THOMSON
POWER SYSTEMS

SERIES TS 840 • 100 - 800 AMP
AUTOMATIC TRANSFER SWITCHES

AGRICULTURAL

REGAL®

THOMSON POWER SYSTEMS TS 840 AUTOMATIC TRANSFER SWITCHES OFFER THE FOLLOWING:

ENCLOSED CONTACT POWER SWITCHING UNITS
- Fully enclosed silver alloy contacts provide high withstand rating & 100% continuous current rating.
- 3 cycle short circuit current withstand.
- Completely isolated utility and generator side power switching units.
- Power switching units can incorporate overcurrent protection, allowing cost savings in upstream devices.
- Not damaged if manually switched while in service.

RELIABLE MOTOR-OPERATED TRANSFER MECHANISM
- Heavy duty brushless gearmotor and operating mechanism provide mechanical interlocking and extreme long life.
- Safe manual operation permits operation under adverse conditions.

SUPERIOR SERVICEABILITY
- All mechanical and control devices are visible and front accessible.
- All control wires and power busses are front-accessible there are no wires or connections which require removal of the transfer switch from its enclosure for servicing.

CONTROL FEATURES
- TSC 80 micropocessor based controller
- NEMA 3R enclosure for outdoor weatherproof applications
- Isolation plug permits disconnecting control circuits from all power sources.

QUALITY ASSURANCE
- ISO 9001 Registered

SEISMIC CERTIFICATION

TS 840 ATS is certified for installation and operation per the following requirements:
- IBC 2006 – Section 13, Occupancy Category IV
- ASCE7-05 Region 3 (minimum SS=342%)

SAFETY STANDARDS
- UL 1008 Automatic Transfer Switches for use in Emergency Systems
- CSA C22.2 No. 178 Automatic Transfer Switches

WARRANTY
- 2 year limited warranty included

Thomson Power Systems TS 840 series of Automatic Transfer Switches employ two mechanically interlocked enclosed contact power switching units and a microprocessor based controller to automatically transfer system load to a 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. TS 840 series automatic transfer switches provide an open transition "break-before-make" transfer system with neutral position delay to ensure adequate voltage decay to prevent out of phase transfers.

TS 840 Automatic Transfer Switches are specifically designed and certified by UL 1008 and CSA C22. No. 178 nationally recognized safety standards for use in emergency systems at 240VAC. High withstand current ratings have been achieved using 3 cycle short circuit testing in accordance with UL 1008/CSA178 standards. This allows flexible system over current coordination by utilization of non-series rated upstream protective devices. TS 840 ATS models can be utilized in light industrial, telecom and agricultural applications which legally require automatic standby power.

TS 840 series of Automatic Transfer Switches are available in 2 basic model types: Standard ATS and Service Entrance Rated (SE). Service Entrance Rated Automatic Transfer Switches incorporate an isolating mechanism and over current protection on the utility supply thereby removing the need to have a separate, upstream circuit breaker/disconnect switch from the transfer switch. This unique Service Entrance Rated ATS design is incorporated into a standard sized automatic transfer switch enclosure providing a space-saving, cost effective solution for most applications. TS 840 SE Service disconnect operation is very simple and ensures a high level of safety for system maintenance personnel when performed. Normal operation and performance of the automatic transfer switch is unaffected by the Service Entrance feature.

TS 840 series automatic transfer switches use a type TSC 80 microprocessor based controller which provides all necessary control functions for fully automatic operation.

WITHSTAND CURRENT RATINGS (ALL MODELS)

MODEL	RATED CURRENT (AMPS)	MAXIMUM VOLTAGE	WITHSTAND CURRENT RATING AMPS (RMS)[1]		
			With Upstream Circuit Breaker Protection	With Upstream Fuse Protection	
			@240V	@240V	FUSE TYPE
TS 84xA - 0100	100A	240	65,000	100,000	T,J
TS 84xA - 0150	150A	240	65,000	100,000	T,J
TS 84xA - 0200	200A	240	65,000	100,000	T,J
TS 84xA - 0250	250A	240	65,000	100,000	T,J
TS 84xA - 0400	400A	240	65,000	100,000	T,J
TS 84xA - 0600	600A	240	65,000	100,000	T,J
TS 84xA - 0800	800A	240	65,000	100,000	Consult Factory

ENCLOSURE DIMENSIONS/CABLE TERMINALS (NEMA 3R, ASA #61 GRAY)

