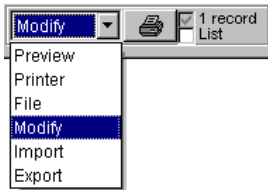


## Print Reports of WinQbase Program

Most of the records in the database of WinQbase program can be printed. A print form is determined by the print report. Print reports are saved in the database and after installation all the sample print reports will be also saved in WinQbase\Reports directory. They shall be saved as files in this directory; each of the reports is composed by two files with frx and fit extensions. These files can be imported back to the database anytime and also existent print reports can be exported from the database into files and the report can be transferred into another WinQbase system as well. The print reports saved in a database can be modified by an user. For print report handling a print tool serves, which is situated in a tool-bar in upper part of most panels of WinQbase program. An operation from scroll menu is to be selected at first and after that this operation is to be activated by press a button with printer symbol. There are following options available:



**Preview** – a print report will displayed in format, which should be appeared during printing in, and after that can be printed from this preview.

**Printer** – it shall perform direct a print by means of a default printer of Windows system without the preview.

**File** – it shall perform a print from the file which is valid for the

default printer.

**Modify** – it shall activate a Report Designer and the report where it can be modified.

**Import** – it shall perform an import of a print report from the file.

**Export** – it shall perform an export of a print report from the database into the file.

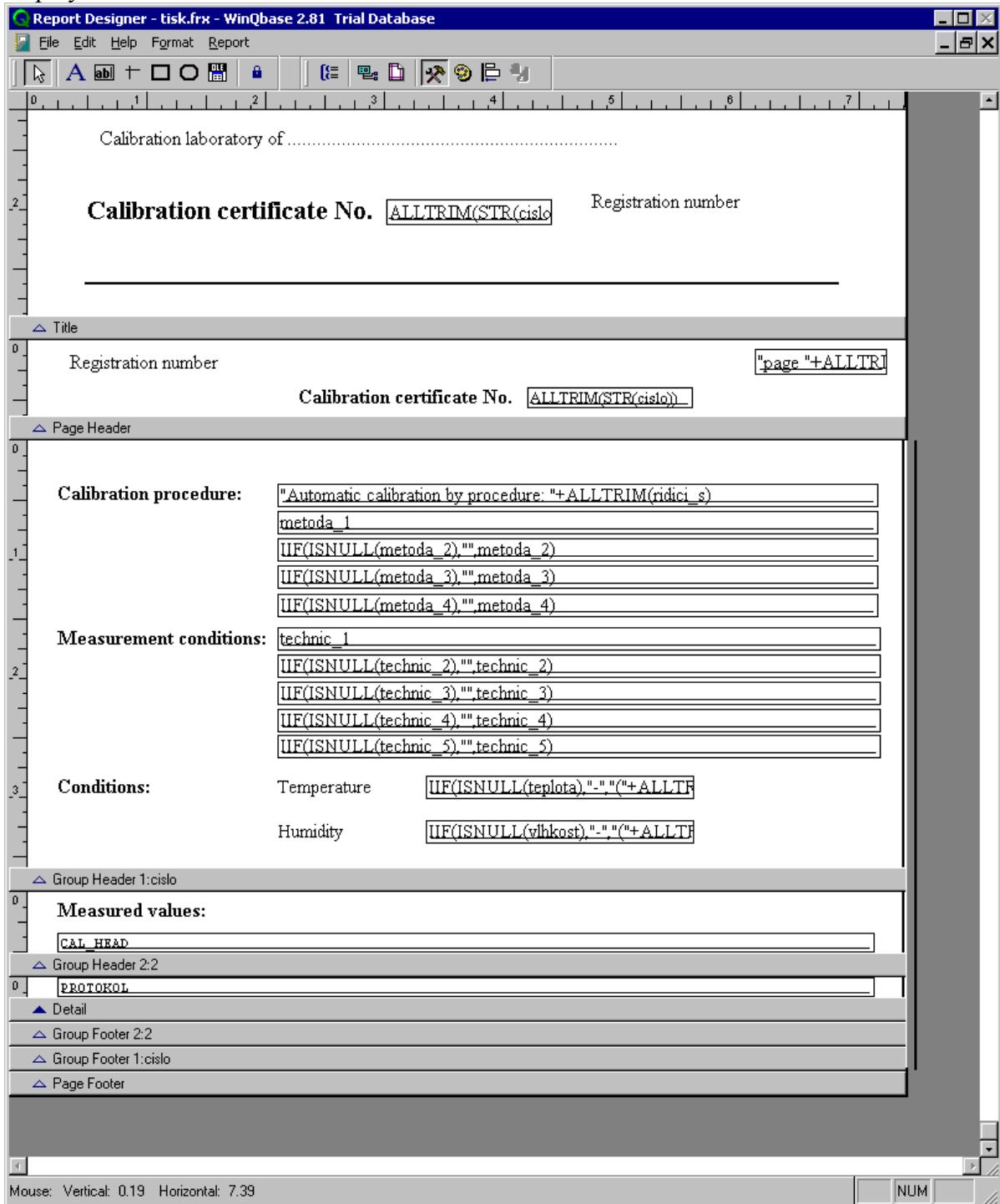
**1 record** – only one currently selected record shall be printed.

