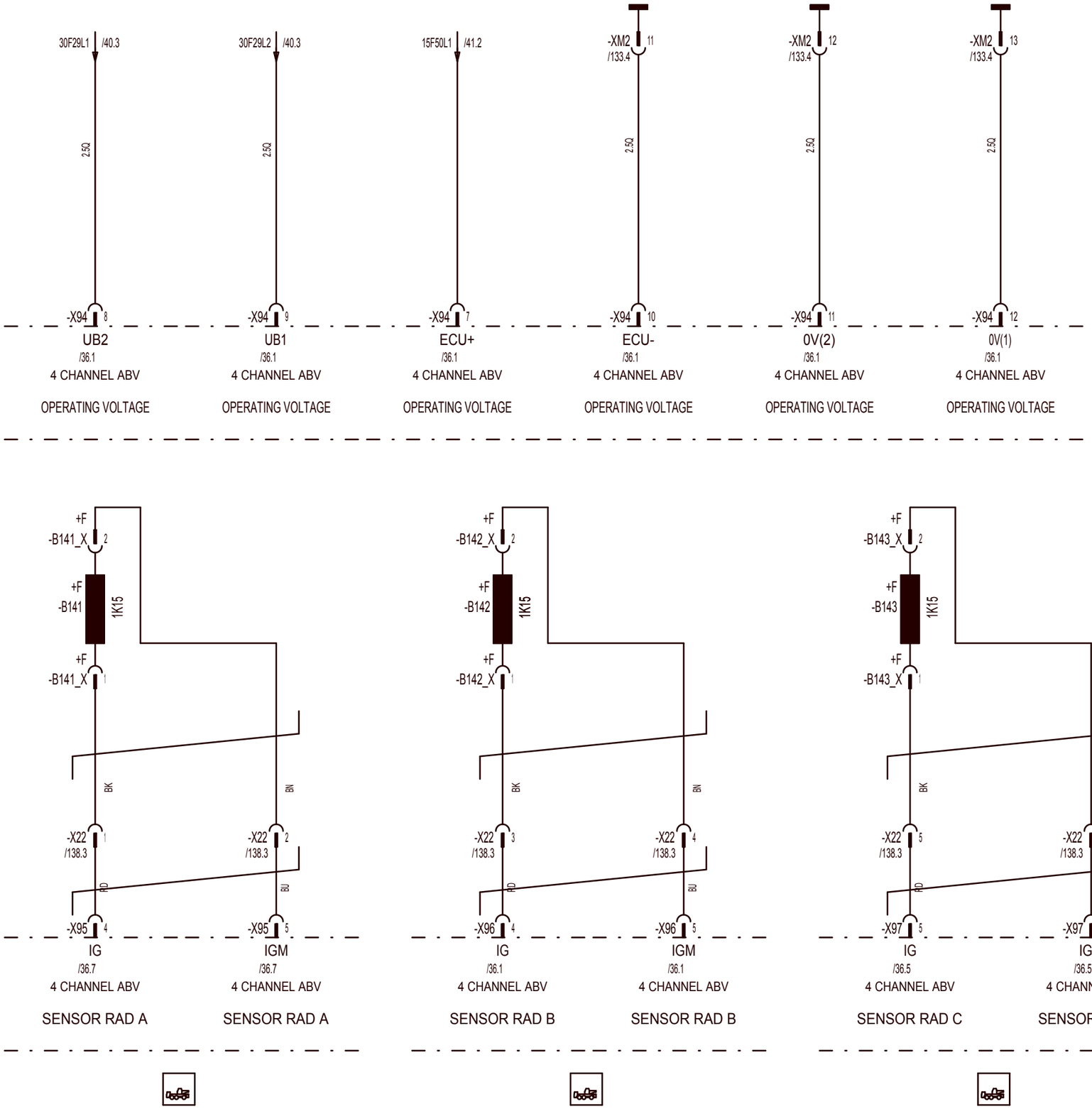


* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* AIR CONDITIONING EQUIPMENT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	111
von	153



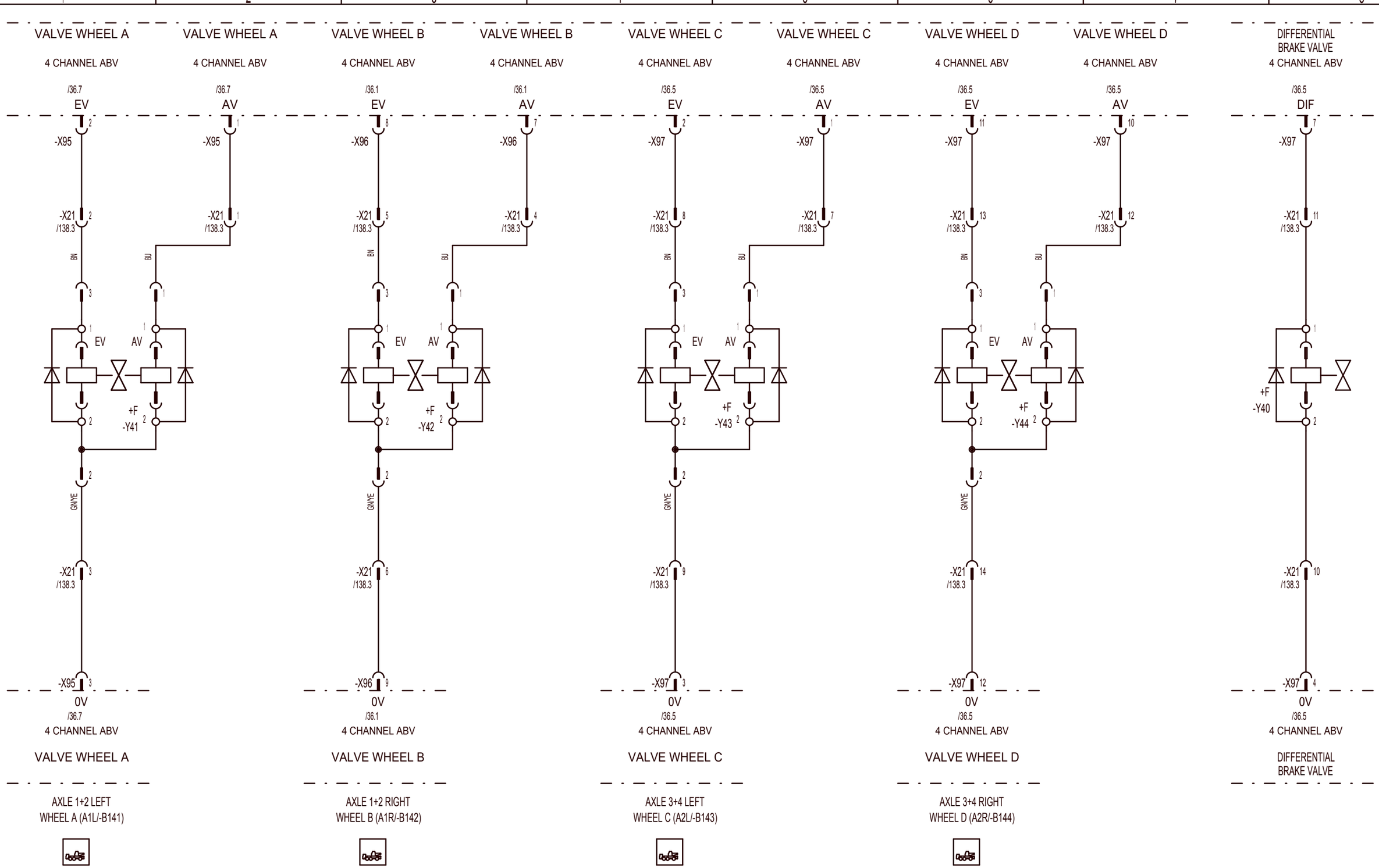
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

4 CHANNEL ABV

Ident-Nr. 984583708

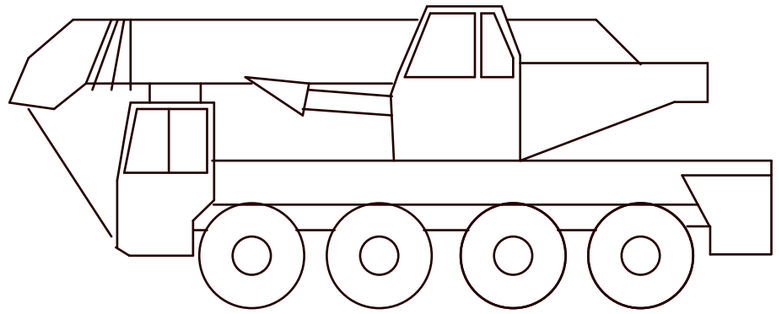
Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 112
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	4 CHANNEL ABV	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 113
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

AXLE AND WHEEL DESIGN.



AXLE 1+2 AXLE 3+4

	LEFT	RIGHT
AXLE 1+2	A (A1L)	B (A1R)
AXLE 3+4	C (A2L)	D (A2R)

ELECTRONICS D

-X94

1	4	7	10	13	16
CAN-L	TSET	ECU+	ECU-	DIAG	ASR-L
2	5	8	11	14	17
CAN-G	ABS	UB2	0V(2)	DIAG	DBR
3	6	9	12	15	18
CAN-H	ASR	UB1	0V(1)	LOCK	WL

-X95

1	4
AV	IG
2	5
EV	IGM
3	6
0V	

-X96

1	4	7
	IG	AV
2	5	8
	IGM	EV
3	6	9
TACH0	PROP	0V

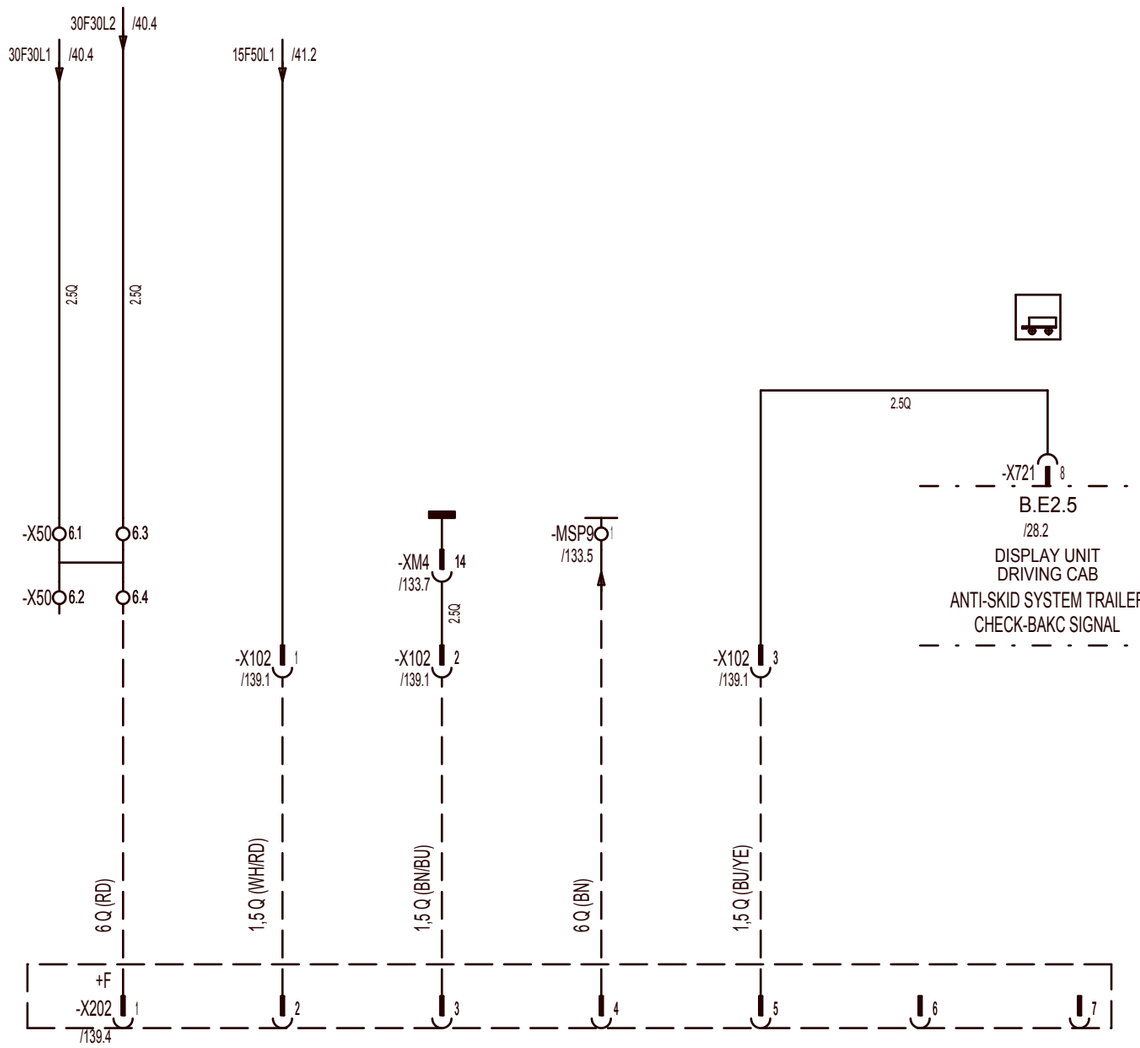
-X97

1	4	7	10	13
AV	0V	DIF	AV	
2	5	8	11	14
EV	IG	IG	EV	
3	6	9	12	15
0V	IGM	IGM	0V	

FCT2 = ABS OFF ROAD
FCT1 = ASR OFF ROAD

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	WHEEL SPEED	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

