Control panel (Table of contents)

Sheet size	Number	Title	Printable
ANSI A (Letter)	1	Table of Contents	True
ANSI A (Letter)	2	Panel layout	True
ANSI A (Letter)	3	Panel cut-out	True
ANSI A (Letter)	4	Customer feed	True
ANSI A (Letter)	5	Panel infeed	True
ANSI A (Letter)	6	120 VAC	True
ANSI A (Letter)	7	24 VDC Distribution	True
ANSI A (Letter)	8	BOM	True
ANSI A (Letter)	9	Wire list	True

Rev.	Date	Description	Appd. by	Status
A				Open

Prj: Control panel

Sheet nb. 1 of 9

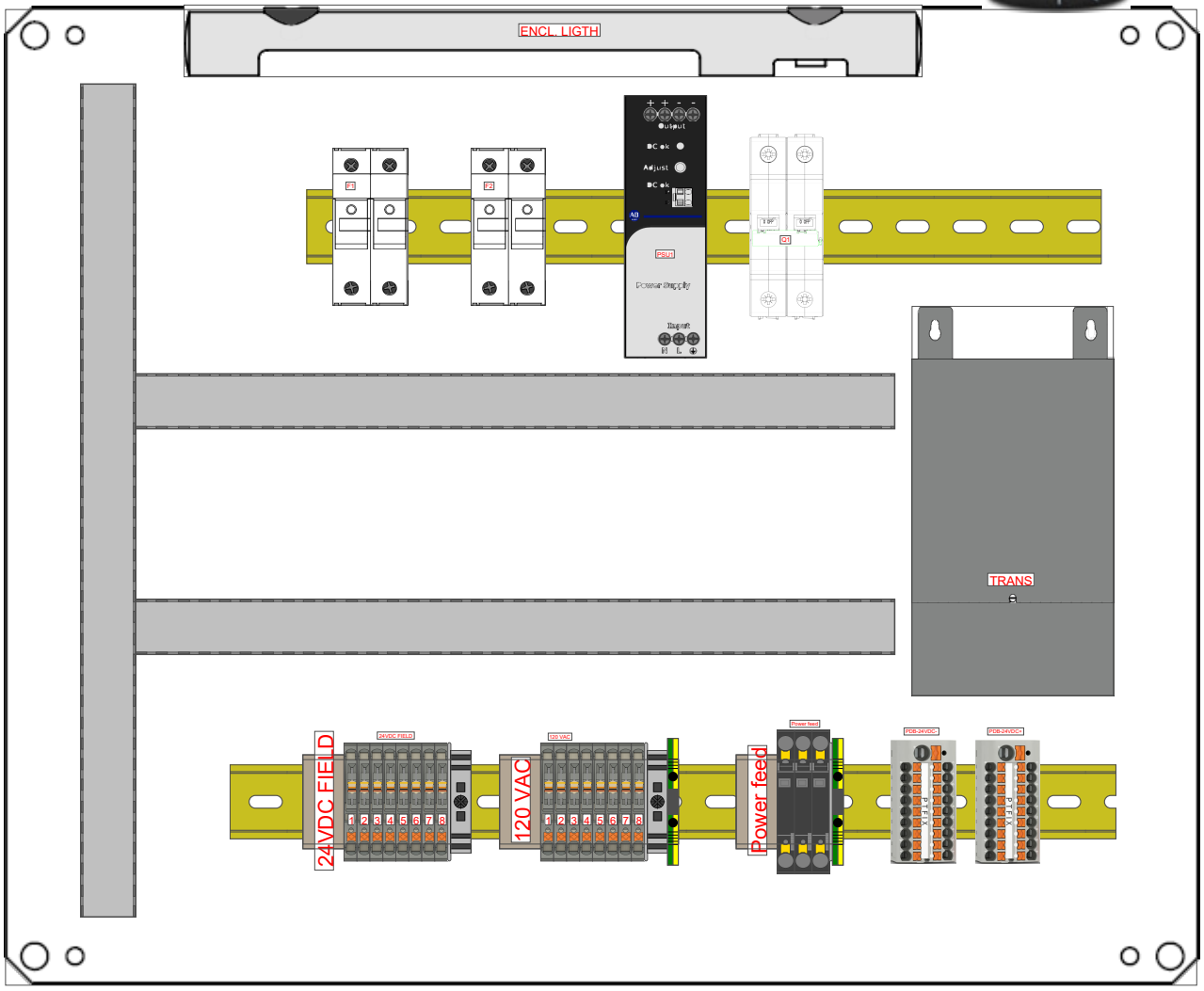
Prj nb: 525

Desg. by: VL

