



# VIVAT

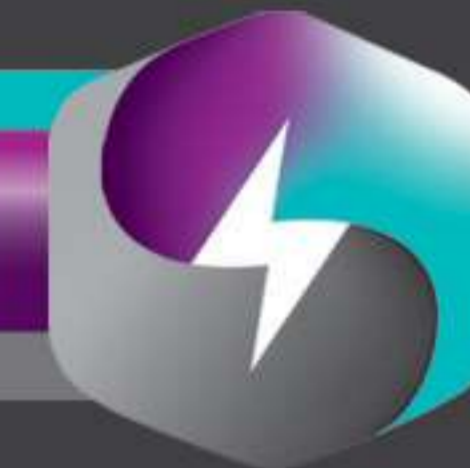
Universal Innovation







### Introduction of Sepahan Battery Industrial Complex



Sepahan Battery Industrial Complex was founded in 1999 as the most hi-tech enterprise in automotive battery manufacturing in Iran. It is occupying a total land area of 65,000 m<sup>2</sup>. In the recent years, the complex has increased its production capacity to 5 million batteries / year and by implementing various development projects providing over 2,000 job opportunities. The manufacturing equipment are mostly fully automated and are made by the most renowned European battery manufacturing equipment suppliers such as Digatron, Sovema, TBS, BM, La Pneumatica, etc. Usage of state-of-the-art equipment and first-class raw material has enabled SBIC to produce the highest quality lead acid batteries for automotive applications to European, Japanese North American standards. Over the last 20 years, highly skilled engineers at SBIC have developed technical capabilities to be able to design and manufacture all types of batteries for OEM and after-market applications. SBIC's new products include EFB batteries for cars equipped with start-stop system and also UPS and solar batteries. Sepahan Battery also exports its products to the GCC, CIS countries and also to some of the African and European ones. Sepahan Battery Industrial Complex is the most advanced battery manufacturer in Iran because of the outstanding specifications as follows:

- 1- Self-sufficiency in battery production and making almost all of the raw materials and components used in its production.
- 2- Benefiting from information technology and implementing and executing fully developed information system and enterprise resource planning (ERP).
- 3- Manufacturing and supply of up-to-date products to the market using just-in-time (JIT) system, ensuring on-time delivery, increased working life, which leads to improved battery performance when being sold in the market and in order to benefits battery dealers and end users.
- 4- Creating suitable infrastructures to complete the cycle of production and recycling batteries to prevent environmental pollution and toxic contamination as one of the main values of the complex.



## Vivat Classic Battery

Vivat Classic batteries are an economical solution for cars with common consumers. These types of batteries are flooded type batteries featuring SLI technology, which are suitable for use in all classes of vehicles. They meet the starter needs of the vehicle and supply necessary energy when the engine is not running.

Some features of classic batteries are as following:

- Lead-Calcium alloyed grid technology
- High starting power under all weather conditions
- Maintenance-free design throughout its service life
- Design suitable for every brand and model with international norms and dimensions

**CLASSIC** 



# JIS

TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max.Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
B20	SMF38B20L	35	52	305	197	129	227	N	A2	0
	SMF38B20R	35	52	305	197	129	227	N	A2	1
B24	SMF50B24L	45	70	380	238	129	227	N	A1	0
	SMF50B24R	45	70	380	238	129	227	N	A1	1
D23	SMF65D23L	60	98	520	238	178	225	B4	A1	0
	SMF65D23R	60	98	520	238	178	225	B4	A1	1
	SMF75D23L	66	110	560	238	178	225	B4	A1	0
	SMF75D23R	66	110	560	238	178	225	B4	A1	1
D26	SMF80D26L	70	118	620	257	176	225	B4	A1	0
	SMF80D26R	70	118	620	257	176	225	B4	A1	1
	SMF90D26L	75	128	660	257	176	225	B4	A1	0
	SMF90D26R	75	128	660	257	176	225	B4	A1	1



## JIS

TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max.Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
D31	SMF75D31L	70	118	620	306	175	225	B4	A1	0
	SMF75D31R	70	118	620	306	175	225	B4	A1	1
	SMF95D31L	80	138	660	306	175	225	B4	A1	0
	SMF95D31R	80	138	660	306	175	225	B4	A1	1
	SMF105D31L	90	158	760	306	175	225	B4	A1	0
	SMF105D31R	90	158	760	306	175	225	B4	A1	1
	SMF120D31L	100	179	860	306	175	225	B4	A1	0
	SMF120D31R	100	179	860	306	175	225	B4	A1	1

