



Division overview

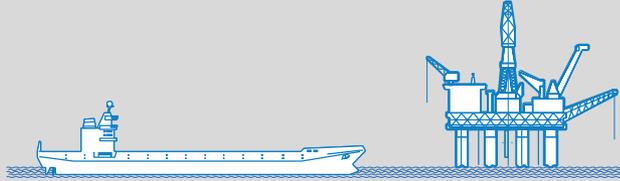
Low Voltage Products Overview presentation - 2015

Low Voltage Products are all around us

You will find them...



... in your home or office **buildings** – both residential and commercial all over the world,



... helping make it easier to manage the flow of **electricity** crossing and exploring the oceans,



... protecting your home appliances or equipment at work from **power** surges or outages,



... in the trains we ride and in the **facilities** that process our water, food and beverage



... in wind mills, **solar fields**, urban areas and homes capturing nature's energy.

A global leader in low voltage technologies

Leading market positions in main businesses

~31,000
employees



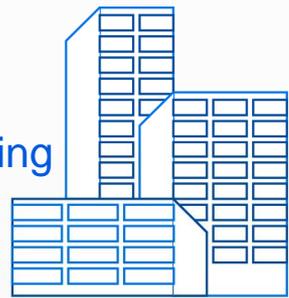
\$7.5
billion
In revenue
(2014)

