AMS
AIR MOVEMENT SUPPLIES

"Be content to act, and leave the talking to others."
— Baltasa

TRUSTED PARTNER OF

Rf-t Rf-Technologies

FIRE DAMPERS

CU2/B

Battery assembly of up to 4 individual dampers.

Suitable for solid walls only.

Manual handle or motorized.

Sections of each 200×200mm up to section of 1500×800mm.

Max size 3200×850mm combined.



Conforms with:

- Standard EN 15650
- Tested to EN 1366-2 (500Pa)
- Classified under EN 13501-3
- Leakage to EN 1571 (Class B)

CE

AMS
AIR MOVEMENT SUPPLIES

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www.airmovementsupplies.ie

Explanation of the abbreviations and pictograms

Wn = nominal width
Hn = nominal height
Dn = nominal diameter
E = integrity
I = thermal insulation
S = smoke leakage
Pa = pascal
ve = vertical wall penetration
ho = horizontal floor penetration
o -> i = meets the criteria from the outside (o) to the inside (i)
i <-> o = fire side not important
V AC = Volt alternating current
V DC = Volt direct current

E.TELE = power supply magnet
E.ALIM = power supply motor
V = volt
W = watt
Auto = automatic
Tele = remote controlled
Pnom = nominal capacity
Pmax = maximum capacity
GKB (type A) / GKF (type F): "GKB" stands for standard plasterboards (type A according to EN 520) while "GKF" plasterboards offer a higher fire resistance for a similar plate thickness (type F according to EN 520)
Cal-Sil = calcium silicate
OP = option (delivered with the product)
KIT = kit (delivered separately for repair or upgrade)
PG = connection flange to the duct

Sn = free air passage
ζ [-] = pressure loss coefficient
Q = airflow
ΔP = static pressure drop
v = air speed in the duct
Lwa = A-weighted sound power level
Lw oct = sound power level per octave midband
dB(A) = A-weighted decibel value
ΔL = correction factor

	battery assembly tested in rigid wall		suitable for built-in installation
	intermediate dimensions on request		

"To be successful, you have to have your heart in your business in your heart."
— Thomas Watson

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FIRE DAMPERS
CU2/B

Battery assembly of max. 4 individual dampers.

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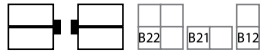
DECLARATION OF PERFORMANCE

CE_DoP_Rf-t_C31_EN F-05/2018

1. Unique identification code of the product-type:	**CU2/B**
2. Intended use/es:	Rectangular fire damper to be used in conjunction with partitions to maintain fire compartments in heating, ventilating and air conditioning installations.
3. Manufacturer:	Rf-Technologies NV, Lange Ambachtstraat 40, B-9860 Oosterzele
4. System/s of AVCP:	System 1
5. Harmonised standard / European Assessment Document; notified body / European Technical Assessment, Technical Assessment Body, notified body; certificate of constancy of performance:	EN 15650:2010, BCCA with identification number 0749; BCCA-0749-CPR-BC1-606-0464-15650.03-0464; BCCA-0749-CPR-BC1-606-0464-15650.13-0464;
6. Declared performance according to EN 15650:2010	(Fire resistance according to EN 1366-2 and classifications according to EN 13501-3)

Essential characteristics					Performance
Range	Wall type	Wall	Sealing	Installation	Classification
CU2/B ≤ 4 x CU2 (200x200 mm ≤ CU2 ≤ 1200x800 mm)	Rigid wall	Reinforced concrete ≥ 110 mm	Mortar	1	EI 120 (v_e i ⇔ o) S - (500 Pa)
CU2/B ≤ 4 x CU2 (200x200 mm ≤ CU2 ≤ 1500x800 mm)	Rigid wall	Reinforced concrete ≥ 110 mm	Mortar	1	EI 120 (v_e i ⇔ o) S - (300 Pa) EI 60 (ve i ⇔ o) S - (500 Pa)

1 Type of installation: built-in 0/180° (B22, B21, B12)



Harmonised standard EN 15650:2010

Essential characteristics	Performance
Nominal activation conditions/sensitivity:	Pass
Response delay (response time): closure time	Pass
Operational reliability: cycling	CFTH - 50 cycles; MANO - 300 cycles; B(L)F(T) - 10000 cycles; BFL(T) - 10000 cycles; BFN(T) - 10000 cycles; ONE - 10000 cycles; UNIQ - 10000 cycles
Durability of response delay:	Pass
Durability of operational reliability:	Pass
Protection against corrosion according to EN 60068-2-52:	Pass
Damper casing leakage according to EN 1751:	≥ class B

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:
Frank Verlinden, Product Manager

Oosterzele, 05/2018

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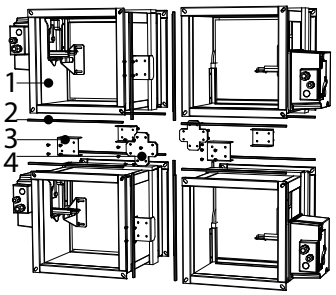
Product presentation CU2/B

The CU2/B damper is a battery assembly of several CU2 dampers with maximum 4 individual dampers (B12, B21 or B22) and with a fire resistance up to 120 minutes. The CU2/B battery assembly is the ideal solution for installations with large dimensions.

Fire dampers are installed where air ducts penetrate fire-resistant compartment walls. Their role is to restore the fire resistance grade of the penetrated wall and to prevent smoke propagation. Fire dampers are distinguished by their degree of fire resistance, by their aeraulic properties as well as by their installation ease. Rf-Technologies' fire dampers are all CE marked. They can be equipped with various types of mechanisms depending on the specific needs linked to the project or to the local regulations.

- ☑ large dimensions
- ☑ battery assembly tested in rigid wall

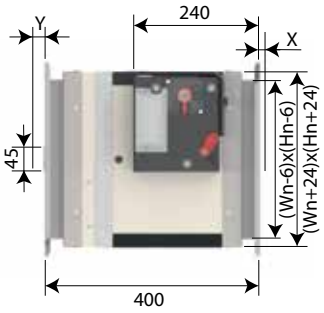
- tested according to EN 1366-2 up to 500 Pa
- suitable for installation in rigid wall
- maintenance-free
- for indoor use
- suitable for built-in installation
- intermediate dimensions on request



1. individual damper with PG25 flange and connection pieces in Promatect
2. EPDM foam
3. connection piece
4. central plate (B22)

Range and dimensions CU2/B

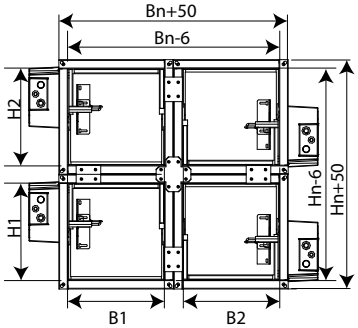
Exceeding blade: X = on the mechanism side, Y = on the wall side



Hn [mm]	300	350	400	450	500	550	600	650	700	750	800
x	-	-	-	-	-	1	26	51	76	101	126
y	2	27	52	77	102	127	152	177	202	227	252

	≥	≤
(W x H) mm	200x200	1500x800

Possibilities: B12, B21, B22 (number of dampers in width / number of dampers in height)



Width:
B multiple of 100: B1 = (Bn-100)/2, B2 = Bn/2;
B ending with 50: B1 = B2 = (Bn-50)/2.

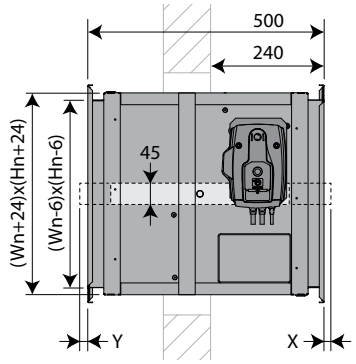
Height:
H multiple of 100: H1 = (Hn-100)/2, H2 = Hn/2;
H ending with 50: H1 = H2 = (Hn-50)/2.

Variant CU2/B-L500

The CU2/B-L500 damper is a battery assembly of several CU2-L500 dampers with maximum 4 individual dampers (B12, B21 or B22). This version ensures that the damper blade doesn't exceed the casing at the wall side (up to a height of 500 mm).

Range and dimensions CU2/B-L500

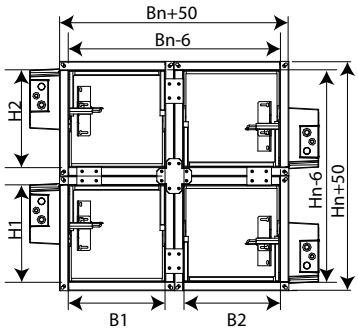
Wn/Hn in steps of 50 mm; intermediate dimensions are subject to extra cost (heights between ≥ 275 and ≤ 299 mm are not possible).
Exceeding blade: X = on the mechanism side, Y = on the wall side



Hn [mm]	500	550	600	650	700	750	800
x	-	1	26	51	76	101	126
y	2	7	52	77	102	127	152

	≥	≤
(W x H) mm	200x200	1500x800

Possibilities: B12, B21, B22 (number of dampers in width / number of dampers in height)



Width:
B multiple of 100: B1 = (Bn-100)/2, B2 = Bn/2;
B ending with 50: B1 = B2 = (Bn-50)/2.

