



# CSB40-S



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

# SEPARATORE AUTOMATICO DI BATTERIE «CSB40-S»

PER FRIGO TRIVALENTE



## FUNZIONI

Il separatore CSB40-S è stato studiato appositamente per la ricarica in parallelo della batteria motore (B1) e servizi (B2) tramite l'alternatore del motore.

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.

**NB:** Con rete 230V inserita, il parallelo non si attiva e viene ricaricata solo la batteria servizi (B2).



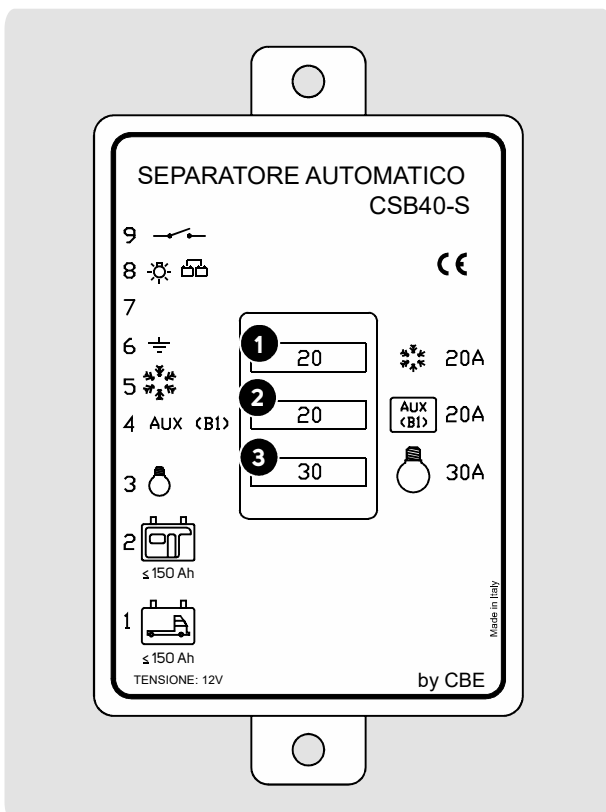
## CARATTERISTICHE

- 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 150 Ah (vedi scheda di collegamento a pagina 10).



## FUSIBILI DI PROTEZIONE

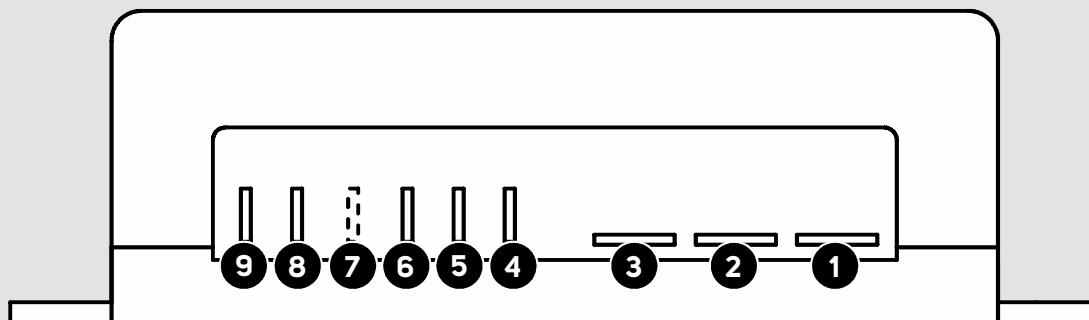


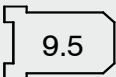
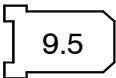

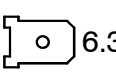

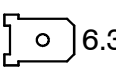

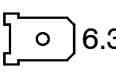
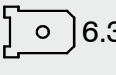
**1)** Fusibile 20A per l'alimentazione del frigo a 12V trivalente. Il frigo trivalente si spegne automaticamente a motore spento.

**2)** Fusibile 20A per l'alimentazione dell'uscita ausiliare "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).	<b>FUSIBILE</b> 3
4)	 6.3	+ uscita utenze ausiliare "AUX" (gradino antifurto, ecc.), collegata direttamente alla batteria motore (B1).	<b>FUSIBILE</b> 2
5)	 6.3	+ uscita 12V frigo trivalente (funziona solo con motore in moto)	<b>FUSIBILE</b> 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-S battery separator is designed for the parallel charge of the car battery (B1) and leisure battery (B2) through the engine alternator.

