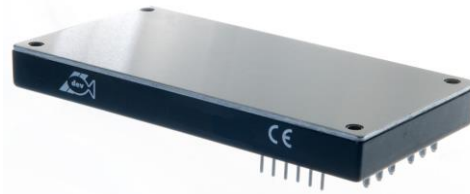




**800 Watt, 2:1 Wide Input Range
DC/DC Converters
Series DV800F2**



Features

- 800 Watt Isolated Output
- Regulated Outputs
- 2 : 1 Wide Input Range
- Isolation I/O 1500Vdc
- Fixed Switching Frequency
- Remote ON/OFF
- Shock & Vibration Meet MIL-STD-810F
- Full Brick Size Meet Industrial Standard 116,8 x 61,0 x 12,7 (mm)
- Efficiency to 90%
- Continuous Short Circuit Protection
- Over Temperature Protection
- Over Current & Over Voltage Protection
- Input Under Voltage Protection
- Operating Case Temperature -40 to +100°C
- Safety Meet IEC/EN/UL62368-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [A] MAX.	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [A]	EFF. [%] (Note 1)	CAP. LOAD Max. [μF]	CASE
DV800F2-24S28	18 - 36	28	28,5	200	36,94	90	5000	F

NOTE:

1. Nominal Input Voltage 24 VDC
2. An External Input Capacitor 220uF for All Models are Recommended to Reduce Input Ripple Voltage
The Output Terminal Required a Minimum Capacitor 470uF to Maintain Specified Regulation
3. Full Load, 10uF Tantalum Capacitor and 1uF Ceramic Capacitors
4. All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V typ.	18-36Vdc
Input Surge Voltage.....	100ms max	50Vdc max.
Input Under Voltage Lockout	Turn-On Voltage Threshold	16,5V min / 17,5V max.
	Turn-Off Voltage Threshold	15,5V min. / 16,5V max.
	Lockout Hysteresis Voltage	1,0 Vdc typ.
Maximum Input Current.....	V _{in} =18V, Full Load,	49A typ.
Inrush Current.....		0,1 A ² s max.
Input Reflected Ripple Current....	P-P thru 12uH inductor, 5Hz to 20MHz	90mA typ.
Input Filter		PI Type
On/Off Control, Positive Remote On/Off logic, Refer to -Vin Pin		
Logic Low (Module Off)	V _{on/off} at I _{on/off} =1.0mA	0 to 0,01mA
Logic High (Module On)	V _{on/off} at I _{on/off} =0.0uA, Pin open=On	1 to 10mA
Suffix "N" On/Off Control, Negative Remote On/Off logic, Refer to -Vin Pin		
Logic High (Module Off)	V _{on/off} at I _{on/off} =0.0uA, Pin open=Off	1 to 10mA
Logic Low (Module On)	V _{on/off} at I _{on/off} =1.0mA	0 to 0,01mA.
Off Converter Input Current	Shutdown input idle current	50 mA max.

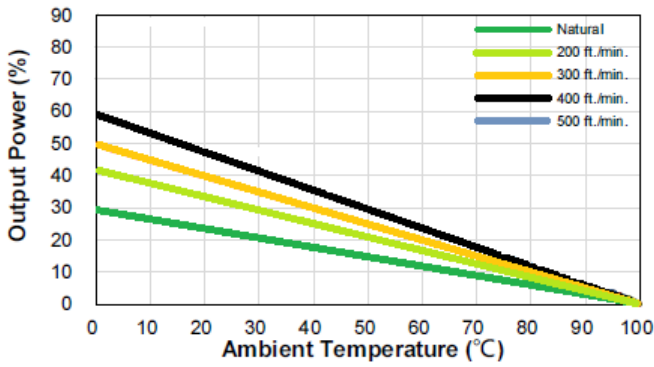
OUTPUT SPECIFICATION:

Voltage Set Point Accuracy	V _{in} =24V, Full Load	±1,0% max.
Output Current Min.		0 mA min.
Line Regulation.....	V _{in} High Line to Low Line, Full Load	±0,2% max.
Load Regulation	Full Load to No Load	±0,5% max.
Temperature Coefficient.....		±0,02%/°C max.
Ripple and Noise (5Hz to 20 MHz BW) (Note 3)	V _o 28V	100mV RMS / 280mV pk-pk max.
Over Current Protection	Continuous Current, Auto Recovery	105%-120%
Short Circuit Protection		Continuous, Auto Recovery
External Trim Adj. Range.....	P _o ≤ max rated power, I _o ≤ I _{o,max}	-40% min, +10% max.
Voltage Remote Sense	P _o ≤ max power, I _o ≤ I _{o,max} % of nom. V _o	+10% max.
Over Voltage Protection	Limited Voltage, % of Nominal V _o	115-140%
Auxiliary Output Voltage.....		7V min. / 13V max.
Auxiliary Output Current.....		20mA max.
Power Good Signal (IOG)	V _{out} Ready: Low Level, Sink Current	20mA max.
	V _{out} not Ready: Open Drain Output, Applied Voltage	50V max.
Load Share Accuracy (50%-100% load)		-5% min. / -5% max.
Output Voltage Current Transient: 75% to 100% Step Load Change dI/dt=0.1A/us (within 1% V _{out} nominal)		
Error Band		±5% max.
Recovery Time		500µ sec. max.
Output Voltage Rise Time	10%V _{o,set} to 90%V _{o,set}	50ms max.
Start up Time From ON/OFF Control	V _{on/off} to 10%V _{o,set} , Remote On	75ms max.
Start up Time From Input	V _{in,min} to 10%V _{o,set} , Power Up	250ms max.

