

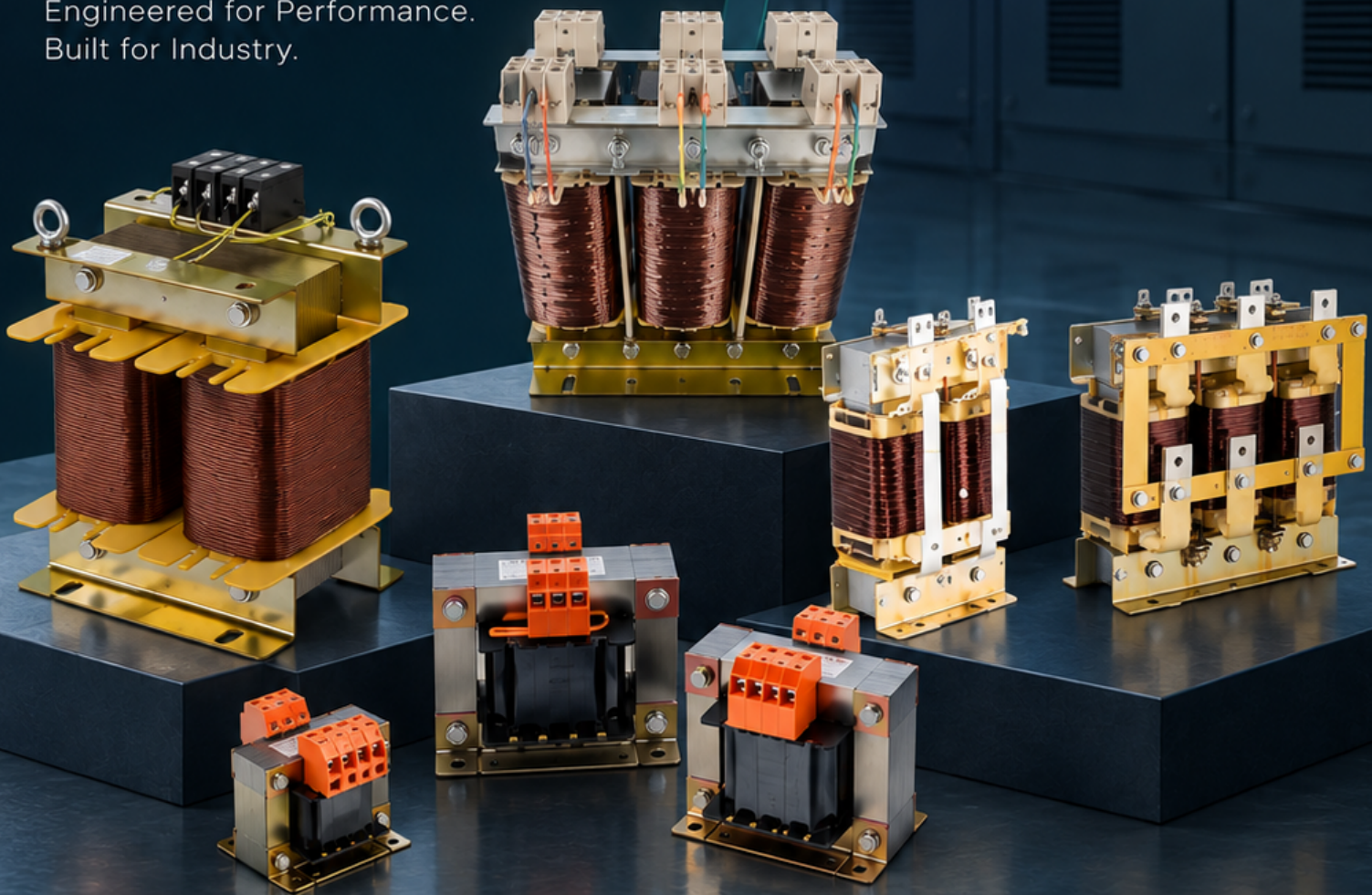


MAYAR GULF INDUSTRIAL COMPANY

PRODUCT CATALOGUE 2026

MAGNETIC COMPONENTS & RELIABLE POWER SOLUTIONS.

Engineered for Performance.
Built for Industry.



