

GOVERNMENT OF TELANGANA  
ELECTRICAL INSPECTORATE  
( An IS/ISO 9001: 2015 Certified Department )



From

The Chief Electrical Inspector to Government  
5th Floor  
R&B Buildings  
A.C. Guards  
Masabtank  
Hyderabad-500004.  
Phone No: 040-23453023

To

M/s: Crescentia Labs Private Limited  
Street: 5-4-187/3 & 4  
H.No/D.No.: 230 to 243, Plot No-15-B  
Sy. No.: 230 to 243, Plot No-15-B  
(V): Turkapally  
(M): Shamirpet  
(D): Medchal  
Pincode: 500101 , Phone No: 9100126998



Lr.No.CEIG/TG/EI Ex. 650V/HT-MDL-2024-10389/D.No. 2287/2024 Dated: 23/08/2024

Sub : The Electricity Act-2003 and Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023 - Electrical Installation of Voltage Exceeding 650 V of M/s **Crescentia Labs Private Limited, Turkapally Shamirpet Mandal Medchal District** - Statutory Approval under Section 54 of the Electricity Act-2003 and Regulation - 45(3) of CEA (Measures Relating to Safety and Electric Supply), Regulations 2023 Accorded.

Ref:- 1) Inspection Dated **21/08/2024**  
2) Your Lr. received on dated., 23/08/2024

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Under Section 54 of The Electricity Act-2003 and Regulations 45(3) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, the following equipment of your Electrical Installation of voltage Exceeding 650V are approved for energisation.

AS PER ANNEXURE ENCLOSED.

Under Regulation 45(6) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, any additions or alteration in your installation shall not be connected to supply until the same are approved in writing by this office and offer for annual inspection under Regulation 32 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023 every year to the concerned Deputy Electrical Inspector.

Under Regulation 15(4), 48(7) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, you are at all times solely responsible for the maintenance of the above installation on such condition as to be free from danger.

The above approval accorded is without prejudice to the statutory/ mandatory obligations to be fulfilled by you under various other acts and rules as the case may be. The approval accorded for energizing the electrical equipment is the safety for men and machine from electrical hazards in your installation and ipso facto does not confer any right to be used for any other purpose other than for which the approval is accorded.

Yours faithfully

*J. Hani - P*  
23/8/24  
CHIEF ELECTRICAL INSPECTOR  
TO GOVERNMENT

Encl:- List of Load Particulars

Annexure to Lr.No.CEIG/TG/EI-Ex 650V/HT-MDL-2024-10389/D.No: /2024,  
Dt: -08-2024.

M/s Crescentia Labs Private Limited, Turkapally (V), Shamirpet (M), Medchal District.

| S.No.       | Name of the Equipment            | Details of the equipment.                                                                                          |
|-------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>I.</b>   | <b>H.V. INSTALLATION (11 KV)</b> |                                                                                                                    |
| 1.          | VCBs                             | Make:- ABB<br>Cap : 800A,12 KV<br>S.No:- 1VYN020924000244,<br>1VYN020924000247,<br>1VYN020924000245<br>Qty : 3 Nos |
| 2.          | Transformers- 1 & 2              | Make:- Voltamp<br>Cap: 1600 KVA,11 KV/433 V<br>S.No:- JNC 65835/1, JNC 65835/2                                     |
| <b>II.</b>  | <b>M.V. INSTALLATION (415V)</b>  |                                                                                                                    |
| 1.          | MV Load                          | 678.2 KW,415V                                                                                                      |
| 2.          | Capacitor                        | 1000 KVAR,415V                                                                                                     |
| 3.          | Generators- 1,2                  | Make:- Leroy-Somer<br>Cap: 1500 KVA,415 V<br>S.No:- LGS3L824C45925,<br>LGS3L824B01591                              |
| <b>III.</b> | <b>L.V. INSTALLATION.(230V)</b>  |                                                                                                                    |
| 1.          | Lighting Load                    | 10 KW,230V                                                                                                         |
| 3.          | LV Load                          | 10 KW, 230V                                                                                                        |

*S. K. N. - P*  
*23/08/24*  
**CHIEF ELECTRICAL INSPECTOR  
TO GOVERNMENT.**

*23/08/24*  
*Ac2*

# CRESCENTIA LABS PVT.LTD.

P.NO: 15B, SY.NO: 230 TO 240, TURKAPALLY VILLAGE, SHAMEERPET MANDAL, MEDCHAL DISTRICT.

