



# SERIES TS 920 • 100 - 400 AMP AUTOMATIC TRANSFER SWITCHES

COMMERCIAL & LIGHT INDUSTRIAL

**REGAL**<sup>®</sup>

THOMSON

# THOMSON POWER SYSTEMS TS 920 AUTOMATIC TRANSFER SWITCHES OFFER THE FOLLOWING:

## POWER CONTACTOR SWITCHING UNITS

- 100% Continuous Current Ratings for use with all load types
- Suitable for Copper and Aluminum power cable connections
- High Short Circuit Withstand Ratings when used with upstream molded case circuit breakers

## RELIABLE SOLENOID OPERATED TRANSFER MECHANISM

- Fast Operation allows In-Phase Power Transfer
- Electrical and Mechanical Interlocked mechanism prevents simultaneous closure of Utility and Generator sources

## SUPERIOR SERVICEABILITY

- Plug-in Control Devices allow quick connections
- Enclosed Power Contacts for safe operation and maintenance

## CONTROL FEATURES

- Advanced TSC 9 Series Transfer Controller with features specifically designed for Commercial ATS applications. User programmable timers, simple LED interface
- Outputs for Automatic Load Shed & Remote Alarming
- kW Load Shed Control (Optional) reduces costs by sizing your standby power system for prioritized loads
- Universal Generator Interface Kit option allows TS 923 to be applied to multiple types of generator sets utilizing 240V remote starting control systems

## PRODUCT DATA

- 100A, 200A, 400A Models
- Service Entrance Rated Models (Optional)
- 120/208/220/240VAC 3 Phase, 4 wire c/w Neutral
- 3 Pole, 50/60Hz
- Rust Resistant Aluminum Enclosures
- NEMA 3R Door for Outdoor Applications (Optional)
- Withstand Short Circuit Current Ratings up to 50kA
- Sturdy enclosure and door construction

## QUALITY ASSURANCE

- ISO 9001 Registered Manufacturing Facilities
- Complies with:
  - NEMA & UL 50
  - UL 508
  - IEEE C62.41, C37.90.1
  - FCC CFR 47 Part 15, Class B
  - IEC EN 61000 Electromagnetic Capability

## SAFETY STANDARDS

- UL 1008 Listed Automatic Transfer Switches for use in legally required Emergency Systems

## WARRANTY

- 2 year limited warranty included

**Thomson Power Systems TS 923** Automatic Transfer Switches employ a power contactor switching unit with a TSC 9 microprocessor based controller to automatically start a generator and transfer system load to the generator supply in the event of a utility supply failure. System load is automatically re-transferred back to the utility supply following restoration of the utility power source to within normal operating limits. All load transfer sequences are "Open Transition" (i.e. "break-before-make") utilizing an in-phase transfer detection control sequence. All TS 923 transfer switch models have been tested in accordance with UL 1008 standards. Molded case circuit breakers or fuses with over current protection are required upstream of the transfer switch. The standard TS 923 Transfer Switch is rated for 100% system load.

The TS 923 Transfer Switches use a TSC 9 microprocessor based controller. All necessary control functions for fully automatic operation are provided from the TSC 9 and door mounted HMI panel. The TS 923 Commercial Transfer Switches are also available with the Service Entrance option.

## STANDARD FEATURES

- Normal Operation Status LED Lights: Load on Utility & Load on Generator, Utility & Generator Source Available, Engine Start Activated, Load Shed Activated
- Diagnostic LEDs: System OK, Alarm, Wait For Transfer, Diagnostic
- USB Port Factory Programming/Diagnostic
- 3 Phase Voltage sensing on Utility and Generator
- Generator AC frequency sensing
- Utility under voltage control setpoint 70% dropout (fixed)
- Generator Setpoints: under voltage 70% dropout (fixed), under frequency 90% pick-up (fixed)
- Engine warmup timer (Selectable 3, 10, 30, 60 sec)
- Utility return timer (Selectable 3, 10, 60, 120 sec)
- Engine start timer (Selectable 3, 6, 10, or disabled)
- Engine cooldown timer (Selectable 3, 60, 120, 300 sec)
- Integrated Programmable Generator Exercise Timer with easy to configure 7, 14 or 28 day, On-load or Off-load Programmability, initiate pushbutton & light
- Local utility power fail simulation test pushbutton
- Engine start contact (5A, 120/240VAC resistive max.)
- Load Shed contact (5A, 120/240VAC resistive max.)
- Alarm Output (100ma, 24Vdc)



