



**SYSTEM  
SENSOR®**

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## **Device Compatibility Document**

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## Control Panel Circuit Specifications

### PDRP-2001(E)(C)

Initiating Device Circuit Voltage: 17.18 - 20.48  
 Max Detector Circuit Standby Current: 2.0mA/circuit  
 Compatibility Identifier: "A"  
 NAC Power: Filtered (Special Application)

## Accessories Circuit Specifications

### 411-UDAC

#### Universal Digital Alarm Communicator

Compatibility Identifier: "A"  
 PCA Board Revision: All  
 Max Detector Circuit Standby Current: 2.0mA/ckt  
 Initiating Device Circuit Voltage: 8.6 - 13.5VDC  
 NAC Power: Full Wave Rectified (Special App)  
 PCB Board Revision: Revision E  
 Max Detector Circuit Standby Current: 1.8mA/ckt  
 Initiating Device Circuit Voltage: 8.5 - 13.1VDC  
 NAC Power: Filtered (Special Application)

PCB Board Revision: Revision F or later  
 Max Detector Circuit Standby Current: 2.0mA/ckt  
 Initiating Device Circuit Voltage: 10.3 - 12.6VDC  
 NAC Power: Filtered (Special Application)  
 Revision level can be found on lower right edge of board

### FCPS-24FS6(E)(C), FCPS-24FS8(E)(C)

#### Field Charger Power Supply

Input Voltage 9 to 32 VDC  
 NAC Power: Filtered (Special Application)

## Compatible Two-Wire Smoke Detectors

Model	Detector ID	Detector Type	Base Model	Base ID	Standby Current (uA)
System Sensor 2W-B	A	Photoelectric I <sup>3</sup>	N/A	N/A	100
System Sensor 2WT-B	A	Photoelectric I <sup>3</sup>	N/A	N/A	100
System Sensor 1100/D	A	Ionization	N/A	N/A	100
System Sensor 1151	A	Ion	B401 / B110LP / B116LP	A	120
System Sensor 1400	A	Ion	N/A	N/A	100
System Sensor 1451	A	Ion	B401B / B406B / B110LP / B116LP	A	120
System Sensor 1451DH	A	Ion	DH-400	A	120
System Sensor 1800	A	Ion	N/A	N/A	120
System Sensor 1851B	A	Ion	B101B / B107B	A	120
System Sensor 1851DH	A	Ion	DH1851DC	A	120
System Sensor 2151	A	Photo	B401 / B110LP / B116LP	A	120
System Sensor 2300T	A	Photo / Therm.	N/A	N/A	120
System Sensor 2400	A	Photo	N/A	N/A	120
System Sensor 2400AIT	A	Photo / Iso. Therm. / Horn	N/A	N/A	120
System Sensor 2400AT	A	Photo / Therm. / Horn	N/A	N/A	120
System Sensor 2400TH	A	Photo / Therm.	N/A	N/A	120
System Sensor 2451	A	Photo	B401B / B406B / DH-400 / B110LP / B116LP	A	120
System Sensor 2451TH	A	Photo / Therm.	B401B / B406B / B110LP / B116LP	A	120
System Sensor 2800	A	Photo	N/A	N/A	120
System Sensor 2800TH	A	Photo / Therm.	N/A	N/A	120
System Sensor 2851B	A	Photo	B101B / B107B	A	120
System Sensor 2851BTH	A	Photo / Therm.	B101B / B107B	A	120
System Sensor 2851DH	A	Photo	DH2851DC	A	120
System Sensor 2100/D/S	A	Photoelectric	N/A	N/A	100

Model	Detector ID	Detector Type	Base Model	Base ID	Standby Current (uA)
System Sensor 2100T/D/S	A	Photoelectric	N/A	N/A	100
System Sensor DH100P	A	Photoelectric	N/A	N/A	120
System Sensor DH100LP	A	Photoelectric	N/A	N/A	120
System Sensor 2WTA-B	A	Photoelectric	N/A	N/A	100
System Sensor 2WTAR-B	A	Photoelectric	N/A	N/A	100

## Maximum Number of Detectors per Zone

When using two-wire smoke detectors containing supplementary relays or indicators, the operation of more than one detector per zone cannot be ensured.

