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FSP GROUP INC  
 MR A CHENG  
 22 JIANGUO E RD  
 TAOYUAN CITY TAIWAN

**RE: Project Number(s) - 01NK19506,01CA03007,01CA02627**

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**QQGQ2** June 6, 2001  
**Power Supplies, Information Technology Equipment Including Electrical Business Equipment - Component**

**FSP GROUP INC** **E190414**  
**22 JIANGUO E RD, TAOYUAN CITY TAIWAN**

| Model No.                  | Rated Input       |       | SC | Output |       |        | OC | SP   | EP  | FC | GC |
|----------------------------|-------------------|-------|----|--------|-------|--------|----|------|-----|----|----|
|                            | V                 | Hz    |    | Max V  | Max A | Max VA |    |      |     |    |    |
| ACE-1010AXX, FSP200-60PUXX | 100/240           | 60/50 | 0  | 3.3    | 12    | 62     | 3  | 1950 | 20  | 2  | 1  |
|                            |                   |       |    | 5      | 16    | 158    |    |      |     |    |    |
|                            |                   |       |    | 12     | 5     | 163    |    |      |     |    |    |
|                            |                   |       |    | -12    | 0.8   | 55     |    |      |     |    |    |
|                            |                   |       |    | -5     | 0.3   | 6.2    |    |      |     |    |    |
|                            |                   |       |    | +5 Vsb | 2     | 27     |    |      |     |    |    |
| ACE-1020AXX                | 100/240           | 60/50 | 0  | 5.45   | 31.20 | 127    | 4  | 1950 | —   | —  | —  |
|                            |                   |       |    | 12.82  | 15.10 | 177    |    |      |     |    |    |
|                            |                   |       |    | 4.98   | 4.78  | 22     |    |      |     |    |    |
|                            |                   |       |    | 3.31   | 29.00 | 70     |    |      |     |    |    |
|                            |                   |       |    | -12.10 | 1.74  | 22     |    |      |     |    |    |
|                            |                   |       |    | -5.17  | 1.43  | 7      |    |      |     |    |    |
| ATX-200GT,<br>ATX-200GN    | 115/230<br>or 230 | 50/60 | 0  | +5R    | 21R   | 105R   | 3  | 1950 | 20B | 0  | 1  |
|                            |                   |       |    | +3.3R  | 14R   | 46.2R  |    |      |     |    |    |
|                            |                   |       |    | +12R   | 6.5R  | 78R    |    |      |     |    |    |
|                            |                   |       |    | -5R    | 0.3R  | 1.5R   |    |      |     |    |    |
|                            |                   |       |    | -12R   | 0.5R  | 6R     |    |      |     |    |    |
|                            |                   |       |    | 5VsbR  | 2R    | 10R    |    |      |     |    |    |
| ATX-250GT,<br>ATX-250GN    | 115/230<br>or 230 | 50/60 | 0  | +5.6   | 62    | 230    | 3  | 1950 | 20B | 0  | 1  |
|                            |                   |       |    | +3.4   | 49    | 81     |    |      |     |    |    |
|                            |                   |       |    | +12.6  | 32    | 300    |    |      |     |    |    |
|                            |                   |       |    | -5.9   | 4.5   | 11     |    |      |     |    |    |
|                            |                   |       |    | -14.1  | 11    | 52     |    |      |     |    |    |
|                            |                   |       |    | 5.2Vsb | 3.9   | 18     |    |      |     |    |    |
| ATX-250N                   | 115/230           | 60/50 | 0  | 5.2    | 43.5  | 153    | 3  | 1950 | 20B | 0  | 0  |
|                            |                   |       |    | 13     | 18    | 211    |    |      |     |    |    |
|                            |                   |       |    | 3.3    | 35.7  | 58.5   |    |      |     |    |    |
|                            |                   |       |    | -5     | 5.6   | 18.7   |    |      |     |    |    |
|                            |                   |       |    |        |       |        |    |      |     |    |    |

