

CHAMPION

Control Panel

OPERATION & SERVICE MANUAL

Simplex Units



THIS MANUAL CONTAINS IMPORTANT SAFETY INFORMATION AND SHOULD ALWAYS BE AVAILABLE TO THOSE PERSONNEL OPERATING THIS UNIT. READ, UNDERSTAND AND RETAIN ALL INSTRUCTIONS BEFORE OPERATING THIS EQUIPMENT TO PREVENT INJURY OR EQUIPMENT DAMAGE.

Safety and Operation Precautions

Champion compressors are the result of advanced engineering and skilled manufacturing. To be assured of receiving maximum service from this machine, the owner must exercise care in its operation and maintenance. This book is written to give the operator and maintenance department essential information for day-to-day operation, maintenance and adjustment. Careful adherence to these instructions will result in economical operation and minimum downtime.

Boxed text formats are used within this manual to alert users of the following conditions:


Indicates a hazard with a high level of risk, which if not avoided, <u>WILL</u> result in death or serious injury.


Indicates a hazard with a medium level of risk which, if not avoided, <u>COULD</u> result in death or serious injury.


Indicates a hazard with a low level of risk which, if not avoided, <u>MAY</u> result in a minor or moderate injury.

Safety and Operation Precautions

Safety is everybody's business and is based on your use of good common sense. All situations or circumstances cannot always be predicted and covered by established rules. Therefore, use your past experience, watch out for safety hazards and be cautious. Some general safety precautions are given below:



REFER TO THE COMPRESSOR OPERATION & SERVICE MANUAL FOR ADDITIONAL IMPORTANT SAFETY INFORMATION.



Failure to observe these notices will result in injury to or death of personnel.

- **Keep fingers and clothing away** from rotating fan, drive coupling/belting, etc.
- **Disconnect the compressor unit** from its power source, lockout and tagout before working on the unit – this machine is automatically controlled and may start at any time.
- **Do not loosen or remove** the belt covers, or break any connections, etc., in the compressor air system until the unit is shut down and the air pressure has been relieved.
- **Electrical shock** can and may be fatal.
- **Perform all wiring** in accordance with the National Electrical Code (NFPA-70) and any applicable local electrical codes. Wiring and electrical service must be performed only by qualified electricians.
- **Open main disconnect switch**, lockout and tagout and check for voltage before working on the control.



Failure to observe these notices could result in damage to equipment.

- **Stop the unit** if any repairs or adjustments on or around the compressor are required.
- **Do not use the air discharge** from this unit for breathing unless used in accordance with NFPA99 compliant Level 1 Medical Air Supply and Filtration Systems.
- **An Excess Flow Valve** should be on all compressed air supply hoses exceeding 1/2 inch inside diameter (OSHA Regulation, Section 1926.302).
- **Do not exceed** the rated maximum pressure values shown on the nameplate.
- **Do not operate unit** if safety devices are not operating properly. Check periodically. Never bypass safety devices.

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Section 1 – Revision History

Version	Date	Notes
00	12-4-17	First Release
01	04-17-18	Second Release
02	08-06-19	Third Release

Section 2 – General Info

The Simplex Control System uses relay based devices to control the operation of the simplex compressor unit.

2.1 Features

- ✓ NEMA 1 Enclosure (NEMA 4 optional)
- ✓ 120VAC Relay Controlled
- ✓ Selector Switch
 - Optional Test-Off-Auto switch on reciprocating compressors
 - Standard Hand-Off-Auto-compressor selector switch (Hydrovane only).
- ✓ Optional Compressor Hour Meter
- ✓ Optional circuitry for the following safety controls:
 - Low oil level
 - Low oil pressure
 - Auto Restart in case of power failure
 - High temperature shut down

Section 3 – Control Panel Start Up and Operation

This start-up guide assumes the compressor package has been properly connected to an electrical supply conforming to all National and Local electrical codes.

3.1 Apply Power

When energizing the control panel for the first time:

1. Ensure the selector switch is in the OFF position (if equipped).
2. Apply power to the control panel.
3. Press the START/RESET button (if equipped).

See Figure 3-1 below for the layout of the selector switch and push buttons on the Simplex Control Panel.



Figure 3-1: Simplex Control Panel Layout

3.2 Motor Jog

Prior to automatic operation of the unit, each motor in the system **MUST** be jogged to ensure proper compressor rotation direction.

IMPORTANT: Extended rotation in the incorrect direction can cause catastrophic damage to the compressor.

- If equipped with selector switch, jog motor using the TEST position. Verify correct rotation direction.
- If equipped with HOA (Hydrovane only), jog motor using the HAND position. Verify correct rotation direction.
- If not equipped with selector switch, jog motor using main disconnect.

3.3 Automatic Operation



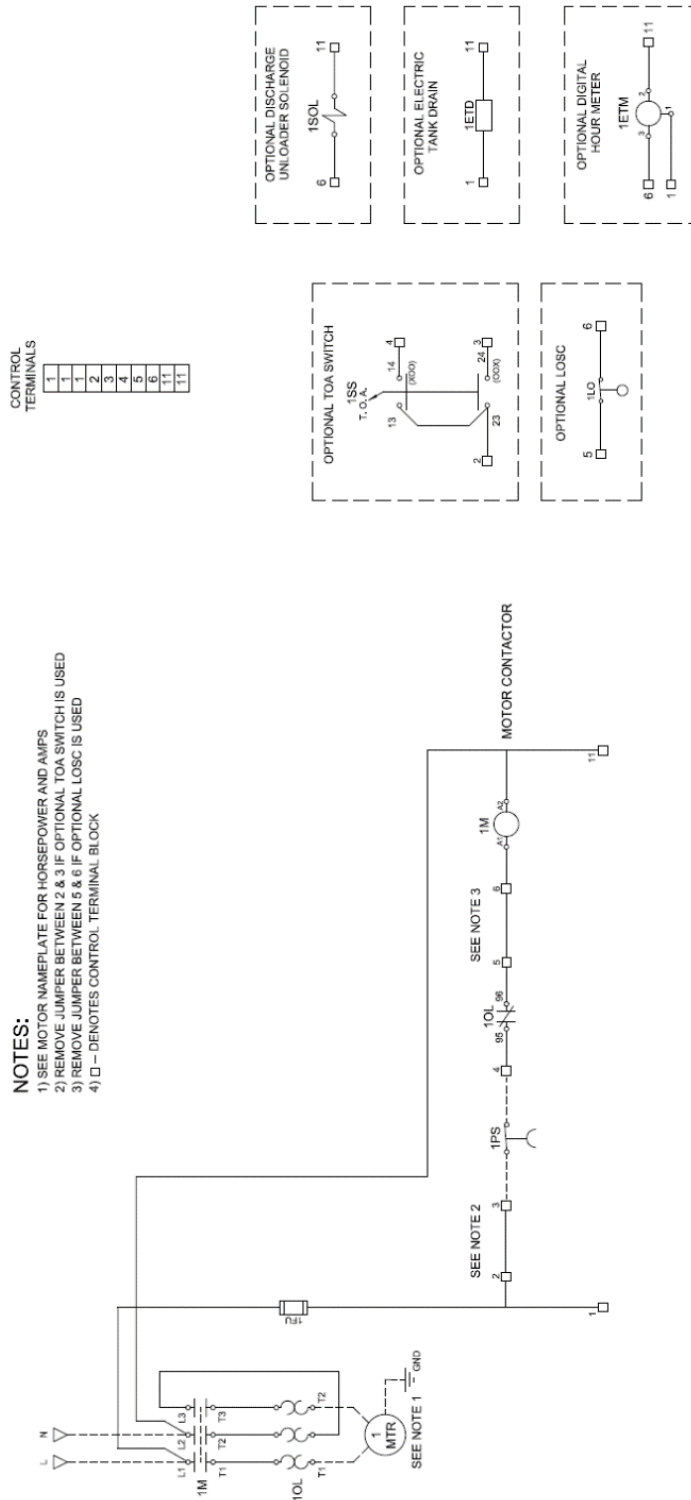
Automatic starting of the compressor can cause injury or death

After the proper pump rotation has been verified:

- If equipped with selector switch, place in the AUTO position to start the automatic sequencing of the compressor.
- If not equipped with selector switch, main disconnect can be closed and automatic sequencing will be provided by the pressure switch.

Section 4 – Wiring Diagrams

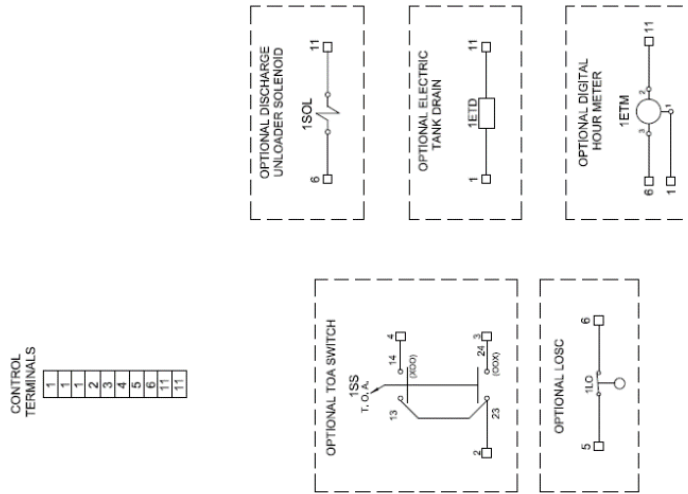
4.1 No Protection Circuit - 115V, 1 Phase



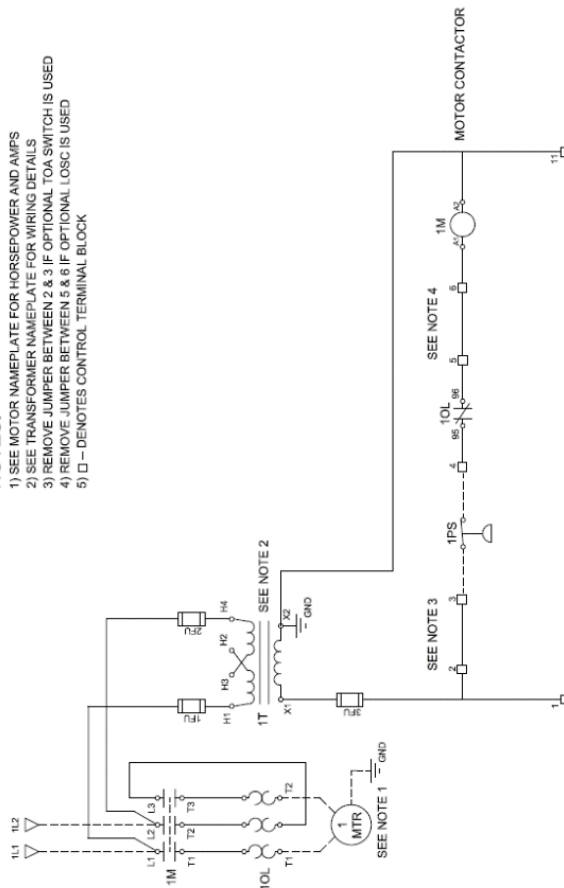
347CAS546-01
Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

