



## CATALOGUE

www.ctcgroup.vn

# Efficient Energy Solution

HA NOI TRANSFORMER MANUFACTURE AND ELECTRICAL EQUIPMENT JOINT STOCK COMPANY

Hotline: 0965.760.683 Email: kienctbt@gmail.com

★ CENTRAL REGION REPRESENTATIVE

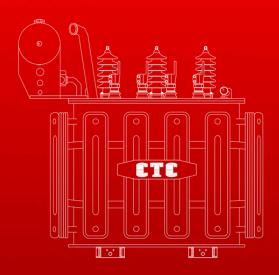
Address: No. 455 Ngo Quyen, An Hai Bac Ward, Son Tra District, Da Nang Tel: 0913 553 357 **★** HEAD & NORTH OFFICE

Address: Quang Minh Industrial Zone, Chi Dong Town, Me Linh District, Hanoi City, Viet Nam Tel: 0243.366.1119

**★** SOUTH REPRESENTATIVE

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### **PREFACE**







ISO 14001

### **COMPANY** INTRODUCTION

HA NOI TRANSFORMER MANUFACTURE AND ELECTRICAL EQUIPMENT JOINT STOCK COMPANY (abbreviated as CTC) was established in 2008. Address: Quang Minh Industrial Zone, Chi Dong Town, Me Linh District, Hanoi City, Viet Nam.

#### Trademark:

Trademarks of products are registered with exclusive intellectual property rights: Brand "CTC-Efficient Energy Solution".

### Scale:

- · Total area: 1.1 ha
- Total factory area: 6500 m<sup>2</sup>
- Management system: ISO 9001, ISO 14001, 5S

### Main areas:

Manufacture all types transformers up to 35kV.

#### Other areas:

- · Manufacturing electrical switchboard and industrial mechanical products · Representatives of distributing industrial electrical equipment products
- · Contractor construction of electrical projects up to 35kV.
- CTC is one of the leading transformer manufacturers in Vietnam.
- CTC's transformer products have successfully completed the tests of
- domestic and international organizations such as Quatest, ETC and ASTA.
- By using modern infrastructure, highly automated manufacturing equipment and an expertised technical team. CTC has confidently asserted its quality in the domestic market and is ready to take export orders.









VILAS





62/QD-EVN 1011/QD-EVN NPC



3079/QĐ=EVN CPC



797/QĐ-ĐL TP.HCM 2608/QĐ-EVN SPC

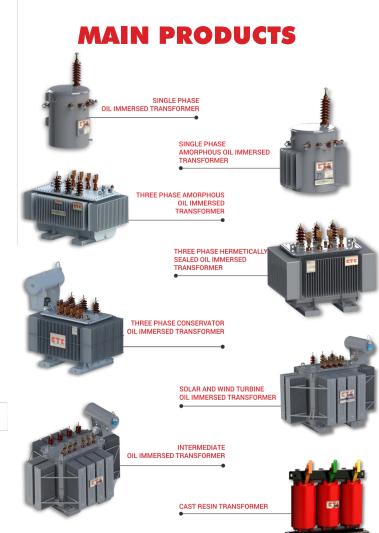


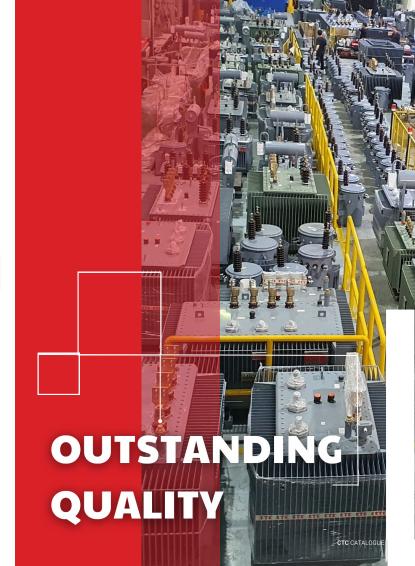
KERI













CTC always focuses on researching and applying the most modern technologies to the production system in order to improve product quality and minimize CO2 emissions that affect the environment.

### **DESIGN BEFORE THE DEMAND**



### **MODERN TECHNOLOGY PRODUCTION LINE**



**TOTAL QUALITY MANAGEMENT** 

The application of calculation software helps designers easily pick the optimal design options. The 3D design style also helps the design to be more intuitive and simulates the operation of the machine closer to the actual operating state.

