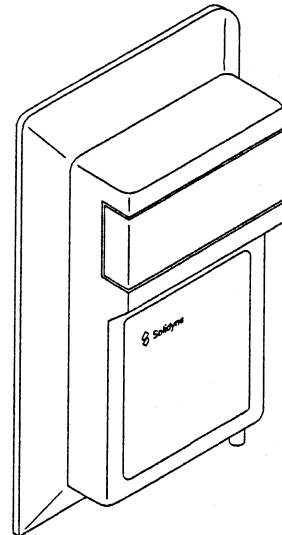




THE 3282SXB TEMPERATURE SENSOR CONTAINS A SOLID STATE SENSING DEVICE DESIGNED TO INTERFACE DIRECTLY WITH SOLIDYNE CLIPPER, AND XL9600 CONTROLLERS. THE SENSOR PRODUCES OUTPUT VOLTAGES WHICH CORRESPOND TO TEMPERATURES BETWEEN  $-25^{\circ}$  F TO  $230^{\circ}$  F. THE 3282SXB INCLUDES AN ENCLOSURE AND MOUNTING HARDWARE. IN ADDITION, AN OVERRIDE PUSH BUTTON IS INCLUDED TO OVERRIDE LOADS AND LOAD PROGRAMS.

- Override Push Button included
- Simple Mounting Design
- Excellent Linearity & Accuracy
- No external power required

## TEMPERATURE SENSOR with OVERRIDE BUTTON



**#3282SXB**

° F	VOLTS	° F	VOLTS	° F	VOLTS	° F	VOLTS	° F	VOLTS	° F	VOLTS
-25	2.415	21	2.670	67	2.926	113	3.182	159	3.437	205	3.693
-24	2.420	22	2.676	68	2.932	114	3.187	160	3.443	206	3.698
-23	2.426	23	2.682	69	2.937	115	3.193	161	3.448	207	3.704
-22	2.432	24	2.687	70	2.943	116	1.198	162	3.454	208	3.709
-21	2.437	25	2.693	71	2.948	117	3.204	163	3.459	209	3.715
-20	2.443	26	2.698	72	2.954	118	3.209	164	3.465	210	3.720
-19	2.448	27	2.704	73	2.959	119	3.215	165	3.470	211	3.726
-18	2.454	28	2.709	74	2.965	120	3.220	166	3.476	212	3.732
-17	2.459	29	2.715	75	2.970	121	3.226	167	3.482	213	3.737
-16	2.465	30	2.720	76	2.976	122	3.232	168	3.487	214	3.743
-15	2.470	31	2.726	77	2.982	123	3.237	169	3.493	215	3.748
-14	2.476	32	2.732	78	2.987	124	3.243	170	3.498	216	3.754
-13	2.482	33	2.737	79	2.993	125	3.248	171	3.504	217	3.759
-12	2.487	34	2.743	80	2.998	126	3.254	172	3.509	218	3.765
-11	2.493	35	2.748	81	3.004	127	3.259	173	3.515	219	3.770
-10	2.498	36	2.754	82	3.009	128	3.265	174	3.520	220	3.776
-9	2.504	37	2.759	83	3.015	129	3.270	175	3.526	221	3.782
-8	2.509	38	2.765	84	3.020	130	3.276	176	3.532	222	3.787
-7	2.515	39	2.770	85	3.026	131	3.282	177	3.537	223	3.793
-6	2.520	40	2.776	86	3.032	132	3.287	178	3.543	224	3.798
-5	2.526	41	2.782	87	3.037	133	3.293	179	3.548	225	3.804
-4	2.532	42	2.787	88	3.043	134	3.298	180	3.554	226	3.809
-3	2.537	43	2.793	89	3.048	135	3.304	181	3.559	227	3.815
-2	2.543	44	2.798	90	3.054	136	3.309	182	3.565	228	3.820
-1	2.548	45	2.804	91	3.059	137	3.315	183	3.570	229	3.826
0	2.554	46	2.809	92	3.065	138	3.320	184	3.576	230	3.832
1	2.559	47	2.815	93	3.070	139	3.326	185	3.582		
2	2.565	48	2.820	94	3.076	140	3.332	186	3.587		
3	2.570	49	2.826	95	3.082	141	3.337	187	3.593		
4	2.576	50	2.832	96	3.087	142	3.343	188	3.598		
5	2.582	51	2.837	97	3.093	143	3.348	189	3.604		
6	2.587	52	2.843	98	3.098	144	3.354	190	3.609		
7	2.593	53	2.848	99	3.104	145	3.359	191	3.615		
8	2.598	54	2.854	100	3.109	146	3.365	192	3.620		
9	2.604	55	2.859	101	3.115	147	3.370	193	3.626		
10	2.609	56	2.865	102	3.120	148	3.376	194	3.632		
11	2.615	57	2.870	103	3.126	149	3.382	195	3.637		
12	2.620	58	2.876	104	3.132	150	3.387	196	3.643		
13	2.626	59	2.882	105	3.137	151	3.393	197	3.648		
14	2.632	60	2.887	106	3.143	152	3.398	198	3.654		
15	2.637	61	2.893	107	3.148	153	3.404	199	3.659		
16	2.643	62	2.898	108	3.154	154	3.409	200	3.665		
17	2.648	63	2.904	109	3.159	155	3.415	201	3.670		
18	2.654	64	2.909	110	3.165	156	3.420	202	3.676		
19	2.659	65	2.915	111	3.170	157	3.426	203	3.682		
20	2.665	66	2.920	112	3.176	158	3.432	204	3.687		

