



KONICA MINOLTA



# **bizhub 287/227**

## Service Launch Guide

08/2015

# Konica Minolta bizhub 287/227

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# Konica Minolta bizhub 287/227

## Specification & Installation Guide



























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06/26/2015

### bizhub 287/227 Specifications

Type	Monochrome Printer/Copier/Scanner
Document holder	Stationary (mirror scanning)
Photoconductor	OPC
Luminous source	LED light-source illumination
Copying system	Laser electrostatic copy method
Developing system	Dry 2-component developing method
Fusing system	Roller Fusing
Resolution	Scanning: 600 x 600 dpi Printing: 1800 (equivalent) x 600 dpi
Document holder	Types: Sheets, books (2-page spreads), three-dimensional objects Size: Maximum 11" x 17" Weight: 4.4 lb.
Paper	Plain Paper (16 lb. to 24 lb.) Thick Paper 1 (24.25 lb. to 32 lb.) Thick Paper 1+ (32.25 lb. to 41.75 lb.) Thick Paper 2 (42 lb. to 55.5 lb.) Thick Paper 3 (55.75 lb. to 68 lb.)** Recycled Paper (16 lb. to 24 lb.) Special Paper (16 lb. to 24 lb.) Letterhead (16 lb. to 24 lb.) Color Paper (16 lb. to 24 lb.) 1-Sided Special Paper (16 lb. to 24 lb.) OHP Transparencies*, envelopes*, label sheets*, tabs*, postcards** *Can only be fed through the bypass tray. **Cannot be duplexed.
Copy sizes	<b>1st Tray:</b> 5.5" x 7.1" to 11.7" x 14.3** <b>2nd Tray:</b> 5.5" x 7.1" to 11.7" x 17.0** <b>Bypass Tray:</b> 3.6" x 5.5" to 11.7" x 17.0** *There are six Foolscap sizes: 220 x 330mm (☐), 8.5" x 13.5", 8.5" x 13" (☐), 8.25" x 13 (☐), 8.12" x 13.25" (☐) and 8" x 13" (☐). Any one of these sizes can be selected. For details, please consult with your authorized Konica Minolta Service representative.
Paper tray capacity	<b>1st Tray and 2nd Tray:</b> Thin Paper/Plain Paper/Recycled Paper/Letterhead/Color Paper/1-Sided Special Paper: 500 sheets; Thick Paper 1/1+/2/3: 150 sheets
Paper tray capacity (cont.)	<b>Bypass Tray:</b> Plain Paper/Recycled Paper/Special Paper/Letterhead/Color Paper/1-Sided Special Paper: 100 sheets; Thick Paper 1/1+/2/3/4/OHP Transparencies/Postcards/Tabs: 20 sheets; Envelopes: 10; Label Sheets: 10 sheets

Copy exit tray capacity	Thin Paper: 100 sheets Plain Paper: 250 sheets Thick Paper: 10 sheets Overhead Projection Transparencies*: 1 sheet *Can only be fed through the bypass tray.																					
Warm-up time	Less than 15 seconds (at room temperature/73° F)																					
Image loss width	Leading Edge: 0.165" Trailing Edge: 0.118" Rear Edge: 0.118" Front Edge: 0.118"																					
First copy	<b>287:</b> 5.3 sec or less <b>227:</b> 5.3 sec or less																					
Print speed*: (Simplex/Duplex)	<b>bizhub 287:</b> Plain paper: 28 sheets/min. Thick 1/Thick 1+/Thick 2/Thick 3: 18 sheets/min.  <b>bizhub 227:</b> Plain paper: 22 sheets/min. Thick 1/Thick 1+/Thick 2/Thick 3: 18 sheets/min.																					
Print speed (ppm)*:	<b>Single Sided/Plain Paper:</b> <table><tr><td><b>Size</b></td><td><b>287</b></td><td><b>227</b></td></tr><tr><td>11" x 17"</td><td>14</td><td>14</td></tr><tr><td>8.5" x 14"</td><td>16</td><td>16</td></tr><tr><td>8.5" x 11" </td><td>28</td><td>22</td></tr><tr><td>8.5" x 11" </td><td>20</td><td>20</td></tr><tr><td>5.5" x 8.5" </td><td>28</td><td>22</td></tr><tr><td>8" x 13" </td><td>16</td><td>16</td></tr></table> *Using 1st Tray	<b>Size</b>	<b>287</b>	<b>227</b>	11" x 17"	14	14	8.5" x 14"	16	16	8.5" x 11" 	28	22	8.5" x 11" 	20	20	5.5" x 8.5" 	28	22	8" x 13" 	16	16
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5.5" x 8.5" 	28	22																				
8" x 13" 	16	16																				
Magnification ratios	1.0 (full size: 1.00±0.5% or less) Enlarge: 121.4%, 129.4%, 154.5%, 200% Reduce: 78.5%, 73.3%, 64.7%, 50.0% Minimal: 93% Stored Zoom Ratios: 3 "Minimal" zoom ratio (90% to 99.9%)																					
Multiple copies	1 to 9,999 sheets																					
Density control	Copy Density: Manual Density Adjustment (9 Levels); Background Density: Automatic and Manual Density Adjustments (9 levels)																					

continued

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



### bizhub 287/227 Specifications continued

Power requirements	120V, 12 A, 60 Hz
Power consumption	1.5 kW or less
TEC Value	<b>287:</b> 2.31 kWh <b>227:</b> 1.89 kWh
Dimensions (with control panel and document feeder)	23.0" (W) x 26.0" (D) x 28.9" (H)
Space requirements*	35.4" (W) x 46.9" (D) x 61.5" (H)
Memory/Hard Disk	4 GB/250 GB HDD (std)
Weight	Approx. 124.6 lb.

\* The indicated space requirements represent the space required to pull out the paper tray and the tray extension of the bypass tray and with the ADF open.

### Duty Cycle


Up to **287:** 120,000, **227:** 100,000.

Maximum monthly copy/print volume supported under standard vendor supplied service. Defines the upper end of the expected customer volume for the device. Customers should consider multiple machines if average monthly volume approaches duty cycle on continual basis.

### Environmental Requirements

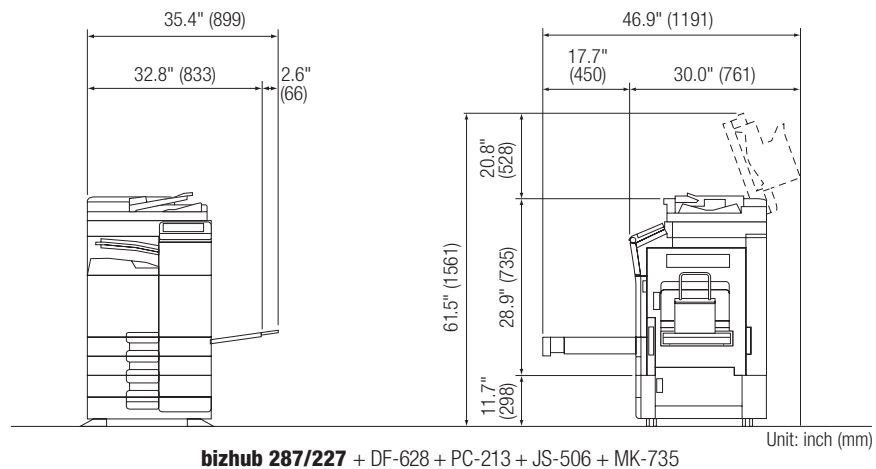
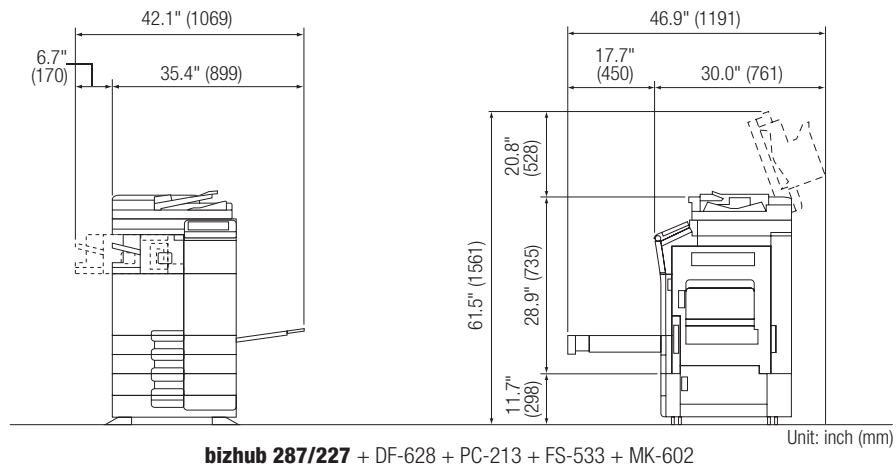
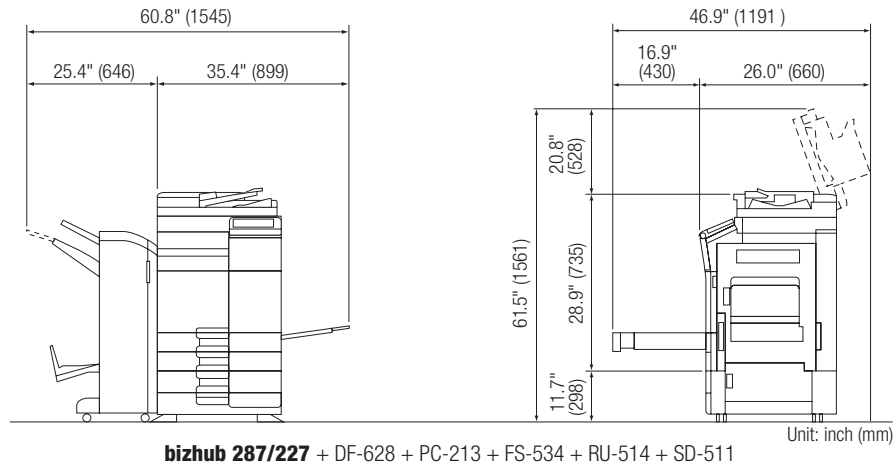
Temperature	50° F to 86° F
Humidity	15% to 85%
Noise during operation	<b>287:</b> 66.7 dB <b>227:</b> 65.8 dB
Noise during full operation (FS-534/FS-533)	<b>287:</b> 68.7 dB or less <b>227:</b> 67.8 dB or less
Noise during standby	40.5 dB or less
Ozone emission	1.5 mg/h

### Electrical Requirements

Line Options	Dedicated	NEMA Diagram for 5-15R 
Voltage:	120 V AC	
Amperage	12 A	
Cycles	60 Hz	
NEMA Part No:	5-15R	
Cord Length	6.6 ft.	

Note: The main electrical outlet must be located within 6.6 feet from the right rear corner of the bizhub 287/227 main unit.

### Space Requirements



**NOTICE:** Be sure to allow a clearance of 8 inches (200 mm) or more at the back of this machine for the ventilation duct.

### Component Considerations

#### Automatic Duplex Unit (Standard)



Support Paper Type	Plain Paper (16 lb. to 24 lb.) Thick Paper 1 (24.25 lb. to 32 lb.) Thick Paper 1+ (32.25 to 41.75 lb.) Thick Paper 2 (42 lb. to 55.5 lb.) Recycled Paper (16 lb. to 24 lb.) Special Paper (16 lb. to 24 lb.) Letterhead (16 lb. to 24 lb.) Color Paper (16 lb. to 24 lb.)
Support Paper Size	11.7" x 17" to 5.5" x 8.5"; 4" x 6"; 8" x 13"; Custom: (W) 3.9" to 12.625" x (L) 5.8" to 18"
Power Requirements	Supplied from main unit

\*There are six Foolscap sizes: 220 x 330mm (☐), 8.5" x 13.5", 8.5" x 13" (☐), 8.25" x 13" (☐), 8.12" x 13.25" (☐) and 8" x 13" (☐). Any one of these sizes can be selected. For details, please consult with your authorized Konica Minolta Service representative.

#### OC-514 Original Cover



Type	Original Cover/Platen Cover
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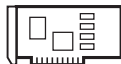
#### DF-628 Reversing Automatic Document Feeder



Type	Reversing Automatic Document Feeder
Support Paper Size	1-Sided/2-Sided Originals/Mixed Originals: 11" x 17"☐ to 5.5" x 8.5"☐
Support Paper Weight	Single-Sided: 9.25 lb. bond to 34 lb. bond Double-Sided: 13.25 lb. bond to 34 lb. bond Mixed Original: 13.5 lb. bond to 34 lb. bond 1-Sided Thin Paper (9.25 lb. to 13.063 lb.) 1-Sided Plain Paper (13.25 lb. to 34 lb.) 2-Sided Plain Paper (13.25 lb. to 34 lb.) Mixed Original Plain Paper (13.25 lb. to 34 lb.)
Paper Capacity	Max. 100 sheets (21.25 lb.)(Single-Sided/Double-Sided Originals)
Paper Transfer Speed	45 image/min (one-sided @ 300 dpi) (B&W/Color) 22 image/min (two-sided @ 300 dpi) (B&W/Color)
Power Requirements	Supplied from main unit
Max. Power Consumption	60.0 W or less
Dimensions WxDxH	23.0" x 19.8" x 5.0"
Weight	Approximately 19.8 lb.

### Component Considerations

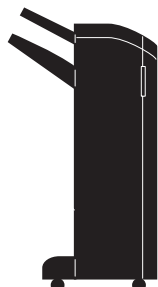
#### FK-513 Fax Kit











Memory Size	128 GB (Std) (128 GB of the 250GB HDD of the main engine is used for fax memory)
Number of Stored Pages	10,000 Pages (approx. 700 characters per page when 8.5" x 11" document is stored using fine resolution)
Number of Fax Lines	1 Fax Line
Communication	ECM/Super G3
Compatible Lines	PSTN, PBX
Scanning Line Density	Ultra Fine: 600 x 600 dpi Super Fine: 16 dot/mm x 15.4 line/mm, 400 x 400 dpi Fine: 8 dot/mm x 7.7 line/mm, 200 x 200 dpi Normal: 8 dot/mm x 3.85 line/mm
Modem Speed	2.4 kbps-33.6 kbps
Compression	MH/MR/MMR/JBIG
Scanning/(Sending) Paper Size	Original Glass: Max. 11" x 17" ADF: 11" x 39" (Normal, Fine, Super Fine) 11" x 17" (Ultra Fine, Manual TX)
Recording Paper Size	11" x 17" to 5.5" x 8.5"
Transmission Speed	Less than 3 sec. (V.34, 33.6 Kbps, JBIG)
Scan Speed	2 sec. (Letter/Fine Mode)
Number of Abbr. Dial	2000
Number of Program Dial	400
Number of Group Dial	100 (Up to 500 destinations per group)
Sequential Multiple Station Transmission	Max. 600
Transmitting Functions	2-in-1 TX, Mixed Original, F-Code Transmission, Frame Erase Transmission, Sharpness, Header/Footer, Memory Transmission, Quick Memory Transmission, Timer Transmission, Incomplete Transmission Hold, Manual Transmission, Confidential Transmission, Password Transmission, Polling Transmission, Bulletin Function, Relay Transmission, Fax Forwarding Function, Overseas TX, V.34 OFF, ECM OFF
Receiving Functions	Duplex Print (RX), Manual Reception, Confidential Reception, Memory Reception, Polling Reception, Bulletin Function, Fax Forwarding (to any destination stored in the Address Book), TSI Routing (to any destination stored in the Address Book).

