BATTERY SELECTION CHART

Method of battery selection (Estimation of initial discharge time)

(1) Determine discharge current.

(2) Determine duration of discharge required.

(3) Select batteries from the selection chart below. Then, select a battery which meets the specification of the equipment in which the battery is loaded such as voltage, dimensions and mass, from the “Battery Index” on page 33 to 36.

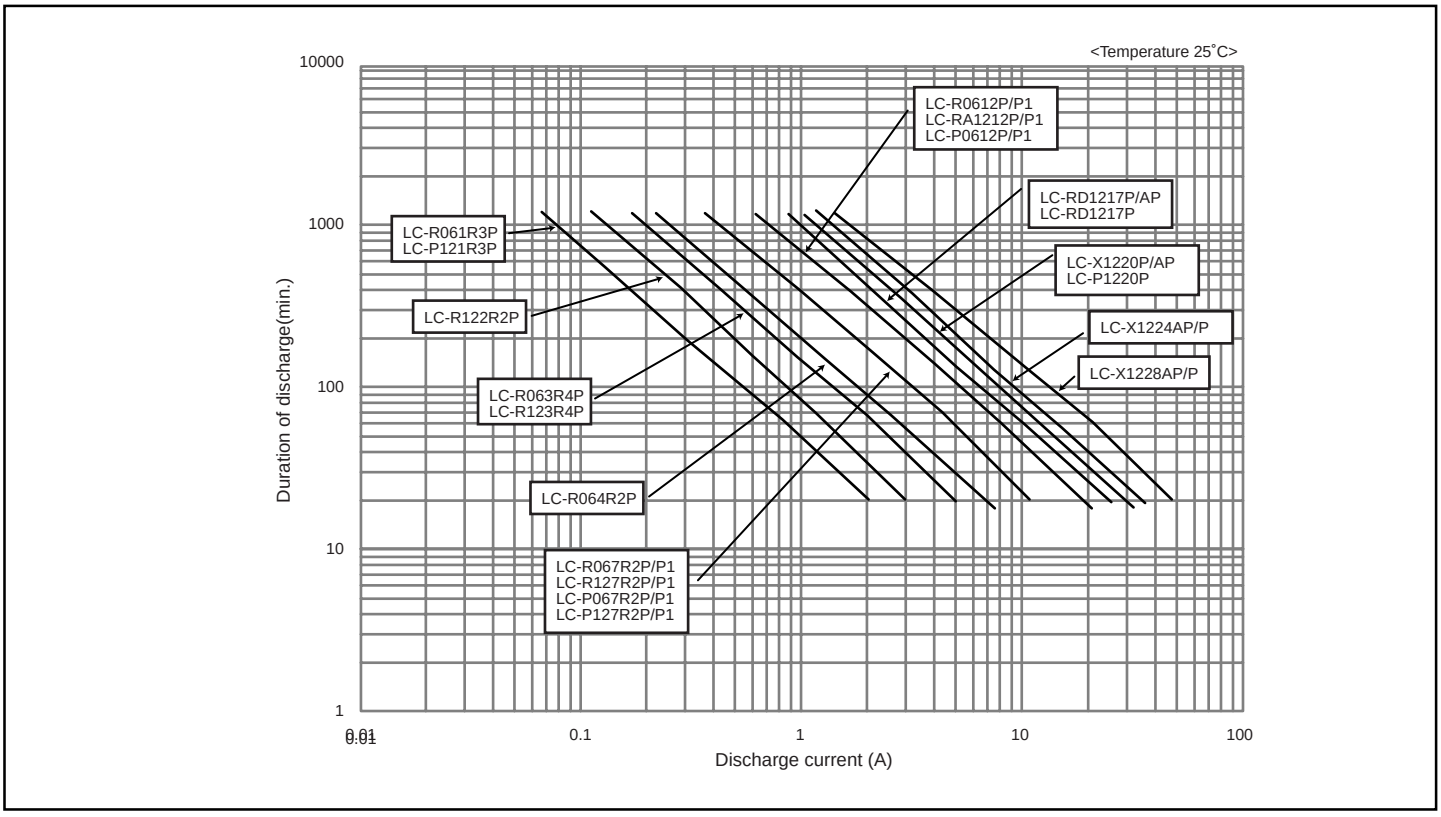