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| Model No.  | Rated Input         |       | SC | Output  |  |  | OC | SP   | EP  | FC | GC |
|--|---------------------|-------|----|---|--|--|----|------|-----|----|----|
|  | V                   | Hz    |    | Max V   | Max A                                      | Max VA   |    |      |     |    |    |
| FSP020-2P01XX<br>where X may be<br>any alphanumeric<br>character or blank                    | 100-240             | 50/60 | 0  | -12<br>+5<br>+5<br>+3.3                               | 6.1<br>0.8<br>0.5<br>5.0                   | 50.5<br>40R<br>10.1<br>22.8                      | 3  | 1950 | 20B | 0  | 0  |
| FSP060-2P01XX  | 100-240             | 50/60 | 0  | 5.12<br>11.7<br>-12.06                                | 26.1<br>11.2<br>1.4                        | 87<br>66<br>15.9                                 | 3  | 1950 | 20B | 2  | 1  |
| FSP060-3P02XX  | 100-240             | 50/60 | 0  | 5.12<br>11.7  | 26.1<br>11.2                               | 87<br>66   | 3  | 1950 | 20B | 2  | 1  |
| FSP090-50NA,<br>FSP090-50NI,<br>FSP090-50NIA,<br>FSP090-50NW,<br>FSP090-51NA,<br>FSP090-51NI | 115/230             | 60/50 | 0  | +5R<br>+12R<br>+3.3R<br>-12R<br>5R                    | 10R<br>1.5R<br>6R<br>0.2R<br>0.72R         | 50R<br>18R<br>19.8R<br>2.4R<br>3.6R              | 3  | 1950 | 20  | 0  | 0  |
| FSP090-50PI,<br>FSP090-50PP,<br>FSP090-50PL  | 100-240             | 47-63 | 0  | +5R<br>+12R<br>+3.3R<br>-12R<br>5R                    | 12R<br>1.5R<br>8R<br>0.2R<br>1.2R          | 60R<br>18R<br>26.4R<br>2.4R<br>6R                | 3  | 1950 | 20  | 0  | 0  |
| FSP090-61GY(a),<br>FSP090-60GZW(b)   | 115/230             | 60/50 | 0  | +5.0<br>+12.00<br>+3.3<br>-5.0<br>-12.0<br>+5sb       | 10.0<br>2.0<br>8.0<br>0.3<br>0.5<br>0.8    | 50.0<br>24.0<br>26.4<br>1.5<br>6.0<br>4.0        | 3  | 1950 | 20  | 0  | 0  |
| FSP100-50CI,<br>FSP100-51CI,<br>FSP145-50CI,<br>FSP145-51CI                                  | 115/230             | 50/60 | 0  | +5.35<br>+11.99<br>+3.37<br>-12.32<br>+4.94           | 36<br>18<br>13<br>7<br>2.6                 | 144<br>187<br>28<br>60<br>12.5                   | 3  | 1950 | 20B | 0  | 1  |
| FSP150-50CI,<br>FSP150-51CI  | 115/230             | 50/60 | 0  | +5.0R<br>+12.0R<br>+3.3R<br>-5.0R<br>-12.0R<br>+5VsbR | 10R<br>4.5R<br>10R<br>0.2R<br>0.3R<br>2.0R | 50.0R<br>54.0R<br>33.0R<br>1.0R<br>3.6R<br>10.0R | 3  | 1950 | 20B | 0  | 1  |
| FSP110-50NA,<br>FSP110-50NI,<br>FSP110-50NIA,<br>FSP110-50NW,<br>FSP110-51NA,<br>FSP110-51NI | 115/230             | 60/50 | 0  | +5R<br>+12R<br>+3.3R<br>-12R<br>5R<br>-5R             | 10R<br>2R<br>8R<br>0.5R<br>0.8R<br>0.3R    | 50R<br>24R<br>26.4R<br>6R<br>4R<br>1.5R          | 3  | 1950 | 20  | 0  | 0  |
| FSP120-50PI,<br>FSP120-50PP  | 100-240             | 47-63 | 0  | +5R<br>+12R<br>+3.3R<br>-12R<br>5R                    | 14R<br>2R<br>8R<br>0.3R<br>1.2R            | 70R<br>24R<br>26.4R<br>3.6R<br>6R                | 3  | 1950 | 20  | 0  | 0  |
| FSP145-50NA,<br>FSP145-50NI,<br>FSP145-50NIA,<br>FSP145-50NW,<br>FSP145-51NA,<br>FSP145-51NI | 115/230             | 60/50 | 0  | +5.15<br>+12.19<br>+3.43<br>-12.24<br>5.23<br>-5R     | 47<br>18.6<br>30<br>1.6<br>1.5<br>0.3R     | 203.5<br>209.9<br>65.7<br>16.53<br>6.43<br>1.5R  | 3  | 950  | 20  | 0  | 0  |
| FSP145-60SI  | 100-120/<br>200-240 | 60/50 | 0  | 5.42<br>+12R<br>+3.3R<br>-5R<br>-12R                  | 37<br>4R<br>10R<br>0.2R<br>0.3R            | 142<br>218                                       | 3  | 1950 | 20  | 8  | 1  |

