

Measures: 2.30 x 1.47 x 0.50"

DC-DC Converters Power Module type COSEL

Ordering information

S 100 DH 05



①Series name
②Single output
③Output wattage
④A: DE60-160V
⑤Output voltage
⑥Optional
T: with Mounting hole
(\$\phi 3.4 \text{ thru})

| MODEL | DHS100A05 | DHS100A12 | DHS100A15 | DHS100A24 |
|-----------------------|-----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 100.0 | 100.8 | 100.5 | 100.8 |
| DC OUTPUT | 5V 20A | 12V 8.4A | 15V 6.7A | 24V 4.2A |

SPECIFICATIONS

| | MODEL | | DHS100A05 | DHS100A12 | DHS100A15 | DHS100A24 | | |
|------------------------|--|-----------------|---|---------------|---------------|---------------|--|--|
| INPUT | VOLTAGE[V] | | DC60 - 160 | | | | | |
| | CURRENT[A] *1 | | 1.1A | 1.1A | 1.1A | 1.1A | | |
| | EFFICIENCY[%] *1 | | 85.0typ | 88.0typ | 88.0typ | 88.0typ | | |
| | VOLTAGE[V] | | 5 | 12 | 15 | 24 | | |
| | CURRENT[A] | | 20 | 8.4 | 6.7 | 4.2 | | |
| | LINE REGULATION[mV] | | 10max | 24max | 30max | 48max | | |
| | LOAD REGULATION[mV] | | 10max | 24max | 30max | 48max | | |
| | | 0 to +100℃*2 | 80max | 120max | 120max | 120max | | |
| | RIPPLE[mVp-p] | -40 to 0°C *2 | 120max | 150max | 150max | 150max | | |
| | | 0 to 15% Load*2 | 160max | 240max | 240max | 240max | | |
| | | 0 to +100℃ *2 | 120max | 150max | 150max | 150max | | |
| OUTPUT | RIPPLE NOISE[mVp-p] | -40 to 0℃ *2 | 200max | 200max | 200max | 250max | | |
| | | 0 to 15% Load*2 | 240max | 300max | 300max | 300max | | |
| | TEMPERATURE REGULATION[mV] | 0 to +65℃ | 50max | 120max | 150max | 240max | | |
| | | -40 to +100℃ | 100max | 240max | 300max | 480max | | |
| | DRIFT[mV] | *3 | 20max | 40max | 60max | 90max | | |
| | START-UP TIME[ms] | | 200max (DCIN 110V, Io=100%) | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4 | | Fixed (TRM pin open), adjustable by external VR or external voltage | | | | | |
| | | | 4.50 - 6.00 | 10.80 - 13.20 | 13.50 - 16.50 | 21.60 - 26.40 | | |
| | OUTPUT VOLTAGE SETTING[V] | | 4.97 - 5.13 | 11.91 - 12.29 | 14.76 - 15.24 | 23.62 - 24.38 | | |
| | OVERCURRENT PROTECTION | | Works over 105% of rating and recovers automatically | | | | | |
| PROTECTION CIRCUIT AND | OVERVOLTAGE PROTECTION[V] | | 6.30 - 7.60 | 13.90 - 17.55 | 17.25 - 21.75 | 27.60 - 34.80 | | |
| OTHERS | REMOTE SENSING | | nothing | | | | | |
| | REMOTE ON/OFF | | Provided (Negative Logic L : ON, H :OFF) | | | | | |
| | INPUT-OUTPUT | | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | |
| ISOLATION | INPUT-FG | | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | |
| | OUTPUT-FG | | AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | |
| | OPERATING TEMP.,HUMID.AND ALTITUDE | | -40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | | | |
| ENVIRONMENT | STORAGE TEMP.,HUMID.AND | ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | | | |
| LIVINONNENI | VIBRATION | | 10 - 55Hz, 49.0m/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis Complies with IEC61373 Category 1 Class B | | | | | |
| | IMPACT | | 196.1m/s² (20G), 11ms, once each along X, Y and Z axis Complies with IEC61373 Category 1 Class B | | | | | |
| SAFETY | AGENCY APPROVALS UL60950-1, C-UL (CSA60950-1), EN60950-1 | | | | | | | |
| OTHERS | CASE SIZE/WEIGHT | | 58.4×12.7×37.3mm [2.3×0.5×1.47 inches] (W×H×D) / 60g max | | | | | |
| OTHERS | COOLING METHOD | | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | | | |

- At rated input(DC110V) and rated load.

 Ripple and ripple noise is measured by using measuring board. Refer to the manual.

 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. Refer to the manual for input range.

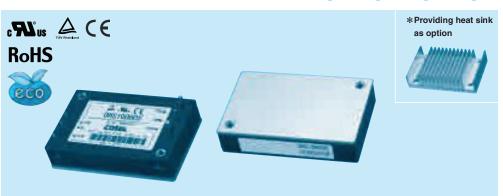




Measures: 2.30 x 1.47 x 0.50"

COSEL **DC-DC Converters Power Module type DHS100B**

Ordering information DH 100



| ①Series name ②Single output ③Single output MB: DC200-400V ⑤Output voltage ⑥Optional T: with Mounting hole (\$\phi 3.4 \text{ thru}) |
|--|
| |

| MODEL | DHS100B03 | DHS100B05 | DHS100B12 | DHS100B15 | DHS100B24 | DHS100B28 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 66.0 | 100.0 | 100.8 | 100.5 | 100.8 | 100.8 |
| DC OUTPUT | 3.3V 20A | 5V 20A | 12V 8.4A | 15V 6.7A | 24V 4.2A | 28V 3.6A |

SPECIFICATIONS

| | MODEL | | DHS100B03 | DHS100B05 | DHS100B12 | DHS100B15 | DHS100B24 | DHS100B28 | |
|--------------------|---------------------------------------|-------------------|--|-------------|---------------|---------------|---------------|---------------|--|
| | VOLTAGE[V] | | DC200 - 400 | | | | | | |
| INPUT | CURRENT[A] *1 | | 0.30A | 0.44A | 0.42A | 0.42A | 0.42A | 0.42A | |
| | EFFICIENCY[%] *1 | | 79.0typ | 82.0typ | 85.0typ | 86.0typ | 86.0typ | 86.0typ | |
| | VOLTAGE[V] | | 3.3 | 5 | 12 | 15 | 24 | 28 | |
| | CURRENT[A] | | 20 | 20 | 8.4 | 6.7 | 4.2 | 3.6 | |
| | LINE REGULATION[mV] | | 10max | 10max | 24max | 30max | 48max | 56max | |
| | LOAD REGULATION[mV] | | 10max | 10max | 24max | 30max | 48max | 56max | |
| | | 0 to +100°C *2 | 80max | 80max | 120max | 120max | 120max | 120max | |
| | RIPPLE[mVp-p] | -40 to 0℃ *2 | 120max | 120max | 150max | 150max | 150max | 150max | |
| | | 0 to 15% Load * 2 | 160max | 160max | 240max | 240max | 240max | 240max | |
| ОИТРИТ | | 0 to +100°C *2 | 120max | 120max | 150max | 150max | 150max | 150max | |
| | RIPPLE NOISE[mVp-p] | -40 to 0℃ *2 | 200max | 200max | 200max | 200max | 250max | 250max | |
| | | 0 to 15% Load * 2 | 240max | 240max | 300max | 300max | 300max | 300max | |
| | TEMPERATURE REGULATION[mV] | 0 to +65℃ | 35max | 50max | 120max | 150max | 240max | 280max | |
| | TEMPERATURE REGULATION[IIIV] | -40 to +100℃ | 66max | 100max | 240max | 300max | 480max | 560max | |
| | DRIFT[mV] | *3 | 16max | 20max | 40max | 60max | 90max | 90max | |
