

REACTOR[®] A-25/A-XP1

PLURAL COMPONENT PROPORTIONER

3A1570V

EN

Air operated, electrically heated, plural component proportioner

A-25: For spraying or dispensing 1:1 ratio polyurethane foam formulations and other 1:1 fast setting materials.

A-XP1: For spraying or dispensing 1:1 ratio polyurea formulations and other 1:1 fast setting materials.

Not for use in explosive atmosphere or hazardous locations.

See page 3 for model information, including maximum working pressure and approvals.

This model is field-configurable to the following supply voltages:

200-240 VAC, 1 Phase

200-240 VAC, 3 Phase

350-415 VAC, 3 Phase

A-25:

2000 psi (14 MPa, 138 bar) Maximum Fluid Working Pressure

80 psi (550 kPa, 5.5 bar) Maximum Air Working Pressure

A-XP1:

3500 psi (24 MPa, 241 bar) Maximum Fluid Working Pressure

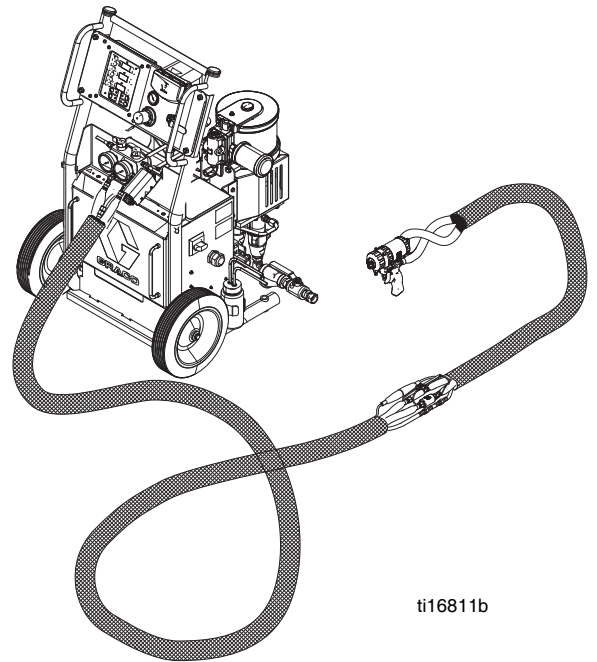
100psi (689 kPa, 6.9 bar) Maximum Air Working Pressure



Important Safety Instructions

Read all warnings and instructions in this manual before using the equipment.

Save these instructions.

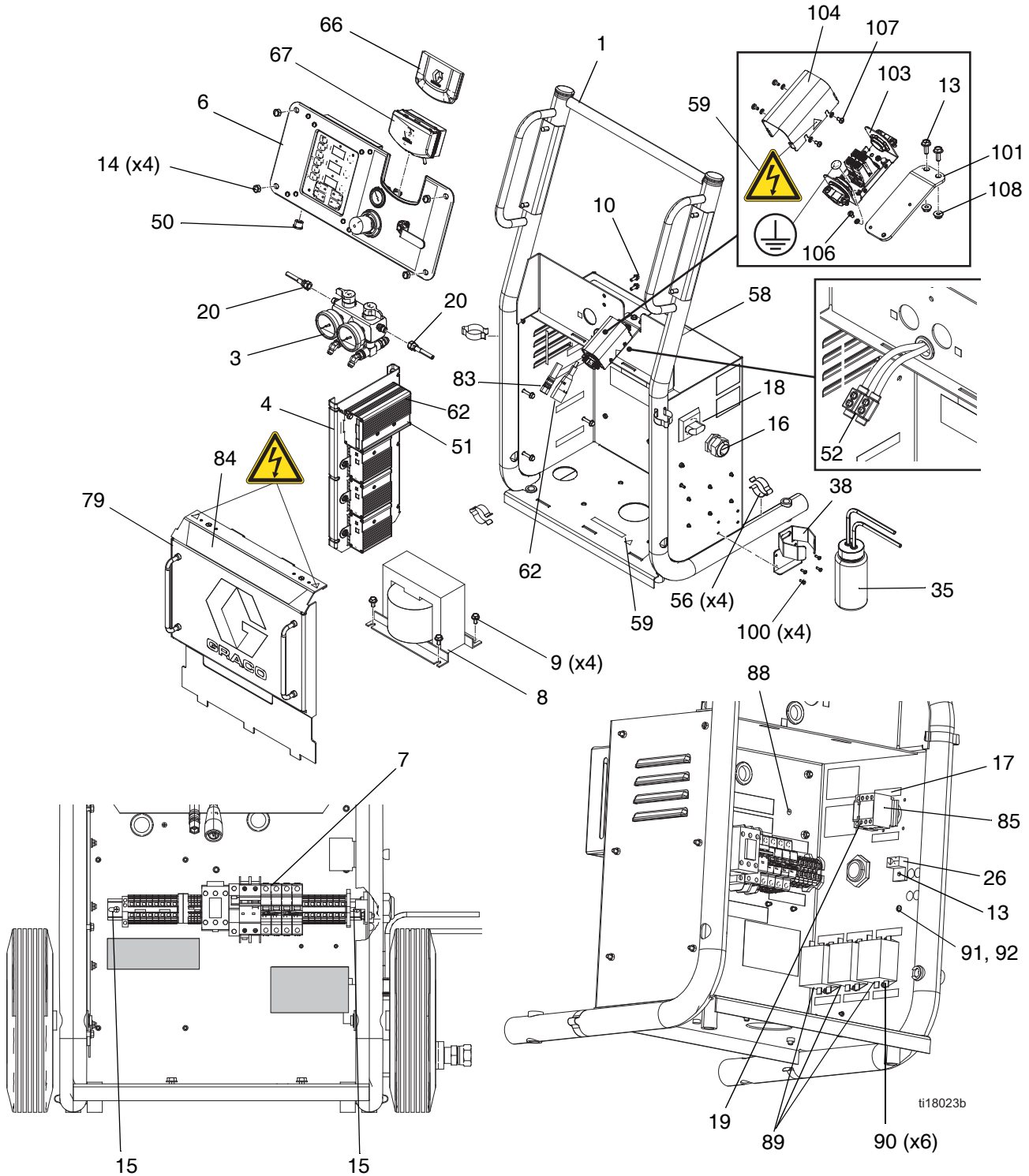


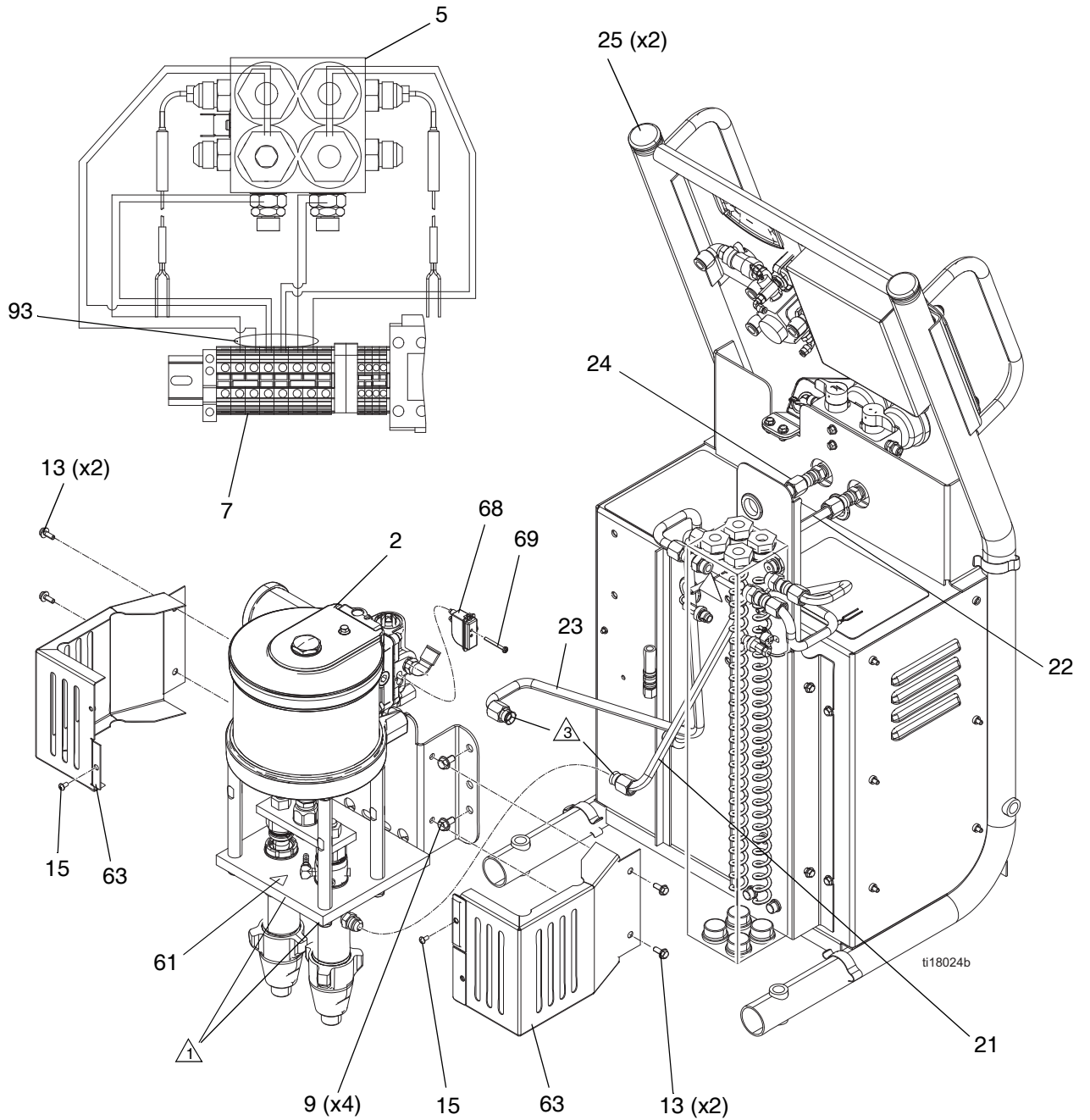
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Parts

