



■ **Features**

- Power Rating 65W
- 100-240Vac Universal input
- Frequency: 50/60Hz
- OVP, and short circuit protection
- Efficiency: level VI
- USB-C output connector
- Flipping A/C input plug US Model only
- Dimensions: 50x40x28mm



\*Product images are for illustrative purposes only and may vary from actual design.

■ **Applications**

- Personal electronic devices

■ **Model List\***(See part number scheme for model number details)

Only USB-C Model

Model	Output Voltage	Output Current	Power	Ripple & Noise
WM065QF-X-USBC	5V	3A	65W	260mVp-p
	9V	3A	65W	260mVp-p
	12V	3A	65W	260mVp-p
	15V	3A	65W	260mVp-p
	20V	3.25A	65W	260mVp-p

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (test under the condition of rated input and rated output)

■ **Technical Data**

Input voltage range	100-240Vac
Rated Frequency	50/60Hz(typ.)
AC Input Current	1.5A max.@100Vac
AC Input Power saving	0.1 W max. @230Vac no load
Inrush Current	60A max.@100Vac (Cold start); 90A max.@230Vac (Cold start)
Leakage Current	0.25mA max.
Output no-load voltage	5V±6%
Output full load voltage	5V±6% 9V±5% 12V±5% 15V±5% 20V±5%
Efficiency	While the input is 115Vac and 230Vac, the average efficiency is more than 88%. Tested at 25%,50%,75% and 100% load after 30 min warm up at max load. Complies with level VI requirements
Over Voltage Protection	Auto recovery once fault condition is removed
Short Circuit Protection	Auto recovery once fault condition is removed
Operating temperature	0~35°C
Storage temperature	-25°C to 70°C

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■ **Technical Data(cont.)**

Operating humidity	8% to 90%
Storage humidity	5% to 95%
MTBF	50K hours min. @full load at 25°C ambient temperature.
Burn-in	2-4hours, 25~35°C, 220Vac Input, 100% Output load
Bending test	With a torque load of 200g, bent ±60 degrees, 45 times/minute 16AWG - 5000cycles Min 18AWG - 4500cycles Min 20AWG - 2400cycles Min 22AWG - 2000cycles Min 24AWG - 1500cycles Min 26AWG - 1000cycles Min
Drop test	Dropped at 1M height, dropped on each side. Dropping on concrete floor standard: No failure of function & case joints still intact
Dimensions	60.5x60.5x31.4mm
Weight	150g

■ **Safety and EMC**

Safety Standard	TBD
EMI	TBD
EMS	TBD
HI-POT test	Primary to secondary: 3000VAC for 3sec. 5mA(production testing) 3000VAC for 1min. 5mA(sample testing) Primary to case: 3000VAC for 3sec 5mA(Production test)
Insulation resistance	Input to output >10Mohm.@500VDC

Disclaimer:

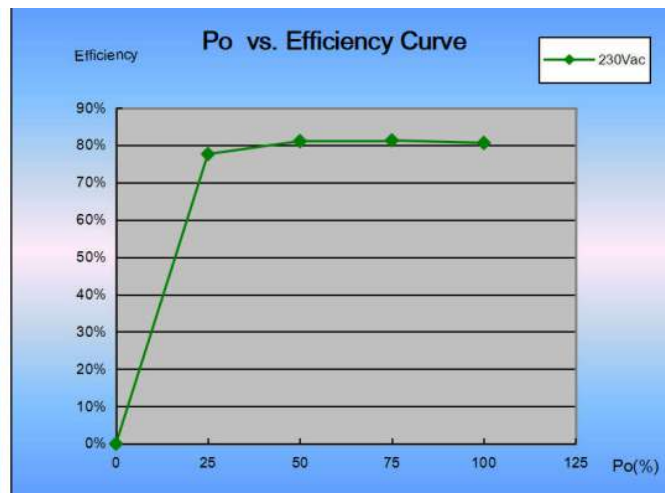
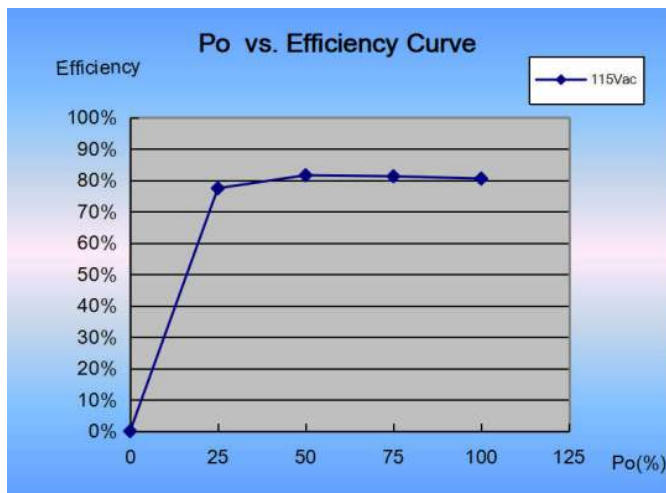
Autec Power Systems' (Autec) Power Supplies are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the Power Supply into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

