ACCESS100

Technical Data - common

Supply Voltage:	9…30 VDC
Power consumption :	1.0 W typ.
	2.0 W max.
Operating temperature :	-25 to + 65 C°
Operation frequency :	13.56 MHz

Technical Data – Card type specific

Caution:

Read-/Write ranges are based on ISO-compliant card size!

A. Mifare/ ISO 14443/ ISO15693 Version. Part numbers 10023-…-..

Typical Read-/Write Distances:

Card type	Nonmetallic environment[1]	Metallic environment[2]
Mifare Classic	65 mm	40 mm
Mifare DESFire	27 mm	20 mm
Baltech Chip Card (BCC)	40 mm	30 mm
ISO 15693	80 mm	60 mm
ISO14443 Hmin=1,5 A/m @	21 mm	15 mm

[1] Read-/Write distances are stated in an environment without any electrically conductive material in close proximity to the reader. Read-/Write ranges depend on the card and reader variations.

[2] Read-/Write distances are stated in an electrically conductive material environment in close proximity to the reader. Read-/Write ranges depend on the card and the reader variations.

B. Legic Advant / Legic prime Version. Part numbers 10087-…-..

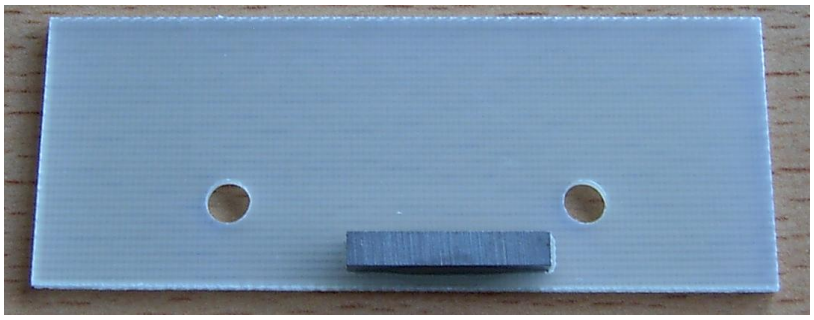
Typical Read-/Write Distances:

Card type	**Nonmetallic environment**[1]	**Metallic environment**[2]
Prime	70 mm	tbd
Advant ISO 15693	90 mm	tbd
Advant ISO 14443	60 mm	tbd
JCOP ISO 14443 A	40 mm	tbd
ISO14443 Hmin=1,5 A/m @	21 mm	tbd

