

Celik[®]
battery

Celik[®]
battery



**Durable
Battery**



COMMERCIAL
Heavy and Super Heavy
Commercial Vehicle Batteries

Durable Battery



Commercial Vehicle Batteries

Çelik heavy and super heavy batteries are manufactured with SFB technology and exclusively developed in three different series; Series 1, Series 2 and Series 3 to meet various energy needs of all commercial vehicles.



**FULLY
FRAMED**

*Full frame
grid technology*





SFB series 1

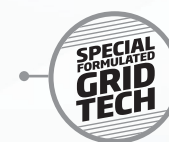
Areas of Application



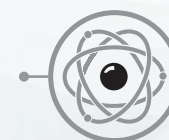
Superior Flooded Battery Technology

Flat Lid Batteries, manufactured with SFB technology are designed to meet the power needs of heavy and super heavy duty vehicles.

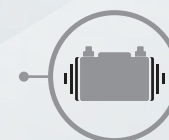
Under normal working conditions, Series 1 batteries offer the energy required by standard-type heavy and super heavy duty vehicles while ensuring the cost-effectiveness with its maintenance-free product features.



Advanced patented Ca-Ca silver alloy grid technology exclusively designed for SFB Series 1 heavy and super heavy duty batteries



Advanced active material designed for SFB Series 1 heavy and super heavy duty batteries



Meets V1 vibration resistance requirements according to EN 50342



Maintenance-free product technology



QR and barcode system enabling tracking of products



Nearly 100% recycling capability of all products. Environmental friendly and sustainable



Higher performance under severe climate and working conditions compared to standard batteries



Shelf life up to 15 months under suitable conditions



series 1



Internal structure consists of special designed grids, strong separators and corrosion resistant material to prevent wear. With advanced plates and unique alloys, these batteries have longer life cycle and minimum discharge feature. Vibration resistance is maximized by an exclusive plate group fitting system used in the battery.



SFB

series 2

Areas of Application



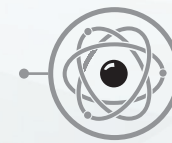
Superior Flooded Battery Technology

Designed and produced with SFB technology to cope with the changing energy needs of heavy and super heavy duty vehicles which require a high performance battery. Series 2 batteries are equipped with a control degassing system, flash arrestor and spill proof kamina lid for higher safety.

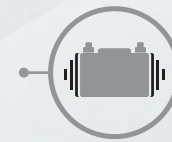
Celik SFB Series 2 batteries offer longer cycle life and higher cost-effectiveness compared to standard batteries. Ensuring the most efficient cold engine start performance for commercial vehicles, they meet your needs even under the most severe climate and working conditions. With minimum discharge feature, they have a shelf life of up to 18 months under suitable conditions.



Advanced patented Ca-Ca, silver alloy grid technology exclusively designed for SFB Series 2 heavy commercial batteries



