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Summary of Operation

X-Pro II Workstation Safety Controller
Lam Research Corporation



The safety controller monitors four conditions: bake hood temperature, bake hood exhaust pressure, X-Pro exhaust hood pressure, and temperature of the bake plate outer shell.

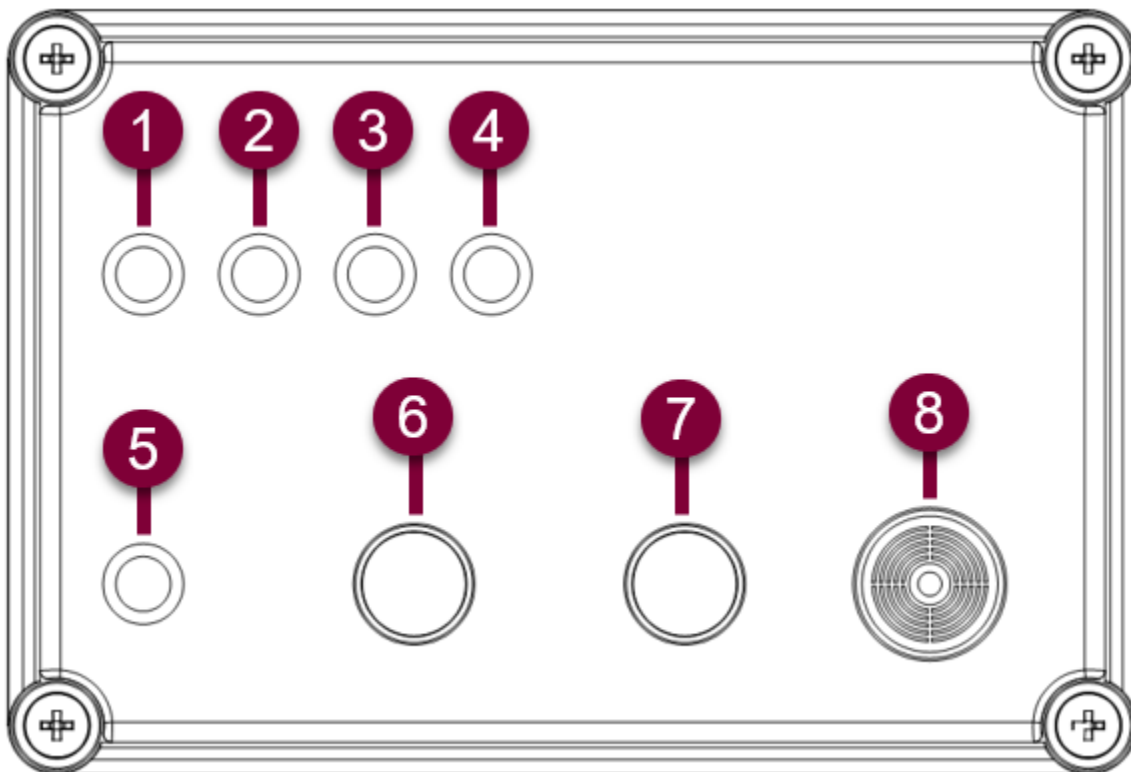
When all of these conditions are met, the safety controller will energize a contactor which connects the bake plate heating element to its controller. Should any of these conditions fall out of the safe range, the safety controller will de-energize the contactor and power is removed from the bake plate heating element. In the event of a fault, one or more of four indicator lamps will show the source(s) of the fault, an alarm will sound, and the white *Mute* switch will be illuminated. The *Mute* button can be pressed to silence the alarm. When all of the safety conditions are restored, the blue *Reset Required* switch will be illuminated. Pressing the *Reset* button will re-energize the contactor and the bake plate will be able to heat again.

Bake hood temperature is monitored with a thermocouple mounted in the bake hood. The thermocouple is connected to a temperature controller which has a dry contact output connected to the safety controller.