**Line** - most of the editing panels contain two print reports. One report is intended for detailed print of mainly one record (selection is not checked) and another one is intended for print of record lists where each of the records is usually in one line (selection is checked).

*Note: It is possible to use a standard tool for record filtration during the record prints.*

## Print Report Modification

Select "Modify" item from the print scroll menu and then by activation of the button with printer symbol the program pass on a print report editing mode. A following window shall display:



There are a main menu and tool-bars in the upper part of the Designer. There is a editing area in the middle part and an information bar below.

## Editing Area

This area is divided in particular bands. A more complicated print report of a calibration certificate, which contains the most bands, is displayed in the picture. The particular bands can be moved by mouse pulling and their size can be changed by that way.

**Title** – It is a band being printed in the first page. It is possible to select whether it shall be printed in the independent page or whether the print shall continually go on. Setting is available from the main menu "Report->Optional bands"

**Page Header** – it is a band which shall be printed in all the other pages and situated very above.

**Group Header 1** – the group has been created only for reports intended for calibration and specified for additional calibration information, e.g. measuring conditions etc. It shall be printed in the other side just behind the "Page Header" zone.

**Group Header 2** – the group has been created only for reports intended for calibration and specified for print of heading of measured calibration results. It can be printed either in one page or in several pages and each of the pages start with the "Page Header" band.

**Body** – it is the most important part of the most of print reports and usually contains data obtained from a database. There are calibrations results in case of a calibration certificate. Contents can be large and even several pages long. "Body" at a calibration certificate is connected with "Group Header 2", at others usually with "Page Header" zone.

**Group Footer 1** – it is only at a calibration print report and has not any practical meaning.

**Group Footer 2** – it is only at a calibration print report and has not any practical meaning.

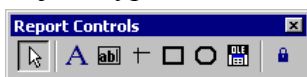
**Page Footer** – it shall be printed at the end of each page except a title and summary.

**Summary** – it shall be printed at the end of a whole report, the band is optional and can be printed in an independent last page or as a last page continuation. Setting is available from the main menu "Report->Optional bands"

## Print Report Objects

The whole print report consists of objects being inserted into particular zones. Object handling is performed by means of "Report Controls" tool-bar.

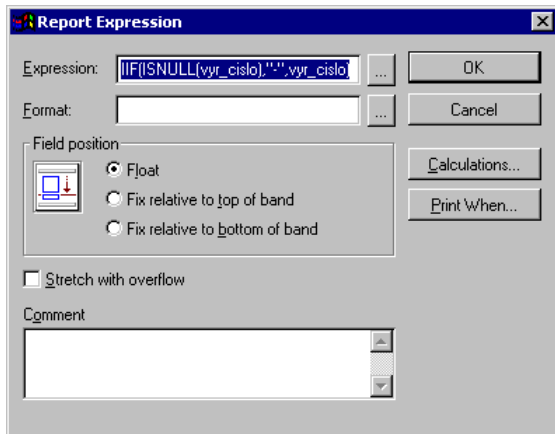
Object Types:



**Select Objects** – a pushbutton with "Arrow" symbol allows to select objects which have already been situated in the editing area.

