



Demag Cranes & Components (I) Pvt. Ltd.

Gat No:-330,332,333,334, Nanekarwadi (Chakan)
Tal-Khed, Dist-Pune. Pin-410501 Maharashtra, India
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Customer Name	Abul Khair Strip Processing Ltd.		
O.C. Number	2530006_7		
Project description	38T_10T x 30 Mtr Span ZKKW Crane		
Total Crane Capacity:	38	Ton	Control
Number of Crabs	1		Main
Main Hoist	38	Ton	Backup
Auxillary Hoist 1	10	Ton	Crane Location
Auxillary Hoist 2	-	Ton	Control Voltage
Total Hookpath			Class
Main Hoist	11500	mm	Type
Auxillary Hoist	21000	mm	Place of installation
Baylength	300000	mm	Part feature
Span	30000	mm	Design Standard
Created on	27-03-2014	Responsible for project	PBB
Revision date	15-04-2014	Last Editor	PBB
		Number of pages	83

APPROVED FOR MANUFACTURING

SIGNATURE :

DATE : 16.04.2014

DEMAG CRANES & COMPONENTS (I) PVT. LTD.

Cabin - With Master Controller
Radio Remote - Joystick
Indoor
110VAC, 50Hz
M7
ZKKW Double Girder Crane
SIEMENS G120 INVERTER
IS3177:1999

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3	DIN SYMBOL LIST	=DOC+DOC		07-04-2014	Prashant.Bh
4	WIRE NUMBERG SCHEME	=DOC+DOC		01-04-2014	Prashant.Bh
5	Structure identifier overview	=DOC+DOC		01-04-2014	Prashant.Bh
6	CRANE LAYOUT_1	=DOC+DOC		15-04-2014	Prashant.Bh
7	CRANE LAYOUT_2	=DOC+DOC		08-04-2014	Prashant.Bh
8	MOTOR SPECIFICATION DETAILS	=DOC+DOC		07-04-2014	Prashant.Bh
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13	PANEL TUBELIGHT & CONTROL CIRCUIT	=PNL+PNL		08-04-2014	Prashant.Bh
14	CRANE BRIDGE LAMP CONTROL CIRCUIT	=PNL+PNL		15-04-2014	Prashant.Bh
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16	SIREN & HOOTER CIRCUIT	=PNL+PNL		08-04-2014	Prashant.Bh
17	CONTROL CIRCUIT	=PNL+PNL		08-04-2014	Prashant.Bh
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20	MAIN HOIST DRIVE CIRCUIT	=PNL+MH		08-04-2014	Prashant.Bh
21	MAIN HOIST BRAKE POWER CIRCUIT	=PNL+MH		08-04-2014	Prashant.Bh
22	MAIN HOIST CONTROL CIRCUIT	=PNL+MH		08-04-2014	Prashant.Bh
23	MAIN HOIST COMMAND CIRCUIT	=PNL+MH		08-04-2014	Prashant.Bh
24	MAIN HOIST FIELD POWER CIRCUIT	=PNL+MH		08-04-2014	Prashant.Bh
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30	AUX HOIST DRIVE CIRCUIT	=PNL+AH		08-04-2014	Prashant.Bh

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36	SPARE	=PNL+AH		07-04-2014	Prashant.Bhiso
40	CT MOTOR DRIVE CIRCUIT	=PNL+CT		08-04-2014	Prashant.Bhiso
41	CT MOTOR BRAKE CIRCUIT	=PNL+CT		08-04-2014	Prashant.Bhiso
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116	Cable diagram	=REP+REP		08-04-2014	Prashant.Bhise

[illegible]

WIRE NUMBERING (FERRULING) SCHEME

a) 3 PHASE & EARTH WIRE NUMBERING:

PCC

PHASE
(R/Y/B/N/PE)

COUNTER
(Signal Isolation)

b) CONTROL VOLTAGE SUPPLY WIRE NUMBERING:

PPCC

POTENTIAL
(24V OR 0V)

COUNTER
(Signal Isolation)

c) PLC IO WIRE NUMBERING: (PLC ADDRESS)

1) For SIEMENS **XB**BB.b

E = INPUT
A = OUTPUT

BBB = ADDRESS BYTE
b = BIT NUMBER

d) GENERAL WIRE NUMBERING:

PPCC

PAGE
NUMBER

COUNTER
(PER PAGE)

DEVICE DESIGNATIONS SCHEME

a) GENERAL

- PPDDC

DD PREFIX

PAGE NUMBER

DEVICE ID

COUNTER

b) DEVICES CONNECTED TO PLC IO MODULES

- DDXBBB.b

DD PREFIX

DEVICE ID

PLC ADDRESS

DEVICE DESIGNATIONS

DEVICE DESIG.	DESCRIPTION
A	PLC / AC /INVERTER
BZ	HOOTER / SIREN
C	CAPACITOR
DS	PANEL DOOR S/W
EF	PANEL TUBE LIGHT
F	MCB / FUSE
FAN	PANEL FAN
G	POWER SUPPLY
H	INDICATOR LAMP/UNDERBRIDGE LAMP
DJB	DSL/DCL BOX
CJB	CRAB JUNCTION BOX
K	CONTACTOR
L	CHOKE / INDUCTORS
LF	LINE FILTER
LS	LIMIT / REED S/W
M	MOTOR
Q	ISOLATOR S/W / MPCB / MCCB
R	RELAY
RB	RELAY BOARD
RY	RELAY BOARD MOUNTED RELAY
OLR	OVERLOAD RELAY
S	SWITCHES / PUSH BUTTON /SELECTOR S/W
SC	SOLENOID COIL / BRAKE / CLUTCH
SSW	SERVICE SCKET
T	TRANSFORMER
TH	TEMPERATURE S/W
W	MULTICORE CABLES
X	TERMINAL STRIP
XP	POWER CONNECTORS
XC	CONTROL CONNECTORS
ACPS	ANTICOLLISION SENSOR
D	DIODE
PX	PROXIMITY S/W
PS	PRESSURE S/W
DR	DIFFUSED REFLECTOR SENSOR
TS	TR./RECEIVER OR THROUGHBEAM SENSOR
RR	RETRO REFLECTIVE SENSOR
-	-
-	-

COLOR CODING AND WIRES FUNCTION

COLOR	FUNCTION
RED	R PHASE-415VAC
YELLOW	Y PHASE-415VAC
BLUE	B PHASE-415VAC
GREY	110VAC/24VAC
BLACK	0VAC
RED	230VAC
BLUE	24VDC
WHITE	0VDC
YELLOW/GREEN	EARTH

COLOR CODING OF WIRES

COLOR	ABBREVIATION
RED	RD
YELLOW	YE
BLUE	BU
GREY	GR
BLACK	BK
WHITE	WH
YELLOW/GREEN	Y/G

MOTOR SPECIFICATION DETAILS

<u>MAIN HOIST MOTOR</u>	
MOTOR DETAILS : 1SE0-311-6YA90/6P	
Make: SIEMENS	
Motor Frame Size: 315S	
Rated Speed (RPM): 985	
CDF (%): 60	
Electrical Power (KW): 75.6	
Rated Current (AMP): 136.28	
Starting Current (AMP):204.42	
Connection:DELTA	
Operating Voltage:400VAC	
Operating Frequency:50Hz	
Control Voltage:110VAC	
Quantity: 1 Nos	
Hoist Speed : 0.8/8.0 MP/M	
Inverter Type: Power Module, PM250, SIEMENS.	
6SL3225-0BE37-5UA0	

<u>AUX HOIST MOTOR</u>	
MOTOR DETAILS :1LA0-206-6YA91/6P	
Make: SIEMENS	
Motor Frame Size: 200L	
Rated Speed(RPM): 975	
CDF(%): 60	
Electrical Power (KW): 17.98	
Rated Current (AMP): 36.77	
Starting Current (AMP): 55.155	
Connection:DELTA	
Operating Voltage:400VAC	
Operating Frequency:50Hz	
Control Voltage:110VAC	
Quantity: 1 Nos	
Hoist Speed : 0.8/8.0 MP/M	
Inverter Type: Power Module, PM250, SIEMENS.	
6SL3225-0BE31-8UA0	

<u>CT MOTOR</u>	
MOTOR DETAILS :1LA0-130-4YA90/4P	
Make: SIEMENS	
Motor Frame Size: 132S	
Rated Speed(RPM): 1432	
CDF(%): 60	
Electrical Power (KW): 5.4	
Rated Current (AMP): 10.53	
Starting Current (AMP): 15.795	
Connection:DELTA	
Operating Voltage:400VAC	
Operating Frequency:50Hz	
Control Voltage:110VAC	
Quantity: 1 Nos	
Hoist Speed : 3.0/30.0 MP/M	
Inverter Type: Power Module, PM250, SIEMENS.	
6SL3225-0BE25-5AA1	

<u>LT MOTOR</u>	
MOTOR DETAILS : 1LA0-163-4YA91/4P	
Make:- NORD	
Motor Frame Size: 160M	
Rated Speed(RPM): 1450	
CDF(%): 60	
Electrical Power (KW): 10.79	
Rated Current (AMP): 21.56	
Starting Current (AMP): 32.34	
Connection: DELTA	
Operating Voltage: 400VAC	
Operating Frequency : 50Hz	
Control Voltage: 110VAC	
QUANTITY : 2 Nos	
LT SPEED : 6.0/60.0 MP/M	
Inverter TYPE: Power Module, PM250,SIEMENS.	
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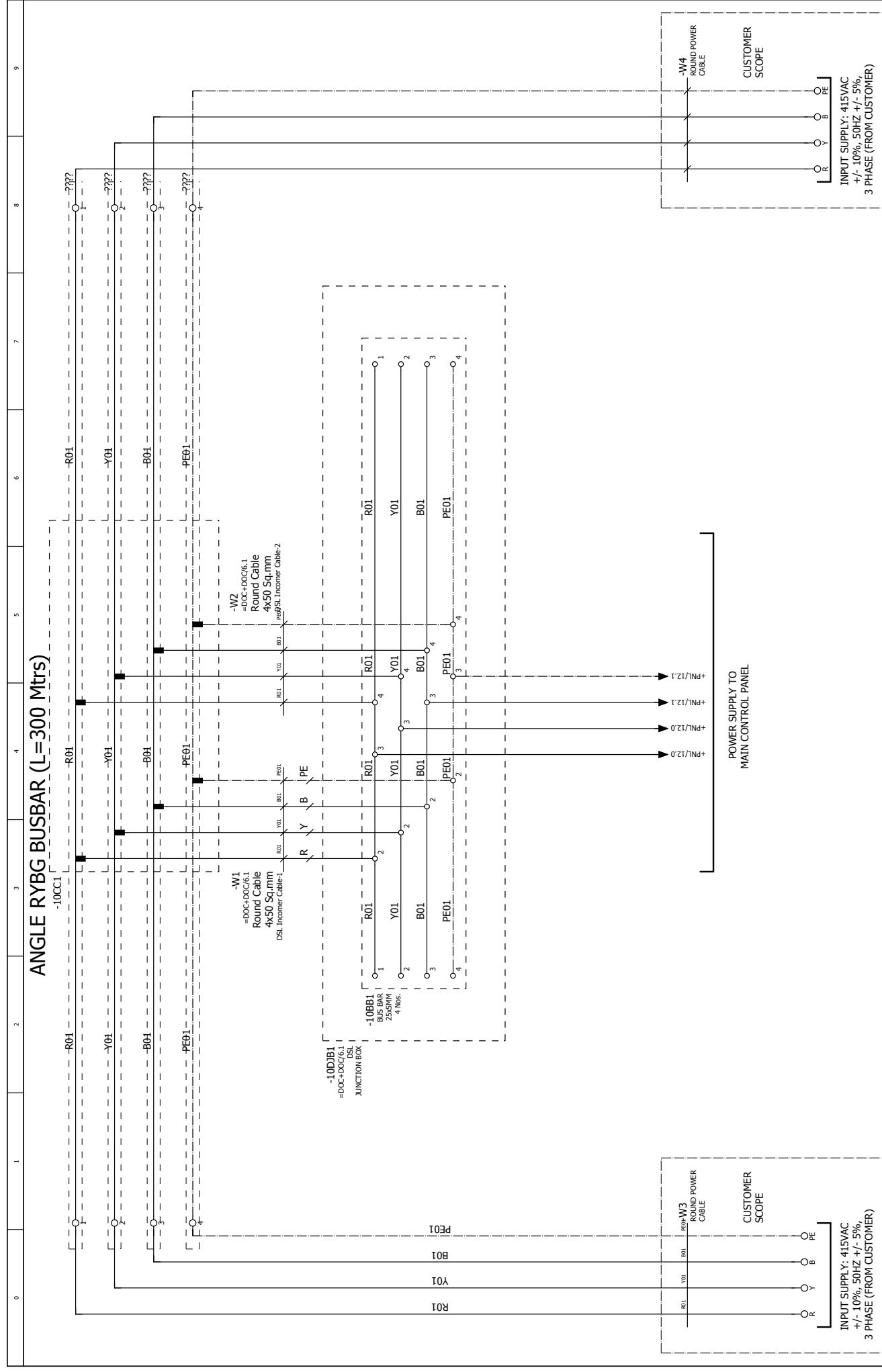
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UP TO : =PNL+DSL/10

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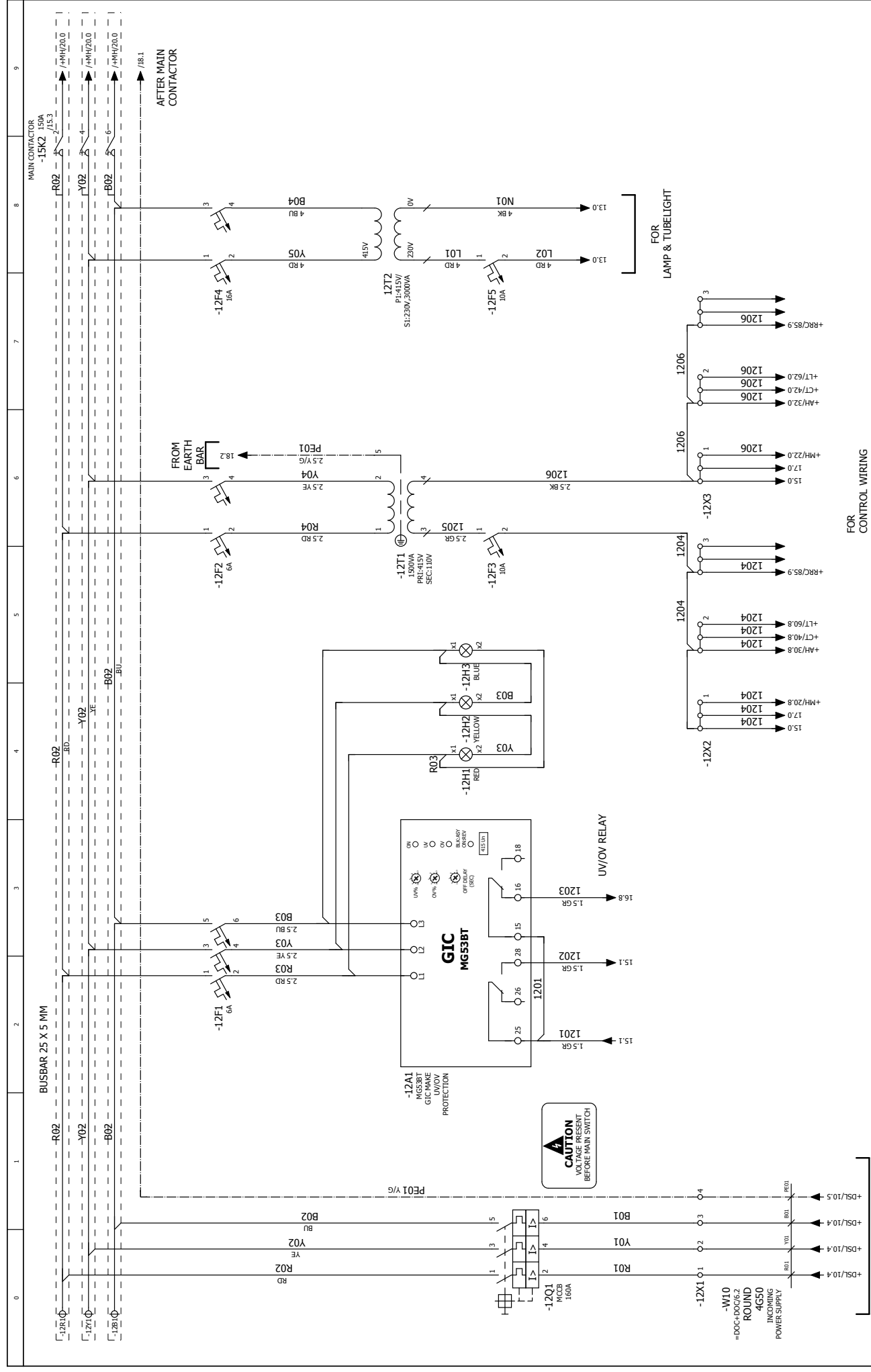
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TO : +PNL/12

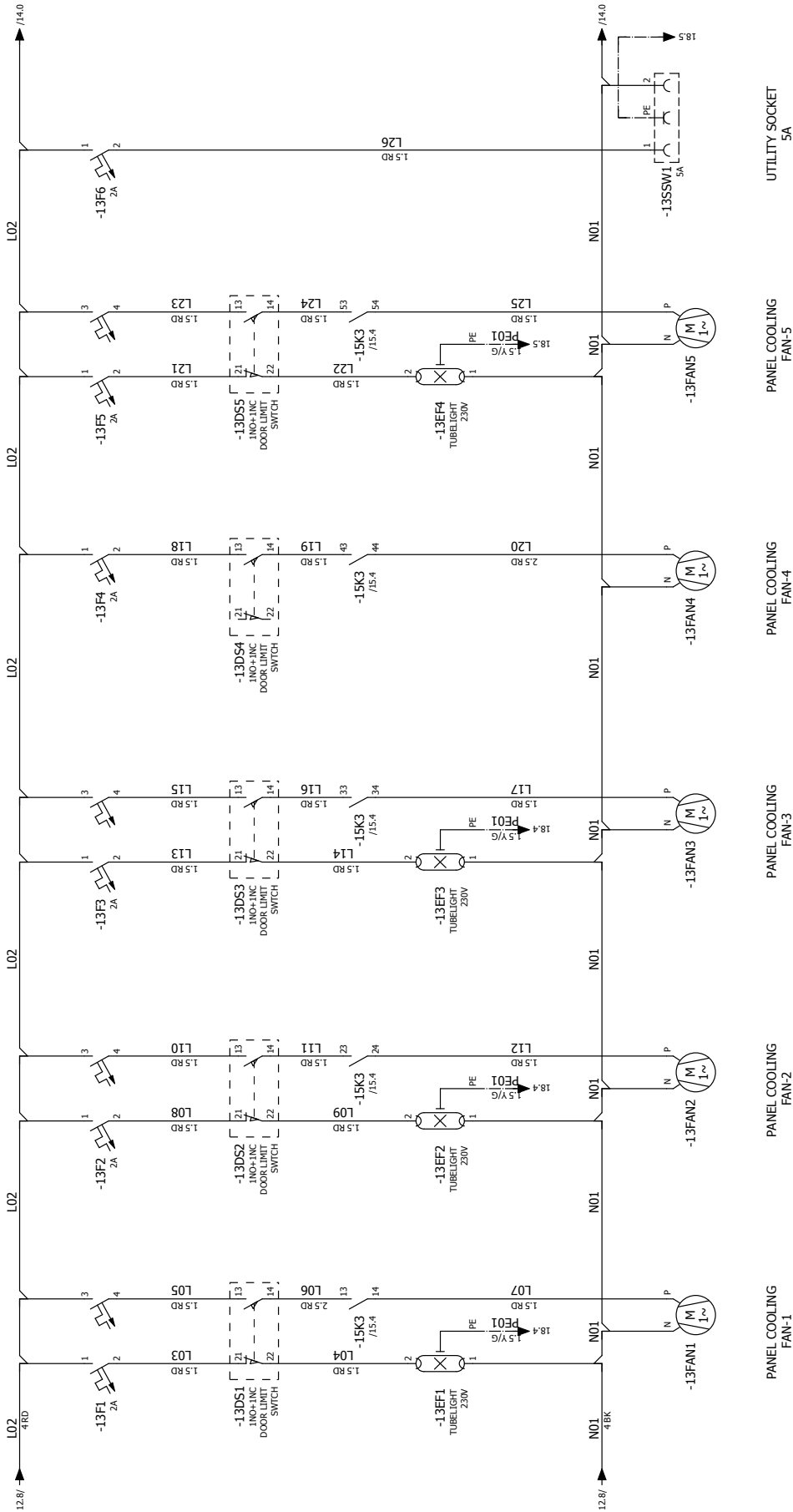
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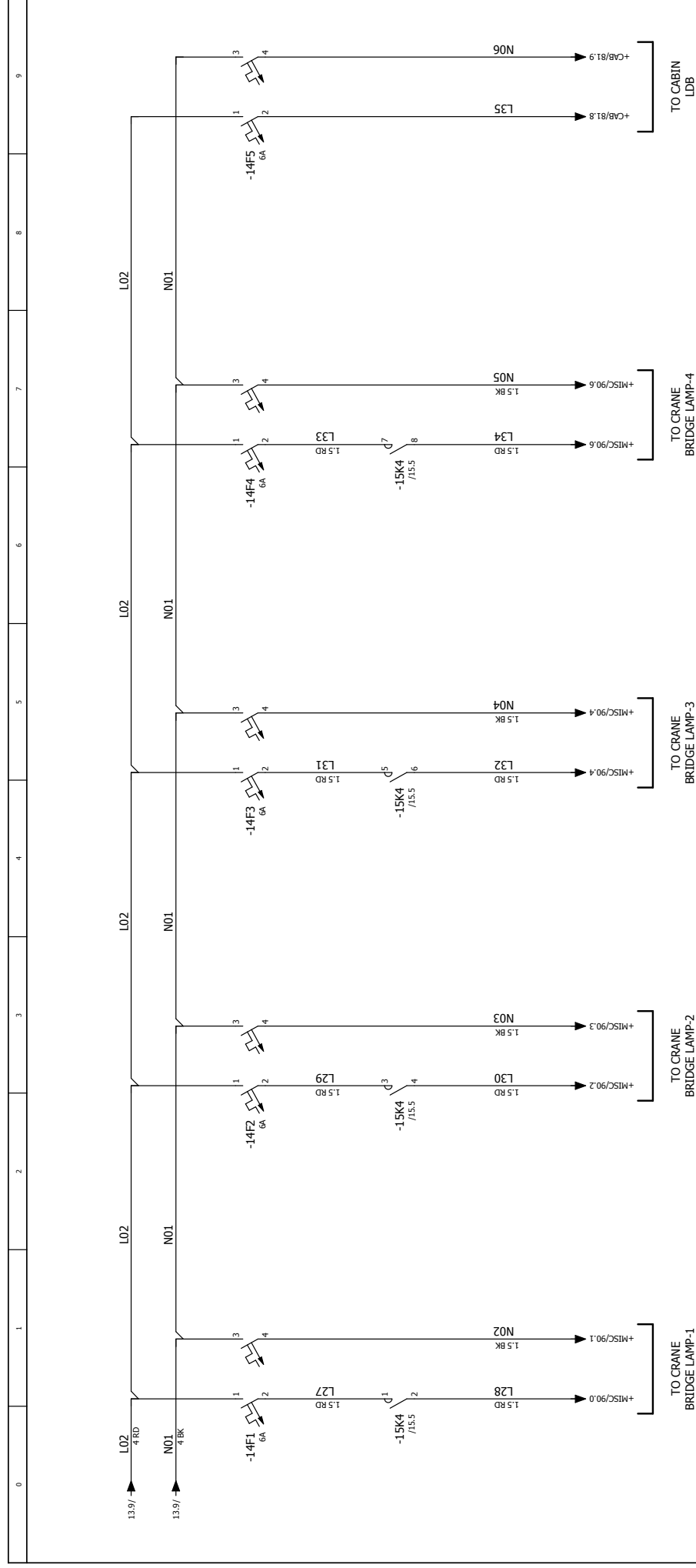
INPUT SUPPLY FROM CURRENT
COLLECTOR JUNCTION BOX

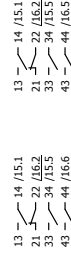
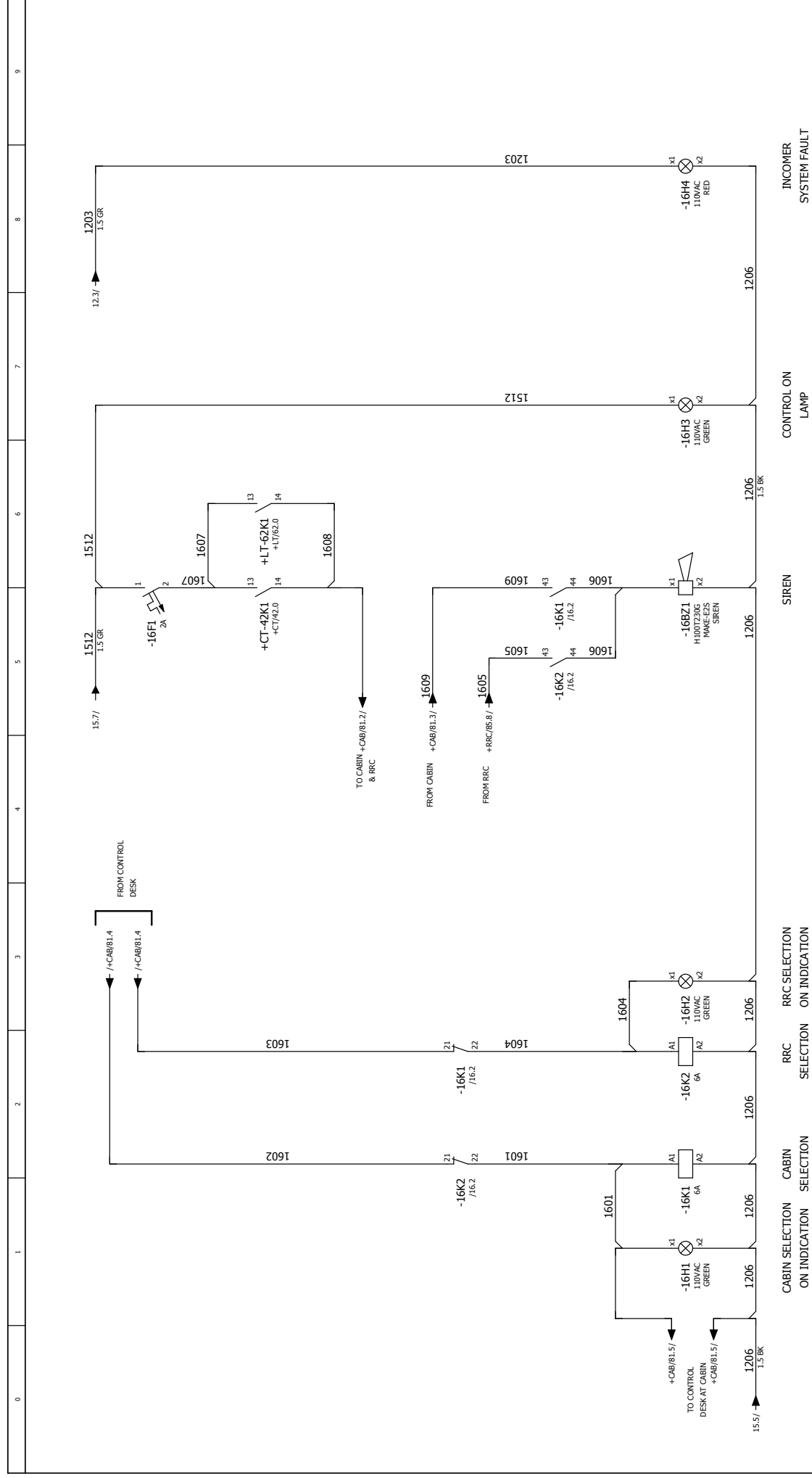
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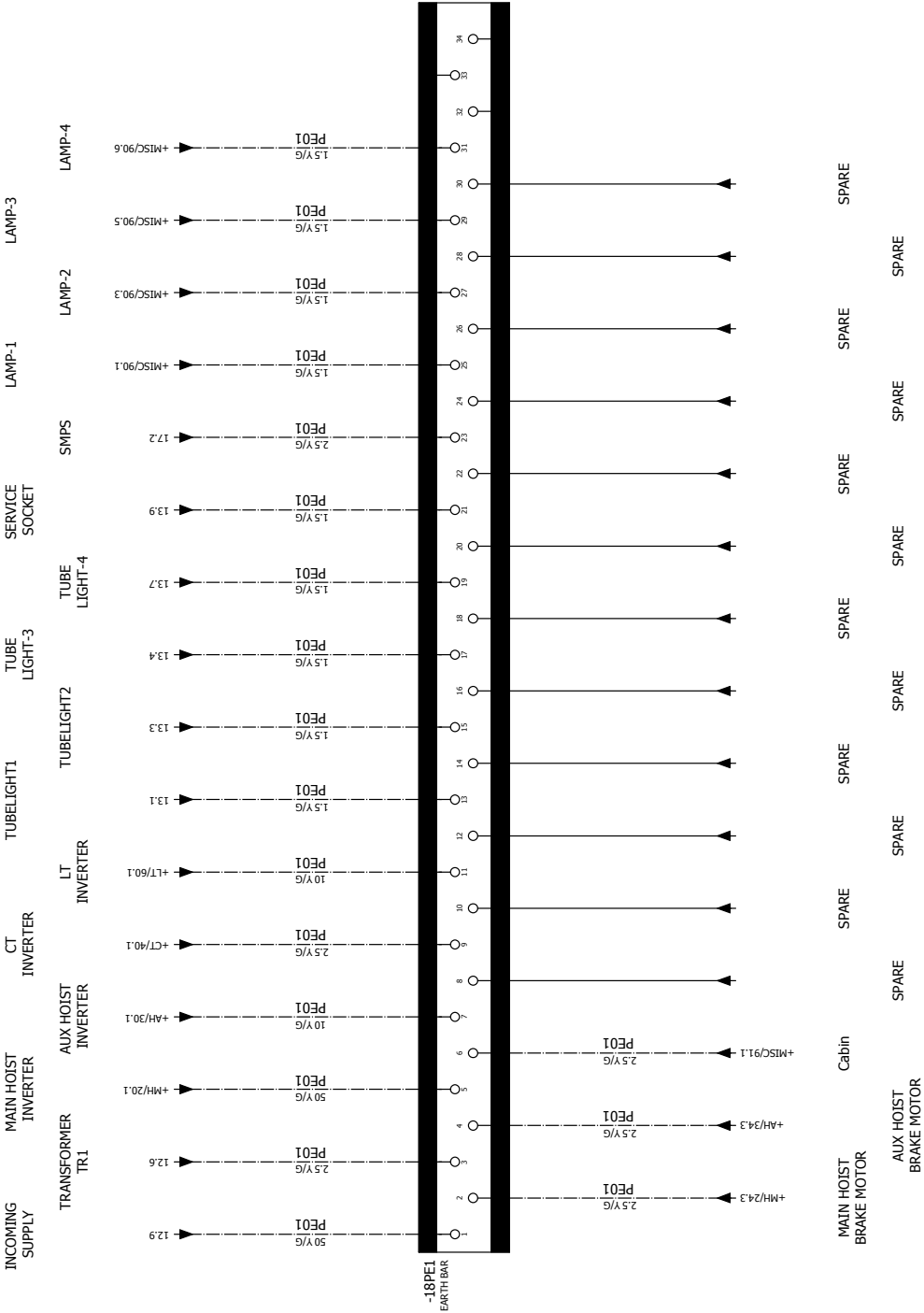
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ATTENTION!!
DO NOT CONNECT LOAD MORE
THAN 2A TO THIS SOCKET.
THIS SUPPLY IS PROVIDED FOR
LAPTOP CONNECTIONS