(4) Example

- Use condition: 2.9 A, 1.5 hours, 12 V; space allowable 100 mm x 160 mm x 105 mm
- 7.2 Ah is selected in the step (3).
- LC-R127R2P 94 mm x 151 mm x 100 mm is selected in the step (4).

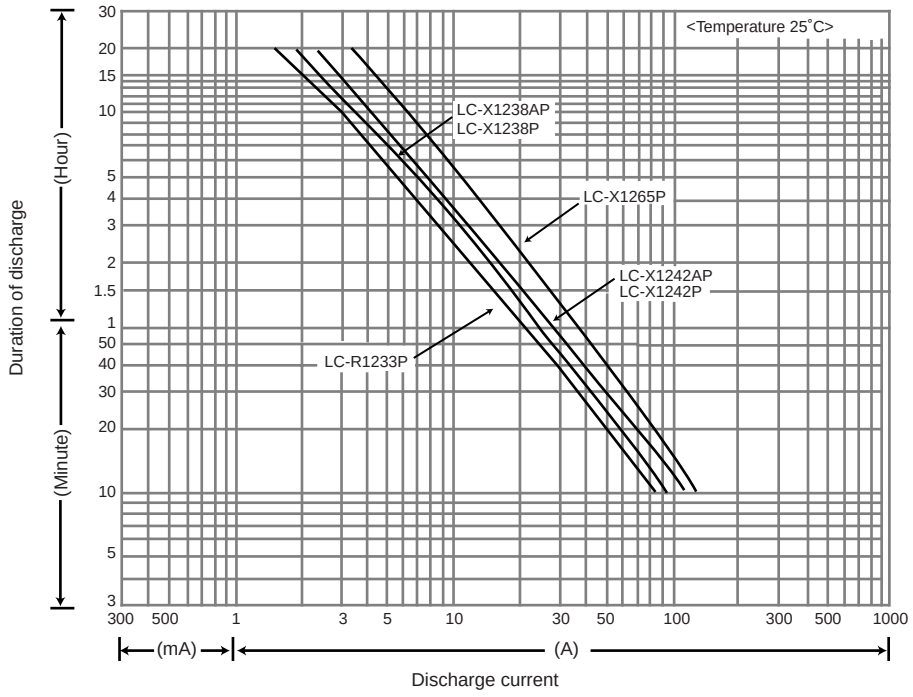
(5) Refer to individual data sheets for detailed discharge characteristics of the battery.

(Note) Data given are the average values obtained within three cycles of charge/discharge, not the minimum values.