Present
in
+100



countries

Manufacturing
Sites
114



Delivering more than 1.5 million products a day

Global offering

Connection, protection and control



Electrical installation



Electrical distribution



Automation, control & protection



Building automation



Residential products

Global offering

Added value support and services



Service



Technical support



Training



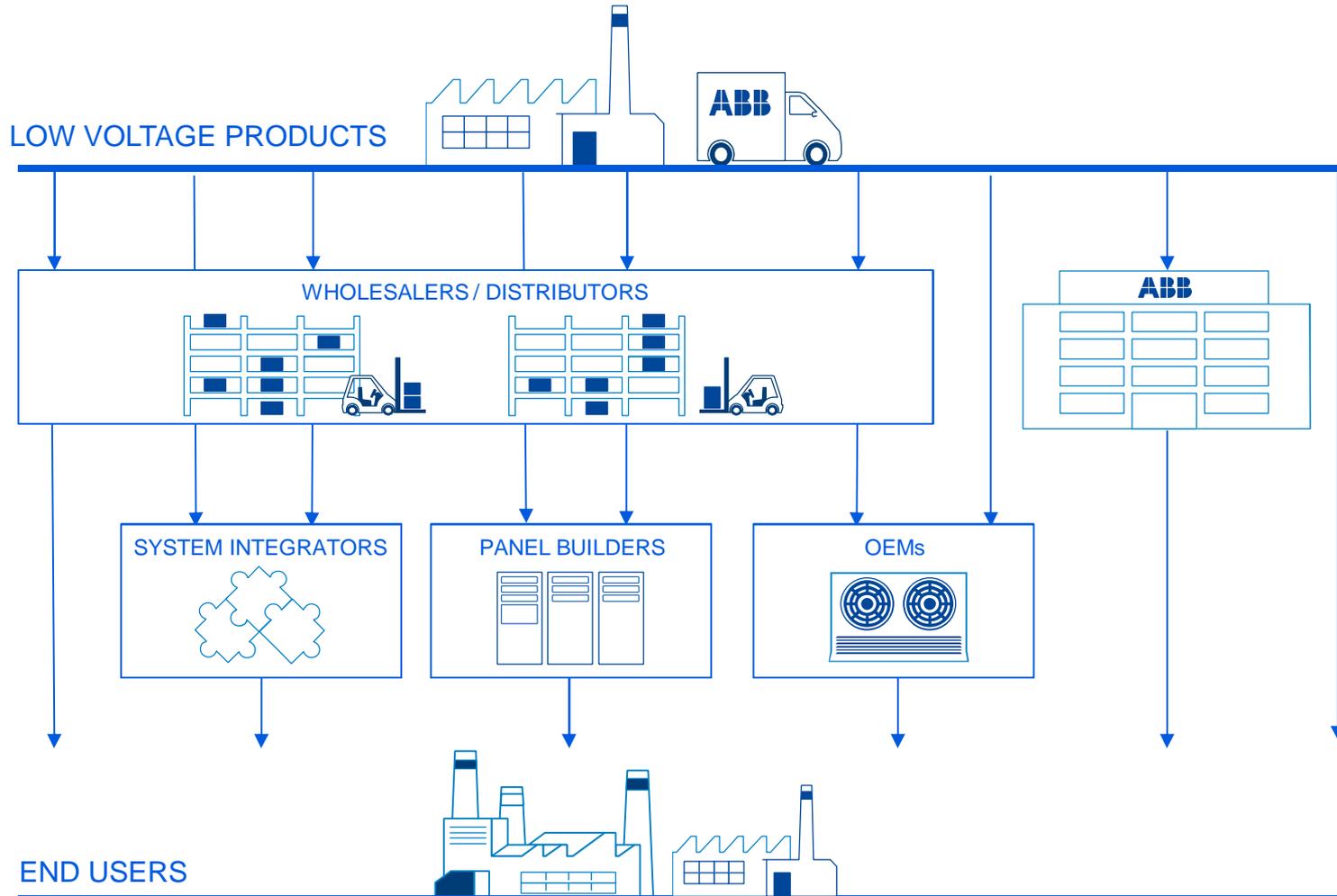
Engineering software



Marketing support

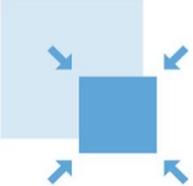
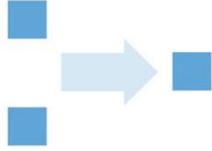
Customers we serve

Supporting multiple routes to market



Solutions focus

Supporting customers with their toughest challenges

Continuous operation 	Energy efficiency 	Safety and protection 
Ease of maintenance 	Harsh environment protection 	Space saving 
Easy to install 	Project cost reduction 	Streamlined range 

2014 performance

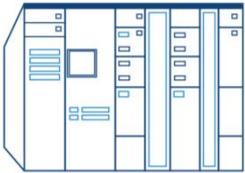
Financial data

US\$ millions unless otherwise indicated	2014* Full year	2013 Full year
Orders received	7,550	7,696
Revenues	7,532	7,729
Operational EBITDA	1,429	1,468
Operational EBITDA margin	18.9%	19.0%
Employees	≈30,000	≈32,000

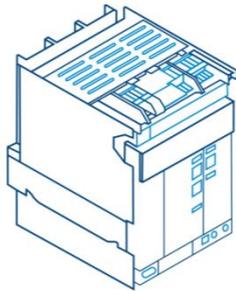
* incl. 5 months of HVAC and 7.5 months of Steel Structure divested businesses

Low Voltage Products

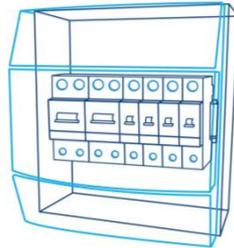
Business Units



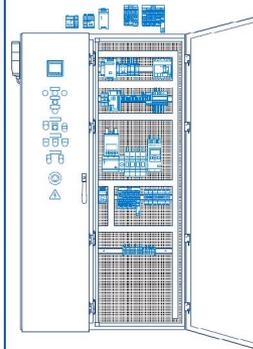
Low Voltage
Systems



Breakers and
Switches



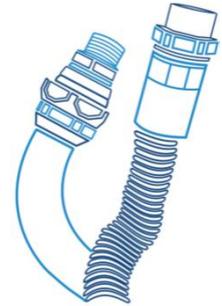
Enclosures
and DIN-Rail



Control
Products



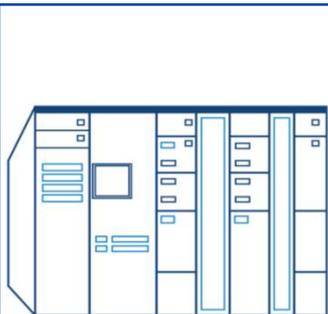
Wiring
Accessories



Protection,
Connection
and Wire
Management

Low Voltage Products

Low Voltage Systems



Low Voltage Systems

MNS conventional switchgear and motor control

Scalable, modular low voltage switchgear suitable for basic switchgear needs to high end motor control center and power distribution systems

MNS intelligent switchgear and motor control

Scalable, modular low voltage switchgear incorporating leading edge intelligent motor control and power distribution technology. Suitable for basic switchgear needs to high end motor control center and power distribution systems

MNS *iS* integrated switchgear and motor control

Integrated intelligent system technology featuring fully segregated power and control cable compartment, system scalability, future proof with ease of upgrades and switchgear condition monitoring functionality

Non-system product packaging and electrical system integration

NSPP provides a single point of contact for customers where bundles or packages of products from several ABB divisions or product groups are required, which may include basic interface engineering. Electrical system integration solutions maximize ABB's portfolio of energy distribution systems for all voltage levels delivering high quality energy management and condition monitoring solutions

Service

Global delivery and service network coverage in five continents

Low Voltage Products

Breakers and Switches

Circuit breakers

Moulded Case Circuit Breakers (MCCB), Air Circuit Breakers (ACB)

Switches

Switch-disconnectors, switch fuses, cam switches, change-over switches, enclosed and safety switches