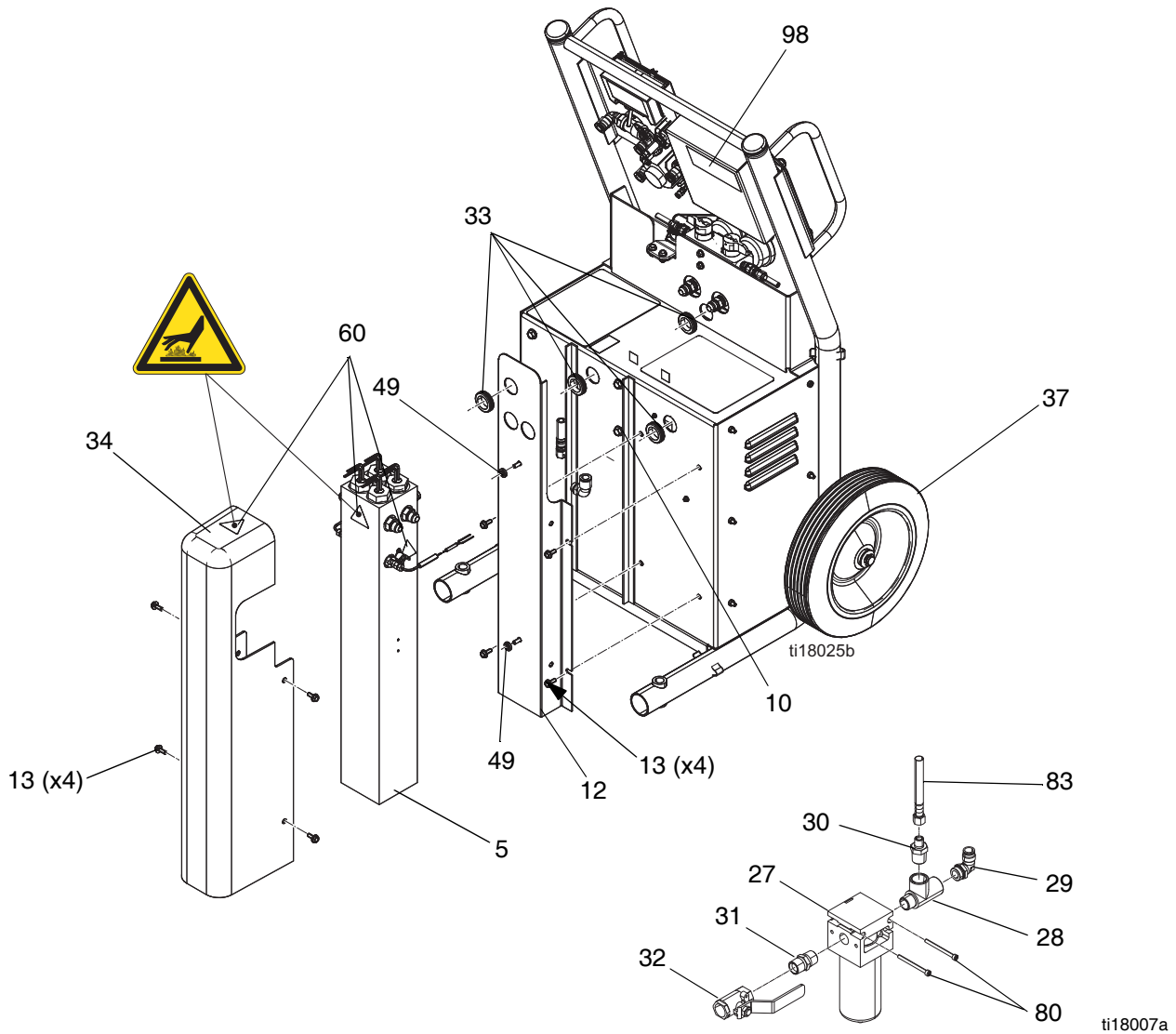
262572, Bare Reactor A-25 / 24Y164, A-XP1 Bare

262614, Reactor A-25 with DataTrak and Wheels / 24Y165, A-XP1 with DataTrak and Wheels





- ① Torque pump locking nuts to 66-74 ft-lbs (90-100 N•m).
- ② Apply anaerobic polyacrylate pipe sealant to all non-swiveling pipe threads.
- ③ Torque tube ends to 212-265 in-lbs (24-30 N•m).
- ④ Connect ground wire (94) from motor lug to ground lug in cabinet.
- ⑤ For Series A only.



262572, Bare Reactor A-25 / 24Y164, Bare Reactor A-XP1
262614, Reactor A-25 with DataTrak and Wheels / 24Y165, Reactor A-XP1 with DataTrak and Wheels

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1	-----	CART	1	7	262576	MODULE (A-25), breaker; see page 54	1
2	262573	PUMP (A-25); see page 52	1		24Y166	MODULE (A-XP1), breaker; see page 54	
	24Y086	PUMP (A-XP1); see page 52		8	247840	TRANSFORMER, 2790va, 230/62	1
3	262577	MANIFOLD (A-25), relief; see page 50	1	9	111799	SCREW, cap, hex hd; M8 x 1.25	8
	24Y177	MANIFOLD (A-XP1), relief; see page 50		10	108296	SCREW, mach, hex wash hd; 1/4-20 UNC-2A	4
4	-----	PANEL, control, heater; see page 49	1	11	125621	SCREW, machine, hex washer, hd; M6 x 1	6
5	24J788	HEATER (A-25), system, (6.0kw, 230v); see page 51	1	12	16G917	BRACKET, heater	1
	24Y163	HEATER (A-XP1), system, (6.0kw, 230v); see page 51		13	114182	SCREW, mach, hex flange; M6 x 1	15
6	262575	PANEL (A-25), control; see page 48	1	14	117623	NUT, cap, 3/8-16	4
	24Y167	PANEL (A-XP1), control; see page 48		15	106084	SCREW, mach, pan hd; M5 x 0.8	2
				16	117682	BUSHING, strain relief	1

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
17	123970	SWITCH (A-25), disconnect, 40a	1	65	-----	TUBE, polyurethane, rnd, black; 5.12 ft (1.56 m); see page 53	1
	123969	SWITCH (A-XP1), disconnect, 40a		66★	-----	INSERT, control panel	2
18	123971	KNOB (A-25), disconnect, operator	1	67†	24B563	KIT, DataTrak	1
	123967	KNOB (A-XP1), disconnect, operator		68†×	24B659	SWITCH, reed assembly	1
19	123972	SWITCH (A-25), fourth pole	1	69†×	-----	FASTENER, screw, pan head, m4 x 35 mm	1
	123968	SWITCH (A-XP1), fourth pole		79	262581	COVER, electrical, assembly	1
20	17H018	COUPLING, hose	2	80	-----	SCREW, shcs, m5x60	2
21	16G921	TUBE, fluid, A, heater, inlet	1	82‡	15H187	WIRE, jumper, w/quick disconnect	1
22	16G922	TUBE, fluid, A, heater, outlet	1	83	16P244	HOSE, coupled, 2.63 ft. (0.8 m)	1
23	16G923	TUBE, fluid, B, heater, inlet	1	84	-----	LABEL, product	1
24	16G924	TUBE, fluid, B, heater, outlet	1	85▲	16J808	LABEL, warning, disconnect wiring	1
25	112125	PLUG, tube	2	88	195874	SCREW, phillips, pan hd; M4 x 8	1
26	117666	TERMINAL, ground	1	89	16K669	FILTER, A-25, electrical	3
27	15D795	FILTER, air, 40 micron	1		17G104	FILTER, A-XP1, electrical	2
28	107128	TEE, service	1		16K669	FILTER, A-XP1, electrical	1
29	16X096	ELBOW, male, swivel	1	90	115266	SCREW, cap, socket hd; M5 x 10	6
30	162449	NIPPLE, reducing	1	91	-----	SCREW, pan hd; M5 x 16	1
31	158491	NIPPLE	1	92	-----	WASHER, #10, external tooth lock	1
32	262660	VALVE, ball, 1/2 npt x 1/2 npt	1	93	-----	TUBE, pe, spiral, wrapping; 1.2 ft (0.4 m)	1
33	114269	GROMMET, rubber	4	94	16M086	WIRE, ground, pump	1
34	16G918	COVER, heater	1	95‡	114601	CONDUIT, flexible, non-metallic	1
35	246995	BOTTLE, assembly, complete	1	96‡	-----	SLEEVE, heat-shrink, 2:1; 0.75 ft, 1/2 in. ID, 1/4 in. OD	1
36	234366	KIT, fluid inlet, pair; see page 50	1	97‡	120573	BRIDGE, plug-in, jumper	4
37†	262695	KIT, wheel; see page 45	2	98	16M088	LABEL, error codes	1
38	16M152	BRACKET, lube, reservoir	1	99‡	114958	STAP, tie	10
44‡	247791	HARNESS, wire, hose	1	100	105676	SCREW, pan hd	4
45‡	261669	KIT, fluid temp sensor, coupler	1	101	17D892	BRACKET, connector	1
49	167002	INSULATOR, heat	2	103	24W204	ENCLOSURE, terminal block	1
50	16J433	HARNESS, wire, display, ext.	1	104	25A234	ENCLOSURE, cover	1
51	16J434	HARNESS, over temp, A-side, B-side	1	106	16P338	SCREW, serrated hex hd 10-32 x .25	2
52*	261821	CONNECTOR, wire, 6awg	1	107	16X129	SCREW, phillips, tooth, 8-32 x .375	5
53‡*	-----	FLUID, oxide inhibitor	1	108	15U698	NUT, M6, serrated flange	2
54‡	206994	FLUID, TSL, 8 oz. bottle	1				
55‡	206995	FLUID, TSL, 1 qt.	1				
56	186494	CLIP, spring	4				
58▲	15G280	LABEL, warning	1				
59▲	189930	LABEL, caution	2				
60▲	189285	LABEL, caution	3				
61▲	15H108	LABEL, pinch point	1				
62	15B380	CABLE, hose, control	1				
63	16G952	COVER, pump	2				
64	-----	TUBE, polyethylene, rnd; 3/4 OD; 0.75 ft (0.2 m); see page 53	1				

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

† Only used with 262614.

