Husqvarna

DXR-250, 2009-10

DXR-250

Electric circuit diagram
Hydraulic circuit diagram

HUSQVARNA CONSTRUCTION PRODUCTS

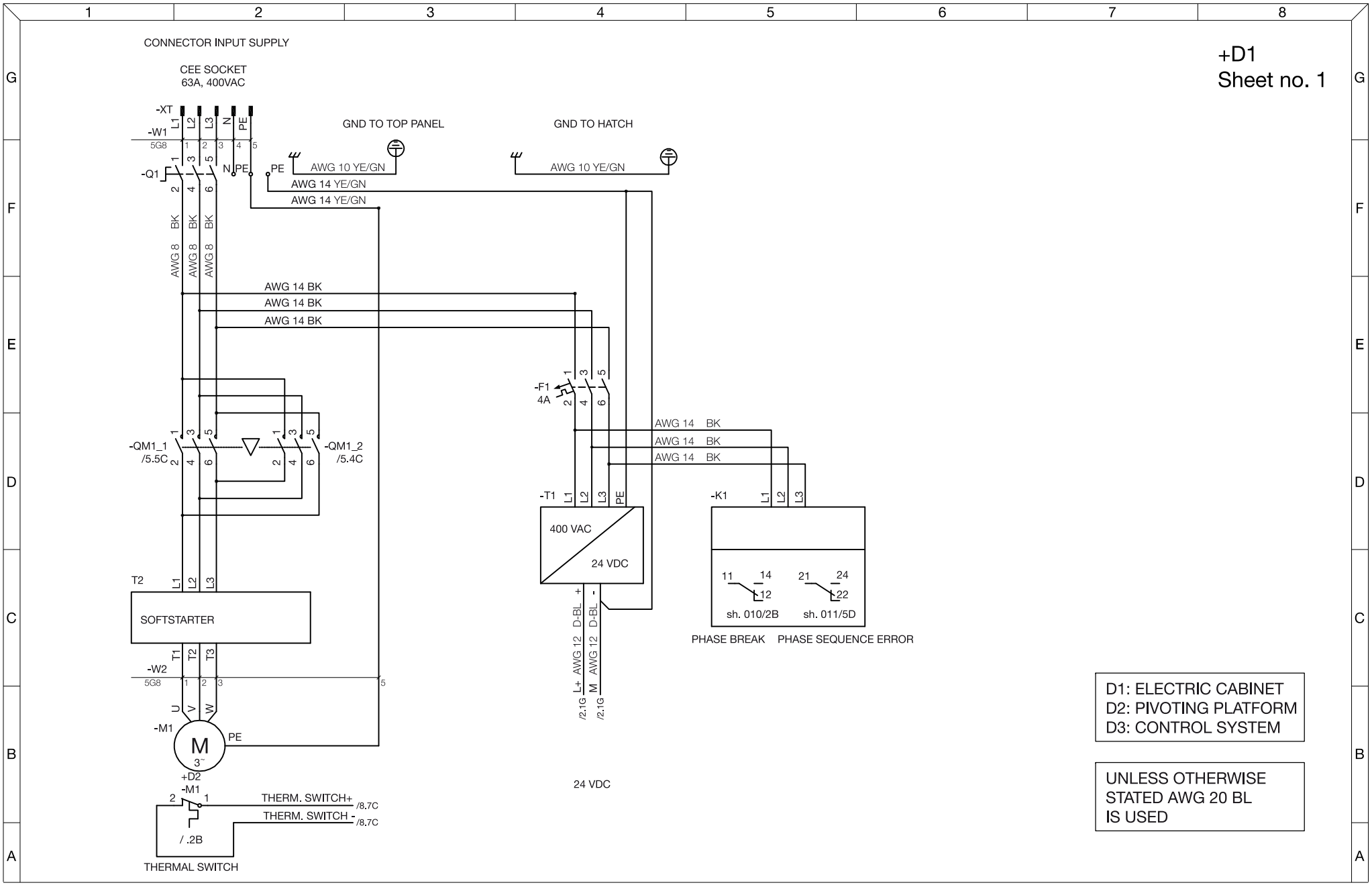
Des. +D1	Description	Sheet ref.
-B1	Safety relay 24 VDC, 2NO dual channel	4.2E
-B2	Time counter	5.7D
-F1	Circuit breaker 5SY C4, 3-pole 4 A	1.4E
-F2	Circuit breaker 5SY C10, 1-pole 10 A	1.6E
-F3	Fuse holder for vehicle fuse	2.2F
	Support bracket 28, 2x45 (HxW), grey	
	Bridge connector (1-2 clip)	
	Blade fuse 5 A/32 V, beige	
-F4	Fuse holder for vehicle fuse	2.4F
	Blade fuse 5 A/32 V, beige	
-F5	Fuse holder for vehicle fuse	2.6F
	Blade fuse 10 A/32 V	
-F6	Fuse holder for vehicle fuse	3.3G
	Blade fuse 5 A/32 V, beige	
-F7	Fuse holder for vehicle fuse	3.4G
	Blade fuse 5 A/32 V, beige	
-F8	Fuse holder for vehicle fuse	3.6G
	Blade fuse 10 A/32 V	
-H2	LED, green, 24 VDC	2.7D
-H4	LED, green, 24 VDC	8.6D
-K1	Phase sequence relay 3x400 VAC, 2 points	1.5D
-K10	Auxiliary relay 24 VDC, 4 points	5.2C
	Base 4-pole	
-K14	Base relay 5 A 24 VDC, 1 point	6.2C
-K15	Base relay 5 A 24 VDC, 1 point	6.3C
-K17	Base relay 5 A 24 VDC, 1 point	6.4C
-K18	Base relay 6 A 24 VDC 1NC	6.6C
-K21	Base relay 5 A 24 VDC, 1 point	6.4C
-K26	Base relay 5 A 24 VDC, 1 point	6.7C
-K27	Base relay 5 A 24 VDC, 1 point	6.5C
-K28	Base relay 5 A 24 VDC, 1 point	3.7B
-K29	Base relay 5 A 24 VDC, 1 point	5.8C
-K30	Base relay 5 A 24 VDC, 1 point	5.1D
-Q1	Safety switch 3-pole 63 A	1.2F
-QM1_1	Reverser	5.5C
	Auxiliary contact block 1NO 1NC side-mounted	
-QM1_2	Auxiliary contact block 1NO 1NC side-mounted	5.4C
-S2	Contact block 1S CC 3SB3	2.6E
	Push button, white, fixed position	
-S3_1	Emergency stop button ∅ 40 mm, red	4.4E
	Contact block 2 NC	
-S4	Contact block 1S CC 3SB3	8.5D
	Push button, white, fixed position	