CTC always researches on design changes to offer products with higher efficiency and ability to operate more durable, able to withstand the impacts of the environment and the connecting system.



### SKILLED EMPLOYEE



### Special materials

#### Magnetic Core



Using cold rolled grain oriented steel and Amorphous steel to reduce losses.

Copper Foil

### Insulation Paper



DDP paper with epoxy resin coating help to fix the wire.

**Enameled Copper wire** 

Enameled wire improved

heat-resistant, impulse and



Insulation Oil

Providing improved fire safety and excellent oxidation stability increases product lifespan.













### **TOP ACCESSORIES**

#### Copper terminal Precision processing, ensuring easy, safety connection.

Copper foil winding

reduces the electromotive

force in the transformer.



Plug-in Bushing Made from high quality epoxy resin, comformity with Europe and international standard.



**Elbow connector** Using terminal to fix the self-breaking bolts suitable for many different cable sections.



#### **Porcelain Bushing** Durable, resistant to a variety of harsh climatic environments.



Pressure valve Minimize incidents when increasing pressure inside the



Oil level indicator Use magnetic force to display the level of oil and prevent leagke.



### Thermometer





**Gas Relay** Early dectection of generated gas to prevent incidents.



Tap changer Import from Europe Union, accurate, easy to use.



MANUFACTURER JFE

ORIGINAL EQUIPMENT



























08 CTC CATALOGUE CTC CATALOGUE 09



# **SERVICES**

Hotline: 0965.760683

Fast delivery and installation support. Goods are always available with under 1000kVA capacity.



10 years warranty for accessories



2-year standard warranty





Free technical support and CONSULTING



Substation design support



Testing transformers support (Applied on each market area)



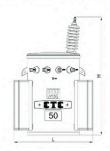


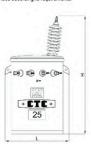
# TWOKSHORZ SINGTE SHYZE SHORZINGHONE

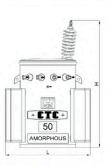
### SINGLE PHASE OIL TRANSFORMER 12,7/2X0,23KV

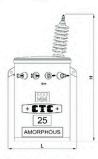
		SPECIFICA	ATIONS		DII	(mm)	WEIGHT (kg)			
(kVA)	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Outside diameter (L)	Height (H)	Mount hanger size (h)	Oil	Core and coil	Total
15	52	≤1	213	2-2,4	610	1030	300	40	120	190
25	67	≤1	333	2-2,4	640	1060	300	50	160	240
37,5	92	≤1	420	2-2,4	710	1110	300	60	210	310
50	108	≤1	570	2-2,4	730	1140	300	60	230	330
75	148	≤1	933	2-2,4	760	1170	300	80	270	420
100	192	≤1	1305	2-2,4	830	1300	600	130	340	540

\* Note: Reference parameters. Customize specification will be provided according to requirements.









### SINGLE PHASE AMORPHOUS 12.7/2X0.23KV

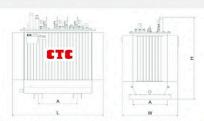
		SPECIFICA	ATIONS		DI	MENSION	(mm)	WEIGHT (kg)			
(kVA)	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Outside diameter (L)	Height (H)	Mount hanger size (h)	Oil	Core and coil	Total	
15	17	≤1	213	2-2,4	690	1120	300	70	130	230	
25	22	≤1	333	2-2,4	720	1120	300	70	160	270	
37,5	31	≤1	420	2-2,4	760	1210	300	60	210	320	
50	36	≤1	570	2-2,4	760	1230	300	60	230	330	
75	49	≤1	933	2-2,4	860	1230	300	80	270	420	
100	64	<b>s1</b>	1305	2-2.4	860	1260	600	130	340	540	

\* Note: Reference parameters. Customize specification will be provided according to requirements.

