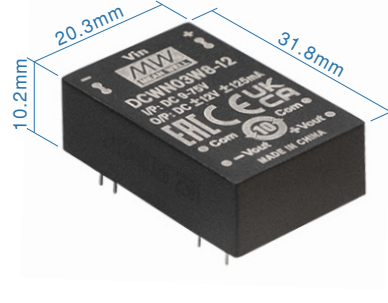
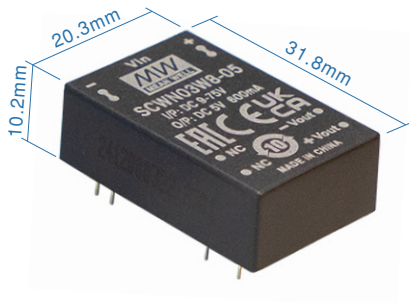




Features

- DIP24 package with industry standard pinout
- **8:1(9~75Vdc)** ultra-wide input range
- Operating temperature range **-40 ~ +95°C**
- No minimum load required
- Comply to BS EN/EN55032 **radiated Class B without additional components**
- High efficiency up to 84%
- Protections: Short circuit (Continuous) / Overload / Over voltage / UVLO
- Remote ON/OFF control (Optional)
- 3KVdc I/O isolation
- 3 years warranty

Applications

- Telecom/datacom system
- Wireless network
- Industrial control facility
- Instrument
- Analyzer
- Detector
- Data switch

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

SCWN03W8 and DCWN03W8 series are 3W isolated and regulated module type DC-DC converter with DIP24 package. It features international standard pins, a high efficiency up to 84%, wide working temperature range -40~+95°C, 3KVdc I/P-O/P isolation voltage, Compliance to BS EN/EN55032 radiated Class B without additional components, continuous-mode short circuit protection, 8:1(9~75V) ultra-wide input range, and various output voltage, 3.3V/5V/12V/15V for single output and $\pm 5V/\pm 12V/\pm 15V$ for dual outputs, which are suitable for all kinds of systems, Such as industrial control, telecommunication field, distributed power architecture, and so on.

Model Encoding

S **CWN03** **W8** **-12**

Output voltage (3.3/5/12/15Vdc , $\pm 5/\pm 12/\pm 15Vdc$)

Wide input voltage (9~75Vdc)

Rated wattage

Series name { S:Single output
D:Dual output

MODEL SELECTION TABLE							
ORDER NO.	INPUT			OUTPUT		EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT		
		NO LOAD	FULL LOAD				
SCWN03W8-03	Nominal 12V, 24V,36V,48V,72V (9 ~ 75V)	5mA	56mA	3.3V	600mA	74%	600μF
SCWN03W8-05		5mA	79mA	5V	600mA	80%	600μF
SCWN03W8-12		7mA	75mA	12V	250mA	84%	250μF
SCWN03W8-15		8mA	76mA	15V	200mA	83%	200μF
DCWN03W8-05		7mA	80mA	±5V	±300mA	79%	*300μF
DCWN03W8-12		9mA	75mA	±12V	±125mA	84%	*250μF
DCWN03W8-15		10mA	78mA	±15V	±100mA	81%	*200μF

* For each output

SPECIFICATION

INPUT

VOLTAGE RANGE	9~75Vdc
SURGE VOLTAGE (100ms max.)	100Vdc
FILTER	Pi type
PROTECTION (Typ.)	1A Fast-Acting Type

OUTPUT

VOLTAGE ACCURACY	±2% for 3.3Vo, ±1.5% for others
RATED POWER	3W
RIPPLE & NOISE Note.2	100mVp-p
LINE REGULATION Note.3	±0.5%
LOAD REGULATION Note.4	Single output models: ±0.5% ; Dual output models: ±1.0%
CROSS DEQUIATION	±5% @ 25%~100% Load only for dual output
SWITCHING FREQUENCY (Typ.)	200KHz

PROTECTION

SHORT CIRCUIT	Protection type : Continuous, automatic recovery	
OVERLOAD	110 ~ 230% rated output power	
	Protection type : Hiccup mode, recovers automatically after fault condition is removed	
OVER VOLTAGE	Protection type : Clamp by zener diode	
UNDER VOLTAGE LOCKOUT (Typ.)	Start-up voltage	8.8Vdc
	Shutdown voltage	8Vdc

ENVIRONMENT

COOLING	Free-air convection
WORKING TEMP.	-40 ~ +95°C (Refer to "Derating Curve")
CASE TEMPERATURE	+115°C max.
WORKING HUMIDITY	20% ~ 90% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 ~ +125°C, 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	±0.05% / °C max. (0 ~ 85°C)
SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 3sec./260°C max.
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes

SAFETY & EMC (Note.5)