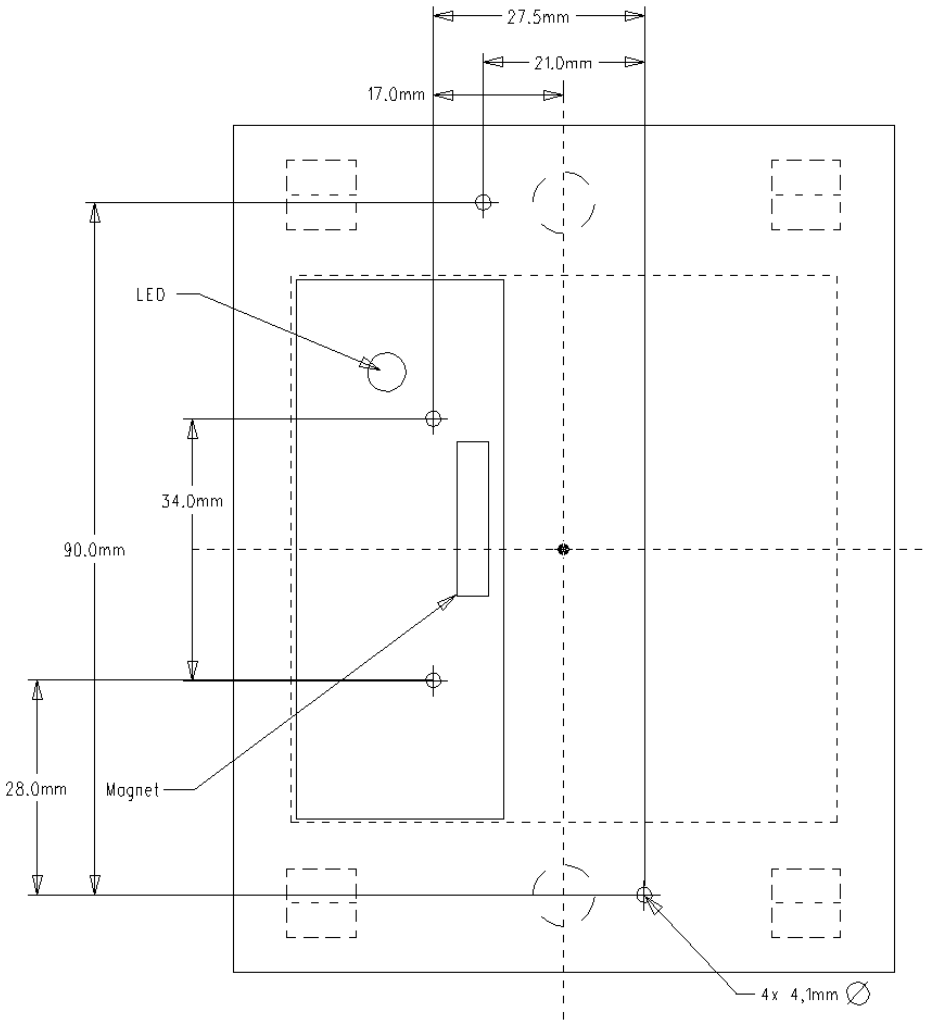
Mounting

When mounting the reader in metallic environment: In order to avoid significant degradation of the reading-/writing performance a distance to electrical conductive material of at least 20 mm is required!

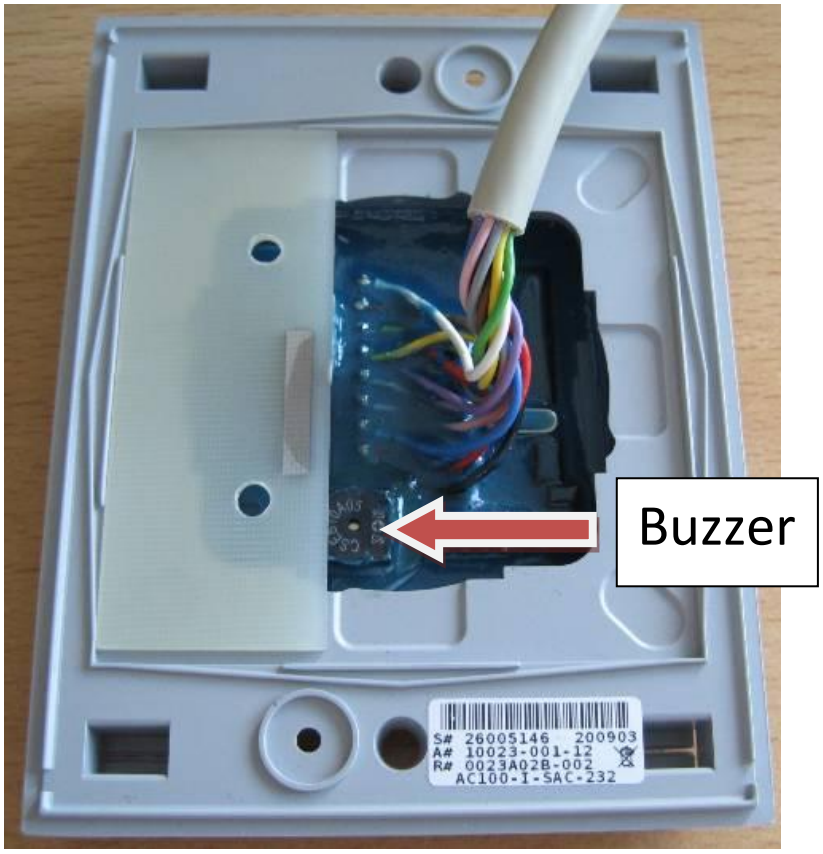
The following drawings/photos illustrate the correct assembly of the magnet plate that is delivered together with the reader. The correct position of the magnet ensures the tamper alarm to close definitely when mounted at the wall.



