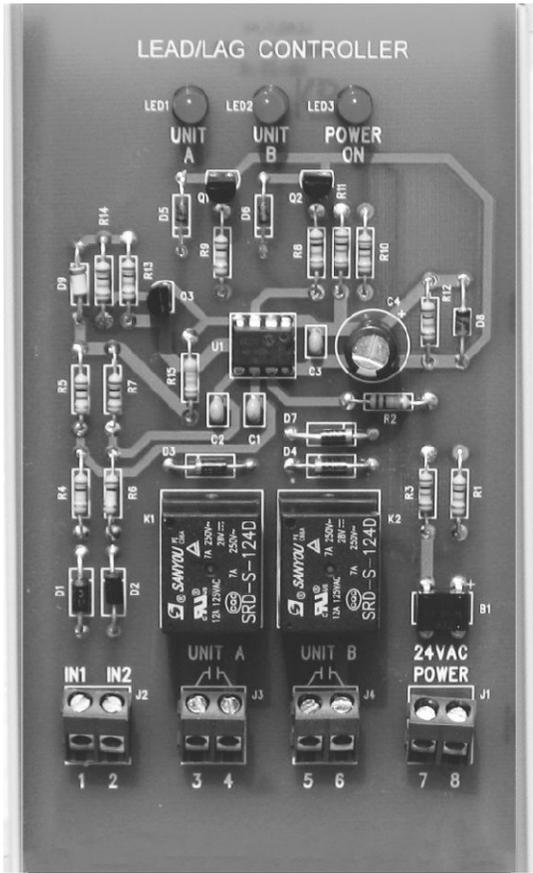


SC-LLC-200 LEAD/LAG CONTROLLER



INSTALLATION INSTRUCTIONS

SPECIFIED CONTROLS



INTRODUCTION

The SC-LLC-200 from Specified Controls is a versatile, 24VAC powered lead/lag controller offering true dual stage control to balance the operating run time between HVAC equipment as well as other redundant devices. The controller has dedicated terminals for 24VAC power, 2 inputs and 2 outputs. LEDs provide visual indication for power and output status.

SEQUENCE OF OPERATION

When 24 Volt power is first applied to the 24VAC terminals 7 and 8 on the SC-LLC-200, Unit 1 and Unit 2 output contacts remain open. When 24 Volts is applied to input terminal 1, Unit 1 output contacts go closed and Unit 2 contacts remain open. When 24 Volts is removed from terminal 1 for at least 10 seconds, Unit 1 output contacts open. When 24 Volts is reapplied to terminal 1, Unit 1 output contacts remain open and Unit 2 output contacts go closed. The lead/lag sequence is reversed every time 24 Volts is removed from terminal 1 for more than 10 seconds and then reapplied.

In a dual stage application, 24 Volts applied to terminal 2 will close the lag output contacts. As long as 24 Volts is maintained on terminal 1, the lag output can be cycled on and off.

The SC-LLC-200 Lead/Lag Controller must be powered from the same 24 Volts as Unit 1 control circuit or a relay will be required.

WIRING DIAGRAMS

The wiring diagrams illustrated in this installation manual represent a sampling of the many ways the SC-LLC-200 can be applied for lead/lag control.

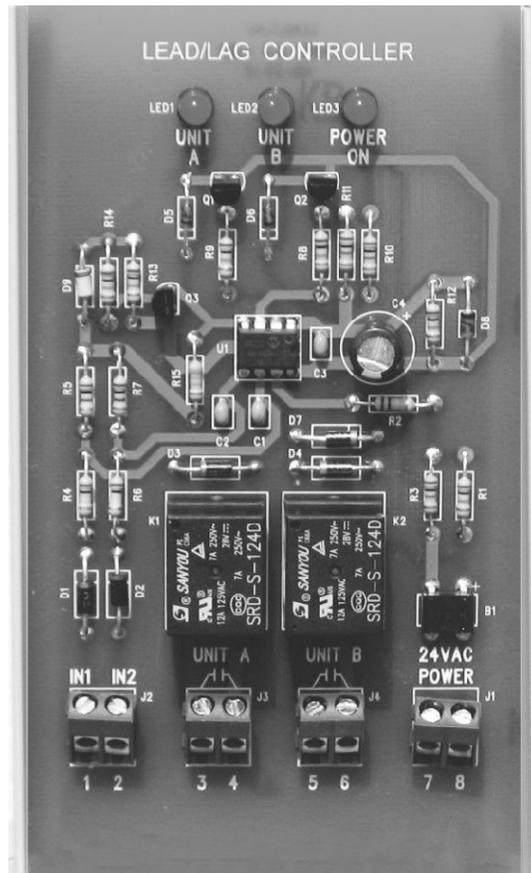
The SC-LLC-200 is an operating controller only and depending on the application, it is the responsibility of the installer to verify that the SC-LLC-200 complies with all electrical and/or plumbing codes.

SPECIFICATIONS	
Input:	24 VAC
Frequency:	60/60 Hz
Contact Rating:	12 Amps @ 24 VAC
PC Board Dimensions:	3.25" W x 5.5" H Mounted on Snap-Track
Controller With Optional Enclosures:	SC-LLC-200-ME with metal enclosure SC-LLC-200-WPE with weather-proof plastic enclosure

