



Product / Process Change Notification (PCN)

- ☒ Major change
☐ Minor change

PCN #: PCN_IndMAIA_20231230

Affected Series: WE-MAIA; 784383xxxx;

PCN Date: June 30, 2023

Effective Date: December 30, 2023

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 increase the production capability, Würth Elektronik will implement **a new winding machine for the size 4020, a bigger fixture for the winding machine for the size 3015** and a **new sandblasting and sputtering machine for the size 40xx**.

Additionally due to internal standardization, Würth Elektronik will apply the **Rated Current measurement conditions according to IEC 62024-2:2020 standard with Class C PCB** and will adjust the Rated Current values accordingly for the WE-MAIA series with part number range of 784383xxxx. **Saturation Current values** will also be updated to reflect the definition of **standard IEC 62024-2:2020**, affecting the part number range mentioned above.

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



DETAIL OF CHANGE:

The change in the **Rated Current measurement conditions** will result in the following parameter alterations:

		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
784383130033	1610	1.9	3.25
784383130047	1610	1.7	2.95
784383130056	1610	1.65	2.7
784383130068	1610	1.55	2.55
784383130082	1610	1.45	2.35
78438313010	1610	1.4	2.2
78438313012	1610	1.3	2.1
78438313015	1610	0.95	1.8
78438313022	1610	0.85	1.25
784383210047	2506	2.2	3.25
78438321010	2506	1.25	2.1
784383220047	2508	2.25	3.35
78438322010	2508	1.75	2.65
78438322022	2508	1.34	1.65



		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
784383230033	2510	3.4	5.5
784383230047	2510	3.2	4.8
784383230068	2510	3.1	4.25
784383230082	2510	2.6	3.9
78438323010	2510	2.5	3.55
78438323012	2510	1.9	3.05
78438323015	2510	1.8	2.85
78438323022	2510	1.3	2.2
78438323033	2510	1.25	1.75
78438323047	2510	0.94	1.4
78438323068	2510	0.85	1.05
78438323082	2510	0.7	0.95
78438323100	2510	0.6	0.9
784383240047	2512	3.4	5.35
784383240056	2512	3.3	4.75
784383240068	2512	3.2	4.25
78438324010	2512	2.8	4.05
78438324012	2512	2.4	3.4
78438324015	2512	2.2	3.05
78438324022	2512	1.6	2.45
78438324033	2512	1.3	1.7
78438324047	2512	1	1.45
78438324056	2512	0.95	1.25
78438324068	2512	0.9	1.05
78438324082	2512	0.8	0.95
78438324100	2512	0.7	0.9
78438333022	3010	1.4	2.35
78438333033	3010	1.1	1.85
78438333047	3010	0.9	1.45



		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
784383340033	3012	4.8	7.4
784383340047	3012	4	6.8
784383340056	3012	3.6	5.8
784383340068	3012	3.5	5.15
78438334010	3012	2.75	4.75
78438334012	3012	2.65	4.05
78438334015	3012	2	3.3
78438334022	3012	1.8	2.9
78438334033	3012	1.4	2.25
78438334047	3012	1.1	1.7
78438334056	3012	1	1.45
78438334068	3012	0.88	1.4
784383350047	3015	4.6	7.1
784383350068	3015	4.1	6.3
784383350082	3015	3.5	5.7
78438335010	3015	2.7	4.95
78438335022	3015	1.8	3
78438335033	3015	1.7	2.7
78438335047	3015	1.5	2.4
78438335068	3015	1.1	1.75
78438335100	3015	0.85	1.25
78438335150	3015	0.65	0.95
78438335220	3015	0.6	0.85
78438335330	3015	0.5	0.7
78438335470	3015	0.39	0.55



		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
784383360033	3020	5.5	8.7
784383360047	3020	4.8	7.55
784383360068	3020	4.5	6.75
78438336010	3020	4	6.15
78438336012	3020	3.9	5.65
78438336015	3020	3.7	5.35
78438336022	3020	2.4	3.6
78438336033	3020	1.9	2.9
78438336047	3020	1.9	2.4
78438336068	3020	1.6	2.15
78438336100	3020	1.2	1.65
784383560033	4020	9.6	14.95
784383560056	4020	8.5	13.65
784383560068	4020	8.2	13.15
78438356010	4020	7.2	10.1
78438356012	4020	5.8	8.9
78438356015	4020	5.8	8.6
78438356018	4020	4.6	6.8
78438356022	4020	4.7	6.2
78438356033	4020	3.6	5.15
78438356047	4020	2.9	4
78438356056	4020	2.8	3.85