Advanced active material designed for SFB Series 2 heavy commercial batteries



Meets V2 vibration resistance requirements according to EN 50342



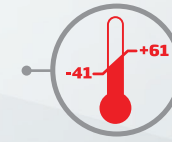
Maintenance-free product technology



QR and barcode system enabling tracking of products



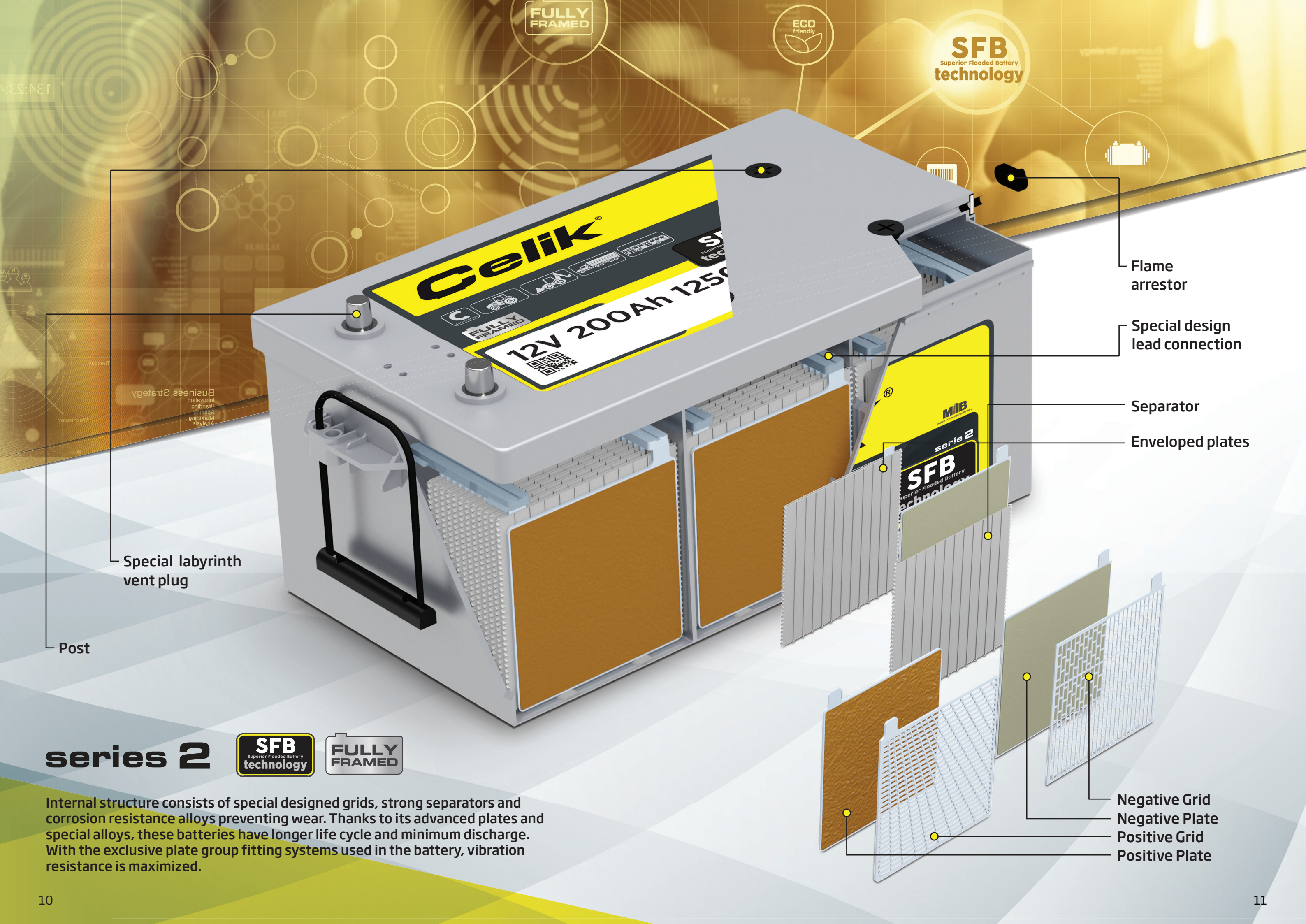
Nearly 100% recycling capability of all products. Environmental friendly and sustainable



Higher performance under severe climate and working conditions compared to standard batteries



Shelf life up to 18 months under suitable conditions



FULLY
FRAMED

ECO
friendly

SFB
Superior Flooded Battery
technology



Flame
arrestor

Special design
lead connection

Separator

Enveloped plates

Business Strategy
Innovation
Planning
Marketing
Analysis

Special labyrinth
vent plug

Post

series 2

SFB
Superior Flooded Battery
technology

FULLY
FRAMED

Internal structure consists of special designed grids, strong separators and corrosion resistance alloys preventing wear. Thanks to its advanced plates and special alloys, these batteries have longer life cycle and minimum discharge. With the exclusive plate group fitting systems used in the battery, vibration resistance is maximized.

