

Amphenol PCD

Engineering Change Request		ECR Number	R10167W
Initiator:	Scott	Date:	2026/04/10

Part number description

Item	K3 Code material part numbers	Drawing/ Doc Number	Version of current related document	New Version
1	MSDXL Series	/	/	/

Reason of change:

- Customer requirement (list the feasibility analysis of customer specification: _____)
 Supplier request (list the PCR number: _____)
 internal improvement corrective other

Please describe here in detail:

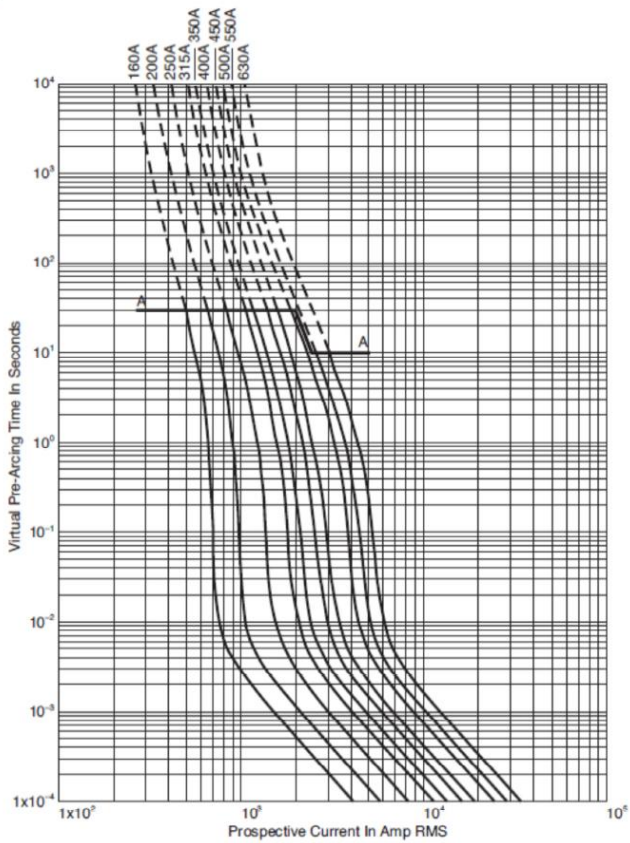
Due to the continuous and uncontrollable price increase of precious metal materials in the global market, in order to keep the cost of the MSDXL series products within a reasonable range, while maintaining the same fuse function and appearance, the internal fuse element is changed from pure silver to a copper-silver composite material.

Change level and impact assessment (Please tick in the appropriate position)

Change level	Change content	Concerned area (Shenzhen, Hermosillo, Chennai)	Whether to notify the customer
Level 1	<input type="checkbox"/> Operator change		<input type="checkbox"/> It is not necessary to notify the customer for approval
	<input type="checkbox"/> Correct the clerical errors of the drawing, BOM, etc., and this change will not affect the production process		
Level 2	<input type="checkbox"/> Change of Main production equipment or tools/Jigs		<input type="checkbox"/> Customers should be notified for approval <input type="checkbox"/> It is not necessary to notify the customer for approval, the reasons are as follows:
	<input type="checkbox"/> Change of main measuring equipment or tools/Jigs		
	<input type="checkbox"/> Appearance changes that do not affect product functions		
	<input type="checkbox"/> Changes in production process or processing technology		
	<input type="checkbox"/> Product structure or specification changes that have not been transferred to mass production		
Level 3	<input type="checkbox"/> Product structure or specification changes that have been transferred to mass production		<input checked="" type="checkbox"/> Customers should be notified for approval
	<input type="checkbox"/> Supplier's production process change or supplier's production site change or addition or replacement of suppliers		
	<input type="checkbox"/> Change of production site		
	<input checked="" type="checkbox"/> Product material changes		
	<input type="checkbox"/> Change of packaging method		
	<input type="checkbox"/> Changes proposed by the customer		