# 1

### OIT AKVNALOKMEK 3 HIVAE GROZED AAAE SEGIEGALIOMA

Capacity from 30KVA to 2000KVA



### **3 PHASE CLOSED TYPE OIL TRANSFORMER**

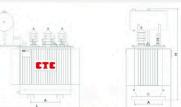
1				SPECIFI	CATIONS		DIM	ENSION	(mm)			WEIGHT (kg	
CAPACITY (kVA)		VECTOR GROUP	No-Load Loss	No-Load current	Load-Loss	Impedance	Length	Width	Height	Wheel Frame	Oil	Core and coil	Total
1000			(W)	(%)	(W)	(%)	(u)	(W)	(H)	(A)mm			
	22/0,4	Dy0-11					900	640	1065		160	290	720
30	35/0,4	Yy0-12	71	2	428	4	900	650	1210	520	190	310	780
	35(22)/0,4	Y(0)/y0- 12(11)					930	660	1260		210	320	850
	22/0,4	Dy0-11					910	650	1070		170	360	790
50	35/0,4	Yy0-12	120	2	715	4	900	650	1260	520	200	340	830
	35(22)/0,4	Y(0)/y0- 12(11)					880	640	1320		200	360	860
	22/0,4	Dy0-11					880	620	1140		170	380	820
75	35/0,4	Yy0-12	165	2	985	4	1090	650	1260	520	200	395	890
	35(22)/0,4	Y(0)/y0- 12(11)					1090	650	1320		210	400	920
	22/0,4	Dy0-11					1070	610	1150		170	410	870
100	35/0,4	Yy0-12	205	2	1250	4	1150	640	1300	520	210	490	980
	35(22)/0,4	Y(0)/y0- 12(11)					1150	650	1350		220	500	1000
	22/0,4	Dy0-11					1220	660	1200		200	560	1000
160	35/0,4	Yy0-12	280	2	1940	4	1280	700	1320	520	250	630	1220
	35(22)/0,4	Y(0)/y0- 12(11)					1310	720	1370		290	645	1270
	22/0,4	Dy0-11					1210	670	1250		220	610	1180
180	35/0,4	Yy0-12	295	2	2090	4	1250	700	1370	520	260	660	1290
	35(22)/0,4	Y(0)/y0- 12(11)					1260	710	1420		290	670	1360

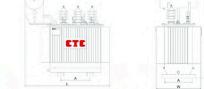
\* Note: Reference parameters. Customize specification will be provided according to requirements.

				SPECIFIC	CATIONS		DIM	ENSION	(mm)			WEIGHT (kg	
(kVA)		VECTOR GROUP	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Length (L)	Width (W)	Height (H)	Wheel Frame (A)mm		Core and coil	Tota
	22/0,4	Dy0-11					1210	670	1250		220	610	1180
250	35/0,4	Yy0-12	340	2	2600	4	1250	700	1370	520	260	660	1290
	35(22)/0,4	Y(D)/yO-					1260	710	1420		290	670	1366
	22/0,4	12(11) Dy0-11					1390	850	1295		290	980	1700
320	35/0,4	Yy0-12	385	2	3170	4	1450	900	1430	670	320	1080	1920
	35(22)/0,4	Y(0)/y0- 12(11)					1470	900	1480		390	1110	2050
	22/0,4	Dy0-11					1440	820	1395		300	1150	2000
400	35/0,4	Yy0-12	433	2	3820	4	1490	860	1520	670	350	1230	2210
	35(22)/0,4	Y(0)/y0- 12(11)					1530	870	1570		430	1280	2430
	22/0,4	Dy0-11	-				1530	890	1410		400	1380	2420
560	35/0,4	Yy0-12	580	2	4810	4	1540	970	1530	670	420	1390	2540
	35(22)/0,4	Y(0)/y0- 12(11)					1560	980	1580		490	1430	2700
	22/0,4	Dy0-11					1540	980	1415		400	1255	2430
630	35/0,4	Yy0-12	790	2	5570	4	1580	1010	1540	670	450	1290	2570
	35(22)/0,4	Y(0)/y0- 12(11)					1600	1020	1590		500	1340	2730
	22/0,4	Dy0-11					1620	1050	1415		420	1405	2650
750	35/0,4	Yy0-12	845	1.5	6540	5	1670	1060	1560	670	480	1510	2850
	35(22)/0,4	Y(0)/y0- 12(11)					1690	1070	1610		510	1550	3080
	22/0,4	Dy0-11	70				1690	1090	1520		490	1770	3400
1000	35/0,4	Yy0-12	980	1.5	8550	5	1780	1130	1670	820	590	1860	3760
	35(22)/0,4	Y(0)/y0- 12(11)					1810	1140	1720		650	1905	3920
	22/0,4	Dy0-11					1800	1180	1590		580	2015	3950
1250	35/0,4	Yy0-12	1115	1	10690	5	1820	1190	1720	820	630	2095	4130
	35(22)/0,4	Y(0)/y0- 12(11)					1850	1200	1770		685	2150	4290
	22/0,4	Dy0-11					1920	1240	1655		690	2320	4560
1600	35/0,4	Yy0-12	1305	1	13680	- 6	1980	1270	1810	820	760	2665	5110
	35(22)/0,4	Y(0)/y0- 12(11)					2000	1280	1860		830	2730	5380
	22/0,4	Dy0-11					2010	1320	1710		760	2905	5470
2000	35/0,4	Yy0-12	1500	1	17100	6	2040	1330	1860	1070	810	2990	5690
	35(22)/0.4	Y[0]/y0-					2060	1340	1910		890	3055	5890