Title: Table of Contents

Boreal Solutions

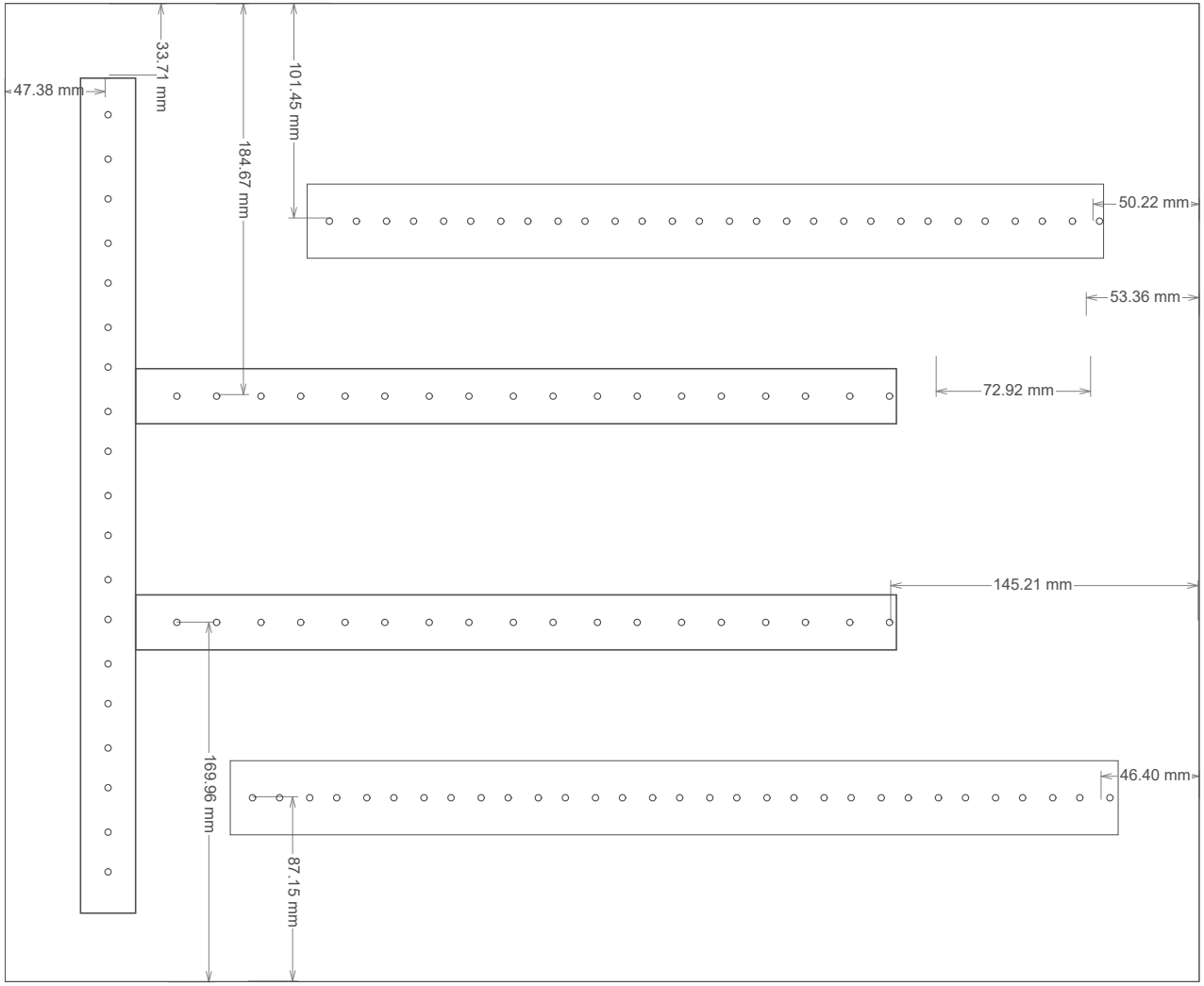




Rev.	Date	Description	Appd. by	Status
A				Open

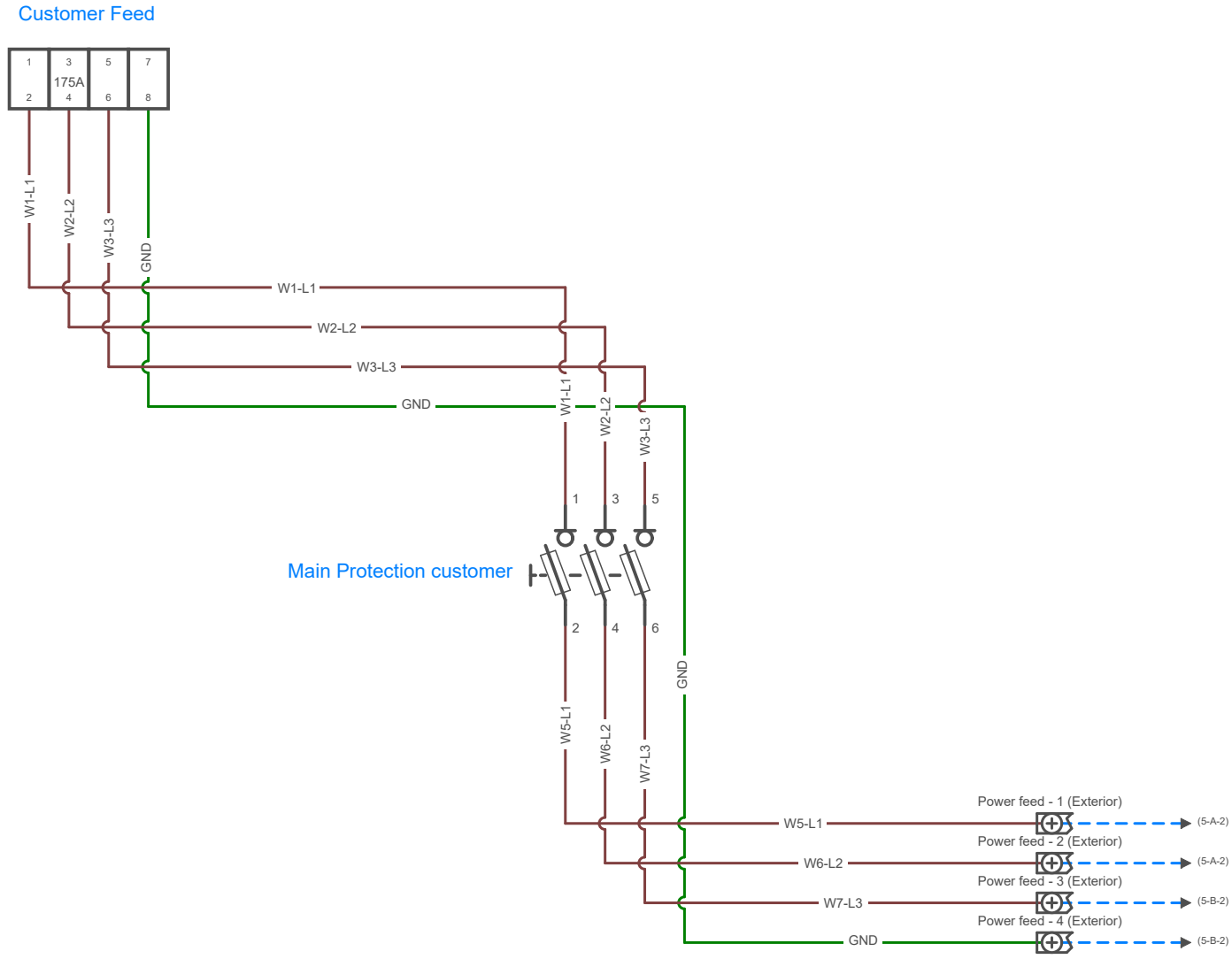
Prj: Control panel	**Sheet nb.** 2 of 9
Prj nb: 525	**Desg. by:** VL
Title: Panel layout	

