



www.ssangyonge.com
www.ssangyonge.co.kr

SSANGYONG ELECTRIC TRANSFORMERS

Product Catalog



SSANGYONG Electric Co.,Ltd.

Head Office & 1st Factory (Gimpo)

106, Hwanggeum 1-ro, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea TEL : +82-31-981-4520 FAX : +82-31-981-4523

2nd Factory (Naju)

19, Hyeoksinsandan 6-gil, Wanggok-myeon, Naju-si, Jeollanam-do, Korea TEL : +82-61-410-4520 FAX : +82-61-410-4521

Homepage : www.ssangyonge.com / www.ssangyonge.co.kr

Printed in Jul. 2019

 SSANGYONG Electric Co.,Ltd.

SSANGYONG ELECTRIC

I Greetings

Ssangyong Electric was established in 1987 for manufacturing transformers, reactors, switch gears and other electric machinery awarded by Secretary of Commerce in 2000 and President's Award for Quality management in 2002. Also in 2010 collected ISO standards and finished new factory construction (floor space 9,983㎡) in Gimpo city. And 2nd factory in Naju in 2019. Ssangyong is trying to become one of the world best manufacturer and to be specialized in export.

K.Y.Yoon, CEO/President

K. Y. YOON

I History of Company

- Sep. 1987 Established SsangYong Electric Co., Ltd.
- Jul. 1988 Export Transformer to France (Ceorit Co., Ltd)
- Apr. 1989 Export Dry type Transformer to Chile
- Jan. 1990 Acquired a license of the Korean Industrial Standard
KSC4804 Discharge coils for H/V Power Capacitors
KSC4806 Series reactors for H/V Power Capacitors
- Apr. 1994 Acquired a license of the Korean Industrial Standard
KSC4306 single bushing pole type Transformers
- May 1997 Acquired KSA / ISO 9001 Quality Certification
- Nov. 2002 Presidential Award for Quality Management (CEO)
- Oct. 2003 Tab switching device patent acquired
- Dec. 2004 Frame structure of the transformer pole transformer device Patent Registration (Registration of - 0370398)
- Dec. 2005 Quality Environmental Management System ISO 9001 / ISO 14001 acquired
- Jan. 2006 Selected as a family company of Industrial Bank
- Sep. 2006 Patent for transformer pole frame
- Oct. 2009 Innovative small and medium enterprises(INNO BIZ) confirmed
- Jul. 2010 New Factory in Gimpo
- May 2011 Eco-friendly products (green smart) development
- Sep. 2013 Auto Transformer development (for Korea Railroad Corporation High Speed Train)
- Oct. 2014 Selected as a "Clean Environment Company" by the Korea Occupational Safety and Health Agency
- May 2015 Epoxy insulated Switch Gear Development (3 circuits, 4 circuits/ Manual, Automatic)
- Jun. 2015 Eco Switch Gear Development (SF6 Free)
- Dec. 2016 Start Export transformer to the Philippines
- Mar. 2019 Registered as an exporting promising company
- Apr. 2019 Second factory Built In Naju Energy valley

**We will do our best to keep
our good reputation for product
development.**

**The world best customer service
and quality control.**



I Contents

| | |
|--|----|
| Power Transformer | 04 |
| Oil Transformer | 06 |
| Pole Mounted Transformer | 08 |
| Pad Mounted Transformer (Compact Type) | 10 |
| AT Transformer | 12 |
| Dry Type Transformer | 14 |
| Series Reactors for High Voltage Power Capacitors | 15 |
| Discharge Coils for High Voltage Power Capacitors | 15 |
| Various Testing Equipments | 17 |
| Patent & Certificates | 18 |



SSANGYONG Electric
International Standards Transformer



Power Transformer

Power transformers are widely used in substations and factory industrial facilities that transmit electricity generated from power plants. Ssangyong Electric provides the highest performance and reliability with the highest quality transformer.

파워 변압기는 발전소에서 만들어진 전기를 송전하는 설비로서 변전소나 공장 산업시설 등에서 널리 이용됩니다. 쌍용전기는 최상 품질의 변압기로 최고의 성능과 신뢰를 제공합니다.

Applications

- Public works and utilities
- Transportation
- Special industries
- Power generation

Ratings

- Phase : 1Ø, 3Ø
- Frequency : 50Hz, 60Hz
- High Voltage : 66KV~11KV
- Low Voltage : 3.3KV, 6.6KV, 22.9KV etc
- Capacity : 1,000 ~ 50,000kVA