■ Sample Test Result

Test Items	Test Condition	Unit	Type-C Output				
			5V	9V	12V	15V	20V
Unload output voltage	90Vac	V	5.15	9.05	12.06	15.08	20.11
	115Vac	V	5.15	9.05	12.06	15.08	20.11
	230Vac	V	5.15	9.05	12.06	15.08	20.11
	264Vac	V	5.15	9.05	12.06	15.08	20.11
Rated load output voltage	90Vac	V	4.99	8.89	11.90	14.92	19.94
	115Vac	V	4.99	8.89	11.90	14.92	19.94
	230Vac	V	4.99	8.89	11.90	14.92	19.94
	264Vac	V	4.99	8.89	11.90	14.92	19.94
Output ripple & noise voltage (Full load)	90Vac	mV	88	74	76	80	108
	115Vac	mV	68	67	86	77	94
	230Vac	mV	71	70	79	69	97
	264Vac	mV	73	75	78	92	105
Short-circuit protection	90Vac	V	0.39	0.39	0.3	0.38	0.38
	264Vac	V	0.33	0.28	0.27	0.26	0.26
Over current protection	90Vac	V	3.5	3.50	3.50	3.5	3.75
	264Vac	V	3.5	3.50	3.50	3.5	3.75
IC Vcc voltage test	90Vac	V	17.77	28.60	37.57	44.7	59.8
	264Vac	V	17.69	29.22	37.70	45.5	59.9
Hi-pot test	3000Vac/5mA/ 1Minute		OK				

■ Efficiency Curve

5V Model

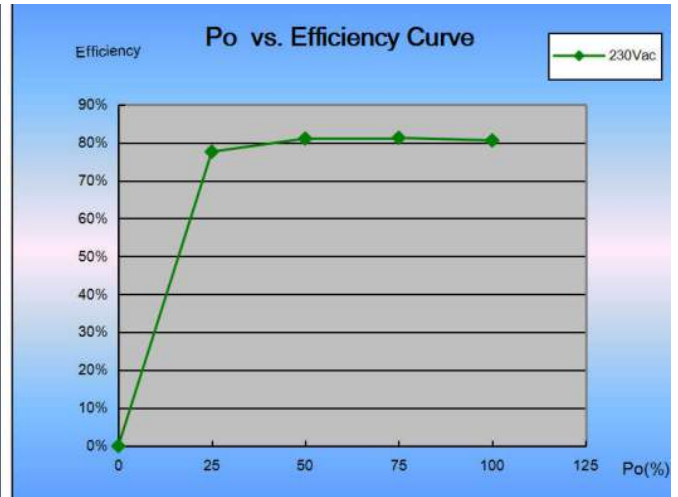
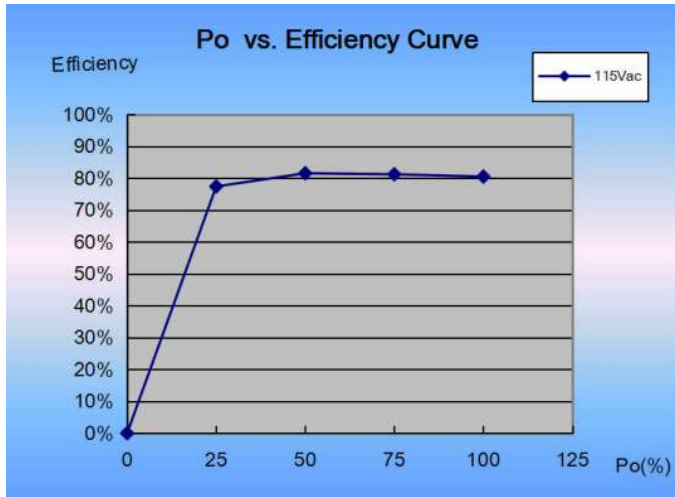