4.2 No Protection Circuit - 208V thru 230V, 1 Phase



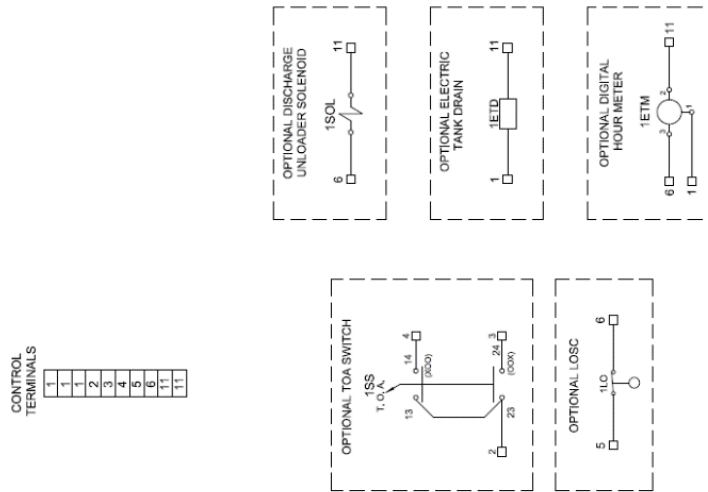
- NOTES:**
- 1) SEE MOTOR NAMEPLATE FOR HORSEPOWER AND AMPS
 - 2) SEE TRANSFORMER NAMEPLATE FOR WIRING DETAILS
 - 3) REMOVE JUMPER BETWEEN 2 & 3 IF OPTIONAL TOA SWITCH IS USED
 - 4) REMOVE JUMPER BETWEEN 5 & 6 IF OPTIONAL LOSC IS USED
 - 5) □ - DENOTES CONTROL TERMINAL BLOCK



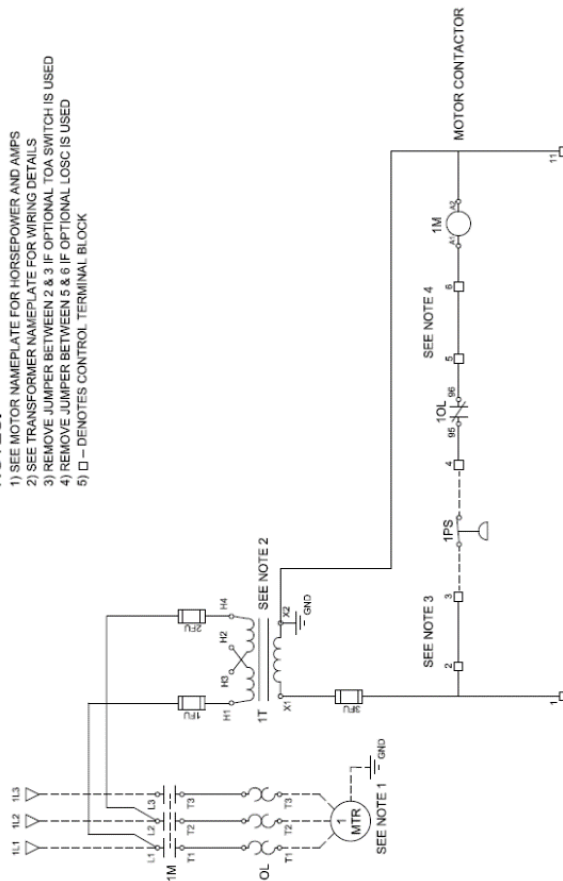
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Section 4 – Wiring Diagrams (cont.)

4.3 No Protection Circuit - 208V thru 575V, 3 Phase



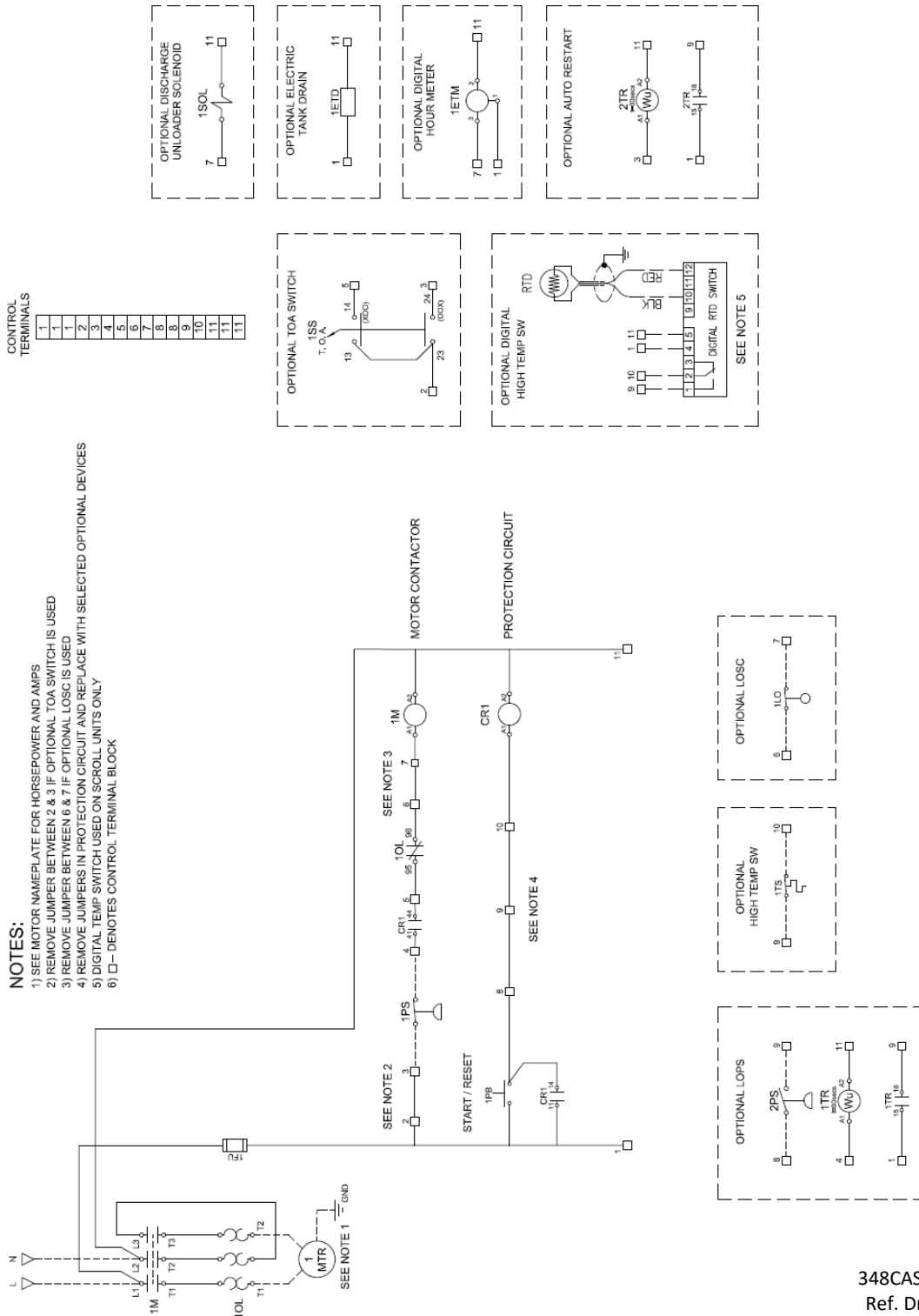
- NOTES:**
- 1) SEE MOTOR NAMEPLATE FOR HORSEPOWER AND AMPS
 - 2) SEE TRANSFORMER NAMEPLATE FOR WIRING DETAILS
 - 3) REMOVE JUMPER BETWEEN 2 & 3 IF OPTIONAL TOA SWITCH IS USED
 - 4) REMOVE JUMPER BETWEEN 5 & 6 IF OPTIONAL LOSS OF CONTROL IS USED
 - 5) □ - DENOTES CONTROL TERMINAL BLOCK



343CAS46-01
Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

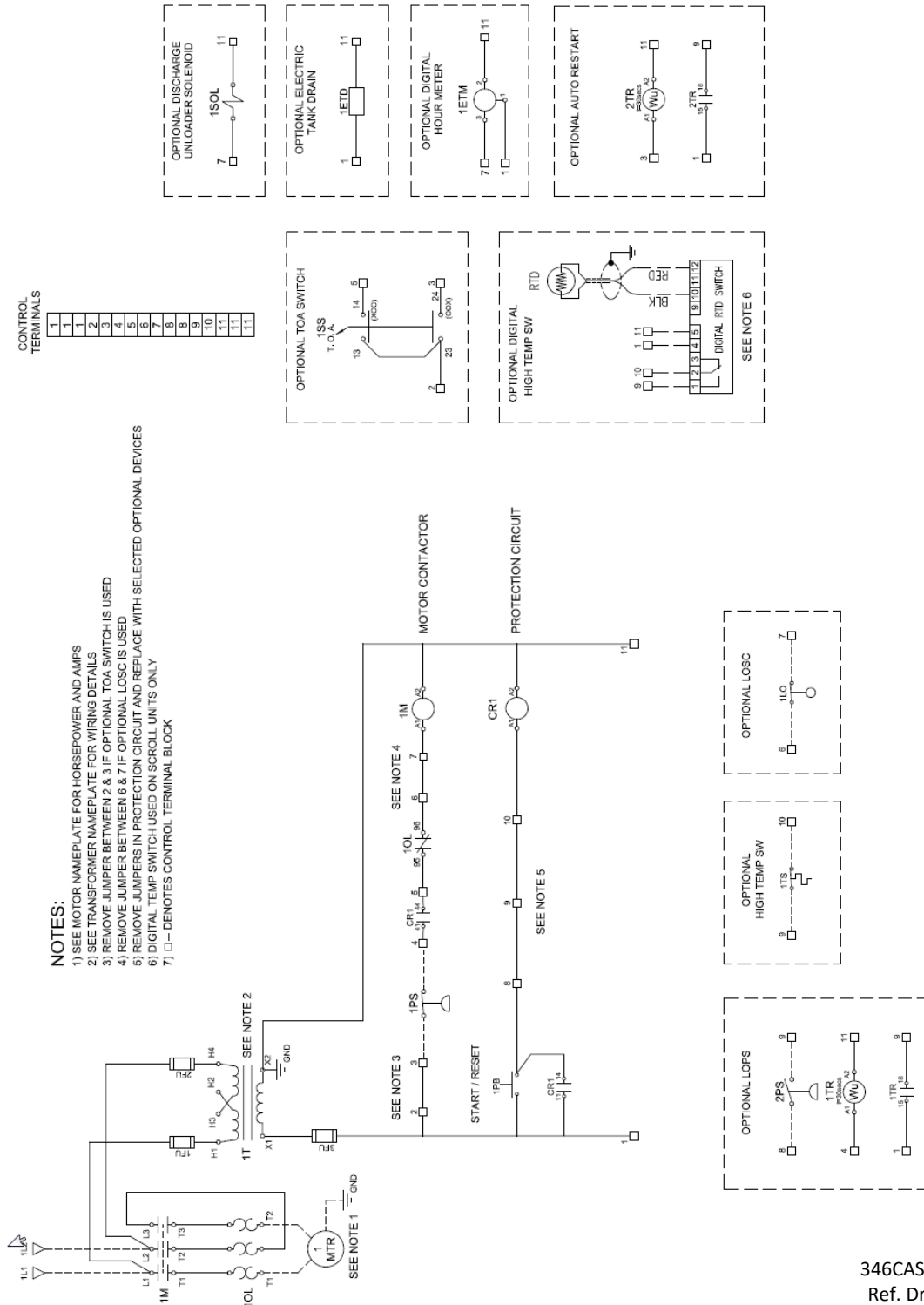
4.4 With Protection Circuit - 115V, 1 Phase



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Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