COMPANY PROFILE

Mayar Gulf Industrial Company is a trusted supplier of industrial magnetic and power-quality solutions for automation, machinery and electrical systems across the Saudi Arabian and wider GCC market.

The portfolio is built around dependable electrical products designed for practical industrial requirements — supporting panel builders, OEMs, automation integrators, machinery manufacturers and EPC/industrial projects with flexible ratings, voltage combinations and mechanical configurations.

Every product family is engineered so that ratings, terminals, mounting and enclosure options can be tailored to a specific application, while remaining aligned with recognized IEC safety and performance standards, giving specifiers and panel builders a consistent basis for design verification and approval.

KEY OPERATING FIGURES

30 VA–200 kVA TRANSFORMER & AUTOTRANSFORMER RANGE	2A–500A REACTOR & CHOKE CURRENT RANGE	600–1000 UNITS PRODUCED PER MONTH
50% CUSTOMIZED / PROJECT-SPECIFIC DESIGNS	100% ROUTINE TESTED BEFORE DISPATCH	20 SKILLED ENGINEERING & PRODUCTION STAFF

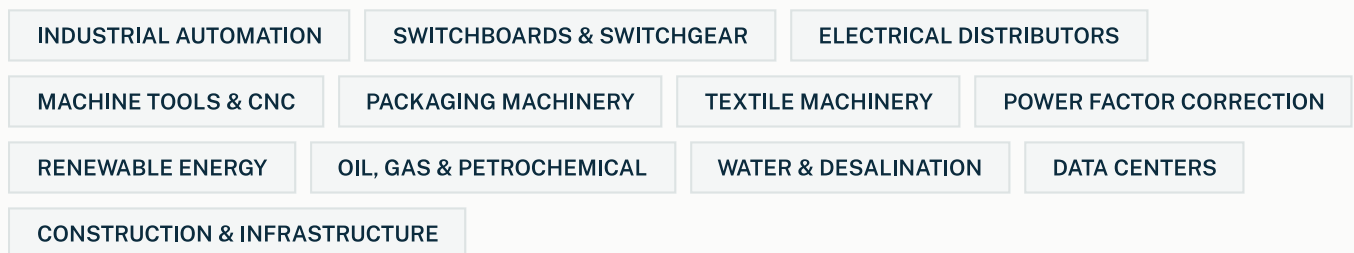
OUR STRENGTHS

WHY CUSTOMERS CHOOSE MAYAR GULF

- Wide production range across control transformers, step-up/step-down transformers, isolation transformers, drive chokes and reactors.
- Products engineered to customer specification, with ratings, voltages, terminals and enclosures tailored to the application.
- Design basis referenced to recognized IEC standards, supporting specifier and consultant approval.
- 100% routine-tested production with factory acceptance testing (FAT) available on request.
- Responsive technical support for OEM, panel-building and project-scale requirements.

MAIN SECTORS

Mayar Gulf products serve a broad base of industrial, utility and infrastructure sectors across Saudi Arabia and the wider GCC.



OUR PRODUCTS

Transformers, autotransformers, chokes and reactors — dry type and low voltage, engineered to customer specification.

01

CONTROL TRANSFORMERS

Stable, isolated control voltage for panels and automation.

02

STEP-UP / STEP-DOWN TRANSFORMERS

One platform to raise or lower voltage for machinery, testing and renewables.

03

ISOLATION TRANSFORMERS

Galvanic isolation for sensitive automation and instrumentation.

04

DRIVE CHOKES

Current-distortion mitigation for VFD and drive systems.

05

REACTORS

Current limiting, improving power factors and harmonic conditioning for power systems.

CONTROL TRANSFORMERS

A dedicated voltage source for control and auxiliary circuits, built to keep relays, contactors, PLC I/O and other low-power control loads running on a clean, tightly regulated supply — decoupled from the fluctuations and switching noise present on the main power feed.

KEY ADVANTAGES

- Tight voltage regulation on the control circuit, holding output within the tolerance sensitive automation and safety devices need.
- Physical and electrical separation from the power circuit, containing supply-side disturbances before they reach the control loop.
- Multi-tap primary windings available to cover regional voltage variants from a single stocked design.
- Compact frame with DIN-rail or base-mount terminal layouts sized to fit standard panel footprints.
- Insulation system selected to the duty-specific thermal class for uninterrupted continuous-duty operation.
- Inrush-withstand winding design available for contactor, solenoid and soft-starter coil loads.



