



# COMBINER BOXES

## SINGLE PHASE ACDB

The ACDB (Alternative Current Distribution Box) receives the AC power from the solar inverter and directs it to AC loads through the distribution board. ACDB includes necessary surge protection device (SPD), MCB to protect the solar inverter from any type of damage or heavy voltage. Specifications of ACDB may change as per load or inverter capacity.

This solar single-Phase AC Surge, over current protection box is suitable for 1Phase 1KW to 5 KW solar inverter systems.

- Provides over-current and surge protection.
- Suitable for solar OnGrid AC side installation.
- Makes AC side wiring easy.
- Single-phase SPD for surge protection.
- Over-current protection with MCB.
- IP 66/67 waterproof box to protect in rains.
- ABS box to withstand all weather conditions.
- Provide Polycarbonate Transparent lid
- Input Connections are provided with Connectwell connectors
- Dimension: 180 x130 x100mm
- MCB current rating can be customized as 16A to 32A as per customer inverter size.



## BOM

1	MODEL ACDB RP001P-5K		
Sl No	Components	Description	Quantity
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	AC Breaker- Single Phase	Eaton/ ABB- as per Inverter Capacity	1
3	AC Surge Protection device	Type 2/ Type 1 +2 Citel/Mersen/ Finder / ABB	1
4	AC Solar Cable	Bonton	As required
5	Cable Glands Input & Output	VSM Plast - Polyamide / MC4 Connector	As required
6	Earth gland	VSM Plast - Polyamide / MC4 Connector	As required
7	End Sealing Terminal lugs	Ashwin	As required
8	End Sleeve Twin Cod	Ashwin	As required
9	EndClamp & Cap	Polyamide Connect well	As required
10	Mounting Rail	TBLS-35/7.5 TRINITY	As required

## THREE PHASE ACDB

- It provides Type 2 Three phase SPD for Surge and Miniature circuit breaker with 10/16/32A for overcurrent protection required for the on-grid inverter.
- Suitable for three phase system with capacity from 5 KW to 15 KW on-grid inverter.
- Makes AC side wiring easy.
- Provides over current and surge protection.
- Suitable for solar OnGrid AC side installation.
- Makes AC side wiring easy.
- Three phase SPD for surge protection.
- Over current protection with MCB.
- IP 66/67 waterproof box to protect in rains.
- ABS box to withstand all weather conditions.
- Provide Polycarbonate Transparent lid
- Input Connections are provided with Connectwell connectors
- Dimension: 180 x180 x100mm
- MCB current rating can be customized as 10A to 32A as per customer inverter size.



## BOM

SI No	Components	Description	Quantity
2	<b>MODEL ACDB RP003P-10K</b>		
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	AC Breaker- Three Phase	Eaton/ ABB- as per Inverter Capacity	1
3	AC Surge Protection device	Type 2/ Type 1+2 Citel/Mersen/ Finder / ABB	1
4	AC Solar Cable	Bonton	As required
5	Cable Glands Input & Output	VSM Plast - Polyamide / MC4 Connector	As required
6	Earth gland	VSM Plast - Polyamide / MC4 Connector	As required
7	End Sealing Terminal lugs	Ashwin	As required
8	End Sleeve Twin Cod	Ashwin	As required
9	EndClamp & Cap	Polyamide Connect well	As required
10	Mounting Rail	TBLS-35/7.5 TRINITY	As required

## 1/1 DC DISTRIBUTION BOX WITH 500V

- On-grid 1 in 1 out DCDB is suitable for accompanying on-grid inverter up to 3 kW in size.
- DCDBs expect 1 string of PV panels up to maximum of 10 no's in series. Panels can be up to 350 W in size.
- Max PV voltage that can be connected up to 500 V
- Max PV current is 10 A per string,
- DCDB is fitted with of 15 A Fuse on the positive and negative input strings, and a DC SPD with minimum 500V for protecting from surge on the DC side.
- DCDB also contains a secondary protection of 16 A 500V DC MCB which is to be used as a switch in case of operational maintenance to turn PV string on and off.
- Tribox Enclosure with ABS base and transparent lid provides waterproof protection with IP rating 66/67
- Polyamide cable glands are provided for Input, output and earth cables
- Dimension: 180x180x100 mm



## BOM

3 MODEL RPDC 003K			
SI No	Components	Description	Quantity
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	Fuse link	15A 1000V Eaton/ Mersen Make	2
3	Fuse Holder	30A 1000V Eaton / Mersen Make	2
4	DC Breaker / Isolator	500V Eaton/ ABB/C & S	1
5	DC Surge Protection device	Type 2 Citel/Mersen/ Finder / ABB	1
6	DC Solar Cable	Leoni / Lapp/ Apar/ Siechem	As required
7	Cable Glands Input & Output	VSM Plast - Polyamide / MC4 Connector	As required
8	Earth gland	VSM Plast - Polyamide / MC4 Connector	As required
9	End Sealing Terminal lugs	Ashwin	As required
10	End Sleeve Twin Cod	Ashwin	As required
11	EndClamp	Polyamide Connect well	As required
12	Mounting Rail	TBLS-35/7.5 TRINITY	As required

## 2/2 DC DISTRIBUTION BOX WITH 500V

- On-grid 2 in 2 out DCDB is suitable for accompanying on-grid inverter up to 6 kW in size.
- DCDBs expect 2 string of PV panels up to maximum of 10 no's in series. Panels can be up to 350 W in size.
- Max PV voltage that can be connected to 500 V
- Max PV current is 10 A per string,
- DCDB is fitted with of 15 A Fuse on the positive and negative input strings, and a DC SPD with minimum 500V for protecting from surge on the DC side.
- DCDB also contains a secondary protection of 16 A 500V DC MCB which is to be used as a switch in case of operational maintenance to turn PV string on and off.
- Tribox Enclosure with ABS base and transparent lid provides waterproof protection with IP rating 66/67
- Polyamide cable glands are provided for Input, output, and earth cables
- Dimension: 280x280x130 mm



