

116952EN-03 2023-05

Flexit Nordic S2

WITH LOCAL DEMAND CONTROL

CTRL 0,65

LOCAL DEMAND CONTROL

Sensor control for different zones

Accessories: App + CO₂-sensor/motion sensor + damper

Result: Increased air flow rate in zones that need it

Energy class:



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a)	Name or trade mark:	Flexit
b)	Model identifier:	Nordic S2 REL Art.no. 800111 Nordic S2 R L Art.no. 800113
c)	$\begin{split} & \text{Specific energy consumption (SEC):} \\ & \text{SEC} = \textbf{t}_{a} \cdot \text{pef} \cdot \textbf{q}_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot \textbf{t}_{h} \cdot \Delta \textbf{T}_{h} \\ & \cdot \textbf{\eta}_{h}^{-1} \cdot \textbf{c}_{\text{air}} \cdot (\textbf{q}_{\text{ref}} \cdot \textbf{q}_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (\textbf{1} - \textbf{\eta}_{\text{t}})) + \textbf{Q}_{\text{defr}} \end{split}$	Cold -80,7 kWh/m² and years Average -39 kWh/m² and years Warm -15,1 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Variable speed drive (X=2,0)
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (EN 13141-7):	74%
h)	Maximum flow rate:	339 m³/h
i)	Electric power input of the drive:	179 W
j)	Sound power level (Lw(A)):	42 dB(A)
k)	Reference flow rate:	0,0658 m ³ /s (237 m ³ /h)
l)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,350 W/(m ³ /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.com
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: $AEC = t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	185 kWh/100m² 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 8533 kWh/years Average 4362 kWh/years Warm 1972 kWh/years



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Flexit Nordic S2

CENTRAL DEMAND CONTROL

CTRL 0,85

CENTRAL DEMAND CONTROL

Sensor control for part of/whole building Accessories: App + CO₂-sensor/motion sensor Result: Increased air flow for whole building

Energy class:



a)	Name or trade mark:	Flexit
u)	Name of diade mark.	
b)	Model identifier:	Nordic S2 REL Art.no. 800111 Nordic S2 R L Art.no. 800113
c)	$\begin{split} & \text{Specific energy consumption (SEC):} \\ & \text{SEC} = \textbf{t}_{a} \cdot \text{pef} \cdot \textbf{q}_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot \textbf{t}_{h} \cdot \Delta \textbf{T}_{h} \\ & \cdot \textbf{\eta}_{h}^{-1} \cdot \textbf{c}_{\text{air}} \cdot (\textbf{q}_{\text{ref}} \cdot \textbf{q}_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (\textbf{1} - \textbf{\eta}_{\text{t}})) + \textbf{Q}_{\text{defr}} \end{split}$	Cold -74,2 kWh/m² and years Average -34 kWh/m² and years Warm -11,1 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Variable speed drive (X=2,0)
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (EN 13141-7):	74%
h)	Maximum flow rate:	339 m³/h
i)	Electric power input of the drive:	179 W
j)	Sound power level (Lw(A)):	42 dB(A)
k)	Reference flow rate:	0,0658 m ³ /s (237 m ³ /h)
l)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,350 W/(m ³ /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.com
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	317 kWh/100m² 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 8209 kWh/years Average 4196 kWh/years Warm 1898 kWh/years



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Flexit Nordic S2

• WITH TIMER

CTRL 0,95

TIMER

Timer control Accessories: App

Result: Increased air flow for whole building

Energy class:



