



AIRPAX® | HVS/SARPV Series

Compact, High DC Voltage Power Switches

INTRODUCTION

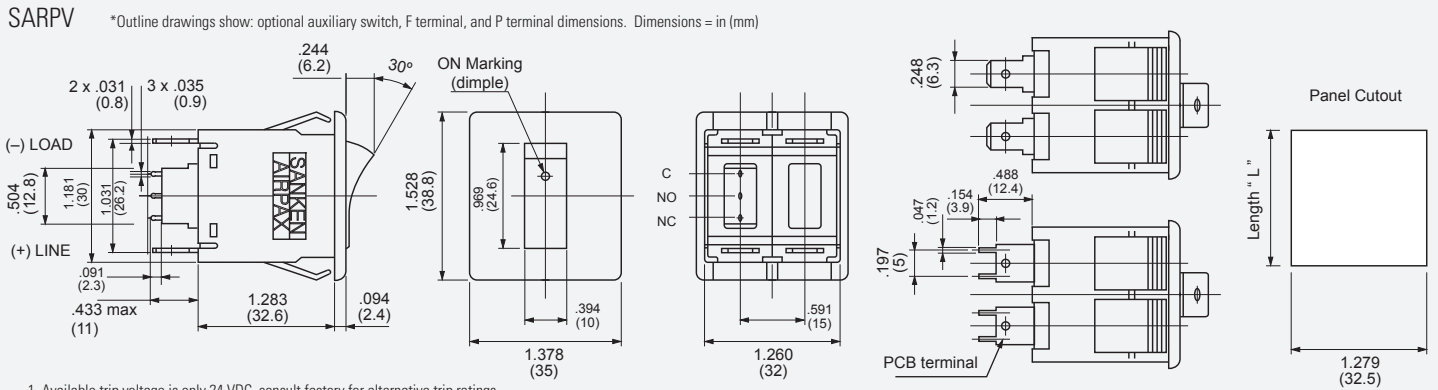
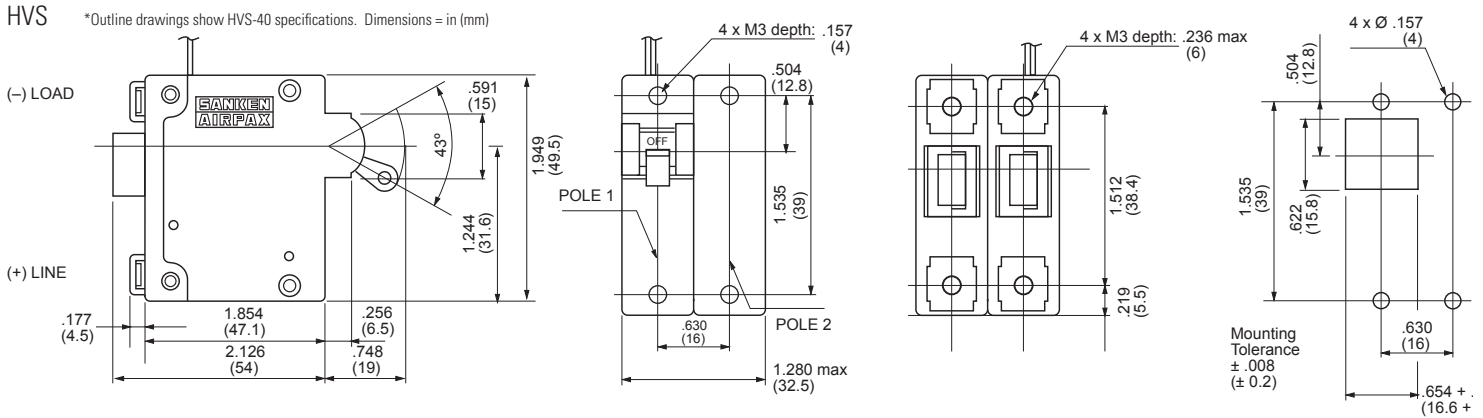
The Airpax™ HVS and SARPV switches provide an ultra-compact means of disconnecting higher DC voltages typically seen in solar power generation systems. In addition, for communicating with a central panel or controller, both are available with remote signal disconnect and auxiliary switch option.

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

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

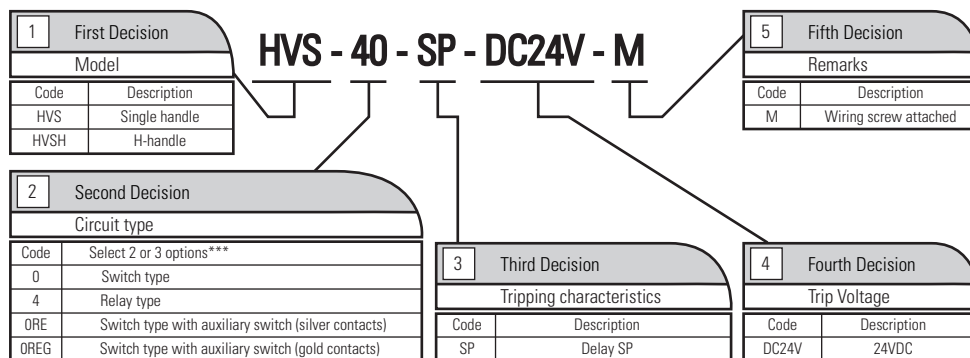
DIMENSIONAL DRAWINGS



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):

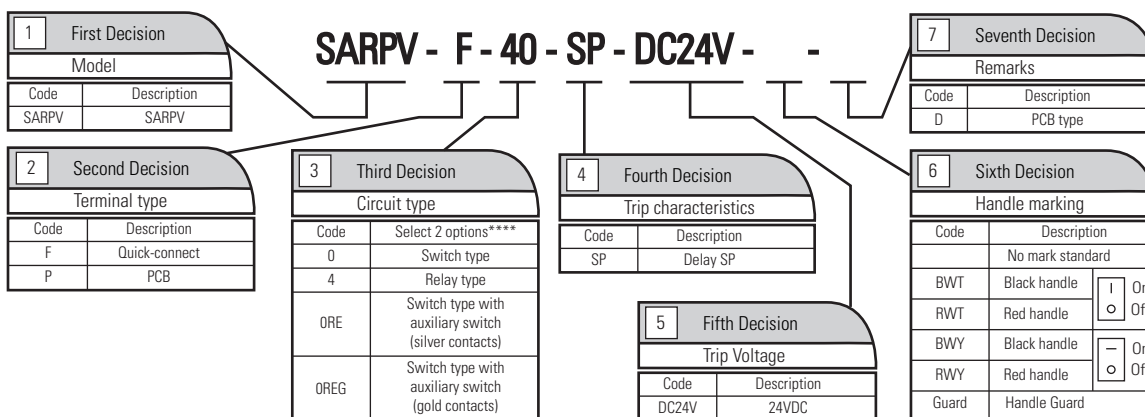
First entry: Pole 1, LH (left-hand) side

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