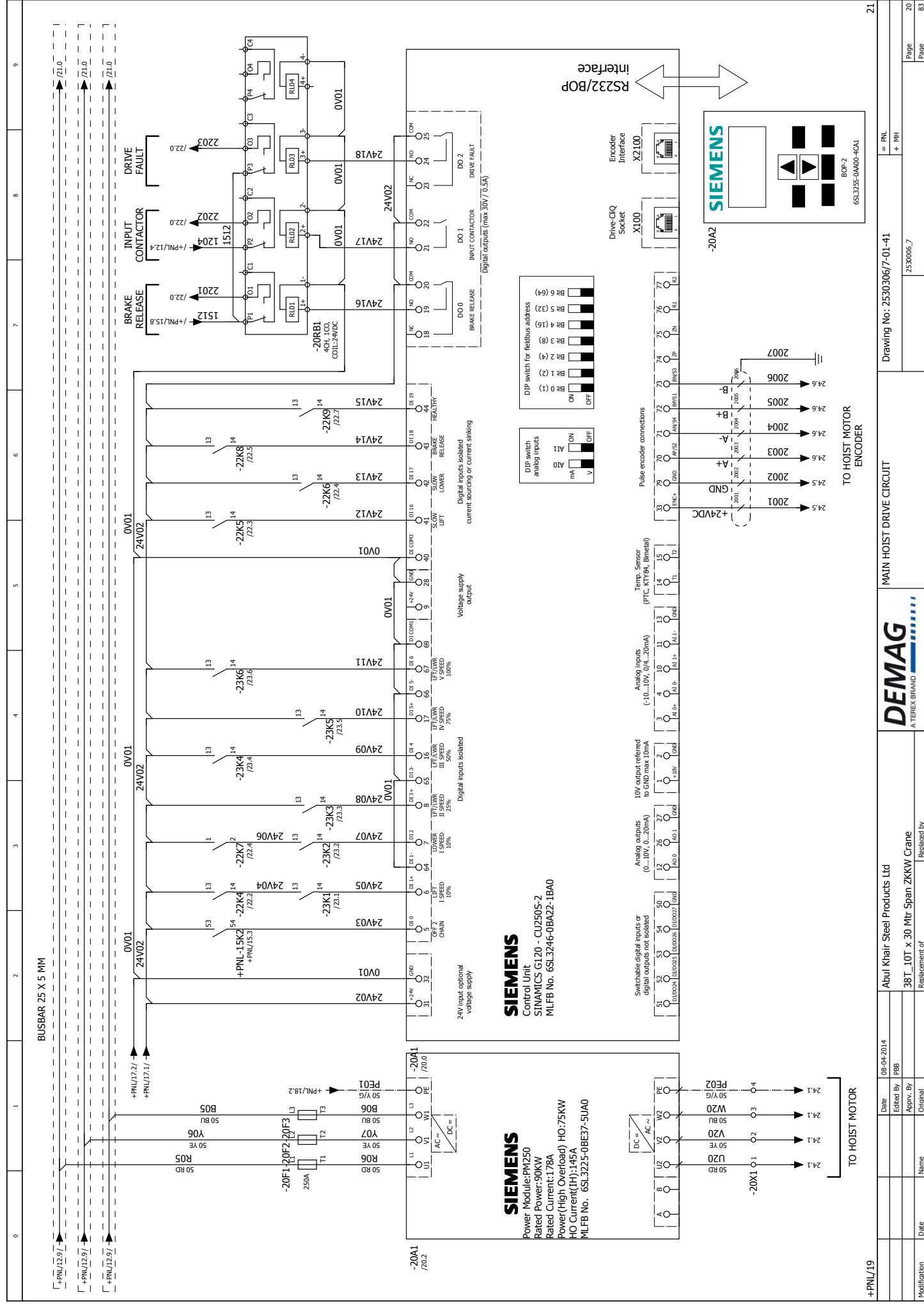
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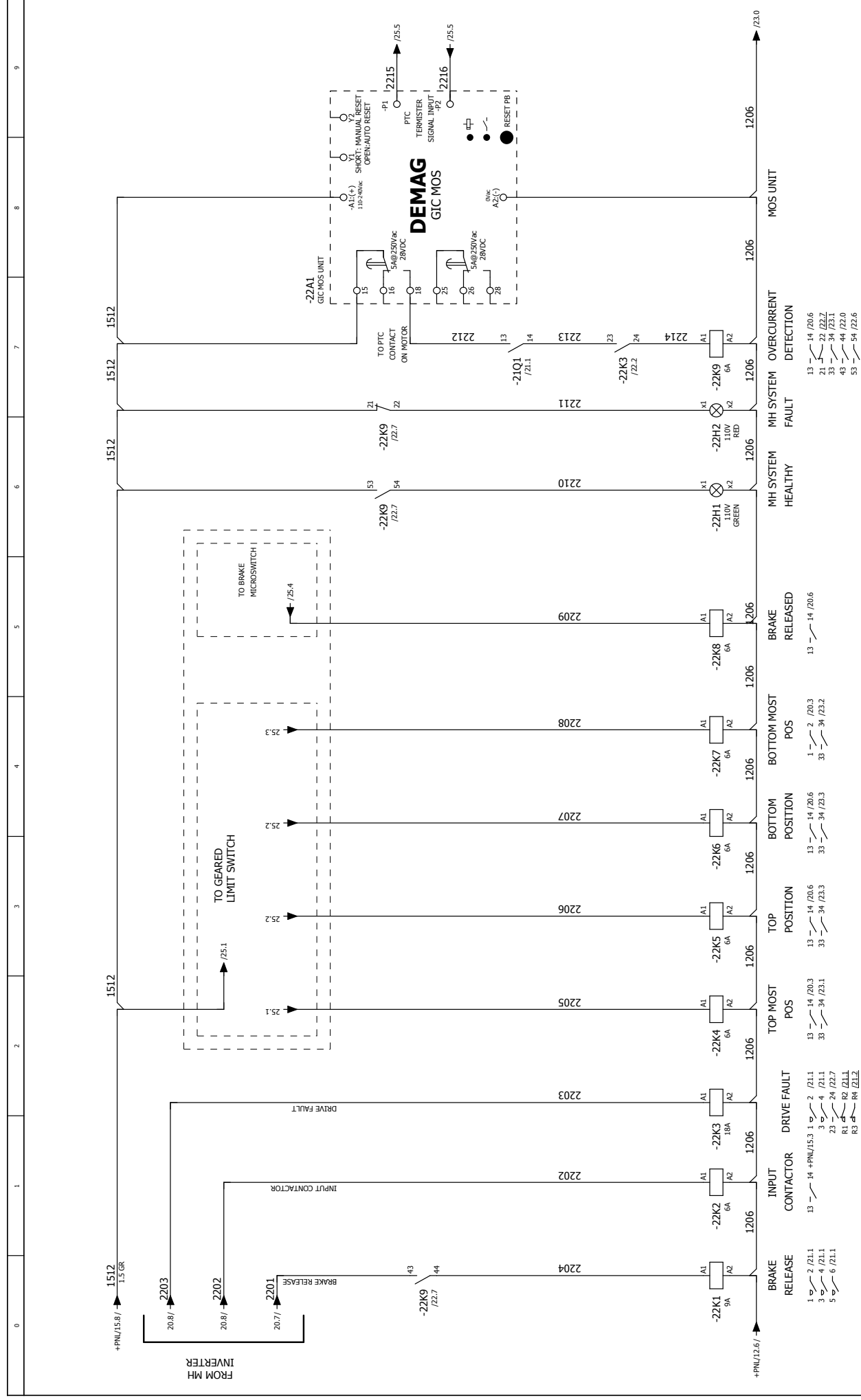
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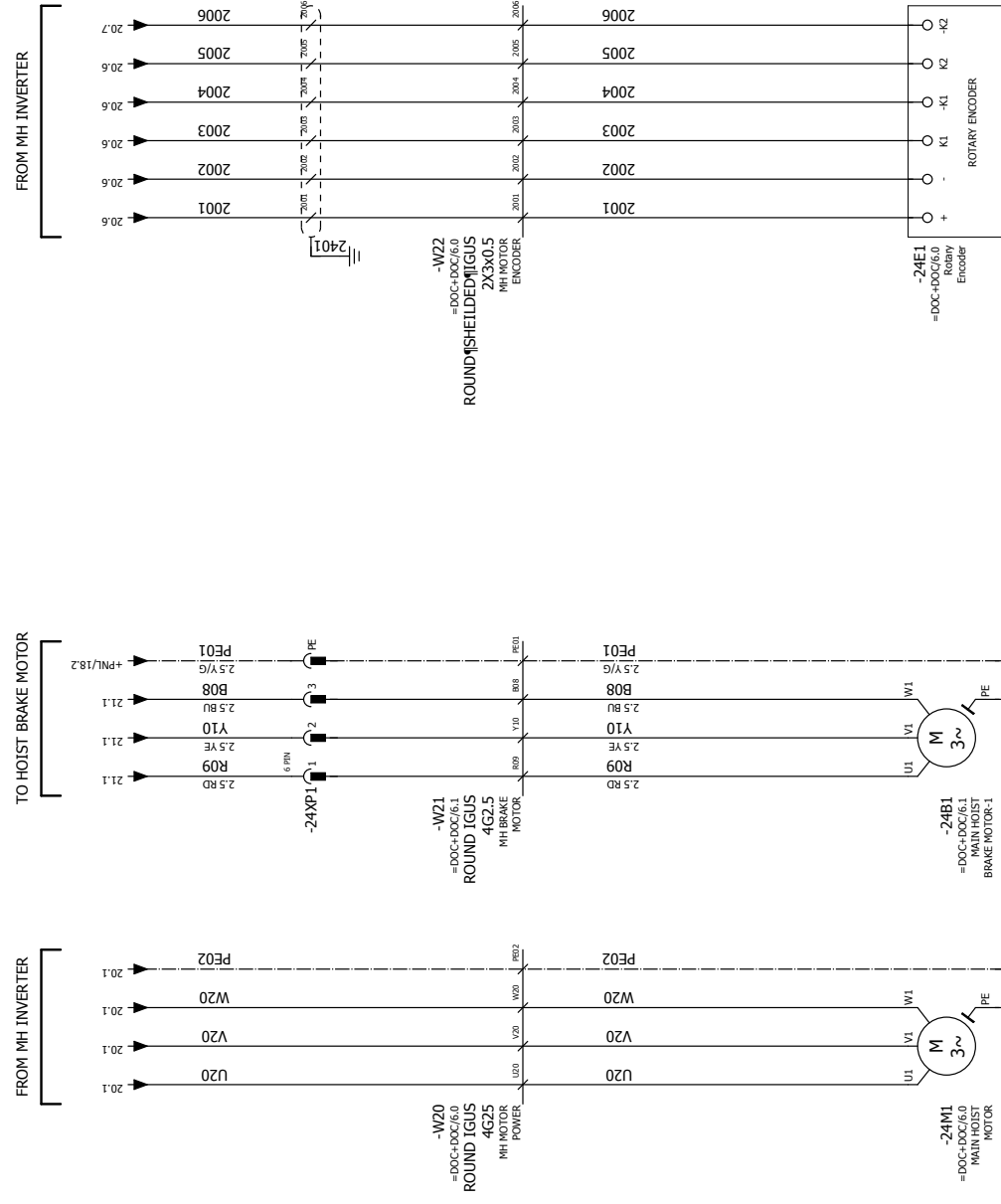
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UP TO : +MH/20