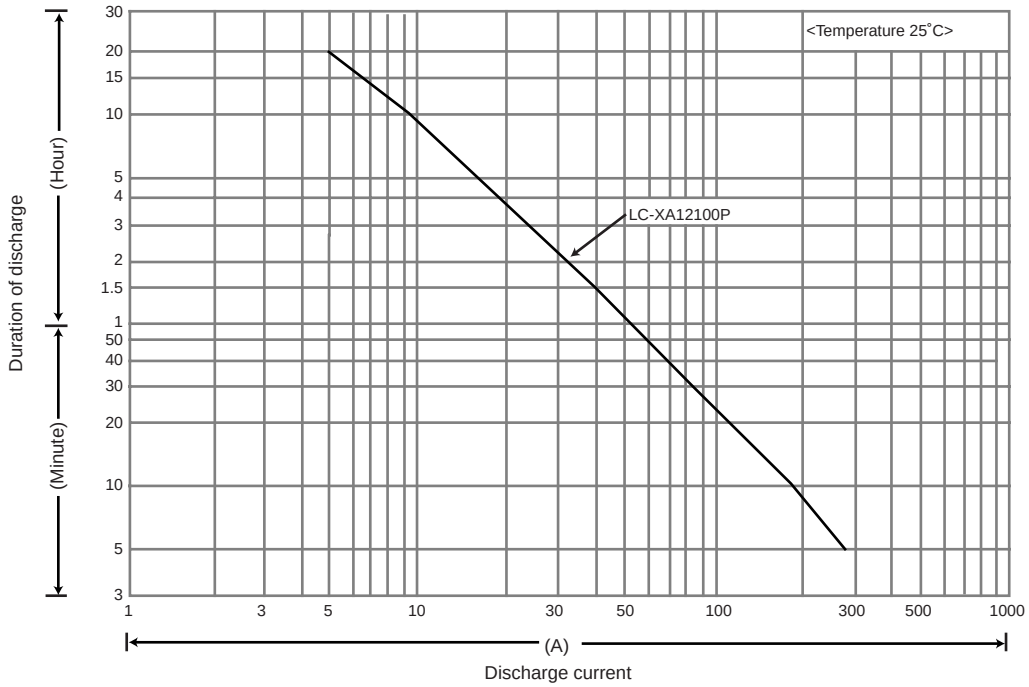
VRLA battery (1.3 Ah to 28 Ah)



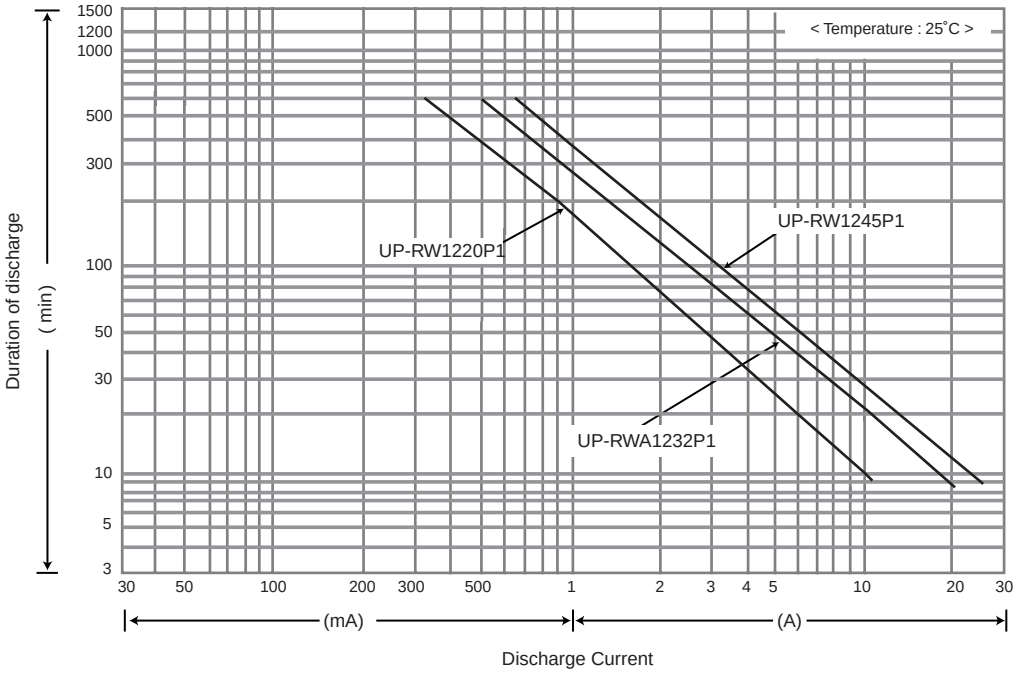
VRLA battery (33 Ah to 65 Ah)