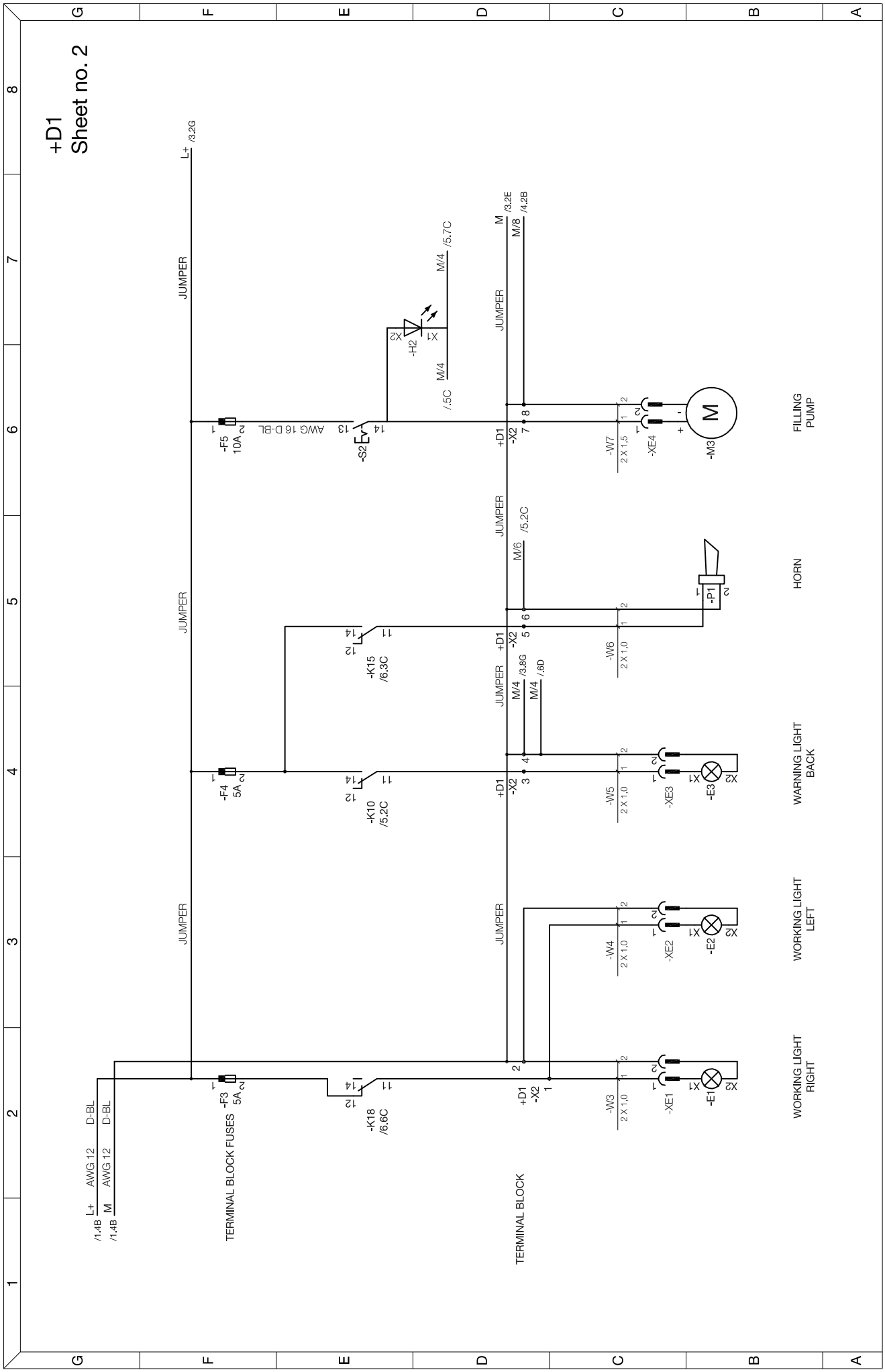
Des. +D1	Description	Sheet ref.
-S5	Assembly ring for LED+ 2 block	5.2F
	Contact block 1NO 1NC	
	Contact block 2NO	
	Knob, 2 fixed positions, black	
-S6	Contact block 1S CC 3SB3	5.3F
	Assembly ring for LED+ 2 block	
	Illuminated push button, flat, black	
-T1	Power supply unit 24 VDC 20 A	1.4D
-T2	Softstarter 400 V 22 kW	5.6F
-T4	Fan control	3.5F
-W1	5GAWG8 JZ602	1.2G
	Cable gland, Skintop ST M32x1.5	
	Locking nut M32x1.5	
-W2	5GAWG8 JZ602	1.2C
	Cable gland, Skintop ST M32x1.5	
	Locking nut M32x1.5	
-W3	2xAWG18 OZ603	2.2C
	Cable gland, Skintop ST M32x1.5	
	Locking nut M32x1.5	
	Multi-hole seal 4x7	
-W4	2xAWG18 OZ603	2.3C
-W5	2xAWG18 OZ603	2.4C
-W6	2xAWG18 OZ603	2.5C
-W7	2xAWG16 OZ603	2.6C
	Cable gland, Skintop ST M32x1.5, dark grey	
	Locking nut M32x1.5, dark grey	
	Multi-hole seal 4x7	
-W8	2xAWG18 OZ603	3.3C
-W9	5GAWG22 JZ603	4.4F
-W10	2xAWG18 OZ603	6.7E
-W11	18GAWG20 JZ603	6.1E
	Cable gland, Skintop ST M25x1.5	
	Locking nut M25x1.5	
-X	Terminal block 2x10/16mm^2	1.2F
	Gnd terminal 3x10/16mm^2	
X2	Terminal blocj3x2.5/4mm^2	2.6D
	End plate 33x59.5 (HxW)	2.2D
	Bridge connector (1-3 clip)	8.2E
-XE1	2-pole socket housing SA, Deutsch	2.2C
-XE2	2-pole socket housing SA, Deutsch	2.3C
-XE3	2-pole socket housing SA, Deutsch	2.4C
-XE4	2-pole socket housing SA, Deutsch	2.6C
-XE5		3.6D
-XT	CEE 5-pin connector, 63 A	1.2G

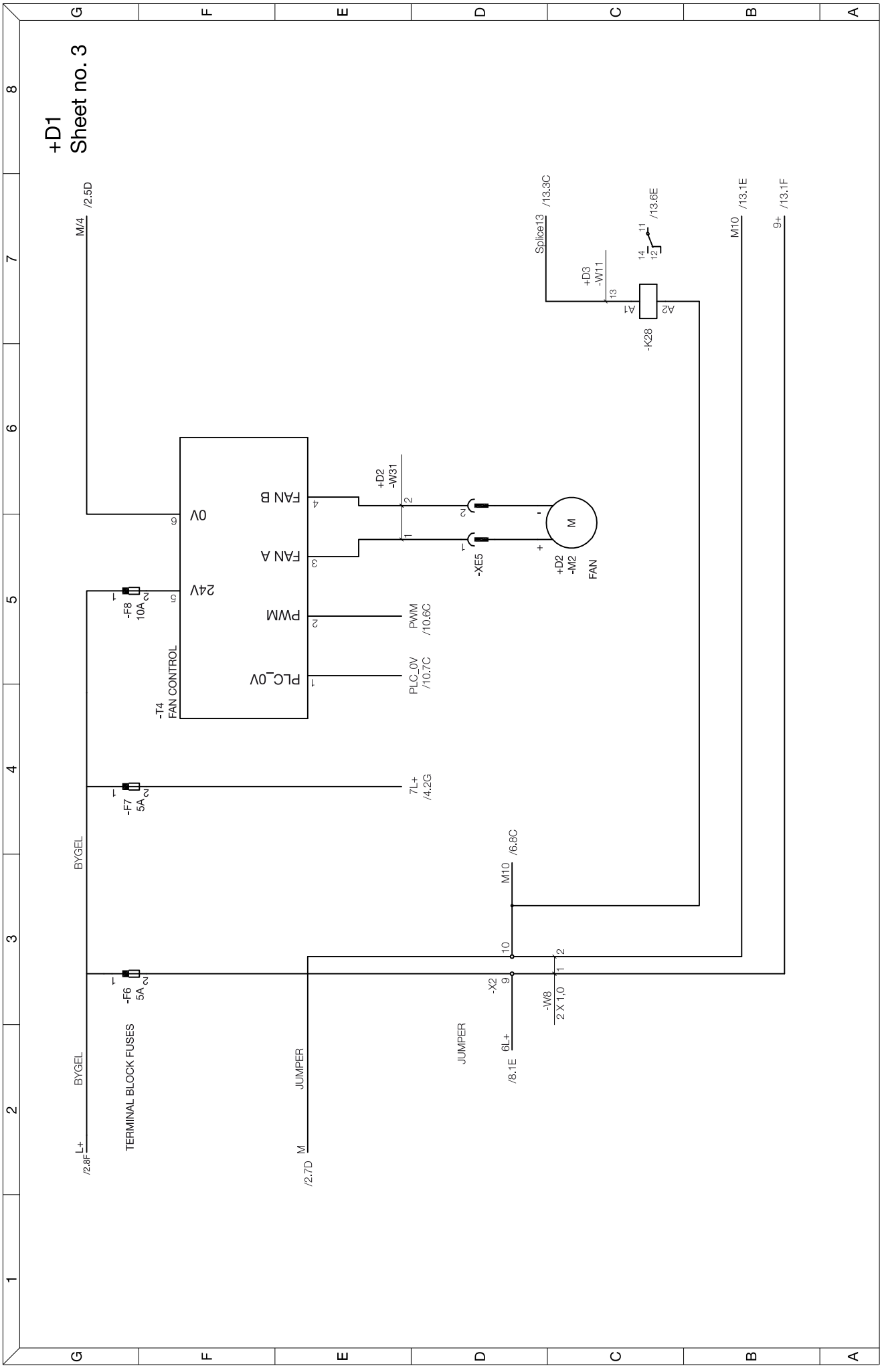
Des. +D2	Description	Sheet ref.
-B3	Pressure switch, 2 bar	8.8D
-E1	LED lighting	2.2B
-E3	LED lighting	2.3B
-E3	LED warning light	2.4B
-M1	Electric motor, 22 kW	1.2B
-M2	Fan	3.6C
-M3	Filler pump	2.6C
-P1	Hooter	2.5B
-P2	Pressure sensor	12.5C
-QV1	Dozer blade front	7.2C
-QV4	Dozer blade rea	7.4C
-QV5	Hydraulic valve, increased hydraulic pressure	10.7C
-QV6	Hydraulic valve, control of grease pump	7.7C
-QV7	Hydraulic valve, C1	9.2C
-QV8	Hydraulic valve, C2	9.4B
-QV9	Hydraulic valve, C3	9.5C
-QV10	Hydraulic valve, C4	9.7C
-QV11	Hydraulic valve, C5	10.2C
-QV12	Hydraulic valve, tool attachment (option)	10.3C
-QV13	Tool	10.5C
-QV15	Belt operation, right	11.2C
-QV16	Belt operation, left	11.4C
-QV17	Dozer blade	11.5C
-QV18	Rotation	11.7C
-QV19	Hydraulic valve, grease pump	7.6C
-S3_2	Emergency stop button ∅ 40 mm, red	4.4G
	Contact block 2 NC	
-T3	Temperature sensor, hydraulic oil	12.3C
-W12	Valve contact 2+earth 3X0.75 4	7.2D
-W13	Valve contact 2+earth 3X0.75 4	7.3D
-W14	Valve contact 2+earth 3X0.75 4	
-W15	Valve contact 2+earth 3X0.75 4	7.4D
-W16	Valve contact 2+earth 3X0.75 4	10.7D
-W17	Valve contact 2+earth 3X0.75 4	7.7D
-W18	2xAWG18 OZ603	8.7F
-W19	Valve contact 3+earth 4X0.75 4	9.2D
-W20	Valve contact 3+earth 4X0.75 4	9.4D
-W21	Valve contact 3+earth 4X0.75 4	9.5D

