



# AIRPAX® | HVS/SARPV Series

## Compact, High DC Voltage Power Switches

### INTRODUCTION

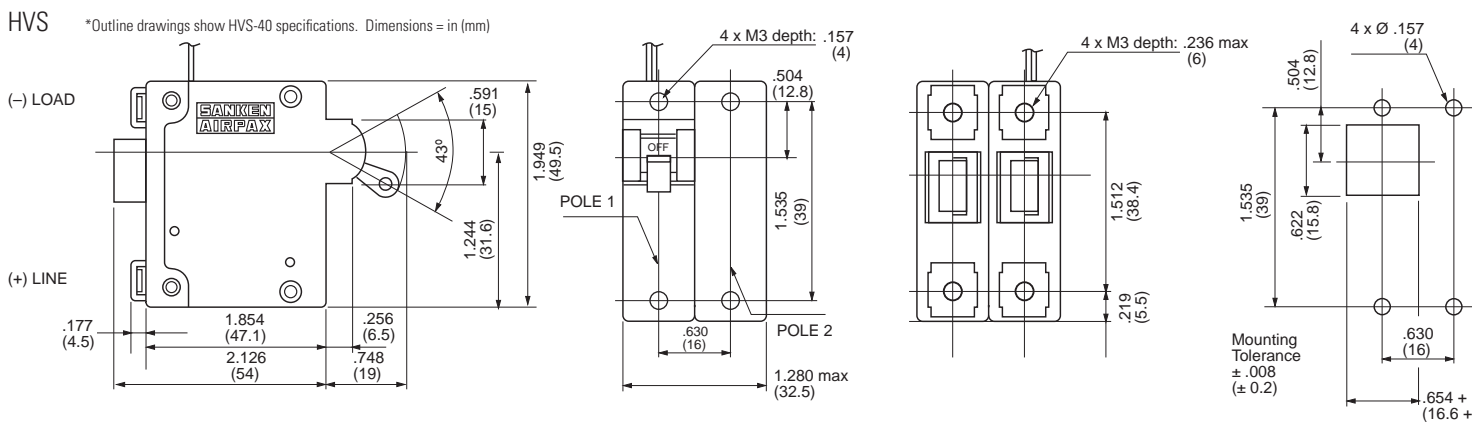
The Airpax™ HVS and SARPV switches provide an ultra-compact means of disconnecting higher DC voltages typically seen in solar power generation systems. In addition, for communicating with a central panel or controller, both are available with remote signal disconnect and auxiliary switch option.

Inverters for a solar power generator typically require the use of a large disconnect switch to handle the high DC voltages associated with solar panels. Introducing the HVS and SARPV high voltage disconnect switches, each with a compact design allowing for expanded design options. This smaller design provides the means for overall system size reduction and eliminates the need for a large separate control enclosure. In addition, the optional remote disconnect configuration and auxiliary switch allows the system controller to be located in an unobstructed location.