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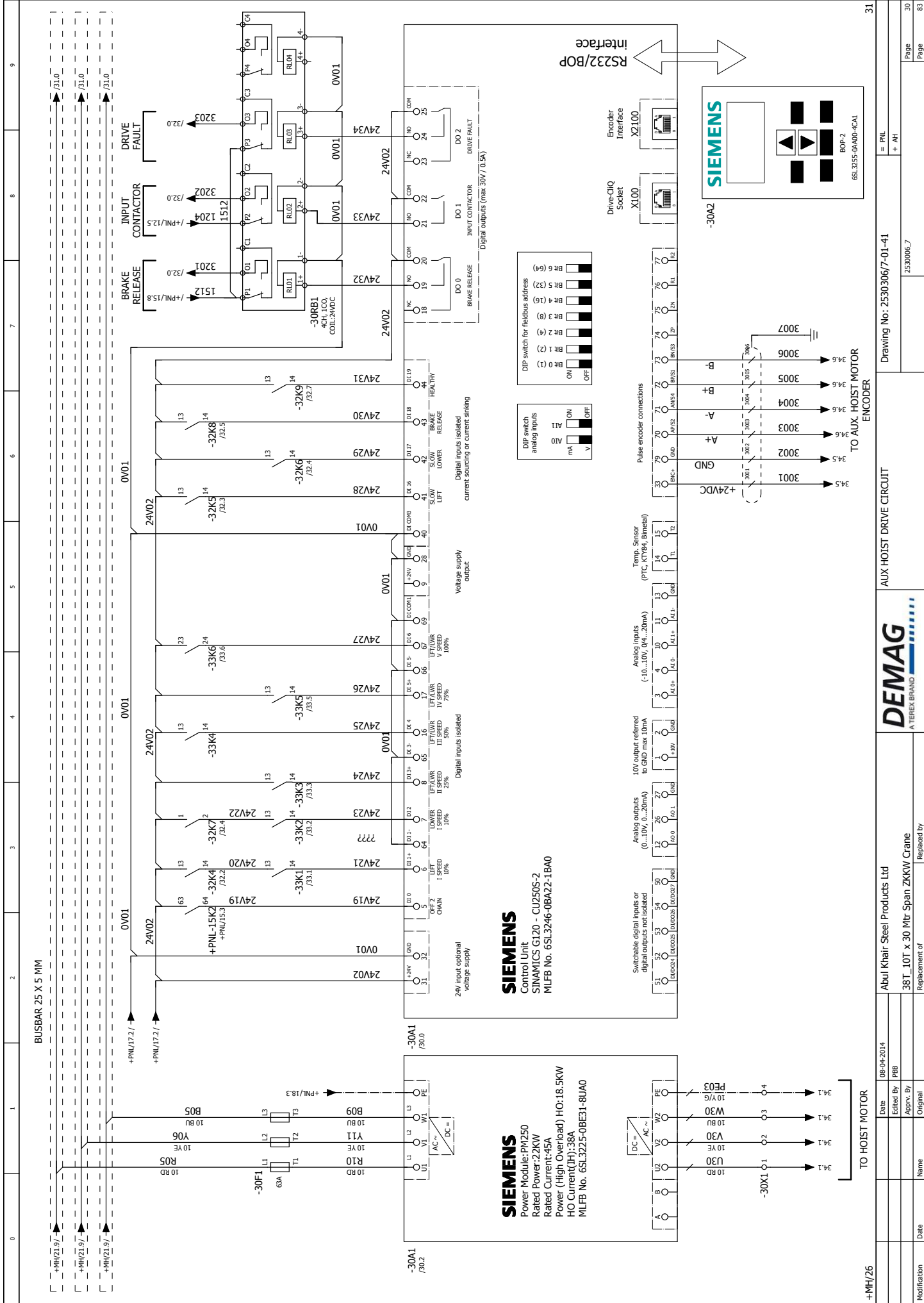
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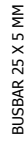
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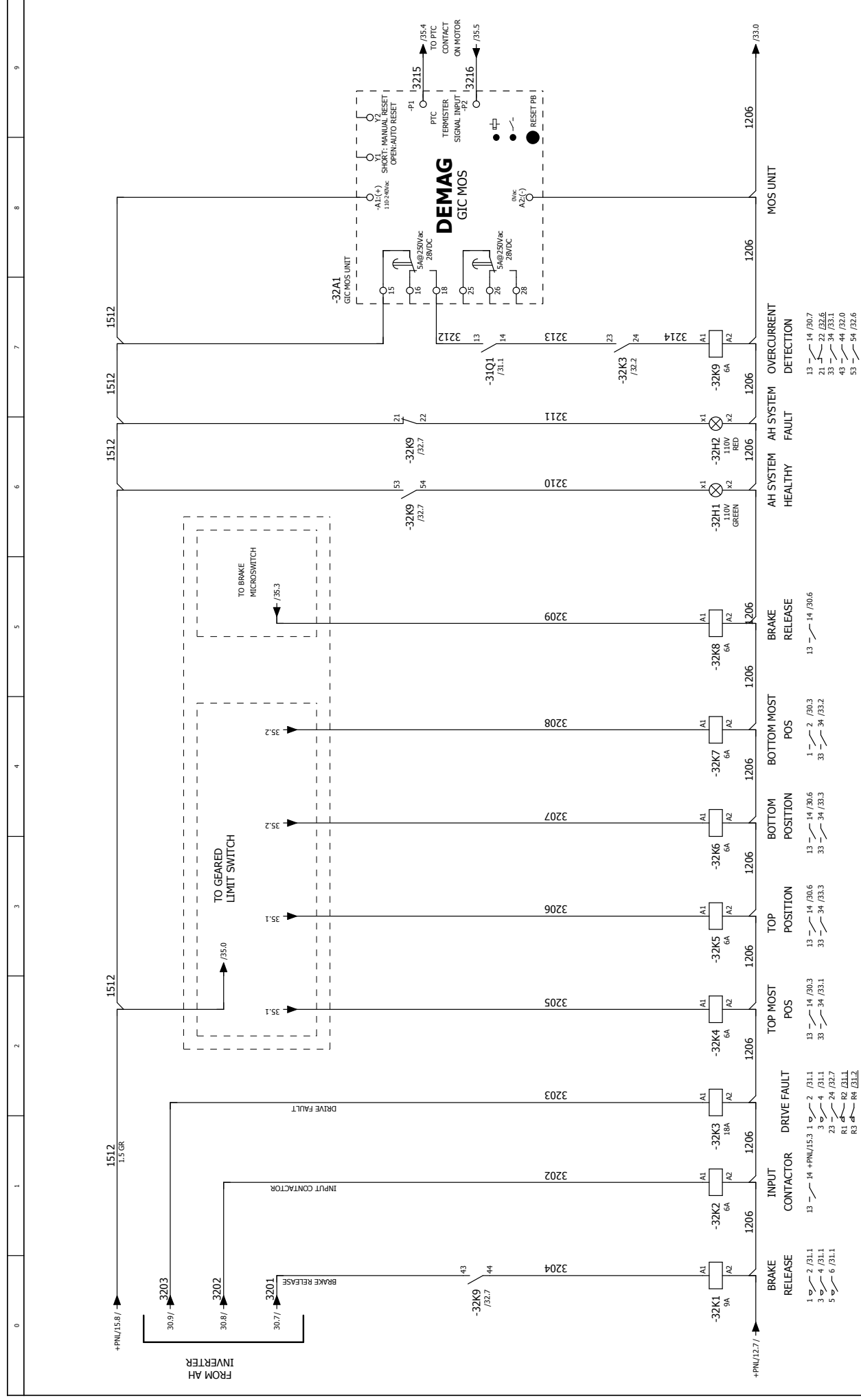
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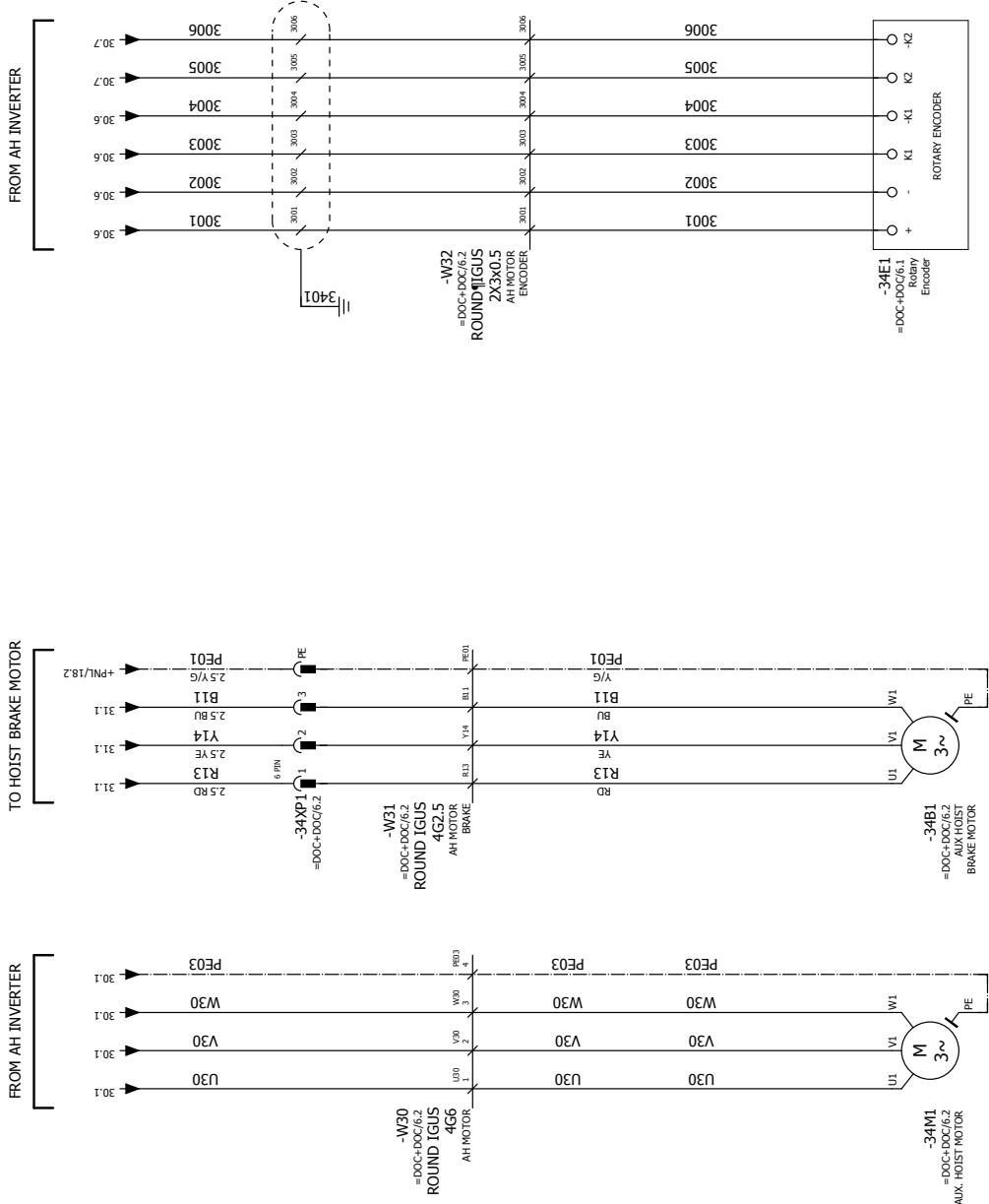
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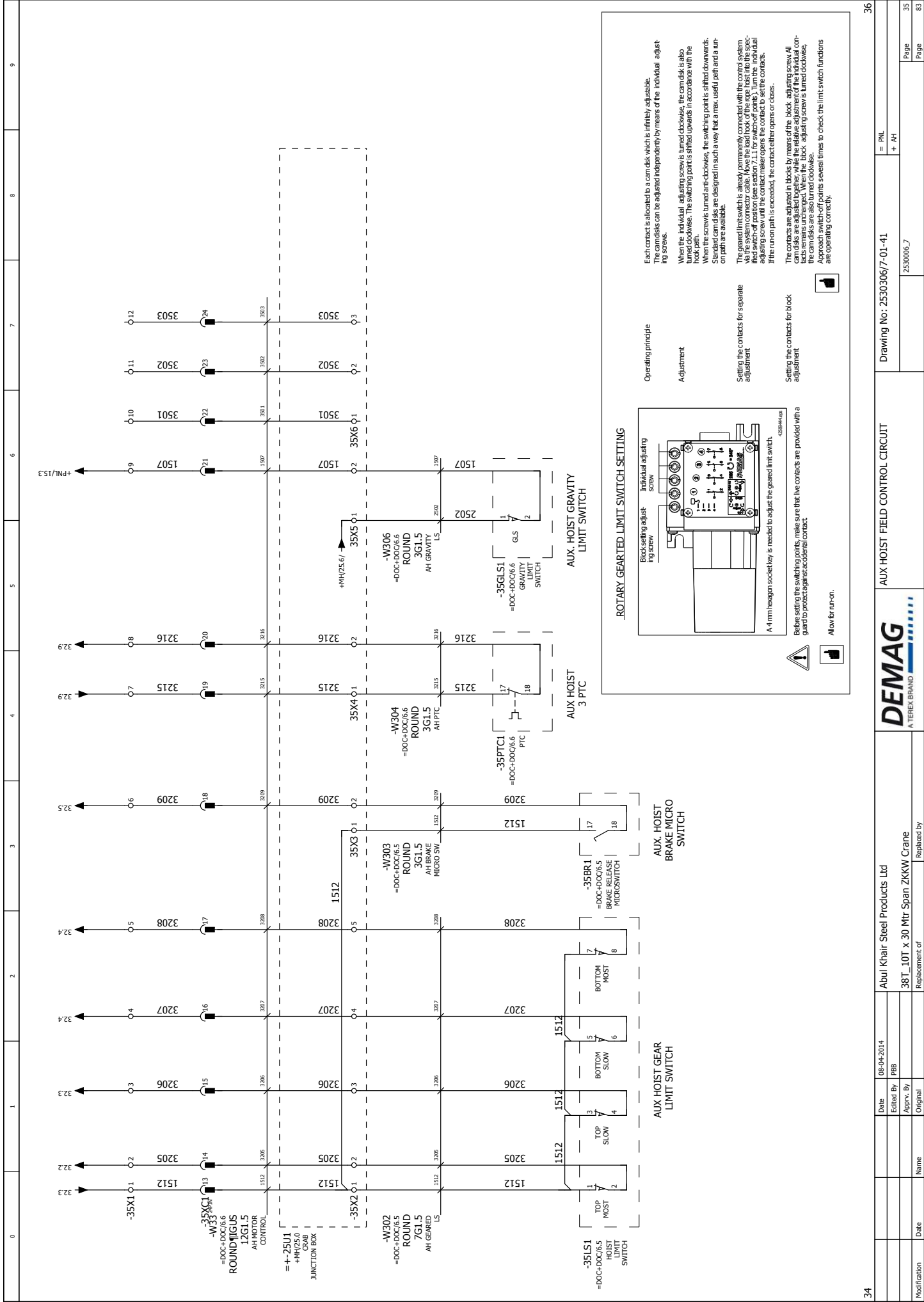
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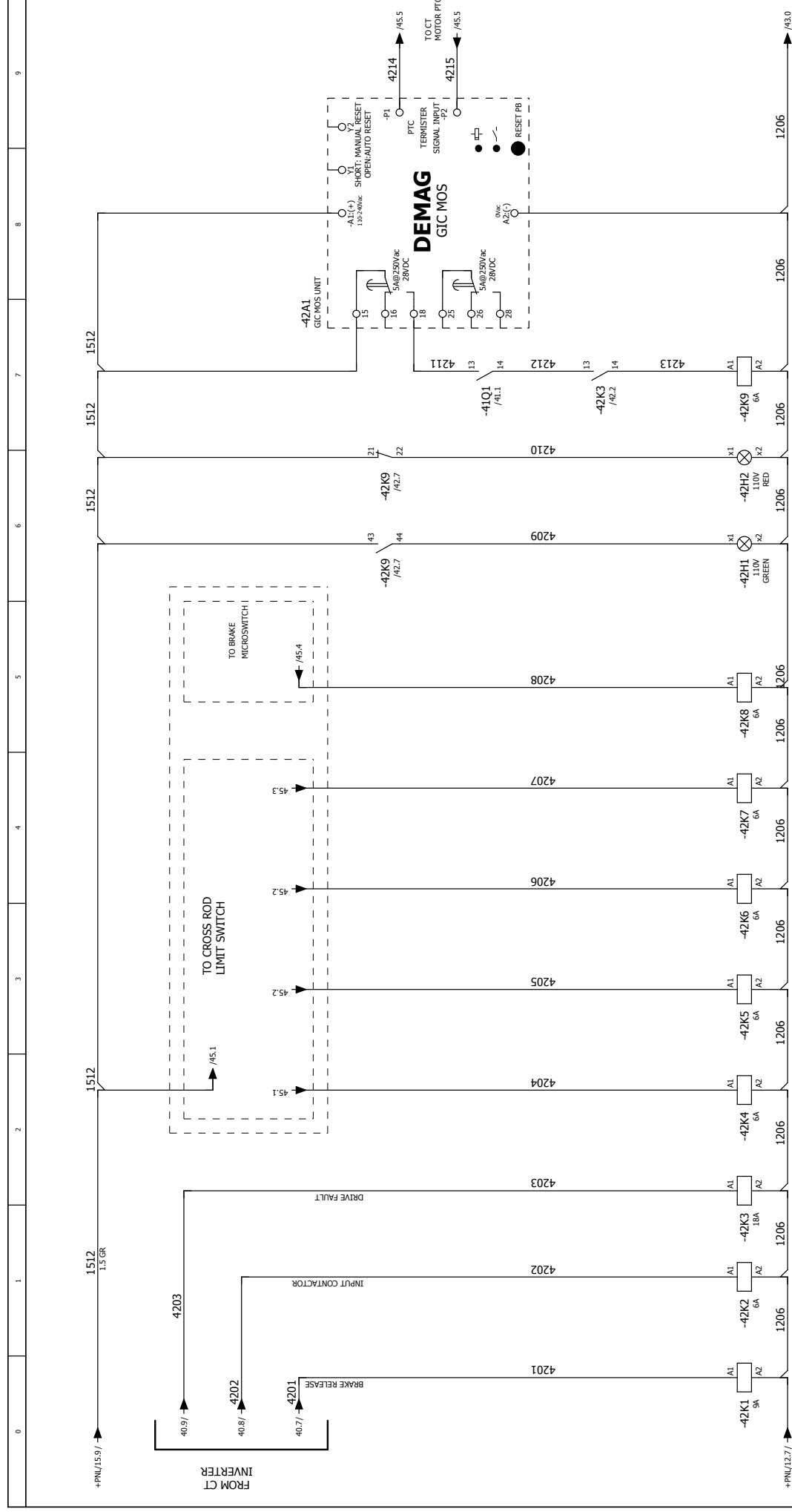