Negative Grid
Negative Plate
Positive Grid
Positive Plate



SFB series 3

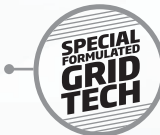
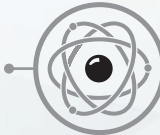
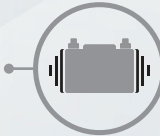







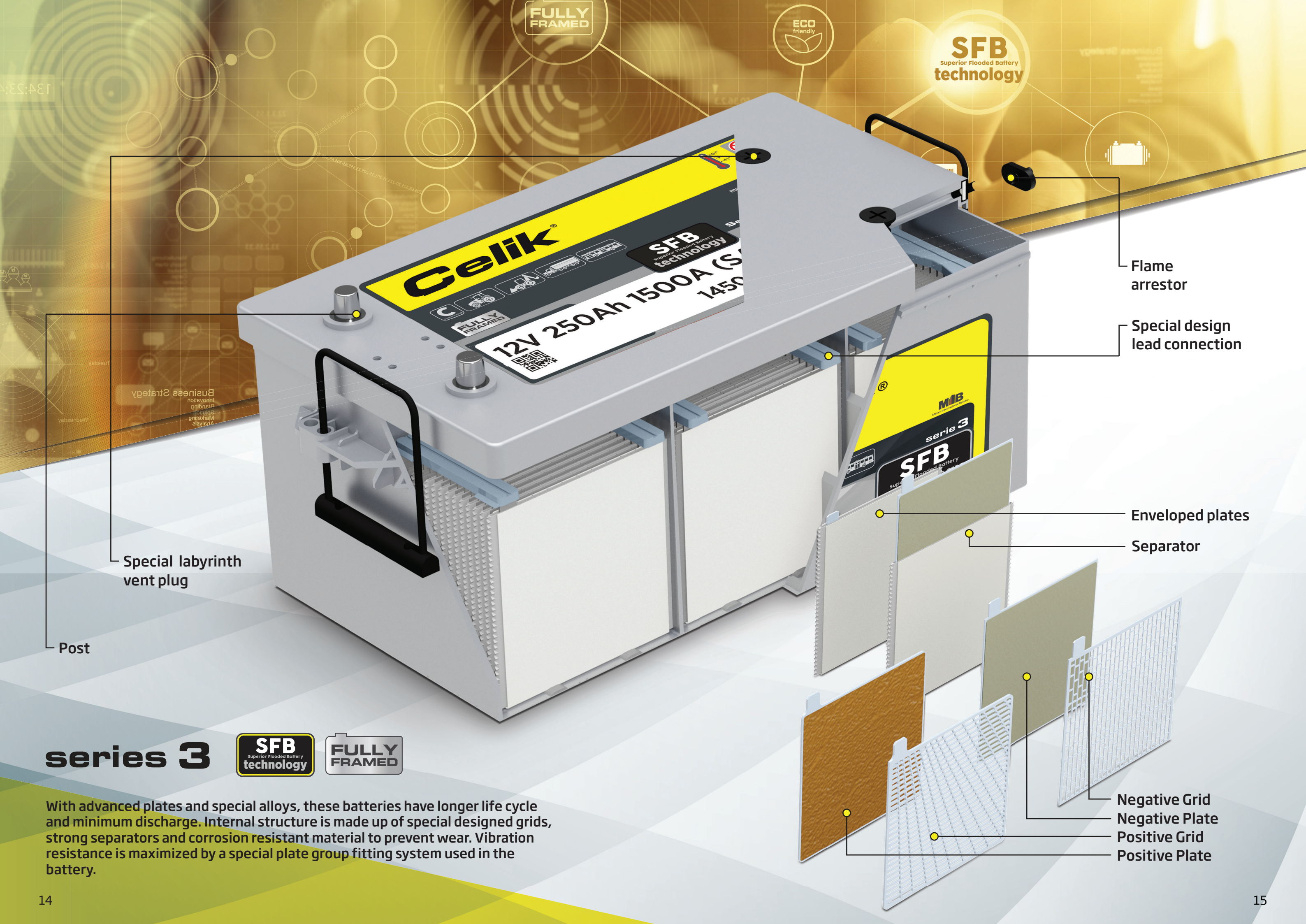
Superior Flooded Battery Technology

Originally designed for super heavy duty vehicles to meet various energy needs of fully equipped commercial and heavy commercial vehicles.