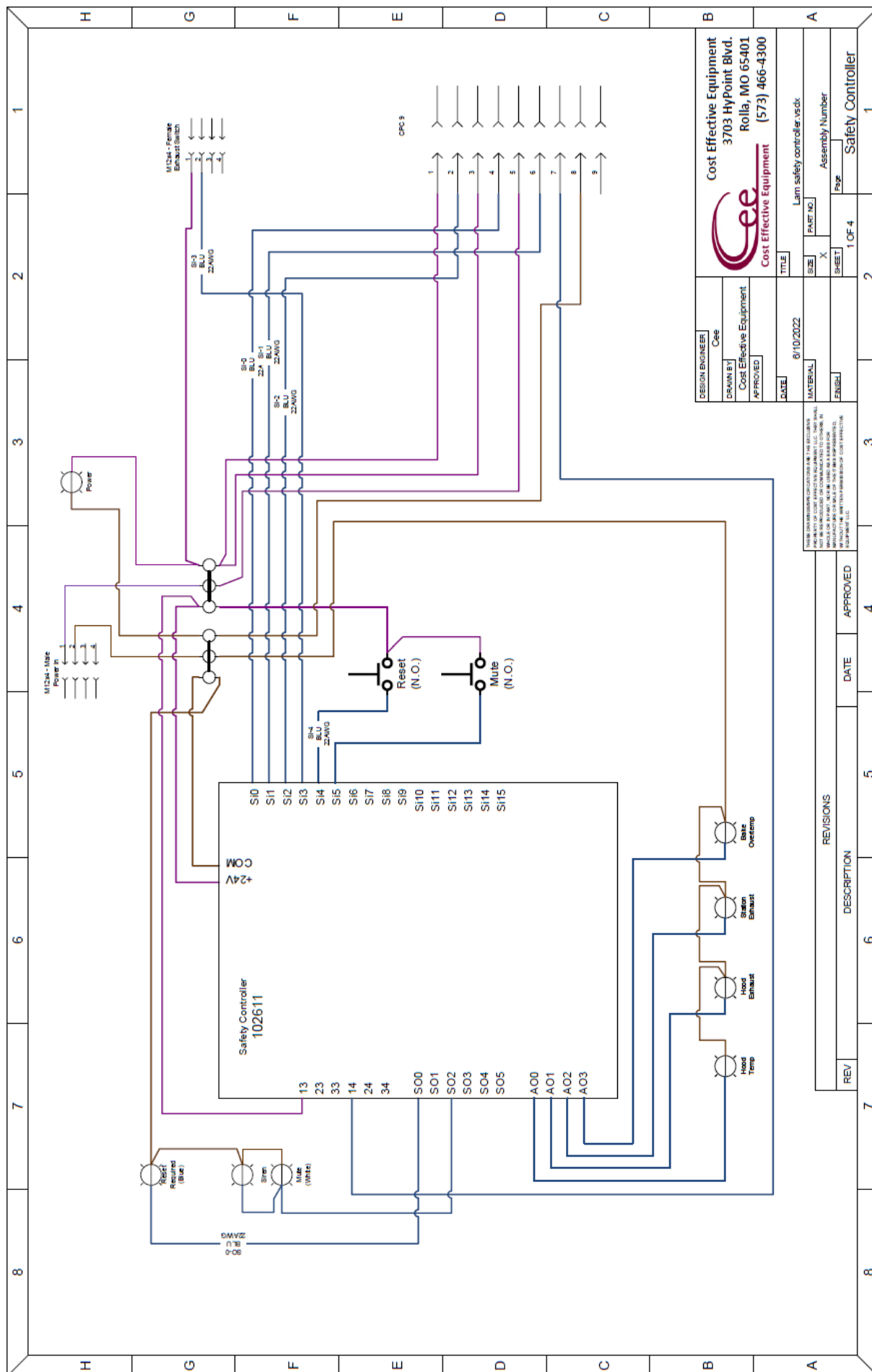
Bake hood exhaust pressure is monitored with a diaphragm switch connected to the safety controller.

