WORLDWIDE PARTNER

HabiTEQ™ ED.02

Home & Building Automation

- Energy efficiency
- Outstanding comfort
- Enhanced safety

GE imagination at work

HabiTEQ™ - Home & Building Automation

Contents

HabiTEQ™

HabiTEQ™

Development of innovative technology impacts our daily lives offering a wealth of new possibilities which includes our very own home or working space.

This is particularly true for the electrical installation – the heart of every building. This area holds great potential for designing properties with greater flexibility, energy saving and outstanding comfort without compromising lifestyle.

The **HabiTEQ™** automation solutions and components are tailored for your building - offering a platform of opportunities to achieve a versatile system satisfying the most demanding customers needs.

HabiTEQ™ components

Offer a single and simple integrated system instead of separate control solutions…

In comparison with classic electrical installations, the HabiTEQ™ intelligent building control system offers noticeable advantages.
All the different functional subsystems within your living space are seamlessly integrated via a 2–wire BUS to a single communicating system, controlled by a powerful central controller. This enables the optimal, energy efficient interaction of the subsystems, which is almost impossible with conventional technology.
The system allows a large number of interactive functions to be realised, including:

| Lighting control | Heating/ventilation control | Climate control | Shutter control | Safety monitoring | Energy management | Central automation |

HabiTEQ™ solutions

Intelligent "plug and play" distribution boards, designed for easy installation and time saving.

GE offers two standard pre-equipped and pre-wired distribution boards – one for apartments (Fix-o-Rail 150) an one for houses (QuiXtra 630). These standard solutions are and flexible and adaptable. The installation can be extended with components in- and outside the panel. Inside there is a significant reserve for DIN-rail modules. Outside the system can be extended with HabiTEQ wireless modules. The communication between the two media (wired and wireless) is bi-directional.

Customer benefits
• Significant time saving
• Available on stock
• 100% tested solution
• Easy extension
• Sharp prices

Advantages

3

HabiTEQ™ Flexible solution for electrical installation

Seamlessly integrating safety, security, lighting, climate, automation of mechanical loads such as shutters and blinds, and many more!
HabiTEQ™ provides comfort, control and convenience through multiple stylish user interfaces (touch screen, switches, etc.)

home

comfort

convenience

or smart & simple
ons!

Easy to install and customize. Using a PC through a choice of serial or ethernet link adds tangible value to installers of commercial buildings and home owners whatever the property: apartments, family homes, villas, etc.
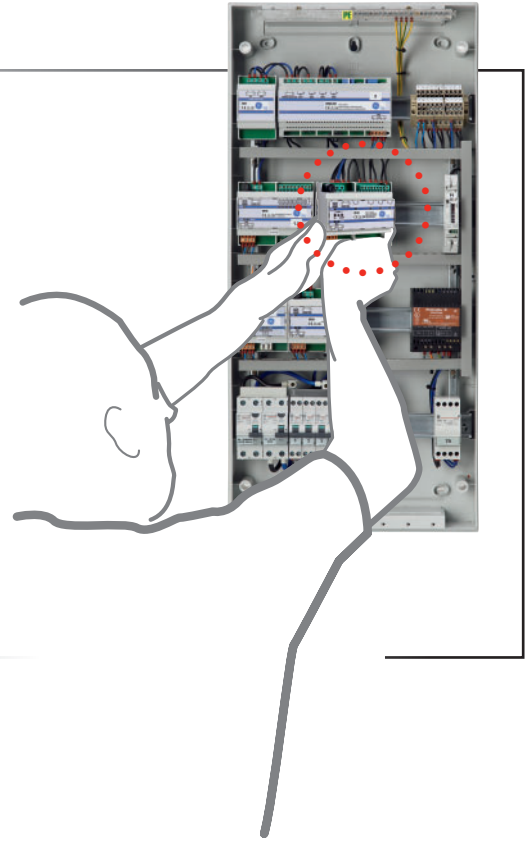
security

building

Easy to install

## Modular building blocks, easily scalable!

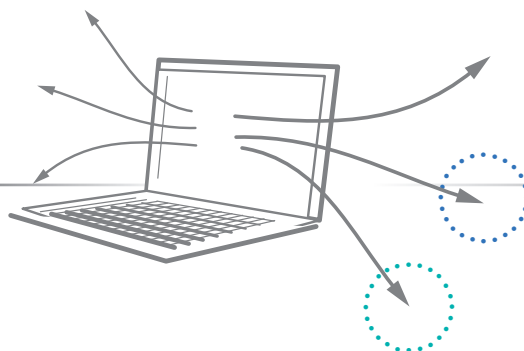- Fast 2-wire BUS system with no polarity, no restrictions on topology
- Quick and easy system configuration
- Fast and simple installation

Value for money

Track and control energy usage with a simple pulse meter

- Flexible functionality – easily enhance and adapt with limited or no additional hardware
- Up to 50% cost saving on system installation & setup[1]
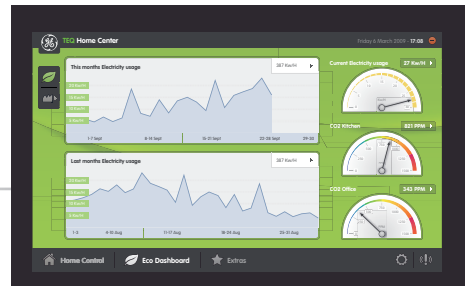
(1) Compared to other popular distributed systems.

Flexibility

Visualize and control through the internet via a PC or mobile phone with no additional hardware[1]

- Integrate third party infrared (IR) remote control
- Make any switch intelligent
- Easy to configure
- User friendly

Integration with larger systems through the ethernet[2] for buildings

Remote access
Multiple clients

Redundancy
Manual override on field modules

Open Standards

(1) Controller with ethernet port.
(2) Using the event handler protocol, supplied on request.

