Battery Backup Enclosures with VRLA Batteries

Compact and fully enclosed improve safety and maintenance, transmit information on the temperature and type of included valve-regulated acid batteries. They save space and improve the efficiency of the DC UPS.

Cat. No.	Output	Protection Current	Dimensions h x w x d (mm)	Weight kg (approx.)
BAT-1.2VRLA	24V - 1.2Ah	25 A fuse	62 x 175 x 120	1.5
BAT-3.4VRLA	24V - 3.2Ah	25 A fuse	82 x 200 x 160	3
BAT-7.2VRLA	24V - 7.2Ah	25 A fuse	145 x 210 x130	5.5
BAT-12VRLA	24V - 12Ah	25 A fuse	210 x 210x210	9

Battery Housing Without Batteries

Compact and fully enclosed improve safety and maintenance, transmit information on the temperature and type of batteries. They save space and improve the efficiency of the DC UPS. Size for 24 VDC: 1.2 Ah, 3 Ah, 7.2 Ah and 12 Ah, batteries are not included.

Cat. No.	Battery Type	Protection Current	Dimensions h x w x d (mm)	Weight kg (approx.)
BTH-1.2	2x 12V/1.2AH	25 A fuse	62 x 175 x 120	0.5
BTH-3.4	2x 12V/3.4AH	25 A fuse	82 x 200 x 160	0.9
BTH-7.2	2x 12V/7.2AH	25 A fuse	145 x 210 x130	1.5
BTH-12	2x 12V/12AH	25 A fuse	210 x 210x210	1.9

Battery Holders

Battery holders for DC UPS system is used in conjunction with a 12 or 24V CBI system. They are designed for maintenance free lead acid batteries (batteries are not included) and protected with a fuse. Units can be installed on a standard 35 mm din rail or wall mounted with a M4 type screw (screws not included).

Photo shown with batteries. Please consult Altech for units with battery options.

Cat. No.	Battery Size AH	Protection A	Dimensions WxHxD (mm)	Weight KG (with battery)	Mounting
BTM-123	12V/3.2Ah	25A fuse	105x136x90	1.6	M4 SCREW
BTM-123D	12V/3.2Ah	25A fuse	105x136x90	1.6	DIN RAIL
BTM-127	12V/7.2Ah	25A fuse	105x153x123	2.4	M4 SCREW
BTM-127D	12V/7.2Ah	25A fuse	105x153x123	2.4	DIN RAIL
BTM-1212	12V/12Ah	25A fuse	170x153x123	3.5	M4 SCREW
BTM-241	2 x 12V/1.2Ah	25A fuse	170x102x80	1.4	M4 SCREW
BTM-241D	2 x 12V/1.2Ah	25A fuse	170x102x80	1.4	DIN RAIL
BTM-243	2 x 12V/3.2Ah	25A fuse	170x136x90	3.1	M4 SCREW
BTM-243D	2 x 12V/3.2Ah	25A fuse	170x136x90	3.1	DIN RAIL
BTM-247	2 x 12V/7.2Ah	25A fuse	170x153x123	4.7	M4 SCREW
BTM-247D	2 x 12V/7.2Ah	25A fuse	170x153x123	4.7	DIN RAIL
BTM-2412	2 x 12V/12Ah	25A fuse	235x153x123	7.9	M4 SCREW

Battery Selection Chart

Battery Type	1.2 Ah	3 Ah	7.2 Ah	12 Ah
Load 1.5 A	20	60	200	400
Load 3 A	8	30	120	240
Load 5 A	3	15	55	100
Load 7.5 A	2	10	30	60
Load 10 A	No	7	20	45
Load 12 A	No	3	12	30
Load 15 A	No	No	9	20
Load 20 A	No	No	7	13

BUFFERING (MINUTE) TIME

Ultra Capacitor Modules

Traditional lead-acid batteries rely on aging technology and toxic chemicals for energy storage. While adequate for many applications, they have limitations for emerging applications that require safe, dependable, quick-back up power, over long periods of time. Ultracapacitors in DC-UPS applications, ensure that critical information and functions are available when supply voltage dips, sags, drops out or surges, or during a battery changeover. Working in conjunction with a complementary power supply, Ultracapacitors modules reliably supply energy in peak power demand conditions, short power outages and reducing stress on the primary power supply and extending its usable life.

Benefits:

- Environmentally safe
- Virtually maintenance free
- Operating temperature range -40°C to +65°C
- Higher power vs. batteries
- No toxic chemicals
- Lasts up to 15 years**
- Higher energy vs. electrolytic capacitors
- Resists shock and vibration

C-TEC Ultra capacitor module

The DC- buffer module of the series C-TEC works with ultra-capacitors as energy storage inside the housing. These capacitors are charge by a external regulated DC-power supply in normal operation. In case of an interruption of the DC-power supply the energy of the capacitors is released. The load is supplied by the buffer module till it is discharged. The back-up time depends on the state of charge of the capacitors and on the discharge current.

Cat. No.	prim. V	sec. V	output A	imax* A	energy Ws	dimensions h x w x d (mm)	weight kg
C-TEC 2403-1	24	24	3	6	1000	92,5x60x116	0.55
C-TEC 2405-5	24/12	24/12	5	7	5000	163x114x145	1.8
C-TEC 2410-10	24/12	24/12	10	10	10000	163x114x145	2.1
C-TEC 2420-8	24	24	20	20	8000	192x84x192	1.8
C-TEC 2440-4P	24	24	40	40	4000	192x84x198	2.0
AC-TEC 2403-1	115 – 230 VAC	24	3	1.5xIA	1000	152,5 x 72 x 130	0.85
AC-TEC 2420-8	3 x 340 – 550 VAC	24	20	1.5xIA	8000	192,5 x 140 x 198	0.55

Capacitor Extension Module

The CEM-Module is used to increase the back-up energy of the C-TEC series. The charging and discharging of the extension module is monitored and controlled by the C-TEC.

Cat. No.	nominal voltage V DC	sec. V DC	output A	imax* A	energy Ws	dimensions h x w x d (mm)	weight kg
CEM 1	24	24	3	3	1kJ, 1000Ws	92,5x60x116	0.85
CEM 2	24	24	3	3	2kJ, 2000Ws	92,5x60x116	1
CEM 8	24	24	20	20	8kJ, 8000Ws	192x84x192	1.4
CEM 16	24	24	20	20	16kJ, 16000Ws	192x84x192	1.9

AKKUTEC DC-UPS Buffer Unit (without batteries)

The battery buffered DC power supply is working according the stand-by parallel mode and ensures in connection with a lead-acid battery a safe continuous DC power supply during a determined time interval in case of mains failure. The total output current is shared between supply of the loads and charging of the buffer unit.

Cat. No.	prim. V	sec. V	output A	dimensions h x w x d (mm)	weight kg
AKKUTEC 2402	115 - 230	24	2	60x92,5x116	0.55
AKKUTEC 2405	115-230	24	5	160x75x150	1
AKKUTEC 2412	230	24	12	155x95x183	0.4
AKKUTEC 2440	3x400	24	44	180x290x150	3.3