

MODEL: T20004R

**CLASS CTL DISTRIBUTION/CONTROL
PANEL WITH TIME SWITCH**



**IN RAINPROOF (TYPE 3R) ENCLOSURE FOR INDOOR/OUTDOOR USE.
SUITABLE FOR SWIMMING POOL/SPA APPLICATIONS AND FOR DIRECT CONNECTION TO A WET-NICHE OR NO NICHE LUMINAIRE.
ALL DEVICES IN THIS CONTROL MUST BE SUPPLIED BY BRANCH CIRCUIT PROTECTORS LOCATED WITHIN THIS ENCLOSURE.**

60 AMP 120/240 VOLT OR 120/208 VOLT SINGLE PHASE, (THREE WIRE) AC

The short circuit rating of this panel is 10000 symmetrical amperes.

IMPORTANT: This control panel must be installed according to the National Electrical Code (including article 680) or Canadian Electrical Code (including section 68) and local code requirements. This installation is subject to the approval by the local inspection authority. The main lugs and neutral main are suitable for No. 14 to 2 AWG COPPER conductors. Use No. 14 to 6 AWG COPPER conductors for branch circuit wiring. Follow gauge selection table and corresponding terminal screw tightening torque requirements below. Install inter-changeable circuit breakers with an interrupting current rating of 10000 symmetrical amperes, or higher. All circuit breakers in this control panel shall be of the same manufacturer and type. See list of suitable types below. Follow manufacturers instructions for installing and testing of ground fault circuit breakers (GFCB) and interrupters (GFCI). Install only LISTED receptacle(s) and/or wiring device(s) inside the enclosure. A LISTED wiring device may be installed in the rectangular side knockout provided. When panel is outdoors, a LISTED rainproof cover must be installed over the wiring device in the side knockouts. If this enclosure is used for direct conduit connection to a wet-niche or no niche luminaire, one of the connection kits listed below in Note 4 must be used. This control should not be connected to any equipment which would cause bodily injury or property damage should it be activated unexpectedly. After wiring, install front panel over wiring compartment and close unused breaker openings with filler plates. **KEEP DOOR CLOSED AT ALL TIMES.**

SUITABLE LISTED BREAKERS

MANUFACTURER	CIRCUIT BREAKER				FILLER
	STD.	TWIN	QUAD	GFCB	PLATE
CROUSE-HINDS	MP	--	--	MP115GF	FP-1
CUTLER-HAMMER	BR	--	--	GFCB	FP-1
G.E.	THQL	--	--	THQLGF	THFP
SIEMENS/ITE	QP	--	--	--	QF-3
SQUARE D	HOM	HOMT	--	HOM-GFI	FP
THOMAS & BETTS	TB	--	--	GFB	FP

WIRING INFORMATION - COPPER CONDUCTORS ONLY

WIRE SIZE 75°C MIN INSULATION	SUPPLY CIRCUIT BREAKER RATING	TERMINAL TORQUE ²		MAX MOTOR LOAD (CONTINUOUS DUTY)		GENERAL PURPOSE BRANCH CIRCUIT BREAKER RATING	GENERAL PURPOSE BRANCH CIRCUIT MAXIMUM CURRENT CAPACITY
		LINE AND NEUTRAL MAIN LUGS	NEUTRAL AND GROUND	120V.	240V.		
		AWG	AMP	LB-IN	LB-IN		
14	15	35	20	1/2	1	15	12
12	20	35	20	1	2	20	16
10	30	35	20	1 1/2	3	30	24
8	50 ³	40	25	2	5	40	32
6	60	45	35	---	---	60	44

²TORQUE CIRCUIT BREAKER LUGS TO VALUES SPECIFIED ON CIRCUIT BREAKERS
³45 AMP FOR CANADA.

NOTES:

- Any Intermatic T100M or ET100CM series Time Switch PF1000M Series freeze protection or RC2000M Series air switch mechanism may be installed in the bracket provided or in the event an existing mechanism is replaced.
- If this control panel requires bonding, attach a LISTED bonding terminal of a suitable size using the mounting hole(s) provided on the bottom of the enclosure (156T11047A may be ordered).
- Wiring devices may be installed in this control panel (order 21T156A (4) Standoffs for mounting).
- The following kits are available to connect under water luminaires to this enclosure:

- 1/2" non-metallic - order 156PA13713A
- 3/4" non-metallic - order 156PA13714A
- 1" non-metallic - order 156PA13715A
- 1/2" metallic - order 156PA14336A

TIME SWITCH RATINGS: (SPST)

