Adjusting Set Time Interval

A timing potentiometer sets the time interval. It is necessary to calculate the period of time between pulses to determine the correct time setting.

1) Determine minimum operating speed. This is the speed at which the output energizes. Any greater speed also maintains an energized output. Any slower speed de-energizes the output.

2) Determine pulse/sec ratio provided by minimum operating speed.

    example: 2 pulses/sec

3) Determine time interval between pulses.

    example: 2 pulses/sec = 1 pulse/0.5 sec

4) Adjust timing potentiometer to a setting slightly greater than 0.5 sec. Minimum operating speed (1 pulse/0.5 sec) will provide 2 pulses in a time interval slightly greater than 0.5 sec and maintain an energized output. Any speed less than the minimum operating speed will not provide two pulses per set time interval, and the unit's output will de-energize.

5) Select a time range, when ordering a 1262, in which the set time interval for minimum operating speed falls midrange. This provides better time setting resolution.

    example: Set time interval - 0.55 sec
                Select time range "D" - 0.06-1.0 sec)

SPECIFICATIONS

INPUT

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

OUTPUT

TYPE: Electromechanical relay
RATING: 10A - 1/6 HP at 120VAC, 1/3 HP at 240VAC

FUNCTION

TYPE: Motion detector
REPEAT ACCURACY: ± 1% of setting
INDICATION: LED indicates unit timing and output energized
TIMING RAMP: 0.02 sec minimum time - 1MΩ/sec
               0.06 sec minimum time - 100KΩ/sec
               0.5 sec minimum time - 10KΩ/sec
TIME RANGE: 0.02 to 1000 secs in 13 ranges
RESPONSE TIME: Set time interval
HYSTEROSIS: ~5% between pick-up and drop-out speeds
RANGE TOLERANCE: ≤ 10% at max, ≤ 0% at min
CONTROL TERMINALS: A-B-C-D-E-F
VOLTAGE PRESENT AT CONTROL TERMINALS:
    A - C : Same as input voltage
    B - C : 120VAC pulse
   D - E - F : 12VDC
    D - E : 12VDC pulse
CYCLE TIME:

Time Range		AC Control	DC Control
A-C	Minimum time control circuit closed	8 msec	0.1 msec
	Minimum time control circuit open	16 msec	0.45 msec
	Maximum control circuit pulses/sec	40	1800
D-H	Minimum time control circuit closed	8 msec	0.1 msec
	Minimum time control circuit open	16 msec	5 msec
	Maximum control circuit pulses/sec	40	200
J-N	Minimum time control circuit closed	8 msec	8 msec
	Minimum time control circuit open	42 msec	42 msec
	Maximum control circuit pulses/sec	20	20

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 122°F)
TIMING VARIATION VS. TEMP: ± 5% maximum
MOUNTING: Base mount
TERMINATION: Terminal block on face of timer
HOUSING: Metal

Underspeed or Overspeed Detection

Output Energizes only when running speed is reached.

AC Control Circuit is compatible with standard mechanical switches, solid state proximity sensors, and 120VAC pulse.

DC Control Circuit is compatible with solid state source or sink proximity sensors.

MSHA Investigation No. IA-137. The 1262 used in conjunction with the ISSC 1221 proximity sensor (see page 50) is approved by the Mine Safety and Health Administration.

CSA File No. LR92815

OPERATION

The output is de-energized when the monitored motion provides less than two pulses per set time interval. The output energizes when the monitored motion reaches or exceeds two pulses per set time interval. Once energized, the output will not de-energize until the monitored motion drops to less than two pulses per set time interval. The output automatically resets and the output energizes, when the monitored speed again matches two pulses per set time interval.
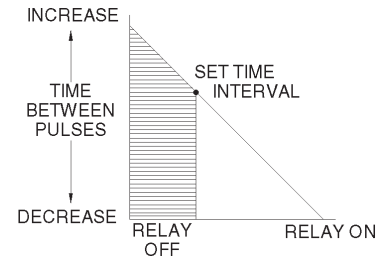
Initial Start Time Delay

The 1262 can be supplied with an initial start time delay which energizes the output for the time specified when the power is applied to the unit. This feature provides time at start up for the monitored equipment to reach a speed that will maintain an energized output. The output will de-energize, if the speed of the monitored equipment fails to reach the set point by the end of this delay. Removing and reapplying power resets the initial time delay.