Home solution

● **Motion sensor** - PIR
EV100 (indoor) DI502 (outdoor)
- Sensor with high immunity to
  false motion
- For automatic lighting and heating

● **Smoke sensor** - DP721R
Smoke sensor pre-warning

● **Carbon monoxide sensor** - FGT312CO
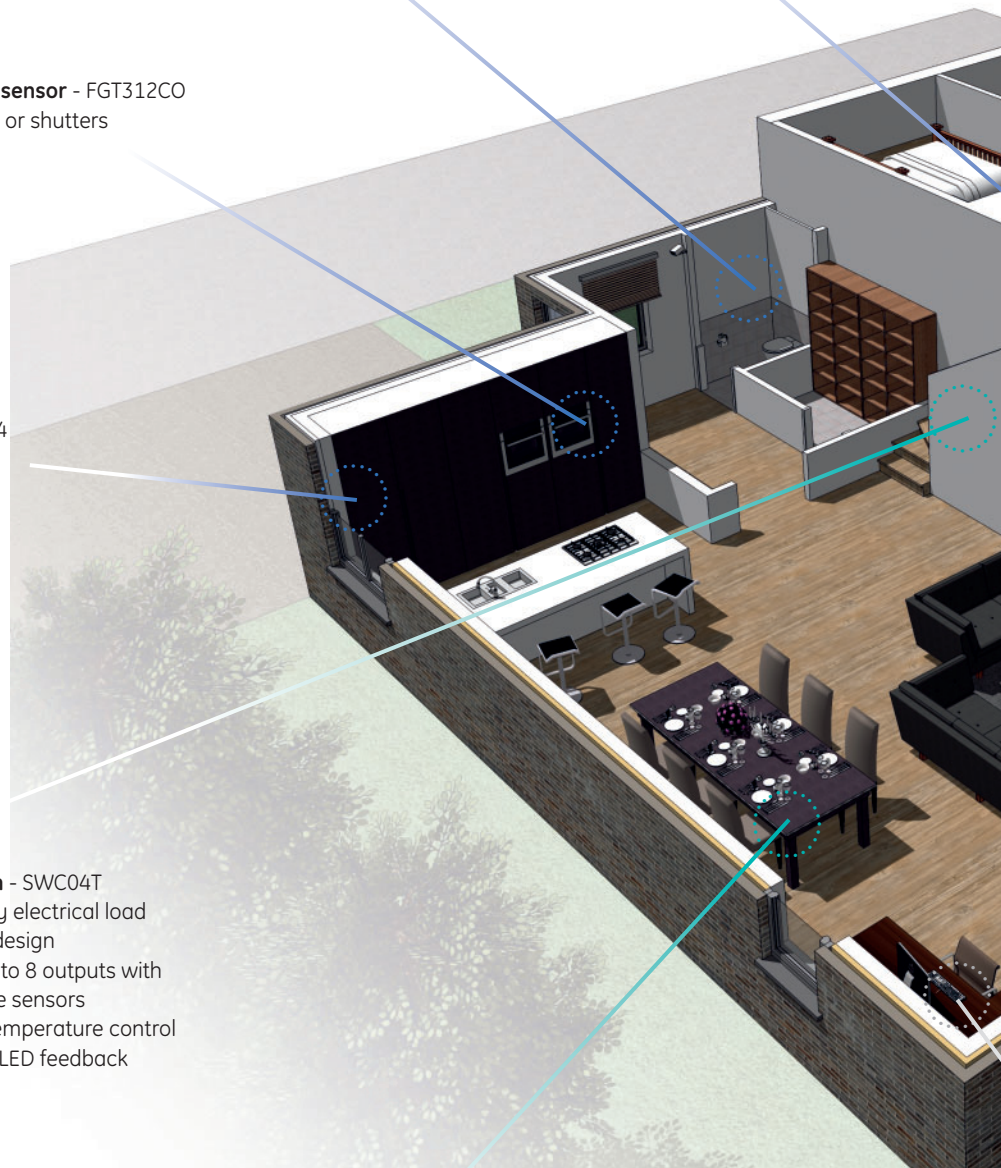- Opens ventilation or shutters
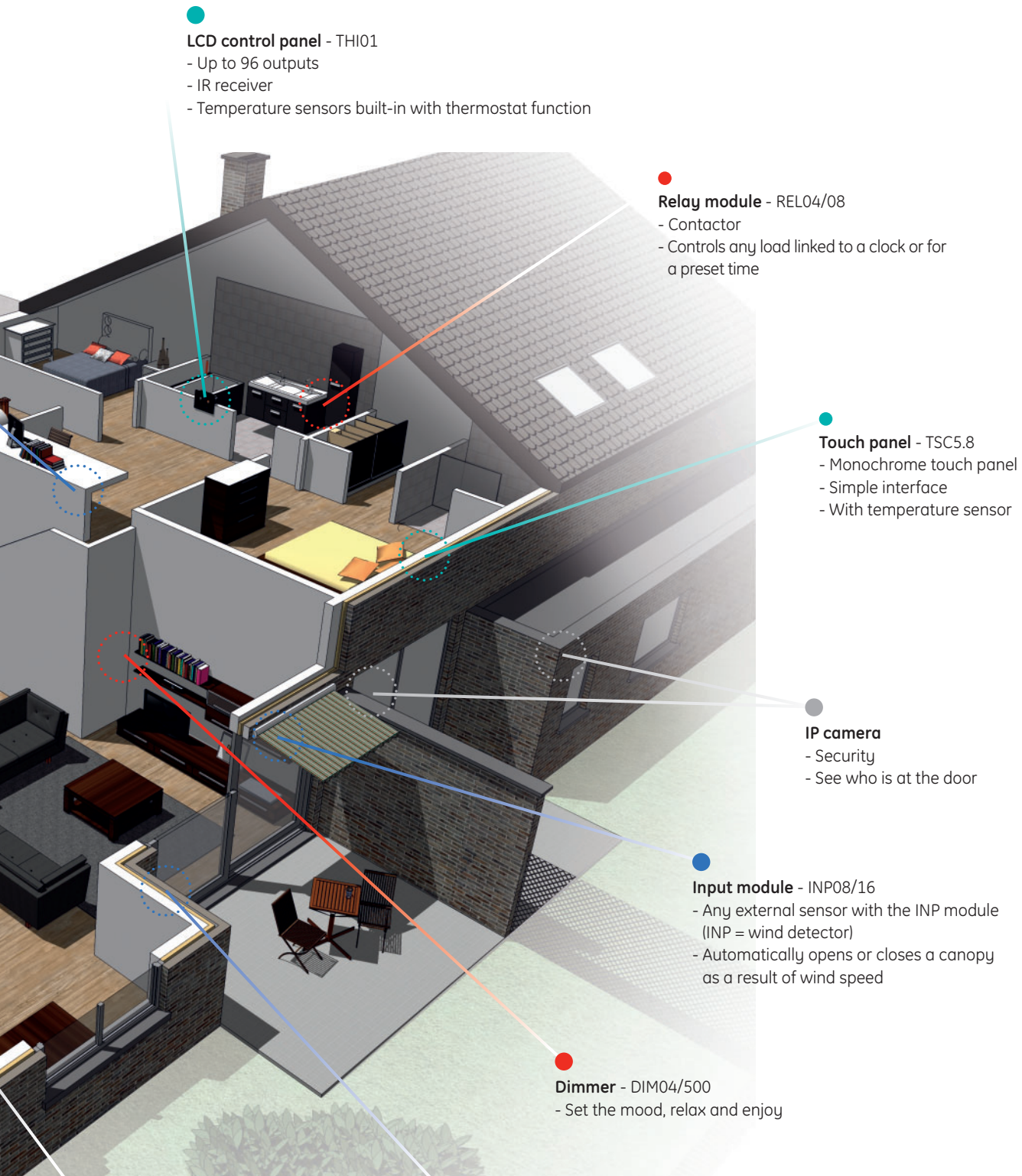
● **Gas sensor** - FGELPG24
- Opens the shutters