Boreal Solutions



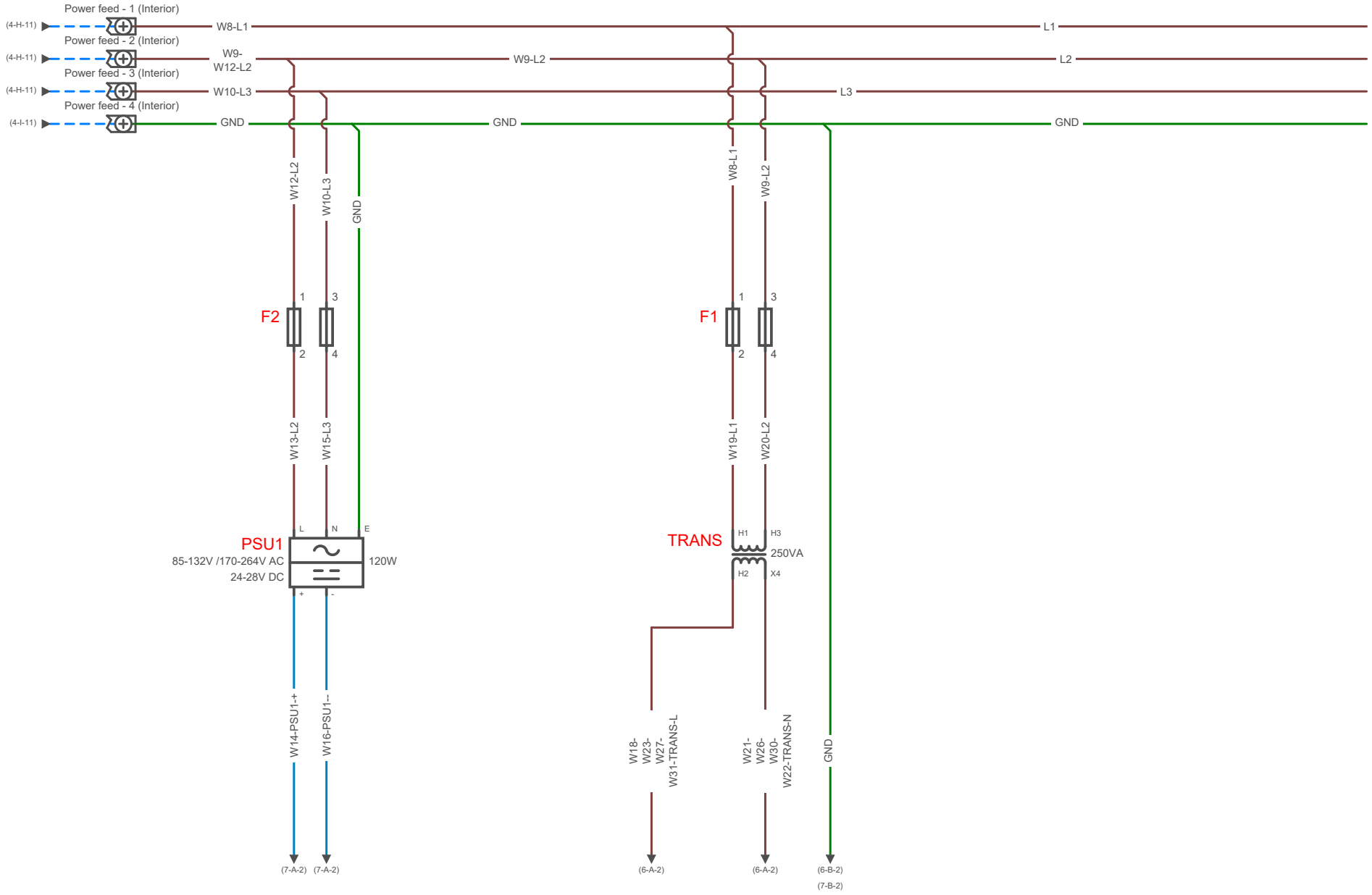
Rev.	Date	Description	Appd. by	Status	Prj: Control panel	Sheet nb. 3 of 9
					Prj nb: 525	Desg. by: VL
A				Open	Title: Panel cut-out	

Boreal Solutions



Rev.	Date	Description	Appd. by	Status	Prj: Control panel	Sheet nb. 4 of 9
					Prj nb: 525	Desg. by: VL
A				Open	Title: Customer feed	