★ Only used with 262572.

× Included in Reed Switch Kit 24B659.

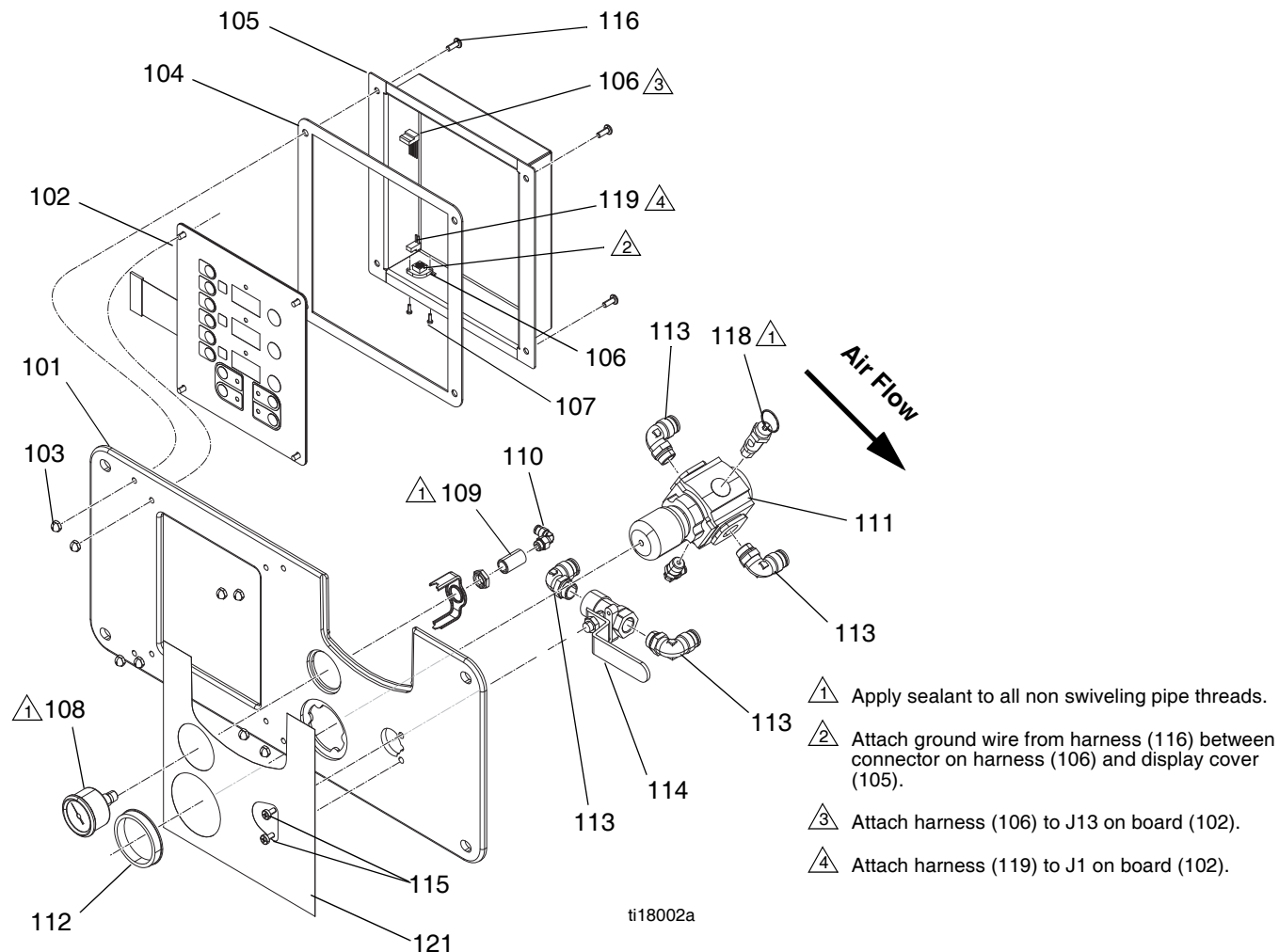
‡ Not shown.

* For series A only.

Control Panel

A-25: 262575

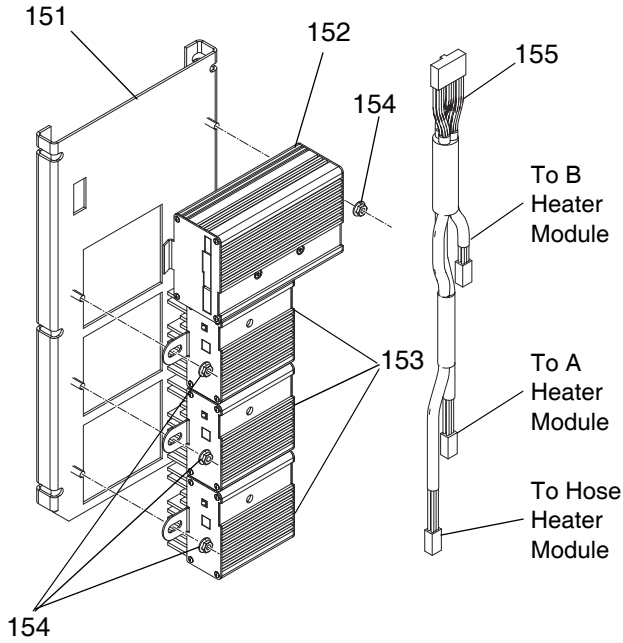
A-XP1: 24Y176



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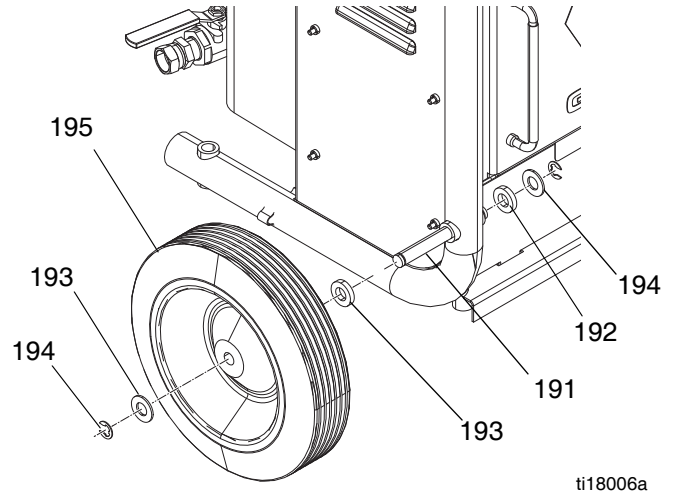
Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
101	16G912	PLATE, display	1	111	15T536	REGULATOR, air, 3/8 npt	1
102	24G883	DISPLAY, temperature; includes 102a-102c	1	112	16F810	NUT, regulator, steel	1
102a	24G882	BOARD, circuit	1	113	16X066	FITTING, elbow, male, swivel	4
102b	246479	SWITCH, membrane	1	114	114362	VALVE, ball, air	1
102c	112324	SCREW	4	115	110637	SCREW, mach, pan head	2
103	117523	NUT, cap (#10)	8	116	331342	SCREW, screw 10-24 x1/2 in. ph pn hd	4
104	16G958	GASKET, display cover	1	117	114469	FITTING, elbow, m swivel	1
105	16G913	COVER, display	1	118	116643	VALVE (A-25), relief, air, 90 psi (620.5 kPa)	1
106	16J432	HARNESS, wire, display	1		113498	VALVE (A-XP1), relief, air, 100 psi (620.5 kPa)	1
107	-----	SCREW, pan head, phillips	2	119	16J431	HARNESS, jumper, heater display	1
108	116257	GAUGE, pressure	1	121	16K525	LABEL, control	1
109	100451	COUPLING, 1/8 npt	1				
110	114151	FITTING, elbow, male, swivel	1				

Temperature Control



Ref. Part	Description	Qty.
151	16G925 PANEL, pod, mounting	1
152	247827 MODULE, heater control	1
153	247828 MODULE, heater	3
154	114183 NUT, hex, flanged, serrated	4
155	247801 CABLE, communication	1

Wheel Kit (262695)



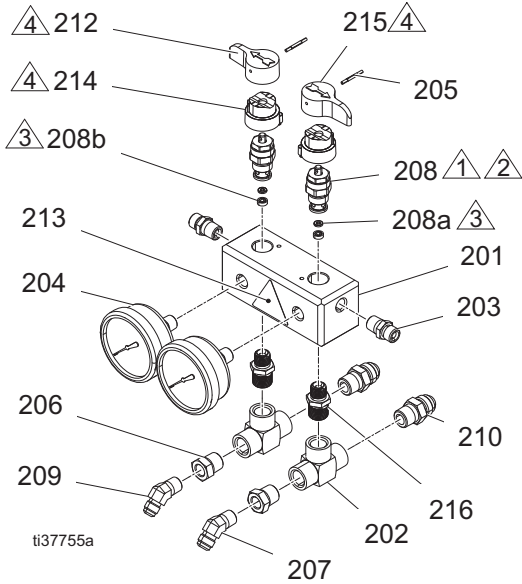
Ref. Part	Description	Qty
191 †	16H182 AXLE, wheel	2
192 †	111841 WASHER, plain 5/8	4
193 †	191824 WASHER, space	4
194 †	101242 RING, retaining, ext.	4
195 †	16G920 WHEEL, semi pneumatic, offset	2

† Only used with 262614. Available as add on wheel kit 262695.