SC-LLC-200

LEAD/LAG CONTROLLER

STAND ALONE APPLICATIONS

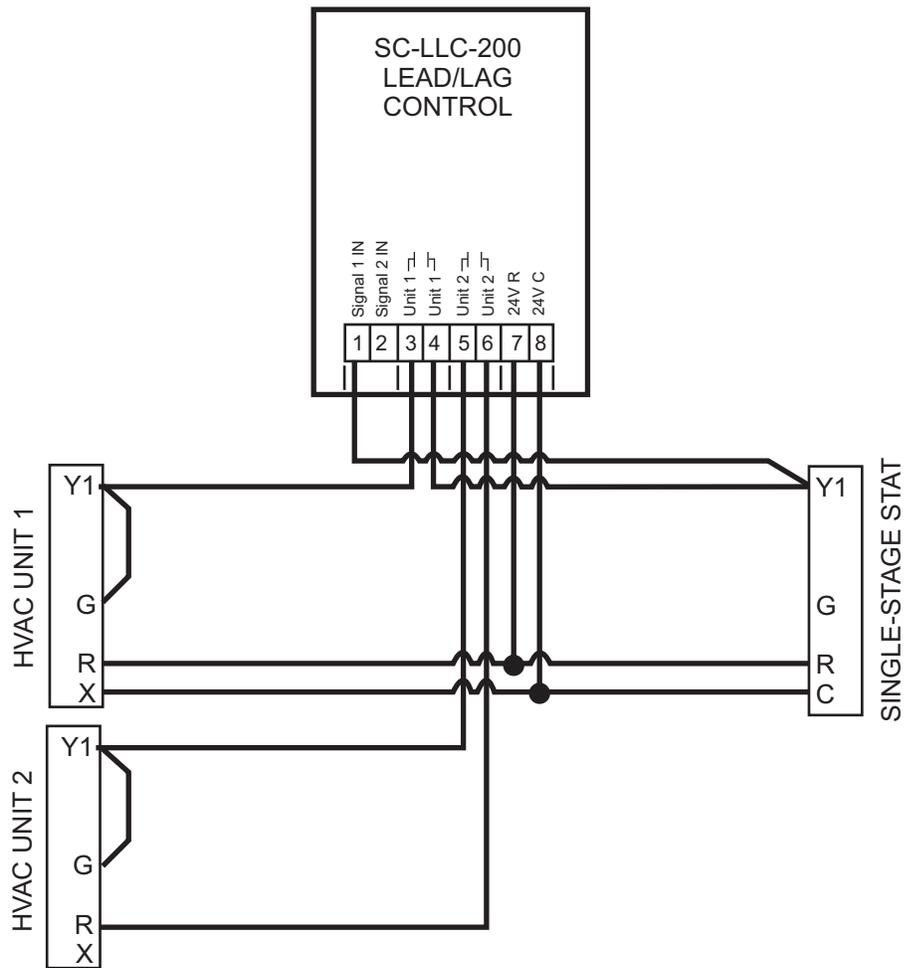


TYPICAL WIRING DIAGRAMS

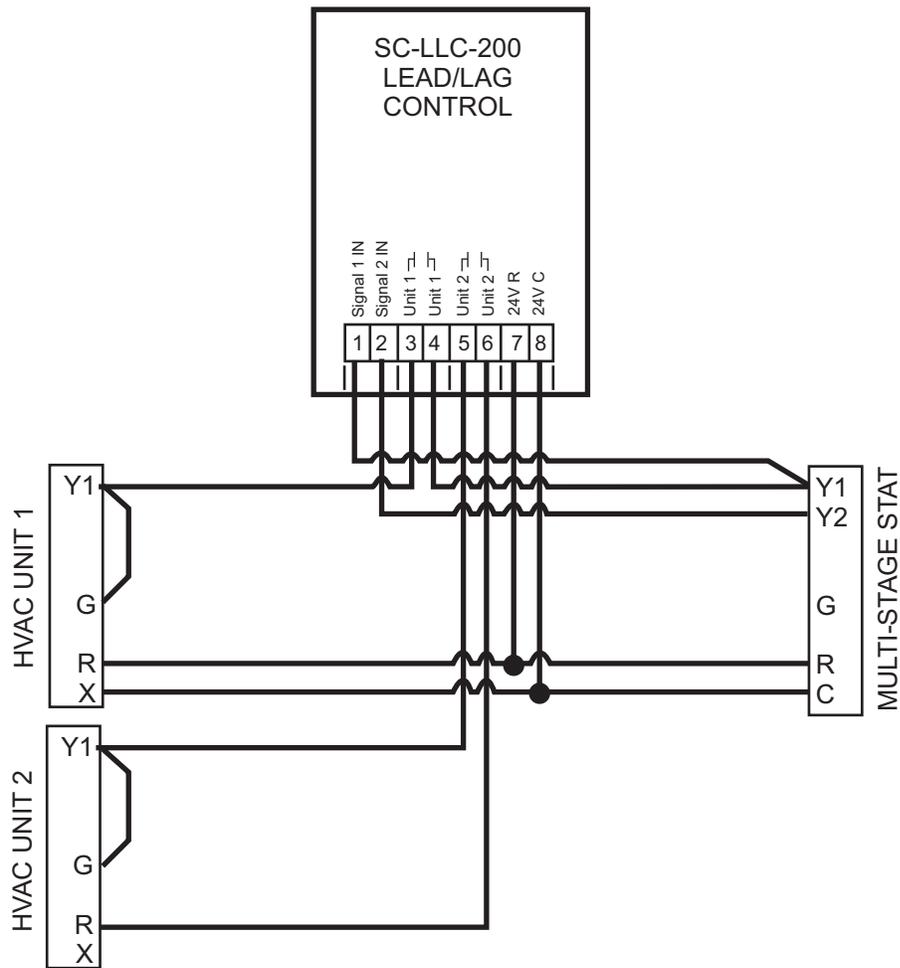
SPECIFIED
CONTROLS



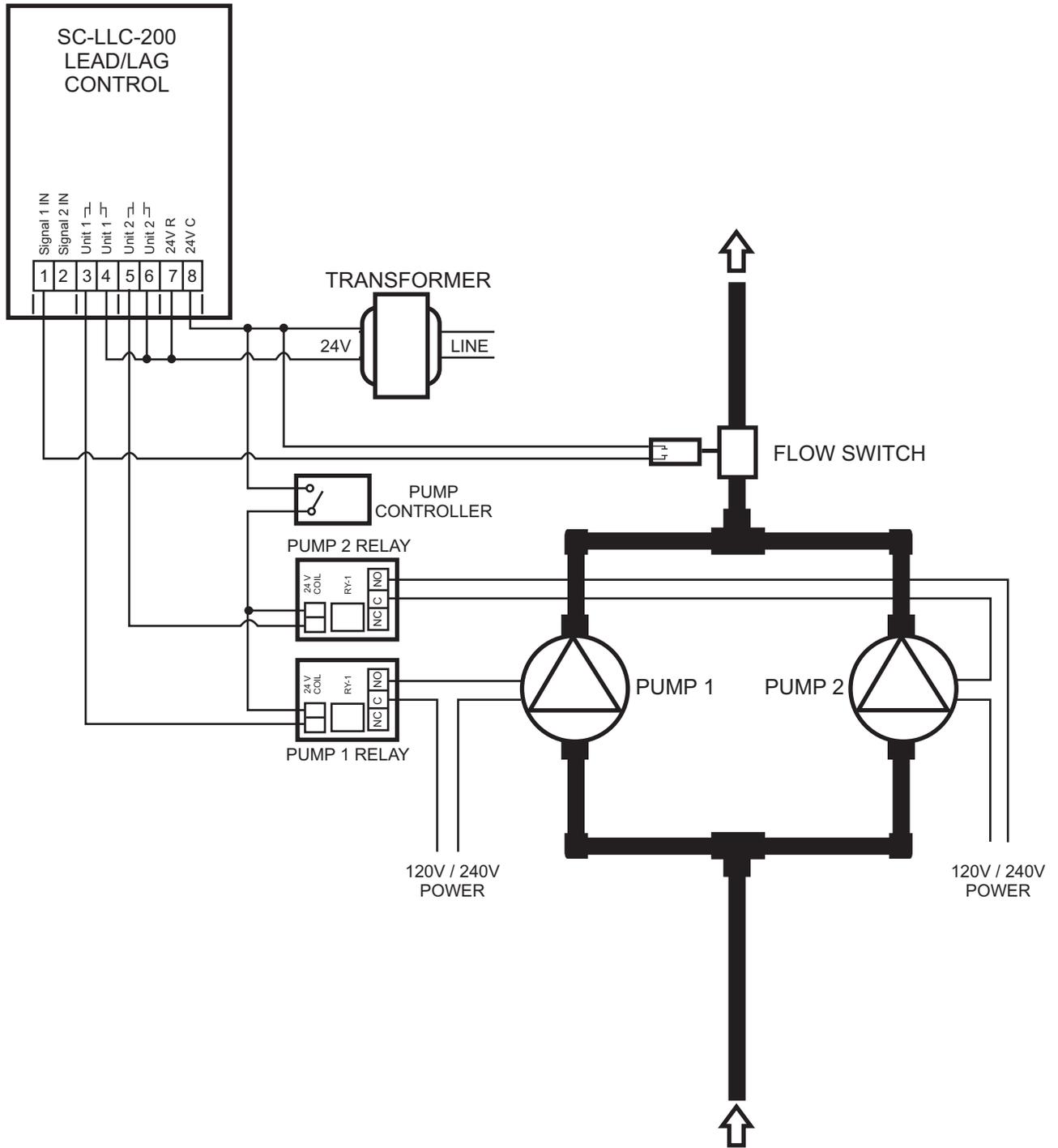
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER WITH SINGLE-STAGE COOLING UNITS IN PARALLEL



