



KNT

EMPOWERING THE FUTURE



WELCOME TO OUR COMPANY

KNT is a sovereign industrial platform born in Egypt to localize the most critical components of medium & high voltage infrastructure, making energy access more affordable, local industry more resilient, and Africa's power grid more self-sufficient.

We deliver high-quality, efficient, and intelligent electrical products through cutting-edge engineering, strategic global partnerships, and a deep-rooted commitment to innovation, safety, and environmental responsibility.

KNT supplies components under its own brand to switchgear panel builders in local and regional markets.

Our Initial focus will be on four main lines:

1. Current Transformers & Voltage Transformers
2. Medium Voltage Vacuum Circuit Breakers
3. SF₆ Gas Insulated Ring Main Unit (GIS RMU)
4. Switchgear AMS Metal Clad Switchgear

Reliable, high quality technology that can compete with European and Western brands.

- Local product manufacturing has a significant impact on reducing lead time, lowering costs, increasing availability, and providing more flexible after sales support.

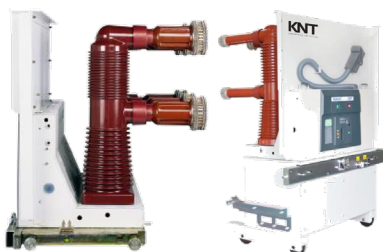
INTRODUCTION

Products

● Vacuum Circuit Breaker VEP

Main parameters

- 12kV/24kV/ 40.5kV
- 25 – 31.5 - 50kA

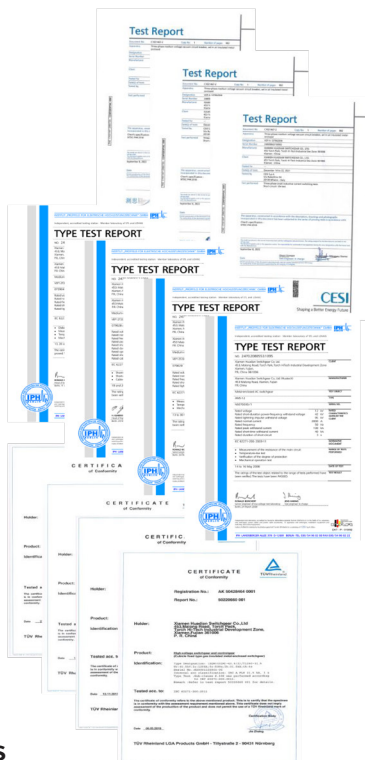


Parameter	3.6kV / 7.2kV / 12kV / 17.5kV	24kV
Rated Current (A)	1250 -1600 -2000 - 2500 -3150 - 4000A	1250 - 1600 - 2000 - 2500 - 3150*
Rated Short Circuit Breaking Current (kA)	25 - 31.5 - 40 - 50	25- 31.5,40
Rated Short Time Withstand Current (kA/s)	25/ 3- 31.5/3 - 40/3 - 50/3	25/3 - 31.5/3
Rated Short Circuit Making Current (kA, Peak)	63 - 80 - 100 - 125	63 - 80 - 100
Rated Capacitor Bank Breaking Current (A)	630 (Single Capacitor Bank) / 400 (Back to Back Capacitor Banks) Class C2	
Electrical endurance (No. of Times)	E2	
Mechanical Endurance (No. of Cycles)	10,000 Class M2	10,000 Class M2
Power Frequency Withstand Voltage (kV, 1min)	28	50
Rated Lightning Impulse Withstand Voltage (kV)	75	125
Rated operating voltage (V)	AC110/220-DC110/220, DC48V, DC24V	
Rated Operating Sequence	O -0.3s -CO -180s -CO / O -15s -CO -180s -CO	
Opening time (ms)	25-50	25-50
Closingtime (ms)	35-50	40-50

