

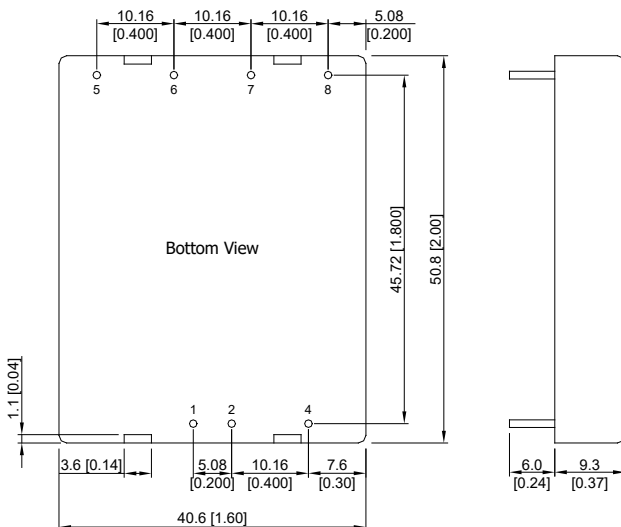
25-30 Watt KMW Single and Dual Series



- Efficiency up to 89%
- 1500VDC Isolation
- MTBF > 1,000,000 Hours
- 4:1 Input
- Six-Sided Shielding
- Remote On/Off
- Output Trim
- UL60950 Approved
- RoHS Compliant



Model Number	Voltage			Current				Reflected Ripple	Input Overvoltage Protection (1000ms)	Over Voltage Protection	Efficiency	Capacitive Load
	Input		Output	Input		Output						
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Min (mA)	Max (mA)	Typ (mA)	Max (VDC)	(VDC)	@ Max Load (%, Typ)	Max (Dual each output)
KMW18H24S3R3	24	10 - 40	3.3	20	922	400	5500	50	50	3.9	82	10000 µF
KMW25H24S5	24	10 - 40	5	20	1225	350	5000	50	50	6.8	85	10000 µF
KMW30H24S12	24	10 - 40	12	20	1404	166	2500	50	50	15	89	1000 µF
KMW30H24S15	24	10 - 40	15	20	1404	133	2000	50	50	18	89	1000 µF
KMW30H24D12	24	10 - 40	±12	20	1404	±83	±1250	50	50	±15	89	330 µF
KMW30H24D15	24	10 - 40	±15	20	1404	±65	±1000	50	50	±18	89	330 µF
KMW18H48S3R3	48	18 - 75	3.3	10	461	400	5500	25	100	3.9	82	10000 µF
KMW25H48S5	48	18 - 75	5	10	613	350	5000	25	100	6.8	85	10000 µF
KMW30H48S12	48	18 - 75	12	10	702	166	2500	25	100	15	89	1000 µF
KMW30H48S15	48	18 - 75	15	10	702	133	2000	25	100	18	89	1000 µF
KMW30H48D12	48	18 - 75	±12	10	702	±83	±1250	25	100	±15	89	330 µF
KMW30H48D15	48	18 - 75	±15	10	702	±65	±1000	25	100	±18	89	330 µF



Dimensions are mm (inches)

Tolerance: X.X±0.25 (X.XX±0.01)

XX±0.13 (X.XXX±0.005)

Pin diameter tolerance: X.X±0.05 (X.XX±0.002)

Pin Connections (NC) Not Connected			
Pin	Single	Dual	Diameter mm(inches)
1	+Vin	+Vin	Ø 1.0 [0.04]
2	-Vin	-Vin	Ø 1.0 [0.04]
4	Remote On/Off	Remote On/Off	Ø 1.0 [0.04]
5	No Pin	+Vout	Ø 1.0 [0.04]
6	+Vout	Common	Ø 1.0 [0.04]
7	-Vout	-Vout	Ø 1.0 [0.04]
8	Trim	Trim	Ø 1.0 [0.04]