Fusegear and CDCs

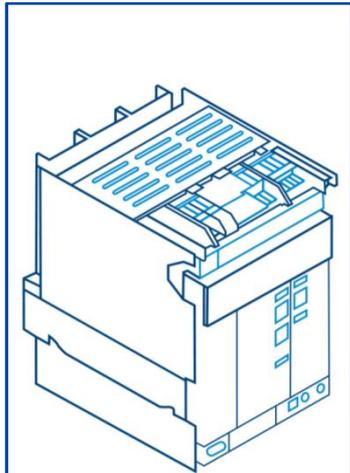
Switch fuses, fuse switch disconnectors, fuse links, fuse monitors and enclosures with busbar system and apparatus

Power enclosures

Primary and main distribution boards, industrial and medium sizes automation boards, console panels and panel board

Service

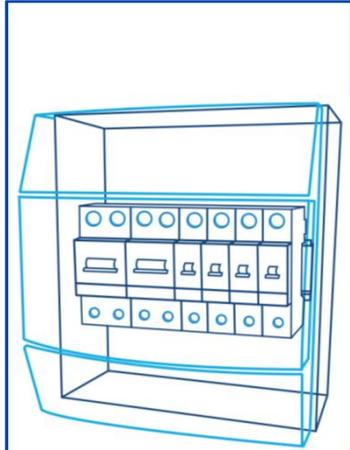
Service agreements, training, spares and consumables, maintenance and repairs, replacement



**Breakers
and
Switches**

Low Voltage Products

Enclosures and DIN-Rail



Distribution Enclosures

Consumer units, distribution enclosures and automation boards and boxes

DIN-Rail Products

Miniature Circuit Breakers (MCBs), Residual Current Devices (RCDs), Surge Protective Devices (SPDs), and other modular DIN-Rail components for measuring, signaling and other functions

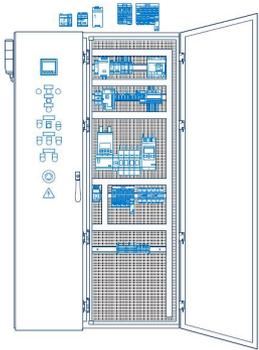
Building Space

Complete range for automation and control in residential and commercial buildings including lighting, heating, ventilation, cooling, blinds, security, energy management and interfaces to other control systems

**Enclosures
and
DIN-Rail**

Low Voltage Products

Control Products



Control Products

Motor protection and control

Manual motor starters, contactors, overload relays, softstarters, pilot devices, arc guard, limit switches, voltage sensors and detectors

Connection

Terminal blocks (screw, PI-Spring, pluggable, stud, IDC...), test blocks, PLC wiring system, markers and marking systems

Electronic products & relays

Electronic timers, measuring and monitoring relays, power supplies, interface relays and octocouplers, signal converters, logic relays and motor controllers

Safety products

Complete machine safety solutions including safety relays, safety controllers, safety PLCs, light guards, control devices, emergency stops, switches and sensors, locks, fencing and pressure sensitive devices

Low Voltage Products

Wiring Accessories



Wiring Accessories

Switches and Sockets

Flush and surface mounted, for dry and water-proof applications with full range of accessories in various designs and price segments

Conventional Electronic Inserts

Complete range on not bus based electronic inserts like thermostats, dimmers, timers, audio components like radios to deliver the customer comfort, efficiency and safety

Movement and Presence Detectors

Wide range of design orientated solutions to detect motions and movements and as well to detect presence to increase the comfort, to use energy more efficient and deliver more security and safety in commercial as well in private sectors

Living Space® Systems

Complete range for automation and control in residential and commercial buildings including lighting, heating, ventilation, cooling, blinds, security, energy management and visualization with the focus on design, comfort, safety and leading edge interface and product design

Door Entry Systems

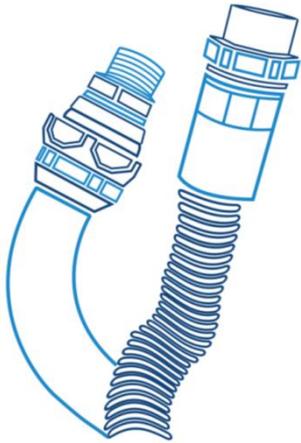
Wide range of door communication and access control solution for private and commercial applications from a villa to a big office building

Industrial Plugs and Sockets

Wide range of industrial sockets and plugs for a wide range of special applications and conditions

Low Voltage Products

Protection, Connection and Wire Management



Connection, Protection and Wire Management

Wire Management and Connectivity

Cable ties, wire termination, wiring duct, metal framing, cable tray, earthing and lighting protection, compression lugs

Flexible & Rigid Conduit Systems

Flexible nylon and metallic conduit systems, rigid conduit systems, fittings and glands

Emergency Lighting and Battery Systems

Exit signs, emergency lighting, monitoring systems, central battery systems, decorative lighting

