

Pallet control system

System information



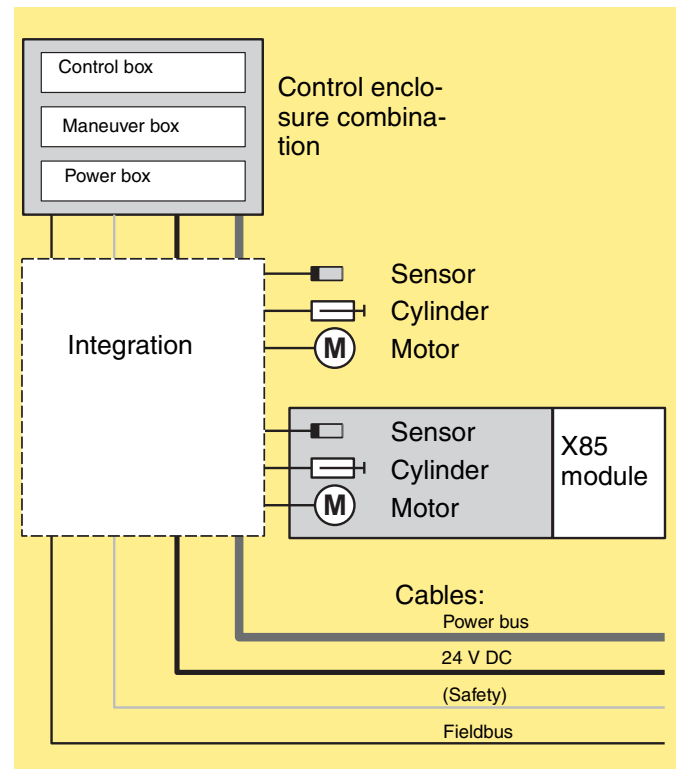
General system architecture

The “Pallet Controls” concept provides standardized control enclosures for distributed line control.

Enclosure groups

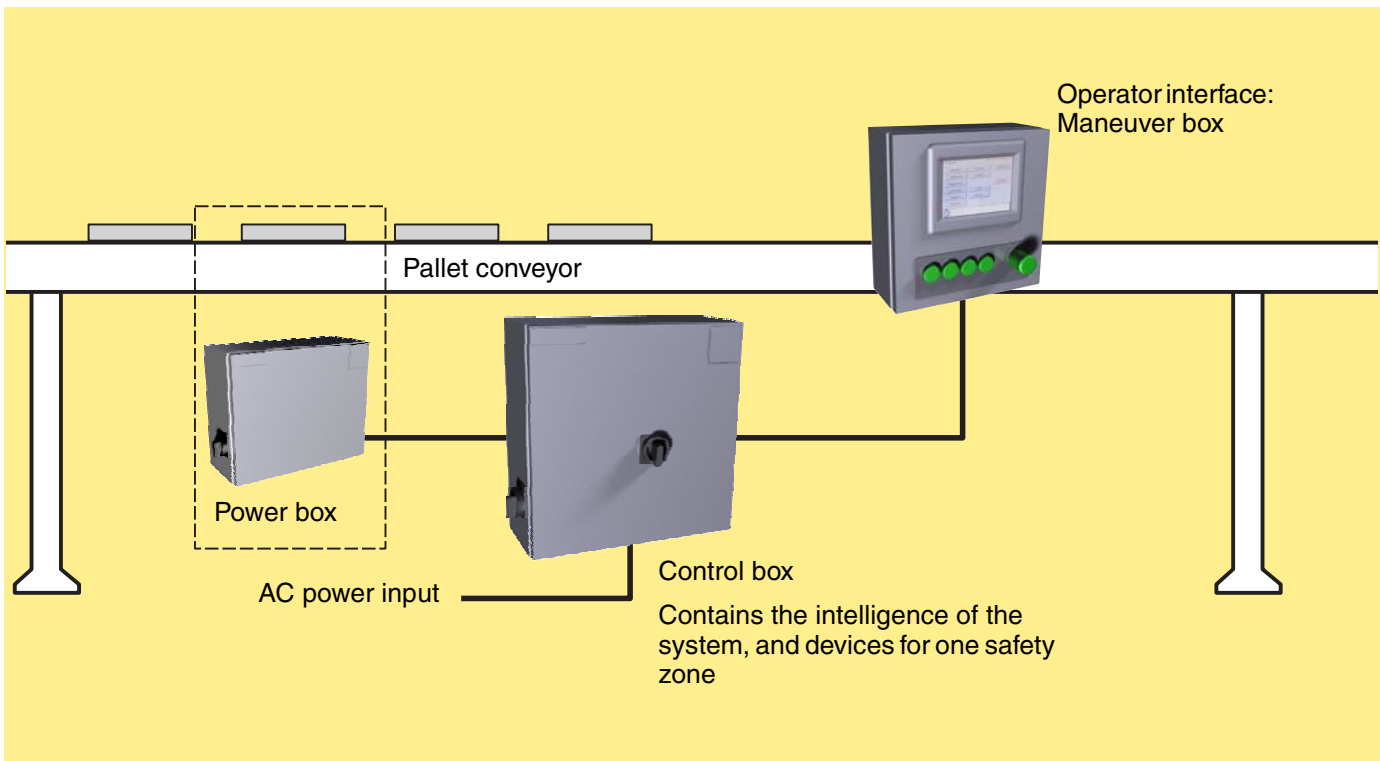
- Control box
- Power box
- Maneuver box

Distributed line control means that all application initiators and actuators such as sensors, pneumatic cylinders and motors are controlled through distributed fieldbus slaves.