Height:
H multiple of 100: H1 = (Hn-100)/2, H2 = Hn/2;
H ending with 50: H1 = H2 = (Hn-50)/2.

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Evolution - kits

	KITS ONE T 24 FDCB	Spring return actuator ONE 24V (with fusible link T) + bipolar beginning- and end-of-range switch
	KITS ONE T 24 FDCU	Spring return actuator ONE 24V (with fusible link T) + unipolar beginning- and end-of-range switch
	KITS ONE T 230 FDCU	Spring return actuator ONE 230V (with fusible link T) + unipolar beginning- and end-of-range switch
	KITS ONE T 230 FDCB	Spring return actuator ONE 230V (with fusible link T) + bipolar beginning- and end-of-range switch
	KIT ONE-X 24	Spring return actuator ONE-X 24V (with fusible link T)
	KIT ONE-X 230	Spring return actuator ONE-X 230V (with fusible link T)
	KITS CFTH	Automatic unlocking mechanism CFTH with FCU and without FTH 72
	KITS BFL24	Spring return actuator BFL 24V
	KITS BFL230	Spring return actuator BFL 230V

	**KITS BFL24-ST**	Spring return actuator BFL 24V with plug (ST)
	**KITS BFLT24**	Spring return actuator BFL 24V with thermo-electric fuse (T)
	**KITS BFLT230**	Spring return actuator BFL 230V with thermo-electric fuse (T)
	**KITS BFLT24-ST**	Spring return actuator BFL 24V with thermo-electric fuse (T) and plug (ST)
	**KITS BFN24**	Spring return actuator BFN 24V
	**KITS BFN24**	Spring return actuator BFN 24V (BFN kits must be used instead of BFL kits for fire dampers produced before 1/7/2015)
	**KITS BFN230**	Spring return actuator BFN 230V
	**KITS BFN24-ST**	Spring return actuator BFN 24V with plug (ST)
	**KITS BFNT24**	Spring return actuator BFN 24V with thermo-electric fuse (T)

	**KITS BFNT230**	Spring return actuator BFN 230V with thermo-electric fuse (T)
	**KITS BFNT24-ST**	Spring return actuator BFN 24V with thermo-electric fuse (T) and plug (ST)
	**KITS BFNT24 CRE**	Spring return actuator BFN 24V with thermo-electric fuse (T)
	**KITS BFNT230 CRE**	Spring return actuator BFN 230V with thermo-electric fuse (T)
	**KITS BFNT24-ST CRE**	Spring return actuator BFN 24V with thermo-electric fuse (T) and plug (ST)
	**KITS BF24**	Spring return actuator BF 24V (BF kits must be used instead of BFN kits for fire dampers produced before 1/7/2015)
	**KITS FDC CFTH**	1 limit switch (FCU/DCU/FCB/DCB)
	**KITS SN2 BFL/BFN**	Auxiliary limit switch 'open/closed'
	**KITS FTH72**	Fusible link FTH 72°C (for CFTH)

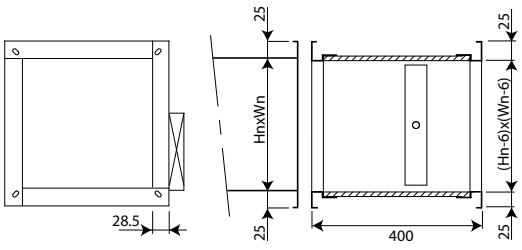
Options - at the time of order

	KITS ZBAT 72	Black spare part for thermo-electric fuse for BFLT/BFNT
	FUS72 ONE	Fusible link 72°C
	MECT	Testbox for mechanisms 24/48 V (magnet, motor, beginning and end of range switches)
	KITS EQ	Kit equipotential connection (per set of 5 pieces)

Options - at the time of order

	EQ	Equipotential connection
	ONE-X CN	Connectors for the bus cables and the power cable.

Flange types - at the time of order

	PG25	Connection to ducts with 20 and 30 mm flanges (with bolts). Elliptical holes Ø 8,5 x 16 mm.

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Storage and handling

As this product is a safety element, it should be stored and handled with care.

Avoid:

- any kind of impact or damage
- contact with water
- deformation of the casing

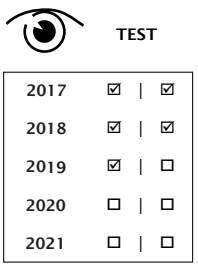
It is recommended:

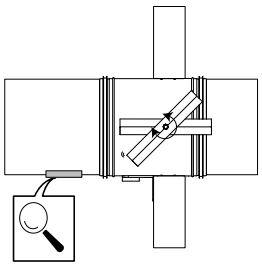
- to unload in a dry area
- not to flip or roll the product to move it
- not to use the damper as a scaffold, working table, etc.
- not to store smaller dampers inside larger ones

Installation

General points

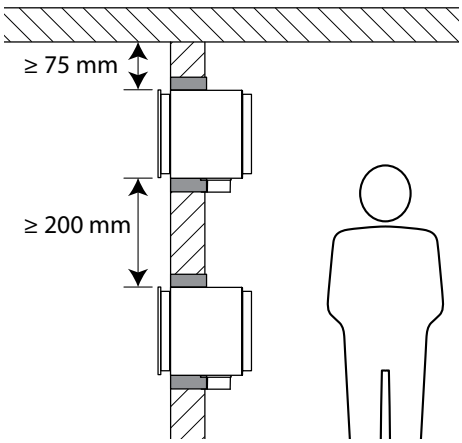
- The installation must comply with the installation manual and the classification report.
- Axis orientation: see the declaration of performance.
- Avoid obstruction of adjoining ducts.
- Product installation: always with closed damper blade.
- Verify if the blade can move freely.
- Please observe safety distances with respect to other construction elements. The operating mechanism must also remain accessible: allow for a clearance of 200 mm around the housing.
- The air tightness class will be maintained if the damper is installed according to the installation manual.
- Rf-t fire dampers are always tested in standardised constructions according to EN 1366-2. The achieved results are valid for similar supporting constructions with a fire resistance, thickness and density equal or superior to the supporting construction used during the test.
- The damper must remain accessible for inspection and maintenance.
- Schedule at least 2 visual checks each year.





Installation at a minimal distance from another damper or from an adjacent supporting construction

1



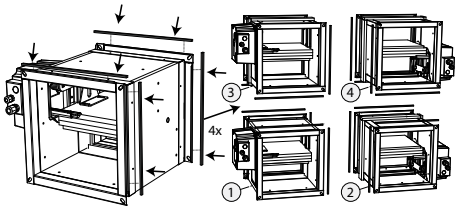
1. Principle
According to the European test standard, a fire damper must be installed at a minimum distance of 75 mm from an adjacent wall and 200 mm from another damper, unless the solution was tested at a shorter distance.

Installation in a rigid wall

The product was tested and approved in:

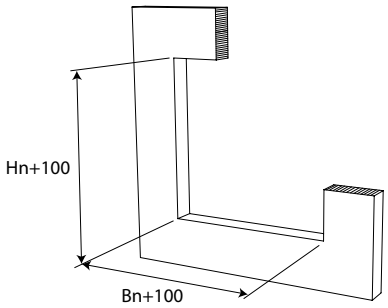
Range	Wall type		Sealing	Classification
CU2/B ≤ 4 x CU2 (200x200 mm ≤ CU2 ≤ 1200x800 mm)	Rigid wall	Reinforced concrete ≥ 110 mm	Mortar	EI 120 (v_e i ↔ o) S - (500 Pa)
CU2/B ≤ 4 x CU2 (200x200 mm ≤ CU2 ≤ 1500x800 mm)	Rigid wall	Reinforced concrete ≥ 110 mm	Mortar	EI 60 (v_e i ↔ o) S - (500 Pa)
CU2/B ≤ 4 x CU2 (200x200 mm ≤ CU2 ≤ 1500x800 mm)	Rigid wall	Reinforced concrete ≥ 110 mm	Mortar	EI 120 (v_e i ↔ o) S - (300 Pa)

1



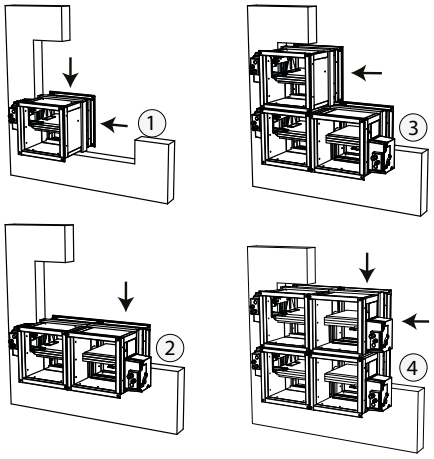
1. Cut the delivered EPDM foam to the correct sizes.
Stick it on the edges of the individual dampers' flanges as illustrated (i.e. the sides that connect with other individual dampers).

