



# **SOLAR** **SOLUTIONS**

**We PURSUE**

**"STIMULATE CREATIVITY,  
DRIVE INNOVATIONS"**



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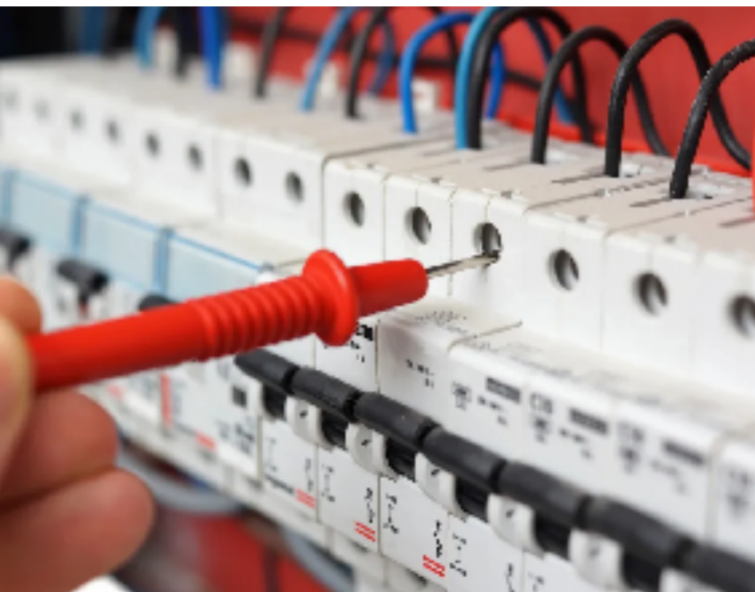
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# WHO WE ARE

Cynectix started its operation as a Design and Engineering Service offering company in field of Mechanical and Electrical design in year 2021. Within a year Cynectix has gained good reputation and popularity among its esteemed Customers and have achieved great milestones with securing long terms contracts.

With our vision of Stimulate Creativity, Drive Innovations, we foster creative ways of thinking to provide better Solutions, Services and Experiences that help our customer achieve their Vision.

Cynectix is here with right mind sets, passionate teams, and conducive environment to foster successful innovations.



In August 2022, Cynectix Control Systems was established, with a distinct emphasis on the separate development of its Electrical and Electronics division. The company is dedicated to the design and manufacture of advanced components and systems within this sector.

With a firm commitment to our customers, we aim to provide a broad spectrum of products and services for industrial, commercial, and consumer markets. Through innovation and a steadfast dedication to quality, we are devoted to delivering exceptional solutions that prioritize the satisfaction of our clients

# ACDB DCDB Distribution Box Combo (1-10 Kw)

## Technical Details :

Terminal	6 SQ. mm KUT 6
Cable Gland	PG 13.5 with earth cable
Cable	4 SQ. mm flexible
Misc.	Hardware & Accessories

ACDB SINGLE PHASE (1-3 kW)	
Product	Technical Description
MCB	32A 2P 10 kA MCB
SPD	40kA 2P AC SPD
Enclosure	180x130x100 mm- ABS transparent IP 66 enclosure

DCDB BOX 1 IN 1 OUT	
Product	Technical Description
MCB	25A 500V DC 6kA MCB
SPD	40kA 600V DC SPD
Enclosure	180x130x100 mm- ABS transparent IP 66 enclosure

ACDB SINGLE PHASE (4-6 kW)	
Product	Technical Description
MCB	32A 2P 10 kA AC MCB
SPD	40kA 2P AC SPD
Enclosure	180x130x100 mm- ABS transparent IP 66 enclosure

DCDB BOX 1 IN 1 OUT - 600V	
Product	Technical Description
MCB	25A 1000VDC   25A 800VDC 6kA MCB
SPD	40kA 600V DC SPD
Enclosure	180x130x100 mm- ABS transparent IP 66 enclosure

ACDB THREE PHASE (7-10 kW)	
Product	Technical Description
MCB	32A 4P 10 kA AC MCB
SPD	40kA AC SPD 3 PHASE
Enclosure	280x190x130 mm- ABS transparent IP 66 enclosure

DCDB BOX 1 IN 1 OUT - 1000V	
Product	Technical Description
MCB	25A 4P 10 kA DC MCB
SPD	40kA 1000V DC SPD
Enclosure	280x190x130 mm- ABS transparent IP 66 enclosure

## Description:

- > **ACDB (Alternating Current Distribution Box)** is installed between the solar inverter and home load, protecting appliances from electrical damage using SPD, AC fuse, and MCB. It directs AC power from the inverter to loads, with the fuse melting to prevent damage from high voltage.
- > **DCDB (Array Junction Box)** is placed between the solar panel and inverter, safeguarding the system by tripping or melting the DC fuse/MCB during disturbances from the panel, ensuring equipment protection.