Model Number	Base Model	PDRP-2001
2W-B	N/A	16
2WT-B	N/A	16
1100/D	N/A	20
1151	B401 / B110LP / B116LP	16/16/1
1400	N/A	20
1451	B401B / B406B / B110LP / B116LP	16 / 1 / 16 / 1
1451DH	DH-400	16
1800	N/A	N/A
1851B	B101B	N/A
1851B	B107B	N/A
1851DH	DH1851DC	16
2100/D/S	N/A	16
2100T/D/S	N/A	16
2151	B401 / B110LP / B116LP	16/16/1
2300T	N/A	16
2400	N/A	16
2400AIT	N/A	1
2400AT	N/A	1
2400TH	N/A	16
2451	B401B / B406B / B110LP / B116LP	16 / 1 / 16 / 1
2451	DH-400	16
2451TH	B401B / B406B / B110LP / B116LP	16 / 1 / 16 / 1
2800	N/A	N/A
2800TH	N/A	N/A
2851B	B101B	N/A
2851B	B107B	N/A
2851BTH	B101B	N/A
2851BTH	B107B	N/A
2851DH	DH2851DC	16
DH100P	N/A	16
DH100LP	N/A	16
2WTA-B	N/A	1
2WTAR-B	N/A	1

## Four-Wire Smoke Detectors/Devices

Smoke Detector/Base	Detector Type	Max Standby Current (mA)	Alarm Current (mA)
System Sensor B112LP	Base	0.12	36
System Sensor B114LP	Base	*	*
System Sensor B404B	Base	*	*
System Sensor DH100ACDC	Photoelectric	0.15	0.70
System Sensor DH100ACDCLP	Photoelectric	0.15	0.70
System Sensor DH100ACDCLWP	Photoelectric	0.15	0.70
System Sensor DH400ACDCI	Ionization Duct	25	95
System Sensor DH400ACDCP	Photoelectric Duct	25	95
System Sensor 1112/24/D	Ionization	0.05	50
System Sensor 1424	Ionization	0.10	41
System Sensor 1451 (w/ B402B/B112LP Base)	Ionization	0.10	39
System Sensor 2112/24ATR	Photoelectric	0.50	60/70
System Sensor 2112/24AIR	Photoelectric	0.50	60/70
System Sensor 2112/24/D	Photoelectric	0.05	50
System Sensor 2112/24R	Photoelectric	0.50	60/70
System Sensor 2112/24TR	Photoelectric	0.50	60/70
System Sensor 2112/24T/D	Photoelectric w/135° Thermal	0.05	50
System Sensor 2112/24TSRB	Photoelectric w/135° Thermal Supervisory Relay	15	45
System Sensor 2312/24TB	Photoelectric	0.12	50
System Sensor 2412 (12 volt)	Photoelectric	0.12	77
System Sensor 2412AT (12 volt)	Photoelectric	0.12	58
System Sensor 2412TH (12 volt)	Photoelectric	0.12	77
System Sensor 2424	Photoelectric	0.10	41
System Sensor 2424TH	Photoelectric	0.10	41
System Sensor 2451	Photoelectric	0.10	39
System Sensor 2451TH (with B402B/B112LP Base)	Photoelectric	0.10	39
System Sensor 2W-MOD	Loop Test/Maintenance Mod.	30	50
System Sensor 4W-B (24 Volt)	Photoelectric I <sup>3</sup>	.05	23
System Sensor 4WT-B (24 Volt)	Photoelectric I <sup>3</sup> w/Therm	.05	23
System Sensor 4WTA-B (24 Volt)	I <sup>3</sup> Photo w/ Therm/Sounder	.05	35
System Sensor 4WTR-B (24 Volt)	I <sup>3</sup> Photo w/ Therm/Relay	.05	35
System Sensor 4WTAR-B (24 Volt)	I <sup>3</sup> Photo w/ Therm/Sounder/Relay	.05	50
System Sensor 4WITAR-B (24 Volt)	I <sup>3</sup> Photo w/ IsolatedTherm/Sounder/Relay	.05	50
System Sensor 2W-MOD2	I <sup>3</sup> Loop Test/Maintenance Mod.	.05	*
System Sensor RRS-MOD	I <sup>3</sup> Reversing Relay/Sync Module	.05	*
System Sensor 6424	Projected Beam	10	28.4
System Sensor Beam 1224(S)	Projected Beam	17	38.5
System Sensor OSI-R-SS	Conventional Beam	50*	54*
System Sensor OSI-RA-SS	Conventional Beam	50*	54*