Magnet plate



Position of magnet plate (Top reader view)

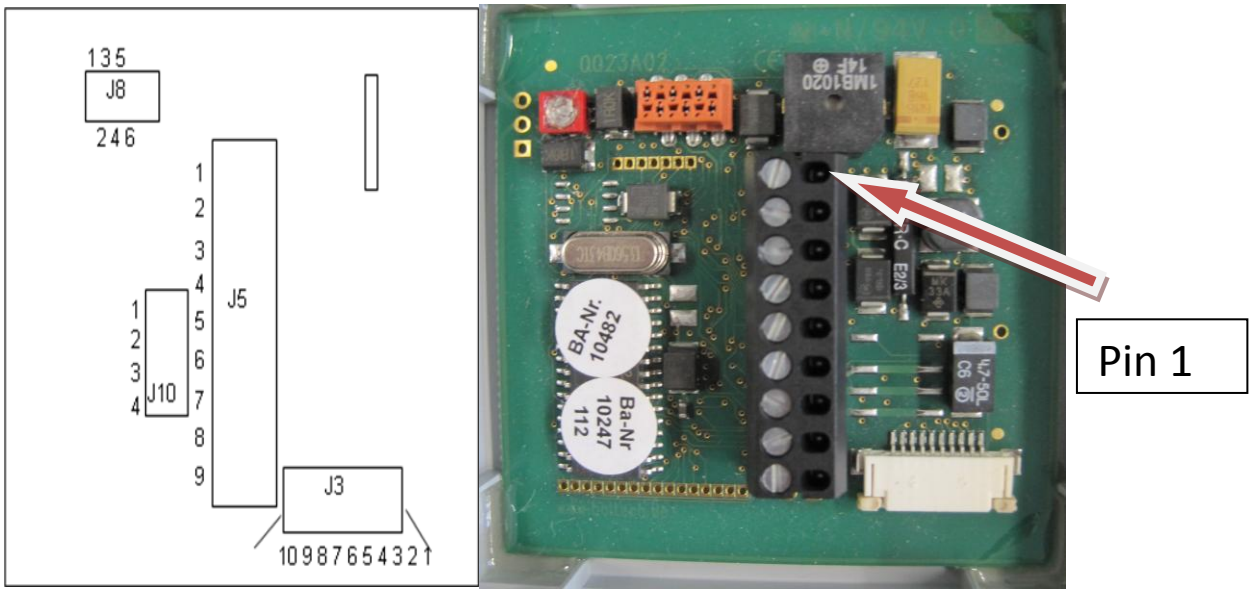


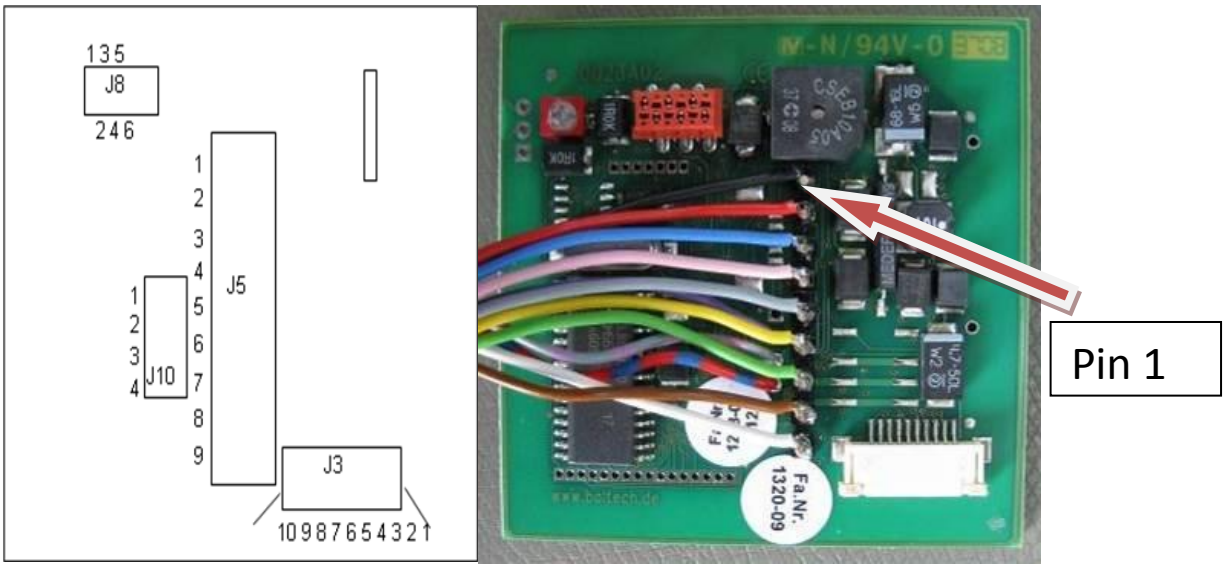
Position of magnet plate (Bottom reader view)