### Component Considerations continued

#### FS-534 Floor Finisher\* (50 sheets)



Type	Floor Finisher										
Output Trays	Output Tray 1, Output Tray 2, Folding Output Tray (Top of RU unit)										
Support Paper Type	<p><b>Output Tray 1 &amp; Output Tray 2:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper 1/1+/2/3 (24.25 lb. bond to 79.75 lb. bond), OHP Transparencies, Postcards*, Envelopes*, Label Sheets*, Letterhead*, Tabs*, Banner Paper*.</p> <p>Staple Settings: Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 23.94 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper 1 (24.25 lb. bond to 32 lb. bond), Thick Paper 1+ (32.25 lb. to 41.75 lb.), Thick Paper 2 (42 lb. to 55.5 lb.)</p> <p>* Fed into Output Tray 1</p>										
Support Paper Size	<p><b>Output Tray 1:</b> 12.25" x 18", 11" x 17" to 5.5" x 8.5"  </p> <p><b>Output Tray 2:</b> Group/Sort: 12.25" x 18", 11" x 17", 5.5" to 8.5"   Offset Group/Offset Sort: 12.25" x 18", 11" x 17" to 5.5" to 8.5", SRA3 Width: 7.188" to 12.625"; Length 5.875" to 18" Staple: 11" x 17" to 7.25" x 10.5"   Width: 7.188" to 11.688"; Length 5.875" to 17"</p> <p><b>Folding Output Tray:</b> 12.25" x 18", 11" x 17" to 5.5" x 8.5"   Width: 3.5" to 12.5"; Length 5.5" to 18"</p>										
Mode	Non-Sort, Sort, Group, Sort/Offset, Group/Offset, Sort and Staple										
Stacking Capacity	<p><b>Output Tray 1:</b> Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. to 24 lb.): 200 sheets. Thick Paper (24.25 to 79.75 lb.), OHP Transparencies, Postcards, Envelopes or Label Sheets, Letterheads, Tabs: 20 sheets</p> <p><b>Output Tray 2 – Group/Sort Mode:</b> Plain Paper (16 lb. to 24 lb.): 3,000 sheets of 8.5" x 11" or smaller, or 1,500 sheets of 8.5" x 14" or larger; or 500 sheets of 5.5" x 8.5" or smaller.</p> <p>Thick Paper (24.25 to 79.75 lb.), OHP Transparencies, Postcards, Envelopes, Labels, Letterheads, Tabs: 20 sheets</p> <p><b>2nd Tray – Offset Group/Offset Sort:</b> 3,000 sheets (8.5" x 11" or smaller); 1,500 sheets (8.5" x 14" or larger); 500 sheets (5.5" x 8.5" or larger)</p> <p>Thin Paper (14 lb. to 15 lb.) Plain Paper (16 lb. to 24 lb.) Recycled Paper (16 lb. to 24 lb.) Thick Paper (24.25 lb. to 79.75 lb.), OHP Transparencies, Postcard, Envelope, Label sheets, Letterhead, Tabs: 20 sheets</p> <p><b>Staple</b> Thin Paper (14 lb. to 15 lb.): 50 sheets Plain Paper (16 lb. to 24 lb.): 50 sheets Recycled Paper (16 lb. to 24 lb.): 50 sheets Thick Paper (24.25 lb. to 32 lb.): 30 sheets Thick Paper 1+ (32.25 lb. to 41.75 lb.): 30 sheets Thick Paper 2 (42 lb. to 55.5 lb.): 20 sheets</p> <table> <tr> <td>2–9 Sheets:</td><td>100 Sets</td></tr> <tr> <td>10–20 Sheets:</td><td>50 Sets</td></tr> <tr> <td>21–30 Sheets:</td><td>30 Sets</td></tr> <tr> <td>31–40 Sheets:</td><td>25 Sets</td></tr> <tr> <td>41–50 Sheets:</td><td>20 Sets</td></tr> </table> <p><b>Folding Output Tray:</b> 100 sheets Thin Paper (14 lb. to 15.5 lb.) Plain Paper (16 lb. to 24 lb.) Recycled Paper (16 lb. to 24 lb.) Thick Paper (24.25 lb. to 79.75 lb.): 20 sheets</p>	2–9 Sheets:	100 Sets	10–20 Sheets:	50 Sets	21–30 Sheets:	30 Sets	31–40 Sheets:	25 Sets	41–50 Sheets:	20 Sets
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10–20 Sheets:	50 Sets										
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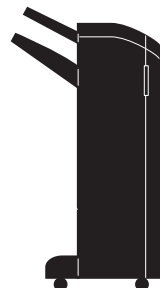
\* NOTE: Please refer to engine specifications for additional paper size and weight limitations. Installation of the FS-534 requires the relay unit that is appropriate for the engine.

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### Component Considerations

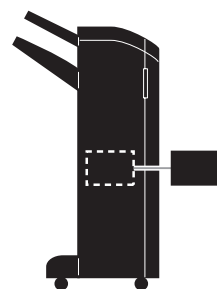
#### FS-534 Floor Finisher\* continued



Staple Mode	Paper Sizes: 8.5" x 11" to 11" x 17"; Corner, 2 Position (Side, Top)
Available Options	PK-520 Punch Kit (2/3-hole Punch)
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 56 W
Dimensions (W x D x H)	11.4" x 25.3" x 40.3" (When tray is pulled out 25.9" (W))
Weight Approx.	79.4 lb.
Consumables	SK-602 Staples (5,000 Staples x 3)

\* NOTE: Please refer to engine specifications for additional paper size and weight limitations. Installation of the FS-534 requires the relay unit that is appropriate for the engine.

#### FS-534 Staple Finisher + SD-511 Saddle Stitcher\* A combination of FS-534 (see specs listed above) and SD-511 (specs listed below)



Applicable	FS-534
Number of bins	1 Tray
Paper types	Thin Paper (14 lb. to 15 lb.), Plain Paper (15 to 24 lb.), Thick Paper 1/1+2 (24.25 to 55.5 lb.)* *Can only be used as a cover page.
Paper sizes	12.25" x 18" □, 11" x 17", 8.5" x 14" □, 8.5" x 11",
Number of Center Stapled or Half-Folded Sheets	Plain Paper (15 to 24 lb.) 1-3 Sheets: 20 Sets 4-10 Sheets: 10 Sets 11-20 Sheets: 5 Sets
Number of Tri-Folded Sheets (Letter Only)	1 Sheet: 30 Sets 2-3 Sheets: 10 Sets
Staple mode	Booklet, 2-point staple
Maximum staple sheet	20 sheets: (19 sheets/14 to 24 lb.) + (1 sheet/13 to 55.5 lb.)
Dimensions (W x D x H)	8.25" x 21.875" x 21.563"
Weight	52.94 lb.
Consumables	SK-602 (5,000 x 3 pkg/case)
Power requirements	Supplied from finisher

\*NOTE: The SD-511 Saddle Stitcher is not available as a separate accessory.

#### RU-514 Relay Unit (Required for FS-534)



Type	Installed into the Main Body
Powered Requirements	Supplied from Main Engine
Dimensions (W x D x H)	16.3" x 21.9" x 6.0"
Weight	Approx. 7.5 lbs.

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



### Component Considerations continued

#### FS-533 Inner Finisher\* (Staple Function only) (50 sheets)




Type	Inner Staple Finisher
Output Trays	Output Tray 1
Support Paper Types	<p><b>Group/Sort:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper (24.25 lb. bond to 79.75 lb. bond), OHP Transparencies, Postcards, Envelopes, Label Sheets, Letterhead, Tabs, Banner Paper.</p> <p><b>Offset Group, Offset Sort:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper (24.25 lb. bond to 79.75 lb. bond)</p> <p><b>Staple Settings:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 23.94 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper (24.25 lb. bond to 55.25 lb. bond)</p>
Mode	Group, Sort, Offset Group, Offset Sort, Staple
Support Paper Size	<p><b>Group/Sort:</b> 12.25" x 18"  , 11" x 17"  to 5.5" x 8.5"  /  , 4" x 6"  , SRA3 </p> <p>Width: 3.56" to 12.625"; Length: 5.5" to 47.25"</p> <p><b>Offset Group/Offset Sort:</b> 12.25" x 18"  , 11" x 17"  , 8.5" x 11"  /  , 7.25" x 10.5" </p> <p>Width: 8.25" to 11.69"; Length: 7.17" x 17"</p> <p><b>Staple:</b> 11" x 17"  , 8.5" x 14"  , 8.5" x 11"  /  , 7.25" x 10.5" </p> <p>Width: 8.25" to 11.69"; Length: 7.17" x 17"</p>
Stacking Capacity	<p><b>Group, Sort, Offset Group, Offset Sort:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.): 500 sheets of 8.5" x 11" or smaller; or 250 sheets of 8.5" x 14" or larger Thick Paper (24.25 lb. bond to 79.75 lb. bond), OHP Transparencies, Postcards, Envelopes, Label Sheets, Letterhead, Tabs, Banner Paper: 10 sheets</p> <p><b>Staple:</b> Thin Paper (14 lb. to 15 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.): 50 sheets of 8.5" x 11" or smaller; or 30 sheets of 8.5" x 14" or larger Thick Paper (24.25 lb. bond to 55.5 lb. bond): 2 sheets</p>
Staple Mode	Corner Front / Back 2-point
Available Options	PK-519 Punch Kit (2-3-hole Punch)
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 40W
Dimensions (W x D x H)	18.6" x 23" x 7.7"
Weight Approx.	26.5 lb.
Consumables	SK-602 Staples (5,000 Staples x 3)


\* NOTE: Installation of the FS-533, on some engines, requires a mount kit.

### Component Considerations


#### MK-602 Mount Kit (Required for FS-533)

	Type	Internal Component
	Function	Required to install the FS-533 Inner Finisher on the bizhub 287/227

#### PK-519 Punch Kit (For FS-533)

	Applicable	Finisher FS-533
	Number of holes	2 or 3 holes
	Support Paper Weight	Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. to 24 lb.), Thick paper (24.25 lb. bond to 79.75 lb. bond)
	Support Paper Size	2-hole Punch Setting: 11" x 17", 8.5" x 14", 8.5" x 11" 3-hole Punch Setting: 11" x 17", 8.5" x 11"
	Power Requirements	Supplied from Finisher FS-533
	Dimensions (WxDXH)	4.3" x 19.0" x 8.0"
	Weight Approx.	Approx. 7 lb.

#### PK-520 Punch Kit (For FS-534)

	Applicable	FS-534
	Number of holes	2 or 3 holes
	Support Paper Weight	Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.),
	Support Paper Size	2-hole Punch Setting: 11" x 17", 8.5" x 14", 8.5" x 11" 3-hole Punch Setting: 11" x 17", 8.5" x 11"
	Power Requirements	Supplied from Finisher FS-534
	Dimensions (W x D x H)	2.4" x 19.4" x 5.6"
	Weight Approx.	Approx. 3.9 lb.

### Component Considerations continued

#### JS-506 Job Separator Tray\*



Output tray	Output Tray 1, Output Tray 2
Mode	Group, Sort, Offset Group*, Offset Sort* * Fed into Output Tray2
Support Paper Types	<b>Group/Sort:</b> Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper (24.25 lb. bond to 79.75 lb. bond), OHP Transparencies, Postcards*, Envelopes, Label Sheets, Letterhead, Tabs*, Banner Paper*. <b>Offset Group, Offset Sort:</b> Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Thick Paper (24.25 lb. bond to 79.75 lb. bond) * Fed into Output Tray 2
Support Paper Size	<b>Output Tray 1:</b> 12.25" x 18"□, 11" x 17"L to 5.5" x 8.5"□/□, SRA3□ Width: 3.56" to 12.625"; Length: 5.5" to 18" <b>Output Tray 2:</b> Group/Sort: 12.25" x 18"□, 11" x 17"□ to 5.5" x 8.5"□/□, 4" x 6"□, SRA3□ Width: 3.56" to 12.625"; Length: 5.5" to 47.25" <b>Offset Group/Offset Sort:</b> 11" x 17"□, to 7.25" x 10.5"□/□ Width: 7.17" to 12.25"; Length: 5.8" to 18"
Stacking Capacity	<b>Output Tray 1:</b> Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.): 100 sheets <b>Output Tray 2:</b> Group/Sort: Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.): 150 sheets; Thick Paper (24.25 lb. bond to 79.75 lb. bond), Transparency, Postcard, Label sheets: 20 Sheets; Envelope: 10 Sheets; Banner Paper: 1 Sheet <b>Offset Group/Offset Sort:</b> Thin Paper (14 lb. to 15.5 lb.), Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.): 150 sheets; Thick Paper (24.25 lb. bond to 79.75 lb. bond): Not specified
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 24W
Dimensions (W x D x H)	19.4" x 18.5" x 8.9"
Weight Approx.	3.3 lb.

\* NOTE: Please refer to engine specifications for additional paper size and weight limitations.

### Component Considerations

#### PC-113 Paper Feed Cabinet



Type	1 x 500 sheet universal drawer + storage
Support Paper Types	Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Single Side Only Paper (16 lb. bond to 24 lb. bond), Special Paper (16 lb. bond to 24 lb. bond), Letterhead (16 lb. bond to 24 lb. bond), Colored Paper (16 lb. bond to 24 lb. bond), Thick Paper 1 (24.25 lb. bond to 32 lb. bond), Thick Paper 1+ (32.25 lb. bond to 41.75 lb. bond), Thick Paper 2 (42 lb. bond to 55.5 lb. bond)
Support Paper Size	11" x 17" (L) to 8.5" x 11" (L/P), 5.5" x 8.5" (L), 8" x 13" (L)* * There are six Foolscap sizes: 220 x 330mm, 8.5" x 13.5", 8.5" x 13", 8.25" x 13, 8.12" x 13.25" and 8" x 13". Only one of these sizes can be selected. For details, please consult with your authorized Konica Minolta Service representative.
Paper Capacity	Tray 3: Plain paper, Recycled paper, 1-sided special paper, Special paper, Letterhead, Colored paper: 500 sheets, Thick 1, Thick 1+, Thick 2: 150 sheets
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 15W
Dimensions (W x D x H)	22.2" x 25.2" x 14.0"
Weight Approx.	50.7 lb.

#### PC-213 Paper Feed Cabinet




Type	2 x 500 sheet universal drawers
Support Paper Types	Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Single Side Only Paper (16 lb. bond to 24 lb. bond), Special Paper (16 lb. bond to 24 lb. bond), Letterhead (16 lb. bond to 24 lb. bond), Colored Paper (16 lb. bond to 24 lb. bond), Thick Paper 1 (24.25 lb. bond to 32 lb. bond), Thick Paper 1+ (32.25 lb. bond to 41.75 lb. bond), Thick Paper 2 (42 lb. bond to 55.5 lb. bond)
Support Paper Size	11" x 17" (L) to 8.5" x 11" (L/P), 5.5" x 8.5" (L), 8" x 13" (L)* *There are six Foolscap sizes: 220 x 330mm (☐), 8.5" x 13.5", 8.5" x 13" (☐), 8.25" x 13 (☐), 8.12" x 13.25" (☐) and 8" x 13" (☐). Any one of these sizes can be selected. For details, please consult with your authorized Konica Minolta Service representative.
Paper Capacity	Tray 3: Recycled paper, 1-sided special paper, Special paper, Letterhead, Colored paper: 500 sheets, Thick 1, Thick 1+, Thick 2, Thick 3: 150 sheets Tray 4: Thin paper, Plain paper, Recycled paper, 1-sided special paper, Special paper, Letterhead, Colored paper: 500 sheets, Thick 1, Thick 1+, Thick 2: 150 sheets
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 15W
Dimensions (W x D x H)	22.2" x 25.2" x 14.0"
Weight Approx.	57.3 lb.

### Component Considerations continued

#### PC-413 Paper Feed Cabinet



Type	Large Capacity Cassette
Support Paper Types	Plain Paper (16 lb. bond to 24 lb. bond), Recycled Paper (16 lb. to 24 lb.), Single Side Only Paper (16 lb. bond to 24 lb. bond), Special Paper (16 lb. bond to 24 lb. bond), Letterhead (16 lb. bond to 24 lb. bond), Colored Paper (16 lb. bond to 24 lb. bond), Thick Paper 1 (24.25 lb. bond to 32 lb. bond), Thick Paper 1+ (32.25 lb. bond to 41.75 lb. bond), Thick Paper 2 (42 lb. bond to 55.5 lb. bond)
Support Paper Size	8.5" x 11" 
Paper Capacity	Plain paper, Recycled paper, 1-sided special paper, Special paper, Letterhead, Colored paper: 2500 sheets, Thick 1, Thick 1+, Thick 2: 1000 sheets
Power Requirements	Supplied from Main Unit
Max. Power Consumption	Less than 45W
Dimensions (W x D x H)	22.2" x 25.2" x 14.0"
Weight Approx.	54.0 lb.

#### DK-513 Enhanced Copy Desk



Type	Storage drawer only
Function	Stores printing materials such as paper or toner. Required when additional paper drawers are not installed, to bring the device to operational height
Dimensions (WxDxH)	22.2" x 25.2" x 14.0"
Weight Approx.	48.0 lb.

#### KP-101 10-Key Pad



Type	10-Key Pad
Function	Provides hard keys for entering numerical values and supports Voice Guidance function available with optional LK-104 v3 i-Option License Kit. Meets Section 508 Accessibility requirements.

