SPECIFICATIONS

INPUT

VOLTAGE: 120VAC
FREQUENCY: 50/60 Hz
TOLERANCE (VOLTAGE): ± 15% of nominal
POWER CONSUMPTION: 10 VA maximum
TRANSIENT PROTECTION: Isolation transformer

OUTPUT

TYPE: Electromechanical relay
RATING: 10 A @ 240VAC maximum

	Type A Resistive Sensitive 3.0kΩ	Type A Resistive Sensitive 30kΩ	Type B Resistive Sensitive 110Ω	Type C Voltage Sensitive
Control Terminals	E&F (C&D jumpered)	C&F (C&D without jumper)	E&F (C&D not used)	E(+)&F(-) (C&D not used)
Max. open circuit voltage	8VDC	40VDC	2VDC	N/A
Max. short circuit current	10mA	10mA	2.0mA	N/A
Max. control resistance to energize unit	3.0kΩ	30kΩ	110Ω	N/A
Min. control resistance to de-energize unit	6.0kΩ	45kΩ	160Ω	N/A
Max. control voltage	N/A	N/A	N/A	20VDC
Min. control voltage	N/A	N/A	N/A	1.5VDC±10%
Control point which may be grounded	E or F	E or F	F	F

Note: N/A indicates not applicable

PHYSICAL

OPERATING TEMP: 0° to 50°C (32° to 120°F)
MOUNTING: Base mount
TERMINATION: Terminal block on face of timer
HOUSING: Metal

WIRING

TYPE A
A-B Voltage input (constant)
C-F Control 30K (energizes output, remove jumper)
E-F Control 3K (energizes output, jumper C&D)
1-2 N.O. (except B2, N.C.)
3-4 N.C. (except B1, N.O.)

Caution: Never apply voltage to C-D-E-F

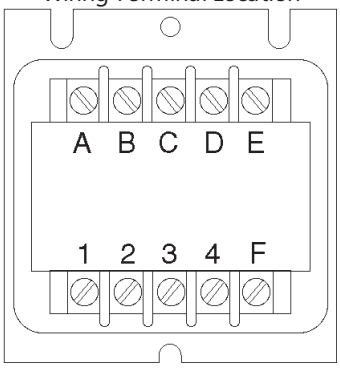
TYPE B
A-B Voltage input (constant)
C-D Not used
E-F Control (energizes output)
1-2 N.O. (except B2, N.C.)
3-4 N.C. (except B1,N.O.)

Caution: Never apply voltage to C-D-E-F

TYPE C
A-B Voltage input (constant)
C-D Not used
E-F Control E(+) F(-) (energizes output)

1-2 N.O. timed (except B2, N.C.)
3-4 N.C. (except B1, N.O.)

Wiring Terminal Location



DIMENSIONS Inches (millimeters)

Exterior dimensions same as 1214 page 30

RESISTANCE OR VOLTAGE DETECTOR

The function of a resistive sensitive relay is based on the detection of various resistance values. Output pick-up occurs when both of the unit's sensing probes come in contact with a material or liquid which provides a resistance value lower than the unit's maximum sensitivity level.

Type A resistive sensitive relay can be wired for output pick-up at a maximum resistance level of either 3,000 or 30,000 ohms.

Type B has a low maximum resistance level for output pick-up at 110 ohms. The unit can be purchased with an optional sensitivity adjustment which allows the resistance level to be set anywhere between 10 and 110 ohms. The type B is ideal in tool or work detection applications requiring coolant solutions which have low resistance.

Type C voltage sensitive relay, amplifies a low DC voltage signal by energizing a mechanical output which is capable of switching heavier voltage loads. The type C can be applied directly to the solid state output of instrumentation or logic control equipment to function as a power relay.

ORDERING DATA

ORDERING CODE 1213 - 1 - A - B - OP1

BASIC MODEL NUMBER
1213
1213 UL

INPUT VOLTAGE
1 120VAC

TYPE
A Resistive sensitive relay with dual control points, 3K ohm or 30K ohm maximum.
*B Low resistive sensitive relay with single control point, 110 ohm maximum.
C Voltage sensitive control point, 20V maximum, 3V minimum.

OUTPUT
B Relay 1 N.O., 1 N.C., contacts electrically isolated
B1 Relay 2 N.O., contacts electrically isolated
B2 Relay 2 N.C., contacts electrically isolated

OPTIONS (if desired)
OP1 Output indication light
*OP2 Sensitivity adjustment which allows resistance level to be set anywhere between 10 and 110 ohms (type B only).

*Not available on UL units