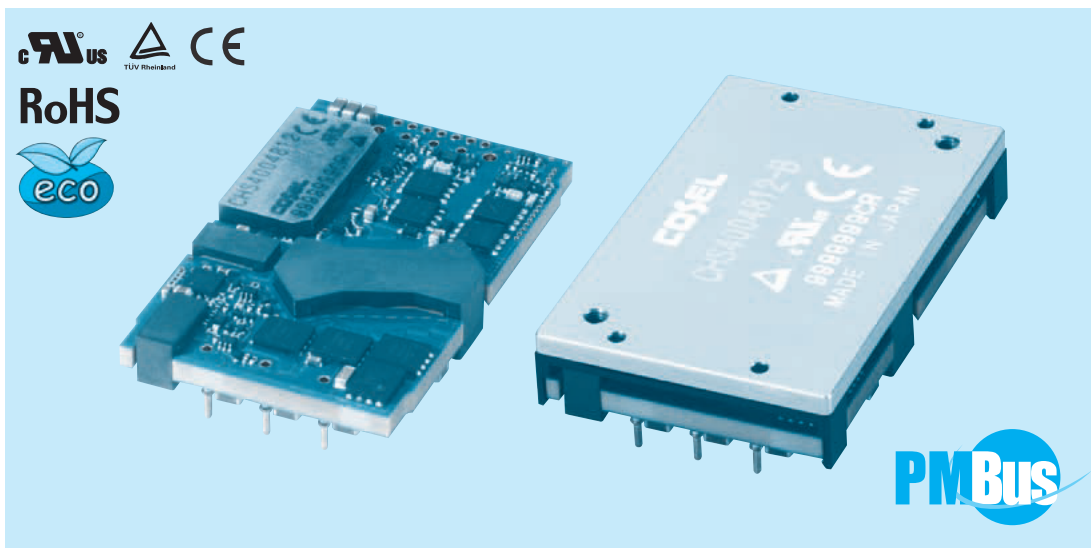


CHS400

CH S 400 48 12 - □

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output power
- ④ Input voltage
24:DC18 - 36V
48:DC36 - 76V
- ⑤ Output voltage
10:10V
12:12V
12H:12V(High efficiency type)
15:15V
24:24V
- ⑥ Optional
R :with Remote ON/OFF
Positive logic control
U :Shut down in protection
circuit working
B :BasePlate option with
Mounting hole M3
P :Parallel operation (5Pins
:without +S,-S and TRM)
(Only CHS40048)
L2:Pin length 5.3mm
L5:5pins type (+S,-S,TRM
less)
I :with the PMBus interface
(Only CHS4004812)

MODEL	CHS4002412	CHS4002415	CHS4002424
MAX OUTPUT WATTAGE[W]	318.0	397.5	348.0
DC OUTPUT	12V 26.5A	15V 26.5A	24V 14.5A

SPECIFICATIONS

	MODEL	CHS4002412	CHS4002415	CHS4002424	
INPUT	VOLTAGE[V]	DC18 - 36			
	CURRENT[A]	*1 14.17typ	17.53typ	15.43typ	
	EFFICIENCY[%]	*1 93.5typ	94.5typ	94.0typ	
OUTPUT	VOLTAGE[V]	12	15	24	
	CURRENT[A]	26.5	26.5	14.5	
	LINE REGULATION[mV]	24max	30max	48max	
	LOAD REGULATION[mV]	24max	30max	48max	
	RIPPLE	[mVrms] *2	60max	60max	90max
		[mVp-p] *2	180max	180max	280max
	RIPPLE NOISE[mVp-p] *2	200max	200max	280max	
	TEMPERATURE REGULATION[mV]	240max	300max	480max	
	DRIFT[mV]	*3 40max	50max	80max	
	START-UP TIME[ms]	50max (DCIN 24V, Io=100%)			
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4	Fixed (TRM pin open), adjustable by external resistor			
		-20% / +10%	-20% / +5%	-20% / +10%	
OUTPUT VOLTAGE SETTING[V] *1	±1.6%	±1.6%	±1.6%		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (Auto restart)			
	OVERVOLTAGE PROTECTION	115% - 135% (Auto restart)	110% - 130% (Auto restart)	115% - 135% (Auto restart)	
	REMOTE SENSING	Provided			
	REMOTE ON/OFF	Provided (Negative Logic L : ON, H :OFF)			

