

TIME DELAY RELAYS

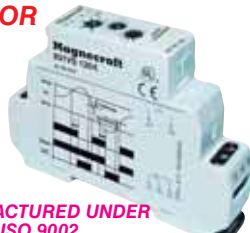
246 & 247



2.62 x 1.46 x 4.06

- ✦ INDUSTRIAL
- ✦ VERSATILE DESIGN
- ✦ BLOWOUT MAGNET AVAILABLE
- ✦ LONG OPTION LIST

831 VOLTAGE SENSOR



MANUFACTURED UNDER ISO 9002

3.54 x 0.692 x 2.56

- ✦ INDEPENDENT UPPER AND LOWER LIMITS
- ✦ TIME DELAY
- ✦ TWO LEDs
- ✦ DIN MODULE

236 VOLTAGE SENSOR



MANUFACTURED UNDER ISO 9002 QS 9000

SEE PAGE 26

- ✦ INDEPENDENT PICK UP AND DROP OUT ADJUSTMENT
- ✦ ELECTROMECHANICAL OUTPUT
- ✦ SOCKET COMPATIBLE

235 CURRENT SENSOR



1.53 x 1.40 x 3.52

- ✦ WIDE SENSE RANGE
- ✦ SOCKET COMPATIBLE
- ✦ KNOB ADJUSTMENT

On delay or off delay	Voltage sensor	Voltage sensor	Current sensor
1	1	1	1
0.1 to 300 seconds	0.1 to 10 seconds	Optional on PX	
See ordering code	Normal sense	24, 120, 240, 480	120
	Voltage 120	24	
5 VA / 2.5 W	1.2 VA	3.5 VA / W	2 VA
Yes	Yes	Yes	Yes
DPDT, 3PDT 4PDT AND OTHERS	SPDT	PX=DPDT, CX=SPDT	SPDT
10 amps resistive @ 120	15 amps resistive @ 240	DPDT=10 amps @ 240	10 amps @ 120
		SPDT=13 amps @ 240	
10 amps resistive @ 28	15 amps resistive @ 24	DPDT=10 amps @ 28	6 amps @ 28
		SPDT=13 amps @ 28	
Silver alloy	Silver-Nickel 90/10	Silver Alloy	Silver Alloy
1,500	1,000	1,000	500
1,500	2,500	2,500	2,500
1,500	Not applicable	2500	Not applicable
-20	-20	-20	-20
AC:+45, DC: +70	+55	+55	+55
-20	-30	-30	-40
+85	+70	+85	+85
100,000	70,000	100,000	200,000
10,000,000	10,000,000	DPDT= 10,000,000, SPDT= 5,000,000	5,000,000
40	40	40	40
227	60	DPDT: 156, SPDT: 125	113

27390D, 33377D

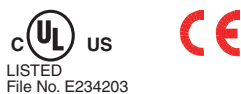
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70-463-1, 70-464-1

70-463-1



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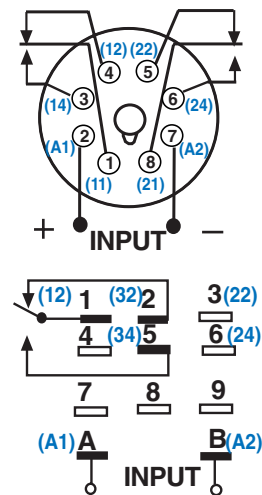
SPDT, 13 AMPS & DPDT, 10 AMPS

WIRING DIAGRAM
(VIEWED FROM PIN END)

UL
UL Recognized
File No. E62636



CLASS 236 VOLTAGE SENSING RELAYS COMBINE A SOLID STATE SENSOR WITH A SPDT, 13 AMP OR DPDT 10 AMP RELAY. PULL-IN & DROPOUT VOLTAGES ARE INDEPENDENTLY ADJUSTABLE. THE 236 CAN BE USED EITHER AS A OVER OR UNDER VOLTAGE DETECTING RELAY. STATUS L.E.D. INCLUDED.