		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
78438357010	4030	7.4	10.25
78438357012	4030	7	9.4
78438357015	4030	6.2	8.2
78438357018	4030	5.8	7.9
78438357022	4030	5.2	7.1
78438357033	4030	5	6.1
78438357047	4030	3.9	5.1
78438357056	4030	3.6	4.7
78438357068	4030	3	3.75
78438357082	4030	2.8	3.45
78438357100	4030	2.7	3.05
784383660082	5020	8.8	13.25
78438366010	5020	7.8	11.1
78438366015	5020	6.7	8.45
78438366022	5020	6	7.4
78438366033	5020	5	6.1
78438366047	5020	4.1	4.65
78438367010	5030	9	11.85
78438367022	5030	7.5	9.8
78438367033	5030	6.2	8
78438367047	5030	5.5	6.45
78438367068	5030	4.3	5.3
78438367082	5030	4.4	4.85
78438367100	5030	3.3	4.3



		Rated Current before change [A]	Rated Current after change [A]
Test conditions:		$\Delta T = 40K$	$\Delta T = 40K$
Tolerance:		max.	max.
Part Number	Size	-	Refer to: IEC 62024-2:2020, Class C PCB
784383560033HT	4020	9.9	13.3
784383560047HT	4020	8.5	12.7
784383560056HT	4020	8.2	12.15
784383560068HT	4020	8.1	11.7
78438356010HT	4020	7.2	8.75
78438356012HT	4020	5.8	8
78438356015HT	4020	5.5	7.45
78438356018HT	4020	4.6	6.05
78438356022HT	4020	4.5	5.9
78438356033HT	4020	3.6	4.45
78438356047HT	4020	3	3.7
78438356056HT	4020	2.9	3.5

The change in the **Saturation Current measurement** conditions will result in the following parameter alterations:

		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
784383130033	1610	4.9	3.35	6.20
784383130047	1610	4.5	3.05	5.60
784383130056	1610	4	2.75	5.20
784383130068	1610	3.8	2.55	4.80
784383130082	1610	3.6	2.50	4.60
78438313010	1610	3.4	2.25	4.25
78438313012	1610	3.2	2.20	4.10
78438313015	1610	2.7	1.80	3.45
78438313022	1610	2.5	1.50	3.25
784383210047	2506	3.7	2.55	4.65
78438321010	2506	2.5	1.7	3.25
784383220047	2508	4.4	2.85	5.65
78438322010	2508	3.35	2.15	4.40
78438322022	2508	2.2	1.40	2.80



		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
784383230033	2510	6.2	4.25	8
784383230047	2510	5.5	3.60	6.9
784383230068	2510	4.7	3.10	6.1
784383230082	2510	4.25	2.70	5.45
78438323010	2510	4.0	2.60	5.3
78438323012	2510	3.8	2.45	4.85
78438323015	2510	3.5	2.25	4.75
78438323022	2510	2.5	2.00	3.55
78438323033	2510	2.1	1.35	2.7
78438323047	2510	1.75	1.10	2.3
78438323068	2510	1.55	1.05	2
78438323082	2510	1.45	0.90	1.85
78438323100	2510	1.35	0.85	1.7
784383240047	2512	6.25	4.15	8
784383240056	2512	6.0	4.25	7.9
784383240068	2512	5.85	3.80	7.4
78438324010	2512	4.9	3.20	6.3
78438324012	2512	4.5	3.05	5.8
78438324015	2512	3.7	2.50	4.7
78438324022	2512	2.9	1.85	3.65
78438324033	2512	2.6	1.75	3.3
78438324047	2512	2.1	1.40	2.65
78438324056	2512	1.75	1.15	2.2
78438324068	2512	1.6	1.00	2.05
78438324082	2512	1.5	1.00	1.9
78438324100	2512	1.4	0.95	1.75
78438333022	3010	3.9	2.75	4.85
78438333033	3010	2.95	2.05	3.70
78438333047	3010	2.4	1.65	3.00