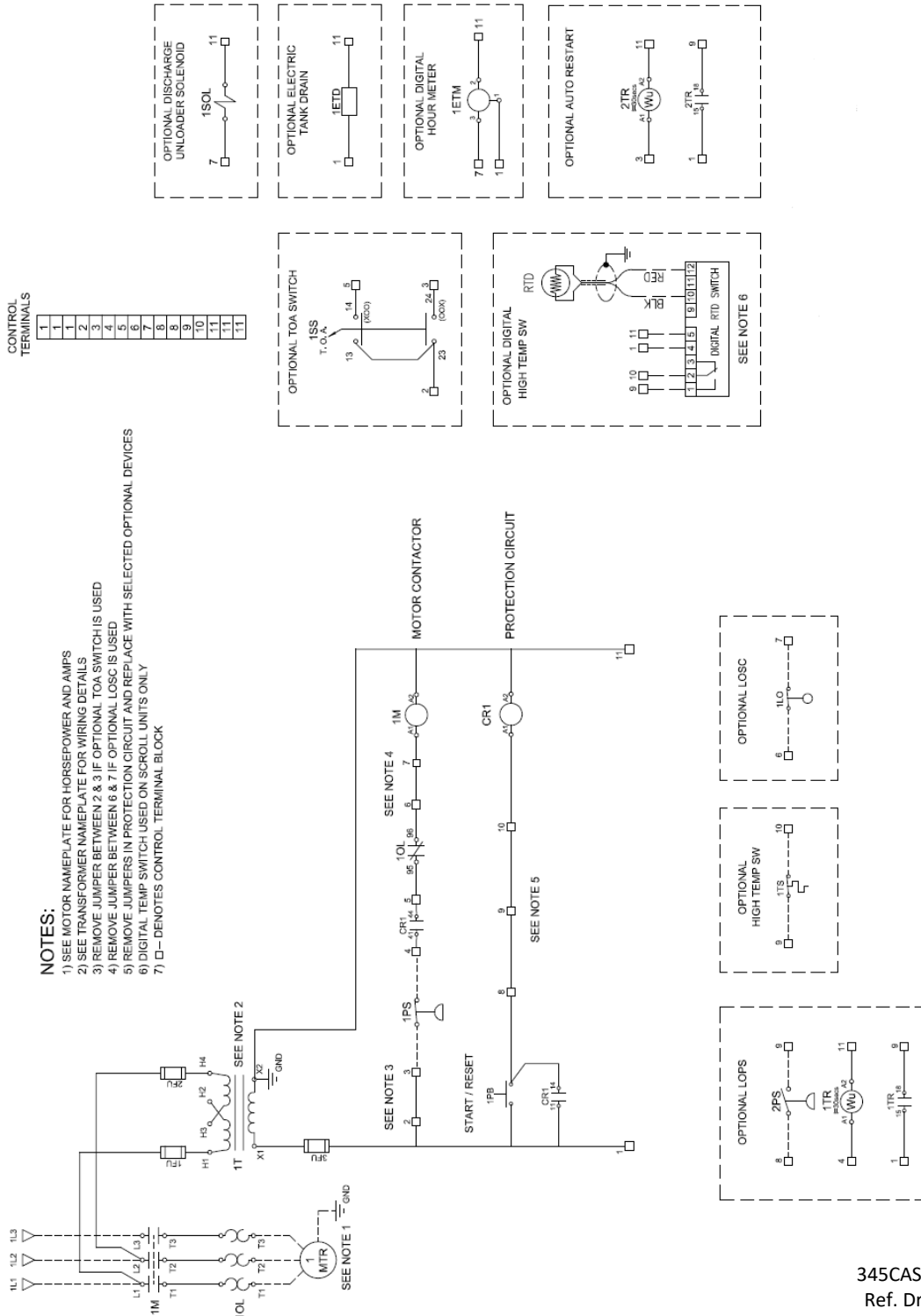
4.5 With Protection Circuit - 208V thru 230V, 1 Phase



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Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

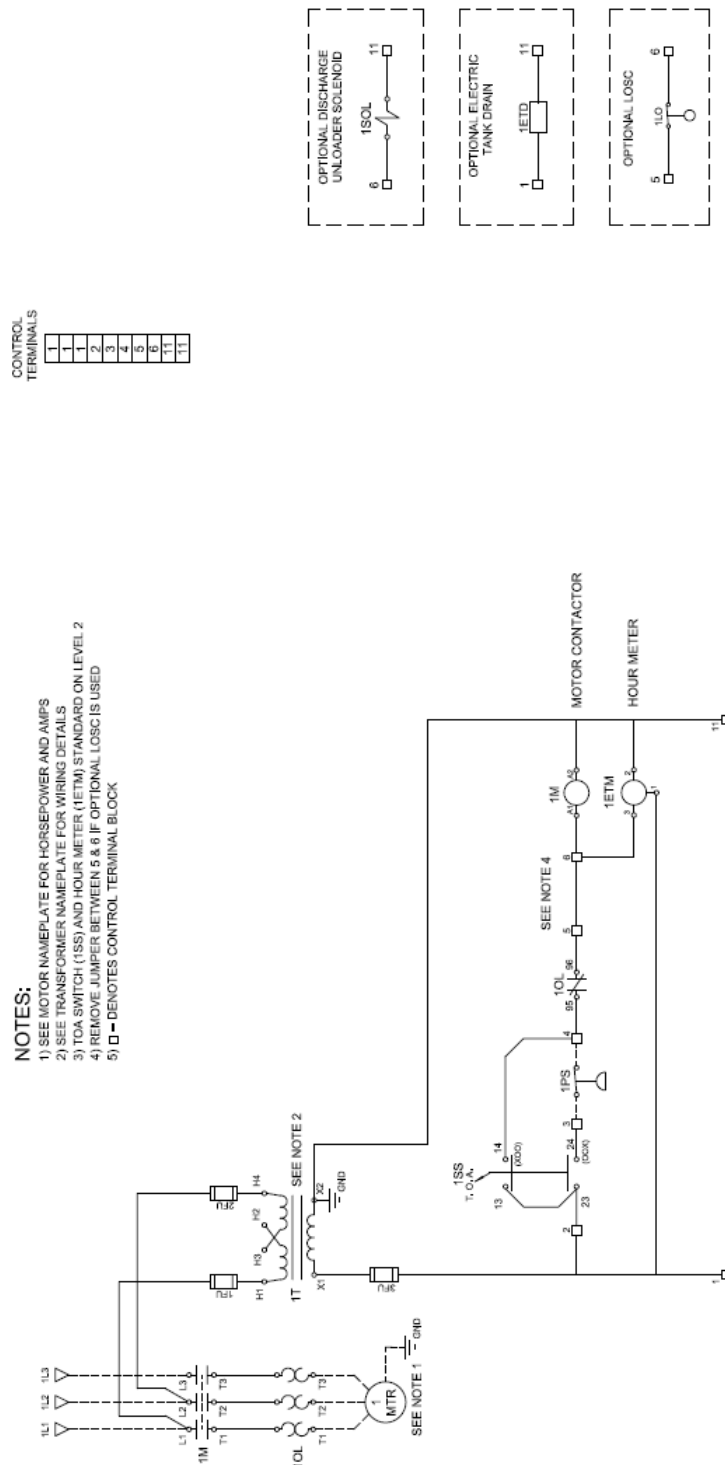
4.6 With Protection Circuit - 208V thru 575V, 3 Phase



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Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

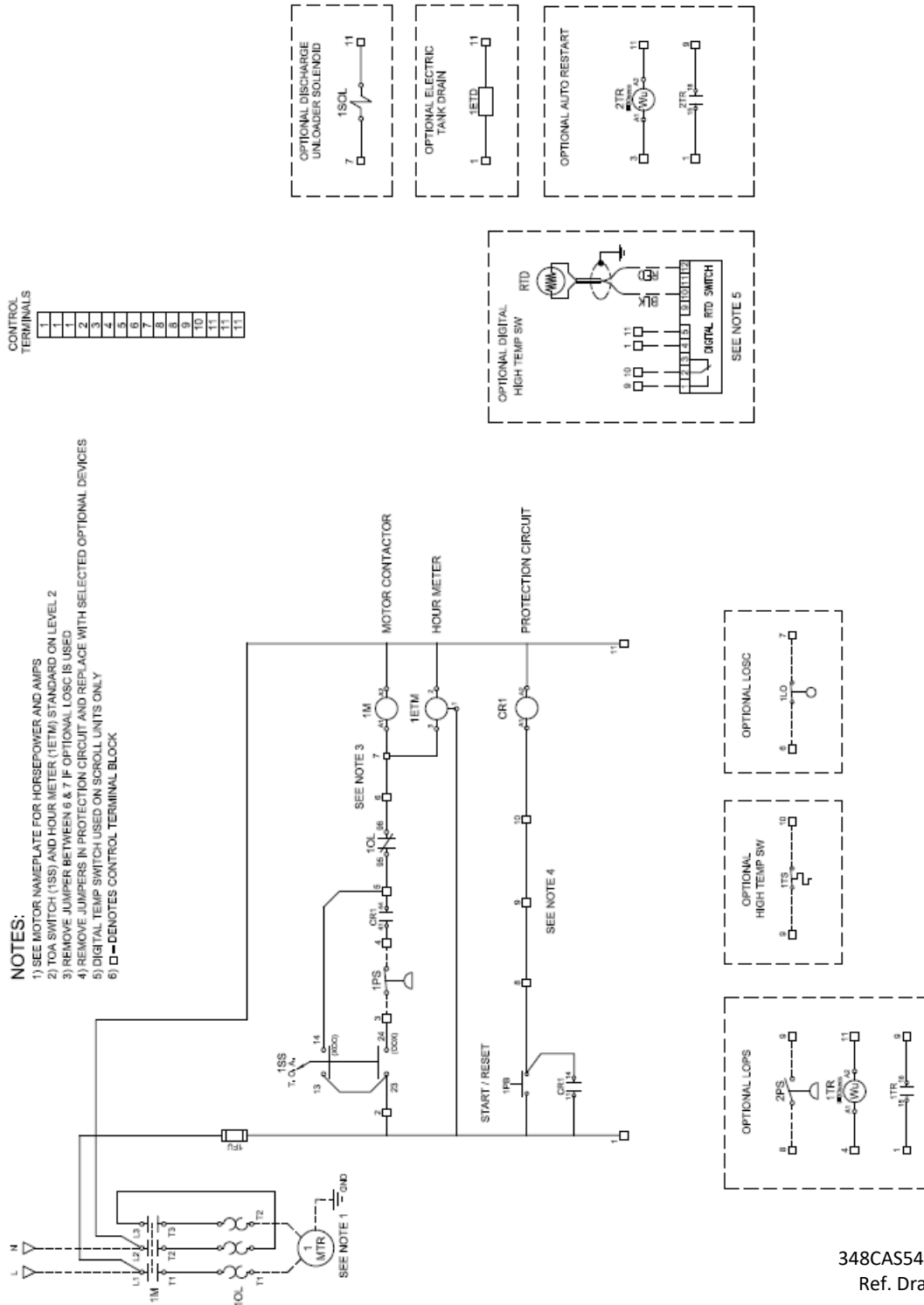
4.9 No Protection Circuit - with Hour Meter & Selector Switch - 208V thru 575V, 3 Phase



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Section 4 – Wiring Diagrams (cont.)