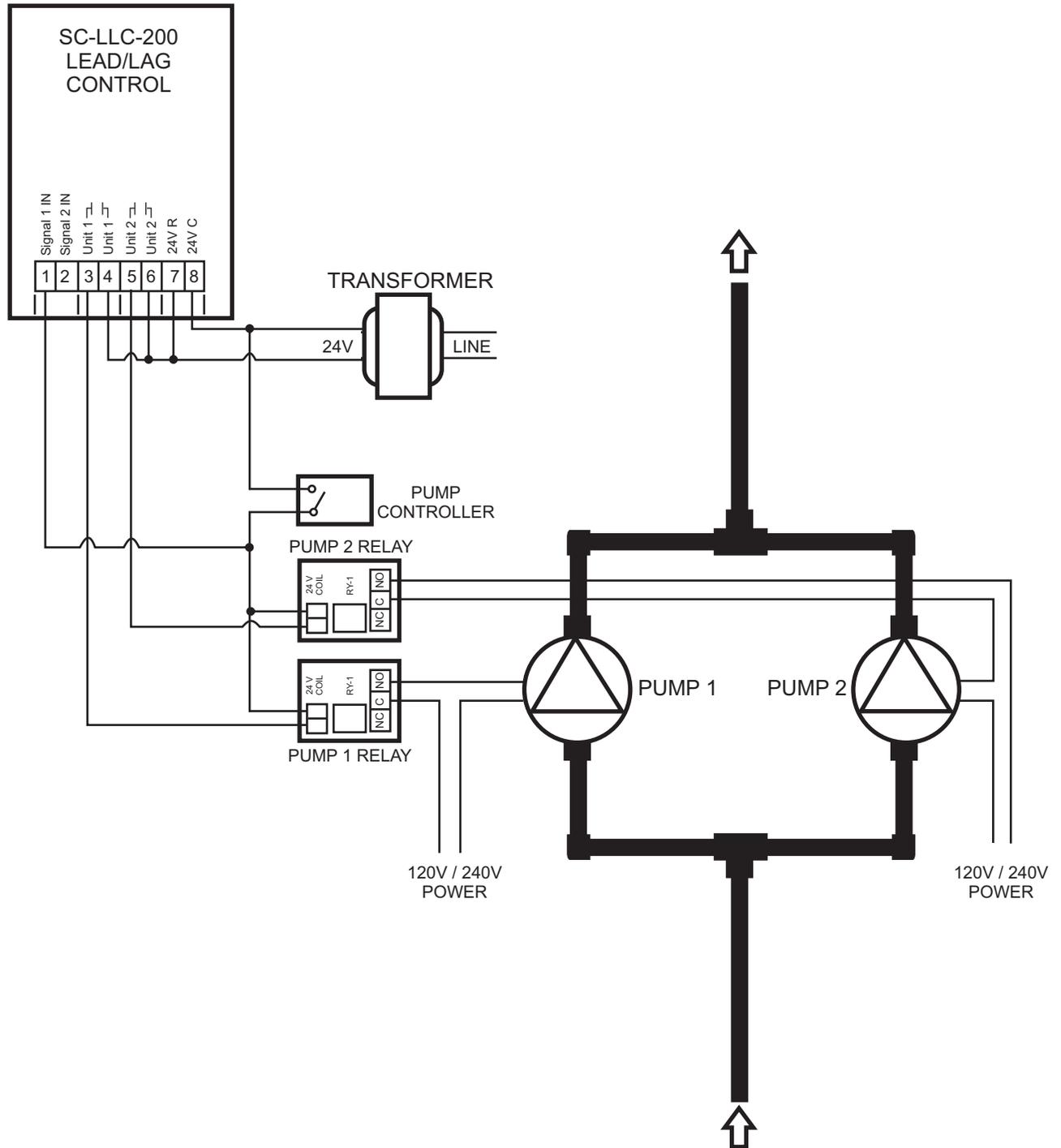
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER WITH SINGLE-STAGE COOLING UNITS IN PARALLEL WITH UPSTAGING



WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER FOR 2 PUMP SYSTEM WITH A FLOW SWITCH TO TRIGGER LEAD/LAG



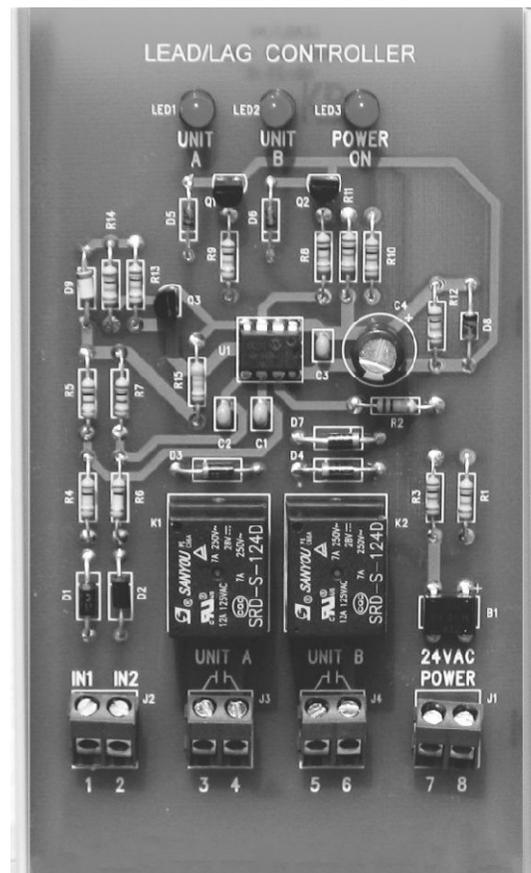
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER FOR 2 PUMP SYSTEM WITH A RELAY TO TRIGGER LEAD/LAG



