


**Voltright™**

## SVS04-22E VOLTAGE STABILISER

VOLTAGE PROTECTION AND STABILISATION  
FOR ALL ELECTRICAL AND ELECTRONIC EQUIPMENT

### Description

As both high and low mains voltage can damage your electrical equipment, the Sollatek SVS is designed to monitor and correct the incoming supply continuously.

If the voltage rises or drops, the SVS will stabilise the output to ensure that the voltage reaching your equipment remains constant at 230V ( $\pm 7\%$ )\*. For full input / output voltage profile, please see table in the next page.

The Sollatek SVS04-22E has a modern state of the art LED display to accurately indicate the state of the input and the output voltage supplied to your load.

The SVS also protects your electrical equipment against power spikes and surges. Using the SVS ensures a stable, and clean voltage supply to your equipment.



### Applications

The SVS04-22E is suitable for all electrical and electronic appliances, including: fridges/freezers, air conditioners, computers, TV/Hi-Fi, telecom/satellite appliances, vaccine fridges/freezers and medical refrigeration equipment.

### Features

- Microprocessor controlled stabiliser
- Solid state with no moving parts
- Requires no maintenance
- Extremely fast response
- Excellent output voltage stability
- Very wide input voltage range (110 - 287V)
- Includes surge and spike suppression
- Incorporates over-voltage & under voltage disconnect (AVS function)
- 6 minute startup delay
- Incorporates TIMESAVE™ Function (10 second start-up delay after long duration powercut)
- Compact modern design incorporating lightweight, high grade flame retardant ABS
- Modern 7 segment LED display for input & output voltage
- British design

#### Features:



#### Protection for:



#### Protection against:



\* For input voltage between 125 V to 280 V

## Advanced features

- The Sollatek SVS boosts low voltage.
- The Sollatek SVS reduces high voltage.
- The Sollatek SVS disconnects the load (fridge, TV, PC etc) using its built-in Automatic Voltage Switcher (AVS™), when mains stabilisation within acceptable limits is outside its capability.
- Automatically reconnects the load, but only after the mains has remained within acceptable limits for a period of 10 seconds to 6 minutes depending on the model. (TimeSave™). This is to allow neutralisation of compressor gases, critical in such applications.
- Incorporates TimeSave™ function
- Uses a unique zero voltage switching technique to achieve clean pure stabilised power.
- Incorporates full surge and spike protection.
- Frequency and voltage measurement smoothing in software to filter noise.
- Fault detection - senses if the measurements being made are unreasonable and disconnects output. Red and yellow LEDs flash alternately to indicate a fault.



### TimeSave™ Function

TIMESAVE™ adds the following protective function:

The Sollatek SVS04-22E units have a built-in microprocessor which adds the advanced feature TimeSave™. TimeSave™ means that when the mains return to normal, the unit checks the duration of the OFF time. If the unit has been off for more than the standard wait time, then it will reconnect the mains within 10 seconds. This ensures the Sollatek unit will give you more vital working time than any other stabiliser. The duration of the start-up delay period varies between 10 seconds and 10 minutes, depending on the model. For refrigeration and air-conditioning equipment, a delay of 3-4 minutes is recommended. The 3-4 minute delay allows compressors to neutralise before re-starting.

## Specification

<b>Input / Output Range</b>	
Input Range	110 V to 287 V
Output Range	201.8 V to 245 V
Output Accuracy	Between 125 V to 280 V ( $\pm 7\%$ )
Frequency Range	35 Hz to 65 Hz
Low Voltage Disconnect	110 V
Low Voltage Reconnect	116 V
High Voltage Reconnect	285 V
High Voltage Disconnect	287 V
<b>General</b>	
Derating Factor	10% to 15% per 10°C above 40°C
Synchronization	Output synchronized to input
Permissible Overload	1000% for 100 ms, 150% for 4 min, 110% for 15 min
Load Types	Designed to run lighting, motors, battery chargers, communications equipment, office equipment, SMPS, air conditioners, compressors, industrial machines, medical equipment and others. Suitable for all domestic, commercial and industrial sites
Technology	Transformer tap switching using relay based
Efficiency	88% at 25% load, 94% at 50% load, 96% at 75% load, 97% at 100% load
Control	Microcontroller based control system provides self checks, system integrity monitoring and diagnostic indicators
Control Protection	Internal surge arrestors and filters in control circuit protect against disturbances. Filtering algorithms and fault tolerant software protects against disturbances and false measurement.
Ambient Temperature Range	0 to +55°C
Relative Humidity	>95%, non condensing
Acoustic Noise	< 45 dB (A)
Expected Service Life	> 10 years
Standards	Manufactured to comply with :- ISO9001:2000, CE, EN 50081-1:1992, EN 50082-1:1998, EN 55022:1998, EN 61000-4-2:1995/1998, EN 61000-4-3:1996, EN 61000-4-4:1995, EN 61000-4-5:1995, EN 61000-4-6:1996, EN 61000-4-11:1994, DD ENV 50204, BS EN 61558-1, EN 60065, EN 60555
Correction Speed	750 Volts per second.
Response	Within 0.1 second.
Wait Time on Start Up	6 min
Power Factor	Unaffected by load power factor
AVS™ Function	Automatic voltage switcher: output is switched off to protect device against over and under voltage
TimeSave™ Function	Reduced startup delay if unit was off for more than the standard delay period to 10 seconds.
<b>Mechanical &amp; Shipping</b>	
Unit Dimensions	162 x 132 x 275 mm
Unit Weight	7.2 kg

