



# Three Phase Buck - Boost Sizing Tables

## THREE PHASE BUCK - BOOST TABLE, TYPE M

| Type M          |           | Three Phase / Two or Three Units - Type M |       |       |       |       |       |       |       |       |       |                         |       |       |       |       |       |
|-----------------|-----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------|
| Catalog Number  | Load Line | Boost - Increase Voltage                  |       |       |       |       |       |       |       |       |       | Buck - Decrease Voltage |       |       |       |       |       |
|                 |           | 208                                       | 208   | 208   | 230   | 240   | 240   | 416   | 416   | 416   | 416   | 208                     | 208   | 240   | 240   | 416   | 416   |
|                 |           | 166                                       | 173   | 187   | 208   | 216   | 228   | 374   | 377   | 395   | 397   | 230                     | 249   | 252   | 264   | 437   | 457   |
| 35-M005         | Load Amps | 1.6                                       | 2.0   | 3.6   | 4.1   | 1.8   | 3.9   | 1.8   | 2.0   | 3.9   | 4.1   | 4.5                     | 2.4   | 4.3   | 2.2   | 4.3   | 2.2   |
|                 | kVA       | 0.60                                      | 0.75  | 1.30  | 1.64  | 0.77  | 1.64  | 1.34  | 1.50  | 2.85  | 3.95  | 1.64                    | 0.90  | 1.82  | 0.95  | 3.12  | 1.65  |
|                 | Line Fuse | 5   | 5     | 7     | 8     | 5     | 7     | 5     | 5     | 7     | 7     | 7                       | 5     | 7     | 5     | 7     | 5     |
| 35-M010         | Load Amps | 3.3                                       | 4.1   | 7.2   | 8.2   | 3.7   | 7.8   | 3.7   | 4.1   | 7.9   | 8.3   | 9.1                     | 4.9   | 8.7   | 4.5   | 8.6   | 4.5   |
|                 | kVA       | 1.20                                      | 1.49  | 2.60  | 3.29  | 1.55  | 3.28  | 2.69  | 3.00  | 5.70  | 5.99  | 3.29                    | 1.80  | 3.64  | 1.90  | 6.24  | 3.30  |
|                 | Line Fuse | 7   | 8     | 15    | 12    | 7     | 15    | 7     | 7.5   | 15    | 15    | 15                      | 7     | 15    |       | 15    | 7     |
| 35-M015         | Load Amps | 4.9                                       | 6.2   | 10.8  | 12.4  | 5.5   | 11.8  | 5.6   | 6.2   | 11.8  | 12.4  | 13.7                    | 7.4   | 13.1  | 6.8   | 12.9  | 6.8   |
|                 | kVA       | 1.80                                      | 2.24  | 3.90  | 4.94  | 2.32  | 4.92  | 4.04  | 4.50  | 8.55  | 8.99  | 4.94                    | 2.70  | 5.46  | 2.86  | 9.36  | 4.95  |
|                 | Line Fuse | 10  | 12    | 20    | 20    | 10    | 20    | 12    | 10    | 20    | 20    | 20                      | 10    | 20    | 10    | 20    | 10    |
| 85-M020         | Load Amps | 8.3                                       | 10.4  | 18.0  | 20.6  | 9.3   | 19.7  | 9.3   | 10.4  | 19.7  | 20.8  | 22.8                    | 12.4  | 21.9  | 11.4  | 21.6  | 11.4  |
|                 | kVA       | 3.00                                      | 3.74  | 6.50  | 8.23  | 3.87  | 8.20  | 6.74  | 7.50  | 14.26 | 14.99 | 8.23                    | 4.50  | 9.10  | 4.76  | 15.60 | 8.25  |
|                 | Line Fuse | 15  | 20    | 30    | 30    | 15    | 30    | 15    | 15    | 30    | 30    | 30                      | 15    | 30    | 15    | 30    | 15    |
| 85-M025         | Load Amps | 16.6                                      | 20.8  | 36.0  | 41.3  | 18.6  | 39.4  | 18.7  | 20.8  | 39.5  | 41.6  | 45.7                    | 24.9  | 43.8  | 22.9  | 43.3  | 22.9  |
|                 | kVA       | 6.00                                      | 7.49  | 13.00 | 16.46 | 7.75  | 16.40 | 13.49 | 15.00 | 28.52 | 29.98 | 16.46                   | 9.00  | 18.20 | 9.53  | 31.21 | 16.50 |
|                 | Line Fuse | 30  | 35    | 60    | 60    | 30    | 60    | 30    | 30    | 60    | 60    | 60                      | 30    | 60    | 30    | 60    | 30    |
| 85-M030         | Load Amps | 24.9                                      | 31.2  | 54.1  | 62.0  | 27.9  | 59.1  | 28.0  | 31.2  | 59.3  | 62.42 | 68.5                    | 37.4  | 65.7  | 34.4  | 64.9  | 34.3  |
