

Supplier's name or trade mark:		Beko
Supplier's address :		Arctic S.A Gaesti, Dambovitia, 13 Decembrie Street, No 210, Romania
Model identifier:		B3WF U 7744 WB 7002740001
Reference to the harmonised or other standards applied		EN 60456:2016/A11:2020, IEC 60704-2-4:2012
Reference to the other technical standards and specifications		
PARAMETER	UNIT	DECLARED/CALCULATED VALUES
Rated capacity for the eco 40-60 programme, at 0,5 kg intervals (c)	kg	7,0
Energy consumption of the eco 40-60 programme at rated capacity (E _{w,full})	kWh/cycle	0,646
Energy consumption of the eco 40-60 programme at half rated capacity (E _{w,½})	kWh/cycle	0,405
Energy consumption of the eco 40-60 programme at quarter rated capacity (E _{w,¼})	kWh/cycle	0,200
Weighted energy consumption of the eco 40-60 programme (E _w)	kWh/cycle	0,444
Standard energy consumption of the eco 40-60 programme (SCE _w)	kWh/cycle	0,862
Energy Efficiency Index (EEI _w)	-	51,5
Water consumption of the eco 40-60 programme at rated capacity (W _{w,full})	L/cycle	45,0
Water consumption of the eco 40-60 programme at half rated capacity (W _{w,½})	L/cycle	36,0
Water consumption of the eco 40-60 programme at quarter rated capacity (W _{w,¼})	L/cycle	28,0
Weighted water consumption (W _w)	L/cycle	37
Washing efficiency index of the eco 40-60 programme at rated capacity (I _w)	-	1,035
Washing efficiency index of the eco 40-60 programme at half rated capacity (I _w)	-	1,035
Washing efficiency index of the eco 40-60 programme at quarter rated capacity (I _w)	-	1,035
Rinsing effectiveness of the eco 40-60 programme at rated capacity (I _r)	g/kg	4,9
Rinsing effectiveness of the eco 40-60 programme at half rated capacity (I _r)	g/kg	4,9
Rinsing effectiveness of the eco 40-60 programme at quarter rated capacity (I _r)	g/kg	4,9
Programme duration of the eco 40-60 programme at rated capacity (t _w)	h:min	3:27
Programme duration of the eco 40-60 programme at half rated capacity (t _w)	h:min	2:41
Programme duration of the eco 40-60 programme at quarter rated capacity (t _w)	h:min	2:41
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at rated capacity (T)	°C	34
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at half rated capacity (T)	°C	27
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at quarter rated capacity (T)	°C	22
Spin speed in the spinning phase of the eco 40-60 programme at rated capacity (S)	rpm	1400
Spin speed in the spinning phase of the eco 40-60 programme at half rated capacity (S)	rpm	1400
Spin speed in the spinning phase of the eco 40-60 programme at quarter rated capacity (S)	rpm	1400
Weighted remaining moisture content (D)	%	53,9
Airborne acoustical noise emissions during eco 40-60 programme (spinning phase)	dB(A) re 1 pW	72
Power consumption in 'off mode' (P _o) (if applicable)	W	0,50
Power consumption in 'standby mode' (P _{sm}) (if applicable)	W	0,50
Does 'standby mode' include the display of information?	-	No
Power consumption in 'standby mode' (P _{sm}) in condition of networked standby (if applicable)	W	2,00
Power consumption in 'delay start' (P _{ds}) (if applicable)	W	4,00

$$A = -0,0391 x c + 0,6918$$

$$B = -0,0109 x c + 0,3582$$

$$C = 1 - (A + B)$$

$$E_{wz} = \frac{1}{n} \sum_{i=1}^n W_{wz,i}$$

E_{wz,i}: energy consumption of test run
E_{wz}: energy consumption of treatment
z: treatment
i: number of test run

$$E_w = A x E_{w,full} + B x E_{w,½} + C x E_{w,¼}$$

$$SCE_w = -0,0025 x c^2 + 0,0846 x c + 0,3920$$

$$EEI_w = \frac{E_w}{SCE_w} x 100$$

$$W_{wz} = \frac{1}{n} \sum_{i=1}^n W_{wz,i}$$

W_{wz,i}: water consumption of test run
W_{wz}: water consumption of treatment
z: treatment
i: number of test run

