AEC

BATTERIES FOR AEC UPS

Battery cabinets

& VRLA batteries

Steel cabinets sized for every AEC UPS, from 1 kVA towers to 200 kVA three-phase systems, delivered with AEC wiring diagrams and 12 V AGM batteries.



BB4 · BB5 · BB8, TO SCALE

10 models
tower, rack and floor-standing cabinets

9–100 Ah
12 V VRLA AGM batteries

±240 V
three-pole string with neutral

200 kW
largest UPS served by one cabinet

WHY AEC CABINETS

Key features
Battery cabinets

Steel cabinets that extend the backup of every AEC UPS: supplied empty or complete with 12 V VRLA AGM batteries, fuses and internal cables, with an AEC wiring diagram for every configuration.

10 models
tower, rack and floor-standing

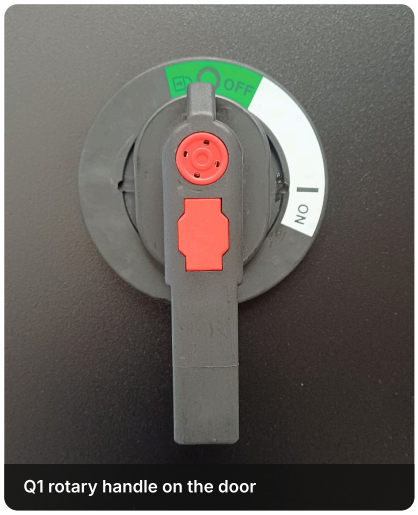
9–100 Ah
12 V VRLA AGM batteries

±240 V
three-pole string with neutral

200 kW
largest UPS served by one cabinet


Steel frame: battery shelves and the Q1 level on top


Assembled and wired with the batteries



Q1 rotary handle on the door

01 · DISCONNECT
Q1 with DC fuses
3-pole switch-disconnector with fuses sized for the UPS; door-mounted rotary handle on BB6–BB8.

02 · STRING
Neutral at the midpoint
One ± string per cabinet, matched to the IST7 split battery; BB8 holds two strings in parallel.

03 · SUPPLY
Empty or complete
Delivered with OZ Power 12 V VRLA AGM batteries, fuses and internal cables, or empty for batteries bought on site.

04 · DOCUMENTS
Wiring diagram for every set
Each configuration has its own AEC wiring diagram, supplied with the cabinet.

05 · SITE
Built to the project
IP20 as standard, up to IP44, forced ventilation, Q1 auxiliary contacts and 2-pole versions on request.

06 · STANDARDS
IEC/EN 62040-1 · EN IEC 62485-2
CE marked, RAL 9005 steel like every AEC UPS, 3-year warranty on the cabinet.


BB4
255 × 880 mm


BB5
460 × 1400 mm


BB6
800 × 1400 mm


BB7
800 × 1900 mm

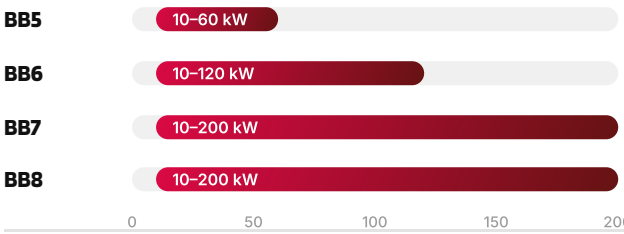

BB8
1400 × 1900 mm

THE RANGE

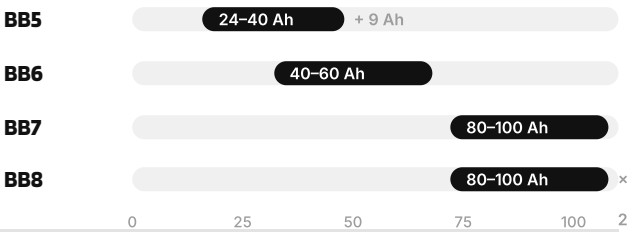
Range overview
Battery cabinets BB5–BB8

One string per cabinet, with the neutral at its midpoint like the IST7 battery input; the BB8 holds two in parallel. The cabinet code is the model + the largest UPS it serves (BB7-160K): fuses and cables follow the power, the battery configuration does not change the code.

UPS POWER SERVED · KW, BY CODE



BATTERY BLOCK · 12 V, AH



SIDE BY SIDE

	BB5	BB6	BB7	BB8
W × D × H, mm	460 × 800 × 1400	800 × 800 × 1400	800 × 800 × 1900	1400 × 800 × 1900
Weight, empty	105 kg	140 kg	160 kg	250 kg
Blocks	30–40 × 24 / 40 Ah 120 × 9 Ah	30–40 × 40 / 60 Ah	28–36 × 80 / 100 Ah	40 · 60 · 64 × 80 / 100 Ah
Largest set, filled	580 kg	≈ 800 kg	1275 kg	2215 kg
Battery shelves	4 + Q1 level	3 + Q1 level	4 + Q1 level	4 + Q1 level, 2 bays
Front	screwed panel	door, Q1 handle	door, Q1 handle	2 doors, Q1 handle
Q1 fuses	+, N, – · 50–125 A	+, – · 50–250 A	+, – · 50–400 A	+, – · 50–400 A
String	±180 … ±240 V	±180 … ±240 V	±168 … ±216 V	2 × ±120 … ±192 V
Base	102 mm plinth	95 mm feet	95 mm feet	95 mm feet

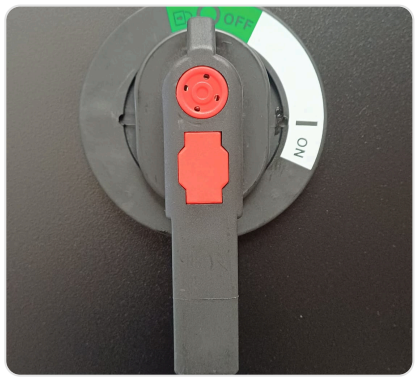
BUILT BY AEC · PHOTOS



BB8 FRAME, WIRED, ON ITS PALLET



BB6 FRAME WITH 60 AH BLOCKS AND Q1



Q1 ROTARY HANDLE ON THE DOOR

SUPPLY

Empty or complete

With OZ Power blocks, fuses and internal cables, or empty for batteries bought on site.

DOCUMENTS

A wiring diagram for every set

Each configuration has its own AEC wiring diagram, supplied with the cabinet.

STANDARDS

IEC/EN 62040-1 · EN IEC 62485-2

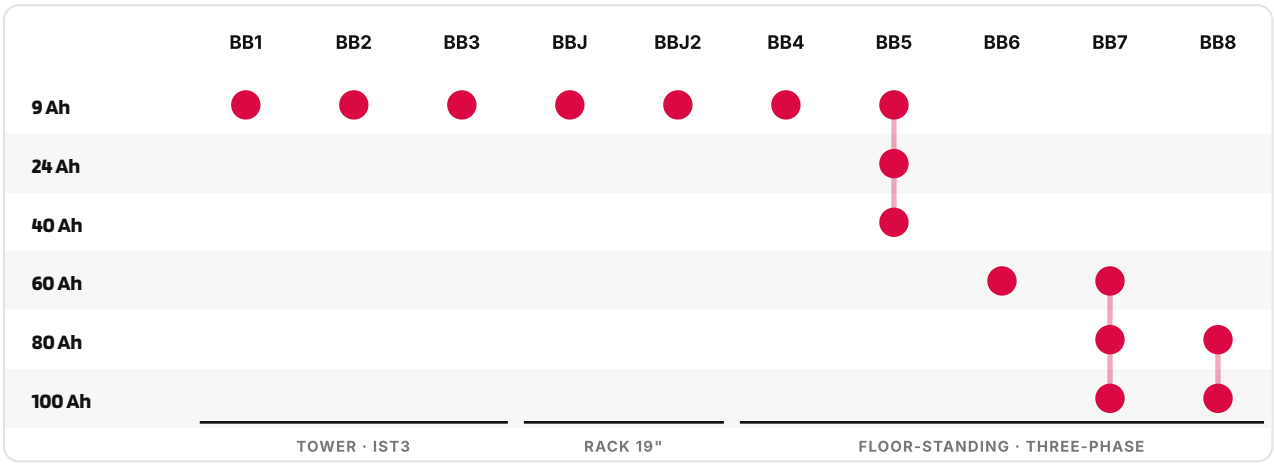
CE marked, RAL 9005 like every AEC UPS, 3-year warranty on the cabinet.

STANDALONE CABINETS

Standalone cabinets
Battery cabinets

AEC cabinets extend every AEC UPS, and they are also sold on their own: for an existing UPS, a new battery string or a project with its own backup time. The number of blocks sets the voltage; the capacity sets the cabinet.

Which cabinet for which battery



BB5 to BB8: standard and on request

01 · STANDARD

Steel, RAL 9005

Black like every AEC UPS; IP20 with ventilation slots.

02 · ON REQUEST

2-pole version

Positive and negative only, no neutral, for UPS with a 2-pole battery input.

03 · ON REQUEST

Q1 auxiliary contacts

Remote signalling of the disconnect status to the UPS or BMS.

04 · CABLES

Cable sizing

Copper cables X1 → UPS to IEC 60364-5-52, voltage drop at most 1.5 V DC.

05 · INSTALLATION

Temperature probe

With temperature-compensated charging, the UPS battery probe goes inside the cabinet, at mid-height of the stack.

06 · STANDARD

Cable entry

Gland plate on top (BB6–BB8); side, top or bottom on BB5.

BUILT TO THE PROJECT

AEC carpentry adapts the cabinets to the site: protection degree, material, ventilation and switchgear.

max. IP44
protection degree on request

Aluminium or stainless steel
cabinet material on request

Forced ventilation
automatic fans, 12 or 24 V DC

max. 1000 A
fuse holders, 2- or 3-pole disconnectors

Data from the AEC BB5–BB8 user manuals and general arrangement drawings, the AEC code list and AEC battery cabinet documentation.

TOWER AND RACK

Tower and rack cabinets
Battery cabinets

Same colour and front style as the UPS they extend. Tower cabinets stand beside the IST3; rack cabinets fit the 19-inch rack under the IST3-J or IST9.

Tower · IST3



BB1

IST3 1 kVA

- 145 × 360 × 225 mm · 4 kg
- Max. 6 × 12 V 9 Ah
- e.g. IST3-1-6X9: UPS + BB1 with 6 batteries



BB2

IST3 2–3 kVA

- 190 × 400 × 330 mm · 6 kg
- Max. 12 × 12 V 9 Ah
- e.g. IST3-2-12X9, IST3-3-12X9



BB3

IST3 6–10 kVA

- 230 × 502 × 553 mm · 15 kg
- Max. 32 × 12 V 9 Ah
- More BB3 per UPS for longer backup

Rack 19" · IST3-J and IST9



BBJ

IST3-J 1–3 kVA

- 438 × 413 mm · 2U · 6 kg
- Max. 8 × 12 V 9 Ah
- Up to 3 BBJ per UPS



BBJ2

IST3-J 6–10 kVA · IST9 20 kVA

- 438 × 500 mm · 3U · 10 kg
- Max. 16 × 12 V 9 Ah
- Up to 8 BBJ2 (IST3-J), 10 BBJ2 (IST9 20 kVA)

HOW THE CODE READS

IST3J-6-32X9

UPS model and kVA, then the total number of batteries × their capacity in Ah. IST3J-6-32X9 = IST3-J 6 kVA with two BBJ2 and 32 × 12 V 9 Ah.

Data from the AEC code list. Battery quantity per UPS is set by the UPS battery voltage: see the UPS sections.

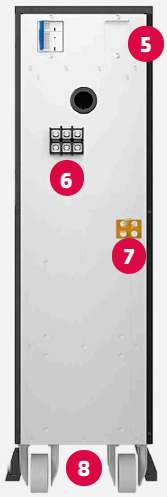
BB4 · TOWER CABINET

BB4 battery cabinet
For IST7 10–40 kVA

A mobile cabinet in the same black body as the IST7 10–20 kVA, for up to 80 batteries of 12 V 9 Ah in four layers. The standard extension of every IST7 S model, and a 9 Ah cabinet for any UPS.



SIDE PANEL REMOVED



TERMINAL SIDE

255 × 755 × 880
W × D × H, mm

58 kg
weight, empty

80 × 12 V 9 Ah
4 layers of up to 20 batteries

10–40 kW
UPS power served

SPECIFICATIONS

Size W × D × H	255 × 755 × 880 mm
Weight, empty	58 kg
Batteries	max. 80 × 12 V 9 Ah
Disconnect	three-pole DC breaker; second breaker optional
Mobility	on wheels
Codes	BB4-10k · BB4-20k · BB4-40k (UPS up to 10 / 20 / 40 kW)
Cables	internal cables included; external cables optional
Colour	black, as the IST7 10–20 kVA

LEGEND

1. **Three-pole DC breaker**
2. **Terminal cover**
3. **Battery layers**
   4 layers, up to 20 batteries each.
4. **DC fuse protection board**
5. **Optional second breaker**
6. **Terminal block**
7. **Earth (ground) terminal**
8. **Wheels**



IST7 S MODEL + BB4

Same 12 V 9 Ah blocks and the same string voltage as the internal battery: IST7-20-80X9 = 40 inside + 40 in BB4. Same black cabinet, side by side.

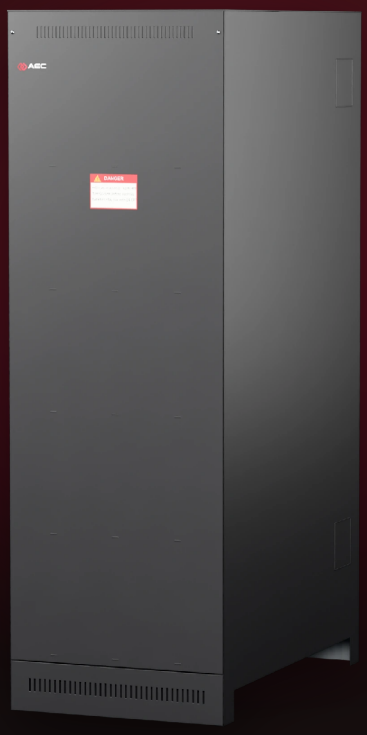
BB4 data from the AEC code list. Wiring diagram supplied by AEC with the cabinet.

BB5

SLIM CABINET

24 to 40 Ah · up to 60 kW

The narrowest AEC floor cabinet: only 460 mm wide, with a screwed front panel. Five levels: four battery shelves and the top level with the fused disconnect Q1, which also takes batteries in the 34–40 configurations.



460 × 800 × 1400
W × D × H, mm

105 kg
weight, empty

30–40 ×12 V
24 / 40 Ah blocks, or 120 × 9 Ah

60 kW
largest UPS, by code



FRONT PANEL OFF · BATTERIES IN



X-RAY · THE STRINGS INSIDE



EMPTY FRAME · SHELVES AND Q1

FOOTPRINT

460 mm wide

Fits beside an IST7 10–40 kVA, in a corridor or a narrow technical room: 0.37 m² of floor.

PROTECTION

Fused on all three poles

+, N and – each on its own fuse: the string is isolated pole by pole.

SERVICE

Removable trays

Galvanised 25 mm trays slide out to load and check the blocks shelf by shelf.

Components
BB5 battery cabinet



OPEN, FROM THE FRONT

LEGEND · **FRONT**

1. **Disconnect Q1**
   3-pole DC fuse holder on the galvanised plate of the top level: fused on +, N and −. No external handle: each pole is a carrier opened by hand with the front panel off.
2. **Terminals X1 to the UPS**
   L+, M (N) and L− to the UPS battery input, PE beside them.
3. **Batteries**
   OZ Power 12 V VRLA AGM, 2 across × 4 deep a shelf as the AEC wiring diagram lays them; Bat. 1 is the negative end.
4. **Links and main cables**
   Short links block to block, jumpers shelf to shelf; + red, − black, N blue from Q1.



Q1 COMPARTMENT

LEGEND · **Q1**

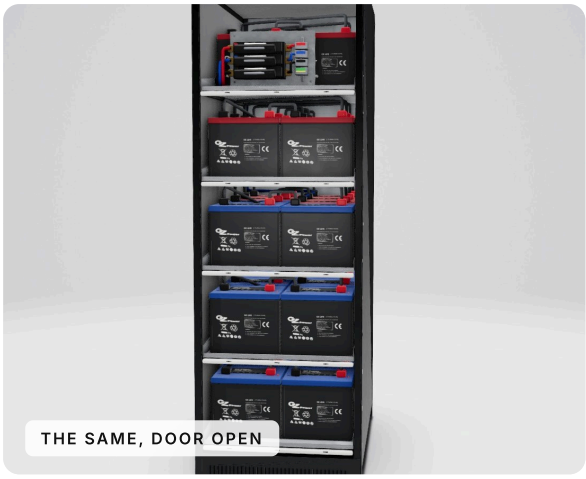
5. **Disconnect Q1**
   3-pole DC fuse holder on the galvanised plate of the top level: fused on +, N and −. No external handle: each pole is a carrier opened by hand with the front panel off.
6. **PE bonding point**
   To the UPS earth or the building earth.

With Q1 OFF the UPS terminals are isolated; the batteries and their cables up to Q1 stay live.

Battery layout
BB5 battery cabinet



X-RAY · + HALF RED, – HALF BLUE



THE SAME, DOOR OPEN

HOW THE STRING IS BUILT

One string with the neutral at its midpoint, as the IST7 split battery: + to N and N to – carry half the voltage each, so 36 blocks give 216 / 216 V, 432 V end to end. The X-ray colours the two halves.

+ half · – half · – cable black · N cable blue · + red



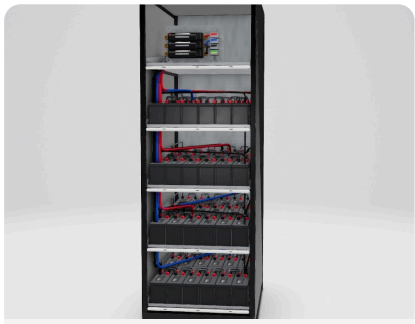
38 × 40 Ah

580 kg filled · IST7 10 · 20 · 30 · 40 · 60 kVA
228 / 228 V · 456 V
OZ-1240 · 197 × 166 × 170 mm · 11.5 kg a block



40 × 24 Ah

420 kg filled · IST7 10 · 20 · 30 · 40 kVA
240 / 240 V · 480 V
OZ-1224 · 166 × 175 × 125 mm · 7.0 kg a block



120 × 9 Ah

405 kg filled · IST7 10 · 20 · 30 · 40 kVA
3 strings of 40 · 240 / 240 V
OZ-1209 · 151 × 65 × 100 mm · 2.3 kg a block

STRING VOLTAGE

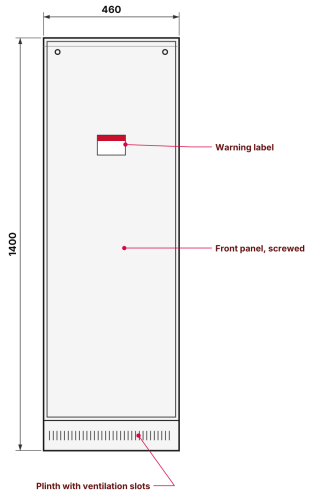
Blocks	+ / N / – · string	Blocks per half
30	180 / 180 V · 360 V	15 + 15
32	192 / 192 V · 384 V	16 + 16
34	204 / 204 V · 408 V	17 + 17
36	216 / 216 V · 432 V	18 + 18
38	228 / 228 V · 456 V	19 + 19
40	240 / 240 V · 480 V	20 + 20

SUPPLIED WITH AEC UPS

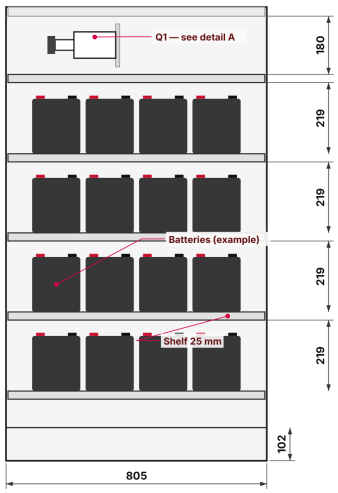
Batteries	Total kg	UPS kVA
30 · 32 · 34 × 24 Ah	340 · 356 · 372	10 · 20
36 · 38 · 40 × 24 Ah	388 · 400 · 420	10 · 20 · 30 · 40
30–38 × 40 Ah	480–580	10 · 20 · 30 · 40 · 60
100 × 9 Ah	355	IST3 10
120 × 9 Ah	405	IST7 10 · 20 · 30 · 40

Technical data
BB5 battery cabinet

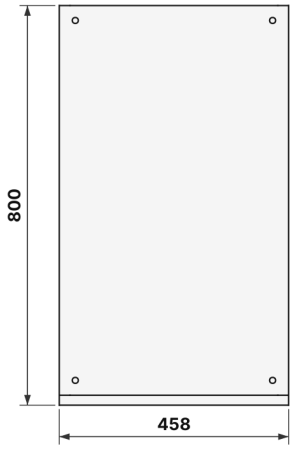
FRONT VIEW



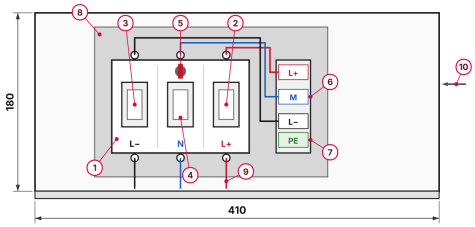
SIDE SECTION



TOP VIEW · CABLE ENTRY



DETAIL A · Q1 COMPARTMENT



1. Q1 3-pole DC switch-disconnector
2. F1 fuse (+)
3. F2 fuse (–)
4. F3 fuse (N)
5. Q1 direct handle (operate with the front panel removed)
6. X1 terminals to UPS: L+ · M · L–
7. PE bonding point
8. Galvanised mounting plate
9. Main cables to the string
10. Cable entry: right side, top and bottom

SPECIFICATIONS

Size W × D × H	460 × 800 × 1400 mm
Weight, empty	105 kg
Levels	4 battery shelves of 219 mm + Q1 level of 180 mm
Internal frame	458 × 785 mm
Front	screwed steel panel
Base	102 mm plinth with ventilation slots
Disconnect Q1	3-pole fuse holder, fused on +, N and –
Fuses	50 / 63 / 100 / 125 A, by code
String voltage	±180 … ±240 V (30–40 blocks)
Cable entry	right side, top and bottom
Floor fixing	through the base; hole positions from AEC
Protection · colour	IP20 (IP21–IP44 on request) · RAL 9005
Typical UPS	IST7 10–60 kVA · IST3 10 kVA (100 × 9 Ah)

CODES · UPS POWER · FUSES

Code	For UPS	Fuses
BB5-11	single-phase UPS, 120 × 9 Ah	–
BB5-10K	up to 10 kW	50 A
BB5-20K	up to 20 kW	63 A
BB5-40K	up to 40 kW	100 A
BB5-60K	up to 60 kW	125 A

Drawings DOC-BB5-GA-001 · MD-001 (AEC, 10/10/2026), full size in Download · data: AEC user manual and code list · fuses and cables on request.

BB6

SQUARE CABINET

40 and 60 Ah · up to 120 kW

An 800 × 800 mm footprint, a hinged door with lock and the Q1 handle on the door: the disconnect is switched without opening the cabinet. Three battery shelves and the Q1 compartment on top, behind a clear screen.



800 × 800 × 1400
W × D × H, mm

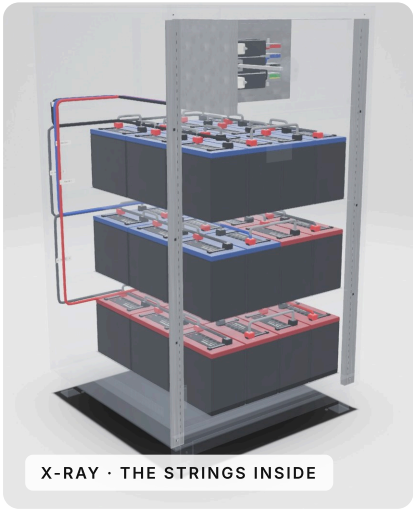
140 kg
weight, empty

30–40 ×12 V
60 Ah blocks · 40 Ah layout available

120 kW
largest UPS, by code



DOOR OPEN · BATTERIES IN



X-RAY · THE STRINGS INSIDE



EMPTY FRAME · SHELVES AND Q1

SAFETY

Q1 switched from outside

Rotary handle on the door, padlockable at OFF: no need to open the cabinet to isolate the UPS.

VISIBILITY

Clear Q1 screen

Polycarbonate screen over Q1, fuses and X1: checked at a glance, never touched by mistake.

FLEXIBILITY

2, 3 or 4 levels

Frames for the battery size: 12 blocks of 60 Ah a shelf, 40 Ah on the same layout.

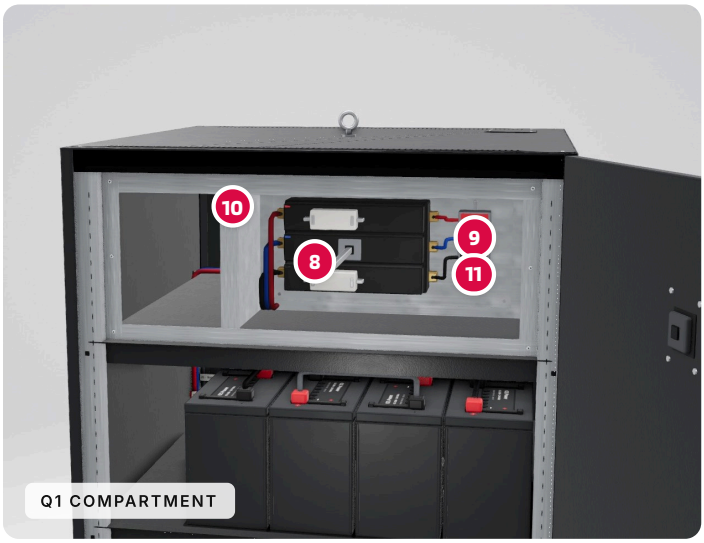
Components
BB6 battery cabinet



OPEN, FROM THE FRONT

LEGEND · **FRONT**

1. **Disconnect Q1**
   3-pole DC fuse switch-disconnector in the top compartment: fuses on + and –, the neutral switched, not fused. Turned from the door handle through a shaft.
2. **Batteries**
   OZ Power 12 V VRLA AGM, 4 across × 3 deep, turned a shelf as the AEC wiring diagram lays them; Bat. 1 is the negative end.
3. **Links and main cables**
   Short links block to block, jumpers shelf to shelf; + red, – black, N blue from Q1.
4. **Galvanised uprights**
   50 mm, holed for the shelf positions.
5. **Q1 rotary handle**
   On the door: lever down = OFF (O), a quarter turn clockwise = ON (I); padlockable.
6. **Door lock**
   Lever lock with key on the free edge.
7. **Door**
   Hinged steel door with lock, the AEC logo and the Q1 rotary handle.



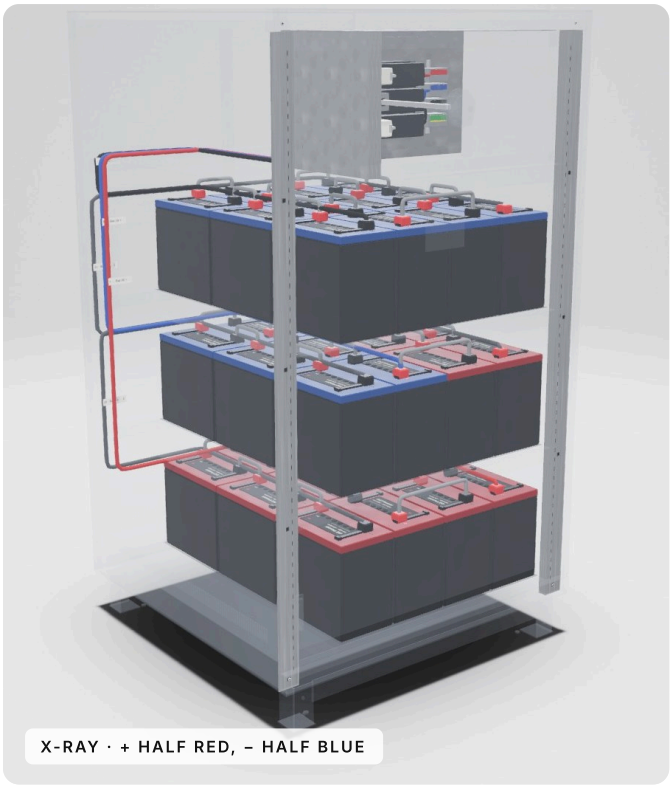
Q1 COMPARTMENT

LEGEND · **Q1**

8. **Q1 screen**
   Clear polycarbonate screen in a galvanised frame: Q1, fuses and X1 visible, never touchable. Open it only with Q1 OFF.
9. **Terminals X1 to the UPS**
   L+, M (N) and L– to the UPS battery input, PE beside them.
10. **Nameplate**
    Model, string voltage, blocks × strings, capacity, CE.
11. **PE bonding point**
    To the UPS earth or the building earth.

With Q1 OFF the UPS terminals are isolated; the batteries and their cables up to Q1 stay live.

Battery layout
BB6 battery cabinet



X-RAY · + HALF RED, – HALF BLUE



THE SAME, DOOR OPEN

HOW THE STRING IS BUILT

One string with the neutral at its midpoint, as the IST7 split battery: + to N and N to – carry half the voltage each, so 36 blocks give 216 / 216 V, 432 V end to end. The X-ray colours the two halves.

+ half · – half · – cable black · N cable blue · + red



30 × 60 Ah

660 kg filled · IST7 10–100 kVA
180 / 180 V · 360 V
OZ-1260 · 230 × 138 × 216 mm · 16.5 kg a block



36 × 60 Ah

760 kg filled · IST7 10–100 kVA
216 / 216 V · 432 V
OZ-1260 · 230 × 138 × 216 mm · 16.5 kg a block



40 × 60 Ah

≈ 800 kg filled · IST7 10–100 kVA
240 / 240 V · 480 V
OZ-1260 · 230 × 138 × 216 mm · 16.5 kg a block

STRING VOLTAGE

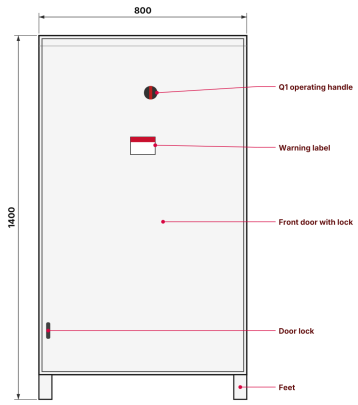
Blocks	+ / N / – · string	Blocks per half
30	180 / 180 V · 360 V	15 + 15
32	192 / 192 V · 384 V	16 + 16
34	204 / 204 V · 408 V	17 + 17
36	216 / 216 V · 432 V	18 + 18
38	228 / 228 V · 456 V	19 + 19
40	240 / 240 V · 480 V	20 + 20

SUPPLIED WITH AEC UPS

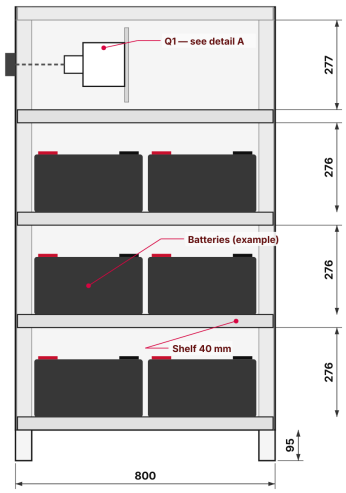
Batteries	Total kg	UPS kVA
30 × 60 Ah	660	10–100
32 × 60 Ah	695	10–100
34 × 60 Ah	730	10–100
36 × 60 Ah	760	10–100
40 × 60 Ah	≈ 800	10–100

Technical data
BB6 battery cabinet

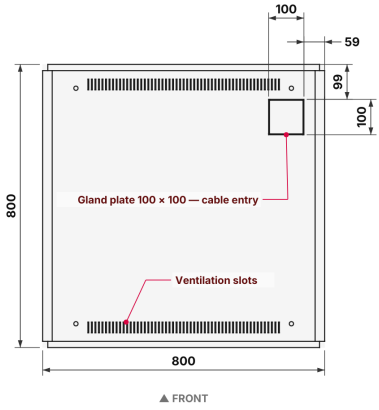
FRONT VIEW



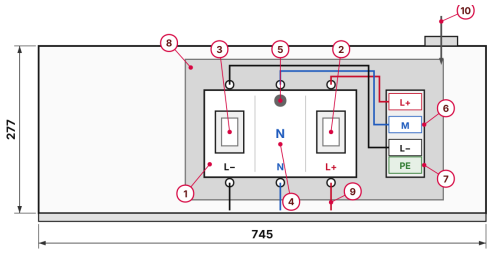
SIDE SECTION



TOP VIEW · CABLE ENTRY



DETAIL A · Q1 COMPARTMENT



1. Q1 3-pole DC switch-disconnector
2. F1 fuse (+)
3. F2 fuse (–)
4. N pole (switched, not fused)
5. Handle shaft to door
6. X1 terminals to UPS: L+ · M · L–
7. PE bonding point
8. Galvanised mounting plate
9. Main cables to the string
10. Cable entry: gland plate 100 × 100 (top)

SPECIFICATIONS

Size W × D × H	800 × 800 × 1400 mm
Weight, empty	140 kg
Levels	3 battery shelves of 276 mm + Q1 level of 277 mm
Internal frame	745 × 760 mm; frames with 2, 3 or 4 levels
Door	hinged, lock, Q1 rotary handle
Base	steel feet 95 mm, open base
Disconnect Q1	3-pole fuse switch-disconnector; fuses on + and –, N switched
Fuses	NH, 50 … 250 A, by code
String voltage	±180 … ±240 V (30–40 blocks)
Cable entry	roof gland plate 100 × 100 mm; open base
Floor fixing	Ø12 mm holes at 610 × 665 mm
Protection · colour	IP20 (IP21–IP44 on request) · RAL 9005
Typical UPS	IST7 10–100 kVA

CODES · UPS POWER · FUSES

Code	For UPS	Fuses
BB6-10K	up to 10 kW	50 A
BB6-20K	up to 20 kW	63 A
BB6-40K	up to 40 kW	100 A
BB6-60K	up to 60 kW	125 A
BB6-80K	up to 80 kW	160 A
BB6-100K	up to 100 kW	250 A
BB6-120K	up to 120 kW	250 A

Drawings DOC-BB6-GA-001 · MD-001 (AEC, 10/10/2026), full size in Download · data: AEC user manual and code list · fuses and cables on request.

BB7

TALL CABINET

80 and 100 Ah · up to 200 kW

The BB6 footprint, 1900 mm high, for the large 80 and 100 Ah blocks: four battery shelves and the Q1 level, which takes 2 or 4 more blocks in the 34 and 36 configurations. Up to 36 × 100 Ah in 0.64 m² of floor.



800 × 800 × 1900 W × D × H, mm	**160** kg weight, empty
28–36 × 12 V 80 / 100 Ah blocks	**200** kW largest UPS, by code



DOOR OPEN · BATTERIES IN



X-RAY · THE STRINGS INSIDE



EMPTY FRAME · SHELVES AND Q1

CAPACITY

43 kWh in 0.64 m²

36 × 12 V 100 Ah, the largest single string in one AEC cabinet.

SAFETY

Q1 switched from outside

Rotary handle on the door, padlockable at OFF; Q1 behind a clear screen.

POWER

Fuses up to 400 A

One cabinet, codes from 10 to 200 kW: fuses and cables follow the UPS.

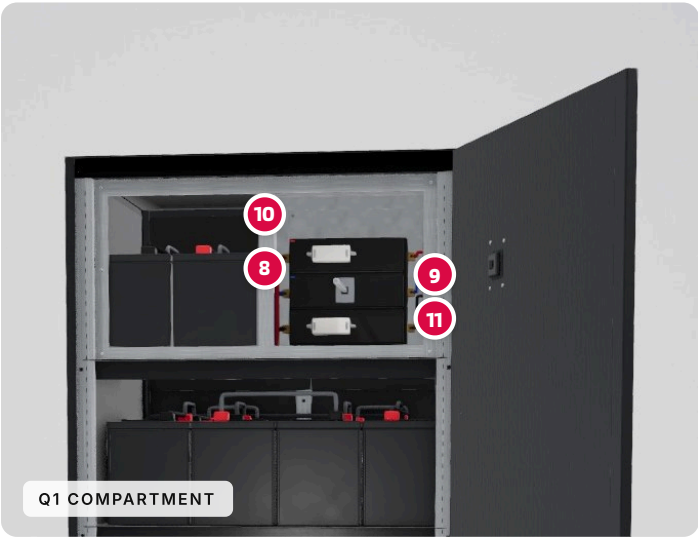
Components
BB7 battery cabinet



OPEN, FROM THE FRONT

LEGEND · **FRONT**

1. **Disconnect Q1**
   3-pole DC fuse switch-disconnector in the top compartment: fuses on + and –, the neutral switched, not fused. Turned from the door handle through a shaft.
2. **Batteries**
   OZ Power 12 V VRLA AGM, 4 across × 2 deep, turned a shelf as the AEC wiring diagram lays them; Bat. 1 is the negative end.
3. **Links and main cables**
   Short links block to block, jumpers shelf to shelf; + red, – black, N blue from Q1.
4. **Galvanised uprights**
   50 mm, holed for the shelf positions.
5. **Q1 rotary handle**
   On the door: lever down = OFF (O), a quarter turn clockwise = ON (I); padlockable.
6. **Door lock**
   Lever lock with key on the free edge.
7. **Door**
   Hinged steel door with lock, the AEC logo and the Q1 rotary handle.



Q1 COMPARTMENT

LEGEND · **Q1**

8. **Q1 screen**
   Clear polycarbonate screen in a galvanised frame: Q1, fuses and X1 visible, never touchable. Open it only with Q1 OFF.
9. **Terminals X1 to the UPS**
   L+, M (N) and L– to the UPS battery input, PE beside them.
10. **Nameplate**
    Model, string voltage, blocks × strings, capacity, CE.
11. **PE bonding point**
    To the UPS earth or the building earth.

With Q1 OFF the UPS terminals are isolated; the batteries and their cables up to Q1 stay live.

Battery layout
BB7 battery cabinet



X-RAY · + HALF RED, – HALF BLUE



THE SAME, DOOR OPEN

HOW THE STRING IS BUILT

One string with the neutral at its midpoint, as the IST7 split battery: + to N and N to – carry half the voltage each, so 36 blocks give 216 / 216 V, 432 V end to end. The X-ray colours the two halves.

+ half · – half · – cable black · N cable blue · + red



30 × 80 Ah

870 kg filled · IST7 10–160 kVA
180 / 180 V · 360 V
OZ-1280 · 260 × 169 × 216 mm · 22.0 kg a block



34 × 80 Ah

960 kg filled · IST7 10–160 kVA
204 / 204 V · 408 V
OZ-1280 · 260 × 169 × 216 mm · 22.0 kg a block



36 × 100 Ah

1275 kg filled · IST7 10–160 kVA
216 / 216 V · 432 V
OZ-12100 · 328 × 172 × 220 mm · 28.5 kg a block

STRING VOLTAGE

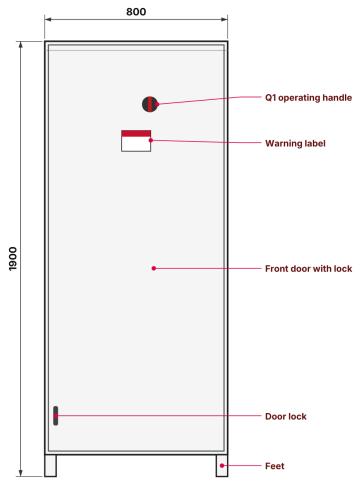
Blocks	+ / N / – · string	Blocks per half
28	168 / 168 V · 336 V	14 + 14
30	180 / 180 V · 360 V	15 + 15
32	192 / 192 V · 384 V	16 + 16
34	204 / 204 V · 408 V	17 + 17
36	216 / 216 V · 432 V	18 + 18

SUPPLIED WITH AEC UPS

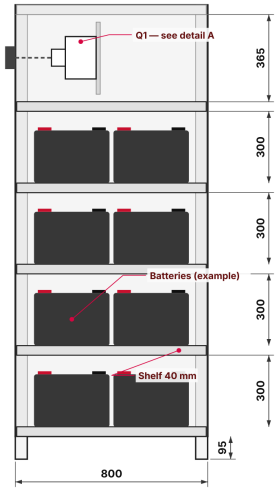
Batteries	Total kg	UPS kVA
30 · 32 · 34 · 36 × 80 Ah	870 · 930 · 960 · 1005	10–160
30 · 32 · 34 · 36 × 100 Ah	1095 · 1155 · 1215 · 1275	10–160

Technical data
BB7 battery cabinet

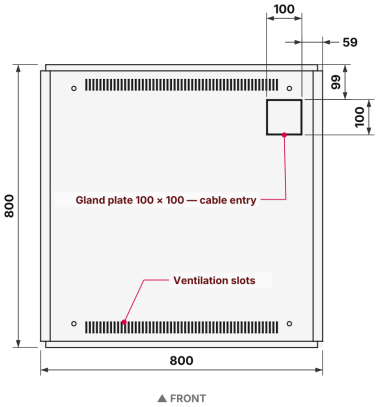
FRONT VIEW



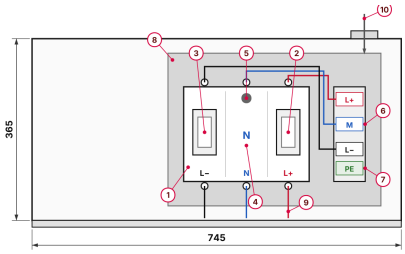
SIDE SECTION



TOP VIEW · CABLE ENTRY



DETAIL A · Q1 COMPARTMENT



1. Q1 3-pole DC switch-disconnector
2. F1 fuse (+)
3. F2 fuse (–)
4. N pole (switched, not fused)
5. Handle shaft to door
6. X1 terminals to UPS: L+ · M · L–
7. PE bonding point
8. Galvanised mounting plate
9. Main cables to the string
10. Cable entry: gland plate 100 × 100 (top)

SPECIFICATIONS

Size W × D × H	800 × 800 × 1900 mm
Weight, empty	160 kg
Levels	4 battery shelves of 300 mm + Q1 level of 365 mm
Internal frame	745 × 760 mm; frames with 2 to 5 levels
Door	hinged, lock, Q1 rotary handle
Base	steel feet 95 mm, open base
Disconnect Q1	3-pole fuse switch-disconnector; fuses on + and –, N switched
Fuses	NH, 50 ... 400 A, by code
String voltage	±168 ... ±216 V (28–36 blocks)
Cable entry	roof gland plate 100 × 100 mm; open base
Floor fixing	4 × Ø9 mm, centres 685 × 700 mm
Protection · colour	IP20 (IP21–IP44 on request) · RAL 9005
Typical UPS	IST7 10–160 kVA (codes up to 200 kW)

CODES · UPS POWER · FUSES

Code	For UPS	Fuses
BB7-10K	up to 10 kW	50 A
BB7-20K	up to 20 kW	63 A
BB7-40K	up to 40 kW	100 A
BB7-60K	up to 60 kW	125 A
BB7-80K	up to 80 kW	160 A
BB7-100K	up to 100 kW	250 A
BB7-120K	up to 120 kW	250 A
BB7-160K	up to 160 kW	400 A
BB7-200K	up to 200 kW	400 A

Drawings DOC-BB7-GA-001 · MD-001 (AEC, 10/10/2026), full size in Download · data: AEC user manual and code list · fuses and cables on request.

BB8

DOUBLE CABINET

Two strings · up to 200 kW

Two bays, two doors, 1400 mm wide: two identical strings in parallel at Q1, each with its own +, N and – cables. Up to 64 × 100 Ah, the largest AEC battery cabinet, with Q1 and its handle in the right bay.



1400 × 800 × 1900
W × D × H, mm

250 kg
weight, empty

40–64 × 12 V
80 / 100 Ah, two strings

200 kW
largest UPS, by code



DOOR OPEN · BATTERIES IN



X-RAY · THE STRINGS INSIDE



EMPTY FRAME · SHELVES AND Q1

CAPACITY
77 kWh in one cabinet
64 × 12 V 100 Ah in two strings of 32: the longest runtimes at 200 kW.

REDUNDANCY
Two strings in parallel
Each string has its own cables to Q1 and is measured on its own.

SERVICE
Two doors, two bays
String A on shelves 4–3, string B on 2–1; Q1 and the handle in the right bay.

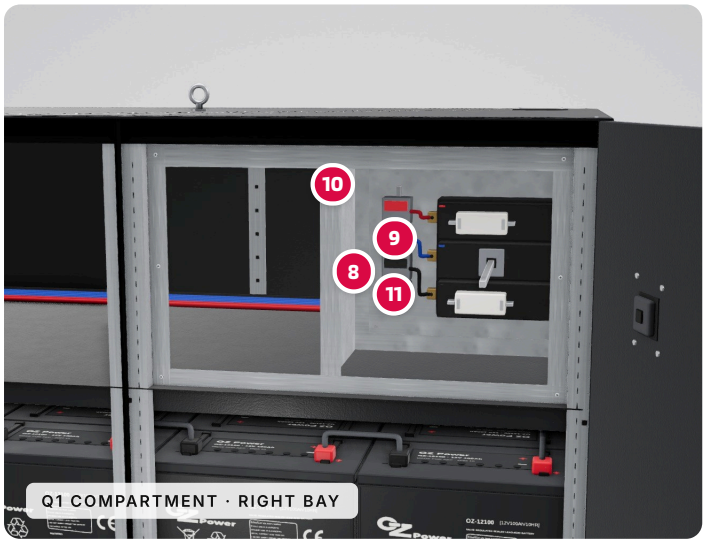
Components
BB8 battery cabinet



OPEN, FROM THE FRONT

LEGEND · **FRONT**

1. **Disconnect Q1**
   3-pole DC fuse switch-disconnector in the right bay: fuses on + and –, the neutral switched, not fused. Both strings meet at Q1.
2. **Batteries**
   OZ Power 12 V VRLA AGM, 4 across × 4 deep a shelf as the AEC wiring diagram lays them; Bat. 1 is the negative end.
3. **Links and main cables**
   Short links block to block, jumpers shelf to shelf; + red, – black, N blue from Q1.
4. **Galvanised uprights**
   50 mm (60 mm in the middle), holed for the shelf positions.
5. **Q1 rotary handle**
   On the door: lever down = OFF (O), a quarter turn clockwise = ON (I); padlockable.
6. **Door lock**
   One lever lock with key per door.
7. **Doors**
   Two hinged steel doors with lock: the AEC logo on the left one, the Q1 rotary handle on the right one.



Q1 COMPARTMENT · RIGHT BAY

LEGEND · **Q1**

8. **Q1 screen**
   Clear polycarbonate screen in a galvanised frame: Q1, fuses and X1 visible, never touchable. Open it only with Q1 OFF.
9. **Terminals X1 to the UPS**
   L+, M (N) and L– to the UPS battery input, PE beside them.
10. **Nameplate**
    Model, string voltage, blocks × strings, capacity, CE.
11. **PE bonding point**
    To the UPS earth or the building earth.

With Q1 OFF the UPS terminals are isolated; the batteries and their cables up to Q1 stay live.

Battery layout
BB8 battery cabinet



X-RAY · + HALF RED, – HALF BLUE



THE SAME, DOOR OPEN

HOW THE STRING IS BUILT

Two identical strings, A and B, each with the neutral at its midpoint: + to N and N to – carry half the voltage each. They meet in parallel at Q1, each on its own +, N and – cables: measure each string on its own.

+ half · – half · – cable black · N cable blue · + red



40 × 100 Ah

1495 kg filled · IST7 10–200 kVA
2 strings of 20 · 120 / 120 V
OZ-12100 · 328 × 172 × 220 mm · 28.5 kg a block



60 × 80 Ah

1650 kg filled · IST7 10–200 kVA
2 strings of 30 · 180 / 180 V
OZ-1280 · 260 × 169 × 216 mm · 22.0 kg a block



64 × 100 Ah

2215 kg filled · IST7 60–200 kVA
2 strings of 32 · 192 / 192 V
OZ-12100 · 328 × 172 × 220 mm · 28.5 kg a block

STRING VOLTAGE

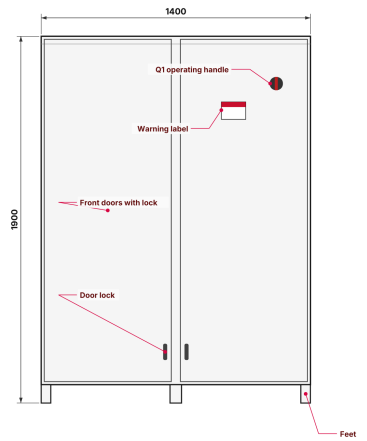
Blocks	Each string	Strings
40 = 2 × 20	120 / 120 V · 240 V	A + B
60 = 2 × 30	180 / 180 V · 360 V	A + B
64 = 2 × 32	192 / 192 V · 384 V	A + B

SUPPLIED WITH AEC UPS

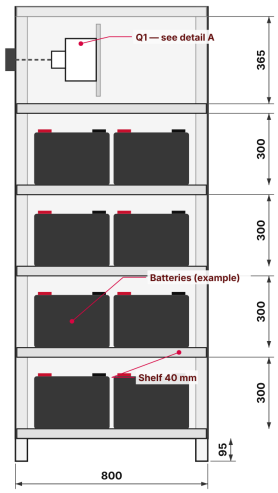
Batteries	Total kg	UPS kVA
40 × 80 Ah	1195	10–40
60 × 80 Ah	1650	10–200
64 × 80 Ah	1735	60–200
40 × 100 Ah	1495	10–40
60 × 100 Ah	2095	10–200
64 × 100 Ah	2215	60–200

Technical data
BB8 battery cabinet

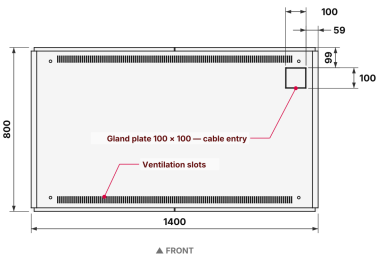
FRONT VIEW



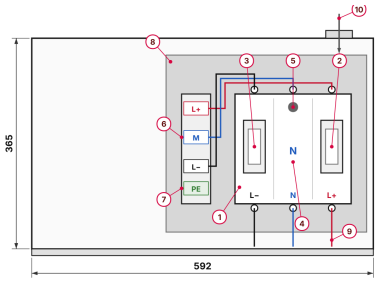
SIDE SECTION



TOP VIEW · CABLE ENTRY



DETAIL A · Q1 COMPARTMENT (RIGHT BAY)



1. Q1 3-pole DC switch-disconnector
2. F1 fuse (+)
3. F2 fuse (–)
4. N pole (switched, not fused)
5. Handle shaft to door
6. X1 terminals to UPS: L+ · M · L–
7. PE bonding point
8. Galvanised mounting plate
9. Main cables to the string
10. Cable entry: gland plate 100 × 100 (top)

SPECIFICATIONS

Size W × D × H	1400 × 800 × 1900 mm
Weight, empty	250 kg
Levels	4 battery shelves of 300 mm + Q1 level of 365 mm
Internal frame	1345 × 760 mm, two bays
Doors	two hinged doors with lock; Q1 handle on the right
Base	steel feet 95 mm, open base
Disconnect Q1	right bay; fuses on + and –, N switched
Fuses	NH00 / NH1 / NH2, 50 … 400 A, by code
String voltage	±120 … ±192 V, each string
Cable entry	roof gland plate 100 × 100 mm; open base
Floor fixing	through the feet; hole positions from AEC
Protection · colour	IP20 (IP21–IP44 on request) · RAL 9005
Typical UPS	IST7 10–200 kVA

CODES · UPS POWER · FUSES

Code	For UPS	Fuses
BB8-10K	up to 10 kW	50 A
BB8-20K	up to 20 kW	63 A
BB8-40K	up to 40 kW	100 A
BB8-60K	up to 60 kW	125 A
BB8-80K	up to 80 kW	160 A
BB8-100K	up to 100 kW	250 A
BB8-120K	up to 120 kW	250 A
BB8-160K	up to 160 kW	400 A
BB8-200K	up to 200 kW	400 A

Drawings DOC-BB8-GA-001 · MD-001 (AEC, 10/10/2026), full size in Download · data: AEC user manual and code list · fuses and cables on request.

INSTALLATION

Installation and safety
Battery cabinets BB5–BB8

From the AEC BB5–BB8 user manuals (10/10/2026). The cabinet holds a DC string of up to 480 V: installation and service by qualified electricians only.

STEP BY STEP

1 Keep Q1 OFF
Open Q1 (BB5: the three fuse carriers) before loading the blocks and keep it open for the whole installation.

2 Load from the bottom
Bottom shelf first, as the AEC wiring diagram places each block: terminals oriented as drawn, covers fitted.

3 Link the blocks
Short links – to + along each shelf, jumpers J1, J2 … shelf to shelf, tightened to the battery torque.

4 Connect N, then –, then +
Main cables from Q1: N blue to the midpoint, – black to Bat. 1, + red to the last block, last of all.

5 Bond PE
PE to the UPS earth or the building earth: same section as the phase cables up to 16 mm², 16 mm² up to 35 mm², half above.

6 Check before ON
Measure + / N and N / – at X1 (each string on its own in the BB8) before Q1 is closed.

THE ROOM

Temperature	20–25 °C is best, 0–40 °C allowed: battery life halves about every 8 °C above 25 °C.
Clearances	BB6–BB8: 100 mm free at the sides and behind for the ventilation slots; the door's swing in front.
Ventilation	Battery room ventilation to EN IEC 62485-2, for the hydrogen a VRLA string can release on charge.
Floor	Check the floor load: up to 2215 kg on 1.12 m² (BB8, 64 × 100 Ah).
Cables	Section by the fuse, from the user manual: e.g. 250 A → 120 mm² copper, PE 60 mm². Cable entry from the roof gland plate or the open base (BB6–BB8), the right side (BB5).

CABLE COLOURS

+ red · N blue · – black · PE yellow-green

BB7-160K

How to read the code

Model + the largest UPS power the cabinet serves, in kW: the fuses and the cables follow it. The battery configuration does not change the code: order the cabinet, then the blocks (OZ Power, Ah and quantity), or the complete set with the UPS.

See every cabinet in 3D

Open the doors, switch Q1, X-ray the strings and change the battery configuration: portal.emea.aecups.com › Tools › 3D. The room check (Tools › Room fit) places the cabinet beside the UPS with the clearances and the floor load.

ORDERING

Ordering codes
Battery cabinets

Code	Description
BB1 · BB2 · BB3	Tower cabinets for IST3 1 kVA · 2–3 kVA · 6–10 kVA
BBJ · BBJ2	Rack cabinets 2U and 3U for IST3-J and IST9
BB4-10k · -20k · -40k	BB4 for UPS up to 10 / 20 / 40 kW, max 80 × 9 Ah, internal cables
BB4-11 · BB5-11	Cabinets for single-phase UPS: max 80 × 9 Ah (BB4) · 120 × 9 Ah (BB5)
BB5-10k ... BB5-60k	BB5 for UPS up to 10 · 20 · 40 · 60 kW; 24 / 40 Ah or up to 120 × 9 Ah; 3 fuse holders
BB6-10k ... BB6-100k	BB6 for UPS up to 10 · 20 · 40 · 60 · 80 · 100 kW; 2 fuse holders
BB7-10k ... BB7-200k	BB7 for UPS up to 10 · 20 · 40 · 60 · 80 · 100 · 120 · 160 · 200 kW
BB8-10k ... BB8-200k	BB8 for UPS up to 10 · 20 · 40 · 60 · 80 · 100 · 120 · 160 · 200 kW
OZ Power 12 V	9 · 24 · 40 · 60 · 80 · 100 · 200 Ah · code on request

BB4–BB8 codes: model + maximum UPS power, which sets fuse rating and cables. Each code is available with or without fuses, internal cables and external cables (X1 → UPS).

1 · UPS

Power and voltage

UPS model and kW set the cabinet code and the number of batteries per string.

2 · BACKUP

Capacity

Backup time sets the battery capacity (9 to 100 Ah) and the number of cabinets.

3 · SITE

Cables and options

External cables to the UPS, and the options for the site listed on p. 183.

EXAMPLE

BB7-120k

BB7 cabinet for a UPS up to 120 kW: fuses F1/F2 250 A NH1, X1 → UPS cables at least 2 × 70 mm² Cu per pole, PE 35 mm².



12 V 9 Ah · 12 V 24 Ah · 12 V 40 Ah · 12 V 60 Ah · 12 V 80 Ah · 12 V 100 Ah · 12 V 200 Ah

OZ Power 12 V batteries, 9 to 200 Ah. Cabinet codes from the AEC code list; fuse data from the AEC battery cabinet catalogues, cable data from the IST7 user manuals.