

# SIL15C Series

5 Vin and 12 Vin single output

DC-DC CONVERTERS C Class Non-isolated

2

For the most current data and application support visit [www.artesyn.com/powergroup/products.htm](http://www.artesyn.com/powergroup/products.htm)

**NEW Product**

OUTPUT POWER (MAX.)	INPUT VOLTAGE	OVP	OUTPUT VOLTAGE <sup>(12)</sup>	OUTPUT CURRENT (MIN.)	OUTPUT CURRENT (MAX.)	EFFICIENCY (TYP.)	REGULATION		MODEL NUMBER <sup>(8,13,14,15)</sup>
							LINE	LOAD	
50 W	4.5-5.5 Vdc	N/A	0.9-3.3 Vdc	0 A	15 A	89%	±0.2%	±0.5%	SIL15C-05SADJ-VJ
75 W	10.2-13.8 Vdc	N/A	0.9-5.0 Vdc	0 A	15 A	91%	±0.2%	±0.5%	SIL15C-12SADJ-VJ

## Part Number System with Options

### SIL15C-12SADJ-VJ

**Product Family**  
SIL = Single in Line

**Rated Output Current**  
15 = 15 Amps

**Performance**  
C = Cost Optimised

**Packaging Options <sup>(15)</sup>**  
J = Pb-free (RoHS 6/6 compliant)

**Mounting Option**  
V = Vertical Mount  
H = Horizontal Mount

**Number of Outputs**  
SADJ = Single Adjustable Output

**Input Voltage**  
05 = 4.5 Vdc to 5.5 Vdc  
12 = 10.2 Vdc to 13.8 Vdc

### Output Voltage Adjustment of the SIL15C Series

The ultra-wide output voltage trim range offers major advantages to users who select the SIL15C series. It is no longer necessary to purchase a variety of modules in order to cover different output voltages. The output voltage can be trimmed in a range of 0.9 Vdc to 5.0 Vdc. When the SIL15C series converter leaves the factory the output has been adjusted to the default voltage of 0.9 V

## Notes

- Measured as per recommended set-up.  $C_{in} = 270 \mu F$  (20 mΩ esr max,  $C_{out} = 680 \mu F$  (10 mΩ esr max).
- $di/dt = 10 A/\mu s$ ,  $V_{in} = Nom$ ,  $T_c = 25^\circ C$ , load change = 0.50  $I_o$  max. to 0.75  $I_o$  max. and 0.75  $I_o$  max. to 0.50  $I_o$  max.
- External input fusing is recommended.
- Measured with external filter. See Application Note 131 for details.
- Uses external resistor from trim pin to output ground. Min value = 485 Ω for 5 V model, 280 Ω for 12 V model. See Application Note 131 for details.
- Signal line assumed <3 m in length
- This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.
- The standard unit with the suffix '-V' is for vertical mounting. To order a unit with horizontal mounting, please add the suffix '-H' to the model number, e.g. SIL15C-05SADJ-HJ.
- Power-up is the time from application of dc input to Power Good enabled. Remote ON/OFF is from ON/OFF asserted high to power good enabled.
- See Application Note 131 for operation above 50 °C.
- See Application Note 131 for ripple current requirements.
- These models have a wide trim output. 5 Vin has an output of 0.9 Vdc to 3.3 Vdc and 12 Vin has an output of 0.9 Vdc to 5 Vdc. An external resistor adjusts the output voltage.
- To order a unit with a pin length of 0.150", please add suffix 'P4' to the model number, e.g. SIL15C-05SADJ-HP4J.
- TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details.
- NOTICE: Some models do not support all options. Please contact your local Artesyn representative or use the on-line model number search tool at <http://www.artesyn.com/powergroup/products.htm> to find a suitable alternative.

## Ripple and Noise Specification

Model	Output Voltage	Pk - Pk	RMS
5 V input models	0.9-2.5 Vdc	30 mV	15 mV
	3.3 Vdc	40 mV	15 mV
12 V input models	0.9-2.5 Vdc	50 mV	20 mV
	3.3-5 Vdc	50 mV	20 mV

# SIL15C Series

5 Vin and 12 Vin single output

PIN CONNECTIONS	
PIN NUMBER	FUNCTION
1	Vout
2	Vout
3	Vout
4	Trim
5	Remote ON/OFF
6	Power Good
7	Ground
8	Ground
9	Reserved
10	Vin
11	Vin
12	Mechanical support (horizontal version only)
13	Mechanical support (horizontal version only)

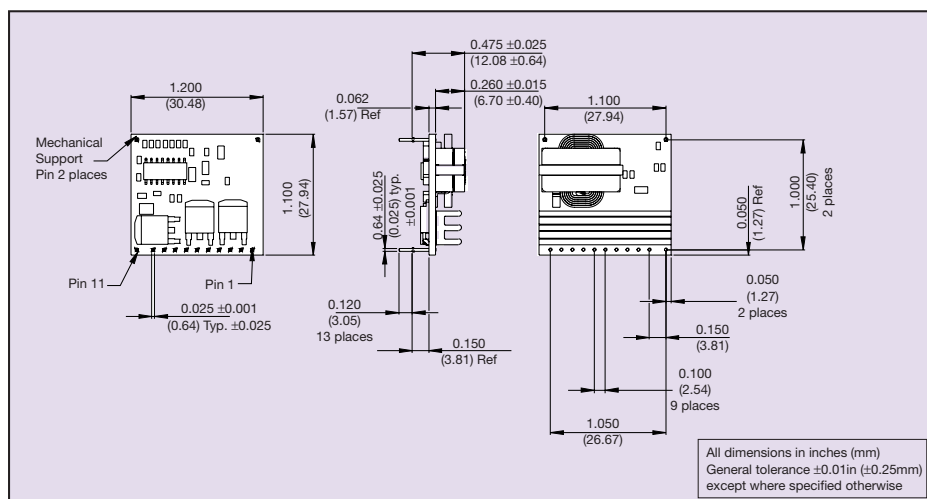


Figure 1: Mechanical Drawing - Horizontal Mount Version

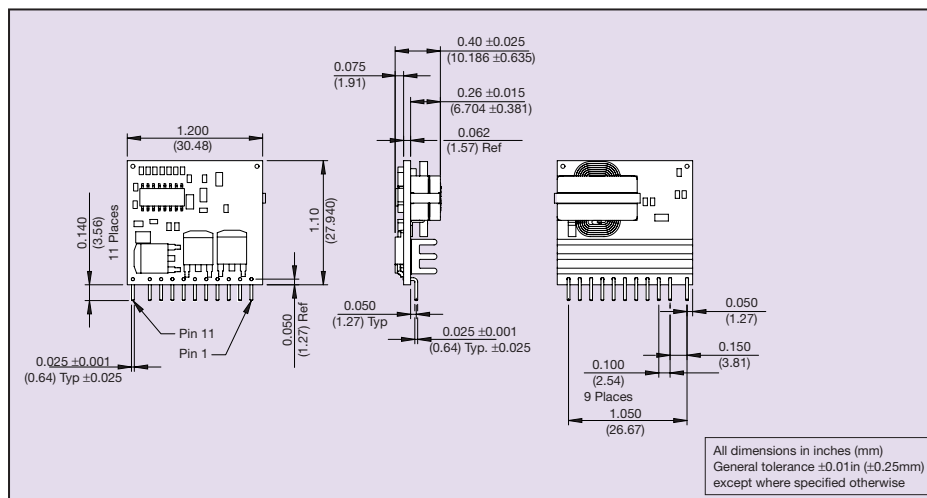


Figure 2: Mechanical Drawing - Vertical Mount Version