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| Model No.  | Rated Input         |       | SC | Max V<br>(Total<br>145 W<br>maximum)                 | Output                                     |   | OC | SP   | EP  | FC  | GC |
|--|---------------------|-------|----|--|--|---|----|------|-----|-----|----|
|  | V                   | Hz    |    |  | Max A                                      | Max VA  |    |      |     |     |    |
| FSP145-60SP,<br>FSP145-60SF  | 100-120/<br>200-240 | 50/60 | 0  | 5.8<br>12.9<br>3.4<br>12.2<br>5.0                    | 42<br>19<br>27<br>1.4<br>1.2               | 172<br>218<br>58<br>15<br>6                       | 3  | 1950 | 20B | 6,2 | 1  |
| FSP180-60SI,<br>FSP145-60SA,<br>FSP180-60SA  | 100-120/<br>200-240 | 50/60 | 0  | 5.5<br>12.8<br>3.3<br>-5.1<br>-13.3<br>5.0           | 43.0<br>20.0<br>32.0<br>1.6<br>18.0<br>3.3 | 170.0<br>232.0<br>61.0<br>6.0<br>70.0<br>15.0     | 3  | 1950 | 20  | 6,2 | 0  |
| FSP145-61GI,<br>FSP145-61GN,<br>FSP145-61GT,<br>FSP145-61GW,<br>FSP145-60GZW(b)                    | 115/230             | 60/50 | 0  | +5.1<br>13.6<br>3.5<br>-5<br>-12.54<br>+4.98         | 42<br>17<br>35<br>-4.8<br>7<br>2           | 165.06<br>193.0<br>62.4<br>12.88<br>50.96<br>9.04 | 3  | 1950 | 20  | 0   | 0  |
| FSP030-2P04XX  | 100-240             | 50/60 | 0  | 5.17<br>13.1   | 14.9<br>4.7                                | 51.8<br>40.9                                      | 3  | 1950 | 20B | 0   | 0  |
| FSP100-60PL  | 115-230             | 50/60 | 0  | +5.24<br>+3.36<br>+12.5<br>-5.3<br>-12.8             | 33.0<br>17.0<br>12.8<br>1.1<br>7.6         | 116<br>50<br>137<br>5<br>4                        | 3  | 1950 | 20B | 0   | 0  |
| FSP110-60PA  | 115-230             | 60/50 | 0  | 5.2<br>+3.4<br>+12.6<br>-5.2<br>-13.1<br>5.1         | 2.9<br>34.0<br>19.0<br>13.5<br>1.1<br>8.2  | 15<br>121<br>53<br>148<br>8<br>46                 | 3  | 1950 | 20B | 0   | 0  |
| FSP145-60PA,<br>FSP145-60PI  | 115-230             | 60/50 | 0  | +5.2<br>+12.7<br>+3.3<br>-5.0<br>-13.2               | 37<br>15<br>22<br>1.4<br>10                | 136<br>167<br>63<br>7<br>58                       | 3  | 1950 | 20B | 0   | 0  |
| FSP145-60GIA,<br>FSP145-60GNA,<br>FSP145-60GTA,<br>FSP145-60PNA(PF)                                | 115/230             | 60/50 | 0  | 5.2<br>13<br>3.4<br>-5<br>-12.54<br>5                | 64<br>21<br>45<br>7<br>9<br>3.6            | 200<br>221<br>64<br>12<br>46<br>17                | 3  | 1950 | 20B | 6,2 | 1  |
| FSP145-SF@,<br>FSP145-SP@  | 100-120/<br>200-240 | 50/60 | 0  | +5.78<br>+12.85<br>+3.35<br>-12.16<br>+5.01<br>-5.03 | 42<br>19.2<br>27<br>1.4<br>1.2<br>0.89     | 172.2<br>218.8<br>58.05<br>15.27<br>5.94<br>3.68  | 3  | 1950 | 20  | 0   | 0  |
| FSP135-60PF  | 115/230             | 50/60 | 0  | 5.2<br>12.5<br>3.3<br>-5.1<br>-12.2<br>5.1           | 39<br>16<br>25<br>1.4<br>6.4<br>2.7        | 157<br>174<br>66<br>7<br>53<br>13                 | 0  | 1950 | 20B | 0   | 1  |
| FSP150-50NI, FSP175-50NI,<br>FSP-150-50NI(PF),<br>FSP175-51NI,<br>FSP150-51NI,<br>FSP-150-51NI(PF) | 115/230             | 60/50 | 0  | +5.15<br>+12.19<br>+3.43<br>-12.24                   | 47<br>18.6<br>30<br>1.6                    | 203.5<br>209.9<br>65.7<br>16.53                   | 3  | 1950 | 20B | 0   | 0  |

