

Änderungsmitteilung (CN)

Product Change Notification

Technologiepark 1 ~ D-66424
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Title [Title] Improved performance New and updated approvals New protection feature Implementation of new labelling process		Date [Datum] 15mar2021	Ref. No. [Lfd. Nr.] CN_18_033	
Part Name [Teilebezeichnung]	RRC Article No. [RRC Art-Nr.]	Index	Customer Article No. [Kunden Art-Nr.]	Index
RRC2140	110076	-05		

Reason for Change [Grund für die Änderung]

Design [Design] Logistics [Logistik] Manufacturing Location [Fertigungsverlagerung]

Processing [Verfahren] Material [Material] Quality / Reliability [Qualität / Zuverlässigkeit]

Change Description [Beschreibung der Änderung]

1. Improved cell to increase the overall performance
 - a. Improved nominal capacity: 4.04Ah instead of 3.88Ah
 - b. Nominal voltage: 10.80V instead of 11.40V
 - c. Improved charge current: 2.82A instead of 2.70A
 - d. Charge voltage: 12.60V instead of 13.05V
 - e. Improved discharge current: 6.00A instead of 5.67A @ 25°C
2. Regulatory
 - a. Updated safety standard: The battery complies with IEC62133-2:2017
 - b. Updated BIS standard for India: The battery complies with IS16046(Part 2):2018
 - c. New CMIM mark for Morocco: 
 - d. New UKCA mark for United Kingdom: 
 - e. The Thailand mark will show a corresponding QR code.
 - f. EAC mark is deleted because this battery is no longer in scope of EAC.

3. New protection feature (Battery Life Management)

The battery life management mechanism prevents the battery from being overcharged when the battery is significantly aged.

This protection feature is based on the "state of health" of the battery. The "state of health" (SOH) is the ratio of FullChargeCapacity() and DesignCapacity(). If the SOH drops down to less than 70%, the requested charge voltage of the smart battery will slightly decreased from 12.60V to 12.45V, allowing any smart charger to automatically react.

Battery life management is a safety feature which reduces the risk of age-related critical conditions.

4. Factory location will change within Taiwan.

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RRC has renovated its logistic process. This will be reflected by the changes on the labels for battery and packaging. With upcoming mass-production (110088-06), these design changes will be implemented.

5. Barcode label on battery and on single box will change

Old barcode label design, e.g.:



New barcode label design, e.g.:



The definition of the content on the new barcode label is shown in separate document.

6. Serial number definition will change

As shown in above barcode labels the serial number definition will change. Most customer's complaint to have the date code integrated in the alphanumeric serial number only. Now we extract it from the serial number and will have it in format YYWW (year + week, e.g. 1950), same as on the chargers. The new date code is available on the battery's barcode label, the single-box label and the outer-box label.

The prefix section "CT:C" from the serial number is deleted. Next sections for model code, revision of pre-assembly and factory line remains the same. The last six digits are now in hex format and reserved for the continuous numeration of the production units.

7. Single-Box label will change

Old single-box label design, e.g.:



New single-box label design, e.g.:



The definition of the content of new single-box label is shown in separate document.

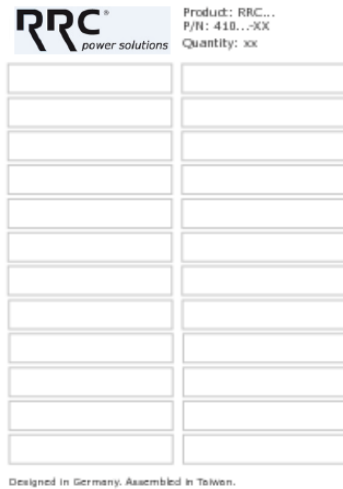
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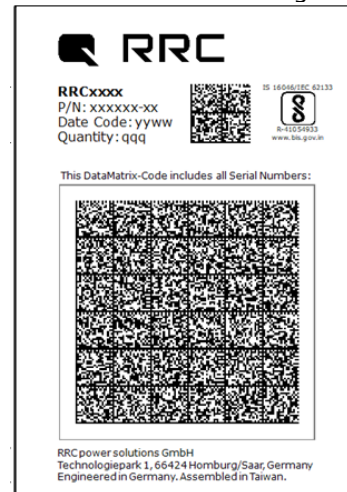


8. Barcode label on outer-box will change

Old barcode label design:



New barcode label design:



The definition of the content of new outer-box label is shown in separate document. The large data matrix code will include the serial numbers of all 32 batteries packed in one outer-box. The smaller one will include model code, part number and date code.

Identification of Change [Erkennen der Änderung]

Traceability is ensured by revision step, see paper label on the single box for each battery as well as on the outer box for 32 pieces of batteries (see examples above).

Impact on Quality and / or Reliability [Auswirkungen auf die Qualität bzw. die Zuverlässigkeit]

Improvement of quality, reliability and traceability.

Battery pack is fully compatible to former revisions.

Qualification Data [Nachweise]	<input type="checkbox"/> Available [verfügbar]	<input checked="" type="checkbox"/> Will be available [wird verfügbar sein]	<input type="checkbox"/> Not applicable [nicht zutreffend]
Samples [Muster]	<input type="checkbox"/> Available [verfügbar]	<input checked="" type="checkbox"/> Will be available [wird verfügbar sein]	<input type="checkbox"/> Not applicable [nicht zutreffend]
Estimated implementation Date* [Voraussichtliches Datum der Einführung]	Last Time Buy of pre-change product [letzte Bestellung für ungeändertes Produkt bis]	Last Time Ship of pre-change product [letzte Lieferung des ungeänderten Produkts]	
Mass-production (#110088-06) with worldwide approvals available from August 2021	na	na	

*: The estimated implementation Date is the forecasted date that a customer may expect to receive the changed product. This is determined by the estimated date of inventory depletion on the Product Change Notification (CN) issue date. This may be affected by fluctuation in supply and demand. Consequently, although customers should be prepared to receive changed product on this date, RRC will continue to ship pre-changed product until a time in which inventory has been depleted. This may result in pre-changed product shipped to customers after this forecast date.

[Das voraussichtliche Datum der Einführung ist ein vorhergesagtes Datum an dem der Kunde das geänderte Produkt erhalten könnte. Dies bestimmt sich durch das voraussichtliche Datum des Lagerbestandsabbaus in Verbindung mit dem Herausgeben der Änderungsmitteilung / Product Change Notification (CN). Dieses wiederum kann beeinflusst werden durch Schwankungen bei Lieferung und Nachfrage. Konsequenterweise, obwohl der Kunde vorbereitet sein sollte das geänderte Produkt zu erhalten, wird RRC weiterhin das ungeänderte Produkt ausliefern, bis zu dem Zeitpunkt, an dem das Lager geräumt ist. Dieser Umstand könnte dazu führen, dass ein ungeändertes Produkt zu einem Zeitpunkt an den Kunden ausgeliefert wird, welcher zeitlich nach dem vorhergesagten Termin liegt.]

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RRC will deem this change accepted unless specific conditions of un-acceptance are provided in writing within 30 days from the date of this notice. All correspondence must be sent to the Quality Contact email address listed above.
[RRC wird diese Änderung als vom Kunden akzeptiert betrachten, wenn nicht innerhalb von 30 Tagen mit ausreichender Begründung in schriftlicher Form widersprochen wird. Jegliche Korrespondenz hierzu muss an die oben genannte email-adresse des zuständigen Qualitäts-Verantwortlichen gesendet werden.]

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