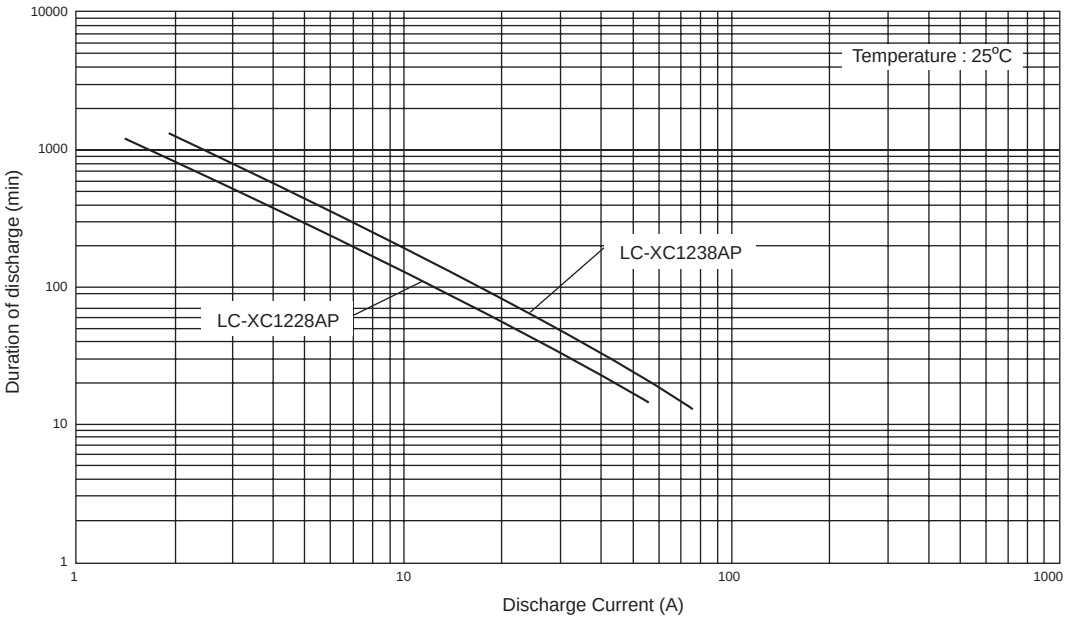
VRLA battery (100 Ah)



VRLA battery for standby power applications (high-power for UPS)