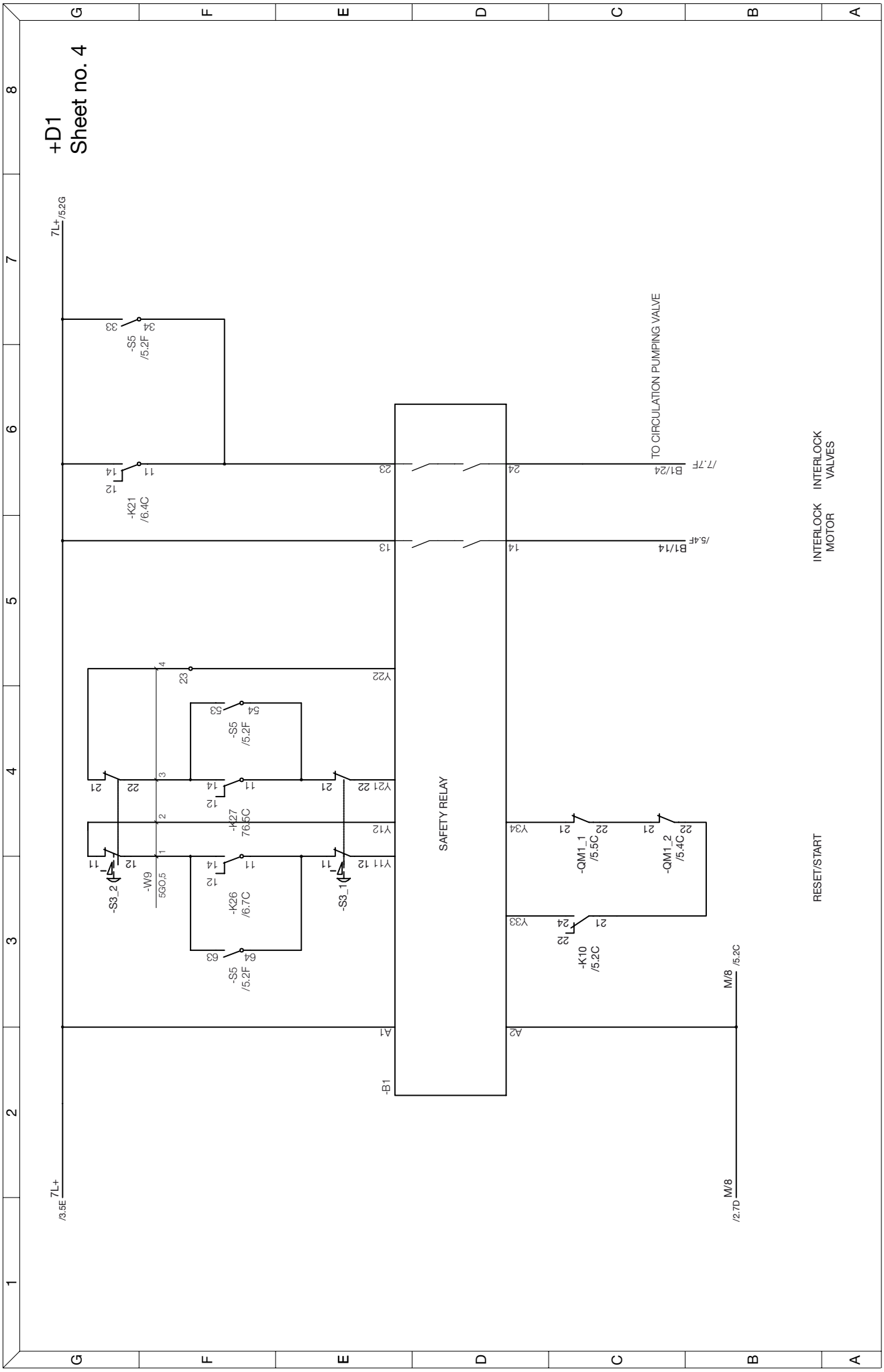
Des. +D2	Description	Sheet ref.
-W22	Valve contact 3+earth 4X0.75 4	9.7D
-W23	Valve contact 3+earth 4X0.75 4	10.2D
-W24	Valve contact 3+earth 4X0.75 4	10.3D
-W25	Valve contact 3+earth 4X0.75 4	10.5D
-W26	Valve contact 3+earth 4X0.75 4	10.6D
-W27	Valve contact 3+earth 4X0.75 4	11.2D
-W28	Valve contact 3+earth 4X0.75 4	11.4D
-W29	Valve contact 3+earth 4X0.75 4	11.5D
-W30	Valve contact 3+earth 4X0.75 4	11.7D
-W31	2xAWG16 OZ603	3.6D
-W40	Valve contact 2+earth 3X0.75 4	7.6D
-W44	2xAWG18 OZ603	8.8F
-W45	7xAWG22, Supertronic 310-PVC	13.2C
-W46	8-pole M12 with cable 4X0.34, l=6	13.8C