Fluid Manifold

A-25: 262577

A-XP1: 24Y177

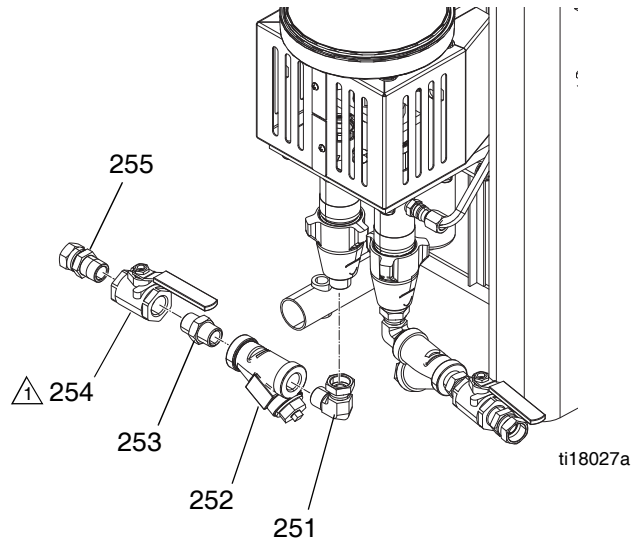


- 1 Apply sealant and torque to 250 in-lbs (28 N•m).
- 2 Use blue thread lock on valve cartridge threads into manifold.
- 3 Part of item 208.
- 4 Apply lubricant to mating surfaces.
- 5 Apply pipe sealant to all NPT threads.

Ref.	Part	Description	Qty.
201	24K993	MANIFOLD, recirculation	1
202	108638	FITTING, pipe, tee	2
203	162453	FITTING, (1/4 npsm x 1/4 npt)	2
204	113641	GAUGE (A-25), pressure, fluid, SST	2
	115523	GAUGE (A-XP1), pressure, fluid, SST	2
205	111600	PIN, grooved	2
206	118758	FITTING, adapter	2
207	123787	FITTING, elbow, 45°, 3/8 JIC x 1/4 NPT	1
208	239914	VALVE, drain; includes 208a, 208b	2
208a	-----	SEAT	2
208b	-----	GASKET	2
209	123788	FITTING, elbow, 45°, 5/16 JIC x 1/4 NPT	1
210	117833	FITTING, union, 1/4 npt x 3/8 JIC	2
212	17X499	HANDLE, valve, drain, red	1
213▲	189285	LABEL, caution	1
214	224807	BASE, valve	2
215	17X521	HANDLE, valve, drain, blue	1
216	157350	ADAPTER	2

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

Fluid Inlet Kit (234366)



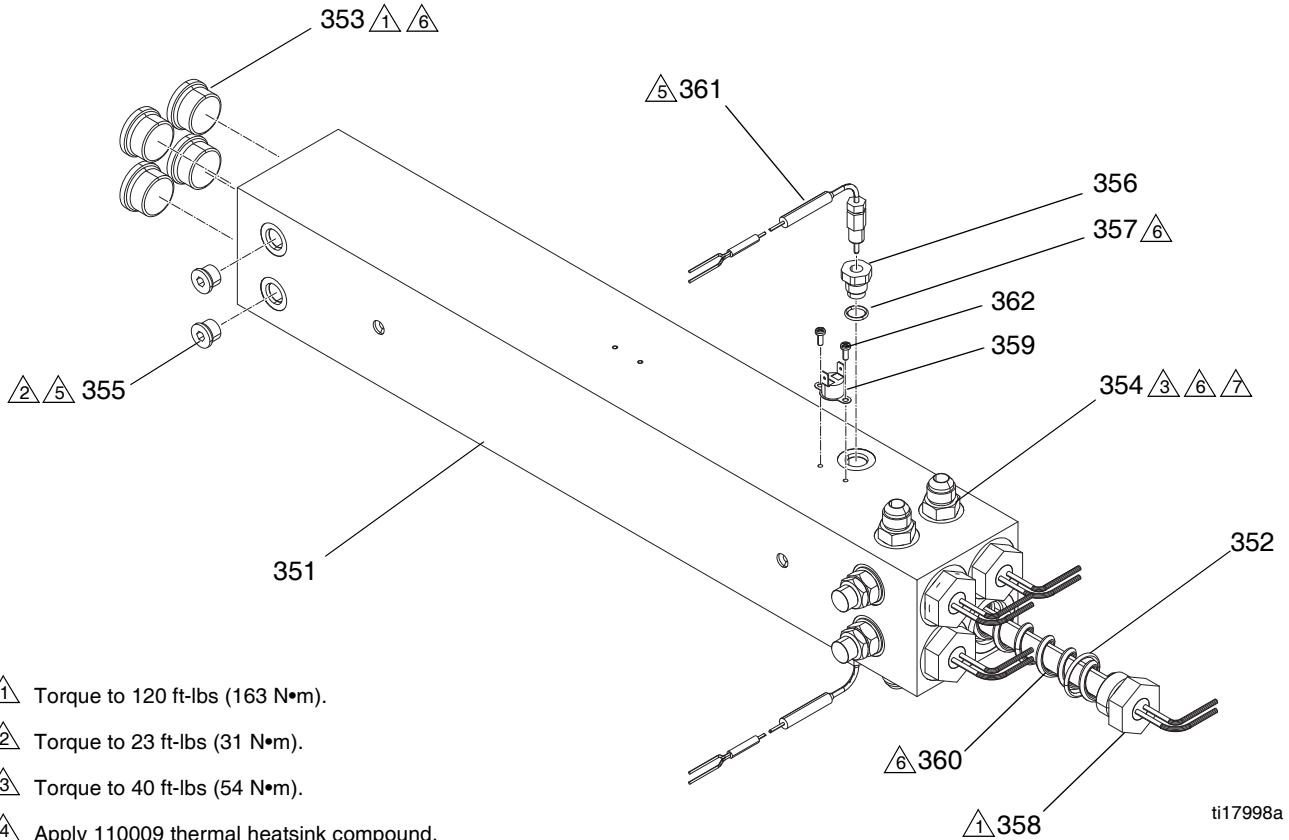
- 1 Assemble ball valves in orientation shown.
- 2 Apply anaerobic polyacrylate pipe sealant to all NPT connections.

Ref.	Part	Description	Qty.
251	160327	UNION, adapter, 90°; 3/4 npt(m) x 3/4-14 npt(f)	2
252	101078	Y-STRAINER; 20 m screen	2
253	C20487	NIPPLE, 3/4 npt	2
254	109077	VALVE, ball; 3/4 npt (fbe)	2
255	118459	UNION, swivel; 3/4-14 npt(m)x 3/4-14 npt(f)	2
256	26A349	ELEMENT, 20 mesh	2

Dual Zone Heater

A-XP1: 10 kw (24Y163)

A-25: 6 kw (24J788)



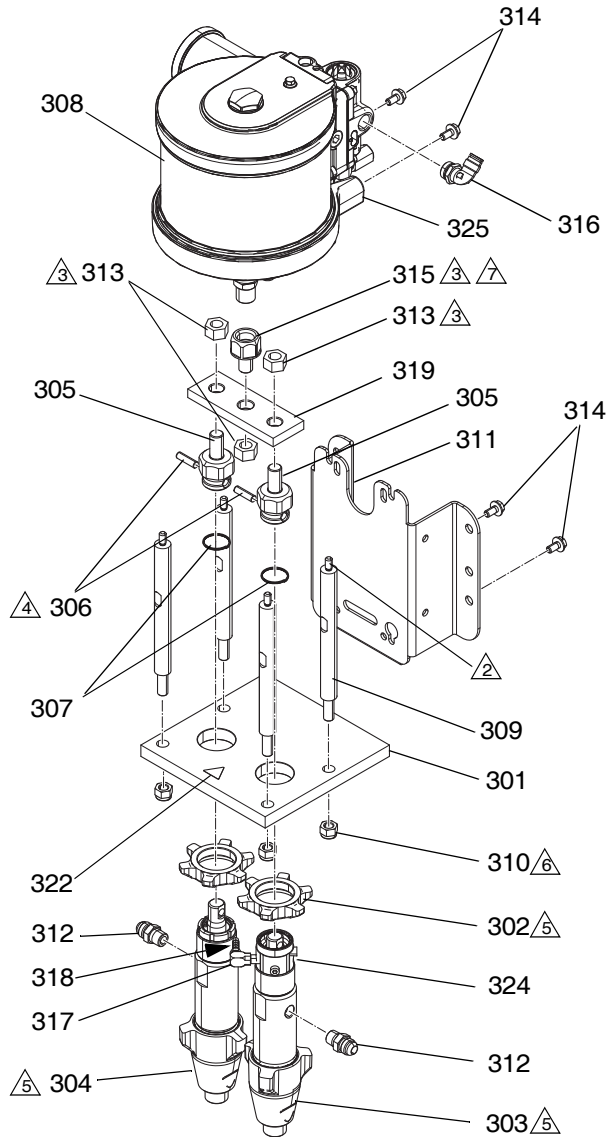
- ① Torque to 120 ft-lbs (163 N•m).
- ② Torque to 23 ft-lbs (31 N•m).
- ③ Torque to 40 ft-lbs (54 N•m).
- ④ Apply 110009 thermal heatsink compound.
- ⑤ Apply sealant and PTFE tape to all non swiveling and threads without o-rings.
- ⑥ Apply lubricant to o-rings.
- ⑦ Orient rupture disc housing (369) with exhaust hole pointing towards the bottom of the heater.

