











CBI - All in ONE	12Vdc				24Vdc				48Vdc	
										
Model	CBI123A	CBI126A	CBI1210A	CBI1235A	CBI243A	CBI245A	CBI2410A	CBI2420A	CBI485A	CBI4810A
INPUT DATA										
Nominal Input Voltage / Tensione d'ingresso nominale	115 - 230 - 277Vac	115 - 230 - 277Vac	115 - 230 - 277Vac	115 / 230 - 277Vac	115 - 230 - 277Vac	115 - 230 - 277Vac	115 / 230 - 277Vac	115 / 230 - 277Vac	115 / 230 - 277Vac	115 / 230 - 277Vac
Input Voltage Range / Campo di funzionamento	90 - 305Vac	90 - 305Vac	90 - 305Vac	90 - 135Vac 180 - 305Vac	90 - 305Vac	90 - 305Vac	90 - 135Vac 180 - 305Vac	90 - 135Vac 180 - 305Vac	90 - 135Vac 180 - 305Vac	90 - 135Vac 180 - 305Vac
Inrush Current (Vn and In Load) / Corrente di Inserzione	≤ 11 A ≤ 5msec	≤ 11 A ≤ 5msec	≤ 11 A ≤ 5msec	≤ 35 A ≤ 5msec	≤ 11 A ≤ 5msec	≤ 11 A ≤ 5msec	≤ 16 A ≤ 5msec	≤ 35 A ≤ 5msec	≤ 16 A ≤ 5msec	≤ 35 A ≤ 5msec
Frequency / Frequenza di Ingresso	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%	47 - 63 Hz ±6%
Input Current (115 - 230Vac) / Assorbimento	2.8 - 1.3A	2.8 - 1.3A	2.8 - 1.3A	8.0 - 4.2A	2.8 - 1.3A	2.8 - 1.3A	3.3 - 2.2A	8.0 - 4.2A	3.3 - 2.2A	8.0 - 4.2A
Internal Fuse / Fusibile Interno (non sostituibile)	4A	4A	4A	10A	4A	4A	6.3A	10A	6.3A	10A
External Fuse (recommended) / Fusibile Esterno raccomandato	10A	10A	10A	16A	10A	10A	16A	16A	16A	16A
OUTPUT DATA										
Output Vdc / I _o / Tensione di uscita Vdc / I _o	12Vdc - 3A	12Vdc - 6A	12Vdc - 10A	12Vdc - 35A	24Vdc - 3A	24Vdc - 5A	24Vdc - 10A	24Vdc - 20A	48Vdc - 5A	48Vdc - 10A
Output Current (In)	3A	6A	10A	35A	3A	5A	10A	20A	5A	10A
Dissipation Power load max (W)	9	17	17	28	13	17	28	54	28	54
Minimum load / Carico minimo	No	No	No	No	No	No	No	No	No	No
Efficiency (50% of In) / Rendimento tipico	≥ 90%	≥ 90%	≥ 90%	> 91%	≥ 90%	≥ 90%	≥ 83%	> 91%	≥ 83%	> 91%
Short-circuit protection / Protezione contro il corto circuito	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Over Load protection / Protezione sovraccarico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Over Voltage Output protection / Protezione sovratensione in uscita	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 35Vdc)	Yes (Typ. 90Vdc)	Yes (Typ. 90Vdc)
Overheating Thermal Protection / Protezione sovratemperatura	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reverse battery protection / Protezione inversione batteria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sulfated battery check / Controllo batteria solfatata	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper	Yes by Jumper
Detection of element in short circuit / Rilevazione elemento in corto circuito	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LOAD OUTPUT / USCITA CARICO										
Output voltage (at a IN) Vdc / Tensione di uscita (a IN) Vdc	10 - 14.4Vdc	10 - 14.4Vdc	10 - 14.4Vdc	10 - 14.4Vdc	22 - 28.8Vdc	22 - 28.8Vdc	22 - 28.8Vdc	22 - 28.8Vdc	44 - 57.6Vdc	44 - 57.6Vdc
Nominal Current IN = Iload	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%	1.1 x In A ± 5%
Continuous current (without battery) Iload = In	3A	6A	10A	35A	10A	5A	10A	20A	5A	10A
Max continuous current (with battery) Iload = In + I _{batt}	6A	12A	20A	70A	6A	10A	20A	40A	10A	20A
Max current Output Load: (Main Input) Iload (4sec.)	9A max	18A max	30A max	105A max	9A max	15A max	30A max	60A max	15A max	30A max
Max current Output Load: (Back Up) Iload (4sec.)	6A max	12A max	20A max	70A max	6A max	10A max	20A max	40A max	10A max	20A max
Push Button or Remote Input Control (AMP type connector)	Start from Battery without main	Start from Battery without main	Start from Battery without main	Start from Battery without main	Start from Battery without main	Start from Battery without main	Start from Battery without main (1)	Start from Battery without main	Start from Battery without main (1)	Start from Battery without main
Time Buffering: min (switch output off without main input)	Can be aduste by PC SW mode	Can be aduste by PC SW mode	Can be aduste by PC SW mode	0.5;1;3;5;10;15; 20; 30; 45;60;∞	Can be aduste by PC SW mode	Can be aduste by PC SW mode	5 min standard - Require: SW S31	0.5;1;3;5;10;15; 20; 30; 45;60;∞	5 min standard - Require: SW S31	0.5;1;3;5;10;15; 20; 30; 45;60;∞
Protections against total discharge	9 - 10 Vdc batt	9 - 10 Vdc batt	9 - 10 Vdc batt	9 - 10 Vdc batt	19 - 20 Vdc batt	19 - 20 Vdc batt	38 - 40 Vdc batt	38 - 40 Vdc batt	38 - 40 Vdc batt	38 - 40 Vdc batt
Threshold alarm Battery almost flat	10 - 11 Vdc batt	10 - 11 Vdc batt	10 - 11 Vdc batt	10 - 11 Vdc batt	20 - 21 Vdc batt	20 - 21 Vdc batt	20 - 21 Vdc batt	20 - 21 Vdc batt	40 - 42 Vdc batt	40 - 42 Vdc batt
BATTERY CHARGER OUTPUT / USCITA CARICA BATTERIA										
Boost - Bulk charge (Typ. at I _o) / Carica Veloce	14.4Vdc	14.4Vdc	14.4Vdc	14.4Vdc	28.8Vdc	28.8Vdc	28.8Vdc	28.8Vdc	57.6	57.6
Max.Time Boost-Bulk charge (Typ. at I _o) / Tempo massimo Carica Veloce	15h	15h	15h	15h	15h	15h	15h	15h	15h	15h
Min.Time Boost-Bulk charge (Typ. at I _o) / Tempo minimo Carica Veloce	1min.	1min.	1min.	1min.	1min.	1min.	1min.	1min.	1min.	1min.
Trickle-Float charge (Typ. at I _o) / Carica di mantenimento	13.75Vdc	13.75Vdc	13.75Vdc	13.75Vdc	27.5Vdc	27.5Vdc	27.5Vdc	27.5Vdc	55Vdc	55Vdc
Recovery Charge / Carica di recupero	2 - 9Vdc	2 - 9Vdc	2 - 9Vdc	2 - 9Vdc	2 - 16Vdc	2 - 16Vdc	2 - 16Vdc	2 - 16Vdc	2 - 24Vdc	2 - 24Vdc
Turn-On delay after applying mains voltage / Accensione con tensione di rete	1sec. Max	1sec. Max	1sec. Max	1sec. Max	1sec. Max	1sec. Max	1.5sec. Max	1sec. Max	1.5sec. Max	1sec. Max
End of charging current (Bulk charge)	0.3A	0.3A	0.3A	0.3A	0.3A	0.3A	0.3A	0.3A	0.3A	0.3A
Start up with strong load (capacitive load) / Start up con carichi capacitivi	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited	Yes, Unlimited
Residual Ripple / Ripple Residuo	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp	≤ 60 mVpp
Charging max I _{batt} / Corrente max. di Carica	3A ± 5%	6A ± 5%	10A ± 5%	35A ± 5%	3A ± 5%	5A ± 5%	10A ± 5%	10A ± 5%	5A ± 5%	10A ± 5%
Charging current Limiting I _o (I _{max}) / Limitazione Corrente di Carica	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}	20 + 100 % / I _{batt}
Jumper Config.Type Battery (NiCd optional)/Configurazione Tipo Batteria	2.23 V/cell Open Lead, 2.25 V/cell Sealed Lead, 2.27 V/cell Sealed Lead, 2.3 V/cell gel; NiCd 1.5V/cell (10 elem.) trickle (I _{max} 10%)				2.23 V/cell Open Lead, 2.25 V/cell Sealed Lead, 2.27 V/cell Sealed Lead, 2.3 V/cell gel; NiCd 1.5V/cell (20 elem.) trickle (I _{max} 10%)				2.23 V/cell Open Lead, 2.25 V/cell Sealed Lead, 2.27 V/cell Sealed Lead, 2.3 V/cell gel; NiCd 1.5V/cell (40 elem.) trickle (I _{max} 10%)	
Quiescent Current / Consumo da batteria max.	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA	≤5mA
Remote Input Control (AMP Type connector)	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle	Boost / Trickle
Characteristic Curve / Caratteristiche di Carica	IUoUo, Automatic, 3 stage / IUoUo, Automatico a 3 Stadi									
SIGNAL OUTPUT (RELAY) / SEGNALAZIONE RELÈ USCITA										
Main or Backup Power	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Low Battery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fault Battery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AUXILIARY OUTPUT (RJ 45 CONNECTION) FOR:										
CAN Bus	No	No	No	Optional	No	No	No	Optional	No	Optional
CLIMATIC DATA										
Ambient Temperature operation / Temperatura Ambiente di Lavoro	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C	-25 + +70°C
De rating T _a > (In) / De rating T _a > (In)	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C	> 50° -2.5%(In) / °C
Ambient Temperature Storage / Temperatura max. Magazzino	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C	-40 + +85°C
Humidity at 25 °C / Umidità	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C	95% to 25°C
Cooling / Raffreddamento	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection	Auto Convection
GENERAL DATA										
Isolation Voltage (IN / OUT) / Tensione di Isolamento (IN / OUT)	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac
Isolation Voltage(IN / PE) / Tensione di Isolamento(IN / TERRA)	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac
Isolation Voltage(OUT / PE) / Tensione di Isolamento(OUT/TERRA)	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac
Protection Class (EN/IEC 60529) / Protezione Classe	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Reliability (MTBF IEC 61709) / Affidabilità	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h
Pollution Degree Environment / Grado d'inquinamento ambientale	2	2	2	2	2	2	2	2	2	2
Connection Terminal Blocks Screw Type / Dimensione morsetti	2,5mm (24-14 AWG)	2,5mm (24-14 AWG)	2,5mm (24-14 AWG)	4mm (30-10 AWG)	2,5mm (24-14 AWG)	2,5mm (24-14 AWG)	2,5mm (24-14 AWG)	4mm (30-10 AWG)	2,5mm (24-14 AWG)	4mm (30-10 AWG)
Protection class (with PE connected) / Grado di protezione (con cavo di terra collegato)	I	I	I	I	I	I	I	I	I	I
Dimension (w-h-d)/Dimensioni (l-h-p) mm	65x115x135 mm	65x115x135 mm	65x115x135 mm	150x115x135 mm	65x115x135 mm	65x115x135 mm	100x115x135 mm	150x115x135 mm	100x115x135 mm	150x115x135 mm
Weight / Peso	0.60 kg approx	0.60 kg approx	0.60 kg approx	1.55 kg approx	0.60 kg approx	0.60 kg approx	0.85 kg approx	1.55 kg approx	0.85 kg approx	1.55 kg approx
Safety Standard Approval / Conformità ed Approvazioni	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE

(1) - Options to be defined by Order, Push Button not available

Optional for auxiliary Output (RJ45 connection): Temp Charging probe: Temperature sensor for battery 2m length. Voltage drop compensation: Cable for battery connection 2m length. Remote monitoring Display. Can Bus Cable.