Celik SFB Series 3 offer longer cycle life and higher cost-effectiveness compared to standard batteries. These batteries empower your fleet with their high performance while reducing your costs with their longer life cycle. With minimum discharge feature, they enable a shelf life of up to 18 months under suitable conditions.



-  Advanced patented Ca-Ca, silver alloy grid technology exclusively designed for SFB Series 2 heavy commercial batteries
-  Advanced active material designed for SFB Series 2 heavy commercial batteries
-  Meets V2 vibration resistance requirements according to EN 50342
-  Maintenance-free product technology
-  QR and barcode system enabling tracking of products
-  Nearly 100% recycling capability of all products. Environmental friendly and sustainable
-  Higher performance under severe climate and working conditions compared to standard batteries
-  Shelf life up to 18 months under suitable conditions



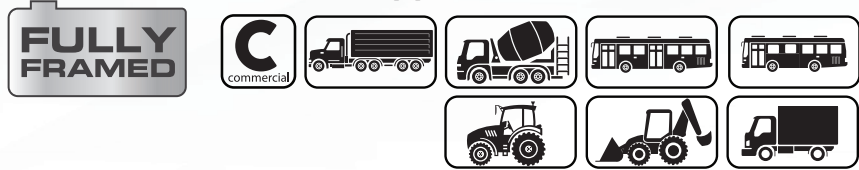
series 3



With advanced plates and special alloys, these batteries have longer life cycle and minimum discharge. Internal structure is made up of special designed grids, strong separators and corrosion resistant material to prevent wear. Vibration resistance is maximized by a special plate group fitting system used in the battery.

Technological Features

Areas of Application



series 1

- Advanced patented Ca-Ca silver alloy grid technology exclusively designed for SFB Series 1 heavy duty batteries
- Maintenance-free product technology
- Nearly 100% recycling capability of all products. Environmental friendly and sustainable
- Advanced active material designed for SFB Series 1 heavy duty batteries
- Meet EN 50342 standard and V1 vibration level
- Shelf life up to 15 months under suitable conditions
- QR and barcode system enabling tracking of products



series 2

- Advanced patented Ca-Ca silver alloy grid technology exclusively designed for SFB Series 2 heavy duty batteries
- Maintenance-free product technology
- Nearly 100% recycling capability of all products. Environmental friendly and sustainable
- Advanced active material designed for SFB Series 2 heavy duty batteries
- Meet EN 50342 standard and V2 vibration level
- Shelf life up to 18 months under suitable conditions
- QR and barcode system enabling tracking of products



series 3

- Advanced patented Ca-Ca silver alloy grid technology exclusively designed for SFB Series 3 heavy duty batteries
- Maintenance-free product technology
- Nearly 100% recycling capability of all products. Environmental friendly and sustainable
- Advanced active material designed for SFB Series 3 heavy duty batteries
- Meet EN 50342 standard and V3 vibration level
- Shelf life up to 18 months under suitable conditions
- QR and barcode system enabling tracking of products

Recycling Beyond Industry Standards

Purification method with direct raffination technology delivers **higher energy efficiency**

TSE ISO EN 14000 and TS EN ISO 50001 certified manufacturing facility **which is sensitive to environment**

Nearly recycling rate of **100%** in all products

Recovery plant having an annual capacity of **40.000 tons**



TYPE			Capacity +25 C and 20 hours (Ah)	CCA EN (A)	CCA SAE (A)	Mounting Type	Lead Terminals	Lower Connection	Outside Dimesions (mm)				Acid Weight (kg)
BOX	ÇELİK CODE	PART NUMBER							Length (mm)	Width (mm)	Excluding Pole (mm)	Height (mm)	