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| Model No.  | Rated Input         |       | SC | Output |       |        | OC | SP   | EP  | FC  | GC |
|--|---------------------|-------|----|--------|-------|--------|----|------|-----|-----|----|
|  | V                   | Hz    |    | Max V  | Max A | Max VA |    |      |     |     |    |
| FSP150-60SF,<br>FSP150-60SP,<br>FSP150-60SP(PF)                                    | 100-120/<br>200-240 | 60/50 | 0  | 4.96   | 3.3   | 15.7   | 3  | 1950 | 20B | 6,2 | 0  |
|  |                     |       |    | -5R    | 0.3R  | 1.5R   |    |      |     |     |    |
|  |                     |       |    | 5R     | 18R   | 90     |    |      |     |     |    |
|  |                     |       |    | 12R    | 4.2R  | 50.4R  |    |      |     |     |    |
|  |                     |       |    | 3.3R   | 10R   | 33     |    |      |     |     |    |
|  |                     |       |    | -5R    | 0.3R  | 1.5R   |    |      |     |     |    |
| FSP200-50NW  | 115/230             | 60/50 | 0  | -12R   | 0.3R  | 3.6R   | 3  | 1950 | 20B | 0   | 0  |
|  |                     |       |    | +5VsbR | 3R    | 15R    |    |      |     |     |    |
|  |                     |       |    | 5.4    | 41    | 166    |    |      |     |     |    |
|  |                     |       |    | 12.4   | 18    | 198    |    |      |     |     |    |
|  |                     |       |    | 3.4    | 37    | 74     |    |      |     |     |    |
|  |                     |       |    | 5.1    | 1.5   | 6      |    |      |     |     |    |
| FSP200-60SF,<br>FSP200-60SP  | 100-120/<br>200-240 | 60/50 | 0  | 12.1   | 1.7   | 15     | 3  | 1950 | 20B | 6,2 | 1  |
|  |                     |       |    | 5.0    | 3.4   | 16     |    |      |     |     |    |
|  |                     |       |    | 5R     | 21R   | 105R   |    |      |     |     |    |
|  |                     |       |    | 12R    | 7R    | 84R    |    |      |     |     |    |
|  |                     |       |    | 3.3R   | 12R   | 39.6R  |    |      |     |     |    |
|  |                     |       |    | -5R    | 0.3R  | 1.5R   |    |      |     |     |    |
| FSP200-61GI,<br>FSP200-61GN,<br>FSP200-61GT,<br>FSP200-61GW,<br>FSP200-60GZW(b)    | 115/230             | 60/50 | 0  | -12R   | 0.5R  | 6R     | 3  | 1950 | 20  | 0   | 0  |
|  |                     |       |    | +5VsbR | 0.8R  | 4R     |    |      |     |     |    |
|  |                     |       |    | +5.1   | 42    | 165.06 |    |      |     |     |    |
|  |                     |       |    | 13.6   | 17    | 193.0  |    |      |     |     |    |
|  |                     |       |    | 3.5    | 35    | 62.4   |    |      |     |     |    |
|  |                     |       |    | -5     | -4.8  | 12.88  |    |      |     |     |    |
| FSP200-60GIA,<br>FSP200-60GNA,<br>FSP200-60GTA                                     | 115/230             | 60/50 | 0  | -12.54 | 7     | 50.96  | 3  | 1950 | 20B | 6,2 | 1  |
|  |                     |       |    | +4.98  | 2     | 9.04   |    |      |     |     |    |
|  |                     |       |    | 5.2    | 64    | 200    |    |      |     |     |    |
|  |                     |       |    | 13     | 21    | 221    |    |      |     |     |    |
|  |                     |       |    | 3.4    | 45    | 64     |    |      |     |     |    |
|  |                     |       |    | -5     | 7     | 12     |    |      |     |     |    |
| FSP150-60IU  | 100-240             | 50/60 | 0  | -12.4  | 9     | 46     | 3  | 1950 | 20B | 0   | 0  |
|  |                     |       |    | 5      | 3.6   | 17     |    |      |     |     |    |
|  |                     |       |    | 5      | 14    | 70     |    |      |     |     |    |
|  |                     |       |    | 12     | 4.5   | 54     |    |      |     |     |    |
|  |                     |       |    | 3.3    | 10    | 33     |    |      |     |     |    |
|  |                     |       |    | -5     | 0.3   | 1.5    |    |      |     |     |    |
| FSP200-60IU  | 100-240             | 50/60 | 0  | -12    | 0.8   | 9.6    | 3  | 1950 | 20B | 0   | 0  |
|  |                     |       |    | 5sb    | 2     | 10     |    |      |     |     |    |
|  |                     |       |    | 5.6    | 51    | 205    |    |      |     |     |    |
|  |                     |       |    | 12.6   | 24    | 220    |    |      |     |     |    |
|  |                     |       |    | 3.4    | 34    | 84     |    |      |     |     |    |
|  |                     |       |    | -5.1   | 2.1   | 9      |    |      |     |     |    |
| FSP200-60U1  | 115-230             | 50/60 | 0  | -12.7  | 12    | 66     | 3  | 1950 | 20B | 0   | 0  |
|  |                     |       |    | 5.1sb  | 5.6   | 23     |    |      |     |     |    |
|  |                     |       |    | 5.78   | 50    | 202    |    |      |     |     |    |
|  |                     |       |    | 12.51  | 19    | 209    |    |      |     |     |    |
|  |                     |       |    | 3.32   | 48    | 74     |    |      |     |     |    |
|  |                     |       |    | -5.18  | 1.4   | 7.3    |    |      |     |     |    |
| FSP235-61GI,<br>FSP235-61GN,<br>FSP235-61GT,<br>FSP235-60GZW(b)                    | 100-120             | 50/60 | 0  | -14.81 | 11    | 61     | 3  | 950  | 20  | 0   | 0  |
|  |                     |       |    | 5.08sb | 3.8   | 17     |    |      |     |     |    |
|  |                     |       |    | +5.2   | 45    | 177.7  |    |      |     |     |    |
|  |                     |       |    | 13.6   | 17    | 193.0  |    |      |     |     |    |
|  |                     |       |    | 3.5    | 35    | 62.4   |    |      |     |     |    |
|  |                     |       |    | -12.54 | 7     | 50.96  |    |      |     |     |    |
| FSP235-60GIA,<br>FSP235-60GNA,<br>FSP235-60GTA<br>FSP235-60PNA<br>FSP235-60PNA(PF) | 115/230             | 50/60 | 0  | +4.98  | 2     | 9.04   | 3  | 1950 | 20B | 6,2 | 1  |
|  |                     |       |    | 5.2    | 64    | 200    |    |      |     |     |    |
|  |                     |       |    | 13     | 21    | 221    |    |      |     |     |    |
|  |                     |       |    | 3.4    | 45    | 64     |    |      |     |     |    |
|  |                     |       |    | -5     | 7     | 12     |    |      |     |     |    |
|  |                     |       |    | -12.4  | 9     | 46     |    |      |     |     |    |
| FSP250-60BN*   | 115/230             | 50/60 | 0  | 5      | 3.6   | 17     | 3  | 1950 | 20B | 0   | 0  |
|  |                     |       |    | +5.24  | 46    | 220    |    |      |     |     |    |