SC-LLC-200

LEAD/LAG CONTROLLER

USED WITH SC-SC-TK-400 TWINNING AND PARALLELING KIT

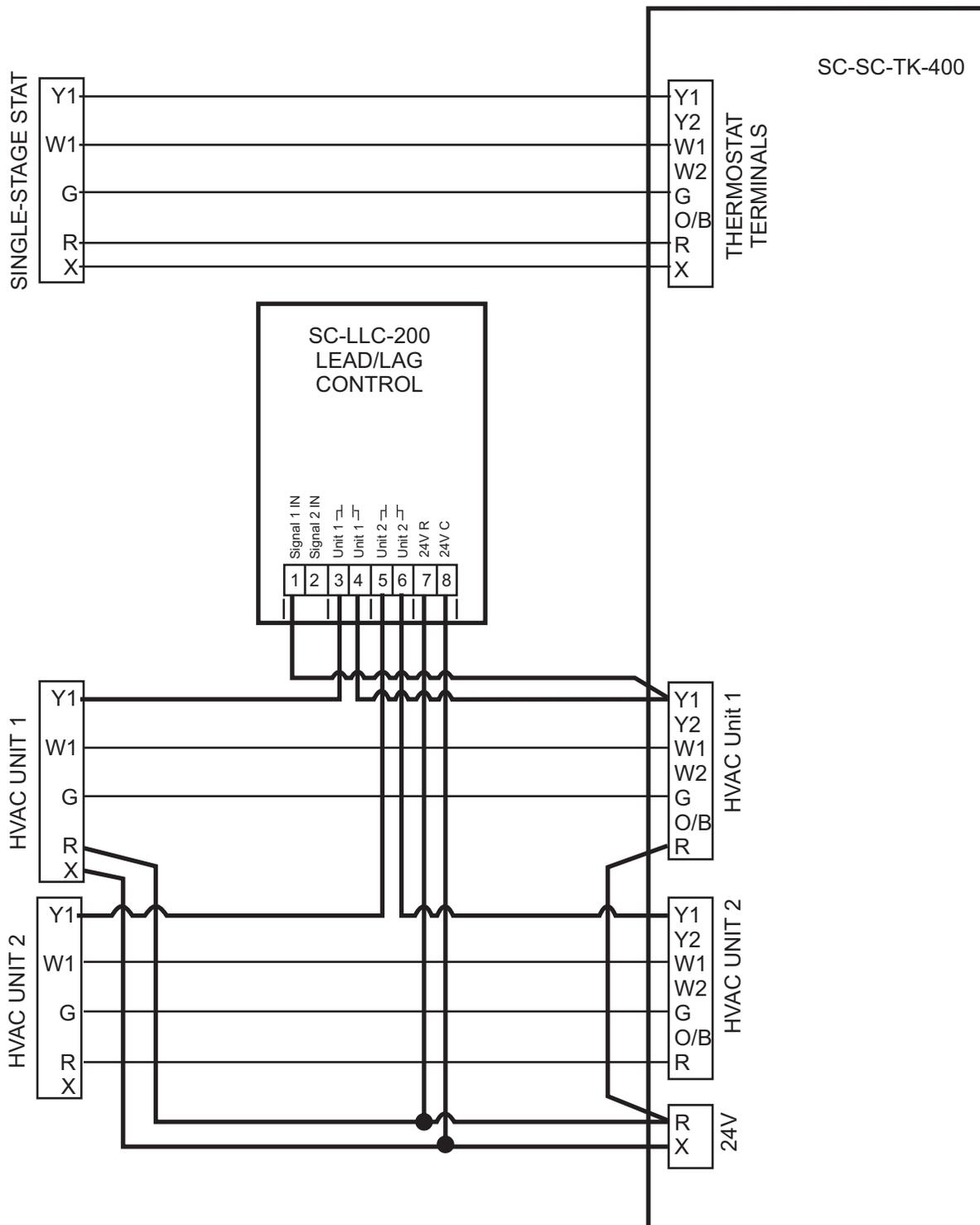


TYPICAL WIRING DIAGRAMS

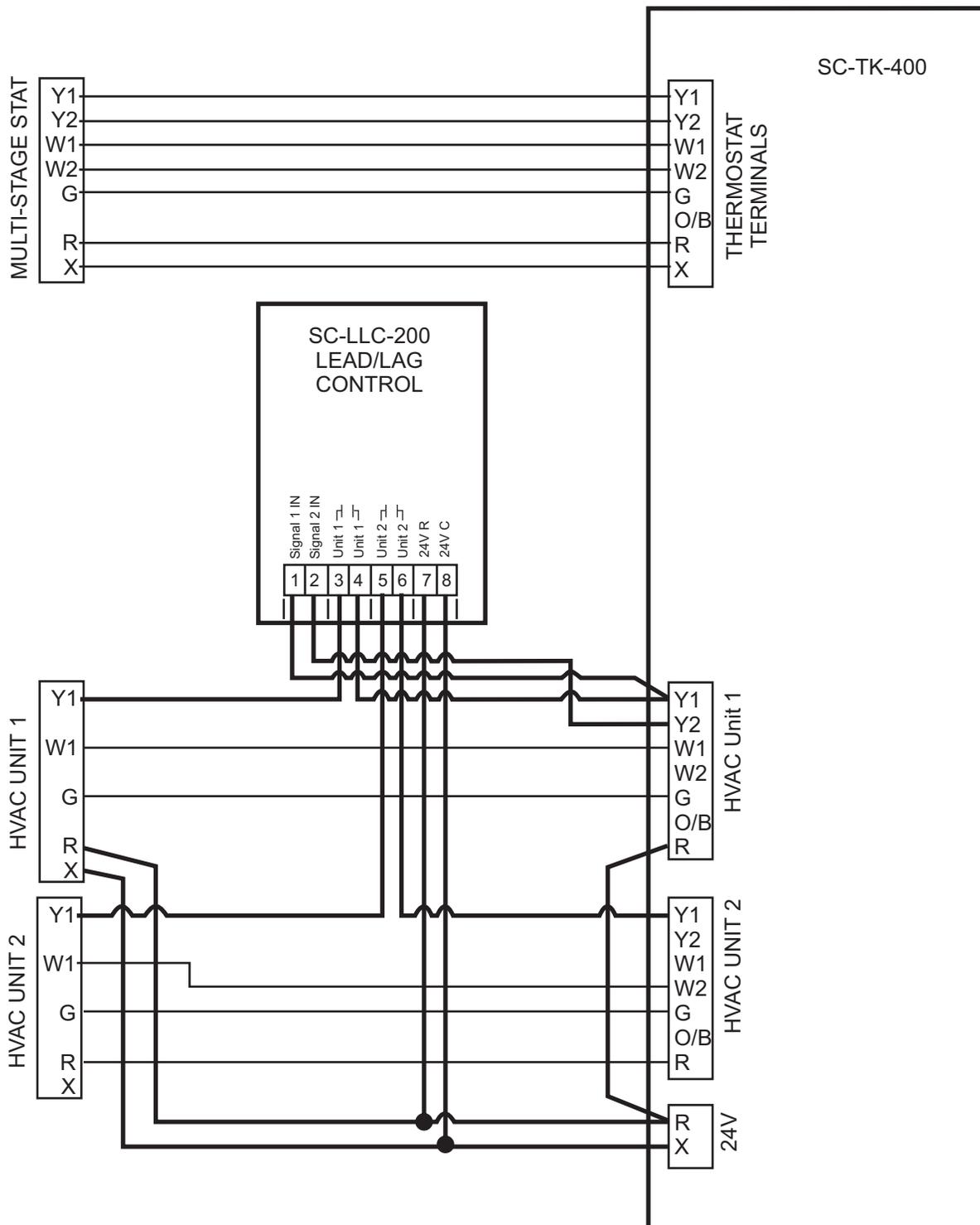
SPECIFIED
CONTROLS



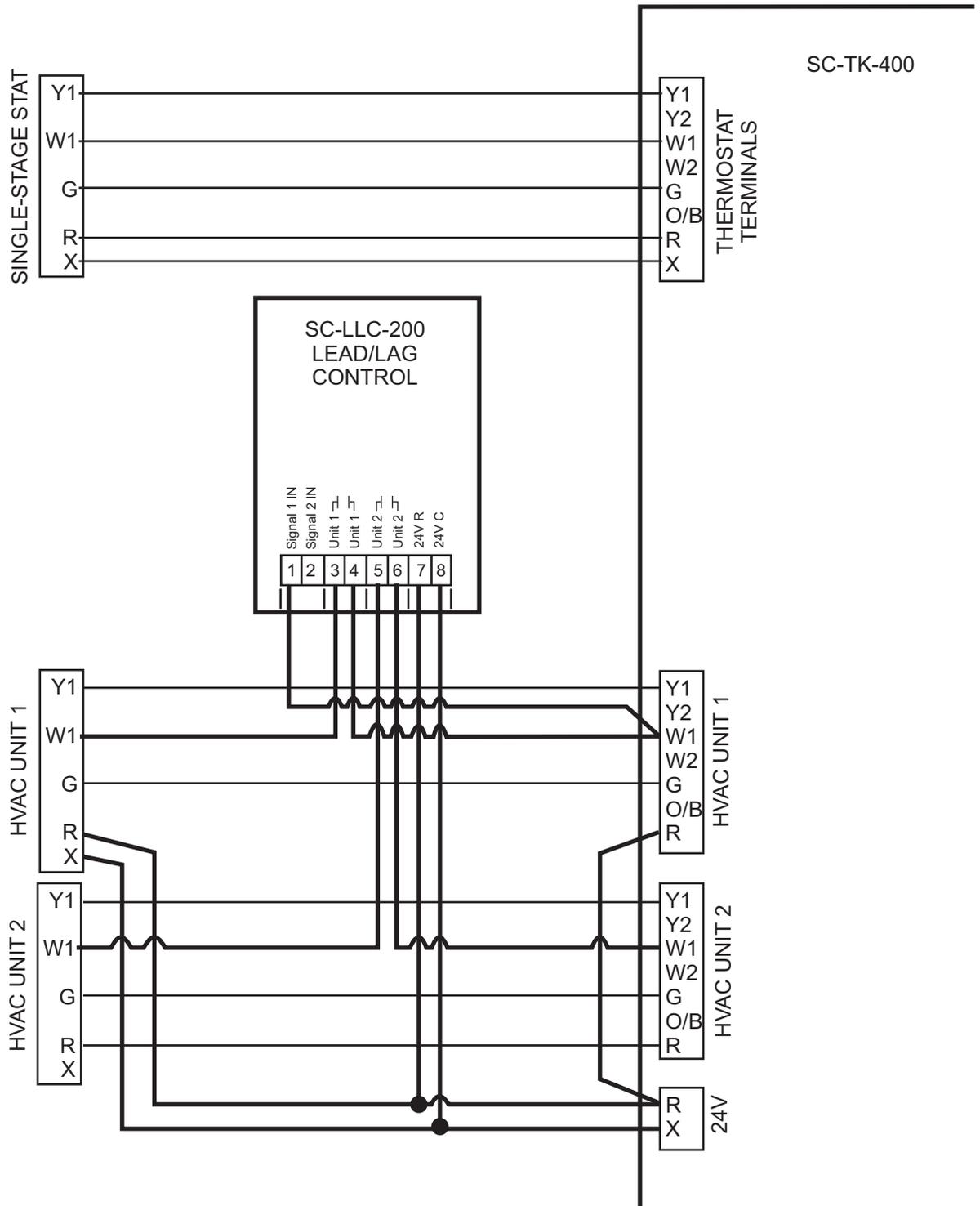