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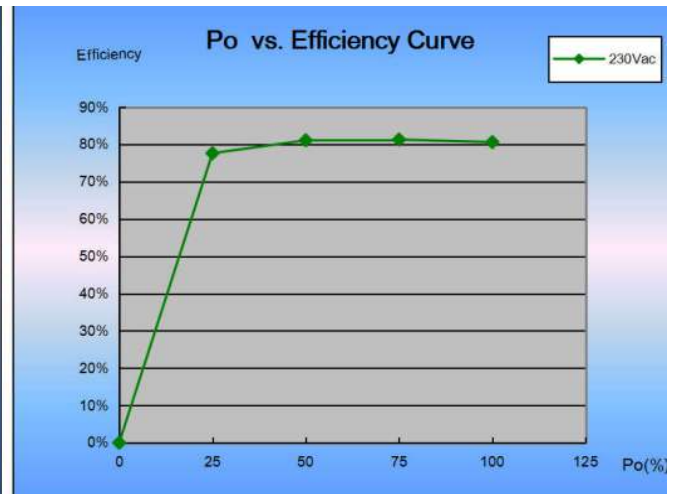
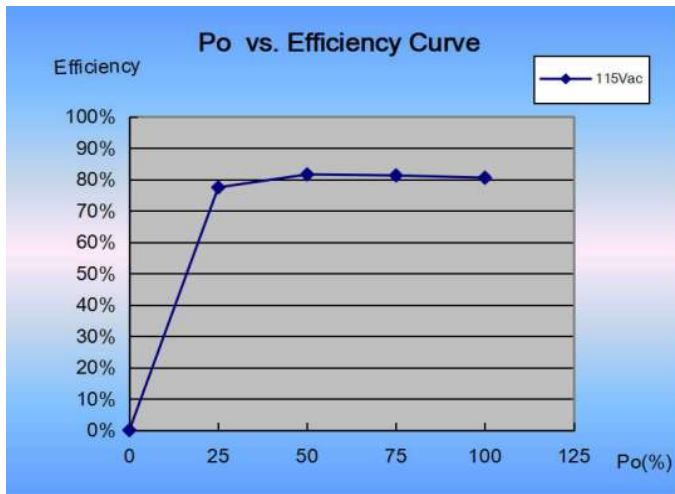
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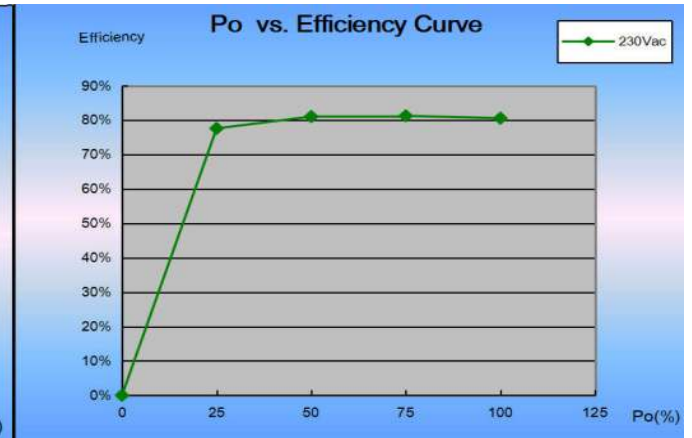
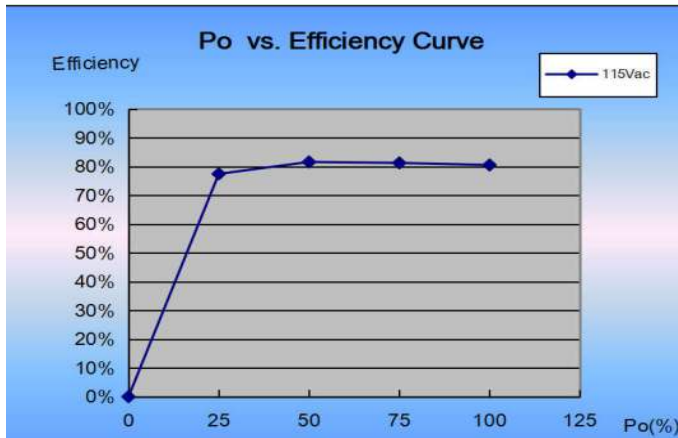
9V Model