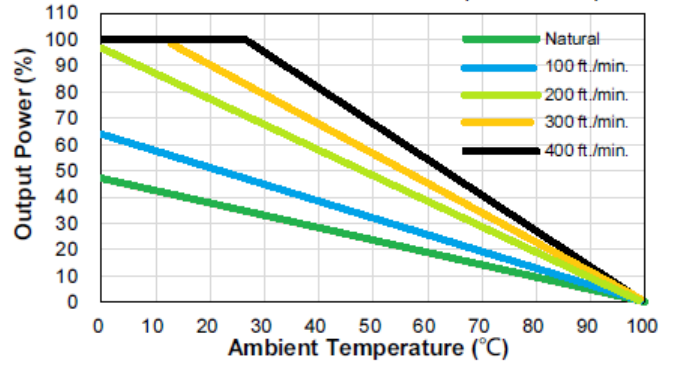
GENERAL SPECIFICATIONS:

Efficiency		See Table
Isolation Voltage (1 Minute)	Input/Output	1500VDC max.
	Input/Case (Baseplate)	1500 VDC max.
	Output/Case (Baseplate)	1500 VDC max.
Isolation Resistance		10 MΩ min.
Isolation Capacitance	Input/Output	2760pF typ.
	Input to Case (Base Plate)	2000pF typ.
	Output to Case (Base Plate)	2000pF typ.
Switching Frequency.....		250 KHz typ.
Operating Case Temperature		-40°C to +100°C
Storage Temperature		-55°C to +105°C
Over Temperature Shutdown.....	Temp. at Center Part of Base Plate	110°C typ.
Over Temperature Recovery	Temp. at Center Part of Base Plate	90°C typ.
MTBF 25°C (MIL-HDBK-217F, GB, Full Load)		410 Khours typ.
Humidity		95% RH max. Non condensing
Altitude		2000m Operating Altitude, 12000m Transport Altitude
Safety.....		Meets IEC/ENUL62368-1
EMI.....		Meets EN55032 Class A with external filter
Shock/Vibration		Meets MIL-STD-810F
Dimensions		4,20x2,40x0.50 inches (116,8x61,0x12.7 mm)
Potting Material.....		UL 94-V0
Case Material		Aluminum Baseplate with Plastic Case
Weight.....		220g typ.

DV800F2-24S28 Derating Curve
without Heatsink (Vin=24V)

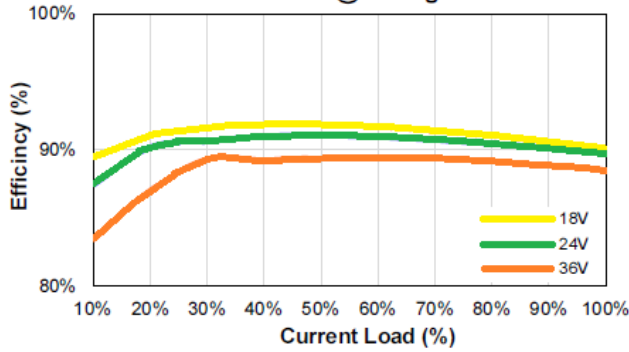


DV800F2-24S28 Derating Curve
with Heatsink KF1168254 (Vin=24V)