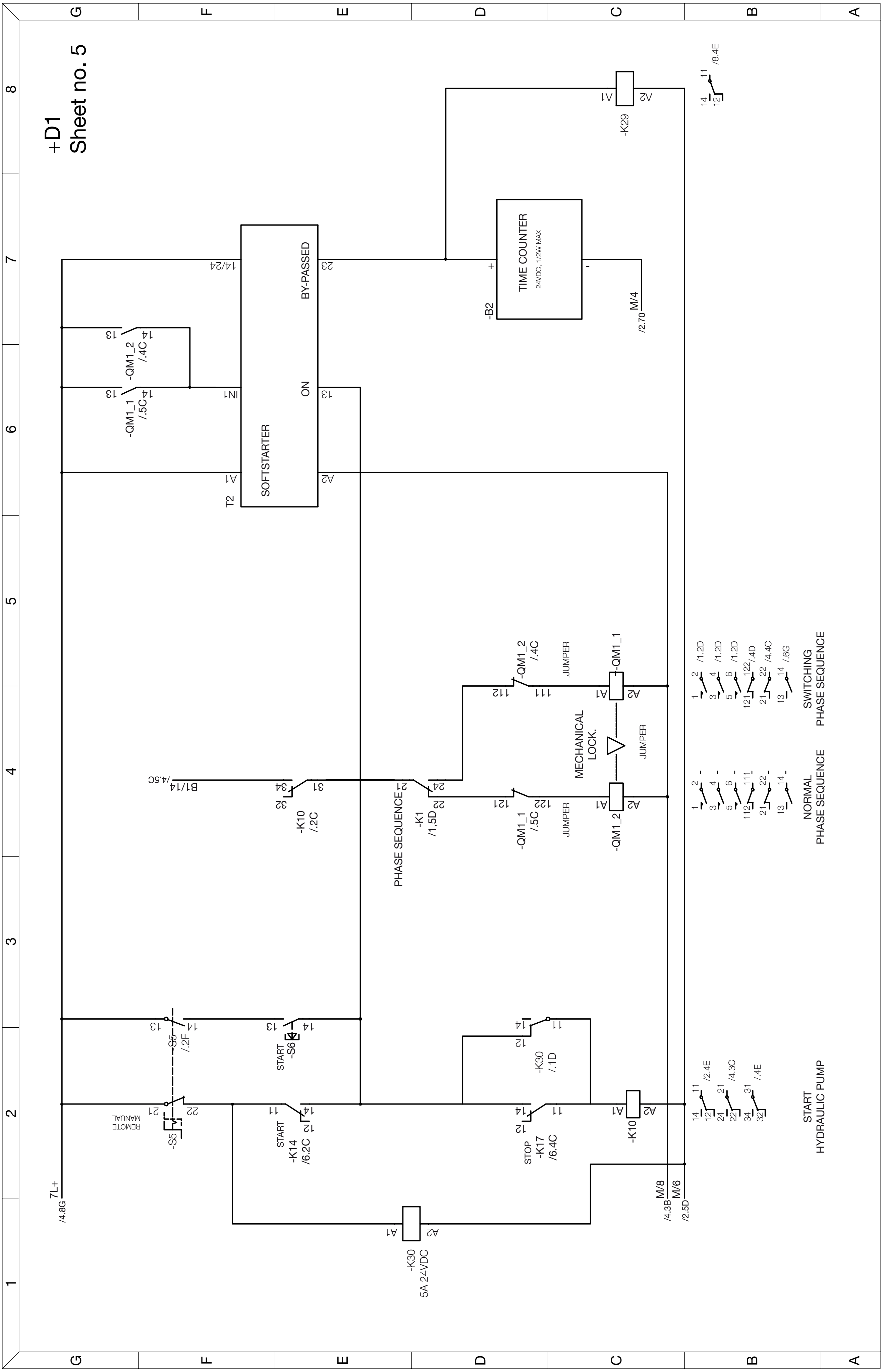
Des. +D3	Description	Sheet ref.
-K22/ XM2	8-pole socket housing, AMPSEAL	13.4C
-K23/ XM4	8-pole socket housing, AMPSEAL	13.5C
-K25/ XMS	6-pole female connector (crimp)	13.2C
-K22	Control module 2038	13.3B
-K23	Control module 2024	13.5B
-K24	Radio module	13.7B
-K25	Terminal unit	13.2B
-W38	4-pole M12 female connector, unshielded, L = 1.5 m	12.4E
-W39	4-pole M12 female connector, unshielded, L = 1.5 m	12.5E
-K22/ XM1	23-pole socket housing, AMPSEAL, grey	9.2E
-K23/ XM1	23-pole socket housing, AMPSEAL, grey	6.1F
-K23/ XM2	23-pole socket housing, AMPSEAL, blue	6.4F
-K23/ XM3	23-pole socket housing, AMPSEAL, black	8.2F

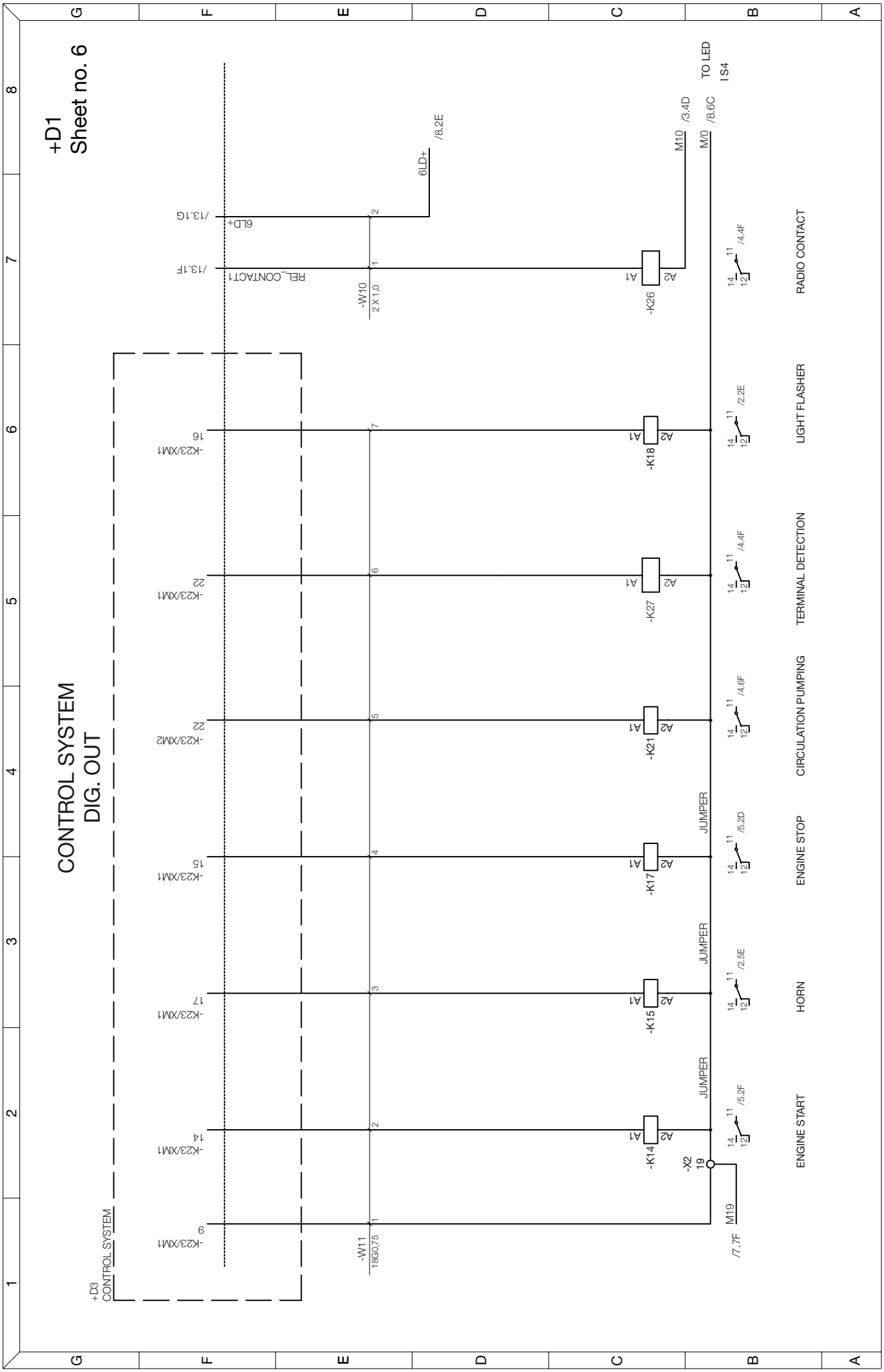

CONNECTOR INPUT SUPPLY
CEE SOCKET
63A, 400VAC
+D1
Sheet no. 1
-XT
-W1
5G8
L1 L2 L3 N PE
GND TO TOP PANEL
GND TO HATCH
AWG 10 YE/GN
AWG 10 YE/GN
-Q1
N PE
PE
AWG 14 YE/GN
AWG 14 YE/GN
BK BK BK
AWG 8 AWG 8 AWG 8
AWG 14 BK
AWG 14 BK
AWG 14 BK
-F1
4A
AWG 14 BK
AWG 14 BK
AWG 14 BK
-QM1_1
/5.5C
-QM1_2
/5.4C
-T1
L1 L2 L3 PE
400 VAC
24 VDC
-K1
L1 L2 L3
11 14
12
21 24
22
sh. 010/2B
sh. 011/5D
PHASE BREAK
PHASE SEQUENCE ERROR
T2
L1 L2 L3
SOFTSTARTER
T1 T2 T3
-W2
5G8
U V W
-M1
M
3~
PE
+D2
-M1
2 1
THERM. SWITCH+
/8.7C
THERM. SWITCH -
/8.7C
/ .2B
THERMAL SWITCH
D-BL +
D-BL -
L+ AWG 12
M AWG 12
/2.1G
/2.1G
24 VDC
D1: ELECTRIC CABINET
D2: PIVOTING PLATFORM
D3: CONTROL SYSTEM
UNLESS OTHERWISE
STATED AWG 20 BL
IS USED
Electric Circuit Diagram

