

# **Bankgiro Inbetalningar**

(Bankgiro Receivables)

Technical manual

January 2008

# Introduction

BgMax is a file layout which gathers reports on all Receivables into one file. BgMax is based on a traditional 80-character layout. The BgMax layout may be extended in future. Supplementary records for payment from the Autogiro service (Direct Debit) and for processing account numbers for international payment are all examples of extensions. An application which reads files in the BgMax layout should be designed to ignore record types it does not recognise.

This record and file description is available for download at [www.bankgirot.se](http://www.bankgirot.se)

## 1 File structure

This section provides a general description of the file structure.

### 1.1 Overview

The illustration below provides a general description of the structure of a BgMax file. The intention is for it to be read from the left, top to bottom. In other words, a BgMax file consists of an initial record, one or more sections and a trailer record. These sections in turn consist of an opening record, one or more payments or deductions, and a deposit record. And so on.

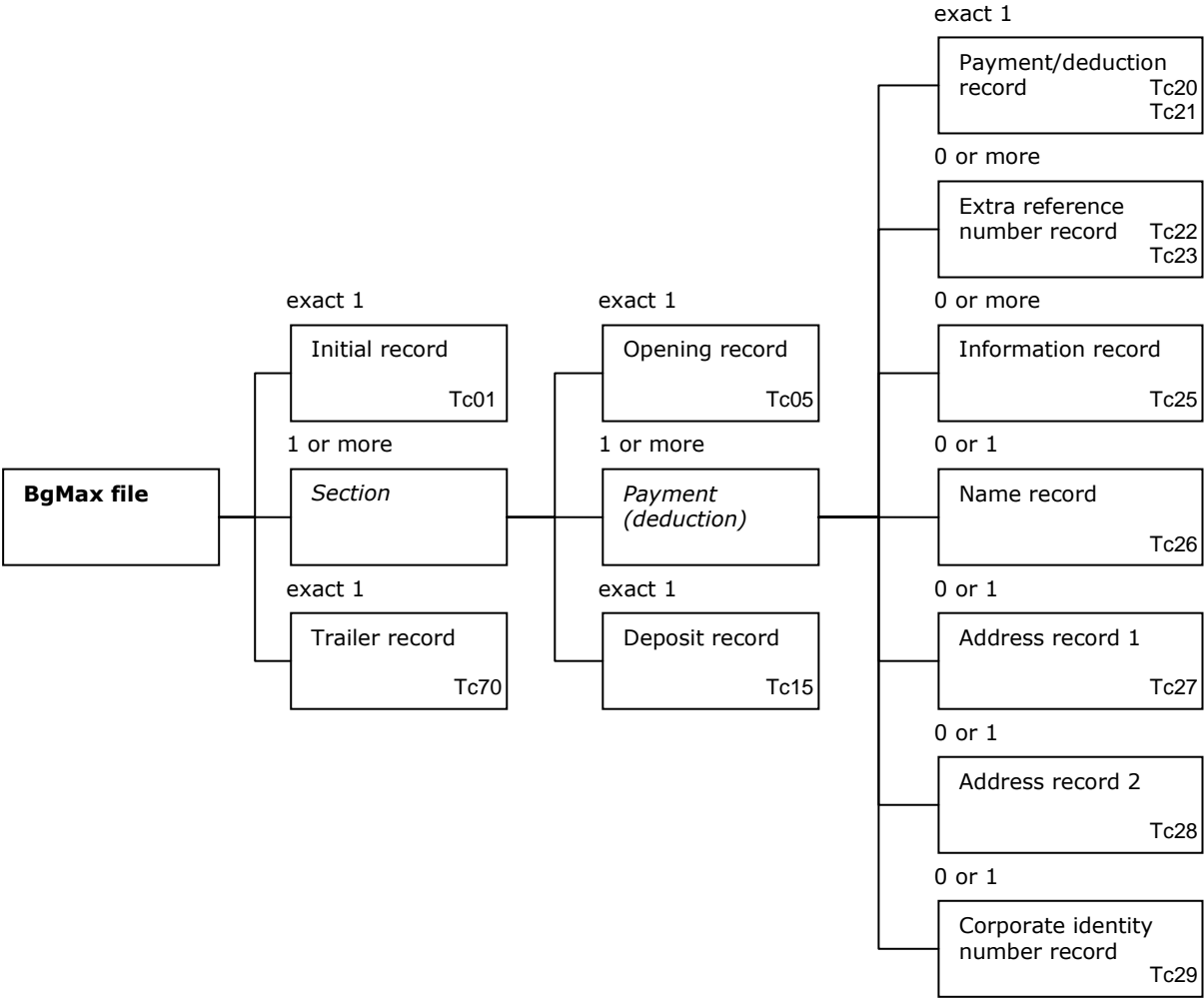


Figure 1: File structure

A BgMax file starts with an *initial record* and ends with a *Trailer record*. There are a number of sections between these. A BgMax file must contain at least one section.

Each section starts with an *opening record* and ends with a *deposit record*. A section consists of a sequence of payments and possibly deductions. A section must contain at least one payment. The concluding deposit record for a section contains information on the deposit made to the bank account, based on the section's payments and deductions.

A payment consists of a *payment record* and any attached *extra reference number records*, *information records* and, where appropriate, the information available on the payer: *name record* and *address record 1* followed by *address record 2* and *corporate identity number record*. Note that the payer's name, address and corporate identity number are not always available, and in such cases there are no corresponding records included in the report either. When the name, address and/or corporate identity number are available, corresponding records are included in the report.

A deduction is structured in the same way as a payment. A deduction relates to a credit invoice, for example. In a section, the total of the payment amounts from one payer must exceed or be equal to the total of the deduction amounts from the same payer. Therefore, a section cannot have a negative amount (less than 0).

An extra reference number record may contain a negative amount if an agreement on extended form registration exists.

## 1.2 Record definitions

File records are defined below. These records follow the traditional 80-character layout.