Typical control transformer construction

INDUSTRY TRENDS & INNOVATION

- ▶ Growing pairing with IIoT-ready panels and remote condition monitoring, as automation retrofits call for control supplies compatible with smart-panel diagnostics.
- ▶ Increasing use of high-efficiency, low-loss core materials and halogen-free/RoHS-compliant insulation to meet tightening plant sustainability targets.
- ▶ Higher inrush-withstand designs specified more often as facilities upgrade to modern soft-starters, VFDs and electronically switched contactors.

CONTROL TRANSFORMERS – SPECIFICATION

APPLICATION AREAS

CONTROL PANELS	PLC & AUTOMATION PANELS	CNC MACHINERY	PACKAGING MACHINES
TEXTILE MACHINERY	RELAY & CONTACTOR CIRCUITS	INDUSTRIAL OEM EQUIPMENT	

TYPICAL SPECIFICATIONS

PARAMETER	TYPICAL / CUSTOM OPTION
Typical rating range	Single phase 25VA to 5kVA, Three phase 25VA to 5kVA and customizable
Primary voltage	220-380-480V, 0-110-220-380V or as required
Secondary voltage	110-220V, 12-24-48V or as required
Frequency	50 / 60 Hz
Insulation / temperature class	Class F / H available, selected per application
Cooling	Natural air cooling (AN); other arrangements on request
Mounting	Base, panel, DIN-rail or customized mounting
Enclosure	Open type, shrouded terminals or fully enclosed execution (IP00–IP54) on request

APPLICABLE IEC STANDARDS

- IEC 61558-1** — General safety requirements and tests for transformers, reactors, power supply units and combinations thereof.
- IEC 61558-2-2** — Particular requirements and tests for control transformers and power supply units incorporating control transformers.
- IEC 60085** — Thermal evaluation and classification of electrical insulation used in the winding system.
- IEC 60529** — Degrees of protection provided by enclosures (IP Code), applied per the selected enclosure option.

STEP-UP / STEP-DOWN TRANSFORMERS

One dry-type winding-and-core platform engineered to move voltage in either direction — stepped up to match imported machinery, test rigs or generation-side interconnection, or stepped down to bring incoming supply to the level a machine, panel or process actually needs. The configuration (step-up or step-down) is fixed by the winding ratio at order stage, so a single design family covers both duties.

KEY ADVANTAGES

- One engineering platform for both step-up and step-down duty, simplifying design standardization, spares holding and vendor qualification across a project.
- Low-loss core and conductor selection for efficient operation whether raising or lowering voltage under continuous load.
- Single-phase or three-phase construction, with delta/star arrangements and multiple ratio options.
- Flexible tapping — off-circuit or on-load — to absorb supply variation, future load growth or multi-voltage secondary requirements.
- Robust winding and core construction rated for continuous duty and mechanical short-circuit withstand.
- Custom impedance, terminal layout and enclosure execution (open, ventilated or fully enclosed) engineered around the specific installation.



Dry-type transformer: step-up / step-down construction

INDUSTRY TRENDS & INNOVATION

- ▶ Step-up demand is rising alongside solar PV, wind and BESS interconnection projects that need generation-side voltage matched to grid or plant distribution levels.
- ▶ Step-down demand is shifting toward compact, low-noise units for data centers and smart-building retrofits where plant-room space is at a premium.
- ▶ Across both directions, low-loss (Ecodesign-aligned) core materials and multi-tap secondaries are increasingly specified to cut lifecycle energy cost and cover mixed-voltage facilities from one unit.