MODEL	CHS4004810	CHS4004812	CHS4004812H
MAX OUTPUT WATTAGE[W]	400.0	396.0	396.0
DC OUTPUT	10V 40A	12V 33A	12V 33A

SPECIFICATIONS

	MODEL	CHS4004810	CHS4004812	CHS4004812H	
INPUT	VOLTAGE[V]	DC36 - 76			
	CURRENT[A]	*1 8.82typ	8.68typ	8.64typ	
	EFFICIENCY[%]	*1 94.5typ	95typ	95.5typ	
OUTPUT	VOLTAGE[V]	10	12	12	
	CURRENT[A]	40	33	33	
	LINE REGULATION[mV]	*7 20max	24max	24max	
	LOAD REGULATION[mV]	*6 *7 20max	24max	24max	
	RIPPLE	[mVrms] *2	60max	60max	60max
		[mVp-p] *2	160max	180max	180max
	RIPPLE NOISE[mVp-p]	*2 180max	200max	200max	
	TEMPERATURE REGULATION[mV]	200max	240max	240max	
	DRIFT[mV]	*3 30max	40max	40max	
	START-UP TIME[ms]	50max (DCIN 48V, Io=100%)			
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), adjustable by external resistor (N/A : parallel operation)			
	OUTPUT VOLTAGE SETTING[V]	*1 *6	-10% / +10%	-10% / +10%	-10% / +10%
		*1 *6	±1.6%	±1.6%	±1.6%
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (Auto restart)			
	OVERVOLTAGE PROTECTION	115% - 135% (Auto restart)			
	REMOTE SENSING	Provided (N/A : parallel operation)			
	REMOTE ON/OFF	Provided (Negative Logic L : ON, H :OFF)			

GENERAL SPECIFICATIONS

ISOLATION	INPUT-OUTPUT	DC2,250V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)
	INPUT-BASEPLATE	*5 DC2,250V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)
	OUTPUT-BASEPLATE	*5 AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-40 to +85°C, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 5,000m (16,000 feet) max
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max
	VIBRATION	10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis
	IMPACT	196.1m/s ² (20G), 11ms, once each along X, Y and Z axis
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950
OTHERS	CASE SIZE/WEIGHT	58.4×9.5×36.8mm [2.3×0.37×1.45 inches] (W×H×D) / 60g max
		58.9×12.7×37.3mm [2.32×0.5×1.47 inches] (W×H×D) / 90g max *5
	COOLING METHOD	Convection / Forced air / Conduction

*1 At rated input (DC24V, DC48V) and rated load. Ta=25°C, 2m/s.

*2 Ripple and ripple noise is measured by using measuring board with ceramic capacitor 2.2 μF or 22 μF. (Refer to instruction manual for wiring output pin)

*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

*4 Refer to the instruction manual for input voltage derating.

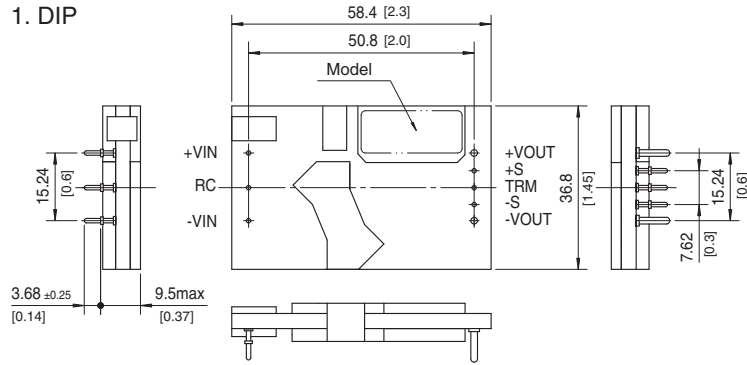
*5 BasePlate Option.

*6 Parallel operation Option is not included.

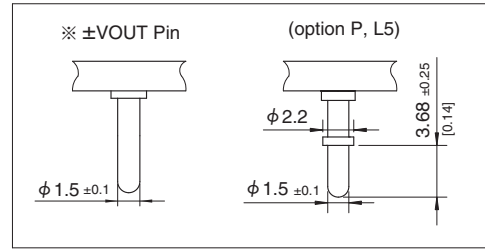
*7 At input voltage DC36-76V(CHS4004810, CHS4004812), DC40-76V(CHS4004812H).