● **Smart switch** - SWC04T
- Controls any electrical load
- With Niko® design
- Controls up to 8 outputs with
  temperature sensors
- Multizone temperature control
- Multicolour LED feedback

● **Interface module** - SMS01
- Any mobile phone
- Controls any electrical load
  with text

LCD control panel - THI01
- Up to 96 outputs
- IR receiver
- Temperature sensors built-in with thermostat function

Relay module - REL04/08
- Contactor
- Controls any load linked to a clock or for
  a preset time

Touch panel - TSC5.8
- Monochrome touch panel
- Simple interface
- With temperature sensor

IP camera
- Security
- See who is at the door

Input module - INP08/16
- Any external sensor with the INP module
  (INP = wind detector)
- Automatically opens or closes a canopy
  as a result of wind speed

Dimmer - DIM04/500
- Set the mood, relax and enjoy

Touch panel-PC - TCPC/NAV10.2
- Central home control with
  energy visualization

Input module - INP04 / INP02
- Can be integrated in any switch

Building solution
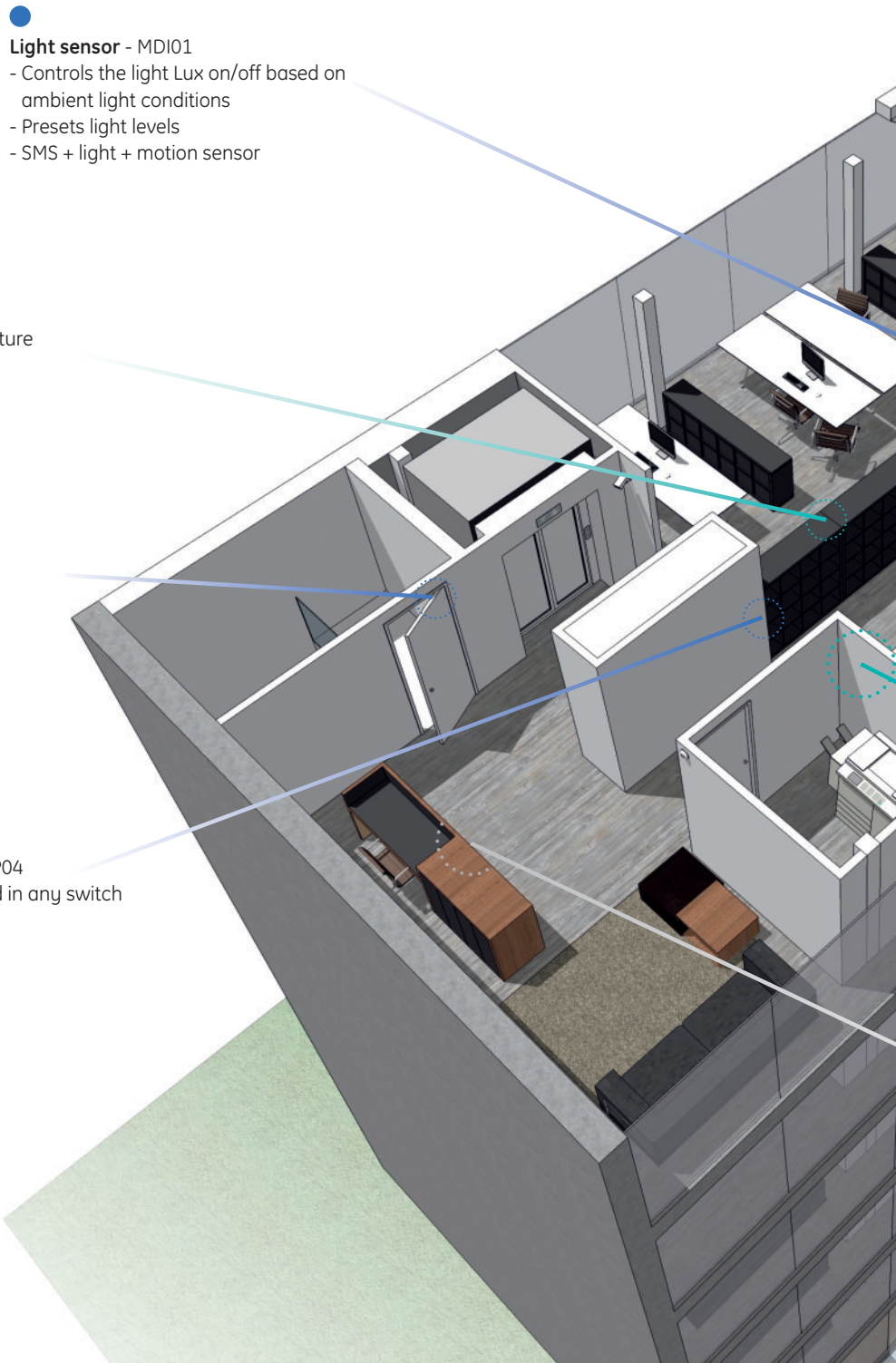
Light sensor - MDI01
- Controls the light Lux on/off based on
  ambient light conditions
- Presets light levels
- SMS + light + motion sensor

