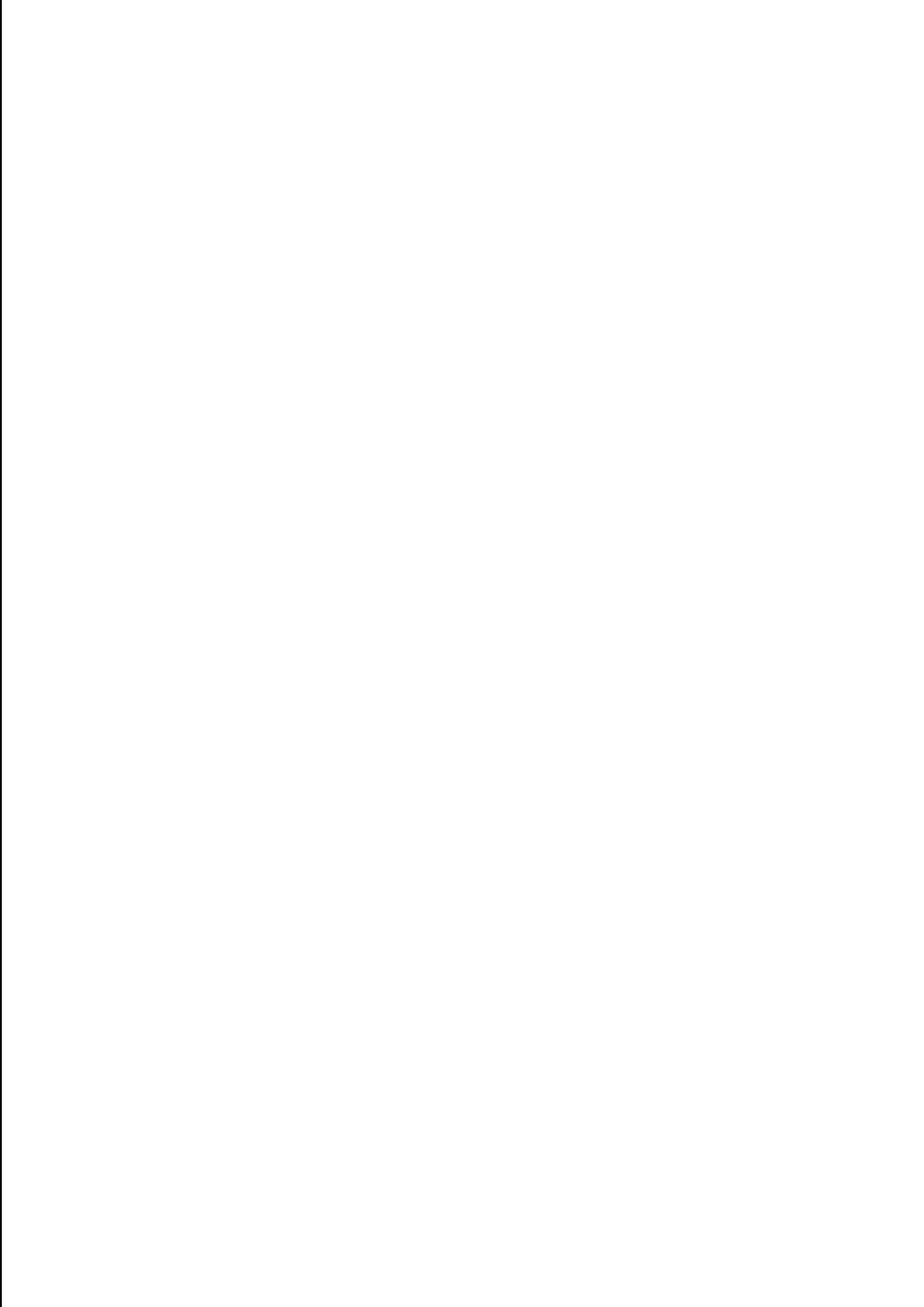## Philips Keyboards

The bank staff and their information system must be able
to communicate with each other. To achieve this, each
operator must be provided with a terminal. The most
common type of device for data entry, and for requesting
information is a keyboard. (The data entered, and replies
from the system, will be visually preserved on a display
unit, backed up with a printer for hard copy).

Different locations in a bank must handle different
types of work, and thus have different input requirements.
The Philips system therefore offers a series of keyboards
Each of these keyboards provides the functions and the
capacity necessary for the location and work for which it is
primarily intended. A teller, for example, usually requires
only numeric and command functions from his keyboard,
whereas at a general location other capacity is required as
well. The Philips PTS 6000 system therefore includes a
range of keyboards which provide increasing capacity from
numeric and functions to alphanumeric + functions and
signals.

With any of the keyboards, the functions of the
keytops can be arranged to suit the particular requirements
of any customer, the colours and inscriptions of the
keytops are to customers' choice. The keytops are
conveniently arranged for optimum accessibility, and
keylock switching is provided to prevent misuse and to
protect confidential information.