=	U
+	H
Blatt	114
von	153



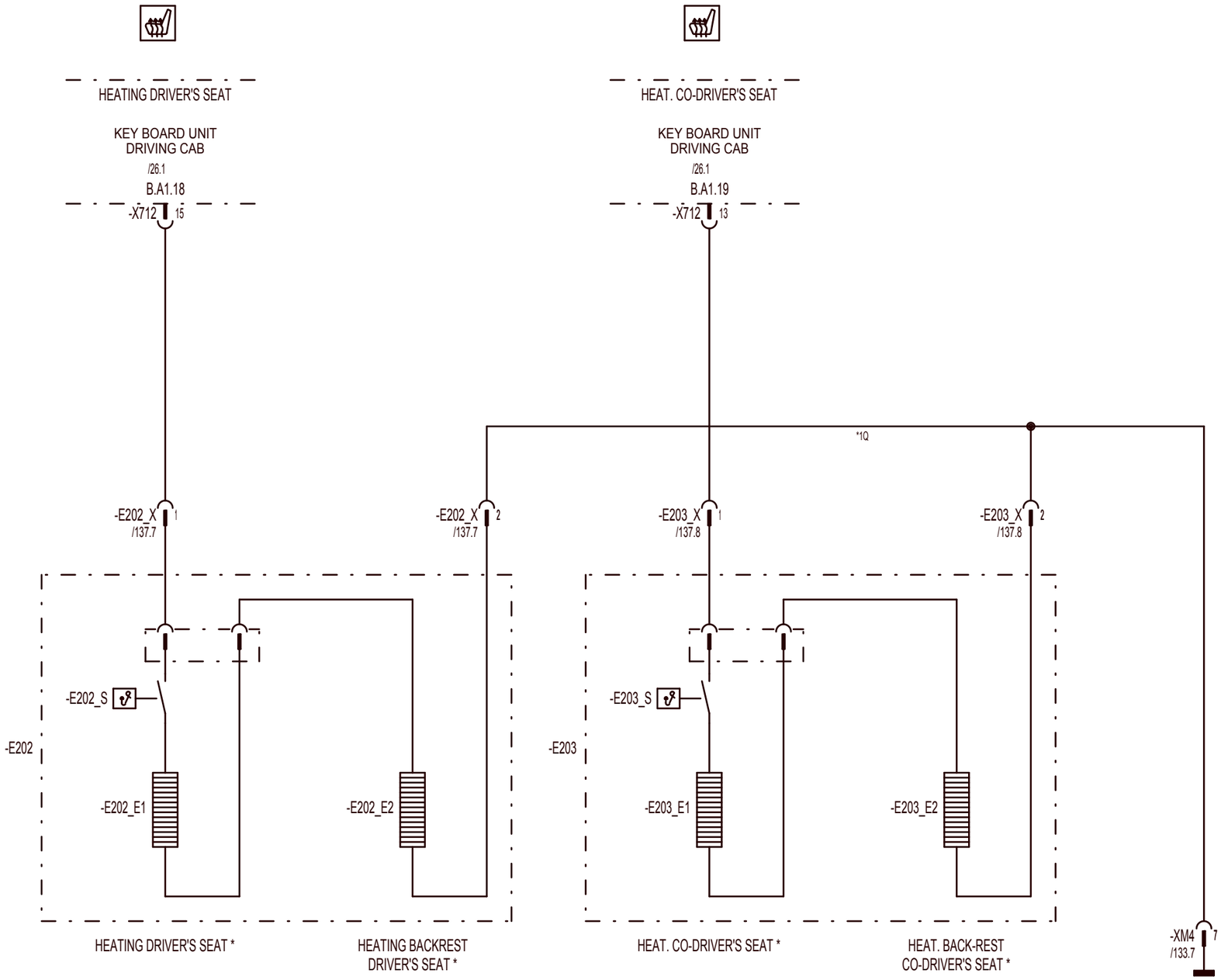
SOCKET ON
ANTI-SKID SYSTEM TRAILER
ISO 7638

* OPTION

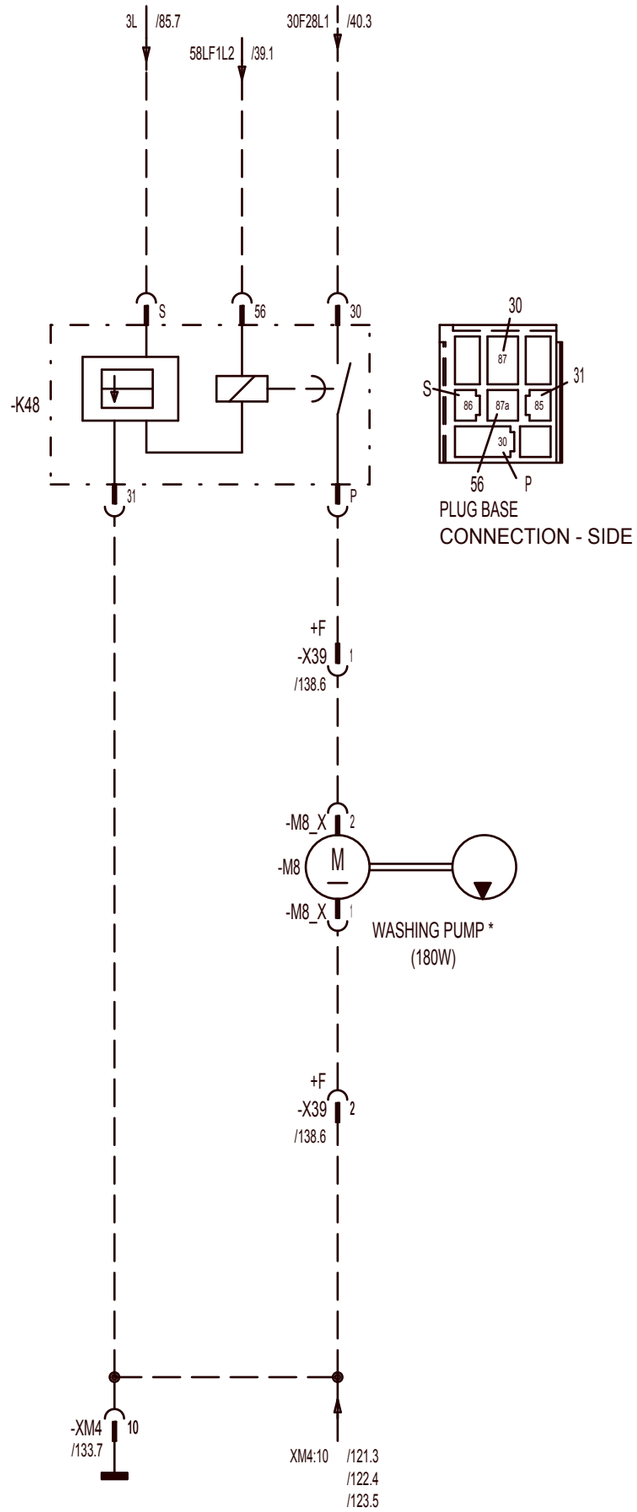
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* ANTI-SKID SYSTEM TRAILER
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	115
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* SEAT HEATING	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 116
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

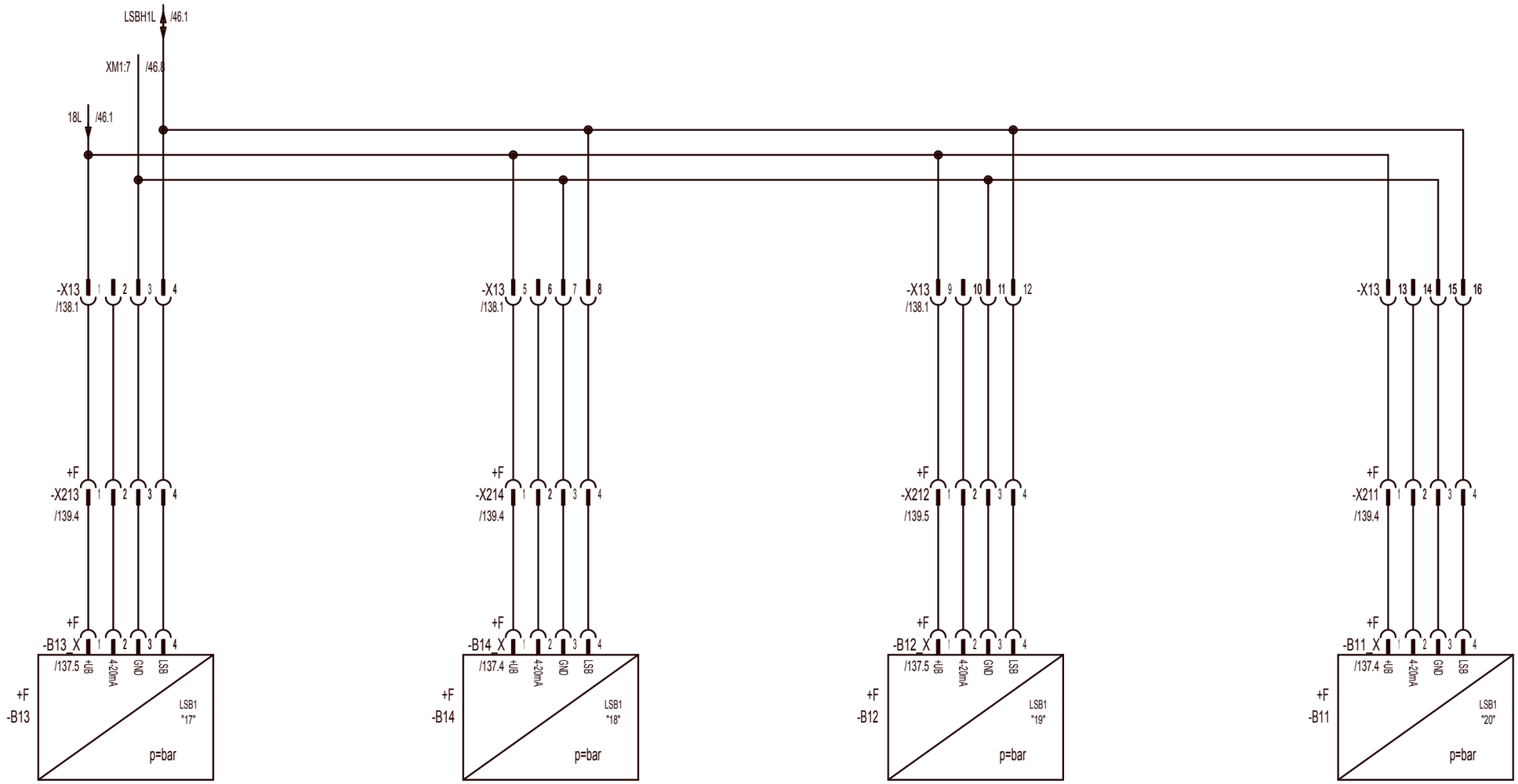


* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* HEADLIGHT WASHER
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	117
von	153

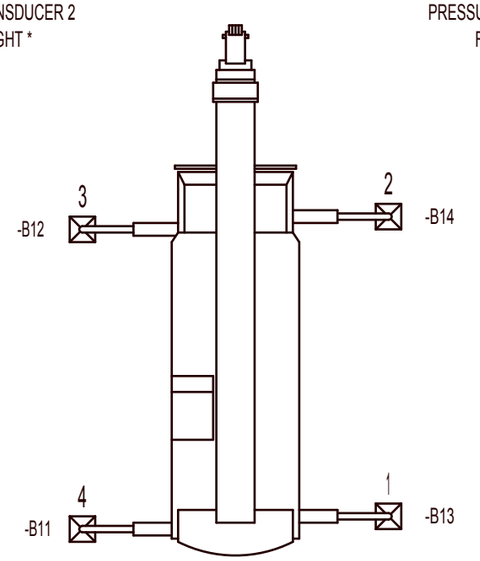


PRESSURE TRANSDUCER 1
REAR RIGHT *

PRESSURE TRANSDUCER 2
FRONT RIGHT *

PRESSURE TRANSDUCER 3
FRONT LEFT *

PRESSURE TRANSDUCER 4
REAR LEFT *



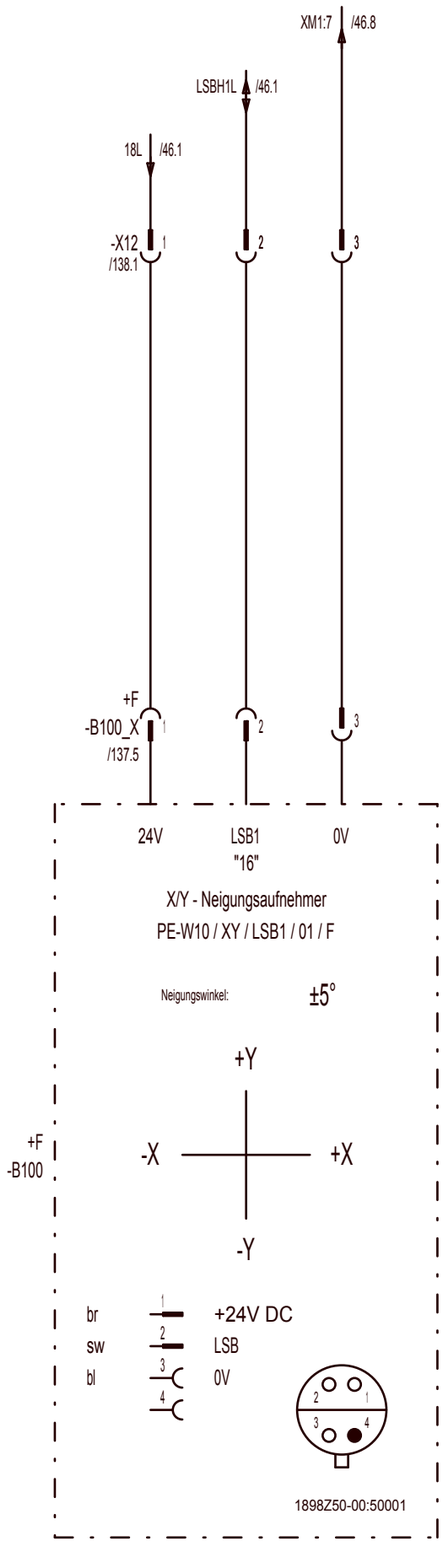
* OPTION

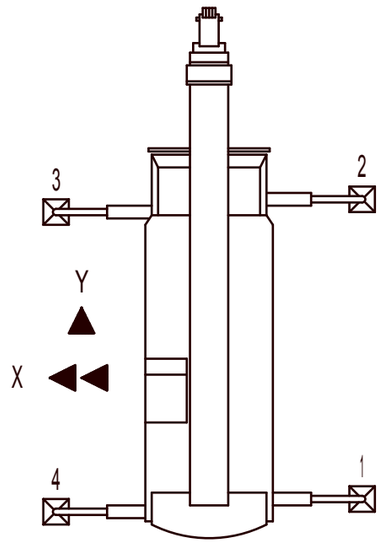
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

* SUPPORTING FORCE INDICATOR

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	118
von	153





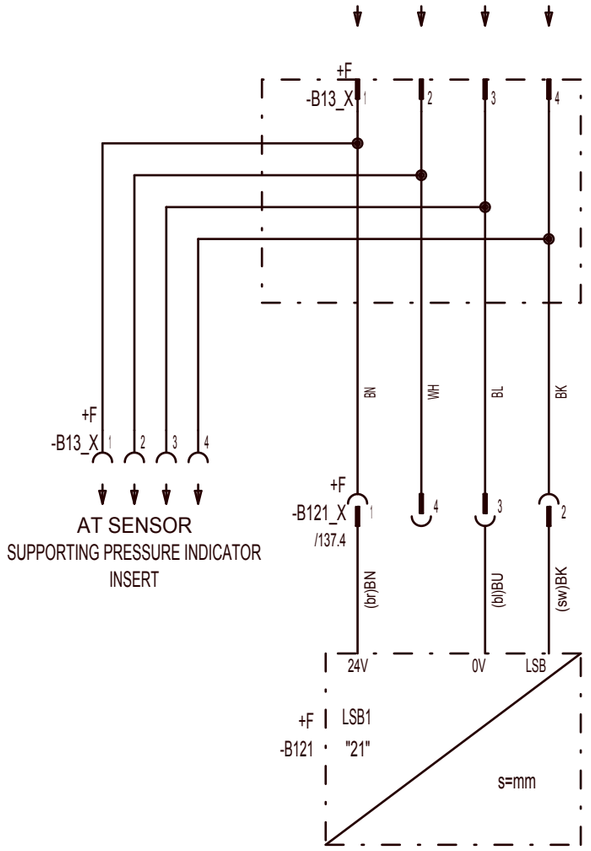
X=0° ==> I=12MA
Y=0° ==> I=12MA

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	INCLINATION SENSOR
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	119
von	153