Room controller - THI01
- To control zone temperature

Door contact - DC101
- Energy saving: heating
  shuts down if the
  window opens

Input module - INP04
- Can be integrated in any switch
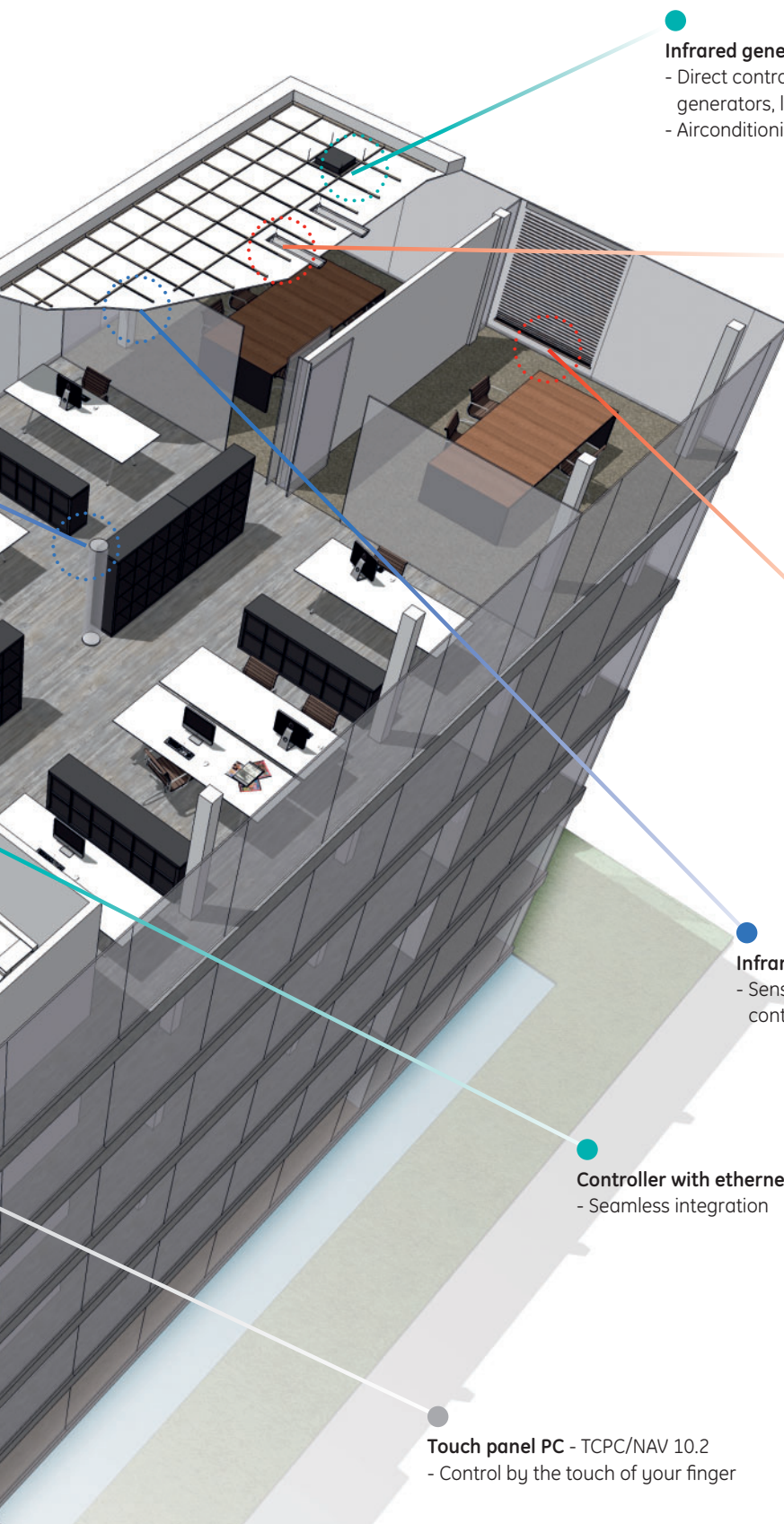
Infrared generator - IRG04
- Direct control of airconditioning with infrared
  generators, linked to presence of open windows
- Airconditioning goes to standby if a window opens

Dimmer - ANR04
- Dimming of fluorescent lamps
- Reduces light levels to the perfect
  amount of light in combination
  with the light sensor

Shutter up / down - ROL02
- Shutters / blinds... positioned
  perfectly
- Stand alone or linked to a smart
  sensor light

Infrared sensor - EV669 / DD669
- Senses 360° motion and
  controls lights and heating

Controller with ethernet - CTD
- Seamless integration

Touch panel PC - TCPC/NAV 10.2
- Control by the touch of your finger

HabiTEQ™

Relays / Load control	Controllers

230Vac/50Hz

REL04
4 relay module
ROL02
REL08

CTD01
CTD01E
CTD01E+
CTD02
CTD02E
Controller with USB and ethernet

2-wire communication BUS

Lamp

Heater

Shutter

USB interface

Ethernet LAN

Network switch

WEB - interface

Residential WIFI camera

GE Home center

SMS01
Mobile interface module

Audio/video system

Airconditioning

Infrared generator

IRG04

Motion & light sensor

MDI01

Control with any universal remote (IR)