AMPERAGE	NUMBER OF POLES	DIMENSIONS INCHES (mm)[1]			SHIPPING WEIGHT lbs (kg)	TERMINAL RATING[3]	
		HEIGHT	WIDTH	DEPTH		QTY (PER PHASE)	RANGE[4]
100A	2,3	31.1" (790)	22.3" (566)	14.0" (356)	143 lbs (65)	1	#14 - 1/0
100A w/Dist[2]	2,3	43.1" (1095)	34.3" (871)	13.0" (330)	233 lbs (106)	1	#14 - 1/0
150A	2,3	31.1" (790)	22.3" (566)	14.0" (356)	143 lbs (65)	1	#2 - 4/0
150A w/Dist[2]	2,3	43.1" (1095)	34.3" (871)	13.0" (330)	233 lbs (106)	1	#2 - 4/0
200A	2,3	31.1" (790)	22.3" (566)	14.0" (356)	143 lbs (65)	1	#6 – 350 mcm
200A w/Dist[2]	2,3	43.1" (1095)	34.3" (871)	13.0" (330)	237 lbs (108)	1	#6 – 350 mcm
250A	2,3	35.1" (892)	27.3" (693)	14.0" (356)	172 lbs (78)	1	#6 – 350 mcm
250A w/Dist[2]	2,3	43.1" (1095)	34.3" (871)	13.0" (330)	251 lbs (114)	1	#6 – 350 mcm
400A	2,3	43.1" (1095)	34.3" (871)	13.0" (330)	227 lbs (103)	2	2/0 – 500 mcm
400A w/Dist[2]	2,3	63.1" (1603)	40.8" (1036)	14.5" (368)	354 lbs (161)	2	2/0 – 500 mcm
600A	2,3	46.1" (1171)	36.3" (922)	14.5" (368)	248 lbs (113)	2	2/0 – 500 mcm
600A w/Dist[2]	2,3	63.1" (1603)	40.8" (1036)	14.5" (368)	358 lbs (163)	2	2/0 – 500 mcm
800A	2,3	48.1" (1222)	37.8" (960)	18.0" (457)	309 lbs (140.4)	3	2/0 – 500 mcm
800A w/Dist[2]	2,3	63.1" (1603)	40.8" (1036)	18.0" (457)	422 lbs (192)	3	2/0 – 500 mcm

[1] Enclosure dimensions are for reference.(DO NOT USE FOR CONSTRUCTION)

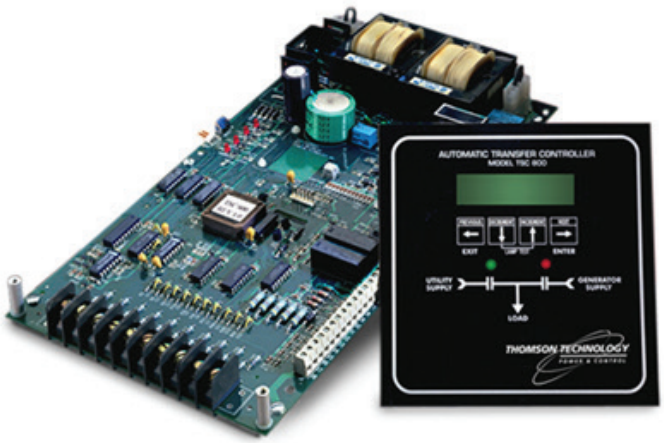
[2] Enclosures for models with Distribution Breaker Options (Dist 2 or Dist 4)

[3] All cable connections suitable for copper or aluminum

[4] Optional terminal ratings are available in some models – Consult Thomson Power Systems

STANDARD FEATURES (With TSC 80 Controller)

- Load on Utility & Load on Generator Lights
- Utility & Generator Source Available Lights
- Three Phase Voltage Sensing on Utility & Generator Sources
- Under Frequency Sensor on Generator Source
- Engine Start Delay Timer 0-60 sec.
- Engine Cooldown Delay Timer 0-30 min.
- Engine Warm-up Timer 0-60 sec.
- Neutral Position Delay 0-60 sec.
- Utility Return Timer 0-30 min.
- Engine Start Contact (10A, 120/240 VAC res. Form B)
- Exercise Timer (On or Off Load, Fixed 30 min.)
- Auxiliary Contact - Utility side (10A, 120/240 VAC res.
  Qty 1, Form C)
- Auxiliary Contact - Generator side (10A, 120/240 VAC res. Qty 1, Form C)
- Local Utility Power Fail Simulation Test Pushbutton
- Provision for Remote Load Test/Peak Shave Switch Input
- NEMA 3R Enclosure
- Solid Neutral
- Storage Temperature: -40°C to 70°C (-40°F to 158°F)
- Operating Temperature: -40°C to 50°C (-40°F to 122°F)
- Humidity: 95% non-condensing, maximum



ORDERING INFORMATION

When placing an order, specify the following 21 digit ATS MODEL CODE as per the features and applications described below.