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.

**NB:** In presence of 230V power supply, the batteries parallel is not activated and the leisure battery (B2) only is charged.



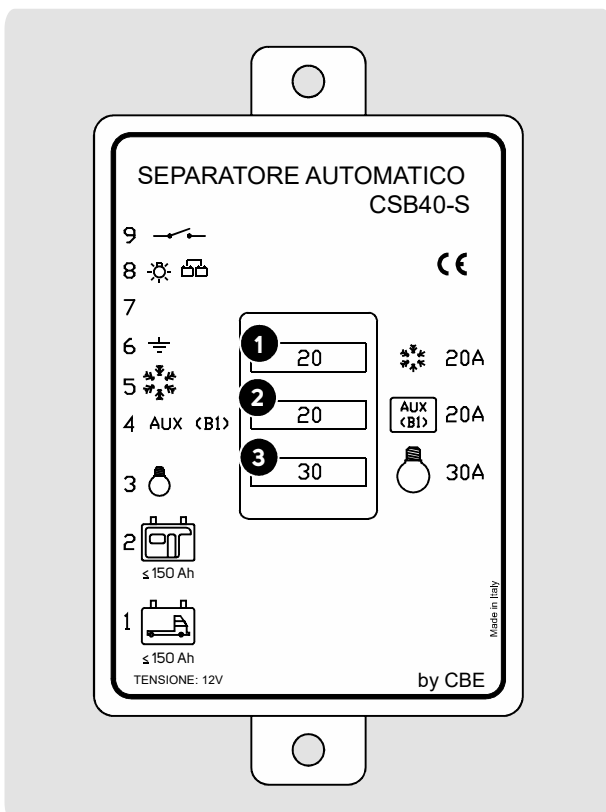
## CHARACTERISTICS

- 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).

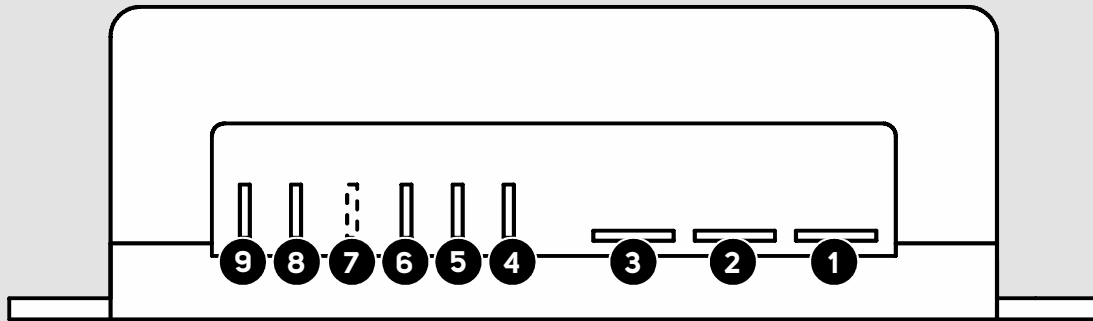


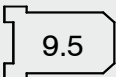
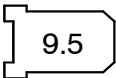

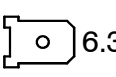

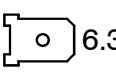

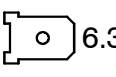
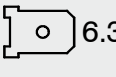
## PROTECTION FUSES



- 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	+ output 12V general light, directly connected to the leisure battery (B2).	<b>FUSE</b> 3
4)	 6.3	+ output "AUX" auxiliary users (step, burglar alarm etc.), directly connected to the c.ar battery (B1).	<b>FUSE</b> 2
5)	 6.3	+ output 12V 3-way fridge (active only when the engine is running).	<b>FUSE</b> 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-S ist für die Parallelaufladung von Fahrzeug- und Verbraucherbatterie entwickelt worden.

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.

**NB:** Wenn das 230V-Netz angeschlossen ist, wird ausschließlich die Verbraucherbatterie beladen und das Parallel-schalten erfolgt nicht.



