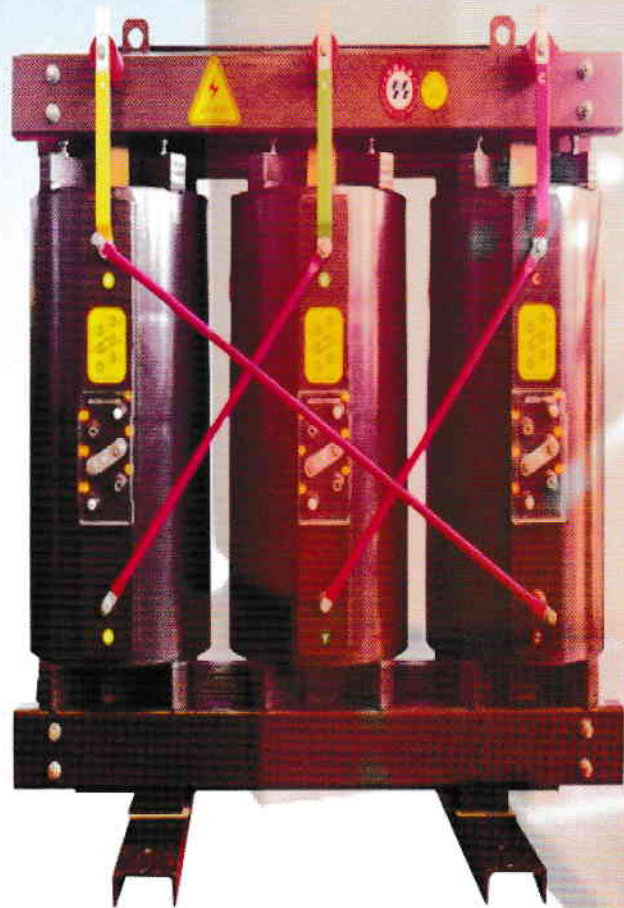




**EWT TRANSFORMER SDN BHD.** (25685-D)



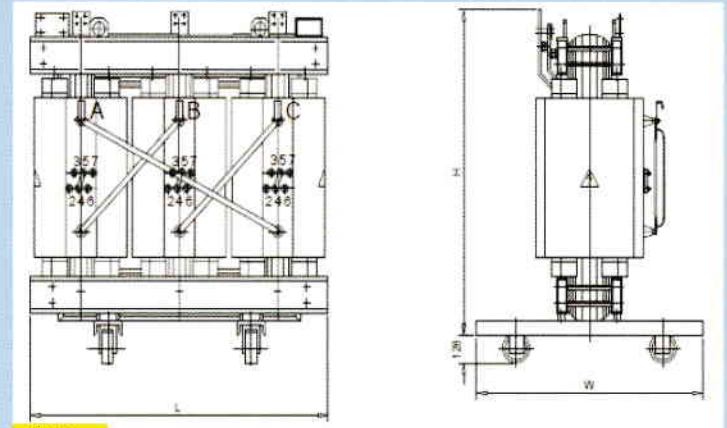
**CAST RESIN TRANSFORMER**

**EWT Cast Resin Transformer (CRT)** are designed based on latest standards to meet the sub stations requirements in urban areas especially in high rise buildings, public amenities with high population density.

EWT CRT are equipped with:

- Enclosure IP21
- Temperature Controlling Device
- Air Force Cooling System
- Distribution Bar

### General Arrangement



Note:

- a) Lower loss and others special requirement upon request.
- b) Dimension and weight are for reference only and subject to product drawing

### Technical Data

(Guarantee values based on tolerances acc. IEC)