Applicable Standards

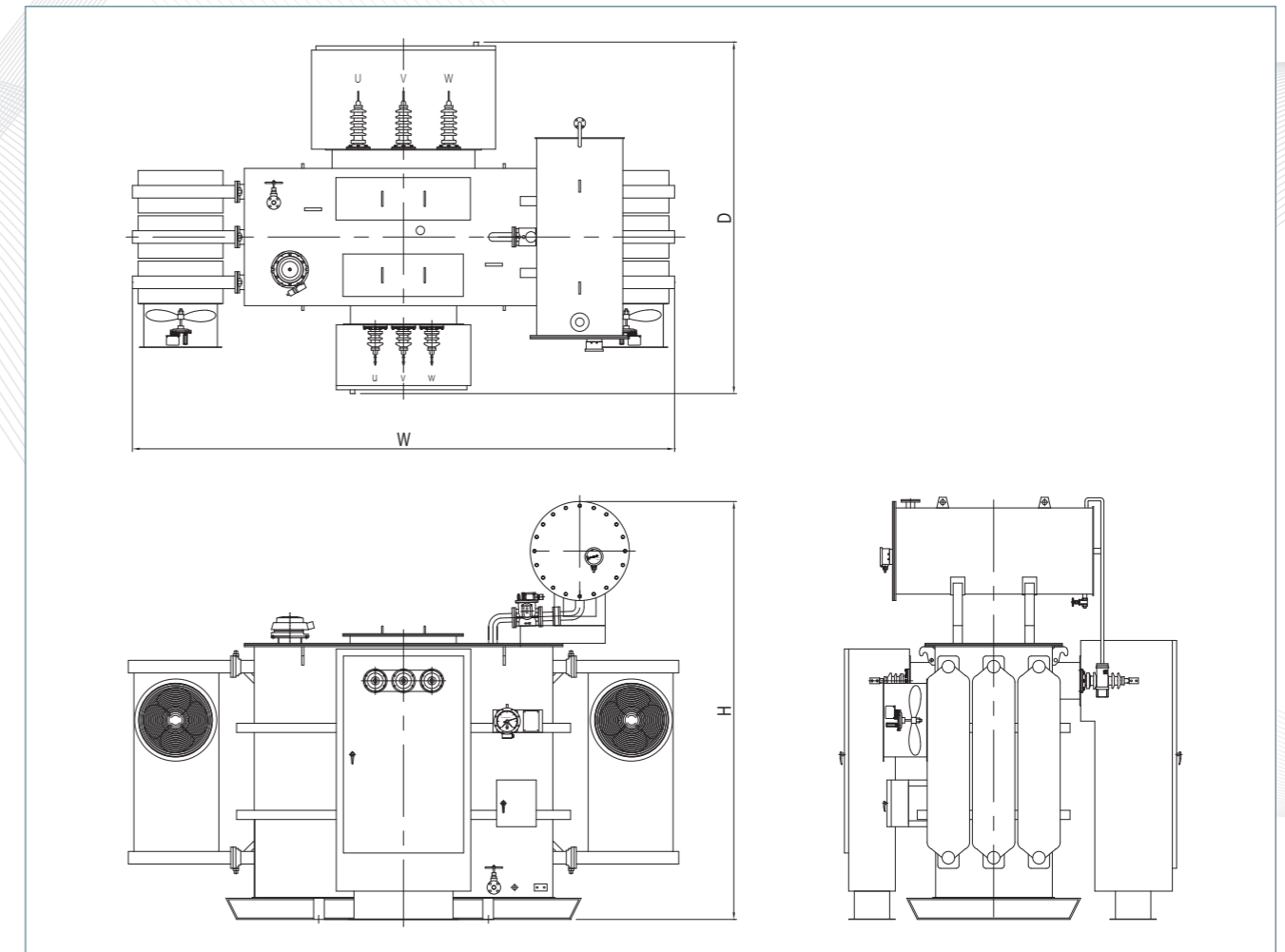
- IEC, IEEE, KS, ANSI



Power Transformer 22.9kV- 6600 or 3300V

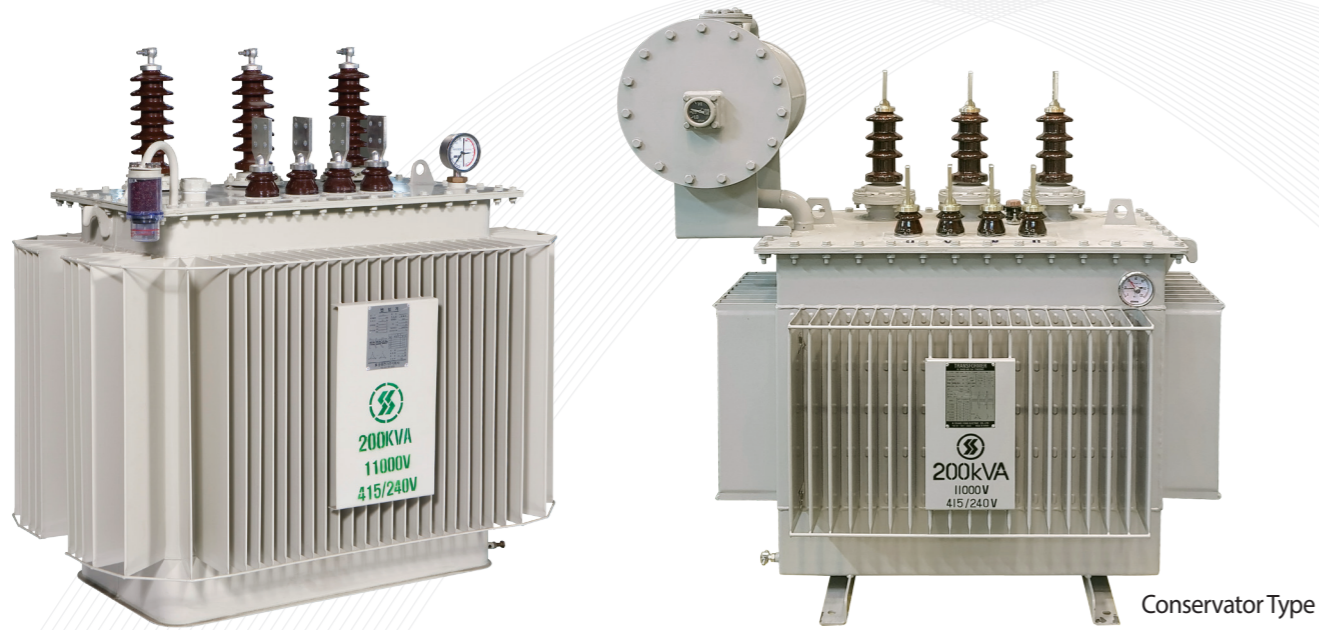
| Capacity(kVA) 3Ø | Efficiency (%) | Dimension (mm) | | | Weight (kg) |
|---------------------|----------------|----------------|------|------|-------------|
| | | W | D | H | |
| 2000 | 98.7 | 2300 | 2050 | 2400 | 5500 |
| 3000 | 98.9 | 2650 | 2400 | 2600 | 6800 |
| 5000 | 99.0 | 2900 | 2650 | 3000 | 9500 |
| 7500 | 99.1 | 3500 | 3350 | 3200 | 14000 |
| 10000 | 99.2 | 3700 | 3500 | 3500 | 17000 |
| 15000 | 99.3 | 3850 | 3800 | 4000 | 25000 |
| 20000 | 99.3 | 4000 | 4100 | 4200 | 35000 |
| 30000 | 99.4 | 4700 | 4350 | 4600 | 48000 |
| 40000 | 99.4 | 4750 | 4600 | 4700 | 55000 |
| 50000 | 99.4 | 4900 | 4700 | 4900 | 61000 |