External view

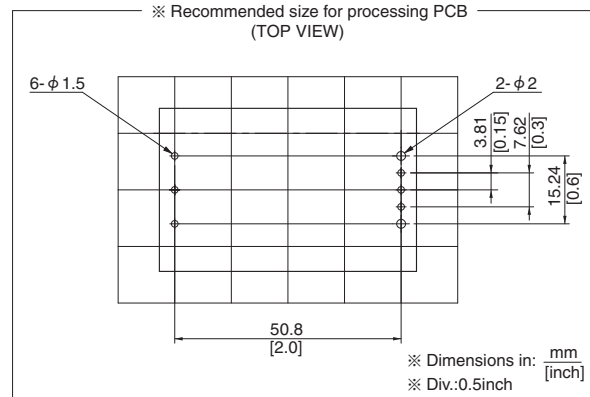
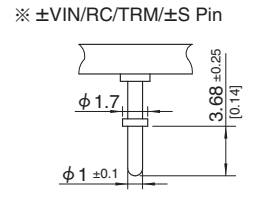
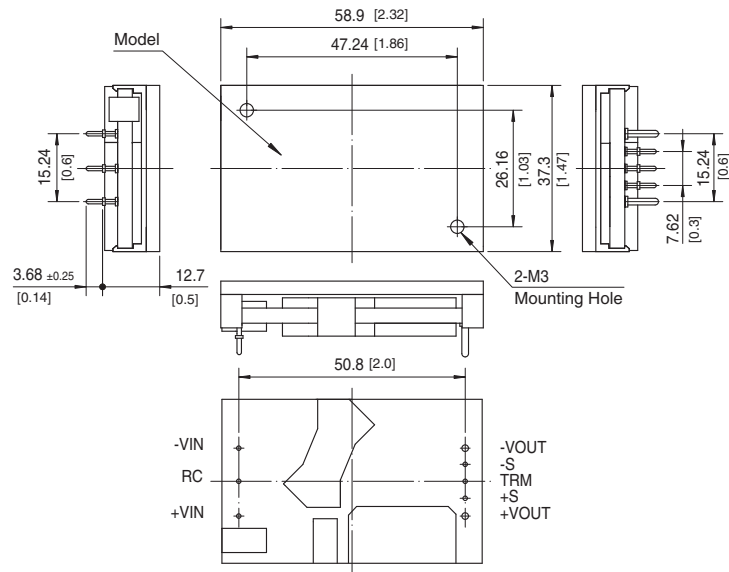
1. DIP



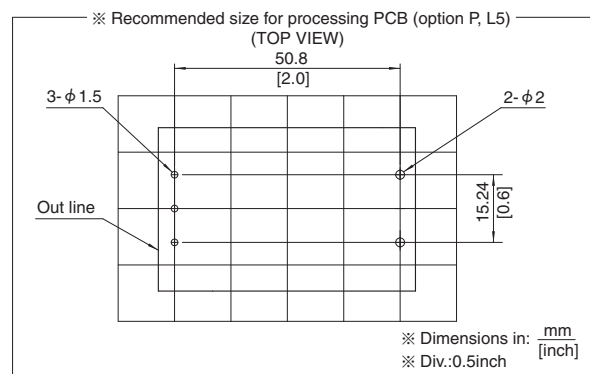
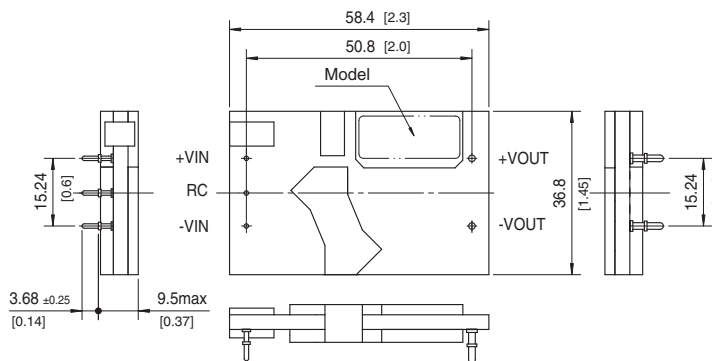
※ Tolerance: ±0.5 [±0.02]
 ※ Dimensions in mm, []=inches



2. BasePlate (optionB)



3. Parallel operation (option P) 5pins type (option L5)



*Please contact us about external view of the PMBus interface (option I).