## ELECTRICAL RATINGS/ENCLOSURE DIMENSIONS/CABLE TERMINALS

MODEL	ATS TYPE	AMPERAGE	MAX VOLTAGE	POLES	SHORT CIRCUIT CURRENT <sup>3</sup>	DIMENSIONS <sup>1</sup>			SHIPPING WEIGHT lbs (kg)	TERMINAL RATING <sup>2</sup>		
						HEIGHT INCHES (mm)	WIDTH INCHES (mm)	DEPTH INCHES (mm)		QTY (PER PHASE)	RANGE	
TS923A0100A	STANDARD	100A	240V	3	22kA <sup>4</sup>	16 1/8" (410)	18 7/8" (479)	8 1/4" (210)	25 lbs (11)	1	#3 - 1/0	
TS923A0100B	SERVICE ENTRANCE	100A	240V	3	10kA	27 1/8" (689)	18 7/8" (479)	8 1/4" (210)	35 lbs (16)	Gen.	1	#3 - 1/0
										Utility	1	#3 - 300 mcm
TS923A0200A	STANDARD	200A	240V	3	25kA <sup>4</sup>	32 7/8" (835)	18 7/8" (479)	8 1/4" (210)	35 lbs (16)	1	#3/0 - 250 mcm	
TS923A0200B	SERVICE ENTRANCE	200A	240V	3	10kA	32 7/8" (835)	18 7/8" (479)	8 1/4" (210)	40 lbs (18)	1	#3/0 - 250 mcm	
TS923A0400A	STANDARD	400A	240V	3	50kA <sup>4</sup>	45 1/8" (1146)	24 7/8" (632)	11" (279.4)	80 lbs (36)	2	#3/0 - 250 mcm	
TS923A0400B	SERVICE ENTRANCE	400A	240V	3	25kA	45 1/8" (1146)	24 7/8" (635)	11" (279.4)	90 lbs (41)	2	#3/0 - 250 mcm	

- 1 Enclosure dimensions are for reference. (DO NOT USE FOR CONSTRUCTION)
- 2 All cable connections suitable for copper or aluminum
- 3 Contact factory for further information on required upstream circuit breaker protection
- 4 When protected by specific upstream circuit breaker, refer to TS 910/920 manual



## OPTIONAL ACCESSORIES (FIELD INSTALLABLE)

The following optional field installable accessory kits can be ordered separately by specifying the following item codes:

CODE	DESCRIPTION	CODE	DESCRIPTION
TS910-N3R100A	NEMA 3R Door, External Door Mountable to NEMA 1 ATS Enclosure (Specify matching ATS model number)	TS910-UGI	Universal Generator Interface Start Kit
TS910-N3R100B		TS910-HTR	Enclosure Heater, 120VAC Fused, supplied from ATS Load Bus
TS913-N3R200A		TS910-KWLS3PH2	kW Load Shed Control output contact, 3 Phase, One Stage, 0 - 200A Current Transformers connected to ATS Load Bus
TS913-N3R200B			
TS910-N3R400A		TS910-KWLS3PH4	kW Load Shed Control output contact, 3 Phase, One Stage, 0 - 400A Current Transformers connected to ATS Load Bus
TS910-N3R400B			
TS910-SPD3PH	Surge Protective Device, 3 Phase Class 1, 120/208V connected to Load Bus		

## ORDERING INFORMATION

All Automatic Transfer Switch models listed in the Electrical Rating chart above are available from our stocking warehouses. Please specify 11 digit model code (e.g. TS923A0100A) plus code number for required optional items (e.g. TS910-UGI)



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NOTE: Specifications subject to change without notice.

**APPLICATION CONSIDERATIONS**

The proper selection and application of power generation products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Any technical advice or review furnished by Regal Beloit America, Inc. and its affiliates with respect to the use of products and components is given in good faith and without charge, and Regal assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

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