\* Contact manufacturer for current draws

## Notification Appliances

Control panels with Notification circuits supplied by Special Application power must use appliances listed in this table.

- Refer to manufacturer’s installation instructions for more information.
- Contact manufacturer for current draws or additional options

### System Sensor - 24VDC

Use only 24VDC devices with 24 volt control panels.

<b>MODEL NUMBER &amp; NOMENCLATURE (System Sensor)</b>
CH12/24 Electronic Chime/Sounder
CH2415, CH241575, CH2475, CH24110 SpectrAlert Chime with Strobe
MA-12/24D Electronic Sounder
MA12/24EH Multi Alert Horn with Mechanical Tone
MAEH24LO, MAEH24LOC, MAEH24LOLA, MAEH24M, MAEH24MC, MAEH2415ADA, MAEH2475ADA, MAEH241575ADA, MAEH24110ADA, MAEH2415ADAS, MAEH241575ADAS Multi Alert Horn with Mechanical Tone/Strobe
MASS24D, MASS24LO, MASS24M Electronic Sounder/Strobe
MASS24LOC, MASS24MC Electronic Ceiling Sounder/Strobe
MASS24LOLA Electronic Sounder/Strobe with Fuego lens
MASS2415ADA, MASS2475ADA, MASS24110ADA, MASS241575ADA Sounder/Signaling Strobe
MASS2415ADAS, MASS241575ADAS Sounder/Signaling Strobe w/ Synch. Ckt.
MDL / MDLW Sync Modules for use with SpectraAlert series
P2415, P241575, P2430, P2475, P24110 SpectrAlert Horn/Strobe
PA400R, PA400W, PA400B Sounder
PC24115, PC24177 SpectrAlert Ceiling Mount Horn/Strobe
PS24LO Add-on Strobe
RP2415ADA, RP241575ADA, RP2475ADA, RP24110ADA Retrofit Strobe Plate
S2415, S241575, S2430, S2475, S24110 SpectrAlert Strobe
SC24115, SC24177 SpectrAlert Ceiling Mount Strobe
SP100W24LOC, SP100W24MC Ceiling Speaker/Strobe, 8" round grille
SP101R24LO, SP101R24M Speaker/Strobe, 5" square grille
SP2C24115, SP2C24177 SpectrAlert Ceiling Mount Speaker Strobe
SP2C2415, SP2C2430, SP2C2415/75, SP2C2475, SP2C24110 SpectrAlert Speaker Strobe
S1224MC, P1224MC, SP1224MC SpectrAlert Strobe
SS24, SS24LO, SS24M, Strobe
SSM24-6, SSM24-8, SSM24-10 Alarm Bell
SS24LOC, SS24LOBC(beige), SS24MC Ceiling Strobe
SS2415ADA, SS2475ADA, SS24110ADA, SS241575ADA Signaling Strobe
SS2415ADAS, SS241575ADAS Signaling Strobe with Synch. Circuit
V4R2415ADA, V4R2475ADA, V4R24110ADA, V4R241575ADA Speaker/Signaling Strobe
SPH-15R, SC2415, SC241575, SC2430, SC2475, SC2495, PC2415, PC242575, PC2430, PC2475
PC2495, SP2C2415, SP2C242575, SP2C495

