MARECHAL ELECTRIC
5 avenue du Chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET RETTBOX® S

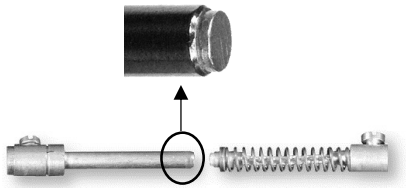
Date: 2021-01-08
Revision: 01

RETTBOX® S is a compact power suply device for all services and safety vehicules.
Fitted with an on-load breaking capacity integrated switch, an electromechanical self-ejection of the portable socket-outlet when starting the vehicule, and a light indicator (LED) for presence of power supply.

RETTBOX® S complies with the essential requirements of the following regulations (a):
- European Directives Low Voltage (LVD) and RoHS (affixing of CE marking),
- REACH European Regulation,
- standards IEC/EN 61984 (essential safety requirements), IEC/EN 60947-3 (breaking capacity AC/DC-22A).

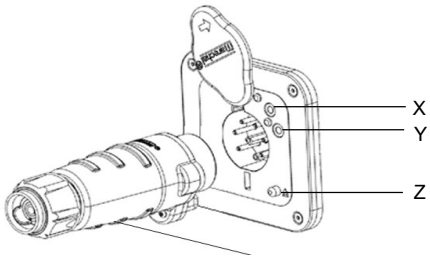
General information	**RETTBOX® S**	
(b) **I_n**	**20 A**	**20 A**
U_{max} (V AC/V DC)	**24 V DC**	**230 V AC**
(c) Frequency (Hz)	X	≤ 500
(d) Number of contacts	6P+E	6P+E
Number of keying positions	7	
Connection (min - max): mm²		
Flexible conductors (Cu): main contacts	1.5 - 6	1.5 - 6
Tightening torque - main contacts	0.8 Nm	0.8 Nm
Wiring lugs	Option	Option
(e) Pollution degree	3	3
Breaking as switch according to IEC/EN 60947-3		
Category AC-22A: In (A) - Umax (V AC)	NA	20 - 230
Category DC-22A: In (A) - Umax (V DC)	20 - 24	NA
Number of operations		
Mechanical	10 000	10 000
Thermal features		
Temperature of use mini/maxi (°C)	-40/+60 °C	-40/+60 °C
Storage temperature mini/max: (°C)	-40/+80 °C	-40/+80 °C
Maximal temperature rise (Kmax): new device	23 K	23 K
Time constant (to reach 63 % of Kmax)	17 mn	17 mn
Mechanical features		
(f) IP : Baseplate lid closed	IP54	IP54
(f) IP: Portable socket-outlet	IP2X	IP2X
(g) IK	IK08	IK08
Retaining/releasing device	Automatic - push-button	
(h) Casing	GRP (poly)	
Standard color	Black	
Resistance of chemical agents	Contact us	
Protection against UV according to UL 746C	f1	f1
Salt mists resistance	> 50 000 h	
Screws and bolts	Stainless steel	
Weight of inlet without accessory (≈)	0.21 kg	0.21 kg
Weight of socket-outlet without accessory (≈)	0.41 kg	0.41 kg
Mounting accessories		
Poly straight handle with built-in cable gland: range take (mm)	5 - 21	5 - 21
Poly 60° handle with built-in cable gland: range take (mm)	9 - 18	9 - 18
Poly box: angle (°)	0	0
Main options		
Included light indicator	Yellow	Green
Aditional light indicator (option)	X	Yellow
Straight handle, built-in cable gland	✓	✓
60° angled handle (adaptator plate), built-in cable gland	✓	✓
Spare parts		
Inlet or socket-outlet contacts	✓	✓
Gaskets	✓	✓
Light indicator	✓	✓

Portable socket-outlet Baseplate



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)

Spring assisted terminal:
Stainless steel ring



X : Power supply light indicator
Y : Battery voltage light indicator (option)
Z : Manual unlocking (push-button)