● Certificates

► Type Test

► Marine application certificate



► High altitude application tests



● Switchgear AMS Metal Clad Switchgear

Main Parameters

- 12kV / 24kV / 40.5kV - 1250A to 4000A
- 25kA to 50kA3s
- AFLR 1s



Description/Rate Voltage	3.6kV/7.2kV/12kV	24kV	40.5kV
Rated Current (A)	1250 -1600 -2000 - 2500 -3150 - 4000*	1250 - 1600 - 2000 - 2500 - 3150*	1250 - 1600 - 2000 - 2500 - 3150*
Rated Short Circuit Breaking Current (kA)	25 - 31.5 - 40 - 50	25 - 31.5 - 40	25 - 31.5
Rated Short Time Withstand Current (kA/s)	25 - 31.5 - 40 - 50	25 - 31.5 - 40	25 - 31.5
Rated short circuit time (s)	3	3	3
Rated peak withstand current (Peak,kA)	63 - 80 - 125 - 130	63 - 80 - 100	63 - 80
Rated short circuit making current (kA)	63 - 80 - 100 - 125	63 - 80 - 100	63 - 80
1min power frequency withstand voltage (kV)	28	50	95/118
Impulse withstand voltage (kV)	75	125	185/215
Mechanical endurance (cycle) VCB	Circuit breaker: 10,000	Circuit breaker: 10,000	Circuit breaker: 10,000
Mechanical endurance (cycle) ESW	Earth switch: 2,000	Earth switch: 2,000	Earth switch: 2,000
IP classification	Switchgear: IP4X	Switchgear: IP4X	Switchgear: IP4X
Size (High*Width*Depth, mm)	2250*800*1400 (1250 / 1600 A or 2000 A)	2250*1000*1680 (≥1600A)	2400*1200*2500
	2250*1000*1400 (≥2500A)		

AMS Metal Clad Switchgear



AMS-12



AMS-24



AMS-40.5

Safety-Fully Type Tested



IPHCESI



ASTA



TUV



XIHARI

EEHC Certificate



● SF₆ GIS RMU Enerswit+12&24kV

Key Parameters

- 12kV& 24kV
- 20kA& 25kA
- AFLR 20kA 1s

Stainless gas tank (2mm)

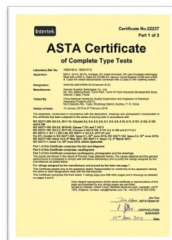
- Safety Interlock
- High dielectric performance
- Partial Discharge performance: ≤20pc



High Reliability-High Parameters

Rated Voltage kV	12	24
Rated Current A	630	630
Rated Power Frequency Withstand Voltage kV	28 / 32	50 / 60
Rated Lighting Impulse Withstand Voltage kV	75/85	125/145
Rated Short-time Withstand Current kA	25	20
Internal Arc Levelk A/s	20/1 - 25/1	20/1
Rated Short Circuit Breaking Current kA	20 - 25	20
VCB Mechanical Life (On/Off) times	10,000	10,000
IP Degree Gas tank/cabinet	IP68/IP4X	IP68/IP4X
Overall Dimensions W x D x H mm	360x755x1525	360x755x1525
Partial Discharge	≤20pc	≤20pc

Type Test & EEHC Certificates



● Current & Potential Transformers CT & VT

Indoor Current Transformers up to 36kV

Medium Voltage Indoor Current Transformers are cast in epoxy resin and designed for insulation up to 36kV.

Features

Comprehensive range of indoor current transformers for metering, protection and special protection:

Compliance with IEC 61869-1&2 standard

Rated Current rating from 5 to 2500A

Reference voltage for isolation up to 36kV

Optimized design and performances

Standard shape

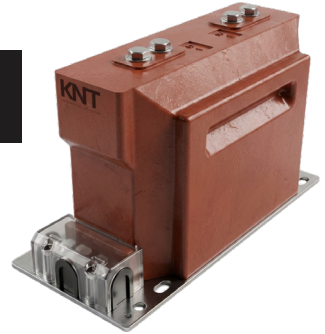
Optimized dimensions

Suitable for use in all types of MV cubicles and in harsh environments:

Metal clad units

Metal enclosed units

Environments with potentially explosive atmosphere



Technical Description:

Rated Voltage: 3.6 kV to 36 kV

Basic Insulation Level: As per relevant standard

Insulation: Class E

Rated Frequency: 50/60 Hz

Rated Continuous Thermal Current: 150 % x I_{pn}

Rated Primary Current (I_{pn}): Up to 2500 A

Basic Secondary Current (I_{sn}): 5A, 1A.