SERIES 1 HEAVY DUTY TYPE STARTER BATTERIES

C13	C13.105.076.F	MF 60512	105	760	800	0	1	B0	347	175	207	232	25,6
	C13.105.076.G	MF 60513	105	760	800	1	1	B0					25,6
D2	D2.115.080.H	MF 60527	115	800	850	0	1	B1	344	175	212	237	27,2
D3	D3.128.090.F	MF 62810	128	900	950	0	1	B0	344	171	262	290	32,2
D4 (Type A)	1D4.120.080.A	MF 62045	120	800	850	3	1	B3	513	186	195	223	34,0
	1D4.120.080.B	MF 62046	120	800	850	3	1	B0					34,0
	1D4.135.095.A	MF 63530	135	950	1000	3	1	B3					35,7
	1D4.135.095.B	MF 63532	135	950	1000	3	1	B0					35,7
	1D4.135.080.A	MF 63531	135	800	1000	3	1	B3					35,0
	1D4.135.080.B	MF 63533	135	800	1000	3	1	B0					35,0
D5 (Type B)	1D5.150.100.A	MF 65021	150	1000	1050	3	1	B3	513	223	195	223	41,2
	1D5.150.100.B	MF 65022	150	1000	1050	3	1	B0					41,2
	1D5.165.110.A	MF 66514	165	1100	1150	3	1	B3					43,0
	1D5.165.110.B	MF 66515	165	1100	1150	3	1	B0					43,0
	1D5.180.120.A	MF 68032	180	1200	1250	3	1	B3					46,0
	1D5.180.120.B	MF 68033	180	1200	1250	3	1	B0					46,0
	1D5.190.125.A	MF 69018	190	1250	1300	3	1	B3					47,0
	1D5.190.125.B	MF 69021	190	1250	1300	3	1	B0					47,0
D6 (Type C)	1D6.200.120.B	MF 70038	200	1200	1250	3	1	B0	518	273	216	242	54,7
	1D6.225.140.B	MF 72038	225	1400	1450	3	1	B0					57,0
	1D6.240.150.B	MF 74012	240	1500	1600	3	1	B0					60,0

SERIES 1 SUPER HEAVY DUTY TYPE STARTER BATTERIES

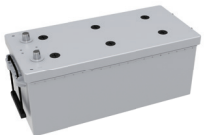
D4 (Type A)	1SD4.145.095.A	MF 64535	145	950	1000	3	1	B3	513	186	195	223	38,0
	1SD4.145.095.B	MF 64536	145	950	1000	3	1	B0					38,0
D5 (Type B)	1SD5.190.120.A	MF 69019	190	1200	1300	3	1	B3	513	223	195	223	48,0
	1SD5.190.120.B	MF 69020	190	1200	1300	3	1	B0					48,0
D6 (Type C)	1SD6.200.125.B	MF 70039	200	1250	1300	3	1	B0	518	273	216	242	55,0
	1SD6.225.125.B	MF 72538	225	1250	1300	3	1	B0					57,5
	1SD6.250.145.B	MF 75011	250	1450	1500	3	1	B0					63,0



TYPE			Capacity +25 C and 20 hours (Ah)	CCA EN (A)	CCA SAE (A)	Mounting Type	Lead Terminals	Lower Connection	Outside Dimesions (mm)				Acid Weight (kg)
BOX	ÇELİK CODE	PART NUMBER							Length (mm)	Width (mm)	Excluding Pole (mm)	Height (mm)	