SQUARE BASE
CONTINUOUS VOLTAGE
MUST BE SUPPLIED TO INPUT.

ALTERNATE NEMA
OR IEC () NUMBERS
VIEWED FROM
PIN SIDE

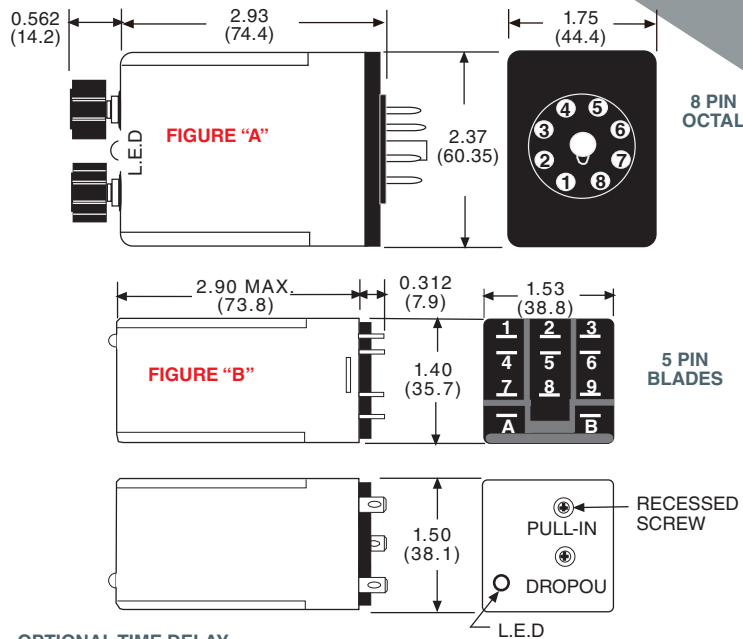
GENERAL SPECIFICATIONS (@ 25°C)

	UNITS	
INPUT/SENSING		
Standard Voltage Nominal:	VAC 50/60 Hz	24, 120, 240, 480
	VDC	24
Input Voltage Absolute Maximum:	maximum	Nominal +60% except 480volt where 600 VAC is maximum
Upper Input Voltage Range:	nominal	75 to 115%
Lower Input Voltage Range:		75 to 95% of set pickup
Power Consumption:	maximum	3.5 VA / W
Transient Protection:		Yes
Reverse Polarity Protection:	DC	Yes
Operate Time:	mS maximum	25
Release Time:		20
Input Indication:		Green LED
TIMING		
Time Scales:		Optional on PX
Setting Adjustment:		PX= KNOB, CX=Recessed potentiometer
Reset Time:	mS maximum	150
OUTPUT		
Contact Rating AC Amperes (AC1):	VAC 50/60Hz	DPDT=10 amps @ 240 SPDT=13 amps @ 240
Contact Rating DC Amperes (DC1):		DPDT=10 amps @ 28 SPDT=13 amps @ 28
Contact Rating Horsepower:	HP @ VAC	1/3 @ 120, 1/2 @ 240
Contact Rating Pilot Duty:		B300
Minimum Load:	mW	500
Contact Material:		Silver Alloy
Output Indication:		No
DIELECTRIC STRENGTH		
Across Open Contacts:	V rms	1,000
Input to Contacts:	V rms	2,500
Pole to Pole:	V rms	2,500
TEMPERATURE		
Operating, Lower:	°C	-20
Operating, Upper:	°C	+55
Storage, Lower:	°C	-30
Storage, Upper:	°C	+85
LIFE EXPECTANCY		
Electrical Full Load	operations	100,000
Mechanical @ no Load :	operations	DPDT= 10,000,000 SPDT= 5,000,000
MISCELLANEOUS		
Operating Position:		Any
Cover Protection Category:	IP	40
Terminals:		PX= 8 pin octal CX= 0.187 x 0.020 quick connect
Weight:	Inch grams	DPDT: 156, SPDT: 125



OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



OPTIONAL TIME DELAY
AVAILABLE IN OCTAL
PIN VERSION

Mating Sockets
70-464-1, 70-750D8-1: ACPX/CPX 70-463-1: ACX
See section 7

STANDARD PART NUMBERS	FIG.	NOMINAL INPUT VOLTAGE	VOLTAGE PULL-IN RANGE	VOLTAGE DROP-OUT RANGE
W236ACPX-1	A	120 VAC	92 TO 140 VAC	75% TO
W236ACPX-4	A	24 VAC	20 TO 30 VAC	95% OF
W236CPX-1	A	24 VDC	20 TO 30 VDC	PICKUP
W236ACX-1	B	120 VAC	90 TO 138 VAC	VOLTAGE
W236ACX-2	B	208 / 220 / 240 VAC	180 TO 276 VAC	SETTING
W236ACX-4	B	480 VAC	360 TO 552 VAC	

CALL FACTORY FOR OTHER VOLTAGES,
TIME AND FUNCTIONS

CROSS REFERENCE GUIDE

MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	SQUARE D	OMRON	A / B	NCC	IDEC
TDRPRO-5000	CNM5, CNS-35-96, CNS-35-76	9050JCK70V14	H3CA-A			
TDRPRO-5001			H3CA-8H			
TDRPRO-5002	CN1, CNS-35-92, CNS-35-72		H3CA-8			
TDRSOXP-24				700HRM12TU24		RTE-P1AD24
TDRSOXP-120				700HRM12TA17		RTE-P1AF20
TDRSOXP-240				700HRM12TA17		RTE-P1AF20
TDRSRXP-12					T2K-xxxxx-466	RTE-P2D12
TDRSRXP-24					T2K-xxxxx-467/462	RTE-P2AD24
TDRSRXP-120					T2K-xxxxx-461	RTE-P1AF20
TDRSOXB-12						RTE-B1D12
TDRSOXB-24						RTE-B1AD24
TDRSOXB-120						RTE-B1AF20
TDRSRXB-12						RTE-B2D12
TDRSRXB-24						RTE-B2AD24
TDRSRXB-120						RTE-B2AF20
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	SQUARE D	CUTLER HAMMER	A / B	SIEMENS	OTHER
W211ACPSOX-18	CDB-38-70001					
W211ACPSOX-5	CDB-38-70003 CGB-38 70010S CHB-38-70001 CKB-38-70010 CB-1003B-70	9050JCK11V20	MTON1P120A	700HT12AA1	OND-0110-120A	SST12AAA (AGASTAT) 5YZ86 (GRAINGER) 7268K23 (McMASTER CAR) TIK-00010-461 (NCC)
W211ACPSOX-7	CKB-38-70180 CHB-38-70003 CB-1005B-70 CDB-38-70005	9050JCK15V20	MTON2P120A	700HT12BA1	OND-1180-120A	5X829 (GRAINGER) 7268K26 (McMASTER CAR)
W211ACPSOX-8	CGB-38-70005M			700HT12CA1		R28-11A10-120M(NET) 5X830 (GRAINGER) 7268K51 (McMASTER CAR)
W211ACPSOX-60	CGB-38-70010M	9050JCK16V20				6X601 (GRAINGER)
W211ACPSOX-61		9050JCK17V20				7268K53 (McMASTER CAR)
W211ACPSOX-62	CGB-38-70050M	9050JCK18V20				7268K54 (McMASTER CAR)
W211ACPSOX-63	CB-1007B70	9050JCK19V20				
W211CPSOX-1	CHD-38-30001 CB-1028D-30 CDD-38-30003			700HT12AZ24	OND-0110-24D	
W211ACPSRX-5	CHB-38-70011 CDB-38-70014 CB-1021B-78	9050JCK21V20	MTOF1P120A	700HT22AA1	OFD-0110-120A	SST22AAA (AGASTAT) 7268K43 (McMASTER CAR)
W211ACPSRX-7	CHB-38-70013	9050JCK25V20	MTOF2P120A	700HT22BA1	OFD-1180-120A	7268K46 (McMASTER CAR) 6X154 (GRAINGER) T3K-00010-461 (NCC)
W211CPSRX-1	CHD-38-30011			700HT22AZ24		7268K32 (McMASTER CAR)
W211CPSRX-3	CHD-38-30013 CDD-38-30008			700HT22BZ24		

THE CROSS REFERENCE IS INTENDED TO MATCH FOOT PRINT, INTERNAL WIRING, AND CONTACT LOAD RATINGS. CONSTRUCTION FEATURES AND GENERAL SPECIFICATIONS SHOULD BE COMPARED IF EXACT REPLACEMENT IS REQUIRED.