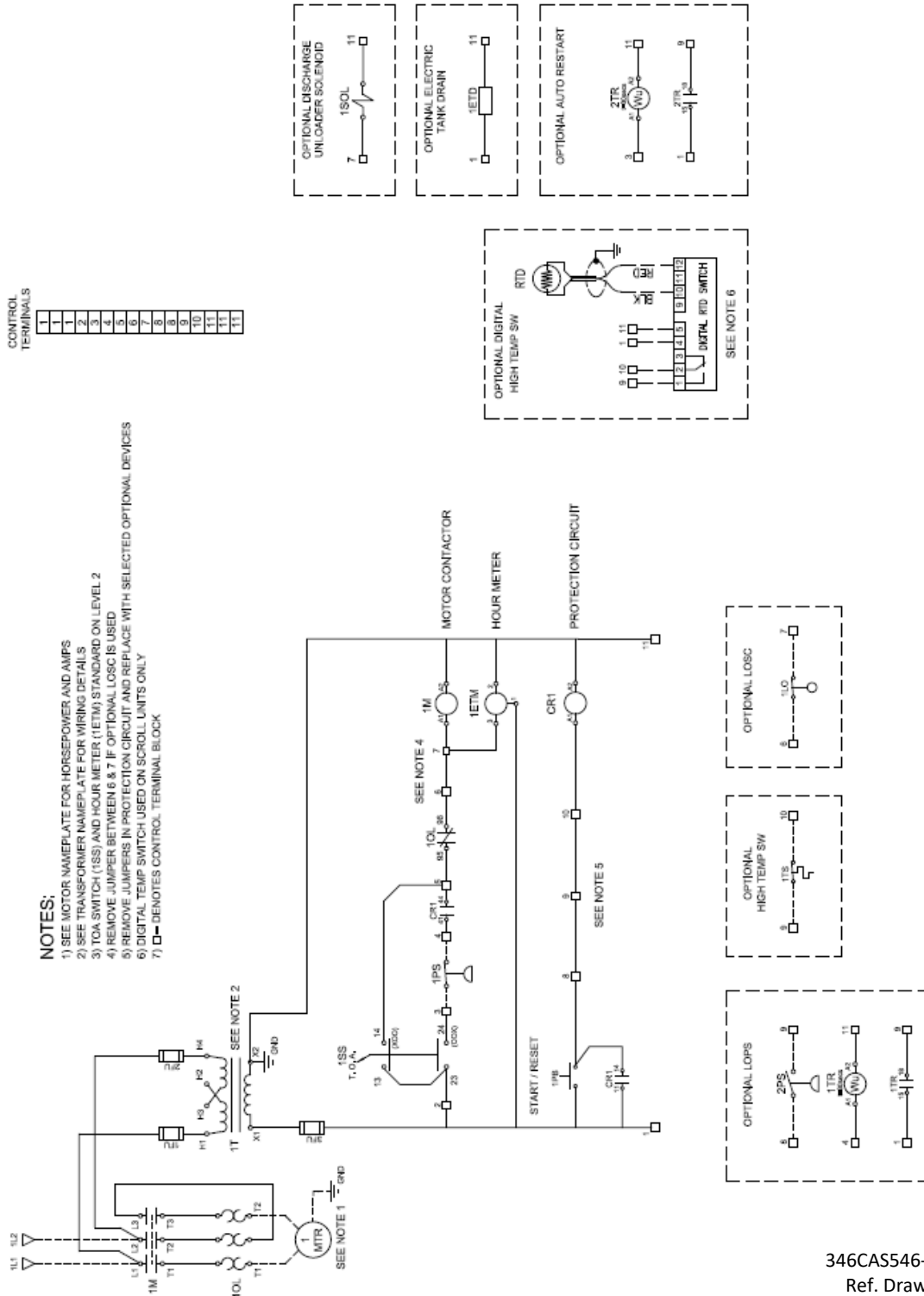
4.10 With Protection Circuit - with Hour Meter & Selector Switch - 115V, 1 Phase



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Section 4 – Wiring Diagrams (cont.)

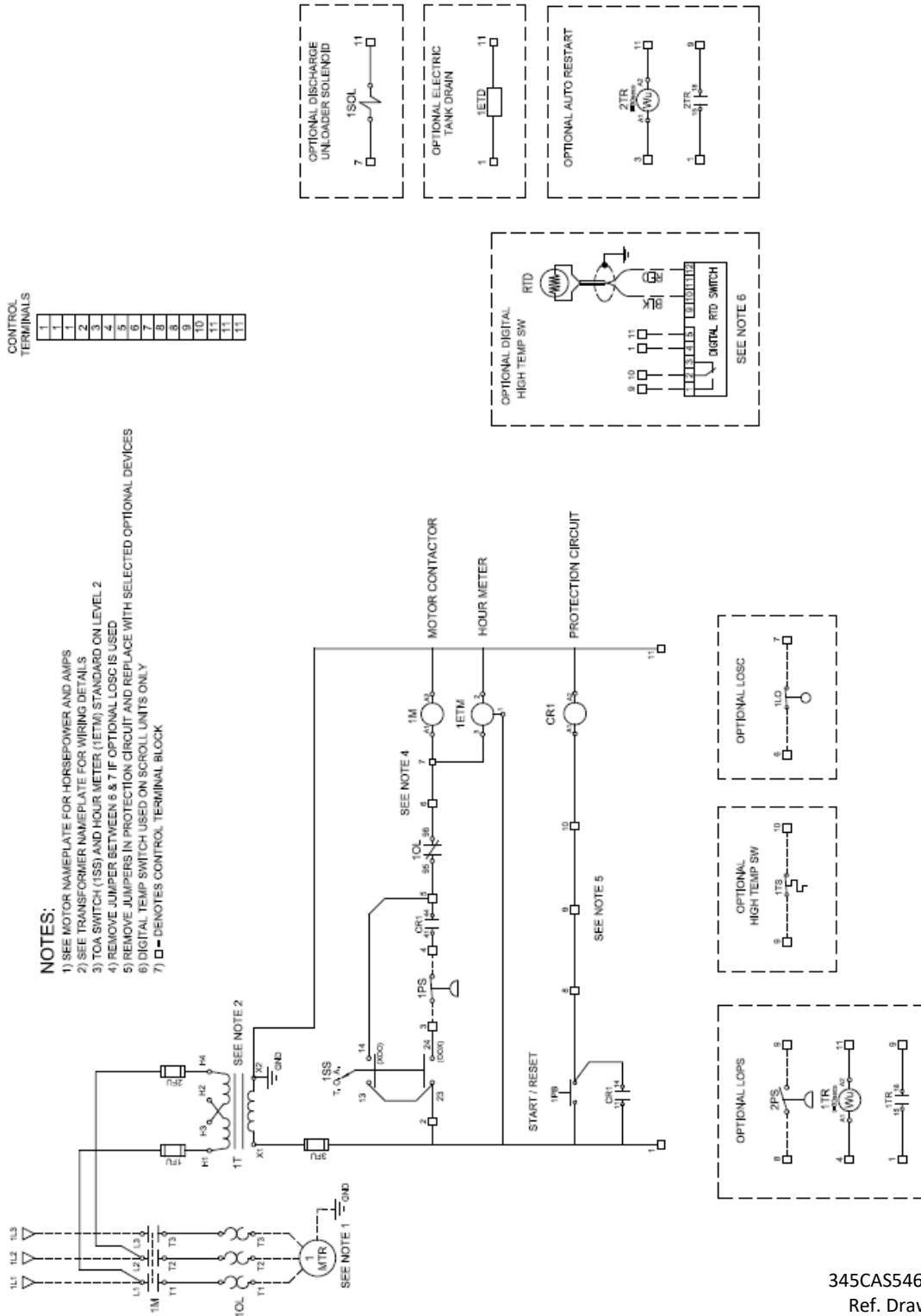
4.11 With Protection Circuit - with Hour Meter & Selector Switch - 208V thru 230V, 1 Phase



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Ref. Drawing

Section 4 – Wiring Diagrams (cont.)

4.12 With Protection Circuit - with Hour Meter & Selector Switch - 208V thru 575V, 3 Phase



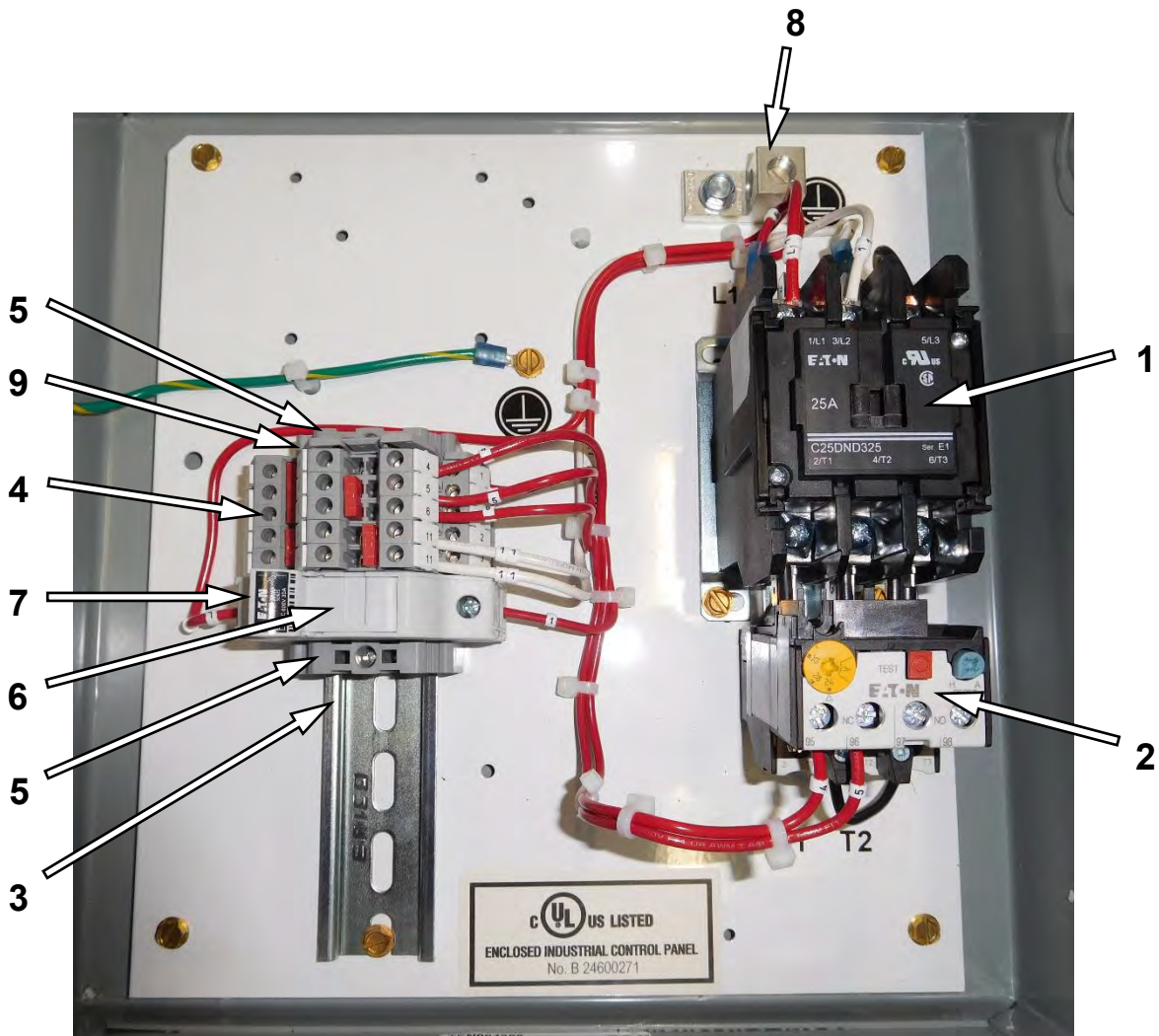
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Section 5 – Parts List

Part Numbering for Control Panels: Add the following suffix to the "PANEL PART #" listed on the following pages.

No suffix	NEMA 1 CONTROL PANEL
-N4	NEMA 4 CONTROL PANEL
-L2	NEMA 1 CONTROL PANEL, WITH HOUR METER AND SELECTOR SWITCH
-N4-L2	NEMA 4 CONTROL PANEL, WITH HOUR METER AND SELECTOR SWITCH

5.1 No Protection Circuit - 115V



Section 5 – Parts List (cont.)