1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
T	S	8	4																

1-3. SERIES
TS - TRANSFER SWITCH

4 & 5. MODEL
84 - 840 SWITCH

6. POLES
2 - 2 POLE
3 - 3 POLE

7. CONFIGURATION TYPE
A - ATS

8 - 11. AMPERAGE
0100
0150
0200
0250
0400
0600
0800

12. APPLICATION
A - STANDARD
B - SERVICE ENTRANCE

13. OPERATION TYPE
1 - OPEN TRANSITION

14 . SAFETY STANDARDS
A - UL 1008 (Service Entrance)
B - CSA C22.2 NO 178
C - UL 1008 / CSA 178

15 . VOLTAGE
1Ø 3 WIRE
D - 120/240
3Ø 4 WIRE (GROUNDED NEUTRAL)
E - 120/208
G - 120240 (DELTA)

16. CONTROLLER
1 - TSC80

17. ENCLOSURE TYPE
D - NEMA3RSD, ASA #61 GRAY
E - NEMA3RDD, ASA #61 GRAY
(800A Only)

18. UTILITY SWITCHING DEVICE
K - MOLDED CASE SWITCH (100 - 800A)
M - MOLDED CASE SWITCH C/W THER-MAG TRIP (100-200A)
N - MOLDED CASE SWITCH C/W ELECTRONIC TRIP (250-800A)

19. GENERATOR SWITCHING DEVICE
K - MOLDED CASE SWITCH (100 - 800A)
M - MOLDED CASE SWITCH C/W THER-MAG TRIP (100-200A)
N - MOLDED CASE SWITCH C/W ELECTRONIC TRIP (250-800A)

20. POWER CONNECTIONS
A - STANDARD

21. ATS CONNECTION CONFIGURATION
A - STANDARD

AVAILABLE IN STOCK

The following standard Automatic Transfer Switch models are available from stock:

MODEL	AMPERAGE	2 POLE (SINGLE PHASE, 3 WIRE WITH NEUTRAL)	STANDARD ATS	SERVICE ENTRANCE RATED ATS	VOLTAGE	TSC 80 CONTROLLER	NEMA 3R ENCLOSURE
TS842A0200A1AD1DKKAA	200A	■	■		120/240V	■	■
TS842A0200B1AD1DNKAA	200A	■		■	120/240V	■	■
TS842A0250A1AD1DKKAA	250A	■	■		120/240V	■	■
TS842A0250B1AD1DNKAA	250A	■		■	120/240V	■	■
TS842A0400A1AD1DKKAA	400A	■	■		120/240V	■	■
TS842A0400B1AD1DNKAA	400A	■		■	120/240V	■	■
TS842A0600A1AD1DKKAA	600A	■	■		120/240V	■	■
TS842A0600B1AD1DNKAA	600A	■		■	120/240V	■	■

OPTIONAL FEATURES (Specify separately from ATS MODEL CODE when ordering)

CODE	DESCRIPTION
Dist 2	Load Distribution Breakers (Qty 2, 200A, 2 Pole Only)
Dist 4	Load Distribution Breakers (Qty 4, 200A, 2 Pole Only)
Dist 6	Load Distribution Breakers (Qty 6, 200A, 2 Pole Only)
SDM	LCD Service Display Module - Displays TSC 80 Controller Settings and Timer Adjustments - Plug in Connector and Cable
TS-H1	Enclosure Strip Heater c/w Thermostat (120VAC External Power Source Required)
TS-H2	Enclosure Strip Heater c/w Thermostat (Internally Powered from ATS Load)

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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.

For a copy of our Standard Terms and Conditions of Sale, Disclaimers of Warranty, Limitation of Liability and Remedy, please contact Customer Service at 1-888-888-0110. These terms and conditions of sale, disclaimers and limitations of liability apply to any person who may buy, acquire or use a Regal Beloit America Inc. product referred to herein, including any person who buys from a licensed distributor of these branded products.