To define the justification and content of the fields, symbols as per the following table are used (**Table 1**).

**Table 1: Justification**

| <i>Symbol</i> | <i>Meaning</i>                 |
|---------------|--------------------------------|
| N             | Numerical content              |
| A             | Alphanumerical content         |
| h0            | Right aligned and zero filled. |
| vb            | Left aligned and left blank    |
| b             | Left blank                     |

## 1.3 Initial record (Transaction code = “01”)

The initial record starts a file and contains information on which format and version of the format the file follows. It also contains a time stamp which indicates when the file was created.

**Table 2: Initial record**

| <i>Term</i>           | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                                                                                                                   |
|-----------------------|--------------------------|-------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transaction code      | 2                        | 1-2         | N:-           | Transaction code = “01” (initial record).                                                                                                                            |
| Layout name           | 20                       | 3-22        | A:vb          | Name of layout “BGMAX”.                                                                                                                                              |
| Version               | 2                        | 23-24       | N:h0          | Layout version.                                                                                                                                                      |
| Write date/time stamp | 20                       | 25-44       | N:-           | CCYYMMDDTTmmSSNNNNNN<br>Where: “CC” = century, “YY” = year,<br>“MM” = month, “DD” = day, “TT” = time,<br>“mm” = minutes, “SS” = seconds,<br>“NNNNNN” = microseconds. |
| Test marker           | 1                        | 45          | A:-           | “T” indicates a test file, “P” indicates a file intended for production.                                                                                             |
|                       | 35                       | 46-80       | :-            | Blank/spare.                                                                                                                                                         |

## 1.4 Opening record (Transaction code = “05”)

The opening record starts a section. A section contains a sequence of payments and any deductions per credit batch and currency, and ends with a deposit record. All payments in a section are to one and the same bankgiro number or plusgiro number with associated bankgiro numbers (in the event of conversion). There are normally several sections for a bankgiro number.

