

| Quadro de Cargas (QD1) |                                    |         |                 |       |                |             |    |     |                 |       |              |              |              |      |         |                      |         |            |               |        |      |      |  |
|------------------------|------------------------------------|---------|-----------------|-------|----------------|-------------|----|-----|-----------------|-------|--------------|--------------|--------------|------|---------|----------------------|---------|------------|---------------|--------|------|------|--|
| Circuito               | Descrição                          | Esquema | Método de inst. | V (V) | Iluminação (W) | Tomadas (W) |    |     | Pot. total (VA) | Fases | Pot. - A (W) | Pot. - B (W) | Pot. - C (W) | FCT  | FCA (A) | I <sub>n</sub> (mm²) | Dn (mm) | dv arc (%) | d'v total (%) | Status |      |      |  |
| 1                      | Iluminação                         | F+N+T   | B1              | 127 V | 2              | 12          | 24 | 100 | 1047            | 1200  | 1047         | 100          | 0,4          | 560  | 1,00    | 0,4                  | 1,5     | 2,0        |               |        |      |      |  |
|                        | a                                  |         |                 |       | 2              | 23          |    |     | 608             |       | 560          | C            |              | 560  | 1,00    | 0,57                 | 6,2     | 1,5        | 23,0          |        |      |      |  |
|                        | b                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | c                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | d                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | e                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | f                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | g                                  |         |                 |       | 4              |             |    |     | 104             |       | 98           | C            |              |      | 1,00    | 0,4                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 26              |       | 24           | C            |              |      | 1,00    | 0,8                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 26              |       | 24           | C            |              |      | 1,00    | 0,8                  | 1,5     | 23,0       |               |        |      |      |  |
| 2                      | Iluminação                         | F+N+T   | B1              | 127 V | 1              | 5           |    |     | 130             |       | 120          | C            |              | 120  | 1,00    | 0,57                 | 1,8     | 15,0       |               |        |      |      |  |
|                        | a                                  |         |                 |       | 2              | 18          |    |     | 658             |       | 608          | C            |              | 608  | 1,00    | 0,21                 | 1,0     | 10,0       | 0,44          | 1,70   |      |      |  |
|                        | b                                  |         |                 |       | 4              |             |    |     | 104             |       | 96           | C            |              | 96   | 1,00    | 1,2                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | c                                  |         |                 |       | 4              |             |    |     | 104             |       | 96           | C            |              | 96   | 1,00    | 1,0                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | d                                  |         |                 |       | 2              |             |    |     | 52              |       | 48           | C            |              | 48   | 0,80    | 0,5                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | e                                  |         |                 |       | 4              |             |    |     | 104             |       | 96           | C            |              | 96   | 1,00    | 1,3                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | f                                  |         |                 |       | 2              |             |    |     | 26              |       | 24           | C            |              | 24   | 0,80    | 0,3                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | g                                  |         |                 |       | 2              |             |    |     | 26              |       | 24           | C            |              | 24   | 0,80    | 0,3                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 12              |       | 12           | C            |              | 12   | 1,00    | 0,2                  | 1,5     | 23,0       |               |        |      |      |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 12              |       | 12           | C            |              | 12   | 1,00    | 0,1                  | 1,5     | 23,0       |               |        |      |      |  |
| 3                      | Tomadas gerais - banheiros/cozinha | F+N+T   | B1              | 127 V | 1              | 10          |    |     | 1173            |       | 1060         | C            |              | 1060 | 1,00    | 0,57                 | 6,2     | 20,0       | 0,45          | 1,70   |      |      |  |