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER AND SC-SC-TK-400 TWINNING KIT FOR COOLING LEAD/LAG



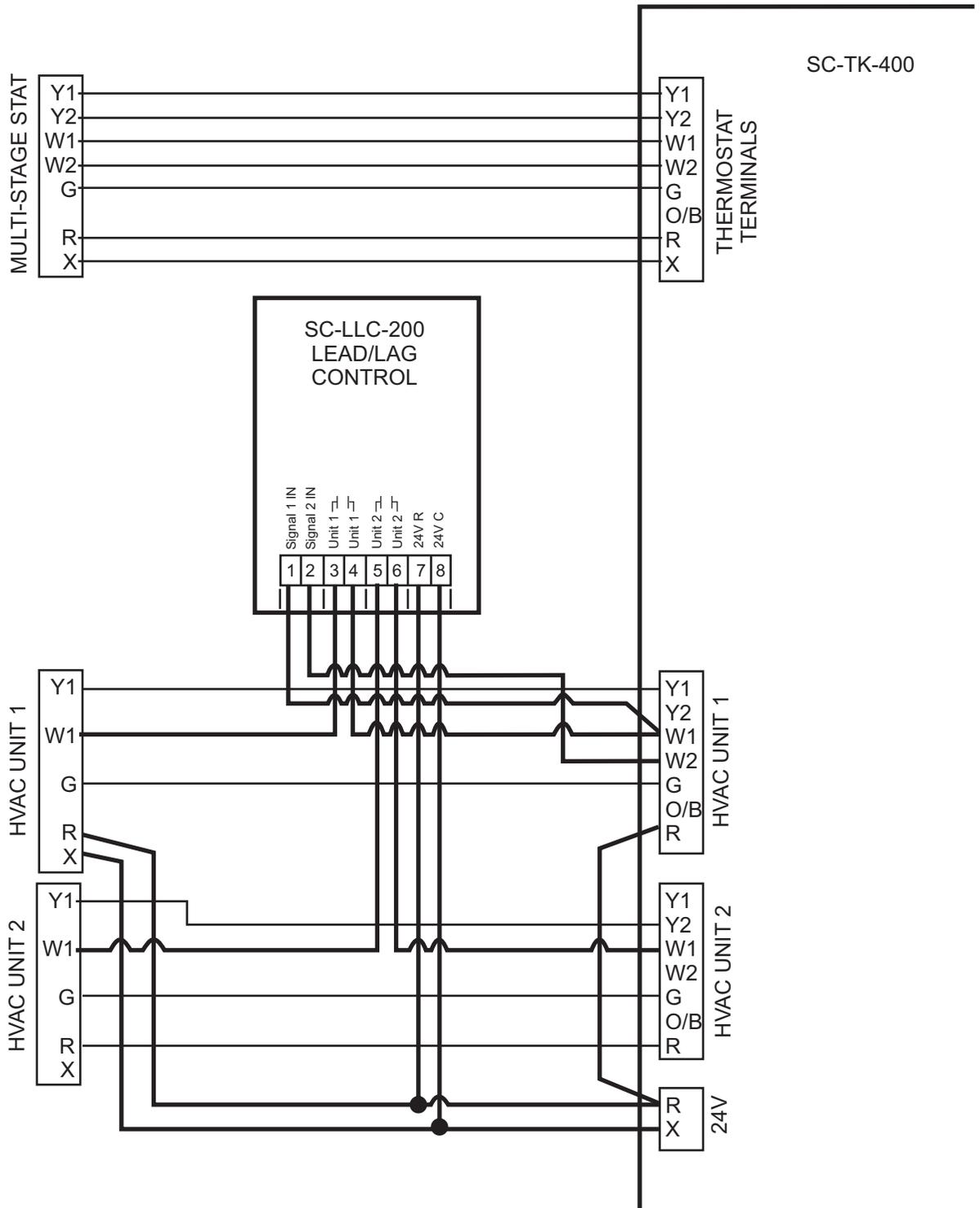
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER AND SC-TK-400 TWINNING KIT FOR COOLING LEAD/LAG WITH UPSTAGING



