

15R-2002

REV. MAY, 1975

INSTRUCTION MANUAL

QT/6QT SERIES—MODULAR DESIGN

AUTOMATIC TRANSFER SWITCH-

MECHANICALLY HELD

NORMAL POSITION

ELECTRICALLY HELD

EMERGENCY POSITION

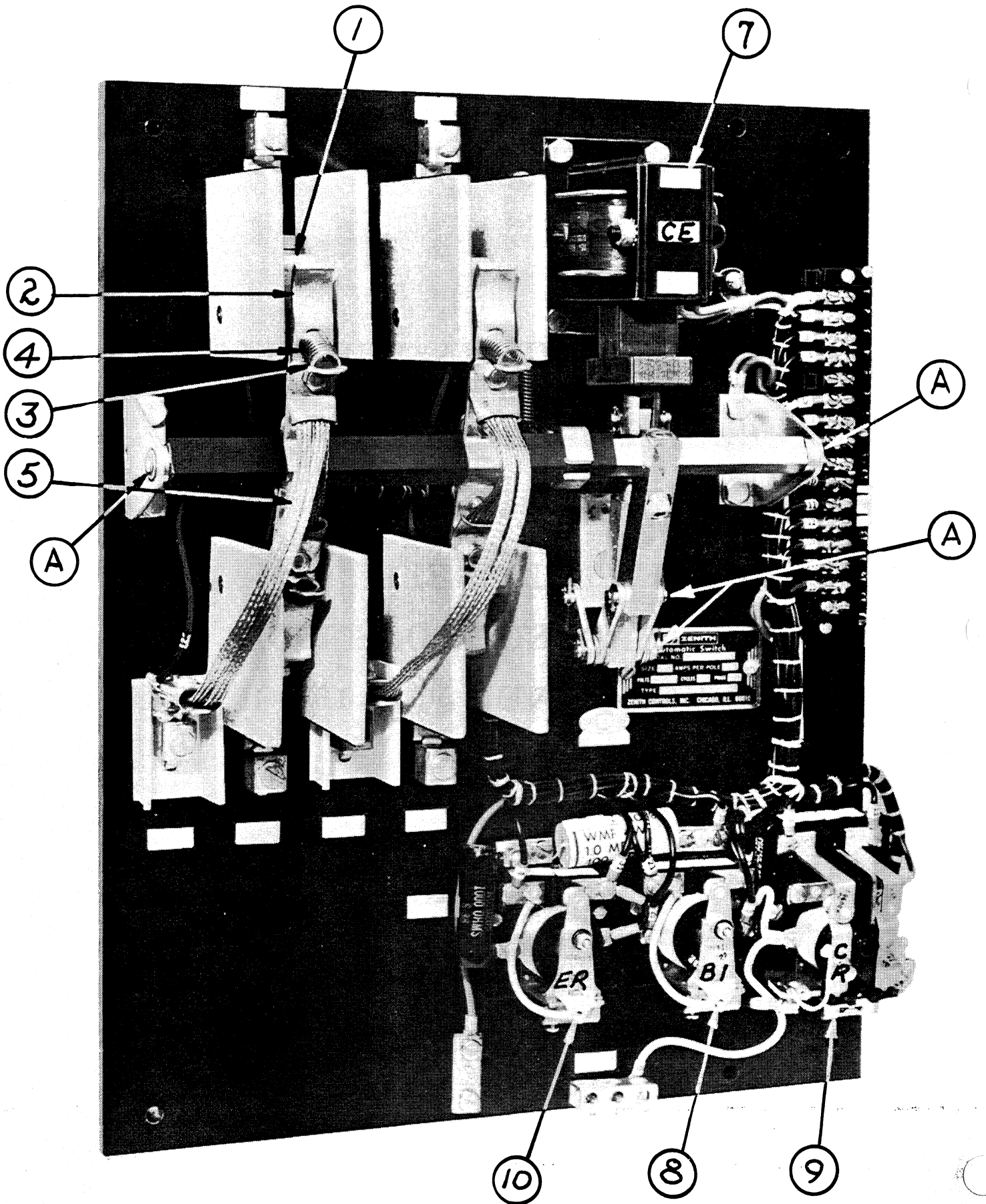
SERIES QT AND 6QT—40 TO 100 AMP

MODEL NO.

SERIAL NO.



CONTROLS, INC.



