
Important Product Safety Bulletin

Immediate Action Required

Impacted Products: Select Eaton Magnum Breakers configurations using Mechanical Interlocks, Key Interlocks or Internal Accessories on the ‘third’ (far right) accessory position.

Eaton’s records indicate that you may have received Eaton Low Voltage Circuit Breakers – Magnum, Magnum DS, Magnum SB and IZM (but not including IZMX) manufactured between **July 1st, 2017 and March 8th, 2018**, as a component or part of an electrical assembly. Breakers manufactured in this date range and include the configurations described above, may experience malfunctions of the accessory opening linkage. A plastic lever in the mechanism may develop a fracture resulting in malfunction.

If the Magnum breakers configuration in your possession do not use Mechanical Interlocks, Key Interlocks or Internal Accessories on the far-right accessory position, no immediate action is required.

WARNING: FAILURE TO FOLLOW THE RECOMMENDATIONS BELOW, FOR IMPACTED UNITS AS DESCRIBED ABOVE, POSES ARC FLASH AND ELECTRICAL SHOCK SAFETY RISKS AND MAY CAUSE PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.

External Interlocks and Key Interlocks intended to prevent closing of affected breakers may not function properly. Ensure that it is safe to close breakers before performing any close (switch on) operation and use appropriate personal protective equipment (PPE) as determined by the arc flash or electric shock hazard level of the system.

The mechanical circuit breaker interlock should not be used to prevent connecting parallel sources in transfer schemes or transfer switches using potentially affected breakers. Verify that any parallel sources are disconnected before closing a source breaker. Connecting sources in parallel may cause a severe arc flash event which may result in personal injury, death and/or property damage.

Affected circuit breakers may not open reliably in response to Under-voltage Release or Shunt Trip accessories in the far right accessory position. Carefully verify that the breaker has opened in response to Under-voltage Releases, Shunt Trips, Key Locks and multi-breaker interlocks.

The primary circuit breaker functions of integral over-current and short-circuit protection, as well as the manual Push OFF button are not affected. The “first” (far left) and “second” (center) accessory positions, and the integral levering interlocks are not affected.

To identify potentially affected breakers, see Appendices 1, 2 and 3. If you have potentially affected breakers in your possession, you are strongly encouraged to take the precautions outlined above and warn any individuals who may interact with these units before they are repaired. Eaton has a repair kit available to resolve the issue. The process is stated in Appendix 4.

Please communicate any findings, questions or concerns to: MagnumAdvisoryBulletin@eaton.com. You can visit www.eaton.com/MagnumAdvisoryBulletin for access to this bulletin and other relevant information.

Eaton regrets any inconvenience this issue may have caused. Thank you in advance for your cooperation and support.

Eaton Low Voltage Air Circuit Breaker Team

APPENDIX 1

To identify if your breaker is in the date range follow these steps:

- 1- Check the breaker's manufacturing date code and location code on the front cover nameplate of the breaker or its original box. APPENDIX 2 See Figures 1 & 2.
- 2- If the location code reads "Made in USA - I" and the date code is in the range of 7/1/2017 through 3/8/2018 (MM/DD/YY), then proceed to Appendix 2.
- 3- If the location code reads "Made in USA - I" and the date code is outside the range of 7/1/2017 through 3/8/2018, then your breaker is NOT AFFECTED – no further action is needed.
- 4- If the location code reads something other than "Made in USA - I", then the date must be read from the left side of the breaker housing. If the breaker is mounted in an assembly, de-energize the equipment and wear appropriate personal protective equipment (PPE) before proceeding. Drawout breakers may need to be switched off and racked out of the assembly. See Figures 3 & 4 to locate the label. If the date code is in the range of 170701 through 180308 (YYMMDD), then proceed to Appendix 2.