## M.V. LOAD DETAILS

| SI.NO | M/C NAME                              | MAKE      | SI.NO:                  | KW           | VOLTS |
|-------|---------------------------------------|-----------|-------------------------|--------------|-------|
| 1     | Air Cooled Chiller - 1 Compressor - 1 | Blue Star | LCA2-400X59X59HAXI00001 | 110          | 415   |
| 2     | Air Cooled Chiller - 1 Compressor - 2 | Blue Star | LCA2-400X59X59PAXI00001 | 110          | 415   |
| 3     | Air Cooled Chiller - 2 Compressor - 1 | Blue Star | LCA2-400X59X59HBXI00002 | 110          | 415   |
| 4     | Air Cooled Chiller - 2 Compressor - 2 | Blue Star | LCA2-400X59X59HBXI00002 | 110          | 415   |
| 5     | Booster Pump - 1                      | Kirloskar | A24AVPO00538            | 9.3          | 415   |
| 6     | Booster Pump - 2                      | Kirloskar |                         | 9.3          | 415   |
| 7     | Chilled Water Pump - 1                | Siemens   | KW21026537012151        | 37           | 415   |
| 8     | Chilled Water Pump - 2                | Siemens   | KW21026531190953        | 37           | 415   |
| 9     | Chilled Water Pump - 3                | Siemens   | KW21026590015354        | 37           | 415   |
| 10    | Fire Hydrant Pump                     | Kirloskar | KML290/XV-69            | 45           | 415   |
| 11    | Fire Hydrant Pump                     | Kirloskar | KML290/XV-124           | 45           | 415   |
| 12    | Jocky Pump                            | Kirloskar | KML278-35               | 9.3          | 415   |
| 13    | Jocky Pump                            | Kirloskar | KML278-49               | 9.3          | 415   |
|       | <b>TOTAL</b>                          |           |                         | <b>678.2</b> |       |

## LV LOAD DETAILS

| S.NO. | DESCRIPTION  | WATTS |   | NUMBERS | WATTS OR KW           |
|-------|--------------|-------|---|---------|-----------------------|
| 1     | 6A Sockets   | 125   | X | 40      | 5000                  |
| 2     | 16A Sockets  | 500   | X | 10      | 5000                  |
|       | <b>TOTAL</b> |       |   |         | <b>10000W OR 10KW</b> |

## LIGHTING LOAD DETAILS

| S.NO. | DESCRIPTION  | WATTS |   | NUMBERS | WATTS OR KW           |
|-------|--------------|-------|---|---------|-----------------------|
| 1     | LED          | 40    | X | 125     | 5000                  |
| 2     | LED          | 12    | X | 200     | 2400                  |
| 3     | LED          | 8     | X | 325     | 2600                  |
|       | <b>TOTAL</b> |       |   |         | <b>10000W OR 10KW</b> |

## TOTAL EQUIPMENT LOAD DETAILS

| SI.NO | EQUIPMENT NAME | MAKE                | SI.NO            | CAPACITY | VOLTS      |
|-------|----------------|---------------------|------------------|----------|------------|
| 1     | TRANSFORMER    | VOLTAMP TRANSFORMER | 65835/1          | 1600KVA  | 11000/433V |
| 2     | TRANSFORMER    | VOLTAMP TRANSFORMER | 65835/2          | 1600KVA  | 11000/433V |
| 3     | VCB - 1        | ABB                 | 1VYN020924000244 | 800A     | 12KV       |
| 4     | VCB - 2        | ABB                 | 1VYN020924000247 | 800A     | 12KV       |
| 5     | VCB - 3        | ABB                 | 1VYN020924000245 | 800A     | 12KV       |
| 6     | GENERATOR      | LEROY SOMER         | LGS3L824C45925   | 1500KVA  | 415V       |
| 7     | GENERATOR      | LEROY SOMER         | LGS3L824B01591   | 1500KVA  | 415V       |