Mechanically, the keyboards offer considerable
freedom of installation choice — they may be sunk into
counters or stand free on a desk. They can be adjusted to
any operator's position whether the operator normally
stands or sits to work.

Any keyboard can be combined with any other
terminal modules to create the optimum working system
for any bank.

Philips PTS 6271 Keyboard Numeric
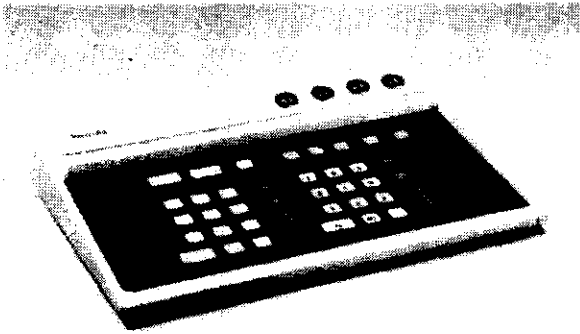
INTRODUCTION AND APPLICATION

The Philips PTS 6271 Keyboard Numeric is an input/
output device comprising two main parts:
- an input part
  a keyboard with a keylock module

- an output part
  a lamp panel with 6 LED lamps and a bell

The keyboard consists of a numeric/function (control)
part comprising a numeric pad and a group of function
(control) keys.

The Philips PTS 6271 Keyboard Numeric is intended to be
used for

- Data input
- Control of functions
- Program input and control of program
- Guiding the operator via a lamp panel

which makes the keyboard very well suited for all kinds
of terminal use, at the counter as well as in the back
office.
    The extremely low profile of the Philips PTS 6271
Keyboard Numeric makes it excellent from an ergonomic
point of view. It is a stand-alone unit and connected to
the Philips PTS 6000 system via a cable, which makes the
keyboard fully adjustable to the best ergonomic position.

PRODUCT DESCRIPTION

The Philips PTS 6271 Keyboard Numeric is made of metal
and equipped with non-reflecting keytops. The keyboard
comprises the following parts:

- a numeric/function part of a 12-key numeric cluster
  and 28 function (control) keys

- a lamp panel with 6 red LED-lamps and an easy ex-
  changeable text panel

- a keylock switch section with up to 4 keylocks with
  two settings each signed 0 (off) and 1

- a bell

In total the keyboard has 39 keys besides one special
shift key (A15). In the standard version of the keyboard all
keys besides the keylocks and the special shift key
have repeat function. If a keyswitch is kept in pressed
down position the repetition starts after 1 second with a
repeat rate of 10 char/sec. By an easy adjustment the
repeat function can be disabled.
    The keyboard has a built-in encoder.
    The keyboard works with n-key roll-over function,
meaning: When depressing a key, the keyboard
transmits the corresponding code (data) in serial and in
synchronism with "clock". After transmitting the code,
the keyboard encoder starts searching for a new key
depression, regardless if the old key (or keys) is (are)
released or not.
    Each key switch position transmits only one code
except shift (A15), which transmits codes in both down-
wards and upwards direction.
    The meaning of each key can be changed by
depressing the shift key (A15), just as well as activation
of each keylock can change the meaning of a certain
keytop position. The actual conversion takes place in
software. By means of those software conversion tables,
a high degree of flexibility for the customer's application
can be achieved.
    The keylock switch section is designed as a separa-
te module, which is easy to exchange to ease service.
The keylock section remains at site with its proper keys.
The standard version of the keyboard is equipped with
two locks, one operator lock (different keys to all key-
boards) and one standard supervisor lock (the same key
accessible to all keyboards), with two keys to each
keylock
    Optionally the keylocks can be arranged according
to special requirements. The total number of keylocks

Philips PTS 6271 Keyboard Numeric

are four and the following versions of the keylocks can be provided:

Type A	operator lock	different keys to all keyboards
		= all locks different

Type A   operator lock
different keys to all keyboards
= all locks different

Type B   standard supervisor lock
the same key to all keyboards
= all locks alike

Type C   special supervisor lock
the same key to all keyboards within
a certain project
= all locks in a project alike

The keylock switches have two key settings marked 0 and 1. The key can only be removed in key setting "0". The keylock in operation determines the meaning that activated keys will get in the same way as for shift and control functions.

The keylock switches have no influence on the signal lamps, which are controlled from the program.

The keyboard is power failure proof and gives automatically key position at Power On.

The audiable alarm, bell function, has a duration of 100 ms. The function is controlled from the program.