### Cholifications 3 PHASE CLOSED TYPE OIL TRANSFORMER WITH EXTRA OIL BOTTLE







### 3 PHASE CLOSED TYPE OIL TRANSFORMER WITH EXTRA OIL BOTTLE

				SPECIFI	CATIONS		DII	MENSION (	nm)			WEIGHT (kg	
(kVA)	RATED VOLTAGE (kV)	VECTOR GROUP	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Length (L)	Width (W)	Height (H)	Wheel Frame (A)mm	Oil	Core and coil	Total
	22/0,4	Dy0-11					1250	640	1345		180	290	740
30	35/0,4	190-12	71	52	428	4	1250	650	1490	520	210	310	800
	35(22)/0,4	Y(0)/y0- 12(11)					1280	660	1540		230	320	870
	22/0,4	Dy0-11					1260	650	1350		190	360	810
50	35/0,4	Yy0-12	120	52	715	4	1250	650	1540	520	220	340	850
	35(22)/0,4	Y(0)/y0- 12(11)					1230	640	1600		220	360	880
	22/0,4	Dy0-11					1230	620	1420		190	380	840
75	35/0,4	Yy0-12	165	52	985	4	1340	650	1540	520	220	395	910
	35(22)/0,4	Y(0)/y0- 12(11)				-	1340	650	1600		230	400	940
	22/0,4	Dy0-11					1320	610	1430		190	410	890
100	35/0,4	Yy0-12	205	<b>s2</b>	1250	4	1400	640	1580	520	230	490	1000
	35(22)/0,4	Y(0)/y0- 12(11)					1400	650	1630		240	500	1020
	22/0,4	Dy0-11					1450	660	1480		220	560	1020
160	35/0,4	Yy0-12	280	52	1940	4	1500	700	1600	520	270	630	1240
	35(22)/0,4	Y(0)/y0- 12(11)					1530	720	1650		310	645	1290
	22/0,4	Dy0-11					1450	670	1550		250	610	1210
180	35/0,4	Yy0-12	295	<b>s2</b>	2090	4	1480	700	1670	520	290	660	1320
	35(22)/0,4	Y(0)/y0- 12(11)					1490	710	1720		320	670	1390

\* Note: Reference parameters. Customize specification will be provided according to requirements.