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| Model No.  | Rated Input |           | SC | Output  |   |   | OC     | SP           | EP         | FC       | GC     |
|--|-------------|-----------|----|---|---|---|--------|--------------|------------|----------|--------|
|  | V           | Hz        |    | Max V   | Max A   | Max VA  |        |              |            |          |        |
| FSP250-60BT*,<br>FSP250-60BN(12V),<br>FSP250-60BT(12V)   |             |           |    | +12.6<br>-12.58<br>+3.46<br>-5.14<br>+4.99          | 19.3<br>4.1<br>33<br>2.8<br>3.9                 | 232<br>45.8<br>92.8<br>13.7<br>17.3             |        |              |            |          |        |
|  |             | +5<br>Vsb |    |   |   |   |        |              |            |          |        |
| FSP250-61GL,<br>FSP250-61GN,<br>FSP250-61GT  | 115/230     | 60/50     | 0  | +5.2<br>13.6<br>3.5                                 | 45<br>17<br>35                                  | 177.7<br>193.0<br>62.4                          | 3      | 950          | 20         | 0        | 0      |
| FSP250-61GN(AMD),<br>FSP250-61GN(A),<br>FSP250-61GT(A),<br>FSP250-61GT(AMD)                                  | 115/230     | 60/50     | 0  | 5.2<br>13.6<br>3.5<br>-5<br>-12.54<br>4.98          | 45<br>17<br>35<br>4.8<br>7                      | 177.7<br>193<br>62.4<br>12.88<br>50.96<br>9.04  | 3      | 1950         | 20B        | 0        | 0      |
| FSP250-60GIA,<br>FSP250-60GNA,<br>FSP250-60GTA   | 115/230     | 60/50     | 0  | 5.2<br>5.2<br>13<br>3.4<br>-5<br>12.4<br>5          | 45<br>45<br>21<br>45<br>7<br>9<br>3.6           | 177.7<br>200<br>221<br>64<br>12<br>46<br>17     | 3<br>3 | 1950<br>1950 | 20B<br>20B | 0<br>6.2 | 0<br>1 |
| FSP280-60FS  | 115/230     | 60/50     | 0  | +5R<br>+12R<br>+3.3R<br>-5R<br>-12R<br>+5sbR        | 22.0R<br>10.0R<br>20.0R<br>0.3R<br>0.8R<br>1.0R | —<br>—<br>—<br>—<br>—<br>—                      | 3      | 1950         | 20B        | 0        | 1      |
| FSP300-60BR**  | 115/230     | 50/60     | 0  | +5R<br>+12R<br>-12R<br>+3.3R<br>-5R<br>+5R          | 30R<br>9R<br>0.8R<br>28R<br>0.3R<br>1-1.6R      | 180R<br>108R<br>9.6R<br>92.4R<br>1.5R<br>8R     | 3      | 1950         | 20B        | 0        | 0      |
| FSP300-60BN,<br>FSP300-60BT<br>FSP300-60BN(PF),<br>FSP300-60BT(PF),<br>FSP300-60BN(12V),<br>FSP300-60BT(12V) | 115<br>/230 | 50<br>/60 | 0  | +5R<br>+12R<br>+3.3R<br>-5R<br>-12R<br>+5Vsb        | 30R<br>11R<br>16R<br>0.3R<br>0.8R<br>2/3R       | —<br>—<br>—<br>—<br>—<br>—                      | 3      | 1950         | 20B        | 0        | 0      |
| FSP300-60U2  | 115/230     | 60/50     | 0  | +5.62<br>+3.47<br>+12.68<br>-14.60<br>-5.16<br>5.14 | 72<br>60<br>29<br>18<br>2.3<br>3.3              | 269<br>104<br>321<br>53<br>11<br>15.3           | 3      | 1950         | 20B        | 0        | 0      |
| FSP300-60GRA   | 115/230     | 60/50     | 0  | +5.6<br>13.2<br>3.5<br>4.8<br>12.7<br>5.3           | 127<br>73<br>50<br>1.6<br>28<br>3.2             | 331.2<br>744.6<br>116.6<br>5.4<br>120.4<br>11.8 | 3      | 1950         | 20         | 0        | 1      |
| FSP300-60PNA(PF)   | 115/230     | 60/50     | 0  | +5R<br>+12R<br>+3.3R<br>-5R<br>-12R<br>+5R          | 30R<br>15R<br>15R<br>0.3R<br>0.8R<br>2R         | 150R<br>180R<br>49.5R<br>1.5R<br>9.6R<br>10R    | 3      | 1950         | 20B        | 0        | 0      |
| FSP300-60U2  | 100-240     | 60-50     | 0  | +5Vsb<br>5.6<br>3.4                                 | 34.2<br>49.1                                    | 143<br>106                                      | 3      | 1950         | 20B        | 2.6      | 1      |