STEP-UP / STEP-DOWN – SPECIFICATION

APPLICATION AREAS

IMPORTED EQUIPMENT VOLTAGE MATCHING	RENEWABLE ENERGY INTERCONNECTION	TESTING SYSTEMS
MACHINE TOOLS	INDUSTRIAL CONTROL PANELS	HVAC EQUIPMENT
POWER DISTRIBUTION	GENERAL INDUSTRIAL & OEM LOADS	

TYPICAL SPECIFICATIONS

PARAMETER	TYPICAL / CUSTOM OPTION
Configuration	Step-up or step-down — fixed by winding ratio at order stage
Rating	Single phase 100VA to 10kVA, Three phase 500VA to 200kVA or as required
Input / output voltage	110-220-380-440-480-600V or as required
Phase	Single-phase or three-phase
Frequency	50 / 60 Hz
Insulation / temperature rise	Class F / H; temperature rise per IEC 60076-11 / IEC 61558-2-13 limits
Cooling	Natural air (AN); forced-air (AF) cooling options where applicable
Taps	Optional off-circuit or on-load taps, subject to design
Enclosure	Open, IP00–IP23 ventilated or fully enclosed IP54 on request

APPLICABLE IEC STANDARDS

IEC 61558-2-13 — Particular requirements specific to autotransformers, with scope limits: single-phase core power ≤ 2 kVA / rated output ≤ 40 kVA; polyphase core power ≤ 10 kVA / rated output ≤ 200 kVA, ≤ 1000 V, ≤ 500 Hz.

IEC 60076-11 — Power transformers – Dry-type transformers: thermal, dielectric and mechanical requirements.

IEC 60076-3 — Insulation levels, dielectric tests and external clearances in air.

IEC 60076-2 — Temperature-rise requirements referenced where liquid-immersed variants are supplied.

IEC 60085 — Thermal classification of the winding insulation system.

ISOLATION TRANSFORMERS

A physical break in the conductive path between source and load, built to stop electrical disturbances from riding straight through to sensitive equipment. Where common-mode noise is a concern, a grounded electrostatic shield between primary and secondary can be added to the same platform.

KEY ADVANTAGES

- True galvanic separation between input and output windings, removing the direct conductive path to earth carried through un-isolated supplies.
- Optional electrostatic shield between windings to attenuate common-mode noise transfer where the installation calls for it.
- Shields sensitive electronic, control and instrumentation equipment from transients and disturbances on the supply side.
- Available as 1:1 isolation or as a voltage-changing isolation transformer, combining isolation with step-up or step-down duty.
- Custom voltage ratios and power ratings built around the specific load and safety requirement.
- Suitable for automation, laboratory, medical-support and general sensitive-equipment installations.



Shielded isolation transformer

INDUSTRY TRENDS & INNOVATION

- ▶ Growing use protecting Industry 4.0 electronics and sensitive automation from supply-side noise as plants add more variable-speed and power-electronic loads.
- ▶ Increasing specification of K-rated isolation transformers designed to safely carry the harmonic-rich currents drawn by modern nonlinear loads.
- ▶ Wider deployment in EV-charging and medical-facility power-quality upgrades where personnel- and equipment-safety isolation is a design requirement.

ISOLATION TRANSFORMERS – SPECIFICATION

APPLICATION AREAS

AUTOMATION SYSTEMS	SENSITIVE INSTRUMENTATION	MEDICAL SUPPORT EQUIPMENT	LABORATORY EQUIPMENT
EV CHARGING INFRASTRUCTURE	DATA CENTERS	POWER-ELECTRONIC / NONLINEAR LOADS	

TYPICAL SPECIFICATIONS

PARAMETER	TYPICAL / CUSTOM OPTION
Configuration	1:1 isolation, or isolation combined with step-up/step-down
Rating	VA / kVA as required
Shielding	Optional grounded electrostatic shield between windings
Voltage	Project specific
Frequency	50 / 60 Hz
Insulation / temperature class	Class F / H, selected per application
Cooling	Natural air cooling; other arrangements on request
Enclosure	Open type, shrouded terminals or fully enclosed on request

APPLICABLE IEC STANDARDS

IEC 61558-1 — General safety requirements and tests for transformers, reactors, power supply units and combinations thereof.

IEC 61558-2-4 — Particular requirements and tests for isolating transformers for general use.

IEC 61558-2-6 — Particular requirements and tests for safety isolating transformers for general use.

IEC 60085 — Thermal classification of the winding insulation system.

