RF creditor reference generator, validator and reference converter

This tool can randomly generate up to 4000 valid RF creditor references. It also allows you to check if RF creditor references are valid and it also converts references to RF creditor references.

The international RF creditor reference number (also called the structured creditor reference) is an international business standard based on **ISO 11649**. In the coming years the national creditor reference numbers will be fased out and instead the international RF creditor reference numbers are used.
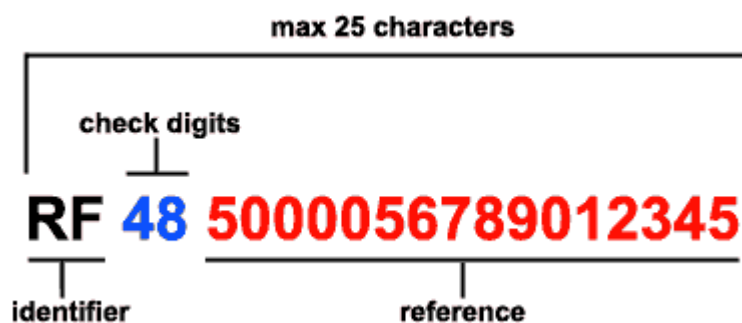
How the RF creditor reference number is used
A vendor adds the creditor reference to its invoices. When a customer pays the invoice, the company writes the creditor reference instead of the invoice number in the message section, or places a creditor reference field in its payment ledger. When the vendor receives the payment, it can automatically match the remittance information to its accounts receivable system.

How the RF creditor reference number is formatted
The creditor reference is an alphanumeric string, 25 characters long, with the letters "RF" at the beginning. After the letters are two check digits, which confirm that the reference will be entered correctly. The remaining part of the creditor reference (up to 21 alphanumeric characters) is the reference. The content of the creditor reference can be determined without any restrictions.

Example: RF 48 5000056789012345

How to validate the check digits

- Move the first four characters of the RF creditor reference number to the right end of the reference.

  Example 1: **RF45**G72UUR   ---->   G72UUR**RF45**
  Example 2: **RF65**18K5   ---->   18K5**RF65**
  Example 3: **RF35**C4   ---->   C4**RF35**
  Example 4: **RF21**4377   ---->   4377**RF21**

- Convert RF to numeric according to the table below:

  Example 1: G72UUR**RF45**   ---->   16 7 2 30 30 27 27 15 4 5
  Example 2: 18K5**RF65**   ---->   1 8 20 5 27 15 6 5

Example 3: C4**RF35**   ---->   12 4 27 15 3 5
Example 4: 4377**RF21**   ---->   4 3 7 7 27 15 2 1

Translation of charaters into digits

Aa = 10	Bb = 11	Cc = 12	Dd = 13	Ee = 14	Ff = 15
Gg = 16	Hh = 17	Ii = 18	Jj = 19	Kk = 20	Ll = 21
Mm = 22	Nn = 23	Oo = 24	Pp = 25	Qq = 26	Rr = 27
Ss = 28	Tt = 29	Uu = 30	Vv = 31	Ww = 32	Xx = 33
Yy = 34	Zz = 35				

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- Calculate the modulo 97 (the remainder after division by 97)

  Example 1: 1672303027271545 % 97 = 1
  Example 2: 18205271565 % 97 = 1
  Example 3: 124271535 % 97 = 82
  Example 4: 4377271521 % 97 = 51

- If the remainder is 1 (one), then the check digits are correct.

  Example 1: **RF45**G72UUR   ---->   OK
  Example 2: **RF65**18K5   ---->   OK
  Example 3: **RF35**C4   ---->   NOT OK
  Example 4: **RF21**4377   ---->   NOT OK