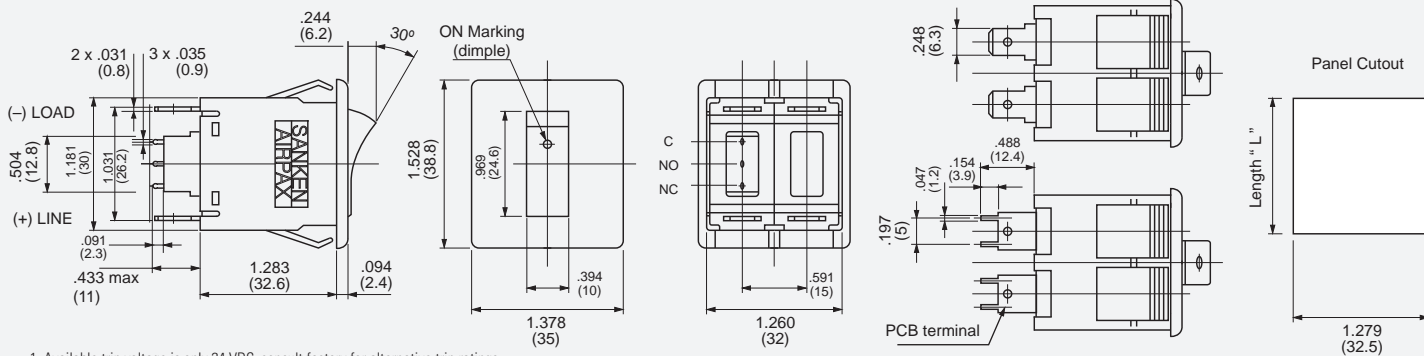
### SPECIFICATIONS

<b>Maximum Rated Current / Voltage</b>	HVS = 30A / 300VDC (open voltage 450VDC) SARPV = 10A / 300VDC (open voltage 450VDC)
<b>Number of Poles</b>	HVS = 2 to 3 poles SARPV = 2 poles
<b>Operating Temperature</b>	HVS = -25°C to +70°C SARPV = -25°C to +65°C
<b>Breaking Capacity</b>	500 amps (in accordance with UL 1077 & EN60934)
<b>Insulation Resistance</b>	At least 100M with 500VDC megger
<b>Dielectric Strength</b>	Dielectric strength: VAC 50 / 60 Hz, 2000V for 1 minute leakage current 1mA or less. Auxiliary switch: VAC 50 / 60 Hz, 500V for 1 minute between contacts
<b>Auxiliary Switch</b>	Resistive Load: Silver contacts: 3A / 125VAC, 2A / 30VDC Gold contacts: 0.05A / 30VDC
<b>Coil Resistance (DCR)</b>	24VDC coil: 157 ± 25% @ 25°C
<b>Vibration Resistance</b>	Approximately 98m/s <sup>2</sup> (10G) (Mil-STD-202 Method 201A @ I <sub>n</sub> )
<b>Shock Resistance</b>	490m/s <sup>2</sup> (50G) (Mil-STD-202 Method 213B test condition A @ I <sub>n</sub> )
<b>Operational Life</b>	>5000 cycles @ 2x per minute @ I <sub>n</sub>

## DIMENSIONAL DRAWINGS



**SARPV** \*Outline drawings show: optional auxiliary switch, F terminal, and P terminal dimensions. Dimensions = in (mm)

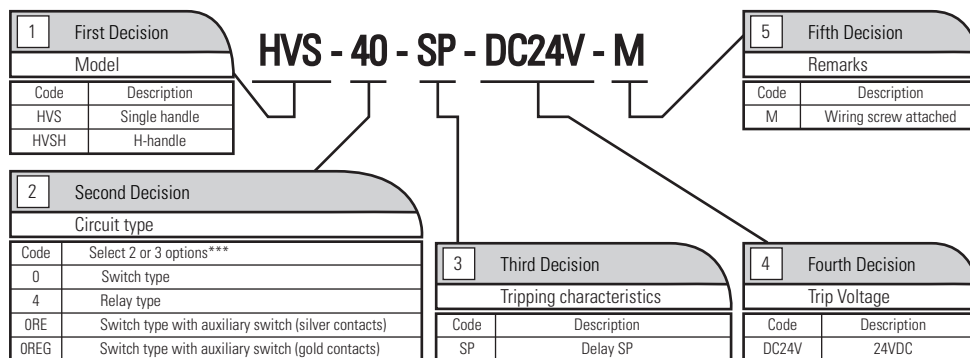


1. Available trip voltage is only 24 VDC, consult factory for alternative trip ratings
2. Polarity designation: Connect LINE-side terminal to (+) pole

### PANEL CUTOUT (SARPV)

Panel Thickness	Length "L"
0.039" (1.0 mm)	1.339" (34.0 mm)
0.047" (1.2 mm)	1.346" (34.2 mm)
0.063" (1.6 mm)	1.370" (34.8 mm)
0.079" (2.0 mm)	1.386" (35.2 mm)
0.091" (2.3 mm)	1.402" (35.6 mm)
0.126" (3.2 mm)	1.433" (36.4 mm)

## DECISION TABLES - HVS



\*\*\* HVS, HVSH can be either a 2-pole or a 3-pole breaker

EXAMPLE: HVS-40

HVS, Pole 1 (LH) Relay type, Pole 2 (RH) Switch type, no 3-pole

Third and fourth decision must be left blank when the second decision is not relay type

Select circuit type for each pole (second decision):