#### AU-102 Biometric Authentication Unit



Biometric Sensor System	Transmission-type optical system
Verification Time	Approx. 1 sec. or less
Interface	USB 2.0
Dimensions WxDxH	Approx. 2.32" x 3.25" x 2.94"
Weight	Approx. 3 oz. (excluding USB cable)
Max. Power Consumption	DC 5 V, 500 mA
System Conditions (during operation)	Ambient temperature: 41° to 95° (F) Humidity: 20% to 80% (No dew condensation)
System Conditions (during non-operation)	Ambient temperature: 32° to 122° (F) Humidity: 20% to 80% (No dew condensation)

NOTE: WT-506 Working Table is required for AU-102 Biometric Authentication Unit.

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## Specification & Installation Guide



### Component Considerations

#### AU-204H Magnetic Stripe Card Reader



Dimensions (WxHxD)	1.28" x 1.23" x 3.94"
Weight	4.5 oz.
Power Supply	Supplied from USB Port
System Conditions (operating mode)	Ambient Temperature: 40° to 158° F Humidity: 10% to 90%
Transmit Frequency	3-60 i.p.s.
Certifications	ISO 7810 and ISO 7811/AAMVA
Card Type Compatibility	All magnetic stripe cards

NOTE: WT-506 Working Table required for AU-204H Magnetic Stripe Card Reader.

#### AU-205H IC Card Reader\*



Dimensions (WxHxD)	2.8" x 3.7" x 0.6"
Host Interface	USB 2.0 (also compliant with USB 1.1)
Power Supply	Supplied from USB Port
Card Protocols Low Frequency (125 kHz)	HID PROX, HID Indaia, EM Prox
Card Protocols High Frequency (13.5 MHz)	<p><b>CCID:</b> MIFARE Classic™ 1K/4K, Ultra Light, Ultra Light C, Plus, MIFARE DESFire™ 0.6, MIFARE DESFire™ EV1, IC Card, iCLASS SE/SR®, MIFARE SE™, DESFire EV1 SE, T=CL, ISO 14443 A with up to 848 kbps transmission rate (depending on card1), ISO 15693 with up to 26 kbps transmission rate (depending on card)</p> <p><b>Keyboard Wedge:</b> MIFARE™ Classic 1K/4K, Ultra Light, Ultra Light C, Plus (Security Lvl 1), MIFARE DESFire™ 0.6, MIFARE DESFire™ EV1 (MAC/DES/3DES/3K3DES/ AES), IC Card, iCLASS SE/SR®, MIFARE SE™, DESFire EV1 SE</p>

\*NOTE: May not be available at time of launch.

#### AU-211P CAC/PIV Solution w/Certificate

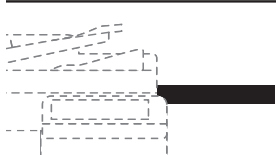


Dimensions (WxHxD)	2.75" x 2.75" x 0.39"
Weight	0.13 lbs.
Power Supply	Supplied from USB Port
System Conditions (operating mode)	0° to 122° F
Interface	Full Speed USB (12 Mbps)
Connector Shape	USB A Type Connector
Compatible Card	PKI-C-Card (PIV, CAC)

NOTE: WT-506 Working Table required. Please contact your local Government Account Manager for additional information.  
Not available at time of launch.

### Component Considerations continued

#### WT-506 Working Table

	Type	External Table
	Function	Holds AU-102 Biometric Authentication Unit, AU-204H Magnetic Stripe Card Reader <sup>1</sup> , AU-205H IC Card Reader <sup>2</sup> , or AU-211P CAC/PIV Solution <sup>3</sup> ; Can be used as a place holder for originals and/or output.
	Dimensions WxDxH	18.30" x 16.33" x 1.5"

<sup>1</sup> AU-204H Magnetic Stripe Card Reader requires WT-506.

<sup>2</sup> AU-205H IC Card Reader can be mounted on WT-506 (or internally with MK-735).

<sup>3</sup> AU-211P requires WT-506. Please contact your local Government Account Manager for additional information.

#### EK-608 USB Host/Local Interface



Type	USB Interface and USB Cable
Function	Required to connect optional External Keyboard (or can use EK-609 when Bluetooth printing is also required) or optional i-Option LK-104 v3 Voice Guidance License kit.

#### EK-609 USB Host/Local Interface with Bluetooth



Type	USB Interface and USB Cable
Function	Supports Bluetooth Printing. Required to connect optional External Keyboard (or can use EK-608 if Bluetooth printing is not required) or optional i-Option LK-104 v3 Voice Guidance License kit.

#### MK-735 Mount Kit



Type	Internal Component
Function	Required if you wish to install the AU-205H internally in the device.

#### LK-102 v3 i-Option License Kit

Type	License Key
Function	Enhanced PDF Encryption (128-bit AES Encryption), PDF/A (1a/1b) and Linearized PDF file support.

Note: The LK-110 supports the same functions as the LK-102 v3, therefore, both license kits cannot be installed on the same device.

#### LK-104 v3 i-Option License Kit

Type	License Key
Function	Voice Guidance

#### LK-105 v4 i-Option License Kit

Type	License key
Function	Provides Searchable PDF function

Note: The LK-110 supports the same functions as the LK-105 v3, therefore, both license kits cannot be installed on the same device.



### Component Considerations

#### LK-106 i-Option License Kit

Type	License key
Function	Supports Bar Code Font Printing

#### LK-107 i-Option License Kit

Type	License key
Function	Supports Unicode Font Printing

#### LK-108 i-Option License Kit

Type	License key
Function	Supports OCR Font Printing

#### LK-110 v2 i-Option License Kit

Type	License Key
Function	OOXML format file conversion for docx/xlsx, Fax to searchable PDF, convert box data to compact PDF, direct print e-mail attached file. Combines LK-102 (Encrypted PDF) & LK-105 (Searchable PDF/OCR) functionality.

*Note: If you install the LK-110 on a device, you cannot install the LK-102 v3 and/or LK-105 v3 on the same device.*

#### LK-111 i-Option License Kit

Type	License Key
Function	Provides ThinPrint client support

#### UK-212 Wireless LAN Upgrade Adapter



Type	WLAN Adapter
Function	Provides wireless secure connection for printing, scanning and Authentication.

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## Specification & Installation Guide



### Mixed Original Support

● Possible    ✕ Not Possible

Document Size <sup>2</sup>	Maximum Document Width <sup>1</sup>					
	11" x 17" landscape	8.5" x 11" portrait	8.5" x 14" landscape	8.5" x 11" landscape	5.5" x 8.5" portrait	5.5" x 8.5" landscape
11" x 17" (☐)	●	●	✕	✕	✕	✕
8.5" x 11" (☐)	●	●	✕	✕	✕	✕
8.5" x 14" (☐)	●	●	●	●	●	✕
8.5" x 11" (☐)	●	●	●	●	●	✕
5.5" x 8.5" (☐)	✕	✕	●	●	●	✕
5.5" x 8.5" (☐)	✕	✕	✕	✕	✕	●

<sup>1</sup> Indicates the width of the widest document size of the mixed originals.

<sup>2</sup> Indicates the document sizes that can be mixed together based on the maximum document width.

### Standard Paper Tray Support

Main Unit – bizhub 287/227 (Paper Tray 1 and 2)

Component	Capacity	Size	Weight
Tray 1	500 sheets	8.5" x 14"	14 lb. bond to 68 lb. bond
Tray 2	500 sheets	11" x 17"	14 lb. bond to 68 lb. bond
Bypass	150 sheets	11" x 17"	16 lb. bond to 79.75 lb. bond

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## Specification & Installation Guide



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### Print Controller (Standard)

Type	Internal Type
CPU	1.2 GHz (shared with copier)
Memory	4 GB (shared with copier) 250 GB HDD (shared with copier)
Print Speed	<b>287:</b> 28 ppm Letter <b>227:</b> 22 ppm Letter
Print Resolution	600 x 600 dpi (1800 equivalent x 600 dpi)
PDL	PCL 5e/c emulation, PCL6 (XL version 3.0), PS 3 (Version 3016) Emulation, XPS
Protocol	TCP/IP (IPv4/IPv6), BOOTP, ARP, ICMP, DHCP, DHCPv6, AutoIP, SLP, SNMP, FTP, LPR/LPD, RAW Socket, SMB over TCIP/IP, IPP, HTTP, POP, SMTP, LDAP, NTP, SSL, IPX, AppleTalk, Bonjour, NetBEUI, WebDAV, DPWS, S/MIME, IPsec, DNS, Dynamic DNS, LLNMR, LLTD, SSDP, SOAP
Support OS	Windows 2000, Windows XP, Windows XP 64-bit, Windows Vista, Windows Vista 64-bit, Windows 7, Windows 7 64-bit, Windows 8, Windows 8 64-bit, Windows Server 2003 R2, Windows Server 2003 64-Bit, Windows Server 2008, Windows Server 2008 64-bit, Windows Server 2012 Standard, Windows Server 2012 Datacenter. Mac OS 9.2 or later; Mac OS X 10.2 or later; Mac OS X 10.4 (Intel) or later; Linux
Font	PCL Resident Fonts: 80 Roman fonts PS3 Emulation Resident Fonts: 137 Roman Type 1 font
Interface	Standard Ethernet (10Base-T/100Base-TX/ 1000Base T); Hi-Speed USB 2.0, USB 1.1, USB Host

### Network Functions

#### Sending Scanned Data in an Email Message

Scanned data can be sent to a specified Email address. The destination is specified from the touch panel of this machine and the scanned data is sent as an Email attachment.

#### Sending Scanned Data as Files (FTP)

Scanned data is uploaded to a specified FTP server. The FTP server address, login password, and other information are entered from the touch panel of this machine. The data files uploaded to the FTP server can be downloaded from a computer on the network.

#### Sending Scanned Data to a Computer on the Network (SMB)

Scanned data can be sent to a shared folder on a specified computer. The name of the destination computer, login password, and other information are entered from the touch panel of this machine.

#### Saving Scanned Data in Boxes

Scanned data is uploaded to a specified web server. The host name, file path, user name, and password are entered on the touch panel of the machine. The data files uploaded to the server can be downloaded from a computer on the network.

#### Using the Machine as a Scanner

This machine can be used as a scanner. The scanner can be controlled from a PC connected to the network, and the scanned image can be loaded into an application on the PC to be processed.

#### Web Service

This machine can be used to access the Internet. No options are required to enable this function.

### Print Drivers

Page Desc. Language	Print Driver	Supported Operating Systems
PCL Driver	Konica Minolta PCL Driver	Windows Server 2003, Standard Edition (Service Pack 1 or later) Windows Server 2003, Enterprise Edition (Service Pack 1 or later) Windows Server 2003 R2, Standard Edition Windows Server 2003 R2, Enterprise Edition Windows XP Professional x64 Edition Windows Server 2003 Standard x64 Edition Windows Server 2003, Enterprise x64 Edition Windows Server 2003 R2, Standard x64 Edition Windows Server 2003 R2, Enterprise x64 Edition Windows Vista Business* Windows Vista Enterprise* Windows Vista Home Basic* Windows Vista Home Premium* Windows Vista Ultimate* Windows Server 2008 Standard* Windows Server 2008 Enterprise* Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows 7 Home Basic* Windows 7 Home Premium* Windows 7 Professional* Windows 7 Enterprise* Windows 7 Ultimate* Windows 8* Windows 8 Pro* Windows 8 Enterprise* Windows Server 2012 Datacenter Windows Server 2012 Standard *Supports 32-bit (x86) or 64-bit (x64) Environments

Page Description Language	Print Driver	Supported Operating Systems
PostScript 3 Emulation	Konica Minolta PostScript 3 Driver	Windows Server 2003, Standard Edition (Service Pack 1 or later) Windows Server 2003, Enterprise Edition (Service Pack 1 or later) Windows Server 2003 R2, Standard Edition Windows Server 2003 R2, Enterprise Edition Windows XP Professional x64 Edition Windows Server 2003 Standard x64 Edition Windows Server 2003, Enterprise x64 Edition Windows Server 2003 R2, Standard x64 Edition Windows Server 2003 R2, Enterprise x64 Edition Windows Vista Business* Windows Vista Enterprise* Windows Vista Home Basic* Windows Vista Home Premium* Windows Vista Ultimate* Windows Server 2008 Standard* Windows Server 2008 Enterprise* Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows 7 Home Basic* Windows 7 Home Premium* Windows 7 Professional* Windows 7 Enterprise* Windows 7 Ultimate* Windows 8* Windows 8 Pro* Windows 8 Enterprise* Windows Server 2012 Datacenter Windows Server 2012 Standard *Supports 32-bit (x86) or 64-bit (x64) Environments

continued

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### Print Drivers continued

Page Description Language	Print Driver	Supported Operating Systems
XPS Driver Emulation	Konica Minolta XPS Driver	Windows Vista Business* Windows Vista Enterprise* Windows Vista Home Basic* Windows Vista Home Premium* Windows Vista Ultimate* Windows Server 2008 Standard* Windows Server 2008 Enterprise* Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows 7 Home Basic* Windows 7 Home Premium* Windows 7 Professional* Windows 7 Enterprise* Windows 7 Ultimate Windows 8* Windows 8 Pro* Windows 8 Enterprise* Windows Server 2012 Datacenter Windows Server 2012 Standard *Supports 32-bit (x86) or 64-bit (x64) Environments
PostScript PPD Driver	Konica Minolta PostScript PPD Driver	Mac OSX 10.5, 10.6, 10.7, 10.8, 10.9, 10.10

Page Description Language	Print Driver	Supported Operating Systems
Fax Driver	Konica Minolta	Windows Server 2003, Standard Edition (Service Pack 1 or later) Windows Server 2003, Enterprise Edition (Service Pack 1 or later) Windows Server 2003 R2, Standard Edition Windows Server 2003 R2, Enterprise Edition Windows XP Professional x64 Edition Windows Server 2003 Standard x64 Edition Windows Server 2003, Enterprise x64 Edition Windows Server 2003 R2, Standard x64 Edition Windows Server 2003 R2, Enterprise x64 Edition Windows Vista Business* Windows Vista Enterprise* Windows Vista Home Basic* Windows Vista Home Premium* Windows Vista Ultimate* Windows Server 2008 Standard* Windows Server 2008 Enterprise* Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows 7 Home Basic* Windows 7 Home Premium* Windows 7 Professional* Windows 7 Enterprise* Windows 7 Ultimate* Windows 8* Windows 8 Pro* Windows 8 Enterprise* Windows Server 2012 Datacenter Windows Server 2012 Standard *Supports 32-bit (x86) or 64-bit (x64) Environments

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



### Print Specifications

Item	Specifications
Model	Built-in print system
Power Supply	Common with the main body
CPU	1.2 GHz (shared with copier)
RAM	4 GB
Hard Disk	250 GB (shared with copier)
Interface	Standard Ethernet (10Base-T, 100Base-TX or 1000Base-T) Standard USB 2.0, USB 1.1, USB Host
Frame Type	Ethernet 802.2 Ethernet 802.3 Ethernet II Ethernet SNAP
Supported Protocols	TCP/IP (IPv4/IPv6), BOOTP, ARP, ICMP, DHCP, DHCPv6, AutoIP, SLP, SNMP, FTP, LPR/LPD, RAW Socket, SMB over TCP/IP, IPP, HTTP, POP, SMTP, LDAP, NTP, SSL, IPX, AppleTalk, Bonjour, NetBEUI, WebDAV, DP-WS, S/MIME, IPsec, DNS, Dynamic DNS, LLNMR, LLTD, SSDP, SOAP
Print Speed	<b>287:</b> 28 ppm (Letter  /Simplex and Duplex)
Color/BW	<b>227:</b> 22 ppm (Letter  /Simplex and Duplex)
First Print Time	<b>287:</b> 5.9 sec. or less <b>227:</b> 6.9 sec. or less
Operating Environment Conditions	50° to 86° F, 15-85% RH
Resolution	600 x 600 dpi (1800 equivalent x 600 dpi)
Data Processing	600 x 600 dpi (Printing and faxing operations) 400 x 400 dpi (faxing operations) 200 x 200 dpi (faxing operations)
Supported Paper Sizes	Width: 4.0" to 11.0" Length: 6.0" to 17.0"
Printer Fonts	PCL Resident Fonts 80 Roman fonts PS3 Emulation resident Fonts: 137 Roman Type 1 fonts
Compatible Computers	IBM PC or compatible and Macintosh (Power PC or Intel Processor)