Explosion Protective Components and Systems

EX-proof lighting, enclosures, junction boxes, cable glands, cable protection, cable ties

Cable Apparatus and Accessories

Hi-Tech fuses, faulted circuit indicators, airfield lighting, cable accessories, apparatus switchgear reclosers, utility distribution connectors

Low Voltage Products

Global footprint: Europe and Mediterranean



Legend:

-  Enclosures and DIN Rail
-  Wiring and accessories
-  Control Products
-  Breakers and switches
-  LP Service center
-  LV Systems
-  LV Service center
-  Thomas & Betts

Global footprint:

69 factories
49 service sites

*Denotes multiple locations



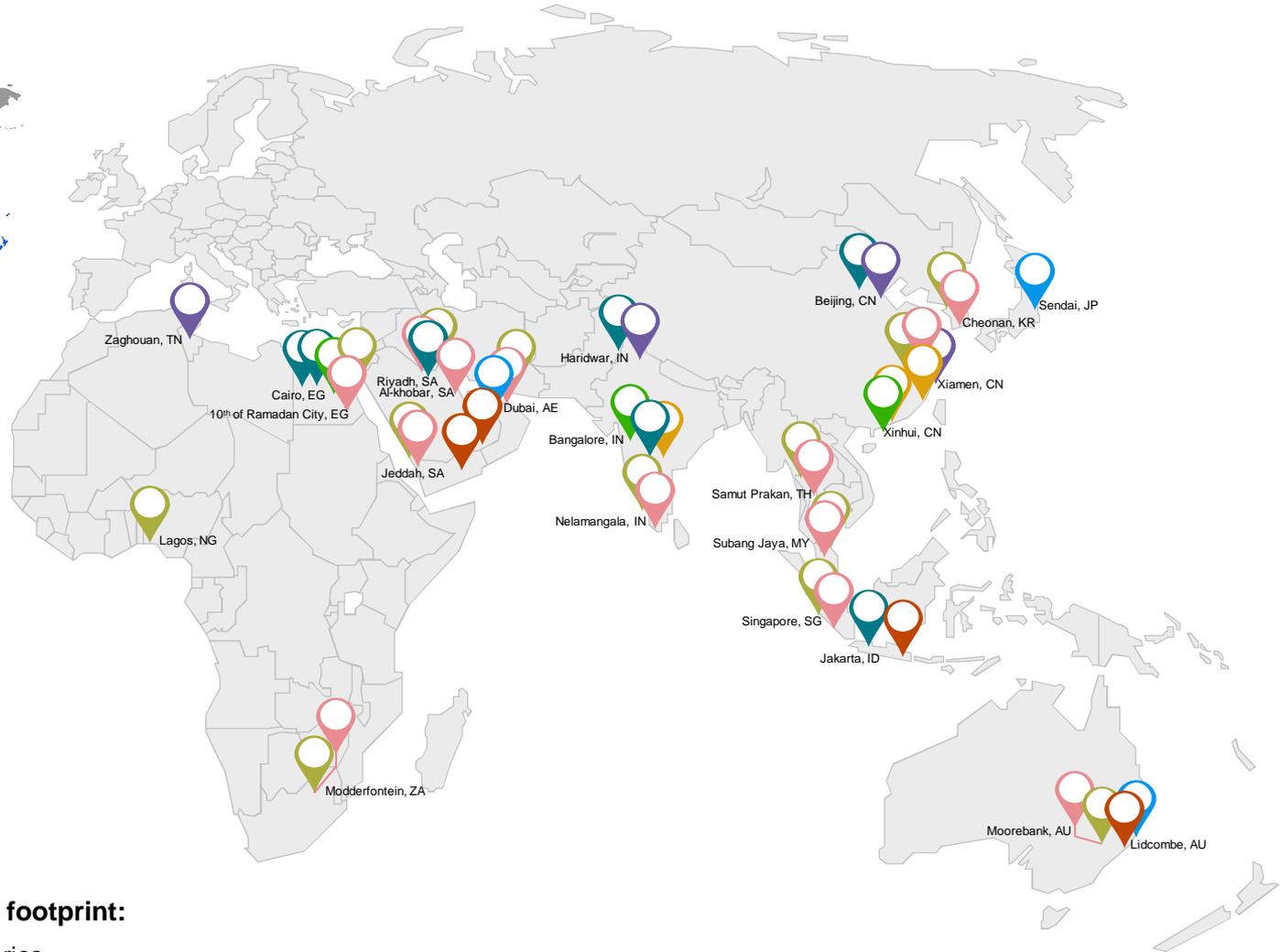
Low Voltage Products

Global footprint: Asia, Middle East and Africa



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Low Voltage Products

Global footprint: Americas



Legend:

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Power and productivity
for a better world™

