

# marathon™

—Thomson Power Systems

Series TS910 • 100 - 400 Amp

TS910 Automatic Transfer Switches



THOMSON  
TECHNOLOGY  
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## THOMSON POWER SYSTEM TS 910 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 superior field service ability
- Enclosed Power Contacts for safe operation and maintenance

### Quality Assurance

- ISO 9001 Registered Manufacturing Facilities
- Complies with:
  - NEMA & UL50
  - 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 optional standby systems

### Control Features

- New/Advanced TSC 9 Series Transfer Controller with features specifically designed for Residential and Light 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
- Wireless Remote Alarm Messaging Module (Optional)
- Universal Generator Interface kit option allows TS 910 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 are available
- 120/240V Single Phase, 3 wire c/w Neutral
- 120/208V Three Phase, 4 wire c/w Neutral
- 2 pole/3 pole, 50/60hz
- Rust Resistant Aluminum Enclosures
- NEMA 3R Door for Outdoor Applications (Optional)
- Withstand Short Circuit Current Ratings up to 50kA

Thomson Power System **TS 910** Automatic Transfer Switches employ a power contactor switching unit with a 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 910** transfer switch models have been tested in accordance with UL 1008 standards. Molded case circuit breakers or fuses with overcurrent protection are required upstream of the transfer switch. The standard **TS 910** Transfer Switch is rated for 100% system load.

The **TS 910** series transfer switches use a TSC 9 microprocessor based controller. All necessary control functions for fully automatic operation are provided. The TSC 9 controller is mounted inside the transfer switch enclosure. Operating status is provided via LED indicators visible through the front panel on NEMA 1 rated enclosures.

The **TS 910** Residential Transfer Switches are also available as Service Entrance Rated devices.

## 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
- Single Phase and Three Phase Voltage sensing on Utility and Generator
- Generator AC frequency sensing
- Utility under voltage control set point 70% dropout (fixed)
- Generator Set points: under voltage 70% dropout (fixed), under frequency 90% pick-up (fixed)
- Engine warm-up timer (Selectable 10 sec, 30 sec, 60 sec)
- Utility return timer (Selectable 10 sec, 60 sec, 120 sec)
- Engine start timer (Selectable 3 sec, 6 sec, 10 sec)
- Engine cool down timer (Selectable 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 & LED, front faceplate mounted
- 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	POLES	MAX VOLTAGE	AMPERAGE	SHORT CIRCUIT CURRENT <sup>3</sup>	DIMENSIONS <sup>1</sup>			SHIPPING WEIGHT LBS	TERMINAL RATING <sup>2</sup>	
						HEIGHT INCHES	WIDTH INCHES	DEPTH INCHES		QTY PER PHASE	RANGE
TS912A0100A	STANDARD	2	240V	100A	10kA	16 1/8"	18 7/8"	8 1/4"	20 lbs	1	#14 - 1/0
TS912A0100B	SERVICE ENTRANCE	2	240V	100A	10kA	27 1/8"	18 7/8"	8 1/4"	30 lbs	1	#14 - 1/0
TS912A0200A	STANDARD	2	240V	200A	10kA	27 1/8"	18 7/8"	8 1/4"	30 lbs	1	#6 - 250mcm
TS912A0200B	SERVICE ENTRANCE	2	240V	200A	10kA	32 7/8"	18 7/8"	8 1/4"	35 lbs	1	#6 - 250mcm
TS912A0400A	STANDARD	2	240V	400A	25kA	45 1/8"	24 7/8"	11"	70 lbs	2	#6 - 250mcm
TS912A0400B	SERVICE ENTRANCE	2	240V	400A	25kA	45 1/8"	24 7/8"	11"	80 lbs	2	#6 - 250mcm
TS913A0100A	STANDARD	3	240V	100A	22kA	16 1/8"	18 7/8"	8 1/4"	25 lbs	1	#14 - 1/0
TS913A0100B	SERVICE ENTRANCE	3	240V	100A	10kA	27 1/8"	18 7/8"	8 1/4"	35 lbs	1	#14 - 1/0
TS913A0200A	STANDARD	3	240V	200A	25kA	32 7/8"	18 7/8"	8 1/4"	35 lbs	1	#6 - 250mcm
TS913A0200B	SERVICE ENTRANCE	3	240V	200A	10kA	32 7/8"	18 7/8"	8 1/4"	40 lbs	1	#6 - 250mcm
TS913A0400A	STANDARD	3	240V	400A	50kA	45 1/8"	24 7/8"	11"	80 lbs	2	#6 - 250mcm
TS913A0400B	SERVICE ENTRANCE	3	240V	400A	25kA	45 1/8"	24 7/8"	11"	90 lbs	2	#6 - 250mcm

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

## OPTIONAL ACCESSORIES (Field Installable)

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

CODE	DESCRIPTION
TS910-N3R100A	NEMA 3R Door, External Door Mountable to NEMA 1 ATS Enclosure (Specify matching ATS model number)
TS910-N3R100B	
TS910-N3R200A	
TS910-N3R200B	
TS913-N3R200A	
TS913-N3R200B	
TS910-N3R400A	
TS910-N3R400B	
TS910-WMS	Wireless Remote Alarm Messaging Module
TS910-SPD1PH	Surge Protective Device, Single Phase, Class 1, 120/240V connected to Load Bus
TS910-SPD3PH	Surge Protective Device, Three Phase Class 1, 120/208V connected to Load Bus

CODE	DESCRIPTION
TS910-UGI	Universal Generator Interface Start Kit
TS910-HTR	Enclosure Heater, 120VAC Fused, supplied from ATS Load Bus
TS910-KWLS1PH2	kW Load Shed Control output contact, Single Phase, One Stage, 0-200A Current Transformers connected to ATS Load Bus
TS910-KWLS1PH4	kW Load Shed Control output contact, Single Phase, One Stage, 0-400A Current Transformers connected to ATS Load Bus
TS910-KWLS3PH2	kW Load Shed Control output contact, Three Phase, One Stage, 0-200A Current Transformers connected to ATS Load Bus
TS910-KWLS3PH4	kW Load Shed Control output contact, Three Phase, One Stage, 0-400A Current Transformers connected to ATS 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. TS912A0100A) plus Code number for required optional items (e.g. TS910-UGI)

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—Thomson Power Systems



9087A - 198th Street  
Langley, BC Canada V1M 3B1  
PH: 604-888-0110  
FAX: 604-888-3381

[www.thomsontechnology.com](http://www.thomsontechnology.com)

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