DATE: November 25, 2014

TO: Elpac Power System Distributors

FROM: ICCNexergy, Manufacturer of Elpac Power Systems™

RE: Chip Discontinuation Notice

ICCNexergy has been notified by Philips that a power supply control chip is entering its End of Life Cycle. This particular chip is used in ICCNexergy's 65W and 100W power supplies, or more specifically, within the following series:

65 Watt Series
- MWA065
- FWA065

100 Watt Series
- MWA100
- FWB100
- MWB100
- FWC100
- MWC100

ICCNexergy has procured a large amount of the EOL chip to support current and future orders and has identified a replacement control chip; however, it is not a pin-for-pin compatible configuration. The new chip from Philips will require the PCB to be revised to accept the new pin layout and will also require updated safety reports. ICCNexergy will not be updating the model number, but will have a new revision for each model. Whereas we cannot provide a specific cutover date at this time, we expect the supply of current chips to last throughout 2015 but wanted to notify customers of the change as soon as possible.

The 65W power supplies have already been revised and updates to the 100W power supplies will follow. Unfortunately, a definitive schedule has not yet been identified for the 100W power supply revision, but will be shared as soon as it is known.

Changes between the current 65W and the new chip version are detailed on the following pages (See Exhibit A: Pages 1-4). The new units will be identified by the Level VI marking on the label. We will be bumping the revision at the top level and expect the new design to start appearing within our distribution channels by approximately Q2 2015.

If you require additional information regarding the changes to the safety reports or have any other questions concerning this notification, you may contact Carol Pickford at cpickford@iccnexergy.com or myself at the contact information below. Thanks for your understanding regarding this matter.

Steve Noble
Distribution Manager
(858) 353-2337
snoble@iccnexergy.com

Exhibit A (Page 1 of 4)
65 Watt Changes
MWA065/FWA065

ICCNexergy believes the performance of the new 65W design is slightly better than the legacy design, but we encourage you to review the following details for any implication that may affect your system's performance. Particularly, we recommend reviewing leakage current and EMI curves, and perhaps re-test EMI compliance at the system level.

Efficiency: Efficiency has been improved by about 2% and no load power consumption has been reduced. The new designs are compliant with the Level VI efficiency requirement for consumer products which will become mandatory in the US in February 2016. Average efficiency is now above 88%, and no load power consumption is approx. 0.07W at 115VAC input, and .140W at 230VAC input.

Inrush Current: Inrush Current will vary from test to test depending on the phase of the AC input unit. However, in a sample of 1 each, the original design had a cold inrush of 35A and in the new design it was 40.5A. We believe the two designs are roughly compatible.

Line / Load Regulation: Regulation is tighter in the new design. For example, in the 12V unit, all combinations of line and load had a range of 11.7 to 12.137V, a delta of 0.437V. The new design has a range of 12.063 to 12.297V, a delta of 0.234V.

Ripple and Noise: Noise is lower in the new design; 85VAC/50Hz decreased from 72mV to 57.5mV and 264/50Hz decreased from 65mV to 50mV.

Overcurrent Shutdown: The shutdown point is slightly lower in the new design. In the 12V unit, the over current went from 8.65A to 8.33A; the 15V unit went from 6.64A to 6.45A

Overvoltage Shutdown: The overvoltage shutdown point is closer to the rated voltage. In the 12V unit, the shutdown point was 15.7V and is now 14.2V. In the 15V unit, the point was 19.6V and is now 17.7V.

Output Turn-on Delay and Rise Time: Output Turn-on Delay is improved at 115VAC from ~ 1300mS to ~650mS, and rise time shortened from 27mS to 14mS. At 230VAC, the delay remains about the same at ~650mS, and rise time remains the same at ~16mS.

Hold-up Time at Shut Down: Hold-up remains the same at ~28mS at full load at 100VAC, but is reduced from ~52mS to 33mS at full load at 240VAC.

