User Information in accordance with Blue Angel

January 2018 (appropriate month)

Models

ComColor FW5230 from serial number 34396001 ComColor FW5231 from serial number 34406001 ComColor FW5000 from serial number 34416001 ComColor black FW1230 from serial number 34546001

General Information

These devices are awarded the environmental label Blue Angel and the information can be found at http://www.blauer-engel.de. The following information complies with the requirements of Blue Angel RAL-UZ 205 and is valid only in Germany. RISO (Deutschland) GmbH declares that its Blue Angel certified devices are all institutional products by definition, as they are only available through authorized dealers or resellers.

Batteries

These devices do not contain any user replaceable batteries.

Recycled Paper

These devices are suitable for using recycled paper.

Recycled Plastic These devices are using recycled plastic 0-1%.

Double-sided Printing

These devices can print in duplex mode. For more information, please refer to User's Guide.

<u>N-up Printing</u>

These devices can print in N-up mode. For more information, please refer to User's Guide.

Guarantee of Repairs

The supply of spare parts and consumables for this device is guaranteed for at least 5 years after the end of production.

Maintenance

The routine maintenance of the device is described in the Quick Guide and can be carried out by the user. All other maintenance must be performed by trained persons. For details, please contact your RISO partners or directly with the RISO (Deutschland) GmbH.

Return of Used Device

Die Rückgabe des Druckers ist im Elektro-Gesetz geregelt. Privatkunden können das Gerät kostenfrei bei den öffentlich rechtlichen Sammelstellen zurückgeben. Geschäftskunden setzten sich bitte mit Ihrem RISO-Partner oder direkt mit der RISO (Deutschland) GmbH in Verbindung.

Return of Used Ink Cartridge

RISO nimmt Verbrauchsmaterialien (z.B. Farbkartuschen) kostenfrei zurück. Ein Bestellformular für die Rücknahme finden Sie im Internet unter www.risoprinter.de/de/riso-recycling/

Substance Emissions

The substance emissions of these devices were measured in accordance with Blue Angel award criteria by using the RISO original ink cartridges and fulfilled the requirements. In general, new electronic devices emit volatile substances into the indoor air. Therefore, please ensure more frequent air exchange in rooms where new device is installed or directly at the workplace, especially during the first days of use.

Noise Emissions

The value of the declared A-weighted sound power level L_{Wad} :

	FW5230 FW5231		FW5000		FW1230
Speed	121ppm		<mark>92ppm</mark>		<mark>121ppm</mark>
Mode	monochrome	Color	monochrome	Color	Monochrome
LwAd	<mark>78,7dB(A)</mark>	<mark>78,4dB(A)</mark>	<mark>76,5dB(A)</mark>	<mark>77,0dB(A)</mark>	<mark>78,7dB(A)</mark>

Energy Data

Energy data of the device FW5230, FW5231, FW5000, FW1230 according to the requirements of RAL-UZ 205

Information on the Device FW5230, FW5231, FW5000, FW1230

Electric power consumption of a device depends both on its characteristics and on the way you use it. The device FW5230, FW5231, FW5000, FW1230 are designed and pre-set so that you can save electricity costs. It switches over to the mode "ready" after the last print. From there, the device can immediately start printing again if required. If not required, the device switches over to electric power saving modes in two steps after a certain time, which is called activation time. In these modes, it consumes less power (watt).

The device will take some more time to print again from an electric power saving mode than from the mode "ready". This delay is called return time. The device is designed in such a way that switching it on and off up to twice a day to the plug-in off mode will not cause damage.

You find the single values of power consumption as well as of activation and return times in the table below. The values stated there are pre-set when the device is delivered. The device meets the Blue Angel requirements with these values.

Overview of the Operation Modes of the Device FW5230, FW5231, FW5000, FW1230

Print speed (DIN A4 format; determined according to ISO/IEC 24734):

At monochrome printing: 121 pages/minute (FW5230, FW5231, FW1230), 92 pages/minute (FW5000) At colour printing: 121 pages/minute (FW5230, FW5231), 92 pages/minute (FW5000)

Symbol on the Switch/Button	Operation Mode	* Power Consumption	
	Highest possible power consumption: at switch on	920	

	Printing (continuous operation at 121/92 pages/minute) monochrome	225 at 121 ppm 180 at 92 ppm	Activation Time** (minutes)	
	Ready	72 (FW 5230, FW 5231, FW 1230) 68 (FW 5000)	0	Return Time*** (seconds)
	Backlight Off	70 (FW5230, FW5231, FW1230) 66 (FW5000)	10 (160)	1 (FW5230, FW5231, FW1230) 2 (FW5000)
\mathbf{C}	Sleep	1,1	45 (160) or Switch actuation	53 (FW5230, FW5231, FW1230) 29 (FW5000)
٢	Standby (Power Off)	0,4	90 (1120) or Switch actuation	-
	Main Power Off	0	Switch actuation	-

- * Averaged values, measured without accessories (e.g. stapler)
- ** Activation time is the time that elapses after the end of the print process until the device switches over to the respective operation mode. The figures in brackets indicate the range, in which the activation time can be changed; see page 19 of the Administrator's Guide.
- *** Return time is the time which the device needs to return to ready mode for printing..

Energy Consumption of the Device FW5230, FW5231, FW1230

For the standard use cycle according to ENERGY STAR, the following assumptions are made for this device: 32 print jobs per working day, each with 228 pages, single-sided at monochrome printing (7296 pages/day).

Hence, the energy consumption for a week in standard usage cycle according to ENERGY STAR version 2.0 (7-day week with 5 working days of 8 hours each) is 4,5 kWh per week determined with test pattern A according to ISO 10561:1999.

Energy Consumption of the Device FW5000

For the standard use cycle according to ENERGY STAR, the following assumptions are made for this device: 32 print jobs per working day, each with 132 pages, single-sided at monochrome printing (4224 pages/day).

Hence, the energy consumption for a week in standard usage cycle according to ENERGY STAR version 2.0 (7-day week with 5 working days of 8 hours each) is 5,1 kWh per week determined with test pattern A according to ISO 10561:1999.

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

Regarding the electric power saving modes you can partly change their activation times. If you shorten an activation time, the device will faster switch over to an electric power saving mode and you will save electricity costs. If you, however, want to extend an activation time, please consider: the device will then switch down later or not at all. Thus, it will stay longer in a mode of increased power consumption and, hence, consume more electric power. Then, in addition, it might no longer meet the maximum value for electric power consumption of the Blue Angel. We recommend not to extend the activation times.