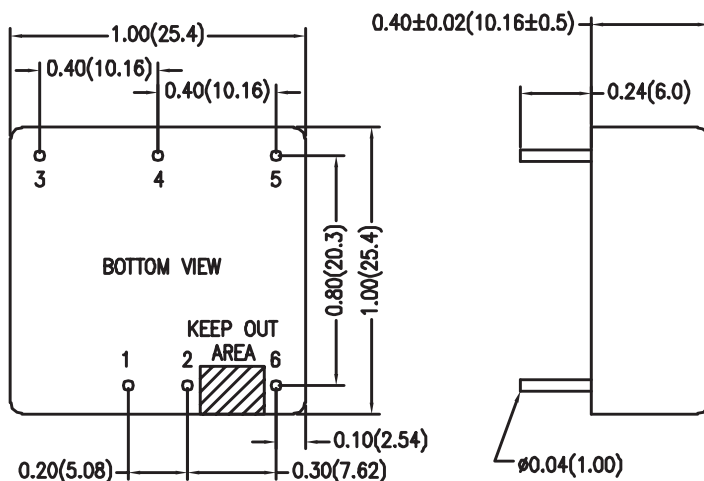


25 Watt QMS Single and Dual Series



Model Number	Voltage			Current			Reflected Ripple Current	Over Voltage Protection	Input Surge Voltage	Efficiency	Capacitive Load
	Input		Output	Input		Output					
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Max (mA)	mA (Typ)	VDC	100ms (Max.)	@ Max Load (%, Typ)	Max (Dual each output)
QMS20H12S3	12	9 - 18	3.3	75	1900	6000	80	3.9	25	87	10300
QMS25H12S5	12	9 - 18	5	85	2340	5000	80	6.2	25	89	6800
QMS25H12S12	12	9 - 18	12	80	2350	2090	80	15	25	89	1200
QMS25H12S15	12	9 - 18	15	80	2350	1670	80	18	25	89	750
QMS25H12D12	12	9 - 18	±12	75	2340	±1040	80	±15	25	89	680
QMS25H12D15	12	9 - 18	±15	75	2360	±840	80	±18	25	89	380
QMS20H24S3	24	18 - 36	3.3	55	940	6000	50	3.9	50	88	10300
QMS25H24S5	24	18 - 36	5	60	1160	5000	50	6.2	50	90	6800
QMS25H24S12	24	18 - 36	12	55	1160	2090	50	15	50	90	1200
QMS25H24S15	24	18 - 36	15	55	1160	1670	50	18	50	90	750
QMS25H24D12	24	18 - 36	±12	50	1170	±1040	50	±15	50	89	680
QMS25H24D15	24	18 - 36	±15	50	1180	±840	50	±18	50	89	380
QMS20H48S3	48	36 - 75	3.3	35	470	6000	30	3.9	100	88	10300
QMS25H48S5	48	36 - 75	5	40	580	5000	30	6.2	100	90	6800
QMS25H48S12	48	36 - 75	12	35	580	2090	30	15	100	90	1200
QMS25H48S15	48	36 - 75	15	35	580	1670	30	18	100	90	750
QMS25H48D12	48	36 - 75	±12	40	585	±1040	30	±15	100	89	680
QMS25H48D15	48	36 - 75	±15	40	590	±840	30	±18	100	89	380



Tolerance: Inches Millimeters

X.XX ±0.01	X.X ±0.25
X.XXX ±0.005	X.XX ±0.13

Pin	±0.002	±0.05
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Pin Connections		
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

Keep out area: Keep copper traces in mating assembly away from this area to prevent shorting.



ES France - Département Composants & Modules
127 rue de Buzenval BP 26 - 92380 Garches