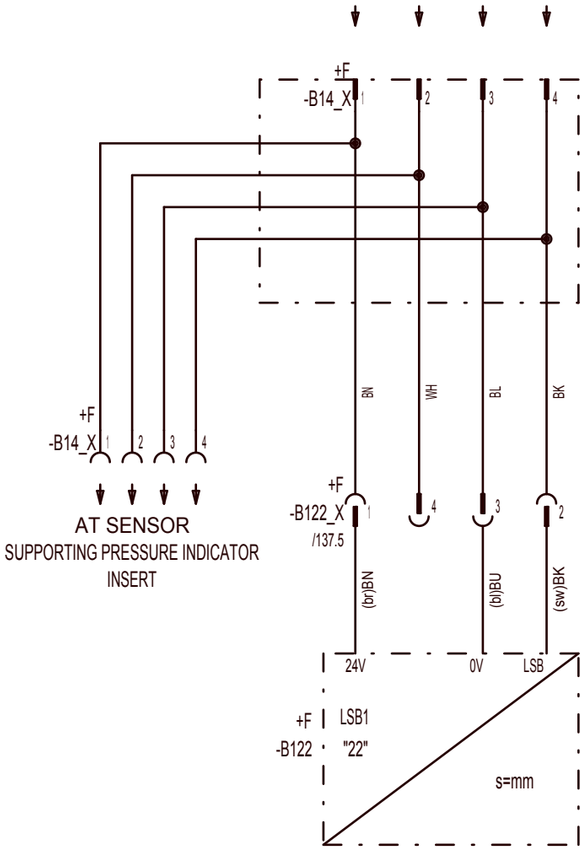
FEEDING PIPE SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT



AT SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT

LENGTH SENSOR 1
REAR RIGHT *

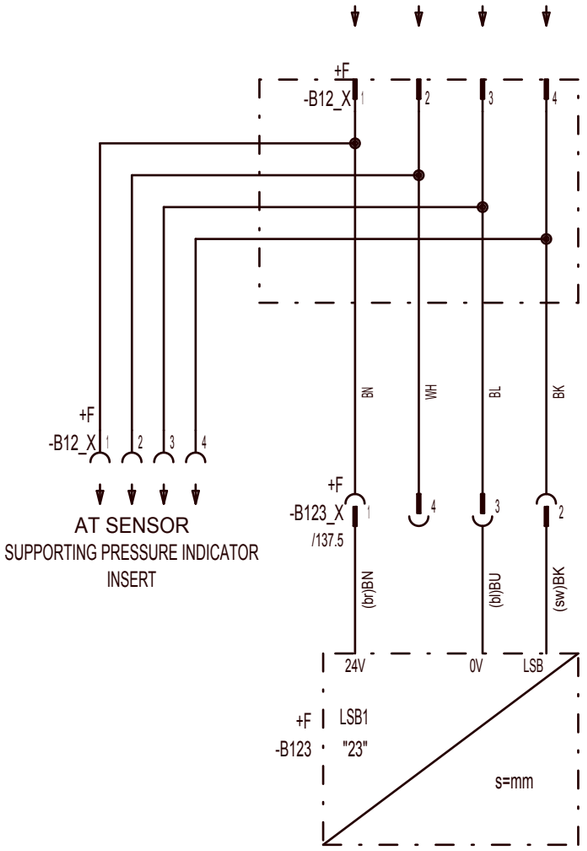
FEEDING PIPE SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT



AT SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT

LENGTH SENSOR 2
FRONT RIGHT *

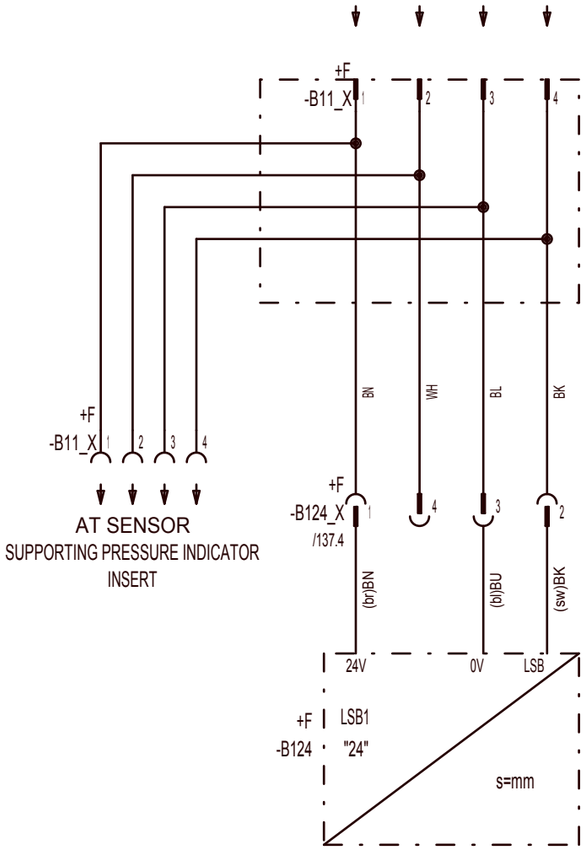
FEEDING PIPE SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT



AT SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT

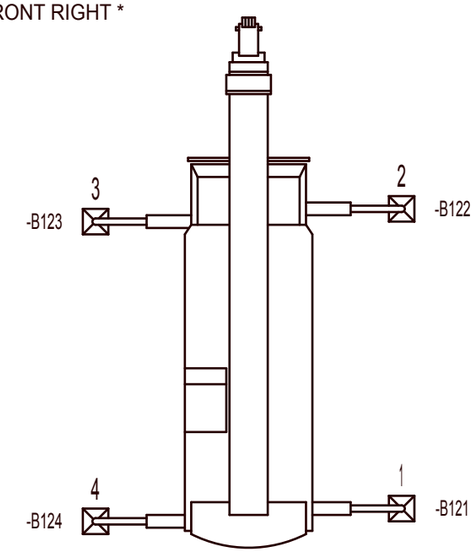
LENGTH SENSOR 3
FRONT LEFT *

FEEDING PIPE SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT



AT SENSOR
SUPPORTING PRESSURE INDICATOR
INSERT

LENGTH SENSOR 4
REAR LEFT *



* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* OUTRIGGER - LENGTH SENSOR
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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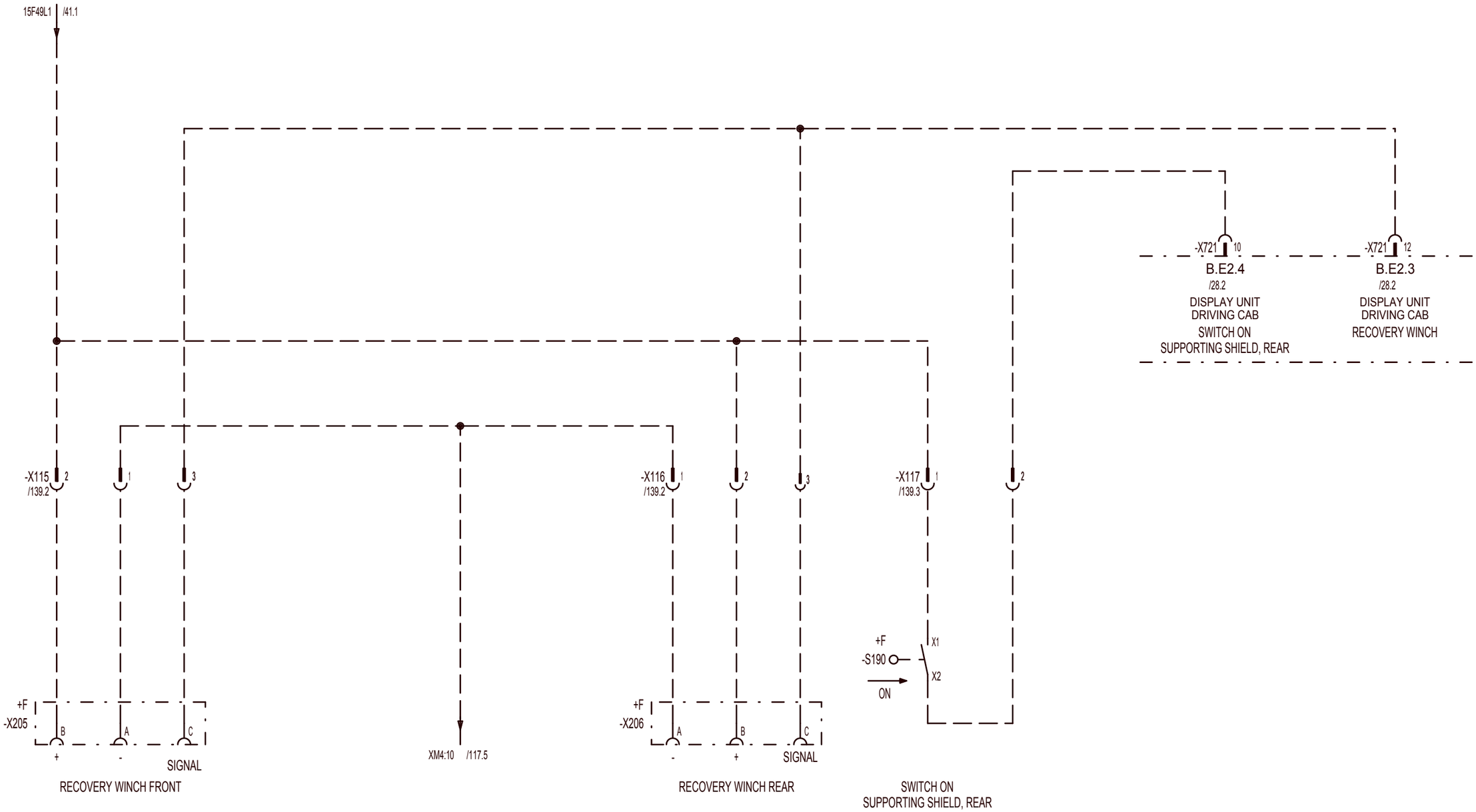
+	H
Blatt	120
von	153



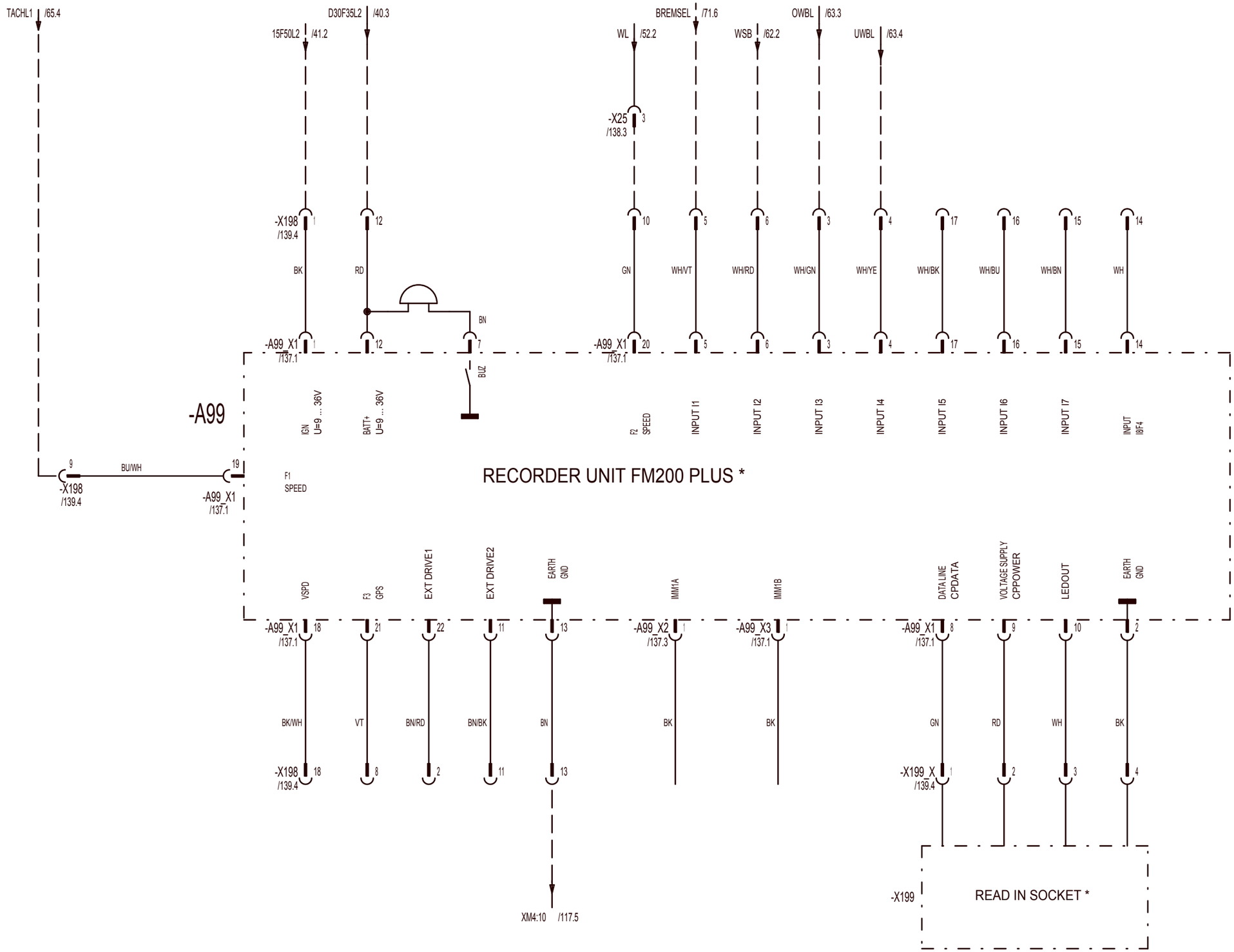
* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* RECOVERY WINCH , * LEVELLING SCOOP
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