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Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
351	-----	HEATER, dual zone	1	358	16A112	HEATER (A-25), immersion, (1500 w, 230 v)	4
352	124132	O-RING	4		16A110	HEATER (A-XP1), immersion, (2550 w, 230 v)	4
353	15H305	FITTING, plug hollow hex 1-3/16 sae	4	359	15B137	SWITCH, over temperature	1
354	121309	FITTING, adapter, sae-orb x jic	4	360	15B135	MIXER, immersion heater	4
355	15H304	FITTING, plug 9/16 sae	2	361	117484	SENSOR	2
356	15H306	ADAPTER, thermocouple, 9/16 x 1/8	2	362	-----	SCREW, mach, pnh	2
357	120336	O-RING, packing	2	369	247520	KIT, rupture disc	2

Air Motor Pump Assembly

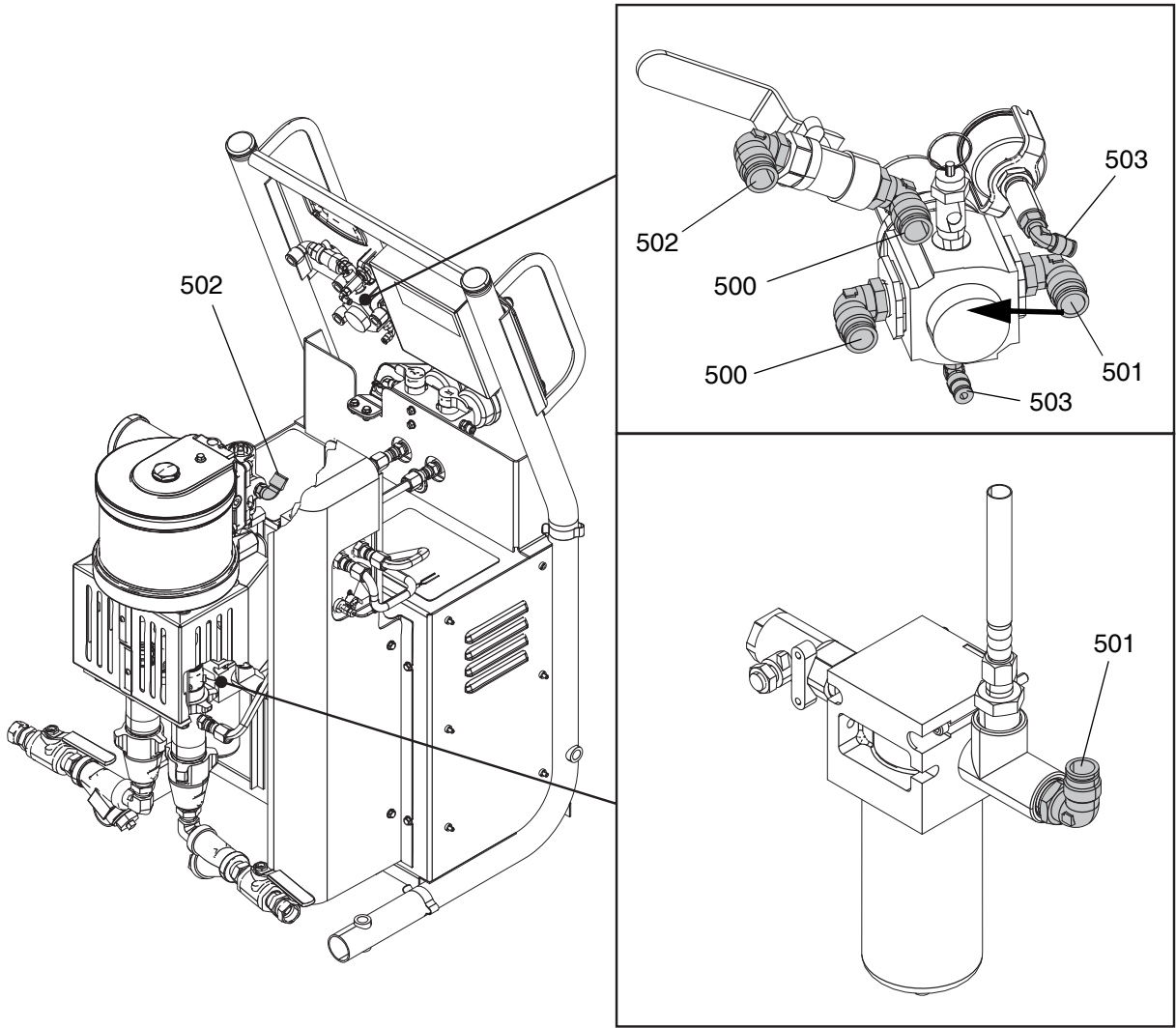
A-25 (262573)
A-XP1 (24Y086)



Ref.	Part	Description	Qty.
301	16G915	PLATE, mounting, cylinder	1
302	193031	NUT, retaining	2
303	246831	PUMP (A-25), displacement, with lube; iso	1
	24Y175	PUMP (A-XP1), displacement, with lube; iso	1
304	245971	PUMP (A-25), displacement; resin	1
	24Y174	PUMP (A-XP1), displacement; resin	1
305	15J132	LINK (A-25), connecting	2
	17F967	LINK (A-XP1), connecting	2
306	183210	PIN (A-25), str, hdls	2
	176818	PIN (A-XP1), str, hdls	2
307	183169	SPRING (A-25), retaining	2
	176817	SPRING (A-XP1), retaining	2
308	M12LP0	MOTOR, air, NXT, 6 in., cycle only; see manual 312796	1
309	16G929	ROD, tie	4
310	125266	NUT, lock, nylon, m12	4
311	16G926	BRACKET, pump mounting	1
312	117833	ADAPTER (A-25), 3/4-16 JIC x 3/8 NPT	2
	121310	ADAPTER (A-XP1), 3/4-16 JIC x 3/8 NPT	2
313	120553	NUT, center lock, 5/8-18	3
314	111799	SCREW, cap, hex hd	4
315	16G914	ADAPTER, rod	1
316	16X096	ELBOW, male, swivel	1
317	15K783	ELBOW, street, 90°	1
318	116746	FITTING, barbed, plated	2
319	16G916	PLATE, yoke, pump	1
322	15H108	LABEL, pinch point	1
324	100139	PLUG, PIPE	2
325	15B565	VALVE, 1/4 npt, park	1

- △1 Apply PTFE tape and sealant to non-swiveling pipe threads.
- △2 Torque to 88.5-124 in.-lbs (10-14 N•m).
- △3 Torque to 77-85 ft-lbs (105-115 N•m). Torque nut (313) after assembly of item pin (306) and spring (307).
- △4 Install adapters so that pins (306) will be in-line with each other.
- △5 Lubricate threads of pump cylinders (303, 304) and plate (301) with lubricant prior to assembly into mounting plate. Assemble pump cylinder 1/2 thread above flush to one and one half thread above flush of mounting pate surface.
- △6 Torque to 27-32 ft-lbs (37-43 N•m).
- △7 Use blue thread lock (medium).

Air Tubing Connections

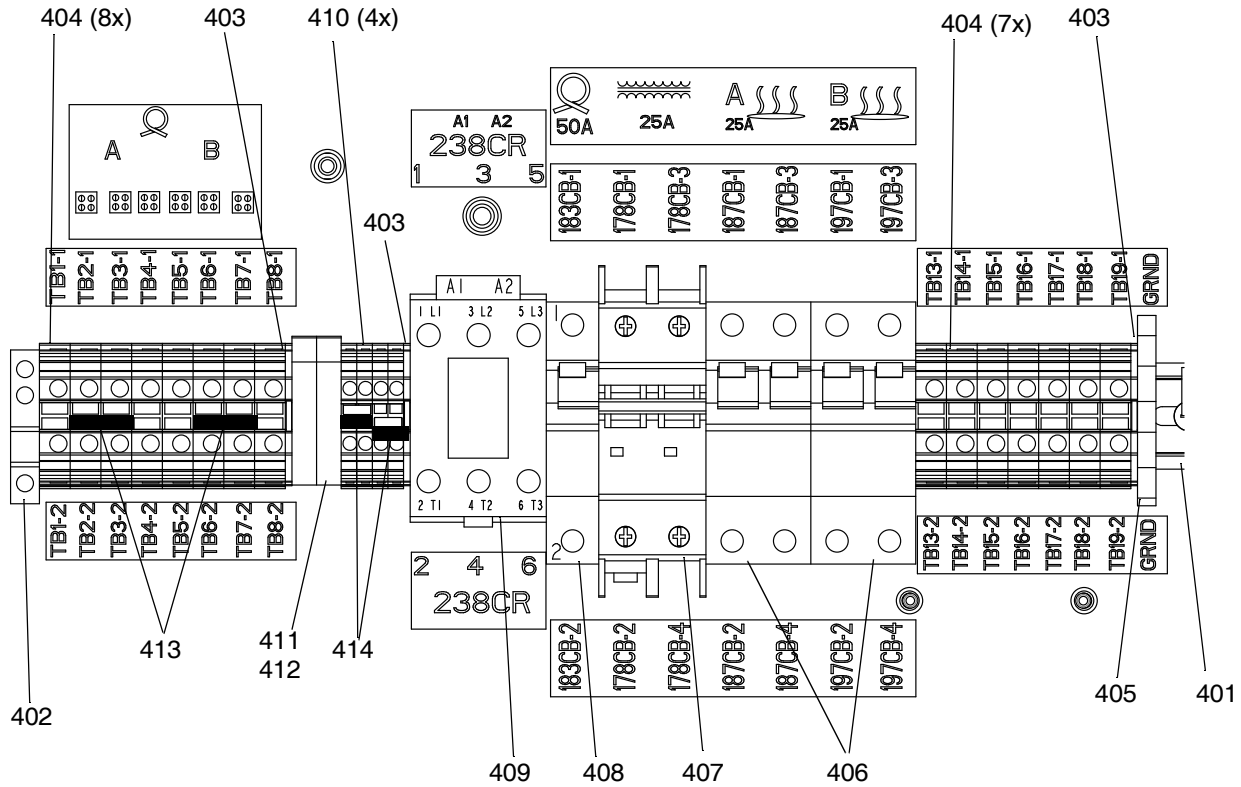


Ref.	Length ft (m)	Connection		Material	Color	Outside Diameter
		From	To			
64	0.75 ft (0.23 m)	503	503	UHMWPE	Black	5/32 in. (4 mm)
65	2.66 ft (0.8 m)	501	501	Nylon	Black	1/2 in. (12.7 mm)
65	1.66 ft (0.5 m)	502	502	Nylon	Black	1/2 in. (12.7 mm)
65	0.75 ft (0.23 m)	500	500	Nylon	Black	1/2 in. (12.7 mm)

Breaker Module

A-25 (262576)

A-XP1 (24Y166)