|                 | kVA       | 9.00                                      | 11.24 | 19.50 | 24.69 | 11.62 | 24.60 | 20.23 | 22.50 | 42.78 | 44.97 | 24.69                   | 13.50 | 27.31 | 14.30 | 46.82 | 24.75 |
|                 | Line Fuse | 45  | 50    | 80    | 90    | 45    | 80    | 45    | 45    | 80    | 90    | 80                      | 45    | 80    | 45    | 80    | 45    |
| 85-M035         | Load Amps | 33.3                                      | 41.6  | 72.1  | 82.6  | 37.2  | 78.9  | 37.4  | 41.6  | 79.1  | 83.2  | 91.4                    | 49.9  | 87.6  | 45.8  | 86.6  | 45.8  |
|                 | kVA       | 12.00                                     | 14.99 | 26.00 | 32.93 | 15.50 | 32.80 | 26.98 | 30.00 | 57.05 | 59.97 | 32.93                   | 18.00 | 36.41 | 19.07 | 62.49 | 33.00 |
|                 | Line Fuse | 60  | 70    | 110   | 125   | 60    | 110   | 60    | 60    | 110   | 110   | 110                     | 60    | 110   | 60    | 110   | 60    |
| 85-M040         | Load Amps | 49.9                                      | 62.4  | 108.2 | 124.0 | 55.9  | 118.3 | 56.17 | 62.45 | 118.7 | 124.8 | 137.1                   | 74.9  | 131.4 | 68.8  | 129.9 | 68.7  |
|                 | kVA       | 18.00                                     | 22.49 | 39.00 | 49.39 | 23.25 | 49.20 | 40.47 | 45.00 | 85.57 | 89.95 | 49.39                   | 27.00 | 54.62 | 28.61 | 93.64 | 49.50 |
|                 | Line Fuse | 80  | 100   | 175   | 175   | 80    | 175   | 80    | 90    | 175   | 175   | 175                     | 80    | 175   | 80    | 175   | 80    |
| 85-M045         | Load Amps | 66.6                                      | 83.2  | 144.3 | 165.3 | 74.5  | 157.8 | 74.8  | 83.2  | 158.3 | 166.4 | 182.8                   | 99.9  | 175.2 | 91.7  | 173.2 | 91.6  |
|                 | kVA       | 24.0                                      | 29.9  | 52.0  | 65.8  | 31.1  | 65.6  | 53.9  | 60.0  | 114.1 | 119.9 | 65.8                    | 36.0  | 72.8  | 38.1  | 124.8 | 66.0  |
|                 | Line Fuse | 110                                       | 150   | 225   | 250   | 110   | 250   | 110   | 125   | 250   | 250   | 225                     | 110   | 225   | 110   | 225   | 110   |
| 85-M050         | Load Amps | 99.9                                      | 124.8 | 216.5 | 248.0 | 111.8 | 236.7 | 112.3 | 124.9 | 237.5 | 249.6 | 274.2                   | 149.9 | 262.8 | 137.6 | 259.9 | 137.4 |
|                 | kVA       | 36.0                                      | 44.9  | 78.8  | 98.7  | 46.5  | 98.4  | 80.9  | 90.00 | 171.1 | 179.9 | 98.7                    | 54.0  | 109.2 | 57.2  | 187.2 | 99.0  |
|                 | Line Fuse | 175                                       | 200   | 350   | 400   | 175   | 250   | 175   | 175   | 350   | 350   | 350                     | 175   | 350   | 175   | 350   | 175   |
| 85-M055         | Load Amps | 166.6                                     | 208.1 | 360.8 | 413.3 | 186.4 | 394.5 | 187.2 | 208.1 | 395.9 | 416.1 | 457.0                   | 249.8 | 438.0 | 229.4 | 433.2 | 229.0 |
|                 | kVA       | 60.0                                      | 74.9  | 130.0 | 164.6 | 77.5  | 164.0 | 134.9 | 150.0 | 285.2 | 299.8 | 164.6                   | 90.0  | 182.0 | 95.3  | 312.1 | 165.0 |
|                 | Line Fuse | 300                                       | 350   | 600   | 600   | 300   | 600   | 200   | 300   | 600   | 600   | 600                     | 300   | 600   | 300   | 600   | 300   |
| Qty. Required   |           | 3   | 3     | 3     | 3     | 2     | 2     | 3     | 3     | 3     | 3     | 3                       | 3     | 2     | 2     | 3     | 3     |
| Connection Dia. |           | TP-18                                     | TP-22 | TP-17 | TP-21 | TP-5  | TP-6  | TP-20 | TP-24 | TP-19 | TP-23 | TP-13                   | TP-14 | TP-10 | TP-9  | TP-15 | TP-16 |
| Page            |           | 62  | 63    | 62    | 63    | 61    | 61    | 63    | 63    | 63    | 63    | 62                      | 62    | 62    | 61    | 62    | 62    |