Dimension





Oil Transformer



Conservator Type

Distribution transformers are to supply the high voltage of the distribution line with the necessary voltage for the customer. Ssangyong Electric is supplying the best transformer to our customers through continuous quality control and R & D.

배전용 변압기는 배전 선로의 고압을 수용가에 필요한 전압으로 바꿔서 공급하는 역할을 합니다. 쌍용전기는 지속적인 품질관리와 연구 개발을 통하여 고객에게 최고의 변압기를 공급하고 있습니다.

Ratings

- Phase : 1Ø, 3Ø
- Frequency : 50Hz, 60Hz
- High Voltage : 3.3KV~22.9KV
- Low Voltage : 0.22KV, 0.38V etc
- Connection : Δ-Δ, Δ-y, y-Δ etc
- Capacity : 50 ~ 3,000kVA
- Standard IEC, ANSI, NEMA, JEC

Oil Transformer Voltage : 22900V-380/220V

| Capacity(kVA)3Ø | Efficiency (%) | Dimension (mm) | | | Weight(kg) |
|-----------------|----------------|----------------|------|------|------------|
| | | W | D | H | |
| 100 | 99.00 or more | 1200 | 750 | 1350 | 750 |
| 150 | 99.05 or more | 1200 | 810 | 1350 | 880 |
| 200 | 99.10 or more | 1250 | 950 | 1400 | 1100 |
| 300 | 99.20 or more | 1250 | 1120 | 1470 | 1550 |
| 400 | 99.25 or more | 1320 | 1200 | 1550 | 1700 |
| 500 | 99.25 or more | 1400 | 1300 | 1600 | 1900 |
| 600 | 99.30 or more | 1400 | 1450 | 1750 | 2300 |
| 750 | 99.30 or more | 1470 | 1560 | 1820 | 2500 |
| 1000 | 99.35 or more | 1550 | 1600 | 1900 | 2700 |
| 1250 | 99.40 or more | 1600 | 1750 | 1980 | 3700 |
| 1500 | 99.45 or more | 1650 | 1800 | 2050 | 4500 |
| 2000 | 99.45 or more | 1900 | 2270 | 2200 | 5000 |
| 2500 | 99.50 or more | 2000 | 2300 | 2400 | 5800 |
| 3000 | 99.50 or more | 2100 | 2400 | 2500 | 6500 |

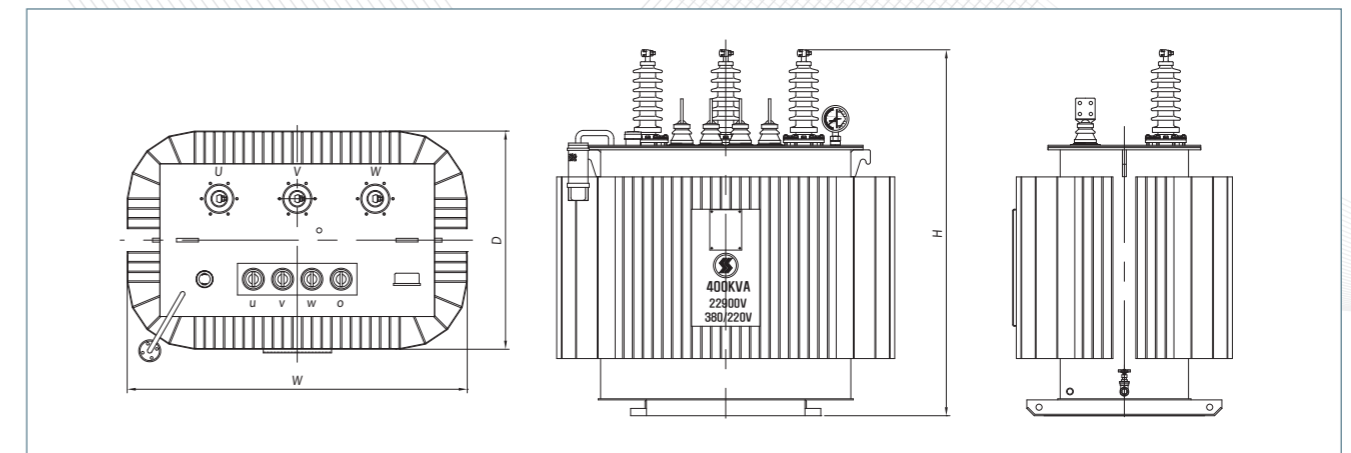
Oil Transformer Voltage : 22900V-6600/3300V

| Capacity(kVA)3Ø | Efficiency (%) | Dimension (mm) | | | Weight(kg) |
|-----------------|----------------|----------------|------|------|------------|
| | | W | D | H | |
| 100 | 99.00 or more | 1150 | 830 | 1300 | 700 |
| 150 | 99.05 or more | 1200 | 850 | 1350 | 1300 |
| 200 | 99.10 or more | 1280 | 980 | 1400 | 1380 |
| 300 | 99.20 or more | 1350 | 1100 | 1370 | 1430 |
| 400 | 99.25 or more | 1420 | 1150 | 1450 | 1570 |
| 500 | 99.25 or more | 1420 | 1200 | 1500 | 1980 |
| 600 | 99.30 or more | 1500 | 1270 | 1530 | 2200 |
| 750 | 99.30 or more | 1530 | 1370 | 1550 | 2700 |
| 1000 | 99.35 or more | 1600 | 1450 | 1600 | 3100 |
| 1250 | 99.40 or more | 1680 | 1550 | 1700 | 3500 |
| 1500 | 99.45 or more | 1700 | 1680 | 1800 | 4200 |
| 2000 | 99.45 or more | 1800 | 1850 | 1950 | 5000 |
| 2500 | 99.50 or more | 1950 | 2000 | 2100 | 5500 |
| 3000 | 99.50 or more | 2100 | 2200 | 2300 | 6000 |

