



# Our Vision

Quality, our guarantee of Success



## Automation Engineering

(Your Trusted Electrical Switchgear & Transformer Manufacturer)

**Corporate Office :** AKH Tower (3rd Floor) Plot # 10, Lane # 05, Road # 01, Block # L, Agrabad Access Road, Barapole, Halishahar H/E, Chittagong-4216. Tel: 88-031-725750, 724259, 722312 Fax: 88-031-714128 E-mail: automation@cobd.com  
**Motijheel Office :** Modern Mansion (5th Floor), 53, Motijheel C/A, Dhaka-1000, Tel: 88-02-9557519, 9563070, 9569223, Fax: 88-02-9585807 E-mail: automation@agni.com  
**Uttara Office :** Khan Tower (4th Floor), 51 Sonargaon Janapath Road, Sector-7, Uttara, Dhaka. Tel: 88-02-8957504, 04473150666, Fax: 88-02-8961391 E-mail: automation\_uttara@agni.com  
**Factory Address :** Mogh Pukur, Vill-Haji Para, South Bashberiya, P.S: Sitakunda, Chittagong, Bangladesh. Tel: 03042-51314-5, Mobile: 01713-103818, 01553-313716, 01819-313319 E-mail: automation.engg@yahoo.com

[www.automation-bd.com](http://www.automation-bd.com)





## Automation Engineering

Automation Engineering (AE) was established in 1994 in a hired small workshop to manufacture electrical switchgears. Soon the products of automation engineering were able to attract the attention of customers. To cope with the increased demand of customer's automation engineering shifted her factory building to Banshbaria Sitakunda in her own land in 2006. After one year it opened transformer manufacturing unit in this factory. 3 phase, 50Hz, 11/0.415 kV Oil immersed distribution transformers up to 3000 kVA are being manufactured. Our transformers are renowned for their high performance and proven reliability. All automation transformers are optimized to meet customer's specification and manufactured as per international standards like IEC 60076 & ANSI. Each and every designed transformer is tested from independent laboratory Like BUET, CUET, BSTI etc. When the test report of the new designed transformer is found satisfactory only then we go for commercial production. Our QC department is very much rigid about quality and never compromise with it.

We are glad to inform you Our Factory is ISO 9001:2008 certified.

### Our Product:

- DISTRIBUTION TRANSFORMER
- HT SWITCHGEAR
- LT SWITCHGEAR
- PFI PLANT
- MAIN & SUB-DISTRIBUTION BOARD
- STAR-DELTA STARTER ETC

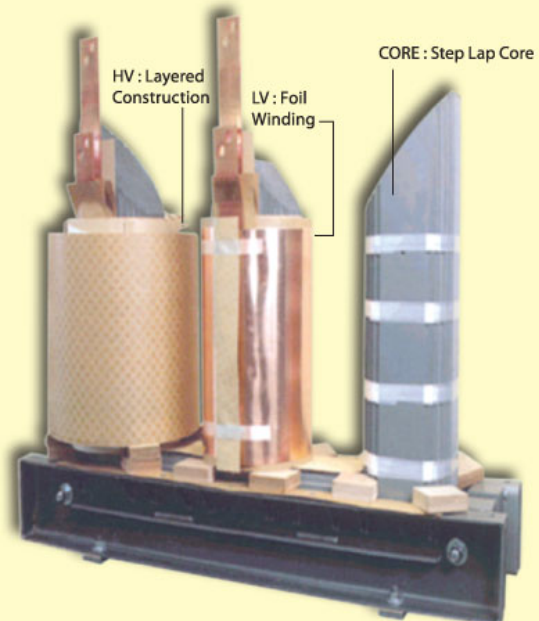


### Transformer:

#### Range of transformer capacity

1. 3 phase, 11/0.415 kV, 50 Hz, 50 kVA
2. 3 phase, 11/0.415 kV, 50 Hz, 100 kVA
3. 3 phase, 11/0.415 kV, 50 Hz, 150 kVA
4. 3 phase, 11/0.415 kV, 50 Hz, 200 kVA
5. 3 phase, 11/0.415 kV, 50 Hz, 250 kVA
6. 3 phase, 11/0.415 kV, 50 Hz, 315 kVA
7. 3 phase, 11/0.415 kV, 50 Hz, 400 kVA
8. 3 phase, 11/0.415 kV, 50 Hz, 500 kVA
9. 3 phase, 11/0.415 kV, 50 Hz, 630 kVA
10. 3 phase, 11/0.415 kV, 50 Hz, 750 kVA
11. 3 phase, 11/0.415 kV, 50 Hz, 1000 kVA
12. 3 phase, 11/0.415 kV, 50 Hz, 1250 kVA
13. 3 phase, 11/0.415 kV, 50 Hz, 2000 kVA
14. 3 phase, 11/0.415 kV, 50 Hz, 2500 kVA
15. 3 phase, 11/0.415 kV, 50 Hz, 3000 kVA

- Tappings: +2.5%, 0, -2.5%, -5%, -7.5%
- Vector group: Dyn-11
- BIL: 75 kV



## % Impedance:

1. 50KVA-630 KVA-4%
2. 631 KVA-1250 KVA-5%
3. 1251 KVA-3150 KVA-6%

We use superior grade CRGO silicon steel in our transformer of Japan and European Union. LT and HT conductor of 99.99% pure electrolytic copper of home and abroad is used in winding. Dry and fresh mineral transformer oil of low di-electric loss and acidity are used in our transformers.