Straight handle, built-in cable gland

AA : 5 sizes gasket

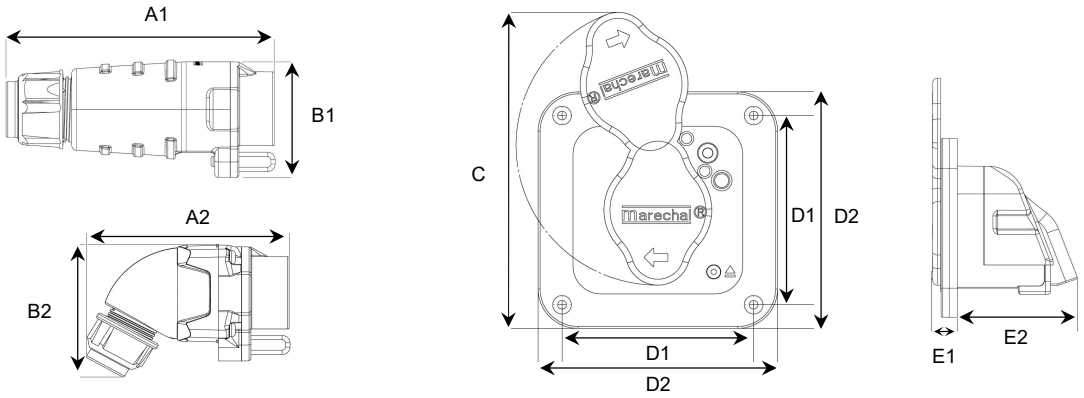
MARECHAL ELECTRIC
5 avenue du Chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

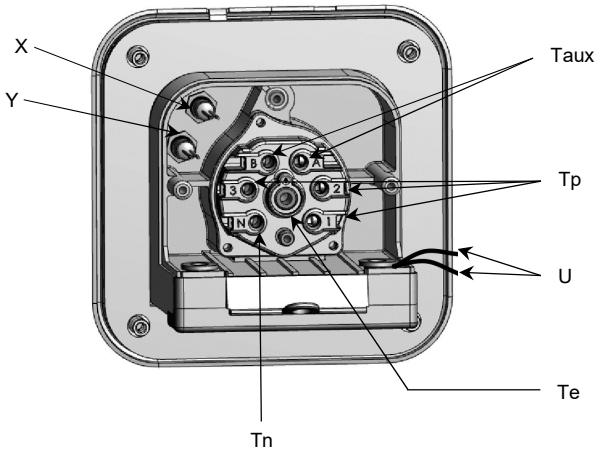
TECHNICAL DATASHEET
RETTBOX® S

Date: 2021-01-08
Revision: 01

Dimensions

	mm
A1	156
A2	109
B1	66
B2	77
C	160
D1	96
D2	120
E1	16
E2	75





Te: Earthing terminal

Tn: Neutral terminal

Tp: Phases terminals

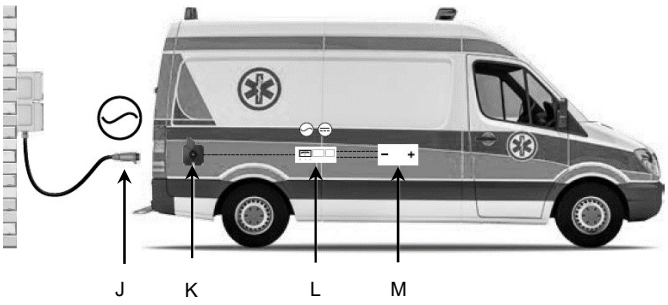
Taux: Auxiliaries terminals

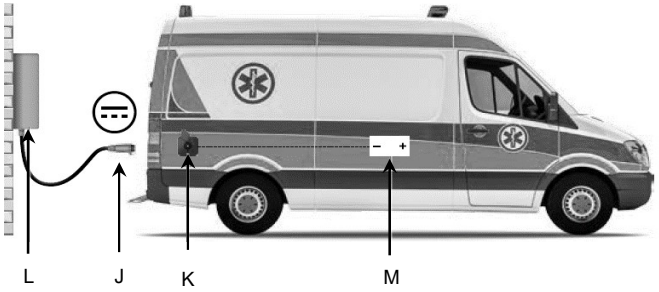
U: Locking system supply

X : Power supply light indicator

Y : Battery voltage light indicator (option)

Examples of uses





J: RETTBOX® S power supply portable socket-outlet
K: RETTBOX® S baseplate:
- yellow light indicator for 12/24 V DC
- green light indicator for 230 V AC + in option yellow light indicator connected to the auxiliary battery terminals

L: External or onboard battery charger 12/24 V DC
M: Auxiliary battery

(a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60947-3 : "Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units"
IEC/EN 61984 : "Connectors – Safety requirements and tests"

(b) In : Rated current, current value defined by the manufacturer

(c) Other frequency: contact us

(d) Contacts with silver nickel alloy tips (Ag/Ni : 85/15)

(e) Pollution degree [IEV 581-21-07]: "Numeral characterizing the expected pollution of the micro-environment."
"Degree 3. Conductive pollution occurs, or dry, non-conductive pollution occurs which becomes conductive due to condensation."

(f) IP : Degrees of protection provided by enclosures (IEC/EN 60529)

(g) IK : Degrees of protection provided by enclosures against mechanical impacts (IEC/EN 62262)

(h) GRP : Glass-reinforced technical plastic