

### 10.2.1 Examples of Heat Gain from Equipment

Examples of average heat gains of different kinds of equipment and appliances can be found in textbooks and published articles. Normal heat gains during continuous use and for energy saver mode for some common types of office equipment are shown in Table 10.3. Examples for restaurant equipment can be found in ASHRAE, 1997 and other sources.

**Table 10.3** Heat gains from common office equipment (Wilkins and Hosni 2000).

Computers	Heat gain, continuous use, W	Heat gain, energy saver mode, W
Average value	55	20
Conservative value	65	25
Highly conservative value	75	30

Based on 386, 486 and Pentium grade

Monitors	Heat gain, continuous use, W	Heat gain, energy saver mode, W
Small (13 to 15 in.)	55	0
Medium (16 to 18 in.)	70	0
Large (19 to 20 in.)	80	0

Typical values for monitors displaying Windows

Laser printers	Heat gain, continuous use, W	Heat gain, 1 page per min., W	Heat gain, idle use, W
Small desktop	130	75	10
Desktop	215	100	35
Small office	320	160	70
Large desktop	550	275	125

Copiers	Heat gain, continuous use, W	Heat gain, 1 page per min., W	Heat gain, idle use, W
Desktop copier	400	85	20
Office copier	1100	400	300

Miscellaneous equipment	Heat gain, continuous use, W	Heat gain, energy saver mode, W
Fax machine	30	15
Image scanner	25	15
Dot matrix scanner	50	25

BELYSNING: HÖST RÄKNAT CA. 10-15 W/m<sup>2</sup>  
 (GOLVYTA)