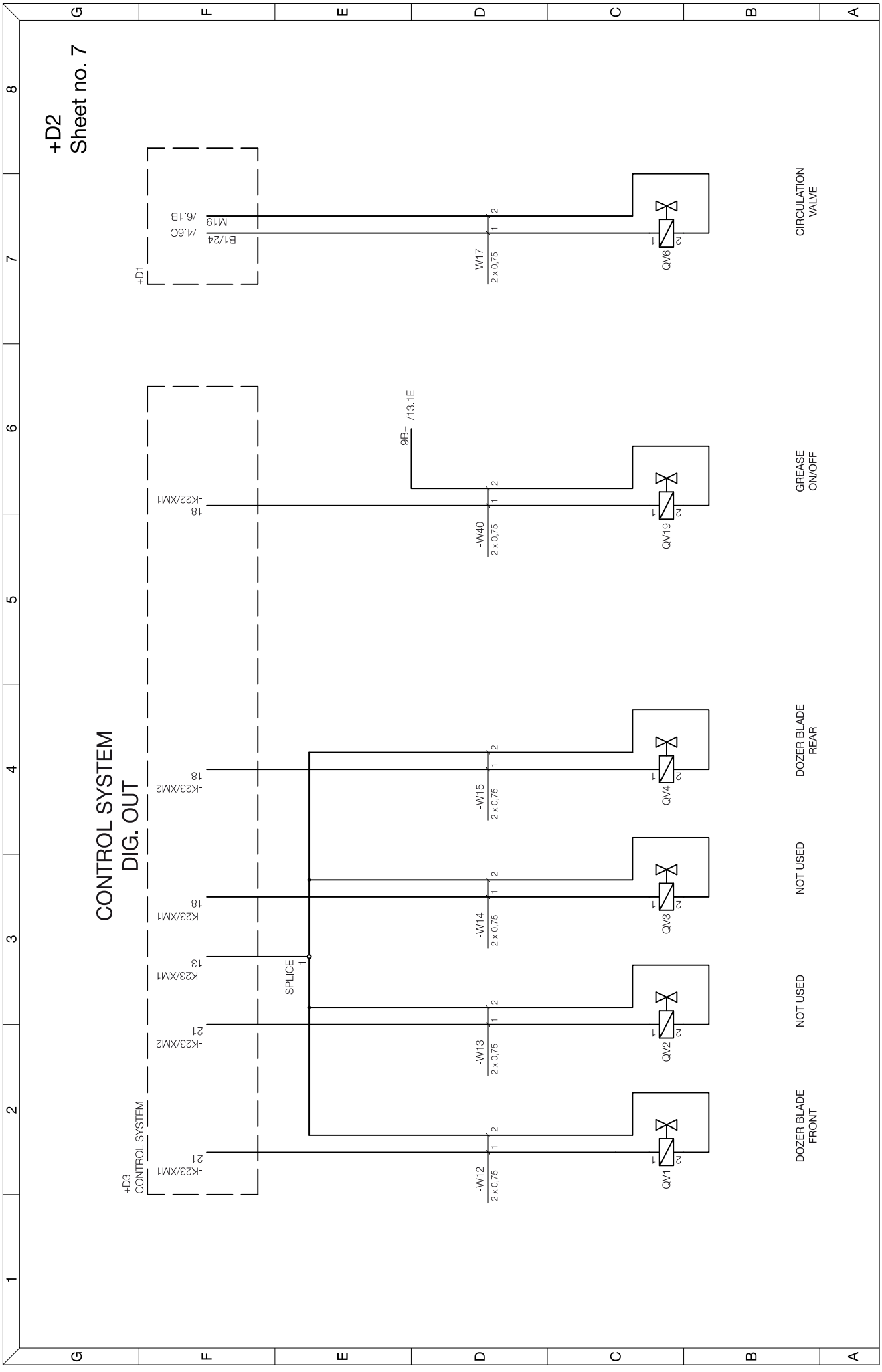

+D1
Sheet no. 2
L+ /3.2G
JUMPER
-F5 10A
AWG 16 D-BL
-S2
-H2
M/4 /5.7C
M/4 /.5C
M /3.2E
M/8 /4.2B
-W7 2 X 1,5
-XE4
-M3
FILLING PUMP
-P1
M/6 /5.2C
-W6 2 X 1,0
HORN
-F4 5A
-K15 /6.3C
-K10 /5.2C
M/4 /3.8G
M/4 /.6D
-W5 2 X 1,0
-XE3
-E3
WARNING LIGHT BACK
-F3 5A
-K18 /6.6C
-W4 2 X 1,0
-XE2
-E2
WORKING LIGHT LEFT
-W3 2 X 1,0
-XE1
-E1
WORKING LIGHT RIGHT
+D1 -X2
TERMINAL BLOCK
TERMINAL BLOCK FUSES
L+ AWG 12 D-BL /1.4B
M AWG 12 D-BL /1.4B

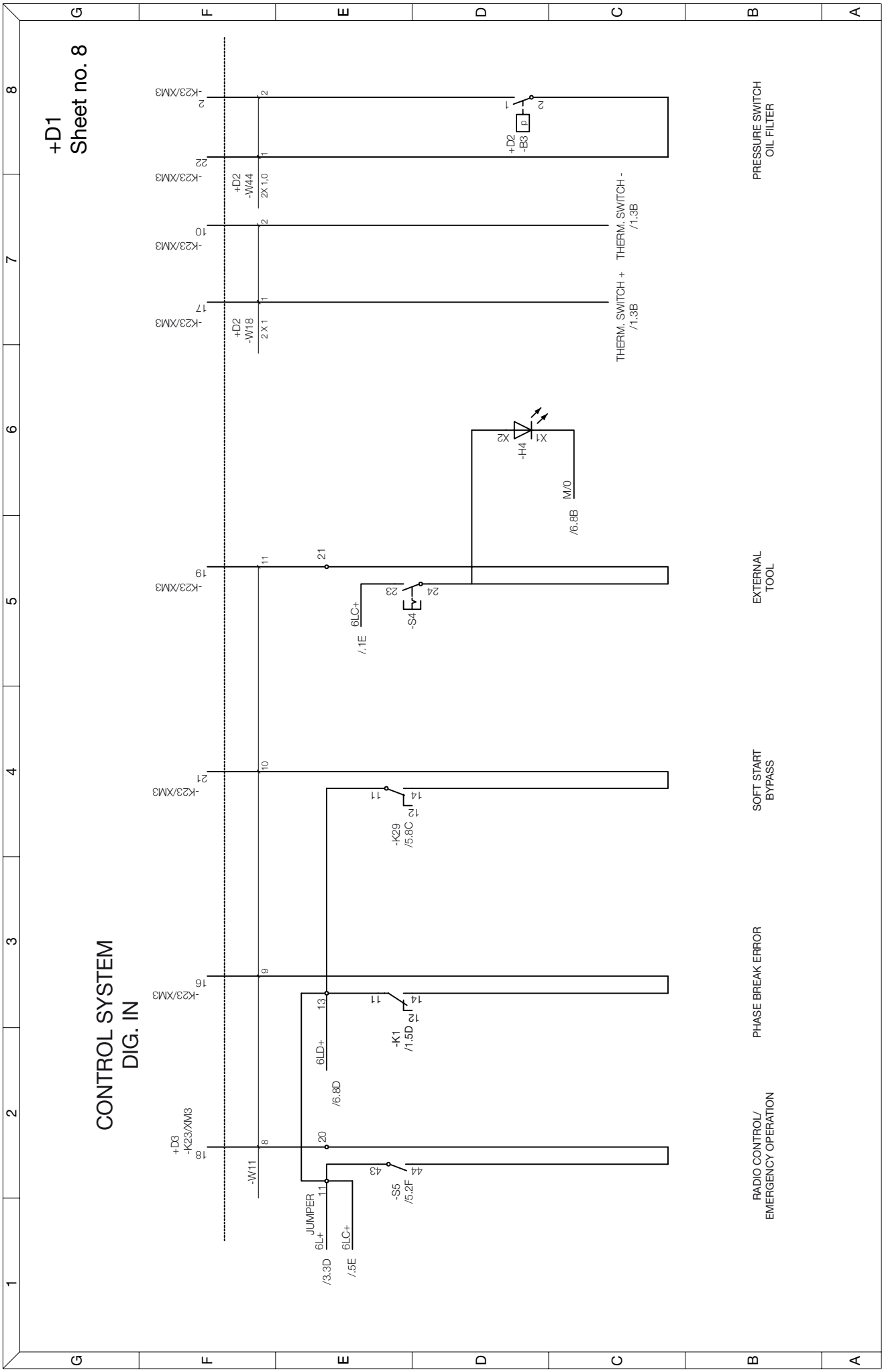

+D1
Sheet no. 3
M/4 /2.5D
Splice13 /13.3C
M10 /13.1E
9+ /13.1F
+D3
-W11
13
14
11
12
/13.6E
A1
A2
-K28
-T4
FAN CONTROL
0V
24V
PWM
PLC_0V
FAN B
FAN A
-F8
10A
-F7
5A
-F6
5A
PWM
/10.6C
PLC_0V
/10.7C
7L+
/4.2G
+D2
-W31
-XE5
M
+D2
-M2
FAN
M10 /6.8C
10
-X2
9
6L+
/8.1E
-W8
2 X 1,0
JUMPER
JUMPER
BYGEL
BYGEL
L+
/2.8F
TERMINAL BLOCK FUSES
M
/2.7D