Quality controls are being done at every stage of production.

All the necessary routine test are done on each & every finished transformer. Our transformer are certified by BUET, CUET and BSTI. Transformers conform with the following international standard:

IEC 60076, ANSI, VDE, DIN, BS etc.



## HT & LT Switchgear

We are assembling LT & HT switchgears with components of Fuji, Terasaki, Vishay, Vitzrotec etc. Busbars of 99.99% pure electrolytic copper of proper size of Malaysia & Thailand are used. Power and Controls cables of reputed local manufactures are used. Switchgears are manufactured and tested as per IEC standard.

HT Switchgear  
(630-1250 A, 11KV)



LT Switchgear  
(100A - 6300A)



## PFI Plant

With low voltage capacitor of Germany power factor improvement plant are assembled here. We use Power factor controller, magnetic contactor, HRC fuse, circuit breaker etc are of superior grade.

## Special Features of Our Product

1. Our products are durable, reliable, safe, economical and environment friendly
2. We have a after sales service team comprising of Experienced engineers and technicians to provide prompted Services to our valued Customers.

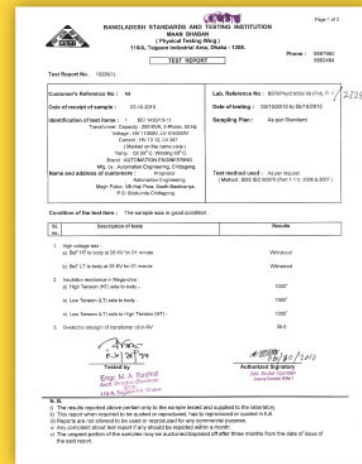
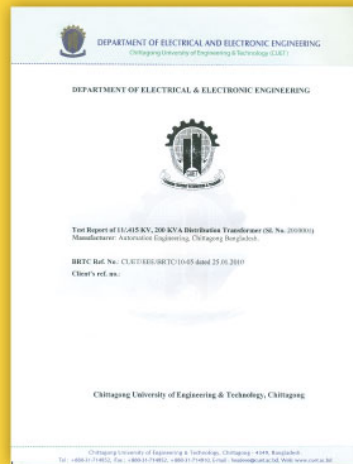


**PFI Plant**  
Capacity: As Per Customer Demand

## Evidence of Quality



ONLY THE ORIGINAL COPY OF THIS REPORT IS ACCEPTABLE



**BUET**

**CUET**

**BSTI**

## TECHNICAL DATA OF TRANSFORMER

11/0.415 kv, 3 Phase, 50 Hz

Rated Power	(kVA)	50	100	150	200	250	315	400	500	630	750	800	1000	1250	1500	1600	2000	2500	3000
No Load Losses Po	(W)	160	250	360	435	540	700	780	1000	1200	1300	1400	1600	1800	2100	2200	2600	3000	3400
Load Losses at 75°C	(W)	950	1700	2100	2820	3180	4000	4600	5500	6800	9500	9700	12000	14500	18500	19500	22500	26500	30500
Total Losses at 75°C	(W)	1110	1950	2460	3255	3720	4700	5380	6500	8000	10800	11100	13600	16300	20600	21700	25100	29500	33900
Impedance at 75°C	(%)	4	4	4	4	4	4	4	4	4	5	5	5	5	6	6	6	6	6
Regulation at p.f=1	(%)	1.75	1.56	1.29	1.30	1.17	1.17	1.06	1.01	0.99	1.16	1.11	1.10	1.06	1.13	1.12	1.03	0.97	0.93
Efficiency at p.f=1	Load at 100% (%)	97.83	98.09	98.39	98.40	98.53	98.53	98.67	98.72	98.75	98.58	98.63	98.66	98.71	98.65	98.66	98.76	98.83	98.88
	Load at 50% (%)	98.43	98.67	98.83	98.87	98.94	98.93	99.04	99.06	99.09	99.03	99.05	99.09	99.14	99.11	99.12	99.18	99.24	99.27
Efficiency at p.f=0.8	Load at 100% (%)	97.30	97.62	97.99	98.01	98.17	98.17	98.35	98.40	98.44	98.23	98.30	98.33	98.40	98.31	98.33	98.46	98.55	98.61
	Load at 50% (%)	98.05	98.34	98.55	98.60	98.68	98.67	98.81	98.83	98.86	98.79	98.82	98.86	98.93	98.89	98.91	98.98	99.05	99.09