**Table 3: Opening record**

| <i>Term</i>               | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                     |
|---------------------------|--------------------------|-------------|---------------|------------------------------------------------------------------------|
| Transaction code          | 2                        | 1-2         | N:-           | Transaction code = “05” (opening record).                              |
| Recipient bankgiro number | 10                       | 3-12        | N:h0          | Recipient’s bankgiro number.                                           |
| Recipient plusgiro number | 10                       | 13-22       | N:h0/A:b      | Recipient’s plusgiro number (only in the case of conversion) or blank. |
| Currency                  | 3                        | 23-25       | A:b           | Code for deposit currency, “SEK” or “EUR”.                             |
|                           | 55                       | 26-80       | -:-           | Blank/spare.                                                           |

## 1.5 Payment record (Transaction code = “20”)

The payment record contains information on a payment made to a bankgiro number (or via a plustgiro number in the case of conversion). The payment record is a primary element in a *payment*, see point 1.1.

**Table 4: Payment record**

| <i>Term</i>               | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                                                                                          |
|---------------------------|--------------------------|-------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Transaction code          | 2                        | 1-2         | N:-           | Transaction code = “20” (payment record).                                                                                                   |
| Remitting bankgiro number | 10                       | 3-12        | N:h0          | Payer’s bankgiro number, if available.                                                                                                      |
| Reference                 | 25                       | 13-37       |               | Payee’s reference, see Table 5.                                                                                                             |
| Payment amount            | 18                       | 38-55       | N:h0          | Payment amount. The final two characters state the öre or cents.                                                                            |
| Reference code            | 1                        | 56          | N:-           | The reference code indicates the status of the reference given by the payer, plus the current format in the reference field, see Table 5.   |
| Payment channel code      | 1                        | 57          | N:-           | Code which indicates the current payment channel, see Table 6.                                                                              |
| BGC serial number         | 12                       | 58-69       | A:-           | The payment’s serial number at Bankgirot. The BGC serial number is unique every day. Also used as an image number, as a key to a slip scan. |
| Slip scan marker          | 1                        | 70          | N:-           | Indicates whether there is a slip scan relating to this payment. See Table 7.                                                               |
|                           | 10                       | 71-80       | -:-           | Blank/spare.                                                                                                                                |

**Table 5: Reference code**

The table below contains a description of the significance of the reference code (position 56). See also 1.7, Extra reference number records.

The reference code shows the quality of the reference in the record in which it is included. Note that a reference in some cases may be perceived as correct by Bankgirot but still be incorrect in the opinion of the payee.

| Value | Format | Meaning                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0     | -:-    | The reference field is blank. May also be due to the fact that the payer has not stated a reference in the payment. May also occur if there is an agreement on extended form registration, see 1.7 Extra reference number records, point 3.                                                                                                                                                                       |
| 1     | -:-    | The reference field is blank. Due to the fact that the payment is a form payment to a bankgiro number which does <u>not</u> have an agreement on extended form registration.                                                                                                                                                                                                                                      |
| 2     | N:hb   | The reference field contains a correction. OCR reference number according to the agreement on OCR reference control, including any agreement on extended form registration with OCR reference control.                                                                                                                                                                                                            |
| 3     | A:-    | The reference field contains one or more references.<br>If there is only one reference, this means that it is incorrect, or that the payment is to a bankgiro number which has no agreement on OCR reference control.<br>If there are a number of references, one or more of these may be correct according to the agreement on OCR reference control. These are then reported as extra reference number records. |
| 4     | A:vb   | The reference field contains a correct reference according to the agreement on extended form registration. References in the case of the agreement on extended form registration are also counted as correct references without reference controlling. Payments with correct references to a bankgiro number which has an agreement on extended form registration with OCR control are reported with value 2.     |
| 5     | A:-    | The reference field contains an incorrect reference according to the agreement on extended form registration.                                                                                                                                                                                                                                                                                                     |
| 6-9   |        | Reserved for future use.                                                                                                                                                                                                                                                                                                                                                                                          |

**Table 6: Payment channel code**

The following table defines the significance of the value in the payment channel field (position 57).