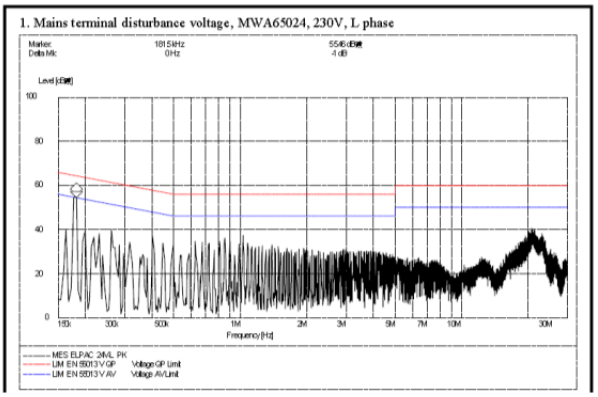
Leakage Current: Leakage current has increased. For Earth Leakage Current, at 264VAC, the normal condition has increased from 82µA to 143µA. The Single Fault condition has increased from 158µA to 261µA. For Touch Current (Primary to Secondary), at 264VAC, the normal condition has increased from 36µA to 46µA. The Single Fault condition has increased from 55µA to 130µA.

Exhibit A (Page 2 of 4)
65 Watt Changes
MWA065/FWA065

Radiated EMI:

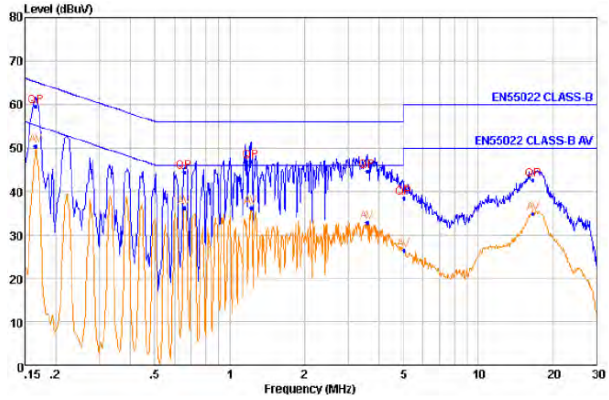
Please see the below representative graphs for comparison between the new and old designs:

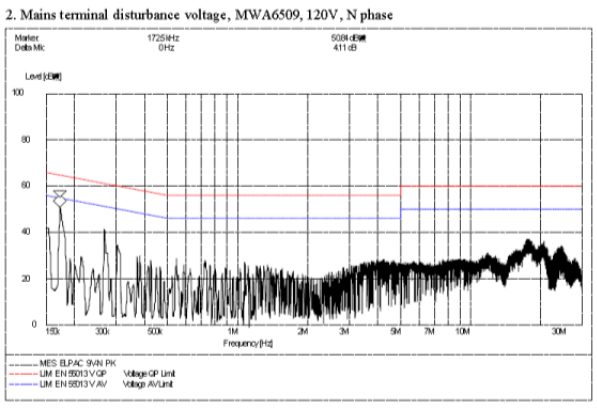
Old Design



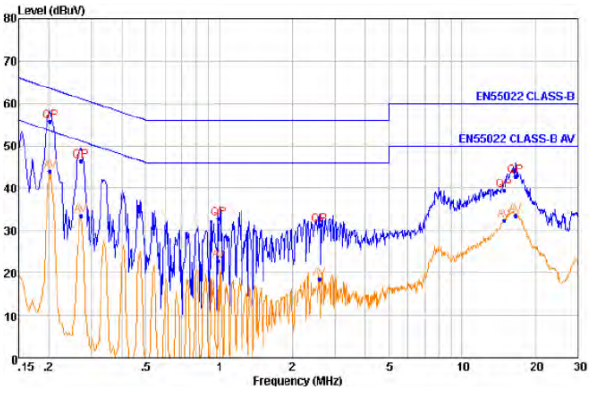
New Design

Model: FWA065024A
Live Line:
Peak Scan:
Level (dBµV)





Neutral Line:
Peak Scan:
Level (dB µ V)



