



**YUASA**

# PRO-SPEC

Power with Advanced Charge Technology

Multiple purpose  
deep cycle batteries



[www.yuasaeurope.com](http://www.yuasaeurope.com)

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Power with Advanced Charge Technology

## Introduction

Yuasa are one of the world's largest battery manufacturers and leaders in the design, manufacture and supply of valve regulated lead-acid batteries, with global manufacturing plants and an extensive marketing and distribution network throughout the UK and Europe.

The Yuasa Pro-Spec range of batteries have been specifically designed for durability and long life in deep discharge use. Unique, state of the art plate barrier prevention and separator systems minimise self discharge and maximise both the out of use storage period and the number of recharge cycles, providing more power and reliability and prolonging the service life of the battery.



## Features

- Vibration Resistant
- Maintenance Free
- Deep Cycle
- Extended Service Life

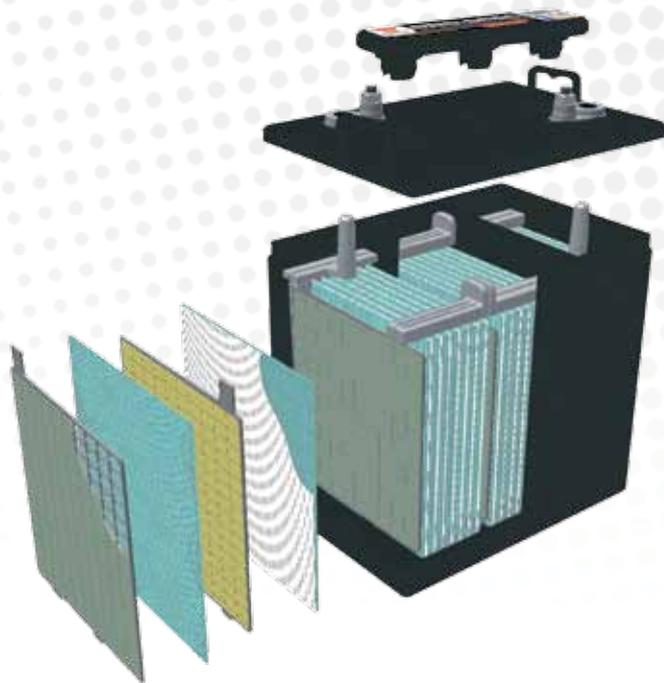
## Applications

### Electric Vehicles including:

- Golf Carts
- Mobility Vehicles

### Warehouse Equipment including:

- Fork Lifts
- Access Platforms
- Floor Cleaners



## Technical Features

1. **Case/Lid:**
  - a. Less weight, shock-resistant and acid-resistant by PP Resin
  - b. Special-designed structure to prevent short-circuit from active-material shedding in the bottom
2. **Terminal:**
  - a. Cast with special lead alloy
  - b. Special plating to minimize heat generation and electric resistance
  - c. Designed to vibration resistance
  - d. Easily detachable with standard & bolt/nut structure
3. **Cap:**
  - a. Engineering structure to vent gas out
  - b. Easy to refill and maintain
4. **Separator:**
  - a. Porous Rubber material against acid and corrosion
  - b. Excellent physical characteristics and lower electric resistance
  - c. Using micro-fibre Glass-mat against active-material shedding
5. **Plates:**
  - a. Negative – 99.9% pure lead with hard paste feature, specific additives for deep cycle purpose
  - b. Positive corrosion-resistant grid with hard paste feature, specific additives for deep cycle purpose

## Terminal Configurations



Embedded Terminal (ET)



Dual Fit Terminal (DT)



Standard Terminal (ST)

## PRO-SPEC Batteries

Type		Capacity				Dimensions (mm)				Weight (kg)
		@25A (Mins)	@75A (Mins)	5HR (Ah)	20HR (Ah)	L	W	H	TH <sup>A</sup>	
Deep Cycle 6V	DCB 605-6	383	105	175	210	259	179	245	276	27.0
	DCB 105-6	447	115	185	225	259	179	245	276	28.6
	DCB 125-6	488	132	195	240	259	179	245	276	30.7
	DCB 145-6	530	145	215	260	259	179	264	295	33.0
Deep Cycle 8V	DCB 875-8	295	75	145	170	262	181	245	276	29.0
	DCB 890-8	340	90	155	190	262	181	245	276	31.6
	DCB 8125-8	425	110	190	240	262	181	283	316	37.6
Deep Cycle 12V	DCB 1275-12	290	70	125	150	329	181	245	276	37.5

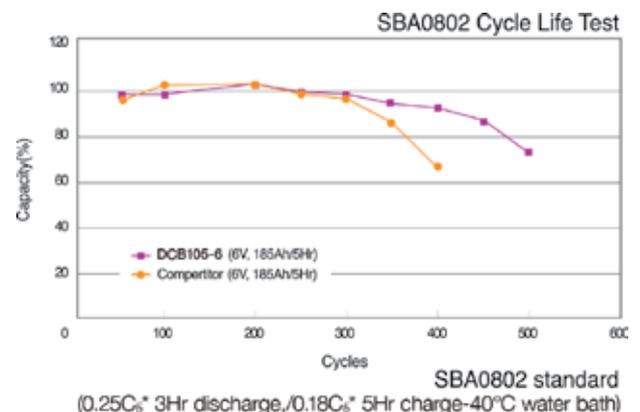
## Independent cycle life test



Improved Paste and 4BS (Tetra Basic lead sulphate) application to longer life cycle and capacity maximization



Unified and embedded terminal application to prevent terminal damage in event of high rate discharging



# PRO-SPEC DCB 605-6



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 20.5~26.6 amperes until the battery voltage measures between 7.14~7.29V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29V/Battery (25°C) until the current measures between 2.05~6.15 amperes.