Tél. 01 47 95 99 89
Fax. 01 47 01 16 22



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



See Model Selection Table for Model Specific Parameters

Input Parameters	Min	Typ	Max	Units
Start Voltage 12 Vin 24 Vin 48 Vin			9 18 36	VDC
Switching Frequency		285		kHz
Start Time (Nom Vin and constant resistive load) Power Up Remote ON/OFF			30 30	ms
Input Polarity Protection	None			
Input Filter	LC Filter			
Conducted EMI	Meets EN55022, Class A, Class B			
Output Parameters	Min	Typ	Max	Units
Output Voltage Accuracy			±1.0	%Vnom
Output Voltage Balance Dual Output, Balanced Loads			±2.0	%
Load Regulation No Load to Full Load Single Dual			±0.2 ±0.2	%
Line Regulation Vin=Min. to Max.			±0.2	%
Ripple & Noise (20MHz) 3.3 & 5 V All other models			100 150	mV P-P
Transient Recovery Time 25% Load Step Change		250		µs
Temperature Coefficient			±0.02	% / °C
Over Current Protection	150% of Iout Max.			
Short Circuit Protection	Hiccup Automatic Recovery			
Remote On Off	Min	Typ	Max	Units
DC/DC On	3.5V-12VDC or Open Circuit			
DC/DC Off	0v -1.2VDC or Short Circuit			
Control Input Current (on) Vctrl = 5.0V			0.5	mA
Control Input Current (off) Vctrl = 0V			-0.5	mA
Control Common	Referenced to Negative Input			
Standby Input Current Supply Off & Nominal Vin		3		mA
Output Voltage Trim	Min	Typ	Max	Units
Trim Up / Trim Down (7)	±10			%

General Specifications	Min	Typ	Max	Units
Isolation Voltage, 60 seconds	1500			VDC
Isolation Resistance 500VDC	1000			Mohms
Isolation Capacitance, 100kHz, 1V			2000	pF
Operating Temperature (Ambient)	-40		+80	°C
Operating Temperature (Case)			+105	°C
Storage Temperature	-50		+125	°C
Humidity			95	%
Thermal Impedance Natural Convection w/o heatsink Natural Convection with heatsink	17.6 14.8			°C/W
MTBF MIL-HDBK-217F @25°C, Ground Benign	313			K Hours
Cooling	Free-Air Convection			
Case Size	1.0 x 1.0x 0.4 inches 25.4 x 25.4 x 10.16 mm			
Case Material	Six-Sided shielded, Metal Case UL94-V0			
Weight	16.5g			
Agency Approvals	CSA 60950-1			