**TOTAL CONNECTED LOAD DETAILS**

| S.NO.          | EQUIPMENT NAME | CAPACITY            |
|----------------|----------------|---------------------|
| 1              | Transformer    | 1600KVA, 11000/433V |
| 2              | Transformer    | 1600KVA, 11000/433V |
| 3              | Generator      | 1500KVA, 415V       |
| 4              | Generator      | 1500KVA, 415V       |
| <b>MV LOAD</b> |                |                     |
| 1              | MOTORS LOAD    | 678.2KW             |
| 2              | CAPACITOR      | 1000KVAR            |
| <b>LV LOAD</b> |                |                     |
| 1              | LIGHTING LOAD  | 10KW                |
| 2              | LV LOAD        | 10KW                |

For CRESCENTIA LABS PVT.LTD.

*Rohit Varmg*

(Authorized Signatory)

For RAJESH TECHNICAL SERVICES

*A. Rajesh*

LIC NO. 4870 1-1247

VALID FROM 04-04-2023 to 03-04-2026



*22/8/24*

**VOLTAMP TRANSFORMERS LIMITED**

UNIT - II, VADADALA, SAVALI, VADODARA 391520

Phone : +91 9374648493 / 8513 / 8522

Fax : +91 2667 251250

Email ID : voltamp@voltamptransformers.com

TRANSFORMER Sr.No.

Format No. TST/F/10

JNC 65835/1

**CAST RESIN DRY TYPE TRANSFORMER**

Sheet 1 of 2

Customer : Crescentia Labs Pvt. Ltd, Hyderabad  
PO No. / Date : 20231219053 Dated 19.12.2023  
Project : GV One, Hyderabad.

**ROUTINE TESTS**

Date of Testing : 18.04.2024

Vector Group : Dyn11

KVA : 1600 Voltage Ratio : 11000 / 433 Volts

% Tappings : +5 % to - 15 % in Step of 1.25 % IS : 11171 / 2026 - Up to Date

| 1 MEASUREMENT OF WINDING RESISTANCE AT 36.1 °C |      |   |  |        |                      |      |   |        |  |
|------------------------------------------------|------|---|--|--------|----------------------|------|---|--------|--|
| H.V. Winding in "mΩ" At Tap No                 |      |   |  |        | L.V. Winding in "mΩ" |      |   |        |  |
| Between                                        | 1U1V | = |  | 504.95 | Between              | 2u2v | = | 0.5516 |  |
|                                                | 1V1W | = |  | 504.95 |                      | 2v2w | = | 0.5514 |  |
|                                                | 1W1U | = |  | 505.10 |                      | 2w2u | = | 0.5632 |  |

| 2 MEASUREMENT OF SHORT CIRCUIT IMPEDANCE & LOAD LOSSES : Tested at 36.2 °C on HV Side |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| C.T. Ratio = C = 100 / 1 = 100 P.T. Ratio = P = 660 / 110 = 6                         |  |  |  |  |  |  |  |  |  |

| Tap No | Current X C    |                |                | Imp Voltage x P x √3 |                 |                 | Wattmeter Reading |      |      | Total M.F. = C X P | (W1+W2+W3) X M.F | Load Loss in Watts |
|--------|----------------|----------------|----------------|----------------------|-----------------|-----------------|-------------------|------|------|--------------------|------------------|--------------------|
|        | I <sub>r</sub> | I <sub>y</sub> | I <sub>b</sub> | V <sub>rn</sub>      | V <sub>yn</sub> | V <sub>bn</sub> | W1                | W2   | W3   |                    |                  |                    |
| 5      | 0.8404         | 0.8463         | 0.8347         | 61.67                | 61.87           | 61.43           | 6.23              | 6.54 | 6.41 | 600                | 19.18 X 600      | 11508              |

| 3 MEASUREMENT OF NO-LOAD LOSS & CURRENT : Tested at 433 Volts on LV side. |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| C.T. Ratio = C = 50 / 1 = 50 P.T. Ratio = P = 660 / 110 = 6               |  |  |  |  |  |  |  |  |  |