| | START-UP TIME[ms] | | 200max (DCIN 280V, Io=100%) | | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4 | | Fixed (TRM pin open), adjustable by external VR or external voltage | | | | | | |
| | | | 2.97 - 3.96 | 4.50 - 6.00 | 10.80 - 13.20 | 13.50 - 16.50 | 21.60 - 26.40 | 25.20 - 30.80 | |
| | OUTPUT VOLTAGE SETTING[V] | | 3.30 - 3.40 | 4.97 - 5.13 | 11.91 - 12.29 | 14.76 - 15.24 | 23.62 - 24.38 | 27.56 - 28.44 | |
| | OVERCURRENT PROTECTION | | Works over 105% of rating and recovers automatically | | | | | | |
| PROTECTION | OVERVOLTAGE PROTECTION[V] | | 4.20 - 5.70 | 6.30 - 7.60 | 13.90 - 17.55 | 17.25 - 21.75 | 27.60 - 34.80 | 32.20 - 40.60 | |
| CIRCUIT AND OTHERS | REMOTE SENSING | | None | | | | | | |
| | REMOTE ON/OFF | | Provided (Negative Logic L : ON, H :OFF) | | | | | | |
| | INPUT-OUTPUT | | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | | |
| ISOLATION | INPUT-FG | | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | | |
| | OUTPUT-FG | | AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20±15 $^{\circ}$ C) | | | | | | |
| | OPERATING TEMP., HUMID. AND ALTITUDE | | -40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | | | | |
| ENVIRONMENT | STORAGE TEMP.,HUMID.AND ALTITUDE | | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | | | | |
| ENVINONMENT | VIBRATION | | 10 - 55Hz, 49.0m/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis | | | | | | |
| | IMPACT | | 196.1m/s² (20G), 11ms, once each along X, Y and Z axis | | | | | | |
| SAFETY | AGENCY APPROVAL | LS | UL60950-1, C-UL, EN60950-1 | | | | | | |
| OTHERS | CASE SIZE/WEIGHT | | 58.4×12.7×37.3mm [2.3×0.5×1.47 inches] (W×H×D) / 60g max | | | | | | |
| OTHERS | COOLING METHOD | | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | | | | |

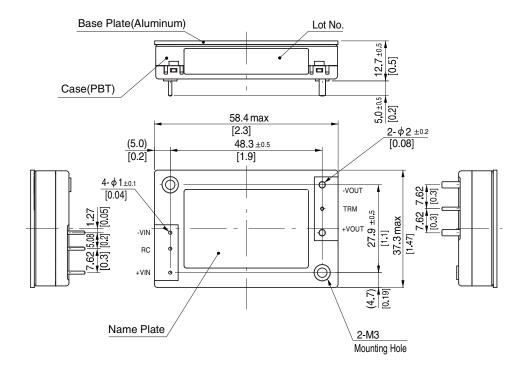
At rated input(DC280V) and rated load.

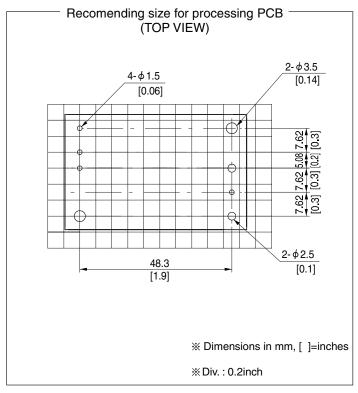
Ripple and ripple noise is measured by using measuring board. Refer to the manual.

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.

Refer to the manual for input range.

Measures: 2.30 x 1.47 x 0.50"





- % Tolerance : ± 0.3 [± 0.012]
- % Weight : 60g max
- ※ Dimensions in mm, []=inches
- Mounting hole screwing torque: 0.49N · m (5.0kgf · cm) max