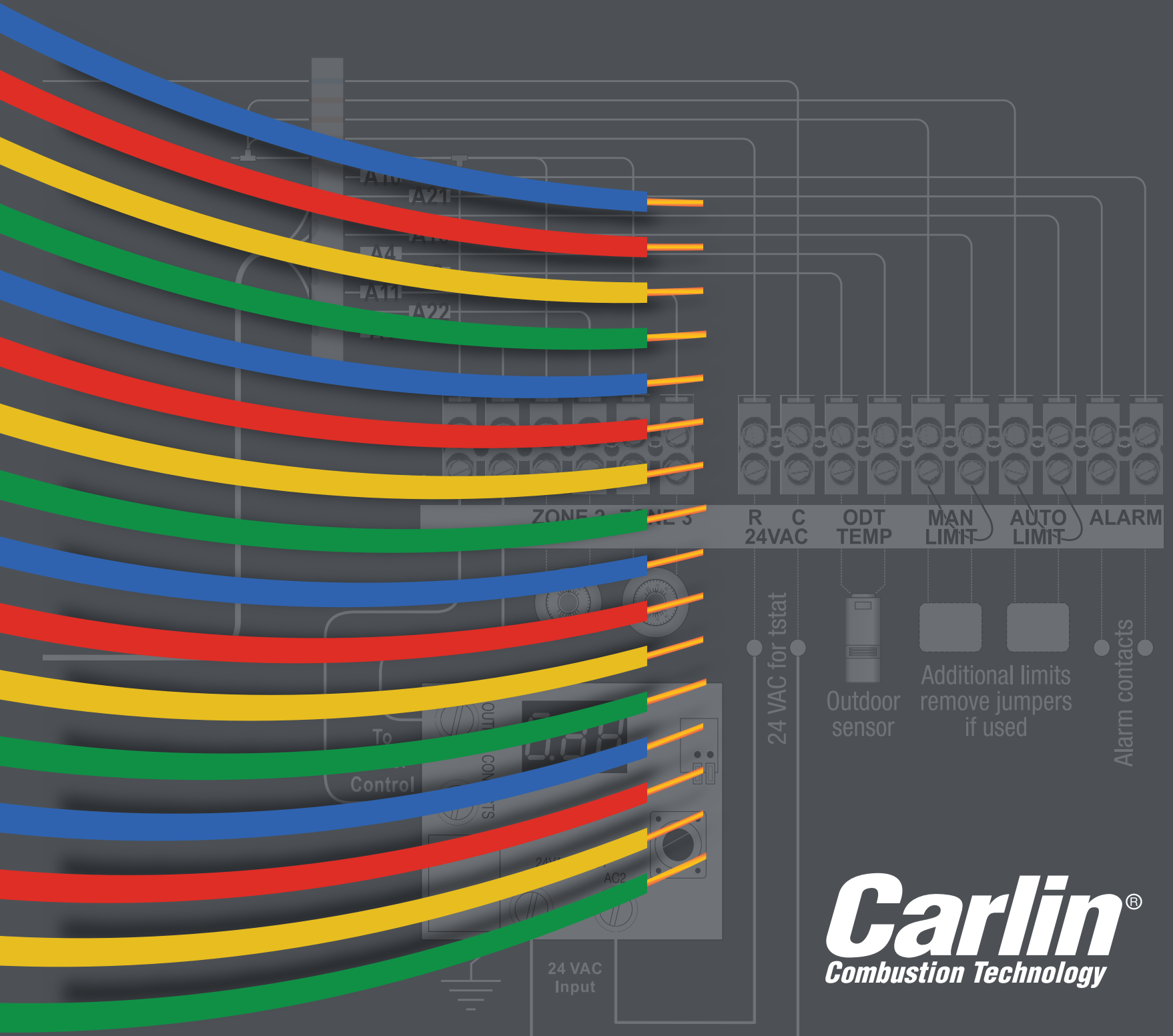


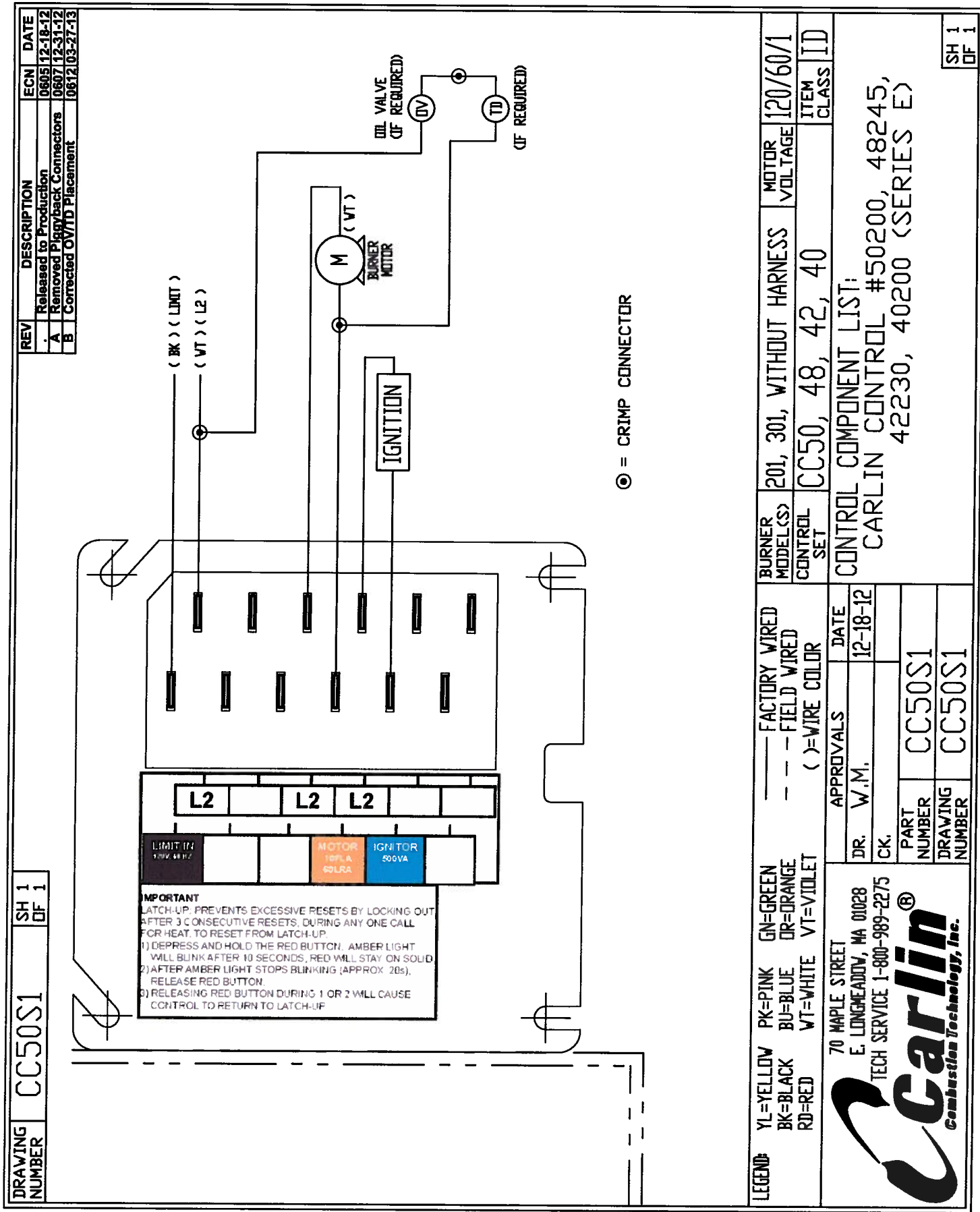
Common Wiring Diagrams for Burners and Controls