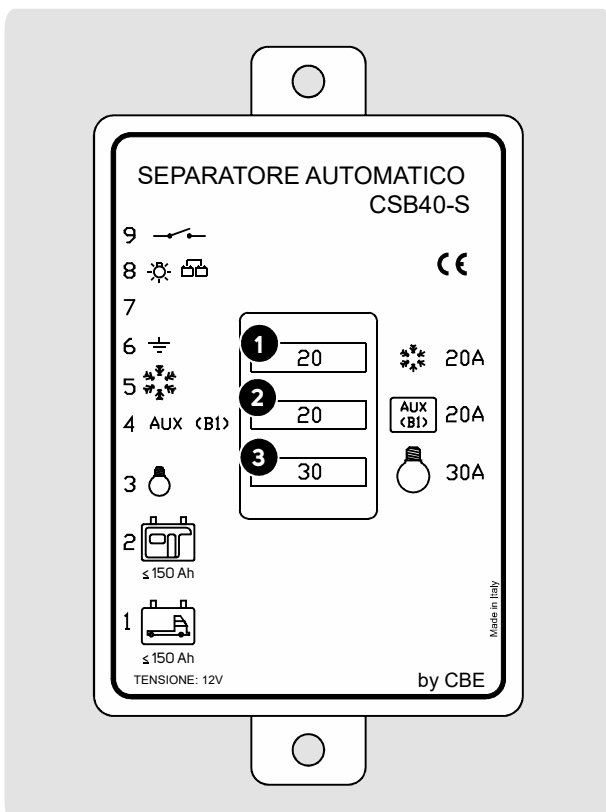
## TECHNISCHE DATEN

- Versorgungsspannung: 12Vdc
- 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).

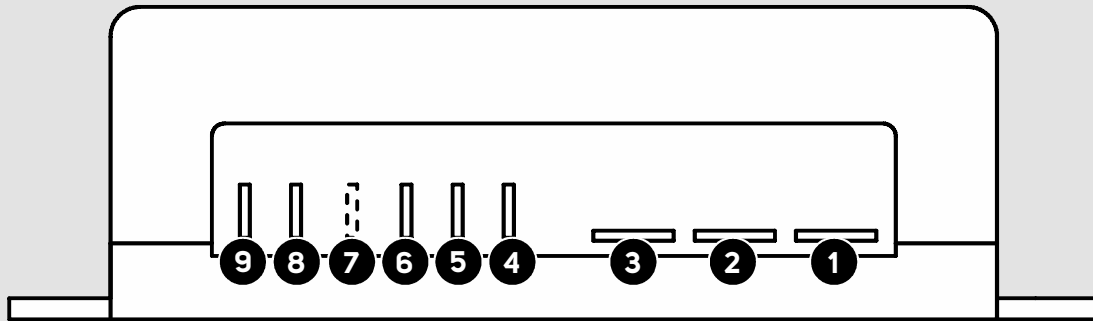


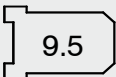
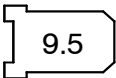

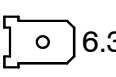

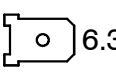

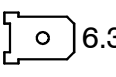
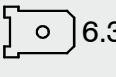
## SICHERUNGEN



- 1) 20A Sicherung für die 12V-Versorgung des Absorberkühlschranks. Bei ausgeschaltetem Motor geht der Absorberkühlschrank automatisch aus.
- 2) 10A 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 Pluspol der Verbraucherbatterie "B2".	
3)	 9.5	+ 12V Hauptlichterausgang, direkt an der Verbraucherbatterie (B2) angeschlossen.	<b>SICHERUNG</b> 3
4)	 6.3	+ Ausgang "AUX" (Trittstufe, Alarmanlage, usw.), direkt an der Fahrzeugbatterie (B1) angeschlossen.	<b>SICHERUNG</b> 2
5)	 6.3	+ Ausgang 12V Absorberkühlschrank (funktioniert nur wenn der Motor an ist).	<b>SICHERUNG</b> 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-S sert pour la recharge en parallèle de la batterie auto et de la batterie services.