General system architecture

Typical control system layout



A typical pallet system may include control enclosures as shown in the illustration above.

Main features

Control box

- Starting point of the pallet control system
- Small physical size, can be placed under the conveyor away from the process area
- Controller with fieldbus master
- Power bus distribution (AC)
- 24 V DC distribution

Power box

- Used for creating additional safety zones (parallel or embedded) in addition to the zone of the control box
- Used for supplying more power to the system

Power boxes provide safe power (category 3/4 according to EN 954-1, category depends on implementation).

The following power box types are available:

- Power-x
- Air-x
- Air

The Power-x version disconnects the power bus as well as 24 V DC, while the Air versions are intended for controlling the air supply valve of the safety zone.

“-x” means “extendable” and indicates that the integrator can increase the number of safety relays.

Maneuver box

- Interface to the operator
- Includes a maneuver unit with START, STOP, and RESET push-buttons, an ALARM lamp and an EMERGENCY switch, which can be hard-wired directly to the control box
- Advanced version includes a 6 inch colour touch panel (HMI)

More information

For detailed information about the control system products, please contact your FlexLink Systems representative, or go to www.flexlink.com.

Control boxes, single safety zone



Control boxes

EU, ASi, PL0	5059416
EU, ASi + Profibus, PL1	5059417
EU, Profibus, PL0	5059592
EU, Profibus, PL1	5059593
US, DeviceNet, PL0	5059607
US, DeviceNet, PL1	5059608
US, ASi, PL0	5059609
US, ASi, PL1	5059610
US, DeviceNet + Ethernet IP, PL1	5059613
US, ASi + Ethernet IP, PL1	5059614

EU = version for Europe, power bus 400 V 50 Hz

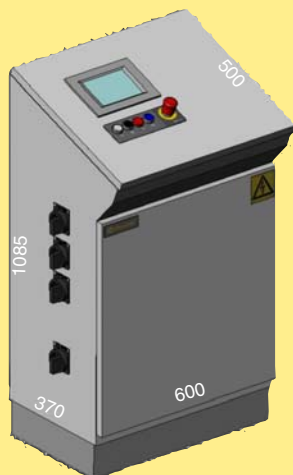
US = version for USA, power bus 480 V 60 Hz

PL0 = performance level 0

PL1 = performance level 1

For more information, see "Control box" on page 340.

Control box, triple safety zone



Control box, triple safety zones

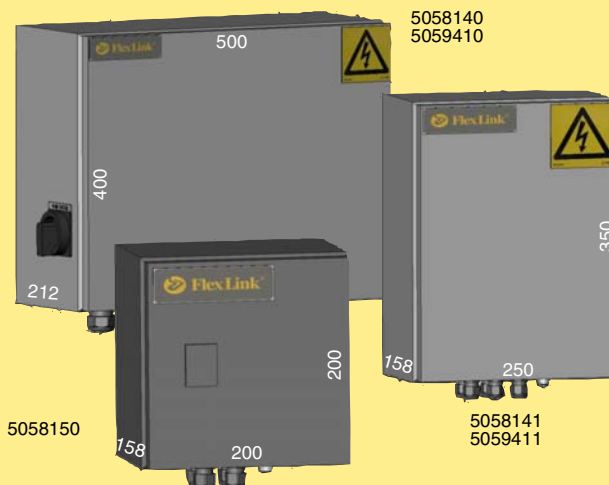
EU, ASi + Profibus, PL1	5110948
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EU = version for Europe

PL1 = performance level 1

For more information, see "Control box" on page 340

Power boxes



Power boxes

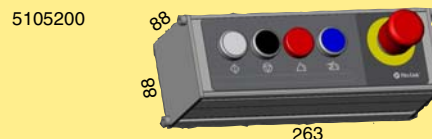
EU, Power-x	5058140
EU, Air-x	5058141
US, Power-x	5059410
US, Air-x	5059411
Air	5058150

EU = version for Europe, power bus 400 V 50 Hz

US = version for USA, power bus 480 V 60 Hz

For more information, see "Power box" on page 340.

Maneuver boxes



Maneuver boxes

Maneuver unit	5105200
EU, Maneuver unit + HMI	5105206
US, Maneuver unit + HMI	5105207

EU = version for Europe, power bus 400 V 50 Hz

US = version for USA, power bus 480 V 60 Hz

HMI = Human Machine Interface (touch screen)

For more information, see "Maneuver box" on page 340.

PO
XS
XL
XLP
X85
X85P
XH
XK
XKP
XB
GR
CS
XT
XC
XF
FST
XMY
XLX
XMX
GRX
CSX
ELV
CTL
TR
APX
IDX