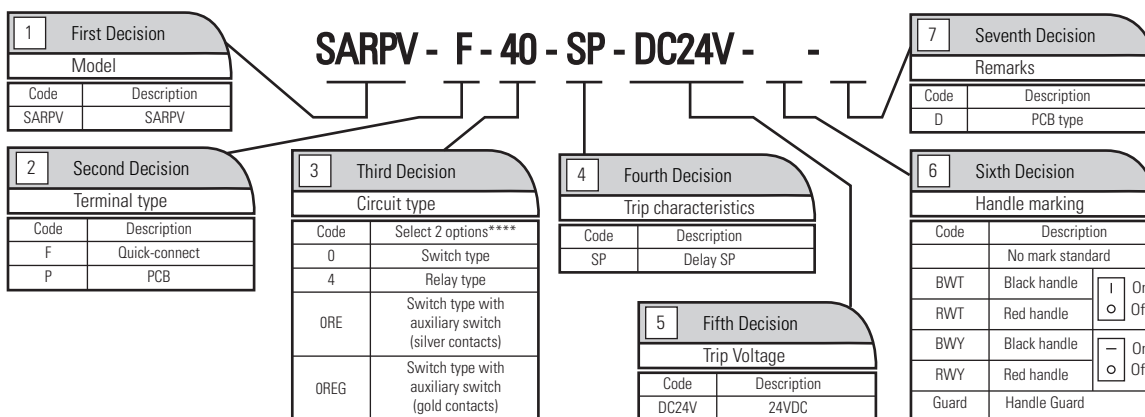
First entry: Pole 1, LH (left-hand) side

Second entry: Pole 2, RH (right-hand) side for 2-pole, center for optional 3-pole

Optional third entry: Pole 3 RH (right-hand) side for 3-pole, leave blank for 2-pole

Fifth decision must be left blank when customer does not require screws to be attached

## DECISION TABLES - SARPV



\*\*\*\* SARPV can be only be a 2-pole breaker

EXAMPLE: SARPV-F-40

SARPV, quick-connects, Pole 1 (LH) Relay type, Pole 2 (RH) Switch type

Fourth and fifth decision must be left blank when the third decision is not relay type

Select circuit type for each pole (second decision):

First entry: Pole 1, LH (left-hand) side

Second entry: Pole 2, RH (right-hand) side

Seventh decision must be left blank when the second decision is not PCB type

*This document is generated from the AIRPAX™ full-line catalog #2455005000 printed in USA, January 2011*

## BUSINESS CENTERS

---

### **Sensata Technologies**

807 Woods Road  
Cambridge, MD 21613, USA  
Phone: +1 410-228-1500  
Brands: Airpax™

### **Sensata Technologies Inc.**

529 Pleasant Street  
Attleboro, MA 02703, USA  
Phone: +1 508-236-3287  
Brands: Klixon™, Sensata Technologies™

### **Sensata Technologies**

4467 White Bear Lake Parkway  
St. Paul, MN 55110, USA  
Phone: +1 800-553-6418  
Brands: Dimensions™

### **Sensata Technologies Holland B.V.**

Kolthofsingel 8  
7602 EM Almelo, The Netherlands  
Phone: +31 546 87 95 55  
Brands: Klixon™, Sensata Technologies™

### **Sensata Technologies China Co., Ltd.**

Novel Plaza, 8th Floor  
128 Nanjing Road West  
Shanghai, 20003  
People's Republic of China  
Phone: +86 21 23061500  
Brands: Klixon™, Sensata Technologies™

### **Sensata Technologies Korea Ltd.**

29F, Trade Tower  
159-1 SamSung-Dong, KangNam-Ku, Seoul  
135-729, Korea  
Phone: +81-2-551-2918  
Brands: Klixon™, Sensata Technologies™

### **Sensata Technologies Japan Ltd.**

305, Tanagashira  
Oyama-cho, Sunto-gun, Shizuoka-ken  
Japan, 410-1396  
Phone: +81 550 78 1211  
Brands: Klixon™, Sensata Technologies™

### **Sensata Technologies Nihon-Airpax**

6-3, Chi Yoda 5 Chome  
Saitama-Ken  
Japan, 350-0214  
Phone: +81 492 83 7575  
Brands: Airpax™



Important Notice: Sensata Technologies (Sensata) reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Sensata advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current. Sensata assumes no responsibility for infringement of patents or rights of others based on Sensata applications assistance or product specifications since Sensata does not possess full access concerning the use or application of customers' products. Sensata also assumes no responsibility for customers' product designs.

<http://airpax.sensata.com/>