#### Low Loss Type in accordance with JKR Specified Losses model ECRL

Type		ECRL 400/10	ECRL 500/10	ECRL 800/10	ECRL 1000/10	ECRL 1250/10	ECRL 1600/10	ECRL 2000/10	
Rated Capacity	kVA	400	500	800	1000	1250	1600	2000	
HV/LV	kV	11/0.433	11/0.433	11/0.433	11/0.433	11/0.433	11/0.433	11/0.433	
Tappings	%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	
Frequency	Hz	50	50	50	50	50	50	50	
Vector group		Dyn11	Dyn11	Dyn11	Dyn11	Dyn11	Dyn11	Dyn11	
Highest voltage of equipment of HV/LV	kV	12/1.1	12/1.1	12/1.1	12/1.1	12/1.1	12/1.1	12/1.1	
Protection		IP20	IP20	IP20	IP20	IP20	IP20	IP20	
Cooling		AN/AF	AN/AF	AN/AF	AN/AF	AN/AF	AN/AF	AN/AF	
Insulation class		F	F	F	F	F	F	F	
Max. temperature class	K	100	100	100	100	100	100	100	
Impedance voltage	%	4	4	5	5	5	6	6	
No Load Loss	W	810	840	1420	1580	1880	2290	2860	
Load Loss at 75°C	W	3880	4660	5200	6250	7760	8950	12450	
Load Loss at 120°C	W	4520	5350	5500	6650	8170	9650	12940	
Length approx	mm	1200	1300	1510	1590	1590	1660	1680	
Width approx	mm	860	860	1020	1020	1020	1150	1150	
Height approx	mm	963	1003	1050	1108	1200	1300	1350	
Weight approx	kg	1720	1800	3100	3400	3880	4610	5500	
Enclosure dimension (L)	IP20 mm	1900	1900	2100	2100	2300	2300	2400	
Enclosure dimension (W)	IP20 mm	1300	1300	1400	1400	1500	1500	1500	
Enclosure dimension (H)	IP20 mm	2200	2200	2200	2200	2200	2200	2300	
Sound level	dB	45	46	49	50	51	51	52	
Efficiency at 100% load	PF 1.0	%	98.82	98.90	99.17	99.21	99.22	99.29	99.23
	PF 0.8	%	98.53	98.62	98.96	99.02	99.03	99.12	99.04
Regulation at 100% load	PF 1.0	%	1.00	1.00	0.75	0.70	0.65	0.60	0.65
	PF 0.8	%	About 3.50	About 3.50	about 4.20	about 4.20	about 4.20	about 4.10	about 4.10

### Technical Data

(Guarantee values based on tolerances acc. IEC)

#### Standard Loss Type Model ECRN

Type		ECRN 500/10	ECRN 630/10	ECRN 800/10	ECRN 1000/10	ECRN 1250/10	
Rated Capacity	kVA	500	630	800	1000	1250	
HV/LV	kV	11/0.433	11/0.433	11/0.433	11/0.433	11/0.433	
Tappings	%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	
Frequency	Hz	50	50	50	50	50	
Vector group		Dyn11	Dyn11	Dyn11	Dyn11	Dyn11	
Highest voltage of equipment of HV/LV	kV	12/1.1	12/1.1	12/1.1	12/1.1	12/1.1	
Protection		IP20	IP20	IP20	IP20	IP20	
Cooling		AN/AF	AN/AF	AN/AF	AN/AF	AN/AF	
Insulation class		F	F	F	F	F	
Max. temperature class	K	100	100	100	100	100	
Impedance voltage	%	4	6	6	6	6	
No Load Loss	W	1160	1300	1520	1770	2090	
Load Loss at 75°C	W	4260	5200	6020	7090	8460	
Length approx	mm	1256	1420	1445	1500	1625	
Width approx	mm	860	860	1020	1070	1270	
Height approx	mm	1230	1260	1385	1481	1610	
Weight approx	kg	1900	2345	3255	3690	3820	
Enclosure dimension (L)	IP20 mm	1900	2100	2100	2100	2300	
Enclosure dimension (W)	IP20 mm	1300	1400	1400	1400	1500	
Enclosure dimension (H)	IP20 mm	2200	2200	2200	2200	2200	
Sound level	dB	45	46	49	50	51	
Efficiency at 100% load	PF 1.0	%	98.91	98.96	99.05	99.11	99.15
	PF 0.8	%	98.64	98.71	98.82	98.89	98.94
Regulation at 100% load	PF 1.0	%	0.90	0.90	0.85	0.75	0.70
	PF 0.8	%	about 3.10	about 4.30	about 4.20	about 4.20	about 4.20

### Technical Specification:

- Fully type tested with KEMA certificate and passed/comply with all the usual quality standards such as Fire Class (F1), Environmental Class (E2), Climatic Class (C2).
- Low losses, low partial discharge, low noise and strong capacity of heat resistant, 150% overload with cooling fan.
- Safe, flameproof and no pollution.
- Maintenance free, easy installation and low cost.
- LV & HV winding shall be insulation Class F & maximum temperature rise shall be limited to 100K at 40°C ambient.