|                        | a                                  |         |                 |       | 13             |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | b                                  |         |                 |       | 13             |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | c                                  |         |                 |       | 13             |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | d                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | e                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | f                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | g                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 1437            |       | 1300         | C            |              | 1300 | 1,00    | 0,71                 | 23,3    | 20,0       | 1,18          | 2,43   |      |      |  |
| 4                      | Ar condicionado - médicos          | F+N+T   | B1              | 220 V |                |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | a                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | b                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | c                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | d                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | e                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | f                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | g                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 1467            |       | 1467         | A+B          |              | 2200 | 1,00    | 1,00                 | 20,0    | 6,40       | 25,0          | 0,82   | 1,77 |      |  |
| 5                      | Ar condicionado - agentes          | F+N+T   | B1              | 220 V |                |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | a                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | b                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | c                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | d                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | e                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | f                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | g                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 1774            |       | 1774         | A+C          |              | 674  | 674     | 1,00                 | 0,71    | 9,7        | 4,4           | 25,0   | 0,27 | 1,53 |  |
| 6                      | Caldeira hospitalar                | F+N+T   | B1              | 220 V |                |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | a                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | b                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | c                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | d                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | e                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | f                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | g                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | h                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
|                        | i                                  |         |                 |       | 1              |             |    |     | 9000            |       | 9000         | A+B+C        |              | 3000 | 3000    | 1,00                 | 0,71    | 33,7       | 10            | 60,0   | 0,33 | 1,49 |  |
| 7                      | Câmara de conservação              | F+N+T   | B1              | 220 V |                |             |    |     | 1000            |       | 900          |              |              | 900  | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | a                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | b                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | c                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | d                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | e                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | f                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | g                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | h                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |
|                        | i                                  |         |                 |       | 2              |             |    |     | 30218           |       | 31110        | A+B+C        |              | 9600 | 1,00    | 0,57                 | 1,20    | 16,0       | 31,0          | 0,20   | 0,48 | 1,74 |  |

| Tipo de carga                                                                                       | Potência instalada (kVA) | Fator de demanda (%) | Demanda (kVA) |
|-----------------------------------------------------------------------------------------------------|--------------------------|----------------------|---------------|
| Iluminação e TUG's (Clínicas e hospitais)                                                           | 6,65                     | 40                   | 2,66          |
| Cond. de Ar (não residencial) Cernig                                                                | 22,50                    | 70                   | 15,75         |
| Cernig - Chuveiros, ferros elétricos, aquecedores de água (residenciais - não residencial) - cernig | 22,50                    | 70                   | 15,75         |
| TOTAL                                                                                               |                          |                      | 22,50         |

| Quadro de Cargas (QD2) |                                                 |         |                 |       |                |             |                 |                |       |              |              |              |       |       |                    |             |           |            |              |        |      |    |
|------------------------|-------------------------------------------------|---------|-----------------|-------|----------------|-------------|-----------------|----------------|-------|--------------|--------------|--------------|-------|-------|--------------------|-------------|-----------|------------|--------------|--------|------|----|