| Value | Meaning                                                                                                 |
|-------|---------------------------------------------------------------------------------------------------------|
| 1     | The payment is an electronic payment from a bank.                                                       |
| 2     | The payment is an electronic payment from Leverantörsbetalningar (the Supplier Payments service).       |
| 3     | The payment is a form payment.                                                                          |
| 4     | The payment is an electronic payment from Autogiro (the Direct Debit) service. Reserved for future use. |
| 5-9   | Reserved for future use.                                                                                |

**Table 7: Slip scan marker**

The following table defines the significance of the value in the slip scan marker field (position 70).

| <b>Value</b> | <b>Meaning</b>                                                                              |
|--------------|---------------------------------------------------------------------------------------------|
| 0            | No slip scan exists. Means that a payment has been made electronically or with an OCR slip. |
| 1            | Slip scan exists. Means that a payment has been made with a giro transfer/paying-in slip.   |
| 2-9          | Reserved for future use.                                                                    |

## 1.6 Deduction record (Transaction code = “21”)

The deduction record describes a deduction from the payment record. This kind of deduction relates to credit invoices, for example.

**Table 8: Deduction record**

| <i>Term</i>               | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                                                                                        |
|---------------------------|--------------------------|-------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Transaction code          | 2                        | 1-2         | N:-           | Transaction code = “21” (deduction record).                                                                                               |
| Remitting bankgiro number | 10                       | 3-12        | N:h0          | The payer’s bankgiro number.                                                                                                              |
| Reference                 | 25                       | 13-37       |               | The payee’s reference (see <b>Table 5</b> ).                                                                                              |
| Payment amount            | 18                       | 38-55       | N:h0          | Payment amount. The final two characters state the öre or cents.                                                                          |
| Reference code            | 1                        | 56          |               | The reference code indicates the status of the reference given by the payer, plus the current format in the reference field, see Table 5. |
| Payment channel code      | 1                        | 57          | N:-           | Code which indicates the current payment channel (see Table 6).                                                                           |
| BGC serial number         | 12                       | 58-69       | A:-           | The payment’s serial number at Bankgirot. Also used as an image number, as a key to a slip scan.                                          |
| Slip scan marker          | 1                        | 70          | N:-           | Indicates whether there is a slip scan relating to this payment. See Table 7.                                                             |
| Deduction code            | 1                        | 71          | N:-           | Type of deduction (see <b>Table 9</b> ).                                                                                                  |
|                           | 9                        | 72-80       | -:-           | Blank/spare.                                                                                                                              |

For the deduction record, the information in the fields *remitting bankgiro number* and *payment channel* is the same as the information in the same fields in the payment record to which the deduction record belongs.

**Table 9: Deduction code**

The following table defines the significance of the value in the deduction field (position 71).

| <b>Value</b> | <b>Meaning</b>                                                    |
|--------------|-------------------------------------------------------------------|
| 0            | Full deduction, no remainder.                                     |
| 1            | Partial deduction, with remainder.                                |
| 2            | Final deduction where a partial deduction was made, no remainder. |
| 3-9          | Reserved for future use.                                          |

## 1.7 Extra reference number record (Transaction code = “22” , “23”)

1. If the payment record contains more than one correct OCR reference number, these are reported as extra reference number records with reference code 2. The payment record’s reference field is reported unchanged with reference code 3. If there is an agreement on extended form registration, see point 3. See also table 5.
2. Bankgirot may find further OCR reference numbers in any information records. Bankgirot identifies correct OCR reference numbers and reports these in extra reference number records with reference code 2. See table 5. The information records are reported unchanged. Searches in information records for extra OCR reference numbers are carried out only if there is an agreement on OCR reference control with length control.
3. If there is an agreement on extended form registration and more than one payment reference has been given on the payment slip, these are reported as extra reference number records with reference code 2, 4 or 5. The payment record’s reference field is then blank and reported with reference code 0. See table 5.
4. In the case of extended form registration, Bankgirot can identify a deduction. The deduction is reported in an extra reference number record with transaction code 23 (i.e. negative amount) in the extra reference number record.