2



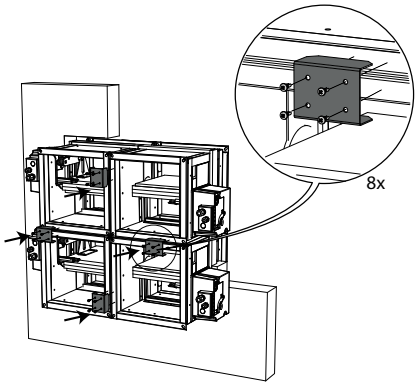
2. Provide in the wall an installation opening of minimum (Xn+100) mm x (Yn+100) mm

3



3. Mount the first individual damper in the opening.
Mount the following dampers in the opening. Every individual damper needs to exceed the wall by 240 mm on the side of the mechanism.
As the mechanism needs to be accessible at all times, you need to provide a free working space of min. 200 mm. If the mechanism is not accessible you need to provide an inspection shutter (e.g. false ceiling).

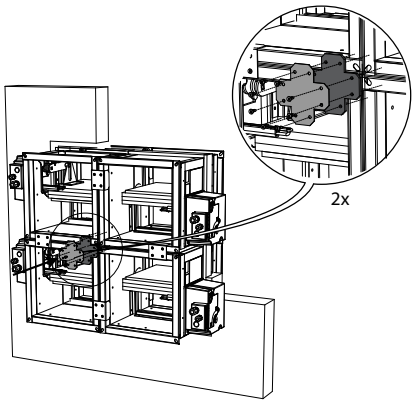
4



4. Fix the connection pieces with 4 self drilling screws on the front and back side of the individual dampers.

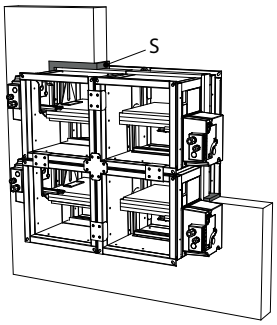
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5



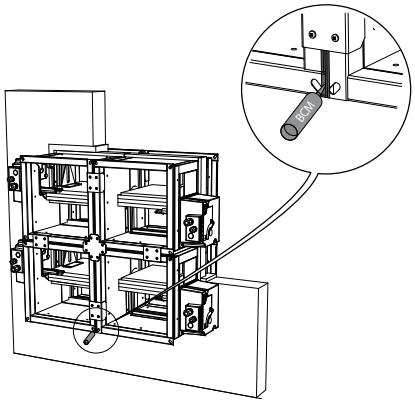
5. For a battery assembly B22: fix the center plate with 8 self drilling screws at the front and back sides of the battery assembly.

6



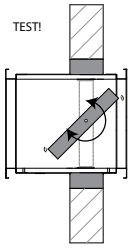
6. The joint S between the damper and the wall needs to be filled along the whole width of the wall with a standard concrete mortar.

7



7. Support the body and block the damper blade in its closed position to prevent deformation of the body during the drying process of the sealing.
Check for openings in between the individual dampers.
Seal the openings with adhesive BCM.
Run a test on the mechanisms of the fire dampers.

8



8. Check the functioning of the damper blades.

Maintenance

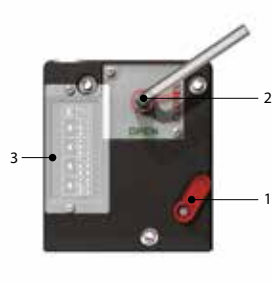
- No specific maintenance required.
- Schedule at least 2 visual checks each year.
- Remove dust and all other particles before use.
- Follow local maintenance regulations (i.e. BS9999 Annex V; NF S 61-933) and EN13306.
- Read the maintenance instructions on our website: https://www.rft.be/assets//PIM/DOCUMENTS/BROCHURE%20KITS/BRO_K139_MAINTENANCE_C.pdf
- Use the damper at up to 95% humidity, non-condensing.
- The fire damper can be cleaned with a dry or slightly damp cloth. It is forbidden to use abrasive cleaners or mechanical cleaning techniques (brush).

Operation and mechanisms

CFTH Mechanism with fusible link

The unlocking mechanism CFTH automatically unlatches the damper blade when the temperature in the duct rises above 72°C. The damper can also be unlocked and reset manually.

1. unlocking button
2. resetting handle
3. cable entrance



Options - at the time of order

FCU	Limit switch 'closed'
FDCU	Unipolar limit switch 'open/closed'
FDCB	Bipolar auxiliary limit switch 'open/closed'

Unlocking

- **manual unlocking**: use the unlocking button (1).
- **automatic unlocking**: when the fusible link melts at 72° C.
- **remote unlocking**: n/a

Resetting

- **manual resetting**: use the enclosed Hex key and turn clockwise(2).
- **motorised resetting**: n/a

Caution:

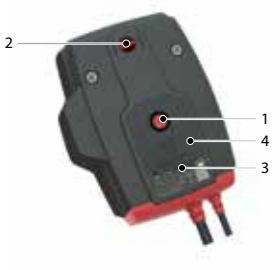
⚠ The mechanism may never be tested on its own, without being attached to the damper. Such a test might damage the mechanism or the operator might be injured.

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ONE Spring return actuator for remote control

The spring-return actuator ONE is designed to easily operate Rf-t fire dampers of all sizes, automatically or remotely. Five models are available, 24 or 230 volt, with FDCU or FDCB position switches; and 24 volt with plug (ST).

1. unlocking button
2. blade position indicator
3. LED
4. battery compartment to reset motor
5. plug (ST)



Options - at the time of order

IXI-R1	Universal field module (Modbus, BACnet or analog connection), pre-mounted on the damper.
IXI-R2-24	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.
IXI-R2-230	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.

Unlocking

- **manual unlocking**: shortly press the unlocking button (1) once.
- **automatic unlocking**: the fusible link reacts as soon as the temperature in the duct reaches 72°C.
- **remote unlocking**: by interrupting the power supply.

Resetting

- **manual resetting**: open the battery compartment (4) and press a 9V battery against the contact springs. Hold this position until the LED (3) emits a continuous light. Check whether the indicator (2) shows that the damper blade is in the open position. Remove the battery, the LED fades away. Close the battery compartment.
- **motorised resetting**: switch off the power supply for at least 5 sec. Power the actuator (respect the prescribed voltage) for at least 75 sec. The resetting stops automatically when the end of range is reached (damper open).

Caution:

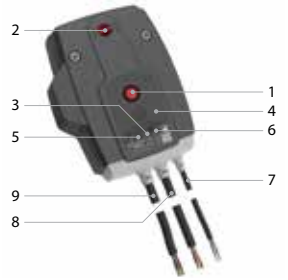
- ⚠ If the LED (3) flickers fast (3x/sec.), the battery is discharged: use a new battery.
- ⚠ If the LED (3) flickers slowly (1x/sec), the resetting is in progress.
- ⚠ If the LED (3) is continuously on, the resetting is complete and the motor is powered.
- ⚠ If the actuator detects voltage on the power cable, a brief contact of the battery is enough to start the resetting process.
- ⚠ The power supply of this actuator cannot be individually replaced. If the cable is damaged, the whole unit must be discarded and replaced.
- ⚠ The housing of the mechanism contains a temperature sensor. When the temperature in the housing exceeds 72°C, the mechanism unlocks. The LED flashes twice per second. When the temperature drops below 72°C, the mechanism can only be reset in a motorised manner after a manual reset (with a battery).
- ⚠ The end of range switches need 1 second after operation to adopt a stable position.
- ⚠ Make sure the thermal trigger device is present in the actuator. The actuator might not function properly if this is not the case.

	prod. < 1/7/2015				prod. ≥ 1/7/2015			
	CR60(1s) CR120	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200	CR60(1s) CR120(1s)	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200
Kit ONE	●	●	●		●	●	●	●

ONE-X Spring return actuator with integrated communication module.

The ONE-X is a spring return actuator with integrated communication module designed to simply operate Rf-t fire dampers of all sizes, automatically or remotely. The ONE-X is available in two versions: 24 V and 230 V.

1. unlocking button
2. blade position indicator
3. LED red: status
4. battery compartment
5. LED blue: communication
6. LED orange: error message
7. supply
8. bus cable



Options - at the time of order

ONE-X CN	Connectors for the bus cables and the power cable.

Unlocking

- **manual unlocking**: shortly press the unlocking button (1) once.
- **automatic unlocking**: the fusible link reacts as soon as the temperature in the duct reaches 72°C.
- **remote unlocking**: via ZENiX controller

Resetting

- **manual resetting**: Open the battery compartment (4) and press a 9V battery against the contact springs. Hold this position until the red LED (3) emits a continuous light. Control whether the indicator (2) indicates that the damper blade is open. Remove the battery. Close the battery compartment.
- **motorised resetting**: via ZENiX controller. By applying voltage during first use (*).