| Circuito               | Descrição                                       | Esquema | Método de inst. | V (V) | Iluminação (W) | Tomadas (W) | Pot. total (VA) | Pot. total (W) | Fases | Pot. - A (W) | Pot. - B (W) | Pot. - C (W) | FCT   | FCA   | I <sub>n</sub> (A) | Seção (mm²) | Desq. (m) | dv par (m) | dv total (m) | Status |      |    |
| 13                     | Iluminação                                      | F+N+T   | B1              | 127 V | 12             | 24          | 612             | 564            | A     | 564          |              |              | 1,00  | 0,41  | 11,8               | 2,5         | 31,0      | 0,58       | 184          | Ok     |      |    |
| a                      |                                                 |         |                 |       | 1              |             | 104             | 98             | A     |              |              |              |       |       | 0,80               | 1,0         | 25,0      |            |              | Ok     |      |    |
| b                      |                                                 |         |                 |       | 1              |             | 144             | 144            | A     |              |              |              |       |       | 0,70               | 1,8         | 25,0      |            |              | Ok     |      |    |
| c                      |                                                 |         |                 |       | 1              |             | 12              | 12             | A     | 12           |              |              |       |       | 0,70               | 0,1         | 25,0      |            |              | Ok     |      |    |
| d                      |                                                 |         |                 |       | 6              | 138         | 120             | 120            | A     |              |              |              |       |       | 1,00               | 1,6         | 25,0      |            |              | Ok     |      |    |
| e                      |                                                 |         |                 |       | 1              |             | 26              | 24             | A     | 24           |              |              |       |       | 1,00               | 0,2         | 25,0      |            |              | Ok     |      |    |
| f                      |                                                 |         |                 |       | 4              | 104         | 78              | 72             | A     | 72           |              |              |       |       | 0,80               | 0,8         | 25,0      |            |              | Ok     |      |    |
| 14                     | Iluminação                                      | F+N+T   | B1              | 127 V | 14             |             | 365             | 338            | B     |              | 338          |              | 1,00  | 0,41  | 7,0                | 2,5         | 31,0      | 0,31       | 157          | Ok     |      |    |
| a                      |                                                 |         |                 |       | 4              |             | 104             | 98             | A     |              |              |              |       |       | 0,80               | 1,0         | 25,0      |            |              | Ok     |      |    |
| b                      |                                                 |         |                 |       | 2              |             | 52              | 48             | B     |              | 48           |              |       |       | 0,80               | 0,5         | 25,0      |            |              | Ok     |      |    |
| c                      |                                                 |         |                 |       | 4              |             | 104             | 98             | B     |              |              |              |       |       | 0,80               | 1,0         | 25,0      |            |              | Ok     |      |    |
| d                      |                                                 |         |                 |       | 4              |             | 104             | 98             | B     |              |              |              |       |       | 0,80               | 1,0         | 25,0      |            |              | Ok     |      |    |
| 15                     | Tomadas gerais - sala vacinas/curativos         | F+N+T   | B1              | 127 V | 12             |             | 1345            | 1200           | C     |              |              |              | 1200  | 1,00  | 0,41               | 25,8        | 4         | 42,0       | 25,0         | 0,87   | 2,12 | Ok |
| 16                     | Tomadas gerais - Inj. ginecológicas             | F+N+T   | B1              | 127 V | 12             |             | 1347            | 1200           | C     |              |              |              | 1200  | 1,00  | 0,41               | 25,9        | 4         | 42,0       | 25,0         | 0,90   | 2,38 | Ok |
| 17                     | Tomadas gerais - coleta/curativos básicos       | F+N+T   | B1              | 127 V | 12             |             | 1200            | 1200           | C     |              |              |              | 1200  | 1,00  | 0,41               | 26,0        | 4         | 42,0       | 25,0         | 1,33   | 2,89 | Ok |
| 18                     | Tomadas gerais - atend. multiprofissional       | F+N+T   | B1              | 127 V | 9              |             | 990             | 900            | B     |              |              |              | 900   | 1,00  | 0,41               | 10,0        | 2,5       | 31,0       | 0,63         | 0,90   | Ok   |    |