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	ame or trade mark:	Flexit
b) M	lodel identifier:	Nordic S2 REL Art.no. 800111 Nordic S2 R L Art.no. 800113
c) SE • r	pecific energy consumption (SEC): $EC = t_a \cdot pef \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI - t_h \cdot \Delta T_h$ $\eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot MISC \cdot (1 - \eta_t)) + Q_{defr}$	Cold -70,3 kWh/m² and years Average -31 kWh/m² and years Warm -8,5 kWh/m² and years
d) Ty	ypology:	Bidirectional ventilation unit for residential
e) Di	rive:	Multi-speed drive (X=1,5)
f) H	eat recovery system:	Regenerativ heat exchanger
g) Th	hermal efficiency (EN 13141-7):	74%
h) M	laximum flow rate:	339 m³/h
i) El	lectric power input of the drive:	179 W
j) So	ound power level (Lw(A)):	42 dB(A)
k) Re	eference flow rate:	0,0658 m ³ /s (237 m ³ /h)
l) Re	eference pressure difference:	50 Pa
m) Sp	pecific Power Input (SPI):	0,350 W/(m ³ /h)
n) Co	ontrol factor and control typology:	0,95
o) Le	eakage:	External leakage: 2 % Internal leakage: 5 %
p) M	lixing rate:	n.a
q) Fil	lter warning:	Filter warning indicated on the control panel. *
r) Fo	or unidirectional ventilation systems:	n.a
s) Pr	re-/dis-assembly instructions:	www.flexit.com
T1	or non-ducted units: ressure variations	n.a
[1]	or non-ducted units: ir tightness	n.a
v) Th	he annual electricity consumption: EC = t _a · q _{net} · MISC · CTRL ^x · SPI + Q _{defr}	406 kWh/100m² and years
w) Al	he annual heating saved: $HS = t_h \cdot \Delta T_h \cdot \eta_h^{-1} \cdot c_{air} \cdot (q_{ref} - q_{net} \cdot CTRL \cdot 1)$ $HSC \cdot (1-\eta_t)$	Cold 8047 kWh/years Average 4114 kWh/years Warm 1860 kWh/years



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Flexit Nordic S2

WITH MANUAL CONTROL

CTRL 1,0

MANUAL CONTROL

Forcing switch control Accessories: CI 70/app/CI 78

Result: Increased air flow for whole building

Energy class:

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a)	Name or trade mark:	Flexit
aj	Name of trade mark.	Nordic S2 REL Art.no. 800111
b)	Model identifier:	Nordic S2 R L Art.no. 800111
c)	$\begin{aligned} &\text{Specific energy consumption (SEC):} \\ &\text{SEC} = t_a \cdot \text{pef} \cdot q_{\text{net}} \cdot \text{MISC} \cdot \text{CTRL}^{\times} \cdot \text{SPI} \cdot t_h \cdot \Delta T_h \\ &\cdot \eta_h^{-1} \cdot c_{\text{air}} \cdot (q_{\text{ref}} \cdot q_{\text{net}} \cdot \text{CTRL} \cdot \text{MISC} \cdot (1-\eta_t)) + Q_{\text{defr}} \end{aligned}$	Cold -68,7 kWh/m² and years Average -29,8 kWh/m² and years Warm -7,5 kWh/m² and years
d)	Typology:	Bidirectional ventilation unit for residential
e)	Drive:	Multi-speed drive (X=1,5)
f)	Heat recovery system:	Regenerativ heat exchanger
g)	Thermal efficiency (EN 13141-7):	74%
h)	Maximum flow rate:	339 m³/h
i)	Electric power input of the drive:	179 W
j)	Sound power level (Lw(A)):	42 dB(A)
k)	Reference flow rate:	0,0658 m ³ /s (237 m ³ /h)
l)	Reference pressure difference:	50 Pa
m)	Specific Power Input (SPI):	0,350 W/(m ³ /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.com
t)	For non-ducted units: Pressure variations	n.a
u)	For non-ducted units: Air tightness	n.a
v)	The annual electricity consumption: AEC = $t_a \cdot q_{net} \cdot MISC \cdot CTRL^x \cdot SPI + Q_{defr}$	438 kWh/100m² 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 7966 kWh/years Average 4072 kWh/years Warm 1841 kWh/years