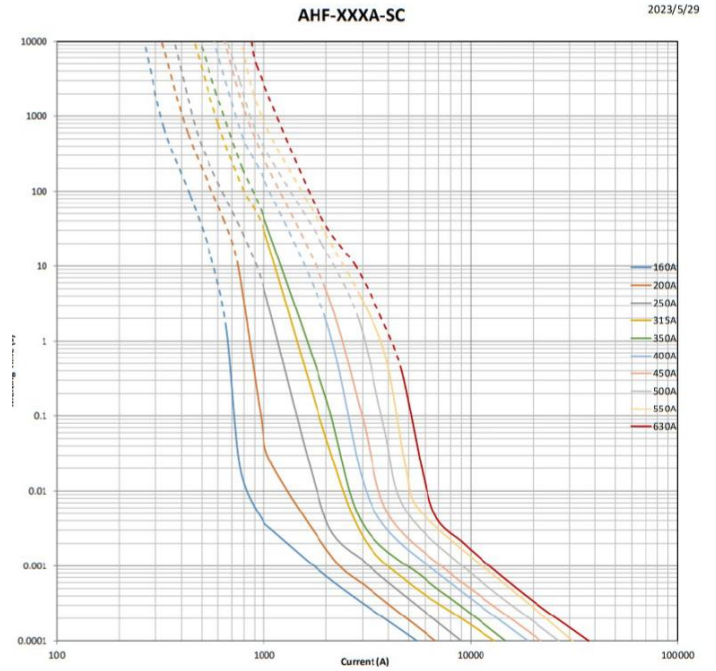
Before change

STERLING SILVER -Time-current curves



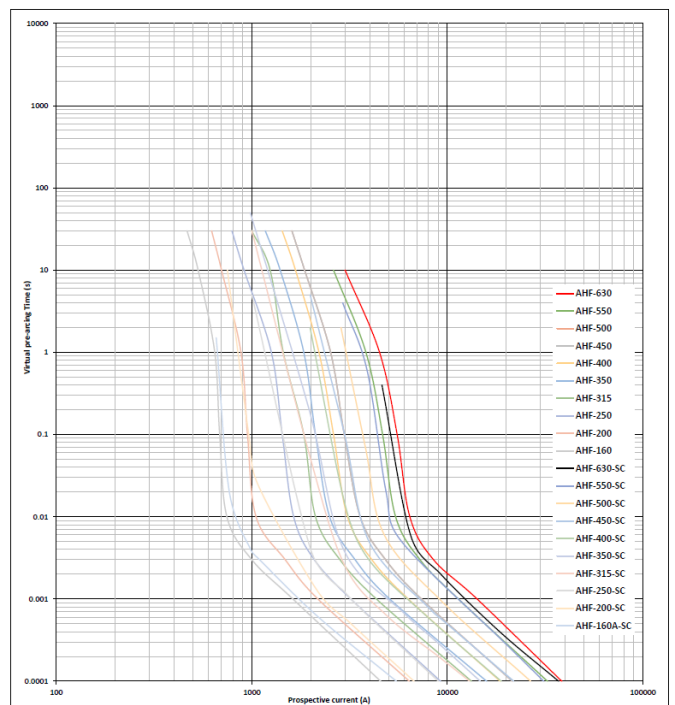
After change

COPPER SILVER COMPOSITE -Time-current curves



The following is a comparison of the curves for silver and the copper-silver composite:

1. Model: AHF-160 – curve for silver
2. Model: AHF-160A-SC – curve for the copper-silver composite (the specification after the material change)
3. High overlap of curves for the same specification.
4. The T-C curve itself has a protection tolerance band of $\pm 15\%$.
5. Small differences in short-circuit protection across the series of curves.
6. The T-C curves of copper-silver composite strips are all slightly faster than those of pure silver, and the matching effect with relays will get better.



Disposition of old materials

- Rework Use as it is scrap
 Other (please describe): _____
 N/A

Expect date to switch to new material

2026.4.30 Hedy

Approval by the supervisor of requester.:

Jack

Approval by the head manager of the request dept.:

Cheng

Customer approval:

- Approved No approved Conditional approval (please describe) :

Signature:

Date:

Remark: