



CSB40-SP



- IT** ISTRUZIONI D'USO
- EN** USER'S MAUNAL
- DE** BEDIENUNGSANLEITUNG
- FR** INSTRUCTIONS D'EMPLOI

SEPARATORE AUTOMATICO DI BATTERIE «CSB40-SP»

PER FRIGO TRIVALENTE

CON SISTEMA DI CARICA B1



FUNZIONI

Il separatore CSB40-SP è stato studiato appositamente per la ricarica della batteria motore (B1) e della batteria servizi (B2) tramite l'alternatore motore, carica batterie e pannello solare.

CON MOTORE IN MOTO

Un dispositivo elettronico comandato dal segnale D+ alternatore inserisce il parallelo batterie con motore in moto, contemporaneamente si attiva anche il relè del frigo trivalente.

Attenzione: Il frigo trivalente viene alimentato a 12V solo con motore in moto.

CON CARICA BATTERIE E PANNELLO SOLARE

Un dispositivo elettronico consente una ricarica (corrente nominale 2A) della batteria motore (B1), il sistema provvede a dare priorità di carica alla batteria servizi (B2).

NB: Questo dispositivo mantiene continuamente il collegamento tra la batteria servizi (B2) e la batteria motore (B1).

Nel caso venisse scollegata la batteria motore, si consiglia di staccare anche la batteria servizi (B2) per evitare una falsa indicazione di presenza batteria motore.



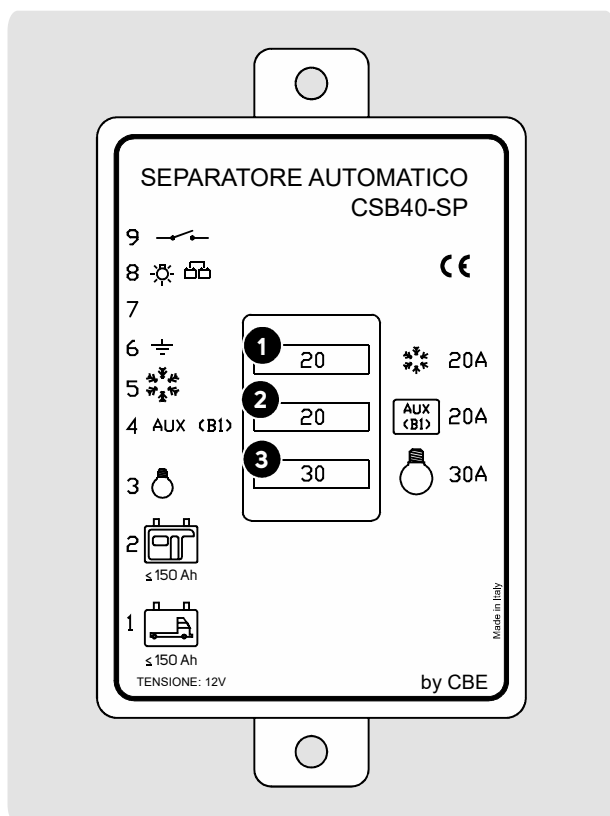
CARATTERISTICHE

- Tensione di alimentazione: 12 Vdc
- Relè di parallelo: max 50A
- Fusibili: utenze 30A, frigo 20A, aux 20A.

Il separatore è adatto per il collegamento di due batterie 12V con capacità max 150Ah (vedi scheda di collegamento a pagina 10).



FUSIBILI DI PROTEZIONE

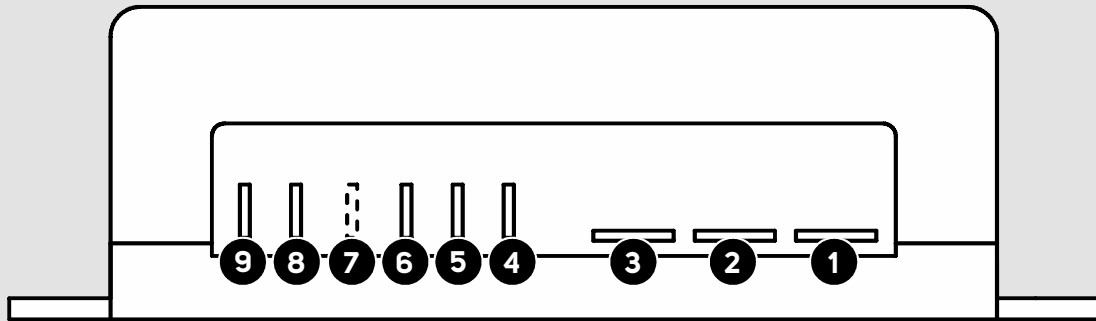


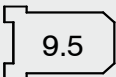
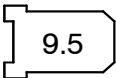

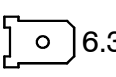

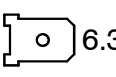

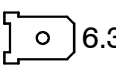
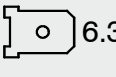
1) Fusibile 20A per l'alimentazione del frigo a 12V trivalente. Il frigo trivalente si spegne automaticamente a motore spento.

2) Fusibile 20A per l'alimentazione dell'uscita ausiliarie "AUX" (gradino, antifurto, ecc.), collegata direttamente alla batteria motore (B1).

3) Fusibile 30A per l'alimentazione dell'uscita 12V generale luci, collegata direttamente alla batteria servizi (B2).

+ COLLEGAMENTI



1)	 9.5	Da collegare al polo positivo della batteria motore "B1"	
2)	 9.5	Da collegare al polo positivo della batteria servizi "B2"	
3)	 9.5	+ uscita 12V generale luci, collegata direttamente alla batteria servizi (B2).	FUSIBILE 3
4)	 6.3	+ uscita utenze ausiliare "AUX" (gradino antifurto, ecc.), collegata direttamente alla batteria motore (B1).	FUSIBILE 2
5)	 6.3	+ uscita 12V frigo trivalente (funziona solo con motore in moto)	FUSIBILE 1
6)	 6.3	Massa elettronica separatore.	
7)	 6.3	Non collegato	
8)	 6.3	+ uscita segnale OUT D+	
9)	 6.3	Ingresso segnale D+ (positivo) alternatore motore.	



FUNCTIONS

The CSB40-SP battery separator is designed for the charge of the car battery (B1) and leisure battery (B2) through engine alternator, battery charger and solar panel.

WITH RUNNING ENGINE

An electronic device controlled by the D+ signal switches on the batteries parallel when the engine is running. At the same time, the 3-way fridge relay is energized.

Important: the 3-way fridge gets 12V power supply only when the engine is running.

WITH BATTERY CHARGER AND SOLAR PANEL

An electronic device allows a recharging (nominal current 2A) of the car battery (B1). The system gives priority to the leisure battery (B2).

NB: This electronic device keeps continuously the connection between the leisure battery (B2) and the car battery (B1).

If the car battery (B1) is disconnected, then it is advised to disconnect also the leisure battery (B2), in order to avoid a false reading of the car battery.



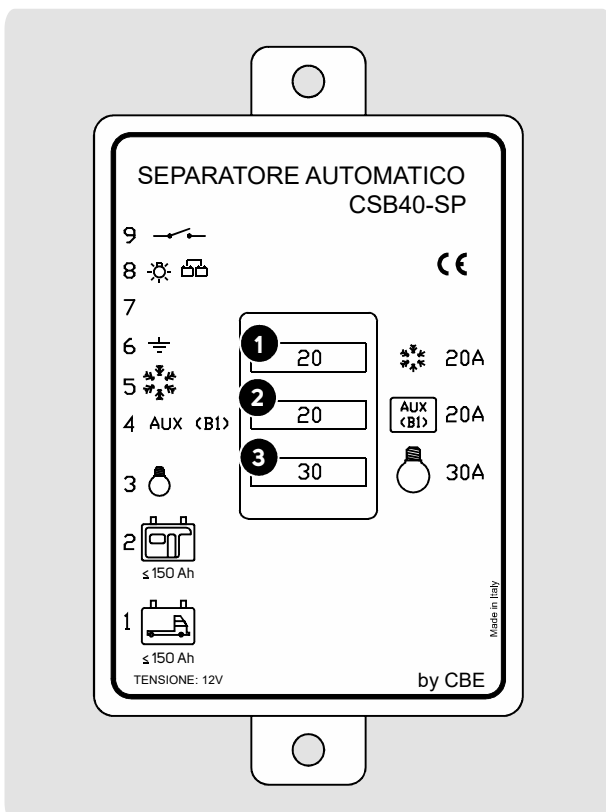
TECHNICAL DATA

- Nominal voltage: 12Vdc
- Parallel relay: max 50A
- Fuses: users 30A, fridge 20A, aux 20A

The battery separator is suitable for two 12V batteries with a maximum 150 Ah capacity (see "WIRING DIAGRAM" on page 10).

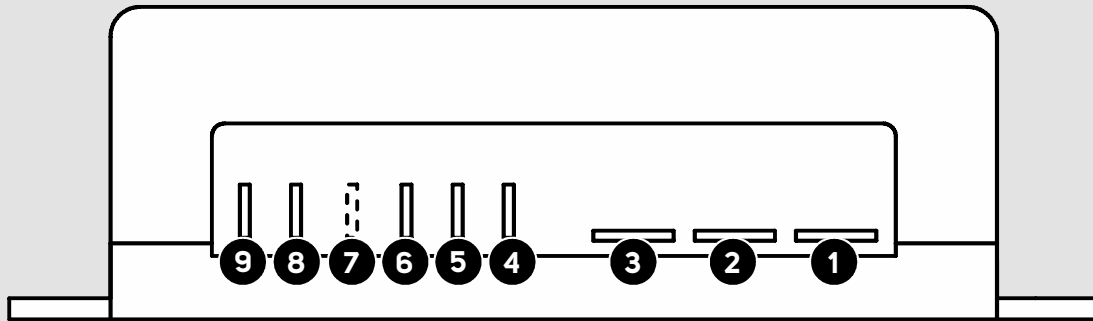


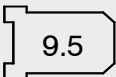
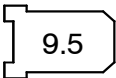

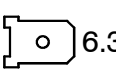

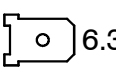

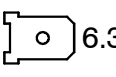
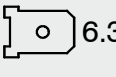
PROTECTION FUSES



- 1)** 20A fuse for the 3-way fridge 12V power supply. The 3-way function fridge switches automatically off when the engine is off.
- 2)** 20A fuse for the auxiliary "AUX" output (step, burglar alarm etc.), directly connected to the car battery (B1)
- 3)** 30A fuse to give power the 12V general lights output, directly connected to the leisure battery (B2).

+ CONNECTIONS



1)	 9.5	To be connected to the "B1" car battery positive pole.	
2)	 9.5	To be connected to the "B2" leisure battery positive pole.	
3)	 9.5	12V general lights output, directly connected to the leisure battery (B2).	FUSE 3
4)	 6.3	+ Output "AUX" auxiliary users (step, burglar alarm etc.), directly connected to the c.ar battery (B1).	FUSE 2
5)	 6.3	+ output 12V 3-way fridge (active only when the engine is running).	FUSE 1
6)	 6.3	Separator electronic mass.	
7)	 6.3	Not connected.	
8)	 6.3	+ output OUT D+ signal.	
9)	 6.3	Input D+ signal (positive).	



FUNKTIONEN

Das Batterietrenngerät CSB40-SP ist für die Wiederaufladung von Fahrzeug- und Verbraucher-batterie durch Lichtmaschine, Ladegerät und Solarzellen entwickelt worden.

MIT MOTOR

Eine elektronische Einrichtung, die über das D+ Signal gesteuert wird, schaltet den Batterieparallelbetrieb nach Motoranlassen. Gleichzeitig wird die Versorgung des 12V-Kühlschranks gestartet.

Bemerkung: Der Absorberkühlschrank funktioniert mit 12V nur wenn der Motor an ist.

MIT LADEGERÄT UND SOLARZELLEN

Eine elektronische Einrichtung erlaubt eine Mitladung (nennstrom 2A) der Fahrzeugbatterie (B1). Das System gibt aber Priorität der Verbraucherbatterie (B2).

NB: Diese Einrichtung erhält stets die Verbindung zwischen die Verbraucherbatterie (B2) und die Fahrzeugbatterie (B1).

Wenn die Fahrzeugbatterie ausgeklemmt wird, sollte auch die Verbraucherbatterie ausgeklemmt werden, damit keine falsche Anzeige der Fahrzeugbatterie entsteht.



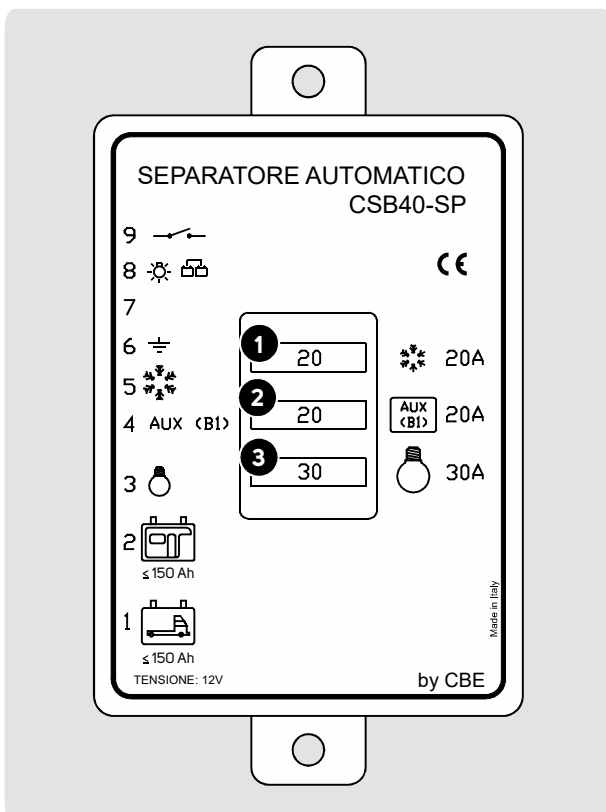
TECHNISCHE DATEN

- Versorgungsspannung: 12 Vcc
- Parallelrelais: max 50A
- Sicherungen: Verbraucher 30A, Kühlschrank 20A, Aux 20A.

Das Batterietrenngerät ist für den Einsatz von 2 12V-Batterien zu max. 150 Ah vorgesehen (siehe "WIRING DIAGRAM" auf S. 10).

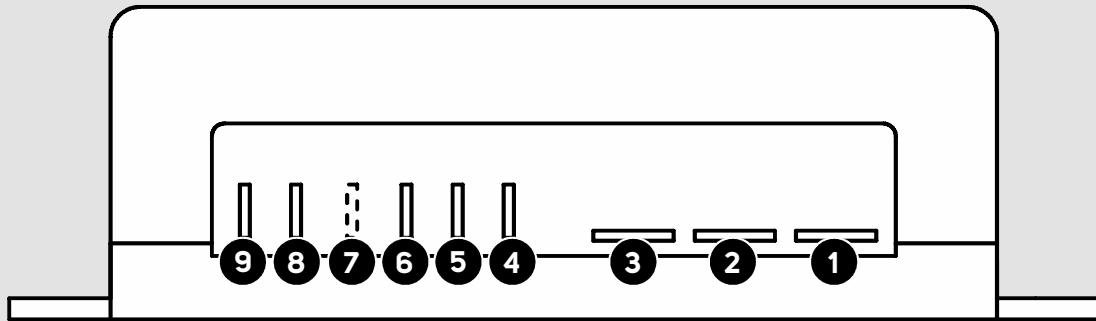


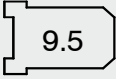
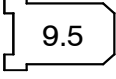
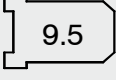
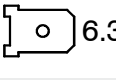
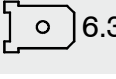
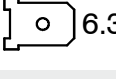
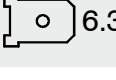
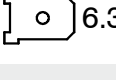
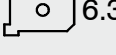
SICHERUNGEN



- 1) 20A Sicherung für die 12V-Versorgung des Absorberkühlschranks. Bei ausgeschaltetem Motor geht der Absorberkühlschrank automatisch aus.
- 2) 20A Sicherung für die Versorgung des AUX-Ausgangs (Trittstufe, Alarmanlage usw.), direkt an der Fahrzeugbatterie (B1) angeschlossen.
- 3) 30A Sicherung für die Versorgung des 12V Hauptlichterausgang, direkt an der Verbraucherbatterie (B2) angeschlossen.

+ ANSCHLÜSSE



1)	 9.5	Zum Anschluss am Pluspol der Fahrzeugbatterie "B1".	
2)	 9.5	Zum Anschluss am Minuspol der Verbraucherbatterie "B2".	
3)	 9.5	+ 12V Hauptlichterausgang, direkt an der Verbraucherbatterie (B2) angeschlossen.	SICHERUNG 3
4)	 6.3	+ Ausgang "AUX" (Trittstufe, Alarmanlage, usw.), direkt an der Fahrzeugbatterie (B1) angeschlossen.	SICHERUNG 2
5)	 6.3	+ Ausgang 12V Absorberkühlschrank (funktioniert nur wenn der Motor an ist).	SICHERUNG 1
6)	 6.3	Masse Trenngeräteelektronik.	
7)	 6.3	Nicht angeschlossen.	
8)	 6.3	+ Ausgang OUT D+ Signal	
9)	 6.3	Eingang D+ Signal (positiv).	



FONCTIONS

Le séparateur CSB40-SP a justement été étudié pour la recharge de la batterie auto (B1) et de la batterie services (B2) par l'intermédiaire de l'alternateur moteur, du chargeur de batteries et du panneau solaire.

AVEC MOTEUR EN MARCHÉ

Après avoir allumé le moteur, un dispositif automatique commandé par le signal D+ permet la recharge des deux batteries en les mettant en parallèle; en même temps l'alimentation 12V est fournie au frigo à absorption.

Attention: le frigo à absorption fonctionne à 12V seulement avec le moteur en marche.

AVEC RESEAU / PANNEAU SOLAIRE

Un dispositif électronique permet à la batterie auto (B1) de recevoir un courant de charge (courant nominal 2A). Le système donne à la batterie de service (B2) la priorité de charge.

NOTE: Ce dispositif maintient continuellement le branchement entre la batterie services (B2) et la batterie auto (B1).

Dans le cas où la batterie auto viendrait débranchée, il est conseillé de débrancher aussi la batterie services (B2) pour éviter une fausse indication de présence batterie auto.



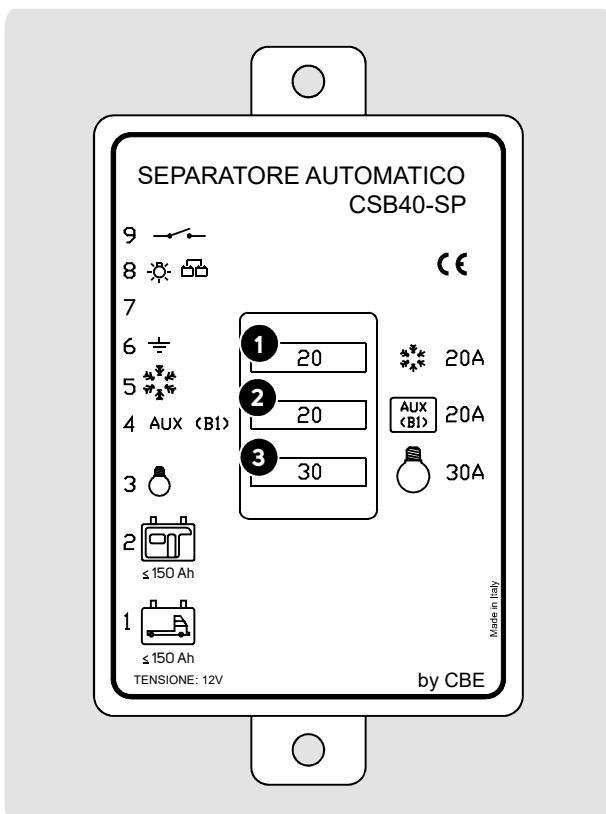
CARACTERISTIQUES

- Tension d'alimentation: 12 Vcc
- Relais du parallèle: max 50A
- Fusibles: services 30A, frigo 20A, Aux 20A

Le séparateur est adapté pour 2 batteries 12V avec capacité max 150 Ah (voir "WIRING DIAGRAM" à page 10).

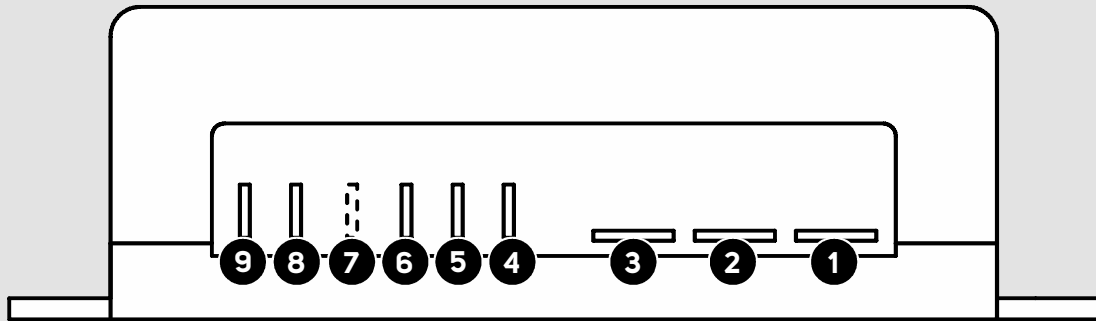


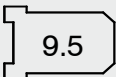
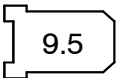

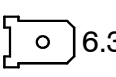

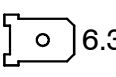

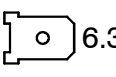
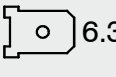
FUSIBLES DE PROTECTION



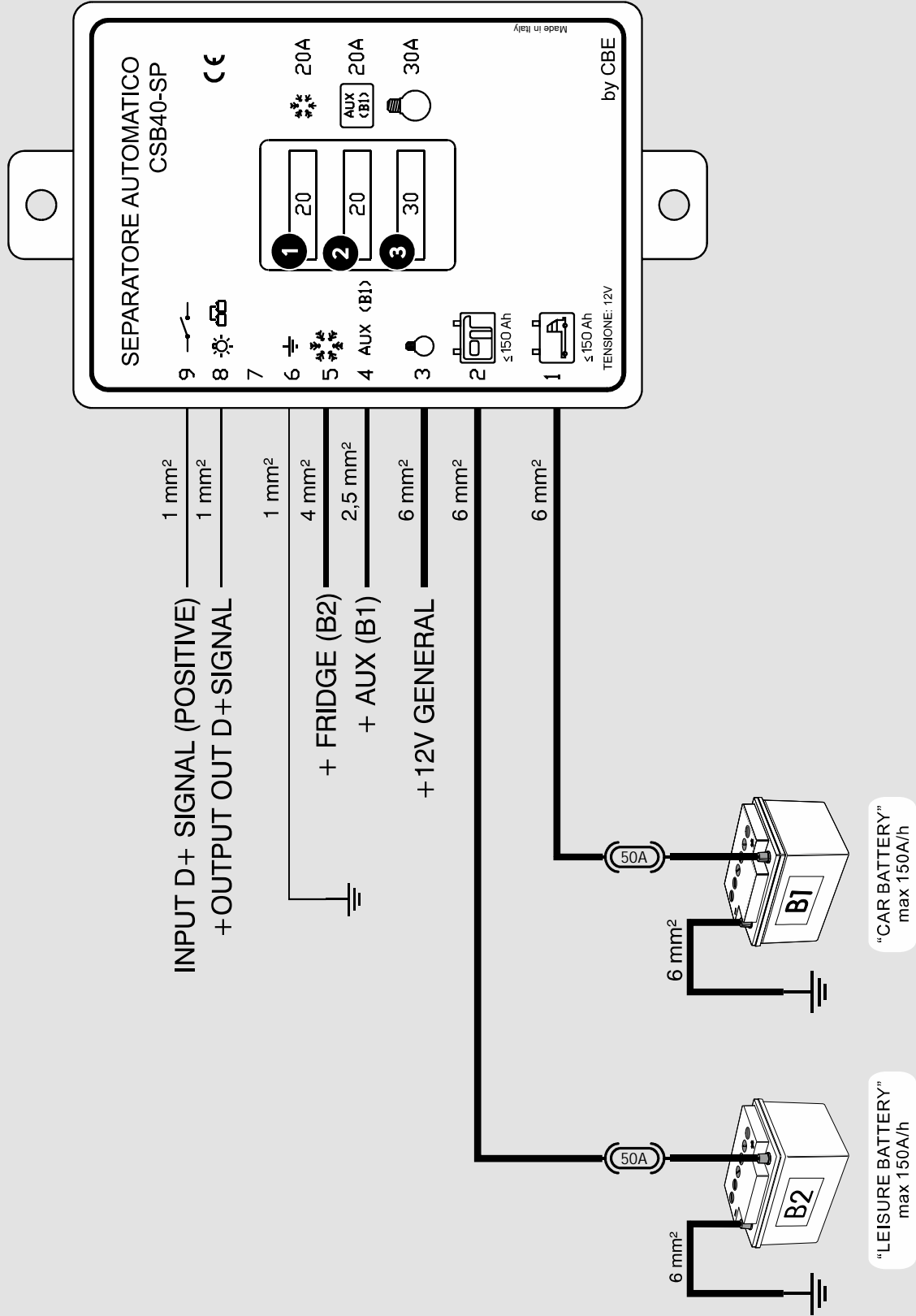
- 1)** Fusible 20A pour l'alimentation du frigo à absorption. Le frigo s'arrête automatiquement lorsque le moteur est à l'arrêt.
- 2)** Fusible 20A pour l'alimentation de la sortie auxiliaire "AUX" (marchepied, alarme etc.), directe B1 (batterie moteur).
- 3)** Fusible 30A pour l'alimentation de la sortie 12V générale lumière, directe B2 (batterie services).

+ CONNEXIONS



1)	 9.5	A brancher au pôle positif de la batterie moteur "B1".	
2)	 9.5	A brancher au pôle positif de la batterie services "B2".	
3)	 9.5	+ sortie 12V générale lumière, directe B2 (batterie services).	FUSE 3
4)	 6.3	+ sortie auxiliaire « AUX » (marchepied, alarme etc.), directe B1 (batterie moteur).	FUSE 2
5)	 6.3	+ sortie 12V frigo à absorption (fonctionne seulement quand le moteur est en marche).	FUSE 1
6)	 6.3	Masse de l'électronique du séparateur.	
7)	 6.3	Pas branché.	
8)	 6.3	Sortie signal OUT D+	
9)	 6.3	Entrée signal D+ (positif) du alternateur moteur.	

WIRING DIAGRAM "CSB40-SP"



NOTE

A series of horizontal dotted lines for writing notes.

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