Figure 1 – Nameplate on breaker box

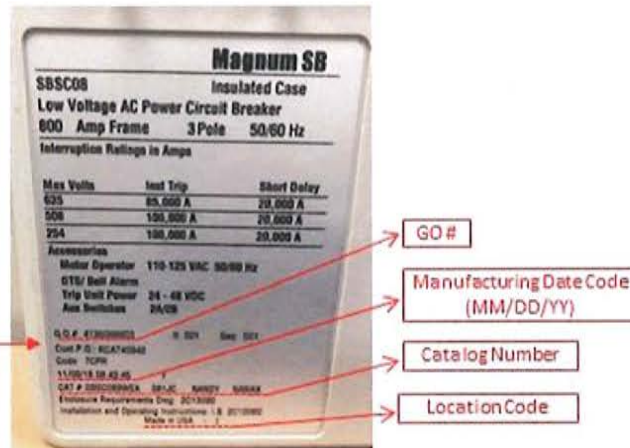


Figure 2 – Nameplate on breaker front cover



Figure 3 – Label location on the left side of the breaker



Figure 4 – Label with date code

APPENDIX 2

Within Date Range – To identify potentially affected breakers follow these steps:

- 1- Visually inspect to determine if the breaker is being used with Mechanical Interlocks (Figure 5) or External Key Locks (Figure 6). External interlocks cannot be identified by the breaker catalog number. Breakers within the date range with any of these accessories are affected.
- 2- Visual inspection is the most reliable method to determine if internal Accessories in the far right accessory position (Figure 7) or Internal Key Locks (Figure 8) were installed in the factory or in the field. Breakers within the date range with any of these accessories are affected.
- 3- For breakers not available for visual inspection, the 18th and 22nd character of the 25-character catalog number may be used to determine if internal accessories were factory installed. See Appendix 3 to read the catalog number. Note that internal accessories may have been installed in the field. Breakers within the date range with any of these accessories are affected.

Figure 5 – Breakers Used with Mechanical Interlocks

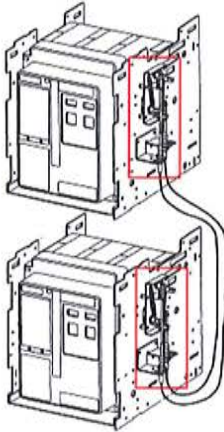


Figure 6 – External Key Interlocks



Figure 7 – Breakers with Shunt Trip or UVR in "third" far right accessory position



Undervoltage Release "UVR" or Second Shunt Trip Magnum plug-in electrical accessories can be viewed for identification. Windows located in the right front of the circuit breaker

Figure 8 – Internal Key Interlocks



The off key lock secures the circuit breaker in the OFF position. It is mounted in the lower right portion of the circuit breaker and can be viewed through the front cover.

APPENDIX 3

Determining Factory-Installed Accessories by Catalog Number

Breakers with factory-installed Internal Accessories can be identified by the 18th character (UVR or Second Shunt Trip in the “third”, or far right, accessory position) and the 22nd character (Internal Key Interlock). Breakers within the date range with any of these accessories (below in red) are affected.

Note that Internal Accessories can also be field-installed and the catalog number will not be updated to reflect field-installed accessories. Breakers within the date range with field-installed accessories are also affected.

Example Catalog Number:

CHARACTER: #18 #22

SBN64N3HEA40CMCMN**N**4NN**K**NAX

In the example, the 18th character is “N” which means there is no factory-installed accessory in the far right accessory location. However, the 22nd character is “K” which indicates there is an internal Kirk key interlock. This breaker is affected due to the internal key interlock, and action is required.