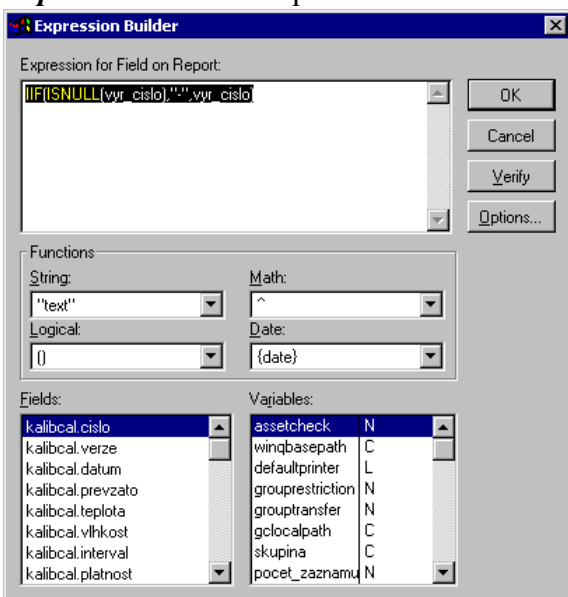
Objects can be selected by means of the mouse or be moved by mouse pulling or by cursor keys.

**Label** – a pushbutton with "A" symbol allows to insert legends in the editing area. Firstly the pushbutton with "A" symbol is to be pressed and then a label can be inserted by left mouse click on required point. On this position a cursor start to twinkle and it is possible to insert a required text by means of the keyboard. For modification of an already existing label the pushbutton with "A" symbol is to be pressed again and then a left mouse click on the already existing label follows. Font can be changed such a way that firstly a particular label is to be selected by a mouse click (it is possible to select even several labels if "Shift" key is being pressed at the same time) and after that "Format -> Font" from the main menu is to be select.



**Field** – a combined expression can be inserted in the editing area by means of the pushbutton with "ab" symbol. The expression is represented by content of a variable. The expression can be a database record (e.g. a calibration number, a serial number, a manufacturer), a system variable (e.g. a page number), system function (DATE() - date) or a fixed text if it is written in quotation marks. It is even possible these expressions combined among each other.

**Expression** – there is possible to create an expression in this editing field. Character size is



not decisive during writing. For expression creation it can be possible to use "Expression Builder" panel which is available by press "..." button situated next to a field with following expression:

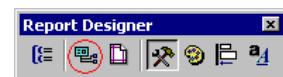
*Expression for Field on Report* – the final expression shall be displayed here.

*Function* – it represents system functions. A list of the most interesting functions is shown in Appendix 2 of this document.

*Field* – it is a list of fields available from a database. By insertion of fields from a database there are two records possible - a complete one, i.e. "kalibcal.serial\_number" and/or shortened one, i.e. "serial\_number". List of the fields for print reports of identification sheets and calibration is shown in Appendix 1.

*Variable* – system variable list. Only variables for finding of page numbers are interesting (they are shown in Appendix 3).

*Note: Before start of the Expression Builder there is suitable firstly to open and close the "Data Environment" in order to load all the variable from the current database. This step can be made only one time at modification of all the print report. The Data Environment is available from the "Report Designer" tool-bar. After this step a list of all available fields is going to be contained in the "Expression Builder" panel.*



An expression can be any type and the program shall transform this format in a printable form automatically.

*String* – text variable

*Number* – numeric variable

*Date* – special format of a date

*Time* – special time format (contains time + date)

*Logic* – "truth" and "untruth" statements only

Expressions can be added (“+” sign between expressions), but the expressions must be of the same type with only some exceptions. By adding of numbers there shall originate a number again. By adding of a date and a number there shall originate a date shifted of day number given by the number. By adding of a time and a number there shall originate a time shifted of second number given by the number. By string adding there shall originate a string composed of all the strings. The string adding is the most used way and sometimes it is suitable to transfer an expression on a string and after that this string add to another string.

*Example:*

*\_PAGENO – system variable - current page number (e.g. 2)*

*PAGECOUNT – system variable – total number of pares of a print report at printing (e.g. 5)*

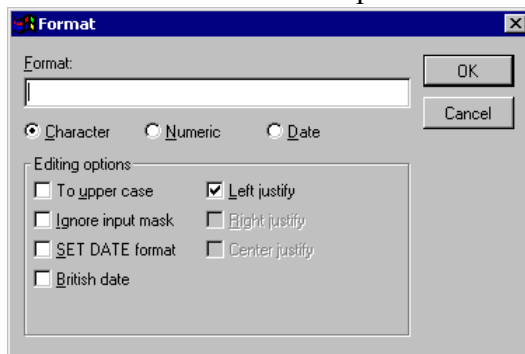
*Expression:*

*“Page”+ALLTRIM(STR(\_PAGENO))+” from the number of  
”+ALLTRIM(STR(PAGECOUNT))*

*It shall be translated during the print:*

*“Page 2 of 5”*

**Format** – if an expression is created already it can be selected its format. In its



principle there is a text alignment in terms of object sizes only if it is not suitable for us. A date type of the expression must be selected at first:

*Character* – a string

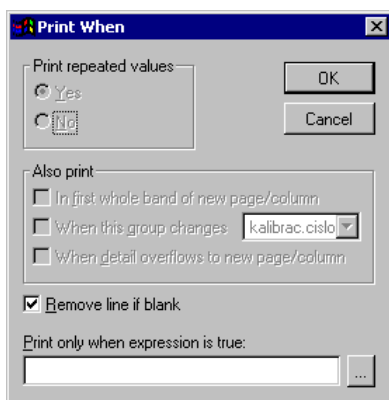
*Numeric* – a figure

*Data and numeric* – a date and time

Date and time format is taken from Windows system in the program and cannot be changed. After that it is possible to select a suitable alignment way by means of "Right justify" or "Left

justify" or "Center justify" fields.

**Print Conditions** – a print condition can be adjusted for an expression finally. This



condition shall be entered into "Print only when expression is true" field. The object print shall be released only if the expression is "truth". For negation can also be used “!=” symbol - i.e. Not Equal to.

A system variable can be entered:

*\_PAGENO!=3 i.e. the object shall be printed in all pages without page 3*

A numeric variable from a database:

*Vysled\_id=3 i.e. the object shall be printed if the calibration result is "Unsatisfactory".*

A string variable from a database:

*vyrobce="METEX" i.e. the object shall be printed if the manufacturer's name is METEX*

**Lapped stretch out** – this field in the “Report Expression” panel shall secure expansion of the "Field" object in a case that there is no possible to print the content because of small object size.

**Line** – a line can be inserted in the editing area by means of the pushbutton with lines symbol. The line shall be created by the left mouse pushbutton and then by mouse pulling. The line can be either vertical or horizontal depending on a mouse pulling direction. Line thickness can be changed by selection of a line and after that by selection from the main menu “**Format -> Pen**”.

**Rectangle** – a rectangle can be inserted in the editing area by means of the pushbutton with a frame symbol. The rectangle shall be created by the left mouse pushbutton and then by mouse pulling, which also determines its size. Rectangle parameters can be changed in the main menu "Format":

*Foreground color* - a rectangle color

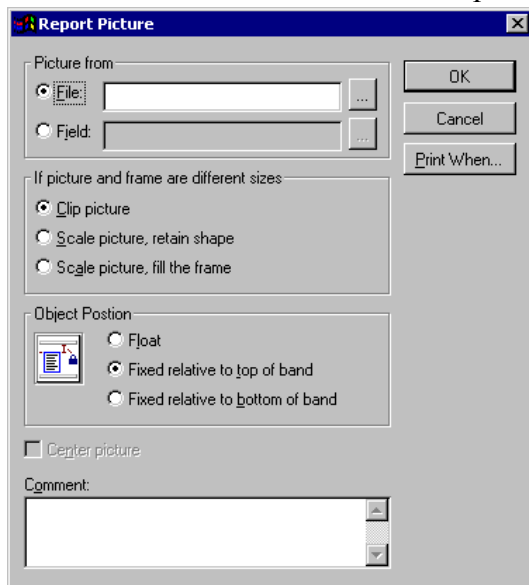
*Background color* - a background color

*Fill In* – way of a filler - crosshatch, full filler

*Pen* – a rectangle thickness

**Rounded Rectangle** – adjustment is the same as at a rectangle

**Picture/OLE Bound Control** – a pushbutton with the „OLE“ symbol allows to insert a



picture into the print report. There are two options of picture inserting:

*File* – a picture from a file will be inserted. For this way of picture insert it is necessary to realize that a path to a picture must be the same and available for each of program users from all the computers. It is also suitable to save the picture in the same point where the shared database is saved and the path shall has the same name in each of the used computers. It is also not advisable to write down a path to a server as „Z:\database\...” but “\\server\database\...”.

*Field* – it inserts a picture from a database. This way is more suitable because the picture is saved in the shared database and is automatically backed up, but in the WinQbase system there is this

possible in a calibration certificate only (the field is called “ole”) and a picture is defined in the record head.