Caution:

- If the ONE-X detects voltage on the power cable, a brief contact of the battery is enough to start the resetting process, provided the ZENiX controller has sent the damper to open position or the ONE-X is being operated for the first time.
- The power supply of this actuator cannot be individually replaced. If the cable is damaged, the whole unit must be discarded and replaced.
- The housing of the mechanism contains a temperature sensor. When the temperature in the housing exceeds 72°C, the mechanism unlocks. The LED flashes twice per second. When the temperature drops below 72°C, the mechanism can only be reset in a motorised manner after a manual reset (with a battery).
- The end of range switches need 1 second after operation to adopt a stable position.

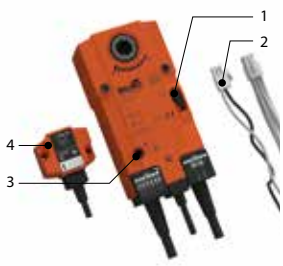
Safety regulations:

- Do not use the ONE-X for any application other than the specified applications, in particular not in aircraft or other airborne vehicles.
- The company that purchases and/or installs the ONE-X is fully responsible for the correct operation of the entire system. Only authorised specialists may perform the installation. All rules and regulations, including statutory regulations, must be observed during installation.
- This device contains electrical or electronic components and must not be disposed of as household waste. All locally applicable regulations and requirements must be strictly observed.

BFL(T) Remotely controlled spring return actuator

The spring return actuator BFL(T) is specially designed to remotely control fire dampers. The BFL(T) model is intended for fire dampers with smaller dimensions (ø ≤ 400 mm or W+H ≤ 1200 mm/1400 mm for CU-LT, CU-LT-1s).

1. locking button
2. plug (ST)
3. access for manual resetting
4. thermo-electric tripping device (T)



Options - at the time of order

SN2 BFL/BFN	Auxiliary limit switch 'open/closed'
IXI-R1	Universal field module (Modbus, BACnet or analog connection), pre-mounted on the damper.
IXI-R2-24	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.
IXI-R2-230	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.

Unlocking

- **manual unlocking**: place the locking button on "unlock". (In case of BFLT: the damper can alternatively be unlocked by pushing the "test" button on the thermo-electric fuse)
- **automatic unlocking**: the thermo-electric fuse reacts as soon as the temperature reaches 72°C (type BFLT).
- **remote unlocking**: by interrupting the power supply.

Caution:

⚠ The thermo-electric fuse will not move the damper into its safety position (when the temperature reaches 72°C) if the motor is not powered.

Resetting

- **manual resetting**: turn the enclosed handle anti-clockwise. To block the motor, place the locking button on "lock"
- **motorised resetting**: switch off the power supply for at least 10 seconds. Supply the actuator (respect the prescribed voltage) for at least 75 seconds. The resetting stops automatically when the end of range is reached (damper open) - it takes about 60 seconds to reset the damper - or when the power supply is interrupted.

Caution:

⚠ Do not use a drill or powered screwdriver.
⚠ Stop as soon as the motor is completely rearmed (end of range).

	prod. < 1/7/2015				prod. ≥ 1/7/2015			
	CR60(1s) CR120	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200	CR60(1s) CR120 (1s)	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200
Kit BFL					●	●	●	
Kit BFN	●	●	●					●
Kit BF				●				

BFN(T) Remotely controlled spring return actuator

The spring return actuator BFN(T) is specially designed to remotely control fire dampers. The BFN(T) model is intended for fire dampers with large dimensions (ø > 400 mm (CR2) or W+H > 1200 mm (CU2, CA2, CU2-15, CU4)) or for dampers CU-LT(-1s), CR60, CR120 with a production date before 1 July 2015.

1. locking button
2. plug (ST)
3. access for manual resetting
4. thermo-electric tripping device (T)



Options - at the time of order

SN2 BFL/BFN	Auxiliary limit switch 'open/closed'
IXI-R1	Universal field module (Modbus, BACnet or analog connection), pre-mounted on the damper.
IXI-R2-24	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.
IXI-R2-230	Universal field controller (Modbus, BACnet), pre-mounted on the damper and with a connection for a second damper.

Unlocking

- **manual unlocking**: place the locking button on "unlock". (In case of BFNT: the damper can alternatively be unlocked by pushing the "test" button on the thermo-electric fuse)
- **automatic unlocking**: the thermo-electric fuse reacts as soon as the temperature reaches 72°C (type BFNT).
- **remote unlocking**: by interrupting the power supply.

Caution:

⚠ The thermo-electric fuse will not move the damper into its safety position (when the temperature reaches 72°C) if the motor is not powered.

Resetting

- **manual resetting**: turn the enclosed handle anti-clockwise. To block the motor, place the locking button on "lock"
- **motorised resetting**: switch off the power supply for at least 10 seconds. Supply the actuator (respect the prescribed voltage) for at least 75 seconds. The resetting stops automatically when the end of range is reached (damper open) - it takes about 60 seconds to reset the damper - or when the power supply is interrupted.

Caution:

⚠ Do not use a drill or powered screwdriver.
⚠ Stop as soon as the motor is completely rearmed (end of range).

Caution:

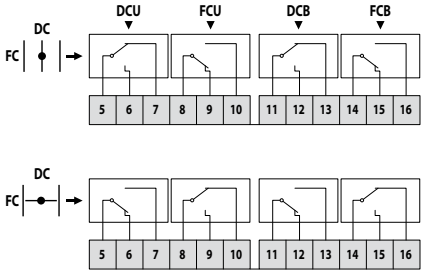
⚠ The mechanism may never be tested on its own, without being attached to the damper. Such a test might damage the mechanism or the operator might be injured.

	prod. < 1/7/2015				prod. ≥ 1/7/2015			
	CR60(1s) CR120	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200	CR60(1s) CR120 (1s)	CU-LT CU-LT-1s	CR2≤400 CU2≤1200	CR2>400 CU2>1200
Kit BFL					●	●	●	
Kit BFN	●	●	●					●
Kit BF				●				

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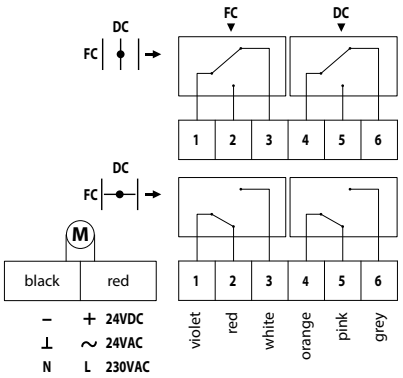
Electrical connection

CFTH



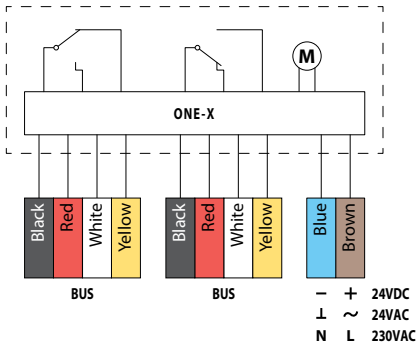
DC : Switch open position fire damper
FC : Switch closed position fire damper

ONE



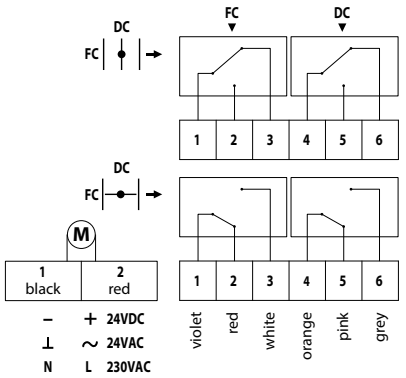
DC : Switch open position fire damper
FC : Switch closed position fire damper