OPTIONS/USER ADAPTATIONS

· The function/control keytops of the keyboard can be specified

— The text panels of the signal lamps and keylocks can be specified

— In the standard version the keyboard is equipped with an operator lock and a standard supervisor lock, but can as an option be equipped with up to four locks in a required combination

— Connection cable

CONNECTIONS

The Philips PTS 6271 Keyboard Numeric is with a cable connected through a PTS 6000 standard interface to a Selector Unit Modular, PTS 6314, local or remote, or to a Terminal Printer, PTS 6371. The standard cable length is 3 meters. With a special cable the length can be up to 10 meters. Power for the keyboard is supplied from the unit to which it is connected

TECHNICAL SUMMARY

Input rate	
Average key-in velocity	10 char/sec
Max key-in velocity for 3 strokes	200 char/sec
Operating force	80 g ± 20% (0.7—1.0 Newton)
Keytop travel	3.5 ± 0.5 mm
Function	N-key roll-over
Number of keytops	40
Key operated switches	up to 4 with two settings each (0 and 1)
Integrated signal lamps	6 red lamps of LED-type
Dimensions	
Depth	195 mm
Height back	43 mm (key not inserted)
Height front	15 mm
	(20 mm from table surface to upper part of first keyrow)
Width	303 mm
Slope	8°
Weight	1.9 kg
Power requirement	+ 5V 0.6A
	distributed through the signal cable

Environmental conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70 °C
Humidity	20 to 80%	20 to 95%

Philips PTS 6271 Keyboard Numeric

Keyboard key-codes
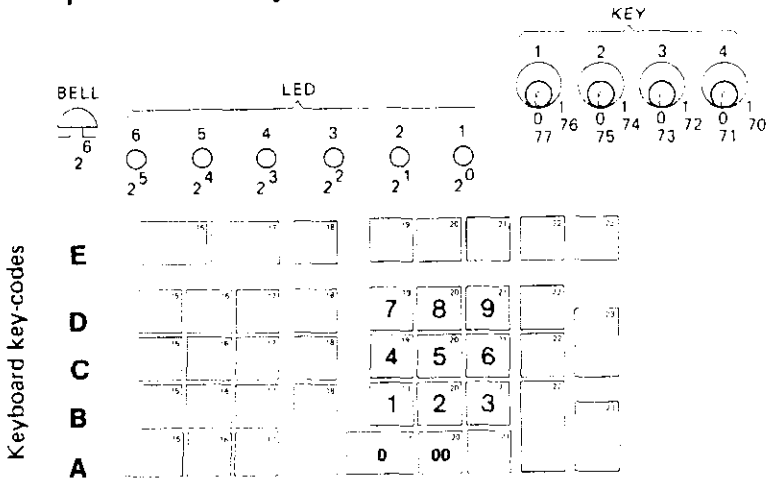
Key-number ◄───────► key-code list

col / row	0	1	2	3	4	5	6	7
0		A19					E15	Key 4 ➔ 1
1	B15	B19					E17	Key 4 ➔ 0
2	B16	B20					E18	Key 3 ➔ 1
3	B17	B21					E19	Key 3 ➔ 0
4	C15	C19					E20	Key 2 ➔ 1
5	C16	C20					E21	Key 2 ➔ 0
6	C17	C21					E22	Key 1 ➔ 1
7	D15	D19					E23	Key 1 ➔ 0
8	D16	D20						
9	D17	D21						DUMMY
A	A16	A20						
B	A17	A21						DUMMY
C	A18	A22						A15 ➔ 1
D	C18	C22						A15 ➔ 0
E	D18	D22						
F	A23	D23						