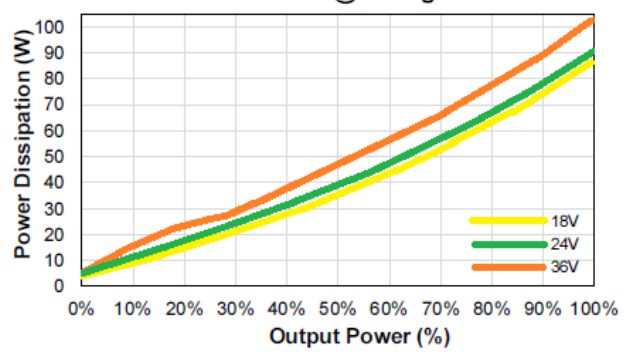


Performance

DV800F2-24S28
Eff Vs Io @25 Deg. C

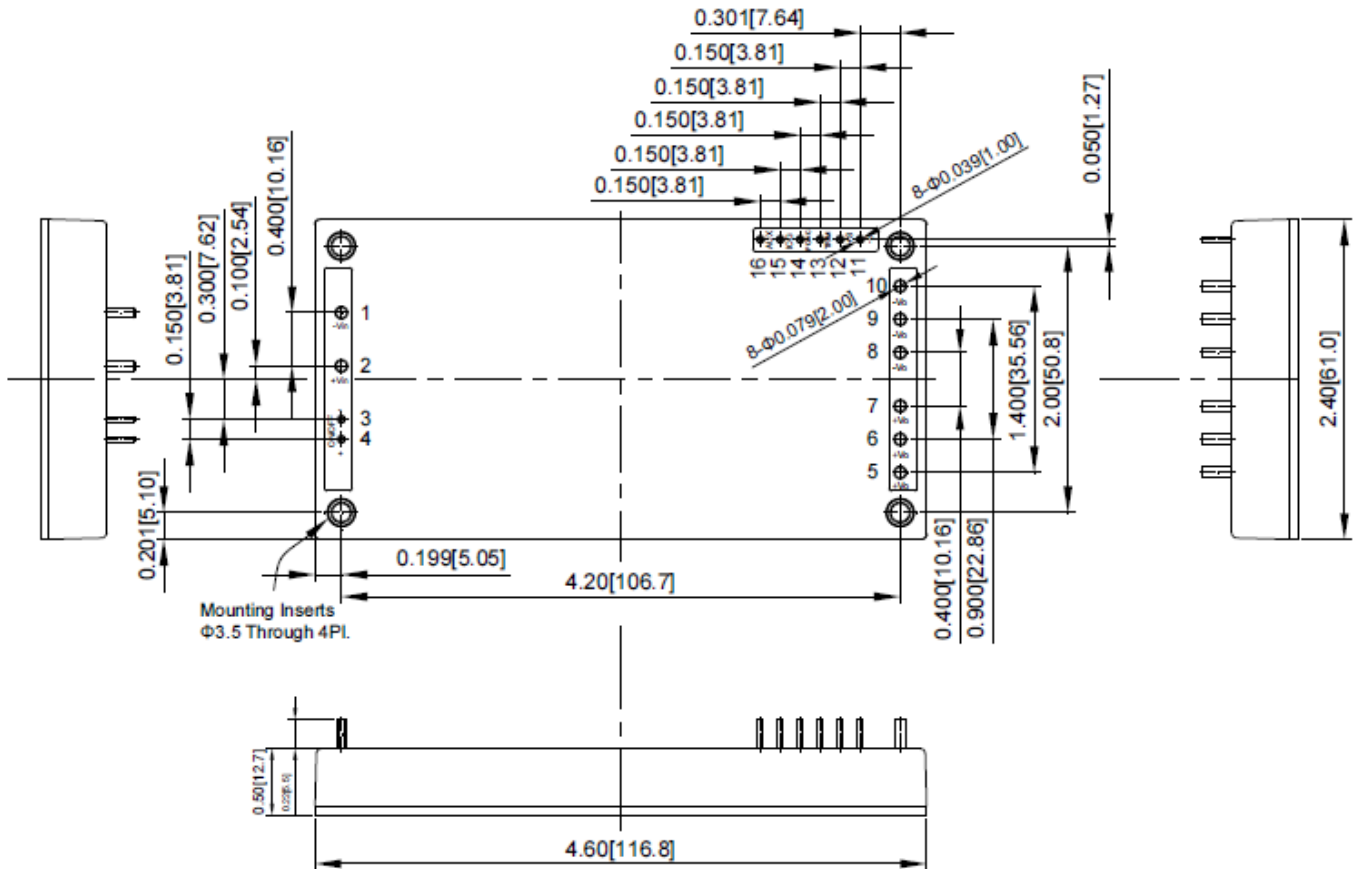


DV800F2-24S28
Pd Vs Po @25 Deg. C



All Dimensions in Inches (mm)