Item	Specifications
Supported Operating Systems	Server Windows Server 2003, Server 2003 R2, Server 2008, Windows Server 2003 x64, Server 2003 R2 x64, Server 2008 x64, Server 2008 R2 x64, Server 2012 x64
	Client Vista, 7/8, Windows XP x64, Vista x64, 7 x64, 8 x64, Windows Server 2003, Server 2003 R2, Server 2008, Windows Server 2003 x64, Server 2003 R2 x64, Server 2008 x64; Mac OS 9.2, OS X 10.2, 10.3, 10.4 PowerPC version, OS X 10.5 PowerPC, Intel ver., OS X 10.6, 10.7, 10.8 Intel ver.; Red Hat Enterprise Linux
Network	Ethernet (TCP/IP)
Web Browser*	Vista/7/8/Server 2003/Server 2008/Server 2008 R2/Server 2012: • Microsoft Internet Explorer 6/7/8/9/10 • Mozilla Firefox 3.5 or later Mac OS 9.x/Mac OS 10.x: • Mozilla Firefox 1.0 or later • Mozilla Firefox 3.5 or later Linux: • Mozilla Firefox 3.5 or later *JavaScript and cookies must be enabled on your web browser.
Flash Player	Adobe® Flash® Player • Plug-in Version 9.0 or later is required to select Flash-based display or use the DATA Management Utility (font/macro's data management)

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### Scanning

Type	Full-Color Scanner
Scanning Size	11" x 17" to 5.5" x 8.5
Scanning Resolution	Push Scanning: 600/400/300/200 dpi Pull Scanning: 600/400/300/200/100 dpi
Scanning Speed (Color/B&W)	<b>DF-628:</b> <sup>†</sup> Duplex: 22 opm (600 x 300 dpi) 17 opm (600 x 600 dpi) Simplex: 45 opm (600 x 300 dpi) 36 opm (600 x 600 dpi)
Main Function	Scan-to-Email, Scan-to-User Box (HDD), Scan-to-FTP, Scan-to-USB, Scan-to-SMB (Desktop Folder), Scan-to-Me, Scan-to-Home, Scan-to-Scan Server, Network Twain (via Ethernet TCP/IP), Scan-to-WebDAV, WS-Scan
Interface	10Base-T/100Base-TX/1000Base-T
Protocol	TCP/IP (FTP, SMB, SMTP)
Support OS	Windows XP, Windows Vista, Windows 7, Windows 8, Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012
Output Format	Single TIFF, Multi TIFF, JPEG, PDF, Compact PDF, XPS, Compact XPS TIFF (MH, MMR), PDF (MH, MMR, JPEG), JPEG, Outline PDF, PPTX, Searchable PDF, PDF/A, Linearized PDF
Driver	TWAIN (XP/XP 64-bit/Vista/Vista 64-bit/7/7 64-bit/8/8 64-bit), TWAIN Driver, HDD TWAIN Driver
Address Setting	LDAP, Import/Export address from PageScope Web Connection
Authentication	SMTP Authentication, Network User Authentication (Active Directory, Novell, NDS, NTLM ver. 1, NTLM ver. 2, LDAP)

<sup>†</sup>Text and image scanning speeds vary depending on the type of document.

### PageScope Software

Network & Device Management	Optional Software
PageScope Data Administrator	PageScope Enterprise Suite
Driver Packaging Utility	– PageScope Account Manager
HDD BackUp Utility	– PageScope Authentication Manager
Log Management Utility	– PageScope My Print Manager
PageScope Download Manager	– PageScope My Panel Manager
	– PageScope Net Care Device Manager (Standard)
<b>User Tools</b>	
PageScope Direct Print	
PageScope Box Operator	
PageScope Print Status Notifier	
Copy Protection Utility	
Print Utility for Unix	
PageScope Web Connection	

NOTE: Users interested in PageScope EMS Plug-ins should consult with their local Konica Minolta office.

### Management Tools

bizhub vCare

### Security

Because information assets are critical, a company needs to effectively protect against the many security risks it faces.

- 1) Prevent Leaks of proprietary, confidential or personal information
- 2) Prevent unauthorized use of equipment
- 3) Effective data encryption
- 4) Protect data from being altered, duplicated or deleted
- 5) Prevent unauthorized access to data via the Internet
- 6) Protect against cyber attacks
- 7) Manage log history

#### Protective Functions:

- HDD Sanitizing — Deletes Graphic Data (when disposing of machine)
- Job Erase — Deletes Graphic Data (after each job)
- Lock Job (when printing confidential documents)
- Protect data by requiring department name and 8-digit password
- Account Track
- HDD Lock
- Prevent Unauthorized Use
- Operation Log with 2,000-event memory
- HDD Encryption
- PDF Scan Encryption
- Protective Functions
- Copy Protection
- Network Authentication
- Single Sign-on Authentication
- SMTP Authentication for Email
- SSL/TSL Compatibility for PS Web Connection, PS Data Administrator and LDAP Server
- Scan Data Encryption (TCP/socket SSL Compatibility)
- LDAP Authentication
- Box Operator Data Encryption
- Verification of Box Data Receipt
- IP Address Filtering
- IP v6
- Encrypted Network Password Printing
- Scan-to-USB Memory with User Authentication
- Print-from-USB Memory with User Authentication
- S/MIME/Encryption
- FIPS 140-2 Compliance
- IEEE 2600.1 Security Ready

#### Optional Protective Functions:

- LK-102 v3 Enhanced PDF Scan Encryption
- AU-102 Biometric Authentication Unit
- AU-204H Magnetic Stripe Card Reader
- AU-205H IC Card Reader
- AU-211PCAC/PIV Solution with Certificate

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



### Paper Considerations

#### Paper Size Conversion Chart

Paper	Letter	Letter R	Legal	Tabloid	Statement	Statement R
Measurement	8.5" x 11"	11" x 8.5"	8.5" x 14"	11" x 17"	5.5" x 8.5"	8.5" x 5.5"

#### Paper Weight Conversion Chart

gsm	Bond	Offset	Cover	Tag	Index	Point	Bristol	Caliper	
								inches	mm
60.20	16	40	22	37	33	3.2	27.4	0.0032	0.081
67.72	18	45	24	41	37	3.6	30.9	0.0036	0.092
75.20	20	50	28	46	42	3.8	34.3	0.0038	0.097
90.30	24	60	33	56	50	4.8	41.2	0.0048	0.120
105.35	28	70	39	64	58	5.8	48.1	0.0058	0.147
109.11	29	73	40	62	60	6.0	49.8	0.0060	0.152
116.63	31	81	45	73	66	6.1	53.2	0.0061	0.155
131.68	35	90	48	80	74	6.2	60.1	0.0062	0.157
135.45	36	90	50	82	75	6.8	61.8	0.0068	0.173
146.73	39	100	54	90	81	7.2	67.0	0.0072	0.183
150.50	40	100	56	93	83	7.3	68.7	0.0073	0.185
161.78	43	110	60	100	90	7.4	73.8	0.0074	0.188
165.55	44	110	61	102	92	7.6	75.5	0.0076	0.193
176.83	47	120	65	108	97	8.0	80.7	0.0078	0.198
199.41	53	135	74	122	110	9.0	91.0	0.0085	0.216
203.17	54	137	75	125	113	9.0	92.7	0.0090	0.229
218.22	58	146	80	134	120	9.5	99.6	0.0092	0.234
244.56	65	165	90	150	135	10.0	111.6	0.0095	0.241
252.08	67	170	93	156	140	10.5	115.1	0.0100	0.250
270.90	72	183	100	166	150	11.0	123.7	0.0110	0.289
285.95	76	192	105	175	158	13.0	130.5	0.0130	0.330
308.52	82	208	114	189	170	14.0	140.8	0.0140	0.356
312.00	87	220	120	200	180	15.0	142.4	0.0150	0.380
385.06	105	267	146	244	220	18.0	175.8	0.0175	0.445



# Konica Minolta bizhub 287/227

## Specification & Installation Guide



KONICA MINOLTA

### Paper Type Specifications\*

#### Normal (Plain Paper)

The Normal paper is used for copying in general and is called "PPC paper." The normal paper is usually not a recycled paper. Specify [Normal] to the tray to which the normal paper or the recycled paper is loaded for copying.

#### Recycled Paper

Recycled Paper is identified as recycled paper along with a designation as to the percentage of the paper that is actually made from recycled materials. Generally speaking, these devices will support recycled paper weighing between 16 lb. to 24 lb. bond.

#### Thick Paper 1

Thick Paper 1 is paper weighing between 24.25 to 32 lb. bond. It can be fed via any paper tray.

#### Thick Paper 1+

Thick Paper 1+ is paper weighing between 32.25 to 41.75 lb. bond. It can be fed via any paper tray.

#### Thick Paper 2

Thick Paper 2 is paper weighing between 42 to 55.5 lb. bond. It can be fed via any paper tray.

#### Thick Paper 3

Thick Paper 3 is paper weighing between 55.75 to 68 lb. bond. It can be fed via any paper tray.

#### Special Paper

A thin or other specialty type paper that falls within the paper weight specification and appears on the Recommended Paper Stock List.

#### OHP

Specify [OHP] to a tray to which transparent films are loaded. It can be fed only via the bypass tray (20 sheets or less).

#### Envelopes

Specify [Envelope] for bypass tray.

#### Postcards

A Postcard is defined as a rectangular piece of the thick paper or thin cardboard. This product series supports 4" x 6" size postcards. Postcards are fed only via the Bypass Tray.

#### Tab Dividers

A stiff sheet with divider tabs. Tab Divider sheets can only be fed (long edge only) via the Bypass Tray.

\*Paper cannot be used in a high humidity environment.

### Recommended Paper Stocks

#### Plain Paper – Color

Class.	Weight	Brand of Paper	Size
Thick 1	32 lb. Bond (120 gr)	Hammermill Color Copy	8.5" X 11"
Thick 1	32 lb. Bond (120 gr)	Hammermill Color Copy Paper – Photo White	8.5" x 11"
Thick 2	60 lb. Cover (163 gr)	Hammermill Color Copy	8.5" X 11"
Thick 3	80 lb. Cover (216 gr)	Hammermill Color Copy	8.5" X 11"

#### Plain Paper – B/W

Plain Paper	20 lb. Bond (75 gr)	Hammermill Tidal MP	8.5" X 11"
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#### Envelopes

Envelopes	24 lb. #6 3/4	Preservation Wove 5789	3.85" x 6.5" (98 x 165 mm)
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#### Tab Dividers

Avery Dennison 20406 (long edge only)	8.5" x 11"
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#### Recycled Paper

Recycled Paper	20 lb. (75 gr)	Domtar Recycled Copy	8.5" x 11"
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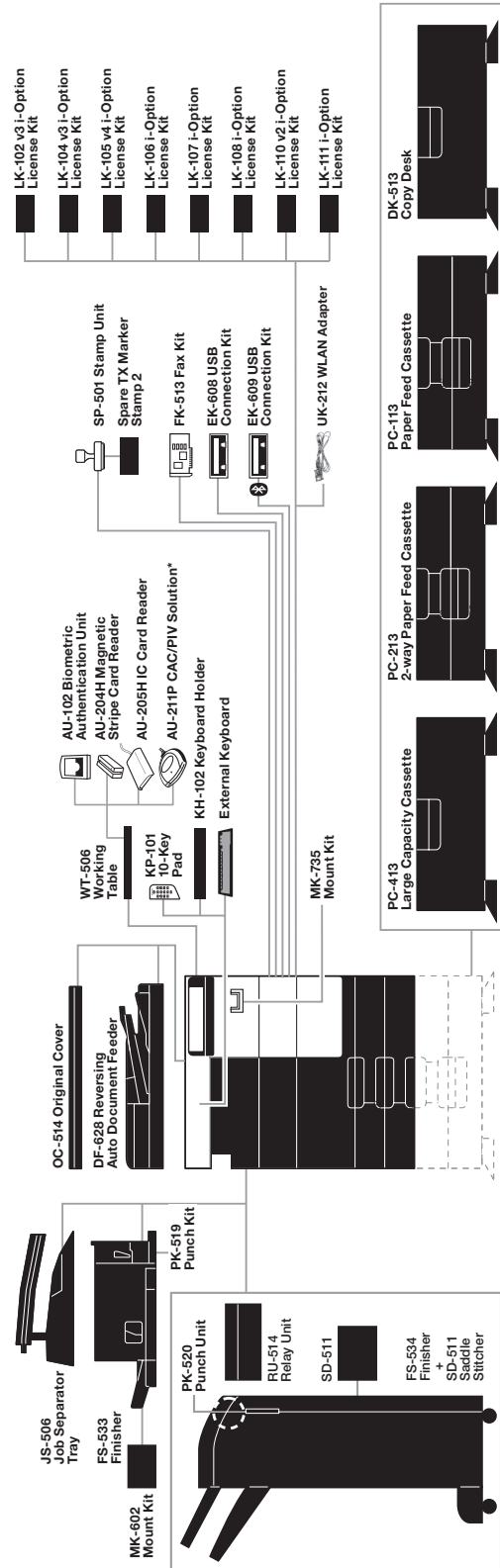
#### Transparency

OHP Sheets	—	3M – PP2500	8.5" x 11"
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### How to Build a System for the bizhub 287/227 Digital Printer/Copier/Scanner/Fax (from start to finish)

- FS-534+SD-511 Floor finisher (50 Sheets)  
+ SD-511 Saddle Stitcher Kit
  - RU-514 Relay Unit (Required to install FS-534)
  - FS-533 Inner Finisher (50-sheet stapling – Requires MK-602)
  - MK-602 Mount Kit (Required to install FS-533)
  - PK-519 Punch Kit (for FS-533)
- Step 5: Analog Fax Options**
- FK-513 Fax Kit (Single line only)
  - SP-501 Stamp Unit (Installed in optional Document Feeder)
  - Spare TX Marker Stamp 2
- Step 6: Controller**
- Standard Controller (PCL/PS/XPS)
- Step 7: Additional Options**
- AU-102 Biometric Authentication Unit (Requires WT-506 Working Table)
  - AU-204H Magnetic Stripe Card Reader (Requires WT-506 Working Table)
  - AU-205H IC Card Reader\*\*\* (Requires WT-506 Working Table or MK-735 Mount Kit)
  - AU-211P CAC/PIV Solution\* (Requires WT-506 Working Table)
  - EK-608 USB Connection Kit (Adds USB 2.0 for External Keyboard and/or Voice Guidance)
- EK-609 USB Connection Kit (Adds USB 2.0 for External Keyboard, Bluetooth® Printing and/or Voice Guidance)
  - External Keyboard (Requires KH-102)
  - KP-101 10-Key Pad (Hard-key 10 Key-pad)
  - LK-102 v3 i-Option License Kit\*\* (Enhanced PDF Encryption, PDF/A (1a/1b) and Linearized PDF support)
  - LK-104 v3 i-Option License Kit (Voice Guidance)
  - LK-105 v4 i-Option License Kit\*\* (Searchable PDF)
  - LK-106 i-Option License Kit (Bar Code Font Printing)
  - LK-107 i-Option License Kit (Unicode Font Printing)
  - LK-108 i-Option License Kit (OCR Font Printing)
  - LK-110 v2 i-Option License Kit\*\* (OOXML file conversion, Enhanced Image Data, Combines LK-102 & LK-105 functionality)
  - LK-111 i-Option License Kit (ThinPrint Client Support)
  - MK-735 Mount Kit (for AU-205H)
  - UK-212 WLAN Adapter
  - UK-209 Upgrade Kit
  - WT-506 Working Table

- Step 1: Base Unit**
- 287/227 Digital Printer/Copier/Scanner  
Includes PS, PCL & XPS Controller, 4 GB Standard Memory, Duplex Unit, 250 GB HDD, Web Browser, USB Interfaces for Scan-to-USB Thumb Drive/Print-from-USB Thumb Drive, USB Local Printing, Optional Authentication Device Connection, Service USB Firmware Updates, Developer Unit and Drum Unit
- Step 2: Document Handling Options (Required)**  
Select one of the following:
- OC-514 Original Cover
  - DF-628 Reversing Automatic Document Feeder
- Step 3: Paper Supply/Cabinet Options (Required)**  
Select one of the following:
- PC-413 Large Capacity Cassette (2,500 sheets - Letter crosswise only)
  - PC-213 2-way Paper Feed Cassette (Two 500-sheet Universal Cassettes)
  - PC-113 Paper Feed Cassette (One 500-sheet Universal Cassette; Includes 1 storage drawer)
  - DK-513 Copy Desk (Storage Drawer Only)
- Step 4: Output Options**
- JS-506 Job Separator Tray
  - FS-534 Floor Finisher (50-sheet stapling – Requires RU-514 Relay Unit)
  - RU-514 Relay Unit (Required to install FS-534)
  - PK-520 Punch Kit (for FS-534)



\*Not available at time of launch. \*\*LK-102 v3 and/or LK-105 v4 cannot be installed since the LK-110 is installed since the LK-110 supports the same functions as the LK-102 v3 and LK-105 v4. \*\*\* May not be available at time of launch.

