easyE-i
the intelligent actuator
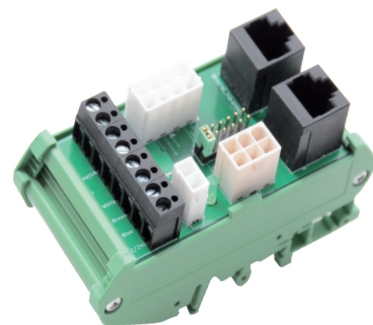
Bansbach
easylift

i-Connect Box

The i-Connect Box and i-Connect Box DIN are accessories,
which are easy to use as a plug & play solution when connecting easyE-i-line actuator(s).

The **i-Connect Box** takes up minimal space and can be easily installed / mounted
on various surfaces by using the integrated mounting holes.

The **i-Connect Box DIN** is meant for more industrial use because it is mounted on
standard DIN rail with brackets and thereby giving easy access to the connections.
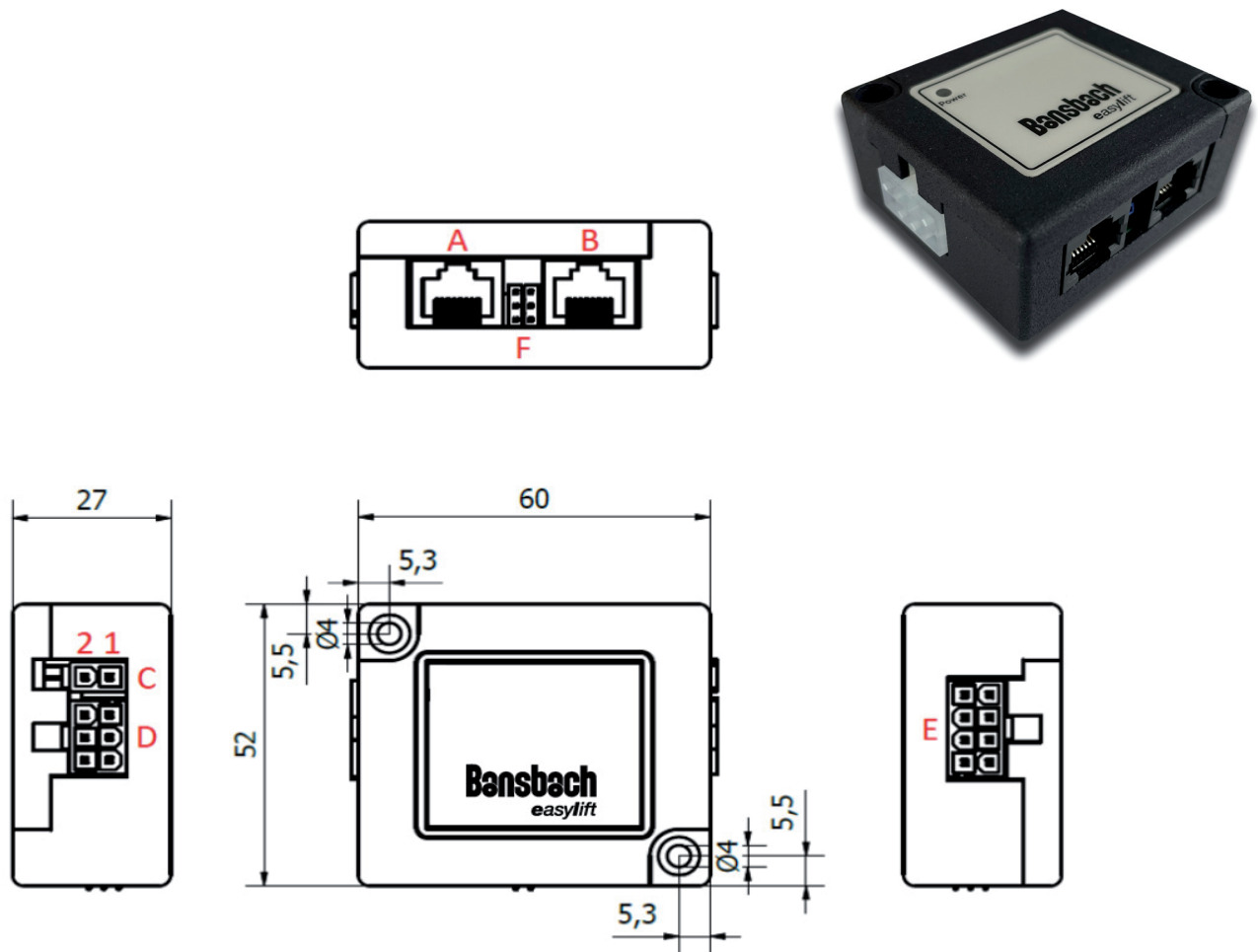