DRIVE CHOKES

An inductive buffer placed between the supply, the drive and the motor to take the edge off current distortion and switching stress. Configured as a line reactor on the drive input, a DC-link choke, or a load/motor reactor on the output, depending on where in the system the protection is needed most.

KEY ADVANTAGES

- Smooths current waveform and limits distortion drawn by the drive from the incoming supply.
- Cuts stress on drive input stages, rectifier diodes and DC-bus capacitors, supporting longer drive service life.
- Reduces nuisance tripping traceable to supply-side voltage notching or switching transients.
- Adds beneficial impedance on installations with long supply or motor cable runs.
- Offered across a range of inductance, current and impedance configurations (typically 2–5% impedance) to match the drive.
- Compact, panel-friendly construction suited to integration inside motor control centers and drive enclosures.



Drive choke assembly

INDUSTRY TRENDS & INNOVATION

- ▶ Accelerating VFD adoption under energy-efficiency mandates for pumps, fans and HVAC plant is driving parallel growth in line/load choke specification.
- ▶ Stricter grid harmonic-emission limits (IEC 61000-3-12) are pushing wider use of chokes as a first line of current-distortion mitigation ahead of active filtering.
- ▶ Rising retrofit demand as older direct-on-line motors are converted to VFD control, where added line impedance protects both drive and legacy cabling.

DRIVE CHOKES – SPECIFICATION

APPLICATION AREAS

VFD SYSTEMS	MOTOR CONTROL CENTERS	PUMPS & FANS	HVAC SYSTEMS	CONVEYORS
PROCESS MACHINERY	INDUSTRIAL DRIVES			

TYPICAL SPECIFICATIONS

PARAMETER	TYPICAL / CUSTOM OPTION
Rated current	5A to 500A or as required in mH/HP/KW/A
Inductance / impedance	Specified according to application (typ. 2–5% Z)
Voltage	Project specific
Frequency	50 / 60 Hz or application specific
Phase	Single-phase or three-phase
Cooling	Natural air; forced cooling options on request
Mounting	Base / panel / customized
Position	Line (input), load (output/motor) or DC-link, as specified

APPLICABLE IEC STANDARDS

IEC 60076-6 — Power transformers–Reactors: general and design/test requirements applied to line and load reactors.

IEC 61800-5-1 — Adjustable speed electrical power drive systems–Safety requirements: electrical, thermal and energy, referenced for the drive/reactor combination.

IEC 61000-3-12 — Limits for harmonic current emissions, relevant to reactor sizing for harmonic mitigation.

IEC 60085 — Thermal classification of the winding insulation system.

REACTORS

A controlled-impedance winding used wherever a power system needs current limiting, harmonic conditioning or switching-transient management. Built as line, load, detuned or application-specific reactors, sized to the fault level, harmonic spectrum or power-quality target of the installation.

KEY ADVANTAGES

- **Prevents Harmonic Resonance:** Shifts the system's resonant frequency below the lowest dominant harmonic, stopping dangerous current amplification.
- **Protects Capacitors:** Lowers thermal and electrical stress on capacitor banks, extending their operational lifespan.
- **Reduces Voltage Distortion:** Absorbs a portion of harmonic currents, cleaning up the voltage waveform across the facility.
- **Limits Inrush Currents:** Acts as an inductor to choke high-frequency current spikes during capacitor switching.
- **Prevents Fuse Nuisance Tripping:** Eliminates localized overcurrents that trip protective devices unexpectedly.
- **Enhances Transformer Reliability:** Reduces eddy current losses and overheating in upstream distribution transformers.



Industrial reactor assembly

INDUSTRY TRENDS & INNOVATION

- ▶ Growing demand from renewable-energy grid integration, where inverter-side and filter reactors support compliance with stricter grid-code harmonic limits.
- ▶ Expanding use in battery energy storage systems (BESS) and EV fast-charging infrastructure for current limiting and power-quality conditioning.
- ▶ Increasing specification of detuned filter reactors as facilities add capacitor-based power-factor correction alongside more nonlinear, drive-fed loads.