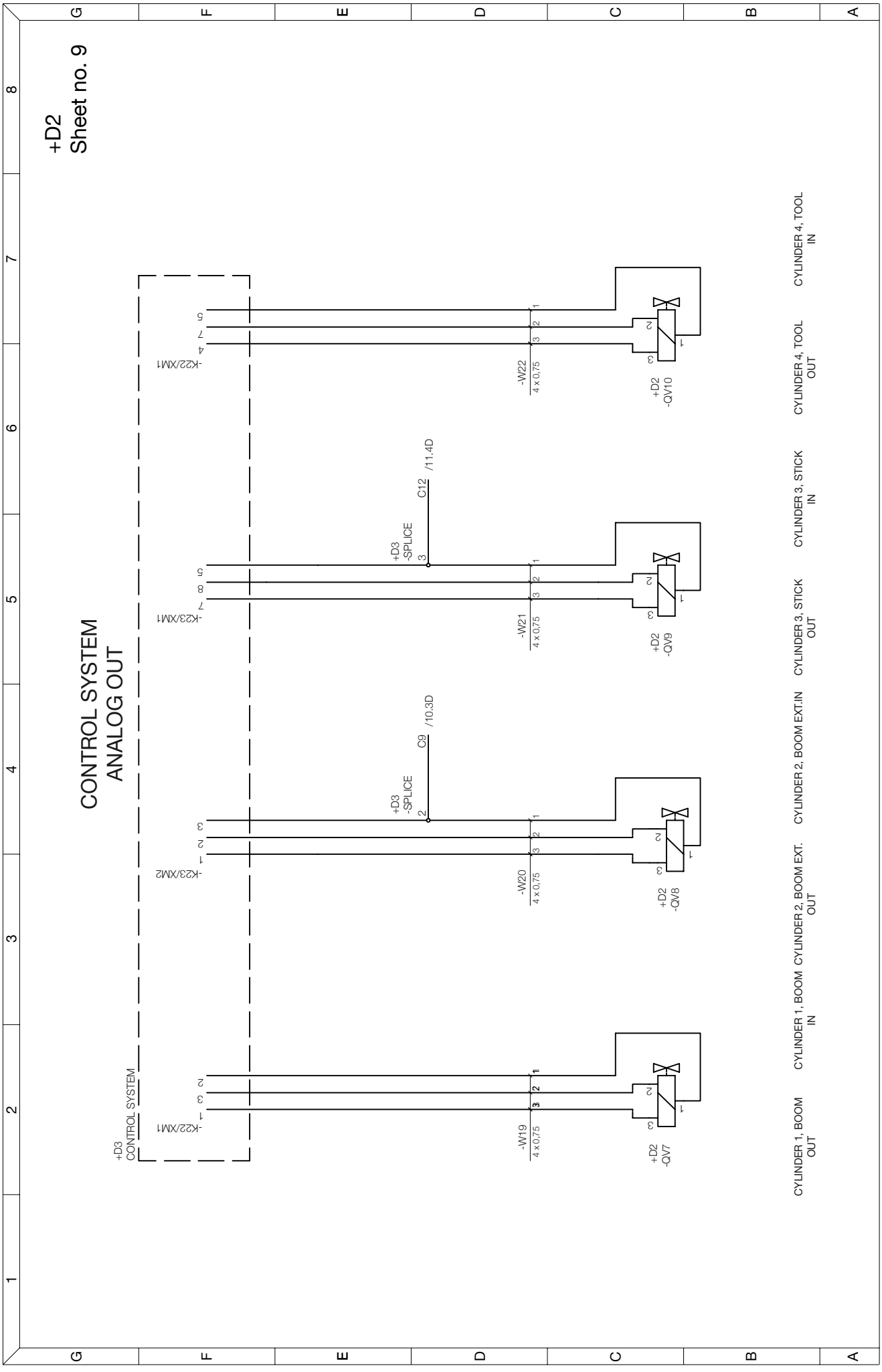

+D1
Sheet no. 4
7L+ /5.2G
7L+ /3.5E
-S5 /5.2F
-K21 /6.4C
TO CIRCULATION PUMPING VALVE
B1/24 /7.7F
B1/14 /5.4F
INTERLOCK MOTOR
INTERLOCK VALVES
SAFETY RELAY
-B1
-K27 76.5C
-K26 /6.7C
-W9
5G0.5
-S3_2
-S3_1
-QM1_1 /5.5C
-QM1_2 /5.4C
-K10 /5.2C
RESET/START
M/8 /5.2C
M/8 /2.7D

