

115337EN-06 2023-09

## Flexit UNI 4

• WITH LOCAL DEMAND CONTROL

#### CTRL 0,65

## LOCAL DEMAND CONTROL

Sensor control for different zones Accessories: Advanced panel + CO<sub>2</sub>-sensor/ motion sensor + damper Result: Increased air flow rate in zones that need it

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 REL EC Art.no. 700061 UNI4 R L EC Art.no. 700063
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{\text{a}} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{\text{h}} \cdot \Delta T_{\text{h}} \cdot \\ &\eta_{\text{h}}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} - q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 - \eta_{\text{t}})) + Q_{\text{defr}} \end{split}$	Cold -83,1 kWh/m² and years Average -39,6 kWh/m² and years Warm -14,7 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	662 m <sup>3</sup> /h (0,1839 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	45 dB(A)
k)	Reference flow rate:	0,1286 m³/s (463m³/h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m <sup>3</sup> /h)
n)	Control factor and control typology:	0,65
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
s)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	236 kWh/100m³ and years
W)	The annual heating saved: $AHS = t_h \cdot \Delta T_h \cdot \eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8898 kWh/year Average 4548 kWh/year Warm 2057 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

## Flexit UNI 4

WITH CENTRAL DEMAND CONTROL

#### CTRL 0,85

#### **CENTRAL DEMAND CONTROL**

Sensor control for part of/whole building Accessories: Advanced panel + CO<sub>2</sub>-sensor/motion sensor

Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 REL EC Art.no. 700061 UNI4 R L EC Art.no. 700063
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{\text{a}} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{\text{h}} \cdot \Delta T_{\text{h}} \cdot \\ &\eta_{\text{h}}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 \cdot \eta_{\text{l}})) + Q_{\text{defr}} \end{split}$	Cold -78 kWh/m² and years Average -35,6 kWh/m² and years Warm -11,2 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	662 m <sup>3</sup> /h (0,1839 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	45 dB(A)
k)	Reference flow rate:	0,1286 m <sup>3</sup> /s (463m <sup>3</sup> /h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m <sup>3</sup> /h)
n)	Control factor and control typology:	0,85
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
s)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	353 kWh/100m³ and years
W)	The annual heating saved: AHS = $t_h \cdot \Delta T_h \cdot \eta_{h^{-1}} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8686 kWh/year Average 4440 kWh/year Warm 2008 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

# Flexit UNI 4

WITH TIMER

#### CTRL 0,95

## **TIMER**

Timer control Accessories: Advanced panel Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 REL EC Art.no. 700061 UNI4 R L EC Art.no. 700063
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 \cdot \eta_{t})) + Q_{\text{defr}} \end{split}$	Cold -75,4 kWh/m² and years Average -33,4 kWh/m² and years Warm -9,4 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	662 m <sup>3</sup> /h (0,1839 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	45 dB(A)
k)	Reference flow rate:	0,1286 m³/s (463m³/h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m³/h)
n)	Control factor and control typology:	0,95
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
S)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	418 kWh/100m³ and years
w)	The annual heating saved: $AHS = t_h \cdot \Delta T_h \cdot \eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8580 kWh/year Average 4386 kWh/year Warm 1983 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

# Flexit UNI 4

WITH MANUAL CONTROL

## CTRL 1

#### MANUAL CONTROL

Forcing switch control Accessories: Basic/advanced panel Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 REL EC Art.no. 700061 UNI4 R L EC Art.no. 700063
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 \cdot \eta_{l})) + Q_{\text{defr}} \end{split}$	Cold -74 kWh/m² and years Average -32,3 kWh/m² and years Warm -8,4 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	662 m <sup>3</sup> /h (0,1839 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	45 dB(A)
k)	Reference flow rate:	0,1286 m³/s (463m³/h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m <sup>3</sup> /h)
n)	Control factor and control typology:	1,0
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
S)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: $AEC = t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	451 kWh/100m³ and years
w)	The annual heating saved: AHS = $t_h \cdot \Delta T_h \cdot \eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8527 kWh/year Average 4359 kWh/year Warm 1971 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

## Flexit UNI 4

WITH LOCAL DEMAND CONTROL

#### CTRL 0,65

#### LOCAL DEMAND CONTROL

Sensor control for different zones Accessories: Advanced panel + CO<sub>2</sub>-sensor/ motion sensor + damper Result: Increased air flow rate in zones that need it