| 19                     | Tomadas gerais - Atend. multiprofissional       | F+N+T   | B1              | 127 V | 10             |             | 1000            | 1000           | C     |              |              |              | 1000  | 1,00  | 0,41               | 10,1        | 2,5       | 31,0       | 0,68         | 0,94   | Ok   |    |
| 20                     | Ar condicionado - sala de vacinas               | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+C   | 674          |              |              | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 0,84   | 1,74 | Ok |
| 21                     | Ar condicionado - Inj. ginecológicas            | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | B+C   |              | 674          |              | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 0,84   | 1,60 | Ok |
| 22                     | Ar condicionado - curativos                     | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+B   |              |              | 674          | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 0,96   | 1,52 | Ok |
| 23                     | Ar condicionado - consulta ginecológica         | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | B+C   |              | 674          | 674          | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 0,96   | 1,51 | Ok |
| 24                     | Ar condicionado - sala de vacinas               | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+B   |              |              | 674          | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 1,11   | 1,42 | Ok |
| 25                     | Ar condicionado - atendimento multiprofissional | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+B   |              | 674          | 674          | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 0,97   | 1,52 | Ok |
| 26                     | Ar condicionado - consulta básica               | F+N+T   | B1              | 220 V | 1              |             | 2458            | 2210           | A+B   | 1105         | 1105         |              |       | 1,00  | 0,41               | 27,2        | 4         | 42,0       | 20,0         | 0,58   | 1,84 | Ok |
| 27                     | Ar condicionado - atendimento multiprofissional | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+B   |              | 674          | 674          | 674   | 1,00  | 0,41               | 16,6        | 4         | 42,0       | 20,0         | 1,10   | 1,42 | Ok |
| 28                     | Câmara de conservação                           | F+N+T   | B1              | 220 V | 1              |             | 1500            | 1200           | A+B   |              | 600          | 600          |       | 1,00  | 0,41               | 16,6        | 2,5       | 31,0       | 0,75         | 2,00   | Ok   |    |
| 29                     | Ar condicionado - multifuncional                | F+N+T   | B1              | 220 V | 1              |             | 1487            | 1347           | A+B   |              | 674          | 674          | 674   | 1,00  | 0,41               | 16,6        | 2,5       | 31,0       | 0,58         | 1,84   | Ok   |    |
| TOTAL                  |                                                 |         |                 |       | 1              | 37          | 63              | 1              | 1     | 6            | 1            | 21359        | 19039 | A+B+C | 5538               | 6208        |           |            |              |        |      |    |

| Tipo de carga                             | Potência instalada (kVA) | Fator de demanda (%) | Demanda (kVA) |
|-------------------------------------------|--------------------------|----------------------|---------------|
| Iluminação e TUG's (Clínicas e hospitais) | 6,65                     | 40                   | 2,66          |
| Cond. de Ar (não residencial) Cernig      | 22,50                    | 70                   | 15,75         |
| TOTAL                                     |                          |                      | 22,50         |

| Quadro de Cargas (QD4) |                                      |         |                 |       |                |             |                 |                |       |              |              |              |       |       |                    |             |                    |             |              |        |      |      |    |
|------------------------|--------------------------------------|---------|-----------------|-------|----------------|-------------|-----------------|----------------|-------|--------------|--------------|--------------|-------|-------|--------------------|-------------|--------------------|-------------|--------------|--------|------|------|----|
| Circuito               | Descrição                            | Esquema | Método de inst. | V     | Iluminação (W) | Tomadas (W) | Pot. total (VA) | Pot. total (W) | Fases | Pot. - A (W) | Pot. - B (W) | Pot. - C (W) | FCT   | FCA   | I <sub>n</sub> (A) | Seção (mm²) | R <sub>e</sub> (Ω) | dv par. (%) | dv total (%) | Status |      |      |    |
| 30                     | Iluminação                           | F+N+T   | B1              | 127 V | 5              | 8           | 269             | 262            | B     | 262          | 0            | 0            | 1,00  | 0,54  | 3,9                | 1,5         | 23,0               | 0           | 0,52         | 1,78   | OK   |      |    |
| a                      |                                      |         |                 |       |                |             | 104             | 98             | B     | 98           | 0            | 0            | 0,94  | 1,5   | 23,0               | 0           | 0                  | 0           |              | OK     |      |      |    |
| b                      |                                      |         |                 |       |                |             | 48              | 48             | B     | 48           | 0            | 0            | 1,00  | 0,4   | 15,0               | 0           | 0                  | 0           |              | OK     |      |      |    |
| c                      |                                      |         |                 |       |                |             | 26              | 24             | B     | 24           | 0            | 0            | 0,80  | 0,3   | 15,0               | 0           | 0                  | 0           |              | OK     |      |      |    |
| d                      |                                      |         |                 |       |                |             | 24              | 0              | B     | 24           | 0            | 0            | 0,80  | 0,3   | 15,0               | 0           | 0                  | 0           |              | OK     |      |      |    |
| e                      |                                      |         |                 |       | 1              |             | 12              | 12             | B     | 12           | 0            | 0            | 1,00  | 0,1   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| f                      |                                      |         |                 |       | 1              |             | 24              | 24             | B     | 24           | 0            | 0            | 1,00  | 0,2   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| g                      |                                      |         |                 |       | 2              |             | 24              | 24             | B     | 24           | 0            | 0            | 0,80  | 0,2   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| 31                     | Iluminação                           | F+N+T   | B1              | 127 V | 4              | 21          | 6               | 857            | 792   | B            | 792          | 0            | 0     | 1,00  | 0,54               | 5,9         | 1,5                | 23,0        | 10,0         | 1,70   | 2,96 | OK   |    |
| a                      |                                      |         |                 |       | 2              |             | 80              | 87             | B     | 80           | 0            | 0            | 0,90  | 0,9   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| b                      |                                      |         |                 |       | 2              |             | 87              | 87             | B     | 80           | 0            | 0            | 0,80  | 0,9   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| c                      |                                      |         |                 |       | 2              |             | 87              | 87             | B     | 80           | 0            | 0            | 0,80  | 0,9   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| d                      |                                      |         |                 |       | 3              |             | 78              | 78             | B     | 72           | 0            | 0            | 1,00  | 0,6   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| e                      |                                      |         |                 |       | 3              |             | 78              | 78             | B     | 72           | 0            | 0            | 1,00  | 0,6   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| f                      |                                      |         |                 |       | 3              |             | 78              | 78             | B     | 72           | 0            | 0            | 1,00  | 0,6   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| g                      |                                      |         |                 |       | 10             |             | 261             | 240            | B     | 240          | 0            | 0            | 1,00  | 2,1   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| h                      |                                      |         |                 |       | 1              |             | 12              | 12             | B     | 12           | 0            | 0            | 1,00  | 0,1   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| i                      |                                      |         |                 |       | 1              |             | 24              | 24             | B     | 24           | 0            | 0            | 0,80  | 0,3   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| j                      |                                      |         |                 |       | 1              |             | 26              | 24             | B     | 24           | 0            | 0            | 0,80  | 0,3   | 1,5                | 23,0        | 0                  | 0           |              | OK     |      |      |    |
| 32                     | Tomadas gerais - sala de espera      | F+N+T   | B1              | 127 V |                | 14          | 1545            | 1400           | C     |              |              |              | 1400  | 1400  | 1,00               | 0,54        | 22,5               | 2,5         | 31,0         | 2,0    | 1,97 | 3,23 | OK |
| 33                     | Tomadas gerais - sala de reuniões    | F+N+T   | B1              | 127 V |                | 5           | 558             | 500            | B     |              |              |              | 500   | 500   | 1,00               | 0,54        | 22,5               | 2,5         | 31,0         | 2,0    | 1,97 | 3,46 | OK |
| 34                     | Tomadas gerais - consultório         | F+N+T   | B1              | 127 V |                | 6           | 664             | 600            | C     |              |              |              | 600   | 600   | 1,00               | 0,54        | 22,5               | 2,5         | 31,0         | 2,0    | 1,97 | 3,23 | OK |