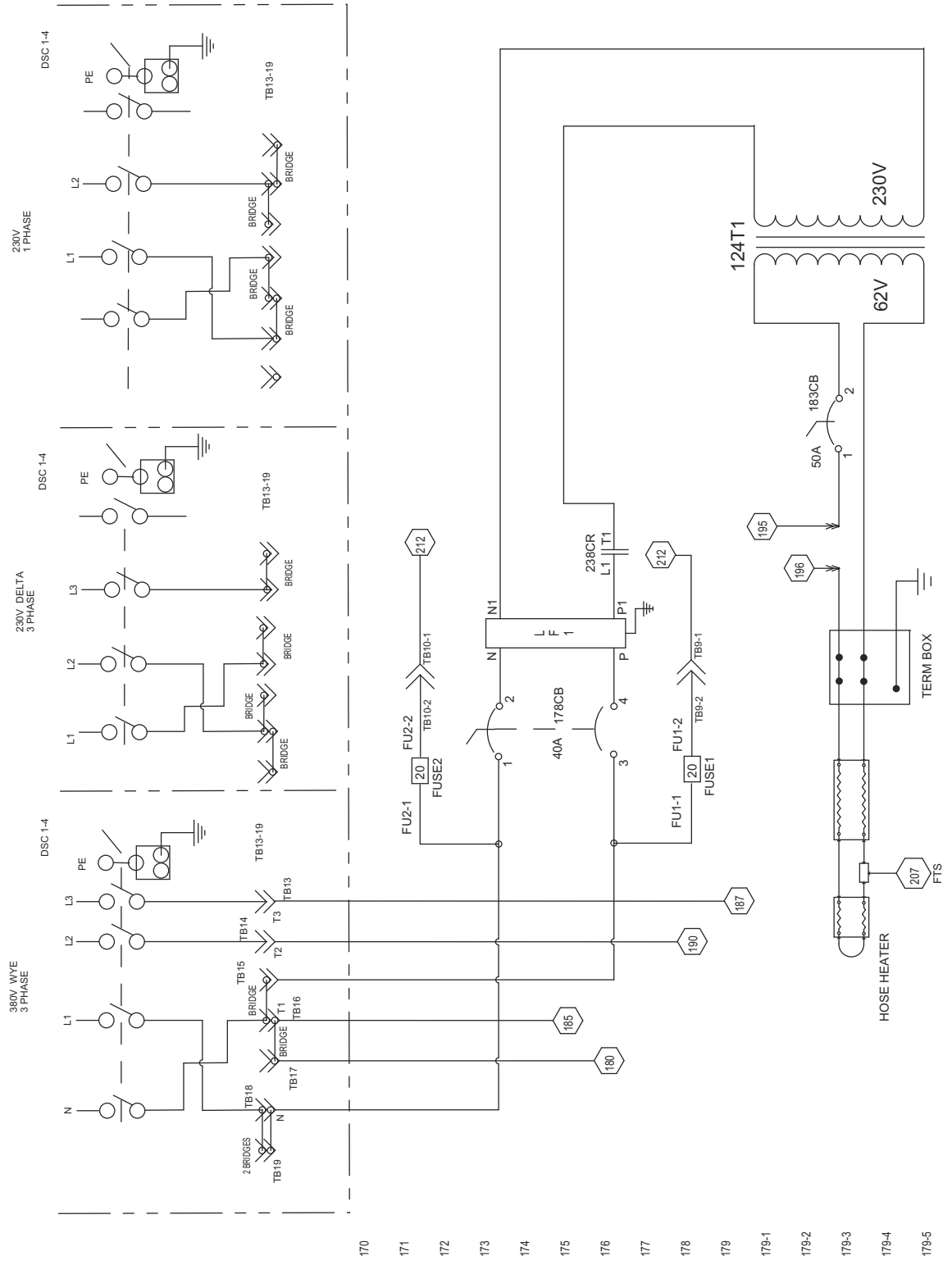
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Ref.	Part	Description	Qty.
401	16H309	RAIL, mounting	1
402	112446	BLOCK, clamp end	1
403	120490	COVER, end	3
404	120570	BLOCK, terminal	15
405	255046	BLOCK, terminal ground	1
406	255050	CIRCUIT BREAKER (A-25), 25a, 2p	2
407	24M176	CIRCUIT BREAKER (A-2, 30a, 2p)	1
408	255026	CIRCUIT BREAKER, 1 pole, 50a, c curve	1
409	255022	RELAY, contactor, 65a, 3p	1
410	120491	BLOCK, terminal	4
411	255043	HOLDER, fuse terminal block 5x20mm	2
412	116225	FUSE, 1a, 5x20mm	2
413	120573	BRIDGE, plug-in, (jumper)	2
414	120485	BRIDGE, plug-in, (jumper)	2
415	16J534	HARNESS (A-25), wiring	1

A-XP1:

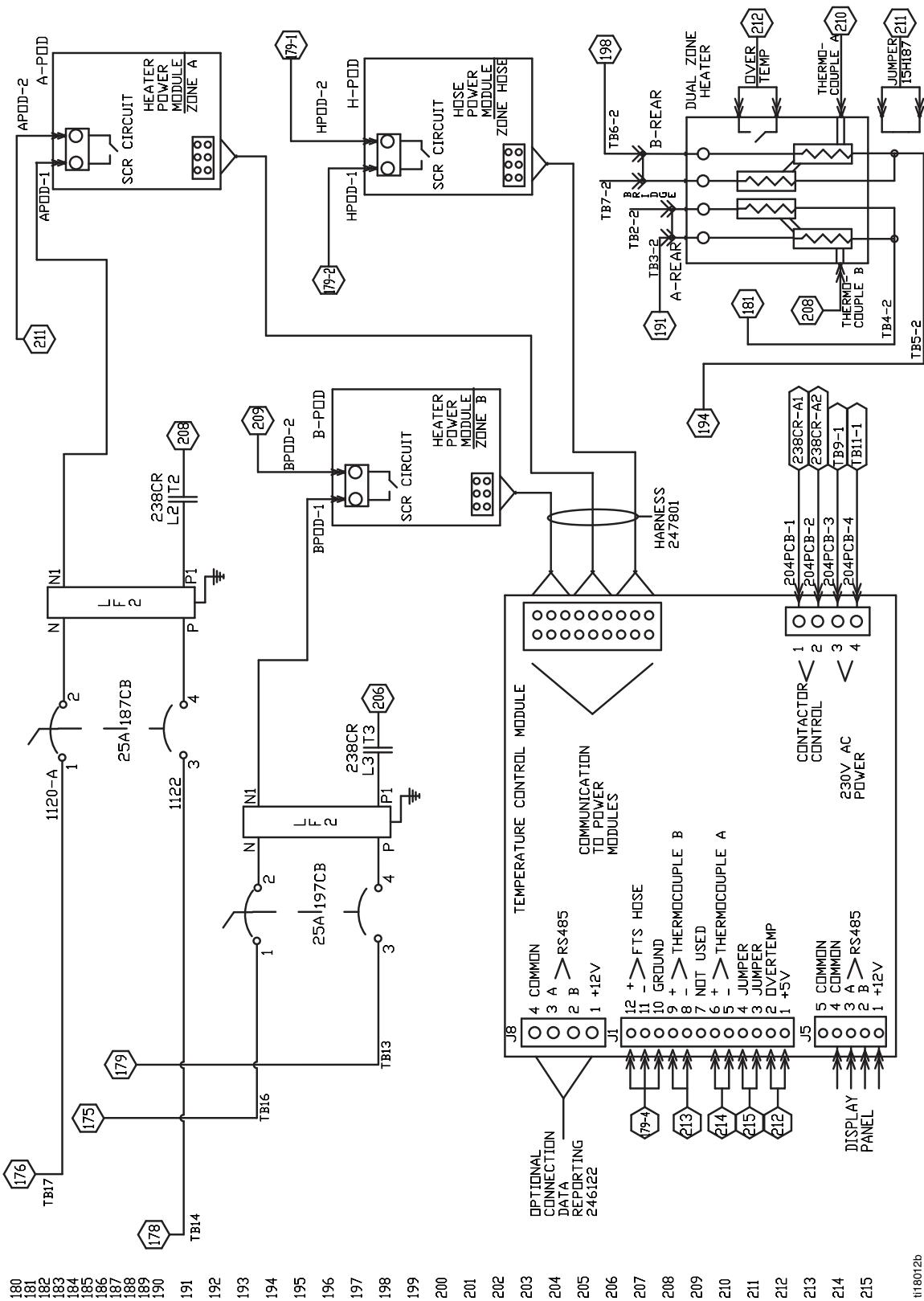
Ref.	Part	Description	Qty.
401	16H309	RAIL, mounting	1
402	112446	BLOCK, clamp end	1
403	120490	COVER, end	3
404	120570	BLOCK, terminal	15
405	255046	BLOCK, terminal ground	1
407	24M176	CIRCUIT BREAKER (A-2, 30a, 2p)	3
408	255026	CIRCUIT BREAKER, 1 pole, 50a, c curve	1
409	255022	RELAY, contactor, 65a, 3p	1
410	120491	BLOCK, terminal	4
411	255043	HOLDER, fuse terminal block 5x20mm	2
412	116225	FUSE, 1a, 5x20mm	2
413	120573	BRIDGE, plug-in, (jumper)	2
414	120485	BRIDGE, plug-in, (jumper)	2
415	17G102	HARNESS (A-25), wiring	1

