ABB-Welcome

Telephone gateway
83350-500

ABB

ABB-Welcome

1 Safety

Warning

Electric voltage!

Risk of death and fire due to electric voltage of 230 V.
– Work on the 230V supply system may only be performed by authorised electricians!
– Disconnect the mains power supply prior to installation and/or disassembly!

2 Environment

Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.
– The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

2.1 Disposal

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2002/96/EC WEEE and 2002/95/EC RoHS)

(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)

3   Technical data

— 4 —

General	
Single-wire clamps	2 x 0,28 mm² – 2 x 0,75 mm²;
Fine-wire clamps	2 x 0,28 mm² – 2 x 0,75 mm²;
Telephone line clamps	0.2 mm²-1,5 mm²
Bus voltage	28 V- ±2 V
Size	4 TE
Protection	IP20
Operating temperature	-25 °C – +55 °C
Size	90 x 72 x 65 mm

4   General function

The 83350 Telephone gateway is part of the ABB-Welcome door communication system and operates exclusively with components from this system.
The product serves for connecting a telephone system to the ABB-Welcome system, so that the connected telephones will act as audio Indoor stations.

To use the Telephone gateway, it is necessary to configure the device as an analogue subscriber of your telephone system.

4.1   Glossary

1. **Default phone number**: when Default phone number is activated,call for all Indoor stations will be redirected to this Default phone number.
2. **Primary and Secondary phone number**: when Primary or Secondary phone number is activated for an Indoor station, calls for this Indoor station will be redirected to this Primary or Secondary phone number. It is possible to toggle between these two numbers.
3. **Direct-accept**: When this function is activated, a user can answer a door call directly by picking up the handset. If deactivated, the user has to press the keys [1] [#] after picking up the handset. If other Indoor stations than the Telephone gateway itself are installed in an apartment, the direct accept function has to be deactivated.
4. **Admin PIN**: this PIN is used as an administrator password to access the programming mode of the Telephone gateway where the Default phone number, Direct-accept feature etc, can be set. It's suggested that only the administrator to know this PIN.
5. **Master PIN**: this PIN is used to activate/deactivate the Default phone number for all Indoor stations. It's suggested that e.g. the receptionist of a company to know this PIN.
6. **Indoor Station PIN**: this PIN is used as an enduser password to protect your Telephone gateway from misuse or unauthorized access e.g. toggling between Primary and Secondary phone number or calling an Outdoor station to open the door. This PIN has to be activated if this additional security level is required.

Default admin PIN	Default master PIN	Default Indoor station PIN
1234	0000	1111

4.2   Functioning

The Telephone gateway is an analogue subscriber of your telephone system. The device includes a telephone book, in which every Indoor station address (bell button) is linked to up to two telephone numbers (Primary and Secondary number). Additionally a Default phone number can be programmed. When the Default phone number is activated,calls for all Indoor stations will be redirected to this default phone number.
The telephone book can contain internal or external numbers.

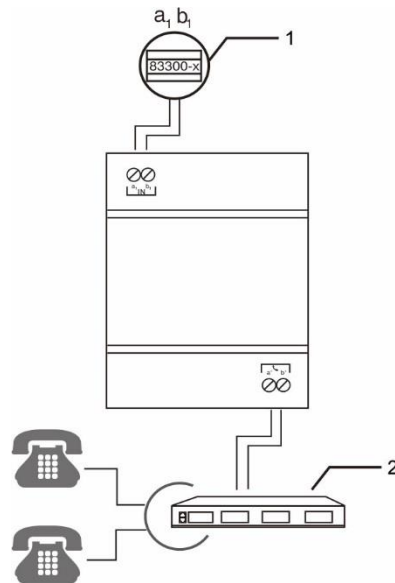| Indoor station address (bell button)	Telephone number 2 (Primary phone number)	Telephone number 3 (Secondary phone number)
01	9764	00493895555
02	0389364860	
03	00493896666	1220
…	…	…

5   Connection

Fig. 1

No.	Function
1	Terminals for ABB-Welcome system
2	Terminals (Telephoneline clamps) for Private Branch Exchange (PBX) in telephone system

	Note
ℹ	The Telephone gateway is always set as master. The related Indoor stations in the same appartment have always to be set as slave (Please refer to the operating manual of the Indoor stations.).