# ACDB Panel (11-150 Kw)

## Technical Details :

System Capacity	upto 150 KW
System Voltage	440 V
No.of Phase	3 phase
AC MCB	VAC - 230 / 440 No.of Poles - 4P
NVR	OV.UV
Cable	Copper flexible Cable as per current rating
Busbar	EC Grade Aluminum Busbar Hindalco make with current density factor of 0.8
Earthing Terminal	Yes
Enclosure	ABS   PC   Fabricated CRCA

MODEL	
CY ACDB 32A NVR PANEL	CY ACDB 32A W/O NVR PANEL
CY ACDB 63A NVR PANEL	CY ACDB 63A W/O NVR PANEL
CY ACDB 100A NVR PANEL	CY ACDB 100A W/O NVR PANEL
CY ACDB 125A NVR PANEL	CY ACDB 125A W/O NVR PANEL
CY ACDB 200A NVR PANEL	CY ACDB 200A W/O NVR PANEL
CY ACDB 250A NVR PANEL	CY ACDB 250A W/O NVR PANEL

## Description:

- > ACDB provides extra protection in case of land-side failures and monitors power consumption from the SPV Power Plant.
- > Designed with high-quality components, our ACDB ensures reliability and easy maintenance.
- > The NVR Panel safeguards equipment by automatically disconnecting during voltage drops, preventing damage in industrial, commercial, and residential applications.

# DCDB Distribution Box

## Technical Details :

System Capacity	Suitable for all systems
Input String	Depends on inverter
DC MCB	VDC - 500 / 1000 /1500 V DC No.of Poles - 2P / 4P
SPD	VDC - 600 / 1000/ 1500 V No.of Poles - 2P / 3P
Fuse	25   32   40   50 Amps
Cable	4 / 6 SQ.mm DC PVC Copper
Terminal Blocks	6 sq.mm
Earthing Terminal	Yes
Enclosure	ABS or Polycarbonate
System Voltage	500/1000/1500 VDC

Models	
CY DCDB - 2 IN 2 OUT	CY DCDB - 12 IN 12 OUT
CY DCDB - 4 IN 4 OUT	CY DCDB - 14 IN 14 OUT
CY DCDB - 6 IN 6 OUT	CY DCDB - 16 IN 16 OUT
CY DCDB - 8 IN 8 OUT	CY DCDB - 18 IN 18 OUT
CY DCDB - 10 IN 10 OUT	CY DCDB - 20 IN 20 OUT

## Description:

- DCDB collects DC power from PV strings, using blocking diodes to prevent reverse current flow, and transfers it to the power inverter.
- It features properly sized cable glands for secure incoming and outgoing connections.
- Our high-performance DCDB is ideal for various solar applications, tested for flawless functionality and durability.
- DCDB's enclosure are dust & waterproof IP 66 rated made of Thermoplastic (ABS).

# String Monitoring Box

## Technical Details :

Enclosure Material	FRP / ABS / Polycarbonate
Ingress Protection	65 / 66 / 67
Operational Voltage	Upto 1500 VDC
Current Range	40A DC
Internal Bus Bar	Copper
Input / Output Method	PVC Gland / MC 4 Connector
Input Protection	1000/ 1500 VDC Isolator SPD, Over Voltage Protection
Structure Type	Wall / Structure Mounted
Operation Temperature	Upto (-25 °C) - (+80 °C)
Monitoring Device	RS485 / OFC /Wireless

Variants	
Model	Description
CY SMB 1000 /1500 VDC 8-1	8 IN 1 OUT
CY SMB 1000 /1500 VDC 12-1	12 IN 1 OUT
CY SMB 1000 /1500 VDC 16-1	16 IN 1 OUT
CY SMB 1000 /1500 VDC 24-1	24 IN 1 OUT
CY SMB 1000 /1500 VDC 32-1	32 IN 1 OUT

## Description:

- > SMB, an upgraded SCB, features monitoring for SPD status, DC disconnect, temperature, voltage, current, and custom parameters.
- > Ideal for utility and commercial string monitoring solutions.
- > Built with high-quality components, it ensures top performance and complies with IEC & UL standards.

# String Combiner Panels

## Technical Details :

Enclosure Material	FRP / ABS / Polycarbonate
Ingress Protection	65 / 66 / 67
Operational Voltage	Upto 1500 VDC
Current Range	40A DC
Internal Bus Bar	Copper
Input / Output Method	PVC Gland / MC 4 Connector Double Compression Gland
Input Protection	500/1000/1500 VDC Isolator SPD, Over Voltage Protection
Structure Type	Wall / Structure Mounted
Operating Temperature	Upto (-25 °C) - (+80 °C)

Variants	
Model	Description
CY SCB 1000 /1500 VDC 8-1	8 IN 1 OUT
CY SCB 1000 /1500 VDC 12-1	12 IN 1 OUT
CY SCB 1000 /1500 VDC 14-1	14 IN 1 OUT
CY SCB 1000 /1500 VDC 16-1	16 IN 1 OUT
CY SCB 1000 /1500 VDC 24-1	24 IN 1 OUT

## Description:

- > Our String Combiner Box, built with high-quality components, serves utility, commercial, and residential needs.
- > Designed to meet IEC & UL standards.
- > It combines multiple PV strings into a single DC output with voltage ranges from 500V to 1500V, ensuring safety and reliability.