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| Model No.  | Rated Input |       | SC | Output |       |        | OC | SP   | EP  | FC  | GC |
|--|-------------|-------|----|--------|-------|--------|----|------|-----|-----|----|
|  | V           | Hz    |    | Max V  | Max A | Max VA |    |      |     |     |    |
| FSP330-60BN***,<br>FSP330-60BT***  | 115/230     | 50/60 | 0  | 14.1   | 32.1  | 360    | 3  | 1950 | 20B | 0   | 0  |
|  |             |       |    | -12.1  | 2.5   | 23.1   |    |      |     |     |    |
|  |             |       |    | -5.2   | 1.2   | 4.4    |    |      |     |     |    |
|  |             |       |    | 5.2    | 5.4   | 24.6   |    |      |     |     |    |
|  |             |       |    | Vsb    |       |        |    |      |     |     |    |
|  |             |       |    | +5R    | 32R   | 160R   |    |      |     |     |    |
|  |             |       |    | +12R   | 8/7R  | 96R    |    |      |     |     |    |
|  |             |       |    | -12R   | 0.8R  | 9.6R   |    |      |     |     |    |
|  |             |       |    | +3.3R  | 28R   | 92.4R  |    |      |     |     |    |
|  |             |       |    | -5R    | 0.3R  | 1.5R   |    |      |     |     |    |
| FSP350-60BN****,<br>FSP350-60BT****  | 115/230     | 50/60 | 0  | +5.17  | 87    | 256    | 3  | 1950 | 20B | 0   | 0  |
|  |             |       |    | +12.52 | 34    | 350    |    |      |     |     |    |
|  |             |       |    | -12.45 | 5.9   | 56.8   |    |      |     |     |    |
|  |             |       |    | +3.32  | 50    | 26.5   |    |      |     |     |    |
|  |             |       |    | -5.13  | 3.6   | 21.5   |    |      |     |     |    |
|  |             |       |    | +4.99  | 4.3   | 18.3   |    |      |     |     |    |
|  |             |       |    | Vsb    |       |        |    |      |     |     |    |
|  |             |       |    | +5     |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
| FSP400-60GN(c)(d)  | 115/230     | 50/60 | 0  | 5.45   | 43.6  | 176.7  | 3  | 1950 | 20B | 0   | 1  |
|  |             |       |    | 3.46   | 44.2  | 110.1  |    |      |     |     |    |
|  |             |       |    | 12.73  | 16.9  | 201.5  |    |      |     |     |    |
|  |             |       |    | -12.0  | 2.2   | 23.2   |    |      |     |     |    |
|  |             |       |    | -5.12  | 0.5   | 1.9    |    |      |     |     |    |
|  |             |       |    | 5.17   | 3.2   | 15.7   |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
| FSPxxx-60PFN,<br>FSP300-60PFN(1),<br>FSP300-60PFN(12V)<br>where xxx=150, 200,<br>250, 235 or 300 | 100/240     | 50-60 | 0  | 5.4    | 58    | 173    | 3  | 1950 | 20B | 2,6 | 0  |
|  |             |       |    | 3.4    | 52    | 108    |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
|  |             |       |    |        |       |        |    |      |     |     |    |
| Optional Appliance Outlet  | 115/230     | 60/50 |    | —      | —     | —      | 1  | 1950 | 20B | 5,6 | 1  |

| Model No.  | Rated Input |       |       | SC | Output |       |        | OC | SP   | EP | FC  | GC |
|--|-------------|-------|-------|----|--------|-------|--------|----|------|----|-----|----|
|  | V           | A     | Hz    |    | Max V  | Max A | Max VA |    |      |    |     |    |
| FSP090-50MA,<br>FSP090-50MI,<br>FSP090-50ML,<br>FSP090-50MP                | 115/230     | 3/1.5 | 60/50 | 0  | +5R    | 10R   | 50R    | 3  | 1950 | 20 | 2,3 | 0  |
|  |             |       |       |    | +12R   | 15R   | 18R    |    |      |    |     |    |
|  |             |       |       |    | +3.3R  | 6R    | 19.8R  |    |      |    |     |    |
|  |             |       |       |    | -12R   | 0.2R  | 2.4R   |    |      |    |     |    |
|  |             |       |       |    | +5R    | 0.72R | 3.6R   |    |      |    |     |    |
|  |             |       |       |    |        |       |        |    |      |    |     |    |
| FSP110-50MA,<br>FSP110-50MI  | 115/230     | 3/1.5 | 60/50 | 0  | +5R    | 10R   | 50R    | 3  | 1950 | 20 | 2,3 | 0  |
|  |             |       |       |    | +12R   | 2R    | 24R    |    |      |    |     |    |
|  |             |       |       |    | +3.3R  | 8R    | 26.4R  |    |      |    |     |    |
|  |             |       |       |    | -12R   | 0.5R  | 6R     |    |      |    |     |    |
|  |             |       |       |    | +5R    | 0.8R  | 4R     |    |      |    |     |    |
|  |             |       |       |    |        |       |        |    |      |    |     |    |
| FSP028-40MS  | 90-264      | 1.0   | 47-63 | 0  | 5.1    | 19.2  | 50.8   | 3  | 1950 | 20 | 2   | 0  |
|  |             |       |       |    | 12.0   | 1.7   | 16.9   |    |      |    |     |    |
|  |             |       |       |    | 12.3   | 1.3   | 15.1   |    |      |    |     |    |
|  |             |       |       |    | 5.03   | 1.45  | 7.2    |    |      |    |     |    |
|  |             |       |       |    | 24.4   | 5.8   | 118    |    |      |    |     |    |
|  |             |       |       |    |        |       |        |    |      |    |     |    |
| FSP060-1S04XX,<br>where X may be any<br>alphanumeric<br>character or blank | 100-240     | 1.5   | 50/60 | 0  | 3.3    | 23.0  | 52.0   | 3  | 1950 | 20 | 2   | 0  |
|  |             |       |       |    | 12.8   | 6.1   | 58.0   |    |      |    |     |    |
| FSP060-2P02XX,<br>where X may be any<br>alphanumeric<br>character or blank | 100-240     | 1.2   | 50/60 | 0  | 3.3    | 15.0  | 53.0   | 3  | 1950 | 20 | 2   | 0  |
|  |             |       |       |    | 13.0   | 3.9   | 31.0   |    |      |    |     |    |
| FSP060-2P03XX,<br>where X may be any<br>alphanumeric<br>character or blank | 100-240     | 1.5   | 50/60 | 0  | 3.3    | 15.0  | 53.0   | 3  | 1950 | 20 | 2   | 0  |
|  |             |       |       |    | 13.0   | 3.9   | 31.0   |    |      |    |     |    |