Bit
1
2
3 } = row
4
5
6 } = column
7
8 = even parity

Key 4 = rightmost keylock
1 = leftmost keylock
➔ 1 = pressed, operated
➔ 0 = released
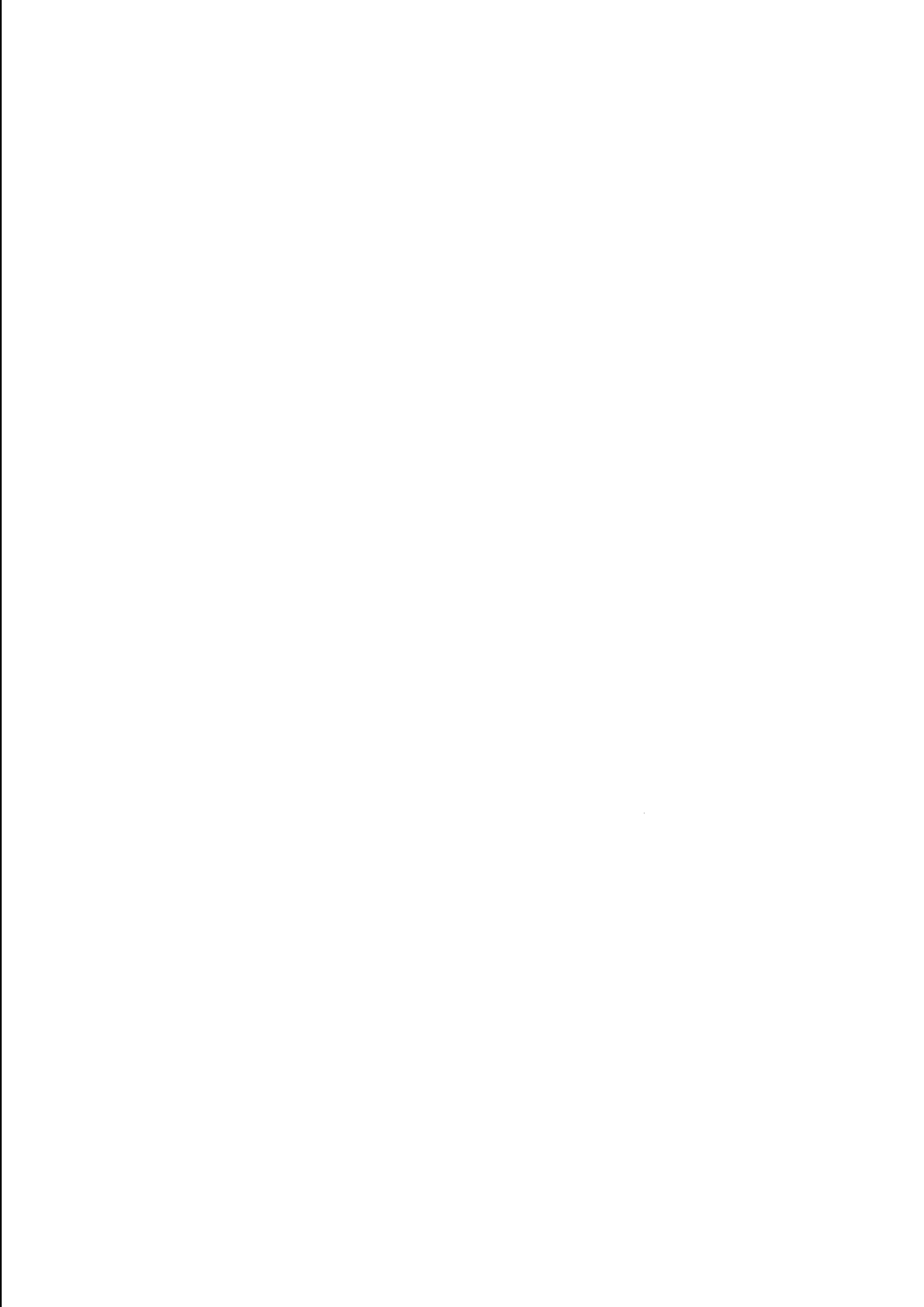
Philips PTS 6272 Keyboard Alphanumeric
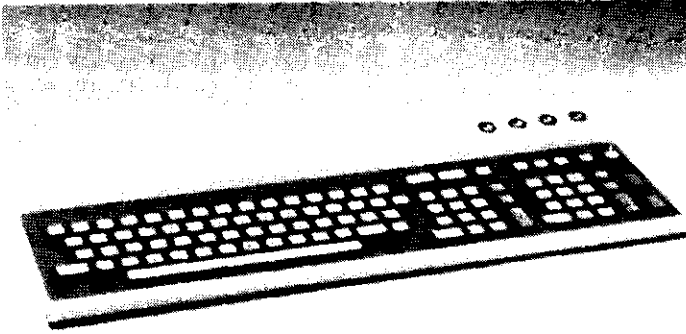
INTRODUCTION AND APPLICATION

The Philips PTS 6272 Keyboard Aphanumeric is an input/output device comprising two main parts:

- an input part
  a keyboard with a keylock module

- an output part
  a lamp panel with 6 LED lamps and a bell

The keyboard consists of

- an alpha part similar to a normal typewriter with shift function and control function realized in software

- a numeric/function (control) part comprising a numeric pad and a group of function (control) keys.

The Philips PTS 6272 is intended to be used for

- Data input
- Control of functions
- Program input and control of program
- Guiding the operator via a lamp panel

which makes the keyboard very well suited for all kinds of terminal use, at the counter as well as in the back office.

The extremely low profile of the Philips PTS 6272 Keyboard Alphanumeric makes it excellent from an ergonomic point of view. It is a stand-alone unit and connected to the Philips PTS 6000 system via a cable, which makes the keyboard fully adjustable to the best ergonomic position.

PRODUCT DESCRIPTION

The Philips PTS 6272 Keyboard Alphanumeric is made of metal and equipped with non-reflecting keytops. The keyboard comprises the following parts:

- an alpha part with 59 keytops with shift function and control function

- a numeric/function part of a 12-key numeric cluster and 28 function (control) keys

- a lamp panel with 6 red LED lamps and an easy exchangeable text panel

- a keylock switch section with up to 4 keylocks with two settings each signed 0 (off) and 1

- a bell

In total the keyboard has 94 keys (including space) besides one CTRL-key, two alpha-shift keys, one alpha-shift lock key and one special-shift key on the numeric part.

In the standard version of the keyboard all keys, besides the keylocks, shift keys and the CTRL key, have repeat function. If a key switch is kept in pressed down position the repetition starts after 1 second with a repeat rate of 10 char/sec. By an easy adjustment the repeat function can be disabled.

The keyboard has a built-in encoder.