SERIES 2 HEAVY DUTY TYPE STARTER BATTERIES

D4 (Type A)	D4.135.095.A	MF 63532	135	950	1000	3	1	B3	513	186	195	223	37,5
	D4.135.095.B	MF 63532	135	950	1000	3	1	B0					37,5
D5 (Type B)	D5.150.100.A	MF 65022	150	1000	1050	3	1	B3	513	223	195	223	41,2
	D5.150.100.B	MF 65022	150	1000	1050	3	1	B0					41,2
	D5.165.110.A	MF 66517	165	1100	1150	3	1	B3					43,0
	D5.165.110.B	MF 66517	165	1100	1150	3	1	B0					43,0
	D5.170.110.A	MF 67020	170	1100	1150	3	1	B3					43,0
	D5.170.110.B	MF 67020	170	1100	1150	3	1	B0					43,0
	D5.180.120.A	MF 68033	180	1200	1250	3	1	B3					46,0
	D5.180.120.B	MF 68033	180	1200	1250	3	1	B0					47,0
	D5.190.125.A	MF 69019	190	1250	1300	3	1	B3					47,0
	D5.190.125.B	MF 69019	190	1250	1300	3	1	B0					47,0
D6 (Type C)	D6.200.120.B	MF 70038	200	1200	1250	3	1	B0	518	273	216	242	54,7
	D6.225.140.B	MF 72038	225	1400	1450	3	1	B0					57,0
	D6.240.150.B	MF 74012	240	1500	1600	3	1	B0					60,0



SERIES 2 SPECIAL TYPE HEAVY DUTY STARTER BATTERIES

D7	D7.100.072.C		100	720	750	2	1	B0	286	269	208	230	30,5
	D7.125.090.C		125	900	950	2	1	B0					36,5
GR31	GR31.105.076.D		105	760	800	9	1	B0	328	171	220	241	25,0
	GR31.105.076.E		105	760	800	9	8	B0					25,0
	GR31.105.090.D		105	900	950	9	1	B0					25,5
	GR31.105.090.E		105	900	950	9	8	B0					25,5



SERIES 2 TAXI BATTERIES

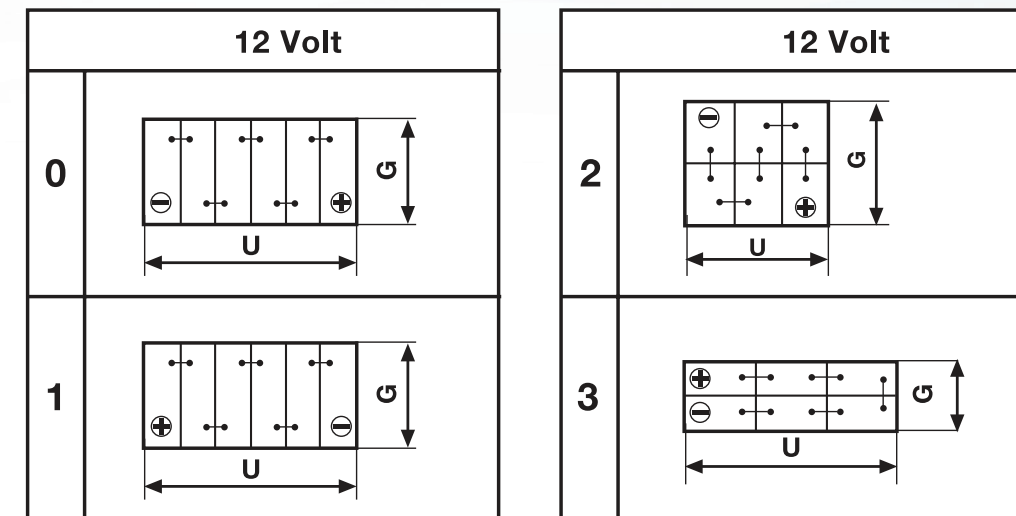
L2	TAXIL2.65.054.A		65	540	570	0	1	B13	242	175	190	190	16,6
L3	TAXIL3.72.057.C		72	570	600	0	1	B1	275	175	190	190	19,0