5.1 No Protection Circuit - 115V

PANEL PART #	HP	VOLTAGE	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004649	.5	115	1	TEN001131	VP1039723
TEN004656	.75	115	1	TEN001131	TEN005493
TEN004656	1	115	1	TEN001131	TEN005493
TEN004661	1.5	115	1	TEN001131	TEN005494
TEN004666	2	115	1	TEN001131	TEN005495
TEN004991	3	115	1	TEN005627	VP1039727

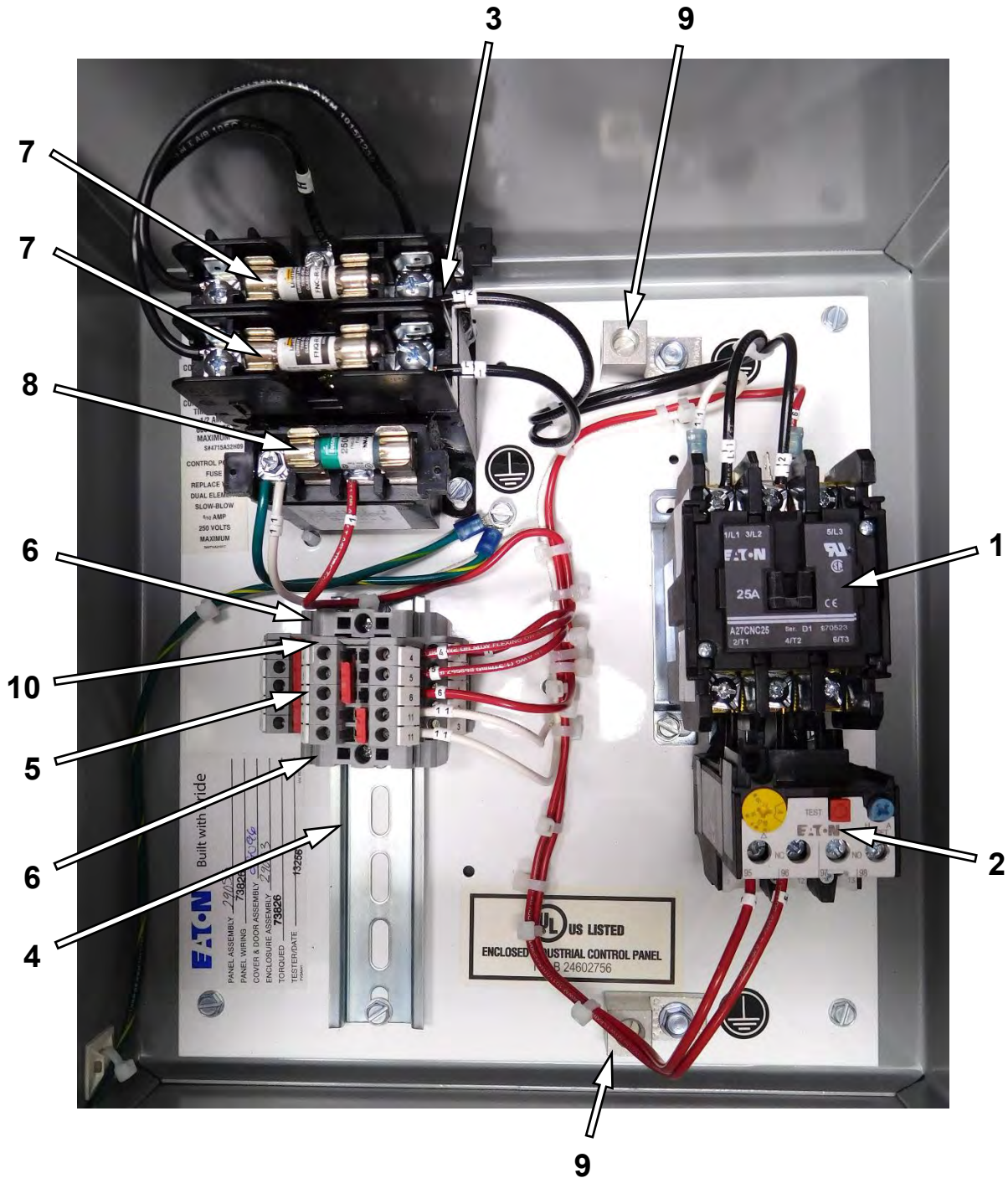
ITEM	PART #	DESCRIPTION	QTY
3	24CA5991	DIN RAIL	1
4	24CA5984	TERMINAL BLOCK	5
5	24CA5987	TERMINAL BLOCK, END STOP	2
6	24CA2898	FUSE 000.80A	1
7	24CA7198	FUSE HOLDER	1
8	24CA7881	GROUND LUG	2
9	24CA5985	TERMINAL BLOCK,END PLATE	1
10	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactora coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.2 No Protection Circuit - 208V, 230V, & 460V



Section 5 – Parts List (cont.)

5.2 No Protection Circuit - 208V, 230V, & 460V

PANEL PART #	HP	VOLT	PH	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004650	.5	208	1	TEN001131	VP1039722
TEN004653	.5	230	1	TEN001131	VP1039721
TEN004657	.75	208	1	TEN001131	VP1039723
TEN004658	.75	230	1	TEN001131	VP1039722
TEN004657	1	208	1	TEN001131	VP1039723
TEN004660	1	230	1	TEN001131	VP1039723
TEN004662	1.5	208	1	TEN001131	TEN005493
TEN004663	1.5	230	1	TEN001131	TEN005493
TEN004667	2	208	1	TEN001131	TEN005496
TEN004669	2	230	1	TEN001131	TEN005496
TEN004670	3	208	1	TEN001131	TEN005494
TEN004671	3	230	1	TEN001131	TEN005494
TEN004670	5	208	1	TEN001131	TEN005494
TEN004671	5	230	1	TEN001131	TEN005494
TEN004676	7.5	208	1	TEN005627	VP1039727
TEN004677	7.5	230	1	TEN005627	VP1039727
TEN004654	.5	208	3	TEN001131	VP1039721
TEN004787	.5	230	3	TEN001131	VP1039720
TEN004655	.5	460	3	TEN001131	VP1039720
TEN004788	.75	208	3	TEN001131	VP1039721
TEN005803	.75	230	3	TEN001131	VP1039721
TEN004659	.75	460	3	TEN001131	VP1039720
TEN004786	1	208	3	TEN001131	VP1039722
TEN004790	1	230	3	TEN001131	VP1039722
TEN004659	1	460	3	TEN001131	VP1039720
TEN004789	1.5	208	3	TEN001131	VP1039723

PANEL PART #	HP	VOLT	PH	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004791	1.5	230	3	TEN001131	VP1039723
TEN004664	1.5	460	3	TEN001131	VP1039721
TEN004792	2	208	3	TEN001131	TEN005493
TEN004791	2	230	3	TEN001131	VP1039723
TEN004668	2	460	3	TEN001131	VP1039722
TEN004792	3	208	3	TEN001131	TEN005493
TEN004793	3	230	3	TEN001131	TEN005493
TEN004672	3	460	3	TEN001131	VP1039723
TEN004794	5	208	3	TEN001131	TEN005496
TEN004795	5	230	3	TEN001131	TEN005496
TEN004674	5	460	3	TEN001131	TEN005493
TEN004796	7.5	208	3	TEN001131	TEN005494
TEN004797	7.5	230	3	TEN001131	TEN005494
TEN004674	7.5	460	3	TEN001131	TEN005493
TEN004798	10	208	3	TEN005627	VP1039727
TEN004799	10	230	3	TEN005627	VP1039727
TEN004679	10	460	3	TEN001131	TEN005496
TEN004681	15	208	3	TEN005627	TEN005535
TEN004799	15	230	3	TEN005627	VP1039727
TEN004682	15	460	3	TEN001131	TEN005494
TEN004683	20	208	3	TEN005633	TEN005535
TEN004684	20	230	3	TEN005633	TEN005535
TEN004685	20	460	3	TEN001131	TEN005495
TEN004688	25	230	3	TEN005633	VP1041424
TEN004999	25	460	3	TEN005627	VP1039727
TEN004999	30	460	3	TEN005627	VP1039727

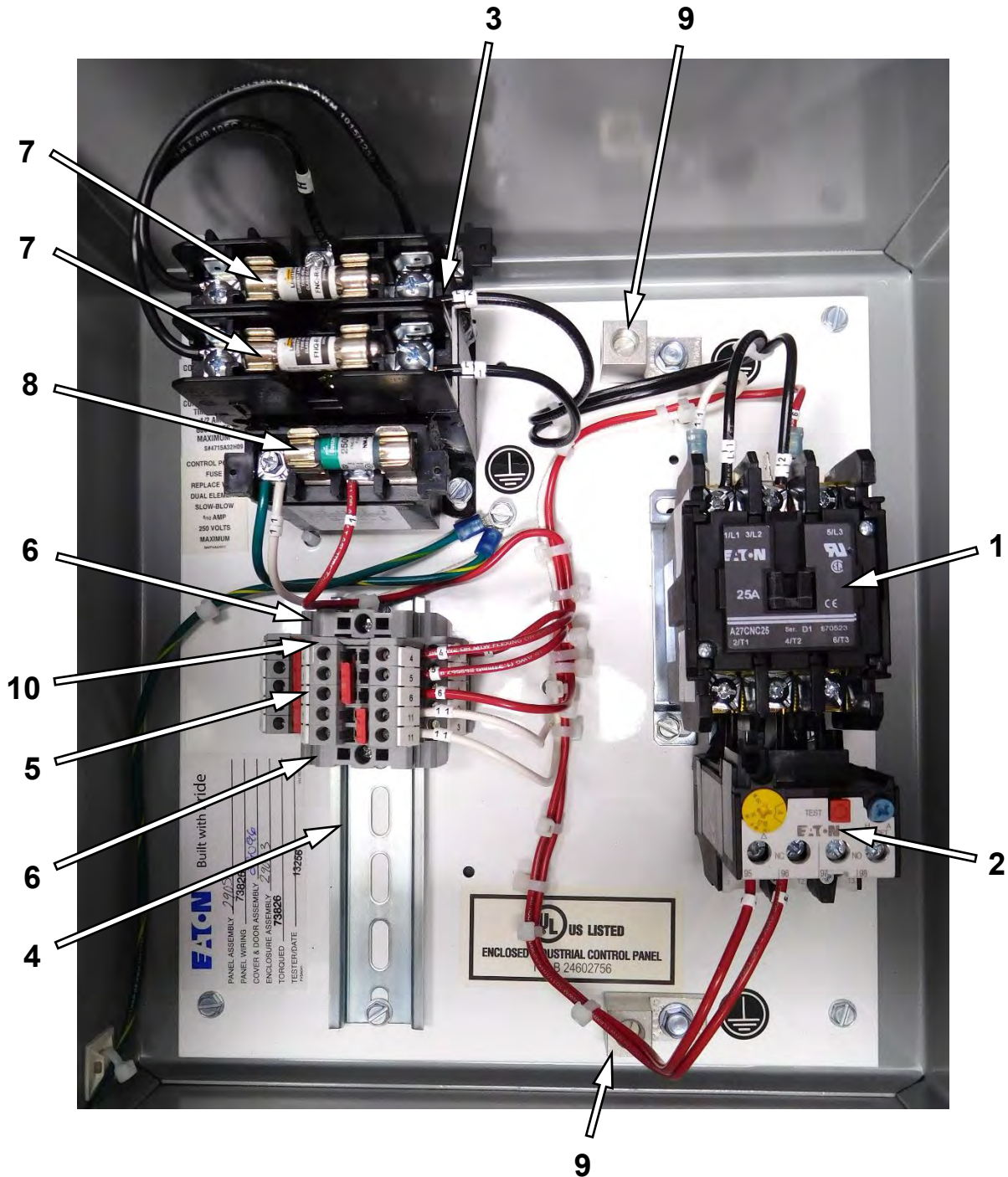
ITEM	PART #	DESCRIPTION	QTY
3	TEN001132	TRANSFORMER,50VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	5
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	24CA2897	FUSE 000.50A	2
8	24CA2898	FUSE 000.80A	1
9	24CA7881	GROUND LUG	2
10	24CA5985	TERMINAL BLOCK,END PLATE	1
11	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contacting coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.3 No Protection Circuit - 208V (25-30hp) & 230V (30hp)



Section 5 – Parts List (cont.)

