ALTERNATING RELAYS

TRIPLEXOR

ATP SERIES PLUG-IN



- Works with 3 Switch inputs--LEAD, LAG & LAG2
- Optional top-mounted switch allows use as standard Triplexor or as Duplexor until system expansion requires additional third Load
- Control voltages of 120V AC or 24V AC/DC
- Plug-in enclosure utilizes industry-standard 8 Pin octal or 12 Pin square sockets
- ◆ Input Switch Failure Indication





with appropriate socket



800-238-7474 www.macromatic.com sales@macromatic.com Macromatic ATP Series Triplexors are used in three load applications requiring both the optimization of load usage by equalizing the run time of multiple loads and additional capacity in case of excess load requirements.

As standard, these products operate as a normal Triplexor with three inputs--see "Typical Installations" on Page 37 for more information. An optional version with an 8-position rotary switch is offered. This allows the unit to operate as either a:

(a) standard Triplexor

- (b) Triplexor locking Load 1, 2 or 3 as the first to be energized (Lead Load)
- (c) standard Duplexor until system expansion requires control for a third Load(d) Duplexor locking Load 1 or 2 as the first to be



energized (Lead Load). All versions offer an indication of a switch failure (out-of-sequence)--LED's will flash if any switch closes out of sequence. Also, if power is lost &

will flash if any switch closes out of sequence. Also, if power is lost & returns with more than just the LEAD Switch closed, there is a fixed 10 second delay between energization of the first output & subsequent outputs to prevent all Loads from coming on at the same time.

FUNCTION	CONTROL VOLTAGE	PRODUCT NUMBER	WIRING/SOCKET∎
TRIPLEXOR ONLY w/o Switch	120V AC 24V AC/DC	ATP120A1 ATP024A1	8 Pin Octal 70169-D L φ ^V φ N
TRIPLEXOR/ DUPLEXOR w/ Switch	120V AC 24V AC/DC	ATP120A1R ATP024A1R	LAG2 4 5 6 2 1 8 1 LOADS
			DIAGRAM 184
TRIPLEXOR/ DUPLEXOR w/ Switch	120V AC 24V AC/DC	ATP120A7R ATP024A7R	12 Pin Square SD12-PC LAG2 L V N LAG LEAD 6 5 4 3 2 1 7 8 9 10 11 12 1 2 3 LOADS DIAGRAM 185

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ALTERNATING RELAYS

TRIPLEXOR

APPLICATION DATA & DIMENSIONS

APPLICATION DATA

Voltage Tolerances: +10%/-15% at 50/60Hz. (AC); +10%/-15% of control voltage (DC)

Load (Burden): Less than 2VA for all voltages

Output Contacts: (3) SPNO 3A @ 24/120V AC General Purpose: C300 Pilot Duty: 1/6HP @ 24/120VAC

Life: Mechanical: 10,000,000 operations; Full Load: 100,000 operations

Temperature: -28° to 65°C (-18° to 149°F)

Time Delay: If power is lost & returns with more than just the LEAD Switch closed, there is a fixed 10 second delay between energization of the second output (Triplex & Duplex mode) & third output (Triplex mode only) to prevent all Loads from coming on at the same time.

LED Indication: One of the Red LED's will be steady ON to indicate which Load will be energized first; all will flash (3 in Triplex mode or 2 only in Duplex mode) to indicate a switch out-of-sequence error.

Optional Selector Switch Settings:

Allows unit to operate as standard Triplexor or Duplexor, or lock selected Loads to operate first (Lead Load) each time:

Triplex Triplex--Lead 1 Triplex--Lead 2 Triplex--Lead 3 Duplex Duplex--Lead 1 Duplex--Lead 2

Approvals: US File #E109466



DIMENSIONS



TYPICAL INSTALLATIONS

3 Switch 3 Pump

All three switches are open and all loads are off. When the LEAD Switch closes, it energizes Load 1. As long as the LEAD Switch remains closed, Load 1 remains energized. If the LAG Switch closes, Load 2 is energized. If the LAG2 Switch closes, it energizes Load 3. Each load is turned off in sequence as the switches are opened. The entire cycle is then repeated, but with Load 2 energized first followed by Load 3 and then Load 1. NOTE: power for outputs is supplied from L connection, not through input switches (see drawing at right).