$$\text{Single Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps}}{1000} \quad \text{kVA} = \frac{\text{Volt Amperes}}{1000}$$

$$\text{Three Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps} \times 1.73}{1000} \quad \text{VA} = \text{kVA} \times 1000$$

Connection diagrams may be found on Pgs. 61 - 63.

Connections found on this Page require ordering 2 or 3 Buck - Boost Transformers

The appropriate size 35 or 80 Series Transformer may be substituted for the 85 Series where desired.



# Three Phase Buck - Boost Sizing Tables

## THREE PHASE BUCK - BOOST TABLE, TYPE Y

| Type Y          |           | Three Phase / Two and Three Units - Type Y |       |       |       |       |       |                         |       |       |       |       |       |       |       |       |       |
|-----------------|-----------|--|-------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Catalog Number  | Load Line | Boost - Increase Voltage                   |       |       |       |       |       | Buck - Decrease Voltage |       |       |       |       |       |       |       |       |       |
|                 |           | 208  | 208   | 208   | 235   | 240   | 240   | 208                     | 208   | 208   | 240   | 240   | 416   |       |       |       |       |
|                 |           | 152  | 164   | 180   | 208   | 208   | 212   | 224                     | 360   | 388   | 416   | 263   | 235   | 240   | 256   | 272   | 390   |
| 35-Y005         | Load Amps | 1.5  | 1.5   | 2.6   | 3.1   | 1.3   | 1.5   | 2.9                     | 1.3   | 2.9   | 1.5   | 1.9   | 3.5   | 1.5   | 3.3   | 1.77  | 3.1   |
|                 | kVA       | 0.55                                       | 0.55  | 0.96  | 1.27  | 0.56  | 0.64  | 1.21                    | 0.96  | 2.09  | 1.25  | 0.69  | 1.27  | 0.56  | 1.38  | .73   | 2.25  |
|                 | Line Fuse | 5  | 5     | 5     | 5     | 5     | 5     | 5                       | 5     | 5     | 5     | 5     | 5     | 4     | 5     | 5     | 5.6   |
| 35-Y010         | Load Amps | 3.0  | 3.1   | 5.3   | 6.2   | 2.7   | 3.0   | 5.8                     | 2.6   | 5.8   | 3.0   | 3.8   | 7.0   | 3.1   | 6.6   | 3.5   | 6.2   |
|                 | kVA       | 1.11                                       | 1.11  | 1.93  | 2.54  | 1.12  | 1.28  | 2.42                    | 1.93  | 4.19  | 2.50  | 1.39  | 2.54  | 1.12  | 2.77  | 1.47  | 4.50  |
|                 | Line Fuse | 5  | 7     | 10    | 12    | 5     | 5     | 10                      | 5     | 12    | 6     | 5     | 10    | 5     | 10    | 5     | 7     |
| 35-Y015         | Load Amps | 4.6  | 4.6   | 8.0   | 9.3   | 4.0   | 4.6   | 8.7                     | 4.0   | 8.7   | 4.6   | 5.8   | 10.6  | 4.6   | 10.0  | 5.3   | 9.3   |