5.3 No Protection Circuit - 208V (25-30hp) & 230V (30hp)

PANEL PART #	HP	VOLTAGE	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004687	25	208	3	TEN005632	VP1041428
TEN004687	30	208	3	TEN005632	VP1041428
TEN004690	30	230	3	TEN005632	VP1041428

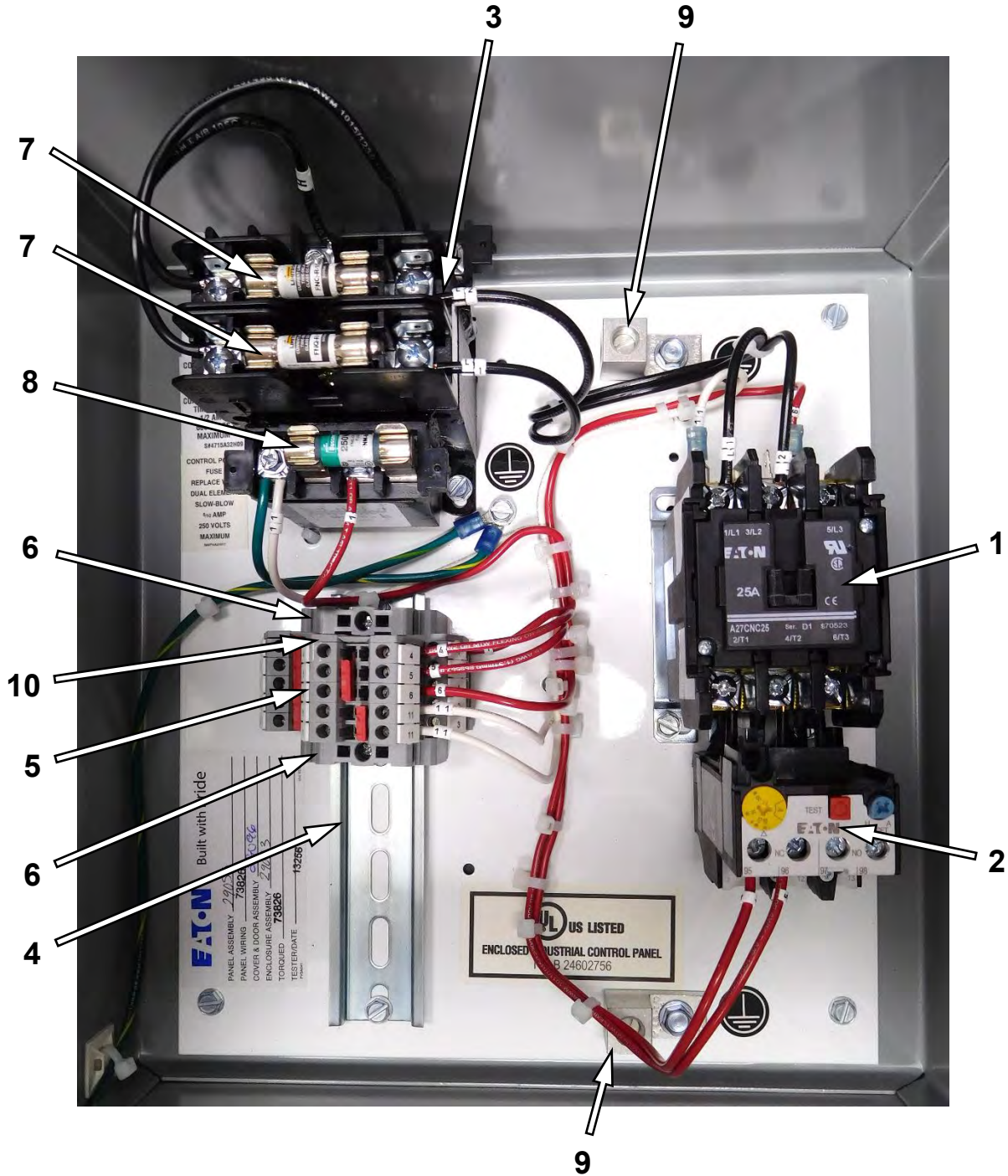
ITEM	PART #	DESCRIPTION	QTY
3	TEN010159	TRANSFORMER,100VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	5
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	24CA2897	FUSE 000.50A	2
8	24CA2898	FUSE 000.80A	1
9	24CA7881	GROUND LUG	2
10	24CA5985	TERMINAL BLOCK,END PLATE	1
11	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactors coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.4 No Protection Circuit - 575V



Section 5 – Parts List (cont.)

5.4 No Protection Circuit - 575V

PANEL PART #	HP	VOLT	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004665	1.5	575	3	TEN001131	VP1039721
TEN004665	2	575	3	TEN001131	VP1039721
TEN004673	3	575	3	TEN001131	VP1039722
TEN004675	5	575	3	TEN001131	VP1039723
TEN004678	7.5	575	3	TEN001131	TEN005493
TEN004680	10	575	3	TEN001131	TEN005496
TEN004680	15	575	3	TEN001131	TEN005496
TEN004686	20	575	3	TEN001131	TEN005494
TEN004689	25	575	3	TEN005627	VP1039727
TEN004689	30	575	3	TEN005627	VP1039727

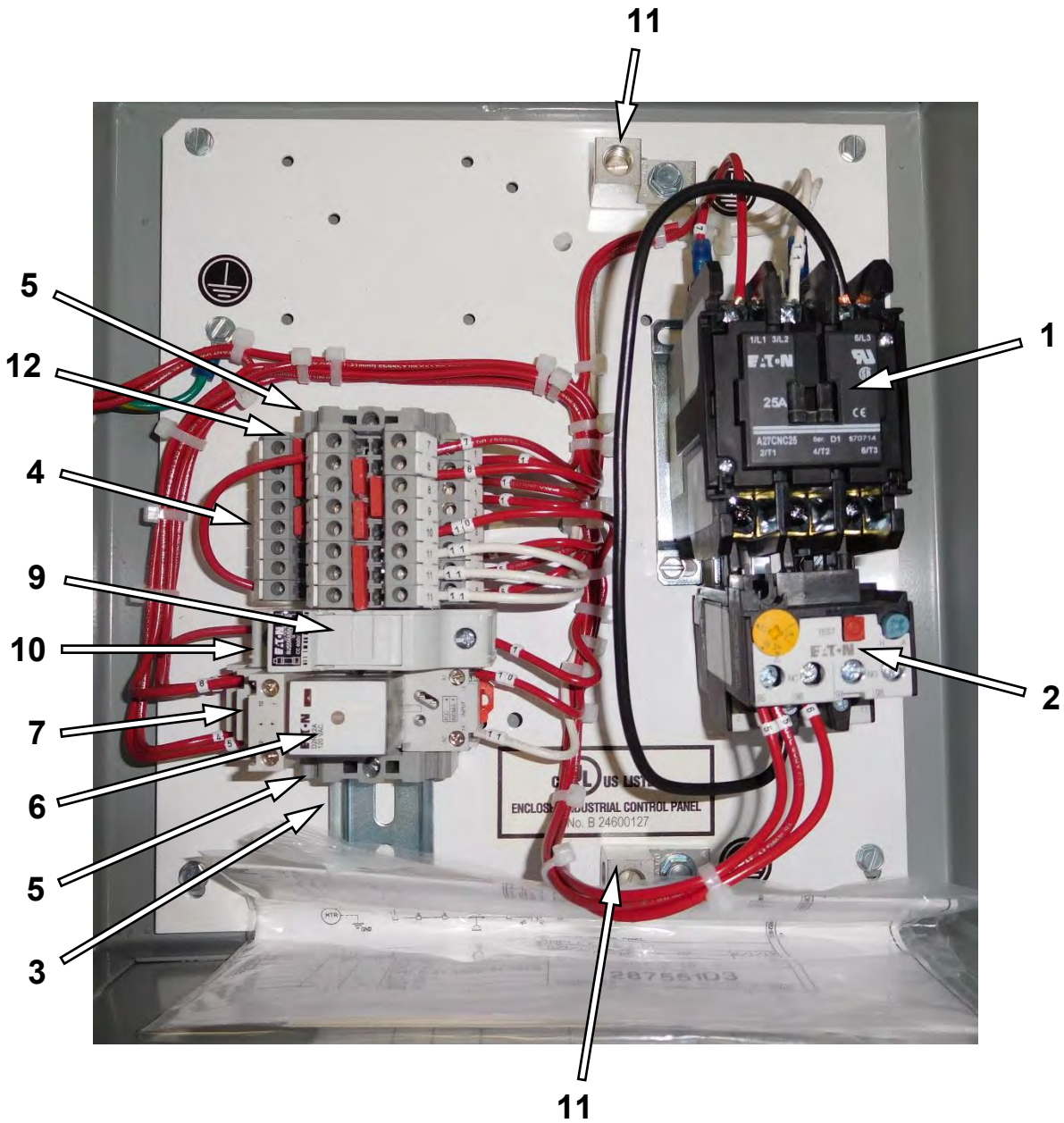
ITEM	PART #	DESCRIPTION	QTY
3	TEN001132	TRANSFORMER,50VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	5
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	24CA2896	FUSE 000.25A	2
8	24CA2898	FUSE 000.80A	1
9	24CA7881	GROUND LUG	2
10	24CA5985	TERMINAL BLOCK,END PLATE	1
11	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactor coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.5 With Protection Circuit - 115V



Section 5 – Parts List (cont.)

5.5 With Protection Circuit - 115V

PANEL PART #	HP	VOLTAGE	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004898	.5	115	1	TEN001131	VP1039723
TEN004904	.75	115	1	TEN001131	TEN005493
TEN004904	1	115	1	TEN001131	TEN005493
TEN004916	1.5	115	1	TEN001131	TEN005494
TEN004923	2	115	1	TEN001131	TEN005495
TEN004992	3	115	1	TEN005627	VP1039727

