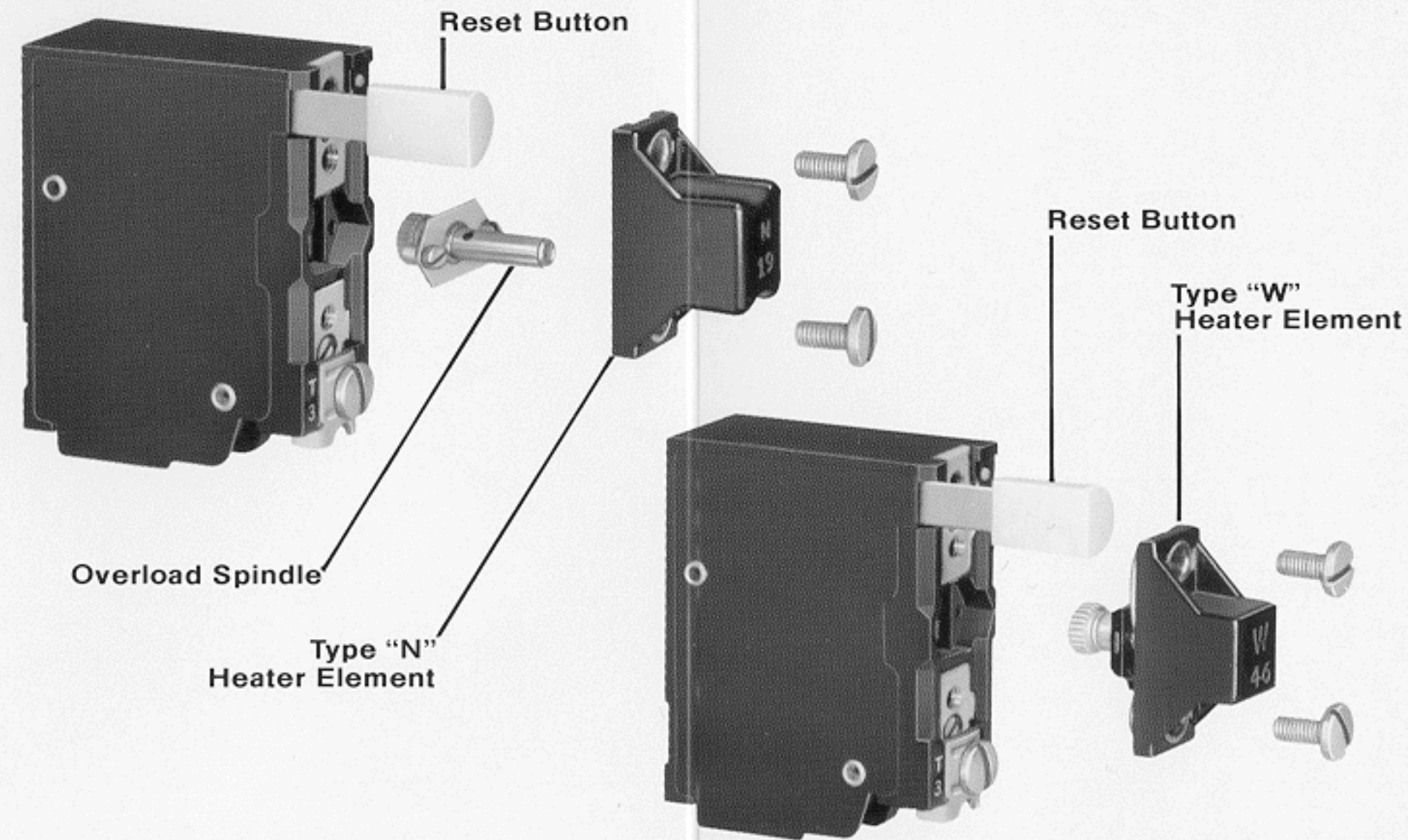


INSTRUCTIONS FOR SELECTION AND INSTALLATION

Conversion From Type N To Type W Eutectic Alloy Overload Relay Heater Elements

1. Remove each existing Type N heater element and each overload spindle (2 screws).
2. Consult index for selection of heater and refer to table covering the Bulletin number of the controller. Select the corresponding Type W heater element for the Type N being replaced. **Note:** For new installations or when motor full load current is known, refer to "Heater Element Selection Tables" in the catalog.
3. Install the Type W heater element(s) selected and secure with the two mounting screws.
4. Reset relay by depressing reset button. **Note:** Single pole overload relay is shown. Install a Type W heater element in each active pole of a 2 or 3 pole block style overload relay in the same manner.