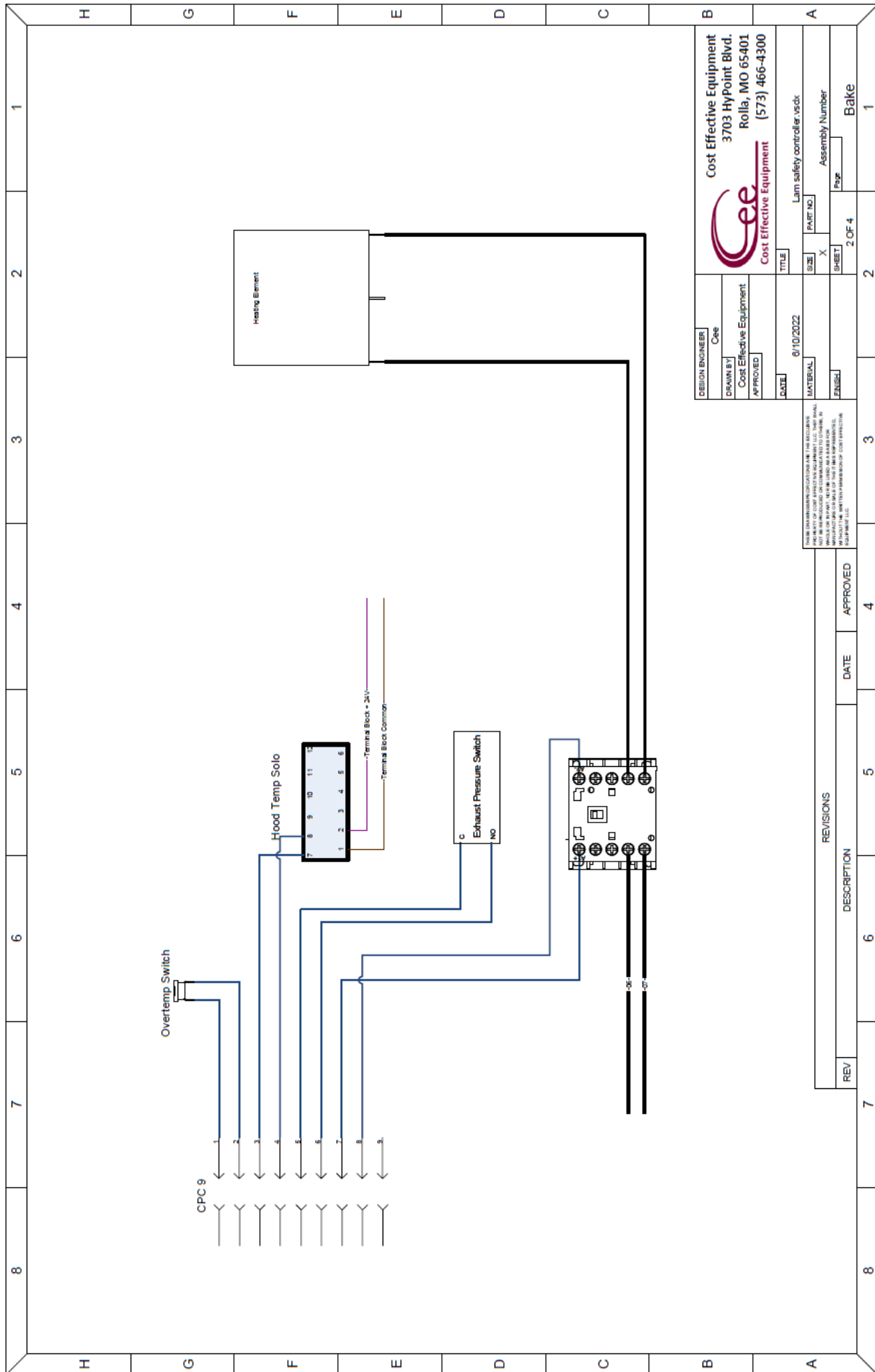
Exhaust hood pressure is monitored with a diaphragm switch connected to the safety controller.

The bake plate outer shell is monitored with a bimetallic switch connected to the safety controller. This switch requires a manual reset if it is tripped.



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|---|------------------|
| 1. Bake Lid Temperature Indicator Lamp | 5. Pilot Light |
| 2. Bake Hood Exhaust Pressure Indicator Lamp | 6. Reset Switch |
| 3. X-Pro Exhaust Hood Pressure Indicator Lamp | 7. Mute Button |
| 4. Bake Over Temperature (outer shell) Indicator Lamp | 8. Audible Alarm |





DESIGN ENGINEER	Cee
DRAWN BY	Cost Effective Equipment
APPROVED	
DATE	8/10/2022
TITLE	Lam safety controller vssdx
SIZE	X
PART NO.	
Assembly Number	
Page	2 OF 4
Sheet	Bake
Rev	1

Cost Effective Equipment
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REVISIONS