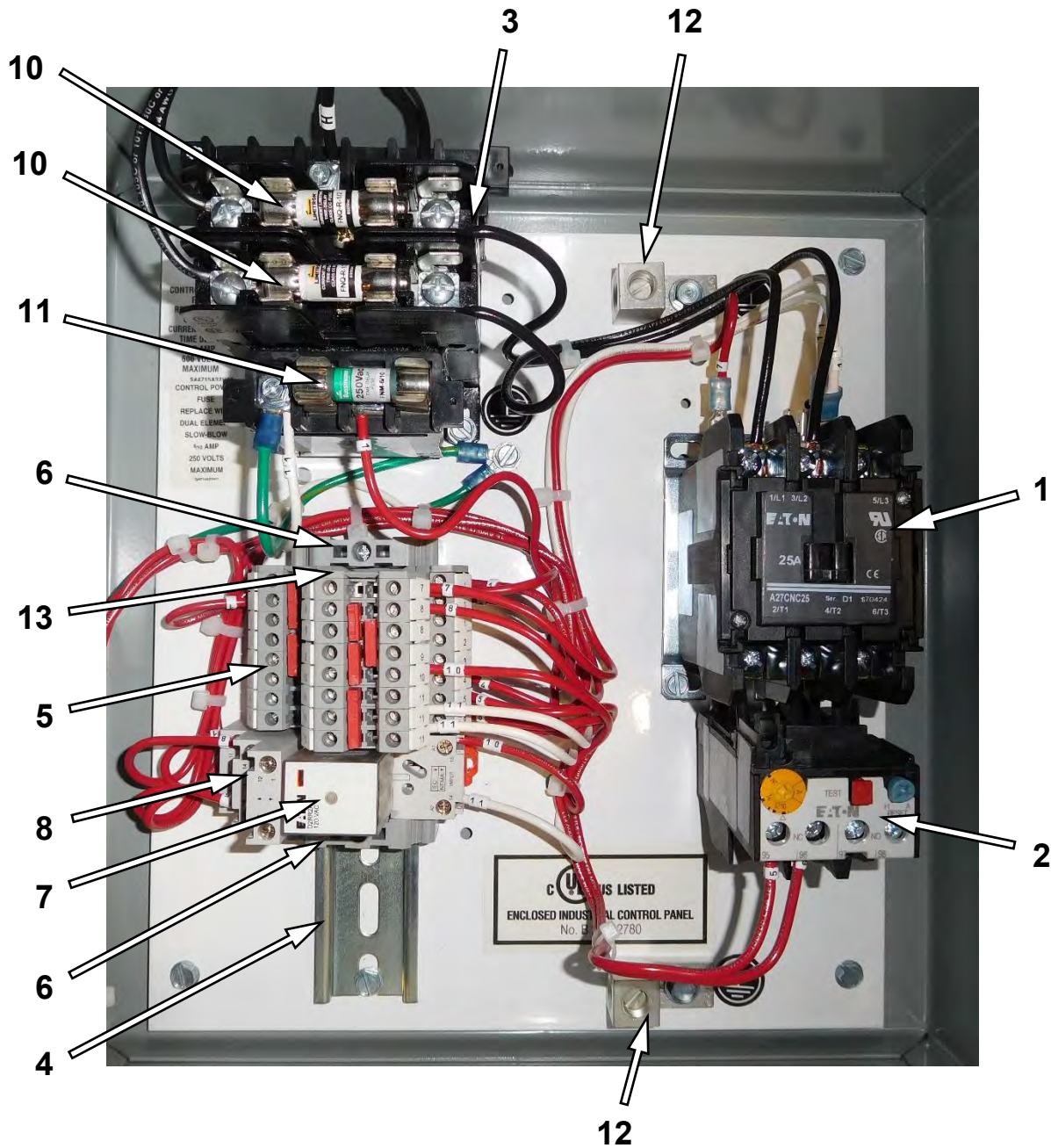
ITEM	PART #	DESCRIPTION	QTY
3	24CA5991	DIN RAIL	1
4	24CA5984	TERMINAL BLOCK	8
5	24CA5987	TERMINAL BLOCK,END STOP	2
6	TEN005628	RELAY	1
7	TEN001613	RELAY SOCKET	1
8	TEN001611	PUSHBUTTON, RESET (NOT SHOWN)	1
9	24CA2898	FUSE 000.80A	1
10	24CA7198	FUSE HOLDER	1
11	24CA7881	GROUND LUG	2
12	24CA5985	TERMINAL BLOCK,END PLATE	1
13	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactor coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.6 With Protection Circuit - 208V, 230V, & 460V



Section 5 – Parts List (cont.)

5.6 With Protection Circuit - 208V, 230V, & 460V

PANEL PART #	HP	VOLT	PH	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004899	.5	208	1	TEN001131	VP1039722
TEN004900	.5	230	1	TEN001131	VP1039721
TEN004905	.75	208	1	TEN001131	VP1039723
TEN004906	.75	230	1	TEN001131	VP1039722
TEN004905	1	208	1	TEN001131	VP1039723
TEN004912	1	230	1	TEN001131	VP1039723
TEN004917	1.5	208	1	TEN001131	TEN005493
TEN004918	1.5	230	1	TEN001131	TEN005493
TEN004924	2	208	1	TEN001131	TEN005496
TEN004925	2	230	1	TEN001131	TEN005496
TEN004931	3	208	1	TEN001131	TEN005494
TEN004932	3	230	1	TEN001131	TEN005494
TEN004931	5	208	1	TEN001131	TEN005494
TEN004932	5	230	1	TEN001131	TEN005494
TEN004933	7.5	208	1	TEN005627	VP1039727
TEN004934	7.5	230	1	TEN005627	VP1039727
TEN004901	.5	208	3	TEN001131	VP1039721
TEN004902	.5	230	3	TEN001131	VP1039720
TEN004903	.5	460	3	TEN001131	VP1039720
TEN004907	.75	208	3	TEN001131	VP1039721
TEN005835	.75	230	3	TEN001131	VP1039721
TEN004909	.75	460	3	TEN001131	VP1039720
TEN004913	1	208	3	TEN001131	VP1039722
TEN004914	1	230	3	TEN001131	VP1039722
TEN004909	1	460	3	TEN001131	VP1039720
TEN004919	1.5	208	3	TEN001131	VP1039723

PANEL PART #	HP	VOLT	PH	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004920	1.5	230	3	TEN001131	VP1039723
TEN004921	1.5	460	3	TEN001131	VP1039721
TEN004926	2	208	3	TEN001131	TEN005493
TEN004920	2	230	3	TEN001131	VP1039723
TEN004928	2	460	3	TEN001131	VP1039722
TEN004926	3	208	3	TEN001131	TEN005493
TEN004908	3	230	3	TEN001131	TEN005493
TEN004910	3	460	3	TEN001131	VP1039723
TEN004915	5	208	3	TEN001131	TEN005496
TEN004927	5	230	3	TEN001131	TEN005496
TEN004929	5	460	3	TEN001131	TEN005493
TEN004935	7.5	208	3	TEN001131	TEN005494
TEN004936	7.5	230	3	TEN001131	TEN005494
TEN004929	7.5	460	3	TEN001131	TEN005493
TEN004938	10	208	3	TEN005627	VP1039727
TEN004939	10	230	3	TEN005627	VP1039727
TEN004940	10	460	3	TEN001131	TEN005496
TEN004942	15	208	3	TEN005627	TEN005535
TEN004939	15	230	3	TEN005627	VP1039727
TEN004943	15	460	3	TEN001131	TEN005494
TEN004944	20	208	3	TEN005633	TEN005535
TEN004945	20	230	3	TEN005633	TEN005535
TEN004946	20	460	3	TEN001131	TEN005495
TEN004949	25	230	3	TEN005633	VP1041424
TEN005000	25	460	3	TEN005627	VP1039727
TEN005000	30	460	3	TEN005627	VP1039727

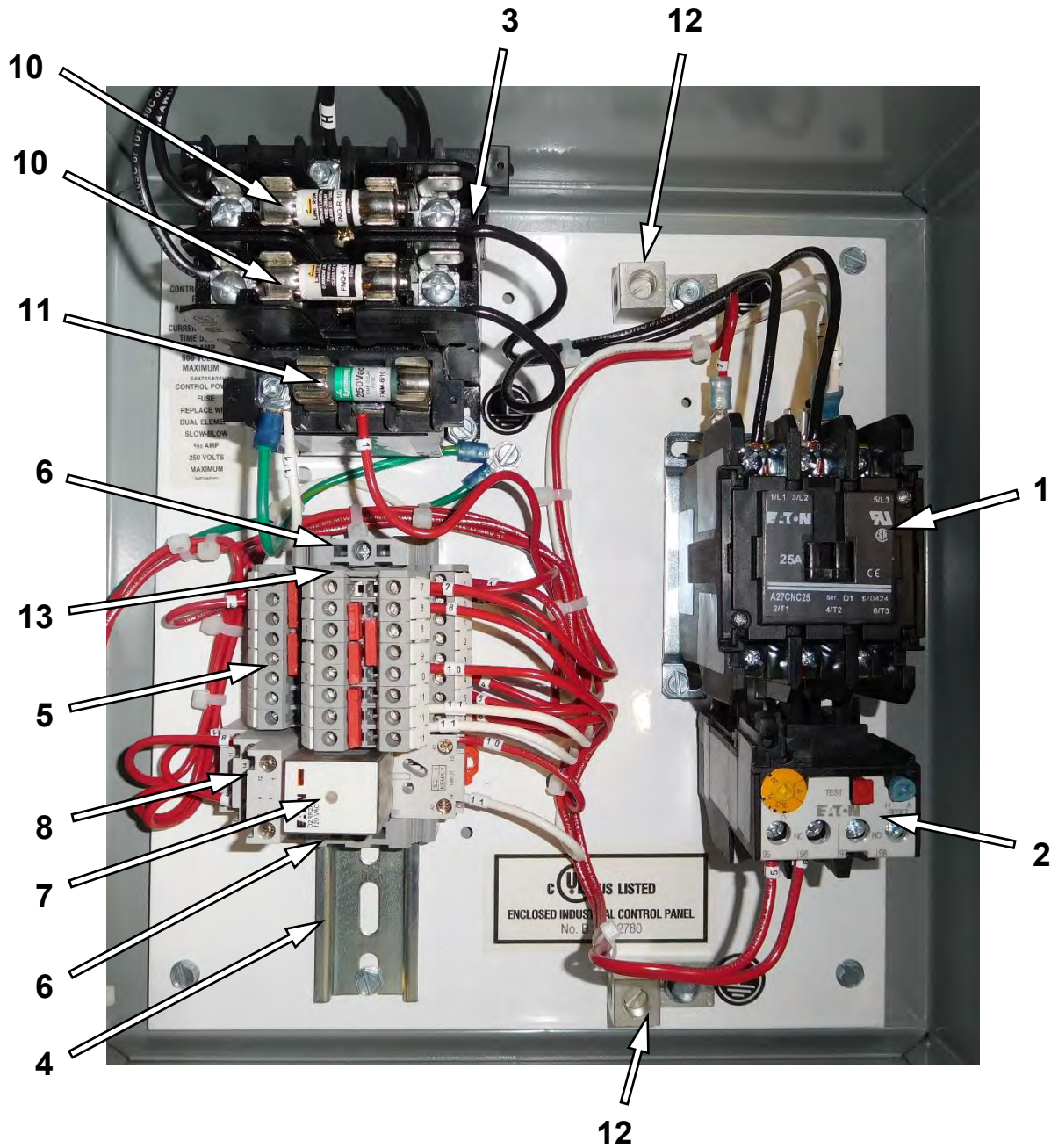
ITEM	PART #	DESCRIPTION	QTY
3	TEN001132	TRANSFORMER,50VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	8
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	TEN005628	RELAY	1
8	TEN001613	RELAY SOCKET	1
9	TEN001611	PUSHBUTTON, RESET (NOT SHOWN)	1
10	24CA2897	FUSE 000.50A	2
11	24CA2898	FUSE 000.80A	1
12	24CA7881	GROUND LUG	2
13	24CA5985	TERMINAL BLOCK,END PLATE	1
14	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactor coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.7 With Protection Circuit - 208V (25-30hp) & 230V (30hp)



Section 5 – Parts List (cont.)

