MERCIA-E

AUTOMATIC TRANSFER SWITCHES

Reliable power transfer with no-break bypass



The Mercia-E Automatic Transfer Switch (ATS) range incorporates a TP&N ATS with an integrated controller, designed to continuously monitor the voltage and frequency of two incoming AC power sources, whether utility, generator, or a combination of both. Upon detection of a source failure, the controller automatically transfers the load to the alternative healthy supply.

The single-line, no-break (SL, NB) bypass arrangement allows the ATS to be safely isolated from service without interruption to the connected load, enabling inspection, maintenance and servicing whilst maintaining continuity of supply. The outgoing load remains energised throughout maintenance procedures, reducing operational downtime and eliminating the need for interruption of supply during ATS servicing or replacement.

Each unit is housed within a compact IP65 rated mild steel enclosure finished in Light Grey (RAL 7035) and fitted with removable gland plates. As standard, volt-free contacts and Modbus communication, with clear LED indication on the door for quick identification of ATS status.

SINGLE LINE NO-BREAK BYPASS
Maintain supply during maintenance

MODBUS RS485
Communication as standard

LED INDICATION
Clear visual status indication

GEN-START, MIMIC & VOLT-FREE TERMINALS
Included as standard

IP65
For internal applications

KEY FEATURES

CONTINUOUS MONITORING

Monitoring voltage and frequency of two AC power sources with automatic or manual.

BMS READY

Volt-free contact terminals are also included for connection to Building Management Systems for remote monitoring and status indication.

CLEAR STATUS INDICATION

LED indication on the door for source availability, supply on bypass and system status.

SAFE MAINTENANCE

Fully isolate the ATS from S1, S2 and Load, allowing interruption-free maintenance while maintaining continuity of supply.

TYPICAL APPLICATIONS

COMMERCIAL BUILDINGS

INDUSTRIAL FACILITIES

CRITICAL INFRASTRUCTURE

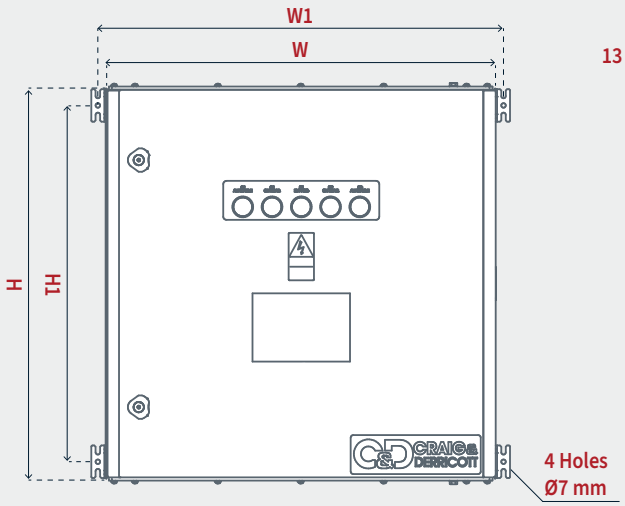
GENERATOR BACK-UP SYSTEMS

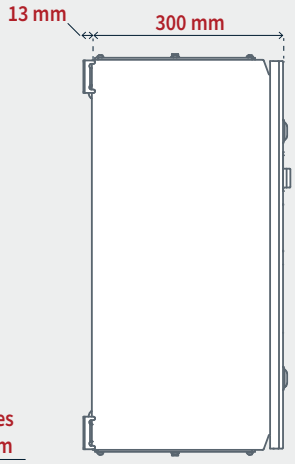
POWER CONTINUITY FOR A MORE RESILIENT TOMORROW

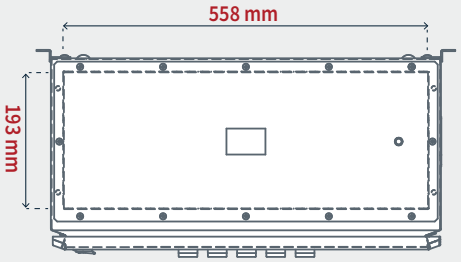
Trusted solutions for critical power applications.

DIMENSIONS

Detailed dimensions, ordering options and accessories for the Mercia-E range.







Size	Overall Dimensions (mm)			Fixing Details			
	Height	Width	Depth	H1	W1	UD	UW
32 - 100 A	600	600	300	548	624	558	193
125 - 160 A	800	600	300	748	624	558	193

Size	Weight
32 - 100 A	TBC
125 - 160 A	TBC

For detailed CAD drawings, please contact the technical team.