The keyboard works with n-key roll-over function, meaning: When depressing a key, the keyboard transmits the corresponding code (data) in serial and in synchronism with "clock". After transmitting the code, the keyboard encoder starts searching for a new key depression, regardless if the old key (or keys) is (are) released or not.

Each key switch position transmits only one code except shift and control (CTRL), which transmits codes in both downwards and upwards direction.

The meaning of each key can be changed by depressing SHIFT- or CTRL-key, just as well as activation of each keylock can change the meaning of a certain keytop position. The actual conversion takes place in software. By means of those software conversion tables, a high degree of flexibility for the customer's application is achieved.

The shift-lock keytop is indicating the activated shift mode with a LED in the keytop. The mode is shifted back

Philips PTS 6272 Keyboard Alphanumeric

to unshifted mode when the shiftlock button is pressed
a second time.

The keylock switch section is designed as a separa-
te module, which is easy to exchange to ease service.
The keylock section remains at site with its proper keys.
The standard version of the keyboard is equipped with
two locks, one operator lock (different keys to all key-
boards) and one standard supervisor lock (the same key
accessible to all keyboards) with two keys to each key-
lock.

Optionally the keylocks can be arranged according
to special requirements. The total number of keylocks
are four and the following versions of the keylocks can
be provided:

Type A	operator lock different keys to all keyboards = all locks different
Type B	standard supervisor lock the same key to all keyboards = all locks alike
Type C	special supervisor lock the same key to all keyboards within a certain project = all locks in a project alike

The keylock switches have two key settings marked 0
and 1. The key can only be removed in key setting "0".
The keylock in operation determines the meaning that
activated keys will get in the same way as for shift and
control functions.

The keylock switches have no influence on the
signal lamps, which are controlled from the program.

The keyboard is power failure proof and gives auto-
matically key position at Power On.

The audiable alarm, bell function, has a duration of
100 ms. The function is controlled from the program.

OPTIONS/USER ADAPTATIONS

— A number of different keytop sets (ISO standard) to the
alpha part of the keyboard has been arranged to suit
available PTS 6000 character generators for printers
and displays

— The function/control keytops in the numeric part of
the keyboard can be specified

— The text panels of the signal lamps and keylocks can
be specified

— In the standard version the keyboard is equipped with
an operator lock and a standard supervisor lock, but
can as an option be equipped with up to four locks in
a required combination

— Connection cable

CONNECTIONS

The Philips PTS 6272 Keyboard Alphanumeric is with a
cable connected through a PTS 6000 standard interface
to a Selector Unit Modular, PTS 6314, local or remote, or
to a Terminal Printer, PTS 6371. The standard cable
length is 3 meters. With a special cable the length can be
up to 10 meters.
Power for the keyboard is supplied from the unit to which
it is connected.

TECHNICAL SUMMARY

Input rate		
Average key-in velocity	10 char/sec	
Max key-in velocity for 3 strokes	200 char/sec	
Operating force	80 g ± 20% (0.7—1.0 Newton)	
Keytop travel	3.5 ± 0.5 mm	
Function	N-key roll-over	
Number of keytops	99	
Key operated switches	up to 4 with two settings each (0 and 1)	
Integrated signal lamps	6 red lamps of LED-type	
Dimensions		
Depth	195 mm	
Height back	43 mm (key not inserted)	
Height front	15 mm (20 mm from table surface to upper part of first keyrow)	
Width	540 mm	
Slope	8°	
Weight	3.0 kg	
Power requirement	+ 5V 0 6A distributed through the signal cable	

Environmental conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70°C
Humidity	20 to 80%	20 to 95%

Philips PTS 6272 Keyboard Alphanumeric
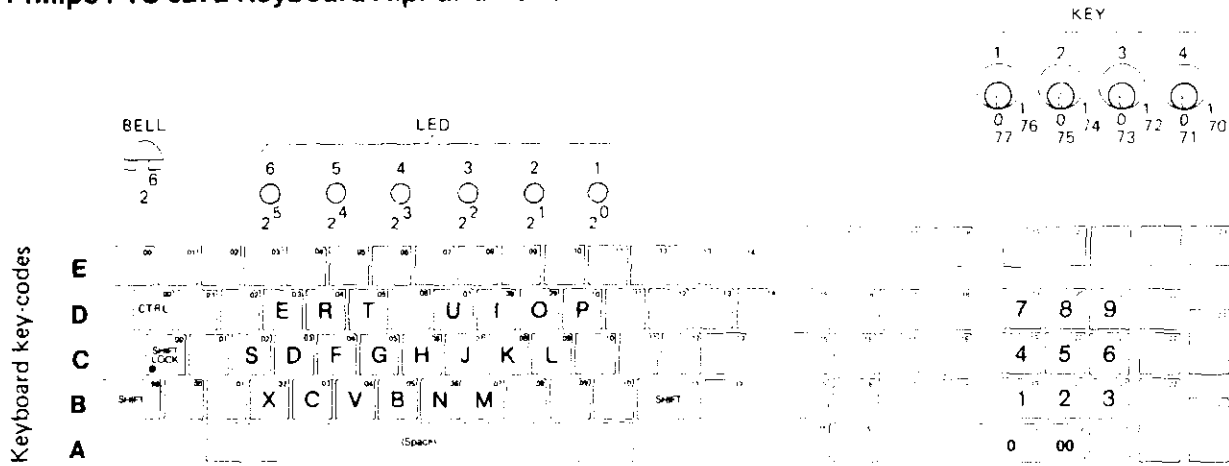
Key-number ◄────────► key-code list