## BOM

4 MODEL RPDC 005K2S			
SI No	Components	Description	Quantity
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	Fuse link	15A 1000V Eaton/ Mersen Make	4
3	Fuse Holder	30A 1000V Eaton / Mersen Make	4
4	DC Breaker / Isolator	500V Eaton/ ABB/C & S	2
5	DC Surge Protection device	Type 2 Citel/Mersen/ Finder / ABB	2
6	DC Solar Cable	Leoni / Lapp/ Apar/ Siechem	As required
7	Cable Glands Input & Output	VSM Plast - Polyamide / MC4 Connector	As required
8	Earth gland	VSM Plast - Polyamide / MC4 Connector	As required
9	End Sealing Terminal lugs	Ashwin	As required
10	End Sleeve Twin Cod	Ashwin	As required
11	EndClamp	Polyamide Connect well	As required
12	Mounting Rail	TBLS-35/7.5 TRINITY	As required

## 1/1 DC DISTRIBUTION BOX WITH 1000V

- On-grid 1 in 1 out DCDB is suitable for accompanying on-grid inverter up to 8 kW in size with Single MPPT
- DCDBs expect 1 string of PV panels up to maximum of 19 no's in series. Panels can be up to 7200 W in size.
- The DCDB is connected between PV panels and the on-grid inverter.
- Max PV voltage is 1000 V
- Max PV current is 10 A per string, totaling 10 A in 1 strings.
- DCDB is fitted with 1 set of 15 A Fuse on the positive and negative side, and a DC SPD for protecting from surge on the DC side.
- DCDB also contains a secondary protection of 16/ 32 A 1000V DC Switch which is to be used as a switch in case of operational maintenance to turn PV string on and off.
- IP 66/67 transparent top Tribox provides waterproof protection.
- Input and output are connected through Cable glands and Connectwell terminal connectors.
- Dimension: 180x180x100 mm

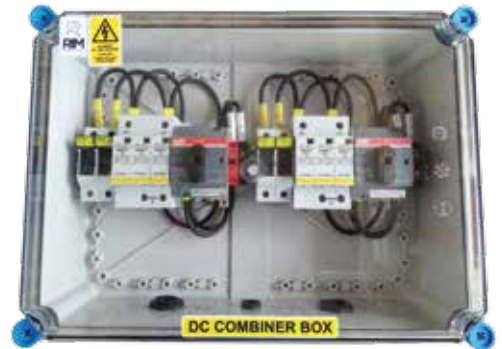


## BOM

SI No	Components	Description	Quantity
5	MODEL RPDC 005K1S		
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	Fuse link	15A 1000V Eaton/ Mersen Make	2
3	Fuse Holder	30A 1000V Eaton / Mersen Make	2
4	DC Switch	1000V ABB/ Salzer/Eaton	1
5	DC Surge Protection device	1000V Type 2 Citel/Finder/ ABB/ Mersen	1
6	DC Solar Cable	Leoni / Lapp/ Apar/ Siechem	As required
7	Cable Glands	VSM Plast - Polyamide / MC4 Connector	As required
8	Earth gland	VSM Plast - Polyamide / MC4 Connector	As required
9	End Sealing Terminal lugs	Ashwin	As required
10	End Sleeve Twin Cod	Ashwin	As required
11	EndClamp	Polyamide Connect well	As required
12	Mounting Rail	TBLS-35/7.5 TRINITY	As required

## 2/2 DC DISTRIBUTION BOX WITH 1000V

- On-grid 2 in 2 out DCDB is suitable for accompanying on-grid inverter up to 12 kW in size with Dual MPPT
- DCDBs expect 2 string of PV panels up to maximum of 19 no's in series.
- The DCDB is connected between PV panels and the on-grid inverter.
- Max PV voltage is 1000 V
- Max PV current is 10 A per string.
- DCDB is fitted with 2 sets of 15 A Fuse on the positive and negative side, and DC SPD for protecting from surge.
- DCDB also contains a secondary protection of 16/ 32 A 1000V DC
- Switch which is to be used as a switch in case of operational maintenance to turn PV string on and off.
- IP 66/67 transparent top Tribox provides waterproof protection.
- Input and output are connected through Cable glands and Connectwell terminal connectors.
- Output Connections are provided with Salzer / Connectwell Terminal connectors
- Dimension: 380x280x130 mm



## BOM

6	MODEL RPDC 010K2S		
Sl No	Components	Description	Quantity
1	Enclosure	IP65/66/67 Tribox/ Hensel/ ABB/ RIM	1
2	Fuse link	15A 1000V Eaton/ Mersen Make	4
3	Fuse Holder	30A 1000V Eaton/ Mersen Make	4
4	DC Breaker/ Isolator	1000V ABB/ Salzer/Eaton	2
5	DC Surge Protection device	1000V Type 2 Citel/Finder/ ABB/ Mersen	2
6	DC Solar Cable	Leoni / Lapp/ Apar/ Siechem	As required
7	Cable Glands for Input & Output	VSM Plast - Polyamide / MC4	As required
8	Earth gland	VSM Plast - Polyamide / MC4	As required
9	End Sealing Terminal lugs	Ashwin	As required
10	End Sleeve Twin Cod	Ashwin	As required
11	EndClamp	Polyamide Connect well	As required
12	Mounting Rail	TBLS-35/7.5 TRINITY	As required
13	Terminal Connectors for Output	Salzer / Connect well	As required