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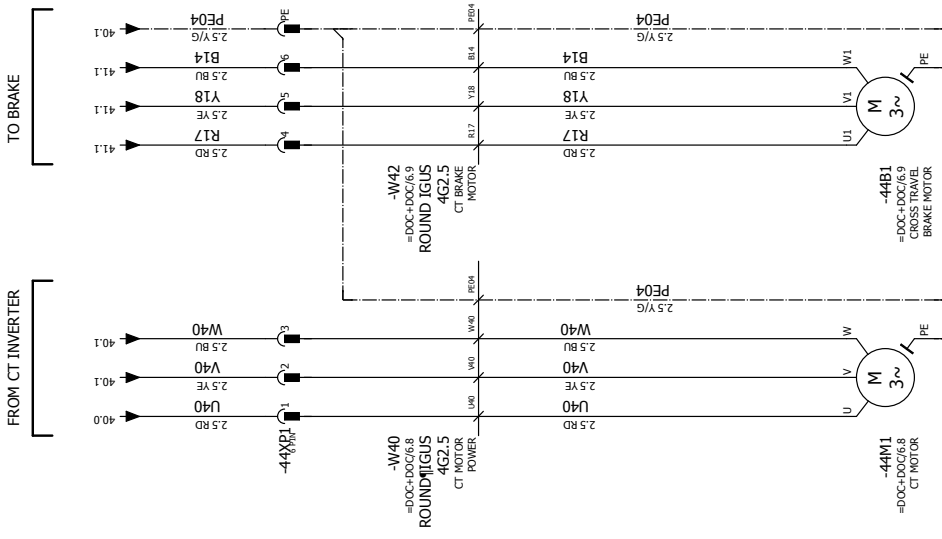
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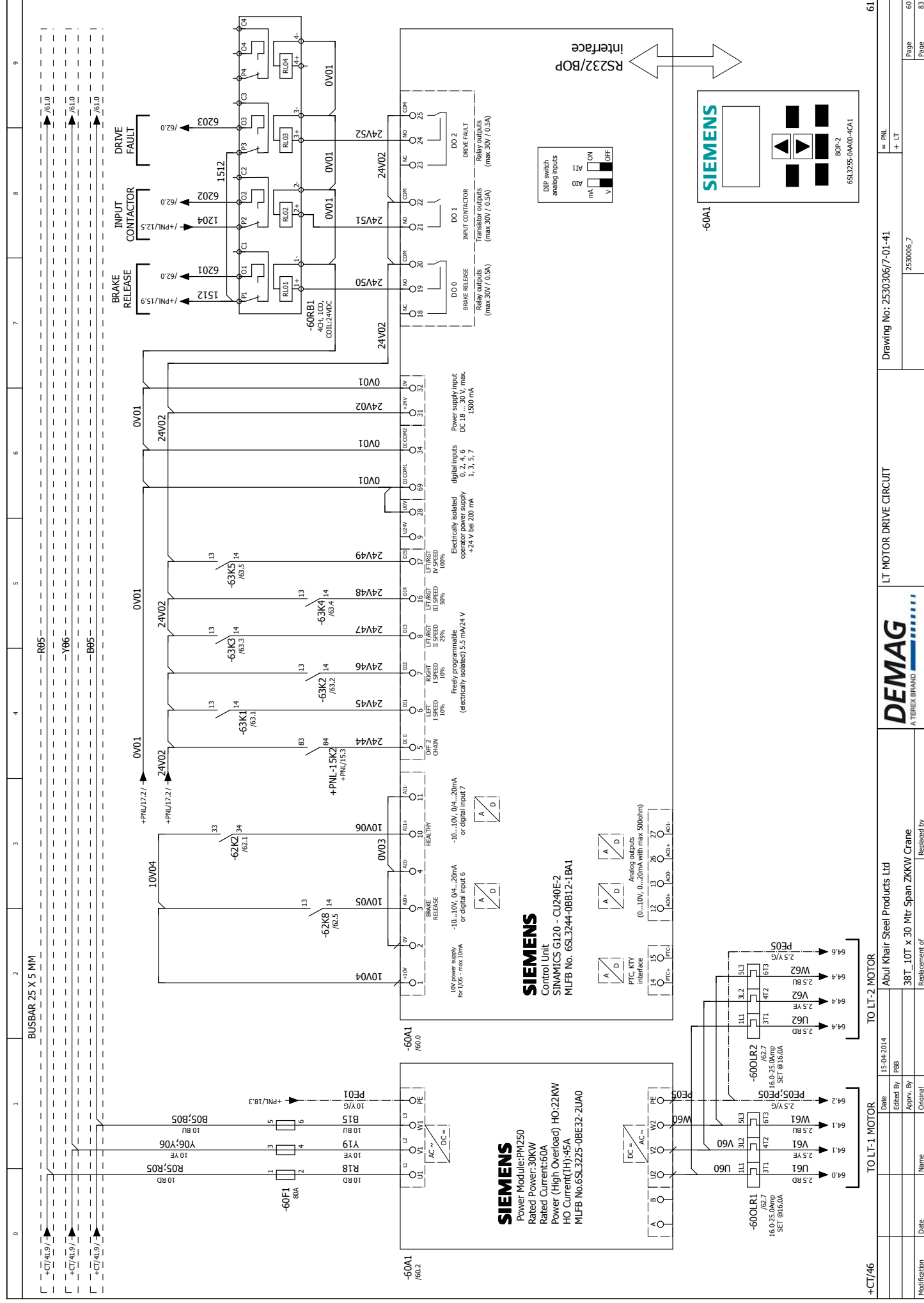
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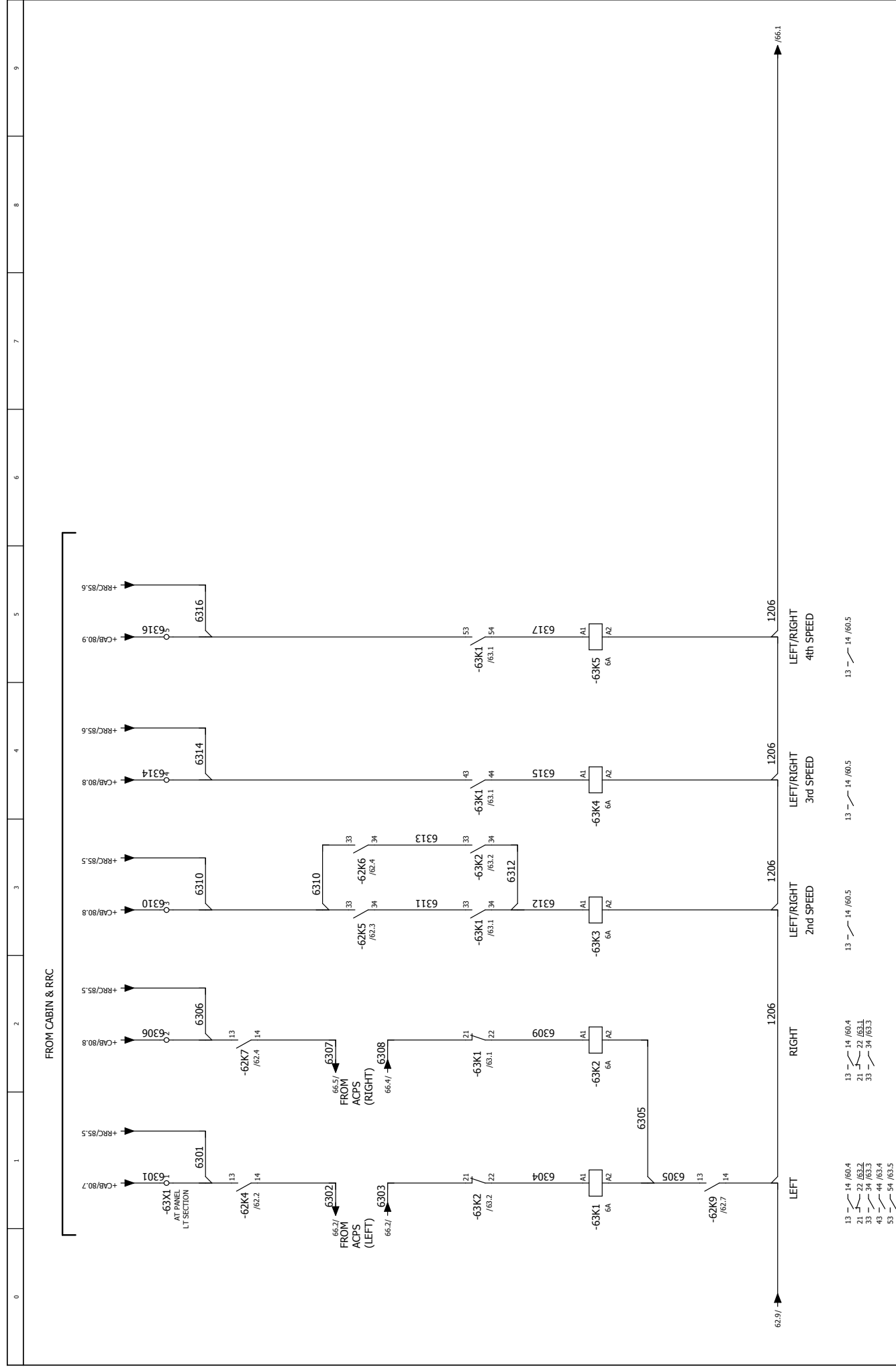
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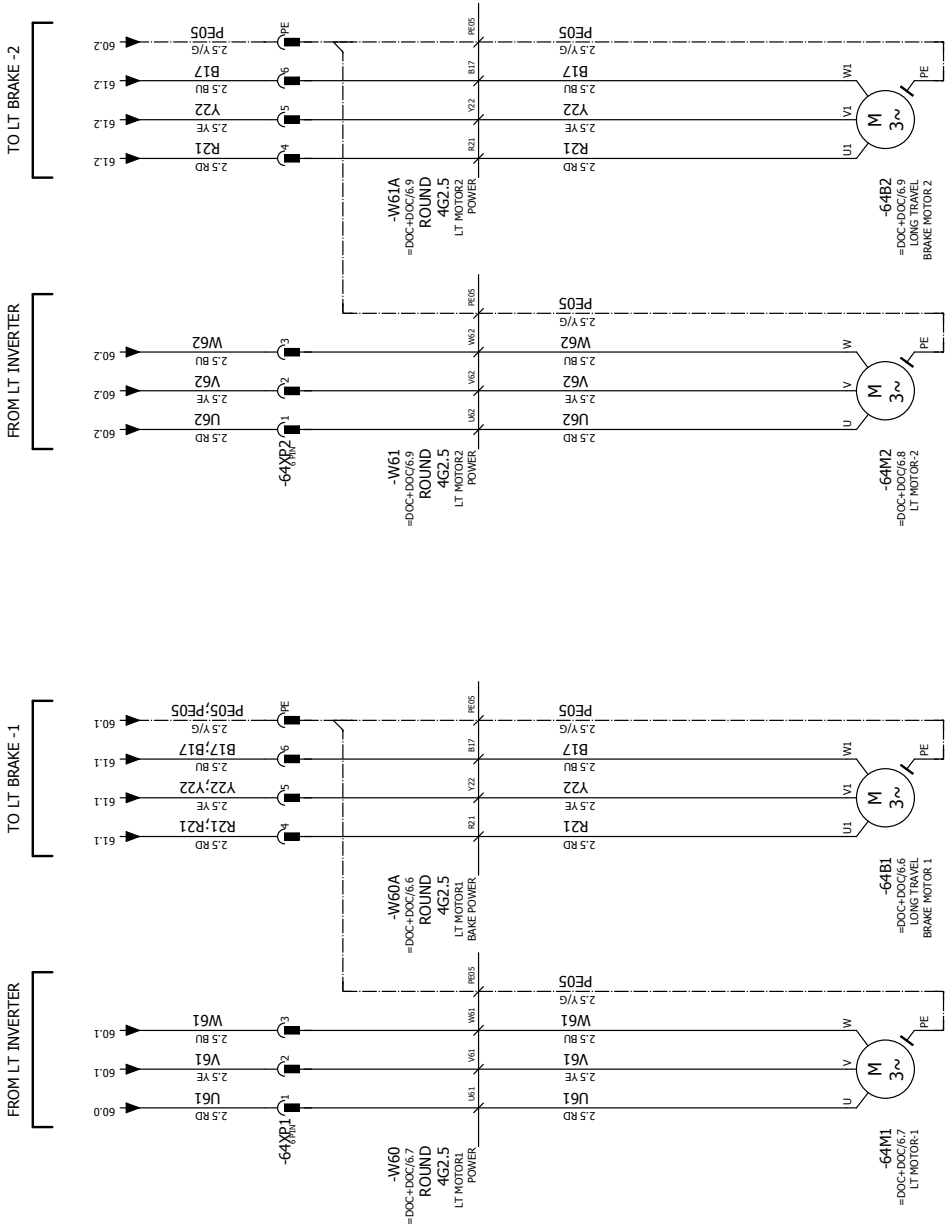
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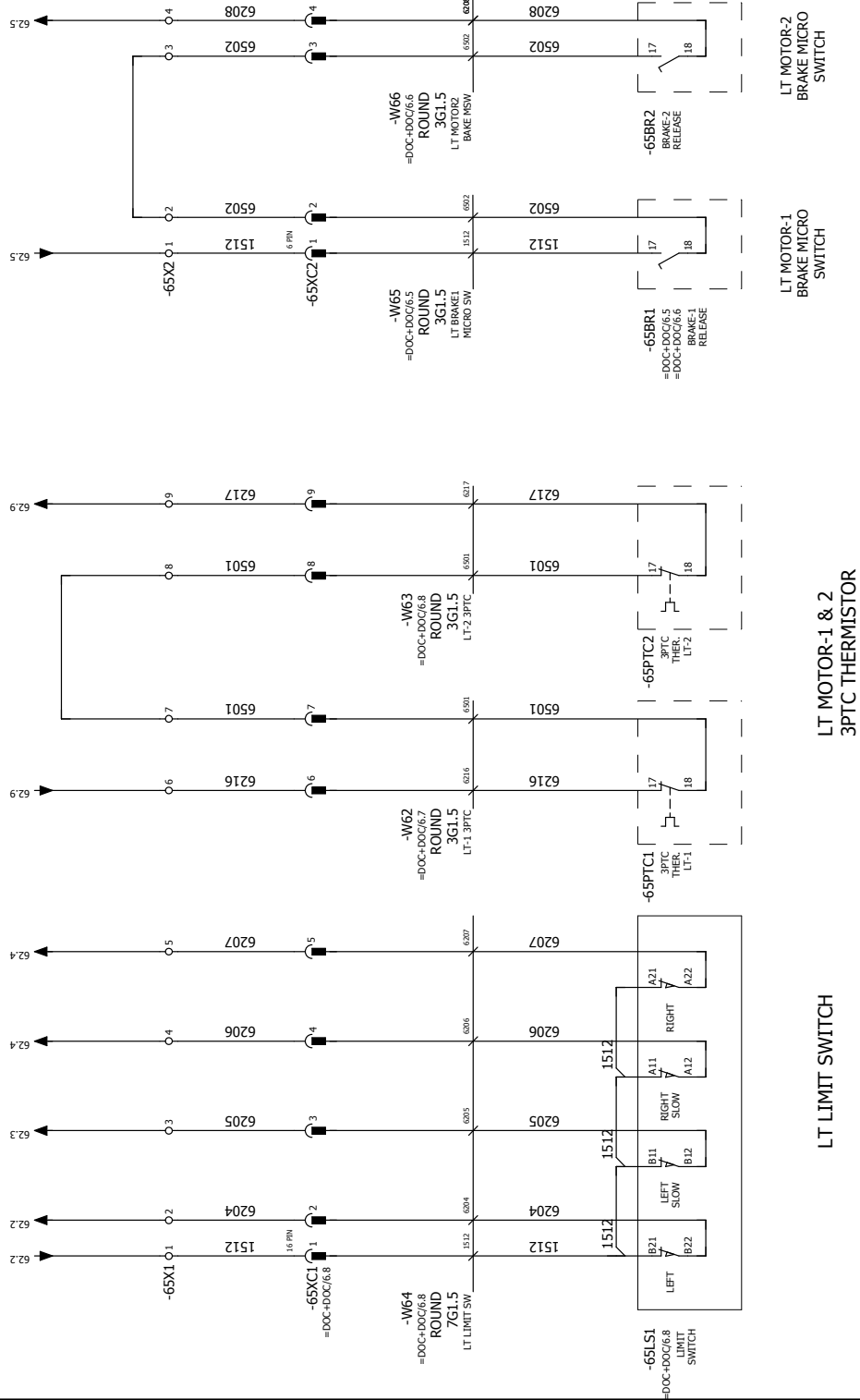
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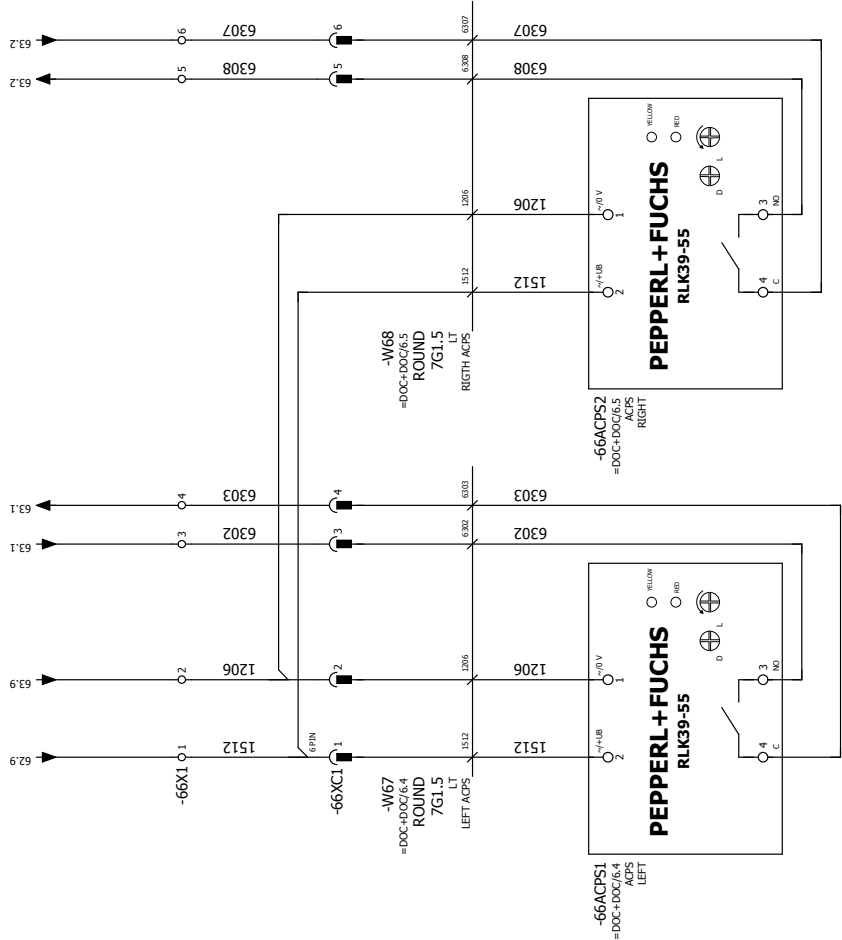