External power supply

Monochrome touch screen

2 line display with IR/ temperature sensor

Smart switch

with thermostat

with IR receiver

12

Lighting control

Input modules

0 to 10Vdc

DIM500
ANA04
Analogue dimmer module
ANR04

INP08
INP16
Input module
INP08/230
INP02
INP04

Door / window contact

CO Detector

Glass break sensor

Switch interface

Energy meter

Gas detector

CO₂ sensor

AIR01CHT
AIR01CT

INP04
Input module

Smoke detector

Motion detector

with motion sensor

with motion sensor and IR receiver

9 to 24Vdc
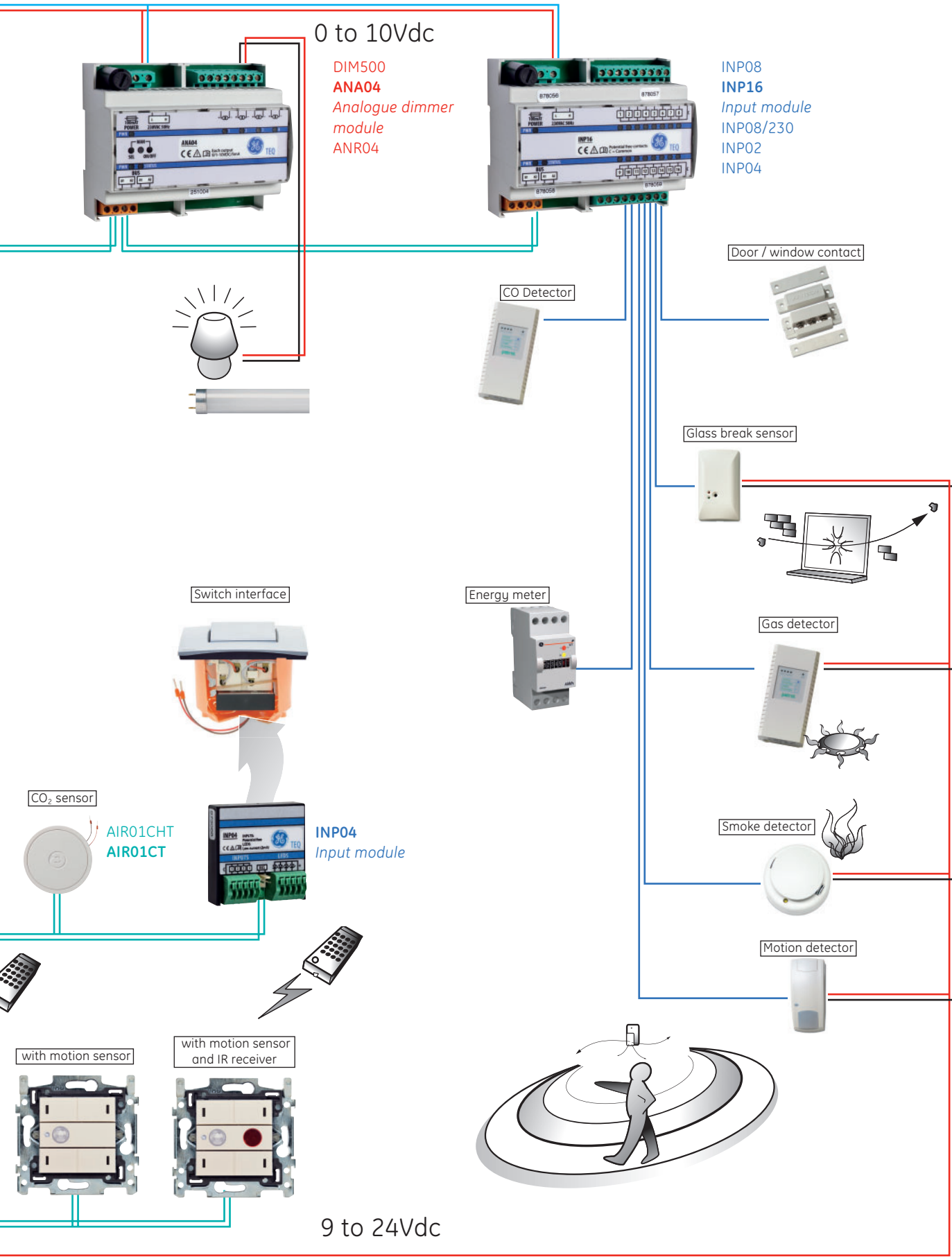
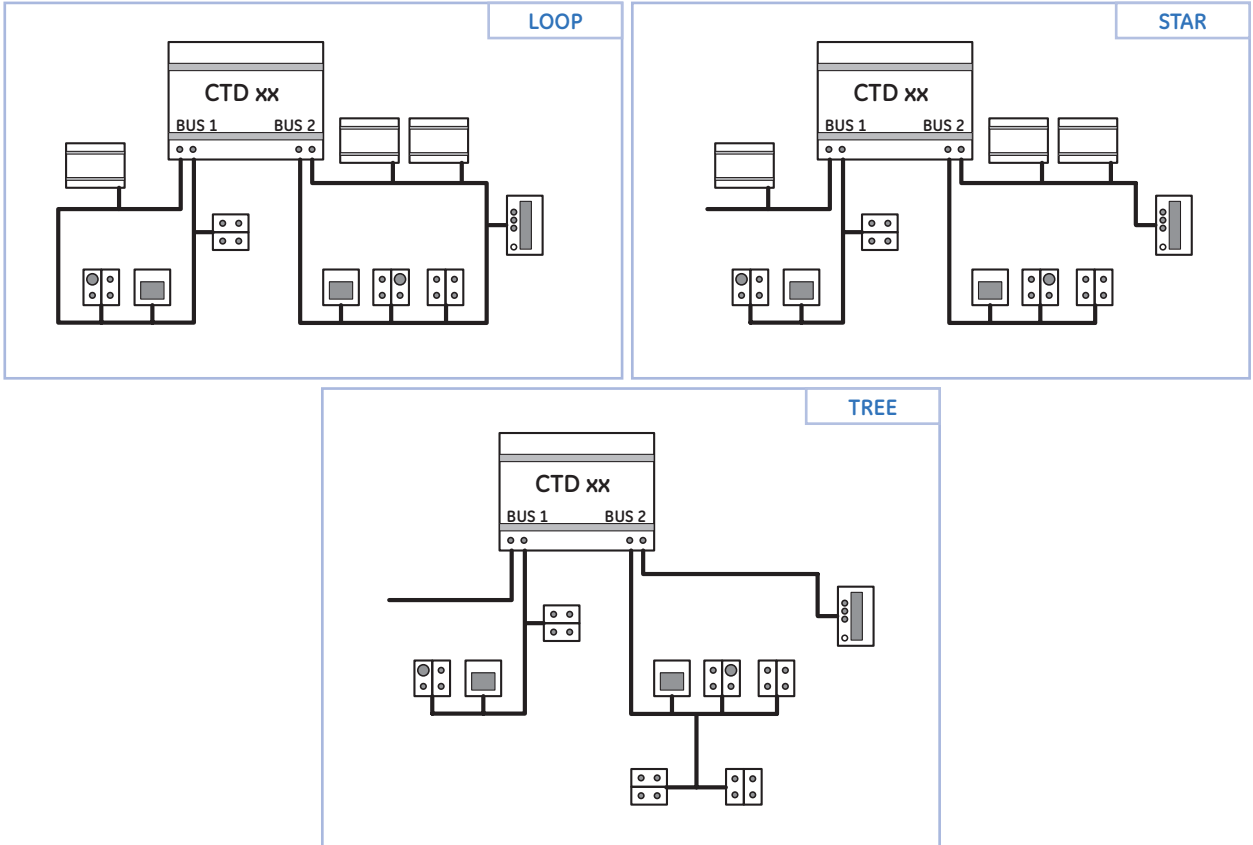## System topologies