Controls Shown With Cover Removed

PARTS LIST

IMPORTANT: Model Number and serial number of switch must be included with all orders for replacement parts. If possible, also specify line voltages, drawing number and date of installation. When ordering mechanical parts not shown on the parts list, encircle the part on the photograph and return with the parts list. When ordering electrical components not shown on the parts list, refer to this part by its legend description in the wiring diagram.

ITEM	DESCRIPTION		SWITCH AMPS	STOCK NUMBER	
1.	Stationary Contacts		40	*1H-1044	
			75	1H-1044	
			100	1H-1045	
2.	Movable Contacts		40	*1H-1112	
			75	1H-1112	
			100	1H-1113	
3.	Spring Retainers		----	1H-1049	
4.	Contact Springs		----	1W-1002	
5.	Load Carriers		40	1P-1058	
			75	1P-1059	
			100	1P-1060	
6.	Test Switch		----	L-2006	
7.	Operating Solenoids	VOLTAGE SYSTEM	VOLTS	STOCK NUMBER	
		120, 120/240, 120/208	120	K-2051	
		240, 240/416	240	K-2052	
		480, 277/480	480	K-2053	
8.	Phase Relays		120	K-1055	
			208/240	K-1056	
			277	K-1057	
			480	K-1058	
9.	Control Relays		120	K-1086	
			208/240	K-1087	
			480	K-1088	
10.	Emergency Relays	All Voltages		K-1055	
	Emergency Frequency Sensing Components		Components		
			"C" (Capacitor)	"R" (Resistor)	"XFR" (Transformer)
			120 208/240 480	PS-1231 PS-1362 PS-1231	---- PS-1376 ---

For Parts for older, non-modular, QT Switches, see parts list 15R-2001.

*Prior to March, 1974, use 1H-1043 St. Contact
1H-1111 Mov. Contact

The modular QT switch is a new Zenith design effective February 1970. This switch can be identified by the universal terminal block on the right edge of the switch panel. The switch is designed for ease of adding accessories in the field. Replacement parts for this switch can be found on page 4 of this manual. Replacement parts for older QT switches (without the universal terminal block can be found in instruction manual 15R-2001). For details of operation, accessories, and wiring, see the wiring diagram attached to switch.

WARNING

The power voltage present in this equipment is dangerous to life. When operating or adjusting this equipment with doors open, special care must be taken to avoid contact with terminals carrying high voltage.

INSTALLATION

A good installation is as necessary as a good transfer switch. A wall mounted switch should not be distorted by an irregular wall. If the wall does not provide a flat surface it will be necessary to build up the mounting points to protect the cabinet from distortion. Floor mounted cabinets must be well braced and protected from damage, possibly by a small fence or wire cage. Be sure that the cabinet is not mounted directly under any water pipes which may sweat and drip water into the cabinet. Be sure cabinet is fully cleaned of dirt and concrete dust before operation.

Enough room should always be allowed to open the cabinet doors fully, so normal visual inspection of all parts is possible.

Before installing the switch and before energizing the circuits, check the switch for shipping or installation damage.

The following may be used as a test procedure after installation of the transfer switch:

Before connecting the load circuit, energize the NL circuit. The phase relays and control relay will be energized. Next, energize the EL circuit. The ER relay will be energized. Operate the test switch TS to the test position. The switch will transfer to the EL side. Return the test switch to the auto position. The transfer switch will restore to the NL position. The load may now be connected and the same procedure followed. A periodic test of the switch, under load conditions, is recommended to insure proper operation of the main switch and all accessories.

MAINTENANCE

A very minimum of maintenance is needed to keep the Zenith transfer switch in top operating condition. It is not necessary to lubricate any parts other than the main shaft bearings and the center toggle linkage. These parts are indicated as items #A on the photograph.

Contact replacement is usually not necessary for many years on the average transfer switch. When replacement is necessary, all contacts are easily removed and replaced from the front of the panel. Both the main contacts and all control contacts are easily visible from the front of the panel, for fast visual inspection.

SOLENOID ADJUSTMENT & REPLACEMENT: Loosen four screws at base of solenoid frame, remove frame without disturbing solenoid plunger and replace with new coil and frame. If the old plunger does not fit in the new solenoid frame, it will have to be replaced also.

If the solenoid should hum when seated, the main cause of the trouble is generally dust or abrasions in the laminations. Light oil applied to a soft cloth and wiped across the face of the plunger where it meets the solenoid will eliminate the humming.

It is also important to make sure that the coil is aligned properly. When replacing a new coil on the unit, and before screws are completely tightened energize the solenoid and tighten the screws one at a time, making sure no noise is evident.



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