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| Model No.                                   | Rated Input         |       | Hz    | SC | Output   |         |        | OC | SP   | EP  | FC  | GC |
|---|---------------------|-------|-------|----|----------|---------|--------|----|------|-----|-----|----|
|   | V                   | A     |       |    | Max V    | Max A   | Max VA |    |      |     |     |    |
| FSP060-4P01XX,<br>FSP060-4P02XX             | 100-240             | 2.0   | 50/60 | 0  | 5.11     | 18.5    | 60.3   | 3  | 1950 | 20B | 0   | 0  |
|   |                     |       |       |    | 12.6     | 8.0     | 67.8   |    |      |     |     |    |
|   |                     |       |       |    | -5.0     | 1.3     | 6.4    |    |      |     |     |    |
|   |                     |       |       |    | -12.0    | 1.28    | 15.3   |    |      |     |     |    |
| FSP060-4P03XX                               | 100-240             | 2.0   | 50/60 | 0  | 5.0      | 17      | 57.9   | 3  | 1950 | 20B | 0   | 0  |
|   |                     |       |       |    | 12.7     | 8.4     | 61.9   |    |      |     |     |    |
|   |                     |       |       |    | 12.9     | 5.3     | 42.0   |    |      |     |     |    |
|   |                     |       |       |    | 5.17     | 5.5     | 23.0   |    |      |     |     |    |
| FSP030-2P01XX                               | 100-240             | 1.0   | 50/60 | 0  | +5       | 4.5     | 28     | 3  | 1950 | 20B | 0   | 1  |
|   |                     |       |       |    | +12      | 0.5     | —      |    |      |     |     |    |
| FSP030-2P02XX                               | 100-240             | 1.0   | 50/60 | 0  | —        | 3.5     | 29     | 3  | 1950 | 20B | 0   | 1  |
| FSP030-2P03XX                               | 100-240             | 1.0   | 50/60 | 0  | +5       | 1.0     | —      | 3  | 1950 | 20B | 0   | 1  |
|   |                     |       |       |    | +12      | 1.0     | 17     |    |      |     |     |    |
| FSP090-50DP,<br>FSP145-50DL                 | 115/230             | 4/2   | 60/50 | 0  | +5.37    | 29      | 114    | 3  | 1950 | 20B | 0   | 1  |
|   |                     |       |       |    | +3.3     | 23      | 41     |    |      |     |     |    |
|   |                     |       |       |    | +11.97   | 10.9    | 121    |    |      |     |     |    |
|   |                     |       |       |    | -12.22   | 15      | 15.6   |    |      |     |     |    |
|   |                     |       |       |    | +5.01    | 3.2     | 15.5   |    |      |     |     |    |
|   |                     |       |       |    | -4.99    | 1.2     | 6.1    |    |      |     |     |    |
|   |                     |       |       |    | +5R      | 10R     | 50R    |    |      |     |     |    |
|   |                     |       |       |    | +12R     | 1.5R    | 18R    |    |      |     |     |    |
|   |                     |       |       |    | +3.3R    | 6R      | 19.8R  |    |      |     |     |    |
|   |                     |       |       |    | -12R     | 0.2R    | 2.4R   |    |      |     |     |    |
| FSP110-50MA,<br>FSP110-50MI                 | 115/230             | 3/1.5 | 60/50 | 0  | +5R      | 10R     | 50R    | 3  | 1950 | 20  | 2,3 | 0  |
|   |                     |       |       |    | +12R     | 2R      | 24R    |    |      |     |     |    |
|   |                     |       |       |    | +3.3R    | 8R      | 26.4R  |    |      |     |     |    |
|   |                     |       |       |    | -12R     | 0.5R    | 6R     |    |      |     |     |    |
| FSP145-50DP,                                | 115/230             | 4/2   | 60/50 | 0  | +5.35    | 37.7    | 149    | 3  | 1950 | 20B | 0   | 1  |
|   |                     |       |       |    | 3.41     | 16.9    | 32     |    |      |     |     |    |
|   |                     |       |       |    | +12.15   | 13.4    | 150    |    |      |     |     |    |
|   |                     |       |       |    | -12.08   | 1.6     | 16.7   |    |      |     |     |    |
|   |                     |       |       |    | +4.98    | 3.2     | 15.5   |    |      |     |     |    |
|   |                     |       |       |    | -5.03    | 1.2     | 5.7    |    |      |     |     |    |
|   |                     |       |       |    | 5        | 18      | 145W   |    |      |     |     |    |
|   |                     |       |       |    | 12       | 4       | max    |    |      |     |     |    |
| FSP145-60AI,<br>FSP145-60AT,<br>FSP145-60AN | 100-120/<br>200-240 | 9/4.5 | 60/50 | 0  | -5       | 0.2     |        | 3  | 1950 | 20B | 0   | 1  |
|   |                     |       |       |    | -12      | 0.3     |        |    |      |     |     |    |
|   |                     |       |       |    | 3.3      | 12      |        |    |      |     |     |    |
|   |                     |       |       |    | 5Vsb     | 2.0/    |        |    |      |     |     |    |
|   |                     |       |       |    |          | 1.6     |        |    |      |     |     |    |
|   |                     |       |       |    |          | /1.0    |        |    |      |     |     |    |
|   |                     |       |       |    | 3.3(R)   | 8.0(R)  | 145W   |    |      |     |     |    |
|   |                     |       |       |    | +5(R)    | 15(R)   | Max    |    |      |     |     |    |
|   |                     |       |       |    | +12(R)   | 4.2(R)  |        |    |      |     |     |    |
|   |                     |       |       |    | -12(R)   | 0.3(R)  |        |    |      |     |     |    |
| FSP180-60PFN(SAXX)                          | 100-240             | 4     | 60-50 | 0  | +5Vsb(R) | 2.0(R)  |        | 3  | 1950 | 20B | 2   | 1  |
|   |                     |       |       |    | +3.3(R)  | 10.0(R) | 180    |    |      |     |     |    |
|   |                     |       |       |    | +5(R)    | 18.0(R) | Max    |    |      |     |     |    |
|   |                     |       |       |    | +12(R)   | 6.0(R)  |        |    |      |     |     |    |
|   |                     |       |       |    | -12(R)   | 0.3(R)  |        |    |      |     |     |    |
|   |                     |       |       |    | -5(R)    | 0.2(R)  |        |    |      |     |     |    |
|   |                     |       |       |    | +5Vsb(R) | 2.0(R)  |        |    |      |     |     |    |
|   |                     |       |       |    | 5.1      | 44      | 175    |    |      |     |     |    |
| 12.1  | 19.3                | 210   |       |    |          |         |        |    |      |     |     |    |
| FSP200-60PFN(SAXX)                          | 100-240             | 4     | 60-50 | 0  | 5.2      | 5       | 24     | 3  | 1950 | 20B | 2   | 1  |
|   |                     |       |       |    | 3.4      | 28.4    | 75     |    |      |     |     |    |
|   |                     |       |       |    | -11.4    | 3.2     | 31     |    |      |     |     |    |
|   |                     |       |       |    | -5.2     | 0.9     | 4      |    |      |     |     |    |
|   |                     |       |       |    | 5        | 20      | 200W   |    |      |     |     |    |
|   |                     |       |       |    |          |         |        |    |      |     |     |    |