Wiring Schematics

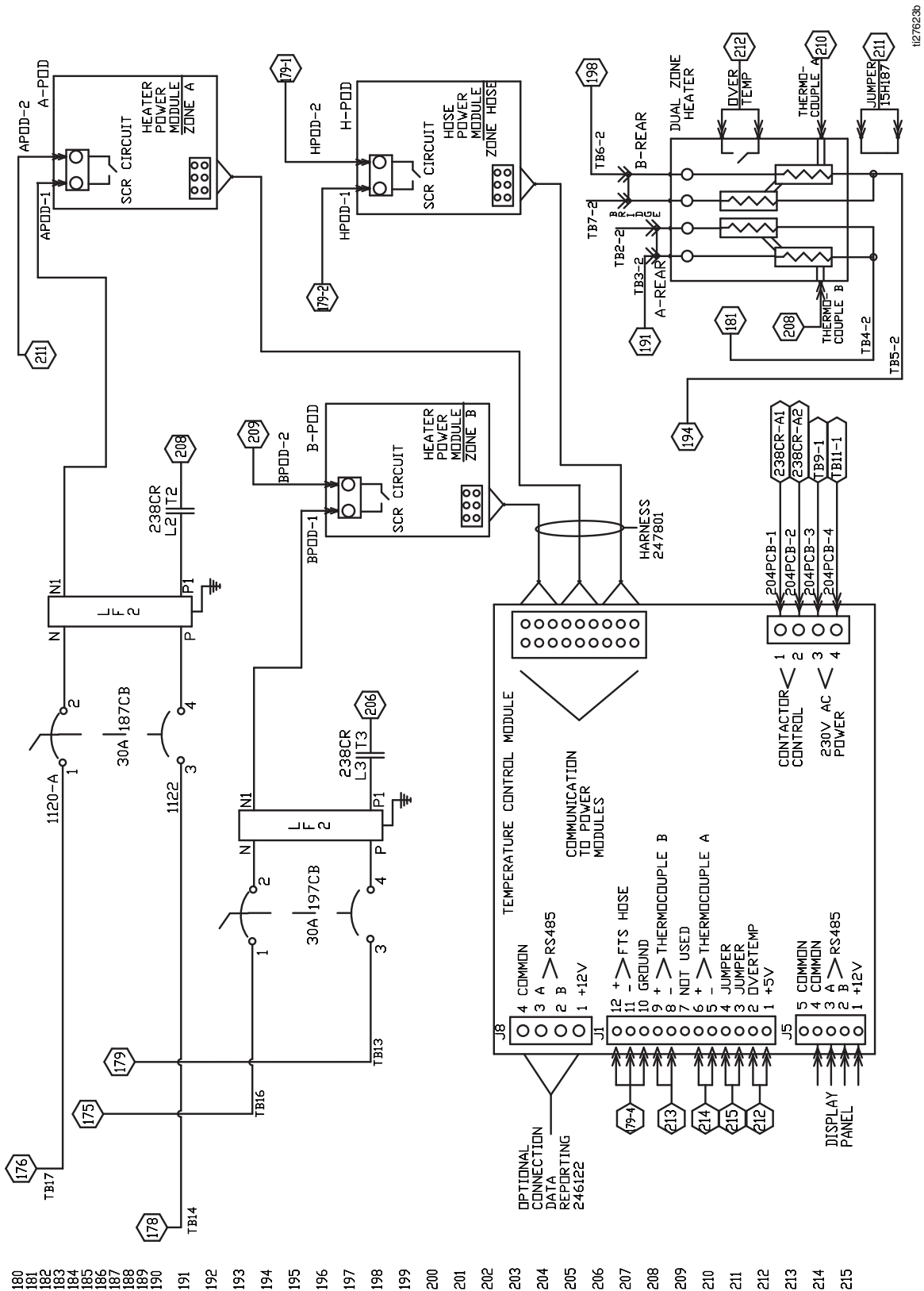


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A-25



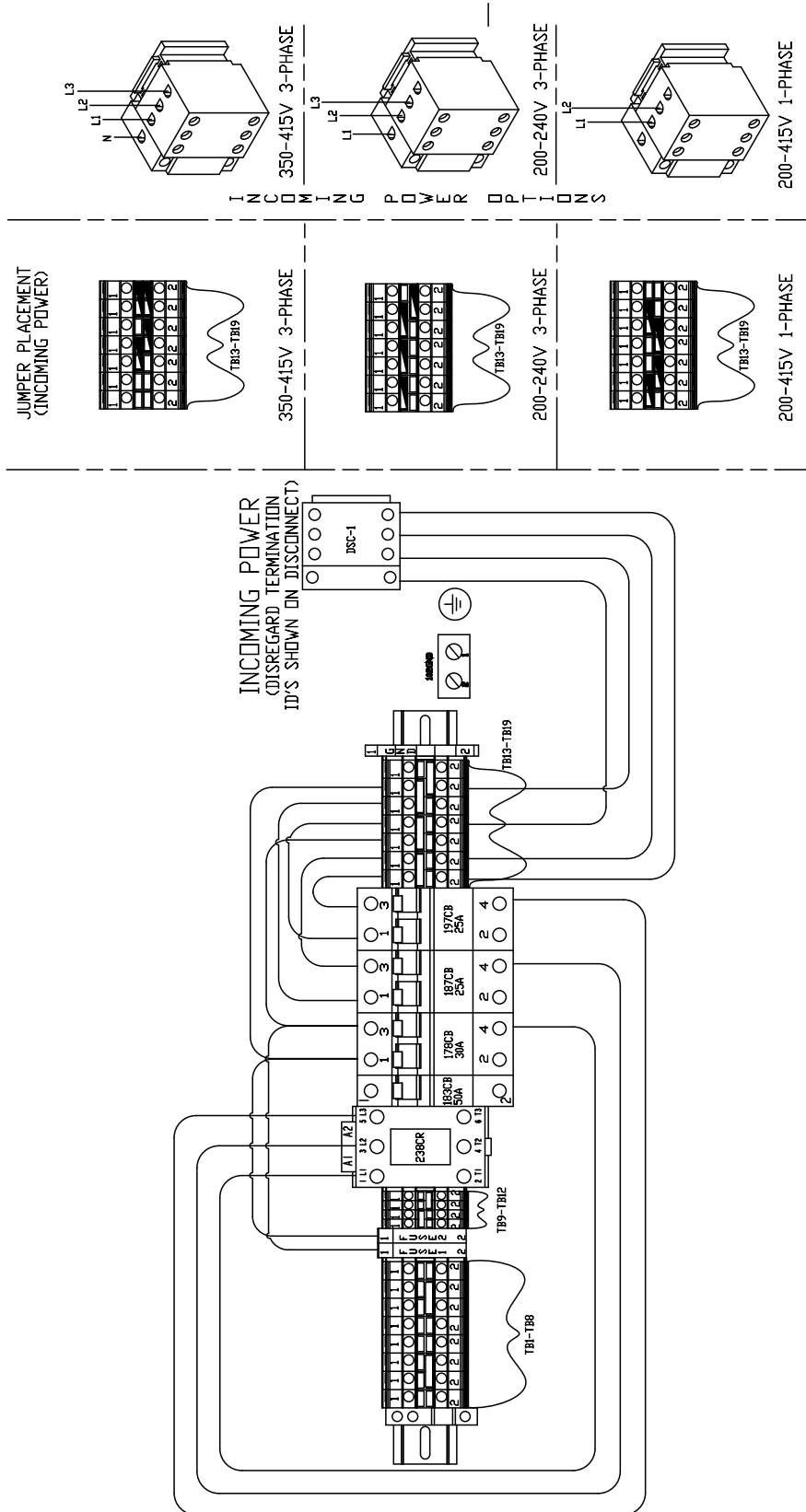
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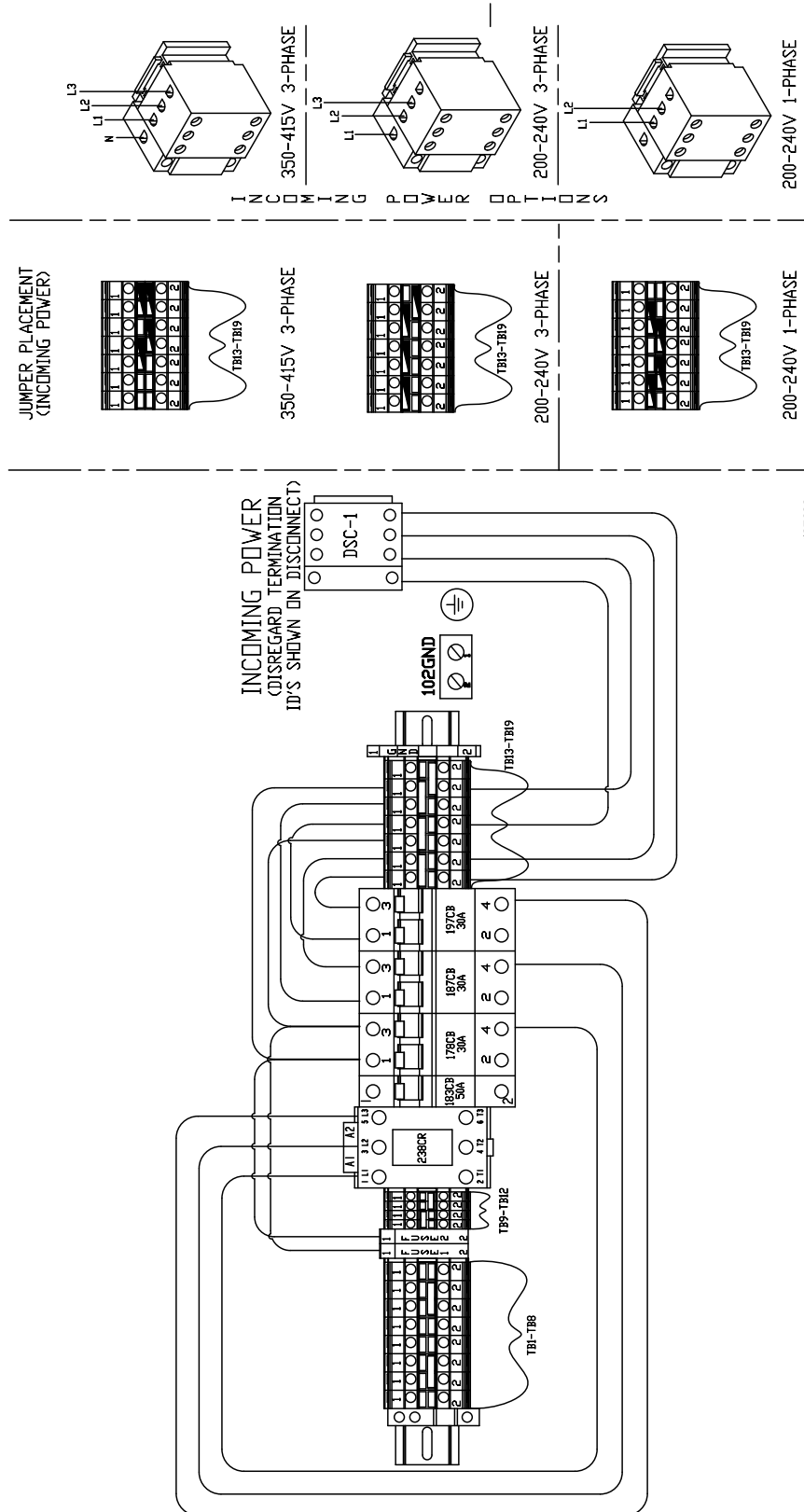
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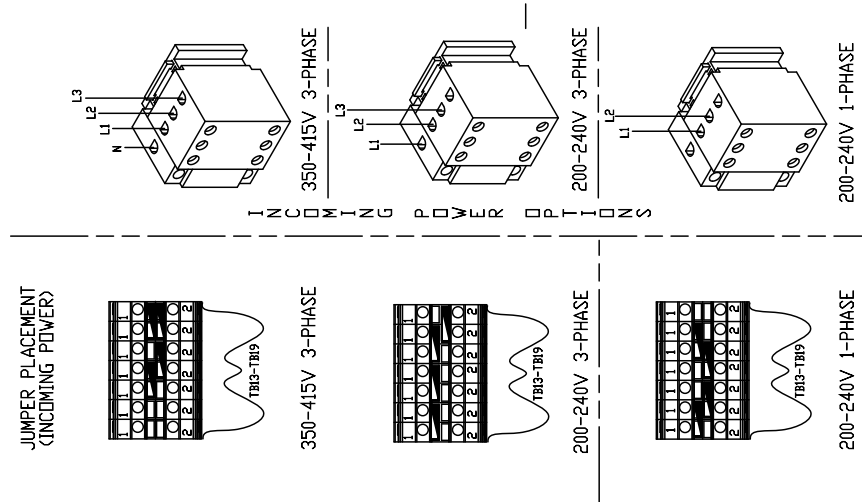
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A-XP1