### System Sensor SpectrAlert Advance

System Sensor Spectralert Advance chimes, chime strobes, horns, horn strobes, and strobes base models: CHR, CHW, CHSR, CHSW, HR, HW, MDL3R, MDL3W, P2R, P2W, P2RH, P2WH, P4R, P4W, P4RH, P4WH, PC2R, PC2W, PC2RH, PC2WH, PC4R, PC4W, PC4RH, PC4WH, SCR, SCW, SCRH, SCWH, SR, SW, SRH, SWH, SW-ALERT, SWH-ALERT, MHR, MHW followed by suffixes denoting application (K=outdoor), market and / or markings (P=Plain, SP=Spanish, FR=French, B=Bi-lingual and PG=Portugese).

System Sensor Spectralert Advance speakers and speaker strobes base models: SEP-SW, SEP-SPSW, SPR, SPW, SPRV, SPWV, SPSR, SPSR-P, SPSW, SPSW-P, SPSW-ALERT, SPSW-CLR-ALERT, SPSRH, SPSRH-P, SPSWH, SWSWH-P SPSRV, SPSWV, SPCR, SPCW, SPCRV, SPCWV, SPSCR, SPSCW, SPSCW-CLR-ALERT, SPSCW-P, SPSCRH, SPSCWH, SPSCWH-P, SPSCRV, SPSCWV, SPSCRVH and SPSCWVH followed by suffixes denoting application (K=outdoor), market (A=Canada) and/ or markings (P=Plain, SP=Spanish, FR=French, B=Bi-lingual and PG=Portugese).

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### **System Sensor L Series**

System Sensor L Series chimes, chime strobes, horns, horn strobes, and strobes base models: P2RL, P2WL, PC2RL, PC2WL, P4RL, P4WL, PC4RL, PC4WL, SRL, SWL, SWL-CLR-ALERT, SWL-ALERT, SCRL, SCWL, SCWL-CLR-ALERT, HWL, HRL, CHWL, CHRL, CHSRL, CHSWL, CHCSRL, CHCSWL, P2GRL, P2GWL, SGRL, SGWL, HGRL, HGWL followed by suffixes denoting market and / or markings (P=Plain, SP=Spanish, F=French, and E=English).

System Sensor L Series chimes, chime strobes, horns, horn strobes, and strobes base models for use in low frequency (UL 464) applications: HCRL-LF, HCWL-LF, HGRL-LF, HGWL-LF, HRL-LF, HWL-LF, P2RL-LF, P2WL-LF.

System Sensor L Series Expander Plates: SEP-SPSWL (Speaker strobe expander, amber lens, white) and SEP-SPSWL-P (Speaker Strobe Expander, White, Plain).

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### **PDRP-2001(E)**

### **Faraday**

Compatible with the following:

### **PDRP-2001(E)**

2830, 2831, 2836, 2834, 2837
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### **Quam-Nichols Speakers**

UL22/25, UL22/70
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### **Notification Appliances For Canadian Applications**

- Refer to manufacturer’s installation instructions for more information.
- Contact manufacturer for current draws or additional options

## System Sensor

MDLA / MDLWA Sync Modules, H24A, P1224MCA, P2415A, P241575A, P2475A, P24110A, PC2415A, PC241575A, PC2430A, PC2475A, PC24115A, PC24177AS1224MCA, S2415A, S241575A, S2475A, SC24110A, SC2415A, SC241575A, SC2430A, SC2475A, SC2495A, SC24115A, SC24177A,
SSM24-6A, SSM24-8A, SSM24-10A - Alarm Bells
CHWA, CHRA, HRA, HWA, SRA, SWA, SCRA, SCWA, SRHA, SWHA, SCRHA, SCWHA, P2RA, P2WA, PC2RA, PC2WA, P4RA, P4WA, PC4RA, PC4WA, CHSRA, CHSWA

## Automatic Water Control Valves (FM-Approved) For Preaction and Deluge Sprinkler Releasing Applications

(Section not recognized by UL)

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Refer to the FM approval guide for automatic water control valves which are compatible with solenoids listed.

