

Annexure A

Description No. SER/ELEC/GS/DESCRIPTION/TRANS/4/ REV-2/FEB 2026, Page 1/2

Distribution Transformer of Rating 500 KVA Start.....  
KVA, 3-phase, 50Hz, Oil Immersed, Non-Sealed type (Transformer tank body and cover are bolted), Copper wound, Primary Winding in Delta and Secondary Winding in Star (Vector symbol- Dyn11), ONAN Cooled Transformer, Conforming to IS 1180 (Part 1):2014 with amendment nos. 1,2,3,4 or latest, and supplied with all standard fittings mentioned in Clause 20.1 of IS 1180 (part 1) latest with condition that Drain-cum-sampling valve will be applicable for all capacity of transformers. Oil temperature indicator & Winding temperature indicators (for Transformers above 200KVA) will be provided as per clause 20.2 f) of IS 1180 (part 1).

Terminal arrangement: The transformers shall be fitted on high voltage and low voltage sides with outdoor type bushings of appropriate voltage and current ratings. The high voltage bushings (3 Nos.) shall conform to IS/IEC 60137. The low voltage bushings (4 Nos.) shall conform to IS 7421.

Suitable cable-end box along with Cable entry hole glands is to be provided as follows.

a) For Outdoor type: L.T. side b) For Indoor type: H.T. side & L.T. side

Consignee to add following details:

(i) KVA Rating of required Transformer: <u>500 KVA</u>	(ii) No Load Voltage Ratio: <u>11KV/415V-240V</u>
(iii) Type of Mounting: <u>PLINTH MOUNTED</u>	(iv) The type of Tap Changer: <u>OFF CIRCUIT</u>
(v) Indoor or Outdoor Type: <u>OUTDOOR</u>	(vi) Energy Efficiency level (latest): <u>3 or more</u>
(vii) BEE Star Rating [see guidelines SN (vii)]: <u>3</u> (The firm shall submit valid BEE certificate for the offered product with desired BEE star rating.)	

Following has to be submitted by supplier along with supply of material:

- Type Test report of Transformer having same rating, make (& model if any) and design from NABL accredited lab as per IS: 1180 (Part 1) latest.
- Routine Test Certificates as per IS: 1180 (Part 1) latest.
- Special Test Certificates as per Clause 21.4 sl. no. (a), (c), (d) & (e) of IS:1180 (Part 1) latest.

.....END.....

*Sharma*  
*SSE/EL/Secy*

Signature Not  
Verified

Digitally signed by  
HIDAYAT ULLAH  
KHAN  
Date: 2026.03.11  
13:07:05+IST  
Reason: IREPS-CRIS  
Location: New Delhi

Annexure A

Description No. SER/ELEC/GS/DESCRIPTION/TRANS/4/ REV-2/FEB 2026, Page 2/2

**Guidelines for Consignee to specify details in the Description:**

(i) KVA Rating of required Transformer: Standard ratings as per IS- 6.3, 10, 16, 25, 63, 100, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000 and 2500.

(ii) No Load Voltage Ratio:

Standard ratings as per IS-

33KV/415V-240V,	33KV/433V-250V,	22KV/415V-240V,	22KV/433V-250V,
11KV/415V-240V,	11KV/433V-250V,	6.6KV/415V-240V,	6.6KV/433V-250V,
3.3KV/415V-240V,	3.3KV/433V-250V		

Ratings as per CESC/ Kolkata requirement-

6KV/415V-240V,	6KV/433V-250V,
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(iii) Type of Mounting: Plinth or Pole Mounting

(iv) The type of Tap Changer: Details as per IS:

a) No taps are normally required to be provided upto 100 KVA Rating. If required for specific application, tap changer as per SN (iv) b) shall be applicable.

b) Off-circuit Tap changer (applicable for Ratings above 100 KVA upto and including 200KVA) for variation of HV Voltage from +2.5% to -5% in steps of 2.5%

c) Off-circuit Tap changer (applicable for all Ratings above 200 KVA) for variation of HV Voltage from -5% to -10% in steps of 2.5%

d) On-load Tap changer (applicable only for 500 KVA and higher Rating) for variation of HV Voltage from +5% to -15% in steps of 2.5%

(v) Indoor or Outdoor Type

(vi) **Energy Efficiency level:**

a) **Energy efficiency level 5** for all Projects & Applications where **Super ECBC requirement is to be complied as per RB policy.**

b) **Energy efficiency level 3 or 4 or 5** for all applications other than Super ECBC, to be decided by the Division/Construction.

(vii) **BEE Star Rating to be specified only for transformers falling under the mandatory BEE Standards & Labelling programme** (presently 16 kVA to 2500 kVA rated transformers with primary voltage up to and including 11 kV).

Consignee shall specify the minimum acceptable BEE Star Rating, which shall not be lower than the Energy Efficiency level specified under item (vi) above.

*Shree*  
SSE/EL/Scm

Signed by Rajesh  
Krishnarao Dongare  
Date. 26-02-2026 16:25:04  
Reason: Approved

**दक्षिण पूर्व रेलवे / South Eastern Railway**  
(प्रधान मुख्य विद्युत अभियंता का कार्यालय, गार्डन रीच, कोलकाता -700043)  
(Office of the Principal Chief Electrical Engineer, Garden Reach, Kolkata-700043)

संख्या /No: eFile Computer No: 202791 & 98667

दिनांक:/Date: As signed.

**Sr. DEE (G)ADA, CKP, KGP, RNC, SRC, Dy.CEE(WS)/KGP, ADEE/G/GRC  
CEE/Con/GRC, ED/Electrical/RVNL, GM/Electrical/IRCON**

**Sub.:** Revised Description for Three Phase Distribution Transformer  
**Ref.:** This office letter of even no. dated 28.11.2024

Description for three phase Distribution Transformers issued vide ref. above has been revised with the approval of competent authority (CEGE) by incorporating the requirement of BEE Star rating for transformers falling under the mandatory BEE Standards & Labelling program. The description is issued under Description No. SER/ELEC/GS/DESCRIPTION/TRANS/4/ REV-2/FEB 2026 and attached as Annexure A.

This Description will supersede the earlier description issued vide reference above. It is requested to follow the approved description for procurement purpose.

Any changes/improvement to the description in the wisdom of the Divisions shall be advised to this Office for changes in the description in future.

**RAJESH  
KRISHNARA  
O DONGARE**

Digitally signed by  
RAJESH KRISHNARAO  
DONGARE  
Date: 2026.02.26  
18:07:29 +05'30'

उप मुख्य विद्युत सेवा अभियंता  
Dy. Chief Elect. Services Engineer  
प्रधान मुख्य बिजली अभियंता के लिये  
For Principal Chief Electrical Engineer

Copy to: PCEE/SER for kind information please.

*Shaukat*  
*SSE/EL South*

Signature Not  
Verified

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13:07:05 IST  
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Location: New Delhi