## Input and Output Voltage Response

		230 V																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Input	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Output	OFF	200/ OFF	209	218	227	236	245	254	263	272	281	290	299	308	317	326	335	344	353	362	371	380	389	398	407	416	425	434	443	452	461	470	479	488	497	506	515	524	533	542	551	560	569	578	587	596	605	614	623	632	641	650	659	668	677	686	695	704	713	722	731	740	749	758	767	776	785	794	803	812	821	830	839	848	857	866	875	884	893	902	911	920	929	938	947	956	965	974	983	992	1001	1010	1019	1028	1037	1046	1055	1064	1073	1082	1091	1100	1109	1118	1127	1136	1145	1154	1163	1172	1181	1190	1199	1208	1217	1226	1235	1244	1253	1262	1271	1280	1289	1298	1307	1316	1325	1334	1343	1352	1361	1370	1379	1388	1397	1406	1415	1424	1433	1442	1451	1460	1469	1478	1487	1496	1505	1514	1523	1532	1541	1550	1559	1568	1577	1586	1595	1604	1613	1622	1631	1640	1649	1658	1667	1676	1685	1694	1703	1712	1721	1730	1739	1748	1757	1766	1775	1784	1793	1802	1811	1820	1829	1838	1847	1856	1865	1874	1883	1892	1901	1910	1919	1928	1937	1946	1955	1964	1973	1982	1991	2000	2009	2018	2027	2036	2045	2054	2063	2072	2081	2090	2099	2108	2117	2126	2135	2144	2153	2162	2171	2180	2189	2198	2207	2216	2225	2234	2243	2252	2261	2270	2279	2288	2297	2306	2315	2324	2333	2342	2351	2360	2369	2378	2387	2396	2405	2414	2423	2432	2441	2450	2459	2468	2477	2486	2495	2504	2513	2522	2531	2540	2549	2558	2567	2576	2585	2594	2603	2612	2621	2630	2639	2648	2657	2666	2675	2684	2693	2702	2711	2720	2729	2738	2747	2756	2765	2774	2783	2792	2801	2810	2819	2828	2837	2846	2855	2864	2873	2882	2891	2900	2909	2918	2927	2936	2945	2954	2963	2972	2981	2990	2999	3008	3017	3026	3035	3044	3053	3062	3071	3080	3089	3098	3107	3116	3125	3134	3143	3152	3161	3170	3179	3188	3197	3206	3215	3224	3233	3242	3251	3260	3269	3278	3287	3296	3305	3314	3323	3332	3341	3350	3359	3368	3377	3386	3395	3404	3413	3422	3431	3440	3449	3458	3467	3476	3485	3494	3503	3512	3521	3530	3539	3548	3557	3566	3575	3584	3593	3602	3611	3620	3629	3638	3647	3656	3665	3674	3683	3692	3701	3710	3719	3728	3737	3746	3755	3764	3773	3782	3791	3800	3809	3818	3827	3836	3845	3854	3863	3872	3881	3890	3899	3908	3917	3926	3935	3944	3953	3962	3971	3980	3989	3998	4007	4016	4025	4034	4043	4052	4061	4070	4079	4088	4097	4106	4115	4124	4133	4142	4151	4160	4169	4178	4187	4196	4205	4214	4223	4232	4241	4250	4259	4268	4277	4286	4295	4304	4313	4322	4331	4340	4349	4358	4367	4376	4385	4394	4403	4412	4421	4430	4439	4448	4457	4466	4475	4484	4493	4502	4511	4520	4529	4538	4547	4556	4565	4574	4583	4592	4601	4610	4619	4628	4637	4646	4655	4664	4673	4682	4691	4700	4709	4718	4727	4736	4745	4754	4763	4772	4781	4790	4799	4808	4817	4826	4835	4844	4853	4862	4871	4880	4889	4898	4907	4916	4925	4934	4943	4952	4961	4970	4979	4988	4997	5006	5015	5024	5033	5042	5051	5060	5069	5078	5087	5096	5105	5114	5123	5132	5141	5150	5159	5168	5177	5186	5195	5204	5213	5222	5231	5240	5249	5258	5267	5276	5285	5294	5303	5312	5321	5330	5339	5348	5357	5366	5375	5384	5393	5402	5411	5420	5429	5438	5447	5456	5465	5474	5483	5492	5501	5510	5519	5528	5537	5546	5555	5564	5573	5582	5591	5600	5609	5618	5627	5636	5645	5654	5663	5672	5681	5690	5699	5708	5717	5726	5735	5744	5753	5762	5771	5780	5789	5798	5807	5816	5825	5834	5843	5852	5861	5870	5879	5888	5897	5906	5915	5924	5933	5942	5951	5960	5969	5978	5987	5996	6005	6014	6023	6032	6041	6050	6059	6068	6077	6086	6095	6104	6113	6122	6131	6140	6149	6158	6167	6176	6185	6194	