$$W_w = A x W_{w,full} + B x W_{w,½} + C x W_{w,¼}$$

$$C_z = \frac{1}{n} \sum_{i=1}^n C_{z,i}$$

$$I_{w,z} = \frac{C_z}{C_{ref}}$$

C_z: Cum of reflectance values
i: test run
z: treatment (full,1/2,1/4)
C_{ref}: The average of the sum of reflectance values for reference machine

$$Asp_i = Asp_{i,223} - Asp_{i,330}$$

$$C_{sj} = \frac{Asp_{avg,j} - b}{m}$$

$$D_{swk} = \frac{D_{sj}}{W_{swk}}$$

$$DL_i = D_{sw_{avg,i}}$$

$$Asp_{avg,j} = \frac{1}{n} \sum_{i=1}^n Asp_i$$

$$D_{sj} = C_{sj} x W_{sj} x \frac{1}{1000} \frac{1}{g}$$

$$D_{sw_{avg,i}} = \frac{1}{n} \sum_{k=1}^n D_{swk}$$

$$R = \frac{1}{n} \sum_{i=1}^n DL_i$$

i: specimen
j: sample
n: number of measurement
Asp_i: net absorbance for each specimen
Asp_{avg}: Average absorbance
m: slope of detergent calibration curve
b: intercept detergent of calibration curve
C_{sj}: concentration of detergent sample
W_{sj}: weight of water in sample
D_{sj}: Mass of detergent recovered from sample
D_{swk}: Ratio of mass of detergent recovered per gram of test swath
D_{sw,avg}: Average D_{swk} of test run
DL_i: Ratio of mass of detergent per kg of load
R: Rinsing effectiveness of all test runs

$$t_{w,z} = \frac{1}{n} \sum_{i=1}^n t_{w,z,i}$$

t_{w,z}: program duration
i: test run
z: treatment
t_{w,z,i}: duration of treatment

$$x = \frac{300 s}{\text{sampling rate (s)}}$$

Sort data in descending order and identify x'th data

$$\vartheta_{max,z,i} = \frac{1}{n} \sum_{i=1}^n \vartheta_{max,z,i,k}$$

ϑ_{max,z}: max temperature of treatment
ϑ_{max,z,i}: max temperature of each run
ϑ_{max,z,i,k}: max temperature of the datalogger
z: treatment
i: test run
k: data logger

$$S_z = \frac{1}{n} \sum_{i=1}^n S_{z,i}$$

S_z: max spin speed of treatment
S_{z,i}: max spin speed of test run
z: treatment
i: test run

$$D_{½,part,i} = \frac{M_{r,½,part,i} - M_{part}}{M_{part}}$$

$$D_{z,i} = \frac{M_{r,z,i} - M_z}{M_z}$$

$$D_z = \frac{1}{n} \sum_{i=1}^n D_{z,i}$$

$$D_{1/2} = \frac{1}{4} (D_{½,part A,1} + D_{½,part B,2} + D_{½,part A,3} + D_{½,part B,4})$$

M: mass of conditioned load
M_r: Mass of load at the end of test run
D_{z,i}: Remaining moisture content of test run
M: Mass of conditioned load
D_z: Remaining moisture content of treatment
i: test run

$$D = [A x D_{full} + B x D_{½} + C x D_{¼}]$$

$$A = -0,0391 x 7,0 + 0,6918 = 0,418$$

$$B = -0,0109 x 7,0 + 0,3582 = 0,282$$

$$C = 1 - (0,418 + 0,282) = 0,300$$

$$A = -0,0391 x c + 0,6918 =$$

$$B = -0,0109 x c + 0,3582 =$$

$$C = 1 - (A + B) =$$

$$E_w = 0,418 x 0,646 + 0,282 x 0,405 + 0,300 x 0,200 = 0,444$$

$$SCE_w = -0,0025 x 7,0^2 + 0,0846 x 7,0 + 0,3920 = 0,862$$

$$EEI_w = \frac{0,444}{0,862} x 100 = 51,5$$

$$E_w = A x E_{w,full} + B x E_{w,½} + C x E_{w,¼} =$$

$$SCE_w = -0,0025 x c^2 + 0,0846 x c + 0,3920 =$$

$$EEI_w = \frac{E_w}{SCE_w} x 100 =$$

$$W_w = 0,418 x 45,0 + 0,282 x 36,0 + 0,300 x 28,0 = 37$$

$$W_w = A x W_{w,full} + B x W_{w,½} + C x W_{w,¼} =$$