12V Model



15V Model

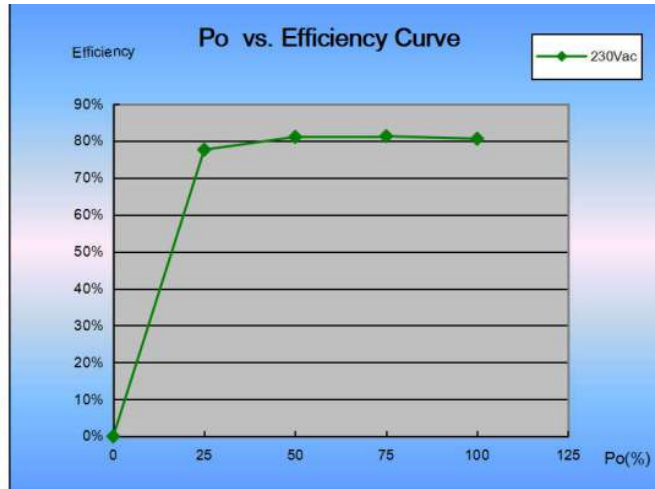
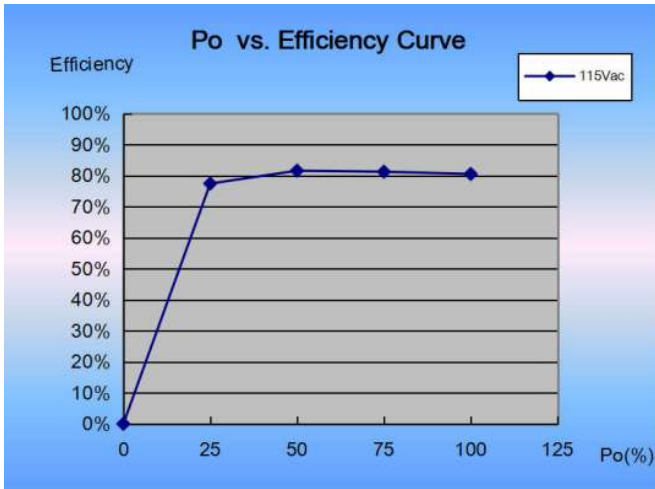