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



KONICA MINOLTA

### Accessory Options for bizhub 287/227 Digital Color Printer/Copier/Scanner/Fax

ACCESSORIES	ITEM NO.	DESCRIPTION	NOTES
<b>BASE UNIT</b>			
bizhub 287	A7AH011X001	bizhub 287 Printer/Copier/Scanner	Includes PS, PCL & XPS Controller, 4 GB Standard Memory, Duplex Unit, 250 GB HDD, Web Browser, USB Interfaces for Scan-to-USB Thumb Drive/Print-from-USB Thumb Drive, USB Local Printing, Optional Authentication Device Connection, Service USB Firmware Updates, Developer Unit and Drum Unit.
bizhub 227	A7AK011X001	bizhub 227 Printer/Copier/Scanner	Includes PS, PCL & XPS Controller, 4 GB Standard Memory, Duplex Unit, 250 GB HDD, Web Browser, USB Interfaces for Scan-to-USB Thumb Drive/Print-from-USB Thumb Drive, USB Local Printing, Optional Authentication Device Connection, Service USB Firmware Updates, Developer Unit and Drum Unit.
<b>DOCUMENT HANDLING OPTION</b>			
OC-514	A7YPWY1	Original Cover	Required if DF-628 is not installed.
DF-628	A7V7WY1	Reversing Automatic Document Feeder	100-Sheet Reversing Automatic Document Feeder; Compatible with bizhub 287, 227.
<b>PAPER SUPPLY/CABINET OPTIONS</b>			
PC-413	A7VA013	Large Capacity Cassette	2,500 sheets; Letter-Size (Portrait) Paper only.
PC-213	A7VAWY2	2-way Paper Feed Cabinet	Two 500-sheet Universal Paper Cassettes.
PC-113	A7VAWY1	Paper Feed Cabinet	One 500-sheet Universal Paper Cassette and Storage Drawer.
DK-513	135370	Enhanced Copy Desk	Storage Drawer only.
<b>OUTPUT OPTIONS</b>			
JS-506	A2YVWY2	Job Separator Tray	Separates print, copy and fax jobs; can be installed if finisher is not attached; supports banner printing.
FS-534	A3EPWY2	Floor Finisher	50-sheet floor finisher required to support PK-520 Punch Kit. Supports banner printing. RU-514 Relay Unit required.
FS-534 + RU-514	A3EPWY2X001	Floor Finisher + Relay Unit	50-sheet floor finisher plus relay unit required for installation.
FS-534 + SD-511	A3EPWYC	Floor Finisher + SD-511 Saddle Stitcher	50-sheet floor finisher equipped with SD-511 Saddle Stitcher that provides center-stapled and folded booklets (up to 20-page booklets), half-fold and tri-fold (for letter-size paper only); RU-514 Relay Unit required.
FS-534 + SD-511 + RU-514	A3EPWYCX001	Floor Finisher + Saddle Stitcher + Relay Unit	50-sheet floor finisher plus saddle stitcher plus relay unit required for installation.
FS-533	A2YUWY2	Inner Finisher	50-sheet Inner Staple Finisher required to support PK-519 Punch Kit. Supports banner printing. MK-602 Mount Kit required for bizhub 287/227.
FS-533 + MK-602	A2YUWY2X001	Inner Finisher + Mount Kit	50-sheet Inner Staple Finisher plus mount kit required for installation.
MK-602	A84FWY1	Mount Kit for FS-533	Required to install FS-533 on bizhub 287 or 227.
PK-519	A3EUW12	2/3-Hole Punch Kit for FS-533	2/3-Hole Punch Kit for FS-533 Inner Finisher.
PK-520	A3ETW11	2/3-Hole Punch Kit for FS-534	2/3-Hole Punch Kit for FS-534.
RU-514	A84GWY1	Relay Unit for FS-534	Required to install FS-534 on bizhub 287 or 227.
<b>ANALOG FAX OPTIONS</b>			
FK-513	A879011	Fax Kit	Supports single line fax capabilities.
SP-501	4614506	Stamp Unit	Installed on RADF.
Spare Fax Stamp	4614511	Spare TX Marker Stamp 2	Installed on RADF.
<b>ADDITIONAL OPTIONS</b>			
AU-102	A0X9WY1	Biometric Authentication Unit	Scans finger vein patterns to enable users to gain access to the device. Requires WT-506 Working Table.
AU-204H	7640013468	Magnetic Stripe Card Reader	Allows authorized access to the MFP using Magnetic Stripe Cards. Requires WT-506 Working Table.
AU-205H	7640008394	IC Card Reader	Allows authorized access to the MFP using a wide variety of iClass card formats. Can be mounted internally using optional MK-735 Mount Kit or externally on optional WT-506 Working Table.
AU-211P*	—	CAC/PIV Solution with Certificate	Requires WT-506 Working Table. Contact your local Government Account Manager for information.
EK-608	A88AWY1	Local USB Interface Kit	Required to connect optional external keyboard and supports Voice Guidance functions available with optional LK-104 v3.
EK-609	A87DWY1	Local USB Interface Kit	Required to connect optional external keyboard, provides Bluetooth printing support for mobile phone link and supports Voice Guidance functions available with optional LK-104 v3.

continued

\*May not be available at time of launch.

# Konica Minolta bizhub 287/227

## Specification & Installation Guide



### Accessory Options for bizhub 287/227 Digital Color Printer/Copier/Scanner/Fax

ACCESSORIES	ITEM NO.	DESCRIPTION	NOTES
<b>ADDITIONAL OPTIONS</b> <i>continued</i>			
LK-102 v3	A0PD116	i-Option License Kit	Enables 128-bit AES PDF encryption; PDF File and password are encrypted; provides PDF/A (1a/1b) and Linearized PDF file format support. Requires UK-204 i-Option Memory Upgrade. ,Please note that the LK-110 supports the same functions as the LK-102 v3, therefore, both license kits cannot be installed on the same device.
LK-104 v3	A0PD117	i-Option License Kit	Provides Voice Guidance functionality. Requires UK-204 i-Option Memory Upgrade.
LK-105 v4	A0PD11T	i-Option License Kit	Provides Searchable PDF functionality. Requires UK-204 i-Option Memory Upgrade. Please note that the LK-110 supports the same functions as the LK-105 v3, therefore, both license kits cannot be installed on the same device.
LK-106	A0PD119	i-Option License Kit	Provides Bar Code Font printing support. Requires UK-204 i-Option Memory Upgrade.
LK-107	A0PD11F	i-Option License Kit	Provides Unicode Font printing support. Requires UK-204 i-Option Memory Upgrade.
LK-108	A0PD11G	i-Option License Kit	Provides OCR Font printing support. Requires UK-204 i-Option Memory Upgrade.
LK-110 V2	A0PD11U	i-Option License Kit	Provides DOCX, XLSX format file conversion, Fax to searchable PDF, convert print data in box to compact PDF, combines LK-102 (encrypted PDF) & LK-105 (searchable PDF / OCR) functionality. Requires UK-204 i-Option Memory Upgrade. Please note that if you install the LK-110 on a device, you cannot install the LK-102 v3 and/or LK-105 v3 on the same device.
LK-111	A0PD11K	i-Option License Kit	Provides ThinPrint client support.
MK-735	A4NMWY1	Mount Kit	Internal Mount Kit for AU-205H. Required if these card readers are not mounted externally using the WT-506.
External Keyboard	7640006869	External Keyboard	Computer type keyboard for alphanumeric data entry (alternative to the standard QWERTY keyboard available on the MFP's LCD). Requires either EK-608 or EK-609 and KH-102.
KH-102	A4NRWY1	Keyboard Holder	Holds the optional QWERTY keyboard in place on the MFP.
KP-101	A64TWY3	10-Key Pad	Optional 10 Key Pad. Supports Voice Guidance function available with optional LK-104 v3 i-Option License Kit. Affixes to the right-hand side of the control panel.
UK-212	A87EWY1	Wireless LAN Upgrade Kit	Provides wireless secure connection for printing, scanning and Authentication.
WT-506	A0W4Y3	Working Table	Required for AU-102 Biometric Unit, AU-204H Magnetic Stripe Card Reader and AU-211P CAC/PIV Solution; required for AU-201H HID Proximity Card Authentication Unit and AU-202H HID iClass Card Authentication Unit if these card readers are not mounted internally using the MK-735.

### CONSUMABLE YIELDS\*

CONSUMABLE	ITEM NO.	YIELD
DV312 Developing Unit	A7Y003D	590,000
DR312 Drum Unit	A7Y00RD	(287) 105,000 (227) 85,000
TN323 Toner	A87M030	23,000
Waste Toner Box (WX-104)	A7XWWY2	110,000
Fusing Unit	A7AHPP2400	(287) 400,000 (227) 320,000
Staples SK-602 (For FS-534, SD-511 and FS-533)	14YK	5,000 x 3 pkg/case

\* Based on 6% total coverage.

# Konica Minolta bizhub 287/227

## Documentation Information



All documentation can be downloaded from MyKonicaMinolta.com by clicking on Product Reference Materials under the Products Portlet.

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### User Manuals

HTML User Guide  
Quick Start Guide  
Using the Machine

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### Parts Manuals

bizhub 227 Parts Manual  
bizhub 287 Parts Manual  
DF-628 Parts Manual  
DK-513 Parts Manual  
EK-608 Parts Manual  
EK-609 Parts Manual  
FK-513 Parts Manual  
FS-533 Parts Manual  
FS-534 Parts Manual  
FS-534SD Parts Manual  
HD-522 Parts Manual  
JS-506 Parts Manual  
KP-101 Parts Manual  
MK-602 Parts Manual  
MK-735 Parts Manual  
OC-514 Parts Manual  
PC-113 Parts Manual  
PC-213 Parts Manual  
PC-413 Parts Manual  
PK-513 Parts Manual  
PK-520 Parts Manual  
RU-514 Parts Manual  
SD-511 Parts Manual  
WT-506 Parts Manual

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### Service Manuals

Field Service Manual - PDF  
Field Service Manual - HTML

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### Installation Instructions

bizhub 287/227 Installation Instructions  
(includes OC-514)  
bizhub 287/227 Network Fax Installation Instructions  
AU-102 Installation Instructions  
DF-628 Installation Instructions  
(includes SP-501)  
DK-513 Installation Instructions  
EK-608 Installation Instructions  
FK-513 Installation Instructions  
HD-522 Installation Instructions\*  
JS-506 Installation Instructions  
KH-102 Installation Instructions  
KP-101 Installation Instructions  
MK-602/FS-533 Installation Instructions  
MK-735 Installation Instructions  
PC-113 Installation Instructions  
PC-213 Installation Instructions  
PC-413 Installation Instructions  
PK-519 Installation Instructions  
PK-520 Installation Instructions  
RU-514/FS-534 Installation Instructions  
RU-514/FS-534SD Installation Instructions  
SD-511 Installation Instructions  
UK-211 Installation Instructions  
UK-212 Installation Instructions  
WT-506 Installation Instructions

\*Comes standard

# Konica Minolta bizhub 287/227

## Firmware and Drivers



Firmware and Drivers can be downloaded from the [One Stop Product Support](#) located under the Service tab on mykonicaminolta.com

### Program Release Information

CSES ID-No. DLBT1505899EN

Model: bizhub 287/227

MFP firmware Ver. G00-28

### 1. Release version and download file name

The newly released program version and download file name is as follows.

[Release version]

<367/287/227 MFP firmware>

**\*This firmware can use for Multi-Language. (Multi-Language firmware is the same as this firmware.)**

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	MFP firmware	-	G00-28	A7AH0Y0-FFFF-G00-28.exe

<367/287/227 Movie Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name	Note
bizhub 287/227	Movie Data	-	01	A7AH0Y0-C000-G00-01_Movie_F1.0(with HDD).exe	for HDD mounted

<287/227 Still Image Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name	Note
bizhub 287/227	Still Image Data	-	01	A7AH0Y0-C600-G00-01_Image_F1.0(without HDD).exe	for no HDD mounted

# Konica Minolta bizhub 287/227

## Firmware and Drivers



### <367/287/227 Voice Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	Voice Data	-	01	A7AH0Y0-C100-G00-01_Voice_F1.0.exe

### <367/287/227 OCR Dictionary Data for Searchable PDF>

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	OCR Dictionary Data	-	01	A7AH0Y0-B100-G00-01_OCRRData_F1.0.exe

### <287/227 PDF/A Font Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	PDF/A Font Data	-	00	A7AH0Y0-B200-G00-00_PDFAFontData_F1.0.exe

### <367/287/227 Unicode Font Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	Unicode Font Data	-	00	A2X00Y0-D000-G00-00_UnicodeFontData_F1.0.exe

### <367/287/227 OCR Font Data>

Model	Program Name	Current Ver.	New Ver.	Program File Name
bizhub 287/227	OCR Font Data	-	00	A2X00Y0-D100-G00-00_OCRRFontData_F1.0.exe

# Konica Minolta bizhub 287/227

## Firmware and Drivers



<287/227 Loadable Driver>

Model	IC Card Reader	IC Card	Current Ver.	New Ver.	Program File Name	Check sum	Note
bizhub 287/227	AU-201H (CardMan5125)	HID Prox	-	01	A7AH0Y0-A001-G00-01_AU-201H.exe	366C	
	AU-202H (RW-100)	HID iClass			A7AH0Y0-A300-G00-01_AU-202H.exe	B6DA	
	AU-205H	HID Prox			A7AH0Y0-A010-G00-01_AU-205H.exe	2A2D	
	AU-102	Biometric			A7AH0Y0-A900-G00-01_AU-102.exe	9150	
	Y-Soft				A7AH0Y0-A521-G00-01_Y-Soft.exe	6D43	

\* Program Files are stored in "LoadableDriver.zip".



# Konica Minolta bizhub 287/227

## Firmware and Drivers



<287/227 Drivers/Application>

Model	Program Name	Current Ver.	New Ver.	Download File Name	Note
bizhub 287 /227	PCL Printer Driver for Windows Vista/7/8/8.1/ Server2003/Server2003R2/ Server2008/Server2008R2/ Server2012/Server2012R2	-	1.1.0.0	367_Series_PS_P CL_FAX_v1.1.0.0. zip	With WHCK (Win_x86,Win_x64)
	PostScript3 Printer Driver for Windows Vista/7/8/8.1/ Server2003/Server2003R2/ Server2008/Server2008R2/ Server2012/Server2012R2	-	1.1.0.0		With WHCK (Win_x86,Win_x64)
	FAX Driver for Windows Vista/7/8/8.1/ Server2003/Server2003R2/ Server2008/Server2008R2/ Server2012/Server2012R2	-	1.1.0.0		With WHCK (Win_x86,Win_x64)
	PageMaker PS-PPD	-	00007.0000		
	XPS Printer Driver for Windows Vista/7/8/8.1/ Server2008/Server2008R2/ Server2012/Server2012R2	-	1.1.1.0	367_Series_XPS_ v1.1.1.0.zip	With WHCK (Win_x86,Win_x64)
	Linux PS-PPD	-	00007.0000	367_Series_Linux _v00007.0000.zip	
	MacOS X (Version10.6.x) PS- PPD	-	1.0.10	367_Series_MacO S_v1.x.x.zip	
	MacOS X (Version10.7.x) PS- PPD	-	1.0.10		

# Konica Minolta bizhub 287/227

## Firmware and Drivers



	MacOS X (Version10.8.x) PS-PPD	-	1.0.10		
	MacOS X (Version10.9.x, 10.10.x) PS-PPD	-	1.1.0		
	Real-Time Mode TWAIN Driver	-	4.0.22000	TWAIN_v4.0.22000.zip	
	HDD TWAIN Driver	-	4.0.22000		
	Auth Device Tool Advanced for AU-202H	- -	1.2.00000	Auth Device Tool Advanced.zip	
	Auth Device Tool Advanced for YSoft CRv2	--	1.2.00000		
	Auth Device Tool Advanced for 5427CK (AU-205H)	-	1.0.04000		

# Konica Minolta bizhub 287/227

## Firmware and Drivers



[Download File Name]

A7AH0Y0-FFFF-G00-28.exe

A7AH0Y0-C000-G00-01\_Movie\_F1.0(with HDD).exe

A7AH0Y0-C600-G00-01\_Image\_F1.0(without HDD).exe

A7AH0Y0-C100-G00-01\_Voice\_F1.0.exe

A7AH0Y0-B100-G00-01\_OCRData\_F1.0.exe

A7AH0Y0-B200-G00-00\_PDFAFontData\_F1.0.exe

A2X00Y0-D000-G00-00\_UnicodeFontData\_F1.0.exe

A2X00Y0-D100-G00-00\_OCRFontData\_F1.0.exe

LoadableDriver.zip

367\_Series\_PS\_PCL\_FAX\_v1.1.0.0.zip

367\_Series\_XPS\_v1.1.1.0.zip

367\_Series\_Linux\_v00007.0000.zip

367\_Series\_MacOS\_v1.x.x.zip

TWAIN\_v4.0.22000.zip

Auth Device Tool Advanced.zip

DLBT1505899EN00.doc

## 2. What changed

### 2.1. Release of bizhub 227, 287 Series (Maintenance Release Program Function Version1.0 Ver. G00-28)

The individual files and the checksum are as follows.