| 35                     | Tomadas gerais - área de consultório | F+N+T   | B1              | 127 V |                | 8           | 867             | 800            | C     |              |              |              | 800   | 800   | 1,00               | 0,54        | 22,5               | 2,5         | 31,0         | 2,0    | 1,97 | 3,23 | OK |
| 36                     | Compressor odontológico              | F+N+T   | B1              | 220 V |                | 1           | 3314            | 2000           | A+C   |              |              |              | 1000  | 1000  | 1,00               | 0,54        | 27,9               | 2,5         | 31,0         | 2,0    | 1,95 | 2,91 | OK |
| 37                     | Ar condicionado - consultório        | F+N+T   | B1              | 220 V |                | 1           | 2456            | 2210           | B+C   |              |              |              | 1105  | 1105  | 1,00               | 0,54        | 27,9               | 2,5         | 31,0         | 2,0    | 1,95 | 2,91 | OK |
| 38                     | Ar condicionado - sala de reuniões   | F+N+T   | B1              | 220 V |                | 1           | 3622            | 3280           | A+C   |              |              |              | 1630  | 1630  | 1,00               | 0,54        | 27,9               | 2,5         | 31,0         | 2,0    | 1,95 | 2,91 | OK |
| 39                     | Ar condicionado - sala de espera     | F+N+T   | B1              | 220 V |                | 1           | 3622            | 3280           | A+B   |              |              |              | 1630  | 1630  | 1,00               | 0,54        | 26,5               | 4           | 42,0         | 20,0   | 1,40 | 2,86 | OK |
| 40                     | Exatidão médica                      | F+N+T   | B1              | 127 V |                | 2           | 500             | 400            | C     |              |              |              | 400   | 400   | 1,00               | 0,50        | 23,0               | 2,5         | 31,0         | 2,0    | 1,93 | 2,78 | OK |
| 41                     | Ar condicionado                      | F+N+T   | B1              | 220 V |                | 2           | 3622            | 3280           | A+B   |              |              |              | 1630  | 1630  | 1,00               | 0,54        | 26,5               | 4           | 42,0         | 20,0   | 1,40 | 2,86 | OK |
| 42                     | Caldeira Odontológica 1              | F+N+T   | B1              | 220 V |                | 1           | 1875            | 1600           | B+C   |              |              |              | 750   | 750   | 1,00               | 0,70        | 12,2               | 2,5         | 31,0         | 2,0    | 1,94 | 2,64 | OK |
| 43                     | Caldeira Odontológica 2              | F+N+T   | B1              | 220 V |                | 1           | 1875            | 1600           | B+C   |              |              |              | 750   | 750   | 1,00               | 0,70        | 12,2               | 2,5         | 31,0         | 2,0    | 1,94 | 2,64 | OK |
| 44                     | Compressor odontológico              | F+N+T   | B1              | 220 V |                | 1           | 3314            | 2000           | A+B+C |              |              |              | 6890  | 8435  | 1,00               | 0,70        | 21,5               | 2,5         | 31,0         | 2,0    | 1,49 | 2,75 | OK |
| TOTAL                  |                                      |         |                 |       | 9              | 29          | 6               | 37             | 2     | 2            | 1            | 3            | 29058 | 23734 | A+B+C              | 6890        | 8435               |             |              |        |      |      |    |

| Tipo de carga                             | Potência instalada (kVA) | Fator de demanda (%) | Demanda (kVA) |
|-------------------------------------------|--------------------------|----------------------|---------------|
| Motores                                   | 7,13                     | 80                   | 5,70          |
| Iluminação e TUG's (Clínicas e hospitais) | 6,61                     | 40                   | 2,64          |
| Cond. de Ar (não residencial) Cernig      | 22,50                    | 70                   | 15,75         |
| TOTAL                                     |                          |                      | 22,50         |

| Quadro de Demanda (QD3)                   |                          |                      |               |         |         |         |          |          |          |           |
|-------------------------------------------|--------------------------|----------------------|---------------|---------|---------|---------|----------|----------|----------|-----------|
| Tipo de carga                             | Potência instalada (kVA) | Fator de demanda (%) | Demanda (kVA) | QD1 (W) | QD2 (W) | QD3 (W) | QD4 (VA) | QD5 (VA) | QD6 (VA) | QD7 (mm²) |
| Motores                                   | 7,13                     | 80                   | 5,70          | 21140   | 9903    | 6017    | 22093    | 6217     | 7424     | 25        |
| Iluminação e TUG's (Clínicas e hospitais) | 23,90                    | 40                   | 9,56          | 19039   | 9536    | 6208    | 7294     | 8925     | 2634     | 2931      |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 23,90                    | 40                   | 9,56          | 23734   | 6860    | 8409    | 8435     | 16739    | 5748     | 5512      |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    | 43249    | 13441    | 14708     |
| Cond. de Ar (Ind. residencial, Cerng.)    | 28,80                    | 37                   | 10,66         | 73863   | 21674   | 24518   | 27662    |          |          |           |