SAFETY STANDARDS	EAC TP TC 020/2011 approved
WITHSTAND VOLTAGE	I/P-O/P:3KVdc
ISOLATION RESISTANCE	I/P-O/P:1000M Ohms / 500Vdc / 25°C / 70% RH
ISOLATION CAPACITANCE (Typ.)	1000pF

EMC EMISSION	Parameter	Standard	Test Level / Note
	Conducted	BS EN/EN55032	Class A without additional components Class B with additional components
	Radiated	BS EN/EN55032	Class B without additional components
EMC IMMUNITY	Parameter	Standard	Test Level / Note
	ESD	BS EN/EN61000-4-2	Level 2, ±8KV air, ±4KV contact
	Radiated Susceptibility	BS EN/EN61000-4-3	Level 2, 3V/m
	EFT/Bursts	BS EN/EN61000-4-4	Level 2, 0.5KV
	Surge	BS EN/EN61000-4-5	Level 2, 1KV Line-Line
	Conducted	BS EN/EN61000-4-6	Level 2, 3V(e.m.f.)

OTHERS

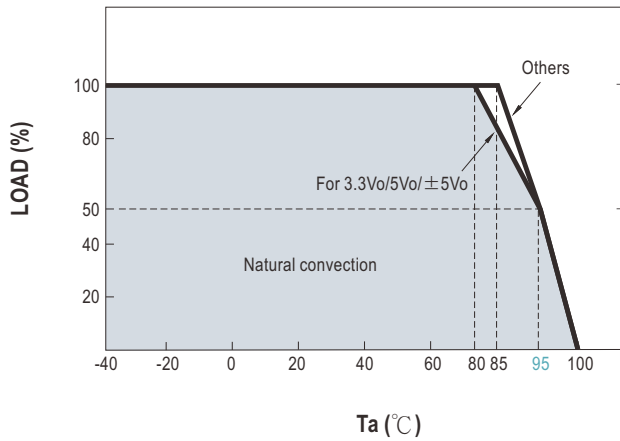
MTBF (Typ.)	2500Khrs MIL-HDBK-217F(25°C)
DIMENSION (L*W*H)	31.8*20.3*10.2mm (1.25*0.8*0.4 inch)
CASE MATERIAL	Non-Conductive black plastic (UL 94V-0 rated)
PACKING	12.5g ; 10pcs/per tube, 600pcs/60 tube/per carton

NOTE

- All parameters are specified at normal input (48Vdc), rated load, 25°C 70% RH ambient.
- Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 0% to 100% rated load.
- The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <http://www.meanwell.com>)

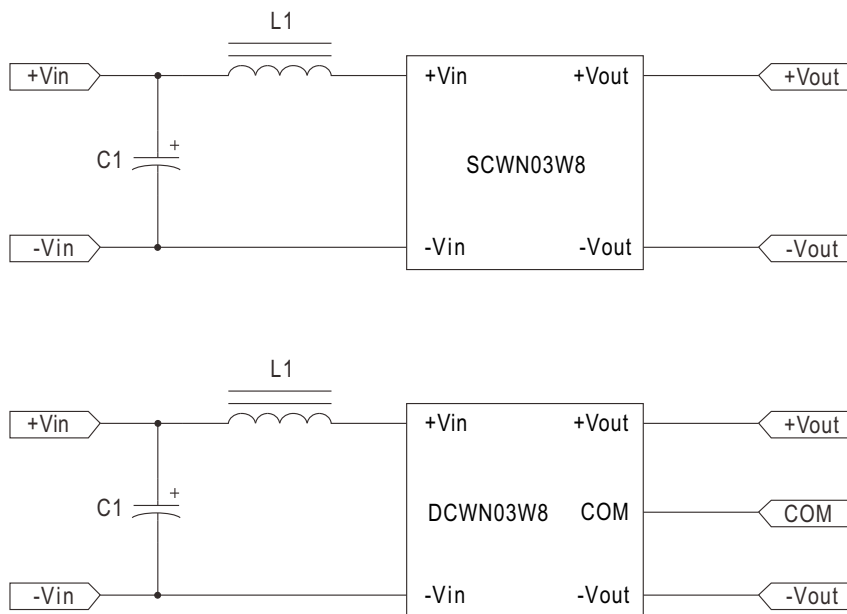
※ Product Liability Disclaimer : For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