Program Name	File Name	Checksum	Note
MFP Card Version	A7AH0Y0-F000-G00-28		
MFP Controller BOOT Program	A7AH0Y0-1E00-G00-01	2053	
Linux-based MFP Controller	Linux-3.10.40	E3C3	
MFP Controller Kernel Program	A7AH0Y0-1C00-G00-11	095A	
MFP Controller Subset	A7AH0Y0-1F00-G00-06	5B1D	
MFP Controller	A7AH0Y0-0100-G00-28	4783	
MFP Controller System	A7AH0Y0-1000-G00-28		
MFP Controller Print Controller	A7AH0Y0-3000-G00-04		
MFP Controller Print Controller Font	A7AH0Y0-3F00-G00-01		
MFP Controller Print Controller Demo Page	A7AH0Y0-3E00-G00-00		
Image Reader Controller	A7AH0Y0-8600-G00-14		
MFP Controller MIO	A7AH0Y0-5000-G00-14		

MFP Controller PIC	A7AH0Y0-8200-G00-06		
FAX board controller	A8790Y0-4000-G00-06	068B	
Operation panel message data	A7AH0Y0-8100-G00-27	8643	
ADF	A7V70Y0-0024-G00-02	EE7C	
Machine Controller	A7AH0Y0-0200-G00-09	1ACC	
Machine Controller Printer	A7AH0Y0-0220-G00-08	B5D2	
Machine Controller Media	A7AH0Y0-0230-G00-00	CED1	
Machine Controller IO	A7AH0Y0-0240-G00-00	DCB1	
Machine Controller Scanner	A7AH0Y0-0300-G00-04	27B1	
Finisher (FS-533)	A2YU0Y0-0071-G10-00	216F	
Finisher (FS-534)	A3EP0Y0-0071-G10-03	8170	
Separator (JS-506)	A2YV0Y0-0070-G00-01	B1E3	
SD	A3ER0Y0-0071-G00-08	D58E	

### 3. Functional restrictions

#### 3.1. Remaining Issues

The following issues will be corrected in maintenance release (Planned for end of September, 2015).

### 3. Functional restrictions

#### 3.1. Remaining Issues

The following issues will be corrected in maintenance release (Planned for end of September, 2015).

1. If the ubiquitous print job is stored immediately after turning ON the Main power SW, the job may be deleted because of the maximum number of the registered document over.
2. "Transfer Belt Unit" button is displayed instead of "Transfer Roller Unit" button on New Release screen of Counter/Data/Life in Service Mode.
3. When i-Option functions required with HDD are activated, the trouble (C-D272) is not displayed even if the HDD installation setting is changed from "Installed" to "Not Installed".
4. When the warning screen is displayed while printing the job on the enlarge Display Mode, "Now Scanning Original" may keep displaying if the warning screen is closed.
5. The password for Memory RX User Box is not reset even if Fax Function Parameter is initialized.  
< Countermeasure >

Please clear the password from the administrator mode.

6. When the fax is sent with "Normal" or "Fine", the part of "#" of TTI information is cut off.
7. If the Main power SW is not turned off and on within 2 min after HDD installation setting is changed to "Installed" from "Not Installed", C-E002 may occur.  
< Countermeasure >

Please turn off and on the Main power SW within 2 min after HDD installation setting is changed to "Installed".

# Konica Minolta bizhub 287/227

## Firmware and Drivers



8. The result of FILE 0 is displayed "NG" in the following Memory check.  
State Confirmation > Memory/Storage Adjustment > Memory Check > Detail Check

### 4. How to install

Please refer to Service Manual.

### 5. Program that recommends applying at the same time

Combinations of this program and other latest program versions are as follows.

[bizhub 287/227 related]

Model	Program Name	Version
bizhub 287/227	MFP Card Version	G00-28
bizhub 287/227	PCL Printer Driver	1.1.0.0
bizhub 287/227	PostScript3 Printer Driver	1.1.0.0
bizhub 287/227	FAX Driver	1.1.0.0
bizhub 287/227	PageMaker PS-PPD	00007.0000
bizhub 287/227	XPS Driver	1.1.1.0
bizhub 287/227	Linux PS-PPD	00007.0000
bizhub 287/227	MacOS X (Version10.6) PS-PPD	1.0.10
bizhub 287/227	MacOS X (Version10.7) PS-PPD	1.0.10
bizhub 287/227	MacOS X (Version10.8) PS-PPD	1.0.10
bizhub 287/227	MacOS X (Version10.9.x,10.10.x) PS-PPD	1.1.0
bizhub 287/227	Real-Time Model TWAIN Driver	4.0.22000
bizhub 287/227	HDD TWAIN Driver	4.0.22000
bizhub 287/227	Auth Device Tool Advanced for AU-202H	1.2.00000
bizhub 287/227	Auth Device Tool Advanced for YSoft CRv2	1.2.00000
bizhub 287/227	Auth Device Tool Advanced for 5427CK (AU-205H)	1.0.04000

### 6. OpenAPI supported function level

The following is OpenAPI supported function level on this firmware.

OpenAPI:

OpenAPI Function Level	4.8
------------------------	-----

Detail:

Auth		1.0/1.1/2.0/2.1/2.5/3.5/3.6/3.7/4.0/4.1/4.2/4.5/4.6/4.7/4.8
Scan to Application		2.0/2.1/2.2/3.0/3.1/3.5/3.6/3.7/4.0/4.5/4.6/4.8
PullPrint		1.0/1.1/2.0/2.1/2.5/3.5/3.6/4.0/4.5/4.6/4.7/4.8
Other A		1.0/3.5/4.0
Job Management		1.0/3.5/3.6/4.0
Setup		1.0/1.1/1.2/1.3/2.0/2.1/2.5/3.5/3.6/3.7/3.8/4.0/4.1/4.2/4.5/4.6/4.7/4.8
Link		4.5/4.6/4.7/4.8
Web Browser	Auth	1.0/1.1/1.5/3.5/3.6/3.7/4.0/4.1/4.2/4.5/4.7/4.8
	Scan to Application	1.0/1.1/3.5/3.6/3.7/4.0/4.1/4.5/4.6/4.7/4.8
	PullPrint	1.0/1.1/1.5/3.5/3.6/4.0/4.1/4.5/4.8
	ScrSvr	1.0/3.5/4.0
	Launcher	1.0/3.5/4.0/4.8
	General	4.0/4.1/4.5/4.6/4.8

### 7. IWS function level

IWS function Level	2.5.0
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**Bulletin #** 9745  
**Date:** 07/02/15  
**Subject:** bizhub 287/227 Monochrome MFPs Technical Training Announcement  
**Technical Education:** 493

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The Technical Education and Development Department of Konica Minolta Business Solutions U.S.A., Inc. is pleased to announce training for the new **bizhub 287/227 Monochrome MFPs**.

**Training will be available in two different offerings:**

The **bizhub 287 Series** technical online differences training for those previously certified on either the bizhub 423 or 364/e Series.

The **bizhub 287/227 5-Day ILT** course will be available for all other audiences, and will certify them on both the 423 and the 287 Series. Course dates will be available in Konica Minolta Learning in mid-July.

The **bizhub 287 Series Technical Differences WBT** covers the introduction, installation, user operation, and service on the bizhub 287/227 and the new options. Topics include:

- Installation and configuration
- New Scanning System with the CCD as part of the moving Scanner Assembly
- Enhanced Consolidated Printed Circuit Boards
- Next generation of Firmware Downloading File Structure and Procedures
- Changes and compatibility of existing and new options

This training takes approximately 90 minutes to complete. Below is a direct link to the course:

[bizhub 287 Series Technical WBT](#)

To locate this training using the online catalog:

1. Log in to MyKonicaMinolta.com
2. Click on the *Learning* tab
3. Click on *Konica Minolta Learning* link
4. Using the main navigation drop down menu at the top of the screen, ensure *Learning* is selected
5. Enter "**287**" in the Find Learning tile and click *Go*
6. Navigate to the course and click on *Add to Learning Plan*  
(Managers also have the *Assign to Others* option)

Please contact Technical Education for questions related to technical training.

Email – [techtrain@kmb.konicaminolta.us](mailto:techtrain@kmb.konicaminolta.us), Phone – (860)683-2402 Ext. 2198,  
Website - Technical Education Information Center



Bulletin # 9783  
Date: 08/03/15  
Subject: Startup Parts  
bizhub 227: 001 bizhub 287: 001

---

The following pages contain the recommended startup parts to support an initial placement of the bizhub 227 and 287 series machines and their accessories. This is not a compilation of all parts that will be needed; it is a suggested list of parts and supplies that could adversely affect machine operation if they are not replaced at the scheduled intervals.

Consult the current parts catalogs and bulletins for additional parts and changes that may be made from time to time.

Use this list as an aid in preparing an initial parts inventory for these models. Parts and supplies can be ordered using standard ordering procedures.



# bizhub 227, 287

## Startup Parts List (One Machine)



For replacement procedures, refer to the Field Service Manuals.  
Main body parts and supplies apply to both models unless noted otherwise.

Section	Description	Part No.	Qty.	Replacement Interval <sup>1</sup>
<b>Main Body</b>				
Paper Feed	Pick-up roller, trays 1 & 2	A5C1562200	2	300,000 <sup>2, 4</sup>
	Feed roller, trays 1 & 2	A00J563600	2	300,000 <sup>2, 4</sup>
	Separation roller, trays 1 & 2	A00J563600	2	300,000 <sup>2, 4</sup>
	Feed roller, manual bypass	A00F623201	1	200,000 <sup>2, 4</sup>
	Separation roller, manual bypass	4658015106	1	200,000 <sup>2, 4</sup>
Processing	Toner cartridge (TN323) <sup>1</sup>	A87M030	1	23,000 <sup>3</sup>
	Drum unit (DR312) <sup>1</sup>	A7Y00RD	1	227: 85,000 <sup>3</sup> 287: 105,000 <sup>3</sup>
	Developing unit (DV312)	A7Y003D	1	227: 590,000 <sup>3</sup> 287: 545,000 <sup>3</sup>
	Toner filter	A7AHR72600	1	150,000 <sup>3</sup>
	Paper dust remover unit	A7AHR72900	1	150,000 <sup>3, 5</sup>
	Ozone filter	A7AHR70300	1	150,000 <sup>3</sup>
	Waste toner box (WX-104) <sup>1</sup>	A7XWWY2	1	110,000 <sup>3, 6</sup>
Image Transfer	Transfer roller unit	A7AHR72900	1	150,000 <sup>3</sup>
Registration	Ozone filter	A7AHR72000	1	150,000 <sup>3</sup>
	Registration roller bushing	A7AH703201	4	900,000 <sup>3, 4</sup>
	Registration roller gear /1	1164351501	1	900,000 <sup>3, 4</sup>
	Registration roller gear /2	A7AH707500	1	900,000 <sup>3, 4</sup>
Fusing	Fusing unit	A7AHR72300	1	400,000 <sup>3</sup>
<b>DF-628</b>				
Paper Feed	Pick-up roller	A143PP5200	2	200,000 <sup>4</sup>
	Feed roller	A143563100	1	200,000 <sup>4</sup>
	Separation roller	A3CFPP4H00	1	200,000 <sup>4</sup>
<b>PC-113</b>				
Paper Feed	Pick-up roller	A5C1562200	1	300,000 <sup>4</sup>
	Feed roller	A00J563600	1	300,000 <sup>4</sup>
	Separation roller	A00J563600	1	300,000 <sup>4</sup>
<b>PC-213</b>				
Paper Feed	Pick-up roller	A5C1562200	2	300,000 <sup>4</sup>
	Feed roller	A00J563600	2	300,000 <sup>4</sup>
	Separation roller	A00J563600	2	300,000 <sup>4</sup>
<b>PC-413</b>				
Paper Feed	Pick-up roller	A5C1562200	2	300,000 <sup>4</sup>
	Feed roller	A00J563600	2	300,000 <sup>4</sup>
	Separation roller	A00J563600	2	300,000 <sup>4</sup>

# bizhub 227, 287

## Startup Parts List (One Machine)



Section	Description	Part No.	Qty.	Replacement Interval <sup>1</sup>
<b>FS-533</b>				
<b>Finisher</b>	Feed roller assy.	A2YUPPK001	1	1,000,000 <sup>4</sup>
	Feed roller assy.	A2YUPPK101	1	1,000,000 <sup>4</sup>
<b>FS-534, FS-534SD</b>				
<b>Finisher</b>	Paddle assy.	A3EPPPD300	2	2,000,000 <sup>4</sup>
	Paddle assy.	A3EPPPD400	1	2,000,000 <sup>4</sup>
<b>SD-511</b>				
<b>Saddle Stitcher</b>	Paddle assy.	A3ERPP7Y00	1	2,000,000 <sup>4</sup>
	Paddle assy.	A3ERPP3801	4	2,000,000 <sup>4</sup>

1. Supply item. Replacement intervals are approximate, based upon copy/print characteristics including print density and coverage. These items can be replaced by the user.
2. Replacement interval based on actual durable life counter (:life counter value).
3. Field standard value
4. Replace all of these parts at the same time.
5. Ozone filer is furnished with the transfer roller unit (A7AHR729) so that they are replaced at the same time.
6. Waste toner full condition is detected by detecting actual waste toner emissions.



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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date:25-Feb-2014

Revised Date: 30-Jun-2015

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**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product Name: DRUM (PHOTOCONDUCTOR) DR312

used for: bizhub 367/287/227

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

CHEMTREC

Telephone: 1-800-424-9300

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**2. HAZARDS IDENTIFICATION****Regulation (EC) No 1272/2008**

Classification: Not classified as dangerous.

**Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

**LABEL ELEMENTS**

Precautionary pictograms: ---

Signal word: ---

Hazard Statement: ---

Precautionary Statements: ---

**Other Hazards**None

---



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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Substrate		>95
Aluminium drum	7429-90-5	
Coating layer		<5
Polycarbonate	+++	
OPC compound	+++	
Organic pigment	+++	

+++ : Supplier's confidential information

Hazardous Ingredients:

None present

---

**4. FIRST-AID MEASURES**

Symptoms of Overexposure: No symptoms expected with intended use.

Routes of Entry: None

Information

Inhalation:	No treatment is required.
Skin Contact:	No treatment is required.
Eye Contact:	No treatment is required.
Ingestion:	No treatment is required.

Note to Physician: None

---

**5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media: CO<sub>2</sub>, water, foam and dry chemical

Extinguishing Media to Avoid: None

Special Firefighting Procedures: None

Fire and Explosion Hazards: This material has no unusual fire or explosive hazards.

Protection of Firefighters: No special equipment is required.

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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Not applicable with intended use.

Environmental Precautions: Not applicable with intended use.

Methods for Cleaning Up: Not applicable with intended use.

---

**7. HANDLING AND STORAGE**

## Handling

Technical Measures: None

Precautions: This product will be scorched in the case of fire.

Safe Handling Advice: None.

## Storage

Technical Measures: None

Storage Conditions: Keep and Store in a cool and dry place.

Incompatible Products: None

Packing Materials: None

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

## Engineering Measures

Ventilation: None required with intended use.