col row	0	1	2	3	4	5	6	7
0		A19	A01	E10	E12	D10	E15	Key 4 ➝ 1
1	B15	B19		E01	C01	D01	E17	Key 4 ➝ 0
2	B16	B20		E02	B05	D04	E18	Key 3 ➝ 1
3	B17	B21		E03	B03	C02	E19	Key 3 ➝ 0
4	C15	C19		E04	C03	D05	E20	Key 2 ➝ 1
5	C16	C20		E05	D03	D07	E21	Key 2 ➝ 0
6	C17	C21		E06	C04	B04	E22	Key 1 ➝ 1
7	D15	D19	C12	E07	C05	D02	E23	Key 1 ➝ 0
8	D16	D20	E00	E08	C06	B02		alpha SHIFT ➝ 1
9	D17	D21	B00	E09	D08	D06		alpha SHIFT ➝ 0
A	A16	A20		B12	C07	B01		CTRL ➝ 1
B	A17	A21	E11	C13	C08	C11		CTRL ➝ 0
C	A18	A22	B08	E13	C09	C10		num SHIFT ➝ 1 = A 15
D	C18	C22	B10	D13	B07	D11		num SHIFT ➝ 0 = A 15
E	D18	D22	B09	D14	B06	D12		
F	A23	D23		E14	D09			

Bit 1 ⎫
   2 ⎬
   3 ⎬ = row
   4 ⎭
   5 ⎫
   6 ⎬ = column
   7 ⎭
   8 = even parity

Key 4 = rightmost keylock
    1 = leftmost keylock
➝ 1 = pressed, operated
➝ 0 = released

Philips PTS 6261 Badge Card Reader
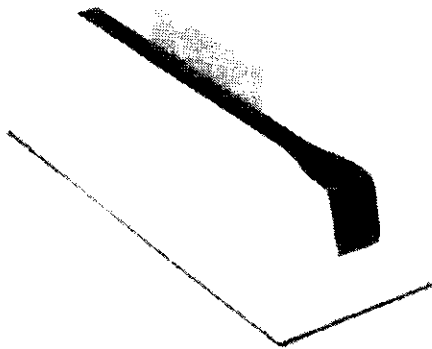
INTRODUCTION AND APPLICATION

The Philips PTS 6261 Badge Card Reader is a read-only device for reading of track 2 (ABA) from magnetic stripes on credit cards according to ISO standard.

The reader is intended to be used for operator and client identification where an increase in velocity and security is desired.

To the Badge Card Reader (BCR) a stand-alone PIN-keyboard, for entering of PIN-numbers, can be connected (PIN = Personal Identification Number).

The Philips PTS 6261 Badge Card Reader is a stand-alone desk top unit and connected to the Philips PTS 6000 system via a cable, which makes it fully adjustable to the best ergonomic position.

PRODUCT DESCRIPTION

The reader has a read slot where the card is moved by hand. The unit can read track 2 (ABA) according to ISO-standards ISO 2894 and ISO 3554.

If in an application the card shall remain in the reader during operation of the terminal an indicator and a "stopper" is available, which is placed in the slot and is put in stop/no stop position by an easy adjustment with a screw-driver.

OPTIONS/USER ADAPTATION
— connection cable (see "Connections").

CONNECTIONS

The Philips PTS 6261 Badge Card Reader is connected with a cable through a PTS 6000 standard interface to a Selector Unit Modular, PTS 6314 local or remote, or to a Terminal Printer, PTS 6371. The standard cable length is 3 m. With a special cable the length can be up to 10 meters.

Power for the reader is obtained from the unit to which it is connected.

To the reader a PIN-keyboard can be connected via a fine cable of 3 m length. The PIN-keyboard is completely controlled from the reader.

TECHNICAL SUMMARY

Card to be used	Credit Card ISO-standard ISO2894, ISO3554
Read	Track 2 (ABA)
Packing density	3.0 bpmm (75 bpi) (ISO)
Read speed	5—40 inch/sec
Dimensions	
depth	220 mm
height	60 mm
width	90 mm
weight	2 kg appr.
Power requirements	+ 5V max 0.3 A —12V max 0.05 A distributed through the signal cable