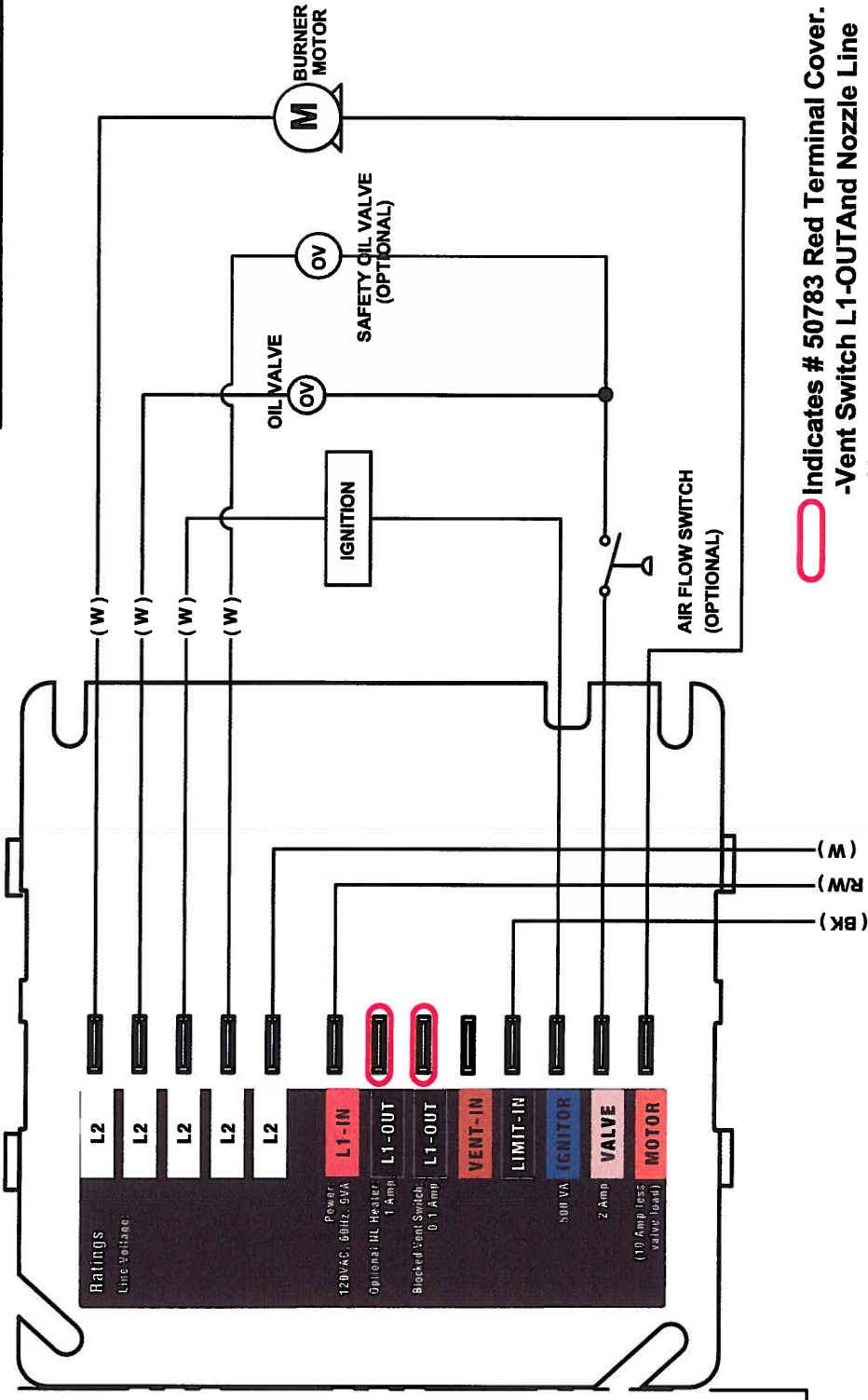
Carlin[®]
Combustion Technology

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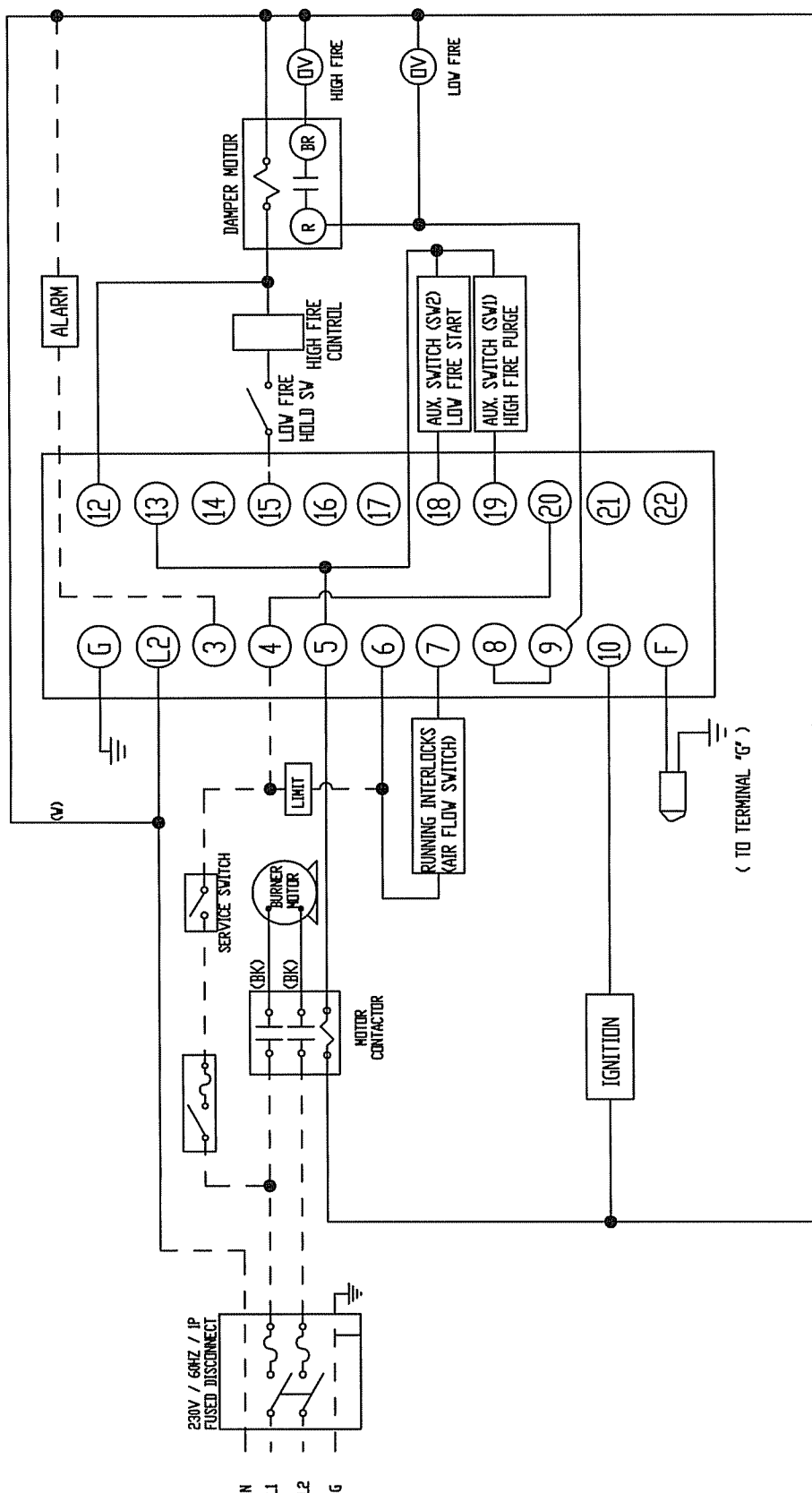
DRAWING NUMBER	CC7S1	SH 1	DF 1
REV	DESCRIPTION	ECN	DATE
A	Released to Production	0601	10-17-12
A	Added Terminal Cover And Notes	0605	12-19-12




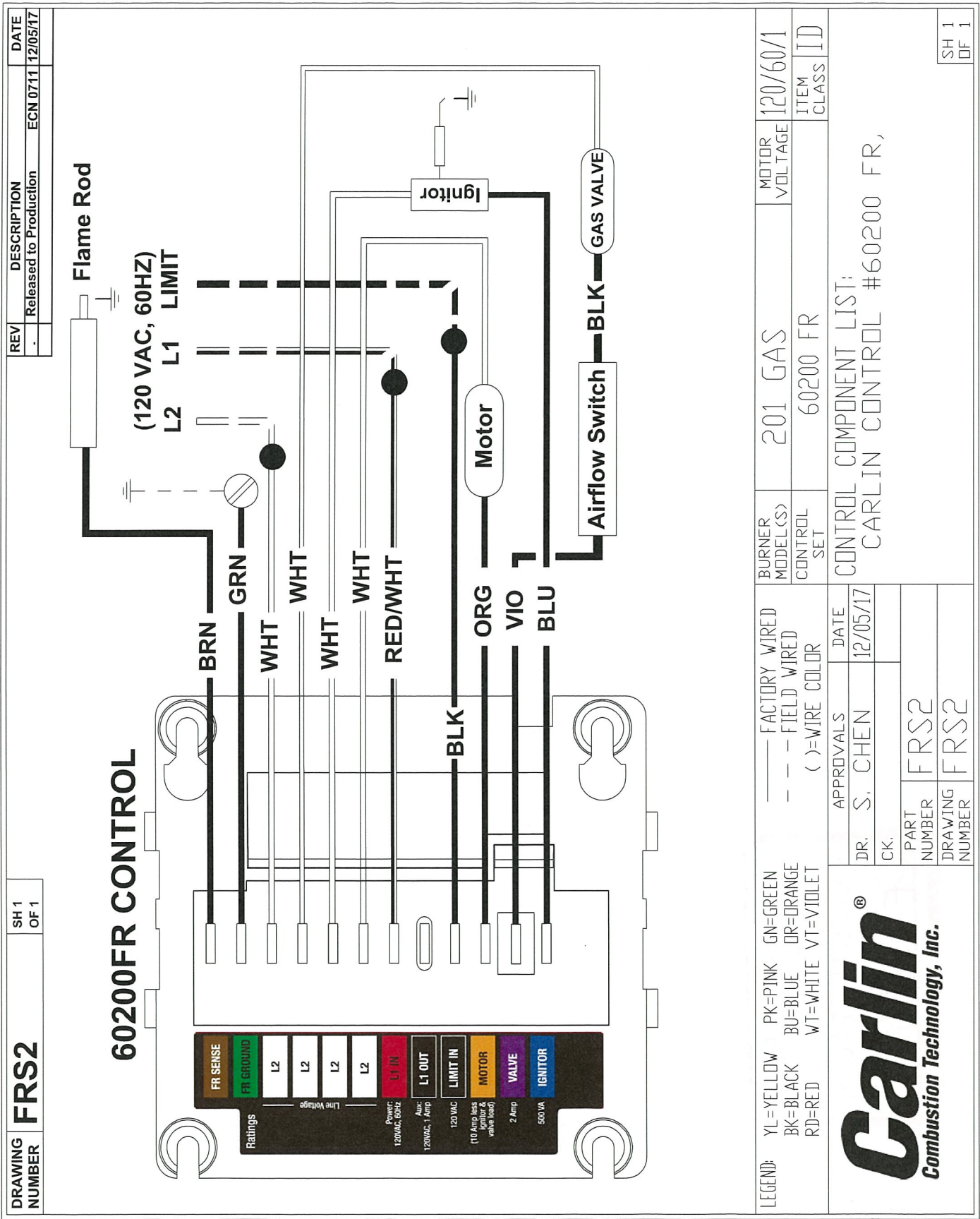
LEGEND:	Y=YELLOW BK=BLACK R=RED	P=PINK BU=BLUE V=WHITE	G=GREEN DR=ORANGE V=VIOLET	FACTORY WIRED FIELD WIRED ()=WIRE COLOR	BURNER MODEL(S) CONTROL SET	201CRD, 301CRD WITHOUT HARNESS CC7	MOTOR VOLTAGE ITEM CLASS	115/60/1 ID
APPROVALS					CONTROL COMPONENT LIST: CARLIN CONTROL #70200			
DR. W.M.					DATE			
CK.					10-03-12			
PART NUMBER					CC7S1			
DRAWING NUMBER					CC7S1			
70 MAPLE STREET E. LONGMEADOW, MA 01028 TECH SERVICE 1-800-989-2275					SH 1 DF 1			



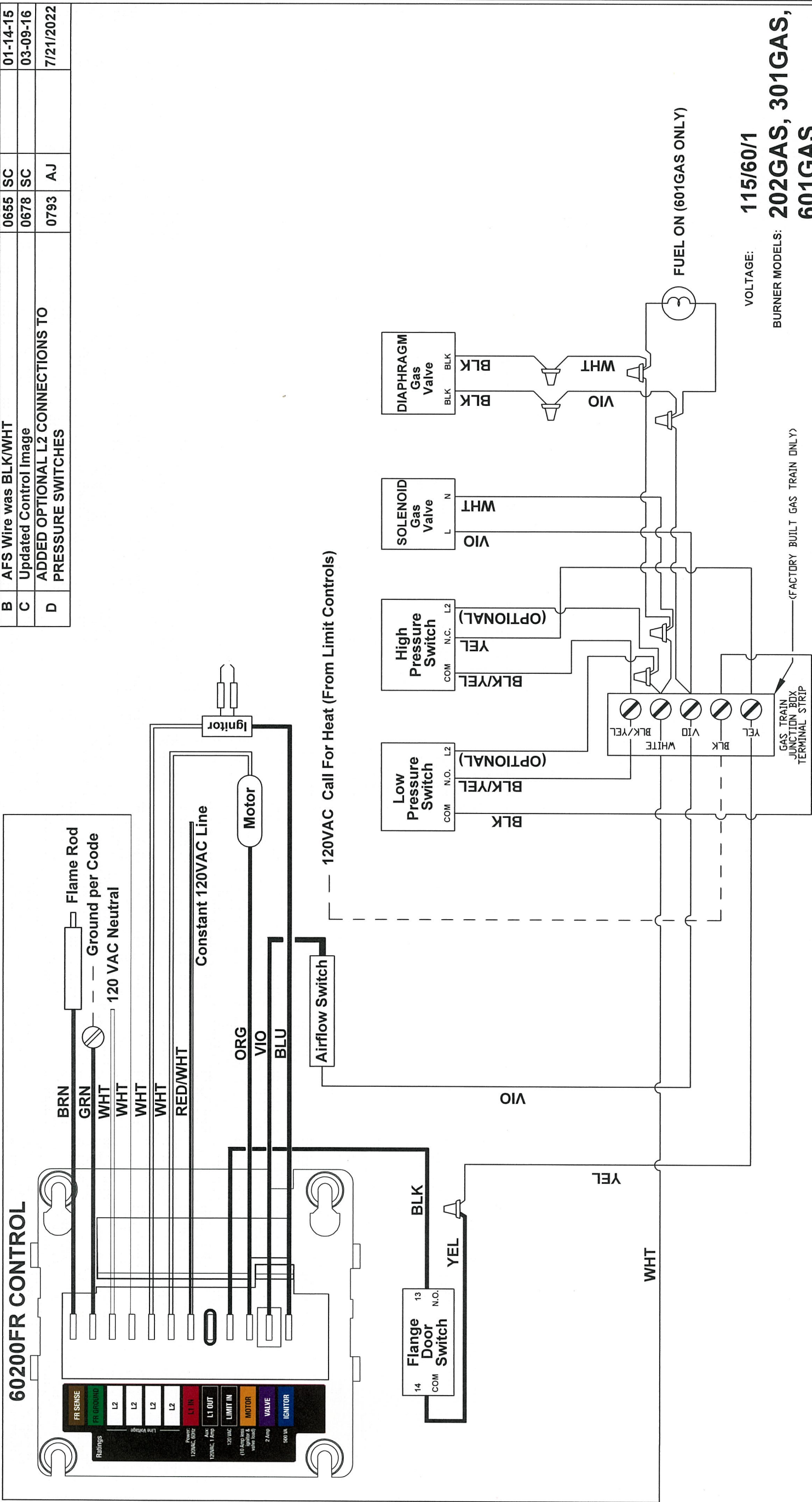
DRAWING NUMBER	V43L2	SH 1 OF 1	REV	DESCRIPTION	BY	APPROVAL	DATE
			A	Was RM7840L1018	ECN 0475 MPC		5-30-07



LEGEND: Y=YELLOW P=PINK BR=BROWN BK=BLACK BU=BLUE OR=ORANGE R=RED W=WHITE V=VIOLET			FACTORY WIRED -- -- FIELD WIRED ()=WIRE COLOR		BURNER MODEL(S)	701, 801, 1050, 1150	MOTOR VOLTAGE	230/60/1	
<div><div>Garlin[®] Combustion Technology, Inc.</div></div> <div>70 MAPLE STREET E. LONGMEADOW, MA 01028 TECH SERVICE 1-800-989-2275</div>					CONTROL SET	EMX43UV (U43, V43)	ITEM CLASS		ID
					CONTROL COMPONENT LIST:				
					RM7840L1075 PROGRAMMER, ST7800A1039 TIMING CARD				
					R7849A1023 UV FLAME AMPLIFIER, C7027A1023 UV SCANNER				
Q7800B1003 SUB-BASE					SH 1 OF 1				



REV	DESCRIPTION	ECN	BY	APPROVAL	DATE
.	Released to Production	0439	LAD		02-27-06
A	Black Wire from Limit Circuit was BLK/RED	0463	MPC		12-26-06
B	AFS Wire was BLK/WHT	0655	SC		01-14-15
C	Updated Control Image	0678	SC		03-09-16
D	ADDED OPTIONAL L2 CONNECTIONS TO PRESSURE SWITCHES	0793	AJ		7/21/2022



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REMOVE BURR AND FLASH FOR PROPER OPERATION AND GOOD APPEARANCE.