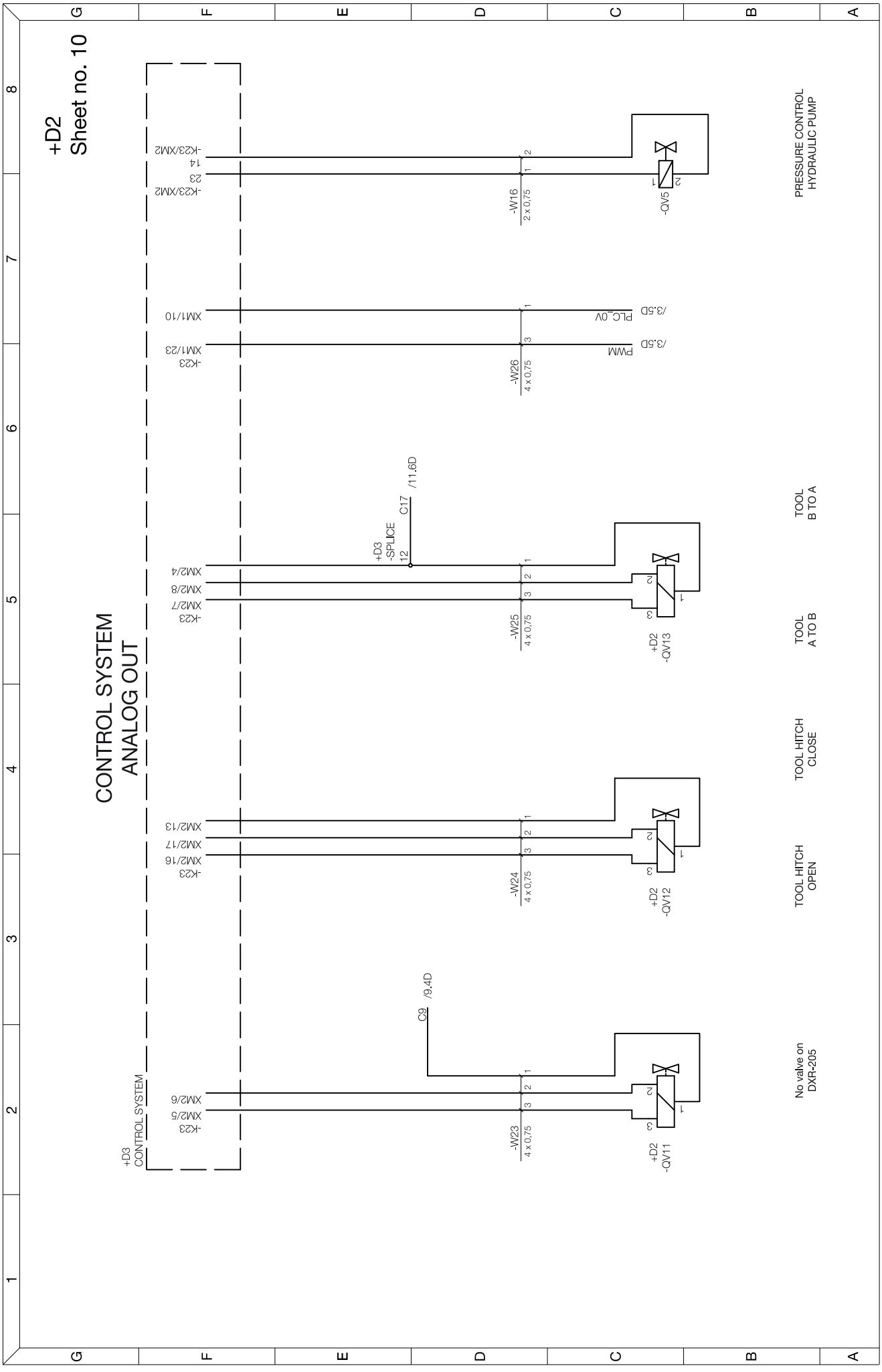

+D1
Sheet no. 5
SOFTSTARTER
BY-PASSED
ON
IN1
14/24
23
13
A1
A2
T2
TIME COUNTER
24VDC, 1/2W MAX
-B2
M/4
/2.70
-K29
-QM1_1
/.5C
-QM1_2
/.4C
MECHANICAL
LOCK.
JUMPER
PHASE SEQUENCE
-K1
/1,5D
-K10
/.2C
B1/14
/4.5C
NORMAL
PHASE SEQUENCE
SWITCHING
PHASE SEQUENCE
START
HYDRAULIC PUMP
-S5
/.2F
REMOTE
MANUAL
START
-S6
START
-K14
/6.2C
STOP
-K17
/6.4C
-K30
/.1D
-K10
-K30
5A 24VDC
7L+
/4.8G
M/8
/4.3B
M/6
/2.5D
/8.4E
/2.4E
/4.3C
/.4E
/1.2D
/.4D
/4.4C
/.6G


+D1
Sheet no. 6
CONTROL SYSTEM
DIG. OUT
+D3
CONTROL_SYSTEM
-K23/XM1
9
-K23/XM1
14
-K23/XM1
17
-K23/XM1
15
-K23/XM2
22
-K23/XM1
22
-K23/XM1
16
-W11
18G0,75
-W10
2X1,0
6LD+
/13.1G
REL_CONTACT1
/13.1F
6LD+
/8.2E
-K14
-K15
-K17
-K21
-K27
-K18
-K26
-X2
19
M19
/7.7F
JUMPER
JUMPER
JUMPER
M/0
M10
/3.4D
/8.6C
TO LED
I S4
ENGINE START
/5.2F
HORN
/2.5E
ENGINE STOP
/5.2D
CIRCULATION PUMPING
/4.6F
TERMINAL DETECTION
/4.4F
LIGHT FLASHER
/2.2E
RADIO CONTACT
/4.4F


+D2
Sheet no. 7
CONTROL SYSTEM
DIG. OUT
+D3
CONTROL SYSTEM
-K23/XM1
21
-K23/XM2
21
-K23/XM1
13
-K23/XM2
18
-K23/XM1
18
-K22/XM1
18
+D1
B1/24
M19
/4.6C
/6.1B
9B+
/13.1E
-SPLICE
1
-W12
2 x 0,75
-W13
2 x 0,75
-W14
2 x 0,75
-W15
2 x 0,75
-W40
2 x 0,75
-W17
2 x 0,75
-QV1
-QV2
-QV3
-QV4
-QV19
-QV6
DOZER BLADE
FRONT
NOT USED
NOT USED
DOZER BLADE
REAR
GREASE
ON/OFF
CIRCULATION
VALVE

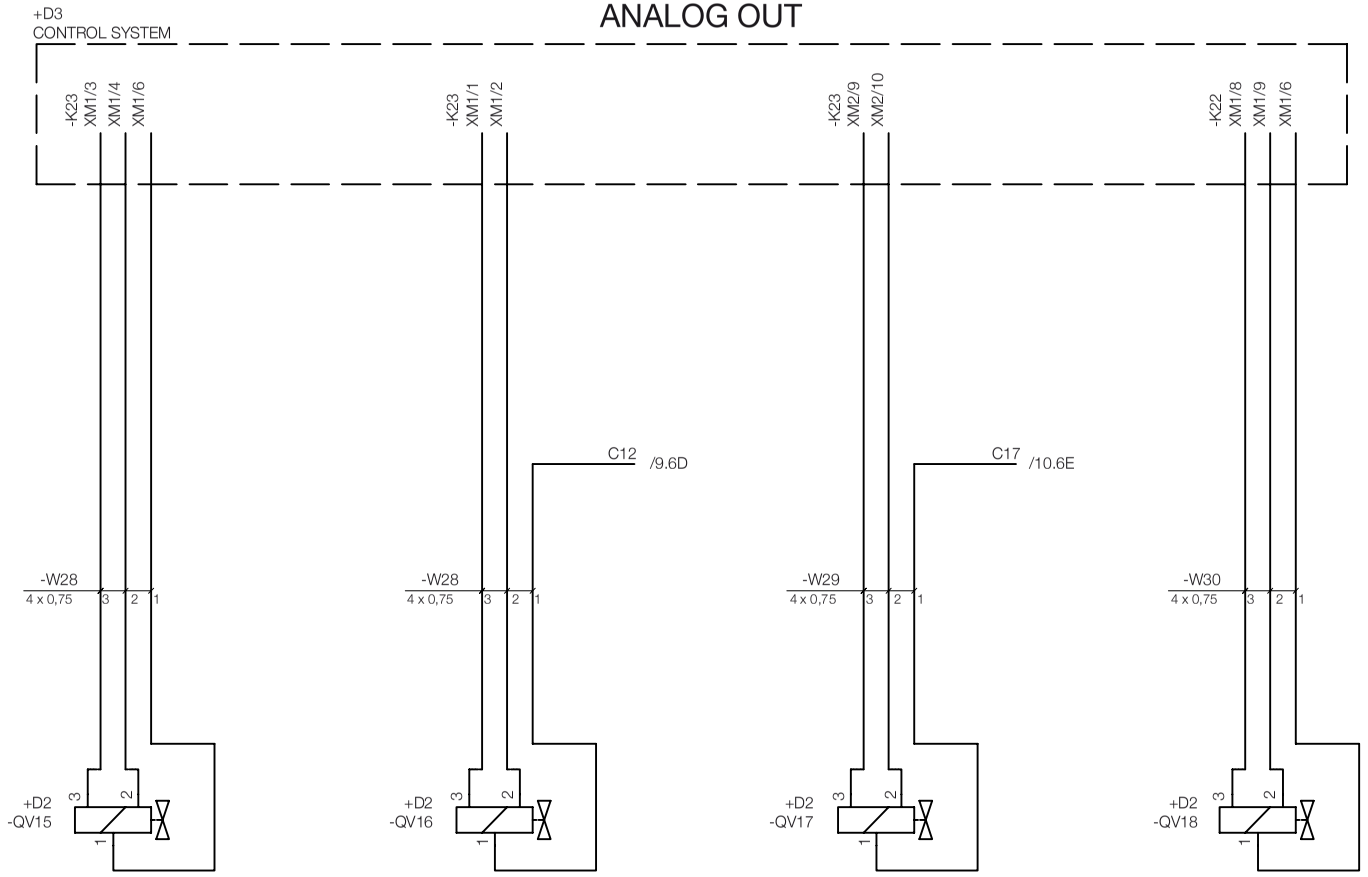

+D1
Sheet no. 8
CONTROL SYSTEM
DIG. IN
-K23/XM3
+D2
-W44
2X1,0
+D2
-W18
2X1
-W11
+D3
-K23/XM3
+D2
-B3
p
PRESSURE SWITCH
OIL FILTER
THERM. SWITCH -
/1.3B
THERM. SWITCH +
/1.3B
-H4
M/0
/6.8B
EXTERNAL
TOOL
6LC+
/.1E
-S4
SOFT START
BYPASS
-K29
/5.8C
PHASE BREAK ERROR
-K1
/1.5D
6LD+
/6.8D
RADIO CONTROL/
EMERGENCY OPERATION
-S5
/5.2F
JUMPER
6L+
/3.3D
6LC+
/.5E


+D2
Sheet no. 9
CONTROL SYSTEM
ANALOG OUT
+D3
CONTROL SYSTEM
-K22/XM1
-K23/XM2
-K23/XM1
+D3
-SPLICE
C9
/10.3D
C12
/11.4D
-W19
4 x 0,75
-W20
4 x 0,75
-W21
4 x 0,75
-W22
4 x 0,75
+D2
-QV7
+D2
-QV8
+D2
-QV9
+D2
-QV10
CYLINDER 1, BOOM OUT
CYLINDER 1, BOOM IN
CYLINDER 2, BOOM EXT. OUT
CYLINDER 2, BOOM EXT.IN
CYLINDER 3, STICK OUT
CYLINDER 3, STICK IN
CYLINDER 4, TOOL OUT
CYLINDER 4, TOOL IN