REACTORS – SPECIFICATION

APPLICATION AREAS

POWER FACTOR CORRECTION SYSTEMS

HARMONIC FILTERS

INDUSTRIAL DRIVES

STEEL & CEMENT PLANTS

PROCESS INDUSTRIES

RENEWABLE ENERGY SYSTEMS

POWER DISTRIBUTION

TYPICAL SPECIFICATIONS

PARAMETER	TYPICAL / CUSTOM OPTION
Rated current	Specified in A/mH/HP/KW/KVAR
Inductance	Specified in mH / μ H or by impedance requirement (5.67, 7 and 14%)
Voltage	Project specific
Frequency	50 / 60 Hz or harmonic-application specific
Phase	Single-phase or three-phase
Duty	Continuous / project specific
Cooling	Natural air or forced cooling
Type	Iron-core or air-core construction, per application

APPLICABLE IEC STANDARDS

IEC 60076-6 — Power transformers –Reactors: covers series, shunt, filter (tuning) and current-limiting reactor types.

IEC 60076-1 — General clauses of the power-transformer series applied where relevant to reactor design and testing.

IEC 61000-3-6 — Assessment of harmonic-current emission limits, referenced when sizing detuned/harmonic-filter reactors.

IEC 60085 — Thermal classification of the winding insulation system.

STANDARDS & CERTIFICATION

Mayar Gulf Industrial Company designs its transformer, choke and reactor ranges with reference to the relevant IEC standards below. Standards are listed for guidance during specification and approval; the exact edition applied to a given order is confirmed at the time of technical offer and stated on the approved drawing and test certificate.

STANDARD	SCOPE	APPLIES TO
IEC 61558-1	General safety of transformers, reactors and power supply units	Control Transformers, Isolation Transformers
IEC 61558-2-2	Particular requirements for control transformers	Control Transformers
IEC 61558-2-4	Particular requirements for isolating transformers	Isolation Transformers
IEC 61558-2-6	Particular requirements for safety isolating transformers	Isolation Transformers
IEC 60076-1	Power transformers – General requirements	Step-up/Step-down Transformers, Reactors
IEC 60076-11	Power transformers – Dry-type transformers	Step-up/Step-down Transformers
IEC 60076-2	Power transformers – Temperature rise (liquid-immersed)	Step-up/Step-down Transformers (oil-type option)
IEC 60076-3	Insulation levels, dielectric tests, external clearances	Step-up/Step-down Transformers
IEC 60076-6	Power transformers – Reactors	Drive Chokes, Reactors
IEC 61800-5-1	Adjustable speed drive systems – Safety requirements	Drive Chokes
IEC 61000-3-12	Limits for harmonic current emissions	Drive Chokes
IEC 61000-3-6	Assessment of harmonic emission limits (MV systems)	Reactors
IEC 60085	Thermal evaluation and classification of insulation	All product families
IEC 60529	Degrees of protection provided by enclosures (IP Code)	All product families

Note: IEC standards are periodically revised. The applicable edition/amendment for a specific purchase order will be confirmed in the technical offer and reflected on the factory test report and nameplate data.

TESTING & FAT

Every unit is subject to routine testing before dispatch, with type tests performed on a representative design basis or as separately specified. Factory Acceptance Testing (FAT) can be arranged for client, consultant or third-party witness on request.

ROUTINE TESTS (PERFORMED ON EVERY UNIT)

TEST	PURPOSE	REFERENCE STANDARD
Winding resistance measurement	Confirms conductor integrity and correct connections; baseline for temperature-rise calculation.	IEC 60076-1 / IEC 61558-1
Voltage ratio & polarity / phase displacement	Verifies turns ratio accuracy and correct vector group / polarity marking.	IEC 60076-1 §11 / IEC 61558-1
No-load loss & no-load current	Checks core loss and magnetizing current against design values.	IEC 60076-1 §11
Load loss & impedance voltage	Verifies winding (copper) loss and short-circuit impedance at rated current.	IEC 60076-1 §11
Insulation resistance (IR) test	Megohmmeter check of winding-to-winding and winding-to-earth insulation prior to HV testing.	IEC 60076-1 / IEC 61558-1
Applied-voltage (separate-source AC) withstand	Dielectric routine test confirming insulation withstand between windings and to earth.	IEC 60076-3 / IEC 61558-1
Induced-voltage withstand test	Verifies inter-turn and inter-layer insulation of the winding under test.	IEC 60076-3
Functional check of taps / accessories	Confirms correct operation of tap links, thermal sensors and terminals where fitted.	Manufacturer routine procedure

ADVANCED TEST EQUIPMENT

Testing is carried out using calibrated, traceable instrumentation maintained under a routine calibration programme.