| % V | Voltage x P x √3      |                      | No Load Current X C |                |                | Wattmeter Reading |      |      | Total M.F. = C X P | (W1+W2+W3) X M.F | No Load Loss in Watts |
|-----|-----------------------|----------------------|---------------------|----------------|----------------|-------------------|------|------|--------------------|------------------|-----------------------|
|     | V <sub>mean</sub> (n) | V <sub>rms</sub> (n) | I <sub>r</sub>      | I <sub>y</sub> | I <sub>b</sub> | W1                | W2   | W3   |                    |                  |                       |
| 100 | 41.66                 | 41.83                | 0.1523              | 0.1184         | 0.1463         | 3.48              | 2.27 | 2.14 | 300                | 7.89 X 300       | 2367                  |

| 4 INDUCED OVER VOLTAGE TEST : Tested on LV Side                      |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Applied 2 x 433 Volts at 125 Cycles/Secs. And withstood for 50 Secs. |  |  |  |  |  |  |  |  |  |

| 5 SEPARATE SOURCE VOLTAGE TEST :                                                                      |  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| (A) Applied 28 kV Between HV winding to L.V. Winding & Earth and withstood for 60 secs. (LC - 22.0mA) |  |  |  |  |  |  |  |  |  |
| (B) Applied 3 kV Between LV winding to H.V. Winding & Earth and withstood for 60 secs. (LC - 4.6mA)   |  |  |  |  |  |  |  |  |  |

| 6 INSULATION RESISTANCE TEST :- AT 36.1 °C (For Reference Only) |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| (a) H.V. winding to Earth 148000 MΩ (With 5.0kV Megger)         |  |  |  |  |  |  |  |  |  |
| (b) L.V. Winding to Earth 265000 MΩ (With 1.0kV Megger)         |  |  |  |  |  |  |  |  |  |
| (c) H.V. winding to L.V. Winding 281000 MΩ (With 5.0kV Megger)  |  |  |  |  |  |  |  |  |  |

| 7 TURNS RATIO TEST :- |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|
|-----------------------|--|--|--|--|--|--|--|--|--|

| Tap Position No. |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|
| U/u Phase        |  |  |  |  |  |  |  |  |  |
| V/v Phase        |  |  |  |  |  |  |  |  |  |
| W/w Phase        |  |  |  |  |  |  |  |  |  |

| 8 POLARITY PHASE RELATIONSHIP (VECTOR GROUP) CHECKED : FOUND OK Dyn11 |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
|-----------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|

Witnessed By :

Tested by

Shruti Jaiswal  
Crescentia Labs Pvt. Ltd

Ramesh Reddy  
GV Discovery Centre Pvt. Ltd.

Rajendra Chaudhan  
Voltamp Transformers Ltd.

**VOLTAMP TRANSFORMERS LIMITED**

UNIT - II, VADADALA, SAVALI, VADODARA 391520

Phone : +91 9374648493 / 8513 / 8522

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Email ID : voltamp@voltamptransformers.com

Format No. TST/F/10

TRANSFORMER Sr.No.

JNC

65835/2

**CAST RESIN DRY TYPE TRANSFORMER**

Sheet 1 of 2

Customer : Crescentia Labs Pvt. Ltd, Hyderabad  
PO No. / Date : 20231219053 Dated 19.12.2023  
Project : GV One, Hyderabad.

**ROUTINE TESTS**

Date of Testing : 18.04.2024

KVA : 1600 Voltage Ratio : 11000 / 433 Volts

Vector Group : Dyn11

% Tappings : +5 % to -15 % in Step of 1.25 % IS : 11171 / 2026 - Up to Date

| 1 MEASUREMENT OF WINDING RESISTANCE AT 36.4 °C |      |   |  |        |                        |      |   |        |  |
|------------------------------------------------|------|---|--|--------|------------------------|------|---|--------|--|
| H.V. Winding in "mΩ" At Tap No.                |      |   |  | 5      | L.V. Winding in "mΩ" : |      |   |        |  |
| Between                                        | 1U1V | = |  | 504.10 | Between                | 2u2v | = | 0.5502 |  |
|                                                | 1V1W | = |  | 504.05 |                        | 2v2w | = | 0.5468 |  |
|                                                | 1W1U | = |  | 503.95 |                        | 2w2u | = | 0.5594 |  |