ONE-X



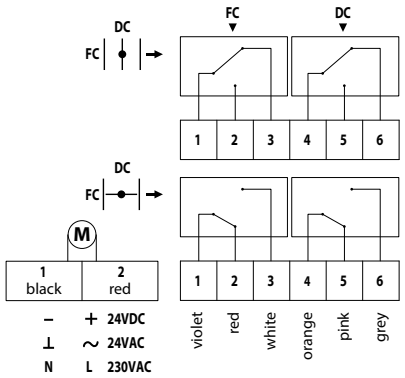
MEC	Nominal voltage motor	Nominal voltage magnet	Power consumption (stand-by)	Power consumption (operating)	Standard switches
CFTH	N/A	N/A	N/A	N/A	1mA...6A, DC 5V...AC 250V
ONE T 24 FDCU	24 V AC/DC (-10/+20%)	N/A	0,28W	4,2W	1mA...1A 60V
ONE T 230 FDCU	230 V AC (-15/+15%)	N/A	0,57W	4,2W	1mA...1A 60V
ONE T 24 FDCU ST	24 V AC/DC (-10/+20%)	N/A	0,28W	4,2W	1mA...1A 60V
ONE T 24 FDCB	24 V AC/DC (-10/+20%)	N/A	0,28W	4,2W	1mA...1A 60V
ONE T 230 FDCB	230 V AC (-15/+15%)	N/A	0,57W	4,2W	1mA...1A 60V
ONE-X 24	24 V AC/DC (-10/+20%)	N/A	0,28W	4,2W	
ONE-X 230	230 V AC (-15/+15%)	N/A	0,57W	4,2W	
BFL24	24 V AC/DC	N/A	0,7W	2,5W	1mA...3A, AC 250V
BFL230	230 V AC	N/A	1,1W	3,5W	1mA...3A, AC 250V
BFL24-ST	24 V AC/DC	N/A	0,7W	2,5W	1mA...3A, AC 250V
BFLT24	24 V AC/DC	N/A	0,8W	2,5W	1mA...3A, AC 250V
BFLT230	230 V AC	N/A	1,4W	4W	1mA...3A, AC 250V
BFLT24-ST	24 V AC/DC	N/A	0,8W	2,5W	1mA...3A, AC 250V
BFN24	24 V AC/DC	N/A	1W	4W	1mA...3A, AC 250V
BFN230	230 V AC	N/A	1,5W	5W	1mA...3A, AC 250V
BFN24-ST	24 V AC/DC	N/A	1W	4W	1mA...3A, AC 250V
BFNT24	24 V AC/DC	N/A	1,1W	4W	1mA...3A, AC 250V
BFNT230	230 V AC	N/A	1,8W	5,5W	1mA...3A, AC 250V
BFNT24-ST	24 V AC/DC	N/A	1,1W	4W	1mA...3A, AC 250V

BFL(T)



DC : Switch open position fire damper
FC : Switch closed position fire damper

BFN(T)



DC : Switch open position fire damper
FC : Switch closed position fire damper

MEC	Resetting time motor	Running time spring	Noise level motor	Noise level spring	Cable supply / control	Cable auxiliary switch	Protection class
CFTH	N/A	1 s	N/A	N/A			IP 42
ONE T 24 FDCU	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)	1 m, 2 x 0.75 mm²	1 m, 6 x 0.75 mm²	IP 54
ONE T 230 FDCU	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)	1 m, 2 x 0.75 mm²	1 m, 6 x 0.75 mm²	IP 54
ONE T 24 FDCU ST	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)	1 m, 2 x 0.75 mm²	1 m, 6 x 0.75 mm²	IP 54
ONE T 24 FDCB	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)	1 m, 2 x 0.75 mm²	(2x) 1 m, 6 x 0,75 mm²	IP 54
ONE T 230 FDCB	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)	1 m, 2 x 0.75 mm²	(2x) 1 m, 6 x 0,75 mm²	IP 54
ONE-X 24	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)			IP 54
ONE-X 230	< 75 s (cabled) / <85 s (battery)	< 30 s	< 64 dB (A)	< 67 dB (A)			IP 54
BFL24	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.34 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFL230	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFL24-ST	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFLT24	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.34 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFLT230	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFLT24-ST	< 60 s	20 s	< 43 dB (A)	< 62 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFN24	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.34 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFN230	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFN24-ST	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFNT24	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.34 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFNT230	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54
BFNT24-ST	< 60 s	20 s	≤ 55 dB (A)	ca. 70 dB (A)	1 m, 2 x 0.75 mm² (halogen-free)	1 m, 6 x 0.75 mm² (halogen-free)	IP 54

Rf-t Rf-Technologies
AMS AIR MOVEMENT SUPPLIES

Weights

CU2/B + CFTH

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	10,8	11,9	12,9	14,0	15,0	16,1	17,1	18,2	19,3	20,3	21,4	22,4	23,5	24,5	25,6	26,7	27,7	27,2	28,2	29,3	30,3	31,4	32,5	33,5	34,6	35,6	36,7
250	kg	11,8	12,9	14,0	15,2	16,3	17,4	18,5	19,7	20,8	21,9	23,0	24,2	25,3	26,4	27,5	28,6	28,2	29,3	30,4	31,5	32,7	33,8	34,9	36,0	37,1	38,3	39,4
300	kg	12,8	14,0	15,2	16,4	17,6	18,7	19,9	21,1	22,3	23,5	24,7	25,9	27,1	28,3	29,4	29,0	30,2	31,4	32,6	33,8	35,0	36,2	37,3	38,5	39,7	40,9	42,1
350	kg	13,8	15,1	16,3	17,6	18,8	20,1	21,3	22,6	23,8	25,1	26,3	27,6	28,9	30,1	29,8	31,0	32,3	33,5	34,8	36,0	37,3	38,5	39,8	41,0	42,3	43,5	44,8
400	kg	14,8	16,1	17,5	18,8	20,1	21,4	22,7	24,0	25,4	26,7	28,0	29,3	30,6	30,4	31,7	33,0	34,3	35,6	36,9	38,3	39,6	40,9	42,2	43,5	44,9	46,2	47,5
450	kg	15,8	17,2	18,6	20,0	21,4	22,7	24,1	25,5	26,9	28,3	29,7	31,0	30,8	32,2	33,6	35,0	36,4	37,7	39,1	40,5	41,9	43,3	44,7	46,0	47,4	48,8	50,2
500	kg	16,8	18,3	19,7	21,2	22,6	24,1	25,5	27,0	28,4	29,9	31,3	31,2	32,6	34,1	35,5	37,0	38,4	39,9	41,3	42,8	44,2	45,7	47,1	48,6	50,0	51,4	52,9
550	kg	17,8	19,3	20,9	22,4	23,9	25,4	26,9	28,4	29,9	31,5	31,4	32,9	34,4	35,9	37,4	38,9	40,5	42,0	43,5	45,0	46,5	48,0	49,5	51,1	52,6	54,1	-
600	kg	18,8	20,4	22,0	23,6	25,2	26,7	28,3	29,9	31,5	31,5	33,0	34,6	36,2	37,8	39,3	40,9	42,5	44,1	45,7	47,2	48,8	50,4	52,0	53,6	55,1	-	-
650	kg	19,8	21,5	23,1	24,8	26,4	28,1	29,7	31,4	31,4	33,0	34,7	36,3	38,0	39,6	41,3	42,9	44,6	46,2	47,8	49,5	51,1	52,8	54,4	56,1	-	-	-
700	kg	20,8	22,6	24,3	26,0	27,7	29,4	31,1	31,2	32,9	34,6	36,3	38,1	39,8	41,5	43,2	44,9	46,6	48,3	50,0	51,7	53,4	55,2	56,9	-	-	-	-
750	kg	21,9	23,6	25,4	27,2	29,0	30,7	30,9	32,7	34,5	36,2	38,0	39,8	41,6	43,3	45,1	46,9	48,7	50,4	52,2	54,0	55,8	57,5	-	-	-	-	-
800	kg	22,9	24,7	26,5	28,4	30,2	30,5	32,3	34,1	36,0	37,8	39,7	41,5	43,3	45,2	47,0	48,9	50,7	52,5	54,4	56,2	58,1	-	-	-	-	-	-

CU2/B + ONE T/ ONE-X

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	11,6	12,7	13,7	14,8	15,8	16,9	17,9	19,0	20,1	21,1	22,2	23,2	24,3	25,3	26,4	27,5	28,5	28,0	29,0	30,1	31,1	32,2	33,3	34,3	35,4	36,4	37,5
250	kg	12,6	13,7	14,8	16,0	17,1	18,2	19,3	20,5	21,6	22,7	23,8	25,0	26,1	27,2	28,3	29,4	29,0	30,1	31,2	32,3	33,5	34,6	35,7	36,8	37,9	39,1	40,2
300	kg	13,6	14,8	16,0	17,2	18,4	19,5	20,7	21,9	23,1	24,3	25,5	26,7	27,9	29,1	30,2	29,8	31,0	32,2	33,4	34,6	35,8	37,0	38,1	39,3	40,5	41,7	42,9
350	kg	14,6	15,9	17,1	18,4	19,6	20,9	22,1	23,4	24,6	25,9	27,1	28,4	29,7	30,9	30,6	31,8	33,1	34,3	35,6	36,8	38,1	39,3	40,6	41,8	43,1	44,3	45,6
400	kg	15,6	16,9	18,3	19,6	20,9	22,2	23,5	24,8	26,2	27,5	28,8	30,1	31,4	31,2	32,5	33,8	35,1	36,4	37,7	39,1	40,4	41,7	43,0	44,3	45,7	47,0	48,3
450	kg	16,6	18,0	19,4	20,8	22,2	23,5	24,9	26,3	27,7	29,1	30,5	31,8	31,6	33,0	34,4	35,8	37,2	38,5	39,9	41,3	42,7	44,1	45,5	46,8	48,2	49,6	51,0
500	kg	17,6	19,1	20,5	22,0	23,4	24,9	26,3	27,8	29,2	30,7	32,1	32,0	33,4	34,9	36,3	37,8	39,2	40,7	42,1	43,6	45,0	46,5	47,9	49,4	50,8	52,2	53,7
550	kg	18,6	20,1	21,7	23,2	24,7	26,2	27,7	29,2	30,7	32,3	32,2	33,7	35,2	36,7	38,2	39,7	41,3	42,8	44,3	45,8	47,3	48,8	50,3	51,9	53,4	54,9	56,4
600	kg	19,6	21,2	22,8	24,4	26,0	27,5	29,1	30,7	32,3	32,3	33,8	35,4	37,0	38,6	40,1	41,7	43,3	44,9	46,5	48,0	49,6	51,2	52,8	54,4	55,9	57,5	59,1
650	kg	20,6	22,3	23,9	25,6	27,2	28,9	30,5	32,2	32,2	33,8	35,5	37,1	38,8	40,4	42,1	43,7	45,4	47,0	48,6	50,3	51,9	53,6	55,2	56,9	58,5	60,2	61,8
700	kg	21,6	23,4	25,1	26,8	28,5	30,2	31,9	32,0	33,7	35,4	37,1	38,9	40,6	42,3	44,0	45,7	47,4	49,1	50,8	52,5	54,2	56,0	57,7	59,4	61,1	62,8	64,5
750	kg	22,7	24,4	26,2	28,0	29,8	31,5	31,7	33,5	35,3	37,0	38,8	40,6	42,4	44,1	45,9	47,7	49,5	51,2	53,0	54,8	56,6	58,3	60,1	61,9	63,7	65,4	67,2
800	kg	23,7	25,5	27,3	29,2	31,0	31,3	33,1	34,9	36,8	38,6	40,5	42,3	44,1	46,0	47,8	49,7	51,5	53,3	55,2	57,0	58,9	60,7	62,5	64,4	66,2	68,1	69,9