**Button Lock** - allows lockout of a selected function in the tool-bar. This is suitable at entering of more the same elements into an output record. If it be to the contrary, there is necessary to press a required object again before every inserting of this object.

**Appendix 1 – List of database variables****CALIBRATION (one record)**

Cislo	Numeric	Calibration No.
Verze	Time	Version
Datum	Date	Date of calibration
Prevzato	Date	Date received
Teplota	String	Temperature
Vlhkost	String	Humidity
Interval	Numeric	Calibration period
Platnost	Date	Verify to (date)
Poznamka	Memo	Comment
Protokol	Memo	Test report
ridici_s	String	Calibration procedure
autor	String	Author
hlavicka_1	String	Test report head, First item
hlavicka_2	String	Test report head, Second item
hlavicka_3	String	Test report head, Third item
metoda_1	String	Methodology, First item
metoda_2	String	Methodology, Second item
metoda_3	String	Methodology, Third item
metoda_4	String	Methodology, Fourt item
technic_1	String	Technical note, First item
technic_2	String	Technical note, Second item
technic_3	String	Technical note, Third item
technic_4	String	Technical note, Fourth item
technic_5	String	Technical note, Fifth item
rozsah_1	String	Range of cal., First item
rozsah_2	String	Range of cal., Second item
rozsah_3	String	Range of cal., Third item
rozsah_4	String	Range of cal., Fourth item
odpovedny	String	Chief of laboratory
ev_cislo	String	Inventory serial No.
vyr_cislo	String	Serial number
vysledek	String	Calibration result
typ_merid	String	Model (of instrument)
vyrobce	String	Manufacturer (of instrument)
firma	String	Customer, Company
město	String	Customer, City
ulice	String	Customer, Street
psc	String	Customer, Zipcode
telefon	String	Customer, Phone
zadatel	String	Customer, Name
uziv_text	String	Users item 1
nevyhovuje	String	List of used special Stringacters used in protocol (*,?...)
vysled_id	Numeric	Calibration result ID
autorkalib	String	Operator (Author of calibration)
ridici_id	Numeric	Calibration procedure ID
uziv_text2	String	Users item 2
uziv_text3	String	Users item 3

cal_head	Memo	Test report head (Function, Range....)
intro	Memo	Instrument check up (Not used with Caliber SW)

**CALIBRATION (list form)**

c_kalibr	Numeric	Calibration No.
c_evid_l	Numeric	Inventory No.
typ_m	String	Model (of instrument)
vyrobce_m	String	Manufacturer (of instrument)
text_vysl	String	Calibration result
do_dat	Date	Verify to (date)
j_ridici_s	String	Calibration procedure
j_operator_a	String	Author
j_operator_b	String	Operator (author of calibration)
verze	Time	Version
dat_kalib	Date	Date of calibration
dat_prev	Date	Date received
teplota	String	Temperature
vlhkost	String	Humidity
mes_int	Numeric	Calibration period
poznamka	Memo	Comment
protokol	Memo	Test report
prvni_row_a	String	Test report head, First item
druhy_row_a	String	Test report head, Second item
tretri_row_a	String	Test report head, Third item
prvni_row_b	String	Methodology, First item
druhy_row_b	String	Methodology, Second item
tretri_row_b	String	Methodology, Third item
ctvrty_row_a	String	Methodology, Fourth item
prvni_row_c	String	Technical note, First item
druhy_row_c	String	Technical note, Second item
tretri_row_c	String	Technical note, Third item
ctvrty_row_b	String	Technical note, Fourth item
paty_row	String	Technical note, Fifth item
prvni_row_d	String	Range of cal., First item
druhy_row_d	String	Range of cal., Second item
tretri_row_d	String	Range of cal., Third item
ctvrty_row_c	String	Range of cal., Fourth item
prac	String	Chief of laboratory
evid_c_mer	String	Inventory serial No.
c_vyrobni	String	Serial number
firma	String	Customer, Company
adr_mesto	String	Customer, City
adr_ulice	String	Customer, Street
adr_psc	String	Customer, Zipcode
adr_tel	String	Customer, Phone
j_zadatel	String	Customer, Name
user_a	String	Users item 3
uziv_text	String	Users item 1
user_b	String	Users item 2