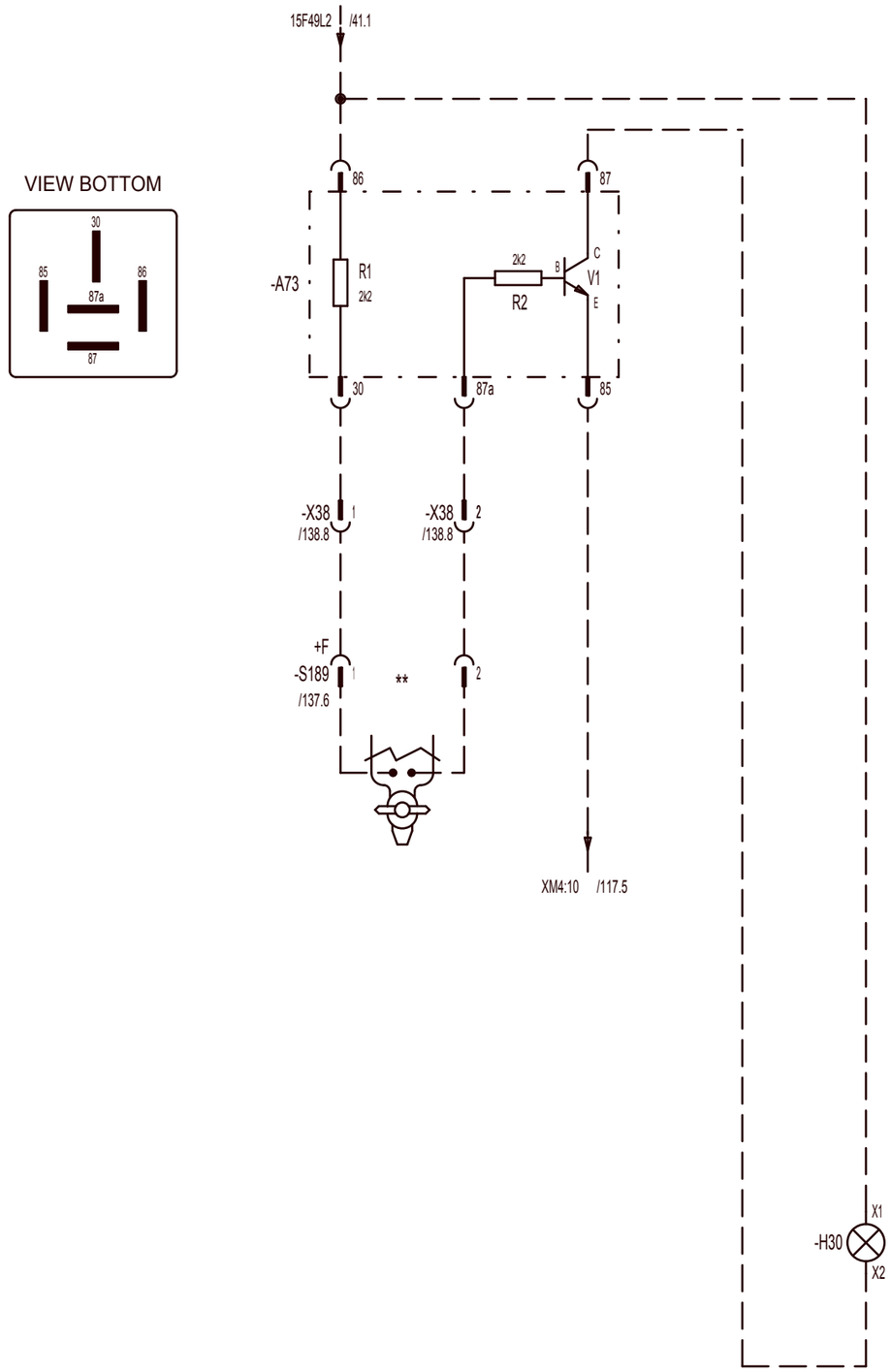
=	U
+	H
Blatt	121
von	153

MAKRO: FM200PLUS



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* RECORDER UNIT	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 122
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

Makro:KRAFTSTOFFENT



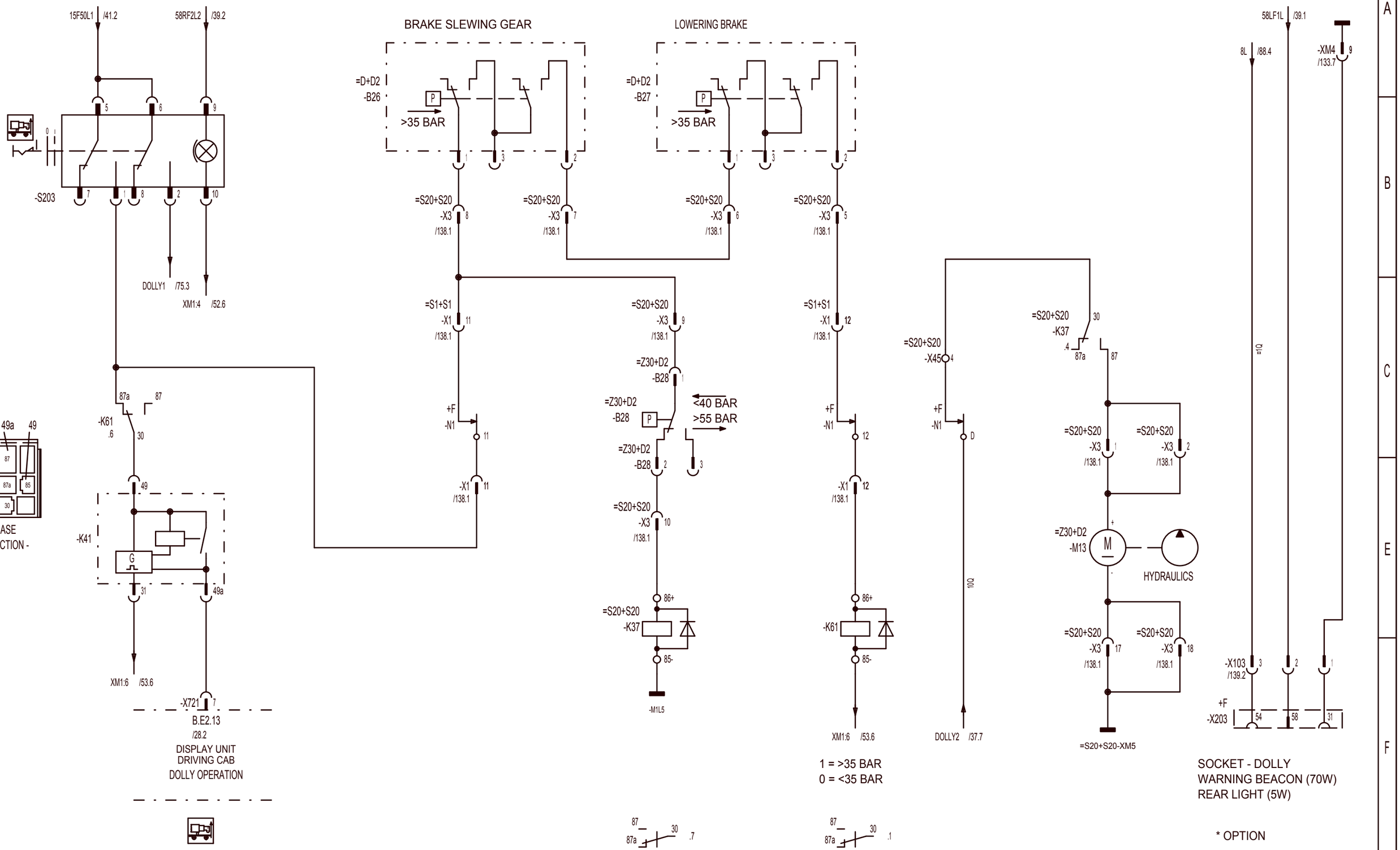
**

TEST THROUGH
BYPASS
OF BOTH
CONTACTS

FUEL CONDENSATION REMOVAL *

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* FUEL CONDENSATION REMOVAL	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 123
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* DOLLY
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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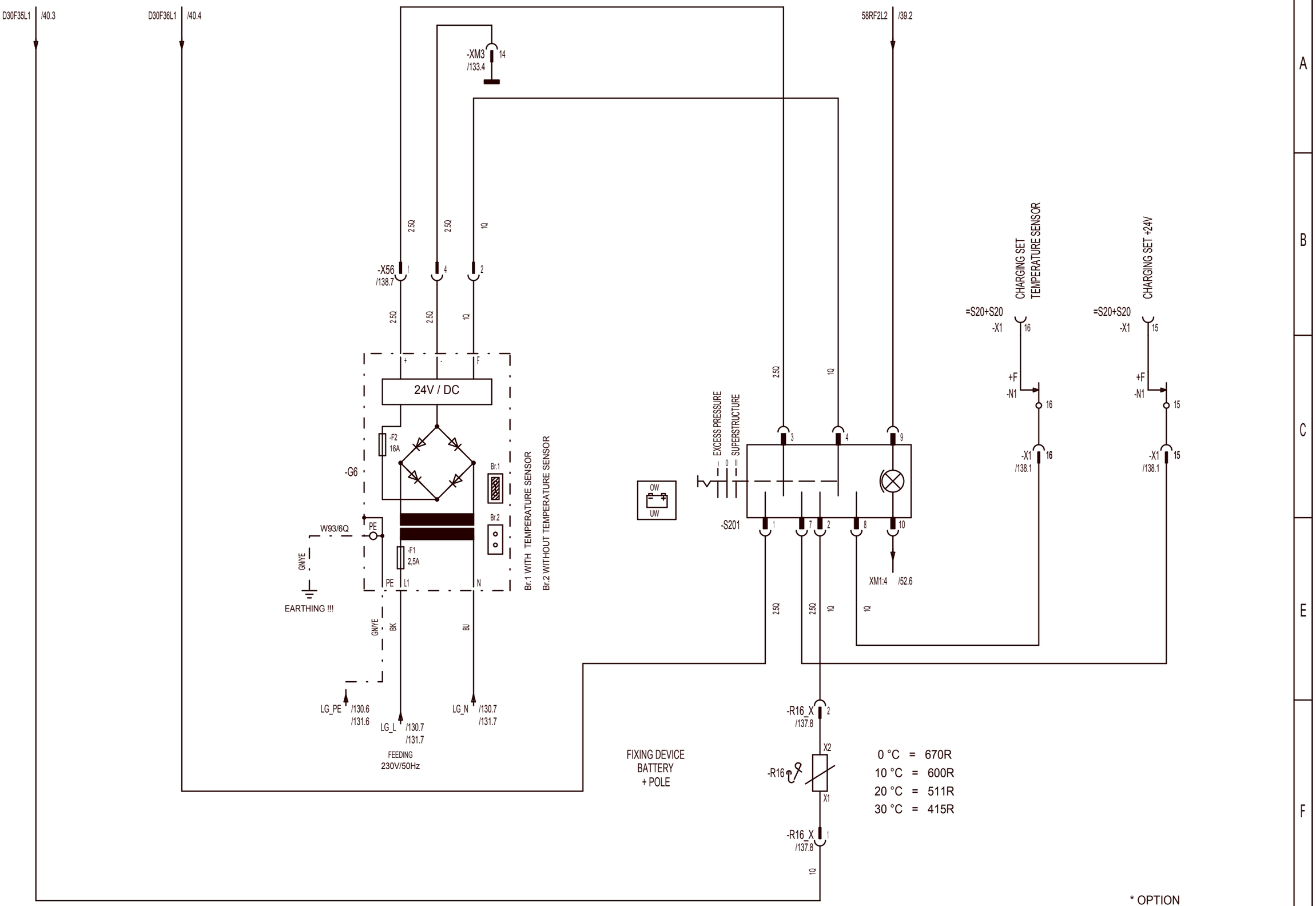
Blatt	124
von	153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* CHARGING SET
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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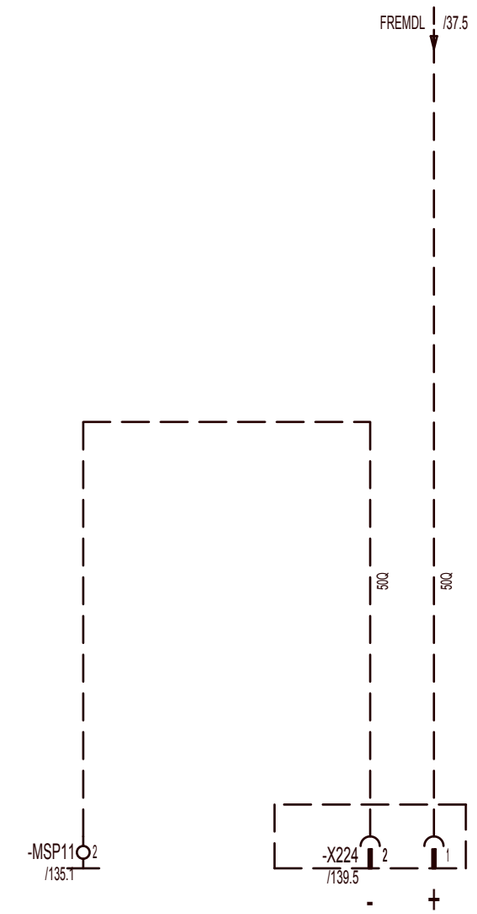
Blatt	125
von	153



MASS GROUPING BLOCK
BATTERY BOX

NATO SOCKET *

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* EXTERNAL FEEDING 24V
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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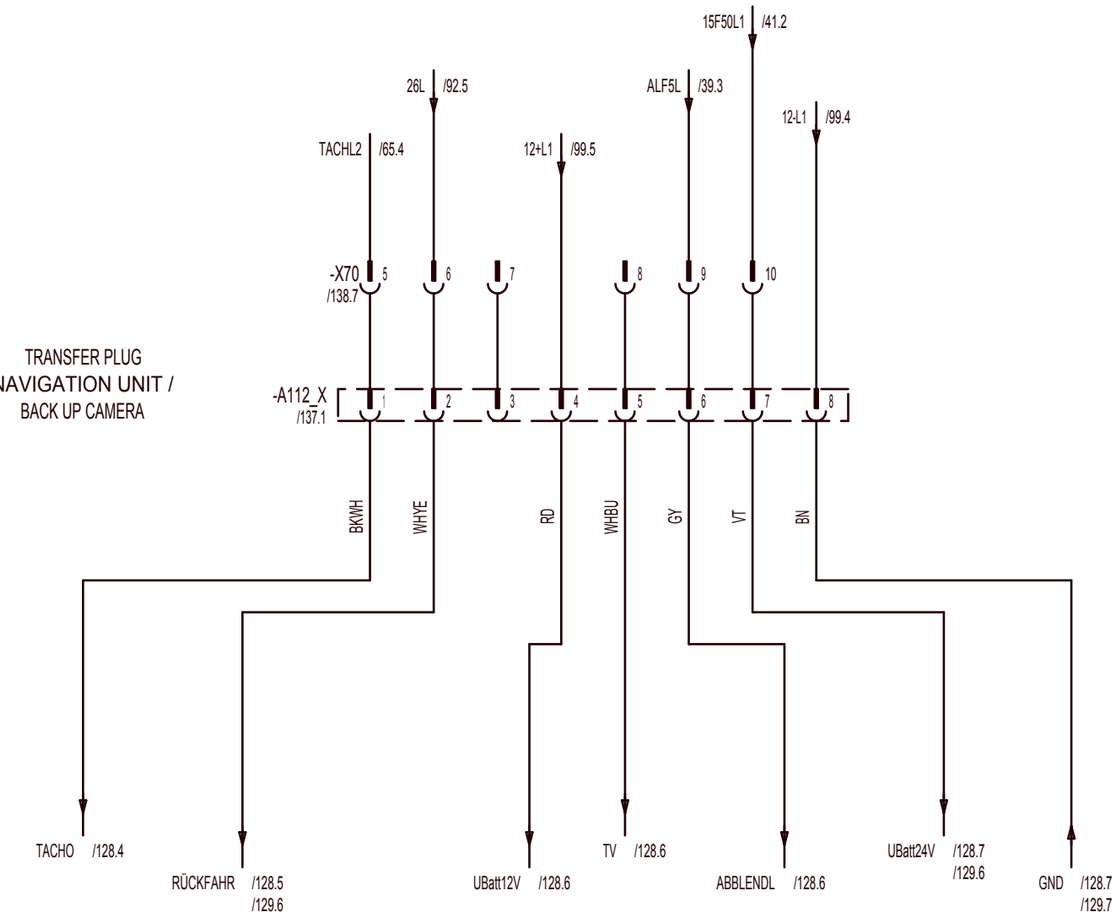
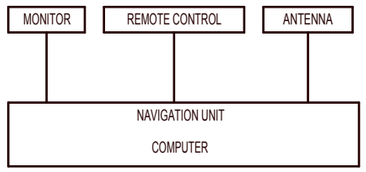
Blatt	126
von	153