Oil Transformer Voltage : 6600/3300V-380/220V

| Capacity(kVA)3Ø | Efficiency (%) | Dimension (mm) | | | Weight(kg) |
|-----------------|----------------|----------------|------|------|------------|
| | | W | D | H | |
| 100 | 99.00 or more | 950 | 900 | 1100 | 700 |
| 150 | 99.05 or more | 1050 | 950 | 1150 | 900 |
| 200 | 99.10 or more | 1180 | 1050 | 1230 | 1050 |
| 300 | 99.20 or more | 1250 | 1180 | 1300 | 1220 |
| 400 | 99.25 or more | 1380 | 1200 | 1400 | 1500 |
| 500 | 99.25 or more | 1400 | 1250 | 1470 | 1750 |
| 600 | 99.30 or more | 1510 | 1300 | 1500 | 2100 |
| 750 | 99.30 or more | 1550 | 1320 | 1500 | 2200 |
| 1000 | 99.35 or more | 1580 | 1420 | 1530 | 2900 |
| 1250 | 99.40 or more | 1600 | 1550 | 1600 | 3700 |
| 1500 | 99.45 or more | 1650 | 1610 | 1650 | 4050 |
| 2000 | 99.45 or more | 1950 | 1810 | 1830 | 5500 |
| 2500 | 99.50 or more | 2100 | 1850 | 2000 | 6300 |
| 3000 | 99.50 or more | 2500 | 2300 | 2250 | 6800 |

Dimension





Pole Mounted Transformer



Pole mounted transformer is a transformer installed on a pole to lower high voltage to low voltage. High temperature rise limit design eliminates the need for radiators and also enables a salt-resistance transformer using polymer bushing for salt areas. When amorphous metal is used as an iron core material, no-load loss is 1/3 compared to silicon steel, and excellent economic efficiency can be secured in light load areas and load fluctuation areas.

주상변압기는 전주위에 설치하는 변압기로 고압을 저압으로 낮춰주기 위한 변압기입니다. 높은 온도상승 한도 설계로 방열기가 필요없고 염해 지역을 위한 폴리머 부싱을 사용한 내염형 변압기도 가능합니다. 철심소재로 아몰퍼스 메탈을 사용할 경우 무부하 손실이 규소강판 대비 1/3 수준으로 경부하 지역 및 부하 변동폭이 큰 지역에서 우수한 경제성 확보할 수 있습니다.

Ratings

- Phase : 1Ø
- Frequency : 50Hz, 60Hz
- High Voltage : 6.6kV, 11.4kV, 13.2kV, 22.9kV, 34.5kV
- Capacity : 10~500kVA
- Winding : Copper or Aluminum
- Standard IEC, ANSI, NEMA, JEC
- Core : Silicon Steel or Amorphous
- Standard IEC, ANSI, NEMA, JEC

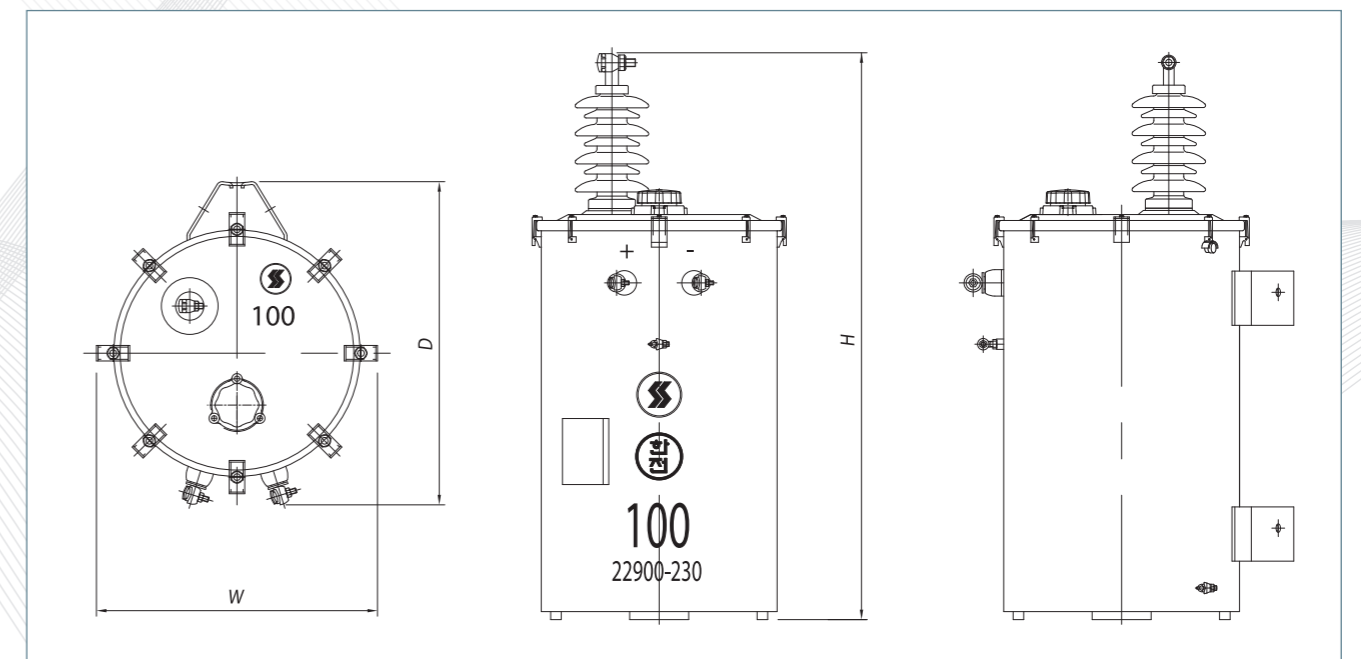
High Efficiency Pole Transformer & Salt-Resistance Transformer Voltage : 13200V-230V