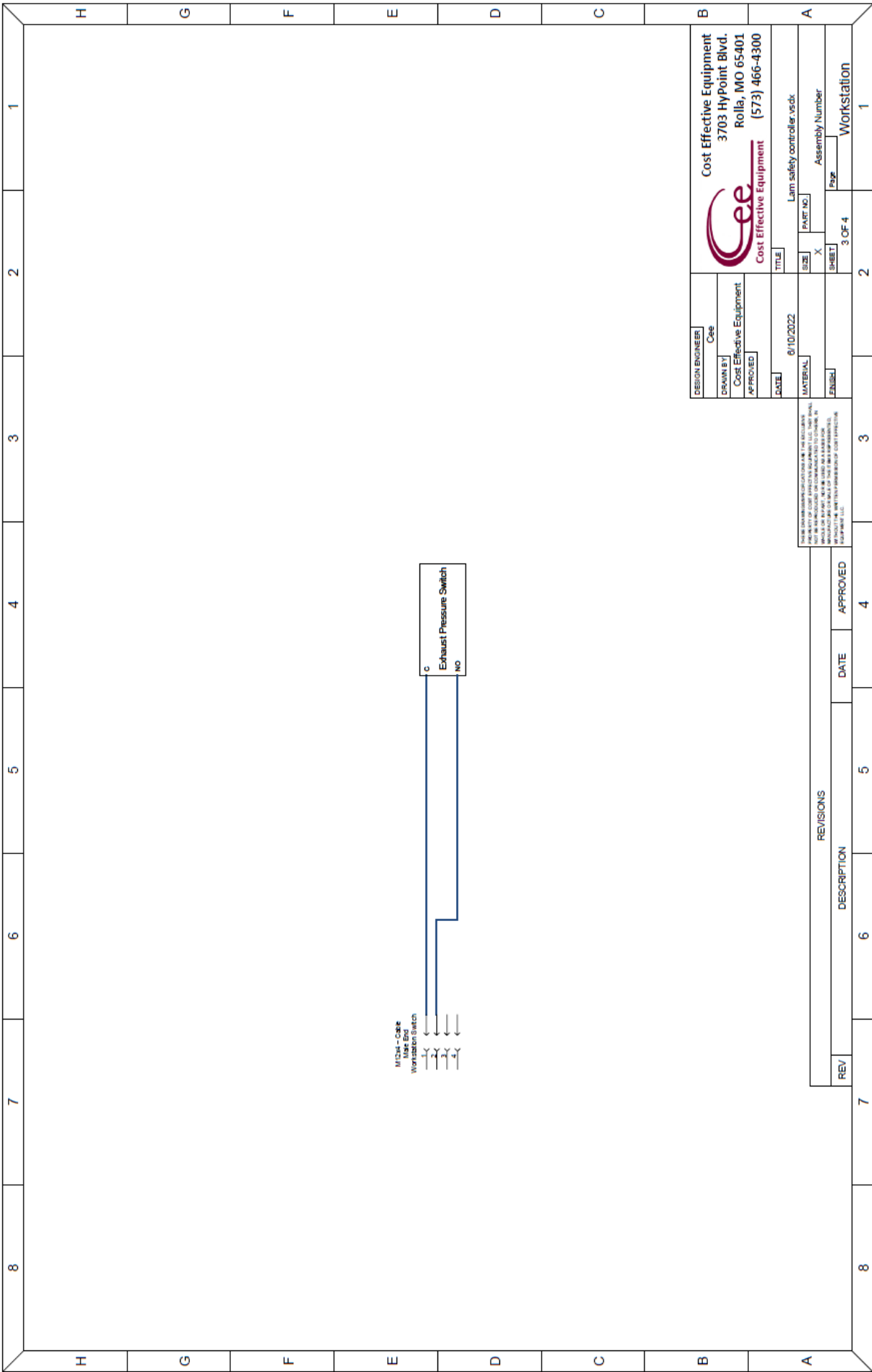
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DESIGN ENGINEER Cee		Cost Effective Equipment 3703 Hypoint Blvd. Rolla, MO 65401 (573) 466-4300	
DATE 8/10/2022	TITLE Lam safety controller v5dx	SIZE X	PART NO.
MATERIAL	FINISH	SHEET 3 OF 4	Assembly Number Workstation

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