Automatic Transformer Turns-Ratio (TTR) meter

High-accuracy voltage ratio, polarity and vector-group verification.

AC/DC high-voltage test set

Applied-voltage and induced-voltage dielectric withstand testing.

Automatic no-load / load-loss test bench

Precision wattmeter system for core loss, no-load current, load loss and impedance voltage.

Power quality & harmonics analyzer

Waveform and harmonic-distortion verification for choke and reactor performance checks.

Sound level meter

Audible noise-emission verification against project or IEC 60076-10 limits.

Digital micro-ohmmeter

Precision winding-resistance measurement, including on low-resistance windings.

Insulation resistance tester / megohmmeter (up to 10 kV)

Winding-to-winding and winding-to-earth insulation resistance and polarization index.

Multi-channel temperature-rise data logger

Thermocouple-based monitoring for type-test temperature-rise verification.

Partial discharge detector

Applied on dry-type / cast-resin units where PD-free operation must be confirmed.

Impulse voltage generator

Lightning-impulse type testing where specified by the purchase order.

PRODUCT SELECTION GUIDE

Quick reference for identifying the appropriate product family before final engineering selection.

PRODUCT	MAIN PURPOSE	KEY RATING	SELECTION DATA	KEY IEC STANDARD
Control Transformer	Control-circuit power	VA / kVA	Input/output voltage, VA, duty, mounting	IEC 61558-1 / -2-2
Step-up/Step-down Transformer	Increase or reduce voltage	kVA	Configuration, voltage ratio, phase, load, frequency	IEC 60076-1 / -11
Isolation Transformer	Electrical separation	VA / kVA	Isolation, shielding, leakage, load	IEC 61558-1 / -2-4
Drive Choke	Drive protection / conditioning	A / mH / %	Drive current, voltage, impedance, cable length	IEC 60076-6 / IEC 61800-5-1
Reactor	Current limiting / harmonic duty	A / mH	Current, inductance, frequency, application	IEC 60076-6

TECHNICAL ADVANTAGES

Engineering priorities that support reliable performance and easier project integration.

Robust Construction

Mechanical structures designed for industrial handling, transport and installation requirements.

High Efficiency

Optimized magnetic design and conductor selection for practical operating performance and reduced losses.

Reliable Insulation

Insulation systems selected according to voltage, temperature class (IEC 60085) and application requirements.

Customized Design

Ratings, voltages, taps, terminals, mounting and dimensions can be tailored to the project.

Quality Control

Production and routine checks integrated into the manufacturing process, aligned with IEC test clauses.

Service Support

Application information can be reviewed to help identify a suitable configuration and standard reference.

CUSTOMIZATION

INFORMATION REQUIRED FOR CUSTOMIZED DESIGN

- Required product family and quantity.
- VA / kVA / current / inductance / impedance.
- Ambient temperature and installation environment.
- Preferred terminals, enclosure and cable entry direction.
- Input/output voltage, phase and frequency.
- Load type and duty cycle.
- Maximum installation dimensions and mounting arrangement.
- Any specific IEC standard, test certificate or third-party inspection required.

TYPICAL CUSTOMIZATION OPTIONS

CATEGORY	AVAILABLE OPTIONS
Electrical	Primary/secondary voltage • multiple taps • frequency • phase • kVA/VA/current • inductance/impedance
Mechanical	L×W×H envelope • mounting holes • terminal position • busbar / cable terminals • lifting arrangement
Thermal	Temperature class (IEC 60085) • ambient requirement • duty cycle • natural / forced cooling
Protection	Thermal sensors • shields • enclosure options (IEC 60529) • protective accessories
Identification	Customer model number • rating plate data • serial numbering • project tagging
Compliance	Applicable IEC standard reference • routine/type test certificate • third-party witness testing on request



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ENGINEERED FOR A
STRONGER TOMORROW.

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