See Model Selection Table for Model Specific Parameters

Input Parameters	Min	Typ	Max	Units
Reverse Polarity Input Current			2	A
Short Circuit Input Power			4500	mW
Start Voltage	24 Vin	9.4	9.7	10
	48 Vin	17	17.5	18
				VDC
Under Voltage Shutdown	24 Vin	9	9.3	9.5
	48 Vin	16	16.5	17
				VDC
Switching Frequency	290	330	360	kHz
Input Filter	Pi Filter			
Output Parameters	Min	Typ	Max	Units
Output Voltage Accuracy		±0.5	±1.0	%
Output Voltage Balance		±0.5	±2.0	%
Dual Output, Balanced Loads				
Load Regulation		±0.3	±1.0	%
Io = 50% to 100%				
Line Regulation		±0.2	±0.5	%
Vin=Min. to Max.				
Ripple & Noise (20MHz)		55	80	mV P-P
Ripple & Noise (20 MHz)			100	mV P-P
Over Line, Load & Temp				
Ripple & Noise (20 MHz)			10	mV RMS
Over Power Protection	120		180	%
Transient Recovery Time		150	300	µs
25% Load Step Change				
Transient Response Deviation,		±2	±4	%
25% Load Step Change				
Temperature Coefficient		±0.01	±0.02	% / °C
Short Circuit Protection	Continuous			
General Specifications	Min	Typ	Max	Units
Isolation Voltage,	1500			VDC
60 seconds				
Isolation Resistance	1000			Mohms
500VDC				
Isolation Capacitance,		1200	1500	pF
100kHz, 1V				
Operating Temperature	-40		+80	°C
(Ambient)				
Storage Temperature	-50		+125	°C
Humidity			95	%
Case Temperature			+105	°C
Lead Temperature			260	°C
Over Temperature Protection	107	112	117	°C
(Case Temperature, automatic recovery)				
MTBF MIL-HDBK-217F	1000			K Hours
@25°C, Ground Benign				
Cooling	Free-Air Convection			
Case Size	2.0 x 1.6 x 0.40 inches			
	50.8 x 40.6 x 10.2 mm			
Case Material	Six-Sided Shielded, Metal Case			
	(UL94V-0)			
Weight	48g			
Agency Approval	UL60950 Approved			

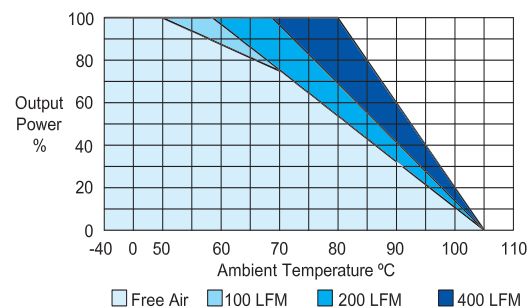
Input Fuse Selection Table	
24V Input	5000 mA Slow-Blow
48V Input	3000 mA Slow-Blow

External fusing should be used for system protection due to a catastrophic failure. See ConTech website for Fusing Application Notes to determine the correct fuse.

Remote On/Off	Min	Typ	Max	Units
Supply On	2.5 to 100VDC or Open Circuit			VDC
Supply Off	-1		1	VDC
Device Standby Input Current		2	5	mA
Control Input Current (on)			5	µA
Vin - RC = 5.0V				
Control Input Current (off)			-100	µA
Vin - RC = 0V				
Control Common	Referenced to Negative Logic			
Output Voltage Trim	Min	Typ	Max	Units
Trim Up / Down Range	±9.0	±10.0	±11.0	%
% of nominal output voltage				

Notes:

- Specifications typical at Ta=+25°C, resistive load, nominal input voltage, full rated output current unless otherwise noted.
- Transient recovery time is measured to within 1% error band for a step change in output load 75% to 100%.
- ConTech power converters require a minimum output loading to maintain specified regulation. Operation under no-load conditions will not damage these modules; however, they may not meet all specifications listed.
- The series has a limitation of a maximum connected capacitance at the output. The power module may be operated in current limiting mode during start-up, affecting the ramp-up and the startup time.
- When measuring peak-to-peak output noise, use a Cout 0.47µF ceramic capacitor. Scope measurement should be made by using a BNC socket, measurement bandwidth is 0-20MHz. Position the load between 2" and 2.5" from the converter.
- Water washability - ConTech DC/DC converters are designed to withstand most solder/wash processes. Careful attention should be used when assessing the applicability in your specific manufacturing process. Converters are not hermetically sealed.
- See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. www.ConTech-us.com/appnotes.html
- Specifications subject to change without notice.
- See ConTech website www.ConTech-us.com/pdf/rohs.pdf for RoHS Statement.



Derating Curve

To avoid exceeding the maximum temperature rating of the components inside the power module, the case temperature must be kept below 90°C.



ES France - Département Composants & Modules
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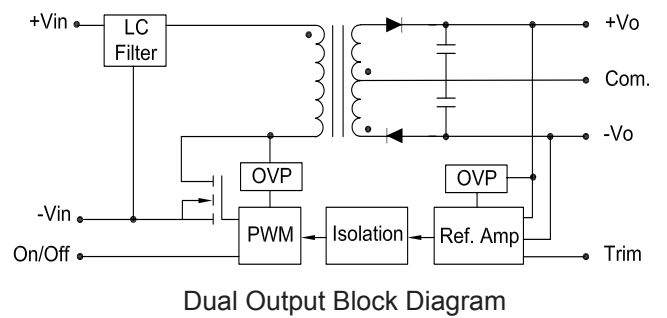
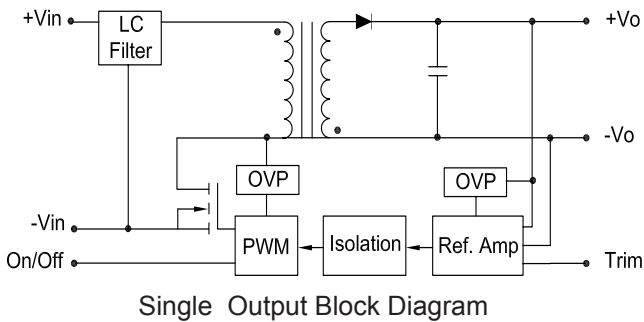