CU2/B + BFL

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	kg	10,8	11,9	13,0	14,0	15,1	16,1	17,2	18,2	19,3	20,4	21,4	22,5	23,5	24,6	25,7	26,7	27,8
250	kg	11,9	13,0	14,1	15,2	16,3	17,5	18,6	19,7	20,8	22,0	23,1	24,2	25,3	26,4	27,6	28,7	-
300	kg	12,9	14,0	15,2	16,4	17,6	18,8	20,0	21,2	22,4	23,5	24,7	25,9	27,1	28,3	29,5	-	-
350	kg	13,9	15,1	16,4	17,6	18,9	20,1	21,4	22,6	23,9	25,1	26,4	27,6	28,9	30,2	-	-	-
400	kg	14,9	16,2	17,5	18,8	20,1	21,5	22,8	24,1	25,4	26,7	28,1	29,4	30,7	-	-	-	-
450	kg	15,9	17,3	18,6	20,0	21,4	22,8	24,2	25,6	26,9	28,3	29,7	31,1	-	-	-	-	-
500	kg	16,9	18,3	19,8	21,2	22,7	24,1	25,6	27,0	28,5	29,9	31,4	-	-	-	-	-	-
550	kg	17,9	19,4	20,9	22,4	23,9	25,5	27,0	28,5	30,0	31,5	-	-	-	-	-	-	-
600	kg	18,9	20,5	22,0	23,6	25,2	26,8	28,4	29,9	31,5	-	-	-	-	-	-	-	-
650	kg	19,9	21,5	23,2	24,8	26,5	28,1	29,8	31,4	-	-	-	-	-	-	-	-	-
700	kg	20,9	22,6	24,3	26,0	27,7	29,4	31,2	-	-	-	-	-	-	-	-	-	-
750	kg	21,9	23,7	25,5	27,2	29,0	30,8	-	-	-	-	-	-	-	-	-	-	-
800	kg	22,9	24,7	26,6	28,4	30,3	-	-	-	-	-	-	-	-	-	-	-	-

CU2/B + BFLT

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	kg	10,9	12,0	13,1	14,1	15,2	16,2	17,3	18,3	19,4	20,5	21,5	22,6	23,6	24,7	25,8	26,8	27,9
250	kg	12,0	13,1	14,2	15,3	16,4	17,6	18,7	19,8	20,9	22,1	23,2	24,3	25,4	26,5	27,7	28,8	-
300	kg	13,0	14,1	15,3	16,5	17,7	18,9	20,1	21,3	22,5	23,6	24,8	26,0	27,2	28,4	29,6	-	-
350	kg	14,0	15,2	16,5	17,7	19,0	20,2	21,5	22,7	24,0	25,2	26,5	27,7	29,0	30,3	-	-	-
400	kg	15,0	16,3	17,6	18,9	20,2	21,6	22,9	24,2	25,5	26,8	28,2	29,5	30,8	-	-	-	-
450	kg	16,0	17,4	18,7	20,1	21,5	22,9	24,3	25,7	27,0	28,4	29,8	31,2	-	-	-	-	-
500	kg	17,0	18,4	19,9	21,3	22,8	24,2	25,7	27,1	28,6	30,0	31,5	-	-	-	-	-	-
550	kg	18,0	19,5	21,0	22,5	24,0	25,6	27,1	28,6	30,1	31,6	-	-	-	-	-	-	-
600	kg	19,0	20,6	22,1	23,7	25,3	26,9	28,5	30,0	31,6	-	-	-	-	-	-	-	-
650	kg	20,0	21,6	23,3	24,9	26,6	28,2	29,9	31,5	-	-	-	-	-	-	-	-	-
700	kg	21,0	22,7	24,4	26,1	27,8	29,5	31,3	-	-	-	-	-	-	-	-	-	-
750	kg	22,0	23,8	25,6	27,3	29,1	30,9	-	-	-	-	-	-	-	-	-	-	-
800	kg	23,0	24,8	26,7	28,5	30,4	-	-	-	-	-	-	-	-	-	-	-	-

CU2/B + BFN

Hn\Wn [mm]		450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	-	-	-	-	-	-	-	-	-	-	-	-	27,5	28,6	29,6	30,7	31,8	32,8	33,9	34,9	36,0	37,0
250	kg	-	-	-	-	-	-	-	-	-	-	-	28,5	29,6	30,8	31,9	33,0	34,1	35,2	36,4	37,5	38,6	39,7
300	kg	-	-	-	-	-	-	-	-	-	-	29,4	30,6	31,8	32,9	34,1	35,3	36,5	37,7	38,9	40,1	41,3	42,4
350	kg	-	-	-	-	-	-	-	-	-	30,1	31,4	32,6	33,9	35,1	36,4	37,6	38,9	40,1	41,4	42,6	43,9	45,1
400	kg	-	-	-	-	-	-	-	-	30,7	32,0	33,3	34,7	36,0	37,3	38,6	39,9	41,3	42,6	43,9	45,2	46,5	47,8
450	kg	-	-	-	-	-	-	-	31,2	32,6	33,9	35,3	36,7	38,1	39,5	40,9	42,2	43,6	45,0	46,4	47,8	49,2	50,5
500	kg	-	-	-	-	-	-	31,5	33,0	34,4	35,9	37,3	38,8	40,2	41,7	43,1	44,6	46,0	47,5	48,9	50,4	51,8	53,2
550	kg	-	-	-	-	-	31,7	33,2	34,8	36,3	37,8	39,3	40,8	42,3	43,8	45,4	46,9	48,4	49,9	51,4	52,9	54,4	55,9
600	kg	-	-	-	-	31,8	33,4	35,0	36,5	38,1	39,7	41,3	42,9	44,4	46,0	47,6	49,2	50,8	52,3	53,9	55,5	57,1	58,7
650	kg	-	-	-	31,8	33,4	35,0	36,7	38,3	40,0	41,6	43,3	44,9	46,6	48,2	49,8	51,5	53,1	54,8	56,4	58,1	59,7	61,4
700	kg	-	-	31,6	33,3	35,0	36,7	38,4	40,1	41,8	43,5	45,2	47,0	48,7	50,4	52,1	53,8	55,5	57,2	58,9	60,6	62,3	64,1
750	kg	-	31,3	33,0	34,8	36,6	38,4	40,1	41,9	43,7	45,5	47,2	49,0	50,8	52,6	54,3	56,1	57,9	59,7	61,4	63,2	65,0	66,8
800	kg	30,8	32,7	34,5	36,3	38,2	40,0	41,9	43,7	45,5	47,4	49,2	51,1	52,9	54,7	56,6	58,4	60,3	62,1	63,9	65,8	67,6	69,5