5.7 With Protection Circuit - 208V (25-30hp) & 230V (30hp)

PANEL PART #	HP	VOLTAGE	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004948	25	208	3	TEN005632	VP1041428
TEN004948	30	208	3	TEN005632	VP1041428
TEN004951	30	230	3	TEN005632	VP1041428

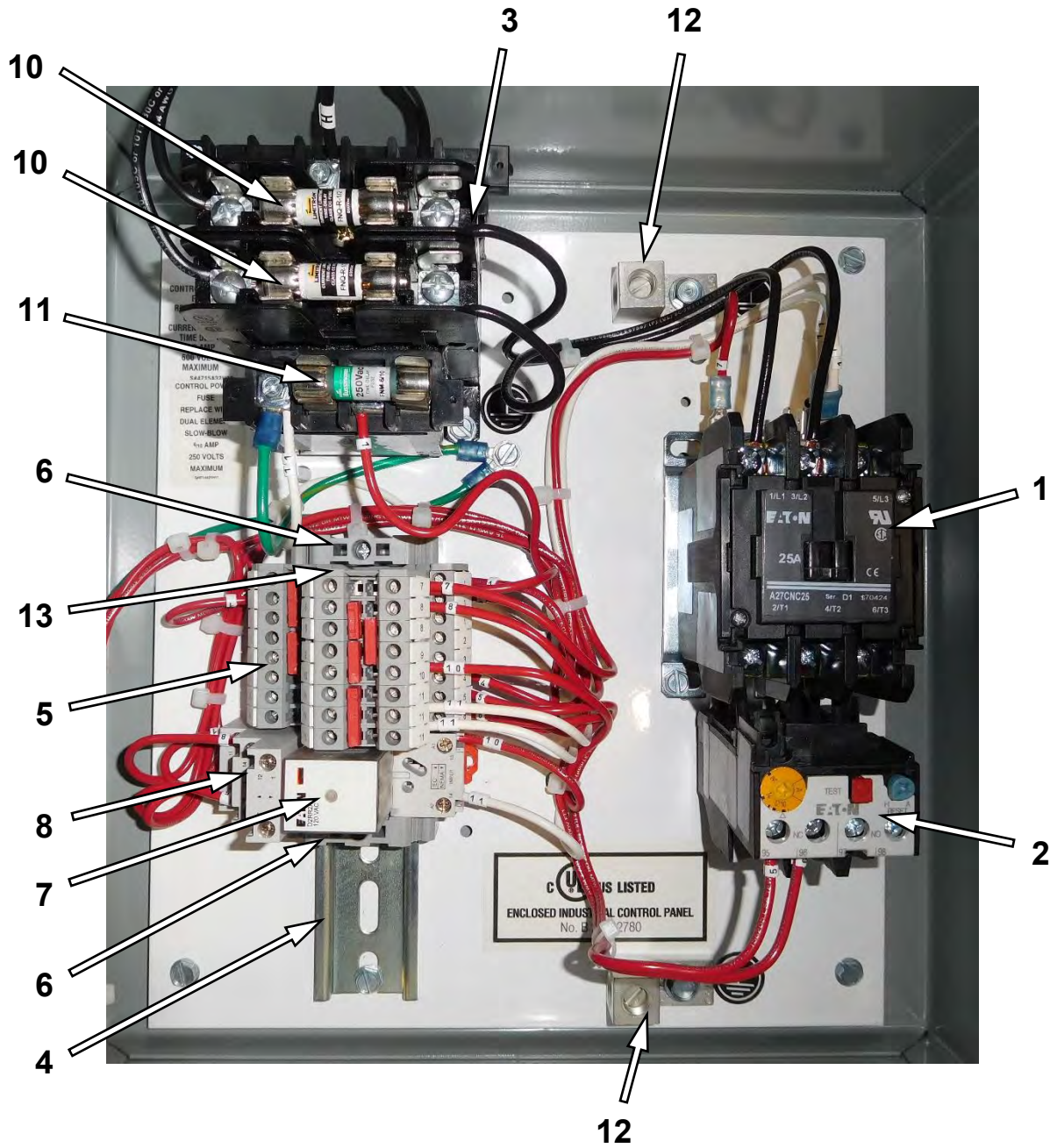
ITEM	PART #	DESCRIPTION	QTY
3	TEN010159	TRANSFORMER,100VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	8
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	TEN005628	RELAY	1
8	TEN001613	RELAY SOCKET	1
9	TEN001611	PUSHBUTTON, RESET (NOT SHOWN)	1
10	24CA2897	FUSE 000.50A	2
11	24CA2898	FUSE 000.80A	1
12	24CA7881	GROUND LUG	2
13	24CA5985	TERMINAL BLOCK,END PLATE	1
14	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactor coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 5 – Parts List (cont.)

5.8 With Protection Circuit - 575V



Section 5 – Parts List (cont.)

5.8 With Protection Circuit - 575V

PANEL PART #	HP	VOLTAGE	PHASE	ITEM 1 CONTACTOR	ITEM 2 OVERLOAD
TEN004922	1.5	575	3	TEN001131	VP1039721
TEN004922	2	575	3	TEN001131	VP1039721
TEN004911	3	575	3	TEN001131	VP1039722
TEN004930	5	575	3	TEN001131	VP1039723
TEN004937	7.5	575	3	TEN001131	TEN005493
TEN004941	10	575	3	TEN001131	TEN005496
TEN004941	15	575	3	TEN001131	TEN005496
TEN004947	20	575	3	TEN001131	TEN005494
TEN004950	25	575	3	TEN005627	VP1039727
TEN004950	30	575	3	TEN005627	VP1039727

ITEM	PART #	DESCRIPTION	QTY
3	TEN001132	TRANSFORMER,50VA	1
4	24CA5991	DIN RAIL	1
5	24CA5984	TERMINAL BLOCK	8
6	24CA5987	TERMINAL BLOCK,END STOP	2
7	TEN005628	RELAY	1
8	TEN001613	RELAY SOCKET	1
9	TEN001611	PUSHBUTTON, RESET (NOT SHOWN)	1
10	24CA2896	FUSE 000.25A	2
11	24CA2898	FUSE 000.80A	1
12	24CA7881	GROUND LUG	2
13	24CA5985	TERMINAL BLOCK,END PLATE	1
14	24CA6985	PUSH BUTTON, RESET, OVERLOAD (NOT SHOWN)	1

Contactora coil replacement

PART #	AMP RATING	CONTACTOR TYPE
VP1039975	15-40	DP
VP1039976	50	DP
VP1064513	65	IEC
VP1064516	80-95	IEC

Section 6 – Aftermarket

6.1 Voltage Conversion Kits

The following conversion kits are provided to convert from 230 volt to 460 volt as needed. When converting from 230 volt to a different voltage, follow the installation instructions provided with the kit.

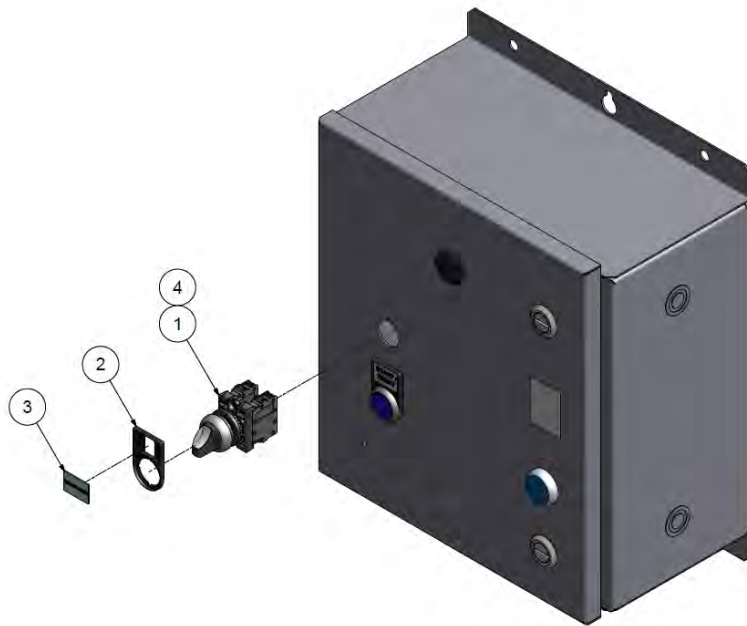


Before performing installation or maintenance, verify available voltage. Open main disconnect and any other circuits. Lockout and tagout all sources of power. Failure to do this may result in injury or equipment damage.

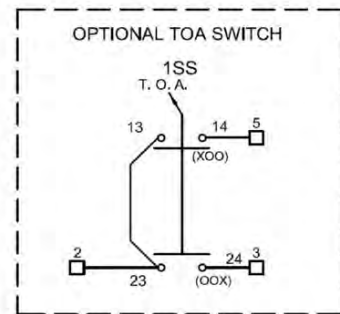
CONVERSION	HORSEPOWER	KIT PART #	DESCRIPTION
230V TO 460V	5 & 7.5	TEN011727	KIT,SCP CONVERSION,460V/3PH,5/7.5HP
230V TO 460V	10	TEN011728	KIT,SCP CONVERSION,460V/3PH,10HP
230V TO 460V	15	TEN011729	KIT,SCP CONVERSION,460V/3PH,15HP
230V TO 460V	25	TEN011730	KIT,SCP CONVERSION,460V/3PH,25HP

Section 6 – Aftermarket (cont.)

6.2 Selector Switch



REMOVE JUMPER BETWEEN 2 & 3



REFERENCE ONLY
REFER TO LATEST WIRING DIAGRAM

TEN009372-00
Ref. Drawing

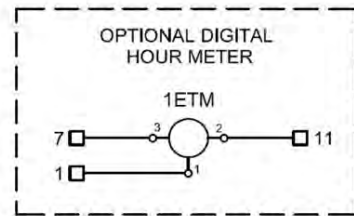
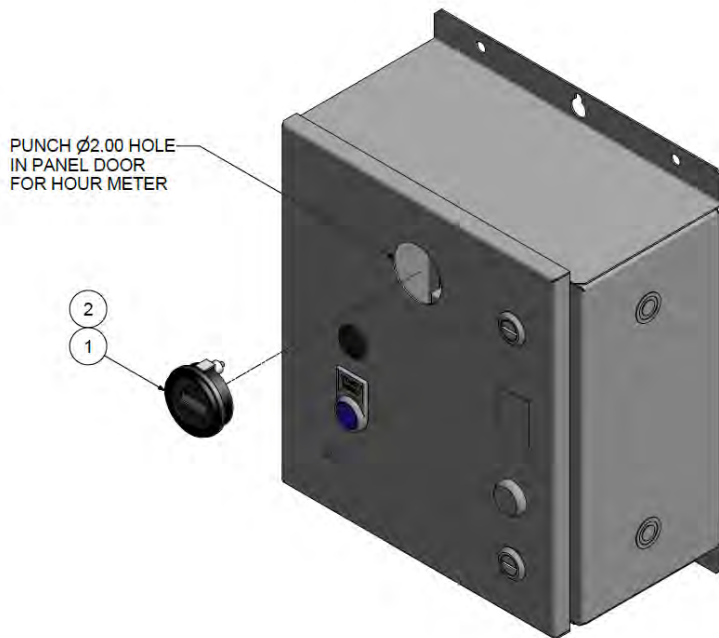
KIT, TEST-OFF-AUTO SWITCH

TEN012070

ITEM	PART #	DESCRIPTION	QTY
1	TEN010375	SWITCH-SELECTOR,3-POS,TEST-OFF-AUTO	1
2	TEN001323	LEGEND PLATE HOLDER	1
3	TEN001150	TEST-OFF-AUTO LEGEND PLATE	1
4	M2439	WIRE, 18 GA	4 FT

Section 6 – Aftermarket (cont.)

6.3 Hour Meter



REFERENCE ONLY
REFER TO LATEST WIRING DIAGRAM

TEN009368-00
Ref. Drawing

KIT, HOURMETER, NEMA 1

TEN012071

ITEM	PART #	DESCRIPTION	QTY
1	TEN001134	HOURMETER,115V,N1	1
2	M2439	WIRE, 18 GA	4 FT

KIT, HOURMETER, NEMA 4

TEN012492

ITEM	PART #	DESCRIPTION	QTY
1	VP1114782	HOURMETER,115V,N4	1
2	M2439	WIRE, 18 GA	4 FT



CHAMPION

For additional information, contact your local representative or visit:
www.championpneumatic.com/contactus.aspx

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