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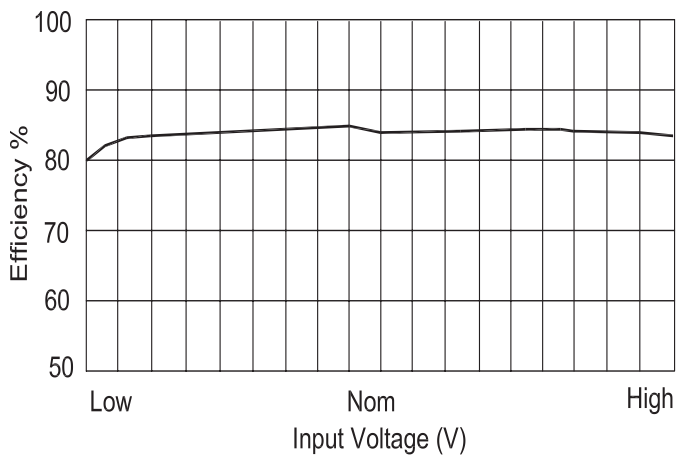
e-mail : comp@es-france.com
Site Web : www.es-france.com

Block Diagrams

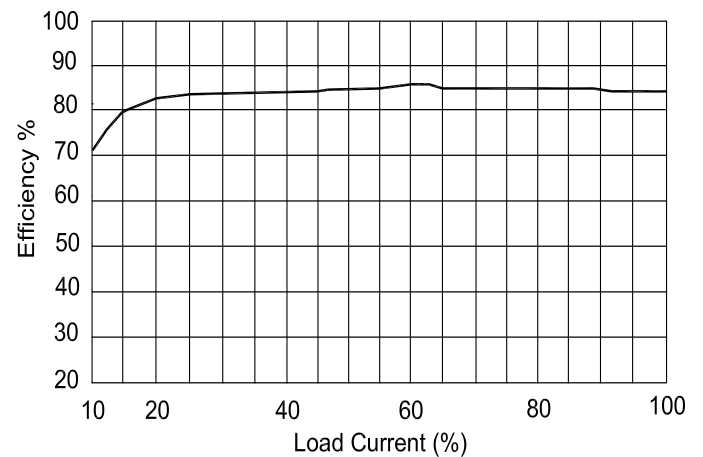


Efficiency Curves

Single Output

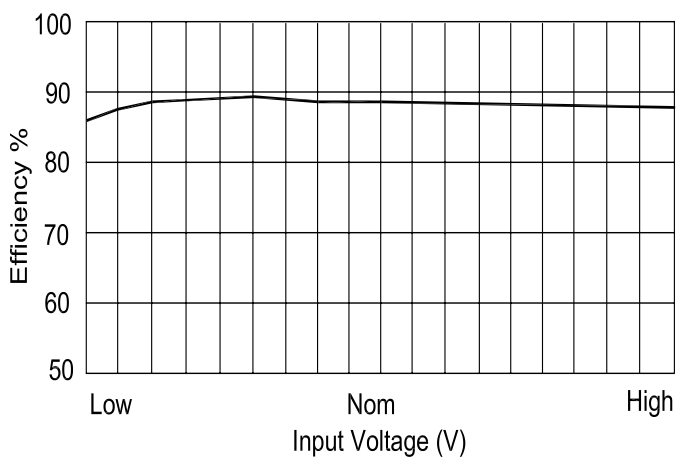


Efficiency vs Input Voltage

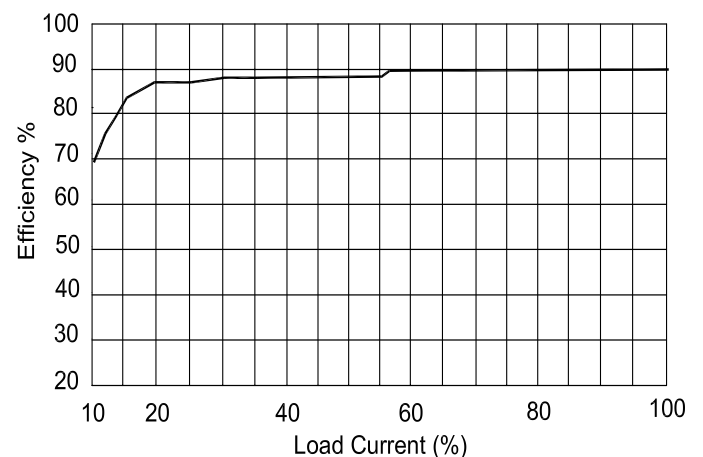


Efficiency vs Output Load

Dual Output



Efficiency vs Input Voltage



Efficiency vs Output Load

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