Open Power Transformer (IP00)

General Data

Open-type power transformers are designed for installation inside electrical panels, control cabinets, or switchboards. They provide reliable step-up or step-down voltage transformation for continuous-duty applications. With dry-type construction and isolated windings, they offer safe operation and reduced electrical interference.

Features

- Dry-type construction with low maintenance requirements
- IP00 open-frame design for integration within enclosed panels or switchboards
- Isolated windings enhance electrical safety and noise suppression
- Moisture-resistant varnish impregnation to protect windings and extend service lifespan

Technical Data

Product	Open Power Transformer (IP00)
Series	TP-IP00
Power (Capacity)	1 KVA – 50 KVA
Phase	Three Phase
Input Voltage (Primary)	100 – 1000 Vac (Delta)
Output Voltage (Secondary)	100 – 1000 Vac (Star+N)
Vector Group	Dyn11 (Default)
Frequency	50 / 60 Hz
Insulation Class	Class F (155°C) < 10 KVA
	Class H (180°C) ≥ 10 KVA
Ambient Temperature (Max)	40°C
Cooling type	AN (Natural Air Cool)
Winding Material	Copper
Test/Insulating Voltage	3 KVac
Insulation Resistance	> 500 MΩ
Duty Cycle	100% (Continuous)

Construction / Protection

Degree of Protection	IP 00
Protection Class	Class I
Short-Circuit Protection	Non short-circuit proof

Standards & Compliance

Compliance	IEC 61558-2-4 (Capacity: < 15 KVA)
	IEC 60076-11 (Capacity: ≥ 15 KVA)

Power Transformer for General Purpose (Outdoor)

General Data

Outdoor power transformers are built for continuous voltage step-up or step-down applications in harsh environments. Their dry-type design ensures low maintenance and reliable performance. Fully isolated windings improve electrical safety and reduce noise interference. Housed in an IP55 weatherproof enclosure for safe outdoor installation.

Features

- Dry-type, low-maintenance transformer design
- IP55-rated enclosure provides protection against dust, rain, and outdoor environments
- Heavy-duty construction for continuous-duty operation and long service life
- Isolated windings improve electrical safety and noise suppression

Technical Data

Product	Power Transformer for General Purpose (Outdoor)
Series	TP-IP55
Power (Capacity)	10 KVA – 300 KVA
Phase	Three Phase
Input Voltage (Primary)	100 – 1000 Vac (Delta)
Output Voltage (Secondary)	100 – 1000 Vac (Star+N)
Vector Group	Dyn11 (Default)
Frequency	50 / 60 Hz
Insulation Class	Class H (180^{o}C)
Ambient Temperature (Max)	40°C
Cooling type	Natural Air Cool (Capacity: < 50 KVA)
	Forced Air Cool (Capacity: ≥ 50 KVA)
Winding Material	Copper
Test/Insulating Voltage	3 KVac
Insulation Resistance	> 1000 MΩ
Duty Cycle	100% (Continuous)

Construction / Protection

Protection Class	Class I
Short-Circuit Protection	Non short-circuit proof

Enclosure

Protection Type	IP 55 (Outdoor)
Enclosure Material	Electro Galvanized Steel Sheet
Enclosure Finishing	RAL 7032 (Powder Coated)

Standards & Compliance

Compliance	IEC 61558-2-4 (Capacity: < 15 KVA)
	IEC 60076-11 (Capacity: ≥ 15 KVA)

Isolation Transformer

General Data

Isolation transformers are designed to deliver galvanic isolation with "protective separation," ensuring a safe and reliable power supply to connected equipment. They provide double or reinforced insulation between primary and secondary windings, significantly enhancing safety and minimizing electrical interference.

Features

- Electrostatic shield between windings for superior noise suppression
- Galvanic isolation with double or reinforced insulation for enhanced safety
- Rugged, heavy-duty design rated for continuous operation and long-term reliability
- Moisture-resistant varnish impregnation to protect windings and extend service lifespan

Technical Data

Product	Isolation Transformer
Series	TDW-IP22
Power (Capacity)	1 KVA – 500 KVA
Phase	Three Phase
Input Voltage (Primary)	100 – 1000 Vac (Delta)
Output Voltage (Secondary)	100 – 1000 Vac (Star+N)
Vector Group	Dyn11 (Default)
Frequency	50 / 60 Hz
Insulation Class	Class F (155^{o}C) < 10 KVA
	Class H (180^{o}C) ≥ 10 KVA
Ambient Temperature (Max)	40°C
Cooling type	Natural Air Cool (Capacity: < 100 KVA)
	Forced Air Cool (Capacity: ≥ 100 KVA)
Winding Material	Copper
Test/Insulating Voltage	3 KVac
Insulation Resistance	> 1000 MΩ
Duty Cycle	100% (Continuous)