### Phase 3 (Constant-current)

constant current charge at 2.05~6.15 amperes until the battery voltage measures between 7.5~8.1V/Battery (25°C) or until  $dV/dt$  reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	6V
Length	259mm
Width	179mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	27kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	210Ah
5Hr	175Ah
75A	105mins
25A	383mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 105-6



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 22.5~29.3 amperes until the battery voltage measures between 7.14~7.29V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29V/Battery (25°C) until the current measures between 2.25~6.75 amperes.

### Phase 3 (Constant-current)

constant current charge at 2.25~6.75 amperes until the battery voltage measures between 7.5~8.1V/Battery (25°C) or until  $dV/dt$  reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	6V
Length	259mm
Width	179mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	28.6kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	225Ah
5Hr	185Ah
75A	115mins
25A	447mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 125-6



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 24~31.2 amperes until the battery voltage measures between 7.14~7.29V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29V/Battery (25°C) until the current measures between 2.4~7.2 amperes.

### Phase 3 (Constant-current)

constant current charge at 2.4~7.2 amperes until the battery voltage measures between 7.5~8.1V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	6V
Length	259mm
Width	179mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	30.7kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	240Ah
5Hr	195Ah
75A	132mins
25A	488mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 145-6



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 26~33.8 amperes until the battery voltage measures between 7.14~7.29V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29V/Battery (25°C) until the current measures between 2.6~7.8 amperes.

### Phase 3 (Constant-current)

constant current charge at 2.6~7.8 amperes until the battery voltage measures between 7.5~8.1V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	6V
Length	259mm
Width	179mm
Height (Embedded Terminal)	295mm
Weight (With Electrolyte)	33kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	260Ah
5Hr	215Ah
75A	145mins
25A	530mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 875-8



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 17~22.1 amperes until the battery voltage measures between 9.52~9.72V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 9.52~9.72V/Battery (25°C) until the current measures between 1.7~5.1 amperes.

### Phase 3 (Constant-current)

constant current charge at 1.7~5.1 amperes until the battery voltage measures between 10~10.8V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

# PRO-SPEC DCB 890-8



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 19~24.7 amperes until the battery voltage measures between 9.52~9.72V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 9.52~9.72V/Battery (25°C) until the current measures between 1.9~5.7 amperes.

### Phase 3 (Constant-current)

constant current charge at 1.9~5.7 amperes until the battery voltage measures between 10~10.8V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	8V
Length	262mm
Width	181mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	29kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	170Ah
5Hr	145Ah
75A	75mins
25A	295mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

## Specifications

Nominal Voltage	8V
Length	262mm
Width	181mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	31.6kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	190Ah
5Hr	155Ah
75A	90mins
25A	340mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 8125-8



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 24~31.2 amperes until the battery voltage measures between 9.52~9.72V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 9.52~9.72V/Battery (25°C) until the current measures between 2.4~7.2 amperes.

### Phase 3 (Constant-current)

constant current charge at 2.4~7.2 amperes until the battery voltage measures between 10~10.8V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	8V
Length	262mm
Width	181mm
Height (Embedded Terminal)	316mm
Weight (With Electrolyte)	37.6kg
Terminal Options	ET, DT and ST

## Capacity

20Hr	240Ah
5Hr	190Ah
75A	110mins
25A	415mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat

# PRO-SPEC DCB 1275-12



## Recommended Charge Profile

### Phase 1 (Constant-current)

constant current charge at 15~19.5 amperes until the battery voltage measures between 14.28~14.58V/Battery (25°C) on charge voltage.

### Phase 2 (Constant-voltage)

constant voltage charge at 14.28~14.58V/Battery (25°C) until the current measures between 1.5~4.5 amperes.

### Phase 3 (Constant-current)

constant current charge at 1.5~4.5 amperes until the battery voltage measures between 15~16.2V/Battery (25°C) or until dV/dt reaches to less than 0.035.

\*END OF CHARGE at 110~120% of AH returned.

\*Note: Charging condition (Voltage, Current, Time) will vary depending on battery size, charger (Charging Type, Output) depth of discharge and temperature.

## Specifications

Nominal Voltage	12V
Length	329mm
Width	181mm
Height (Embedded Terminal)	276mm
Weight (With Electrolyte)	37.5kg
Terminal Options	ET

## Capacity

20Hr	150Ah
5Hr	120Ah
75A	70mins
25A	280mins

## 5Hr Capacity by temperature

40°C	105%
30°C	100%
0°C	80%

## Material specifications

Cover Style	Individual Fitting Structure
Cover vent style	Gang style
Container & cover material	Black polypropylene plastic
Case to cover seal method	Heat sealing
Inner-cell connector type	Through the partition weld
Plate lug weld method	Automated cast-on process
Positive grid material	Antimony lead alloy
Negative grid material	Antimony lead alloy
Separator type	Microporous rubber with glass mat



**YUASA**

**PRO-SPEC**

Power with Advanced Charge Technology

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