Environmental conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70 °C
Humidity	20 to 80%	20 to 95%
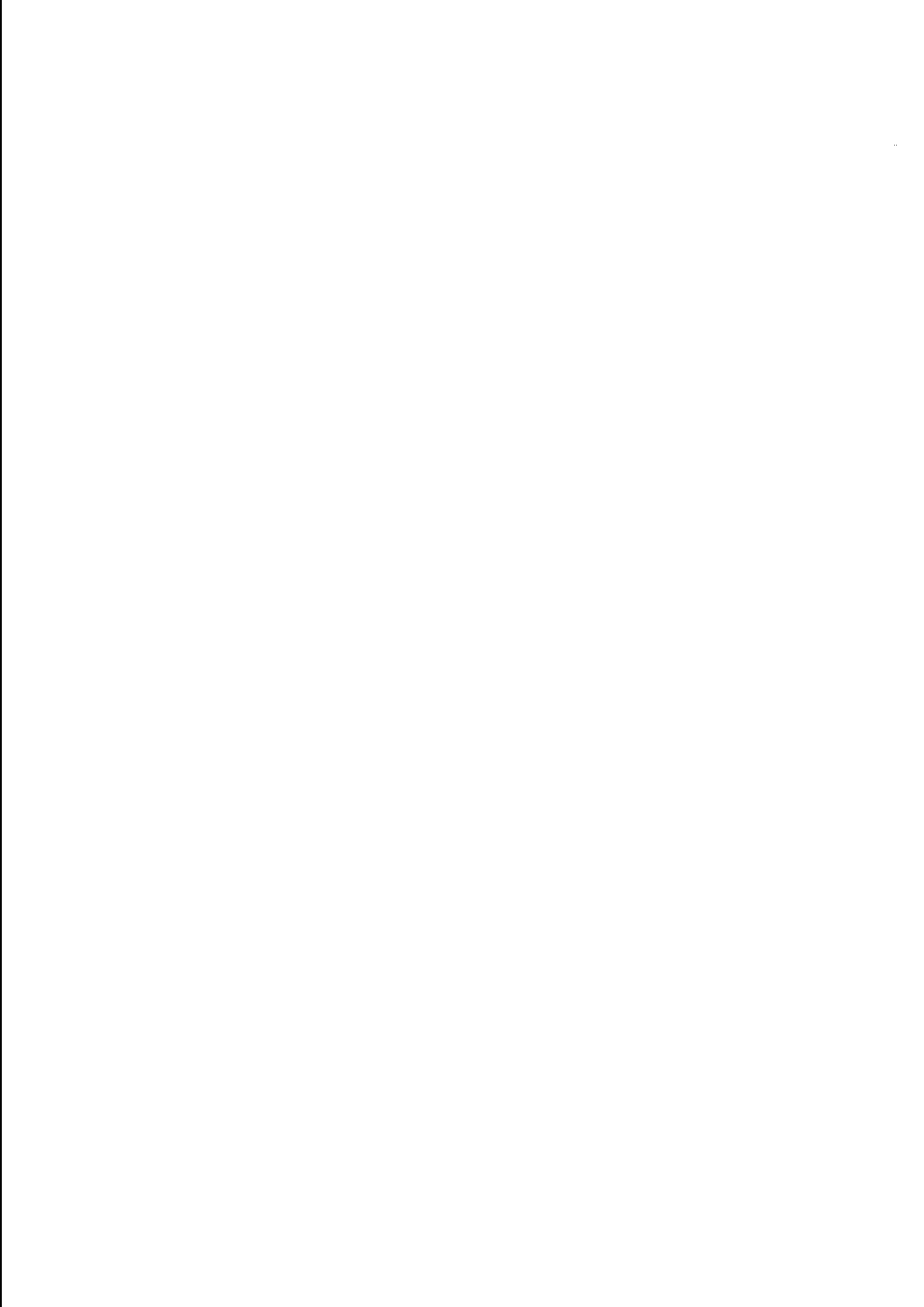
Philips PTS 6266 Magnetic Stripe Unit

INTRODUCTION AND APPLICATION

The Philips PTS 6266 Magnetic Stripe Unit is intended for use in Philips PTS 6000 terminal stations. The unit will read and write on magnetic stripes. The stripe can be the magnetic stripe on a credit card or a selfadhesive magnetic tape placed on a passbook cover. The unit will facilitate input of client identification and transaction data. At passbook transactions the magnetic label is used for storing account number, balance and the last row printed in the passbook. The information will be read and updated at every transaction.

From credit cards the tracks 2 and 3 can be read and track 3 can be written.

To the Magnetic Stripe Unit (MSU) a stand alone PIN-Keyboard for entering of PIN-numbers can be connected (PIN = Personal Identification Number).

The Philips PTS 6266 Magnetic Stripe Unit is a stand alone desk top unit and connected to the Philips PTS 6000 system via a cable, which makes the unit fully adjustable to the best ergonomic position.

PRODUCT DESCRIPTION
The main parts are
- a read/write slot where the documents are inserted.
- a signalling lamp showing when the unit is busy and the documents must not be removed.

Read function
The unit can read track 2 or track 3 (one at a time) according to ISO-standard for reading of magnetic stripes. Selection of track 2 or track 3 is made by software. After positioning of the document a motor drives the read/write mechanism along the card/passbook.