# JIS

TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max.Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
G51	SMF155G51R	150	290	1010	510	222	232	B8	A1	3
	SMF155G51L	150	290	1010	510	222	232	B8	A1	4
	SMF185G51R	170	336	1135	510	222	232	B8	A1	3
	SMF185G51L	170	336	1135	510	222	232	B8	A1	4
	SMF200G51R	180	360	1215	510	222	232	B8	A1	3
	SMF200G51L	180	360	1215	510	222	232	B8	A1	4
	SMF205G51R	190	383	1265	510	222	232	B8	A1	3
	SMF205G51L	190	383	1265	510	222	232	B8	A1	4
H51	SMF210H51R	200	407	1050	512	278	239	B8	A1	3
	SMF210H51L	200	407	1050	512	278	239	B8	A1	4
	SMF245H51R	220	456	1100	512	278	239	B8	A1	3
	SMF245H51L	220	456	1100	512	278	239	B8	A1	4
	SMFH5122511111R	225	468	1110	512	278	239	B8	A1	3
	SMFH5122511111L	225	468	1110	512	278	239	B8	A1	4



## DIN

TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max.Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
L1	SMF55090	50	79	470	207	175	190	B3	A1	0
L2	SMF55018	50	79	470	242	175	190	B3	A1	0
	SMF55559	55	88	505	242	175	190	B3	A1	0
	SMF56019	60	98	560	242	175	190	B3	A1	0
L3	SMF56638	66	110	595	278	175	190	B3	A1	0
	SMF57220	72	122	660	278	175	190	B3	A1	0
L5	SMF59018	90	158	830	350	175	188	B3	A1	0
	SMF60044	100	179	920	350	175	188	B3	A1	0





## Low Maintenance Batteries

### DIN

TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max. Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
L1	55090	50	79	470	207	175	190	B3	A1	0
L2	55014	50	79	470	242	175	190	B3	A1	0
	55559	55	88	505	242	175	190	B3	A1	0
	56019	60	98	560	242	175	190	B3	A1	0
L3	56638	66	110	595	278	175	190	B3	A1	0
	57220	72	122	660	278	175	190	B3	A1	0
L5	59039	90	158	830	350	175	188	B3	A1	0