| Capacity (kVA) 1Ø | Efficiency (%) (50%Load) | Efficiency (%) (100%Load) | Voltage Regulation (%) | No load current (%) | No load loss (W) | Load Loss (%) | Dimension (mm) | | | Weight (kg) |
|-------------------|--------------------------|---------------------------|------------------------|---------------------|------------------|---------------|----------------|-----|------|-------------|
| | | | | | | | W | D | H | |
| 20 | 98.95 or more | 98.61 or more | 1.7 or less | 1.0 or less | 48 or less | 232 or less | 470 | 600 | 1120 | 250 |
| 30 | 99.05 or more | 98.71 or more | 1.5 or less | 1.0 or less | 62 or less | 327 or less | 480 | 610 | 1160 | 277 |
| 50 | 99.15 or more | 98.83 or more | 1.4 or less | 0.8 or less | 89 or less | 501 or less | 520 | 660 | 1210 | 358 |
| 75 | 99.20 or more | 98.92 or more | 1.4 or less | 0.8 or less | 132 or less | 681 or less | 560 | 720 | 1240 | 420 |
| 100 | 99.25 or more | 98.99 or more | 1.3 or less | 0.7 or less | 165 or less | 851 or less | 570 | 730 | 1240 | 470 |
| 167 | 99.15 or more | 98.68 or more | 1.3 or less | 0.7 or less | 215 or less | 2003 or less | 820 | 760 | 1260 | 510 |

High Efficiency Amorphous Transformer Voltage : 13200V-230V

| Capacity (kVA) 1Ø | Efficiency (%) (50%Load) | Efficiency (%) (100%Load) | Voltage Regulation (%) | No load current (%) | No load loss (W) | Load Loss (%) | Dimension (mm) | | | Weight (kg) |
|-------------------|--------------------------|---------------------------|------------------------|---------------------|------------------|---------------|----------------|-----|------|-------------|
| | | | | | | | W | D | H | |
| 10 | 98.76 or more | 97.90 or more | 2.0 or less | 1.2 or less | 12 or less | 202 or less | 460 | 580 | 1090 | 155 |
| 20 | 98.95 or more | 98.20 or more | 1.7 or less | 1.2 or less | 19 or less | 347 or less | 500 | 610 | 1110 | 195 |
| 30 | 99.07 or more | 98.40 or more | 1.5 or less | 1.0 or less | 25 or less | 462 or less | 600 | 680 | 1140 | 250 |
| 50 | 99.19 or more | 98.60 or more | 1.4 or less | 0.8 or less | 35 or less | 674 or less | 660 | 750 | 1150 | 350 |
| 75 | 99.20 or more | 98.60 or more | 1.4 or less | 0.8 or less | 48 or less | 1016 or less | 800 | 750 | 1200 | 420 |
| 100 | 99.26 or more | 98.70 or more | 1.3 or less | 0.7 or less | 58 or less | 1259 or less | 820 | 760 | 1250 | 480 |

Dimension





Pad Mounted Transformer (Compact Type)



Our pad mounted transformer is suitable for use in the city area and cultural assets, which is reduced by 15 ~ 30% in size compared to existing pad transformer. It is safe because there is no external exposure of cable and live part. It can protect transformer or line in case of internal or external accidents of transformer. Transformer with built-in fuse for circuit breaker Transformer suitable for refinement of urban environment It is installed in underground power distribution system which grounded processing line is protected. It has built-in protection device inside of transformer, It is a transformer that does not require a power transformer and has excellent safety and compatibility with the surrounding environment.

우리의 지상변압기는 기존 지상변압기 대비 크기 15~30% 축소 배전되는 시가지 및 문화재 주변 등에 사용하기 적합한 구조로써 케이블 및 충전부의 외부 노출이 없어 안전하며 변압기의 내·외부 사고 시 변압기 또는 선로를 보호할 수 있도록 회로 차단을 위한 퓨즈가 내장된 변압기 도시환경의 미려화에 적합한 변압기로서 가공배전선로를 지중화한 지중 배전 계통에 설치되며 변압기 내부에 보호 장치가 내장되어 있고 외부전원 연결 부분이 완전 절연되어 있어 별도로 변전설비가 필요 없으며 안전성과 주위 환경과의 친화성이 매우 탁월한 변압기입니다.