+D2
Sheet no. 10
CONTROL SYSTEM
ANALOG OUT
+D3
CONTROL SYSTEM
-K23/XM2
14
23
-W16
2 x 0,75
-QV5
PRESSURE CONTROL
HYDRAULIC PUMP
XM1/10
XM1/23
-K23
/3.5D
PLC_0V
PWM
-W26
4 x 0,75
C17
/11.6D
+D3
-SPLICE
12
XM2/4
XM2/8
XM2/7
-K23
-W25
4 x 0,75
+D2
-QV13
TOOL
B TO A
TOOL
A TO B
XM2/13
XM2/17
XM2/16
-K23
-W24
4 x 0,75
+D2
-QV12
TOOL HITCH
CLOSE
TOOL HITCH
OPEN
C9
/9.4D
XM2/6
XM2/5
-K23
-W23
4 x 0,75
+D2
-QV11
No valve on
DXR-205

+D2
Sheet no. 11

CONTROL SYSTEM
ANALOG OUT

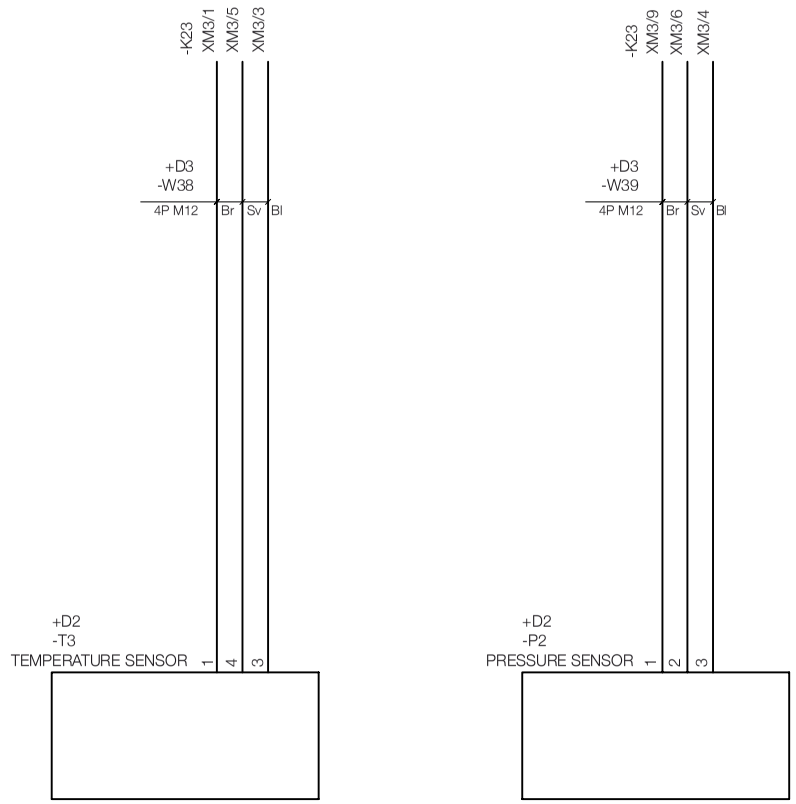


TRACK BELT RIGHT FORWARD	TRACK BELT RIGHT BAKCWARD	TRACK BELT LEFT FORWARD	TRACK BELT LEFT BACKWARD	OUTRIGGER DOWN	OUTRIGGER UP	ROTATION CLOCKWISE	ROTATION COUNTER-CLOCKWISE

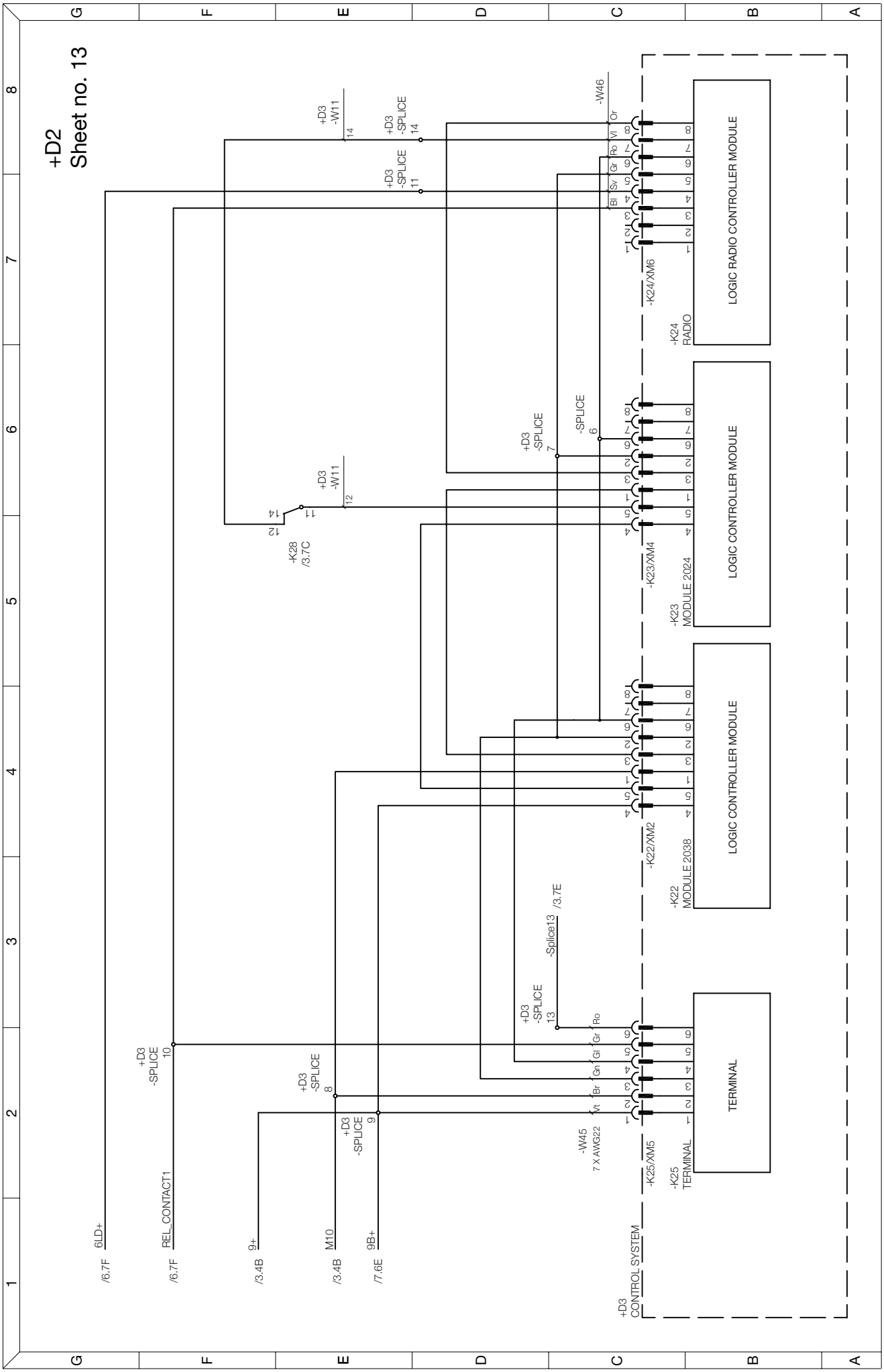
Electric Circuit Diagram

+D3
Sheet no. 12

CONTROL SYSTEM
ANALOG IN



Electric Circuit Diagram


+D2
Sheet no. 13
+D3
CONTROL SYSTEM
-K25
TERMINAL
-K25/XM5
TERMINAL
-K22
MODULE 2038
-K22/XM2
LOGIC CONTROLLER MODULE
-K23
MODULE 2024
-K23/XM4
LOGIC CONTROLLER MODULE
-K24
RADIO
-K24/XM6
LOGIC RADIO CONTROLLER MODULE
-W45
7 X AWG22
-W46
-K28
/3.7C
-Splice13
/3.7E
6LD+
/6.7F
REL_CONTACT1
/6.7F
9+
/3.4B
M10
/3.4B
9B+
/7.6E

Hydraulic Circuit Diagram