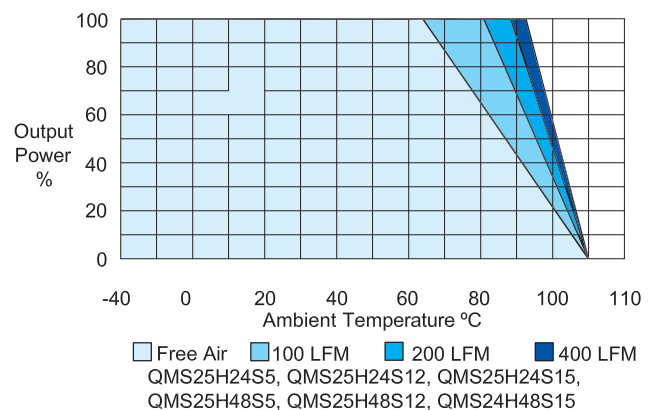
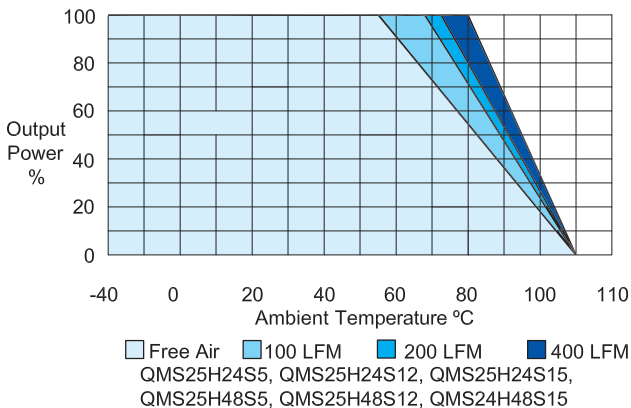
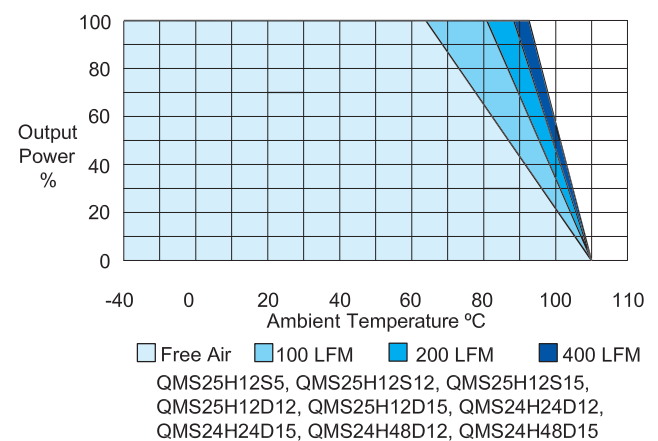
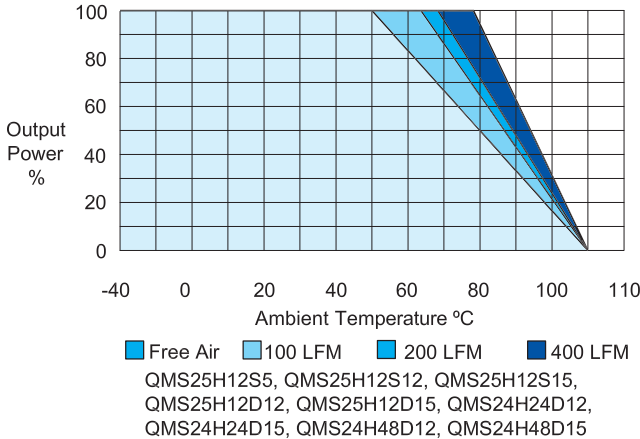
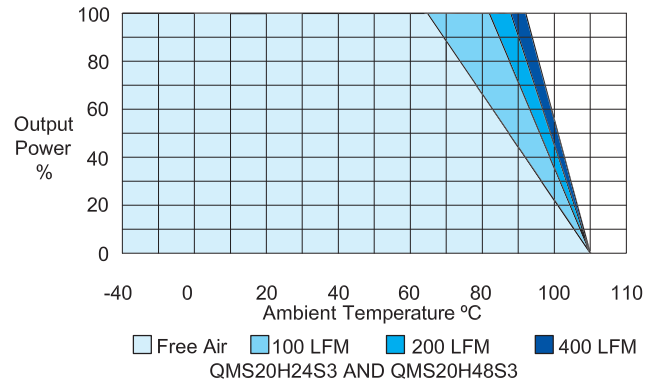
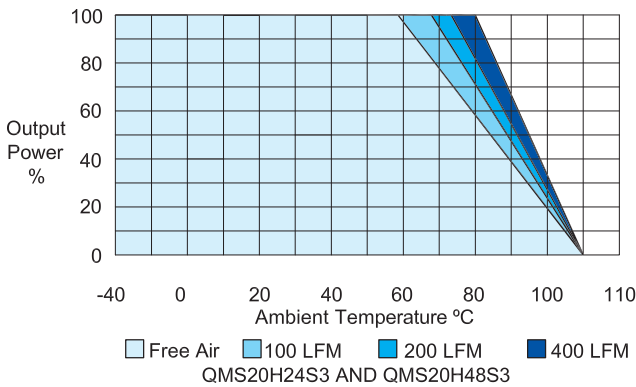
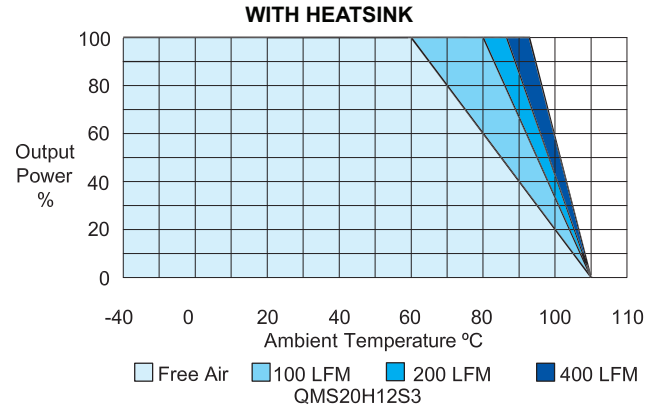
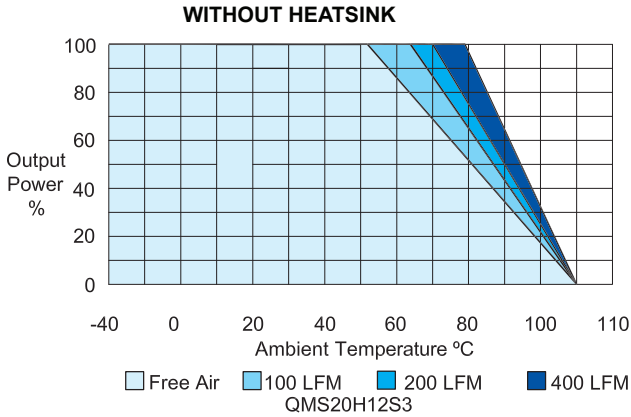
Notes:

1. Specifications typical at Ta=+25°C, resistive load, nominal input voltage, full rated output current unless otherwise noted.
2. Ripple & Noise measurement bandwidth is 20MHz.
3. Transient recovery time is measured to within 1% error band for a step change in output load 75% to 100%.
4. 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.
5. See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. www.ConTech-us.com/appnotes.html.
6. Specifications subject to change without notice.
7. Output voltage trimming must use resistive components only. Applying external voltage to the trim pin can damage unit.
8. See ConTech website www.ConTech-us.com/pdf/rohs.pdf for RoHS Statement.