Class of Accuracy: 0.2S, 0.5S, 0.5, 1.0, 5P10, 5P20, PS

Rated Burden: Up to 30 VA

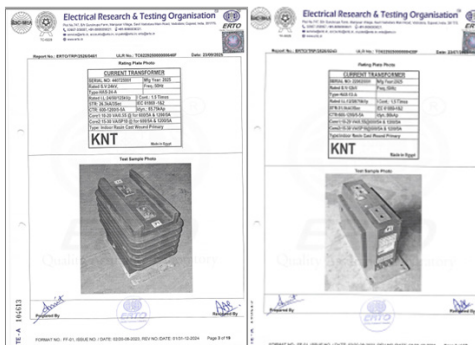
Rated Short Time Current: Up to 40 kA / 3 second

Specifications for MV current transformers

Parameter	12 KV Specification	17.5 KV Specification	24 KV Specification
Rated System Voltage (Ur)	12 kV	17.5	24 kV
Insulation Level	12/28/75kV	17.5/38/95kV	24/50/125 kV
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Primary Current (Ip)	50 A up to 2500 A (*)	50 A up to 2500 A (*)	50 A up to 2500 A (*)
Secondary Current (Is)	1or 5A	1or 5A	1or 5A
No. of secondary circuits	1 or 2 or 3 circuits	1 or 2 or 3 circuits	1 or 2 or 3 circuits
Accuracy Classes secondary (1)	0.2S - 0.5 - 0.5S	0.2S - 0.5 - 0.5S	0.2S - 0.5 - 0.5S
Accuracy Classes secondary (2)	5P10 - 5P20	5P10 - 5P20	5P10 - 5P20
Rated Burden secondary (1)	10 - 15 VA	10 - 15 VA	10 - 15 VA
Rated Burden secondary (2)	20 - 30 VA	20 - 30 VA	20 - 30 VA
Short-Time Thermal Current	31,5 kA/3 s		25 kA/3 s

Model Type	Dimension in mm		
	Width	Height	Length
HAS - 12 - A	147	285	212
HAS - 24 - A	208	350	310

CT Typetest & EEHC Certificates



● Current & Potential Transformers CT & VT

Indoor Voltage Transformers up to 36kV

Medium Voltage Indoor Voltage Transformers are cast in epoxy resin and designed for insulation up to 36kV.

Features

Comprehensive range of indoor voltage transformers for metering and special protection:

Compliance with IEC 61869-1&3 standard
Phase to Earth and Phase to Phase Connection
Reference voltage for isolation up to 36kV

Optimized design and performances

Standard shape
Optimized dimensions and weight

Suitable for use in all type of MV cubicle and in harsh environments:

Metal clad units
Metal enclosed units



Technical Description:

Rated Voltage: 3.6 kV to 36 kV
Basic Insulation Level: As per relevant standard
Insulation: Class E
Rated Frequency: 50/60 Hz
Rated Primary Voltage: Up to 36 kV / RT3
Rated Secondary Voltage: 110 V / RT3
Class of Accuracy: 0.2, 0.5, 1.0, 3P, 6P
Rated Burden: Up to 200 VA
Over Voltage Factor: 1.2 continuous & 1.9 for 8 hrs.

Rated primary voltage	$11000/\sqrt{3} - 22000/\sqrt{3}$
Rated Insulation level	12/28/75 - 24/50/125 Kv
Rated secondary voltage winding 1	$110/\sqrt{3}$
Rated secondary voltage winding 2	110/3
Rated short time withstand voltage for secondary winding	3 Kv – 1 min
Rated burden winding 1	100 VA
Rated burden winding 2	100 VA
Accuracy class winding 1	0.5
Accuracy class winding 1	3P
Rated frequency	50/60 HZ
Creepage distance	$\geq 2 \text{ Cm/Kv}$
Minimum ambient temperature	-5°C
Maximum ambient temperature	45°C (50°C as option)
Maximum relative humidity	95 %
Maximum altitude	1000 mt

Model Type	Dimension in mm		
	Width	Height	Length
HVS - 12 - A	148	355	220
HVS - 24 - A	355	178	320

The figure consists of two side-by-side photographs of electrical test setups. Both setups include a power supply, a transformer, and a voltmeter. The left setup is labeled 'Voltage Transformer' and 'KNT'. The right setup is also labeled 'Voltage Transformer' and 'KNT'. Both setups show a transformer with a 100V input and a voltmeter connected to the secondary winding. The left setup includes a power supply and a transformer, while the right setup includes a power supply and a transformer. The left setup is labeled 'Voltage Transformer' and 'KNT'. The right setup is also labeled 'Voltage Transformer' and 'KNT'. Both setups show a transformer with a 100V input and a voltmeter connected to the secondary winding.





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