



Product / Process Change Notification (PCN)

- ☒ Major change
☐ Minor change

PCN #: PCN_IndHCC_20240308

Affected Series: WE-HCC; 744331xxx, 744332xxx, 744333xxx, 744334xxx

PCN Date: December 08, 2023

Effective Date: March 08, 2024

Change Category:

- ☒ Equipment / Location
☒ General Data
☐ Material
☐ Process
☐ Product Design
☒ Shipping / Packaging
☐ Supplier
☐ Software

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Data Sheet Change:

☒ Yes ☐ No

Attachment:

☐ Yes ☒ No

Description and purpose of change:

To meet current customer demands, Würth Elektronik eiSos will implement an additional production line to increase the production capability, and in line with internal standardization, Würth Elektronik eiSos will ensure some datasheet improvements for WE-HCC series with part number range of 744331xxx, 744332xxx, 744333xxx, 744334xxx.

All products with date code 2024-03-08 or later, will be affected by this change.

There will be no change in form, fit, function, quality or reliability of the product.

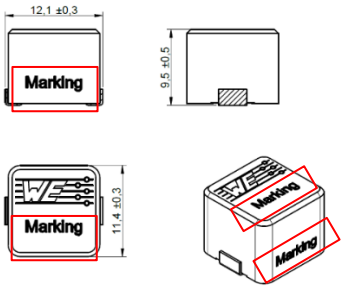
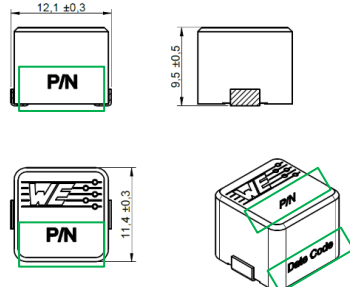
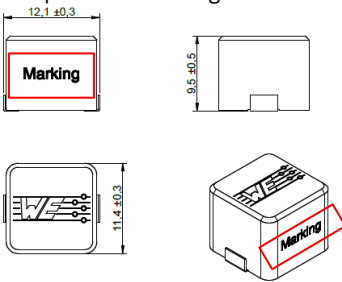
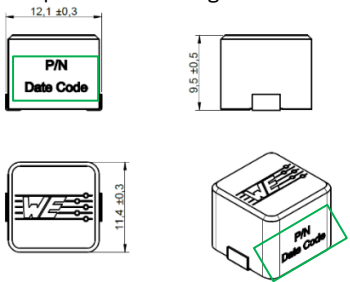
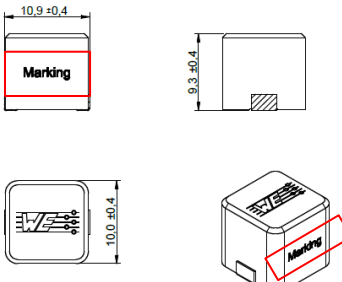
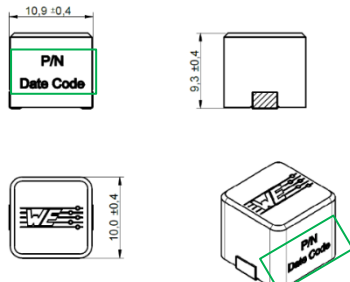
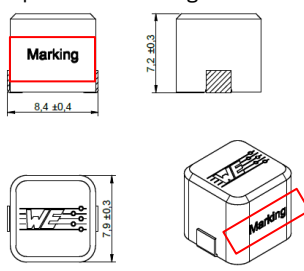
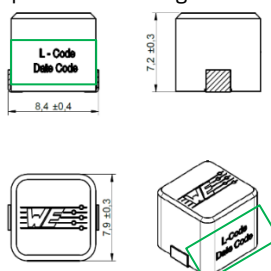
Detail of Change:

1. The new production line can be identified by checking the digits four and five of the lot number, as follows:

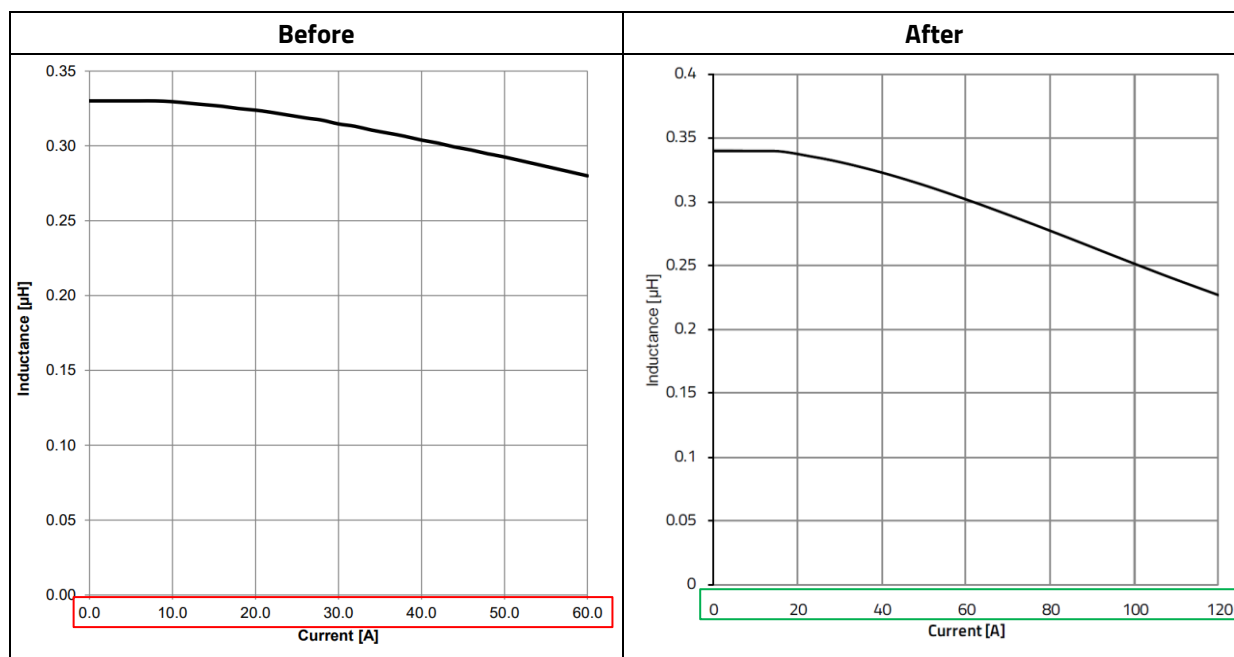
Current production line identification:	New production line identification:
Lot number: 618 10 XXX XXXX XXX	Lot number: 618 10 XXX XXXX XXX
	Lot number: 618 20 XXX XXXX XXX
Country of origin on Delivery Note: China	Country of origin on Delivery Note: China

2. The product marking representation in the datasheet for the WE-HCC series with part number range of 744331xxx, 744332xxx, 744333xxx, 744334xxx, will be improved by replacing the words "Marking" for the corresponding information: "P/N" as Product Number, "L-Code" as the Inductance Code, and "Date Code"

as YYWW (where YY is the year and WW is the week number according to the ISO-8601 standard); consequently to each size case, as follows:

Before	After
Size: 1210 part number range of 744331XXXX 	Size: 1210 part number range of 744331XXXX 
Size: 1210 part number range of 744332XXXX 	Size: 1210 part number range of 744332XXXX 
Size: 1090 part number range of 744333XXXX 	Size: 1090 part number range of 744333XXXX 
Size: 8070 part number range of 744334XXXX 	Size: 8070 part number range of 744334XXXX 