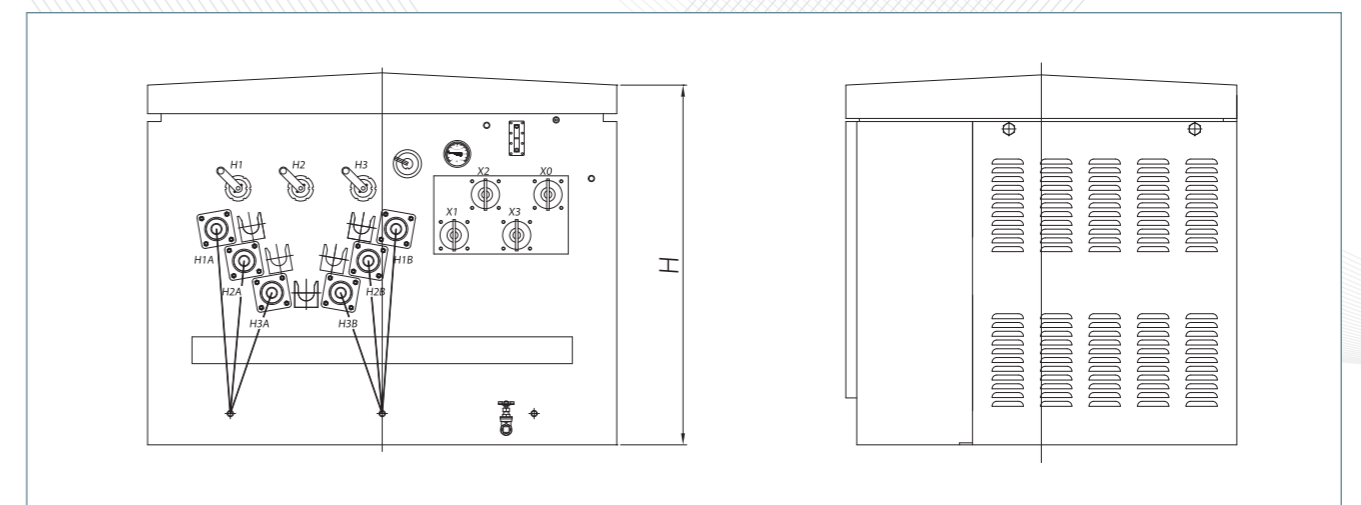
Ratings

- Phase : 1Ø or 3Ø
- Frequency : 50Hz, 60Hz
- High Voltage : Max 34.5kV
- Capacity : Max 2500kVA
- Winding : Copper or Aluminum
- Standard IEC, ANSI, NEMA, JEC

Pad Mounted Transformer (Compact Type) Voltage : 22900V-400/230V

| Capacity(kVA) | Efficiency (%) (50%Load) | Efficiency (%) (100%Load) | Voltage Regulation (%) | No load current (%) | No load loss (W) | Dimension (mm) | | | Weight (kg) |
|---------------|--------------------------|---------------------------|------------------------|---------------------|------------------|----------------|------|------|-------------|
| | | | | | | W | D | H | |
| 75 | 98.80 or more | 98.60 or more | 1.4 or less | 0.8 or less | 105 or less | 1500 | 1000 | 1150 | 1250 |
| 150 | 99.00 or more | 98.90 or more | 1.3 or less | 0.7 or less | 107 or less | 1500 | 1000 | 1150 | 1450 |
| 300 | 99.10 or more | 98.90 or more | 1.3 or less | 0.7 or less | 107 or less | 1500 | 1100 | 1150 | 1900 |
| 500 | 99.10 or more | 98.90 or more | 1.3 or less | 0.7 or less | 107 or less | 1500 | 1250 | 1150 | 2300 |

Dimension



Pad Mounted Transformer (Compact Type) Voltage : 13200V-230V

| Capacity(kVA) | Efficiency (%) (50%Load) | Efficiency (%) (100%Load) | Voltage Regulation (%) | No load current (%) | No load loss (W) | Dimension (mm) | | | Weight (kg) |
|---------------|--------------------------|---------------------------|------------------------|---------------------|------------------|----------------|------|------|-------------|
| | | | | | | W | D | H | |
| 50 | 99.00 or more | 98.60 or more | 1.4 or less | 0.8 or less | 105 or less | 1000 | 1000 | 950 | 630 |
| 100 | 99.20 or more | 98.90 or more | 1.3 or less | 0.7 or less | 107 or less | 1000 | 1000 | 950 | 950 |
| 200 | 99.20 or more | 98.90 or more | 1.5 or less | 0.6 or less | 300 or less | 1000 | 1400 | 1050 | 1500 |



AT Transformer



The autotransformer is installed between the feeder line and the electric line in the AC AT feeding system. It connects two windings wound in the same iron core in series and draws the center point terminal to supply electric power to the electric line while maintaining the voltage between the electric line, rail, rail and feeder line.

단권변압기는 교류 AT급전방식에서 급전선과 전차선 사이에 설치하며, 동일철심에 감은 2개의 권선을 직렬로 접속하고 중심점 단자를 인출하여 전차선과 레일, 레일과 급전선간의 전압이 유지되면서 전철에 전력을 공급할 수 있는 변압기입니다.