Bus Addressing

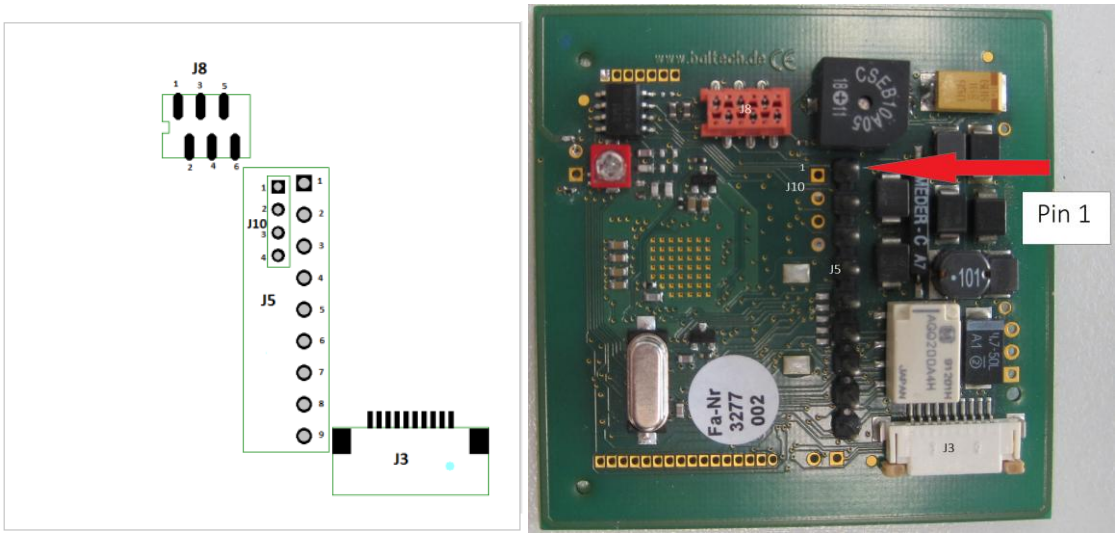
If the ACCESS100 reader is intended to operate with a bus protocol like BRP-Net or Snet, you have to setup a valid bus address to activate and communicate via this protocol. For this purpose Baltech provides so-called address cards (AdrCard).
Refer to the documentation “AdrCard - Address Setup for Bus Protocols” for correct handling. Please observe that address setup is only possible as long as the reader is **not** mounted to the wall (tamper alarm must be activated).

Pinning





Rear View Reader A: Mifare/ISO 14443 / ISO 15693



Rear View Reader B: Legic Advant/ Legic Prime

J5: Screw-Clamp, pluggable, 9-Pole. Alternative, potted devices: pigtail cable 1m length.			
		RS485 / Wiegand	
Pin#	Color	Name	Description
1	Black	GND	Power and Signal GND
2	Red	+VIN	Supply Voltage (9…30 VDC)
3	Blue	Mult_A: 485/WIE_D0	RS485 A or Wiegand data 0, depending on configuration
4	Pink	Mult_B: 485/WIE_D1	RS485 B or Wiegand data 1, depending on configuration
5	Grey	LEDGN	Wiegand: LED-control input
6	Yellow	LEDRD	Wiegand: LED-control input
7	Green	REL_WC	Relais working contact (not installed for ACC-Versions)
8	Brown	REL_NO	Relais normal open (not installed for ACC-Versions)
9	White	REL_NC	Relais normal closed. (Special option, available by ordering from factory: Wiegand-Interface Buzzer control input

RS485 interface termination resistor: 120 Ohms, to be connected between Mult_A and Mult_B at both **ends** of the RS485 bus lane cable. Stub line length 1 m max.

J10: Through holes, 4-Pole			
		RS232/CMOS	
Pin#	Color	Name	Description
1		+5V	Power
2	Magenta	GND	GND
3	Grey-pink	RX	RS232 / CMOS
4	Red-blue	TX	RS232 / CMOS

J8: Service Interface AMP MicroMatch 6-Pole			
Pin#	Name	Physical	Description
1	TX	RS232 / CMOS	Reader transmit
2	RX	RS232 / CMOS	Reader receive
3	GND	GND	
4	+5V	5V 5%	5VDC supply reader (if connected, the +VIN from J5 must not be connected)
5	NC	RS232 / CMOS	Do not Connect!
6	NC	RS232 / CMOS	Do not Connect!