i-Connect Box

i-Connect Box DIN

All solutions have identical sockets and a LED that indicate when the external power supply is on.
Furthermore they are compatible with our easyE-i-line series for connection of:

- i-Connect Box for easyE-i-line actuators with Molex minifit JR
- i-Connect Box DIN rail for easyE-i-line actuators with Molex
  minift JR or open ends using the screw terminals
- USB programming cable for easyE-i-line actuators
- Power supply
- Port for routing to the next i-Connect Box
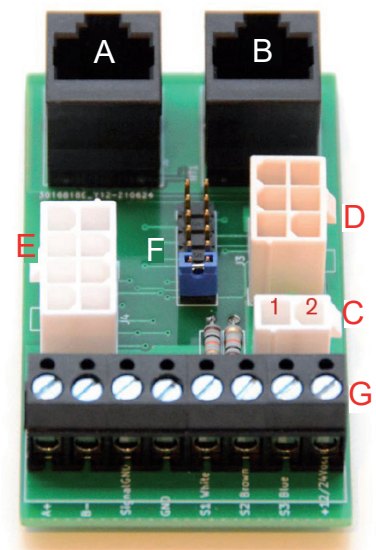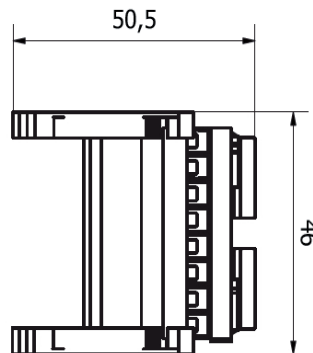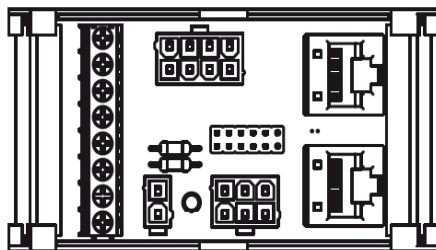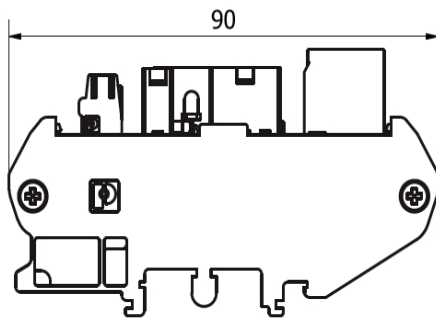- Bansbach handset (simple)

i-Connect Box

i-Connect Box have identical dimensions. Dimensions in [mm]

A: RJ45 type, connection for the programming cable

B: RJ45 type, conneciton for routing to the next i-Connect Box with a cable (routing sequence is B to A ... B to A)

C: 2 pin Molex minift type, power supply input. Pin 1: +12/24VDC, Pin 2: GND

D: 6 pin Molex minift type, connection for a Bansbach handset (simple)

E: 8 pin Molex minifit type, connection for the easyE-i-line actuator

F: Jumper settings, see page 4

i-Connect Box DIN

90

50,5

46

A   B

E   F   D

1 2 C

G

i-Connect Box have identical dimensions. Dimensions in [mm]