Construction / Protection

Protection Class	Class I
Short-Circuit Protection	Non short-circuit proof

Enclosure

Protection Type	IP 22 (Capacity: < 100 KVA)
	IP 21 (Capacity: ≥ 100 KVA)
Enclosure Material	Electro Galvanized Steel Sheet
Enclosure Finishing	RAL 7032 (Powder Coated)

Standards & Compliance

Compliance	IEC 61558-2-4 (Capacity: < 15 KVA)
	IEC 60076-11 (Capacity: ≥ 15 KVA)

K-Factor Transformer for Harmonic Distortion

General Data

K-Factor transformers are designed to withstand the extra heating effects caused by harmonic currents from non-linear loads. Standard transformers can overheat under these conditions, resulting in higher losses, insulation failure, or reduced lifespan. K-Factor transformers address this by limiting hot spots, reducing eddy current losses, and operating safely in harmonic-rich environments.

Features

- Dry-type construction with low maintenance requirements
- Designed to withstand harmonic currents
- Oversized conductors and reduced eddy-current losses
- Neutral conductor sized at 200%

Technical Data

Product	K-Factor Transformer
Series	TKF
Power (Capacity)	15 KVA – 300 KVA
Phase	Three Phase
K-Factor Rating	K4, K13, K20, K30
Input Voltage (Primary)	100 – 1000 Vac (Delta)
Output Voltage (Secondary)	100 – 1000 Vac (Star+N)
Vector Group	Dyn11 (Default) / Dzn0 (Upon Request)
Frequency	50 / 60 Hz
Insulation Class	Class H (180^{o}C)
Ambient Temperature (Max)	40°C
Cooling type	Natural Air Cool (Capacity: < 80 KVA)
	Forced Air Cool (Capacity: ≥ 80 KVA)
Winding Material	Copper
Test/Insulating Voltage	3 KVac
Insulation Resistance	> 1000 MΩ
Duty Cycle	100% (Continuous)

Construction / Protection

Protection Class	Class I
Short-Circuit Protection	Non short-circuit proof

Enclosure

Protection Type	IP 55 (Outdoor)
Enclosure Material	Electro Galvanized Steel Sheet
Enclosure Finishing	RAL 7032 (Powder Coated)

Standards & Compliance

Compliance	IEC 61558-2-4 (Capacity: < 15 KVA)
	IEC 60076-11 (Capacity: ≥ 15 KVA)

Power Transformer for General Purpose (Indoor)

General Data

General-purpose transformers provide reliable voltage conversion for continuous-duty operation. The dry-type design reduces maintenance requirements while ensuring long service life. Fully isolated windings enhance electrical safety and minimize electrical interference. Enclosed in an IP2X metal housing, they are suitable for indoor installation in machinery rooms, control panels, and power distribution systems.

Features

- Dry-type construction with low maintenance requirements
- Housed in an IP-rated metal enclosure (IP22) for indoor installation
- Rugged construction for continuous duty and dependable performance
- Isolated windings for electrical safety and noise suppression

Technical Data

Product	Power Transformer for General Purpose (Indoor)
Series	TP-IP21/IP22
Power (Capacity)	1 KVA – 1000 KVA
Phase	Three Phase
Input Voltage (Primary)	100 – 1000 Vac (Delta)
Output Voltage (Secondary)	100 – 1000 Vac (Star+N)
Vector Group	Dyn11 (Default)
Frequency	50 / 60 Hz
Insulation Class	Class F (155°C) < 10 KVA
	Class H (180°C) ≥ 10 KVA
Ambient Temperature (Max)	40°C
Cooling type	Natural Air Cool (Capacity: < 100 KVA)
	Forced Air Cool (Capacity: ≥ 100 KVA)
Winding Material	Copper
Test/Insulating Voltage	3 KVac
Insulation Resistance	> 1000 MΩ
Duty Cycle	100% (Continuous)

Construction / Protection

Protection Class	Class I
Short-Circuit Protection	Non short-circuit proof

Enclosure

Protection Type	IP 22 (Capacity: < 100 KVA)
	IP 21 (Capacity: ≥ 100 KVA)
Enclosure Material	Electro Galvanized Steel Sheet
Enclosure Finishing	RAL 7032 (Powder Coated)

Standards & Compliance

Compliance	IEC 61558-2-4 (Capacity: < 15 KVA)
	IEC 60076-11 (Capacity: ≥ 15 KVA)