6203	6212	6221	6230	6239	6248	6257	6266	6275	6284	6293	6302	6311	6320	6329	6338	6347	6356	6365	6374	6383	6392	6401	6410	6419	6428	6437	6446	6455	6464	6473	6482	6491	6500	6509	6518	6527	6536	6545	6554	6563	6572	6581	6590	6599	6608	6617	6626	6635	6644	6653	6662	6671	6680	6689	6698	6707	6716	6725	6734	6743	6752	6761	6770	6779	6788	6797	6806	6815	6824	6833	6842	6851	6860	6869	6878	6887	6896	6905	6914	6923	6932	6941	6950	6959	6968	6977	6986	6995	7004	7013	7022	7031	7040	7049	7058	7067	7076	7085	7094	7103	7112	7121	7130	7139	7148	7157	7166	7175	7184	7193	7202	7211	7220	7229	7238	7247	7256	7265	7274	7283	7292	7301	7310	7319	7328	7337	7346	7355	7364	7373	7382	7391	7400	7409	7418	7427	7436	7445	7454	7463	7472	7481	7490	7499	7508	7517	7526	7535	7544	7553	7562	7571	7580	7589	7598	7607	7616	7625	7634	7643	7652	7661	7670	7679	7688	7697	7706	7715	7724	7733	7742	7751	7760	7769	7778	7787	7796	7805	7814	7823	7832	7841	7850	7859	7868	7877	7886	7895	7904	7913	7922	7931	7940	7949	7958	7967	7976	7985	7994	8003	8012	8021	8030	8039	8048	8057	8066	8075	8084	8093	8102	8111	8120	8129	8138	8147	8156	8165	8174	8183	8192	8201	8210	8219	8228	8237	8246	8255	8264	8273	8282	8291	8300	8309	8318	8327	8336	8345	8354	8363	8372	8381	8390	8399	8408	8417	8426	8435	8444	8453	8462	8471	8480	8489	8498	8507	8516	8525	8534	8543	8552	8561	8570	8579	8588	8597	8606	8615	8624	8633	8642	8651	8660	8669	8678	8687	8696	8705	8714	8723	8732	8741	8750	8759	8768	8777	8786	8795	8804	8813	8822	8831	8840	8849	8858	8867	8876	8885	8894	8903	8912	8921	8930	8939	8948	8957	8966	8975	8984	8993	9002	9011	9020	9029	9038	9047	9056	9065	9074	9083	9092	9101	9110	9119	9128	9137	9146	9155	9164	9173	9182	9191	9200	9209	9218	9227	9236	9245	9254	9263	9272	9281	9290	9299	9308	9317	9326	9335	9344	9353	9362	9371	9380	9389	9398	9407	9416	9425	9434	9443	9452	9461	9470	9479	9488	9497	9506	9515	9524	9533	9542	9551	9560	9569	9578	9587	9596	9605	9614	9623	9632	9641	9650	9659	9668	9677	9686	9695	9704	9713	9722	9731	9740	9749	9758	9767	9776	9785	9794	9803	9812	9821	9830	9839	9848	9857	9866	9875	9884	9893	9902	9911	9920	9929	9938	9947	9956	9965	9974	9983	9992	10001	10010	10019	10028	10037	10046	10055	10064	10073	10082	10091	10100	10109	10118	10127	10136	10145	10154	10163	10172	10181	10190	10199	10208	10217	10226	10235	10244	10253	10262	10271	10280	10289	10298	10307	10316	10325	10334	10343	10352	10361	10370	10379	10388	10397	10406	10415	10424	10433	10442	10451	10460	10469	10478	10487	10496	10505	10514	10523	10532	10541	10550	10559	10568	10577	10586	10595	10604	10613	10622	10631	10640	10649	10658	10667	10676	10685	10694	10703	10712	10721	10730	10739	10748	10757	10766	10775	10784	10793	10802	10811	10820	10829	10838	10847	10856	10865	10874	10883	10892	10901	10910	10919	10928	10937	10946	10955	10964	10973	10982	10991	11000	11009	11018	11027	11036	11045	11054	11063	11072	11081	11090	11099	11108	11117	11126	11135	11144	11153	11162	11171	11180	11189	11198	11207	11216	11225	11234	11243	11252	11261	11270	11279	11288	11297	11306	11315	11324	11333	11342	11351	11360	11369	11378	11387	11396	11405	11414	11423	11432	11441	11450	11459	11468	11477	11486	11495	11504	11513	11522	11531	11540	11549	11558	11567	11576	11585	11594	11603	11612	11621	11630	11639	11648	11657	11666	11675	11684	11693	11702	11711	11720	11729	11738	11747	11756	11765	11774	11783	11792	11801	11810	11819	11828	11837	11846	11855	11864	11873	11882	11891	11900	11909	11918	11927	11936	11945	11954	11963	11972	11981	1199