ANTI-COLLISION SENSOR LEFT DIRECTION

ANTI-COLLISION SENSOR RIGHT DIRECTION

NOTE:- Connect necessary anticollision.

If Left Direction Anticollision is not in use, Short Terminal 3-4 of 66XC1 connector.

If Right Direction Anticollision is not in use, Short Terminal 5-6 of 66XC1 connector.

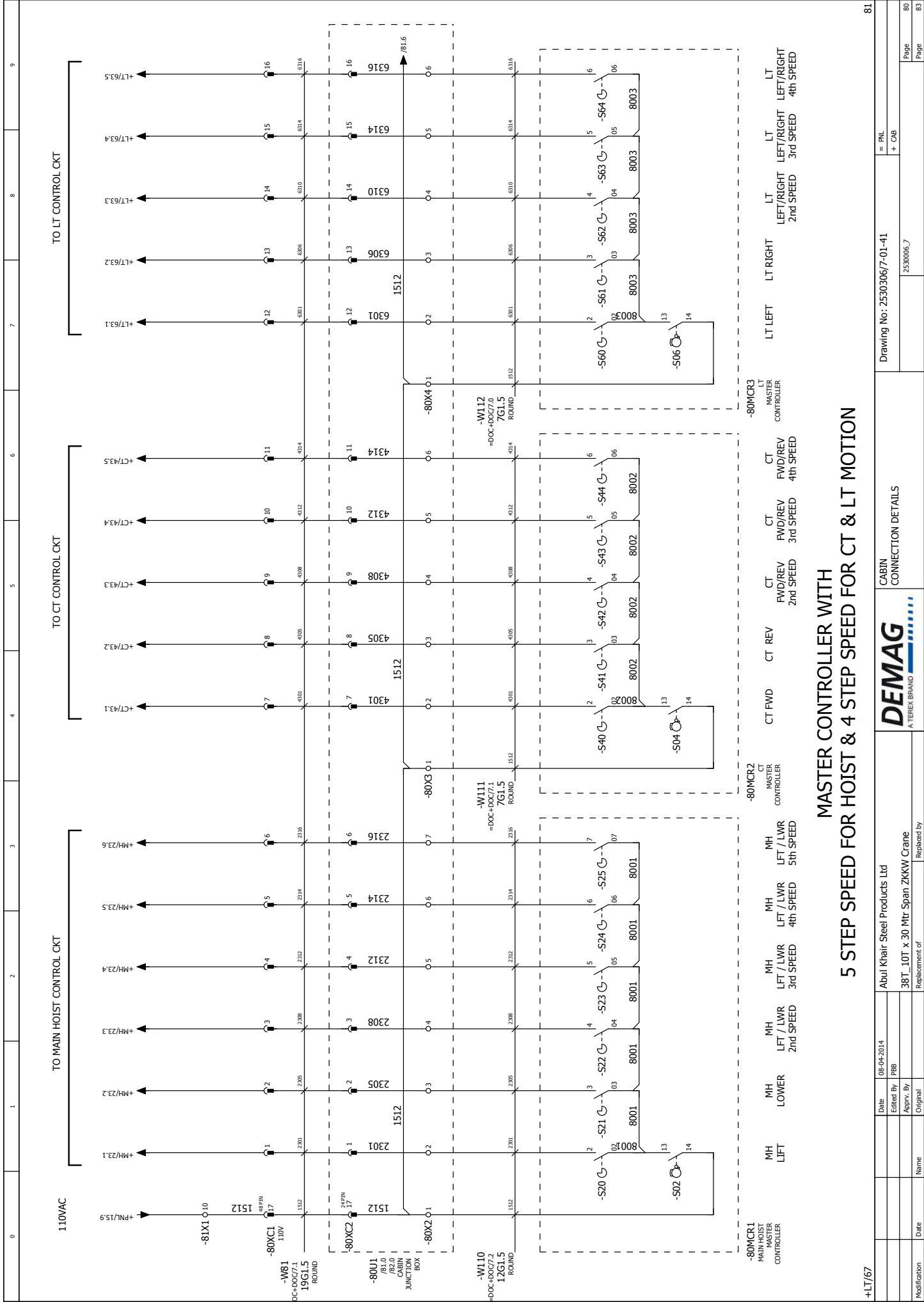
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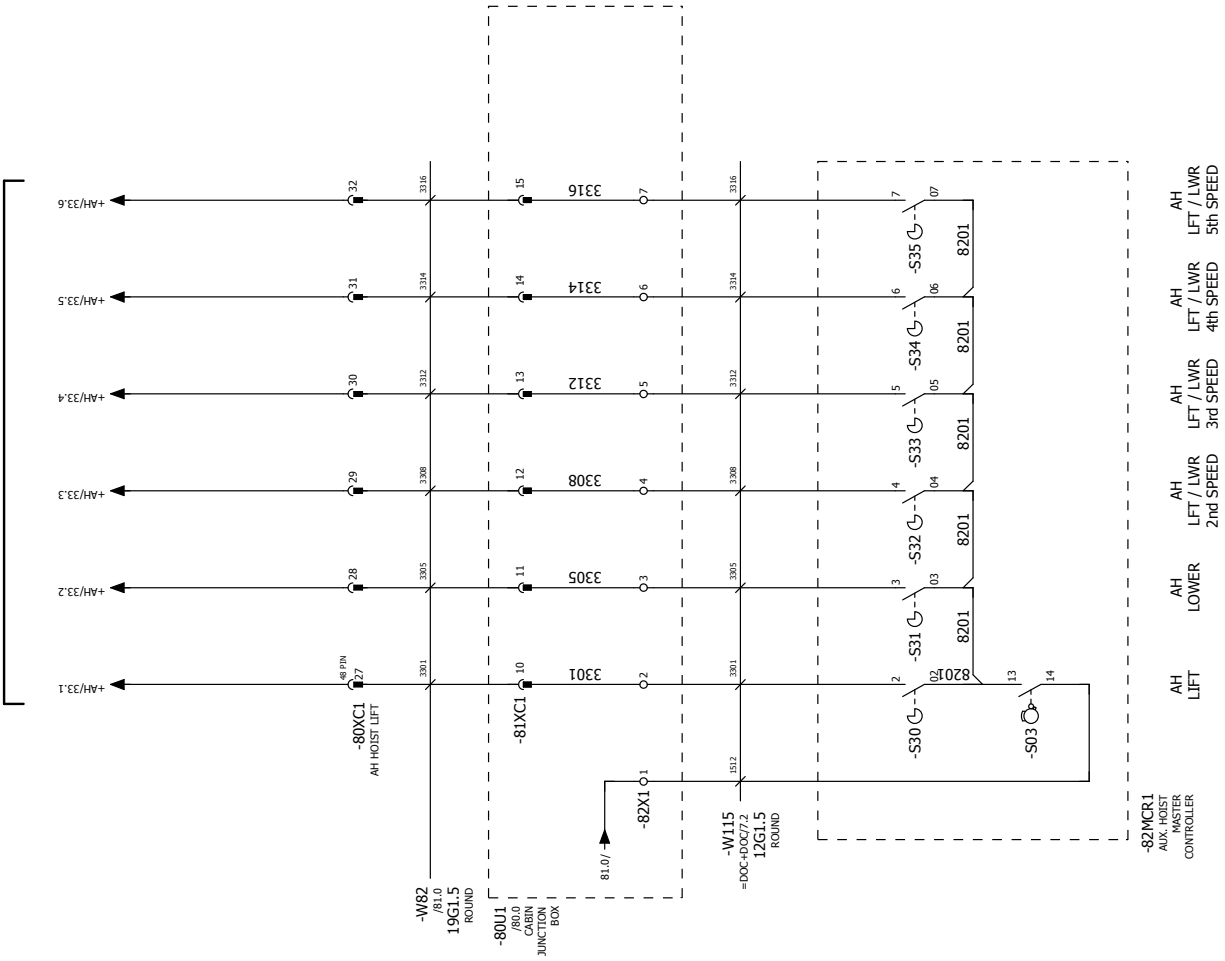
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[illegible]