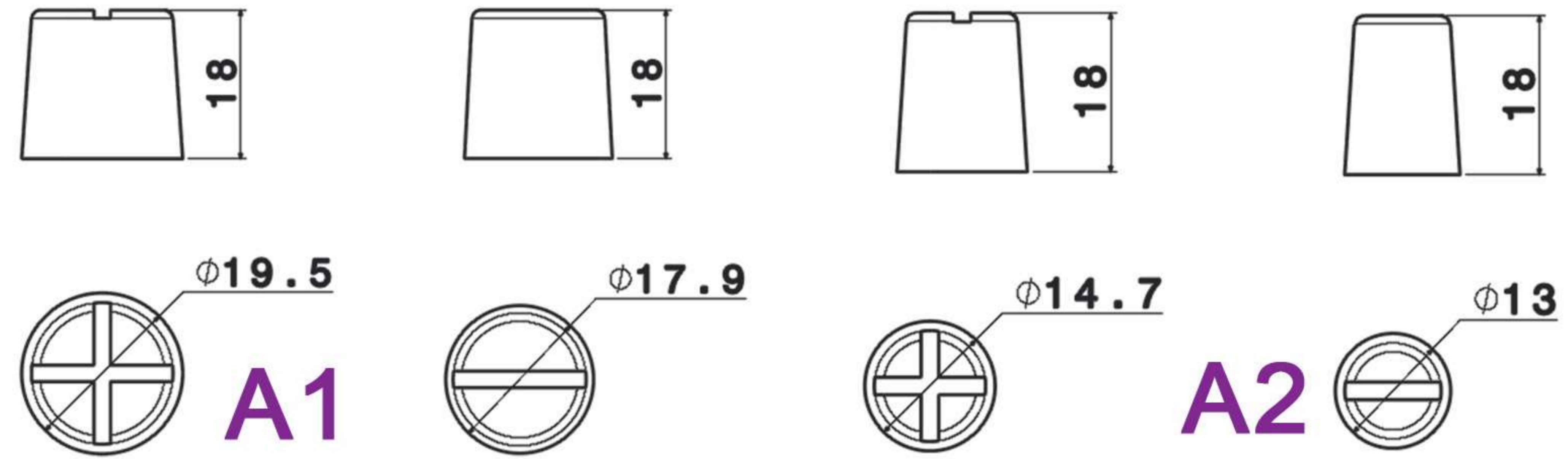
## Low Maintenance Batteries

JIS

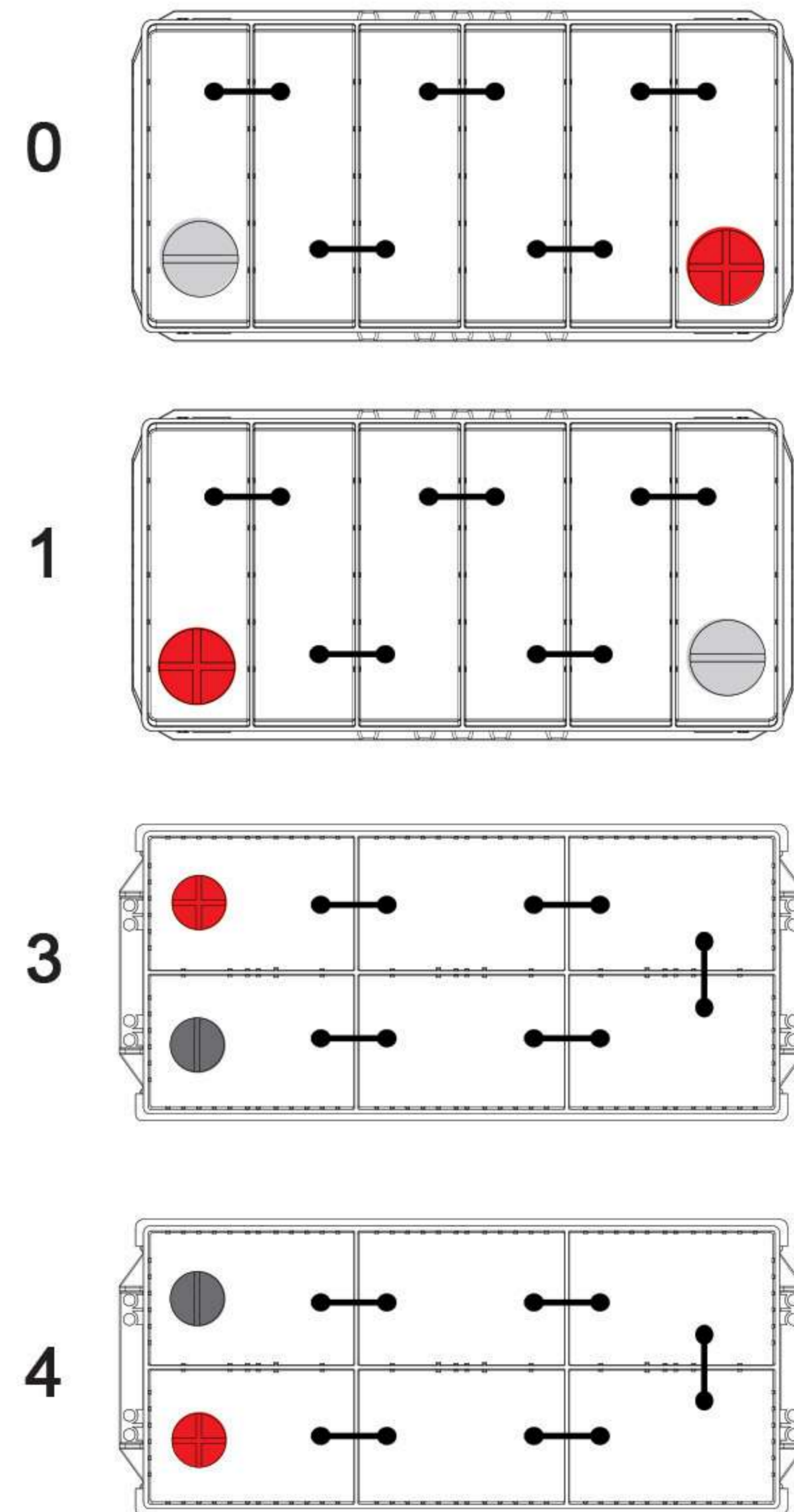
TYPE		Capacity 20 HR (AH)	Reserve Capacity (min)	CCA EN (A)	Max. Overall Dimension (mm)			Base Hold Down	Terminal Type	Terminal Layout
Box	Part Number				Length	Width	Total Height			
D23	D23060520101	60	98	520	238	178	225	B4	A1	0
	D23060520111	60	98	520	238	178	225	B4	A1	1
	D23066560101	66	110	560	238	178	225	B4	A1	0
	D23066560111	66	110	560	238	178	225	B4	A1	1
D31	120D31L	100	179	860	306	175	225	B4	A1	0
	120D31R	100	179	860	306	175	225	B4	A1	1
E41	125E41L	120	223	1020	410	176	234	B8	A1	0
G51	155G51R	150	290	1010	513	222	217	B8	A1	3
	185G51R	170	336	1135	513	222	217	B8	A1	3
	200G51R	180	360	1215	513	222	217	B8	A1	3
	205G51R	190	383	1265	513	222	217	B8	A1	3
H51	210H51R	200	407	1050	512	278	239	B8	A1	3
	245H51R	220	456	1100	512	278	239	B8	A1	3
	H51225111131	225	468	1110	512	278	239	B8	A1	3

# LAYOUTS, HOLD DOWN AND TERMINALS

## Battery Terminals



## Battery Terminals Layout



## Battery Base Hold Down