A: RJ45 type, connection for the programming cable

B: RJ45 type, conneciton for routing to the next i-Connect Box with a cable
(routing sequence is B to A ... B to A)

C: 2 pin Molex minift type, power supply input. Pin 1: +12/24VDC, Pin 2: GND

D: 6 pin Molex minift type, connection for a Bansbach handset (simple)

E: 8 pin Molex minifit type, connection for the easyE-i-line actuator

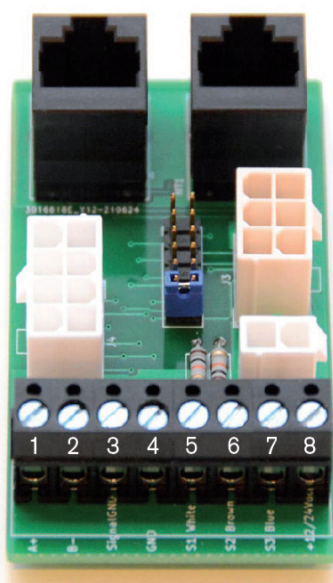**F:**   Jumper settings, see page 4

G: Screw terminals for easyE-i-line actuators with open ends wire and connection for input
and output signals, see page 4

i-Connect Box DIN Screw terminal color coding

No.	Color	Function
1	Yellow	RS485 RX +A
2	Green	RS485 TX -B
3	Orange	*
4	Black	GND Power
5	White	*
6	Brown	*
7	Blue	*
8	Red	Power (12 or 24 V)

The *indicates that function depends on the actuator configuration.
See scheme below

Please notice, the indicated terminal digits are only as a visual presentation
for the installation guide and not on the physical product.

Type	SDB	SDH	SDP	SPP	SBS	MDO
Description	Single/Direction/Basic	Single/Direction/Hall	Single/Direction/Position	Single/Position/Position	Single/Bus/Status	Multiple/Direction/override
Key letter	A	B	C	D	E	F
No/Color						
1 Yellow	RS485 TX +A	RS485 TX +A	RS485 TX +A	RS485 TX +A	RS485 TX +A	RS485 TX +A
2 Green	RS485 RX -B	RS485 RX -B	RS485 RX -B	RS485 RX -B	RS485 RX -B	RS485 RX -B
3 Orange	GND Signal	Hall B output	GND Signal	GND Signal	GND Signal	GND Signal
4 Black	GND Power	GND Power	GND Power	GND Power	GND Power	GND Power
5 White	Not used	Hall A output	Position output	5-10 V reference	Not used	Override
6 Brown	Dir. IN	Dir. IN	Dir. IN	Pos ok/stop input	Error out	Dir. IN
7 Blue	Dir. OUT	Dir. OUT	Dir. OUT	Position input	Stop input	Dir. OUT
8 Red	Power 12/24 V	Power 12/24 V	Power 12/24 V	Power 12/24 V	Power 12/24 V	Power 12/24 V
Jumper settings i-Connect-Box						
Jumper settings i-Connect-Box DIN						

Numbers refer to label on screw terminal, not pin numbers in the 8-pin Molex minift plug.
Jumper is closest to screwterminal on i-Connect Box DIN.
i-Connect Box is delivered with 2 jumpers, but always place jumper(s) according to the above overview.

Single or multiple (MDO)

EasyE-i-line actuators with key letters A-B-C-D-E are all „Single" actuators, meaning that you cannot synchronize multiple actuators. However, it is possible to address up to 10 „single" actuators in the same system.