INSTALLATION GUIDANCE

REMOVABLE GLAND PLATE

Top and bottom removable gland plates provide easy cable entry and a flexible installation.

PROGRAMMABLE FUNCTIONS

Integrated controller with passcode protection allows key ATS functions to be configured, including:

- Under/over voltage
- Under/over frequency
- Power loss

CONNECTION TERMINALS

Generator start/ stop, remote control and Modbus RS485 communication terminals are provided on the ATS unit for easy connection.

CLEAR STATUS INDICATION

A clear backlit LCD display and integrated LEDs provide excellent visibility of the ATS operating status, even in dimly lit areas.

SAFE ISOLATION

All switches are padlockable in the OFF position, allowing safe isolation and lock-off during maintenance.

CLEAR LABELLING

All terminals, connections and controls are clearly labelled, including phase markers and installation information, to support a straightforward and efficient installation.

TECHNICAL SPECIFICATION

Detailed technical information for the Mercia-E range.

ELECTRICAL CHARACTERISTICS

Specifications	Rating
Rated Voltage (Ue)	400 V
Rated Current (Ie)	32 - 160 A
Thermal Current Rating (Ith)	32 - 160 A
Rated Impulse Withstand Voltage (Uimp)	8 kV
Rated Short-Time Withstand Current (1s)	<63 A: 800 A 80 A - 160 A: 3 kA
Rated Short-Time Making Capacity (Icm)	<63 A: 630 A 80 A - 160 A: 1.25 kA
Rated Insulation Voltage (Ui)	690 V
IP Rating	IP65
AC33b Power	See table on page 4
Conditional Short-Circuit Current	<45 A: 10 kA (50 A gG Fuse-link) 63 A - 160 A: 50 kA (80A gG Fuse-link)
Cable Access	Btm Entry & Exit
EMC Environment	A & B
Class of Equipment	PC
Form of Separation	Form 3
Ambient Temperature	-25°C ~ +55°C
Maximum Cable Capacity	50 mm^2

STANDARDS & COMPLIANCE

Standards	Description
BS EN 60947-1	Low-voltage switchgear and control-gear
BS EN 60947-3	Switches, disconnectors, switch-disconnectors, and fuse-combination units
BS EN 60947-5-1	Control circuit devices and switching elements. Electromechanical control circuit devices
BS EN 60947-6-1	Low-voltage transfer switching equipment, specifying requirements for automatic and manual power transfer systems.
BS EN 61439-1	Low-voltage switchgear and controlgear assemblies, defining design, construction, and verification requirements to ensure safety and performance.
BS EN 61439-2	Low-voltage switchgear and controlgear assemblies - Power switchgear and controlgear assemblies
BS 8519:2020	Selection and installation of fire-resistant power and control cable systems for life safety, fire-fighting and other critical applications.
BS EN 9991:2024	Fire safety in the design, management and use of residential buildings.
BG 70/2021	Life safety and fire-fighting power supplies
BS EN 60529	Degrees of protection provided by enclosures
Directive 2014/35/EU	Low Voltage Directive - Product safety requirements that apply to electrical equipment in the European Economic Area (EEA)
RoHS	Compliant
REACH	Compliant

QUALITY YOU CAN TRUST

Manufactured to internationally recognised standards, giving you confidence in safety, reliability and long term performance.

CE RoHS compliant UKCA MADE IN BRITAIN

RELIABLE IN DEMANDING ENVIRONMENTS

Engineered for dependable performance in critical power applications, the Mercia-E ATS combines a robust mild steel enclosure with reliable automatic power transfer technology. Designed to maintain continuity of supply, its no-break bypass arrangement enables safe maintenance without interrupting the connected load.

IP65

IP65

Enclosure protection rating

FORM 3

Internal separation

ORDERING INFORMATION

Part No.	Description		
	Current Rating	AC33b Power	Type
ATS0324D530	32 A	14 kW	Mercia-E ATS 600 High
ATS0454D530	45 A	20 kW	Mercia-E ATS 600 High
ATS0634D530	63 A	35 kW	Mercia-E ATS 600 High
ATS0804D530	80 A	44 kW	Mercia-E ATS 600 High
ATS1004D530	100 A	55 kW	Mercia-E ATS 600 High
ATS1254D530	125 A	69 kW	Mercia-E ATS 800 High
ATS1604D530	160 A	89 kW	Mercia-E ATS 800 High

NEED A DIFFERENT CONFIGURATION

Please contact our sales team to discuss alternative configurations or bespoke requirements.

TECHNICAL SUPPORT

Our team is here to help with product selection, technical information and bespoke solutions.

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