

# Triumph

Maintenance-Free Monoblock UPS Batteries

**UPSCALE**



**UPGRADE**

There is today a definite preference for monobloc batteries with improved performance to provide assured back-up for Un-interrupted Power Supply Systems.

#### "Up-Grade" in Technology

"Triumph - HP" Monobloc batteries use state-of-the-art thin plate lead acid battery technology for enhanced performance, as compared with conventional VRLA batteries using thicker plates.

The many Superior Features include

- Long Shelf life: low self discharge
- Excellent High-Rate Performance: thin plate design
- Excellent Performance over wide temperature range: special alloy
- Fast charge capability: very low Internal Resistance
- High Energy Density: less weight

#### "Up-Scale" in Power

"Triumph - HP" Monobloc batteries have the distinct advantage of providing the crucial extra time needed with additional loads.

These batteries have 15 % extra power for durations upto one hour. This extra power translates to increased back-up time available compared to other makes of batteries.

#### Other Benefits to Users

- Space Saving : 15 % with Small footprint models where floor space is at a premium
- Power Saving : Saves upto 20 % while charging.
- Safety : Does not emit Noxious , Corrosive fumes. Spill-proof and leak-proof

#### Range of 12V Monoblocs

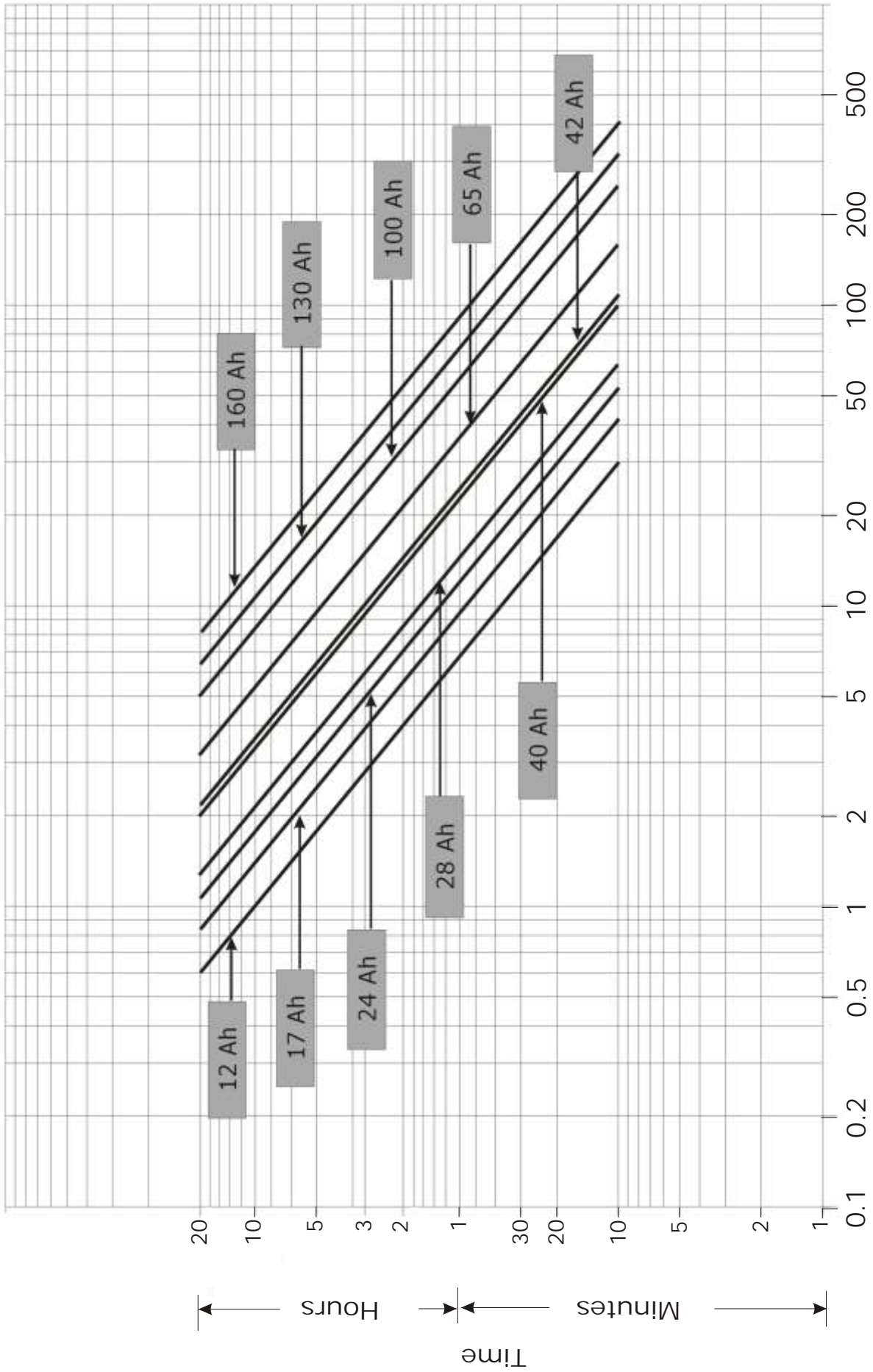
Model	Capacity (Ah)	Dimensions (mm)			Approx. Wt. (Kgs)	Small Footprint Model
		L	W	H		
TP 12	12	175	85	130	5	
* TP 17	17	181	76	168	6	
* TP 24	24	175	166	125	9	
TP 24S	24	249	97	151	10	☒
TP 28S	28	249	97	201	12	☒
* TP 40	40	197	165	170	13	
TP 42S	42	220	121	250	15	☒
* TP 65	65	330	168	176	23	
* TP 100	100	410	176	250	35	
TP 130	130	525	220	225	54	
TP 160	160	525	220	225	56	