Quasi-peak and Average measurement

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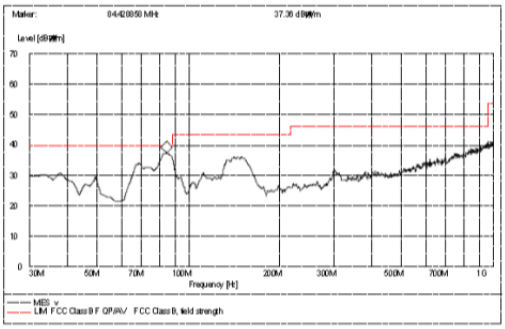
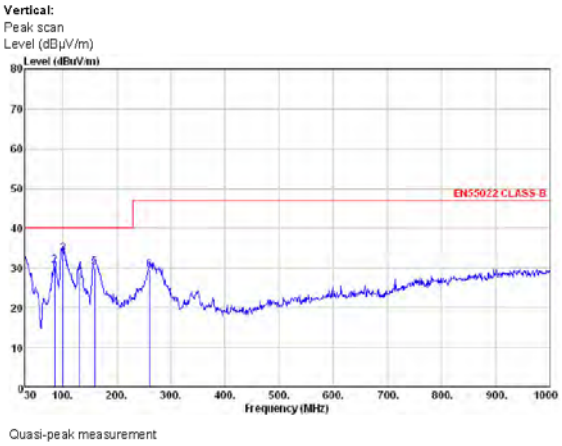
Phone: 708-836-3800 | Fax: 708-836-3801

Exhibit A (Page 3 of 4)
65 Watt Changes
MWA065/FWA065

MWA065024A 120V Vertical

1. Electromagnetic radiation disturbances, MWA65024, 120V, antenna polarization: Vertical



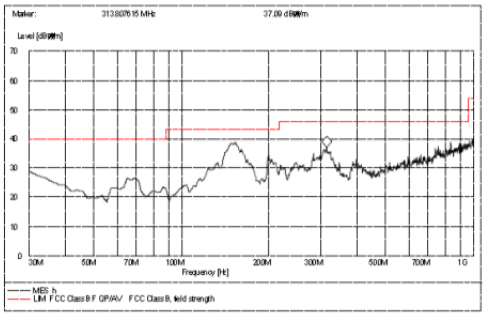


Quasi-peak measurement

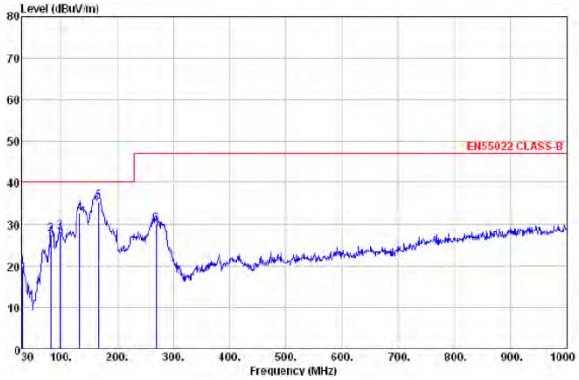
MWA065024A 120V Horizontal

4 Westbrook Corporate Center Suite 900 | Westchester, IL 60154
Phone: 708-836-3800 | Fax: 708-836-3801

2. Electromagnetic radiation disturbances, MWA65024, 120V, antenna polarization: Horizontal



Horizontal:
Peak scan
Level (dBµV/m)



Quasi-peak measurement

Exhibit A (Page 4 of 4)
65 Watt Changes
MWA065/FWA065

Old:

No.	Frequency (MHz)	Antenna Polarization	Antenna Height (cm)	Table Angle (Degree)	QP Limits (dBµV/m)		Emission Level (dBµV/m)
					CISPR 11	FCC P.15	
1	84.42	V	100	0	40	40	35.62
2	152.46	H	150	180	40	43.5	36.21
3	148.57	V	100	0	40	43.5	35.17

New:

No.	Freq	Level	Remark	Antenna Factor	Cable Loss	Limit Line	Preamp Factor	Over limit	A/pos	T/pos
	MHz	dBuV/m		dB/m	dB	dBuV/m	dB	dB	cm	deg
1	30.000	30.86	QP	17.90	0.63	40.00	28.50	-9.14	100	28
2	85.290	30.63	QP	7.73	1.08	40.00	28.26	-9.37	102	140
3	100.810	33.45	QP	8.67	1.18	40.00	28.78	-6.55	103	207
4	131.850	28.84	QP	7.40	1.37	40.00	28.36	-11.16	105	98
5	159.010	29.97	QP	7.76	1.51	40.00	28.15	-10.03	110	324
6	260.860	29.50	QP	12.48	1.97	47.00	27.57	-17.50	101	164

Level=Read Level + Antenna Factor + Cable Loss-Preamp Factor