|                 | kVA       | 1.67                                       | 1.67  | 2.89  | 3.81  | 1.68  | 1.92  | 3.63                    | 2.89  | 6.28  | 3.75  | 2.09  | 3.81  | 1.68  | 4.16  | 2.21  | 6.75  |
|                 | Line Fuse | 8  | 10    | 12    | 15    | 8     | 9     | 15                      | 7.5   | 15    | 9     | 8     | 15    | 7     | 15    | 9     | 15    |
| 85-Y020         | Load Amps | 7.7  | 7.7   | 13.4  | 15.6  | 6.7   | 7.7   | 14.5                    | 6.7   | 14.5  | 7.6   | 9.7   | 17.6  | 7.8   | 16.6  | 8.8   | 15.6  |
|                 | kVA       | 2.78                                       | 2.79  | 4.83  | 6.36  | 2.81  | 3.21  | 6.05                    | 4.83  | 10.47 | 6.26  | 3.49  | 6.36  | 2.81  | 6.93  | 3.68  | 11.25 |
|                 | Line Fuse | 12   | 15    | 25    | 30    | 15    | 15    | 25                      | 15    | 25    | 15    | 15    | 25    | 10    | 25    | 15    | 25    |
| 85-Y025         | Load Amps | 15.4                                       | 15.5  | 26.8  | 31.2  | 13.5  | 15.4  | 29.1                    | 13.4  | 29.0  | 15.3  | 19.4  | 35.3  | 15.6  | 33.3  | 17.7  | 31.2  |
|                 | kVA       | 5.57                                       | 5.58  | 9.66  | 12.72 | 5.62  | 6.42  | 12.10                   | 9.66  | 20.94 | 12.52 | 6.99  | 12.72 | 5.62  | 13.87 | 7.37  | 22.51 |
|                 | Line Fuse | 25   | 25    | 45    | 45    | 25    | 25    | 45                      | 25    | 45    | 25    | 25    | 45    | 25    | 45    | 25    | 45    |
| 85-Y030         | Load Amps | 23.1                                       | 23.2  | 40.2  | 46.9  | 20.2  | 23.1  | 43.6                    | 20.1  | 43.6  | 23.0  | 29.1  | 53.0  | 23.4  | 50.0  | 26.5  | 46.8  |
|                 | kVA       | 8.35                                       | 8.38  | 14.49 | 19.09 | 8.43  | 9.64  | 18.15                   | 14.49 | 31.42 | 18.78 | 10.49 | 19.09 | 8.43  | 20.80 | 11.05 | 33.76 |
|                 | Line Fuse | 35   | 45    | 60    | 70    | 35    | 35    | 60                      | 35    | 60    | 35    | 30    | 60    | 30    | 60    | 30    | 70    |
| 85-Y035         | Load Amps | 30.9                                       | 31.0  | 53.6  | 62.5  | 27.0  | 30.9  | 58.2                    | 26.8  | 58.1  | 30.7  | 38.8  | 70.6  | 31.2  | 66.7  | 35.4  | 62.4  |
|                 | kVA       | 11.14                                      | 11.17 | 19.32 | 25.45 | 11.25 | 12.85 | 24.21                   | 19.32 | 41.89 | 25.04 | 13.98 | 25.45 | 11.25 | 27.74 | 14.73 | 45.02 |
|                 | Line Fuse | 45   | 50    | 80    | 90    | 45    | 45    | 80                      | 45    | 80    | 45    | 45    | 80    | 40    | 80    | 40    | 90    |
| 85-Y040         | Load Amps | 46.3                                       | 46.5  | 80.4  | 93.8  | 40.5  | 46.3  | 87.3                    | 40.2  | 87.2  | 46.0  | 58.2  | 106.0 | 46.8  | 100.1 | 53.1  | 93.7  |