Tolerance Inches x.xx±0.02 x.xxx±0.01
 Millimeters x.x±0.5 x.xx±0.25



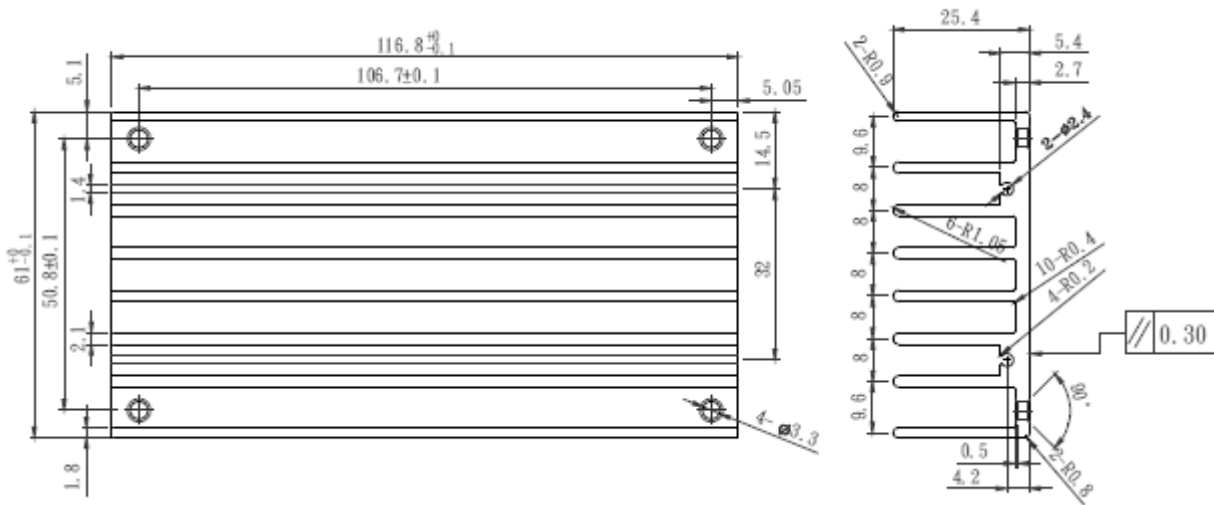
PIN CONNECTION	
Pin	Function
1	-V Input
2	+V Input
3	-ON/OFF
4	+ON/OFF
5-7	+V Output
8-10	-V Output
11	-Sense
12	+Sense
13	TRIM
14	PC Parallel Control
15	IOG Inverter Operation Good Signal
16	AUX Auxiliary Power for Output Signal

Note: Base plate can be connected to FG through M3 threaded mounting insert. Recommended torque 3Kgf-cm.

CASE F: HEAT SINK

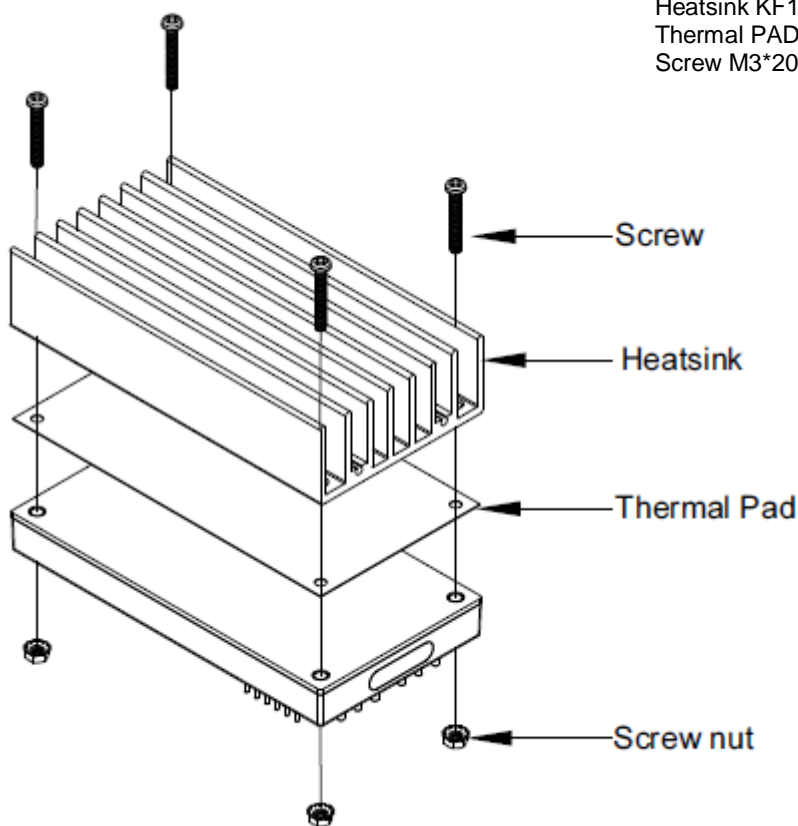
Order No. 17.079.235 Heatsink KF1168254 Full-Brick

all dimensions in mm



CASE F: HEAT SINK SET

Order No. 17.079.817 Model No. Heatsink-SET/KF1168254-2 NOT Mounted, with Thermal PAD, Screw & Nut



Heatsink KF1168254
 Thermal PAD: 60*115.8*0.23
 Screw M3*20 & Nut M3