Flexible BUS topology... star, loop, tree or any combination with no polarity... enables quick and easy installation


System overview

- 2-wire bi-directional BUS communication.
- BUS supplies power to the I/O module and has no polarity
- I/O reaction speed: 400 outlets = 0.3 sec
- Simultaneous communication
- Current based BUS principle = high resistance against external influences
- Cable: shielded twisted pair section 2 x 1.0 mm^2
  Distance max. 200m (open), max. 400 m (closed)

Your home or building automation solution... is just six steps away

1 Enter installation details on floor plan.

2 Transfer installation details to the configurator.

3 Output of parts list and HabiTEQ™ distribution board.

4 Place the order for your HabiTEQ™ distribution board & other accessories (switches, touchscreen etc..)

5 Install & connect

6 Configure & startup
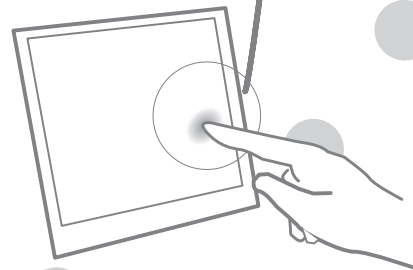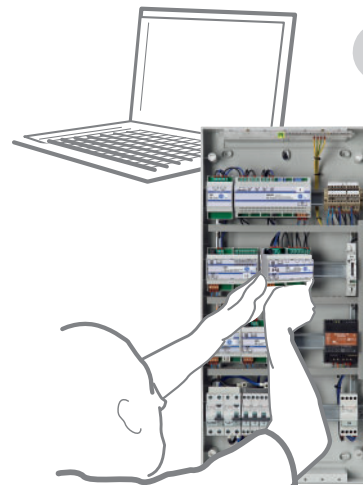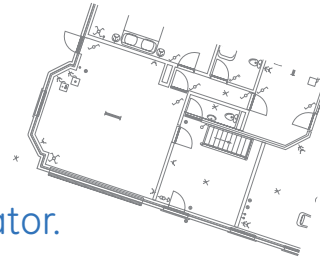
Simple installation – Can be done by your local electrician
- Quick & easy system setup through PC
- "HabiTEQ™ System Manager" free software. For online support go to the homepage of our website and click on Portfolio Residential. www.ge.com/ex/industrialsolutions

Pre-wired distribution board
Automation components

- Fast & flexible 2-wire BUS system
- Quick & easy configuration
- "Plug & Play" operation