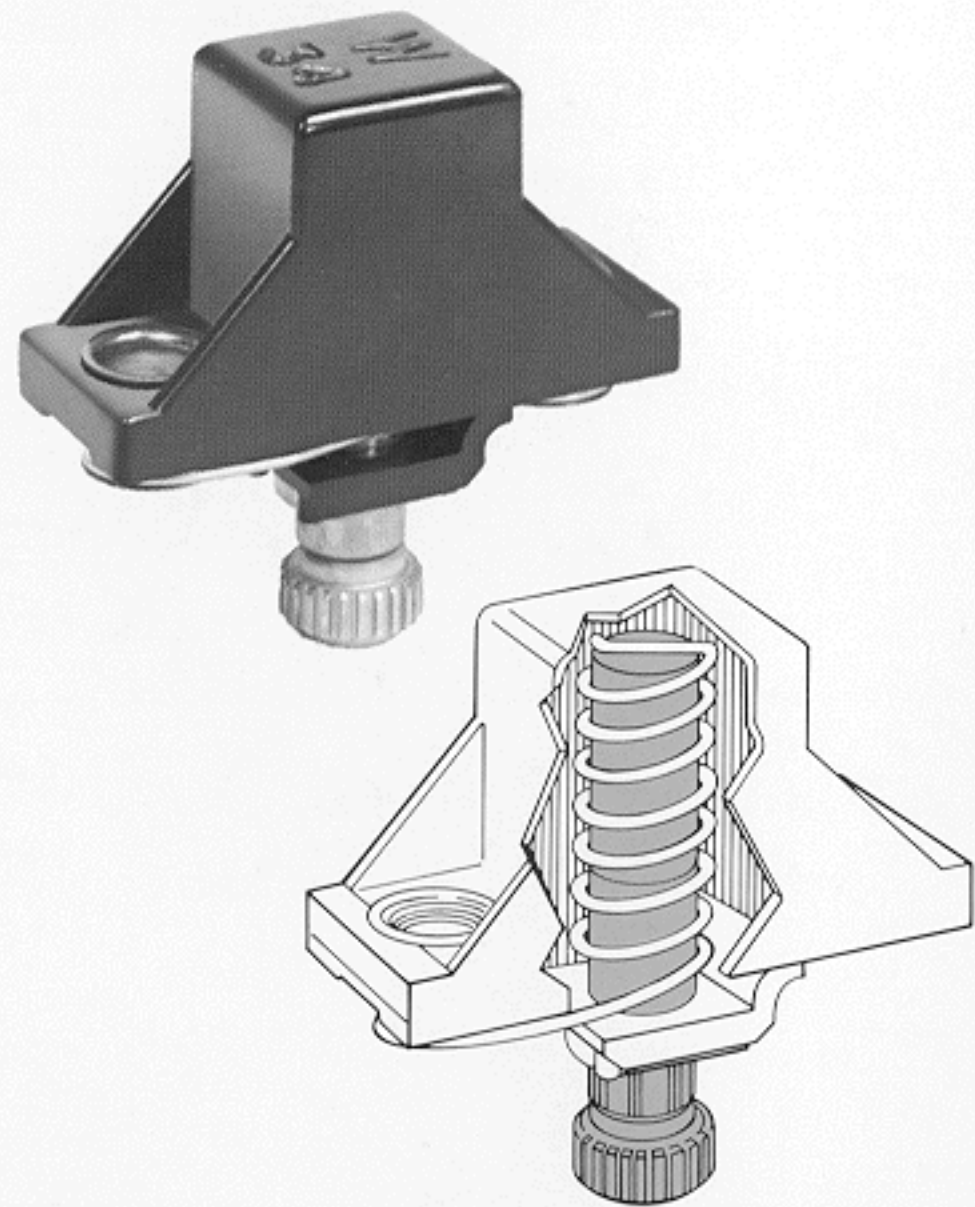


Bulletin Number Index	Table Color Code
705 with Block Style Overload Relays	Table 3
705 with Side Mounted Overload Relays	Table 1
706	Table 4
707	Table 4
709	Table 1
712	Table 2
713	Table 1
715 with Block Style Overload Relays	Table 3
715 with Side Mounted Overload Relays	Table 1