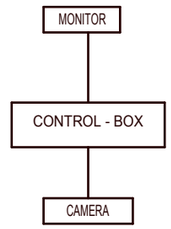


CONNECTION
NAVIGATION UNIT
OR
BACK UP CAMERA

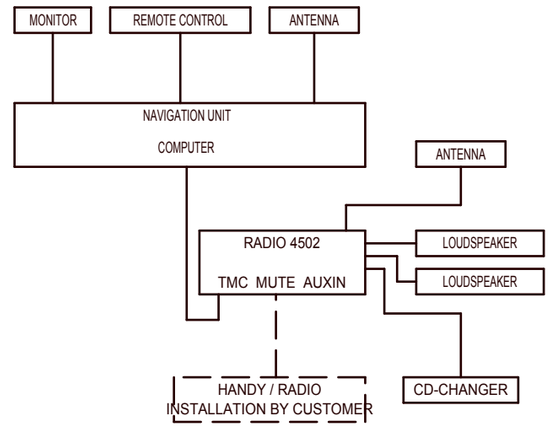
NAVIGATION UNIT



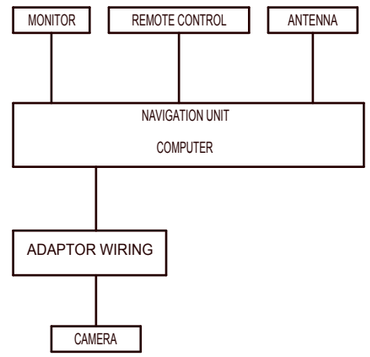
BACK UP CAMERA



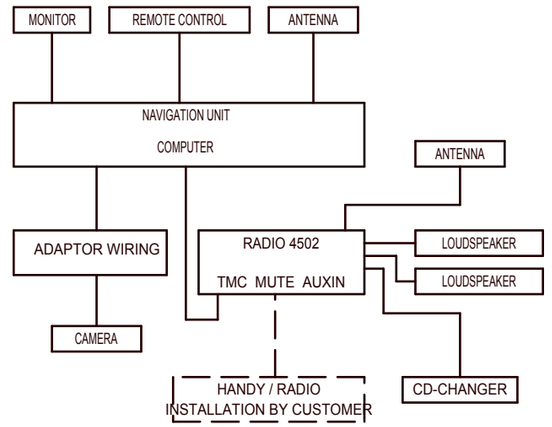
NAVIGATION UNIT AND RADIO



NAVIGATION UNIT AND BACK UP CAMERA



COMPLETE - SYSTEM



* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

* NAVIGATION UNIT OVERVIEW PLAN

* BACK UP CAMERA OVERVIEW PLAN

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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+	H
Blatt	127
von	153

REVERSE GEAR

*4 0,3M

*4 4M

*4 25M

*4 5M

-A110_D 25 21 26

PLUG GROUPING
PLUG A AND B
SEE SHEET RADIO /99.6

D2 D1 C B A

REAR VIEW
RADIO

ANTENNA
*1

GPS

*1

TACHO /127.1
RÜCKFAHR /127.2
UBatt12V /127.3
TV /127.3
ABBLENDL /127.4
UBatt24V /127.4
GND /127.4

BKWH WHYE WHBN RD WHBU GY VT BN

*1

-A112_XA
/137.3

1 SPEEDO
2 R
3 MUTE
4 +12V UBatt
5
6 58d
7 Kl.15
8 - (BK)

*1
-A112

NAVIGATION UNIT PC 5100
*1

TMC-SIGNAL
NAV+ NAV-

-A112_XC2 10 12

(RD) (BK)

=U+H
-A112_X2

-A112_XB
(BN)

YE RD BUYE
BK WHBN BUGN

*1

NAV Unit

(YE) (GN) (BU)
C1 C2 C3

C
B (BN)
A (BK)

REAR VIEW

*1

MONITOR

*4

NAV Unit

NAVIGATION UNIT
WITH BACK UP CAMERA

*1

MS 5000/01
MONITOR
*1

NAV Unit

*1

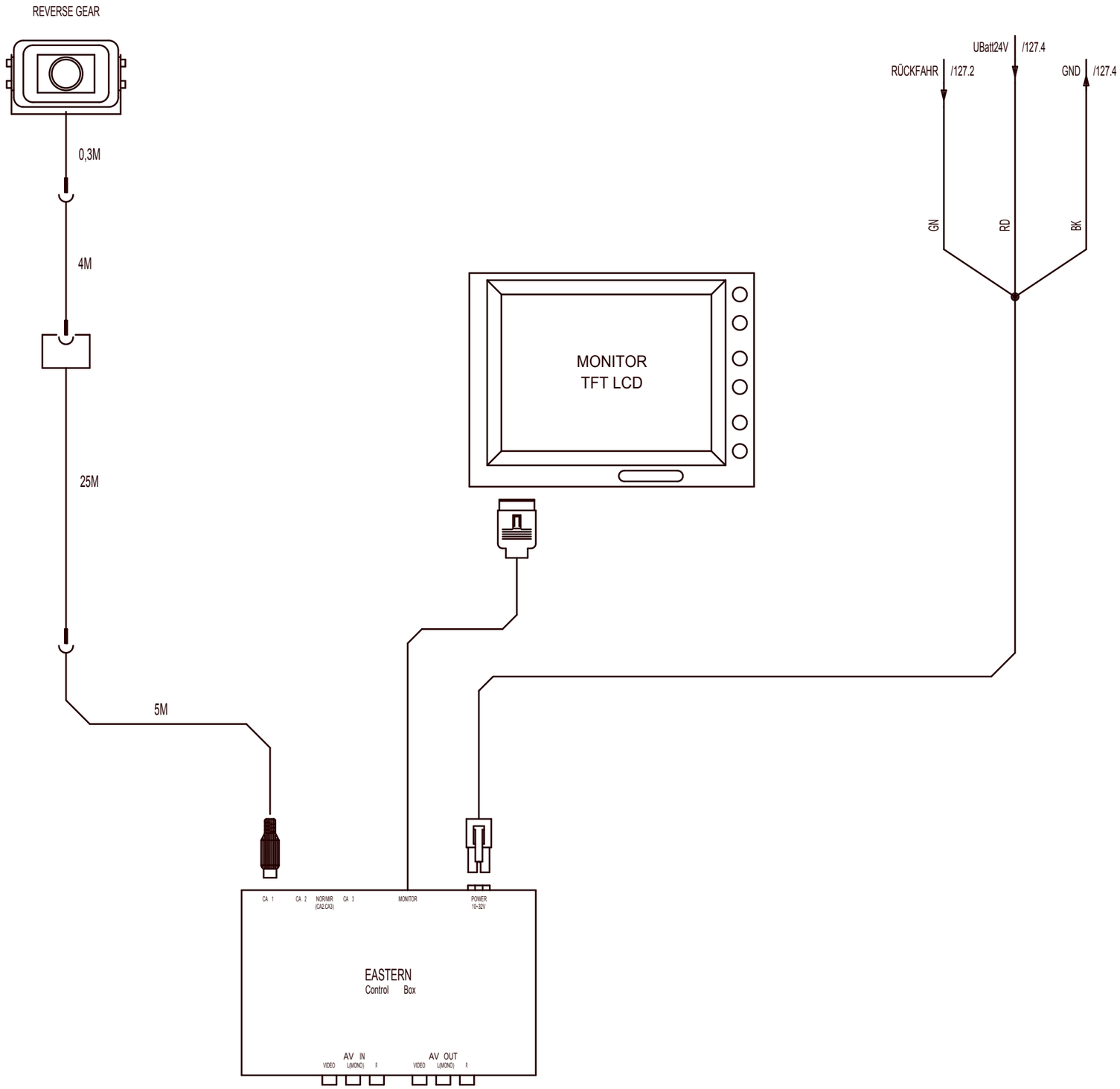
LOUDSPEAKER
NAVIGATION UNIT
(OPTION)

*1 SCOPE OF DELIVERY NAVIGATION UNIT
*4 SCOPE OF DELIVERY BACK UP CAMERA

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* NAVIGATION UNIT BASIC VERSION , * NAVIGATION UNIT WITH BACK UP CAMERA
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

= U
+ H
Blatt 128
von 153



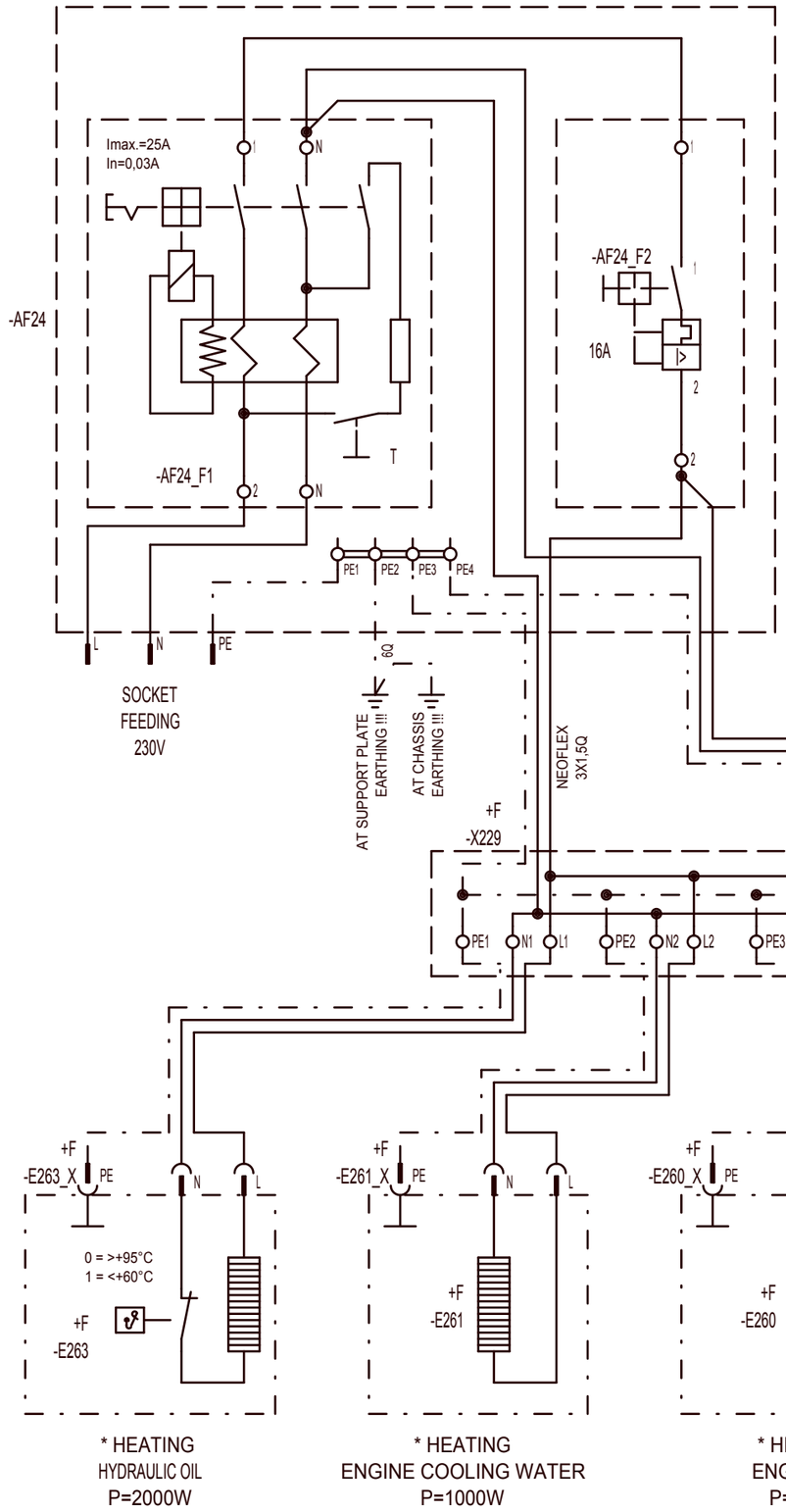
3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* BACK UP CAMERA
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