SMS01
Mobile interface module

CTD01
Mini controller with USB

CTD02E
Full controller with
USB & ethernet

DIM 04/500
Dimmer module
500VA

ANR04
Analogue dimmer module
for fluorescent tubes
0-10V

ANA04
Analogue dimmer module
0-10V
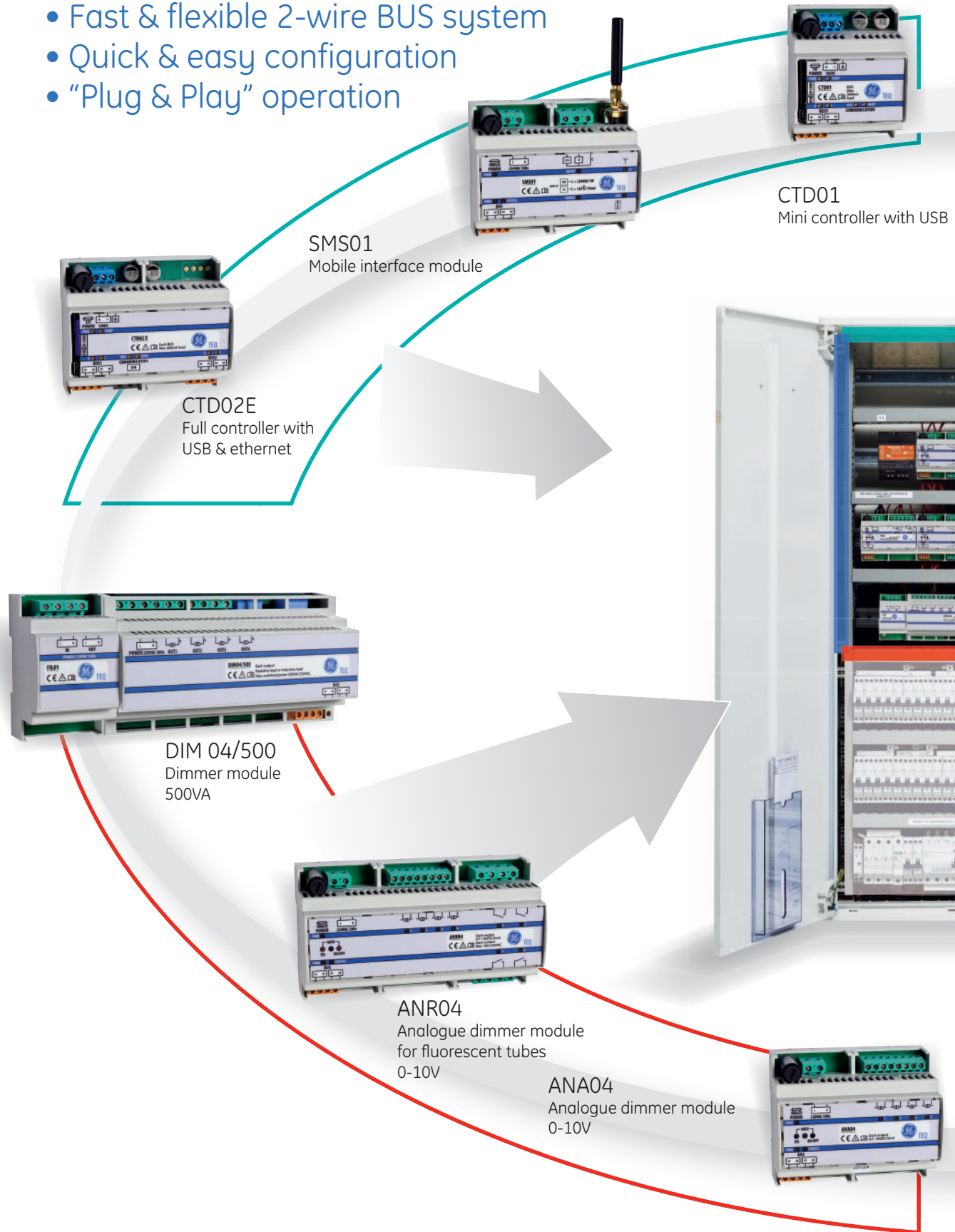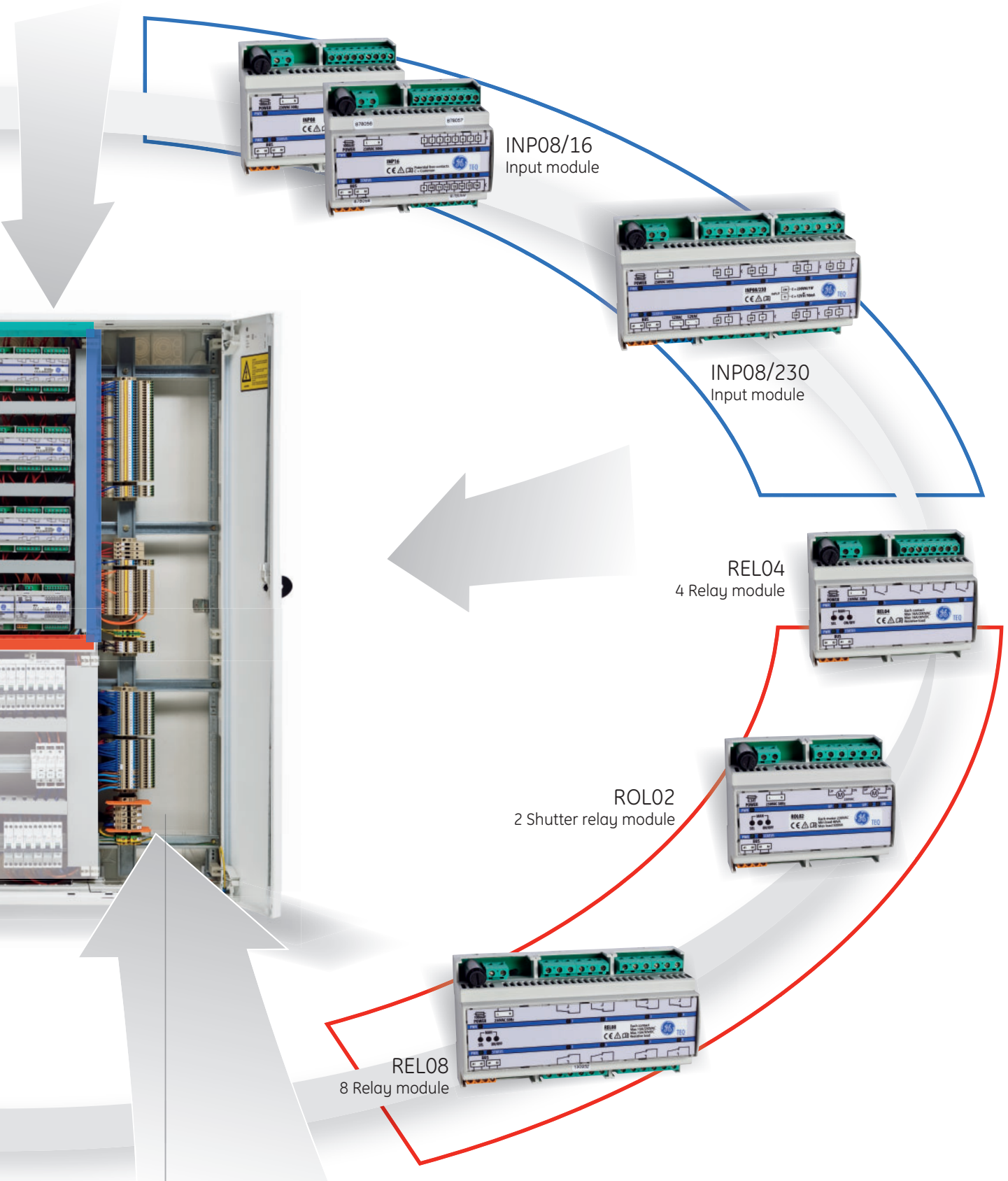
INP08/16
Input module

INP08/230
Input module

REL04
4 Relay module

ROL02
2 Shutter relay module

REL08
8 Relay module

Separate cable compartment (enclosure types C-D-E-F)
Enclosure shown is type C7 (see page 22)