MASTER CONTROLLER WITH 5 STEP SPEED FOR HOIST & 4 STEP SPEED FOR CT & LT MOTION

TO AUX. HOIST CONTROL CKT



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UP TO : +RRC/85

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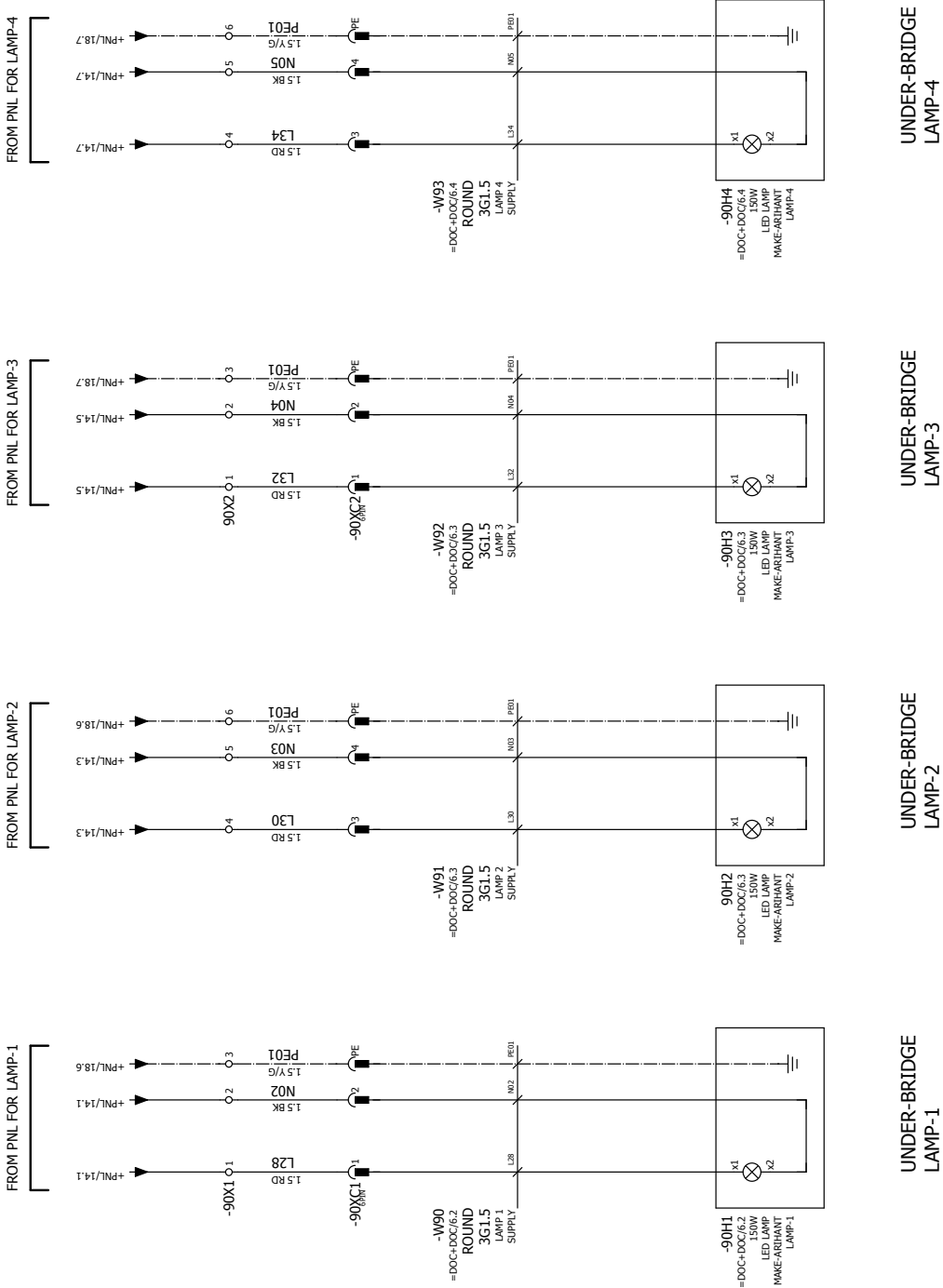
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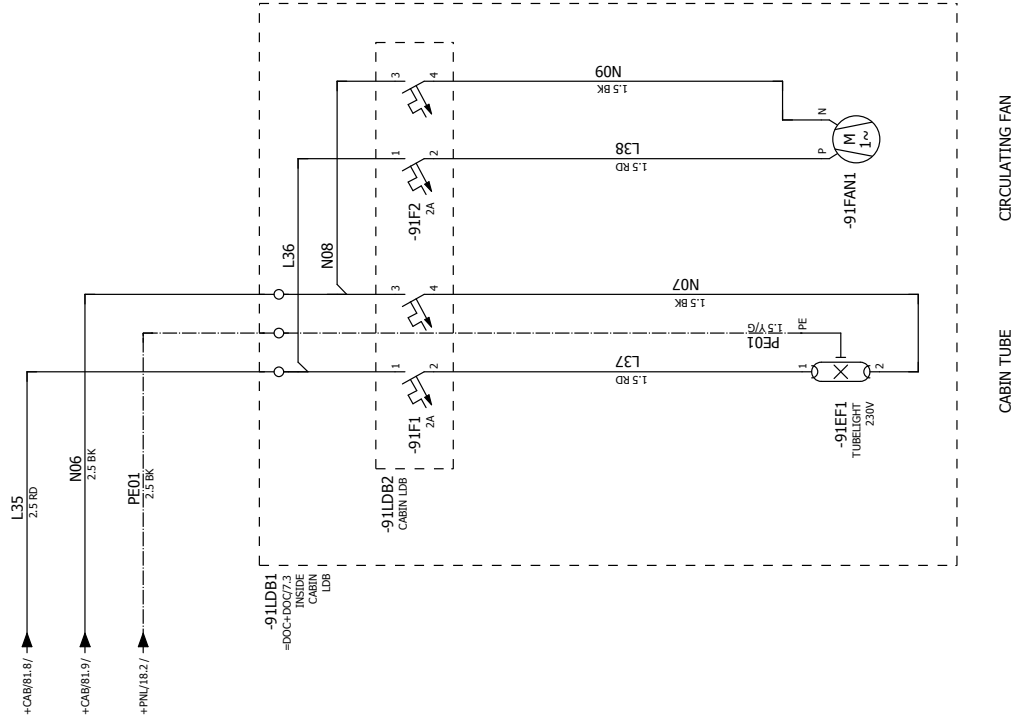
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FROM : 87

UP TO : +MISC/90

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0	1	2	3	4	5	6	7	8	9
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 FROM : 92
 UP TO : =REP+REP/100



0	1	2	3	4	5	6	7	8	9
Cable diagram									
Cable									
=PNL+DSL-W1									
DSL Incomer Cable-1									
Cable name : Function text : No. of conductors : 4 Cross-section : 50 Sq.mm mm² Cable length :									
Targets 1									
Targets 2									
R-PHASE									
Y-PHASE									
B-PHASE									
PE-PHASE									
=PNL+DSL-W2									
DSL Incomer Cable-2									
Cable name : Function text : No. of conductors : 4 Cross-section : 50 Sq.mm mm² Cable length :									
Targets 1									
Targets 2									
R-PHASE									
Y-PHASE									
B-PHASE									
PE-PHASE									
=PNL+PNL-W10									
INCOMING POWER SUPPLY									
Cable name : Function text : No. of conductors : 4G Cross-section : 50 mm² Cable length :									
Targets 1									
Targets 2									
R-PHASE									
Y-PHASE									
B-PHASE									
PE									
=DOC+DOC/6.2									
=DOC+DOC/6.1									
=PNL+MISC/92									
101									
= REP + REP									
2530006.7									
100									
83									

0	1	2	3	4	5	6	7	8	9
Cable diagram									
Cable									
Cable name : =PNL+MISC-W93									
Function text : LAMP 4 SUPPLY									
Cable type : ROUND									
No. of conductors : 3G									
Cross-section : 1.5 mm²									
Cable length :									
Targets 1									
Targets 2									
Function text									
0V									
PE									
6 PIN									
Core Number/Color									
2									
3									
Conn. point									
x2									
Designation from									
-80H3									
-PE4									
-90H4									
Page / column									
/90.6									
/90.6									
=DOC+DOC/6.4									
Conn. point									
4									
PE									
-90XC2									
-90XC2									
Conductor Designation									
N05									
PE01									
-90XC2									
Target designation to									
-90XC2									
/90.6									
/90.6									
=DOC+DOC/6.4									
Function text									
0V									
PE									
6 PIN									

101

102

Date		08-04-2014		Abul Khair Steel Products Ltd		Demag Cranes & Components		Cable diagram		= REP	
Ed.		Prasant.Bhise		38T_10T x 30 Mtr Span ZKKW Crane		India Pvt. Ltd.		2530006.7		+ REP	
Appr				Replacement of							
Original				Replaced by							
Name											
Page										101.a	
Page										83	

Cable diagram

Cable

Cable name : =PNL+MH-W20			Cable type : ROUND IGUS				Cable length :	
Function text : MH MOTOR POWER			No. of conductors : 4G		Cross-section : 25 mm²			
Function text	Targets 1			Core Number/ Color	Conductor Designation	Targets 2		
	Page / column	Designation from	Conn. point			Target designation to	Page / column	Function text
R-PHASE	/24.1	-24M1	U1	1	U20	-20X1	/20.1	R-PHASE
Y-PHASE	/24.1	-24M1	V1	2	V20	-20X1	/20.1	Y-PHASE
B-PHASE	/24.1	-24M1	W1	3	W20	-20X1	/20.1	B-PHASE
PE	/24.1	-24M1	PE	4	PE02	-20X1	/20.1	PE
	=DOC+DOC/6.0					=DOC+DOC-20X1	=DOC+DOC/6.2	

Cable name : =PNL+MH-W21				Cable type : ROUND IGUS				Cable length :	
Function text : MH BRAKE MOTOR				No. of conductors : 4G		Cross-section : 2.5 mm²			
						Targets 2			
Function text				Page / column		Designation from		Conn. point	
R-PHASE				/24.2		-24B1		U1	
Y-PHASE				/24.2		-24B1		V1	
B-PHASE				/24.2		-24B1		W1	
PE				/24.2		-24B1		PE	
6 PIN				=DOC+DOC/6.1					

101.a

			Date	08-04-2014	Abul Khair Steel Products Ltd	Demag Cranes & Components		Cable diagram		= REP		103
			Ed.	PrasantBhise		India Pvt. Ltd.				+ REP		
Modification	Date	Name	Original		Replacement of	38T_10T x 30 Mtr Span ZKKW Crane		2530006.7				Page 102
					Replaced by							Page 83

[illegible]

Cable diagram

Cable

Cable name : =PNL+MH-W22		Cable type : ROUND(SHEILED)IGUS			
Function text : MH MOTOR ENCODER		No. of conductors : 2X3		Cross-section : 0.5 mm ²	
		Cable length :			
		Targets 1		Targets 2	
Function text	Page / column	Designation from	Core Number/ Color		Function text
			Conn. point	Conductor Designation	
+	/20.6	-20A1-33	1	2001	+
-	/20.6	-20A1-79	1	2002	-
A+	/20.6	-20A1-70	2	2003	A+
A-	/20.6	-20A1-71	3	2004	A-
B	/20.6	-20A1-72	4	2005	B
B-	/20.7	-20A1-73	5	2006	B-
	=DOC+DOC/6.0				=DOC+DOC/6.0

Cable name : = PNL + MH-W23				Cable type : ROUND 11IGUS					
Function text : MH MOTOR CONTROL				No. of conductors : 12G		Cross-section : 1.5 mm²		Cable length :	
Targets 1				Core Number/ Color	Conductor Designation	Targets 2			
Function text	Page / column	Designation from	Conn. point			Conn. point	Target designation to	Page / column	Function text
110V	/25.1	-25U1-25X2	1	1	1512	1	-25XC1	/25.1	110V
TOP MOST	/25.1	-25U1-25X2	2	2	2205	2	-25XC1	/25.1	TOP MOST
TOP SLOW	/25.2	-25U1-25X2	3	3	2206	3	-25XC1	/25.2	TOP SLOW
BOTTOM SLOW	/25.2	-25U1-25X2	4	4	2207	4	-25XC1	/25.2	BOTTOM SLOW
BOTTOM MOST	/25.3	-25U1-25X2	5	5	2208	5	-25XC1	/25.3	BOTTOM MOST
MH BRAKE MICRO SWITCH	/25.4	-25U1-25X3	2	6	2209	6	-25XC1	/25.4	MH BRAKE MICRO SWITCH
FROM HOIST 3PTC	/25.5	-25U1-25X4	1	7	2215	7	-25XC1	/25.5	FROM HOIST 3PTC
TO HOIST 3PTC	/25.5	-25U1-25X4	2	8	2216	8	-25XC1	/25.5	TO HOIST 3PTC
110VAC TO MH GRAVITY LIMIT SWITCH	/25.6	-25U1-25X5	1	9	2501	9	-25XC1	/25.6	110VAC TO MH GRAVITY LIMIT SWITCH
SPARE	/25.7	-25U1-25X6	1	10	2503	10	-25XC1	/25.7	SPARE
=	/25.7	-25U1-25X6	2	11	2504	11	-25XC1	/25.7	=
=	/25.8	-25U1-25X6	3	12	2505	12	-25XC1	/25.8	=
24 PIN	=DOC+DOC/6.4	-25U1-25X2					-25XC1	=DOC+DOC/6.4	24 PIN

102[illegible]

0	1	2	3	4	5	6	7	8	9
Cable diagram									
Cable									
Cable name : =PNL+MH-W202				Cable type : ROUND			Cable length :		
Function text : MH GEARED LS				No. of conductors : 7G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
MH TOP MOST LIMIT SW	/25.1	-25U1-25X2	1	1	1512	1	-25LS1	/25.1	MH TOP MOST LIMIT SW
=	/25.1	-25U1-25X2	2	2	2205	2	-25LS1	/25.1	=
MH TOP SLOW LIMIT SW	/25.2	-25U1-25X2	3	3	2206	4	-25LS1	/25.1	MH TOP SLOW LIMIT SW
MH BOTTOM SLOW LIMIT SW	/25.2	-25U1-25X2	4	4	2207	6	-25LS1	/25.2	MH BOTTOM SLOW LIMIT SW
MH BOTTOM MOST LIMIT SW	/25.3	-25U1-25X2	5	5	2208	8	-25LS1	/25.3	MH BOTTOM MOST LIMIT SW
		=DOC+DOC/6.3					-25U1	=DOC+DOC/6.3	

Cable name : =PNL+MH-W203				Cable type : ROUND			Cable length :		
Function text : MH BRAKE1 MICRO SW				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
MAIN HOIST BRAKE MICRO SWITCH	/25.4	-25U1-25X3	1	1	1512	17	-25BR1	/25.4	MAIN HOIST BRAKE MICRO SWITCH
=	/25.4	-25U1-25X3	2	2	2209	18	-25BR1	/25.4	=
		=DOC+DOC/6.3					-25U1	=DOC+DOC/6.3	

Cable name : =PNL+MH-W204				Cable type : ROUND			Cable length :		
Function text : MH PTC				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
MAIN HOIST 3 PTC	/25.5	-25U1-25X4	1	1	2215	17	-25PTC1	/25.5	MAIN HOIST 3 PTC
=	/25.5	-25U1-25X4	2	2	2216	18	-25PTC1	/25.5	=
		=DOC+DOC/6.4					-25U1	=DOC+DOC/6.4	

Cable name : =PNL+MH-W206				Cable type : ROUND			Cable length :		
Function text : MH GRAVITY LS				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
MAIN HOIST GRAVITY LIMIT SWITCH	/25.6	-25U1-25X5	1	1	2501	1	-25GLS1	/25.6	MAIN HOIST GRAVITY LIMIT SWITCH