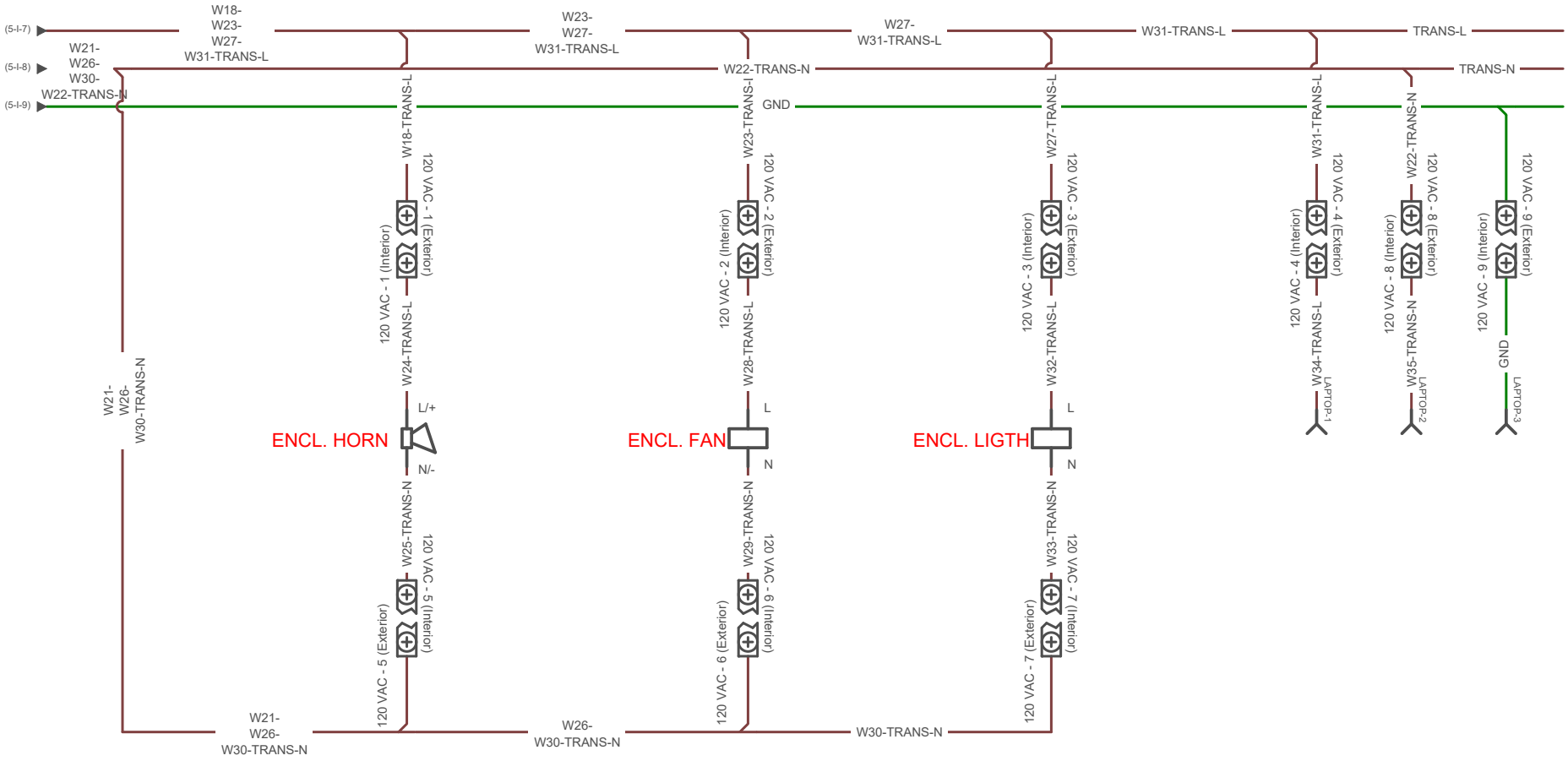
Boreal Solutions

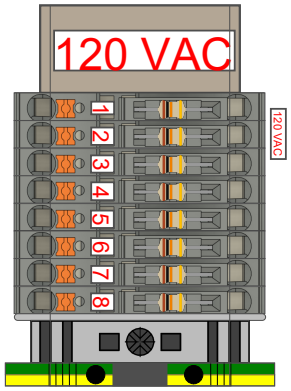


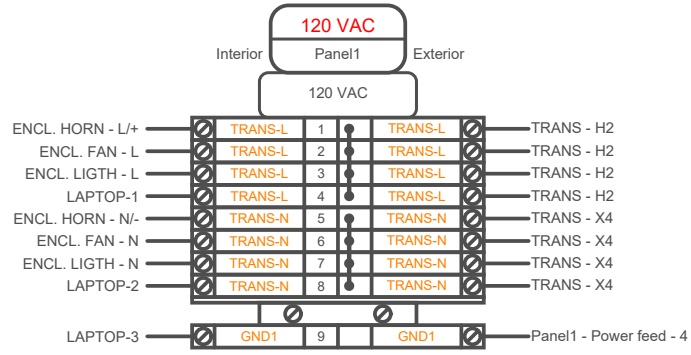
Rev.	Date	Description	Appd. by	Status
A				Open

Prj: Control panel	**Sheet nb.** 5 of 9
Prj nb: 525	**Desg. by:** VL
Title: Panel infeed	

