



Specification No- CFF/CDS/O-2 PDB

Specification for 3200A, 415V Distribution Board

1. The Power Distribution Board (PDB) should consist of ACBs (Only specified makes) housed in a sheet steel enclosure of thickness not less than 2 mm suitable for three phase four wire system.
2. PDB should be painted first with corrosion resistant paint and then with industrial grade grey paint and contain base frame suitable for floor mounting.
3. The Panel is to be provided with proper sealing against rodent/ reptile entry.
4. The backside of the PDB should be provided with openable Door/ Doors in each section.
5. The PDB is to be designed to accommodate 08 Nos (3.5Cx 300 sq mm) cables for incomer of 3200 A and 06 No (3.5Cx300 sq. mm) cables for 2500A outgoing feeder, 4 No (3.5Cx300 sq. mm) cables for 1250A and 01 No (3.5Cx300 sq. mm) cable in each 400 A and 200 A outgoing feeder. The PDB should have provision for entry of all the cables through detachable plates at the bottom.
6. The PDB should be provided with the earthing bus bar and suitable for natural air cooling arrangement (Preferably Net type).
7. There should be three sections in PDBs for housing incoming and outgoing ACBs/ Switches.
8. All the bus bars should contain sleeves with heat shrunk PVC as per standard colour coding i.e. Red, Yellow, Blue for phases and Black for Neutral and the clearances of bus bars from each other and panel body should be as per relevant IS.

The PDB should have the following items:

A) INCOMING FEEDER DETAILS

S.NO	ITEM	QTY
01	4 Pole, Air circuit breaker, 3200A, 415 V, manual draw out (MDO) type of breaking capacity at least 50 KA with guide frame and over current protection, short circuit protection, Earth fault protection & shunt trip.	01 Nos
02	Voltmeter :0- 500V analog	03 Nos
03	Ammeter: 0-3200 A, analog	03 Nos

Prepared By A R Idrisi/ Dy. Manager- CDS

Checked By A K Kaithal/ Manager- CDS & PSX

Approved By Surendra Kumar/ AGM- M&S, HSE and PMG

[Handwritten signatures and dates]
23/02/19
23/02/2019



अनुसंधान एवं सेवाएँ
सेन्ट्रल फाउंड्री फोर्ज प्लांट
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

04	Phase live indicator, High luminosity LED's.	06 Nos
05	Fuse-2A with base.	09 Nos
06	Current Transformer of ratio 3200/5A	03 Nos
07	Energy meter	01 No

B) OUTGOING FEEDER DETAILS:

Outgoing feeder shall include following feeders :

i) 2500A OUTGOING FEEDER: 01 No

S.NO	ITEM	QTY
01	4 Pole, Air circuit breaker, 2500A, 415 V, manual draw out (MDO) type of breaking capacity at least 50KA with guide frame, overload / instantaneous short circuit / delayed short circuit / ground fault protection.	01 Nos
02	Indicating Light	3 Nos
03	Fuse-2A with base	3 Nos
04	Analog Ammeter with selector switch (0-2500 A)	1 Nos
05	Current Transformer of ratio 2500/5A	3 Nos
06	Energy Meter	1 No

ii) 1250 A OUTGOING FEEDER: 01 No

S.NO	ITEM	QTY
01	4 Pole, Air circuit breaker, 1250A, 415 V, manual draw out (MDO) type of breaking capacity at least 50KA with guide frame, overload / instantaneous short circuit / delayed short circuit / ground fault protection.	01 Nos
02	Indicating Light	3 Nos
03	Fuse-2A with base	3 Nos

Prepared By

A R Idrisi/ Dy. Manager- CDS

Checked By

A K Kaithal/ Manager- CDS & PSX

Approved By

Surendra Kumar/ AGM- M&S, HSE and PMG

Handwritten signatures and dates:
23/02/19
23/02/19
28/02/2019



अनुसूचना एवं सेवाएँ
सेन्ट्रल फाउंड्री फोर्ज प्लान्ट
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

04	Analog Ammeter with selector switch (0-1250 A)	1 Nos
05	Current Transformer of ratio 1250/5A	3 Nos
06	Energy Meter	1 No

iii) **400A OUTGOING FEEDER: 01 No**

S.NO	ITEM	QTY
01	4 Pole, 415 Volts, 400A MCCB unit of breaking capacity at least 36 KA with indicating LED	01 Nos

iv) **200 A OUTGOING FEEDER: 02 No**

S.NO	ITEM	QTY
01	4 Pole, 415 Volts, 200A MCCB unit of breaking capacity at least 36 KA with indicating LED	02 set

Make of Items:

S.NO	ITEM	MAKE/DESCRIPTION
01	Air circuit Breaker, MCCB.	L&T/ SIEMENS
02	Energy Meter / Multifunction meter	Schneider / Conzerv/ Siemens/ L&T
03	Voltmeters & Ammeters	AE, 96*96sq mm, digital
04	Indicators LED's	L&T/SIEMENS
05	Current Transformers	KAPPA/AE/ENG ELECTRIC
06	Bus bars	Aluminium
07	Ammeter selector switch	L&T/SIEMENS/KAYCEE

Prepared By

A R Idrisi/ Dy. Manager- CDS

Checked By

A K Kaithal/ Manager- CDS & PSX

Approved By

Surendra Kumar/ AGM- M&S, HSE and PMG

Handwritten signatures and dates:
23/02/19
23/02/19
23/02/2019