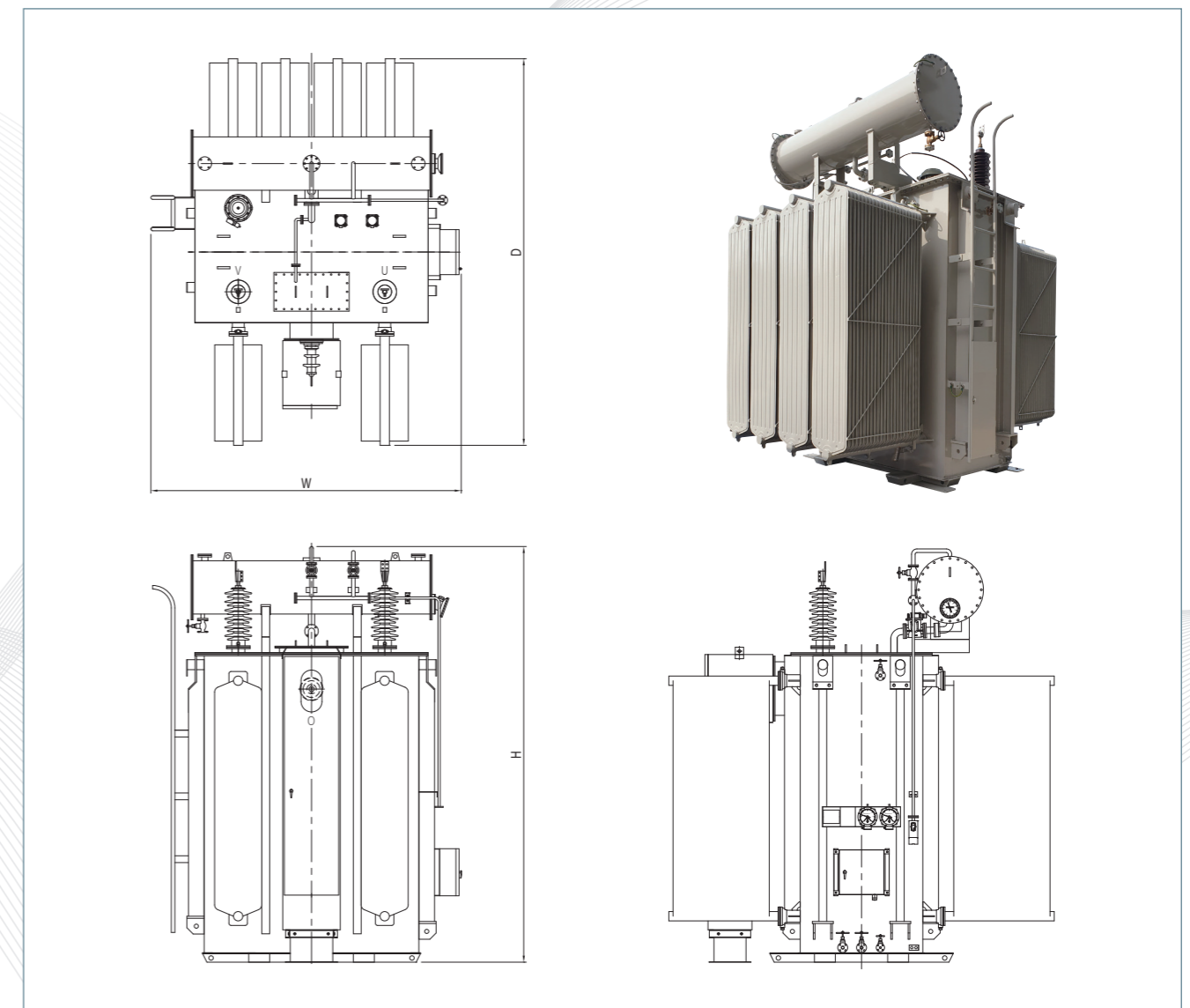
Ratings

- Phase : 1Ø
- Frequency : 50Hz, 60Hz
- High Voltage : Max 55kV
- Capacity : Max 15,000kVA
- Winding : Copper
- Standard IEC, ANSI, NEMA, JEC

Auto Transformer 55kV-27.5kV

| Capacity(kVA) | Dimension(mm) | Bushing Interval(mm) | Weight(kg) | Efficiency(%) |
|---------------|----------------------------|----------------------|------------|----------------|
| 5000 | W 2700 D 3250 H 3750 | 1100 | 12000 | 99% or more |
| 7500 | W 2690 D 3550 H 3750 | 1200 | 14500 | |
| 10000 | W 3000 D 3700 H 3900 | 1200 | 18000 | |
| 15000 | W 3150 D 4300 H 3950 | 1400 | 23000 | |