Boreal Solutions



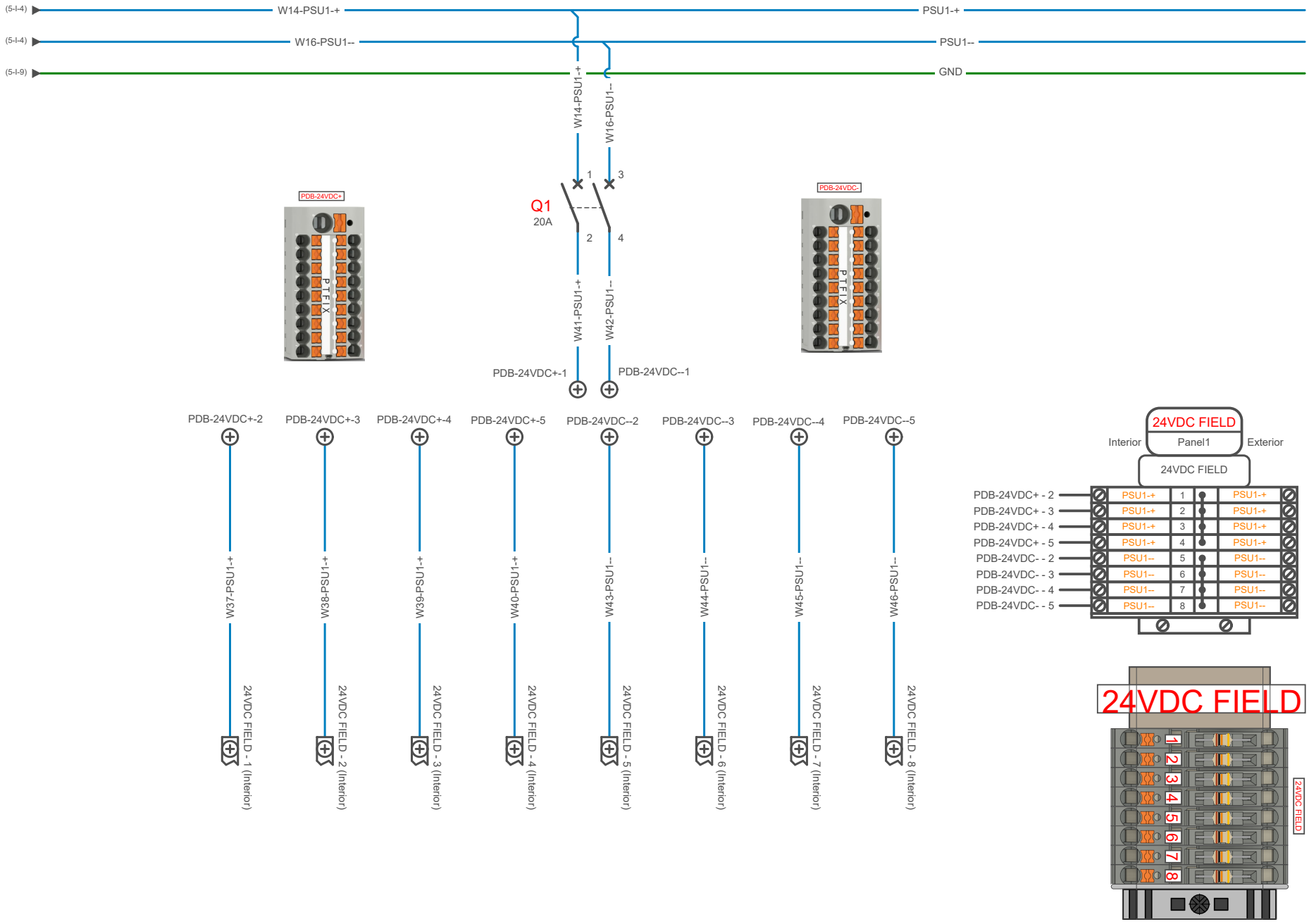




Rev.	Date	Description	Appd. by	Status
A				Open

Prj: Control panel	Sheet nb. 6 of 9
Prj nb: 525	Desg. by: VL
Title: 120 VAC	

Boreal Solutions



Rev.	Date	Description	Appd. by	Status
A				Open

Prj: Control panel	**Sheet nb.** 7 of 9
Prj nb: 525	**Desg. by:** VL
Title: 24 VDC Distribution	

Boreal Solutions

Control panel (BOM)