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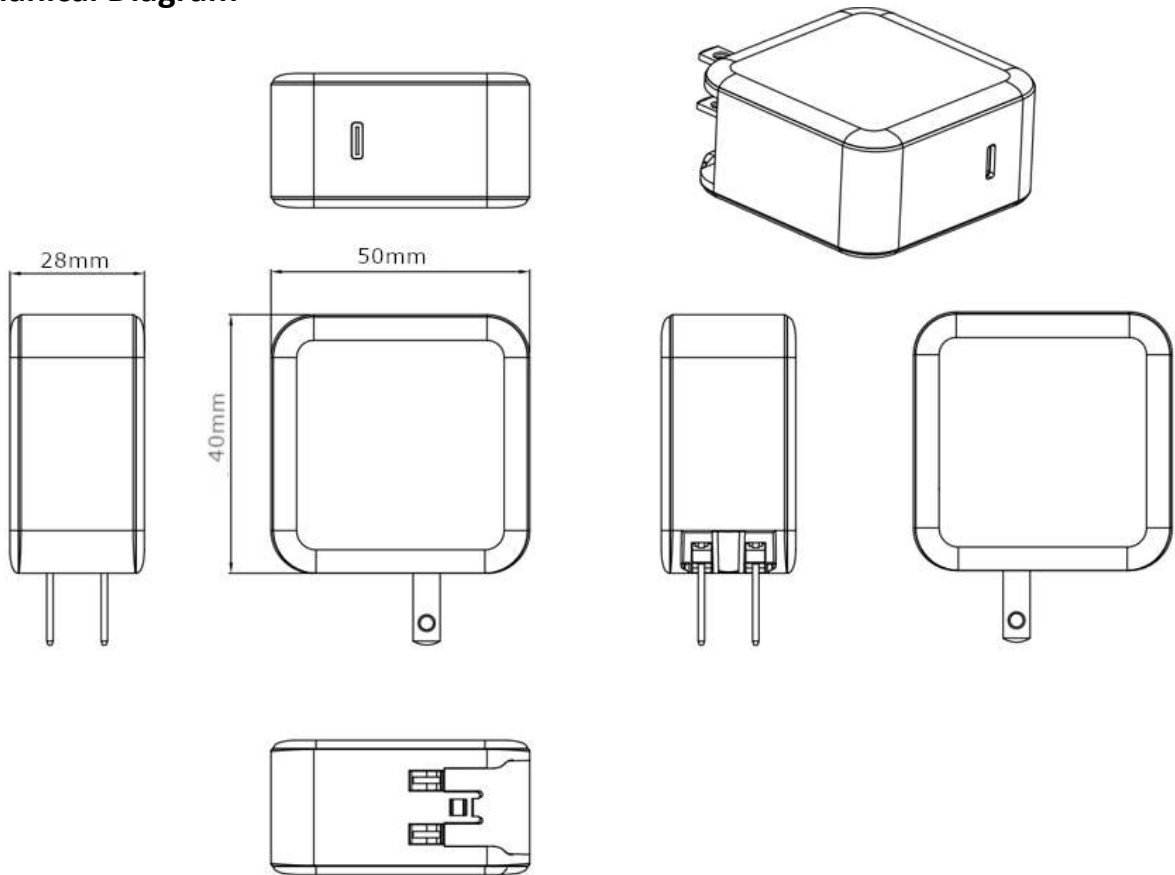
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20V Model



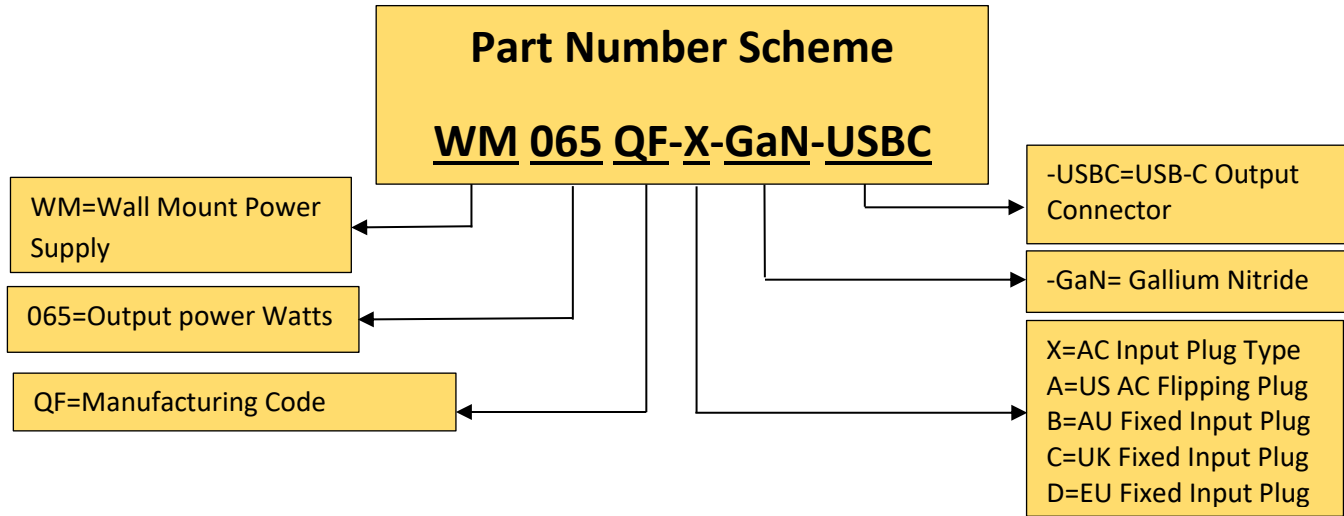
■ Mechanical Diagram



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