|                 | kVA       | 16.7                                       | 16.7  | 28.9  | 38.1  | 16.8  | 19.2  | 36.3                    | 28.9  | 62.8  | 37.5  | 20.9  | 38.1  | 16.8  | 41.6  | 22.1  | 67.5  |
|                 | Line Fuse | 60   | 80    | 125   | 150   | 60    | 70    | 125                     | 60    | 125   | 70    | 60    | 125   | 60    | 125   | 70    | 125   |
| 85-Y045         | Load Amps | 61.8                                       | 62.0  | 107.2 | 125.0 | 54.1  | 61.8  | 116.4                   | 53.6  | 116.2 | 61.4  | 77.6  | 141.3 | 62.4  | 133.4 | 70.9  | 124.9 |
|                 | kVA       | 22.2                                       | 22.3  | 38.6  | 50.9  | 22.5  | 25.7  | 48.4                    | 38.6  | 83.7  | 50.0  | 27.9  | 50.9  | 22.5  | 55.4  | 29.4  | 90.0  |
|                 | Line Fuse | 80   | 100   | 175   | 200   | 80    | 90    | 175                     | 80    | 175   | 125   | 80    | 175   | 70    | 175   | 80    | 175   |
| 85-Y050         | Load Amps | 92.7                                       | 93.0  | 160.9 | 187.6 | 81.1  | 92.7  | 174.7                   | 80.4  | 174.4 | 92.1  | 116.4 | 212.0 | 93.6  | 200.2 | 106.3 | 187.4 |
|                 | kVA       | 33.4                                       | 33.5  | 57.9  | 76.3  | 33.7  | 38.5  | 72.6                    | 57.9  | 125.6 | 75.1  | 41.9  | 76.3  | 33.7  | 83.2  | 44.2  | 135.0 |
|                 | Line Fuse | 125  | 175   | 250   | 300   | 125   | 150   | 250                     | 150   | 250   | 150   | 125   | 250   | 125   | 250   | 150   | 250   |
| 85-Y055         | Load Amps | 154.6                                      | 155.1 | 268.1 | 312.7 | 135.3 | 154.6 | 291.2                   | 134.0 | 290.7 | 153.5 | 194.1 | 353.3 | 156.1 | 333.7 | 177.2 | 312.4 |
|                 | kVA       | 55.7                                       | 55.8  | 96.6  | 127.2 | 56.2  | 64.2  | 121.0                   | 96.6  | 209.4 | 125.2 | 69.9  | 127.2 | 56.2  | 138.7 | 73.6  | 225.1 |
|                 | Line Fuse | 200  | 250   | 400   | 450   | 200   | 225   | 400                     | 200   | 400   | 250   | 250   | 400   | 175   | 400   | 200   | 450   |
| Qty. Required   |           | 3  | 3     | 3     | 3     | 2     | 2     | 2                       | 3     | 3     | 3     | 3     | 3     | 2     | 2     | 2     | 3     |
| Connection Dia. |           | TP-18                                      | TP-22 | TP-17 | TP-21 | TP-5  | TP-1  | TP-6                    | TP-20 | TP-19 | TP-24 | TP-14 | TP-13 | TP-2  | TP-10 | TP-9  | TP-23 |
| Page            |           | 62   | 63    | 62    | 63    | 61    | 61    | 61                      | 63    | 63    | 63    | 62    | 62    | 61    | 62    | 61    | 63    |