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 RER EC Art.no. 700060 UNI4 R R EC Art.no. 700062
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 \cdot \eta_{l})) + Q_{\text{defr}} \end{split}$	Cold -83,1 kWh/m² and years Average -39,6 kWh/m² and years Warm -14,7 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	660 m <sup>3</sup> /h (0,1833 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	44 dB(A)
k)	Reference flow rate:	0,1282 m <sup>3</sup> /s (462 m <sup>3</sup> /h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m³/h)
n)	Control factor and control typology:	0,65
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
s)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	236 kWh/100m³ and years
w)	The annual heating saved: $AHS = t_h \cdot \Delta T_h \cdot \eta_{h^{-1}} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8898 kWh/year Average 4548 kWh/year Warm 2057 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

## Flexit UNI 4

WITH CENTRAL DEMAND CONTROL

#### CTRL 0,85

#### **CENTRAL DEMAND CONTROL**

Sensor control for part of/whole building Accessories: Advanced panel + CO<sub>2</sub>-sensor/motion sensor

Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 RER EC Art.no. 700060 UNI4 R R EC Art.no. 700062
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 \cdot \eta_{l})) + Q_{\text{defr}} \end{split}$	Cold -78 kWh/m² and years Average -35,6 kWh/m² and years Warm -11,2 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	660 m <sup>3</sup> /h (0,1833 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	44 dB(A)
k)	Reference flow rate:	0,1282 m <sup>3</sup> /s (462 m <sup>3</sup> /h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m <sup>3</sup> /h)
n)	Control factor and control typology:	0,85
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
s)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: $AEC = t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	353 kWh/100m³ and years
w)	The annual heating saved: AHS = $t_h \cdot \Delta T_h \cdot \eta_{h^{-1}} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8686 kWh/year Average 4440 kWh/year Warm 2008 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

# Flexit UNI 4

WITH TIMER

#### CTRL 0,95

## **TIMER**

Timer control Accessories: Advanced panel Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 RER EC Art.no. 700060 UNI4 R R EC Art.no. 700062
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 - \eta_{l})) + Q_{\text{defr}} \end{split}$	Cold -75,4 kWh/m² and years Average -33,4 kWh/m² and years Warm -9,4 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	660 m <sup>3</sup> /h (0,1833 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	44 dB(A)
k)	Reference flow rate:	0,1282 m³/s (462 m³/h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m <sup>3</sup> /h)
n)	Control factor and control typology:	0,95
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
s)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: $AEC = t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	418 kWh/100m³ and years
w)	The annual heating saved: AHS = $t_h \cdot \Delta T_h \cdot \eta_{h^{-1}} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8580 kWh/year Average 4386 kWh/year Warm 1983 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.



115337EN-06 2023-09

# Flexit UNI 4

WITH MANUAL CONTROL

## CTRL 1

#### MANUAL CONTROL

Forcing switch control Accessories: Basic/advanced panel Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
b)	Model identifier:	UNI4 RER EC Art.no. 700060 UNI4 R R EC Art.no. 700062
c)	$\begin{split} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_{a} \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_{h} \cdot \Delta T_{h} \cdot \\ &\eta_{h}^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1 - \eta_{l})) + Q_{\text{defr}} \end{split}$	Cold -74 kWh/m² and years Average -32,3 kWh/m² and years Warm -8,4 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (component):	83%
h)	Maximum flow rate:	660 m <sup>3</sup> /h (0,1833 m <sup>3</sup> /s)
i)	Electric power input of the drive:	340 W
j)	Sound power level (Lw(A)):	44 dB(A)
k)	Reference flow rate:	0,1282 m³/s (462 m³/h)
1)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,36 W/(m³/h)
n)	Control factor and control typology:	1,0
0)	Leakage:	External leakage: 2 % Internal leakage: 5 %
p)	Mixing rate:	n.a
q)	Filter warning:	Filter warning indicated on the control panel. *
r)	For unidirectional ventilation systems:	n.a
S)	Pre-/dis-assembly instructions:	www.flexit.no
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	451 kWh/100m³ and years
w)	The annual heating saved: AHS = $t_h \cdot \Delta T_h \cdot \eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1-\eta_t))$	Cold 8527 kWh/year Average 4359 kWh/year Warm 1971 kWh/year

This document describes:

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units.