# LT AC Combiner Panels

## Technical Details :

Enclosure Material	CRCA
Ingress Protection	54 / 55 / 65/ 66
Operational Voltage	440 VAC, 800 VAC
Insulation Voltage	As per standard
Max Operation Current	6300A AC
Internal Bus Bar	Aluminum / Copper
Input / Output Method	Double Compression Gland
Input Protection	440/ 800 VAC MCCB
Standards	as per IS & IEC 61439
Inbulit SPD   Air Circuit Breaker   Multi-Function Meter   Auxiliary Panel	

Models	
CY LT ACCP - 2 IN 1 OUT	CY LT ACCP - 8 IN 1 OUT
CY LT ACCP - 3 IN 1 OUT	CY LT ACCP - 10 IN 1 OUT
CY LT ACCP - 4 IN 1 OUT	CY LT ACCP - 12 IN 1 OUT
CY LT ACCP - 5 IN 1 OUT	CY LT ACCP - 14 IN 1 OUT
CY LT ACCP - 6 IN 1 OUT	CY LT ACCP - 16 IN 1 OUT

## Description:

- > LT Panels, built with high-quality components, cater to utility and commercial needs.
- > Designed to meet IEC & IS standards.
- > Suitable for indoor and outdoor installations, they feature weatherproof design for ground-mounted and rooftop applications.

# Electrical LT Panels

## Technical Details :

### MCC Panel

Operation Current	32A-3200A
Ambient Temperature	Max 50 °C -60 °C
Short Circuit Withstand Capacity	16KA - 100KA
Protection Class	IP20/IP44/IP55 / IP65 / as required
Type	Fixed & Semi draw out type with single or double front design
Communication	Modbus Protocol, RS485
Auto Manual Arrangement	On-Off Push Buttons with ON Indication Lamps (optional)

### PCC Panel

Operation Current	Up to 6300A
Ambient Temperature	Max 50 °C -60 °C
Short Circuit Withstand Capacity	50KA - 100KA for 1Sec
Protection Class	IP 20/IP 44 / IP 65
Type	Fixed & Semi draw out type with single or double front design
Communication	Modbus Protocol, RS485

## APFC Panel

Design	Sheet Steel Enclosures
Enclosure Finish	Epoxy powder-coated (grey), rust-proof zinc passivated
Rated Voltage	220 / 415 / 440 / 525 / 690 VAC
Output Rating	Customizable as per request
Capacitors	Heavy Duty, 440V-880V, 50/60Hz
Contactors	As per Standards
Reactors	Al/Cu wound, tuned/de-tuned
Incoming/Outgoing	MCCB/ACB, HRC Fuses/SFU/MCCB
Metering	Digital Ammeter/Voltmeter, RS-485 (optional)
APFC Controller	Microprocessor-based, LCD, RS-485 (optional)
Ambient Temperature	Max 50°C, Avg 40°C (24h), 35°C (annual)
Protection Class	IP 20 / IP 44 / IP 65
KVAR Ratings	5-50 KVAR (wall), 60-2500 KVAR (floor)
Operation	Auto/Manual, A/M Switch, On/Off Buttons
Indications	R, Y, B phase, On/Off per bank
Unbalanced Compensation	Customizable

Stat-Delta Panel	
Supply Voltage	415V AC, 50Hz
Start Time delay	1 minute
Phase Unbalance Volt	45V +/-5V
Output	1C/0,6 Amp 230VAC

DOL Starter Panel	
Phase	3 Phase
Ambient Temperature	50 °C
Frequency	50-60 HZ
Power	0.25HP to 10HP

## VFD Panel

System	Feeder
Rated Current	Up to 5000A
Voltage	230/380/415/440V AC
Insulation	1000V
Service Voltage	690V
Temperature	45°C
Short Time Current	Up to 65KA (1s), 105KA peak
Protection	IP42-IP65
Separation	Up to 3B/4B
Bus Bar System	Interleaved above 3200A
Bus Bar	Aluminium or Copper
Feeder	Semi Draw-out / Fixed

## Crane Control Panel

Phase	3 Phase
Power Source	415VAC
IP Ratings	IP55 / IP65
Voltage	415VAC
Mounting Type	BASE MOUNTING

## Brands We Use



Disclaimer : All trademarks, logos and brand names are the property of their respective owners. All company, product and service names used in this brochure are for identification purpose only. Use of these names, trademarks and brands does not imply endorsement.

## Our Esteemed Clients



**KPI Green Energy Limited**  
(Formerly known as K.P.I. Global Infrastructure Limited)



# CYNECTIX CONTROL SYSTEMS PVT.LTD

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