Derating Curves

To avoid exceeding the maximum temperature rating of the components inside the power module, the case temperature must be kept below 105°C.



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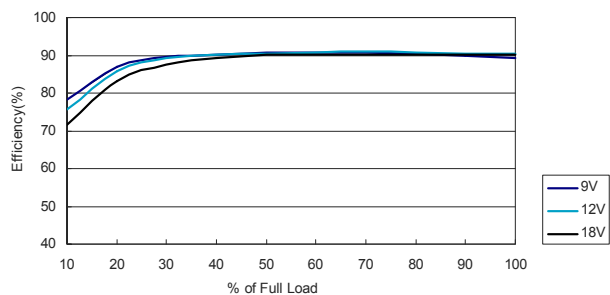


Tél. 01 47 95 99 89
Fax. 01 47 01 16 22

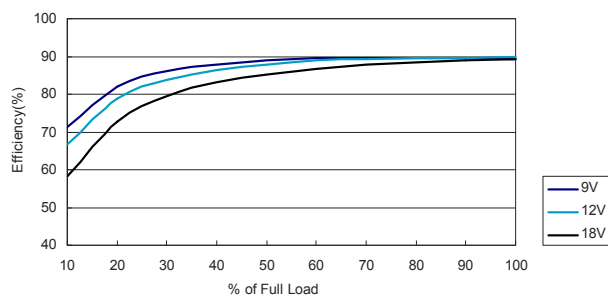


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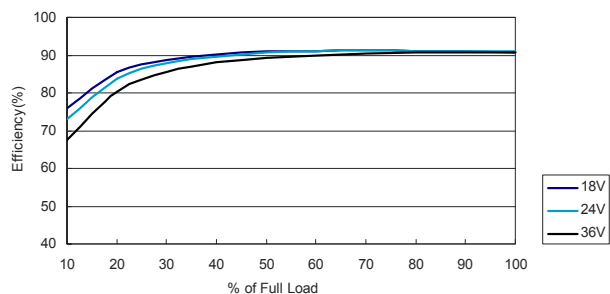
Efficiency Curves - Typical



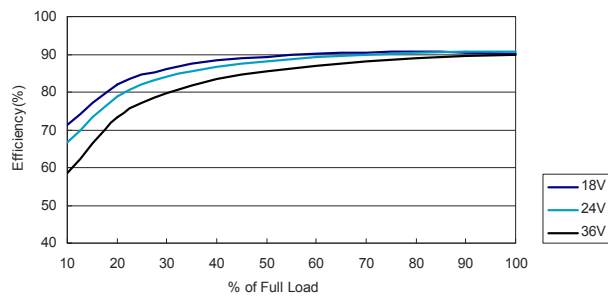
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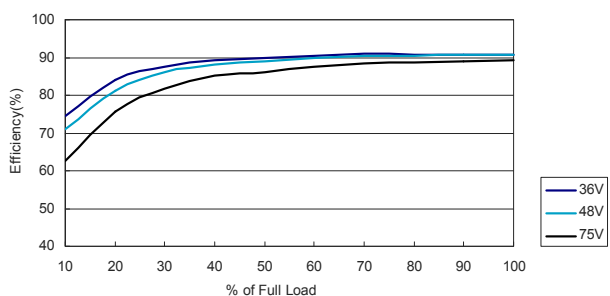
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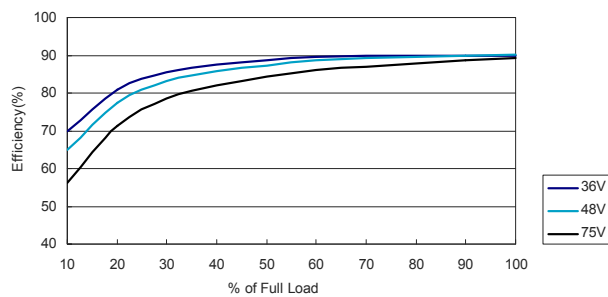
QMS25H24S5



QMS25H24D12



QMS25H48S5



QMS25H48D12