Table 1, °F to Voltage Reading

**DISCLAIMER**

Solidyne Corporation reserves the right to change product specifications without notice. Solidyne Corporation assumes no liability for damages incurred directly or indirectly from the use of this equipment or from errors, omissions or discrepancies between the equipment and the installation guides.

## GENERAL

The 3282SXB temperature sensor contains a solid state sensing device designed to interface directly with Solidyne Clipper, and XL9600 Controllers. The sensor produces output voltages which correspond to temperatures between  $-25^{\circ}\text{F}$  -  $230^{\circ}\text{F}$ . The 3282SXB includes an enclosure and mounting hardware. In addition, an override push button is included to override loads and load programs. The sensor is not designed for direct immersion in liquid.

## SPECIFICATIONS

**OUTPUT VOLTAGE:** 2.415 VDC to 3.832 VDC  
(corresponds to  $-25^{\circ}\text{F}$  to  $+230^{\circ}\text{F}$ )  
See Table 1.

**TIME STABILITY:**  $\pm 0.5$  per 1000 hours of operation (typical)

**ACCURACY:**  $\pm 1^{\circ}\text{F}$  after calibration (See Calibration section, p. 5)

**OPERATING TEMPERATURE:**  $-25^{\circ}\text{F}$  to  $230^{\circ}\text{F}$

**STORAGE TEMPERATURE:**  $-40^{\circ}\text{F}$  to  $230^{\circ}\text{F}$

**DIMENSIONS:** See Figure 1.

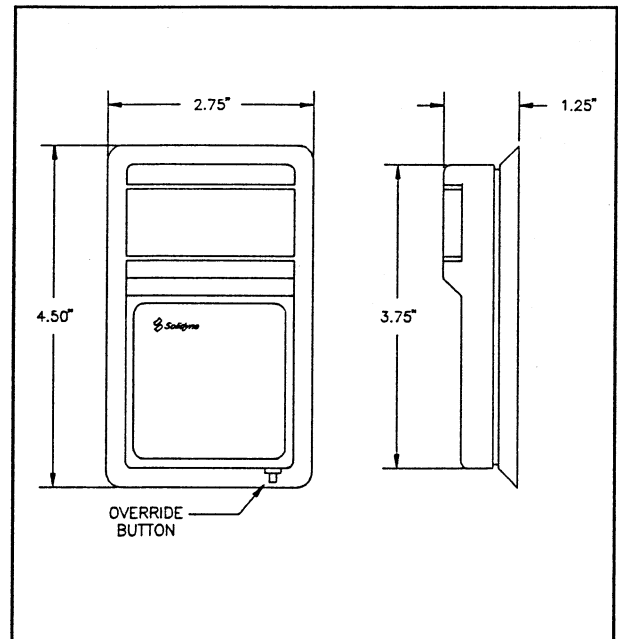


Fig. 1, Dimensions

## INSTALLATION

### **CAUTION**

**BEFORE INSTALLING OR REMOVING THE 3282SXB, DISCONNECT POWER TO THE CONTROLLER TO PREVENT EQUIPMENT DAMAGE OR PERSONAL INJURY**

1. Read installation instructions carefully.
2. Discharge any static you may have accumulated by touching a good earth ground before touching any components.
3. Check the range of operation and applicability of this sensor for your application.
4. This product should be installed by a trained, qualified service technician.
5. After the installation is complete, be sure to check the system out for proper operation.