Dimension





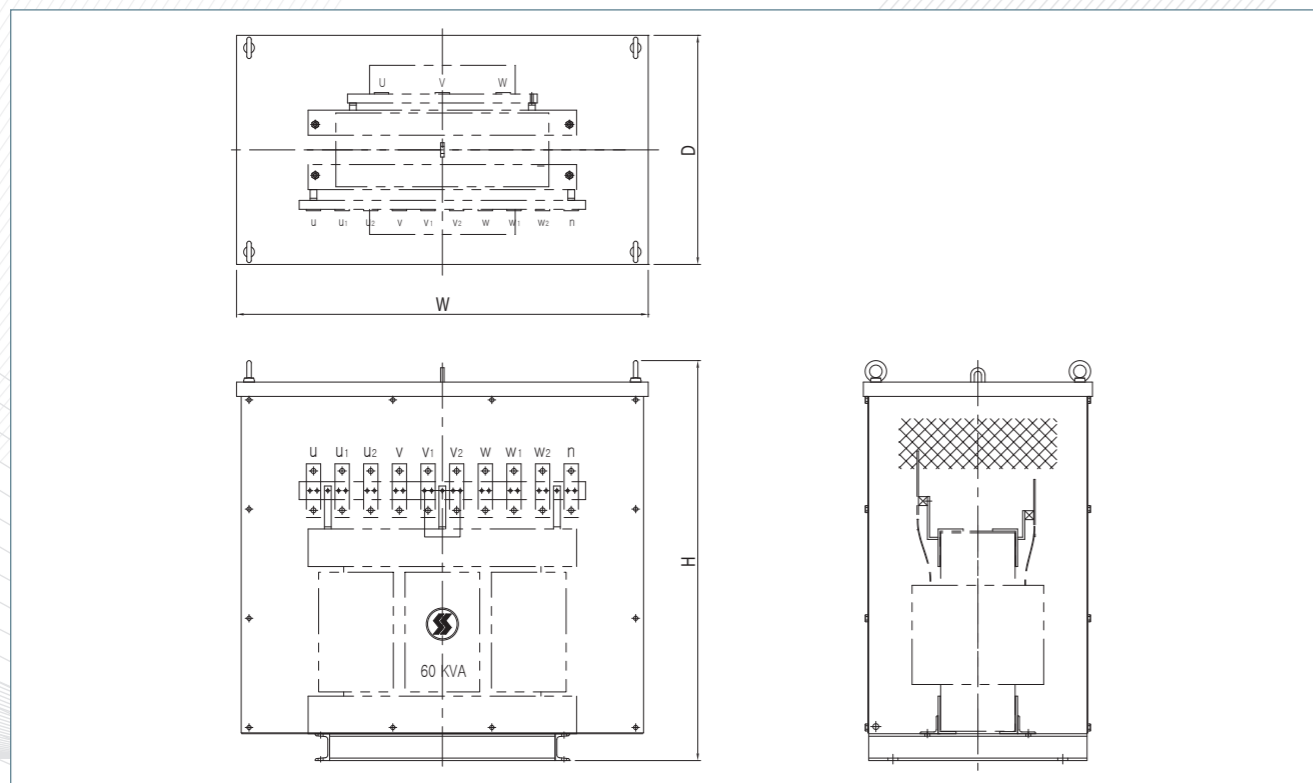
Dry Type Transformer



Ratings

- Phase : 1Ø, 3Ø
- Frequency : 50Hz, 60Hz
- High Voltage : Up to 7.2kV
- Low Voltage : 208 / 120V, 380 / 220V etc
- Vector : Ddo, Dyn11 etc
- Capacity : Up to 3,000kVA
- Winding : Copper or Aluminum

Dimension



Series Reactors for High Voltage Power Capacitors



Ratings

- Phase : 1Ø, 3Ø
- Frequency : 50Hz, 60Hz
- Circuit voltage : 3.3kV~77kV
- Reactor capacity : * 1Ø : 10~150kVA
* 3Ø : 3~3,000kVA
- Capacity : 1,000~50,000kVA

Discharge Coils for High Voltage Power Capacitors



Ratings

- Phase : 1Ø, 3Ø
- Frequency : 50Hz, 60Hz
- A primary voltage (Line Voltage) : * 1Ø : 10~150kVA
* 3Ø : 3kVA~1.800kVA
- 2nd Voltage : 110V ~ 220V
- High Voltage : 6.6kV, 11.4kV, 13.2kV, 22.9kV



Clean and Tidy Environment
We pursue the best quality with thorough production management.

깨끗하고 정돈된 내부.
철저한 생산관리로 최고의 품질을 추구합니다.

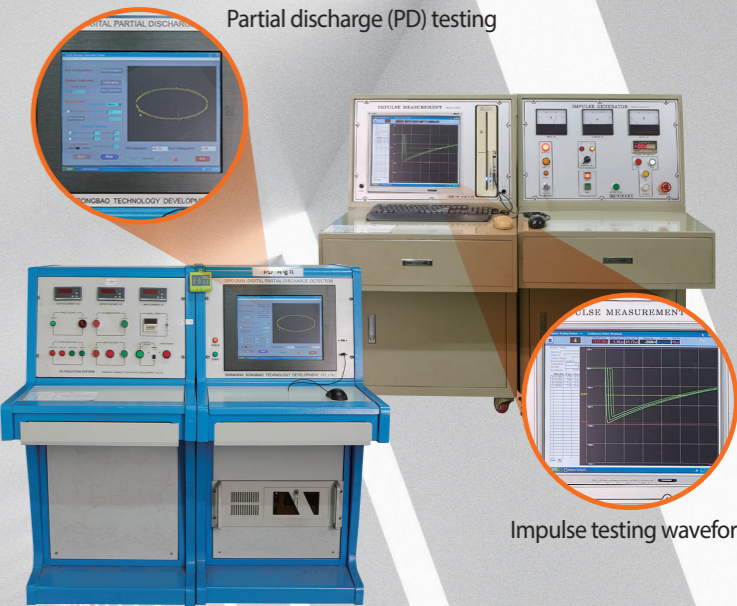


Various Testing Equipments

State-of-the-art digital instruments
Periodic calibration
One-Stop Test Service
최신식 디지털 계측기
정기 검교정
원스탑 테스트 서비스

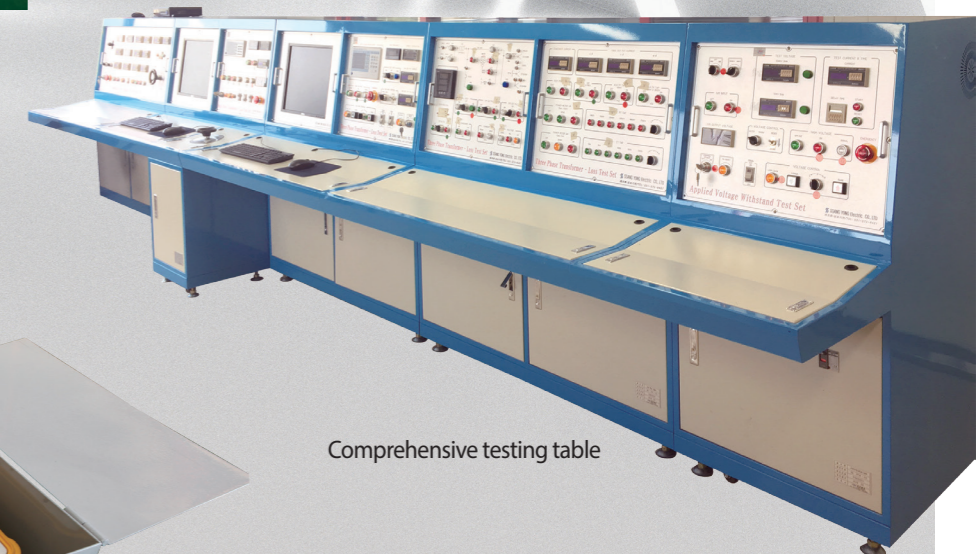


Impulse generator



Partial discharge (PD) testing

Impulse testing waveform



Comprehensive testing table



Ohmmeter

Naju 2nd Factory

We will do our best to keep our good reputation for product development.
The world best customer service and quality control.

Patient & Certificates



Gimpo Head Office & 1st Factory