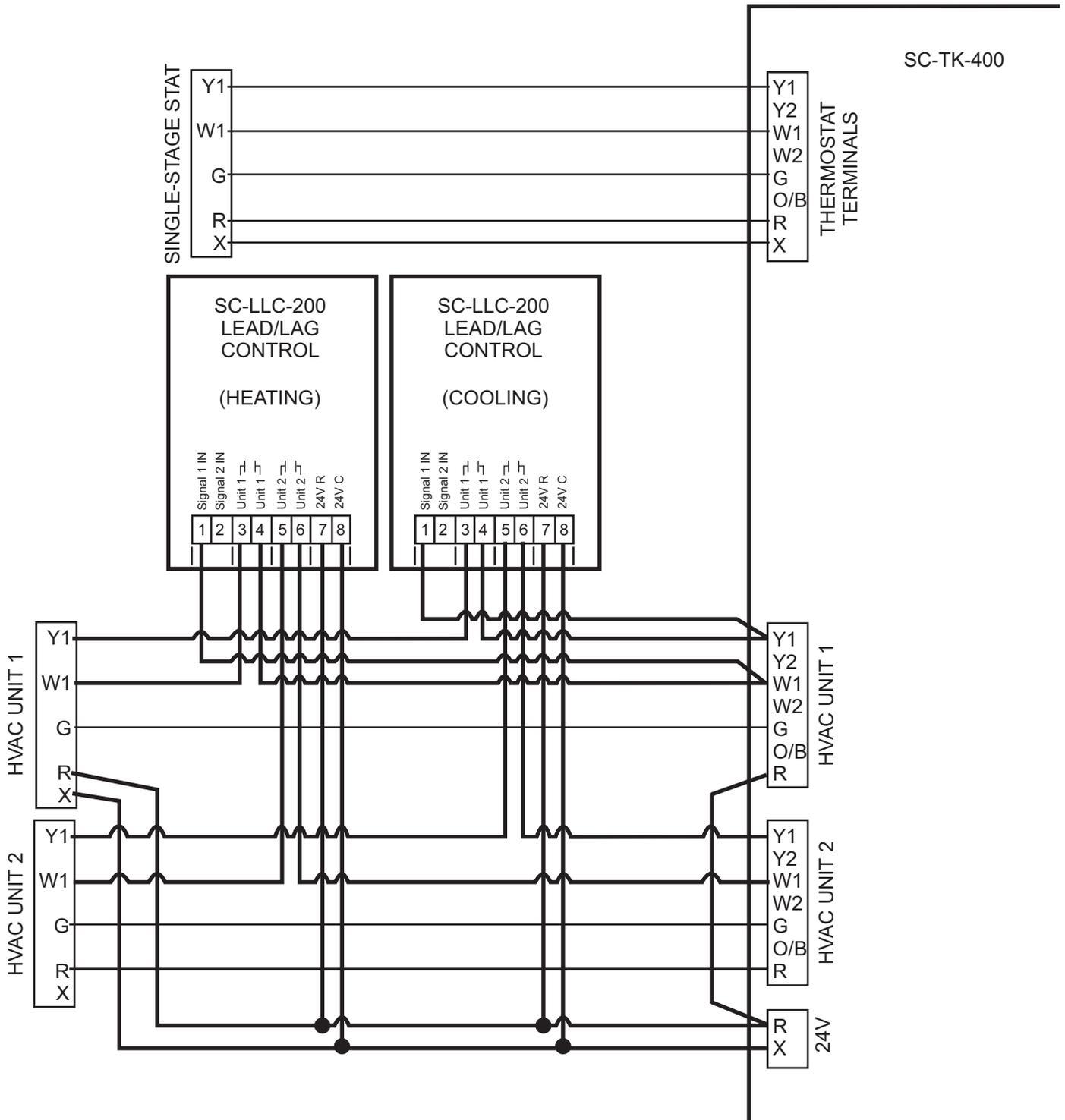
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER AND SC-TK-400 TWINNING KIT FOR HEATING LEAD/LAG