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

INTERPRET ALL DIMENSIONS PER LATEST ANSI Y14.5

QUALITY CHARACTERISTICS

CRITICAL

MAJOR A

MAJOR B

MINOR SYMBOL

STATISTICAL

TOLERANCE UNLESS OTHERWISE SHOWN

FRACTIONAL ± 1/64

ANGLE ± 1.0 °

DEC .XX ± .01

.XXX ± .005

SCALE FULL

LEGEND:

YEL=YELLOW

PNK=PINK

GRN=GREEN

BLK=BLACK

BLU=BLUE

ORG=ORANGE

RED=RED

WHT=WHITE

BRN=BROWN

VIO=VIOLET

= Crimp Connector

FACTORY WIRED

FIELD WIRED

APPROVALS

DR.

LAD

DATE

02-27-06

CK.

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THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

INTERPRET ALL DIMENSIONS PER LATEST ANSI Y14.5

FRS1A

FRS1A

WIRING DIAGRAM

ECN NUMBER

0439

DRAWING NUMBER

FRS1A

PART NUMBER

MATL NUMBER

PART DESC.

MATL DESC.

ITEM CLASS

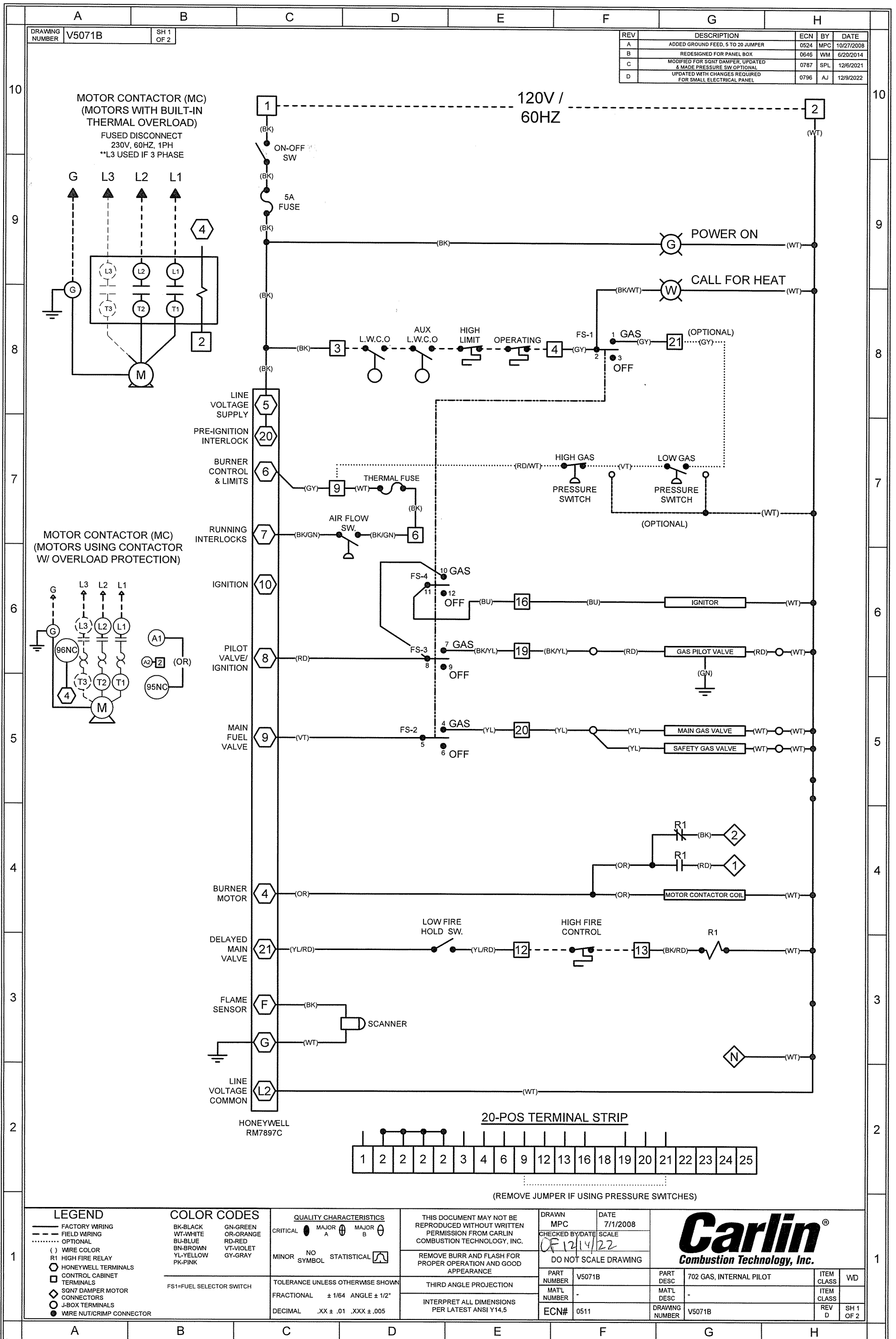
ITEM CLASS

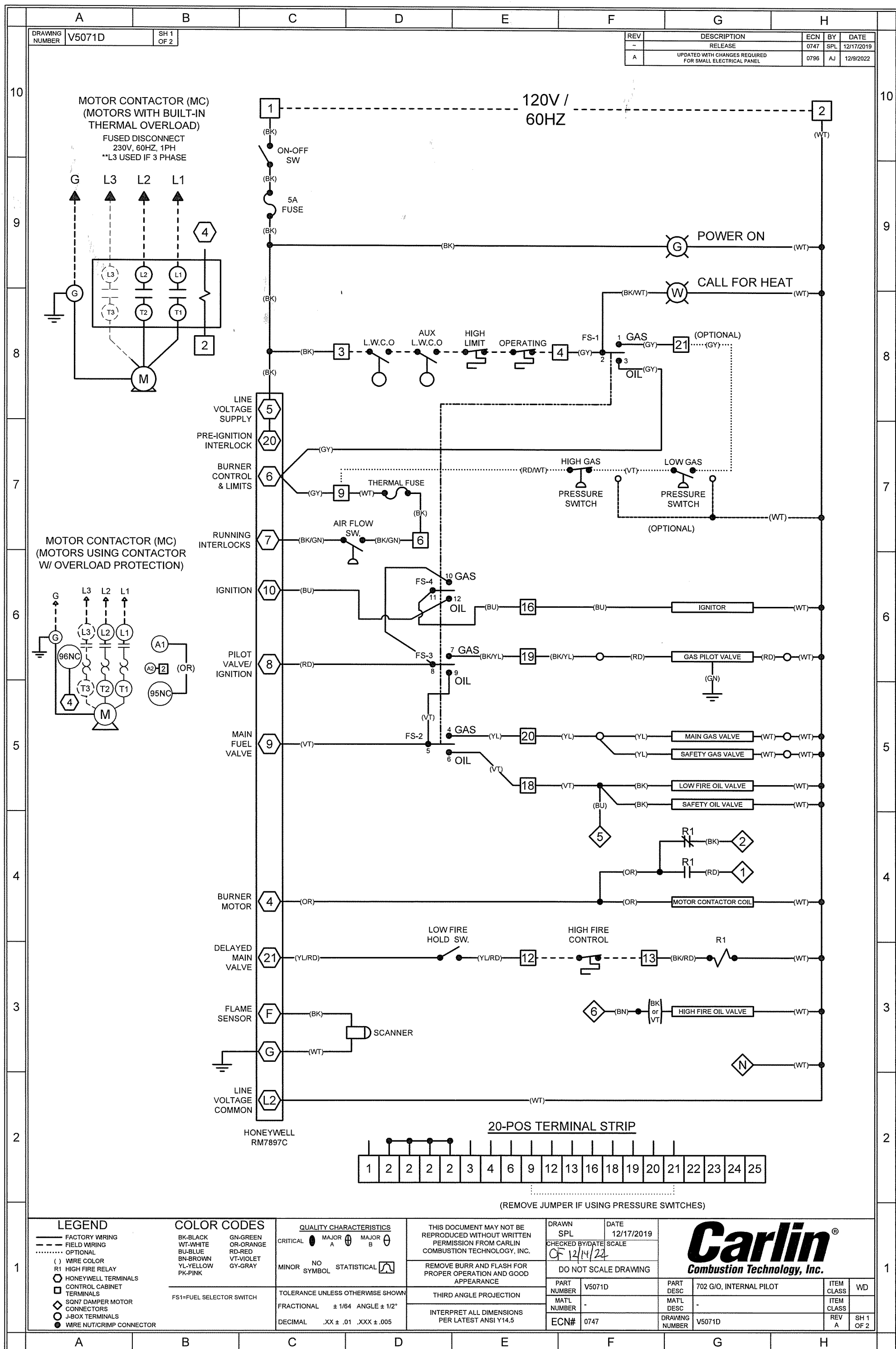
REV

SH 1 OF 1

CARLIN

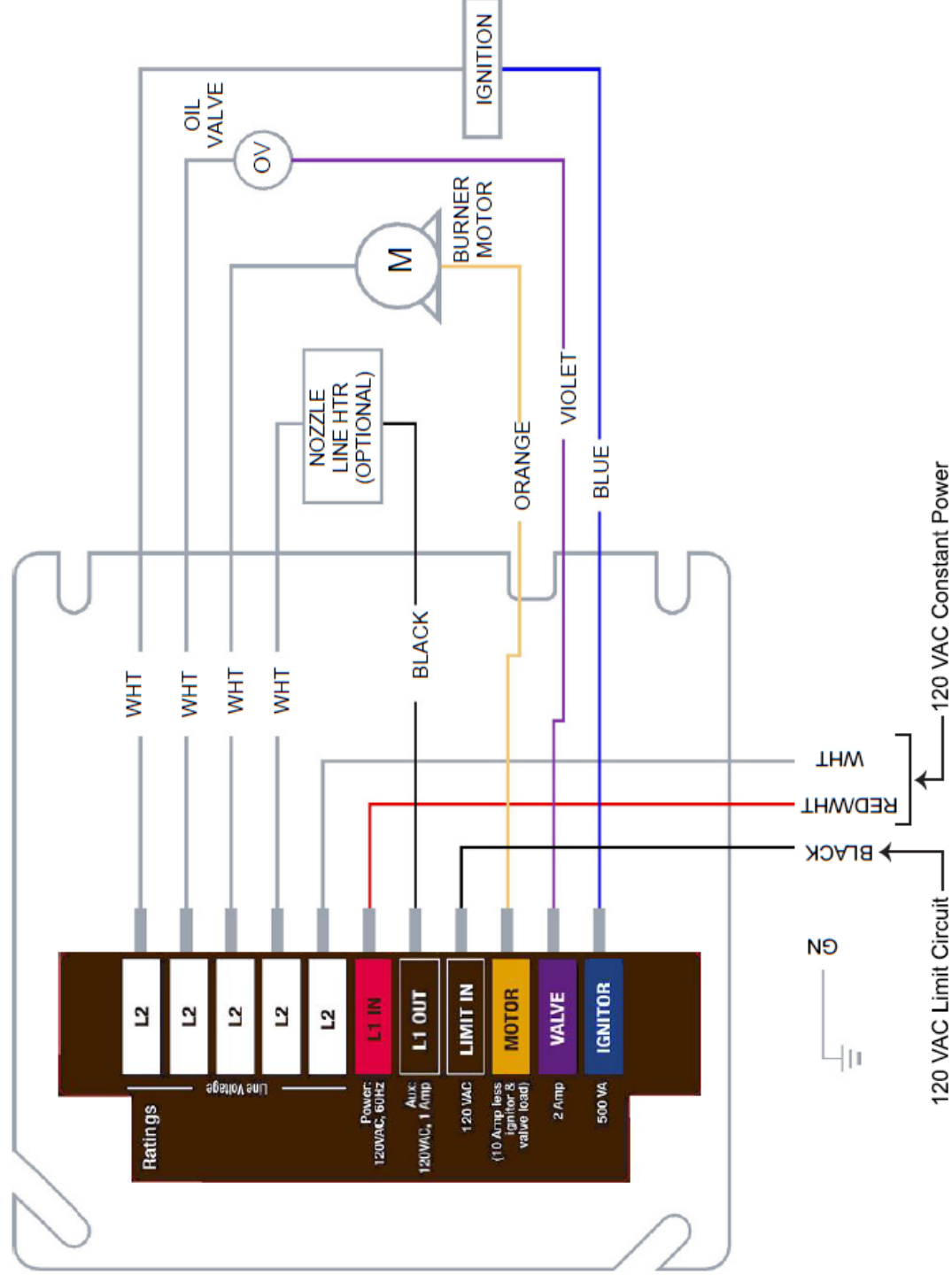
Combustion Technology, Inc.