HabiTEQ™

Pre-wired distribution board
Protection devices

• Quick & easy installation
• Circuit and people protection

MCB's for
line protection

RCD's for people protection

Surge protection

Overvoltage
protection
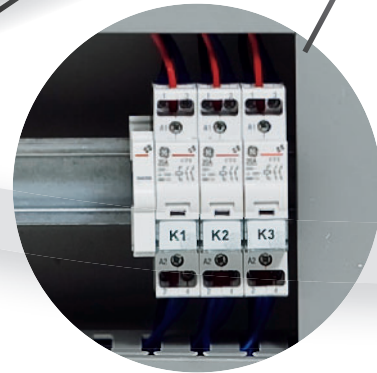
Contactors for
controlled socket-outlets

Protection devices

Controlled outputs

M Motor

R Relay

D Dimmer

M
R
D

Potential free and 230Vac binary inputs
Connections from push-buttons, magnetic contacts and external detectors to input module.

BUS connection

Screwless terminals for quick connection

Conventional cabled and controlled socket-outlets

Automation solutions

Customized distribution boards
One enclosure for each requirement

Type A
Fix-o-Rail 150
Surface Mounting

Type B-F
Fix-o-Rail 144 F
Flush Mounting

Picture shown B6F

Rows	Type A	Code	H x W x D	Mod/ Row	Total Mod
4	FOR 150	**A4**	750x355x150	18	72

Rows	Type B-F	Code	H x W x D	Mod/ Row	Total Mod
4	FOR 144F	**B4F**	800x740x(35)140	24	96
5	FOR 144F	**B5F**	950x740x(35)140	24	120
6	FOR 144F	**B6F**	1100x740x(35)140	24	144

• Customized:
- equipped with modular devices
- external wiring direct onto input modules
- cables from socket circuits directly into MCB's
- wiring of controlled outputs on terminals
- single phase 40A incomer

• Customized:
- equipped with modular devices
- external wiring direct onto input modules
- cables from socket circuits directly into MCB's
- wiring of controlled outputs on terminals

Type B-S
Fix-o-Rail 144 S
Surface Mounting

Picture shown B6S

Rows	Type B-S	Code	H x W x D	Mod/Row	Total Mod
4	FOR 144S	B4S	800x740x140	24	96
5	FOR 144S	B5S	950x740x140	24	120
6	FOR 144S	B6S	1100x740x140	24	144

• Customized:
- equipped with modular devices
- external wiring direct onto input modules
- cables from socket circuits directly into MCB's
- wiring of controlled outputs on terminals

Type B
VP-SYSTEM MV/MS
MW= Wall Mounting
MS= Floor Standing

Picture shown B8

Rows	Type B	Code	H x W x D	Mod/Row	Total Mod
4	VP MW	B4	650x550x210	24	96
5	VP MW	B5	800x550x210	24	120
6	VP MW	B6	950x550x210	24	144
7	VP MW	B7	1100x550x210	22	154
8	VP MW	B8	1250x550x210	22	176
9	VP MW	B9	1400x550x210	22	198
12	VP MS	BS12	1980x550x210	20	240

• Customized:
- equipped with modular devices
- external wiring direct onto input modules
- cables from socket circuits into terminals
- wiring of controlled outputs on terminals

Customized distribution boards
One enclosure for each requirement

Type C
VP-SYSTEM MW/MS
MW= Wall Mounting
MS= Floor Standing

Picture shown C7

Type D
VP-SYSTEM MW/MS

Picture shown D9

Rows	Type C	Code	H x W x D	Mod/Row	Total Mod
5	VP MW	C5	800x800x210	22	110
6	VP MW	C6	950x800x210	22	132
7	VP MW	C7	1100x800x210	22	154
8	VP MW	C8	1250x800x210	22	176
9	VP MW	C9	1400x800x210	22	198
12	VP MS	CS12	1980x800x210	22	264

Rows	Type D	Code	H x W x D	Mod/Row	Total Mod
5	VP MW	D5	800x1050x210	34	170
6	VP MW	D6	950x1050x210	34	204
7	VP MW	D7	1100x1050x210	34	238
8	VP MW	D8	1250x1050x210	34	272
9	VP MW	D9	1400x1050x210	34	306
12	VP MS	DS12	1980x1050x210	34	408

• Customized:
- equipped with modular devices
- separate cable compartment (in- and outgoing cables)
- cables from socket circuits onto terminals
- wiring of controlled outputs into terminals
- wiring of inputs on terminals

• Customized:
- equipped with modular devices
- separate cable compartment (in- and outgoing cables)
- cables from socket circuits onto terminals
- wiring of controlled outputs into terminals
- wiring of inputs on terminals

Type E
VP-SYSTEM MW

Picture shown E8

Type F
QuiXtra™ 630

Picture shown FS12

Rows	Type E	Code	H x W x D	Mod/ Row	Total Mod
5	VP MW	E5	800x1300x210	38	190
6	VP MW	E6	950x1300x210	38	228
7	VP MW	E7	1250x1300x210	38	266
8	VP MW	E8	1400x1300x210	38	304
9	VP MW	E9	1980x1300x210	38	342

Rows	Type F	Code	H x W x D	Mod/ Row	Total Mod
5	QuiXtra 630	F5	900x1240x250	36	180
6	QuiXtra 630	F6	1050x1240x250	36	216
7	QuiXtra 630	F7	1200x1240x250	36	252
8	QuiXtra 630	F8	1350x1240x250	36	288
9	QuiXtra 630	FS9	1600x1240x250	36	324
10	QuiXtra 630	FS10	1750x1240x250	36	360
12	QuiXtra 630	FS12	2050x1240x250	36	432

• Customized:
- equipped with modular devices
- separate cable compartment (in- and outgoing cables)
- cables from socket circuits onto terminals
- wiring of controlled outputs into terminals
- wiring of inputs on terminals

• Customized:
- equipped modular devices
- separate cable compartment (in- and outgoing cables)
- main compartment with transparent door
- cables from socket circuits onto terminals
- wiring of controlled outputs into terminals
- wiring of inputs on terminals
• Optional: main compartment with plain door