Write function
Writing track 3 on the stripe is made with the motor driven read/write head. A read-after-write check is performed (read and write is made in separate passes).

Signal lamp
A red signal lamp is provided which is lit during the read and/or write operation. If the document by accident is removed during read or write operation, the lamp will remain lit and a message to the operator can be given on the printer or the display.

OPTIONS/USER ADAPTATIONS
— Connection cable (see "Connections").

CONNECTIONS
The Philips PTS 6266 Magnetic Stripe Unit is with a cable connected through a PTS 6000 standard interface to a Selector Unit Modular. PTS 6314 local or remote, or to a Terminal Printer PTS 6371. The standard cable length is 3 m. With a special cable the length can be up to 10 meters.

Power for the Magnetic Stripe Unit is obtained from the separate power module. PTS 6431 Power Supply Unit. The PTS 6266 MSU is connected to the PTS 6431 PSU via a standard cable of 3 m length.

To the Magnetic Stripe Unit a PIN-keyboard can be connected via a fine cable of 3 m length. The PIN keyboard is completely controlled from the MSU.
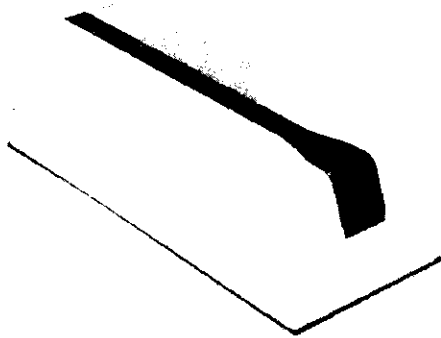
Philips PTS 6266 Magnetic Stripe Unit

TECHNICAL SUMMARY

Document to be used	Passbooks. max thickness 3 mm with a magnetic stripe located in accordance with DIN 32744. The characteristics of the magnetic material shall conform to the specifications contained in ISO 3554.
	Credit card. ISO-standard ISO2894. ISO 3554. DIS 4909 ISO/TC68/SCI-N33
Read	track 2 and 3
Write	track 3
Packing density track 2	3.0 bpmm (75 bpi) (ISO)
Packing density track 3	8.3 bpmm (210 bpi) (ISO)
Read/write speed	200 mm/s
Return speed	200 mm/s
Memory for write/read information	107 characters
Time to read track 3 with 50 characters	About 0.4 sec
Time to write track 3 with 30 characters	About 0.6 sec

Dimensions
Depth	160 mm
Height	120 mm
Width	280 mm
Weight	5 kg

Power required from power supply PTS 6431	+ 5V 0.7 A
	—12V 0.015 A
	+ 24V 0.25 A

Environmental
conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70°C
Humidity	20 to 80%	20 to 95%

Philips PTS 6262 Badge Card Reader

INTRODUCTION AND APPLICATION

The Philips 6262 Badge Card Reader is a read-only device for reading of track 2 and 3 from magnetic stripes on credit cards according to ISO standard.

The reader is intended to be used for operator and client identification where an increase in velocity and security is desired.

To the Badge Card Reader (BCR) a stand-alone PIN-keyboard, for entering of PIN-numbers, can be connected. (PIN = Personal Identification Number).

The Philips PTS 6262 Badge Card Reader is a stand-alone desk top unit and connected to the Philips PTS 6000 system via a cable, which makes it fully adjustable to the best ergonomic position.

PRODUCT DESCRIPTION

The reader has a read slot where the card is moved by hand. The unit can read track 2 and 3 according to ISO-standards ISO 2894 and ISO 3554. The selection between track 2 and 3 is program controlled; one command for reading of track 2 and one command for reading of track 3.

If in an application the card shall remain in the reader during operation of the work station a sensor and a "stop-per" is available, which is placed in the slot and is put in stop/no stop position by an easy adjustment with a screw-driver.

OPTIONS/USER ADAPTATIONS

Different connection cables are used depending on to which work station main module the PTS 6262 BCR shall be connected.

CONFIGURATION

The Philips PTS 6262 Badge Card Reader is a work station module, which is cable connected to a work station main module. The main module carries the communications-module. The main module carries the communications-module and power distribution functions for the connected in-modules. The connection is via the PTS 6000 standard in-terface, the so called Short Distance Interface (SDI). The standard cable length is 3 meters. With a special cable the length can be up to 10 meters.

To the reader a PIN-keyboard can be connected via a fine cable of 3 meters length. The PIN-keyboard is completely controlled from the reader.

TECHNICAL SUMMARY

Card to be used	Credit Card ISO-standard ISO2894. ISO3554
Read	Track 2 and 3
Packing density	75—210 bpi Track 2 75 bpi Track 3 210 bpi
Read speed	5—25 inch/sec
Dimensions depth height width weight	220 mm 60 mm 90 mm 2 kg appr.
Power requirements	+ 5V max 0.4 A — 12V max 0.05 A distributed through the signal cable

Environmental conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70°C
Humidity	20 to 80%	20 to 95%