Model 70200 Universal Oil Primary Control

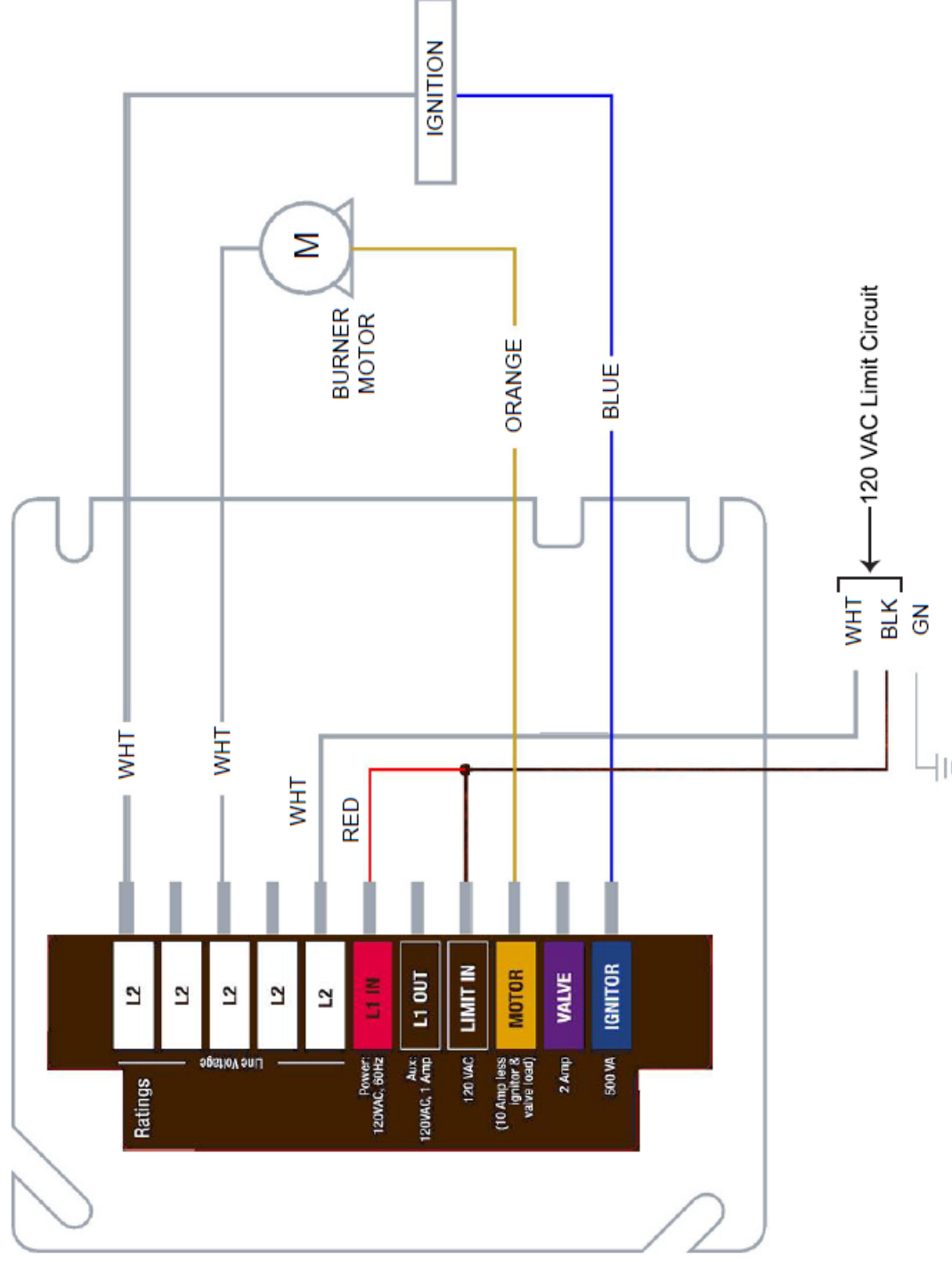
6-Wire Recommended Wiring



Model 70200 Universal Oil Primary Control

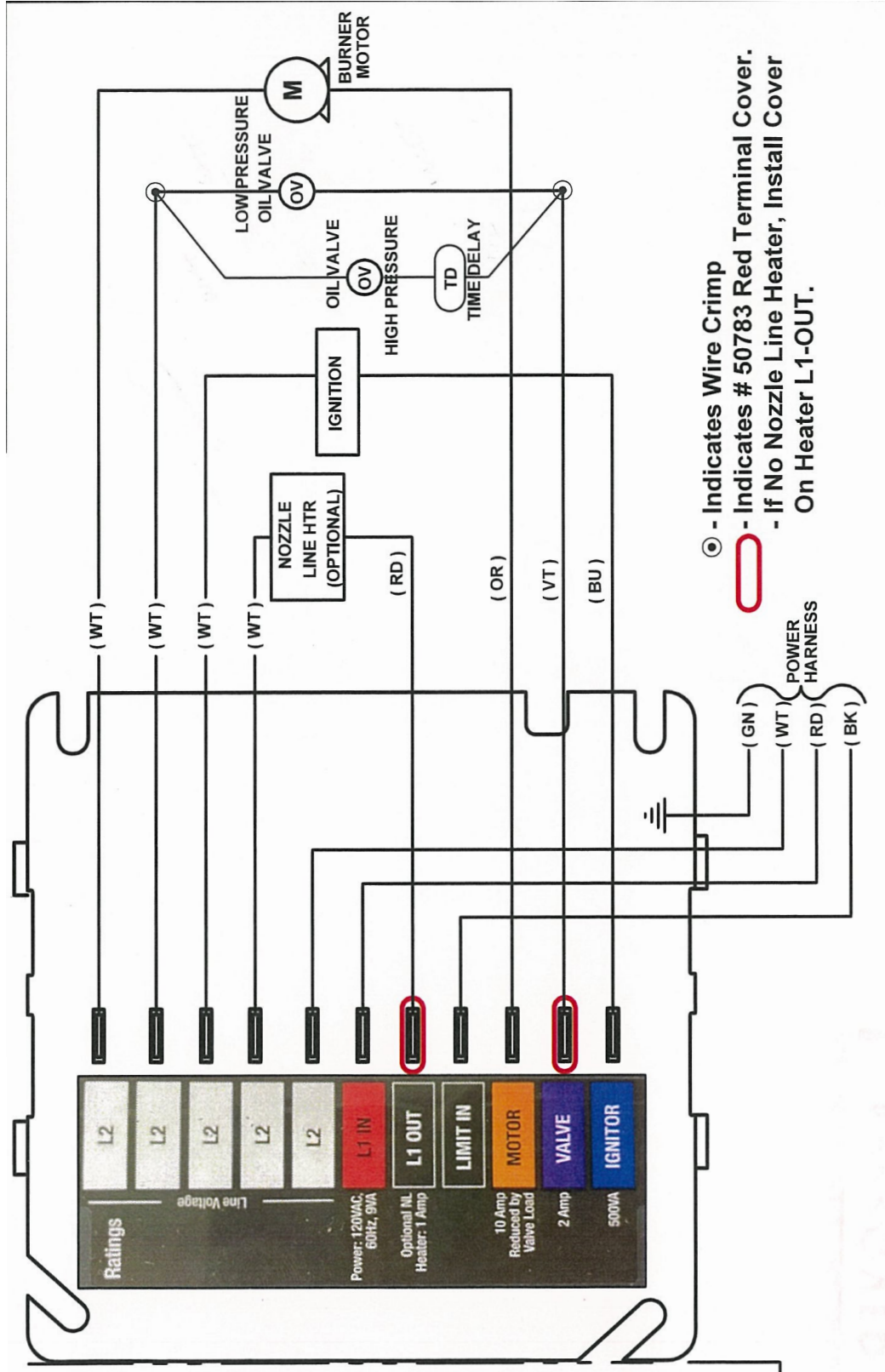
3-Wire Replacement Wiring

NOTICE: When connecting to BLACK power harness wire, without constant L1 power, wire nut together L1 (RED) and Limit In (BLACK) from control.



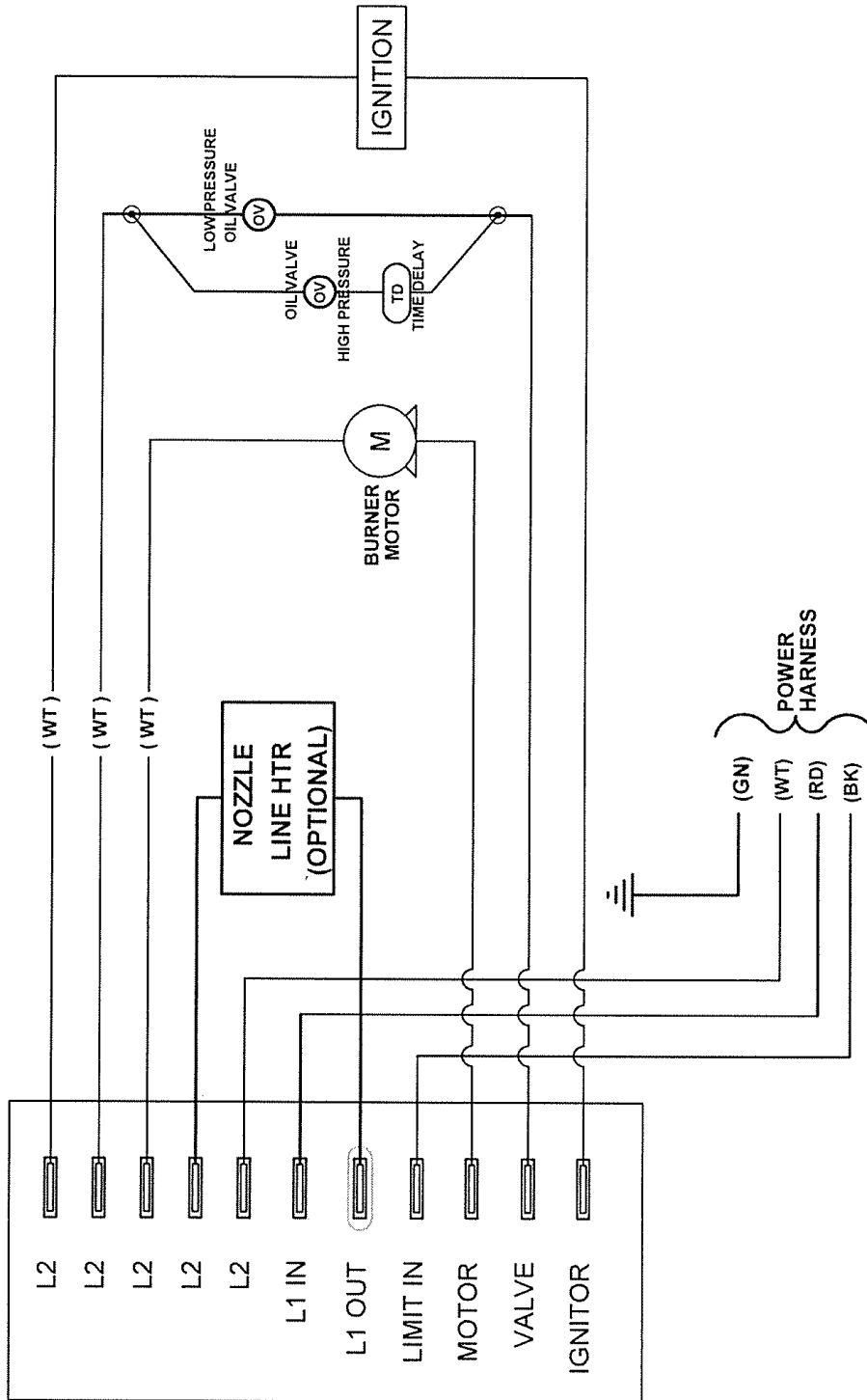
Model 70200 Universal Oil Primary Control

6-wire with 4-second time delay



Model 70200 Universal Oil Primary Control

with 2-stage pump (Burner Model EZ-66)



Indicates # 50783 Red Terminal Cover.
- If no Nozzle Line Heater, Install Cover On Heater L1-OUT.