Derating Curve



EMC Suggestion Circuit

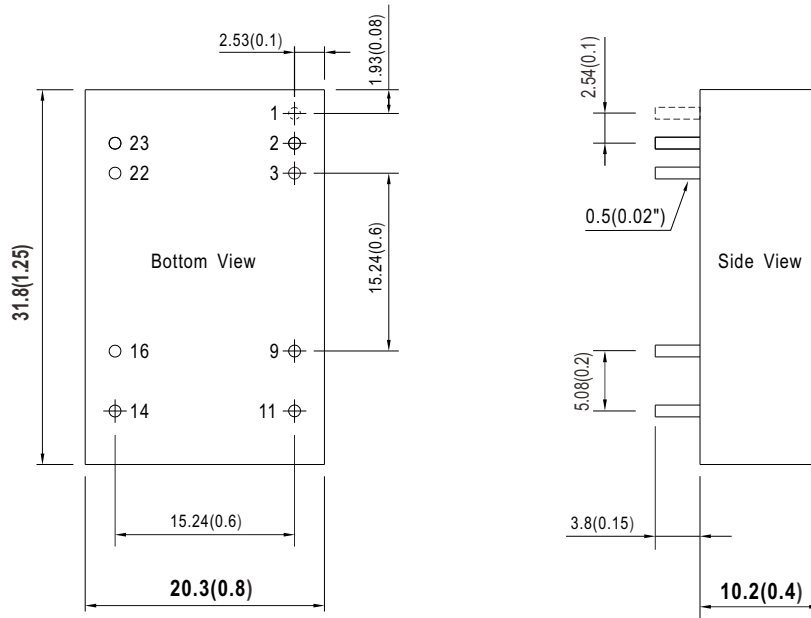
※ Required external components to meet BS EN/EN55032 radiated Class B are as below:



Model No.	BS EN/EN55032 conduction Class B	
SCWN03W8 DCWN03W8	C1	L1
	2.2μF/100V	12μH

■ Mechanical Specification

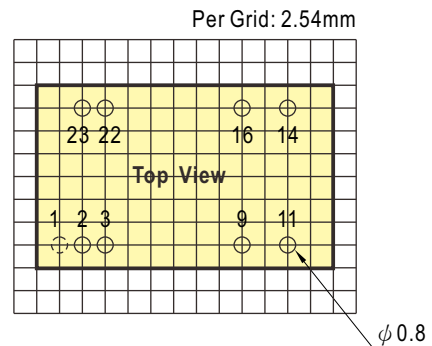
- All dimensions in mm(inch)
- Tolerance: $x.x \pm 0.5\text{mm}$ ($x.xx \pm 0.02"$)
 $x.xx \pm 0.25\text{mm}$ ($x.xxx \pm 0.010"$)
- Pin size is: $0.5 \pm 0.05\text{mm}$ ($0.02" \pm 0.002"$)



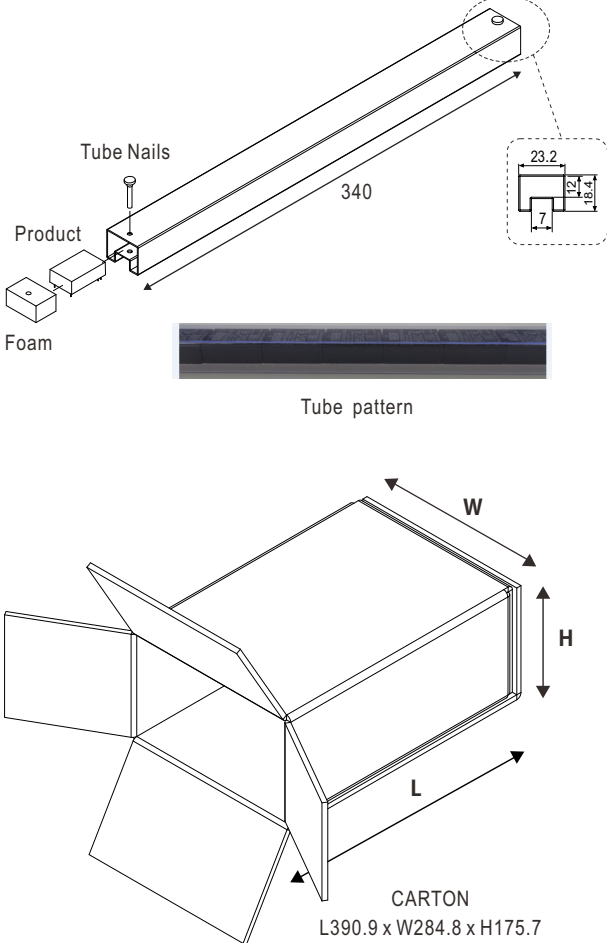
■ Pin Assignment

Pin-Out		
Pin No.	SCWN03W8 (Single output)	DCWN03W8 (Dual output)
1	N.P. (Remote ON/OFF by request)	N.P. (Remote ON/OFF by request)
2,3	-Vin	-Vin
9	N.C.	Common
11	N.C.	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

* N.P. : No Pin for standard model, the pin available when R.C is selected



Packing

Standard Tube Packing	MPQ Per Tube (PCS)	One Tube G.W.	Max. Q'TY/ Carton(PCS)	One Carton G.W.
Unit : mm  Tube Nails Product Foam 340 23.2 12 18.4 7 Tube pattern CARTON L390.9 x W284.8 x H175.7 W H L	10	148g	600	10.88Kg

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>