## Control Parameters

OSHA-PEL(USA): Not Applicable

ACGIH-TLV(USA):

Not Applicable

DFG-MAK(EC): Not Applicable

Worksafe-TWA(Austl):

Not Applicable

## Personal Protective Equipment

None required when used as intended in Konica Minolta equipment.

Hygiene Measures: Wash hands after handling.

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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Physical State: Solid

Form: Cylinder

Color: Dark green

Odor:

Almost odorless

&lt;&lt;Results of the coated compounds on the aluminum substrate.&gt;&gt;

Boiling Point:

Not applicable

Melting/Softening Point:

No data available

Flash Point:

Not applicable

pH:

Not applicable

Explosion Properties:

Not applicable

Upper/ lower flammability or explosive limits

No data available

Density(g/cm<sup>3</sup>):

1.2

Solubility in water:

insoluble

Flammability:

Not applicable

Oxidizing Properties:

No data available

Auto-Ignition Temperature(°C):

No data available

Vapor Pressure:

Not applicable

Vapor density:

Not applicable

Partition Coefficient, n-Octanol/Water:

Not applicable

Decomposition temperature:

Not applicable

(\*= Based on data for other Konica Minolta Products with similar ingredients)

---

**10. STABILITY AND REACTIVITY**

Reactivity:

None.

Stability:

Stable

Hazardous Reactions:

None

Conditions to avoid:

None

Materials to Avoid:

None

Hazardous Decomposition Products: CO, CO<sub>2</sub>



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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**11. TOXICOLOGICAL INFORMATION**

Health Effects from Exposure: No symptoms expected with intended use.

## Toxicological Data

&lt;&lt;Result of the coated compounds on the aluminum substrate.&gt;&gt;

## Acute Toxicity:

Inhalation, LC50(mg/l):	Not applicable
Ingestion(oral), LD50(mg/kg):	No data available
Dermal, LD50(mg/kg):	Not applicable
Eye irritation:	No data available
Skin irritation:	No data available
Skin sensitizer:	No data available
Mutagenicity:	Negative (AMES test)

Local Effects: No data available

Chronic Toxicity or Long Term Toxicity: None

## Carcinogenicity

IARC Monographs:	Not listed
NTP(USA):	Not listed
OSHA Regulated(USA):	Not listed

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**12. ECOLOGICAL INFORMATION**No data available

---

**13. DISPOSAL CONSIDERATION**

## Appropriate Methods of Disposal

Waste may be disposed or incinerated under conditions which meet all federal, state and local environmental regulations.

---

**14. TRANSPORT INFORMATION**

Special Precautions: None

## Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**15. REGULATORY INFORMATION**

## US Information

California Proposition 65:

This product contains no chemical substances subject to California Proposition 65.

CERCLA (Comprehensive Environmental Response Compensation and Liability Act) :

None.

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance :

None.

311/312 Hazard Categories :

None.

313 Reportable Ingredients :

None.

## EU Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable

- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (POPs): Not applicable

- Regulation (EU) No 649/2012 of the European Parliament and of the Council on Concerning the Export and Import of Dangerous Chemicals (PIC): Not applicable

- Directive 2012/18/EU of the European Parliament and of the Council on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC, (Seveso III): Not applicable

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council:

- Annex XIV- List of Substances Subject To Authorization: Not applicable

- Annex XVII- Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: Not applicable

For this product a chemical safety assessment was not carried out.

## Canada Information

WHMIS (Canada): This product is NOT subject to the controlled products regulations.





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Products Name: DRUM (PHOTOCONDUCTOR) DR312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**16. OTHER INFORMATION**

NFPA Hazard Rating: The National Fire Protection Agency(USA): Health: 0 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association(USA): Health: 0 Flammability: 1 Reactivity: 0

Recommended Uses: Photoconductor for Electrophotographic Equipment

## Abbreviations:

ACGIH-TWA: Threshold Limit Value of American Conference of Government Industrial Hygienists

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DFG-MAK: Maximale Arbeitsplatz-Konzentration by Deutsche Forschungsgemeinschaft

DGR: Dangerous Goods Regulations

EINECS: European Inventory of Existing Commercial Chemical Substances

H-Code: Hazard Code

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

NTP: National Toxicology Program

OEL: Occupational exposure limit

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

SARA: Superfund Amendments and Reauthorization Act

TSCA: Toxic Substances Control Act

vPvB: very Persistent and very Bioaccumulative

WHMIS: Workplace Hazardous Materials Information System

Revision Information: Regular revision on revised date.

## Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

## Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

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Product Name: TN323

Prepared Date:25-Feb-2014

Revised Date: 30-Jun-2015

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**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product Name: TN323

used for: bizhub 367/287/227

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

CHEMTREC

Telephone: 1-800-424-9300

---

**2. HAZARDS IDENTIFICATION****Regulation (EC) No 1272/2008**

Classification: Not classified as dangerous.

**Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

**LABEL ELEMENTS**

Precautionary pictograms: ---

Signal word: ---

Hazard Statement: ---

Precautionary Statements: ---

**Other Hazards**Dust explosion (like most finely divided organic powders).

---



Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Substance [ ] Preparation [ X ]

## Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Styrene acrylic resin	+++	65-75
Ferrite Iron oxide	1309-37-1	5-15
. Manganese oxide	1344-43-0	1-10
Wax	+++	1-10
Carbon black	1333-86-4	1-10
Wax-2	+++	1-10
Amorphous silica	7631-86-9	1-10
Titanium dioxide	13463-67-7	<1

+++ : Supplier's confidential information

## Hazardous Ingredients:

Chemical Name: Carbon black

CAS No.: 1333-86-4

EINECS-No.: 215-609-9

NTP(USA): Not listed

California Proposition 65(USA): Listed

Symbol(EC): Not listed

DFG-MAK(GER): III 3B

REACH Registration number: 01-2119384822-32-XXXX

IARC Monographs: Group 2B

H code(EC): Not listed

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7

NTP(USA): Not listed

Symbol(EC): Not listed

EINECS-No.: 236-675-5

IARC Monographs: Group 2B

H code(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0

Symbol(EC): Not listed

EINECS-No.: 215-695-8

H code(EC): Not listed

**4. FIRST-AID MEASURES**

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

**5. FIRE-FIGHTING MEASURES**

Suitable Extinguishing Media: CO<sub>2</sub>, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).



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Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions: None

Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

---

**7. HANDLING AND STORAGE**

## Handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

## Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Engineering Measures

Ventilation: None required with intended use.

## Control Parameters (As total dust)

ACGIH-TLV (USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)

OSHA-PEL (USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)

DFG-MAK (GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA (Austl.): 10mg/m3

## Control Parameters (As Ingredients: Carbon black)

ACGIH-TLV (USA): 3mg/m3

OSHA Z-Table (USA): 3.5mg/m3

Worksafe-TWA (Austl.): 3mg/m3

## Control Parameters (As Ingredients: Titanium dioxide)

ACGIH-TLV(USA): 10mg/m3

OSHA Z-Tables(USA): 15mg/m3

Worksafe-TWA(Austl): 10mg/m3

## Control Parameters (As Ingredients: Manganese oxide)

ACGIH-TLV(USA): 0.2mg/m3

OSHA Z-Tables(USA): ceiling 5mg/m3

Worksafe-TWA(Austl): 1mg/m3

## Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.



Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

**9. PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance

Physical State: Solid	Color: Black
Form: Powder (mean dia. is 5-10um by volume)	
Odor:	Almost odorless
PH	Not applicable
Boiling Point(°C):	Not applicable
Melting Point(°C)/[F]:	Around No data available /[] (Softening Point)
Flash Point(°C):	Not applicable
Auto-Ignition Temperature(°C):	No data available
Upper/ lower flammability or explosive limits	No data available
Explosion Properties:	No data available
Evaporation rate:	No data available
Vapor Pressure:	Not applicable
Vapor density:	Not applicable
Specific Gravity:	1.2
Solubility:	Insoluble in water.
Partition Coefficient, n-Octanol/Water:	Not applicable
Decomposition temperature:	Not applicable

**10. STABILITY AND REACTIVITY**

Reactivity:	None.
Stability:	Stable except above 200C(392F).
Hazardous Reactions:	Dust explosion, like most finely divided organic powders.
Conditions to avoid:	Electric discharge, throwing into fire.
Materials to Avoid:	Oxidizing materials.
Hazardous Decomposition Products:	CO, CO2, NOx and smoke.
Hazardous Polymerization:	Will not occur.



Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity:

Ingestion(oral), LD50(mg/kg): &gt;2000(Rat) \*

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): &gt;5.11(Rat,4hour) \*

(This was the highest attainable concentration.)

Eye irritation: Minimal irritant(Rabbit) \*

Skin irritation: Non irritant(Rabbit) \*

Skin sensitizer: Non sensitiser (Mouse) \*

Local Effects: see Chronic Toxicity or Long term Toxicity

### Chronic Toxicity or Long Term Toxicity:

In a two-year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m<sup>3</sup>), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m<sup>3</sup>), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level(16mg/m<sup>3</sup>). The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading", a series of generic responses to the presence of large quantities of respirable, insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

### Carcinogenicity

The IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to Carbon Black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity: Negative \*(AMES test)

Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)

## 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available

Mobility: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available



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Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**13. DISPOSAL CONSIDERATION**

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

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**14. TRANSPORT INFORMATION**

Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

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**15. REGULATORY INFORMATION****US Information**

TSCA (Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.

CERCLA (Comprehensive Environmental Response Compensation and Liability Act) :

None.

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance :

None.

311/312 Hazard Categories :

None.

313 Reportable Ingredients :

None.

**EU Information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable

- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (POPs): Not applicable

- Regulation (EU) No 649/2012 of the European Parliament and of the Council on Concerning the Export and Import of Dangerous Chemicals (PIC): Not applicable

- Directive 2012/18/EU of the European Parliament and of the Council on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC, (Seveso III): Not applicable

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council:

- Annex XIV- List of Substances Subject To Authorization: Not applicable
- Annex XVII- Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: Not applicable

For this product a chemical safety assessment was not carried out.

**Canada Information**

WHMIS (Canada): This product is NOT subject to the controlled products regulations.

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Product Name : TN323

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**16. OTHER INFORMATION**

HMIS Rating: The National Paint and Coating Association (USA): Health: 1 Flammability: 1 Reactivity: 0

Explanation of term: IARC 2B means "possible human carcinogen".

## Abbreviations:

ACGIH-TWA: Threshold Limit Value of American Conference of Government Industrial Hygienists

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DFG-MAK: Maximale Arbeitsplatz-Konzentration by Deutsche Forschungsgemeinschaft

DGR: Dangerous Goods Regulations

EINECS: European Inventory of Existing Commercial Chemical Substances

H-Code: Hazard Code

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

NTP: National Toxicology Program

OEL: Occupational exposure limit

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

SARA: Superfund Amendments and Reauthorization Act

TSCA: Toxic Substances Control Act

vPvB: very Persistent and very Bioaccumulative

WHMIS: Workplace Hazardous Materials Information System

Revision Information: Regular revision on revised date.

## Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,  
Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 43-191H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow,  
U.Mohr, S.Takenaka, and R.Mermelstein(1991)Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied  
Toxicology 17, pp.280-299.NIOSH CURRENT INTELLIGENCE BULLETIN :Evaluation of Health Hazard and Recommendation  
for Occupational Exposure to Titanium Dioxide :DRAFT

## Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

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Product Name: DV312

Prepared Date:25-Feb-2014

Revised Date: 30-Jun-2015

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**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product Name: DV312

used for: bizhub 367/287/227

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

CHEMTREC

Telephone: 1-800-424-9300

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**2. HAZARDS IDENTIFICATION****Regulation (EC) No 1272/2008**

Classification: Not classified as dangerous.

**Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

**LABEL ELEMENTS**

Precautionary pictograms: ---

Signal word: ---

Hazard Statement: ---

Precautionary Statements: ---

**Other Hazards**

Dust explosion (like most finely divided organic powders).



Product Name : DV312

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Substance [   ]

Preparation [ X ]

## Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Ferrite    Iron oxide	1309-37-1	60-70
.            Manganese oxide	1344-43-0	15-25
.            Magnesium oxide	1309-48-4	1-10
Styrene-acrylic resin	+++	1-10
Acryl resin	+++	1-10
Carbon black	1333-86-4	< 1

+++ : Supplier's confidential information

## Hazardous Ingredients:

Chemical Name: Carbon black

CAS No.: 1333-86-4

EINECS-No.: 215-609-9

NTP(USA): Not listed

California Proposition 65(USA): Listed

Symbol(EC): Not listed

DFG-MAK(GER): III 3B

REACH Registration number: 01-2119384822-32-XXXX

IARC Monographs: Group 2B

H code(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0

Symbol(EC): Not listed

EINECS-No.: 215-695-8

H code(EC): Not listed

**4. FIRST-AID MEASURES**

Ingestion:        Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical attention.

Inhalation:       Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact:     Immediately flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact:    Wash with water and mild soap.

**5. FIRE-FIGHTING MEASURES**

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

Protection of Firefighters:    Use self-contained breathing apparatus(SCBA).



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Product Name : DV312

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions: None

Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

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**7. HANDLING AND STORAGE**

## Handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

## Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Engineering Measures

Ventilation: None required with intended use.

## Control Parameters (As total dust)

ACGIH-TLV (USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)

OSHA-PEL (USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)

DFG-MAK (GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA (Austl.): 10mg/m3

## Control Parameters (As Ingredients: Carbon black)

ACGIH-TLV (USA): 3mg/m3

OSHA Z-Table (USA): 3.5mg/m3

Worksafe-TWA (Austl.): 3mg/m3

## Control Parameters (As Ingredients: Manganese oxide)

ACGIH-TLV(USA): 0.2mg/m3

OSHA Z-Tables(USA): ceiling 5mg/m3

Worksafe-TWA(Austl): 1mg/m3

## Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.



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Product Name: DV312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance

Physical State: Solid	Color: Black
Form: Powder (mean dia. is 30-40um by volume)	
Odor:	Almost odorless
PH	Not applicable
Boiling Point(°C):	Not applicable
Melting Point(°C)/[F]:	Around No data available /[] (Softening Point)
Flash Point(°C):	Not applicable
Auto-Ignition Temperature(°C):	No data available
Upper/ lower flammability or explosive limits	No data available
Explosion Properties:	No data available
Evaporation rate:	No data available
Vapor Pressure:	Not applicable
Vapor density:	Not applicable
Specific Gravity:	5.0
Solubility:	Insoluble in water.
Partition Coefficient, n-Octanol/Water:	Not applicable
Decomposition temperature:	Not applicable

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**10. STABILITY AND REACTIVITY**

Reactivity:	None.
Stability:	Stable except above 200C(392F).
Hazardous Reactions:	Dust explosion, like most finely divided organic powders.
Conditions to avoid:	Electric discharge, throwing into fire.
Materials to Avoid:	Oxidizing materials.
Hazardous Decomposition Products:	CO, CO <sub>2</sub> , and smoke.
Hazardous Polymerization:	Will not occur.

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Product Name : DV312

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**11. TOXICOLOGICAL INFORMATION****Acute Toxicity:**

Ingestion(oral), LD50(mg/kg):	>2000(Rat) *
Dermal, LD50(mg/kg):	No data available
Inhalation, LC50(mg/l):	No data available (This was the highest attainable concentration.)
Eye irritation:	No data available
Skin irritation:	No data available
Skin sensitizer:	No data available

Local Effects: see Chronic Toxicity or Long term Toxicity

**Chronic Toxicity or Long Term Toxicity:**

In a two-year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m<sup>3</sup>), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m<sup>3</sup>), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level(16mg/m<sup>3</sup>). The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading", a series of generic responses to the presence of large quantities of respirable, insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

**Carcinogenicity**

The IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to Carbon Black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Mutagenicity: Negative \*(AMES test)

Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)

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**12. ECOLOGICAL INFORMATION**

No data are available on the adverse effects of this material on the environment.

Ecotoxicity:	No data available
Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available

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**13. DISPOSAL CONSIDERATION**

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

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Product Name : DV312

Prepared Date : 25-Feb-2014

Revised Date : 30-Jun-2015

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**14. TRANSPORT INFORMATION**

Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

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**15. REGULATORY INFORMATION**

US Information

TSCA (Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.

CERCLA (Comprehensive Environmental Response Compensation and Liability Act) :

None.

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance :

None.

311/312 Hazard Categories :

None.

313 Reportable Ingredients :

None.