UVR OR SECOND SHUNT TRIP		
Catalog Character 18		
N	NONE	
A	110-127 VAC	INSTANTANEOUS UVR
R	208-240 VAC	INSTANTANEOUS UVR
C	24 VDC	INSTANTANEOUS UVR
H	48 VDC	INSTANTANEOUS UVR
E	110-125 VDC	INSTANTANEOUS UVR
F	220-250 VDC	INSTANTANEOUS UVR
G	32 VDC	INSTANTANEOUS UVR
X	380-415 VAC	INSTANTANEOUS UVR
J	480 VAC	INSTANTANEOUS UVR
K	600 VAC	INSTANTANEOUS UVR
D	60 VDC	INSTANTANEOUS UVR
M	110-127 VAC	TIME DELAY UVR
L	208-240 VAC	TIME DELAY UVR
P	24 VDC	TIME DELAY UVR
Y	48 VDC	TIME DELAY UVR
S	110-125 VDC	TIME DELAY UVR
T	220-250 VDC	TIME DELAY UVR
U	32 VDC	TIME DELAY UVR
V	380-415 VAC	TIME DELAY UVR
W	480 VAC	TIME DELAY UVR
Z	600 VAC	TIME DELAY UVR
1	110-127 VAC/DC	SECOND SHUNT TRIP
2	208-250 VAC/DC	SECOND SHUNT TRIP
3	24 VDC	SECOND SHUNT TRIP
4	48 VDC	SECOND SHUNT TRIP
6	60 VDC	SECOND SHUNT TRIP
7	120 VAC CAPACITOR TRIP	SECOND SHUNT TRIP
8	240 VAC CAPACITOR TRIP	SECOND SHUNT TRIP
9	60VDC CONTINUOUS DUTY	SECOND SHUNT TRIP
B	110-127VAC/DC CONTINUOUS DUTY	SECOND SHUNT TRIP
O	220-250VAC/DC CONTINUOUS DUTY	SECOND SHUNT TRIP
I	24VDC CONTINUOUS DUTY	SECOND SHUNT TRIP
Q	48VDC CONTINUOUS DUTY	SECOND SHUNT TRIP

OPERATIONS COUNTER / INTERNAL KEY LOCK		
Catalog Character 22		
N	NO COUNTER	NO LOCK
K	NO COUNTER	KIRK LOCK
C	NO COUNTER	CASTELL LOCK
R	NO COUNTER	RONIS LOCK
A	COUNTER	NO LOCK
Y	COUNTER	KIRK LOCK
L	COUNTER	CASTELL LOCK
H	COUNTER	RONIS LOCK
S	NO COUNTER	CES LOCK
E	COUNTER	CES LOCK

APPENDIX 4

Field Repair Action

For customers with select Eaton Magnum Breakers configurations using Mechanical Interlocks, Key Interlocks or Internal Accessories on the 'third' (far right) accessory position, Eaton resources will be provided to complete the repairs at no cost (Validated GO number required).

To request a list of General Order numbers that you received with potentially affected breakers, please contact the Eaton team at MagnumAdvisoryBulletin@eaton.com

ACTION 1 – If you have a unit identified by this bulletin that is affected, please obtain and install the repair kit. To start the process, open a Warranty Claim by contacting the Eaton CORE support group at 1-800-410-2910 or email CORE at CORE@eaton.com

A claim requires:

- Claim Type:
 - o Request a "Missing Component Claim"
- Breaker GO and Item Number:
 - o The breaker GO # can be found on the nameplate of the breaker, as shown in Figures 1 & 2.
- Style or Catalog Number of kit needed:
 - o State "2A12888G20".
- Quantity needed:
 - o One kit per affected breaker in your possession.
- Description of the nonconformance:
 - o State "Magnum Accessory Lever Field Repair".
- Ship To address for the kits with contact details:
 - o Provide the company name, complete shipping address, contact name, and contact email address.

ACTION 2 - If you are not the end user for this product and have subsequently shipped this product to a third party, Eaton asks that you forward this notice to the third party by registered carrier and assist them in requesting the repair kit per ACTION 1.

ACTION 3 - If for some reason you are unable to forward this notice to the third party, please contact the Eaton team at MagnumAdvisoryBulletin@eaton.com and ask them to make the contact with the end-user. They will need the customer company name, complete shipping address, contact name, and contact email address.