103

		Date	08-04-2014	Abul Khair Steel Products Ltd		Demag Cranes & Components		Cable diagram		104.a	
		Ed.	PrasantBhise			India Pvt. Ltd.				= REP	
		Apr		38T_10T x 30 Mtr Span ZKKW Crane				253006.7		+ REP	
Modification	Date	Name	Original	Replacement of		Replaced by				Page	Page
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0	1	2	3	4	5	6	7	8	9
Cable diagram									
Cable									
Cable name : =PNL+AH-W302				Cable type : ROUND			Cable length :		
Function text : AH GEARED LS				No. of conductors : 7G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
AH BOTTOM MOST LIMIT SW	/35.2	-25U1-35X2	5	5	3208	8	-35LS1	/35.2	AH BOTTOM MOST LIMIT SW
		=DOC+DOC/6.5					-25U1	=DOC+DOC/6.5	
Cable name : =PNL+AH-W303				Cable type : ROUND			Cable length :		
Function text : AH BRAKE MICRO SW				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
AUX. HOIST BRAKE MICRO SWITCH	/35.3	-25U1-35X3	1	1	1512	17	-35BR1	/35.3	AUX. HOIST BRAKE MICRO SWITCH
=		-25U1-35X3	2	2	3209	18	-35BR1	/35.3	=
		=DOC+DOC/6.5					-25U1	=DOC+DOC/6.5	
Cable name : =PNL+AH-W304				Cable type : ROUND			Cable length :		
Function text : AH PTC				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
AH MICROTHERM	/35.4	-25U1-35X4	1	1	3215	17	-35PTC1	/35.4	AH MICROTHERM
=		-25U1-35X4	2	2	3216	18	-35PTC1	/35.4	=
		=DOC+DOC/6.6					-25U1	=DOC+DOC/6.6	
Cable name : =PNL+AH-W306				Cable type : ROUND			Cable length :		
Function text : AH GRAVITY LS				No. of conductors : 3G			Cross-section : 1.5 mm ²		
Targets 1				Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
AH GRAVITY LIMIT SW	/35.6	-25U1-35X5	1	1	2502	1	-35GLS1	/35.6	AH GRAVITY LIMIT SW
=		-25U1-35X5	2	2	1507	2	-35GLS1	/35.6	=
		=DOC+DOC/6.6					-25U1	=DOC+DOC/6.6	
Date				Date				= REP	
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Appr				Appr				253006.7	
Original				Original				Page	
Replacement of				Replacement of				Page	
Abul Khair Steel Products Ltd				Demag Cranes & Components				Cable diagram	
38T_10T x 30 Mtr Span ZKKW Crane				India Pvt. Ltd.				106.a	
106				107				83	

Cable diagram

Cable

Cable name : =PNL+CT-W40		Cable type : ROUND IGUS		No. of conductors : 4G		Cross-section : 2.5 mm²		Cable length :	
Function text : CT MOTOR POWER									
		Targets 1		Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
R-PHASE	/44.1	-44M1	U	1	U40	1	-44XP1	/44.1	R-PHASE
Y-PHASE	/44.1	-44M1	V	2	V40	2	-44XP1	/44.1	Y-PHASE
B-PHASE	/44.1	-44M1	W	3	W40	3	-44XP1	/44.1	B-PHASE
PE	/44.1	-44M1	PE	6	PE04	PE	-44XP1	/44.3	PE
6 PIN	=DOC+DOC/6.8						-44XP1	=DOC+DOC/6.8	6 PIN

Cable name : =PNL+CT-W42		Cable type : ROUND IGUS		No. of conductors : 4G		Cross-section : 2.5 mm²		Cable length :	
Function text : CT BRAKE MOTOR									
		Targets 1		Targets 2					
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation	Conn. point	Target designation to	Page / column	Function text
R-PHASE	/44.2	-44B1	U1	1	R17	4	-44XP1	/44.2	R-PHASE
Y-PHASE	/44.2	-44B1	V1	2	Y18	5	-44XP1	/44.2	Y-PHASE
B-PHASE	/44.2	-44B1	W1	3	B14	6	-44XP1	/44.2	B-PHASE
PE	/44.2	-44B1	PE	4	PE04	PE	-44XP1	/44.3	PE
6 PIN	=DOC+DOC/6.9						-44XP2	=DOC+DOC/6.9	6 PIN

106.a

			Date	08-04-2014	Abul Khair Steel Products Ltd	Demag Cranes & Components	Cable diagram		= REP + REP		108
			Ed.	Prasant Bhise		India Pvt. Ltd.					
Modification	Date	Name	Appr		38T_10T x 30 Mtr Span ZKKW Crane				2530006.7		Page 107
			Original		Replacement of	Replaced by					Page 83

Cable diagram

Cable

Cable name : =PNL+CT-W44				Cable type : ROUND IIGUS				Cable length :	
Function text : CT CONTROL CABLE				No. of conductors : 12G				Cross-section : 1.5 mm²	
Targets 1				Core Number/ Color		Conductor Designation		Targets 2	
Function text	Page / column	Designation from	Conn. point			Conn. point	Target designation to	Page / column	Function text
110VAC	/45.1	-25U1-45X2	1	1		1512	-45XC1	/45.1	110VAC
FWD LIMIT	/45.1	-25U1-45X2	2	2		4204	-45XC1	/45.1	FWD LIMIT
FWD SLOW LIMIT	/45.2	-25U1-45X2	3	3		4205	-45XC1	/45.2	FWD SLOW LIMIT
REV SLOW LIMIT	/45.2	-25U1-45X2	4	4		4206	-45XC1	/45.2	REV SLOW LIMIT
REV LIMIT	/45.3	-25U1-45X2	5	5		4207	-45XC1	/45.3	REV LIMIT
TO CT PTC	/45.5	-25U1-45X4	1	6		4214	-45XC1	/45.5	TO CT PTC
CT BRAKE RELEASE	/45.5	-25U1-45X4	2	7		4215	-45XC1	/45.5	CT BRAKE RELEASE
FROM CT PTC	/45.4	-25U1-45X3	2	8		4208	-45XC1	/45.4	FROM CT PTC
SPARE	/45.5	-25U1-45X5	1	9		4501	-45XC1	/45.5	SPARE
=	/45.6	-25U1-45X5	2	10		4502	-45XC1	/45.6	=
=	/45.6	-25U1-45X5	3	11		4503	-45XC1	/45.6	=
=	/45.6	-25U1-45X5	4	12		4504	-45XC1	/45.6	=
16 PIN	=DOC+DOC/6.7	-25U1-45X2					-45XC1	=DOC+DOC/6.7	16 PIN

Cable name : =PNL+CT-W400		Cable type : ROUND				Cable length :		
Function text : CT END LIMIT SWITCH		No. of conductors : 7G		Cross-section : 1.5 mm²				
Function text	Targets 1			Core Number/ Color	Targets 2			
	Page / column	Designation from	Conn. point		Conductor Designation	Target designation to	Page / column	Function text
CT FWD LIMIT SW	/45.1	-25U1-45X2	1	1	1512	-45LS2	/45.1	CT FWD LIMIT SW
=	/45.1	-25U1-45X2	2	2	4204	-45LS2	/45.1	=
CT FWD SLOW LIMIT SW	/45.2	-25U1-45X2	3	3	4205	-45LS3	/45.1	CT FWD SLOW LIMIT SW
CT REV SLOW LIMIT SW	/45.2	-25U1-45X2	4	4	4206	-45LS4	/45.2	CT REV SLOW LIMIT SW
CT REV LIMIT SW	/45.3	-25U1-45X2	5	5	4207	-45LS5	/45.3	CT REV LIMIT SW
	=DOC+DOC/6.7					-25U1	=DOC+DOC/6.7	

Cable diagram

Cable

Cable name : =PNL+CT-W401		Cable type : ROUND		No. of conductors : 3G		Cross-section : 1.5 mm²		Cable length :	
Function text : CT BRAKE MICRO SW		Core Number/Color		Conn. point		Designation from		Targets 1	
								Targets 2	
Function text		Page / column		Conn. point		Designation from		Conn. point	
CROSS TRAVEL BRAKE MICRO SWITCH		/45.4		1		-25U1-45X3		17	
								Target designation to	
=		/45.4		2		-25U1-45X3		-45BR1	
								/45.4	
		=DOC+DOC/6.7						-25U1	
								=DOC+DOC/6.7	

Cable name : =PNL+CT-W402		Cable type : ROUND		No. of conductors : 3G		Cross-section : 1.5 mm²		Cable length :	
Function text : CT MOTOR PTC		Core Number/Color		Conn. point		Designation from		Targets 1	
								Targets 2	
Function text		Page / column		Conn. point		Designation from		Conn. point	
CT-1 MICROTHERM		/45.5		1		-25U1-45X4		17	
								Target designation to	
=		/45.5		2		-25U1-45X4		-45PTC1	
								/45.5	
		=DOC+DOC/6.8						-25U1	
								=DOC+DOC/6.8	

Date		Date		Date		Date		Date	
Ed.		Ed.		Ed.		Ed.		Ed.	
Appr		Appr		Appr		Appr		Appr	
Original		Original		Original		Original		Original	
Name		Name		Name		Name		Name	
Replacement of		Replacement of		Replacement of		Replacement of		Replacement of	
Abul Khair Steel Products Ltd		Abul Khair Steel Products Ltd		Abul Khair Steel Products Ltd		Abul Khair Steel Products Ltd		Abul Khair Steel Products Ltd	
38T_10T x 30 Mtr Span ZKKW Crane		38T_10T x 30 Mtr Span ZKKW Crane		38T_10T x 30 Mtr Span ZKKW Crane		38T_10T x 30 Mtr Span ZKKW Crane		38T_10T x 30 Mtr Span ZKKW Crane	
Replaced by		Replaced by		Replaced by		Replaced by		Replaced by	
Demag Cranes & Components India Pvt. Ltd.		Demag Cranes & Components India Pvt. Ltd.		Demag Cranes & Components India Pvt. Ltd.		Demag Cranes & Components India Pvt. Ltd.		Demag Cranes & Components India Pvt. Ltd.	
Cable diagram		Cable diagram		Cable diagram		Cable diagram		Cable diagram	
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+ REP		+ REP		+ REP		+ REP		+ REP	
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Cable diagram

Cable

Cable name : =PNL+LT-W65		Cable type : ROUND		Cable length :	
Function text : LT BRAKE1 MICRO SW		No. of conductors : 3G		Cross-section : 1.5 mm²	
Function text		Conductor Designation		Targets 2	
Page / column		Conn. point		Page / column	
/65.6		18		/65.6	
=DOC+DOC/6.6		-65BR1		-65XC2	
6 PIN		-65BR1		=DOC+DOC/6.6	
				6 PIN	

Cable name : =PNL+LT-W66		Cable type : ROUND		Cable length :	
Function text : LT MOTOR2 BAKE MSW		No. of conductors : 3G		Cross-section : 1.5 mm²	
Function text		Conductor Designation		Targets 2	
Page / column		Conn. point		Page / column	
/65.7		17		/65.7	
=DOC+DOC/6.6		-65BR2		-65XC2	
6 PIN		-65BR2		=DOC+DOC/6.6	
				6 PIN	

Cable name : =PNL+LT-W67		Cable type : ROUND		Cable length :	
Function text : LT LEFT ACPS		No. of conductors : 7G		Cross-section : 1.5 mm²	
Function text		Conductor Designation		Targets 2	
Page / column		Conn. point		Page / column	
/66.1		2		/66.1	
=DOC+DOC/6.4		-66ACPS1		-66XC1	
LT ACPS 0VAC SUPPLY		-66ACPS1		=	
LT ACPS 110VAC SUPPLY		-66ACPS1		LT ACPS 0VAC SUPPLY	
LEFT ACPS CONTACT		-66ACPS1		LT ACPS 110VAC SUPPLY	
		-66ACPS1		LEFT ACPS CONTACT	
6 PIN		-66ACPS1		=	
		-66ACPS1		6 PIN	

Cable name : =PNL+LT-W68		Cable type : ROUND		Cable length :	
Function text : LT RIGTH ACPS		No. of conductors : 7G		Cross-section : 1.5 mm²	
Function text		Conductor Designation		Targets 2	
Page / column		Conn. point		Page / column	
/66.3		2		/66.1	
=DOC+DOC/6.4		-66ACPS2		-66XC1	
LT ACPS 0VAC SUPPLY		-66ACPS2		LT ACPS 0VAC SUPPLY	
LT ACPS 110VAC SUPPLY		-66ACPS2		LT ACPS 110VAC SUPPLY	
RIGHT ACPS CONTACT		-66ACPS2		RIGHT ACPS CONTACT	

0	1	2	3	4	5	6	7	8	9
Cable diagram									
Cable									
Cable name : =PNL+LT-W68									
Function text : LT RIGTH ACPS									
Cable type : ROUND									
No. of conductors : 7G									
Cross-section : 1.5 mm²									
Cable length :									
Targets 1									
Targets 2									
Function text									
Page / column									
Designation from									
Conn. point									
Target designation to									
Page / column									
Function text									
RIGHT ACPS CONTACT									
/66.3									
-66ACPS2									
6									
-66XC1									
RIGHT ACPS CONTACT									
/66.5									
-66XC1									
=DOC+DOC/6.5									
6 PIN									
=DOC+DOC/6.5									
6 PIN									

112.a		113	
Date		08-04-2014	
Ed.		Prasant.Bhise	
Appr			
Original			
Name		Abul Khair Steel Products Ltd	
Date		38T_10T x 30 Mtr Span ZKKW Crane	
Replacement of		Replaced by	
Modification		Demag Cranes & Components	
India Pvt. Ltd.		Cable diagram	
2530006.7		= REP	
Page		Page	
112.b		83	

0	1	2	3	4	5	6	7	8	9
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Cable diagram

Cable

Cable name : =PNL+CAB-W113		Cable type :		Cable length :	
Function text : ROUND		No. of conductors : 12G		Cross-section : 1.5 mm ²	
Targets 1		Targets 2			
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation
FROM SIREN ON/OFF	/81.3	-81CDK1-81X3		5	1609
110V	/81.3	-81CDK1-81X3		6	1512
M/C SELECTION	/81.4	-81CDK1-81X3		7	1602
RRC SELECTION	/81.4	-81CDK1-81X3		8	1603
TO M/C ON INDICATION	/81.5	-81CDK1-81X3		9	1601
FROM M/C ON INDICATION	/81.5	-81CDK1-81X3		10	1206
	=DOC+DOC/7.1				
		-80A1			

Cable name : =PNL+CAB-W114		Cable type :		Cable length :	
Function text : ROUND		No. of conductors : 3G		Cross-section : 1.5 mm ²	
Targets 1		Targets 2			
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation
230V	/81.8	-80U1-81X2	1	1	L35
0V	/81.9	-80U1-81X2	2	2	N06

Cable name : =PNL+CAB-W115		Cable type :		Cable length :	
Function text : ROUND		No. of conductors : 12G		Cross-section : 1.5 mm ²	
Targets 1		Targets 2			
Function text	Page / column	Designation from	Conn. point	Core Number/ Color	Conductor Designation
	=DOC+DOC/7.2				
110V	/82.1	-82MCR1-S03	14		1512
AH HOIST LIFT	/82.1	-82MCR1-S30	2		3301
AH HOIST LOWER	/82.1	-82MCR1-S31	3		3305
AH LFT / LWR 2nd SPEED	/82.2	-82MCR1-S32	4		3308
AH LFT / LWR 3rd SPEED	/82.2	-82MCR1-S33	5		3312
AH LFT / LWR 4th SPEED	/82.3	-82MCR1-S34	6		3314
AH LFT / LWR 5th SPEED	/82.3	-82MCR1-S35	7		3316

Date		08-04-2014		Abul Khair Steel Products Ltd		Demag Cranes & Components		Cable diagram		= REP		115	
Ed.		Prasant.Bhise		38T_10T x 30 Mtr Span ZKKW Crane		India Pvt. Ltd.				+ REP			
Aprr				Replacement of		Replaced by						2530006.7	
Original												114.a	
Name												Page	
Date												Page	
												83	