This limitation is caused by limited bandwidth, but with additional equipment the theoretical limit is increased to addressing up to 128 easyE-i-line actuators in the same system.
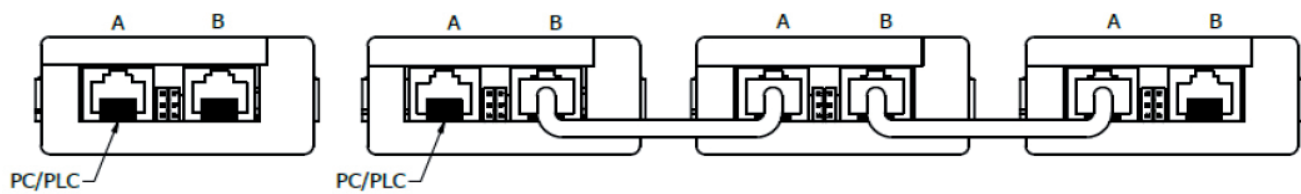
All configurations of easyE-i-line actuators (A-E) have different options as displayed in the overview on page 4. EasyE-i-line actuators (A-E) can be connected to the i-Connect Box / i-Connect Box DIN (one to one) as a single actuator, or multiple actuators if routed with i-Connect Boxes cables.
Note routing sequence is B to A ... B to A ... B to A (also called daisychain).

Each easyE-i-line actuator has it own address 1 to 128 (default is 8) and Modbus communicate with all addresses.

Handsets or other, such as potentiometers, dry contacts or analog PLC outputs, must be connected to every easyE-i-line actuator individually.

Configurations: A-B-C-D-E

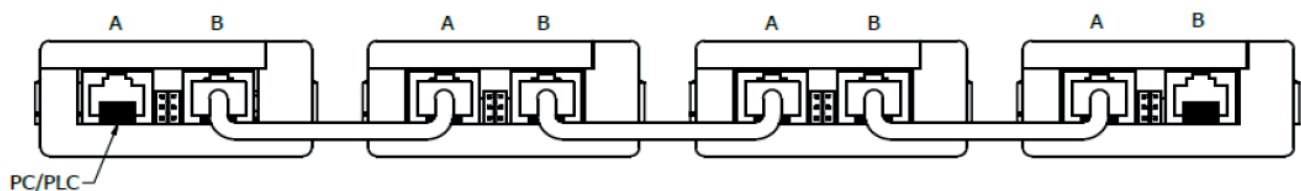EasyE-i-line actuators with the key letter F are always multiple (minimum 2 and maximum 8 pcs). F-configuration easyE-i-line actuators are for synchronous use only. It is possible to override the synchronous function and run a single easyE-i-line actuator only. The override function is activated by pulling pin 7 (in 8-pin Molex) or pin 5 (white wire in screw terminal) down. It is now possible to run this actuator alone using the handset connected to the corresponding i-Connect Box DIN

Each easyE-i-line actuator has its own address from 200 to 207. Address 200 is always the Master. If nothing else is agreed when ordering the default address is 200. Up to 8 icons (but minimum 2) may run in the same system, but only the „Master" (address 200) is controlled by a handset or other, such as, third party dry contacts or PLC.

The „Master" uses and occupies Modbus for communication with the „Slaves". Hence, controlling the MDO

MDO master addr. 200   Configurations: F

Products and accessories - incl. Part No.

i-Connect Box
EEL-I-CONNECT
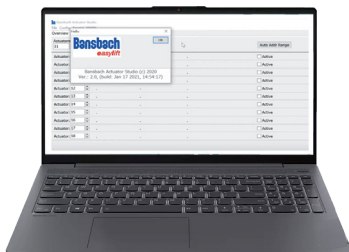
i-Connect Box DIN
EEL-I-CONNECT-DIN

Handset
EEL-HS3-A-MOL-A

Power supply 24VDC/2A (EU/UK/US/AU)
EEL-I-PW-24V-2A

Programming cable (USB-RS485)
EEL-I-PROGUSB

Bansbach software BAS
Bansbach Actuator Studio

Cable
EEL-I-RJ45-0.25 / -1.0 / -5.0 / -10 / -20 (length)

Recommendations and warnings

■ Attention! EasyE-i-line actuators and the i-connect Box / DIN have no fuses in them.
   Use an external fuse according to application.

■ Please ensure that the power supply is capable of supplying sufficient current –
   otherwise the actuator may be damaged.

■ Double-check correct polarity of the power supply. If connected wrong the actuator will be damaged.

■ Connect the icon actuator to a power supply before connecting the USB programming cable.

Subject to technical changes and printing mistakes.