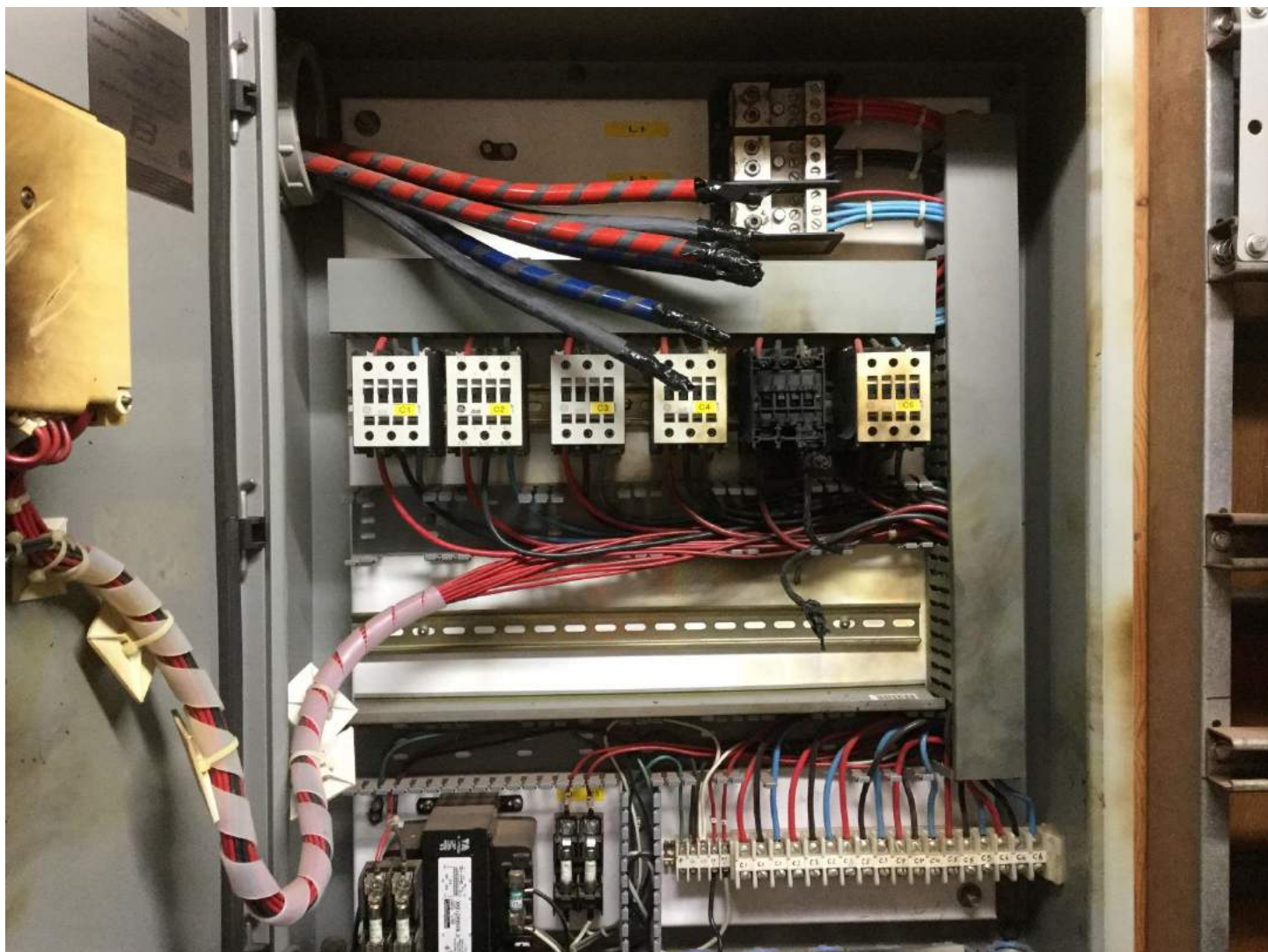


Incident Summary (Reference #) (5614177)

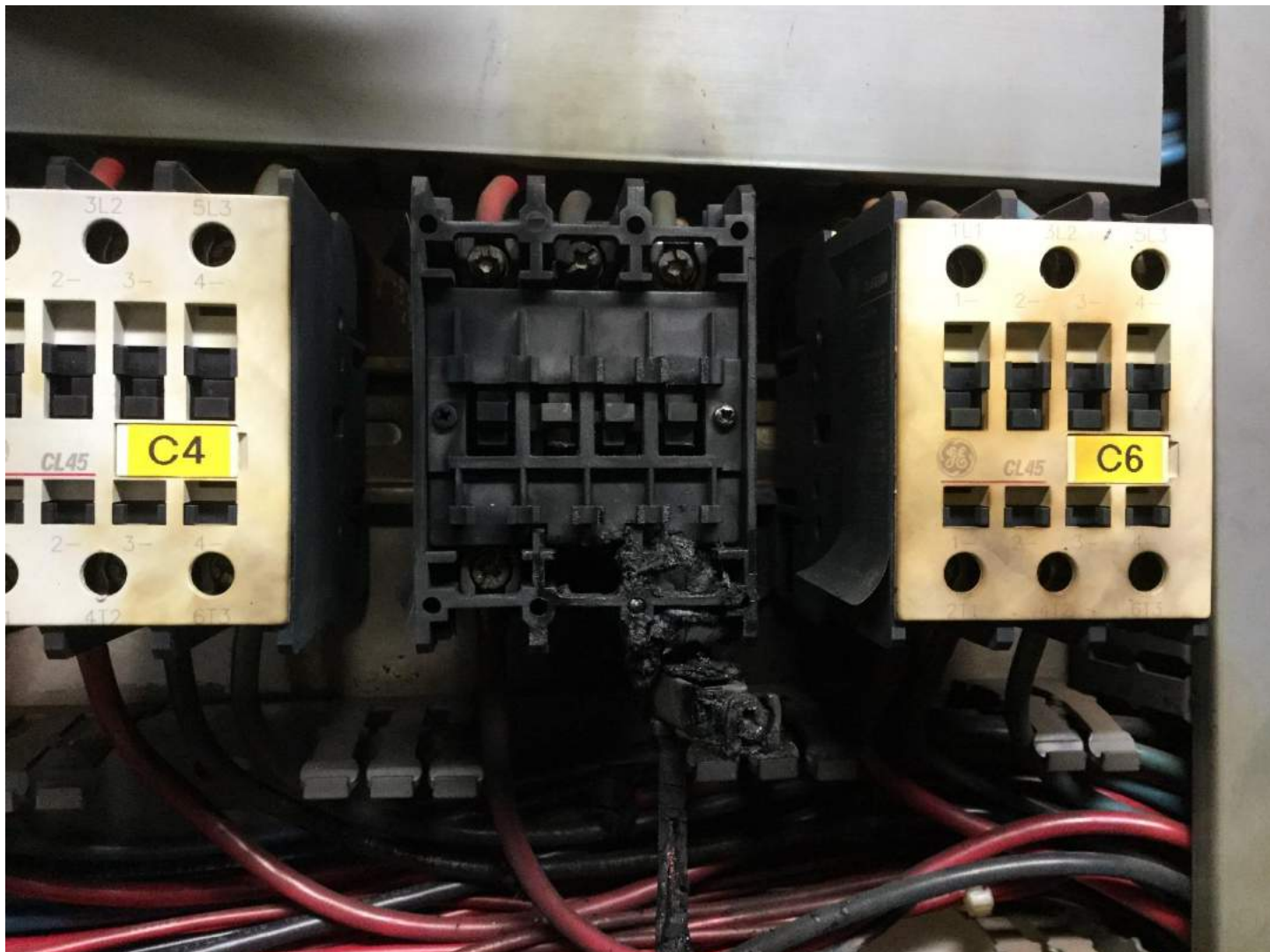
AneI, likely beyond repair.	Incident Date		<i>April 4, 2017</i>	
	Location		<i>Richmond</i>	
	Regulated industry sector		<i>Low voltage electrical system</i>	
	Impact	Injury	Qty injuries	<i>0</i>
			Injury description	<i>n/a</i>
			Injury rating	<i>n/a</i>