1 Bulletin 705, 709, 713 and 715 With Side Mounted Overload Relays							
N Element Number	W Element Number						
	Size 00	Size 0	Size 1	Size 2	Size 3	Size 4	Size 5
NN4	W10	W10	W10				
NN3X	W11	W11	W11				
NN3	W12	W12	W12				
NN2X	W13	W13	W13				
NN2	W14	W14	W14				
NN1X	W15	W15	W15				
NN1	W16	W16	W16				
N1X	W17	W17	W17				
N1	W18	W18	W18				
N2X	W19	W19	W19				
N2	W20	W20	W20				
N3X	W21	W21	W21				
N3	W22	W22	W22				
N4X	W23	W23	W23				
N4	W24	W24	W24				
N5	W25	W25	W25				
N6	W26	W26	W26				
N7	W27	W27	W27				
N8	W28	W28	W28				
N9	W29	W29	W29				W29
N10	W30	W30	W30				W30
N11	W31	W31	W31				W31
N12	W32	W32	W32				W32
N13	W33	W33	W33				W33
N14	W34	W34	W34				W34
N15	W35	W35	W35				W35
N16	W36	W36	W36				W36
N17	W37	W37	W37				W37
N18	W38	W38	W38				W38
N19	W39	W39	W39				W39
N20	W40	W40	W40				W40
N21	W41	W41	W41				W41
N22	W42	W42	W42				W42
N23	W43	W43	W43				W43
N24	W44	W44	W44	W44			
N25	W45	W45	W45	W45			
N26	W46	W46	W46	W46			
N27	W47	W47	W47	W47			
N28	W48	W48	W48	W48			
N29	W49	W49	W49	W49			
N30	W50	W50	W50	W50			
N31	W51	W51	W51	W51			
N32		W52	W52	W52	W53		
N33		W53	W53	W53	W54		
N34		W54	W54	W54	W55		
N35		W55	W55	W56	W56		
N36		W56	W56	W57	W58		
N37		W57	W57	W58	W59	W60	
N38		W58	W59	W60	W60	W61	
N39			W60	W61	W61	W62	
N40			W61	W62	W62	W63	
N41			W62	W63	W63	W64	
N42			W63	W64	W64	W65	
N43				W65	W65	W66	
N44				W66	W66	W67	
N45				W67	W67	W68	
N46				W68	W68	W69	
N70				W69	W69	W70	
N71					W70	W71	
N72					W71	W72	
N73					W72	W73	
N74					W74	W74	
N75					W75	W75	
N76					W76	W76	
N77						W78	
N78						W79	
N79						W81	

2 Bulletin 712						
N Element Number	W Element Number					
	Size 0	Size 1	Size 2	Size 3	Size 4	Size 5
NN4	W10	W10				
NN3X	W11	W11				
NN3	W12	W12				
NN2X	W13	W13				
NN2	W14	W14				
NN1X	W15	W15				
NN1	W16	W16				
N1X	W17	W17				
N1	W18	W18				
N2X	W19	W19				
N2	W20	W20				
N3X	W21	W21				
N3	W22	W22				
N4X	W23	W23				
N4	W24	W24				
N5	W25	W25				
N6	W26	W26				
N7	W27	W27				
N8	W28	W28				
N9	W29	W29				W29
N10	W30	W30				W30
N11	W31	W31				W31
N12	W32	W32				W32
N13	W33	W33				W33
N14	W34	W34				W34
N15	W35	W35				W35
N16	W36	W36				W36
N17	W37	W37				W37
N18	W38	W38				W38
N19	W39	W39				W39
N20	W40	W40				W40
N21	W41	W41				W41
N22	W42	W42				W42
N23	W43	W43				W43
N24	W44	W44	W44			
N25	W45	W45	W45			
N26	W46	W46	W46			
N27	W47	W47	W47			
N28	W48	W48	W48			
N29	W49	W49	W49			
N30	W50	W50	W50			
N31	W51	W51	W51			
N32	W52	W52	W52	W53		
N33	W53	W53	W53	W54	W54	
N34	W54	W54	W54	W55	W55	
N35	W55	W55	W56	W56		
N36	W56	W56	W56	W58		
N37	W57	W57	W58	W59		
N38	W58	W59	W60	W60		
N39		W60	W61	W61	W61	W61
N40			W61	W62	W62	W62
N41			W62	W63	W63	W63
N42			W63	W64	W64	W64
N43				W65	W65	W65
N44				W66	W66	W66
N45				W67	W67	W67
N46				W68	W68	W68
N70				W69	W69	W70
N71					W70	W71
N72					W71	W72
N73					W72	W73
N74					W73	W74
N75					W75	W75
N76					W76	W76
N77						W78
N78						W79
N79						W80