(kVA)		GROUP	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Length (L)	Width (W)	Height (H)	Wheel Frame (A)mm		Core and coil	Tota
57	22/0,4	Dy0-11					1550	710	1570		280	800	149
250	35/0,4	Yy0-12	340	52	2600	4	1610	740	1690	520	320	860	161
	35(22)/0,4	Y(D)/y0- 12(11)					1620	770	1740		350	910	170
	22/0,4	Dy0-11					1610	850	1635		320	980	173
320	35/0,4	Yy0-12	385	52	3170	4	1670	900	1770	670	350	1080	195
	35(22)/0,4	Y(D)/y0- 12(11)					1690	900	1820		420	1110	208
	22/0,4	Dy0-11					1640	820	1735		340	1150	204
400	35/0,4	Yy0-12	433	52	3820	4	1690	860	1860	670	390	1230	225
	35(22)/0,4	Y(D)/y0- 12(11)					1730	870	1910		450	1280	247
	22/0.4	Dy0-11					1755	890	1800		440	1380	246
560	35/0.4	Yy0-12	580	52	4810	4	1765	970	1920	670	460	1390	258
	35(22)/0,4	Y(D)/y0- 12(11)					1785	980	1970		530	1430	274
	22/0,4	Dy0-11					1745	980	1805		440	1255	24
630	35/0,4	Yy0-12	780	<b>s2</b>	5570	4	1785	1010	1930	670	490	1290	261
	35(22)/0,4	Y(D)/y0- 12(11)					1805	1020	1980		540	1340	277
	22/0,4	Dy0-11					1805	1050	1805		460	1405	266
750	35/0,4	190-12	845	\$1.5	6540	5	1855	1060	1950	670	520	1510	285
	35(22)/0,4	Y(D)/y0- 12(11)					1875	1070	2000		550	1550	312
	22/0,4	Dy0-11					1875	1090	1840		560	1770	347
1000	35/0,4	Yy0-12	980	\$1.5	8550	5	1955	1130	1990	820	660	1860	383
	35(22)/0,4	Y(0)/yo-					1985	1140	2040		720	1905	399
_	22/0,4	12(11) Dy0-11				_	1955	1180	1910		650	2015	400
1250	35/0,4	Yy0-12	1115	51	10690	5	1975	1190	2040	820	680	2095	420
	35(22)/0,4	Y[0]/y0-				100	2005	1200	2090		755	2150	436
	22/0,4	12(11) Dy0-11					2120	1240	2025		760	2320	463
1600	35/0,4	190-12	1306	s1	13680	6	2180	1270	2180	820	830	2665	518
		Y[D]/yo-		-			2200	1280	2230		880	2730	545
	35(22)/0,4	12(11)											
	22/0,4	Dy0-11			-		2190	1320	2080		830	2905	554
2000	35/0,4	Y/O-12 Y(D)/yO-	1500	£1	17100	6	2220	1330	2290	1070	960	2990 3055	576
	35(22)/0,4	12(11)					2240	1540	2280		960	3055	596

# SPECIFICATIONS 3 PHASE AMORPHOUS OIL TRANSFORMER

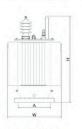
Capacity from 100KVA to 2000KVA

# SPECIFICATIONS INTERMEDIATE OIL TRANSFORMER

Capacity from 3200KVA to 6300 KVA







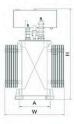
### 3 PHASE AMORPHOUS OIL TRANSFORMER 22/0.4kV D/Yo-11 AMORPHOUS

		SPECIFIC	ATIONS			IMENSION (n	nm)			WEIGHT (kg	
(kVA)	No-Load Loss	No-Load current	Load-Loss	Impedance	Length	Width	Height	Wheel Frame	Oil	Core and coil	Total
	(W)	(%)	(W)	(%)	(L)	(W)	(H)	(A)mm			
100	75	52	1258	4+6	1230	850	1310	520	290	590	1070
160	95	52	1940	4+6	1250	860	1310	520	320	670	1140
180	115	52	2185	4+6	1310	880	1310	520	350	740	1330
250	125	52	2600	4+6	1390	880	1360	520	410	1060	1590
320	145	\$2	3330	4+6	1450	950	1360	670	430	1180	2030
400	165	52	3818	4+6	1540	960	1360	670	520	1390	2550
560	220	<b>£2</b>	4810	4+6	1590	1020	1410	670	580	1520	2720
630	270	52	5570	416	1760	1020	1480	670	610	1680	2990
750	290	\$2	6725	4+6	1850	1100	1490	670	670	1790	3340
800	310	52	6920	4+6	1940	1100	1550	670	790	1930	3980
1000	350	52	8550	4+6	1970	1140	1550	820	880	2040	4240
1250	420	52	10690	4+6	2140	1360	1590	820	980	2340	4330
1500	470	s 2	12825	4+6	2290	1560	1590	820	1120	2570	4690
1600	490	52	13680	4+6	2410	1590	1640	820	1260	2940	4810
2000	580	52	17100	416	2580	1650	1720	820	1380	3450	5560

\* Note: Reference parameters. Customize specification will be provided according to requirements.







### INTERMEDIATE OIL TRANSFORMER

Section 1		SPECIFICAT	IONS		DIM	ENSION (mm	WEIGHT (kg)				
(kVA)	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Length (L)	Width (W)	Height (H)	Wheel Frame (A)mm		Core and coil	Total
3200	4400	1	28000	7	2530	1410	2560	1200	1210	3330	7660
4000	5300	1	32000	7	2660	1530	2610	1200	1560	4750	8510
2500	6400	1	40000	7	2850	1840	2860	1200	1880	5150	9650
6300	7600	1	42000	7.5	3100	1920	2970	1200	2100	6400	12550

<sup>\*</sup> Note: Reference parameters. Customize specification will be provided according to requirements.