CROSS REFERENCE GUIDE

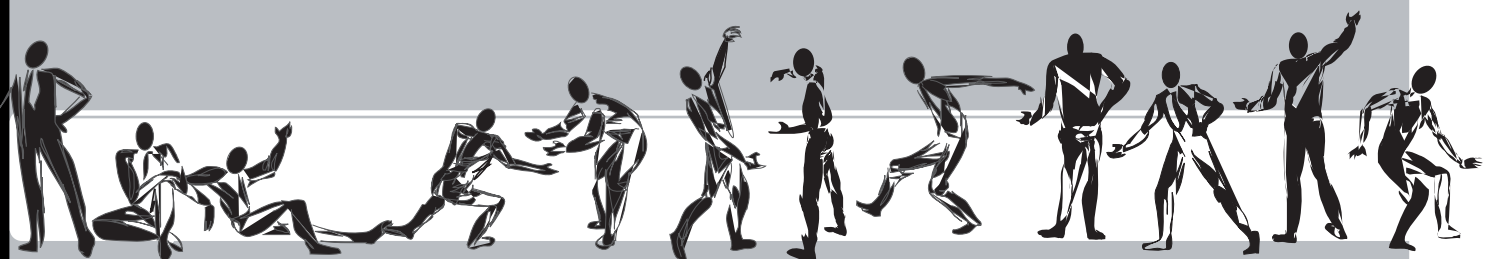
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	A / B	SQUARE D	SIEMENS	OTHER
211ACPSOX-3		700HT12BA24	9050JCK15V14	OND-0110-24A	
W211CPSOX-3	CDD-38-30005	700HT12BZ24			7268K35 (McMASTER CAR)
	CHD-38-30003				
	CB-38-70014				
211ACPSRX-8					SS51622-12 (MACROMATIC)
211ACPSRX-60			9050JCK26V20		T3K-00010-461 (NCC)
MAGNECRAFT & STRUTHERS-DUNN	SQUARE D	A / B	McMASTER CAR	GRAINGER	
W222ACPFX-16			7630K17		
W222ACPFX-27	9050JCK57V20	700HV32DA1			
W222ACPFX-11	9050JCK51V20	700HV32AA1	7630K12	1A366	
222CPFX-11		700HV32AZ24			
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	A / B	MIDTEX	CUTLER HAMMER	
W388ACPSOX-1	CLF-41-70010				
W388ACPSOX-2			614-12T400		
W388CPSOX-1	CLH-41-70010				
W388CPSOX-2			614-12C400		
W388CPSRX-22	CUA-42-70010		612-12C400		
W388ACPSOX-42	CUA-51-70010	700HS12AA1	612-43T100		
W388ACPSOX-44		700HS12BA1	614-43T400		
W388CPSRX-2		700HS22AZ24	612-43C100	MTON1B120A	
W388CPSRX-4		700HS22BZ24	612-43C400	MTON2B120A	
W388CPSRX-35			612-43T400	MTON2B120A	
W388ACQSOX-1	CLF-42-70010				
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	<p>FOR TIME DELAY RELAYS APPLICATION ENGINEERING ASSISTANCE</p> <p><i>Scott Heilman</i>, PRODUCT MANAGER FAX: (843) 395-8530 EMAIL: sheilman@magnecraft.com</p>			
W67CPSOX-1	R123012X2E1				
W67CPSOX-2	R123024X2E1				
MAGNECRAFT & STRUTHERS-DUNN	GRAINGER				
W236CPX-1	5Z564				
W236ACPX-1	5Z562				

U. S. A.

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