EU Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (POPs): Not applicable
- Regulation (EU) No 649/2012 of the European Parliament and of the Council on Concerning the Export and Import of Dangerous Chemicals (PIC): Not applicable
- Directive 2012/18/EU of the European Parliament and of the Council on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC, (Seveso III): Not applicable
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council:
  - Annex XIV- List of Substances Subject To Authorization: Not applicable
  - Annex XVII- Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: Not applicable

For this product a chemical safety assessment was not carried out.

Canada Information

WHMIS (Canada): This product is NOT subject to the controlled products regulations.



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Product Name: DV312

Prepared Date: 25-Feb-2014

Revised Date: 30-Jun-2015

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**16. OTHER INFORMATION**

HMIS Rating: The National Paint and Coating Association (USA): Health: 1 Flammability: 1 Reactivity: 0

Explanation of term: IARC 2B means "possible human carcinogen".

## Abbreviations:

ACGIH-TWA: Threshold Limit Value of American Conference of Government Industrial Hygienists

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DFG-MAK: Maximale Arbeitsplatz-Konzentration by Deutsche Forschungsgemeinschaft

DGR: Dangerous Goods Regulations

EINECS: European Inventory of Existing Commercial Chemical Substances

H-Code: Hazard Code

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

NTP: National Toxicology Program

OEL: Occupational exposure limit

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

SARA: Superfund Amendments and Reauthorization Act

TSCA: Toxic Substances Control Act

vPvB: very Persistent and very Bioaccumulative

WHMIS: Workplace Hazardous Materials Information System

Revision Information: Regular revision on revised date.

## Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,  
Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 43-191H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow,  
U.Mohr, S.Takenaka, and R.Mermelstein(1991)Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied  
Toxicology 17, pp.280-299.

## Restrictions:


The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

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## Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an \* are filled-in (n.a. for not applicable).  
Additional information regarding each item may be found under P14.

Brand *	Konica Minolta	<div>Logo</div> <div></div>
Company name *	Konica Minolta, Inc.	
Contact information *	https://www.konicaminolta.net/neoqa/gl/about.php	
Internet site *	http://www.konicaminolta.com/index.html	
Additional information		

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.	
Type of product *	<a href="#">Multifunction Printer</a>
Commercial name *	<a href="#">bizhub</a>
Model number *	<a href="#">227</a>
Issue date *	<a href="#">5 June 2015</a>
Intended market *	<input type="checkbox"/> Global <input type="checkbox"/> Europe <input checked="" type="checkbox"/> Asia, Pacific & Japan <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Other
Additional information	<a href="#">version 1.0</a>

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality Control		Requirement met	
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see <a href="http://www.itecodeclaration.org">www.itecodeclaration.org</a> ).	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Model number *	bizhub 227	Logo	
Issue date *	5 June 2015		

Product environmental attributes - Legal requirements		Requirement met		
Item		Yes	No	n.a.
<b>P1</b>	<b>Hazardous substances and preparations</b>			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm <sup>2</sup> /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P2</b>	<b>Batteries</b>			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P3</b>	<b>Safety, EMC connection to the telephone network and labeling</b>			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4</b>	<b>Consumable materials</b>			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P5</b>	<b>Product packaging</b>			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

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Issue date *	<a href="#">5 June 2015</a>		

Product environmental attributes - Market requirements - Environmental conscious design			Requirement met		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
<b>P6</b>	<b>Treatment information</b>				
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P7</b>	<b>Design</b>				
	<b>Disassembly, recycling</b>				
P7.1*	Parts that have to be treated separately are easily separable		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Product lifetime</b>				
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.9.	Spare parts are available after end of production for: <b>7</b> years				<input type="checkbox"/>
P7.10	Service is available after end of production for: <b>7</b> years				<input type="checkbox"/>
	<b>Material and substance requirements</b>				
P7.11*	Product cover/housing material type: Material type: <b>PC+ABS</b> Material type: <b>PS-HI</b> Material type: <b>PC+PET</b>				
P7.12	Electrical cable insulation materials of power cables are PVC free.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.13	Electrical cable insulation materials of signal cables are PVC free		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking: <b>FR(40)</b>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.17	Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive) <input type="checkbox"/> , TBBPA (reactive) <input type="checkbox"/> , Other; chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <b>FR(17)</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: Comment: No legal limits exist, this is a market requirement. 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: <b>FR(17), FR(40)</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.20	Of total plastic parts' weight >25g, recycled material content is <b>11%</b> .				
P7.21	Of total plastic parts' weight >25g, biobased material content is <b>0.01%</b> .				
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P8</b>	<b>Batteries</b>				
P8.1*	Battery chemical composition: <b>Lithium</b>				<input type="checkbox"/>
P8.2	Batteries meet the requirements of the following voluntary program/s:				<input type="checkbox"/>

Note B2: IEC61249-2-21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

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Product environmental attributes - Market requirements (continued)					Requirement met		
Item					Yes	No	n.a.
P9 Energy consumption							
9.1 For the product the following power levels or energy consumptions are reported:							
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for energy modes and test method *			
Maximum	1382 W	1234 W	1414 W	RAL UZ-171			
Active (Printing)	410 W	430 W	430 W	RAL UZ-171			
Ready	102 W	104 W	100 W	RAL UZ-171			
Low power	16.9 W	17.5 W	16.6 W	RAL UZ-171			
Sleep	0.5 W	0.5 W	0.6 W	RAL UZ-171			
Plug-in off	0.0001 W	0.0001 W	0.0006 W	RAL UZ-171			
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	W	W	W				
PTEC * Typical Energy Consumption	W	W	W				
TEC * Typical Energy Consumption	1.0 kWh/week	1.1 kWh/week	1.0 kWh/week	Energy Star			
ETEC * Annual Energy Consumption	kWh/year	kWh/year	kWh/year				
Display resolution* : Megapixels							
Print Speed* : 22 Images per minute							
Default time to enter energy save mode: minutes							
P9.2* Information about the energy save function is provided with the product.							
P9.3* The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version: 2 Tier: Product category: MFDs Others specify:							
P10 Emissions							
Noise emission – Declared according to ISO 9296							
P10.1	Mode	Mode description	Declared A-weighted sound power level $L_{WAd}$ (B)	Declared A-weighted sound pressure level $L_{pAm}$ (dB)			
				Operator position	Bystander positions		
				Desktop or Desk side	(only if product is not operator attended)		
	Idle	* Ready	* 4.2	20.8			
	Operation	* Printing	* 6.8	47.1			
	Other mode						
Measured according to: <input checked="" type="checkbox"/> ISO7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74 with $L_{pAm}$ measurement distance m)							
P10.2 The product meets the acoustic noise requirements of the following voluntary program/s: RAL UZ-171							

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Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	n.a.
<b>Chemical emissions from printing products</b>				
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard <input type="checkbox"/> , other specify: <i>RAL UZ-171</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P10.4	Typical emission rate (print phase) is (mg/h): Dust <i>0.975</i> Ozone <i>0.194</i> Styrene <i>0.108</i> Benzene <i>0.004</i> TVOC <i>1.942</i>			<input type="checkbox"/>
P10.5	Chemical emission requirements of the following coluntary program/s <i>RAL UZ-171</i> are met for: Dust <input checked="" type="checkbox"/> Ozon <input checked="" type="checkbox"/> Styrene <input checked="" type="checkbox"/> Benzene <input checked="" type="checkbox"/> TVOC <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Electromagnetic emissions</b>				
P10.6	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P11 Consumable materials for printing products</b>				
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.3*	2-sided (duplex) printing/copying is an integrated product function.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P12 Ergonomics for computing products</b>				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P13 Packaging and documentation</b>				
P13.1*	Product packaging material type(s): <i>wood</i> weight (kg): <i>4.4</i> Product packaging material type(s): <i>paper</i> weight (kg): <i>5.0</i> Product packaging material type(s): <i>foamed PS</i> weight (kg): <i>0.4</i>			
P13.2*	Product plastic packaging is free from PVC.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	Specify media for user and product documentation (tick box): Electronic <input checked="" type="checkbox"/> Paper <input checked="" type="checkbox"/> Other <input type="checkbox"/>			<input type="checkbox"/>
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: <i>0</i> %			<input type="checkbox"/>
<b>P14 Additional information (See Note B4)</b>				
BTU (115v)	<i>22.3 BTU/h The figure is based on the TEC value of 1.1 kWh / week (=24 h x 7 days)</i>			
BTU (230v)	<i>20.6 BTU/h The figure is based on the TEC value of 1.0 kWh / week (=24 h x 7 days)</i>			

Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.


## Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2.3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

# 

## Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an \* are filled-in (n.a. for not applicable).  
Additional information regarding each item may be found under P14.

Brand *	Konica Minolta	Logo 
Company name *	Konica Minolta, Inc.	
Contact information *	<a href="https://www.konicaminolta.net/neoqa/gl/about.php">https://www.konicaminolta.net/neoqa/gl/about.php</a>	
Internet site *	<a href="http://www.konicaminolta.com/index.html">http://www.konicaminolta.com/index.html</a>	
Additional information		

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.	
Type of product *	<i>Multifunction Printer</i>
Commercial name *	<i>bizhub</i>
Model number *	<i>287</i>
Issue date *	<i>5 June 2015</i>
Intended market *	<input type="checkbox"/> Global <input type="checkbox"/> Europe <input checked="" type="checkbox"/> Asia, Pacific & Japan <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Other
Additional information	<i>version 1.0</i>

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality Control		Requirement met	
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see <a href="http://www.itecodeclaration.org">www.itecodeclaration.org</a> ).	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Product environmental attributes - Legal requirements		Requirement met		
Item		Yes	No	n.a.
<b>P1</b>	<b>Hazardous substances and preparations</b>			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm <sup>2</sup> /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P2</b>	<b>Batteries</b>			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P3</b>	<b>Safety, EMC connection to the telephone network and labeling</b>			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4</b>	<b>Consumable materials</b>			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P5</b>	<b>Product packaging</b>			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model number *	<a href="#">bizhub 287</a>	Logo	
Issue date *	<a href="#">5 June 2015</a>		

Product environmental attributes - Market requirements - Environmental conscious design			Requirement met		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
<b>P6</b>	<b>Treatment information</b>				
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P7</b>	<b>Design</b>				
	<b>Disassembly, recycling</b>				
P7.1*	Parts that have to be treated separately are easily separable		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Product lifetime</b>				
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.9.	Spare parts are available after end of production for: <b>7</b> years				<input type="checkbox"/>
P7.10	Service is available after end of production for: <b>7</b> years				<input type="checkbox"/>
	<b>Material and substance requirements</b>				
P7.11*	Product cover/housing material type: Material type: <b>PC+ABS</b> Material type: <b>PS-HI</b> Material type: <b>PC+PET</b>				
P7.12	Electrical cable insulation materials of power cables are PVC free.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.13	Electrical cable insulation materials of signal cables are PVC free		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking: <b>FR(40)</b>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.17	Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive) <input type="checkbox"/> , TBBPA (reactive) <input type="checkbox"/> , Other; chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <b>FR(17)</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: Comment: No legal limits exist, this is a market requirement. 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: <b>FR(17), FR(40)</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.20	Of total plastic parts' weight >25g, recycled material content is <b>11%</b> .				
P7.21	Of total plastic parts' weight >25g, biobased material content is <b>0.01%</b> .				
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P8</b>	<b>Batteries</b>				
P8.1*	Battery chemical composition: <b>Lithium</b>				<input type="checkbox"/>
P8.2	Batteries meet the requirements of the following voluntary program/s:				<input type="checkbox"/>

Note B2: IEC61249-2-21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.



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Product environmental attributes - Market requirements (continued)					Requirement met				
Item	Yes						No	n.a.	
<b>P9 Energy consumption</b>									
9.1 For the product the following power levels or energy consumptions are reported:									
Energy mode *	Power level at <b>100</b> V AC	Power level at <b>115</b> V AC	Power level at <b>230</b> V AC	Reference / Standard for energy modes and test method *					
<b>Maximum</b>	<b>1382</b> W	<b>1234</b> W	<b>1414</b> W	<b>RAL UZ-171</b>					
<b>Active (Printing)</b>	<b>450</b> W	<b>460</b> W	<b>460</b> W	<b>RAL UZ-171</b>					
<b>Ready</b>	<b>103</b> W	<b>106</b> W	<b>102</b> W	<b>RAL UZ-171</b>					
<b>Low power</b>	<b>17.1</b> W	<b>17.5</b> W	<b>16.4</b> W	<b>RAL UZ-171</b>					
<b>Sleep</b>	<b>0.5</b> W	<b>0.5</b> W	<b>0.6</b> W	<b>RAL UZ-171</b>					
<b>Plug-in off</b>	<b>0.0001</b> W	<b>0.0002</b> W	<b>0.0007</b> W	<b>RAL UZ-171</b>					
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	W	W	W				<input checked="" type="checkbox"/>		
PTEC * Typical Energy Consumption	W	W	W				<input checked="" type="checkbox"/>		
TEC * Typical Energy Consumption	<b>1.4</b> kWh/week	<b>1.4</b> kWh/week	<b>1.3</b> kWh/week	<b>Energy Star</b>					
ETEC * Annual Energy Consumption	kWh/year	kWh/year	kWh/year				<input checked="" type="checkbox"/>		
Display resolution * : Megapixels							<input checked="" type="checkbox"/>		
Print Speed * : <b>28</b> Images per minute							<input type="checkbox"/>		
Default time to enter energy save mode: minutes							<input type="checkbox"/>		
P9.2 *	Information about the energy save function is provided with the product.						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P9.3 *	The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version: <b>2</b> Tier: Product category: <b>MFDs</b> Others specify:						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P10 Emissions</b>									
<b>Noise emission – Declared according to ISO 9296</b>									
P10.1	Mode	Mode description	Declared A-weighted sound power level $L_{WA,d}$ (B)	Declared A-weighted sound pressure level $L_{pAm}$ (dB)					
				Operator position <input type="checkbox"/>	Bystander positions <input checked="" type="checkbox"/>				
				Desktop <input type="checkbox"/> or Desk side <input type="checkbox"/>	(only if product is not operator attended)				
	Idle	* <b>Ready</b>	* <b>4.2</b>	<b>20.9</b>		<input type="checkbox"/>			
	Operation	* <b>Printing</b>	* <b>6.8</b>	<b>47.4</b>		<input type="checkbox"/>			
	Other mode								
	Measured according to: <input checked="" type="checkbox"/> ISO7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74 with $L_{pAm}$ measurement distance m)								
P10.2	The product meets the acoustic noise requirements of the following voluntary program/s: <b>RAL UZ-171</b>						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	n.a.
<b>Chemical emissions from printing products</b>				
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard <input type="checkbox"/> , other specify: <i>RAL UZ-171</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P10.4	Typical emission rate (print phase) is (mg/h): Dust <i>0.636</i> Ozone <i>0.406</i> Styrene <i>0.116</i> Benzene <i>0.005</i> TVOC <i>1.748</i>			<input type="checkbox"/>
P10.5	Chemical emission requirements of the following columtary program/s <i>RAL UZ-171</i> are met for: Dust <input checked="" type="checkbox"/> Ozon <input checked="" type="checkbox"/> Styrene <input checked="" type="checkbox"/> Benzene <input checked="" type="checkbox"/> TVOC <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Electromagnetic emissions</b>				
P10.6	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P11 Consumable materials for printing products</b>				
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.3*	2-sided (duplex) printing/copying is an integrated product function.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P12 Ergonomics for computing products</b>				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P13 Packaging and documentation</b>				
P13.1*	Product packaging material type(s): <i>wood</i> weight (kg): <i>4.4</i> Product packaging material type(s): <i>paper</i> weight (kg): <i>5.0</i> Product packaging material type(s): <i>foamed PS</i> weight (kg): <i>0.4</i>			
P13.2*	Product plastic packaging is free from PVC.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	Specify media for user and product documentation (tick box): Electronic <input checked="" type="checkbox"/> Paper <input checked="" type="checkbox"/> Other <input type="checkbox"/>			<input type="checkbox"/>
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: <i>0</i> %			<input type="checkbox"/>
<b>P14 Additional information (See Note B4)</b>				
BTU (115v)	<i>28.0 BTU/h The figure is based on the TEC value of 1.4 kWh / week (=24 h x 7 days)</i>			
BTU (230v)	<i>26.0 BTU/h The figure is based on the TEC value of 1.3 kWh / week (=24 h x 7 days)</i>			

Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

## Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2.3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19