

# User Information in accordance with RAL-UZ 122 'Blue Angel' for Brother MFC-990CW.



## General information.

There is growing interest in the environmental impact of products. To enable consumers to make informed choices, labels such as "Blue Angel" can assist. The label can only be applied to environmentally sound products and services. It is only awarded after a rigorous certification process by the RAL Institute in Germany.

For further information about "Blue Angel" please refer to the webpage <http://www.blauer-engel.de>

## Equipment Setup.

The machine should be placed on a suitable level surface and not in direct sunlight. For other conditions please refer to the Users Guide.

## Assured repairs.

Brother warrants that spares for this product will be available for five years from the end of production. Please contact your Brother Dealer for details.

## Maintenance.

Any maintenance or service work required may only be carried out by trained personnel.

## Batteries.

The DECT handset contains a user replaceable NiMH battery (BCL-BT20). Such batteries should not be disposed of as general waste. They should be correctly recycled in accordance with local regulations. For details please refer to the webpage <http://www.brother.eu/recycle> and click on your country flag.

## Product emissions.

The award of the "Blue Angel" mark only applies when Brother inks are used. Original Brother inks fulfill the requirements for the "Blue Angel" mark. Ensure that during use (and particularly the first few days after installation) the machine is used in a well ventilated area.

## Recycled paper.

The machine can use recycled paper which is produced in accordance with European standard EN 12281:2002 or DIN 19309.

## Double-sided (duplex) printing.

The machine utilizes a software-assisted manual duplex capability. It allows double-sided printing on A4 paper. For further details please refer to the Users Guide.

## Product Takeback.

At the end of the product life it must be recycled in accordance with local regulations. It can be returned to a Municipal Collection Facility or to a retailer when a replacement is purchased. Where applicable this facility may be offered by your Brother dealer. Please refer to the webpage <http://www.brother.eu/recycle> and click on your country flag.

## Ink Cartridge Takeback schemes.

Brother will accept empty cartridges for recycling free of charge from users in accordance with local regulations. For details of the return scheme please refer to the webpage <http://www.brother.eu/recycle> and click on your country flag.

## Acoustic noise emissions.

Guaranteed noise level  $L_{WAd}$

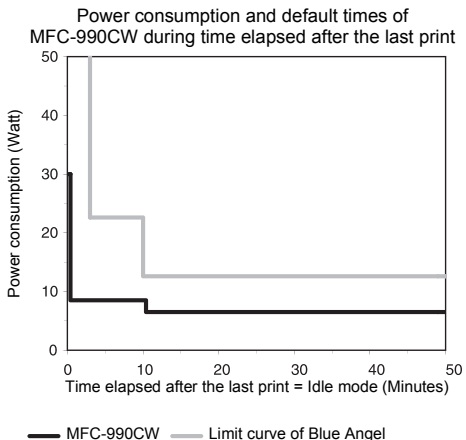
Mono printing: **63.4 dB(A)**

Colour printing: **56.6 dB(A)**

Machines with a  $L_{WAd} > 63.0$  dB(A) are not suitable for use in rooms where predominantly intellectual work is carried out. These devices should be set up in separate rooms due to their noise emissions.

# Power consumption and activation times.

## Energy consumption.



The amount of electricity a machine consumes depends as much on its properties as it does on the way you use it. The machine is designed to allow you to reduce electricity costs. It switches to Stand-by mode after the last print. If required it can immediately print again from this mode. If no additional prints are required the device switches after a certain period of time - the **Activation time** - to energy-saving modes.

In these modes the machine consumes less power (watts). If the machine is to print again it needs a little longer to return from an energy-saving mode than from the Stand-by mode. This delay is called the **Recovery time**. The machine, however, meets the stringent Blue Angel requirements for recovery time (<http://www.blauer-engel.de>). It needs only 2 seconds to return from "Sleep" mode to Stand-by mode.

The machine is so designed as to ensure that it can stand switch-on and switch-off into Plug-in Off mode up to twice a day without suffering damage.


The table overleaf shows the individual values of power consumption as well as default times and recovery times. The values listed in the table are preset upon delivery. With these values the machine meets the Blue Angel requirements. For maximum energy savings we advise the default values should be used.

## Summary of the operating modes MFC-990CW.

Printing speed for A4 sized pages :

for mono printing : 2.0 ppm

for colour printing : 1.4 ppm

Switch/ button symbol	Operating state	Power consumption* (Watt)		
	Maximum power consumption during switch-on	30		
	Printing (continuous operation, 13 pages/minute) Black & white	16	Activation time ** in minutes	
	Stand-by mode	8.5	0.4	Recovery time *** in seconds
	Powersaving mode	8.0	10.4 (1-60)	2
	Power plug connected and device switched off	0.9	Switch Activated	25
	Switched off	0.0	Power plug removed	25

\* Averaged values, measured without accessories

\*\* Default time is the time that elapses after the end of the printing process until the device enters the mode.

\*\*\* Recovery time is the amount of time it takes to return to Stand-by mode.

The figures in brackets indicate the range within which you can adjust the default time.

## Energy Consumption of MFC-990CW.

The energy consumption in the standard cycle of use according to Energy Star 7/2005 is **1.61 kWh/week**.

The value was measured at the above mentioned settings (delivery status).

To a certain extent you can deactivate the energy-saving modes or change their times. If the timer value is reduced then the machine switches to an energy saving mode quicker which has the effect of reducing the energy usage.

If, however, you wish to extend a time or to even turn off an energy-saving mode you should consider: if you do so, the device switches to a mode of lower power consumption later or does not switch down at all.

Consequently, it remains longer in a mode of higher power consumption and thus consumes more electricity. The machine will always use some power whilst connected to the AC mains. For zero power consumption the machine should be unplugged from the AC outlet.