Nominal capacity is at 20 hour rate of discharge to 1.75 vpc at 25° C

\* These batteries conform to JIS 8702



# Battery Selection Chart



Load in Amps at 25° C



## Charging

### For Float applications

If Single voltage setting charger:

13.8 V per 12 V monobloc at 25°C

If Dual voltage setting charger:

Boost: 14.0 V , Float: 13.7 V per 12 V monobloc at 25°C

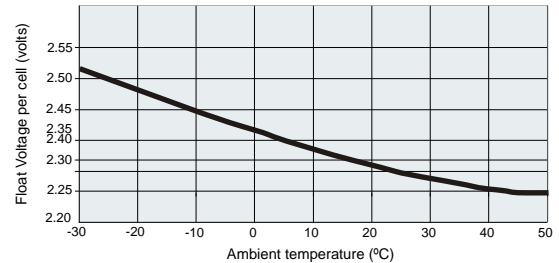
### For Cyclic applications

14.4 V per 12V monobloc at 25° C

Charger voltage compensation for temperature (refer Graph 1)

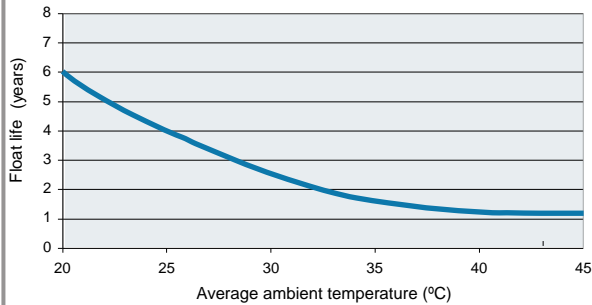
Current limit: Minimum 0.1C<sub>20</sub> amps.

**Graph 1 - Temperature Compensation**

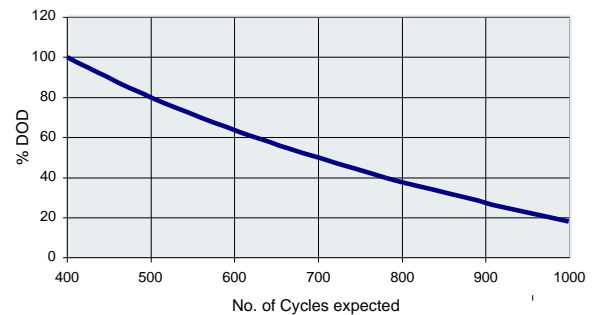


## Performance

**Graph 2 - Float Life Vs Temperature**

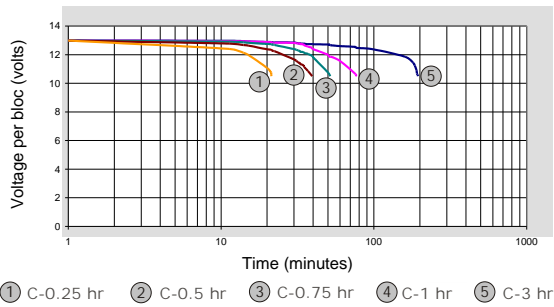


**Graph 3 - Cycle Life Vs Depth of Discharge at 25°C**

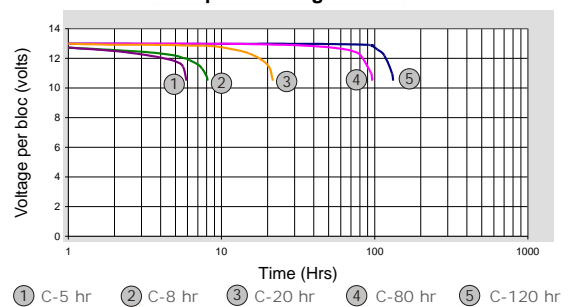


## Discharge Characteristics at 25°C

**Graph 4 - Voltage Vs Time**



**Graph 5 - Voltage Vs Time**



### Delhi

Tel: (0120) 2432734 - 37, Fax: (0120) 2432738, Email: delhi@hbl.in

### Mumbai

Tel: (022) 27880838, Fax: (022) 27893512, Email: mumbai@hbl.in

### Chennai

Tel: (044) 26261329, Tele Fax: (044) 26200073, Email: chennai@hbl.in

### Bangalore

Tel: (080) 251130303 -5, Fax: (080) 251130306, Email: bangalore@hbl.in

### Kolkatta

Tel: (033)23599174, Fax: (033) 23599173, Email: calcutta@hbl.in

### Lucknow

Tel: (0522) 2610555, Fax: (0522) 2611444, Email: lucknow@hbl.in

In accordance with its policy of continuous improvement the company reserves the right to change specifications and designs without notice



HBL Power Systems Ltd.  
Road # 10, Banjara Hills, Hyderabad 500 034, India.  
E mail : contact@hbl.in  
Web : www.hbl.in

Dealer / Stockist :