BATTERY INSTALLATION MANUAL

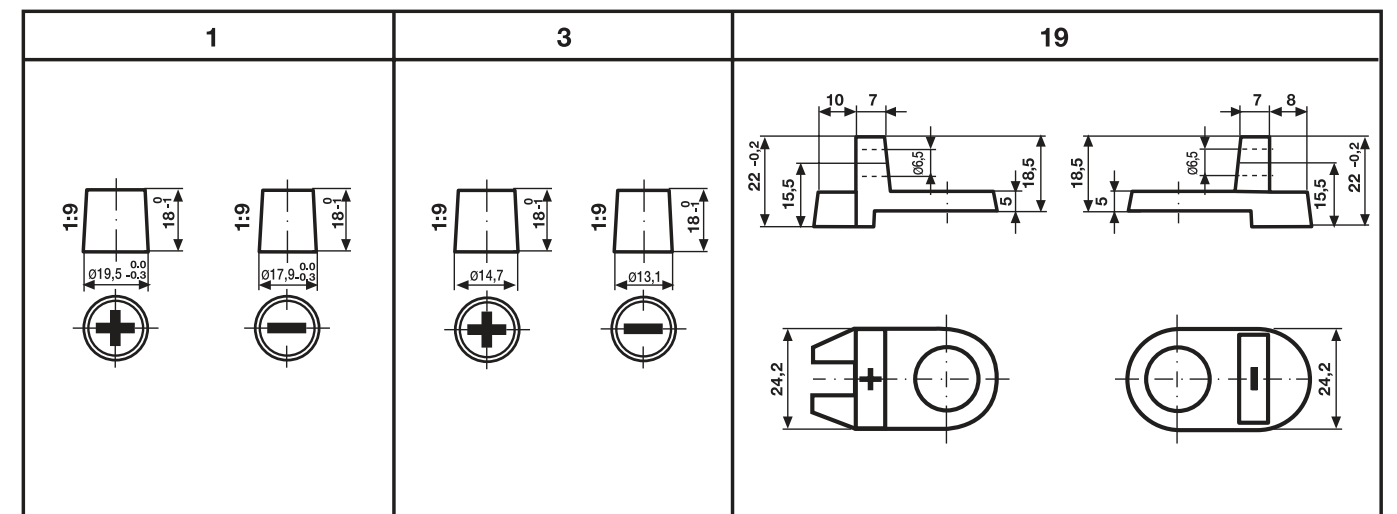
Types of Installation

TYPE			Capacity +25 C and 20 hours (Ah)	CCA EN (A)	CCA SAE (A)	Mounting Type	Lead Terminals	Lower Connection	Outside Dimesions (mm)				Acid Weight (kg)	
BOX	ÇELİK CODE	PART NUMBER							Length (mm)	Width (mm)	Excluding Pole (mm)	Height (mm)		
SERIES 3 SUPER HEAVY DUTY TYPE STARTER BATTERIES														
D4 (Type A)	SD4.145.095.A	MF 64536	145	950	1000	3	1	B3	513	186	195	223	38,0	
	SD4.145.095.B	MF 64537	145	950	1000	3	1	B0					38,0	
D5 (Type B)	SD5.190.125.A	MF 69020	190	1250	1300	3	1	B3	513	223	195	223	48,0	
	SD5.190.125.B	MF 69021	190	1250	1300	3	1	B0					48,0	
D6 (Type C)	SD6.200.125.B	MF 70040	200	1250	1300	3	1	B0	518	273	216	242	55,0	
	SD6.225.125.B	MF 72539	225	1250	1300	3	1	B0					57,5	
	SD6.250.145.B	MF 75012	250	1450	1500	3	1	B0					63,0	
SERIES 3 SPECIAL TYPE STARTER BATTERIES														
GR31	GR31.115.100.D		115	1000	1050	9	1	B0	328	171	220	241	26,5	
	GR31.115.100.E		115	1000	1050	9	8	B0					26,5	



W = Width
L = Length

Connection Terminals



Hold Downs

B 00	Without bottom connections	
B 01		
B 03		
B 04		
B 09		
B 13		
B 14		

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