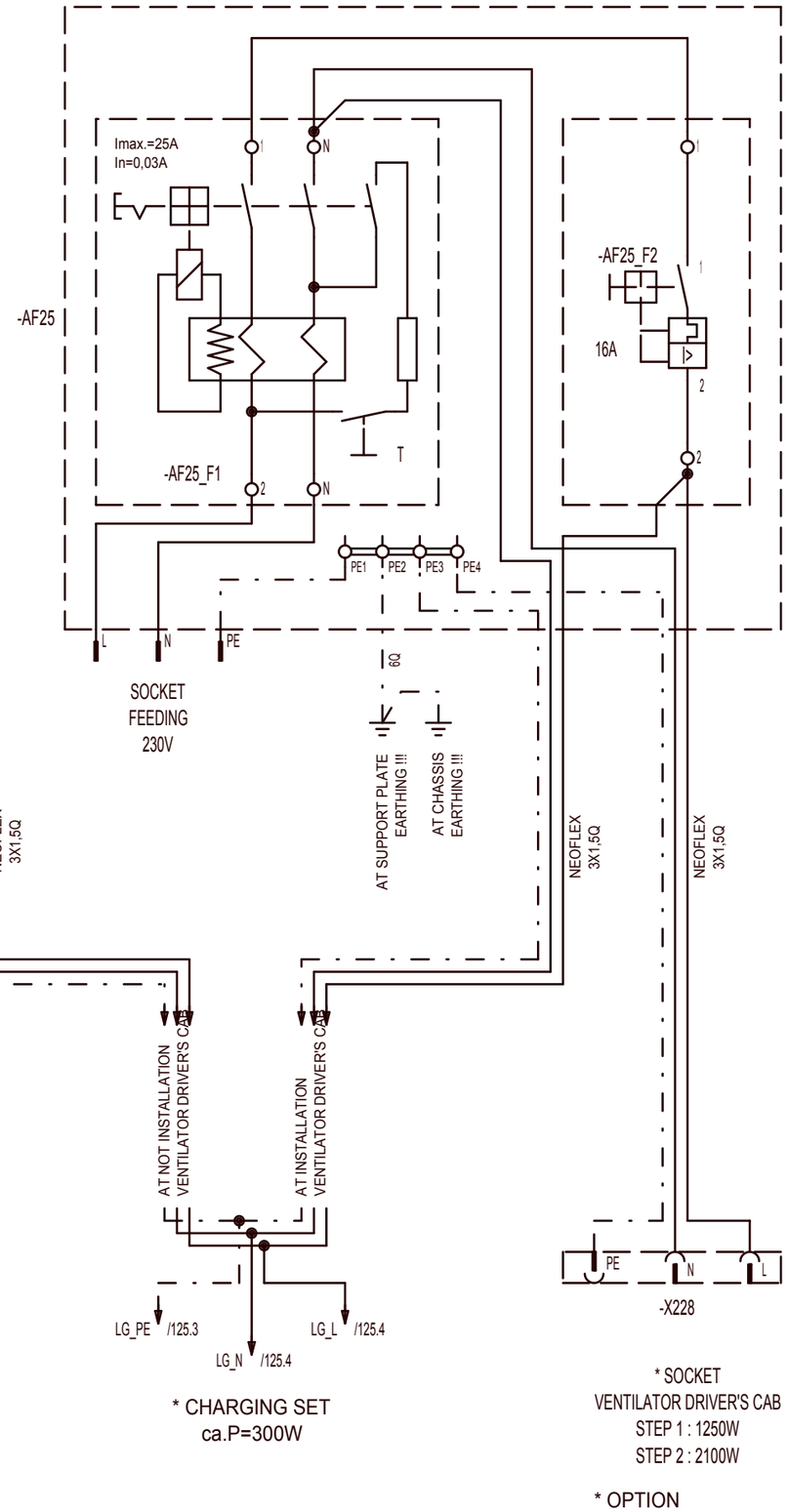
=	U
+	H
Blatt	129
von	153

Makro:FE_230V

MAIN FUSE 230V



MAIN FUSE 230V



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	* EXTERNAL FEEDING 230V
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

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+	H
Blatt	130
von	153

Makro:FE_110V

MAIN FUSE 110V

-AF23

Imax.=25A
In=0,03A

-AF23_F1

-AF23_F2
In=16A

PE1 PE2 PE3 PE4

L N PE

SOCKET
FEEDING
110V

6Q

AT SUPPORT PLATE
EARTHING !!!

AT CHASSIS
EARTHING !!!

NEOFLEX
3X1,5Q

+F
-X229

PE1 N1 L1 PE2 N2 L2 PE3 N3 L3 PE4 L4.1 L4.2

+F
-E263_X PE N L

0 = >+95°C
1 = <+60°C

+F
-E263

* HEATING
HYDRAULIC OIL
P=1500W

+F
-E261_X PE N L

+F
-E261

* HEATING
ENGINE COOLING WATER
P=1000W

+F
-E260_X PE N L

+F
-E260

* HEATING
ENGINE OIL
P=300W

+F
-S134_X PE X2 X1

0 = >+76°C
1 = <+38°C

+F
-S134

* TEMPERATURE SENSOR
ENGINE OIL *

MAIN FUSE 110V

-AF24

Imax.=25A
In=0,03A

-AF24_F1

-AF24_F2
16A

PE1 PE2 PE3 PE4

L N PE

SOCKET
FEEDING
110V

6Q

AT SUPPORT PLATE
EARTHING !!!

AT CHASSIS
EARTHING !!!

NEOFLEX
3X1,5Q

MAIN FUSE 110V

-AF25

Imax.=25A
In=0,03A

-AF25_F1

-AF25_F2
16A

PE1 PE2 PE3 PE4

L N PE

SOCKET
FEEDING
110V

6Q

AT SUPPORT PLATE
EARTHING !!!

AT CHASSIS
EARTHING !!!

NEOFLEX
3X1,5Q

NEOFLEX
3X1,5Q

AT NOT INSTALLATION
VENTILATOR DRIVER'S CAB

AT INSTALLATION
VENTILATOR DRIVER'S CAB

LG_PE /125.3

LG_N /125.4

LG_L /125.4

* CHARGING SET
ca.P=300W

PE N L

-X228

* SOCKET
VENTILATOR DRIVER'S CAB
STEP 1 : 1250W

* OPTION

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1	Änderung	Datum	Name		Datum	Name	Copyright (c)

* EXTERNAL FEEDING 110V

Ident-Nr. 984583708

Zeich-Nr. 3272-920.06.01.000-002

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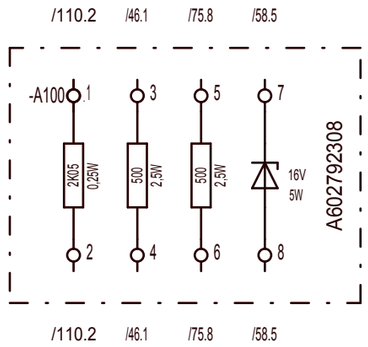
+ H
Blatt 131
von 153



3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OUTLINE OF DEVICE	Ident-Nr. 984583708	= U
2										+ H
1				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	Blatt 134
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153

MASS GROUPING BLOCK W6

+F -XM6.1
1 2 3 4 5 6 7 8 9 10 11 12
/42.2 /81.2 /81.2 /91.3 /42.3 /81.3 /81.4 /42.3

+F -XM6.2
1 2 3 4 5 6 7 8 9 10 11 12
/42.3 /64.6 /82.2 /82.2 /82.3 /82.4 /42.5 /42.5 /83.5 /90.3

+F -XM6.5
1 2 3 4 5 6 7 8 9 10 11 12
/42.4 /76.2 /42.5 /42.5 /76.2 /91.2 /76.3 /90.4

+F -XM6.7
1 2 3 4 5 6 7 8 9 10 11 12
/42.5 /64.4 /86.8 /85.8 /42.2

+F -XM6.8
1 2 3 4 5 6 7 8 9 10 11 12
/42.5 /61.5 /68.6 /68.6 /42.6 /42.7 /68.7 /74.2 /74.6 /74.4

+F -XM6.9
1 2 3 4 5 6 7 8 9 10 11 12
/42.6 /42.8 /42.8 /63.6 /77.5 /90.5 /91.4 /91.5

+F -XM6.10
1 2 3 4 5 6 7 8 9 10 11 12
/42.6 /92.4 /81.5 /81.5 /42.5 /81.7 /81.7 /91.8 /92.5 /42.2 /42.2

+F -XM6.11
1 2 3 4 5 6 7 8 9 10 11 12
/42.6 /76.7 /76.7 /76.8 /42.3 /42.3

+F -XM6.12
1 2 3 4 5 6 7 8 9 10 11 12
/42.7 /82.5 /82.5 /82.7 /42.3 /82.7 /90.7 /42.4 /92.4

+F -XM6.13
1 2 3 4 5 6 7 8 9 10 11 12
/42.7 /90.8 /91.8

+F -XM6.14
1 2 3 4 5 6 7 8 9 10 11 12
/53.7 /90.4 /42.8 /42.7 /42.7 /75.6 /75.6

+F -XM6.15
1 2 3 4 5 6 7 8 9 10 11 12
/42.2 /42.4 /76.5 /76.6 /42.4 /76.6

+F -XM6.16
1 2 3 4 5 6 7 8 9 10 11 12
/42.3 /91.4 /42.5 /76.4 /76.4 /42.6 /76.5 /42.5 /42.6

MASS GROUPING BLOCK W8

+F -XM8.1
1 2 3 4 5 6 7 8 9 10 11 12
/42.3 /60.6 /52.7 /59.3 /59.2

+F -XM8.2
1 2 3 4 5 6 7 8 9 10 11 12
/42.2 /42.3 /66.4 /66.4

MASS GROUPING BLOCK W34

+F -XM34.1
1 2 3 4 5 6 7 8
/86.4 /86.1 /86.2 /86.2 /86.3 /42.2

+F -XM34.2
1 2 3 4 5 6 7 8
/86.4 /86.6 /86.6 /86.7 /86.8 /42.3 /42.4

+F -XM34.3
1 2 3 4 5 6 7 8
/87.3 /87.4 /87.1 /90.1 /90.3 /42.3 /42.3

+F -XM34.4
1 2 3 4 5 6 7 8
/87.4 /87.5 /91.1 /91.3 /87.2 /42.4

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OUTLINE OF DEVICE MASS GROUPING BLOCK
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

Ident-Nr. 984583708
Zeich-Nr. 3272-920.06.01.000-002

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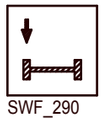
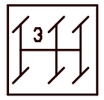
+ H
Blatt 136
von 153

1	2	3	4	5	6	7	8

 SWF_317	TRAVEL RANGE SWITCH BACKWARDS	 SWF_289	INCLINATION LEFT UP	 SWF_281	DRIVING PROGRAM 1 REAR AXLE STEERING	 SWF_295	LIGHT	 SWF_12	STEERING PUMP
 SWF_318	TRAVEL RANGE SWITCH NEUTRAL	 SWF_290	INCLINATION LEFT DOWN	 SWF_86	DRIVING PROGRAM 2 REAR AXLE STEERING	 SWF_275	HEATING	 SWF_13	FOG LAMP
 SWF_319	TRAVEL RANGE SWITCH FORWARD	 SWF_291	INCLINATION RIGHT UP	 SWF_264	DRIVING PROGRAM 3 REAR AXLE STEERING	 SWF_269	HEATING WARM	 SWF_301	PARKING LIGHT
 SWF_282	SPEED HIGHER	 SWF_292	INCLINATION RIGHT DOWN	 SWF_265	DRIVING PROGRAM 4 REAR AXLE STEERING	 SWF_2	HEATING COLD	 SWF_39	PARKING BRAKE EDDY CURRENT BRAKE / TELMA
 SWF_283	SPEED LOWER	 SWF_322	INFORMATION	 SWF_270	DRIVING PROGRAM 5 REAR AXLE STEERING	 SWF_83	VENTILATOR HIGHER	 SWF_150	REAR MIRROR HEATING SPEED LIMITATION
 SWF_307	DRIVING PROGRAM 1 = ECONOMY 2= POWER	 SWF_294	DEGREE OF LOCK RIGHT	 SWF_271	DRIVING PROGRAM 6 REAR AXLE STEERING	 SWF_333	VENTILATOR LOWER OUTRIGGER LIGHTING	 SWF_69	BRAKING SYSTEM
 SWF_276	GEAR UP	 SWF_293	DEGREE OF LOCK LEFT	 SWF_154	REAR AXKE REKEASE	 SWF_174	SEAT HEATING	 SWF_5	WARNING BEACON	 SWF_151	CONVERTER CLUTCH OPERN
 SWF_277	GEAR BACK	 SWF_306	LEVEL	 SWF_96	LONGITUDINAL DIFFERENTIAL PAWL	 SWF_7	AIR CONDITIONING EQUIPMENT	SWF_6	WARNING FLASHER	SWF_70	BRAKE LINING
SWF_298	OFF-ROAD GEAR ON / OFF	SWF_285	AXLES LOCKED	SWF_97	TRANSVERSAL DIFFERENTIAL PAWL	SWF_266	CIRCULATING AIR	SWF_15	COOLING WATER	SWF_34	TRANSMISSION FAILURE
SWF_320	LIGHTING DISPLAY UNIT KEY BOARD UNIT			SWF_349	TRANSVERSAL DIFFERENTIAL PAWL FRONT	SWF_267	FRESH AIR	SWF_14	AIR FILTER		
SWF_321	PROGRAM 2			SWF_348	TRANSVERSAL DIFFERENTIAL PAWL REAR	SWF_273	HEATING FOOT SPACE	SWF_296	PREHEAT		
SWF_297	POWER TAKE-OFF ON / OFF			SWF_68	EQUALIZATION	SWF_272	HEATING FRONT PANE	SWF_181	SUPPLEMENTARY BRAKE		

A B C E F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DESCRIPTION OF SYMBOLS	Ident-Nr. 984583708	= U
2										+ H
1				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002	Blatt 140
	Änderung	Datum	Name		Datum	Name	Copyright (c)			von 153


SWF_27

DIRECTION INDICATOR
POWERED UNIT


SWF_29

DIRECTION INDICATOR
TRAILER


SWF_172

AUTOMATIC
ANTI-LOCK SYSTEM
POWERED UNIT


SWF_171

AUTOMATIC
ANTI-LOCK SYSTEM
TRAILER


SWF_149

RELEASING
DOLLY OPERATION


SWF_98

BRAKE FORCE
REDUCTION


SWF_284

SPEED


SWF_278

TRANSMISSION


SWF_87

ATTENTION


SWF_36

TRANSMISSION OIL TEMPERATURE


SWF_23

FUEL TANK INDICATOR


SWF_95

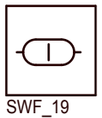
ENGINE TEMPERATURE


SWF_16

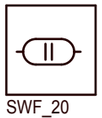
ENGINE OIL PRESSURE


SWF_25

CHARGE CONTROL BATTERY


SWF_19

AIR PRESSURE RESERVE I


SWF_20

AIR PRESSURE RESERVE II


SWF_21

AIR PRESSURE RESERVE III


SWF_279

BRAKE PRESSURE I


SWF_280

BRAKE PRESSURE II


SWF_99

WINDSCREEN WIPER


SWF_179

WINDSCREEN WASHER


SWF_207

HOOTER


SWF_11

SPEED MODIFICATIONS


SWF_28

ENGINE STOP

LEVEL AUTOMATIC
DOWN

LEVEL AUTOMATIC
UP

SUPPORT RAM DOWN

OUTRIGGERS UP

OUTRIGGER ON

OUTRIGGER OFF


SWF_195

WINDOW LIFTER


SWF_374

FUEL CONDENSATION REMOVAL

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	DESCRIPTION OF SYMBOLS
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

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Zeich-Nr. 3272-920.06.01.000-002

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+ H
Blatt 141
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1	2	3	4	5	6	7	8