| 2 MEASUREMENT OF SHORT CIRCUIT IMPEDANCE & LOAD LOSSES : Tested at 36.2 °C on HV Side |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| C.T. Ratio = C = 100 / 1 = 100 P.T. Ratio = P = 660 / 110 = 6                         |  |  |  |  |  |  |  |  |  |

| Tap No. | Current X C    |                |                | Imp Voltage x P x √3 |                 |                 | Wattmeter Reading |      |      | Total M.F. = C X P | (W1+W2+W3) X M.F | Load Loss in Watts |
|---------|----------------|----------------|----------------|----------------------|-----------------|-----------------|-------------------|------|------|--------------------|------------------|--------------------|
|         | I <sub>r</sub> | I <sub>y</sub> | I <sub>b</sub> | V <sub>rn</sub>      | V <sub>yn</sub> | V <sub>bn</sub> | W1                | W2   | W3   |                    |                  |                    |
| 5       | 0.8431         | 0.8483         | 0.8308         | 61.29                | 61.33           | 60.95           | 5.90              | 6.65 | 6.32 | 600                | 18.87 X 600      | 11322              |

| 3 MEASUREMENT OF NO-LOAD LOSS & CURRENT : Tested at 433 Volts on LV side. |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| C.T. Ratio = C = 50 / 1 = 50 P.T. Ratio = P = 660 / 110 = 6               |  |  |  |  |  |  |  |  |  |

| % V | Voltage x P x √3      |                      | No Load Current X C |                |                | Wattmeter Reading |      |      | Total M.F. = C X P | (W1+W2+W3) X M.F | No Load Loss in Watts |
|-----|-----------------------|----------------------|---------------------|----------------|----------------|-------------------|------|------|--------------------|------------------|-----------------------|
|     | V <sub>mean</sub> (n) | V <sub>rms</sub> (n) | I <sub>r</sub>      | I <sub>y</sub> | I <sub>b</sub> | W1                | W2   | W3   |                    |                  |                       |
| 100 | 41.66                 | 41.80                | 0.1638              | 0.1311         | 0.1604         | 3.50              | 2.28 | 2.13 | 300                | 7.91 X 300       | 2373                  |

| 4 INDUCED OVER VOLTAGE TEST : Tested on LV Side                        |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Applied 2 x 433 Volts at 124.6 Cycles/Secs. And withstood for 50 Secs. |  |  |  |  |  |  |  |  |  |

| 5 SEPARATE SOURCE VOLTAGE TEST :                                                                      |  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| (A) Applied 28 kV Between HV winding to L.V. Winding & Earth and withstood for 60 secs. (LC - 20.9mA) |  |  |  |  |  |  |  |  |  |
| (B) Applied 3 kV Between LV winding to H.V. Winding & Earth and withstood for 60 secs. (LC - 4.5mA)   |  |  |  |  |  |  |  |  |  |

| 6 INSULATION RESISTANCE TEST :- AT 36.1 °C (For Reference Only) |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| (a) H.V. winding to Earth 142000 MΩ (With 5.0kV Megger)         |  |  |  |  |  |  |  |  |  |
| (b) L.V. Winding to Earth 202000 MΩ (With 1.0kV Megger)         |  |  |  |  |  |  |  |  |  |
| (c) H.V. winding to L.V. Winding 399000 MΩ (With 5.0kV Megger)  |  |  |  |  |  |  |  |  |  |

| 7 TURNS RATIO TEST :- |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|
|-----------------------|--|--|--|--|--|--|--|--|--|

| Tap Position No. |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|
| U/u Phase        |  |  |  |  |  |  |  |  |  |
| V/v Phase        |  |  |  |  |  |  |  |  |  |
| W/w Phase        |  |  |  |  |  |  |  |  |  |

| 8 POLARITY PHASE RELATIONSHIP (VECTOR GROUP) CHECKED : |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| FOUND OK Dyn11                                         |  |  |  |  |  |  |  |  |  |

Witnessed By :

Tested by

Shruti Jaiswal  
Crescentia Labs Pvt. Ltd

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