	Damage		Damage description	<i>Damage to an automatic capacitor control panel.</i>
			Damage rating	<i>Minor</i>
	Incident rating		<i>Minor</i>	
Incident overview		<i>A contactor in the capacitor control panel failed, resulting in a short circuit. The resultant arc flash blew open the door of the control cabinet.</i>		
INVESTIGATION CONCLUSIONS	Site, system and components		<i>The control panel is located in the electrical room and monitors the power factor of the building electrical system. As required, it energizes the coils of 6 individual contactors which in turn supply power to the corresponding capacitor in order to correct the power factor.</i>	
	Failure scenario(s)		<i>One of the contactors, likely through age and use, experienced a failure upon energization, resulting in a short circuit and arc flash.</i>	
	Facts and evidence		<i>As shown in accompanying photos, contactor #5 experienced catastrophic damage.</i>	
	Causes and contributing factors		<i>Although it is unknown how many times the contactor has cycled over the 19 years that it has been in operation, it is likely that the structural components became fatigued and broke during the final energization.</i>	



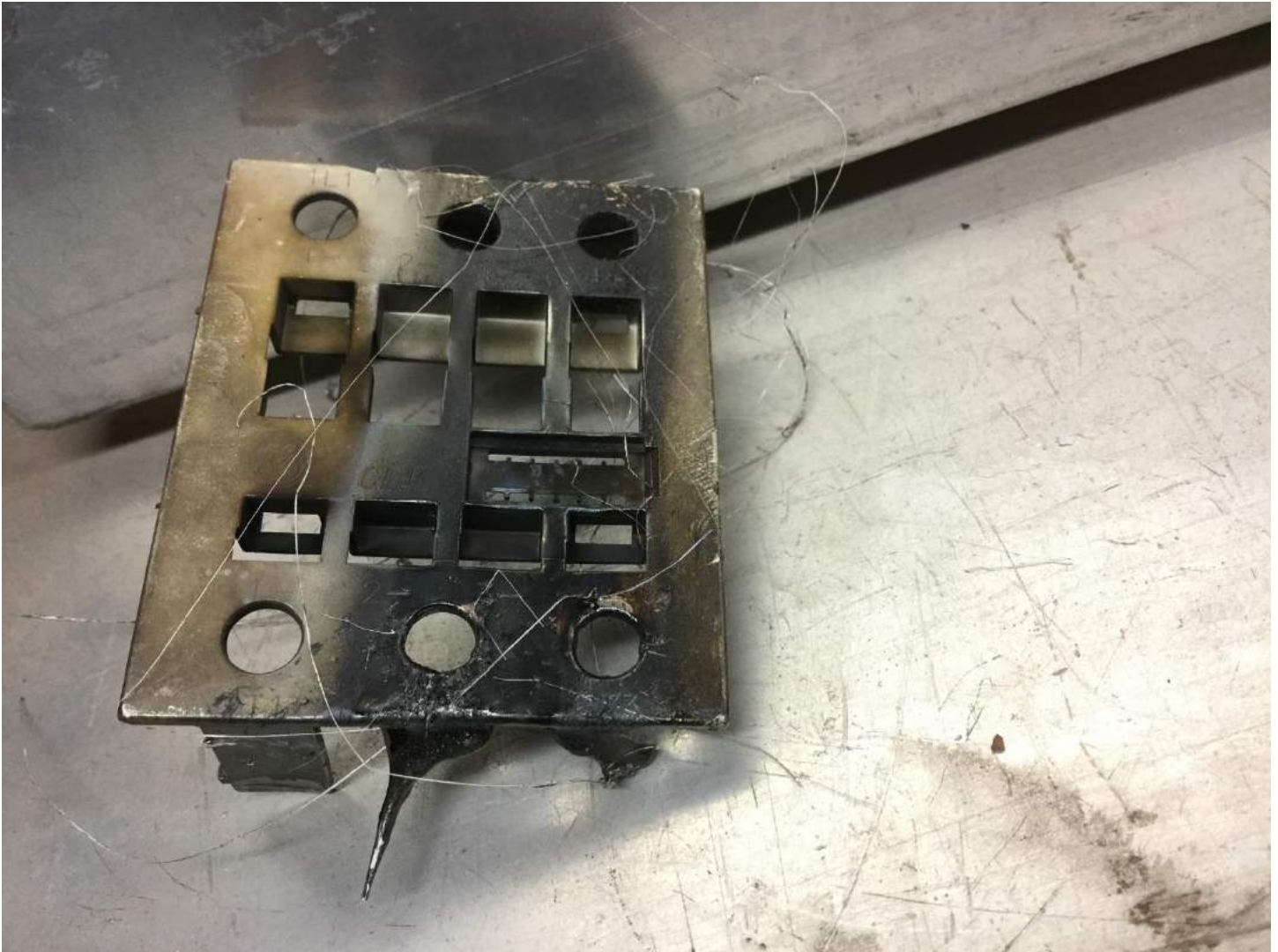
Automatic capacitor control cabinet



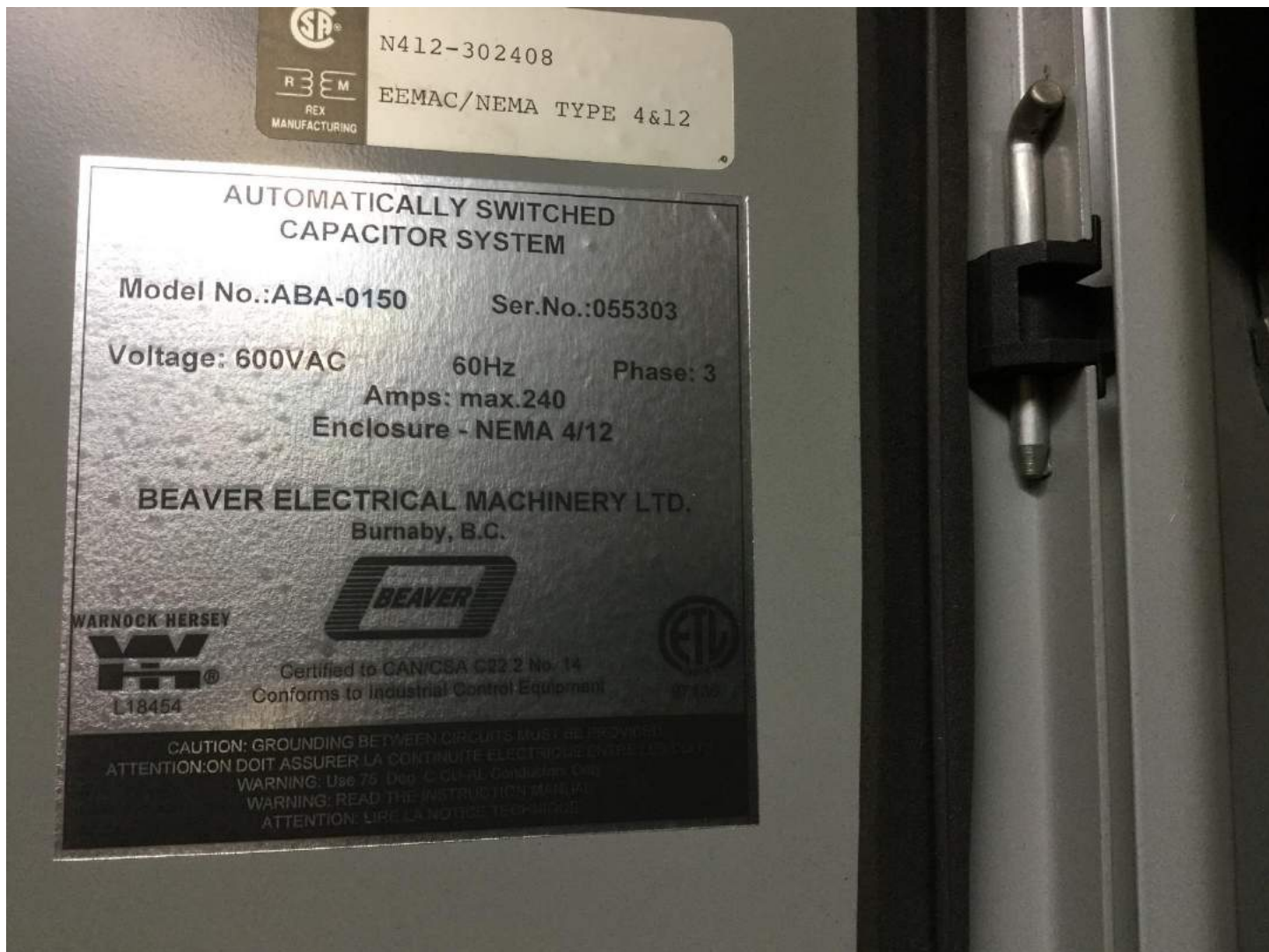
Contactor #5 destroyed



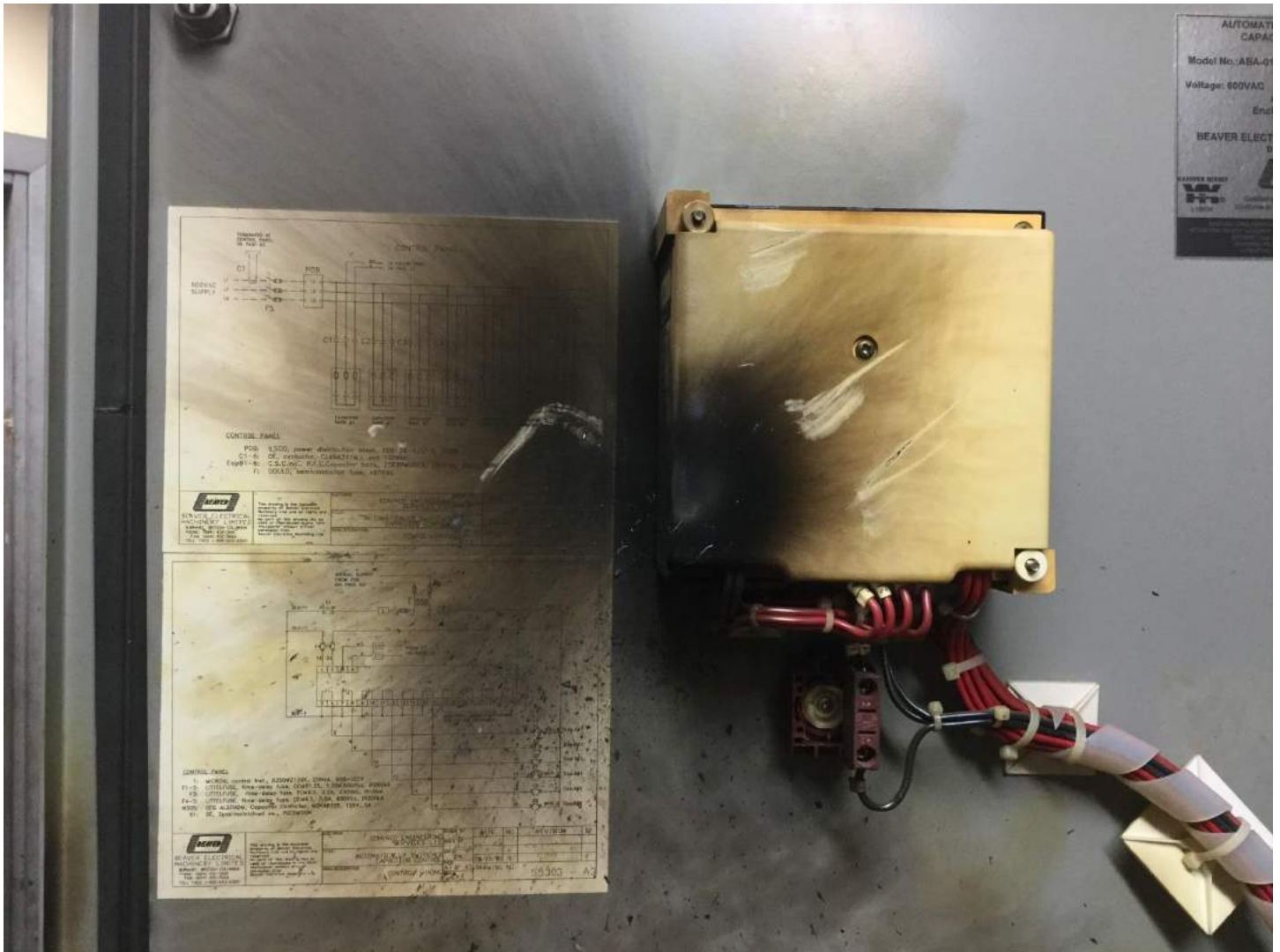
Contactor #5



Front face of contactor #5 – found on floor



Manufacturers label



Inside of cabinet door