CU2/B + BFNT

Hn\Wn [mm]		500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	-	-	-	-	-	-	-	-	-	-	-	27,6	28,7	29,7	30,8	31,9	32,9	34,0	35,0	36,1	37,1
250	kg	-	-	-	-	-	-	-	-	-	-	28,6	29,7	30,9	32,0	33,1	34,2	35,3	36,5	37,6	38,7	39,8
300	kg	-	-	-	-	-	-	-	-	-	29,5	30,7	31,9	33,0	34,2	35,4	36,6	37,8	39,0	40,2	41,4	42,5
350	kg	-	-	-	-	-	-	-	-	30,2	31,5	32,7	34,0	35,2	36,5	37,7	39,0	40,2	41,5	42,7	44,0	45,2
400	kg	-	-	-	-	-	-	-	30,8	32,1	33,4	34,8	36,1	37,4	38,7	40,0	41,4	42,7	44,0	45,3	46,6	47,9
450	kg	-	-	-	-	-	-	31,3	32,7	34,0	35,4	36,8	38,2	39,6	41,0	42,3	43,7	45,1	46,5	47,9	49,3	50,6
500	kg	-	-	-	-	-	31,6	33,1	34,5	36,0	37,4	38,9	40,3	41,8	43,2	44,7	46,1	47,6	49,0	50,5	51,9	53,3
550	kg	-	-	-	-	31,8	33,3	34,9	36,4	37,9	39,4	40,9	42,4	43,9	45,5	47,0	48,5	50,0	51,5	53,0	54,5	56,0
600	kg	-	-	-	31,9	33,5	35,1	36,6	38,2	39,8	41,4	43,0	44,5	46,1	47,7	49,3	50,9	52,4	54,0	55,6	57,2	58,8
650	kg	-	-	31,9	33,5	35,1	36,8	38,4	40,1	41,7	43,4	45,0	46,7	48,3	49,9	51,6	53,2	54,9	56,5	58,2	59,8	61,5
700	kg	-	31,7	33,4	35,1	36,8	38,5	40,2	41,9	43,6	45,3	47,1	48,8	50,5	52,2	53,9	55,6	57,3	59,0	60,7	62,4	64,2
750	kg	31,4	33,1	34,9	36,7	38,5	40,2	42,0	43,8	45,6	47,3	49,1	50,9	52,7	54,4	56,2	58,0	59,8	61,5	63,3	65,1	66,9
800	kg	32,8	34,6	36,4	38,3	40,1	42,0	43,8	45,6	47,5	49,3	51,2	53,0	54,8	56,7	58,5	60,4	62,2	64,0	65,9	67,7	69,6

Rf-t Rf-Technologies
AMS AIR MOVEMENT SUPPLIES

CU2/B-L500 + CFTH

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	11,6	12,8	13,9	15,1	16,2	17,4	18,6	19,7	20,9	22,0	23,2	24,3	25,5	26,6	27,8	29,0	30,1	29,5	30,7	31,8	33,0	34,1	35,3	36,4	37,6	38,8	39,9
250	kg	12,7	14,0	15,2	16,4	17,6	18,9	20,1	21,3	22,5	23,8	25,0	26,2	27,4	28,7	29,9	31,1	30,6	31,8	33,1	34,3	35,5	36,7	38,0	39,2	40,4	41,6	42,9
300	kg	13,8	15,1	16,4	17,7	19,0	20,3	21,6	22,9	24,2	25,5	26,8	28,1	29,4	30,7	32,0	31,5	32,8	34,1	35,4	36,7	38,0	39,3	40,6	41,9	43,2	44,5	45,8
350	kg	14,9	16,3	17,7	19,0	20,4	21,8	23,1	24,5	25,9	27,2	28,6	30,0	31,4	32,7	32,3	33,7	35,1	36,4	37,8	39,2	40,6	41,9	43,3	44,7	46,0	47,4	48,8
400	kg	16,0	17,5	18,9	20,3	21,8	23,2	24,7	26,1	27,5	29,0	30,4	31,9	33,3	33,0	34,4	35,9	37,3	38,8	40,2	41,6	43,1	44,5	46,0	47,4	48,8	50,3	51,7
450	kg	17,1	18,6	20,1	21,7	23,2	24,7	26,2	27,7	29,2	30,7	32,2	33,7	33,5	35,0	36,5	38,0	39,6	41,1	42,6	44,1	45,6	47,1	48,6	50,1	51,6	53,2	54,7
500	kg	18,2	19,8	21,4	23,0	24,6	26,1	27,7	29,3	30,9	32,5	34,0	33,9	35,5	37,0	38,6	40,2	41,8	43,4	45,0	46,5	48,1	49,7	51,3	52,9	54,5	56,0	57,6
550	kg	19,3	21,0	22,6	24,3	25,9	27,6	29,2	30,9	32,5	34,2	34,1	35,8	37,4	39,1	40,7	42,4	44,0	45,7	47,3	49,0	50,7	52,3	54,0	55,6	57,3	58,9	-
600	kg	20,4	22,1	23,9	25,6	27,3	29,0	30,8	32,5	34,2	34,2	35,9	37,6	39,4	41,1	42,8	44,5	46,3	48,0	49,7	51,4	53,2	54,9	56,6	58,4	60,1	-	-
650	kg	21,5	23,3	25,1	26,9	28,7	30,5	32,3	34,1	34,1	35,9	37,7	39,5	41,3	43,1	44,9	46,7	48,5	50,3	52,1	53,9	55,7	57,5	59,3	61,1	-	-	-
700	kg	22,6	24,5	26,3	28,2	30,1	31,9	33,8	33,9	35,8	37,7	39,5	41,4	43,3	45,1	47,0	48,9	50,7	52,6	54,5	56,4	58,2	60,1	62,0	-	-	-	-
750	kg	23,7	25,6	27,6	29,5	31,5	33,4	33,6	35,5	37,5	39,4	41,4	43,3	45,2	47,2	49,1	51,1	53,0	54,9	56,9	58,8	60,7	62,7	-	-	-	-	-
800	kg	24,8	26,8	28,8	30,8	32,9	33,1	35,1	37,1	39,1	41,2	43,2	45,2	47,2	49,2	51,2	53,2	55,2	57,2	59,2	61,3	63,3	-	-	-	-	-	-

CU2/B-L500 + ONE T / ONE-X

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	12,4	13,6	14,7	15,9	17,0	18,2	19,4	20,5	21,7	22,8	24,0	25,1	26,3	27,4	28,6	29,8	30,9	30,3	31,5	32,6	33,8	34,9	36,1	37,2	38,4	39,6	40,7
250	kg	13,5	14,8	16,0	17,2	18,4	19,7	20,9	22,1	23,3	24,6	25,8	27,0	28,2	29,5	30,7	31,9	31,4	32,6	33,9	35,1	36,3	37,5	38,8	40,0	41,2	42,4	43,7
300	kg	14,6	15,9	17,2	18,5	19,8	21,1	22,4	23,7	25,0	26,3	27,6	28,9	30,2	31,5	32,8	32,3	33,6	34,9	36,2	37,5	38,8	40,1	41,4	42,7	44,0	45,3	46,6
350	kg	15,7	17,1	18,5	19,8	21,2	22,6	23,9	25,3	26,7	28,0	29,4	30,8	32,2	33,5	33,1	34,5	35,9	37,2	38,6	40,0	41,4	42,7	44,1	45,5	46,8	48,2	49,6
400	kg	16,8	18,3	19,7	21,1	22,6	24,0	25,5	26,9	28,3	29,8	31,2	32,7	34,1	33,8	35,2	36,7	38,1	39,6	41,0	42,4	43,9	45,3	46,8	48,2	49,6	51,1	52,5
450	kg	17,9	19,4	20,9	22,5	24,0	25,5	27,0	28,5	30,0	31,5	33,0	34,5	34,3	35,8	37,3	38,8	40,4	41,9	43,4	44,9	46,4	47,9	49,4	50,9	52,4	54,0	55,5
500	kg	19,0	20,6	22,2	23,8	25,4	26,9	28,5	30,1	31,7	33,3	34,8	34,7	36,3	37,8	39,4	41,0	42,6	44,2	45,8	47,3	48,9	50,5	52,1	53,7	55,3	56,8	58,4
550	kg	20,1	21,8	23,4	25,1	26,7	28,4	30,0	31,7	33,3	35,0	34,9	36,6	38,2	39,9	41,5	43,2	44,8	46,5	48,1	49,8	51,5	53,1	54,8	56,4	58,1	59,7	61,4
600	kg	21,2	22,9	24,7	26,4	28,1	29,8	31,6	33,3	35,0	35,0	36,7	38,4	40,2	41,9	43,6	45,3	47,1	48,8	50,5	52,2	54,0	55,7	57,4	59,2	60,9	62,6	64,3
650	kg	22,3	24,1	25,9	27,7	29,5	31,3	33,1	34,9	34,9	36,7	38,5	40,3	42,1	43,9	45,7	47,5	49,3	51,1	52,9	54,7	56,5	58,3	60,1	61,9	63,7	65,5	67,3
700	kg	23,4	25,3	27,1	29,0	30,9	32,7	34,6	34,7	36,6	38,5	40,3	42,2	44,1	45,9	47,8	49,7	51,5	53,4	55,3	57,2	59,0	60,9	62,8	64,6	66,5	68,4	70,2
750	kg	24,5	26,4	28,4	30,3	32,3	34,2	34,4	36,3	38,3	40,2	42,2	44,1	46,0	48,0	49,9	51,9	53,8	55,7	57,7	59,6	61,5	63,5	65,4	67,4	69,3	71,2	73,2
800	kg	25,6	27,6	29,6	31,6	33,7	33,9	35,9	37,9	39,9	42,0	44,0	46,0	48,0	50,0	52,0	54,0	56,0	58,0	60,0	62,1	64,1	66,1	68,1	70,1	72,1	74,1	76,1

