

SIL20C Series

5 Vin and 12 Vin single output

DC-DC CONVERTERS

C Class Non-isolated

2

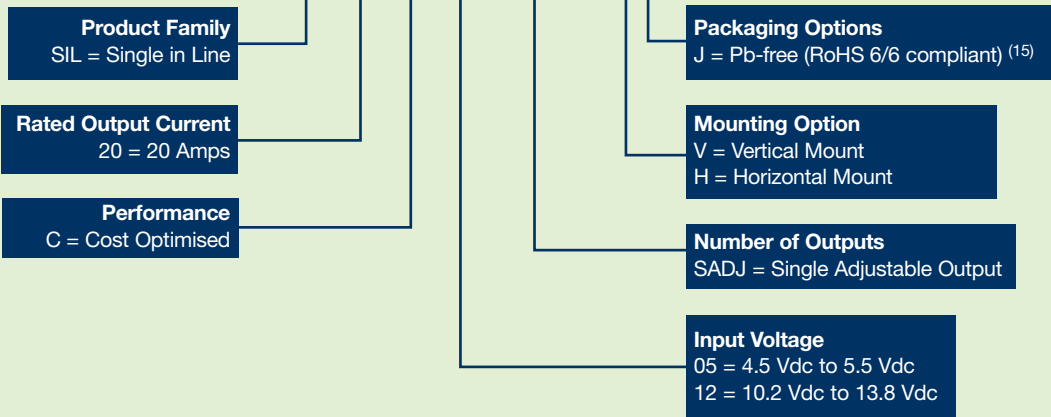
For the most current data and application support visit www.artesyn.com/powergroup/products.htm

NEW Product

OUTPUT POWER (MAX.)	INPUT VOLTAGE	OVP	OUTPUT VOLTAGE ⁽¹²⁾	OUTPUT CURRENT (MIN.)	OUTPUT CURRENT (MAX.)	MAXIMUM LOAD (TYP.)	REGULATION		MODEL NUMBER ^(8,13,14,15)
							LINE	LOAD	
66 W	4.5-5.5 Vdc	N/A	0.9-3.3 Vdc	0 A	20 A	87%	±0.2%	±1.3%	SIL20C-05SADJ-VJ
100 W	10.2-13.8 Vdc	N/A	0.9-5.0 Vdc	0 A	20 A	91%	±0.2%	±1.3%	SIL20C-12SADJ-VJ

Part Number System with Options

SIL20C-12SADJ-VJ



Output Voltage Adjustment of the SIL20C-12SADJ Series

The ultra-wide output voltage trim range offers major advantages to users who select the SIL20C-12SADJ 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 SIL20C-12SADJ series converter leaves the factory the output has been adjusted to the default voltage of 0.9 V

Notes

- 1 Measured as per recommended set-up. $2 \times C_{in} = 270 \mu\text{F}$ (20 mΩ esr max, $C_{out} = 680 \mu\text{F}$ (10 mΩ esr max).
- 2 $di/dt = 10 \text{ A}/\mu\text{s}$, $V_{in} = \text{Nom}$, $T_c = 25^\circ\text{C}$, 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.
- 3 External input fusing is recommended.
- 4 Measured with external filter. See Application Note 131 for details.
- 5 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.
- 6 Signal line assumed <3 m in length
- 7 This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.
- 8 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. SIL20C-05SADJ-HJ.

Notes Cond.

- 9 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.
- 10 See Application Note 131 for operation above 50 °C.
- 11 See Application Note 131 for ripple current requirements.
- 12 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.
- 13 To order a unit with a pin length of 0.150", please add suffix 'P4' to the model number, e.g. SIL20C-05SADJ-HP4J.
- 14 TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details.
- 15 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

SIL20C Series

5 Vin and 12 Vin single output

DC-DC CONVERTERS

C Class Non-isolated

3

For the most current data and application support visit www.artesyn.com/powergroup/products.htm

NEW Product

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)

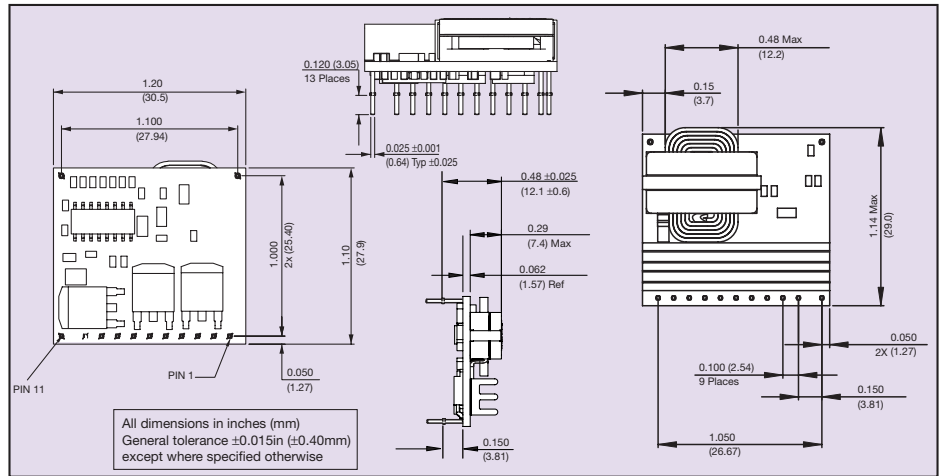


Figure 1: Mechanical Drawing - Horizontal Mount Version

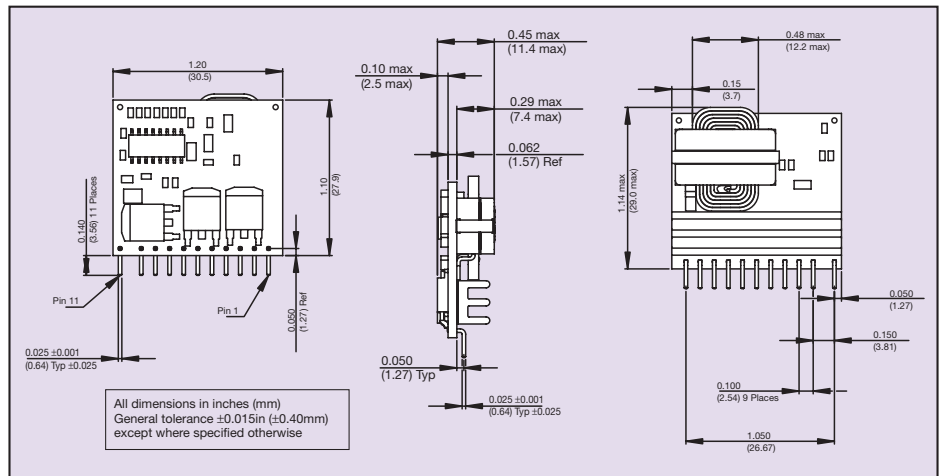


Figure 2: Mechanical Drawing - Vertical Mount Version

Datasheet © Artesyn Technologies® 2005

The information and specifications contained in this datasheet are believed to be correct at time of publication. However, Artesyn Technologies accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice. No rights under any patent accompany the sale of any such product(s) or information contained herein.

Please consult our website for the following items: ✓ Application Note ✓ Longform Data Sheet

www.artesyn.com