$$\text{Single Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps}}{1000} \quad \text{kVA} = \frac{\text{Volt Amperes}}{1000}$$

$$\text{Three Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps} \times 1.73}{1000} \quad \text{VA} = \text{kVA} \times 1000$$

Connection diagrams may be found on Pgs. 61 - 63.

Connections found on this Page require ordering 2 or 3 Buck - Boost Transformers

The appropriate size 35 or 80 Series Transformer may be substituted for the 85 Series where desired.

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# Three Phase Buck - Boost Sizing Tables

## THREE PHASE BUCK - BOOST TABLE, TYPE LM

| Type LM                            |           | Three Phase / Two or Three Units - Type LM |              |              |               |               |               |               |              |              |                         |              |               |               |               |               |               |               |              |
|------------------------------------|-----------|--|--------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|-------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
| Catalog Number                     | Load Line | Boost - Increase Voltage                   |              |              |               |               |               |               |              |              | Buck - Decrease Voltage |              |               |               |               |               |               |               |              |
|                                    |           | 240  | 240          | 240          | 416           | 416           | 440           | 480           | 480          | 480          | 200                     | 216          | 230           | 230           | 240           | 240           | 416           | 480           | 480          |
| 35-LM010                           | Load Amps | 1.6  | 2.0          | 3.7          | 1.6           | 2.0           | 4.1           | 2.1           | 1.8          | 3.9          | 2.4                     | 4.1          | 4.5           | 2.4           | 4.5           | 2.5           | 2.5           | 4.3           | 2.2          |
|                                    | kVA       | 0.68                                       | 0.86         | 1.54         | 1.20          | 1.50          | 3.13          | 1.80          | 1.54         | 3.28         | 0.86                    | 1.54         | 1.80          | 0.98          | 1.90          | 1.04          | 1.80          | 3.64          | 1.90         |
|                                    | Line Fuse | 5  | 5            | 7            | 5             | 5             | 7             | 5             | 5            | 7            | 5                       | 6            | 7             | 5             | 7             | 5             | 5             | 7             | 5            |
| 35-LM015                           | Load Amps | 2.4  | 3.1          | 5.5          | 2.5           | 3.1           | 6.1           | 3.2           | 2.7          | 5.9          | 3.7                     | 6.1          | 6.7           | 3.7           | 6.8           | 3.7           | 3.7           | 6.5           | 3.4          |
|                                    | kVA       | 1.02                                       | 1.29         | 2.31         | 1.80          | 2.26          | 4.70          | 2.70          | 2.31         | 4.92         | 1.29                    | 2.31         | 2.70          | 1.47          | 2.86          | 1.56          | 2.70          | 5.46          | 2.86         |
|                                    | Line Fuse | 5  | 6            | 10           | 5             | 6             | 10            | 6             | 5            | 10           | 5                       | 9            | 10            | 5             | 10            | 5             | 5             | 10            | 5            |
| 85-LM020                           | Load Amps | 4.0  | 5.1          | 9.2          | 4.1           | 5.2           | 10.2          | 5.4           | 4.6          | 9.8          | 6.2                     | 10.2         | 11.3          | 6.1           | 11.4          | 6.2           | 6.2           | 10.9          | 5.7          |