DISTINGUISHING SIGN =	SYSTEM
U	EXCESS PRESSURE
D	SUPERSTRUCTURE
A	BOOM
F	CHASSIS

DISTINGUISHING SIGN +	LOCATION
	EXCESS PRESSURE
H	DRIVER'S CAB
F	VEHICLE
S	SWITCH CABINET

DISTINGUISHING SIGN +	LOCATION SUPERSTRUCTURE / BOOM
K	CABIN
D	SUPERSTRUCTURE
A	BOOM
S	SWITCH CABINET

DISTINGUISHING SIGN -	TYPE OF MATERIAL
A	COMPONENTS / SUBASSEMBLIES
B	CONVERTERS NOT ELECTR. VALUE <=> ELECTR. VALUE
C	CONDENSER
D	TIME-LAG DEVICES-MEMORY DEVICES-BINARY CELLS
E	MISCELLANEOUS
F	PROTECTIVE RELAYS
G	GENERATORS / POWER SUPPLIES
H	SIGNALLING DEVICES
K	RELAY / CONTACTORS
L	INDUCTANCES
M	ENGINE
N	SLIP RIING TRANSMISSION
P	MEASURING EQUIPMENT / TESTING DEVICES
Q	POWER CURRENT - JUMPER WIRES
R	RESISTORS
S	SWITCH
T	TRANSFORMERS
U	MODULATORS / CONVERTERS
V	SEMICONDUCTOR
W	CIRCUITS
X	CRAMP / PLUG / SOCKET
Y	VALVES
Z	TERMINATION, EQUALIZERS, FILTERS,-DELIMITERS, CABLE CONNECTIONS

CLAMP SIGNAL	DESCRIPTION OFF DIN 72552
15	(+) BATTERY SWITCHED AFTER IGNITION SWITCH
30	(+) BATTERY
30b	(+) BATTERY SWITCHED AFTER BATTERY MASTER SWITCH
31	(-) BATTERY
31b	(-) BATTERY SWITCHED AFTER BATTERY MASTER SWITCH
49	FLASHER UNIT
50	STARTER
50e	START INHIBITING RELAY - INPUT
50f	START INHIBITING RELAY - OUTLET
52	TRAILER - SIGNAL
53,a,b,c,e,i	WIPER ENGINE
54	STOP LIGHT
54g	TRAILER - SIGNAL (COMPRESSED-AIR SYSTEM)
55	FOG LAMP
56,a,b,d	LOW BEAM
57,a,L,R	PARKING LIGHT
58,b,c,d,L,R	SIDE MARKER LAMP ,REAR LIGHT , LICENCE PLATE LIGHT ,INSTRUMENT LIGHTING
61	GENERATOR TEST
72	ALARM SWITCH ,WARNING BEACON
75	RADIO ,CIGARETTE LIGHTER
76	LOUDSPEAKER
B+, B-	BATTERY (+); (-)
D+, D-	GENERATOR (+); (-)
DF, DF1, DF2	GENERATOR FIELD ,FIELD 1,FIELD 2

FUSES A	COLOURS	
2	GY	GREY
3	VT	VIOLET
5	LB	BEIGE
7,5	BN	BROWN
10	RD	RED
15	BU	BLUE
20	YE	YELLOW
30	GN	GREEN

WIRE COLOURS DIN IEC 757 OLD	NEW	COLOURS
gr	GY	GREY
vi	VT	VIOLET
rs		
br	BN	BROWN
rt	RD	RED
bl	BU	BLUE
ge	YE	YELLOW
gn	GN	GREEN
sw	BK	BLACK
or	OG	ORANGE
ws	WH	WHITE

EXAMPLE : =U+H-K53:30

= SYSTEM	+ LOCATION EXCESS PRESSURE	- TYPE OF MATERIAL	COUNTING NUMBER	: CONNECTION
= U	+ H	- K	53	: 30

EXAMPLE : 15F44L

SIGNAL	FUSES
15	F44L

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN
2				Ausgabe	03.02.06	lwerof0	
1							
	Änderung	Datum	Name		Datum	Name	Copyright (c)

KEY OF SYMBOLS

Ident-Nr.	984583708
Zeich-Nr.	3272-920.06.01.000-002

=	U
+	H
Blatt	142
von	153

A B C E F

BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-A1 =U	+H 26.1			-A77 =U	+H 62.2			-A130_X1 =U	+F 137.1		
-A5 =U	+H 28.1			-A99 =U	+H 122.3			-A130_X2 =U	+F 137.2		
-A9 =U	+F 30.2			-A99_X1 =U	+H 137.1			-A130_X3 =U	+F 137.1		
-A9_X =U	+F 30.1			-A99_X2 =U	+H 137.3			-A130_X4 =U	+F 137.1		
-A10 =U	+F 31.2			-A99_X3 =U	+H 137.1			-A130_X5 =U	+F 137.2		
-A10_X =U	+F 31.1			-A100 =U	+H 134.2			-A130_X6 =U	+F 137.3		
-A11 =U	+H 21.1			-A100_R2 =U	+H 46.1			-A130_X7 =U	+F 137.3		
-A12 =U	+H 22.1			-A100_R3 =U	+H 75.8			-A130_X8 =U	+F 137.1		
-A13 =U	+F 23.1			-A100_V1 =U	+H 58.5			-A131 =U	+H 103.7		
-A14 =U	+F 24.1			-A103 =U	+F 79.1			-A131 =U	+F 104.7		
-A15 =U	+H 25.1			-A103_X =U	+F 137.2			-A132 =U	+F 106.2		
-A51 =U	+H 33.1			-A104 =U	+F 80.4			-A132_XA =U	+F 137.2		
-A60 =U	+H 36.1			-A104_X =U	+F 137.1			-A132_XB =U	+F 137.3		
-A61 =U	+F 34.1			-A110 =U	+H 99.5			-A132_XC =U	+F 137.1		
-A62 =U	+H 35.1			-A110_A =U	+H 137.1			-A133 =U	+F 106.6		
-A68 =U	+F 70.4			-A110_B =U	+H 137.2			-A134 =U	+F 109.3		
-A68_B1 =U	+F 70.4			-A110_D =U	+H 128.2			-A134_X =U	+H 137.3		
-A68_Y1 =U	+F 70.6			-A111_X =U	+H 137.1			-A135 =U	+F 109.6		
-A68_Y2 =U	+F 70.7			-A112 =U	+H 128.5			-A135_X1 =U	+H 137.1		
-A69 =U	+F 67.1			-A112_X =U	+H 137.1			-A135_X2 =U	+H 137.2		
-A69_X =U	+F 137.1			-A112_XA =U	+H 137.3			-A135_X3 =U	+H 137.3		
-A70 =U	+H 65.3			-A112_XC2 =U	+H 128.5			-A135_X4 =U	+H 137.3		
-A71 =U	+H 46.1			-A130 =U	+H 103.3			-A135_X5 =U	+H 137.1		
-A73 =U	+H 123.4			-A130 =U	+F 104.3			-A135_X8 =U	+H 137.2		

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708	= U	
2				Ausgabe	03.02.06	lwerof0				+ H	
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 143	
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BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-A136 =U	+H 110.3			-AF20 =U	+H 39.8			-B12_X =U	+F 137.5		
-A136_X2 =U	+H 137.2			-AF23 =U	+H 131.1			-B13 =U	+F 118.2		
-A137 =U	+H 110.3			-AF23_F1 =U	+H 131.1			-B13_X =U	+F 137.5		
-A137_M =U	+H 110.5			-AF23_F2 =U	+H 131.3			-B14 =U	+F 118.3		
-A137_R1 =U	+H 110.6			-AF24 =U	+H 131.3			-B14_X =U	+F 137.4		
-A137_R2 =U	+H 110.7			-AF24 =U	+H 130.1			-B26 =D	+D2 124.3		
-A137_X1 =U	+H 137.4			-AF24_F1 =U	+H 131.4			-B27 =D	+D2 124.4		
-A137_X2 =U	+H 137.4			-AF24_F1 =U	+H 130.1			-B28 =Z30	+D2 124.4		
-A137_X3 =U	+H 137.5			-AF24_F2 =U	+H 131.5			-B28 =U	+F 65.1		
-A137_X4 =U	+H 137.6			-AF24_F2 =U	+H 130.3			-B29 =U	+F 66.7		
-A137_X5 =U	+H 137.4			-AF25 =U	+H 131.6			-B29_X =U	+F 137.5		
-A145 =U	+H 100.1			-AF25 =U	+H 130.6			-B30 =U	+H 54.4		
-A145_X =U	+H 137.3			-AF25_F1 =U	+H 130.6			-B30_X =U	+H 137.5		
-A150 =U	+H 96.1			-AF25_F1 =U	+H 131.6			-B31 =U	+F 57.5		
-A150_E =U	+H 96.3			-AF25_F2 =U	+H 130.8			-B31_X =U	+F 137.4		
-A150_M1 =U	+H 96.2			-AF25_F2 =U	+H 131.8			-B32 =U	+F 57.7		
-A150_M2 =U	+H 96.2			-B5 =U	+H 72.1			-B33 =U	+F 57.2		
-A150_X =U	+H 137.4			-B6 =U	+H 72.3			-B33_X =U	+F 137.5		
-A151 =U	+H 96.4			-B7 =U	+H 72.5			-B35 =U	+F 56.1		
-A151_E =U	+H 96.6			-B8 =U	+H 72.5			-B35_X =U	+F 137.6		
-A151_M1 =U	+H 96.4			-B9 =U	+H 72.3			-B36 =U	+F 56.3		
-A151_M2 =U	+H 96.5			-B11 =U	+F 118.7			-B36_X =U	+F 137.4		
-A151_X =U	+H 137.5			-B11_X =U	+F 137.4			-B37 =U	+F 56.6		
-AF0 =U	+H 37.3			-B12 =U	+F 118.5			-B37_X =U	+F 137.5		

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 144
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BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-B38 =U	+F 56.4			-B142 =U	+F 112.3			-E39 =U	+H 89.7		
-B47 =U	+F 58.3			-B143 =U	+F 112.5			-E40 =U	+H 86.6		
-B47_X =U	+F 137.5			-B144 =U	+F 112.7			-E41 =U	+F 91.1		
-B47_Y1 =U	+F 58.5			-E1 =U	+H 86.7			-E42 =U	+F 91.1		
-B48 =U	+H 60.1			-E2 =U	+H 86.2			-E43 =U	+F 91.2		
-B50 =U	+F 79.2			-E3 =U	+H 86.8			-E50 =U	+H 86.1		
-B50_X =U	+F 137.4			-E4 =U	+H 86.3			-E51 =U	+F 90.1		
-B51 =U	+F 79.3			-E5 =U	+H 86.6			-E52 =U	+F 90.1		
-B51_X =U	+F 137.5			-E6 =U	+H 86.2			-E53 =U	+F 90.2		
-B52 =U	+F 79.4			-E10 =U	+H 87.1			-E60 =U	+F 91.3		
-B52_X =U	+F 137.4			-E11 =U	+H 87.2			-E61 =U	+F 91.3		
-B70 =U	+F 63.6			-E14 =U	+H 87.4			-E62 =U	+F 91.4		
-B70_X =U	+F 137.4			-E15 =U	+H 87.5			-E63 =U	+F 91.4		
-B100 =U	+F 119.4			-E20 =U	+H 88.4			-E64 =U	+F 91.5		
-B100_X =U	+F 137.5			-E22 =U	+H 88.6			-E75 =U	+F 91.8		
-B121 =U	+F 120.2			-E25 =U	+H 88.1			-E75_X =U	+F 137.5		
-B121_X =U	+F 137.4			-E26 =U	+H 88.2			-E79 =U	+F 91.8		
-B122 =U	+F 120.4			-E27 =U	+H 88.3			-E80 =U	+F 90.3		
-B122_X =U	+F 137.5			-E28 =U	+H 88.2			-E81 =U	+F 90.3		
-B123 =U	+F 120.5			-E34 =U	+H 89.3			-E82 =U	+F 90.4		
-B123_X =U	+F 137.5			-E35 =U	+H 89.4			-E83 =U	+F 90.4		
-B124 =U	+F 120.7			-E36 =U	+H 89.4			-E84 =U	+F 90.5		
-B124_X =U	+F 137.4			-E37 =U	+H 89.6			-E95 =U	+F 90.7		
-B141 =U	+F 112.1			-E38 =U	+H 89.6			-E95_X =U	+F 137.6		

1	2	3	4	5	6	7	8

BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-E99 =U	+F 90.8			-E129_X =U	+F 137.5			-F79 =U	+H 37.5		
-E100 =U	+F 95.5			-E200 =U	+H 96.6			-F80 =U	+H 37.5		
-E101 =U	+F 95.6			-E200_X =U	+H 137.6			-F81 =U	+H 37.4		
-E102 =U	+F 95.5			-E201 =U	+H 96.7			-F82 =U	+H 37.4		
-E103 =U	+F 95.7			-E202 =U	+H 116.3			-G1 =U	+H 37.3		
-E128 =U	+F 92.1			-E202_E1 =U	+H 116.3			-G2 =U	+H 37.3		
-E128_E1 =U	+F 92.1			-E202_E2 =U	+H 116.4			-G3 =U	+H 37.4		
-E128_E2 =U	+F 92.2			-E202_S =U	+H 116.3			-G4 =U	+H 37.4		
-E128_E3 =U	+F 92.2			-E202_X =U	+H 137.7			-G6 =U	+H 125.3		
-E128_E4 =U	+F 92.2			-E203 =U	+H 116.5			-G7 =U	+F 52.2		
-E128_E5 =U	+F 92.3			-E203_E1 =U	+H 116.5			-G7_X =U	+F 137.6		
-E128_E6 =U	+F 92.3			-E203_E2 =U	+H 116.6			-H4 =U	+H 99.7		
-E128_E7 =U	+F 92.3			-E203_S =U	+H 116.5			-H5 =U	+H 99.4		
-E128_E8 =U	+F 92.4			-E203_X =U	+H 137.8			-H30 =U	+H 123.5		
-E128_X =U	+F 137.4			-E204 =U	+H 98.6			-H51 =U	+F 85.8		
-E129 =U	+F 92.5			-E204_X =U	+H 137.8			-H52 =U	+F 85.8		
-E129_E1 =U	+F 92.8			-E230 =U	+F 59.2			-H53 =U	+F 92.5		
-E129_E2 =U	+F 92.8			-E231 =U	+F 52.7			-K37 =S20	+S20 124.4		
-E129_E3 =U	+F 92.7			-E260 =U	+F 130.3			-K40 =U	+H 85.5		
-E129_E4 =U	+F 92.7			-E260 =U	+F 131.4			-K40_X =U	+H 137.8		
-E129_E5 =U	+F 92.6			-E261 =U	+F 131.3			-K41 =U	+H 124.1		
-E129_E6 =U	+F 92.6			-E261 =U	+F 130.2			-K48 =U	+H 117.4		
-E129_E7 =U	+F 92.6			-E263 =U	+F 130.1			-K49 =U	+H 88.4		
-E129_E8 =U	+F 92.5			-E263 =U	+F 131.2			-K50 =U	+H 53.6		