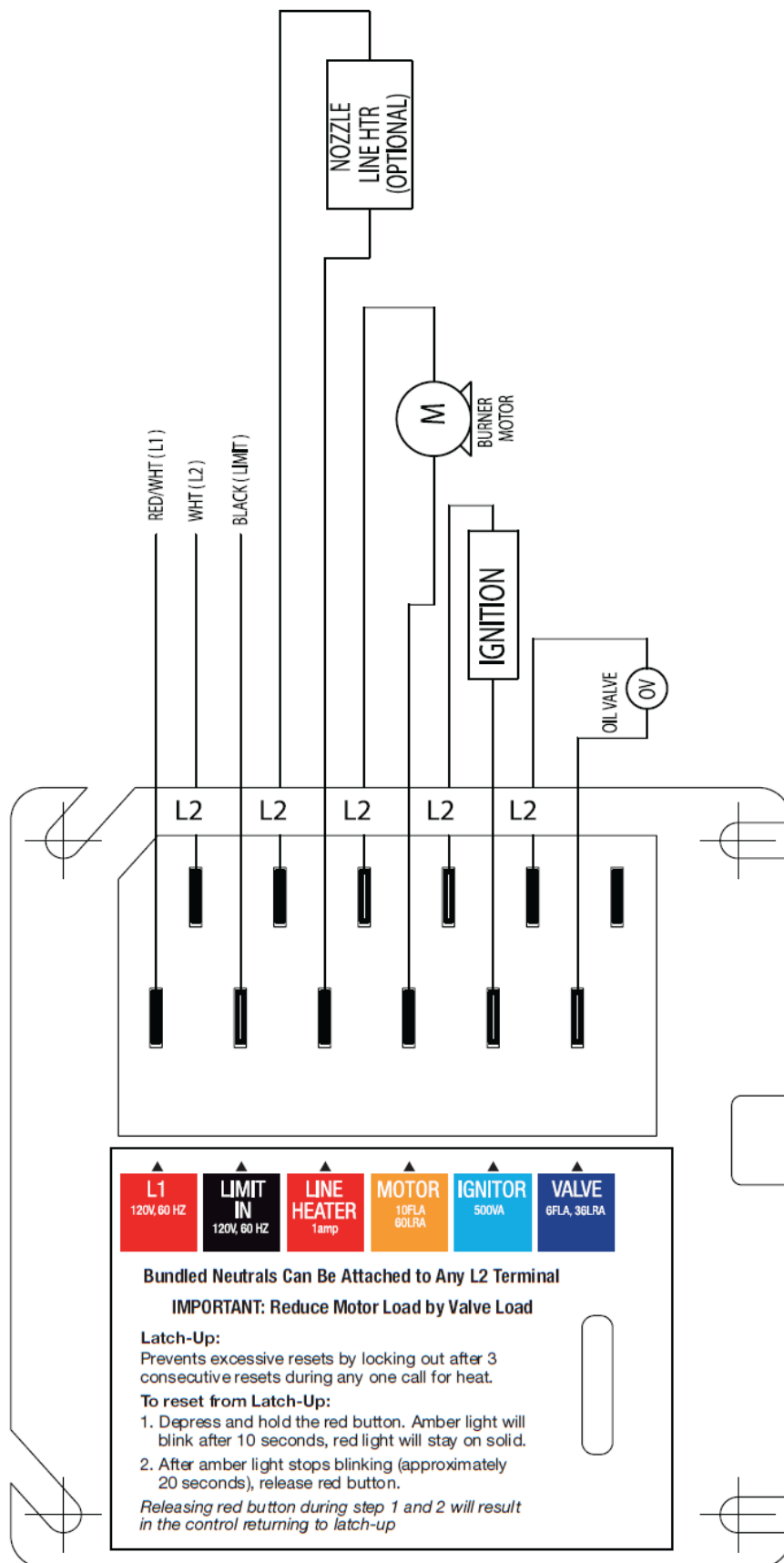
⊙ = CRIMP CONNECTOR

#70200 CONTROL

CONTROL SET 70200
4 SECOND TIME DELAY
BURNER MODEL 4 WIRE HARNESS W/L1=RD
MOTOR VOLTAGE 115/60/1

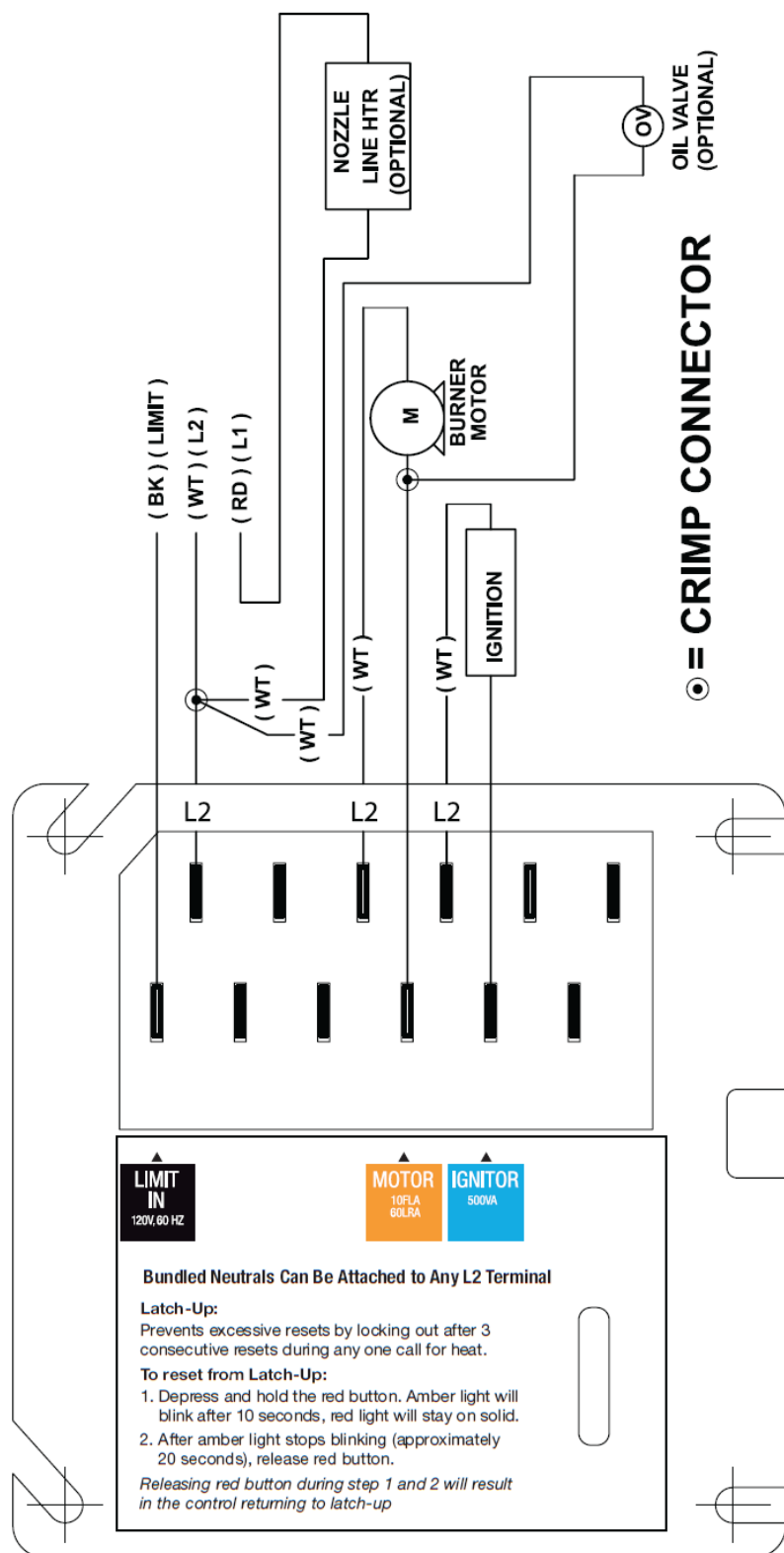
Model 60200 Oil Primary Control

Residential Factory Wiring



Model 50200 Oil Primary Control

Residential Factory Wiring

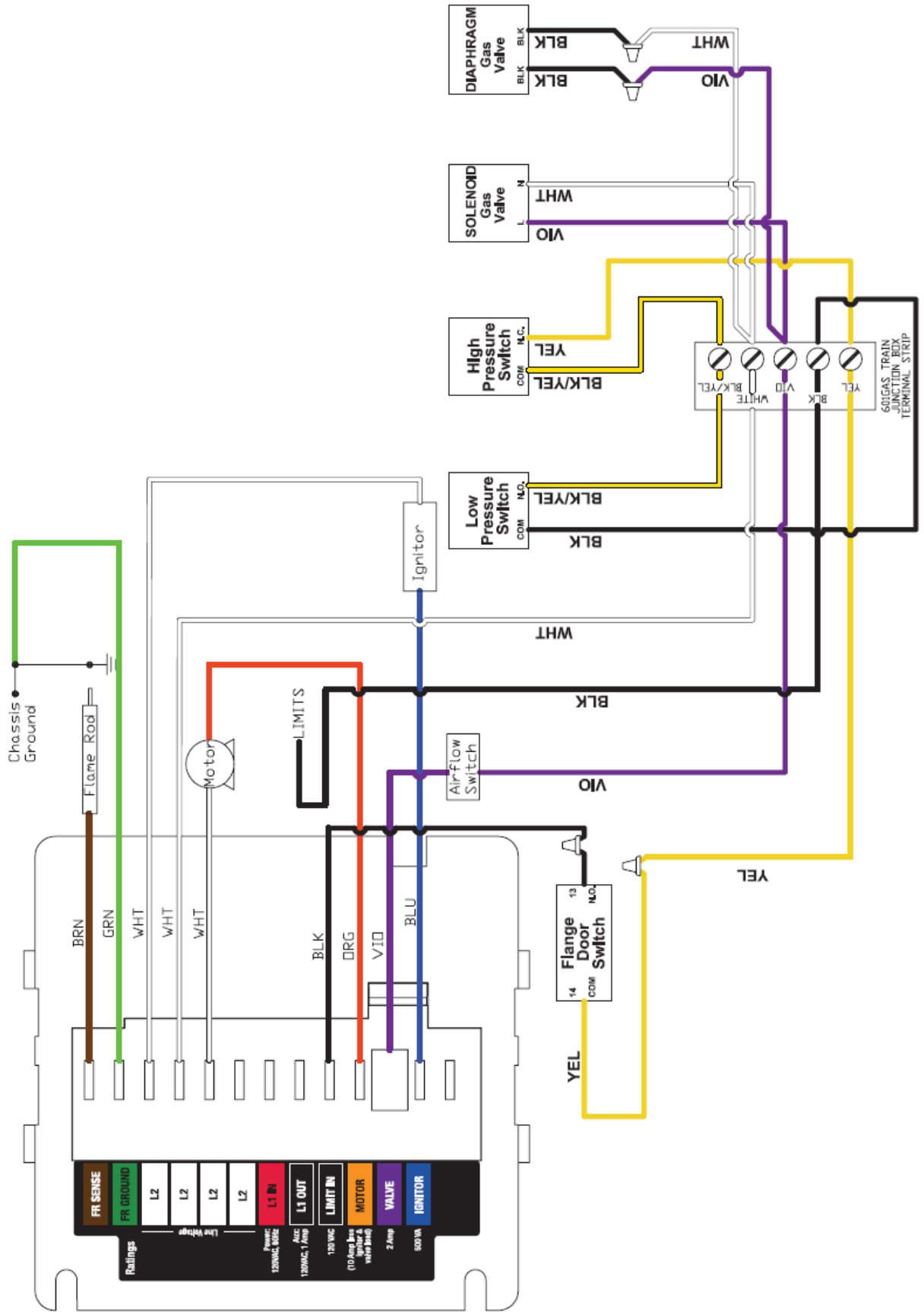


Residential Factory Wiring



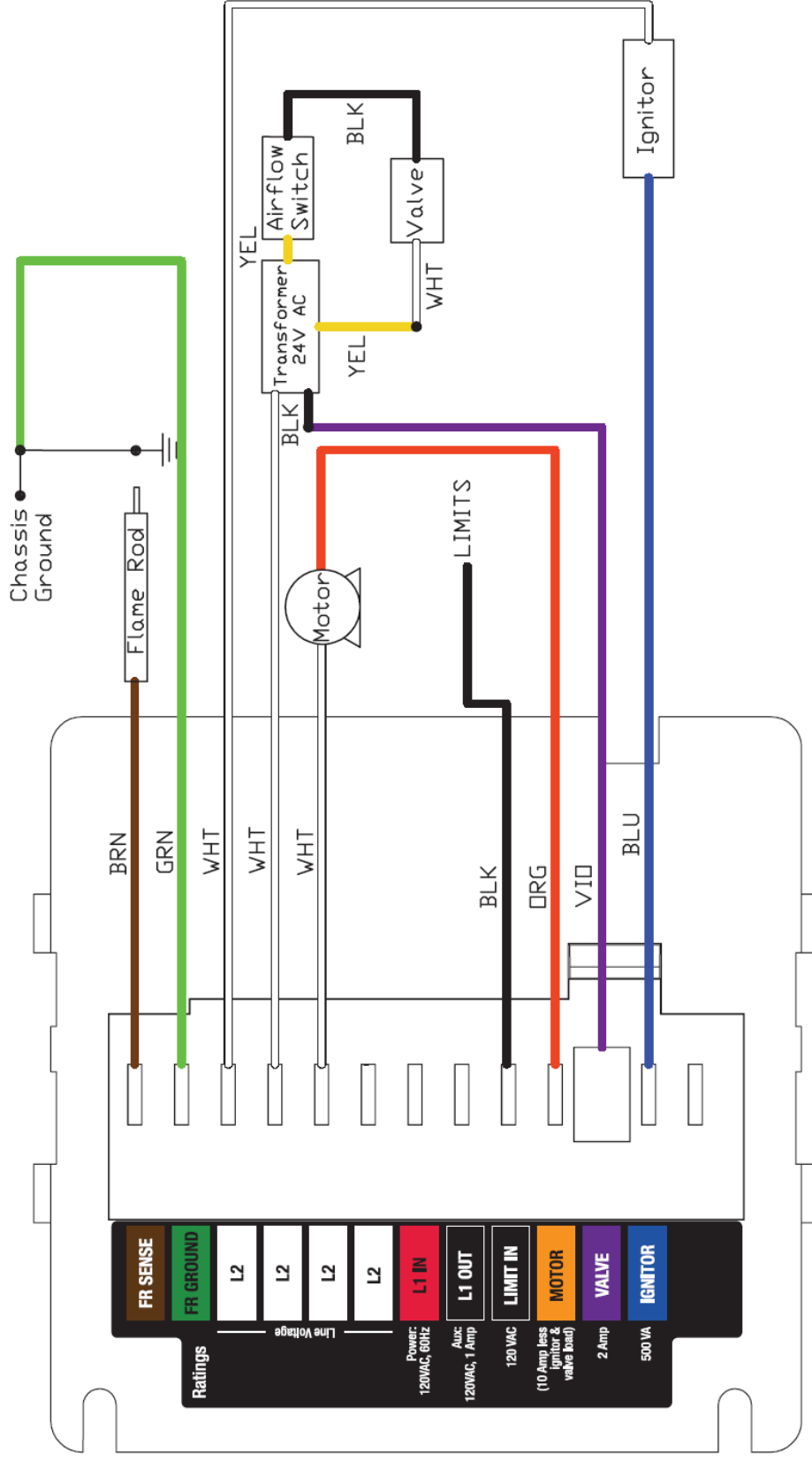
Model 60200FR Gas Burner Primary Control