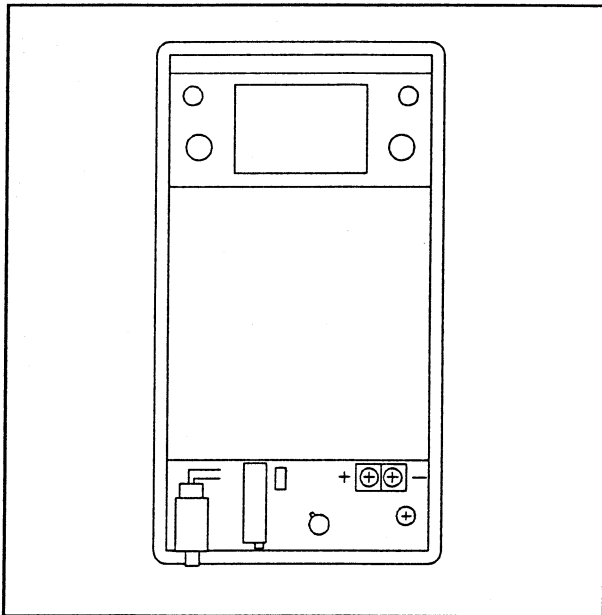


Fig. 2: 3282SXB Terminations

## MOUNTING / LOCATION

The 3282SXB can be placed on a wall mount plate. To mount the 3282SXB, remove the cover. A two-position terminal block is located on the 3282SXB circuit board, see Figure 2.

The sensor should be mounted on an interior wall in a draft-free location that closely approximates average indoor building temperature and thermal response, preferably near day/night thermostats.

## WIRING with Clipper/ClipperNet

The 3282SXB has two terminals which must be wired to the Clipper baseplate. The (-) terminal must be connected to the IN/OUT COM and the (+) terminal to one of the 8 inputs of the Clipper, see Figure 3. Typically, a twisted-pair of 18 AWG wires should be used. Shielding is not necessary under most conditions and the sensor can be located up to 2000 feet from the controller.

**NOTE:** The sensor, while being moisture-resistant, will not withstand complete immersion in liquid.

## WIRING with XL9600

The XL9600 ICS-4 Board has three columns of terminal blocks. Each column has four 8-position terminal blocks for the 32 digital inputs, 32 analog inputs and 32 outputs the XL9600 can accommodate. The row of 8-position terminal blocks above these columns are for the digital input, analog voltage input, analog current input and digital/analog output commons.

The (-) terminal of the 3282SXB connects to any position of the Analog Voltage Common block. The (+) terminal connects to one of the terminals of the middle column (Analog Inputs), see Figure 4.

The corresponding jumper (right bank) on the power supply board must be placed in the voltage (right) position.

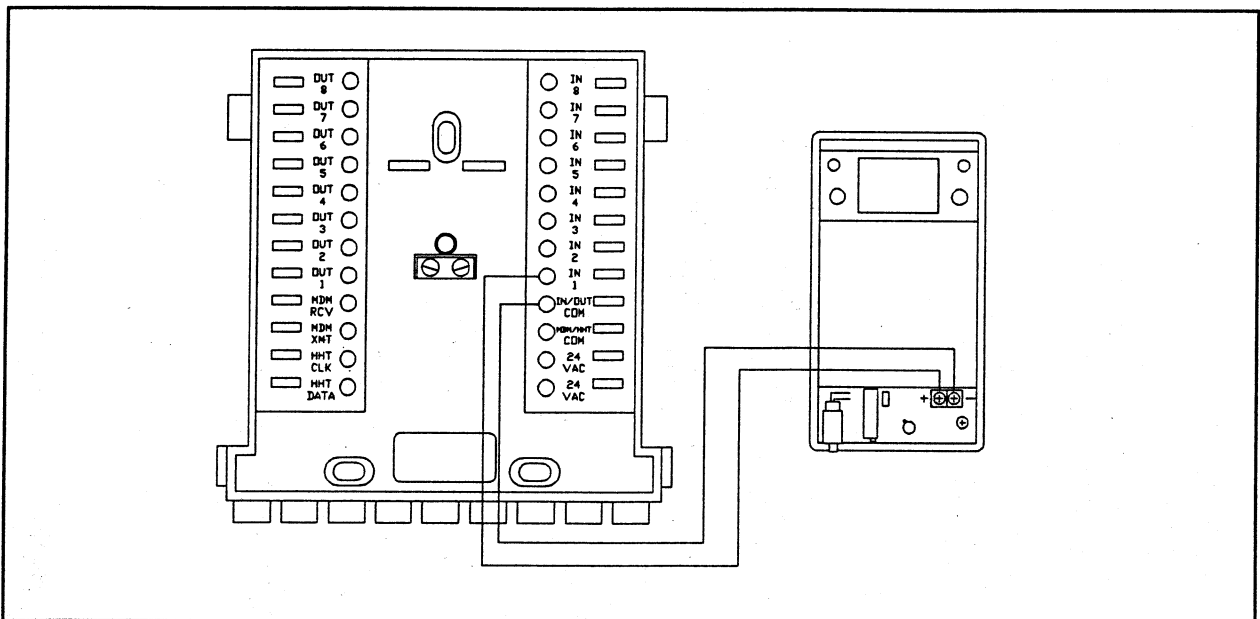


Figure 3: Clipper Connections