MODEL 1262
BASE MOUNT

INDUSTRIAL SOLID STATE MOTION DETECTOR

iSSC®

Kanson Electronics, Inc.

ORDERING DATA

ORDERING CODE   1262 - 1 - L - D - B - OP3(10)

BASIC MODEL NUMBER
1262

INPUT VOLTAGE
1   120VAC

DETECTION MODE
L   Underspeed

TIME RANGE (Secs)

A	0.02-0.10	F	0.06-5.0	L	0.5-250
B	0.02-0.25	G	0.06-10.0	M	0.5-500
C	0.02-0.50	H	0.06-25.0	N	0.5-1000
D	0.06-1.0	J	0.5-50.0	W	Fixed time
E	0.06-2.5	K	0.5-100		(see note)

NOTE: Specify W and desired fixed time.
Factory will set time within 5%

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

OPTION (If desired)
OP3(t) Initial start time delay. Specify in parentheses time
selected from below.

1 sec   10 secs
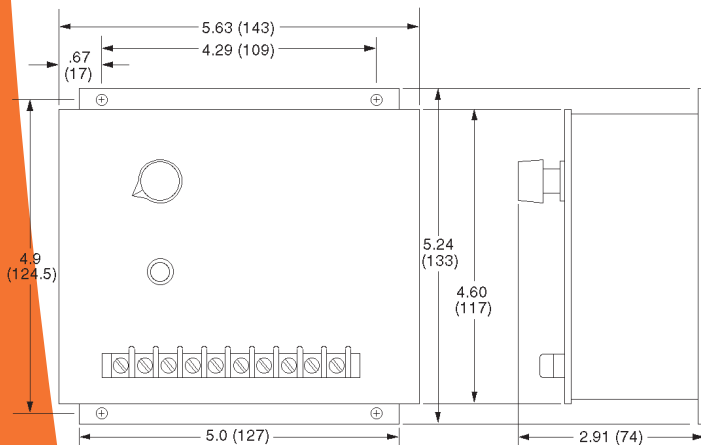5 secs   25 secs

SPECIAL MODEL for PLC WATCHDOG applications
ORDER NUMBER **1262-PC**
0.06-2.5 second timeout
2 second start-up delay
Relay output 1 N.O., 1 N.C.

APPLICABLE ACCESSORIES
See accessory section for details
Locking attachment   RP-217

DIMENSIONS Inches (millimeters)

WIRING

A-B   Voltage input (constant)
A-C   AC Control — mechanical contact or prox sensor
B-C   AC Control — 120VAC Pulse
D-E-F DC Control — source or sink* prox sensor
          D- (DC-) common for prox sensor
          E- (A) input for prox sensor
          F- (+ 12VDC) supplied to prox sensor
D-E   12VDC Pulse
          D- (DC-) Common
          E- (+12VDC) Supplied by sourcing output
E-F   DC Control — mechanical contact
          *When using sink prox sensor, install 1200 ohm pull-up
resistor (supplied with unit) at E-F.
1-2   N.O. (except B2, N.C.)
3-4   N.C. (except B1, N.O.)

Wiring Terminal Location

120 VAC 50/60 Hz
INPUT (CONSTANT)

120 VAC CONTROL
(CONNECT CONTROL CONTACT OR N.O. 120 VAC SENSOR AT L1 & C)
THIS INPUT IS NOT TO BE USED IN A MSHA APPROVED INSTALLATION

*DC
CONTROL

(CONNECT CONTROL CONTACT AT E & F. CONNECT 12VDC SENSOR AT D, E & F)
USE THIS INPUT WITH A 1221 PROXIMITY SENSOR FOR MSHA INSTALLATION

*NOTE: TO USE ISSC DC PROXIMITY SWITCH 1221 (N.O.) ,
A 1200 Ω PULL-UP RESISTOR (SUPPLIED WITH UNIT)
MUST BE INSTALLED AT TERMINALS E & F.
(SEE DWG. G2693).