Le parallèle intervient quand le moteur se met en marche. L'alternateur recharge alors les deux batteries en même temps: le relais du frigo à absorption s'excite et en conséquence ce dernier vient à être alimenté.

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

**NB:** Quand le rseau est inséré, seule la batterie de service se recharge et le parallèle n'intervient pas.



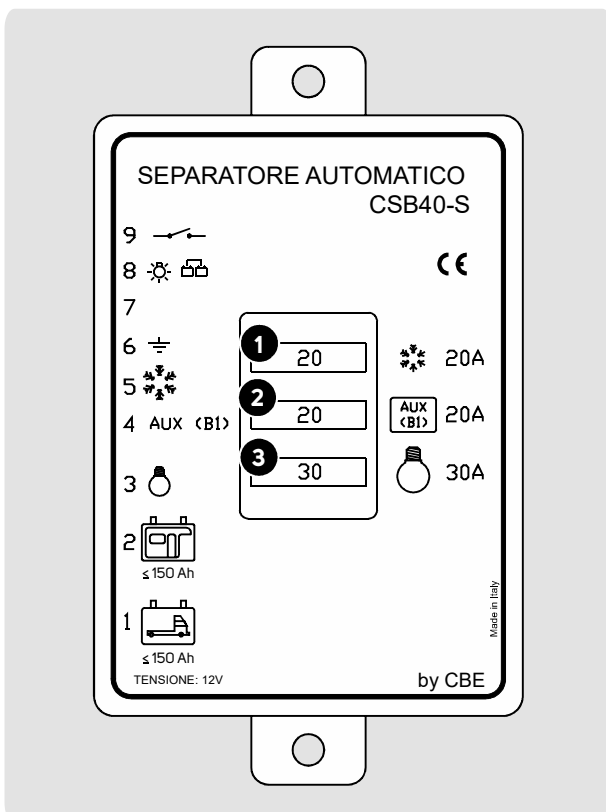
## CARACTERISTIQUES

- 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).



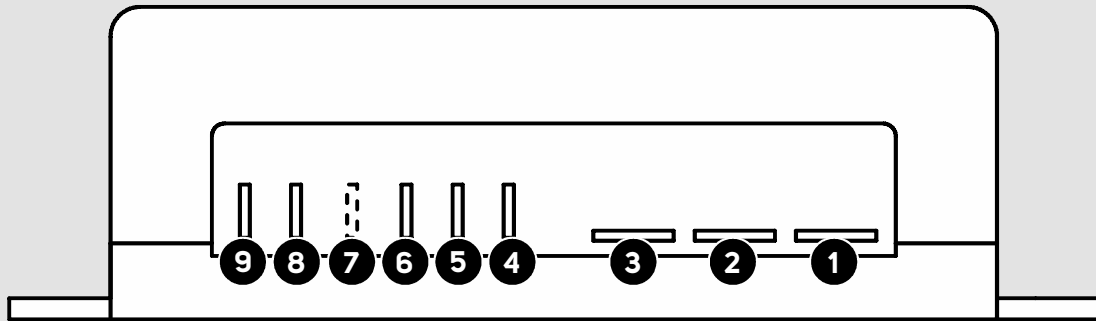
## FUSIBLES DE PROTECTION

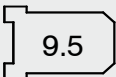
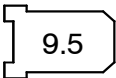

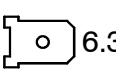

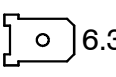

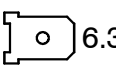
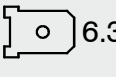


- 1) Fusible 20A pour l'alimentation du frigo à absorption. Le frigo s'arrête automatiquement lorsque le moteur est à l'arrêt.
- 2) Fusible 20A pour l'alimentation de la sortie auxiliaire "AUX" (marchepied, alarme etc.), directe B1 (batterie moteur).
- 3) Fusible 30A pour l'alimentation de la sortie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