TYPE W ELEMENTS



More reliable motor overload protection for today's motors

Allen-Bradley offers improved protection for today's motors—Type W heater elements. Directly heated elements are quick-tripping in locked rotor condition. New eutectic alloy provides consistently accurate protection, high dependability; plus reduced sensitivity to ambient temperature changes, minimizing the possibility of nuisance tripping in running condition. Type W heater elements can be used with existing Series K style starters. A single stock of heater elements can serve both new and existing devices.



Power Group
Milwaukee, Wisconsin 53204

Publication MC109—July, 1982
Supersedes Publication MC109 Dated May, 1982



3 Bulletin 705 and 715 With Block Style Overload Relays							
N Element Number	W Element Number						
	Size 00	Size 0	Size 1	Size 2	Size 3	Size 4	Size 5
NN4	W10	W10	W10				
NN3X	W11	W11	W11				
NN3	W12	W12	W12				
NN2X	W13	W13	W13				
NN2	W14	W14	W14				
NN1X	W15	W15	W15				
NN1	W16	W16	W16				
N1X	W17	W17	W17				
N1	W18	W18	W18				
N2X	W19	W19	W19				
N2	W20	W20	W20				
N3X	W21	W21	W21				
N3	W22	W22	W22				
W4X	W23	W23	W23				
N4	W24	W24	W24				
N5	W25	W25	W25				
N6	W26	W26	W26				
N7	W27	W27	W27				
N8	W28	W28	W28				
N9	W29	W29	W29				W29
N10	W30	W30	W30				W30
N11	W31	W31	W31				W31
N12	W32	W32	W32				W32
N13	W33	W33	W33				W34
N14	W34	W34	W34				W35
N15	W35	W35	W35				W35
N16	W36	W36	W36				W36
N17	W37	W37	W37				W37
N18	W38	W38	W38				W38
N19	W39	W39	W39				W39
N20	W40	W40	W40				W40
N21	W41	W41	W41				W41
N22	W42	W42	W42				W42
N23	W44	W44	W44				W43
N24	W45	W45	W45	W45			
N25	W46	W46	W46	W46			
N26	W47	W47	W47	W47			
N27	W48	W48	W48	W48			
N28	W49	W49	W49	W49			
N29	W50	W50	W50	W50			
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N38		W59	W59	W60	W61		
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N41			W62	W63	W64	W64	
N42			W63	W64	W65	W65	
N43				W65	W66	W66	
N44				W65	W67	W67	
N45				W66	W68	W68	
N46				W67	W69	W69	
N70				W68	W70	W71	
N71					W71	W72	
N72					W73	W73	
N73					W74	W74	
N74					W75	W75	
N75					W76	W76	
N76					W78	W78	
N77						W79	
N78						W81	
N79						W82	

4 Bulletin 706 and 707						
N Element Number	W Element Number					
	Size 0	Size 1	Size 2	Size 3	Size 4	Size 5
NN4	W10	W10				
NN3X	W11	W11				
NN3	W12	W12				
NN2X	W13	W13				
NN2	W14	W14				
NN1X	W15	W15				
NN1	W16	W16				
N1X	W17	W17				
N1	W18	W18				
N2X	W19	W19				
N2	W20	W20				
N3X	W21	W21				
N3	W22	W22				
N4X	W23	W23				
N4	W24	W24				
N5	W25	W25				
N6	W27	W27				
N7	W28	W28				
N8	W29	W29				
N9	W30	W30				W29
N10	W31	W31				W30
N11	W32	W32				W31
N12	W33	W33				W32
N13	W34	W34				W34
N14	W35	W35				W35
N15	W36	W36				W35
N16	W37	W37				W36
N17	W38	W38				W37
N18	W39	W39				W38
N19	W40	W40				W39
N20	W41	W41				W40
N21	W42	W42				W41
N22	W43	W43				W42
N23	W44	W44				W43
N24	W45	W45	W45			
N25	W46	W46	W46			
N26	W47	W47	W47			
N27	W48	W48	W48			
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N42			W63	W63	W64	W65
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N72					W72	W72
N73					W73	W74
N74					W74	W75
N75					W75	W76
N76					W76	W77
N77						W79
N78						W80
N79						W81