5.1   Integration of the Telephone gateway in your telephone system

The procedure of integrating the Telephone gateway into your system depends on the telephone system and can vary. Please refer to the topic "Integration of analogue subscribers" in the manual of your telephone system.

The integration of the Telephone gateway is succsessfull, if it can be called by other participants and can call others by itself.

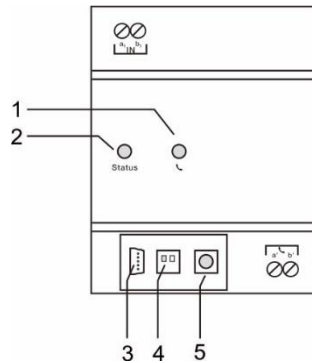|	Note
ℹ	System security **Avoid misuse by intruders and configure your telephone system in a way, that the Telephone gateway can not directly be called from an external telephone. This will prevent unauthorised access of intruders.** If it is necessary to have external access to the Gateway, please activate the Indoor station PIN (See Page 9).

5.2   Device overview

Fig. 2

No.	Function
1	Operation status of connection to PBX ● Connected to PBX (idle or ongoing call) ✕ : a. Ringing
2	Operation status of ABB-Welcome bus ● : Ready for operation. Bus voltage is applied. ✕: a. Receiving data
1+2	✕: Reset to factory defaults ongoing
3	USB port for software update (can be done only in the factory).
4	In pure audio installations the terminal resistor must always be deactivated ('OFF'). In video installations or mixed audio and video installations the terminal resistor must be activated on the last device of a branch ('ON').
5	Long-press 3s to reset the device to factory settings. Both LEDs will flash, if reset function is performed. Below are the original factory settings: Master PIN: 0000 Admin PIN: 1234 Indoor station PIN: 1111 Direct-accept: OFF Default phone number: empty Primary phone number: empty Secondary phone number: empty Call diverted to Default phone number: OFF Indoor station PIN required: OFF

6   Mounting / Installation

	Warning
⚠	**Electric voltage!** Risk of death and fire due to electric voltage of 230 V. – Low-voltage and 230 V cables must not be installed together in a flush-mounted socket! In case of a short-circuit there is the danger of a 230 V load on the low-voltage line.

	Warning
⚠	**Electric voltage!** The upstream fuse must be disconnected when working on the lighting system.

6.1   Requirements for the electrician

	Warning

⚠	**Electric voltage!**
	Install the device only if you have the necessary electrical engineering knowledge and experience.
	• Incorrect installation endangers your life and that of the user of the electrical system.
	• Incorrect installation can cause serious damage to property, e.g. due to fire.
	
	The minimum necessary expert knowledge and requirements for the installation are as follows:
	• Apply the "five safety rules" (DIN VDE 0105, EN 50110):
	    1. Disconnect the power;
	    2. Secure against being reconnected;
	    3. Ensure there is no voltage;
	    4. Connect to earth;
	    5. Cover or barricade adjacent live parts.
	• Use suitable personal protective clothing.
	• Use only suitable tools and measuring devices.
	• Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

6.2   Mounting
The device must only be installed on mounting rails according to DIN EN 50022.

6.3   System security
Avoid misuse by intruders and configure your telephone system in a way, that the Telephone gateway can not directly be called from an external telephone. This will prevent unauthorised access of intruders.
If it is necessary to have external access to the Gateway, please activate the Indoor station PIN (See Page 9).

7   Commissioning

The following components are required to operate the Telephone gateway:
- ABB-Welcome door communication system including the System controller and at least one Outdoor station.
- A PBX with analogue input
- At least one telephone for configuring via DTMF

For the initial startup of the Telephone gateway, a few basic settings need to be made.
Two options are available for commissioning:
1.   Via telephone, connected to the system
2.   Via Internet browser and IP-Gateway 83342-xxx. To configure the Telephone gateway via the IP-Gateway, please see the manual of the IP Gateway.