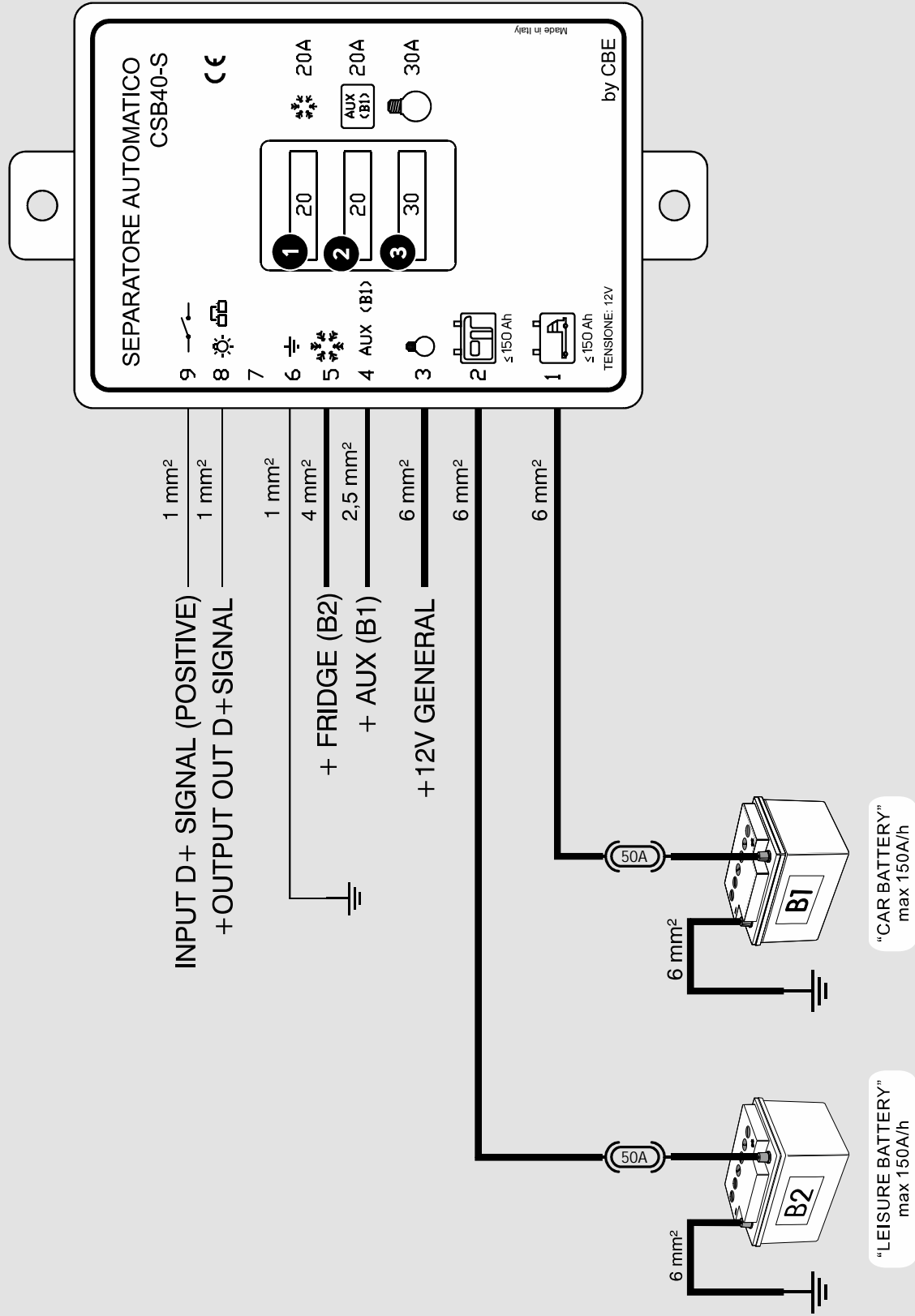


**+** CONNEXIONS



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).	<b>FUSE</b> 3
4)	 6.3	+ sortie auxiliaire « AUX » (marchepied, alarme etc.), directe B1 (batterie moteur).	<b>FUSE</b> 2
5)	 6.3	+ sortie 12V frigo à absorption (fonctionne seulement quand le moteur est en marche).	<b>FUSE</b> 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-S"



**NOTE**

A series of horizontal dotted lines for writing notes.

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