Commercial Gas Train 120V - FACTORY WIRING



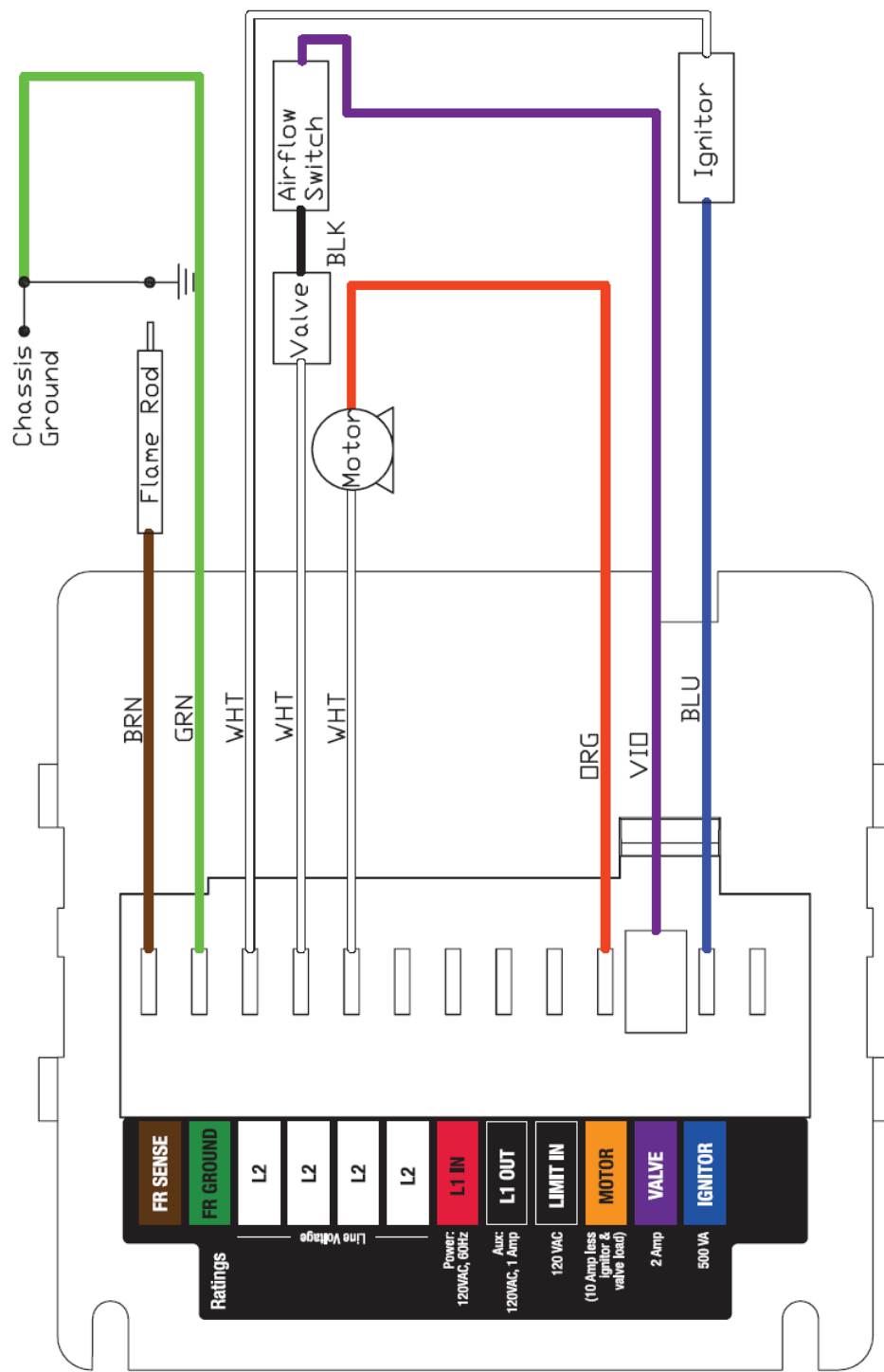
Model 60200FR Gas Burner Primary Control

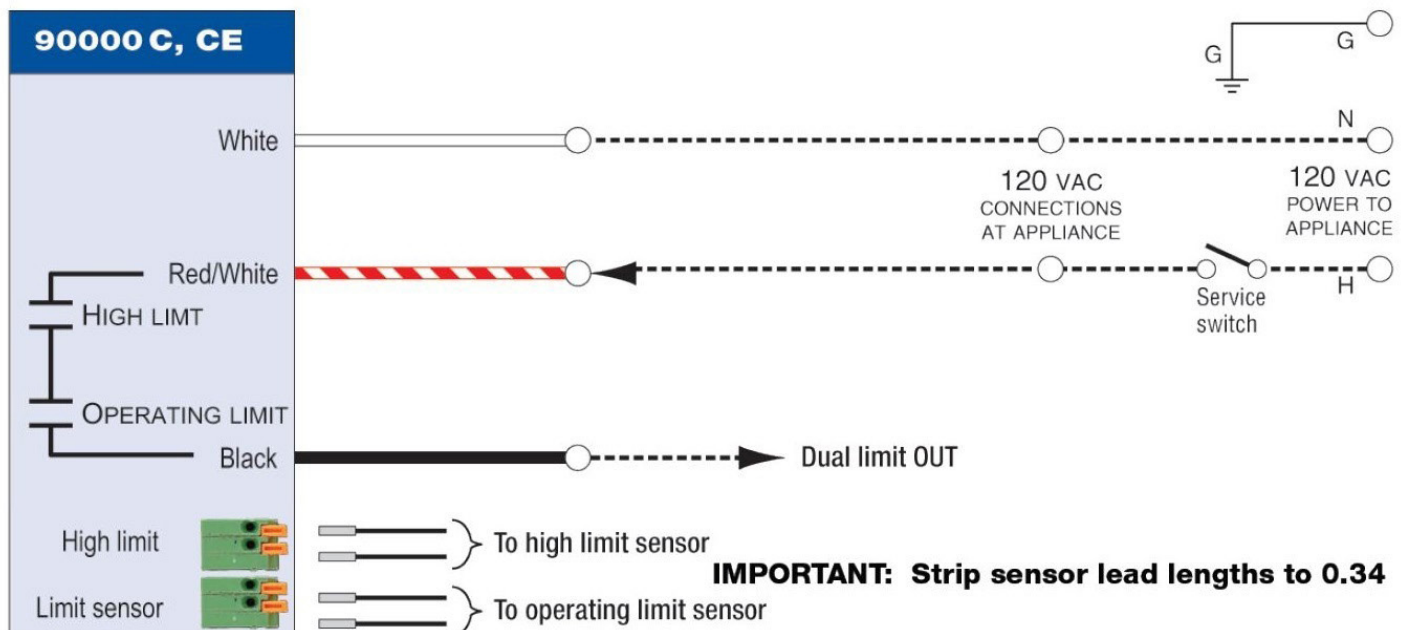
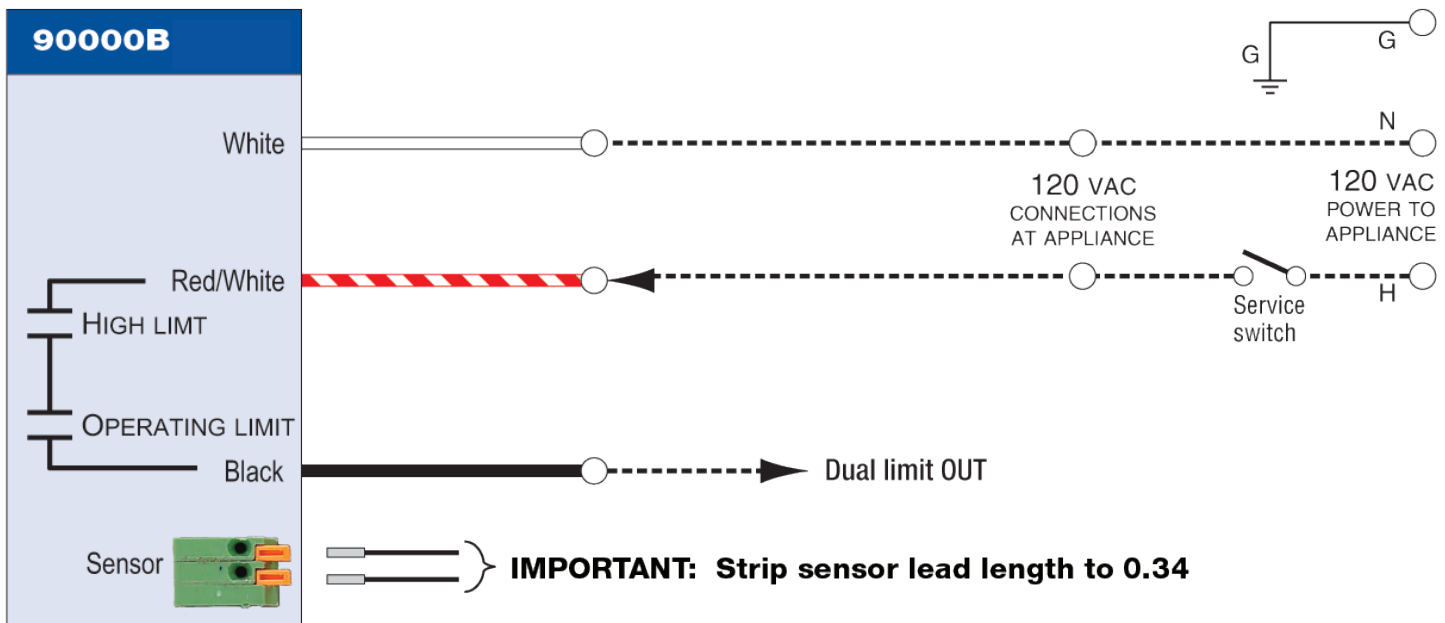
EZGas Pro 24V - FACTORY WIRING

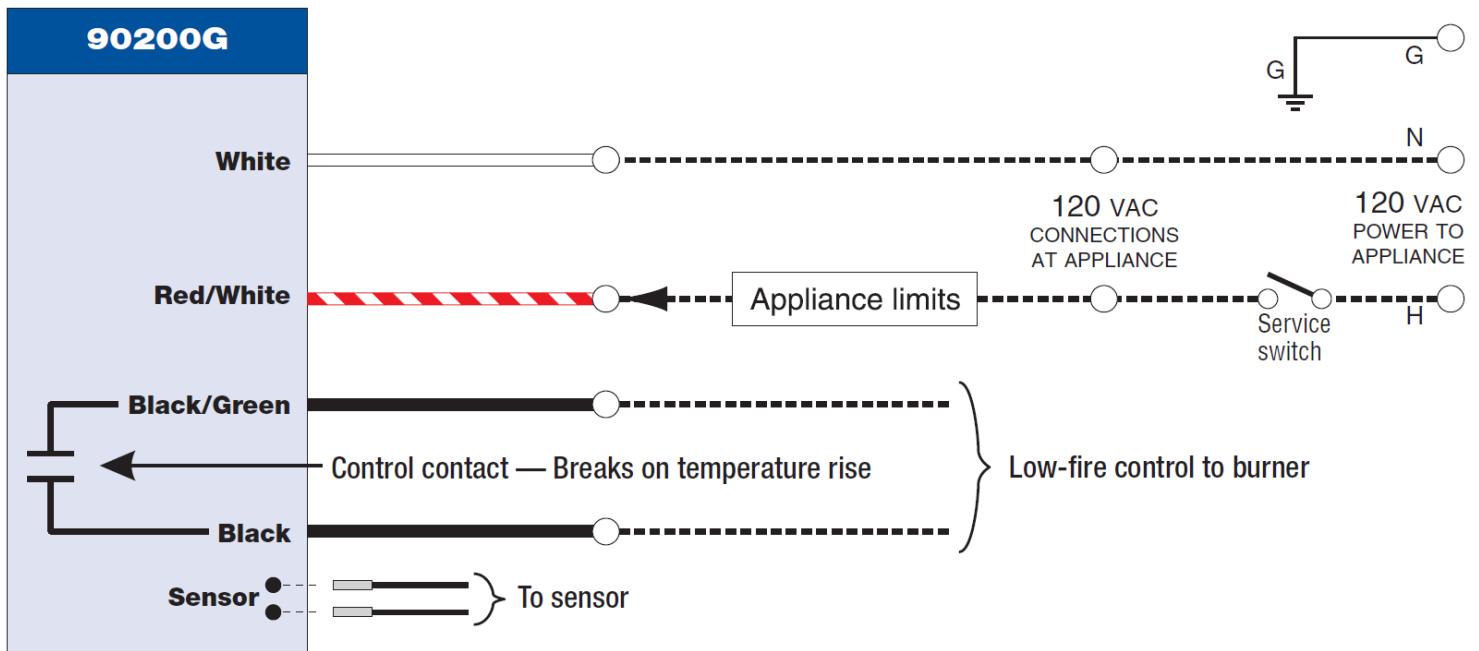
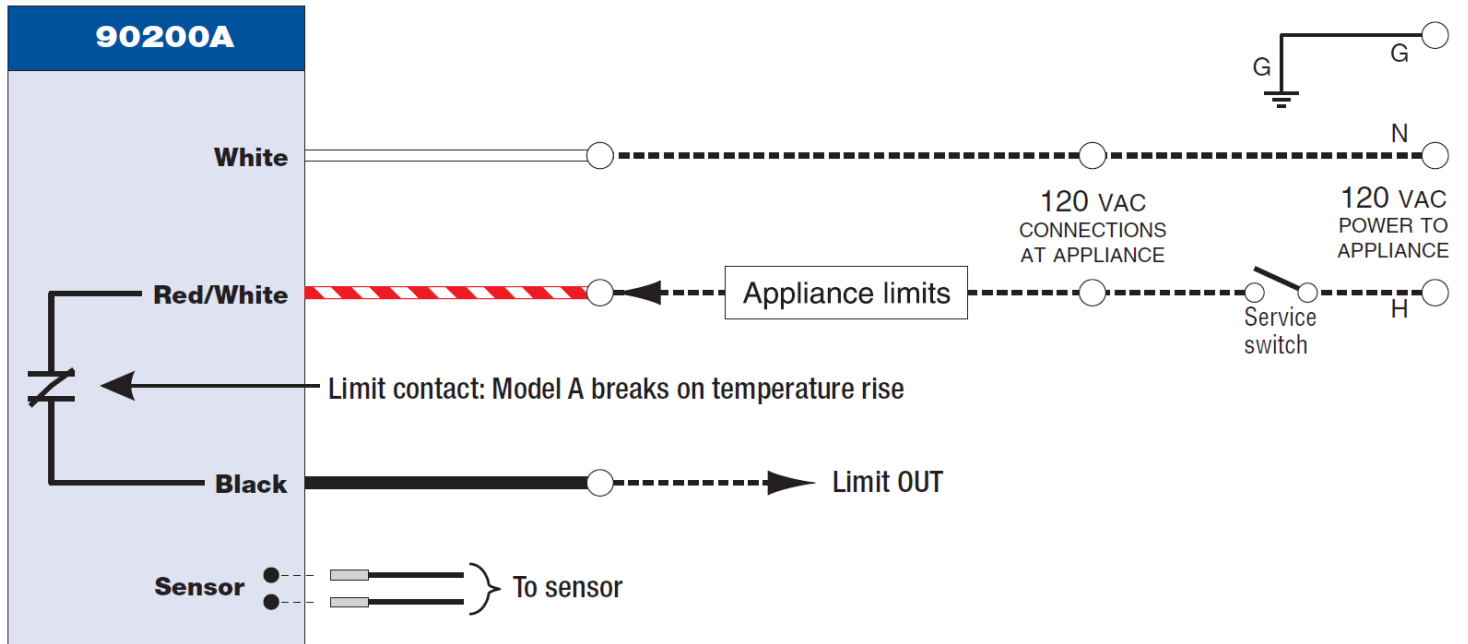


Model 60200FR Gas Burner Primary Control

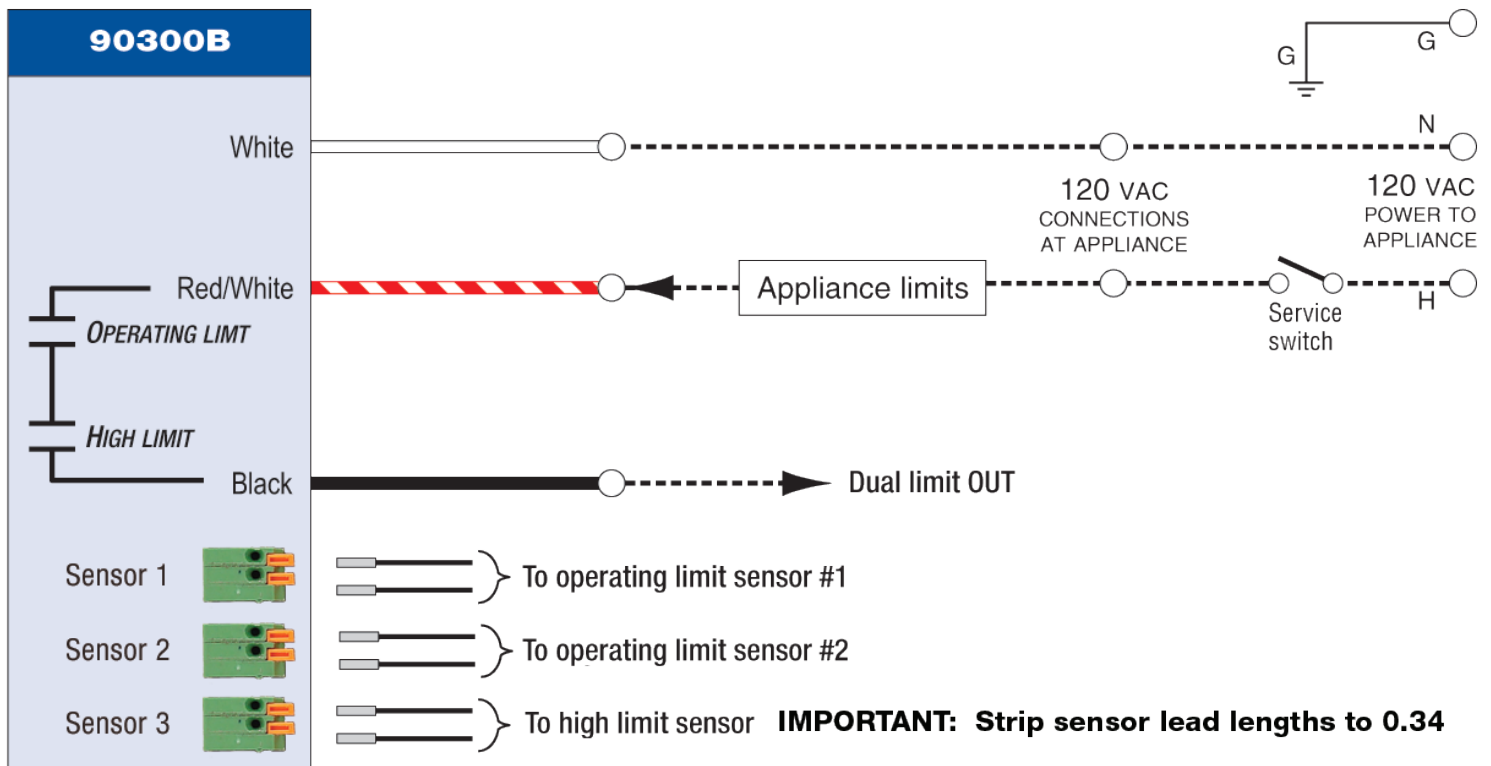
EZGas Pro 120V - FACTORY WIRING



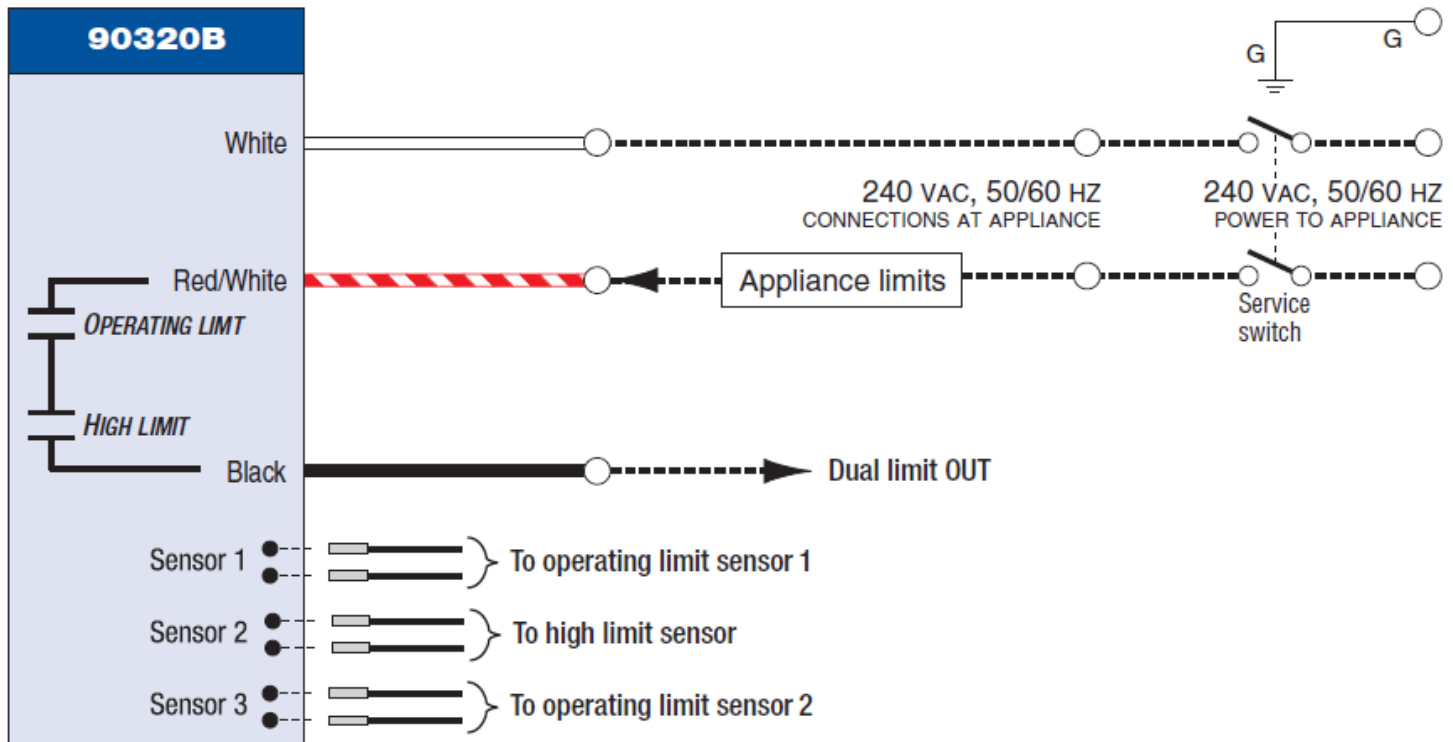


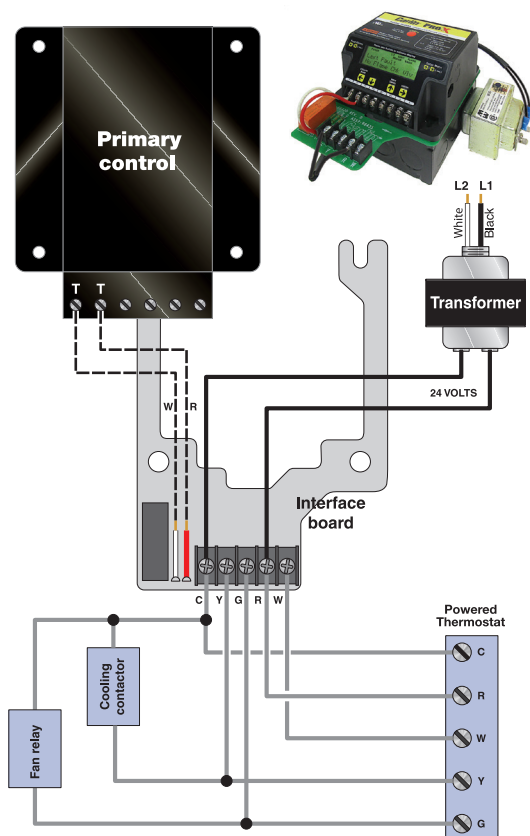


Model 90300 Microprocessor Temperature Controls



Model 90320 Microprocessor Temperature Controls





Smart Thermostat/ Constant Powered Thermostat wired into the burner primary control

WARNING: Wiring must comply with local and national electrical codes.

