CENTRAL BATTERY SYSTEMS

Beghelli

Design and configuration of NZBVA and NZBVE

The central battery systems NZBVA and NZBVE can be designed according to the instructions below:

1. Determine from the customer's specifications:
   - Quantity and technical details of the exit sign and emergency luminaires to be supplied (lamp type, lamp power, ballast lumen factor and gear)
   - Quantity and technical details of the circuits (maintained mode, non-maintained mode, selectively switchable non maintained mode, selectively switching-on non-maintained mode)
   - Type of luminaire monitoring
2. Power consumption in mains and battery mode (lamp and gear manufacturer data)[1)]
3. Charging unit
4. Battery
5. Operation and monitoring modules for the central station (system spreadsheet)
6. Options for the central station (system spreadsheet)
7. Output(s) to sub-station(s) if required
8. Central station (system spreadsheet)

Type: Identification of the central station:

NZBVA-Z
230/__/___/__/_/_

NZBVE-Z
Rack compartment MULTI CONTROL-I (0 = no, 1 = yes)
Duration (h) (1=1 h/3=3 h/8 = 8 h)
Rack compartments needed for operation and monitoring modules
Battery capacity (Ah)
Charge current (A)

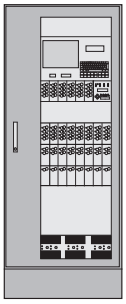
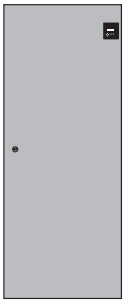
9. Operation and monitoring modules for the sub-station(s) (system spreadsheet)
10. Options for the sub-station(s) (system spreadsheet)
11. Sub-station(s) (system spreadsheet)

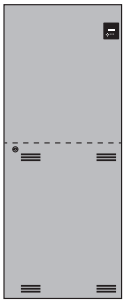
Type: Identification of the sub-station:

NZBVA-UV
/_ __ -
NZBVE-UV
Maintaining fire protection 30 min.(-30)
Rack compartments needed for operation and monitoring modules
Mounting (S = floor standing/W = wall mounting)

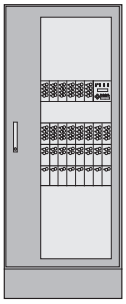
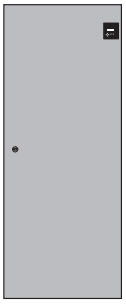
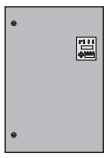
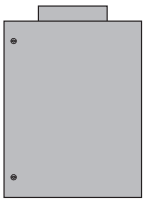
1) Power consumption of the ECSL, ECKC and EC modules on request.

System spreadsheet NZBVA and NZBVE

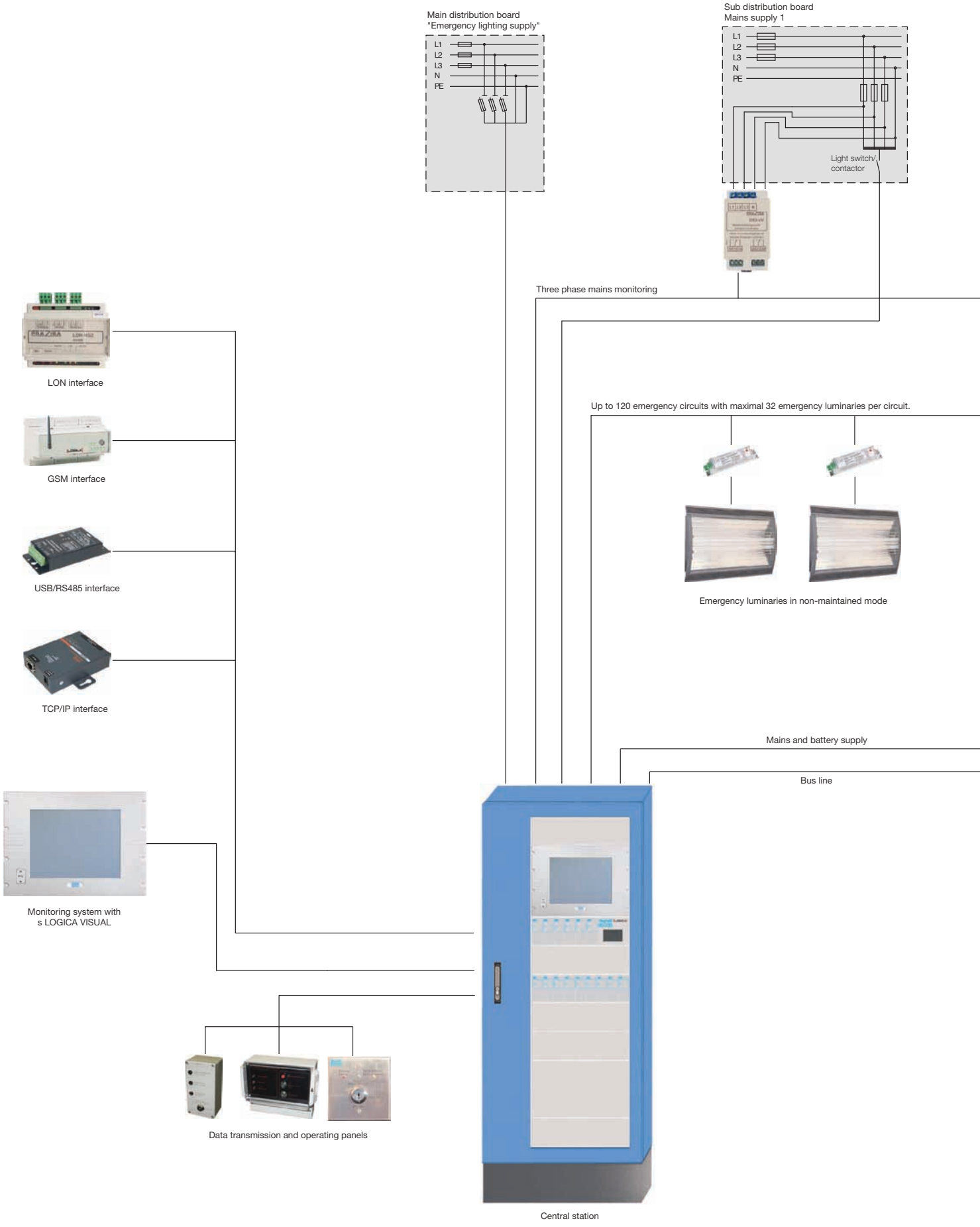


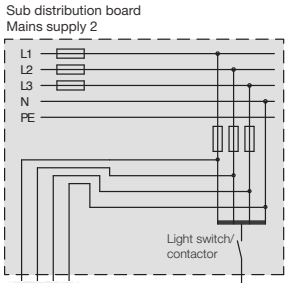
Typ	**NZBVA-Z 230/_/_/6 NZBVA-Z 230/_/_/14 NZBVA-Z 230/_/_/22 NZBVA-Z 230/_/_/30**	**NZBVE-Z/S 230/_/_/6 NZBVE-Z/S 230/_/_/14 NZBVE-Z/S 230/_/_/22 NZBVE-Z/S 230/_/_/30**	**NZBVE-Z/A 230/_/_/6 NZBVE-Z/A 230/_/_/14**	**NZBVE-Z/K 230/_/_/6 NZBVE-Z/K 230/_/_/14**
Charging unit L230/1.8	max. 6	max. 6	max. 6	max. 6
Batteries with a lifetime expectation of 10 years	33 to 760 Ah	33 to 200 Ah	33 to 200 Ah	33 to 96 Ah
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Built-in printer ED	optional	optional	optional	optional
LON-BUS interface	optional	optional	optional	optional
Monitoring system LOGICA-Visual	optional	optional	optional	optional
USB interface TCP/IP interface GSM interface	optional (max. 1)	optional (max. 1)	optional (max. 1)	optional (max. 1)
Mains switch/contactor dependent control module LSSA 230/24	optional (max. 8) (max. 8) (max. 8) (max. 8)	optional (max. 8) (max. 8) (max. 8) (max. 8)	optional (max. 1) (max. 2)	optional (max. 4) (max. 4)
Operation and monitoring modules AK 1× 32 EÜ AK 2× 32 EÜ AK 4× 32 EÜ Operation and monitoring modules AK 1× 32 SÜ AK 2× 32 SÜ AK 4× 32 SÜ Operation and monitoring module AK 32-SÜ-AC	Rack compartments (max. 6) (max. 14) (max. 22) (max. 30)	Rack compartments (max. 6) (max. 14) (max. 22) (max. 30)	Rack compartments (max. 6) (max. 14)	Rack compartments (max. 6) (max. 14)
Design	Floor standing cabinets (electronics and battery)	Floor standing cabinets (electronics and battery)	Wall-mounted cabinet (electronics) Floor standing cabinet (battery)	Floor standing combined cabinet (electronics and battery)
Dimensions (H × W × D)	2000 × 800 × 600 mm	2000 × 800 × 400 mm	890 × 800 × 400 mm	2000 × 800 × 600 mm

Typ	**NZBVA-U / S 6** **NZBVA-U / S 14** **NZBVA-U / S 22** **NZBVA-U / S 30**	**NZBVE-U / S 6** **NZBVE-U / S 14** **NZBVE-U / S 22** **NZBVE-U / S 30**	**NZBVA-U / A 6** **NZBVA-U / A 14** **NZBVE-U / A 6** **NZBVE-U / A 14**	**NZBVA-U / A 6-30** **NZBVA-U / A 14-30** **NZBVE-U / A 6-30** **NZBVE-U / A 14-30**
Charging unit L230 / 1.8	–	–	–	–
Batteries with a lifetime expectation of 10 years	–	–	–	–
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Built-in printer ED	–	–	–	–
LON-BUS interface	–	–	–	–
Monitoring system LOGICA-Visual	No	No	No	No
USB interface	–	–	–	–
TCP / IP interface				
GSM interface				
Mains switch/contactor dependent control module LSSA 230/24	optional (max. 8) (max. 8) (max. 8) (max. 8)	optional (max. 8) (max. 8) (max. 8) (max. 8)	optional (max. 1) (max. 2)	optional (max. 4) (max. 4)
Operation and monitoring modules AK 1× 32 EÜ AK 2× 32 EÜ AK 4× 32 EÜ	Rack compartments (max. 6) (max. 14) (max. 22) (max. 30)	Rack compartments (max. 6) (max. 14) (max. 22) (max. 30)	Rack compartments (max. 6) (max. 14)	Rack compartments (max. 6) (max. 14)
Operation and monitoring modules AK 1× 32 SÜ AK 2× 32 SÜ AK 4× 32 SÜ				
Operation and monitoring module AK 32-SÜ-AC				
Design	Floor standing cabinet	Floor standing cabinet	Wall-mounted cabinet	Wall-mounted cabinet
Dimensions (H × W × D)	2000 × 800 × 600 mm 2000 × 800 × 600 mm 2000 × 800 × 600 mm 2000 × 800 × 600 mm	2000 × 800 × 400 mm 2000 × 800 × 400 mm 2000 × 800 × 400 mm 2000 × 800 × 400 mm	380 × 600 × 350 mm 760 × 600 × 350 mm	949 × 608 × 324 mm 1149 × 608 × 324 mm

System spreadsheet NZBVA and NZBVE



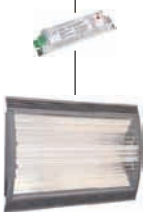


The mains switch control module LSSA 230/24 transfers the status of the mains switches to any emergency lighting circuit or to any emergency luminaire.

Emergency luminaries may be switched with the light switch by using the LSSA mains switch control module.

Emergency luminaries in maintained mode

Emergency luminaries in maintained mode connected to mains switches



Emergency luminaries in non-maintained mode

Emergency luminaries in maintained mode

Emergency luminaries in maintained mode connected to mains switches

Sub distribution board

Central station for NZBVA

Central station NZBVA-Z acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- 6 rack compartments for charging unit L230/1.8
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules

Control cabinet including a lockable door with inspection pane and detachable frame. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz*
	U: 230 V (+6%/-10)
	3 ~ N PE 50/60 Hz
	U: 400 V (+6%/-10)
Battery supply:	*U = 216 V*
Fuses and terminal blocks according to technical specification	

Cable entry:	*from bottom*
Cabinet:	*Steel sheet*
Mounting:	*Floor standing*
Degree of protection:	*IP 54*
Electrical class:	*I*
Rated ambient temperature:	*-5 °C to +35 °C*

SlebLOGICA system:

Cabinet colour:	*light grey RAL 7035*
Colour of modules:	*black/red*

AutoLOGICA system:

Cabinet colour:	*brilliant blue RAL 5007*
	or
	light grey RAL 7035
Colour of modules:	*grey/blue*

Central station for NZBVE KOMBI

Central station NZBVE KOMBI acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- 6 rack compartments for charging unit L230/1.8
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules (with separate control cabinet)

Control cabinet with lockable door and inspection pane. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz*
	U: 230 V (+6%/-10)
	3 ~ N PE 50/60 Hz
	U: 400 V (+6%/-10)
Battery supply:	*U = 216 V*
Fuses and terminal blocks according to technical specification	

Cable entry:	*from top*
Cabinet:	*Steel sheet*
Mounting:	*Floor standing*
Degree of protection:	*IP 21*
Electrical class:	*I*
Rated ambient temperature:	*-5 °C to +35 °C*

SlebLOGICA system:

Cabinet colour:	*light grey RAL 7035*
Colour of modules:	*black/red*

AutoLOGICA system:

Cabinet colour:	*brilliant blue RAL 5007*
	or
	light grey RAL 7035
Colour of modules:	*grey/blue*

Central station for NZBVE

Central station NZBVE-Z acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- 6 rack compartments for charging unit L230/1.8
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules (with combined control and battery cabinet)
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules (with separate control cabinet)

Control cabinet with lockable door and inspection pane. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz*	*Cable entry:*	*from top*
	U: 230 V (+6%/-10)	*Cabinet:*	*Steel sheet*
	3 ~ N PE 50/60 Hz	*Mounting:*	*Floor standing*
	U: 400 V (+6%/-10)	*Degree of protection:*	*IP 21*
Battery supply:	*U = 216 V*	*Electrical class:*	*I*
Fuses and terminal blocks according to technical specification		*Rated ambient temperature:*	*-5 °C to +35 °C*

SlebLOGICA system:		*AutoLOGICA system:*	
Cabinet colour:	*light grey RAL 7035*	*Cabinet colour:*	*brilliant blue RAL 5007 or light grey RAL 7035*
Colour of modules:	*black/red*	*Colour of modules:*	*grey/blue*

Charging unit for NZBVA and NZBVE

Charging unit L230/1.8

Temperature-controlled charging based on IU characteristic with charging mode-dependent switching from charging to maintaining battery charging (float charging). When multiple charging units are used, each of them is independent from the other.

Technical data

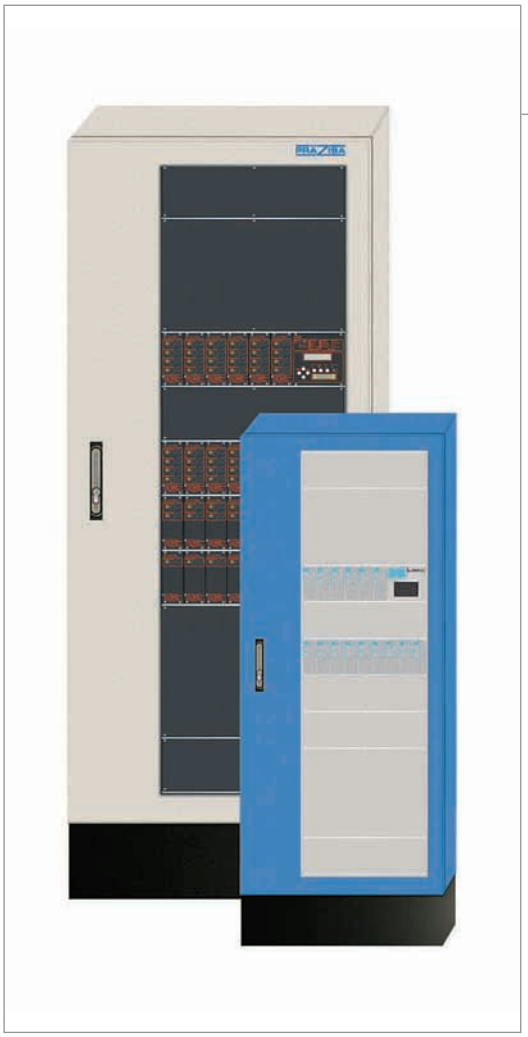
Charge voltage:	*244 V*		
Charge current:	*1.8 A*		
Design:	*19" rack insert (1 rack compartment)*		
Type:	*L230/1.8*		
Order no.:	**G32893-SL**	*Order no.:*	**G32893-AL**
Colour of modules:	*black/red*	*Colour of modules:*	*grey/blue*

Batteries for NZBVA and NZBVE

Batteries

Sealed lead-acid battery with a lifetime expectation of 10+ years at an ambient temperature of 20° C acc. to EN 50171.
Battery capacity 33 Ah up to 760 Ah.

Further information about battery details available on request.



Sub-station for NZBVA (floor standing)

Sub-station NZBVA-U/S acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules

Cabinet with lockable door, inspection pane and detachable frame. Modules for 19" rack technology.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz* *U: 230 V (+6%/-10)* *3 ~ N PE 50/60 Hz* *U: 400 V (+6%/-10)*	*Cable entry:*	*from bottom*
		Cabinet:	*Steel sheet*
		Mounting:	*Floor standing*
		Degree of protection:	*IP 54*
Battery supply:	*U = 216 V*	*Electrical class:*	*I*
Fuses and terminal blocks according to technical specification		*Rated ambient temperature: -5 °C to +35 °C*	
SlebLOGICA system:		*AutoLOGICA system:*	
Cabinet colour:	*light grey RAL 7035*	*Cabinet colour:*	*brilliant blue RAL 5007* *or* *light grey RAL 7035*
Colour of modules:	*black/red*	*Colour of modules:*	*grey/blue*

Sub-station for NZBVE (floor standing)

Sub-station NZBVE-U/S acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules (system with separate control cabinet)

Cabinet with lockable door and inspection pane. Modules for 19" rack technology.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz* *U: 230 V (+6%/-10)* *3 ~ N PE 50/60 Hz* *U: 400 V (+6%/-10)*	*Cable entry:*	*from bottom*
		Cabinet:	*Steel sheet*
		Mounting:	*Floor standing*
		Degree of protection:	*IP 54*
Battery supply:	*U = 216 V*	*Electrical class:*	*I*
Fuses and terminal blocks according to technical specification		*Rated ambient temperature: -5 °C to +35 °C*	
SlebLOGICA system:		*AutoLOGICA system:*	
Cabinet colour:	*light grey RAL 7035*	*Cabinet colour:*	*brilliant blue RAL 5007* *or* *light grey RAL 7035*
Colour of modules:	*black/red*	*Colour of modules:*	*grey/blue*

Sub-station for NZBVA and NZBVE (wall mounting)

Sub-station NZBVA-U/A or NZBVE-U/A acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules

Cabinet with lockable door and inspection pane. Modules for 19" rack technology.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz*
	U: 230 V (+6%/-10)
	3 ~ N PE 50/60 Hz
	U: 400 V (+6%/-10)
Battery supply:	*U = 216 V*
Fuses and terminal blocks according to technical specification	

Cable entry:	*from top*
Cabinet:	*Steel sheet*
Mounting:	*Wall mounting*
Degree of protection:	*IP 54*
Electrical class:	*I*
Rated ambient temperature: -5 °C to +35 °C	

SlebLOGICA system:

Cabinet colour:	*light grey RAL 7035*
Colour of modules:	*black/red*

AutoLOGICA system:

Cabinet colour:	*brilliant blue RAL 5007 or light grey RAL 7035*
Colour of modules:	*grey/blue*

Sub-station with 30 minutes rated fire protection for NZBVA and NZBVE (wall mounting)

Sub-station NZBVA-U/A-30 or NZBVE-U/A-30 acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules

Cabinet with maintaining fire protection of 30 minutes following DIN 4102-2 with lockable door. Modules for 19" rack technology.

Technical data

Mains supply:	*1 ~ N PE 50/60 Hz*
	U: 230 V (+6%/-10)
	3 ~ N PE 50/60 Hz
	U: 400 V (+6%/-10)
Battery supply:	*U = 216 V*
Cable entry:	*From top via a fitted cable entry to which a fire protected cable duct can be tightly connected.*

Body:	*Highly compressed fire protection panels*
Surface coating:	*Sprela, grey (similar to RAL 7035)*
Mounting:	*Wall mounting*
Degree of protection:	*IP 54*
Electrical class:	*I*
Rated ambient temperature: -5 °C to +35 °C	

Fuses and terminal blocks according to technical specification