Part number	Manufacturer	Description	Qty	Where used
1492-JG3	Allen Bradley	Allen-Bradley 1492-JG4 Terminal Block, Grounding, 22 - 10AWG, Green/Yellow, 4mm	2	Panel1-120 VAC / Panel1-Power feed
1606-XLB120E	Allen Bradley	1606-XLB120E: Basic Power Supply, 24-28V DC, 120 W, 85-132V /170-264V AC Input Voltage	1	PSU1
16021-4	Eaton	Eaton Bussmann series power distribution block, Flammability Rating UL 94-V0, 600 Vac, 600 Vdc, 175A, Power distribution block, Four-pole, Black, Molded Thermoplastic	1	Customer Feed
018700-30	Stego	Filter Fan Plus FPI enclosure fan assembly, intake, with filter, 3.62 x 3.62in enclosure cutout, NEMA 12, 230 VAC operating voltage, 11 CFM, light gray, (4) 6-position ratchet lever mount, G3 (coarse) filter mat, indoor use only.	1	ENCL. FAN
025401-00	Stego	LED enclosure light, 24-48 VDC operating voltage, on/off switch, magnet mount, 2-pole plug with snap lock, 5W, IP20. Requires power or extension cable.	1	ENCL. LIGTH
3003224	Phoenix Contact	Partition plate - ATP-UK	3	Panel1-24VDC FIELD / Panel1-120 VAC / Panel1-Power feed
3036796	Phoenix Contact	P-CO Component Connector	16	Panel1-24VDC FIELD / Panel1-120 VAC
3211922	Phoenix Contact	PT 4-TG	16	Panel1-24VDC FIELD / Panel1-120 VAC
3270200	Phoenix Contact	Fuse modular terminal block - PTC 4-HESI (5X20)	3	Panel1-Power feed
3273110			2	PDB-24VDC- / PDB-24VDC+
38613010	Socomec	Socomec FUSERBLOC series rotary disconnect switch, fusible, Class J, load break capable, 3-pole, 600 VAC/250 VDC, 100A, 200kA SCCR, panel mount, UL 98 rated, front or side operated, accepts 10 x 10mm size shaft.	1	Main Protection customer
64581055	Werma	Stack light siren element, 70mm diameter, self-adjusting pulse tone(s), 80-100 dB, IP65, 24 VDC.	1	ENCL. HORN
Any 10kOhm 1/2W Resistor	Any	10kOhm 1/2W Resistor	16	Panel1-24VDC FIELD / Panel1-120 VAC
C1FC25XE	Hammond	General purpose transformer, encapsulated, 250 VA, 1-phase, 190/200/208/220/240 or 380/400/416/440/480 VAC primary, 120/240 VAC secondary, 50/60 Hz, NEMA 3R, wall mount.	1	TRANS
Din rail			795.59 mm	Panel1
E/NS 35 N	Phoenix Contact	End stop - E/NS 35 N, 0800886	2	Panel1-24VDC FIELD / Panel1-120 VAC
EHCC2DU	Edison	Modular fuse holder, accepts Class CC fuses, 30A, 600V, 2-pole, 18-4 AWG copper only, integral pressure plate with separate spade connection, 35mm DIN rail mount.	2	F1 / F2
NP2420SSC	Hubbell-Wiegmann	Subpanel, 22.2 x 18.2in, 12 gauge 304 stainless steel. For use with Ultimate series enclosures.	1	Panel1
S202-C20	ABB	Miniature Circuit Breaker - S200 - 2P - C - 20 ampere	1	Q1
SCHT 5	Weidmuller	SCHT, Terminal marker, 44.5 x 19.5 mm, Pitch in mm (P): 5.00 beige	3	Panel1-24VDC FIELD / Panel1-120 VAC / Panel1-Power feed
Standard wire duct			1,113.15 mm	Panel1

Rev.	Date	Description	Appd. by	Status	Prj:	Sheet nb.
					Control panel	8 of 9
					Prj nb: 525	Desg. by: VL
A				Open	Title: BOM	

Boreal Solutions

Control panel (Wire list)