7.1   Commissioning via telephone

1. Call the Telephone gateway via your PBX

2. Enter Admin PIN

No.	Function	Command	Example or explanation
1	Enter Admin PIN	[*] [*] [*] Admin PIN [#]	The default Admin PIN is 1234

3. If the Admin PIN is correct, the Telephone gateway enters the programming mode and the settings can be done as followed:

No.	Function	Command	Example or explanation
1	Set Default phone number	[7] [3] [6] [*] Default phone number [#]	
2	Add a new Indoor station to phonebook	[2] [4] [7] [*] Indoor station number [#]	The Indoor station number can be 1 (or 01) to 250.
3	Add a range of Indoor stations phone book	[2] [4] [7] [7] [*] Indoor station number 1 [*] Indoor station number 2 [#]	Indoor station number 2 must always be greater than Indoor station number 1.
4	Add or change Primary and Secondary phone number	[2] [*] Indoor station number [*] Primary phone number [*] Secondary phone number [#]	
5	Add or change Primary phone number in the phonebook	[2] [*] Indoor station number [*] Primary phone number [#]	To be used if the user does not use Secondary phone number
6	Activate "Direct-accept" feature	[7] [3] [2] [1] [#]	
7	Deactivate "Direct-accept" feature	[7] [3] [2] [0] [#]	If there are Indoor stations in system, this function should be activated.
8	Set New Admin PIN	[7] [*] [*] [*] New Admin PIN [*] [*] [*] New Admin PIN [#]	
9	Set New Master PIN	[7] [*] [*] New Master PIN [*] [*] + New Master PIN [#]	
10	Activate mandatory usage of Indoor station PIN	[7] [4] [7] [1] [#]	
11	Deactivate mandatory usage of Indoor station PINs	[7] [4] [7] [0] [#]	

12	Set New Indoor station PINs	[*] Indoor station Number [*] [7] [*] New Indoor station PIN [*] New Indoor station PIN [#]	
13	Set Telephone gateway Identifier for programming via IP-Gateway and PC.	[7] [4] [3] [*] Identifier [*] Identifier [#]	Identifier should be an integer from 1 to 99, and has to be unique.
14	Reset to Factory Setting	[7] [3] [7] [8] [*] Admin PIN [#]	

8 Operation

After Programming, users can use a telephone to call the Telephone gateway.

When there is a call-in from Outdoor station, and telephone is in normal standby:

No.	Function	Command	Example or explanation
1	Accept Call-in	[1] [#]	

Commands below can be done via telephone when there is ongoing conversation between Outdoor station and telephone:

No.	Function	Command	Example or explanation
1	Open default lock	[3] [#]	Open default lock of Outdoor station
2	Open the 2nd lock	[2] [#]	Open the 2nd lock of Outdoor station
3	Control Switch actutor	[5] [1] [#] to [5] [199] [#]	

When there is no ongoing conversation between Outdoor station and telephone, user calls the Telephone gateway, then
1. When Call Divert to Default phone number is activated, the telephone will play "Calls are diverted" tone;
2. When Call Divert to Default phone number is deactivatedd, the telephone will play "Calls are not diverted" tone.
3. Settings below can be done via telephone:

No.	Function	Command	Example or explanation
1	Call Outdoor station	[1] [1] [#] to [1] [9] [#] or [1] [#]	[1] [1] [#] to [1] [9] [#] to call a special Outdoor station [1] [#] will call Outdoor station 1
2	Call Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [1] [1] [#] to [1] [9] [#] or [*] Indoor station number [*] Indoor station PIN [*] [1] [#]	
3	Call the last call-in Outdoor station	[1] [0] [#]	
4	Call the last call-in Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [1] [0] [#]	
5	Open the default lock of the specific Outdoor station	[3] [1] [#] to [3] [9] [#]	
6	Open the default lock of the specific Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [3] [1] [#] to [3] [9] [#]	
7	Open the default lock of the last call-in Outdoor station	[3] [0] [#]	
8	Open the default lock of the last call-in Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [3] [0] [#]	
9	Open 2nd lock of the specific Outdoor station	[2] [1] [#] to [2] [9] [#]	
10	Open the 2nd lock of the specific Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [2] [1] [#] to [2] [9] [#]	
11	Open the 2nd lock of the last call-in Outdoor station	[2] [0] [#]	
12	Open the 2nd lock of the last call-in Outdoor station when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [2] [0] [#]	
13	Call Guard unit	[4] [#]	
14	Call Guard unit when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [4] [#]	
15	Control Switch actuator	[5] [1] [#] to [5] [199] [#]	

16	Control Switch actuator when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [5] [1] [#] to [5] [199] [#]	
17	Activate Default phone number	[*] Indoor station number [*] [6] [0] [#]	
18	Activate Default phone number when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [6] [0] [#]	
19	Activate Primary phone number	[*] Indoor station number [*] [6] [1] [#]	
20	Activate Primary phone number when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [6] [1] [#]	
21	Activate Secondary phone number	[*] Indoor station number [*] [6] [2] [#]	
22	Activate Secondary phone number when Indoor station PIN is must	[*] Indoor station number [*] Indoor station PIN [*] [6] [2] [#]	
23	Set new Indoor station PIN	[*] Indoor station number [*] Indoor station PIN [*] [7] [*] New Indoor station PIN [*] New Indoor station PIN [#]	
24	Activate Call Divert to Default phone number	[*] [*] Master PIN [*] [6] [0] [#]	
25	Deactivate Call Divert to Default phone number	[*] [*] Master PIN [*] [6] [9] [#]	

9   Tones for indication

No.	Function	Tones	Explanation
1	Successfull		Confirmation of a successfull operation
2	Not successful		Notification of a not successfull operation
3	Door Call (repeating)		Doorcall waiting (only when direct accept feature is deactivated, because further Indoor stations in same appartment)
4	Call Divert activated (repeating)		Call divert to the default number is activated. Tone is heard after calling the Telephone gateway.
5	Call Divert deactivated (repeating)		Call divert to the default number is deactivated. Tone is heard after calling the Telephone gateway.
6	Programming Mode (repeating)		Telephone gateway is in programming mode

10 Appendix

10.1 Frequently-used commisioning

Use case: One apartment with one telephone + one Telephone gateway.

User uses phone to call Telephone gateway firstly, then

No.	Function	Command	Example or explanation
Step 1	Enter Admin PIN	[*] [*] [*] + Admin PIN + [#]	The default Admin PIN is 1234
Step 2	Set Default phone number	[7] [3] [6] [*] + Default phone number + [#]	
Step 3*	Add a new Indoor station to Telephone gateway phonebook	[2] [4] [7] [*] + Indoor station number + [#]	Indoor station number could be from 001 to 250
Step 4	Set Primary/Secondary phone number	[2] [*] + Indoor station number [*] + Primary phone number + [*] + Secondary phone number + [#]	

10.2 Main commands of operation

When there is a call-in from Outdoor station, and telephone is in normal standby:

No.	Function	Command	Example or explanation
1	Accept Call-in	[1] [#]	

When there is no ongoing conversation between Outdoor station and telephone, user calls the Telephone gateway.

No.	Function	Command	Example or explanation
1	Call Outdoor station	[1] [1] [#] to [1] [9] [#] or [1] [#]	[1] [1] [#] to [1] [9] [#] to call a special Outdoor station [1] [#] will call Outdoor station 1
2	Call Guard unit	[4] [#]	

Commands below can be done via telephone when there is ongoing conversation between Outdoor station and telephone:

No.	Function	Command	Example or explanation
1	Open default lock	[3] [#]	
2	Open the 2nd lock	[2] [#]	
4	Control Switch actutor	[5] [1] [#] to [5] [199] [#]	

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