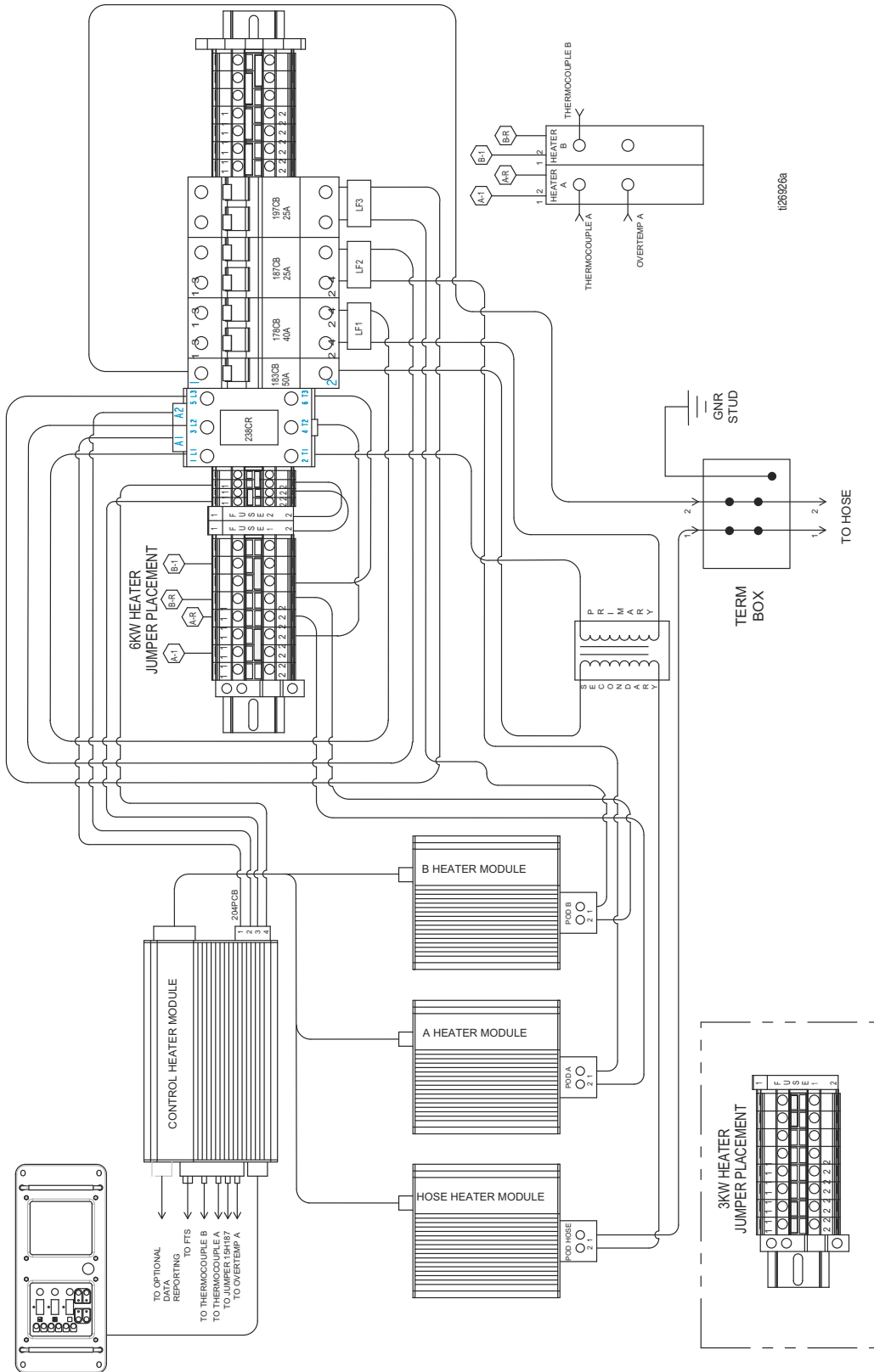


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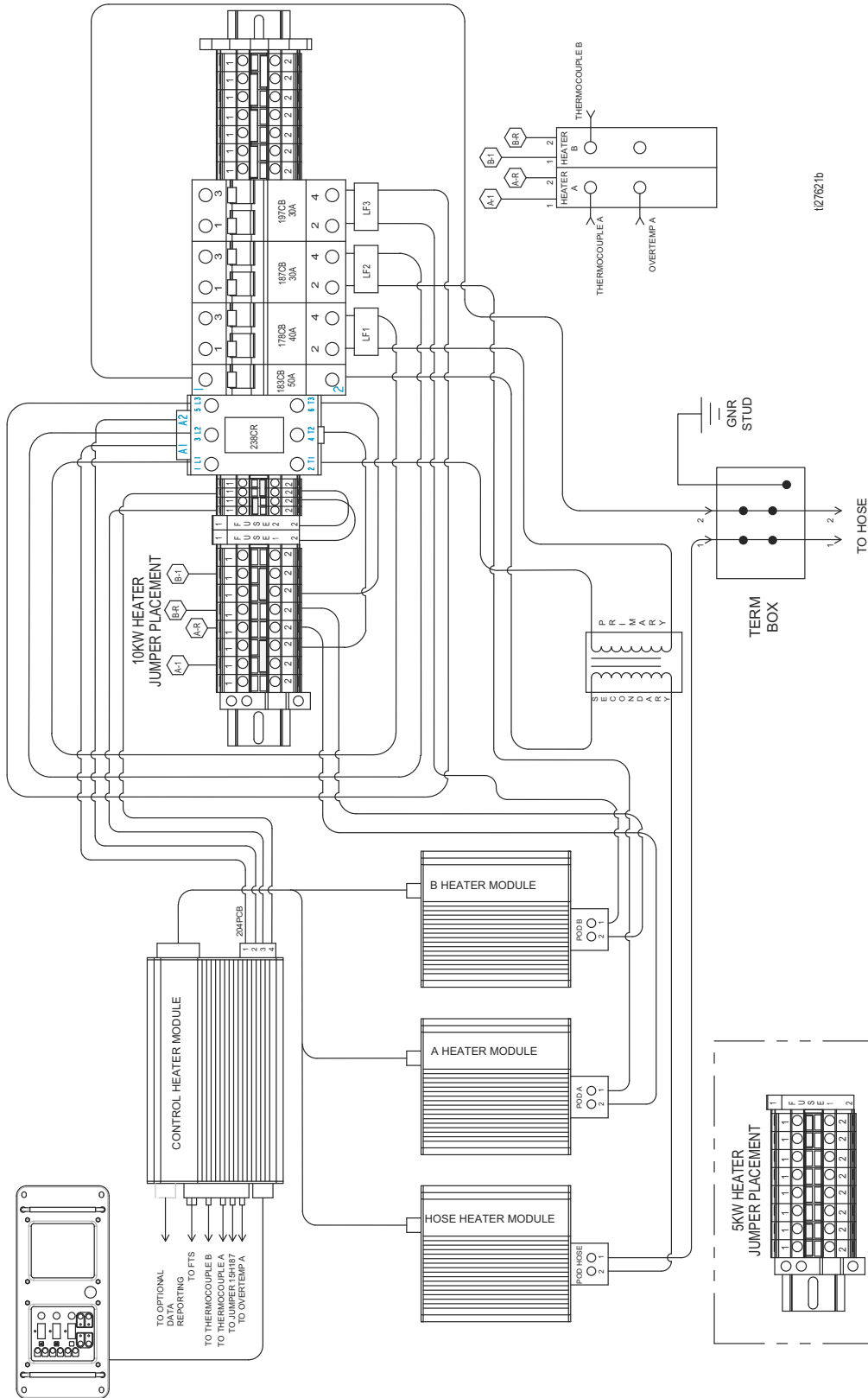
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Simplified Schematic, Heater Controls



A-XP1

Simplified Schematic, Heater Controls



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