**Table 10: Extra reference number record**

| <i>Term</i>               | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                                                                                                                                              |
|---------------------------|--------------------------|-------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transaction code          | 2                        | 1-2         | N:-           | Transaction code = “22”<br>Transaction code = “23” if a negative amount is reported in an extra reference number record. Can occur only if there is an agreement on extended form registration. |
| Remitting bankgiro number | 10                       | 3-12        | N:h0          | The payer’s bankgiro number.                                                                                                                                                                    |
| Reference                 | 25                       | 13-37       |               | The payee’s reference (see Table 5)                                                                                                                                                             |
| Payment amount            | 18                       | 38-55       | N:h0          | May contain part-totals in the case of extended form registration. Otherwise the payment amount is always zero. The payment’s total amount is always reported in the payment record.            |
| Reference code            | 1                        | 56          |               | The reference code indicates the status of the reference given by the payer, plus the current format in the reference field, see Table 5.                                                       |
| Payment channel code      | 1                        | 57          | N:-           | Code which indicates the current payment channel (see Table 6).                                                                                                                                 |
| BGC serial number         | 12                       | 58-69       | N:h0          | The payment’s serial number at Bankgirot. The BGC serial number is always unique every day. Also used as an image number, as a key to a slip scan.                                              |
| Slip scan marker          | 1                        | 70          | N:-           | Indicates whether there is a slip scan relating to this payment. See Table 7.                                                                                                                   |
|                           | 10                       | 71-80       | -:-           | Blank/spare.                                                                                                                                                                                    |

For extra reference number records, the information in the fields *remitting bankgiro number* and *BGC serial number* is always the same as the information in the same fields in the payment record or deduction record to which the extra reference number record belongs.

## 1.8 Information record (Transaction code = “25”)

The information record is appended to the payment in the cases in which the payer has sent information records, e.g. in Leverantörsbetalningar (the Supplier Payments service). Up to 99 information records can be added to a payment. These information records are in a particular order and appear in the sequence in which the payer supplied them.

**Table 11: Information record**

| <i>Term</i>      | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                            |
|------------------|--------------------------|-------------|---------------|-----------------------------------------------|
| Transaction code | 2                        | 1-2         | N:-           | Transaction code = “25” (information record). |
| Information text | 50                       | 3-52        | A:-           | Information from the payer to the payee.      |
|                  | 28                       | 53-80       | -:-           | Blank/spare.                                  |

## 1.9 Name record (Transaction code = “26”)

In the cases in which the payer’s name is available, this is appended to the payment using the name record.

**Table 12: Name record**

| <i>Term</i>      | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                     |
|------------------|--------------------------|-------------|---------------|----------------------------------------|
| Transaction code | 2                        | 1-2         | N:-           | Transaction code = “26” (name record). |
| Payer’s name     | 35                       | 3-37        | A:vb          | The payer’s name                       |
| Extra name field | 35                       | 38-72       | A:vb          | Extra name field.                      |
|                  | 8                        | 73-80       | -:-           | Blank/spare.                           |

## 1.10 Address record 1 (Transaction code = “27”)

In the cases in which the payer’s address is available, this is appended to the payment using the address record. Address record 1 is followed by address record 2 (section 1.11).

**Table 13: Address record 1**

| <i>Term</i>      | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                               |
|------------------|--------------------------|-------------|---------------|--------------------------------------------------|
| Transaction code | 2                        | 1-2         | N:-           | Transaction code = “27” (address record part 1). |
| Payer’s address  | 35                       | 3-37        | A:vb          | Address.                                         |
| Payer’s postcode | 9                        | 38-46       | A:vb          | Postcode.                                        |
|                  | 34                       | 47-80       | -:-           | Blank/spare.                                     |

## 1.11 Address record 2 (Transaction code = “28”)

In the cases in which the payer’s address is available, this is appended to the payment using the address record. Address record 2 is preceded by address record 1 (section 1.10).