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| Model No.  | Rated Input         |             | Hz    | SC   | Output                                       |  | Max VA max                                      | OC   | SP   | EP  | FC | GC |
|--|---------------------|-------------|-------|--|--|--|---|------|------|-----|----|----|
|  | V                   | A           |       |  | Max V  | Max A  |   |      |      |     |    |    |
| FSP200-60AT,<br>FSP200-60AN  | 200-240             |             |       |  | 12<br>-5<br>-12<br>3.3<br>5Vsb               | 7<br>0.3<br>0.5<br>14<br>2.0/<br>1.6<br>/1.0       |   |      |      |     |    |    |
| FSP235-60AL,<br>FSP235-60AT,<br>FSP235-60AN                                  | 100-120/<br>200-240 | 9/4.5       | 60/50 | 0  | 5<br>12<br>-5<br>-12<br>3.3<br>5Vsb          | 22<br>8<br>0.3<br>0.5<br>14<br>2.0/<br>1.6<br>/1.0 | 235W<br>max                                     | 3    | 1950 | 20B | 0  | 1  |
| FSP250-60AL,<br>FSP250-60AT,<br>FSP250-60AN                                  | 115/230             | 9/4.5       | 60/50 | 0  | 5.96<br>12.9<br>3.68<br>5.09<br>12.34<br>5.1 | 58<br>19<br>89.1<br>138<br>17.88<br>3.3            | 229.1<br>186.2<br>89.1<br>6.29<br>17.88<br>16.1 | 3    | 1950 | 20B | 0  | 1  |
| @FSP250-60PN,<br>FSP250-60PT,<br>FSP200-60PN,<br>FSP160-60PN,<br>FSP145-60PN | 100-240             | 47-63       | 0     | 5.22<br>12.52<br>3.38<br>5.04<br>12.13       | 48<br>29<br>34<br>2<br>1.5                   | 226.08<br>235.8<br>70.56<br>9.04<br>17.67          | 3   | 1950 | 20   | 6.2 | 1  |    |
| @FSP235-60PN,<br>FSP235-60PT,<br>FSP200-60PT,<br>FSP200-60PA,<br>FSP160-60PT | 100-240             | 47-63       | 0     | 5.2<br>3.35<br>12.42<br>5.14<br>12.3<br>5.15 | 46<br>32<br>23<br>1.9<br>9.5<br>4.2          | 186.3<br>82.96<br>216.6<br>8.98<br>69.07<br>12.56  | 3   | 1950 | 20   | 6.2 | 1  |    |
| FSP030-2P05XX  | 2.0                 | 100<br>/240 | 50/60 | 0  | +5(R)<br>+12(R)                              | 4.5(R)<br>0.2(R)                                   | —   | 3    | 1950 | 20  | 0  | 0  |
| FSP180-60SI  | 100-120/<br>200-240 | 50<br>/60   | 0     | 5.5<br>12.8<br>3.3<br>-5.1<br>-13.3<br>5.0   | 43.0<br>20.0<br>32.0<br>1.6<br>18.0<br>3.3   | 170.0<br>232.0<br>61.0<br>6.0<br>70.0<br>15.0      | 3   | 1950 | 20   | 6.2 | 0  |    |

\* - (+5V & +3.3V = 145W) (Total output 250W max).

\*\* - (+5V & +3.3V = 180W) (Total output 300W max).

\*\*\* - (+5V & +3.3V = 220W) (Total output 330W max).

\*\*\*\* - (+5V & +3.3V = 220W) (Total output 350W max).

@ - (-5V and +3.3V is optional).

(a) - Y may be I, N, T or W.

(b) - Z may be I, N, P or T.

(c) - +5V and +3.3V = 235W.

(d) - Total Output = 400W maximum.

R - Rated values.

@ - Indicates optional AC outlet 115/230 47-63 0 115/230 2/1(rated) 0 1950 20B 5 1.

Marking: Company name and model designation.

## See General Information Preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.