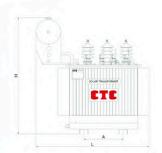
### CHOLITICIAN SOLAR OIL TRANSFORMER AND WIND ENERGY



### SOLAR OIL TRANSFORMER AND WIND ENERGY

		s	PECIFICATI	ONS			DIN	MENSION (		WEIGHT (kg)			
APACITY (kVA)	RATED VOLTAGE	VECTOR GROUP	No-Load Loss	No-Load current	Load Loss	Impedance	Length	Width	Height	Wheel Frame		Core and coil	Total
	(kV)		(W)	(%)	(w)	(%)	(L)	(w)	(H)	(A)mm			
1000	23/2x0,69	Dy0-11	980	≤ 1.5	8550	5	1890	1290	1720	820	520	1800	3430
1250	23/2x0,69	Dy0-11	1115	≤1	10690	5	2000	1380	1790	820	610	2045	3980
2500	23/2x0,69	Dy0-11	1305	≤1	13680	6	2120	1440	1855	820	720	2350	4590
5000	23/2x0,69	Dy0-11	3920	51	35280	7	2730	1850	2705	1200	2050	6750	11850







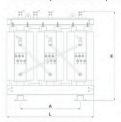


### SHECIFICERIONS CHAL BERIN LEFT LEFT

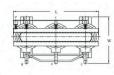


### **CAST RESIN TRANSFORMER**

1000		SPECIFICAT	IONS			DIMEN	SION (mm)		1
CAPACITY (kVA)	No-Load Loss (W)	No-Load current (%)	Load-Loss (W)	Impedance (%)	Length (L)	Width (W)	Height (H)	Wheel Frame (A)mm	WEIGHT (kg)
250	850	≤ 2	3959	4	1340	825	1500	882	1300
400	1150	≤ 2	5405	4	1395	840	1560	956	1700
560	1610	≤ 2	6900	4	1450	850	1575	992	2100
630	1700	≤ 2	7130	4	1545	930	1720	1056	2360
750	2050	≤ 2	7498	5	1625	840	1720	1110	2400
1000	2400	≤ 2	8211	6	1725	1000	1855	1178	3100
1250	2850	≤ 2	11914	6	1840	1010	1900	1220	3400
1600	3300	≤ 2	13110	6	1960	1030	1980	1334	4400
2500	5150	≤2	17411	6	2290	1110	2225	1432	5800







# OTHER PRODUCTS



Fuse Cut Out



Interrupter switch



Reactor



LBS SF6 Type



Electrical Cabinet for all types



Lightning arrester



Load break switch with SCADA control



Line post and Dead-end Insulator



Ring main unit

# HIGHTLIGHT **PROJECTS**





**EVN HA NOI** 

EVN SPC: VINH LONG, AN GIANG, CA MAU, LONG AN, DONG THAP, BEN TRE



**EVN CPC: NGHE AN, QUANG NAM** 

**BUWON 4** 

**UNDERGROUND CABLE PROJECT** 



EVN NPC: BAC NINH, BAC GIANG, BAC KAN, THAI NGUYEN, QUANG NINH, THANH HOA, NGHE AN...



TRANSFORMER IN THE BANGAL BAY -

**VINSFAST CHARGING STATION IN LAOS** 



CENTRANDE INTEGRATED SALES CORP , PHILIPPINES



MYANMAR



**EXPORT TRANSFORMERS TO CONGO** 



**EXPORTER 189 TRANSFORMER IN IRAQ** 





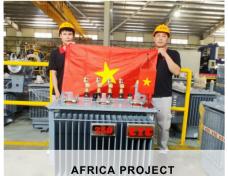
**EXPORT TRANSFORMERS TO THAILAND** 





**EXPORTER 263 TRANSFORMER IN LIBYA** 









**EXPORTER UNICORE TRANSFORMER TO MYANMAR** 

CTC CATALOGUE 27 26 CTC CATALOGUE

# HIGHTLIGHT **PROJECTS**













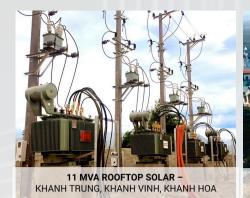














INOUE VIETNAM RUBBER COMPANY - ME LINH, HANOI





VINHOMES OCEAN PARK URBAN AREA PROJECT







**VINFAST ELECTRIC CHARGING STATION** 





26 CTC CATALOGUE CTC CATALOGUE 27