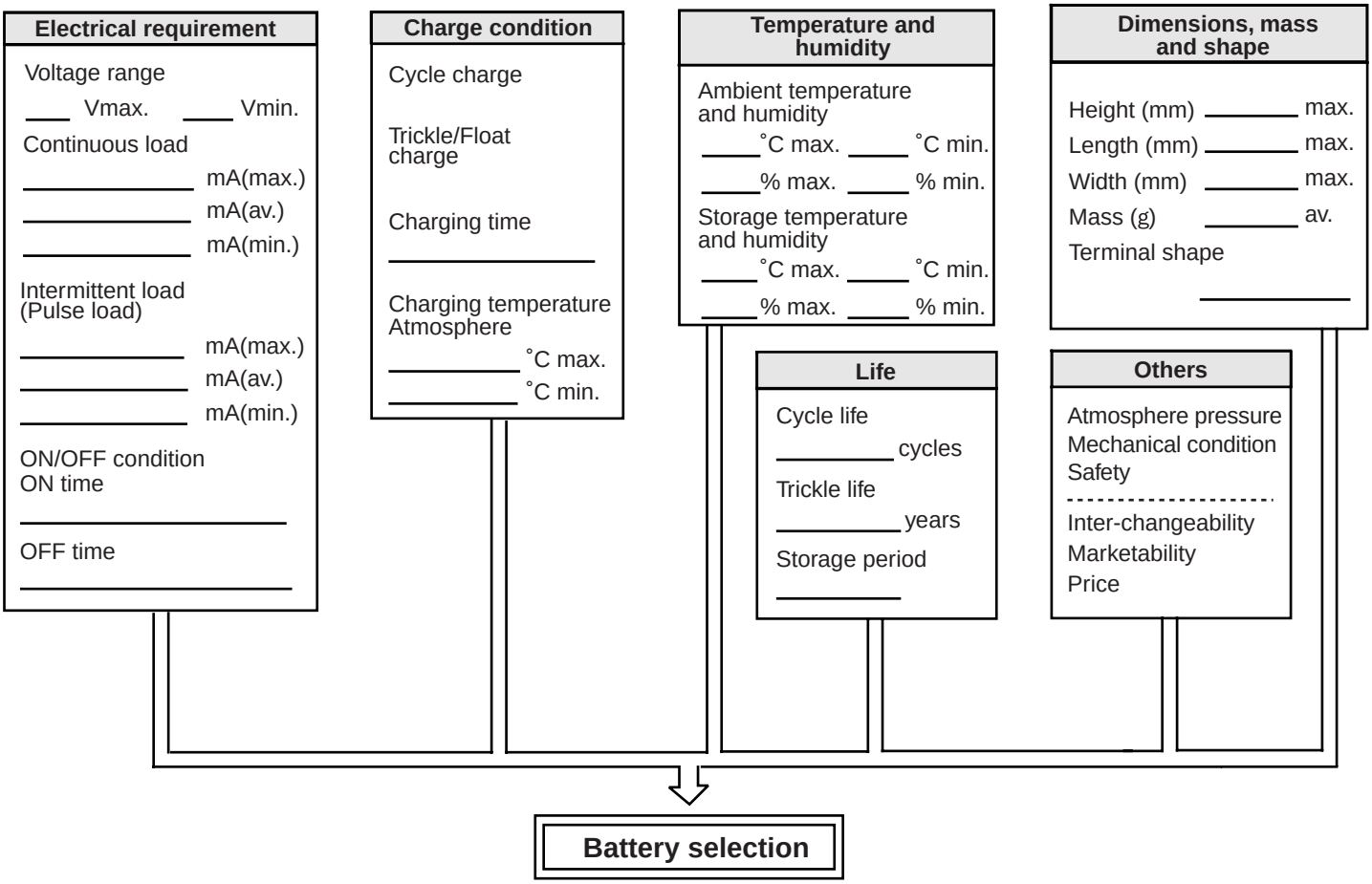
VRLA battery for main power applications



Steps for selecting batteries are described below.

- Study of required specifications (draft)
  Study the required specifications (draft) by checking the requirements for the battery with the battery selection criteria. Technical requirements for selecting the battery are presented below.

Technical requirements for battery selection



- **Battery selection**

First, select several candidate batteries by referring to the technical brochures and data sheets of the batteries presently available. Then from the candidates select a battery which can meet as many of the ideal requirements as possible. In fact, however, battery selection can be seldom made so smoothly. Practically, possible removal or easing of the requirements should be considered first; then depending on the result, a proper battery should be selected from those presently available. This way of proceeding enables economic selection of the battery. Any questions at this stage should be asked to battery engineers in depth. Sometimes, new or improved batteries which are not carried in the brochures have become available, and an appropriate battery may be found among them. Usually, required specifications are finalized at this stage.

- **Request for improving or developing batteries**

If no battery which will satisfy special requirements can be found by the above-described approach, requests for improving or developing new batteries should be made to our technical department, and these requests should be coordinated as quickly as possible to allow enough time for studying: the study takes usually 6 to 12 months or even longer depending on the request.
In this section, guidelines for selecting appropriate batteries for specific equipment were mentioned. If further information regarding the battery selection is required, please contact us.

If charge/discharge conditions do not meet Panasonic recommendations, battery life will possibly become short.
Please check battery characteristics indicated in specification and confirm actual charge/discharge pattern.
For further details, please contact Panasonic office.