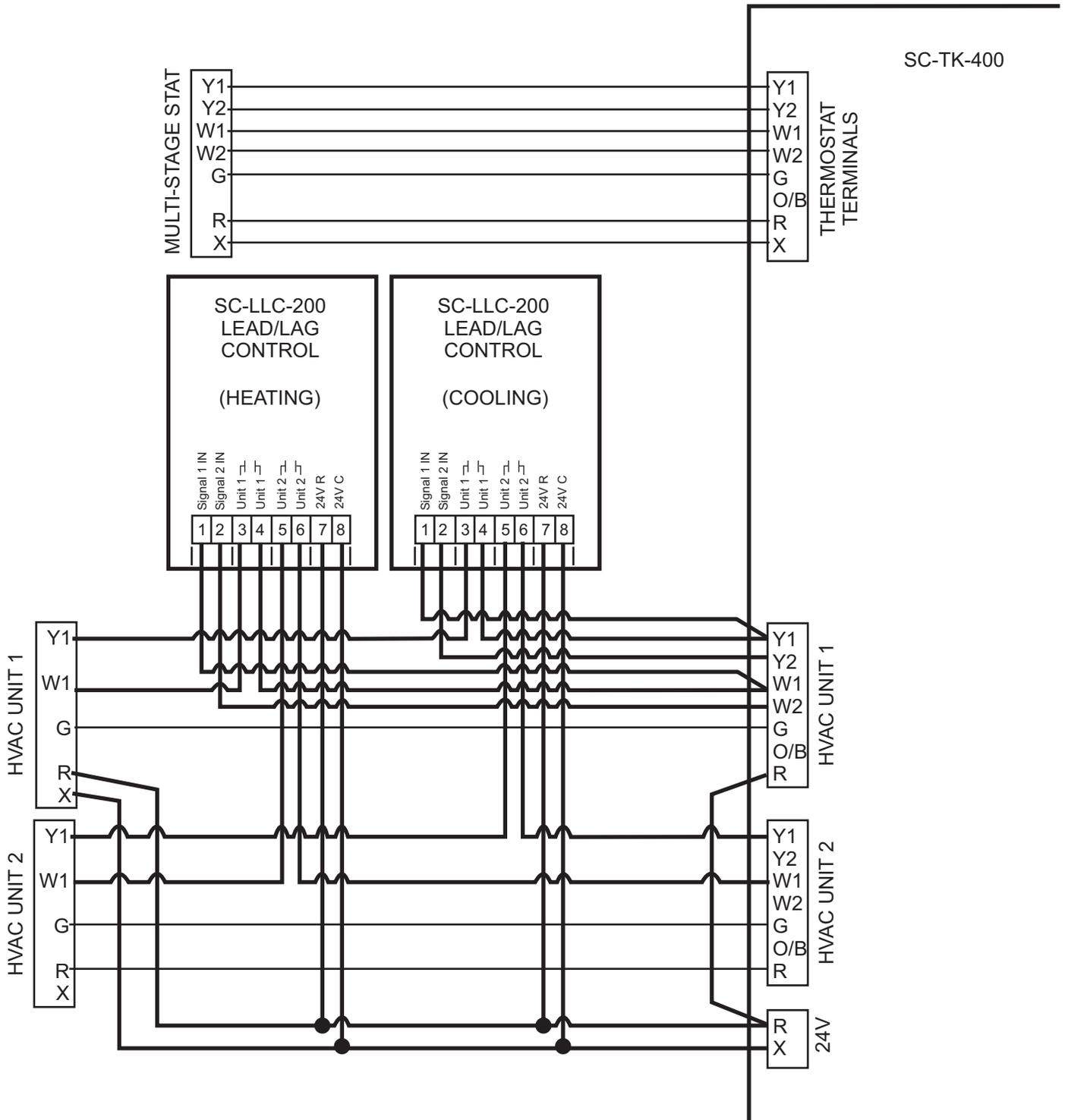
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLER AND SC-TK-400 TWINNING KIT HEATING LEAD/LAG WITH UPSTAGING



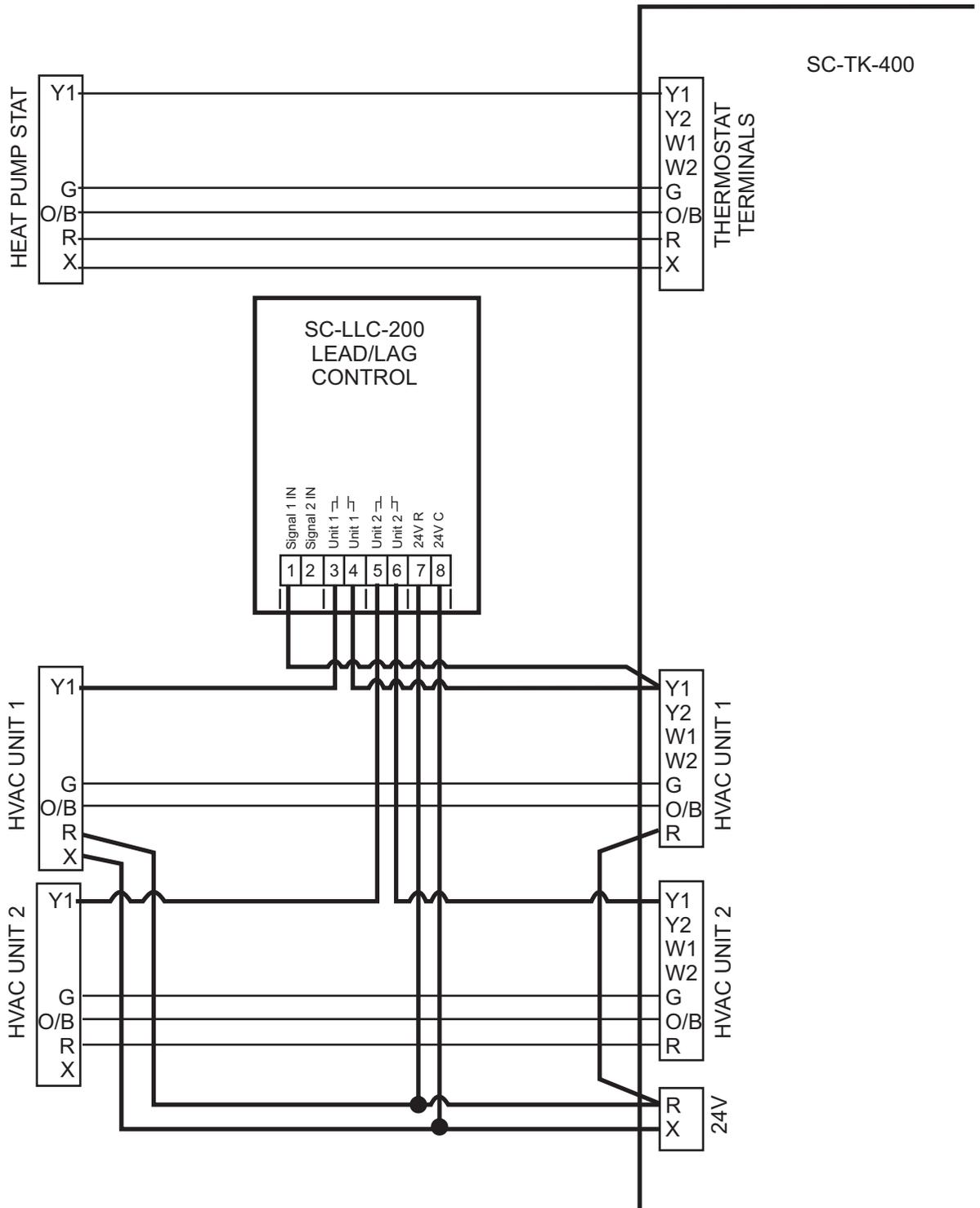
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT FOR HEATING AND COOLING LEAD/LAG