### Technical Data

(Guarantee values based on tolerances acc. IEC)

#### Low Loss Type in accordance with TNB Specified Losses model ECRL

Type			ECRL 300/10	ECRL 500/10	ECRL 750/10	ECRL 1000/10
Rated Capacity		kVA	300	500	750	1000
HV/LV		kV	11/0.433	11/0.433	11/0.433	11/0.433
Tappings		%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%
Frequency		Hz	50	50	50	50
Vector group			Dyn11	Dyn11	Dyn11	Dyn11
Highest voltage of equipment of HV/LV		kV	12/1.1	12/1.1	12/1.1	12/1.1
Protection			IP20	IP20	IP20	IP20
Cooling			AN/AF	AN/AF	AN/AF	AN/AF
Insulation class			F	F	F	F
Max. temperature class		K	100	100	100	100
Impedance voltage		%	4.75	4.75	4.75	4.75
No Load Loss		W	400	800	1000	1200
Load Loss at 75°C		W	2600	3850	5650	6580
Load Loss at 120°C		W	2800	4100	6000	7000
Length approx		mm	1150	1300	1510	1590
Width approx		mm	820	860	1020	1020
Height approx		mm	960	1003	1050	1108
Weight approx		kg	1600	1800	3000	3400
Enclosure dimension (L)	IP20	mm	1900	1900	2100	2100
Enclosure dimension (W)	IP20	mm	1300	1300	1400	1400
Enclosure dimension (H)	IP20	mm	2200	2200	2200	2200
Sound level		dB	45	46	49	50
Efficiency at 100% load	PF 1.0	%	99.00	99.07	99.11	99.22
	PF 0.8	%	98.75	98.83	98.89	99.02
Regulation at 100% load	PF 1.0	%	0.90	0.80	0.80	0.70
	PF 0.8	%	about 3.60	about 3.50	about 3.50	about 3.50

### Technical Data

(Guarantee values based on tolerances acc. IEC)

#### Standard Loss Type Model ECRN

Type			ECRN 1600/10	ECRN 2000/10	ECRN 2500/10	ECRN 3150/10
Rated Capacity		kVA	1600	2000	2500	3150
HV/LV		kV	11/0.433	11/0.433	11/0.433	11/0.433
Tappings		%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%	± 2 x 2.5%
Frequency		Hz	50	50	50	50
Vector group			Dyn11	Dyn11	Dyn11	Dyn11
Highest voltage of equipment of HV/LV		kV	12/1.1	12/1.1	12/1.1	12/1.1
Protection			IP20	IP20	IP20	IP20
Cooling			AN/AF	AN/AF	AN/AF	AN/AF
Insulation class			F	F	F	F
Max. temperature class		K	100	100	100	100
Impedance voltage		%	6	6	6	6
No Load Loss		W	2450	3050	3600	4500
Load Loss at 75°C		W	10240	12600	15000	21000
Length approx		mm	1675	1805	1945	2050
Width approx		mm	1270	1270	1270	1270
Height approx		mm	1660	1940	1985	2250
Weight approx		kg	4470	5855	7005	7625
Enclosure dimension (L)	IP20	mm	2300	2400	2600	2600
Enclosure dimension (W)	IP20	mm	1500	1500	1500	1500
Enclosure dimension (H)	IP20	mm	2200	2300	2500	2600
Sound level		dB	51	52	53	55
Efficiency at 100% load	PF 1.0	%	99.20	99.21	99.25	99.19
	PF 0.8	%	99.00	99.02	99.07	98.98
Regulation at 100% load	PF 1.0	%	0.65	0.65	0.60	0.70
	PF 0.8	%	about 4.20	about 4.10	about 4.10	about 4.20