A B C E F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
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+	H
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BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-K51 =U	+H 53.4			-M10 =U	+H 85.7			-MSP15 =U	+F 135.1		
-K52 =U	+H 87.2			-M11 =U	+H 97.2			-MSP16 =U	+F 135.3		
-K53 =U	+H 60.4			-M11_X =U	+H 137.7			-MSP17 =U	+F 135.3		
-K54 =U	+H 59.2			-M12 =U	+H 97.6			-MSP18 =U	+F 135.3		
-K55 =U	+H 60.5			-M12_X =U	+H 137.8			-MSP19 =U	+F 135.3		
-K56 =U	+H 60.5			-M13 =Z30	+D2 124.7			-MSP21 =U	+F 135.4		
-K61 =U	+H 124.6			-M17 =U	+F 102.2			-MSP22 =U	+F 135.4		
-K70 =U	+H 94.5			-M17_X =U	+F 137.6			-MSP23 =U	+F 135.4		
-K71 =U	+H 94.6			-M18 =U	+F 102.2			-MSP24 =U	+F 135.6		
-K72 =U	+H 94.6			-M19 =U	+F 102.5			-N1 =U	+F 132.1		
-K73 =U	+H 94.7			-M20 =U	+H 100.3			-P10 =U	+H 65.1		
-K74 =U	+H 94.8			-M20_X =U	+H 137.7			-P10_XA =U	+H 137.6		
-K75 =U	+H 94.8			-M21 =U	+H 100.5			-P10_XB =U	+H 137.8		
-K76 =U	+H 102.6			-M21_X =U	+H 137.8			-P10_XD =U	+H 137.6		
-K77 =U	+H 102.1			-M35 =U	+F 109.8			-P11 =U	+H 65.5		
-K78 =U	+H 102.4			-M36 =U	+F 110.7			-P11_XA =U	+H 137.8		
-K79 =U	+H 102.5			-MSP7 =U	+H 133.7			-P11_XB =U	+H 137.6		
-K233 =U	+F 106.6			-MSP8 =U	+H 133.6			-P11_XD =U	+H 137.8		
-L17 =U	+F 62.3			-MSP9 =U	+H 133.5			-P14 =U	+H 52.5		
-M1 =U	+F 52.2			-MSP10 =U	+H 133.4			-P15 =U	+H 101.4		
-M2 =U	+H 64.2			-MSP11 =U	+H 135.1			-P15_X =U	+H 137.6		
-M8 =U	+H 117.5			-MSP12 =U	+H 135.1			-P30 =U	+F 55.2		
-M9 =U	+H 85.5			-MSP13 =U	+F 135.1			-P30_X =U	+F 137.8		
-M9_X =U	+H 137.6			-MSP14 =U	+F 135.1			-P31 =U	+F 58.1		

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708	= U
2				Ausgabe	03.02.06	lwerof0				+ H
1									Zeich-Nr. 3272-920.06.01.000-002	Blatt 147
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BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-P31_X =U	+F 137.6			-S25_X =U	+H 137.8			-S134 =U	+F 130.4		
-R9 =U	+F 60.7			-S30 =U	+F 74.2			-S134 =U	+F 131.5		
-R16 =U	+H 125.6			-S31 =U	+F 74.2			-S159 =U	+H 111.4		
-R16_X =U	+H 137.8			-S33 =U	+F 74.3			-S189 =U	+F 137.6		
-R25 =U	+H 64.2			-S41 =U	+F 74.4			-S190 =U	+F 121.5		
-R66 =U	+H 58.5			-S42 =U	+F 74.5			-S201 =U	+H 125.6		
-R66_X =U	+H 137.8			-S43 =U	+F 74.6			-S203 =U	+H 124.1		
-S1 =U	+H 37.2			-S44 =U	+F 74.7			-S205 =U	+H 75.2		
-S4 =U	+H 85.2			-S50 =U	+F 75.6			-SP1 =U	+F 74.2		
-S4_X =U	+H 137.6			-S51 =U	+F 75.7			-SP3 =U	+F 77.2		
-S5 =U	+H 61.3			-S60 =U	+F 76.2			-SP4 =U	+F 77.1		
-S5_X =U	+H 137.6			-S61 =U	+F 76.4			-SPCAN.1 =U	+F 51.5		
-S12 =U	+H 88.4			-S62 =U	+F 76.5			-SPCAN.2 =U	+F 78.4		
-S13 =U	+H 88.6			-S63 =U	+F 76.7			-SPCAN.3 =U	+F 78.5		
-S14 =U	+H 97.2			-S64 =U	+F 68.4			-U1 =U	+H 99.4		
-S15 =U	+H 97.4			-S65 =U	+F 68.5			-U1_X =U	+H 137.7		
-S16 =U	+H 97.7			-S89 =U	+F 77.7			-U2 =U	+H 94.5		
-S17 =U	+H 38.2			-S90 =U	+F 77.5			-U2_X =U	+H 137.8		
-S18 =U	+H 133.1			-S112 =U	+H 111.4			-X1 =U	+H 138.1		
-S19 =U	+H 96.3			-S114 =U	+H 71.8			-X1 =S1	+S1 138.1		
-S22 =U	+H 69.7			-S116 =U	+H 71.7			-X3 =S20	+S20 138.1		
-S23 =U	+H 68.7			-S117 =U	+F 59.5			-X3 =U	+H 138.1		
-S24 =U	+H 39.8			-S118 =U	+F 64.5			-X4 =U	+H 138.2		
-S25 =U	+H 109.1			-S119 =U	+F 64.7			-X7 =U	+H 138.1		

A B C E F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT
2				Ausgabe	03.02.06	lwerof0		
1								
	Änderung	Datum	Name		Datum	Name	Copyright (c)	

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BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-X8 =U	+H 138.1			-X44 =U	+F 34.1			-X88 =U	+H 138.6		
-X9 =U	+H 138.1			-X45 =U	+F 34.5			-X89 =U	+H 138.8		
-X10 =U	+H 138.1			-X46 =U	+H 35.1			-X90 =U	+H 138.6		
-X11 =U	+H 138.1			-X50 =U	+H 133.1			-X91 =U	+H 138.7		
-X12 =U	+H 138.1			-X53 =U	+H 138.6			-X92 =U	+H 138.8		
-X13 =U	+H 138.1			-X54 =U	+H 138.7			-X93 =U	+H 138.6		
-X15 =U	+H 138.1			-X56 =U	+H 138.7			-X94 =U	+H 36.1		
-X16 =U	+H 138.3			-X57 =U	+H 138.8			-X95 =U	+H 36.7		
-X17 =U	+H 138.3			-X64 =U	+H 138.6			-X96 =U	+H 36.1		
-X18 =U	+H 138.3			-X65 =U	+H 138.6			-X97 =U	+H 36.5		
-X19 =U	+H 138.3			-X67 =U	+H 138.7			-X100 =U	+H 139.1		
-X20 =U	+H 138.3			-X68 =U	+H 138.7			-X102 =U	+H 139.1		
-X21 =U	+H 138.3			-X70 =U	+H 138.7			-X103 =U	+H 139.2		
-X22 =U	+H 138.3			-X71 =U	+H 138.6			-X105 =U	+H 139.1		
-X23 =U	+H 138.3			-X74 =U	+H 138.7			-X107 =U	+H 139.1		
-X24 =U	+H 138.3			-X75 =U	+H 138.6			-X111 =U	+H 139.3		
-X25 =U	+H 138.3			-X76 =U	+H 138.6			-X112 =U	+H 139.1		
-X26 =U	+H 138.3			-X79 =U	+H 138.6			-X115 =U	+H 139.2		
-X27 =U	+H 138.3			-X80 =U	+H 138.7			-X116 =U	+H 139.2		
-X28 =U	+H 138.4			-X81 =U	+H 138.6			-X117 =U	+H 139.3		
-X29 =U	+H 138.6			-X82 =U	+H 138.7			-X130 =U	+H 139.1		
-X37 =U	+H 138.7			-X84 =U	+H 138.8			-X130_B =U	+H 139.1		
-X38 =U	+H 138.8			-X86 =U	+H 138.6			-X131 =U	+H 139.1		
-X39 =U	+F 138.6			-X87 =U	+H 138.7			-X133 =U	+F 139.2		

BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-X134 =U	+H 139.3			-X229 =U	+F 131.3			-X635 =U	+F 23.1		
-X135 =U	+H 139.1			-X233 =U	+F 139.4			-X641 =U	+F 24.2		
-X136 =U	+H 139.2			-X234 =U	+F 139.4			-X642 =U	+F 24.3		
-X137 =U	+H 139.3			-X235 =U	+F 139.4			-X643 =U	+F 24.1		
-X138 =U	+H 139.1			-X240 =U	+F 139.5			-X644 =U	+F 24.1		
-X190 =U	+H 133.1			-X271 =U	+H 33.5			-X645 =U	+F 24.1		
-X190_B =U	+H 133.1			-X272 =U	+H 33.1			-X651 =U	+H 25.2		
-X198 =U	+H 139.4			-X273 =U	+H 33.1			-X652 =U	+H 25.3		
-X199 =U	+H 122.6			-X274 =U	+H 33.2			-X653 =U	+H 25.1		
-X199_X =U	+H 139.4			-X275 =U	+H 33.5			-X654 =U	+H 25.1		
-X200 =U	+F 139.4			-X611 =U	+H 21.2			-X655 =U	+H 25.1		
-X202 =U	+F 139.4			-X612 =U	+H 21.3			-X711 =U	+H 26.1		
-X203 =U	+F 124.8			-X613 =U	+H 21.1			-X712 =U	+H 26.1		
-X205 =U	+F 121.1			-X614 =U	+H 21.1			-X713 =U	+H 26.1		
-X206 =U	+F 121.4			-X615 =U	+H 21.1			-X714 =U	+H 26.1		
-X207 =U	+F 139.5			-X621 =U	+H 22.2			-X721 =U	+H 28.2		
-X211 =U	+F 139.4			-X622 =U	+H 22.3			-X724 =U	+H 28.1		
-X212 =U	+F 139.5			-X623 =U	+H 22.1			-XM1 =U	+H 133.4		
-X213 =U	+F 139.4			-X624 =U	+H 22.1			-XM2 =U	+H 133.4		
-X214 =U	+F 139.4			-X625 =U	+H 22.1			-XM3 =U	+H 133.4		
-X224 =U	+H 139.5			-X631 =U	+F 23.2			-XM4 =U	+H 133.7		
-X228 =U	+H 131.8			-X632 =U	+F 23.3			-XM5 =U	+H 133.7		
-X228 =U	+H 130.8			-X633 =U	+F 23.1			-XM6 =U	+H 133.7		
-X229 =U	+F 130.2			-X634 =U	+F 23.1			-XM6.1 =U	+F 136.2		

1	2	3	4	5	6	7	8

BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-XM6.2 =U	+F 136.2			-Y13 =U	+F 76.5			-Y81a =U	+F 81.3		
-XM6.5 =U	+F 136.2			-Y16 =U	+F 76.6			-Y81b =U	+F 81.4		
-XM6.7 =U	+F 136.4			-Y17 =U	+F 76.6			-Y82a =U	+F 81.5		
-XM6.8 =U	+F 136.4			-Y18 =U	+F 76.7			-Y82b =U	+F 81.5		
-XM6.9 =U	+F 136.4			-Y19 =U	+F 76.8			-Y83a =U	+F 81.7		
-XM6.10 =U	+F 136.4			-Y20 =U	+F 74.2			-Y83b =U	+F 81.7		
-XM6.11 =U	+F 136.5			-Y24 =U	+F 74.4			-Y84a =U	+F 82.2		
-XM6.12 =U	+F 136.5			-Y25 =U	+F 74.6			-Y84b =U	+F 82.2		
-XM6.13 =U	+F 136.5			-Y39 =U	+F 75.2			-Y85a =U	+F 82.3		
-XM6.14 =U	+F 136.5			-Y40 =U	+F 113.8			-Y85b =U	+F 82.4		
-XM6.15 =U	+F 136.5			-Y41 =U	+F 113.1			-Y86a =U	+F 82.5		
-XM6.16 =U	+F 136.7			-Y42 =U	+F 113.3			-Y86b =U	+F 82.5		
-XM8.1 =U	+F 136.2			-Y43 =U	+F 113.4			-Y87a =U	+F 82.7		
-XM8.2 =U	+F 136.4			-Y44 =U	+F 113.6			-Y87b =U	+F 82.7		
-XM34.1 =U	+F 136.2			-Y49 =U	+H 71.3			-Y102a =U	+H 63.3		
-XM34.2 =U	+F 136.4			-Y50 =U	+F 58.7			-Y102b =U	+H 63.3		
-XM34.3 =U	+F 136.5			-Y51 =U	+F 53.7			-Y107 =U	+H 102.3		
-XM34.4 =U	+F 136.7			-Y52 =U	+F 61.5			-Y107_X =U	+H 139.6		
-Y5 =U	+F 83.5			-Y53 =U	+F 60.6			-Y108 =U	+H 100.7		
-Y9a =U	+F 75.6			-Y64 =U	+F 68.6			-Y108_X =U	+H 139.7		
-Y9b =U	+F 75.6			-Y65 =U	+F 68.6			-Y109 =U	+H 100.8		
-Y10 =U	+F 76.2			-Y66 =U	+F 68.7			-Y109_X =U	+H 139.7		
-Y11 =U	+F 76.3			-Y80a =U	+F 81.2			-Y112 =U	+F 111.6		
-Y12 =U	+F 76.4			-Y80b =U	+F 81.2			-Y112_X =U	+F 139.8		

A B C E F

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
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	Änderung	Datum	Name		Datum	Name	Copyright (c)		

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von	153

BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET	BMK	SYSTEM	PLACE	SHEET
-Y150 =U	+F 106.4										
-Y151 =U	+F 106.5										
-Y220 =U	+F 77.2										
-Y221 =U	+F 77.2										
-Y222 =U	+F 77.3										
-Y225 =U	+F 77.4										
-Y226 =U	+F 77.6										
-Y231 =U	+F 78.2										
-Y232 =U	+F 78.4										

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	Ident-Nr. 984583708	= U
2									+ H
1				Ausgabe	03.02.06	lwerof0		Zeich-Nr. 3272-920.06.01.000-002	Blatt 152
	Änderung	Datum	Name		Datum	Name	Copyright (c)		von 153

OPERATING EQUIPMENT

VERSION 001		VERSION 002		VERSION 003		VERSION 004		VERSION 005		VERSION 006		VERSION 007		VERSION 008	
SHEET	REMARK	SHEET	REMARK	SHEET	REMARK	SHEET	REMARK	SHEET	REMARK	SHEET	REMARK	SHEET	REMARK	SHEET	REMARK
40,52	LICHTMASCHINE: REGLER-VERSORGUNGSSPG. VON -F41 AUF -F27	61	TABELLE "OHNE WIRBELSTROMBRMSE" ENTFERNT												

3				Gez.	08.03.05	lwebem0	LIEBHERR WERK EHINGEN	OPERATING EQUIPMENT	Ident-Nr. 984583708
2				Ausgabe	03.02.06	lwerof0			Zeich-Nr. 3272-920.06.01.000-002
1									
	Änderung	Datum	Name		Datum	Name	Copyright (c)		

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Blatt	153
von	153