3. For the WE-HCC series with part number range of 744331xxx, 744332xxx, 744333xxx, 744334xxx, Würth Elektronik eiSos will update the Typical Inductance vs. Current Characteristics curves by adjusting the limit of the X-axis to be able to identify the current saturation of 30 % drop in inductance value reported in the datasheet. An example for the case of the article 7443310033 is presented below:



4. For the WE-HCC series with part number range of 744331xxx, the Saturation Current values for a 30 % drop in inductance value will be corrected in the datasheet according to the table below:

Article	Saturation Current for a 30% drop in inductance before change [A]	Saturation Current for a 30% drop in inductance after change [A]
7443310022	73.7	177.2
7443310033	67.3	115.4
7443310047	63.7	116.2
7443310068	59.2	63.5
7443310082	56.2	67.8
7443310100	51.2	55.1
7443310150	54.4	54.5
7443310220	38.0	44.0
7443310330	38.9	38.9
7443310390	34.9	35.3
7443310470	35.5	35.5



5. Performance Rated Current and Rated Current for the WE-HCC series with part number range of 744331xxx, 744332xxx, 744333xxx, 744334xxx, will be standardized in the datasheet agreeing to IEC 62024-2:2020 standard. Performance Rated Current will supersede Rated Current. Because of this, the phrase Rated Current will not be used anymore. Typical Temperature Rise vs. Current Characteristics curves will be standardized accordingly. As an illustration of the standardization, the changes in the Electrical Properties Table for the part number 7443340470 is summarized as follows:

Before						After					
Properties		Test conditions	Value	Unit	Tol.	Properties		Test conditions	Value	Unit	Tol.
Rated Current	I_R	$\Delta T = 50\text{ K}$	7.5	A	max.	Performance Rated Current ¹⁾	$I_{RP,40K}$	$\Delta T = 40\text{ K}$	8.9	A	max.
Performance Rated Current ¹⁾	$I_{RP,40K}$	$\Delta T = 40\text{ K}$	8.9	A	max.	¹⁾ Performance Rated Current $I_{RP,40K}$ supersedes Rated Current I_R in all previously published material. Please, refer to IEC 62024-2:2020.					
¹⁾ refer to IEC 62024-2:2020						Test conditions of Performance Rated Current: refer to IEC 62024-2, Class D (PCB Copper Width: 40 mm; PCB Copper Thickness: 1000 μm)					

For further information, please refer to our landing page: [What do rated current values mean? \(we-online.com\)](https://www.we-online.com/what-do-rated-current-values-mean/)

6. Besides, as part of the datasheets improvement, the maximum Operating Voltage of 120 V will be added in the Electrical Properties table for the WE-HCC series with part number range of 744331xxx, 744332xxx, 744333xxx, 744334xxx, as follows:

Before						After					
None.						Properties		Test conditions	Value	Unit	Tol.
						Operating Voltage	V		120	V	max.

Reliability / Qualification Summary:

The product approval is according to the AEC-Q200 Change Management and is internally released by the Product Management Department*.

The following items are part of the internal release process:

- High Temperature Exposure / MIL-STD-202G Method 108
- Temperature Cycling / JESD22 Method JA-104
- Biased Humidity / MIL-STD-202 Method 103
- Operational Life / MIL-PRF-27
- External Visual / MIL-STD-883-2009
- Physical Dimension / JESD22 Method JB-100
- Mechanical Shock / MIL-STD-202-213
- Vibration / MIL-STD-202 Method 204
- Resistance to Soldering Heat / MIL-STD-202 Method 210 J-STD-020
- ESD / AEC-Q200-002 or ISO/DIS10605
- Solderability (SMD) / PC-A-610
- Electrical Characterization / User Spec.
- Board Flex / AEC-Q200-005
- Terminal Strength(SMT) / AEC-Q200-006
- Low Temperature Storage Life / JESD22-A119

*All necessary tests for Mfg. Site Transfer according AEC-Q 200 table 5A.