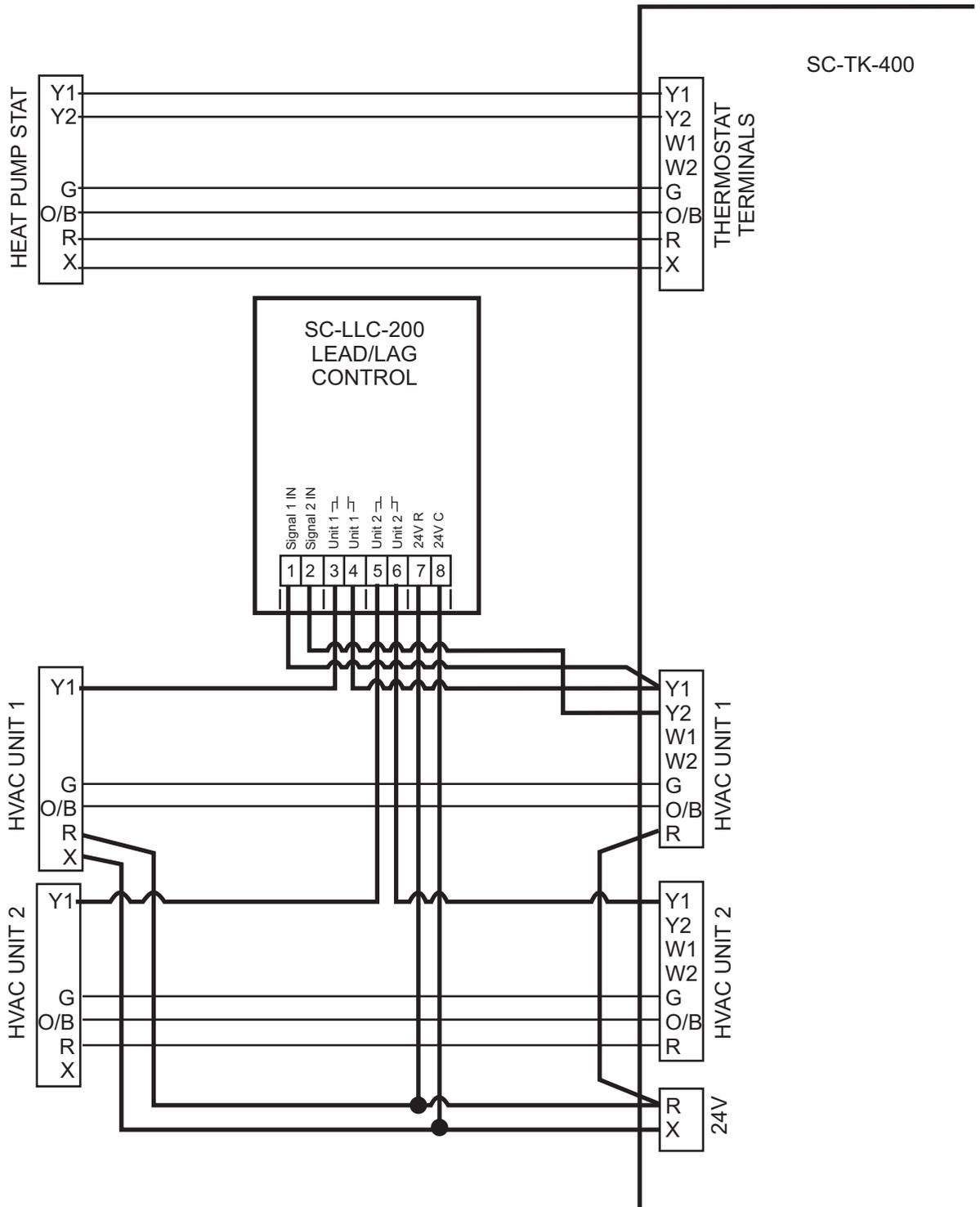
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT FOR HEATING AND COOLING LEAD/LAG WITH UPSTAGING



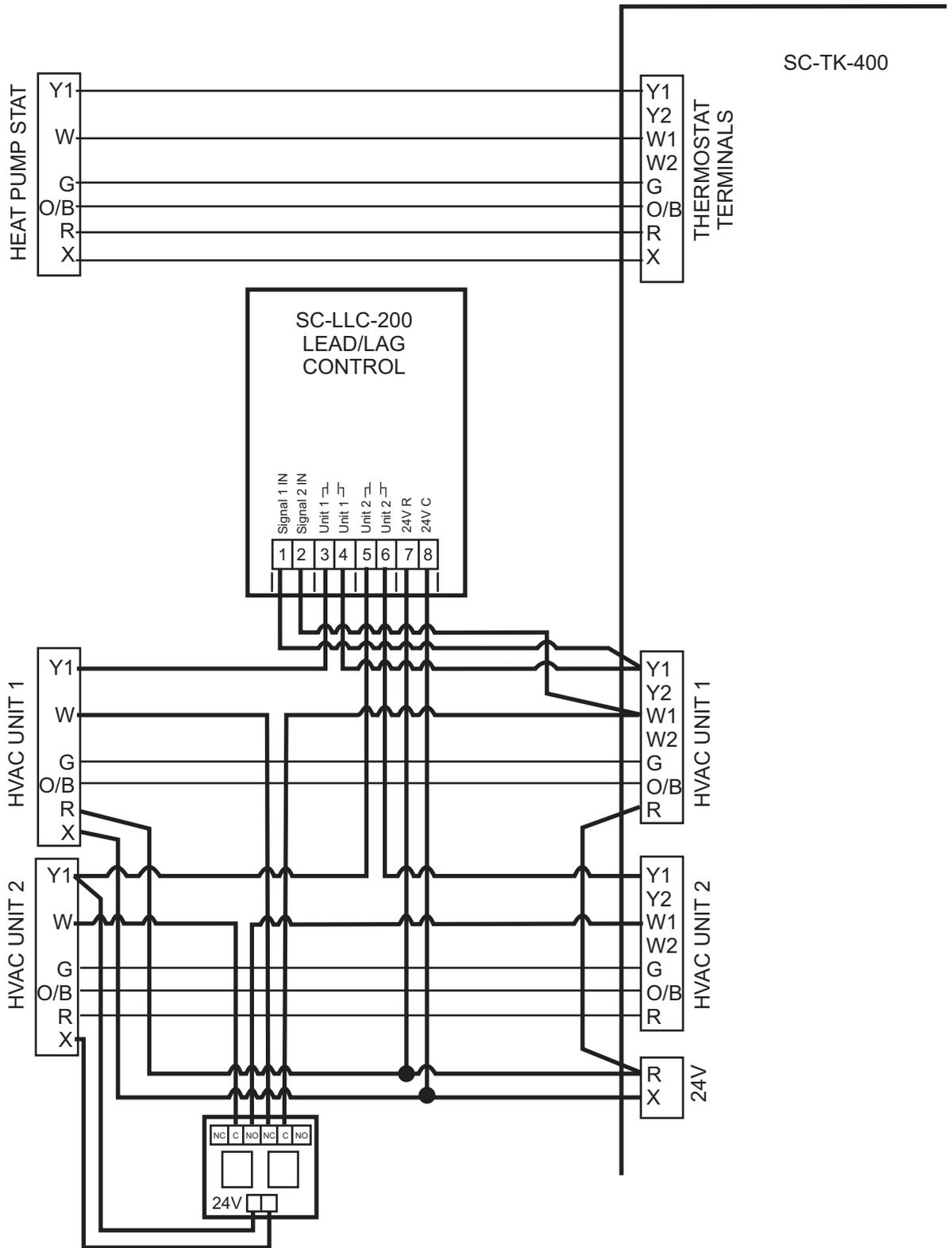
WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT FOR 1 HEAT / 1 COOL HEAT PUMP



WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT FOR 1 HEAT / 1 COOL HEAT PUMP WITH UPSTAGING



WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT AND RY-2 DPDT RELAY FOR 2 HEAT / 1 COOL HEAT PUMP



WIRING DIAGRAM USING SC-LLC-200 LEAD/LAG CONTROLLERS AND SC-TK-400 TWINNING KIT FOR 2 HEAT / 1 COOL HEAT PUMP WITH UPSTAGING (Auxiliary / EH Heat Work Together)