|                                    | kVA       | 1.70                                       | 2.15         | 3.85         | 3.00          | 3.76          | 7.83          | 4.50          | 3.85         | 8.20         | 2.15                    | 3.85         | 4.51          | 2.46          | 4.76          | 2.60          | 4.50          | 9.10          | 4.76         |
|                                    | Line Fuse | 8  | 10           | 15           | 9             | 10            | 15            | 10            | 8            | 15           | 8                       | 15           | 15            | 8             | 15            | 9             | 9             | 15            | 9            |
| 85-LM025                           | Load Amps | 8.1  | 10.3         | 18.5         | 8.3           | 10.4          | 20.5          | 10.8          | 9.2          | 19.7         | 12.4                    | 20.8         | 22.6          | 12.3          | 12.9          | 12.5          | 12.5          | 21.9          | 11.4         |
|                                    | kVA       | 3.40                                       | 4.30         | 7.70         | 6.01          | 7.53          | 15.67         | 9.00          | 7.70         | 16.40        | 4.30                    | 7.70         | 9.02          | 4.92          | 9.53          | 5.20          | 9.01          | 18.20         | 9.53         |
|                                    | Line Fuse | 15   | 20           | 30           | 15            | 20            | 30            | 20            | 15           | 30           | 15                      | 25           | 30            | 15            | 30            | 15            | 15            | 30            | 15           |
| 85-LM030                           | Load Amps | 12.2                                       | 15.5         | 27.7         | 12.5          | 15.6          | 30.8          | 16.2          | 13.8         | 29.5         | 18.6                    | 30.8         | 33.9          | 18.5          | 34.4          | 18.7          | 18.7          | 32.8          | 17.2         |
|                                    | kVA       | 5.10                                       | 6.46         | 11.55        | 9.02          | 11.29         | 23.51         | 13.50         | 11.55        | 24.60        | 6.46                    | 11.55        | 13.5          | 7.38          | 14.30         | 7.80          | 13.52         | 27.31         | 14.30        |
|                                    | Line Fuse | 25   | 25           | 45           | 25            | 25            | 45            | 25            | 25           | 45           | 25                      | 45           | 45            | 25            | 45            | 25            | 25            | 45            | 25           |
| 85-LM035                           | Load Amps | 16.3                                       | 20.7         | 37.0         | 16.7          | 20.9          | 41.1          | 21.6          | 18.5         | 39.4         | 24.8                    | 41.1         | 45.2          | 24.7          | 45.8          | 25.0          | 25.0          | 43.8          | 22.9         |
|                                    | kVA       | 6.80                                       | 8.61         | 15.40        | 12.03         | 15.06         | 31.35         | 18.00         | 15.40        | 32.80        | 8.61                    | 15.40        | 18.04         | 9.84          | 19.07         | 10.40         | 18.03         | 36.41         | 19.07        |
|                                    | Line Fuse | 30   | 35           | 60           | 30            | 35            | 60            | 35            | 30           | 60           | 30                      | 50           | 60            | 30            | 60            | 30            | 30            | 60            | 30           |
| 85-LM040                           | Load Amps | 24.5                                       | 31.0         | 55.5         | 25.0          | 31.3          | 61.7          | 32.4          | 27.7         | 59.1         | 37.3                    | 61.7         | 67.9          | 37.0          | 68.8          | 37.5          | 37.5          | 65.7          | 34.4         |
|                                    | kVA       | 10.2                                       | 12.9         | 23.1         | 18.0          | 22.5          | 47.0          | 27.0          | 23.1         | 49.2         | 12.9                    | 23.1         | 27.0          | 14.7          | 28.6          | 15.6          | 27.0          | 54.6          | 28.6         |