text_druh	String	Report name
text_druh2	String	Report name comment
text_druh3	String	unused
c_metoda	Numeric	Methodology ID
c_tech	Numeric	Technical note ID
c_rozsah	Numeric	Range of cal. ID
c_firma	Numeric	Customer ID
c_prac_lab	Numeric	Chief of laboratory ID
vysledek	Numeric	Resultat der Kalibration ID
druh_id	Numeric	Type of report ID
ridici_id	Numeric	Calibration procedure ID
operator	Numeric	Author ID
evid_id	Numeric	Inventory ID
kalibr_id	Numeric	Calibration ID
autorka_id	Numeric	Operator ID (Author of calibration)
hist	Logical	History record
nenihist	Logical	History not exists
univ_kal	String	unused
zakryt	Logical	Hidden record
gen_kal	General	unused

**INSTRUMENT INVENTORY**

c_evid_1	Numeric	Inventory serial No.
dat_zal	Date	First recorder on
typ_m	String	Model (of instrument)
vyrobce_m	String	Manufacturer (of instrument)
napis	String	Type of inventory
typ_mer	String	Category
typ_vel	String	Quantity
firma	String	Customer, Company
adr_mesto	String	Customer, City
adr_ulice	String	Customer, Street
adr_psc	String	Customer, Zipcode
adr_tel	String	Customer, Phone
j_zadatel	String	Customer, Name
verze	Time	Version
evid_c_mer	String	Asset number
cena	Numeric	Price
c_vyrobni	String	Serial number
dat_u	Date	Activated on
dat_v	Date	Discarded on
dokumentac	Logical	Documentation
specifikac	Memo	Specification
navazano	Memo	Traceability to
poznamka	Memo	Comment
uziv_text	String	Users item 1
user	String	Users item 2
j_operator	String	Author
evid_id	Numeric	Inventory ID
operator	Numeric	Author ID

cislo_adr	Numeric	Groups of instrument ID
typmer_id	Numeric	Model ID
vyrobce_id	Numeric	Manufacturer ID
c_zadatel	Numeric	Customer ID
uziv_id	Numeric	Users item 1 ID
velicin_id	Numeric	Quantity ID
charakt_id	Numeric	Kategorie ID
typ_evi_id	Numeric	Typ der Inventarliste ID
hist	Logical	History record
nenihist	Logical	History not exists
univ_evi	String	unused
zakryt	Logical	Hidden record
gen_evi	General	unused

*Numeric* – numeric variable

*String* – text variable

*Date* – date

*Time* – date + time

*Logical* – logical variable („true“, „false“)

*Memo* – text variable

*OLE* – OLE object installed in Windows system (picture BMP, JPG, document DOC)

## Appendix 2 – list of selected functions (independently of character size)

*string* = **STR**(*figure*, *length*, *number of decimal positions*) – conversion of a figure to a string

*string* = **SUBSTR**(*string*, *from*, *number of symbols*) – it returns a string part starting with "from" position (1=1st symbol), the length is given by number of symbols

*string* = **ALLTRIM**(*string*) – elimination of spaces before and behind the string

*string* = **UPPER**(*string*) – conversion of all characters to upper case characters („ABCDEF...“)

*string* = **LOWER**(*string*) – conversion of all characters to lower case characters („abcdef...“)

*string* = **PROER**(*string*) – conversion of characters to lower case characters, the first character is a upper case one („Abcdef...“)

*figure* = **ATC**(*string1*, *string2*) – it returns position of finding of string 1 in string 2  
if string 1 is not found, 0 is returned, the first position = 1

*date* = **DATE**() – current date of the compute

*string* = **DTOC**(*string*) – conversion of a date to a string

*time* = **DATETIME**() – current date + time of the compute

*date* = **TTOD**(*time*) – conversion of a time to a date

*expression* = **IIF**(*logical*, *expression1*, *expression2*) – it returns expression1, if "truth" is logical, if not it returns expression2

*logical* = **ISNULL**(*expression*) – it returns "truth", if the expression has been never entered (e.g. an item in the database)

*logical* = **EMPTY**(*expression*) – it returns "truth", if the expression is empty (expression = 0 or „“)

*figure* = **VAL**(*string*) – conversion of a string to a figure

Appendix 3

**SYSTEM OF VARIABLES**

<u>P</u> AGENO	Numeric
<u>P</u> AGECOUNT	Numeric

Actual page number

Total page number