1. Remove the factory installed jumper from the T-T terminals of the burner primary control.
2. Connect the red and white wires from the Kool Kit board to the T-T terminals on the burner primary control. The wires are not polarity sensitive.
3. Connect the thermostat terminals to the Kool Kit interface board as shown.

Note: Thermostat designations may vary depending on the thermostat brand. Refer to the thermostat wiring instructions for the proper terminal designations.

4. (Optional) Connect the cooling contactor and the fan relay to the Kool Kit interface board as shown.

The following are common thermostat terminal designations. Refer to your thermostat installation/wiring instructions for the proper terminal designations.

C = 24 VAC common
R = 24 VAC hot
W = Heat
Y = Cool
G = Fan

Smart Thermostat/ Constant Powered Thermostat wired into the HydroStat 3250-Plus

WARNING: Wiring must comply with local and national electrical codes.

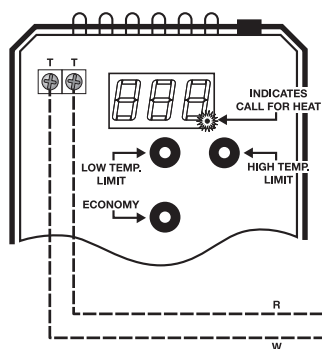
1. Verify the factory installed jumper is installed on the T-T terminals of the burner primary control.
2. Connect the red and white wires from the Kool Kit board to the T-T terminals on the HydroStat 3250-Plus. The wires are not polarity sensitive.

3. Connect the thermostat terminals to the Kool Kit interface board as shown.

Note: Thermostat designations may vary depending on the thermostat brand. Refer to the thermostat wiring instructions for the proper terminal designations.

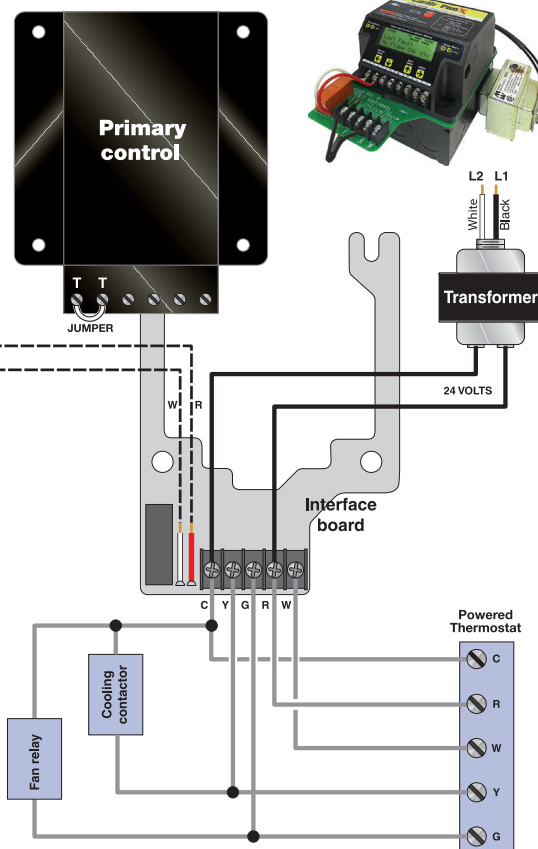
4. (optional) Connect the cooling contactor and the fan relay to the Kool Kit interface board as shown.

HydroStat 3250-Plus



The following are common thermostat terminal designations. Refer to your thermostat installation/wiring instructions for the proper terminal designations.

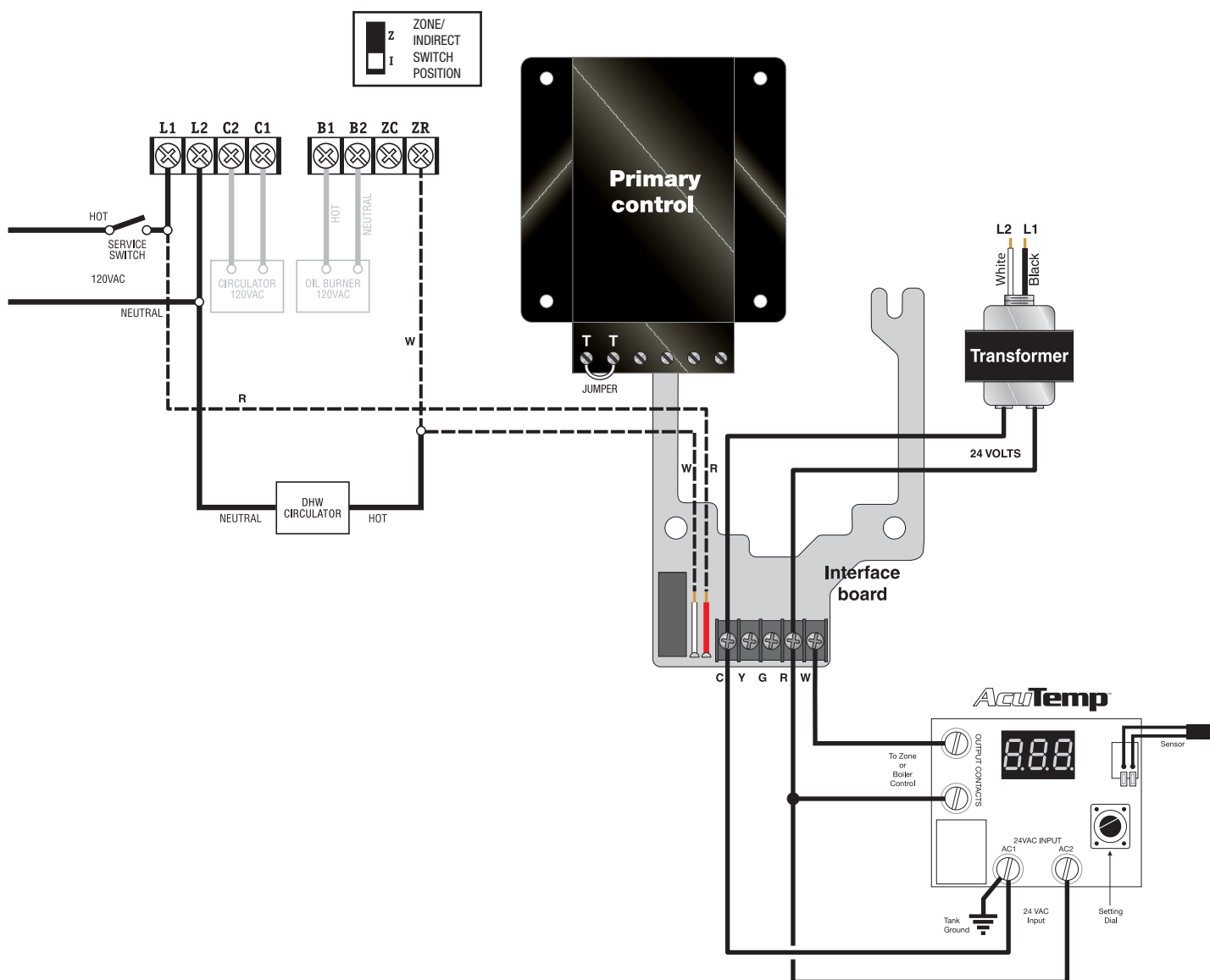
C = 24 VAC common
R = 24 VAC hot
W = Heat
Y = Cool
G = Fan



AcuTemp Indirect Tank Control wired into the HydroStat 3250-Plus

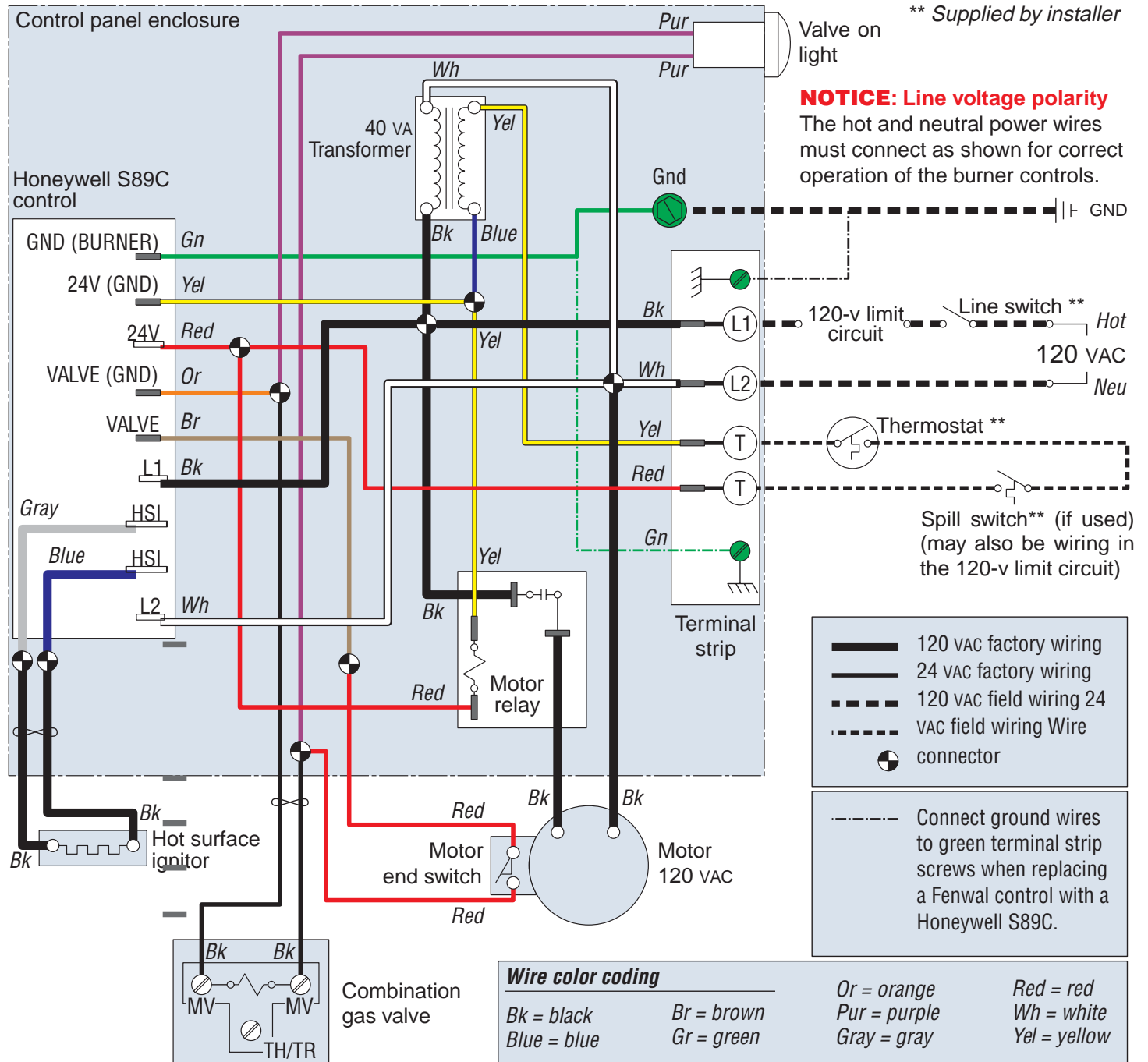
WARNING: Wiring must comply with local and national electrical codes.

1. Verify the factory installed jumper is installed on the T-T terminals of the burner primary control.
2. Connect the output contacts from the AcuTemp to the R and W terminals on the Kool Kit interface board. The terminals are not polarity sensitive.
3. Connect the 24 VAC input AC1 on the AcuTemp to the C terminal on the Kool Kit interface board. Connect the 24 VAC input AC2 on the AcuTemp to the R terminal on the Kool Kit interface board.
4. Connect the red wire from the Kool Kit board to the L1 Terminal on the Hydrostat 3250-Plus. Be sure to comply with local and national electric codes as this is a 120 VAC connection
5. Connect the white wire from the Kool Kit board to the ZR terminal on the Hydrostat 3250-Plus. Be sure to comply with local and national electric codes as this is a 120 VAC connection.
6. Connect the domestic hot water circulator to the L2 (neutral) and ZR (hot) terminals on the Hydrostat 3250-Plus.
7. Set the Z/I switch on the Hydrostat 3250 to the I position. If the switch is left in the Z position the boiler may not provide adequate hot water.



Model G3B Gas burner

Wiring diagram — wire routing





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www.carlincombustion.com