**30 AMP, RESISTIVE, INDUCTIVE, TUNGSTEN OR
1000 VA PILOT DUTY - 120/208/240 VOLT A.C.
2 HP (24 FLA)-120 VOLT A.C., 5HP (28 FLA) -24 VOLT A.C.
CLOCK MOTOR: 208/277 VOLTS - 60 HZ.**

(to order clock motor replacement, specify part no. WG - on motor cover)

TIME SWITCH OPERATING INSTRUCTIONS

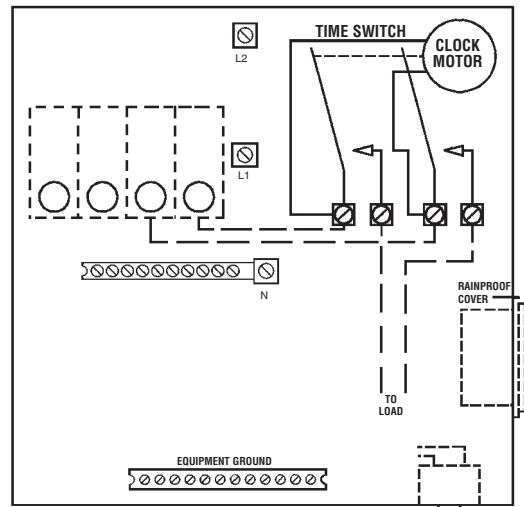
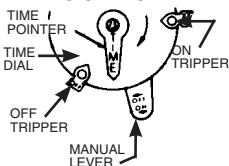
1. TO SET "ON" AND "OFF" TIMES:

Hold TRIPPERS against edge of CLOCK-DIAL, pointing to time (AM or PM) when ON and OFF operations are desired. Tighten tripper screws firmly.

2. TO SET TIME-OF-DAY:

Pull CLOCK-DIAL outward. Turn in either direction and align the exact time-of-day on the CLOCK-DIAL (the time now, when switch is being put into operation) to the pointer.
-DO NOT MOVE POINTER-

- TO OPERATE SWITCH MANUALLY:** Move MANUAL-LEVER below left or right as indicated by arrows. This will not affect the next operation.
- FOR MORE THAN ONE DAILY ON-OFF OPERATION:** Place additional tripper pairs on CLOCK-DIAL (order 156T1978A).
- IN CASE OF POWER FAILURE:** Reset CLOCK-DIAL to proper time of day. See step 2 above.



Mechanical Controls

T20000R Series 60 Amp Pool/Spa Control Panels

The T20000R Series Control Panels features an all-weather enclosure and contain a 4 circuit breaker base, an equipment grounding bar and a mechanical time switch mechanism. The circuit breaker base accepts interchangeable type breakers made by a several manufacturers. In addition, the enclosure has provision for installing additional switches or GFCI receptacles on the side and inside.

Applications:

- Filter Pumps
- Lights
- Ventilating Systems
- Signs
- Air Conditioners
- Heaters

Specifications:

Enclosure: 0.048 in. steel with electrostatically applied light beige finish
16 $\frac{3}{4}$ in. (42.6 cm) H x 8 $\frac{7}{8}$ in. (22.5 cm) W x 4 $\frac{3}{8}$ in. (11.1 cm) D

Knockouts: Five combination $\frac{1}{2}$ – $\frac{3}{4}$ in. and three $\frac{3}{4}$ – 1 in. on the bottom, one combination $\frac{1}{2}$ – $\frac{3}{4}$ in. on the left side, one $\frac{3}{4}$ – 1 in. on the back and one combination 1 $\frac{3}{4}$ x 2 $\frac{3}{4}$ in. knockout on the right side for mounting switches or GFCI

Panel Rating: 60 Amp, 120, 240 VAC or 120, 208 VAC; Single Phase, 60 Hz

Time Switch Rating: 30 Amp Resistive/Inductive, Tungsten or 1000 VA Pilot Duty each pole, 120, 208, 240 VAC; 2 HP (24 FLA), 120 VAC; 5 HP (28 FLA), 240 VAC

Shipping Weight: See table

Agency Approval: CSA/C-US

Model #	Description/Mechanism	Switch	Clock Supply Volts AC, 60 Hz	Shipping Weight
T21000R	Enclosure only	None	NA	11.2 lbs (5.0 kg)
T21001R	T101M	SPST	120	12.2 lbs (5.5 kg)
T21004R	T104M	DPST	240	12.2 lbs (5.5 kg)
T20004R*	T104M	DPST	240	11.6 lbs (5.3 kg)

* T20004R has a limited availability, T21004R is the replacement model.

For additional trippers (1 ON 1 OFF per pack), Order No. 156T1978A.

For additional OFF trippers (25 OFF per pack), order No. PA115.

For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

Note: See page 130 for a detailed list of replacement mechanisms.



T21000R



T21004R



T20004R