Reference	Net	Source	Source location	Destination	Destination location
W1	L1	Customer Feed-2		Main Protection customer-1	
W2	L2	Customer Feed-4		Main Protection customer-3	
W3	L3	Customer Feed-6		Main Protection customer-5	
W4	GND1	Customer Feed-8		Panel1 - Power feed - 4 (Exterior)	Panel1
W5	L1	Main Protection customer-2		Panel1 - Power feed - 1 (Exterior)	Panel1
W6	L2	Main Protection customer-4		Panel1 - Power feed - 2 (Exterior)	Panel1
W7	L3	Main Protection customer-6		Panel1 - Power feed - 3 (Exterior)	Panel1
W8	L1	Panel1 - Power feed - 1 (Interior)	Panel1	F1-1	Panel1
W9	L2	Panel1 - Power feed - 2 (Interior)	Panel1	F1-3	Panel1
W10	L3	Panel1 - Power feed - 3 (Interior)	Panel1	F2-3	Panel1
W11	GND1	Panel1 - Power feed - 4 (Interior)	Panel1	PSU1-E	Panel1
W12	L2	Panel1 - Power feed - 2 (Interior)	Panel1	F2-1	Panel1
W13	L2	PSU1-L	Panel1	F2-2	Panel1
W14	PSU1-+	PSU1-+	Panel1	Q1-1	Panel1
W15	L3	PSU1-N	Panel1	F2-4	Panel1
W16	PSU1--	PSU1--	Panel1	Q1-3	Panel1
W17	GND1	Panel1 - Power feed - 4 (Interior)	Panel1	120 VAC - 9 (Exterior)	Panel1
W18	TRANS-L	TRANS-H2	Panel1	120 VAC - 1 (Exterior)	Panel1
W19	L1	TRANS-H1	Panel1	F1-2	Panel1
W20	L2	TRANS-H3	Panel1	F1-4	Panel1
W21	TRANS-N	TRANS-X4	Panel1	120 VAC - 5 (Exterior)	Panel1
W22	TRANS-N	TRANS-X4	Panel1	120 VAC - 8 (Exterior)	Panel1
W23	TRANS-L	TRANS-H2	Panel1	120 VAC - 2 (Exterior)	Panel1
W24	TRANS-L	ENCL. HORN-L/+	Panel1	120 VAC - 1 (Interior)	Panel1
W25	TRANS-N	ENCL. HORN-N/-	Panel1	120 VAC - 5 (Interior)	Panel1
W26	TRANS-N	TRANS-X4	Panel1	120 VAC - 6 (Exterior)	Panel1
W27	TRANS-L	TRANS-H2	Panel1	120 VAC - 3 (Exterior)	Panel1
W28	TRANS-L	ENCL. FAN-L	Panel1	120 VAC - 2 (Interior)	Panel1
W29	TRANS-N	120 VAC - 6 (Interior)	Panel1	ENCL. FAN-N	Panel1
W30	TRANS-N	TRANS-X4	Panel1	120 VAC - 7 (Exterior)	Panel1
W31	TRANS-L	TRANS-H2	Panel1	120 VAC - 4 (Exterior)	Panel1
W32	TRANS-L	120 VAC - 3 (Interior)	Panel1	ENCL. LIGTH-L	Panel1
W33	TRANS-N	ENCL. LIGTH-N	Panel1	120 VAC - 7 (Interior)	Panel1
W34	TRANS-L	120 VAC - 4 (Interior)	Panel1	LAPTOP-1	
W35	TRANS-N	120 VAC - 8 (Interior)	Panel1	LAPTOP-2	
W36	GND1	120 VAC - 9 (Interior)	Panel1	LAPTOP-3	
W37	PSU1-+	PDB-24VDC+-2	Panel1	Panel1 - 24VDC FIELD - 1 (Interior)	Panel1
W38	PSU1-+	PDB-24VDC+-3	Panel1	Panel1 - 24VDC FIELD - 2 (Interior)	Panel1
W39	PSU1-+	PDB-24VDC+-4	Panel1	Panel1 - 24VDC FIELD - 3 (Interior)	Panel1
W40	PSU1-+	PDB-24VDC+-5	Panel1	Panel1 - 24VDC FIELD - 4 (Interior)	Panel1
W41	PSU1-+	Q1-2	Panel1	PDB-24VDC+-1	Panel1
W42	PSU1--	Q1-4	Panel1	PDB-24VDC--1	Panel1
W43	PSU1--	PDB-24VDC--2	Panel1	Panel1 - 24VDC FIELD - 5 (Interior)	Panel1
W44	PSU1--	PDB-24VDC--3	Panel1	Panel1 - 24VDC FIELD - 6 (Interior)	Panel1
W45	PSU1--	PDB-24VDC--4	Panel1	Panel1 - 24VDC FIELD - 7 (Interior)	Panel1
W46	PSU1--	PDB-24VDC--5	Panel1	Panel1 - 24VDC FIELD - 8 (Interior)	Panel1

Rev.	Date	Description	Appd. by	Status
A				Open

Prj: Control panel

Sheet nb. 9 of 9

Prj nb: 525

Desg. by: VL

Title: Wire list

Boreal Solutions