		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
784383340033	3012	11.1	8.10	13.3
784383340047	3012	9.4	5.95	12.3
784383340056	3012	8.5	5.65	11.1
784383340068	3012	7.7	4.95	10
78438334010	3012	6.6	4.30	8.4
78438334012	3012	6.0	4.15	7.5
78438334015	3012	5.7	3.90	7.1
78438334022	3012	5.0	3.60	6.1
78438334033	3012	4.0	2.75	5.1
78438334047	3012	3.8	2.60	4.75
78438334056	3012	3.0	2.10	3.7
78438334068	3012	2.7	1.75	3.5
784383350047	3015	5.8	4.35	7.40
784383350068	3015	8.1	5.80	9.70
784383350082	3015	7.0	4.95	9
78438335010	3015	4.5	3.00	5.95
78438335022	3015	3.5	2.50	4.20
78438335033	3015	3.2	2.25	3.85
78438335047	3015	2.8	1.85	3.70
78438335068	3015	2.4	1.60	3.10
78438335100	3015	2.0	1.35	3
78438335150	3015	1.71	1.17	2.20
78438335220	3015	1.60	1.10	2.0
78438335330	3015	1.30	0.90	1.7
78438335470	3015	1.18	0.75	1.50



		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
784383360033	3020	8.3	5.45	10.5
784383360047	3020	8.0	5.40	9.8
784383360068	3020	6.2	4.10	8.1
78438336010	3020	5.0	3.25	6.5
78438336012	3020	4.75	3.05	6
78438336015	3020	4.50	2.95	5.85
78438336022	3020	4.30	2.75	5.55
78438336033	3020	4.25	2.85	5.35
78438336047	3020	3.90	2.40	5.15
78438336068	3020	2.85	1.85	3.65
78438336100	3020	2.35	1.55	3
784383560033	4020	12.4	7.95	16.7
784383560056	4020	10.8	6.90	14.7
784383560068	4020	9.4	5.80	12.7
78438356010	4020	9.0	5.30	11.5
78438356012	4020	9.0	5.55	11.2
78438356015	4020	7.8	4.80	10.2
78438356018	4020	6.5	4.35	8.7
78438356022	4020	6.2	4.05	7.9
78438356033	4020	5.5	3.55	7.1
78438356047	4020	4.7	3.05	5.75
78438356056	4020	4.6	2.65	5.5



		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
78438357010	4030	9.6	6.20	12.50
78438357012	4030	8.8	5.55	11.60
78438357015	4030	8.5	5.55	11.00
78438357018	4030	8	5.05	10.30
78438357022	4030	7	4.60	9.20
78438357033	4030	5	3.30	7
78438357047	4030	6.4	4.15	8.20
78438357056	4030	6	3.90	8.10
78438357068	4030	5.5	3.50	7.20
78438357082	4030	5.2	3.35	6.80
78438357100	4030	4.6	3.00	5.95
784383660082	5020	11	7.10	15.3
78438366010	5020	10	6.25	14
78438366015	5020	9.5	5.85	13.2
78438366022	5020	9	5.35	12
78438366033	5020	7	4.40	9.7
78438366047	5020	5.5	3.50	7.7
78438367010	5030	9.6	5.95	13.1
78438367022	5030	7.5	4.55	10.2
78438367033	5030	7.3	4.35	10
78438367047	5030	5.4	3.35	6.5
78438367068	5030	5.7	3.70	7.7
78438367082	5030	5	3.25	6.6
78438367100	5030	4.8	3.25	6.6



		Saturation current before change [A]	Saturation current after change [A]	Saturation current after change [A]
Test conditions:		$ \Delta L/L < 20 \%$	$ \Delta L/L < 10 \%$	$ \Delta L/L < 30 \%$
Tolerance:		Typ.	Typ.	Typ.
Part Number	Size	-	Refer to: IEC 62024-2:2020	Refer to: IEC 62024-2:2020
784383560033HT	4020	11	7.25	14.8
784383560047HT	4020	10	6.45	13
784383560056HT	4020	9.55	6.05	13
784383560068HT	4020	8.5	5.45	11.7
78438356010HT	4020	6.5	4.25	9.3
78438356012HT	4020	6.9	4.30	9.3
78438356015HT	4020	6.6	4.20	9
78438356018HT	4020	6.2	3.95	8.3
78438356022HT	4020	5.6	3.70	7.6
78438356033HT	4020	4.8	3.10	6.5
78438356047HT	4020	3.7	2.35	5.05
78438356056HT	4020	3.5	2.25	4.9

RELIABILITY / QUALIFICATION SUMMARY:

Process changes are 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
- 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
- Solderability / IPC-A-610
- Electrical Characterization / User Spec.
- Board Flex / AEC-Q200-005
- Terminal Strength(SMT) / AEC-Q200-006
- Low Temperature Storage Life / JESD22-A119

As to the adjustment of the Rated Current, there will be no change of the product, therefore no additional reliability or qualification testing will be performed.