**Table 14: Address record 2**

| <i>Term</i>           | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                 |
|-----------------------|--------------------------|-------------|---------------|--------------------------------------------------------------------|
| Transaction code      | 2                        | 1-2         | N:-           | Transaction code = “28” (address record part 2).                   |
| Payer’s local address | 35                       | 3-37        | A:vb          | Local address.                                                     |
| Payer’s country       | 35                       | 38-72       | A:vb          | Country (only in the case of overseas addresses, otherwise blank). |
| Payer’s country code  | 2                        | 73-74       | A:vb          | Country code (only in the case of overseas addresses).             |
|                       | 6                        | 75-80       | -:-           | Blank/spare.                                                       |

## 1.12 Corporate identity record (Transaction code = “29”)

When the payer has a corporate identity number and this is available, this is attached to the payment using the corporate identity record.

**Table 15: Corporate identity record**

| <i>Term</i>               | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                   |
|---------------------------|--------------------------|-------------|---------------|------------------------------------------------------|
| Transaction code          | 2                        | 1-2         | N:-           | Transaction code = “29” (corporate identity record). |
| Corporate identity number | 12                       | 3-14        | N:h0          | The payer’s corporate identity number. 10 digits.    |
|                           | 66                       | 15-80       | -:-           | Blank/spare.                                         |

### 1.13 Deposit record (Transaction code = “15”)

The deposit record concludes a section and contains information on the deposit resulting from the section’s payments. A file often contains more than one deposit record as there are several Receivables every day. Separate deposit records are always created for payments to plusgiro numbers, in the euro currency and if the customer has an agreement on unique customer identifiers.

The opening record contains data on the bankgiro number or plusgiro number (with associated recipient bankgiro numbers) to which the section’s payments have been directed (see section 0 above).

**Table 16: Deposit record**

| <i>Term</i>                   | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                                                                             |
|-------------------------------|--------------------------|-------------|---------------|----------------------------------------------------------------------------------------------------------------|
| Transaction code              | 2                        | 1-2         | N:-           | Transaction code = “15” (deposit record).                                                                      |
| Recipient bank account number | 35                       | 3-37        | N:h0          | The recipient’s bank account number.                                                                           |
| Payment day                   | 8                        | 38-45       | N:-           | Payment date, CCYYMMDD                                                                                         |
| Deposit serial number         | 5                        | 46-50       | N:h0          | Serial number for each customer’s deposit. Unique bankgiro number and year.                                    |
| Deposit amount                | 18                       | 51-68       | N:h0          | The amount of the deposit. The final two characters state the öre or cents.                                    |
| Currency                      | 3                        | 69-71       | A:-           | Code for deposit currency, “SEK” or “EUR”.                                                                     |
| Number of payments            | 8                        | 72-79       | N:h0          | The number of payment and deduction records included in this deposit.                                          |
| Type of deposit               | 1                        | 80          | -:-           | Unique customer identifier according to agreement with bank. Possible values “K”, “D” or “S”, otherwise blank. |

The deposit serial number (positions 46-50) is reported to the bank in connection with the deposit to the bank account. The same deposit serial number can be reported on the bank statement from the bank.

The recipient’s bank account number (positions 3-37) is reported using 16 characters, of which the first four digits (pos. 22-25) relate to the bank’s clearing number and the rest (pos. 26-37) relate to the account number (right aligned and zero filled).

## 1.14 Trailer record (Transaction code = “70”)

The trailer record ends a file. It contains the number of payment records, the number of deduction records, the number of extra reference records and the number of deposit records in this file.

**Table 17: Trailer record**

| <i>Term</i>                       | <i>No. of characters</i> | <i>Pos.</i> | <i>Format</i> | <i>Description</i>                                         |
|-----------------------------------|--------------------------|-------------|---------------|------------------------------------------------------------|
| Transaction code                  | 2                        | 1-2         | N:-           | Transaction code = “70” (trailer record).                  |
| Number of payment records         | 8                        | 3-10        | N:h0          | The number of payment records in this file.                |
| Number of deduction records       | 8                        | 11-18       | N:h0          | The number of deduction records in this file.              |
| Number of extra reference records | 8                        | 19-26       | N:h0          | The number of extra reference number records in this file. |
| Number of deposit records         | 8                        | 27-34       | N:h0          | The number of deposit records in this file.                |
|                                   | 46                       | 35-80       | -:-           | Blank/spare.                                               |