Manufacturer	Model	Voltage	Watts	Amps	NPS	Orifice	PSI
<b>Solenoid Group A</b>							
Skinner	LV2LXB25	24 VDC	11	458 mA	1/2"	5/8"	
<b>Solenoid Group B - These valves are interchangeable</b>							
ASCO	T8210A107	24 VDC	16.8	700 mA	1/2"	5/8"	
ASCO	R8210A107	24 VDC	16.8	700 mA	1/2"	5/8"	
ASCO	8210A107	24 VDC	16.8	700 mA	1/2"	5/8"	
<b>Solenoid Group C</b>							
Star Sprinkler Corp.	p/n 5550	24 VDC	part of Model D Deluge Valve				
<b>Solenoid Group D</b>							
ASCO	8210G207	24 VDC	10.6	440 mA	1/2"	1/2"	
<b>Solenoid Group E</b>							
Skinner	73218BN4UNLVNOC111C2	24 VDC	10.0	420 mA	1/2"	5/8"	
<b>Solenoid Group F</b>							
Skinner	73212BN4TNLVNOC322C2	24 VDC	22.0	0.92	1/2"	1/2"	250
<b>Solenoid Group G</b>							
Skinner	71395SN2ENJ1NOH111C2	24 VDC	10.0	420 mA	1/4"	1/16"	250

## Releasing Applications

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### Compatible Solenoids

Manufacturer	Model	Rated Current DC Milliamps	Rated Voltage DC Volts
Asco	HV2740607	375	24
Asco	HV2838521	375	24
Asco	HV2740608	375	24
Barnbrook Systems	EA45	200	24
Honeywell / Skinner	701X7028	917	24
Kidde-Fenwal	890181	2000	24



Kidde-Fenwal	486500	290	24
Kidde-Fenwal	895630	2000	24
Kidde-Fenwal	897494	1500	24
Parker Hannifin	7321HBN4UZ01N0HZ10C2	410	24
Ceodeux Extinguisher Valves Technology S.A.	B04425146	500	24
Snap-Tite	2823A-2NB-A4F6	458	24
Snap-Tite	2823A-2NB-A4F5	917	12
TLX	PA0337	500	24
TLX	PA0036-A	600	24
Versa	CGS-4232-NB3-S2	438	24
Victaulic	753E	364	24
Victaulic	767	364	24
Viking	11591	417	24
Viking	11595	417	24
Viking	11592NC	416	24

## Door Holders

MANUFACTURER	MODEL	TYPE	Current (mA)
Edwards	DH150A	Floor Mount	96
Edwards	DH154A	Flush Mount	96
Edwards	DH158A	Surface Mount	96
Rixon Firemark	FM-980	Floor Mount, single	68
Rixon Firemark	FM-996	Surface Wiring	68
Rixon Firemark	FM-998	Concealed Wiring	68

## Relays

MANUFACTURER	MODEL	Current (mA)
Air Products & Controls, LTD	MR-101/C	15
	MR-201/C	35
	PAM-1	15
	PAM-2	15
	PAM-SD	15
System Sensor	A77-716B	20
	PR-1	15
	PR-2	30
	PR-3	30
	EOLR-1	30
	R-10T	23
	R-14T	23
	R-20T	40
	R-24T	40
	R-10E	23
	R-14E	23
	R-20E	40
	R-24E	40