|                                    | Line Fuse | 45   | 50           | 80           | 45            | 50            | 90            | 50            | 45           | 80           | 45                      | 80           | 80            | 45            | 80            | 45            | 45            | 80            | 45           |
| 85-LM045                           | Load Amps | 32.7                                       | 41.4         | 74.0         | 33.4          | 41.8          | 82.2          | 43.3          | 37.0         | 78.9         | 49.7                    | 82.3         | 90.5          | 49.4          | 91.7          | 50.0          | 50.0          | 87.6          | 45.8         |
|                                    | kVA       | 13.6                                       | 17.2         | 30.8         | 24.0          | 30.1          | 62.7          | 36.0          | 30.8         | 65.6         | 17.2                    | 30.8         | 36.0          | 19.6          | 38.1          | 20.8          | 36.0          | 72.8          | 38.1         |
|                                    | Line Fuse | 60   | 60           | 110          | 60            | 70            | 125           | 70            | 60           | 110          | 60                      | 100          | 110           | 60            | 110           | 60            | 60            | 110           | 60           |
| 85-LM050                           | Load Amps | 49.0                                       | 62.1         | 111.1        | 50.1          | 62.7          | 123.4         | 64.9          | 55.5         | 118.3        | 74.6                    | 123.4        | 135.8         | 74.1          | 137.6         | 75.0          | 75.0          | 131.4         | 68.8         |
|                                    | kVA       | 20.4                                       | 25.8         | 46.2         | 36.1          | 45.1          | 94.0          | 54.0          | 46.2         | 98.4         | 25.8                    | 46.2         | 54.1          | 29.5          | 57.2          | 31.2          | 54.1          | 109.2         | 57.2         |
|                                    | Line Fuse | 80   | 100          | 175          | 80            | 100           | 175           | 100           | 80           | 175          | 80                      | 150          | 175           | 80            | 175           | 80            | 80            | 175           | 80           |
| 85-LM055                           | Load Amps | 81.7                                       | 103.6        | 185.2        | 83.5          | 104.5         | 205.6         | 108.2         | 92.6         | 197.2        | 124.3                   | 205.8        | 226.4         | 123.5         | 229.4         | 125.1         | 125.1         | 219.0         | 114.7        |
|                                    | kVA       | 34.0                                       | 43.0         | 77.0         | 60.1          | 75.3          | 156.7         | 90.0          | 77.6         | 164.0        | 43.0                    | 77.0         | 90.2          | 49.2          | 95.3          | 52.0          | 90.1          | 182.0         | 95.3         |
|                                    | Line Fuse | 150  | 175          | 300          | 150           | 175           | 300           | 175           | 150          | 300          | 150                     | 250          | 300           | 150           | 300           | 150           | 150           | 300           | 150          |
| Qty. Required Connection Dia. Page |           | 2 TP-7<br>61                               | 2 TP-3<br>61 | 2 TP-4<br>61 | 3 TP-18<br>62 | 3 TP-22<br>63 | 3 TP-21<br>63 | 3 TP-22<br>63 | 2 TP-5<br>61 | 2 TP-6<br>61 | 2 TP-11<br>62           | 2 TP-8<br>61 | 2 TP-12<br>62 | 2 TP-11<br>62 | 2 TP-12<br>62 | 2 TP-11<br>62 | 3 TP-14<br>62 | 2 TP-10<br>62 | 2 TP-9<br>61 |

$$\text{Single Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps}}{1000}$$

$$\text{kVA} = \frac{\text{Volt Amperes}}{1000}$$

$$\text{Three Phase kVA} = \frac{\text{Load Voltage} \times \text{Load Amps} \times 1.73}{1000}$$

$$\text{VA} = \text{kVA} \times 1000$$

Connection diagrams may be found on Pgs. 61 - 63.

Connections found on this Page require ordering 2 or 3 Buck - Boost Transformers

The appropriate size 35 or 80 Series Transformer may be substituted for the 85 Series where desired.