CU2/B-L500 + BFL

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	kg	11,7	12,8	14,0	15,2	16,3	17,5	18,6	19,8	20,9	22,1	23,2	24,4	25,5	26,7	27,9	29,0	30,2
250	kg	12,8	14,0	15,2	16,5	17,7	18,9	20,1	21,4	22,6	23,8	25,0	26,3	27,5	28,7	29,9	31,2	-
300	kg	13,9	15,2	16,5	17,8	19,1	20,4	21,7	23,0	24,3	25,6	26,9	28,2	29,5	30,8	32,0	-	-
350	kg	15,0	16,3	17,7	19,1	20,4	21,8	23,2	24,6	25,9	27,3	28,7	30,0	31,4	32,8	-	-	-
400	kg	16,1	17,5	19,0	20,4	21,8	23,3	24,7	26,2	27,6	29,0	30,5	31,9	33,4	-	-	-	-
450	kg	17,2	18,7	20,2	21,7	23,2	24,7	26,2	27,7	29,3	30,8	32,3	33,8	-	-	-	-	-
500	kg	18,3	19,8	21,4	23,0	24,6	26,2	27,8	29,4	30,9	32,5	34,1	-	-	-	-	-	-
550	kg	19,4	21,0	22,7	24,3	26,0	27,6	29,3	30,9	32,6	34,3	-	-	-	-	-	-	-
600	kg	20,5	22,2	23,9	25,6	27,4	29,1	30,8	32,5	34,3	-	-	-	-	-	-	-	-
650	kg	21,6	23,4	25,2	26,9	28,8	30,5	32,3	34,1	-	-	-	-	-	-	-	-	-
700	kg	22,7	24,5	26,4	28,3	30,1	32,0	33,9	-	-	-	-	-	-	-	-	-	-
750	kg	23,8	25,7	27,6	29,6	31,5	33,5	-	-	-	-	-	-	-	-	-	-	-
800	kg	24,9	26,9	28,9	30,9	32,9	-	-	-	-	-	-	-	-	-	-	-	-

CU2/B-L500 + BFLT

Hn\Wn [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	kg	11,8	12,9	14,1	15,3	16,4	17,6	18,7	19,9	21,0	22,2	23,3	24,5	25,6	26,8	28,0	29,1	30,3
250	kg	12,9	14,1	15,3	16,6	17,8	19,0	20,2	21,5	22,7	23,9	25,1	26,4	27,6	28,8	30,0	31,3	-
300	kg	14,0	15,3	16,6	17,9	19,2	20,5	21,8	23,1	24,4	25,7	27,0	28,3	29,6	30,9	32,1	-	-
350	kg	15,1	16,4	17,8	19,2	20,5	21,9	23,3	24,7	26,0	27,4	28,8	30,1	31,5	32,9	-	-	-
400	kg	16,2	17,6	19,1	20,5	21,9	23,4	24,8	26,3	27,7	29,1	30,6	32,0	33,5	-	-	-	-
450	kg	17,3	18,8	20,3	21,8	23,3	24,8	26,3	27,8	29,4	30,9	32,4	33,9	-	-	-	-	-
500	kg	18,4	19,9	21,5	23,1	24,7	26,3	27,9	29,5	31,0	32,6	34,2	-	-	-	-	-	-
550	kg	19,5	21,1	22,8	24,4	26,1	27,7	29,4	31,0	32,7	34,4	-	-	-	-	-	-	-
600	kg	20,6	22,3	24,0	25,7	27,5	29,2	30,9	32,6	34,4	-	-	-	-	-	-	-	-
650	kg	21,7	23,5	25,3	27,0	28,9	30,6	32,4	34,2	-	-	-	-	-	-	-	-	-
700	kg	22,8	24,6	26,5	28,4	30,2	32,1	34,0	-	-	-	-	-	-	-	-	-	-
750	kg	23,9	25,8	27,7	29,7	31,6	33,6	-	-	-	-	-	-	-	-	-	-	-
800	kg	25,0	27,0	29,0	31,0	33,0	-	-	-	-	-	-	-	-	-	-	-	-

CU2/B-L500 + BFN

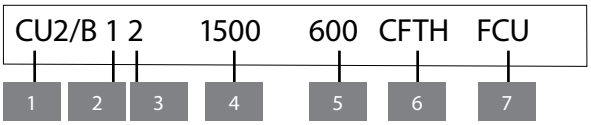
Hn\Wn [mm]		450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	-	-	-	-	-	-	-	-	-	-	-	-	29,9	31,0	32,2	33,3	34,5	35,6	36,8	38,0	39,1	40,3
250	kg	-	-	-	-	-	-	-	-	-	-	-	31,0	32,2	33,4	34,6	35,9	37,1	38,3	39,5	40,8	42,0	43,2
300	kg	-	-	-	-	-	-	-	-	-	-	31,9	33,2	34,5	35,8	37,1	38,4	39,7	41,0	42,3	43,6	44,9	46,2
350	kg	-	-	-	-	-	-	-	-	-	32,7	34,1	35,4	36,8	38,2	39,5	40,9	42,3	43,6	45,0	46,4	47,8	49,1
400	kg	-	-	-	-	-	-	-	-	33,3	34,8	36,2	37,7	39,1	40,5	42,0	43,4	44,9	46,3	47,8	49,2	50,6	52,1
450	kg	-	-	-	-	-	-	-	33,9	35,4	36,9	38,4	39,9	41,4	42,9	44,4	46,0	47,5	49,0	50,5	52,0	53,5	55,0
500	kg	-	-	-	-	-	-	34,2	35,8	37,4	39,0	40,6	42,2	43,7	45,3	46,9	48,5	50,1	51,6	53,2	54,8	56,4	58,0
550	kg	-	-	-	-	-	34,5	36,1	37,8	39,4	41,1	42,7	44,4	46,0	47,7	49,4	51,0	52,7	54,3	56,0	57,6	59,3	60,9
600	kg	-	-	-	-	34,5	36,3	38,0	39,7	41,5	43,2	44,9	46,6	48,3	50,1	51,8	53,5	55,3	57,0	58,7	60,4	62,2	63,9
650	kg	-	-	-	34,5	36,3	38,1	39,9	41,7	43,5	45,3	47,1	48,9	50,7	52,5	54,3	56,0	57,9	59,6	61,4	63,2	65,0	66,8
700	kg	-	-	34,3	36,2	38,0	39,9	41,8	43,6	45,5	47,4	49,2	51,1	53,0	54,8	56,7	58,6	60,4	62,3	64,2	66,0	67,9	69,8
750	kg	-	33,9	35,9	37,8	39,8	41,7	43,6	45,6	47,5	49,5	51,4	53,3	55,3	57,2	59,2	61,1	63,0	65,0	66,9	68,9	70,8	72,7
800	kg	33,5	35,5	37,5	39,5	41,5	43,5	45,5	47,5	49,5	51,6	53,6	55,6	57,6	59,6	61,6	63,6	65,6	67,6	69,6	71,7	73,7	75,7

CU2/B-L500 + BFNT

Hn\Wn [mm]		450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
200	kg	-	-	-	-	-	-	-	-	-	-	-	-	30,0	31,1	32,3	33,4	34,6	35,7	36,9	38,1	39,2	40,4
250	kg	-	-	-	-	-	-	-	-	-	-	-	31,1	32,3	33,5	34,7	36,0	37,2	38,4	39,6	40,9	42,1	43,3
300	kg	-	-	-	-	-	-	-	-	-	-	32,0	33,3	34,6	35,9	37,2	38,5	39,8	41,1	42,4	43,7	45,0	46,3
350	kg	-	-	-	-	-	-	-	-	-	32,8	34,2	35,5	36,9	38,3	39,6	41,0	42,4	43,7	45,1	46,5	47,9	49,2
400	kg	-	-	-	-	-	-	-	-	33,4	34,9	36,3	37,8	39,2	40,6	42,1	43,5	45,0	46,4	47,9	49,3	50,7	52,2
450	kg	-	-	-	-	-	-	-	34,0	35,5	37,0	38,5	40,0	41,5	43,0	44,5	46,1	47,6	49,1	50,6	52,1	53,6	55,1
500	kg	-	-	-	-	-	-	34,3	35,9	37,5	39,1	40,7	42,3	43,8	45,4	47,0	48,6	50,2	51,7	53,3	54,9	56,5	58,1
550	kg	-	-	-	-	-	34,6	36,2	37,9	39,5	41,2	42,8	44,5	46,1	47,8	49,5	51,1	52,8	54,4	56,1	57,7	59,4	61,0
600	kg	-	-	-	-	34,6	36,4	38,1	39,8	41,6	43,3	45,0	46,7	48,4	50,2	51,9	53,6	55,4	57,1	58,8	60,5	62,3	64,0
650	kg	-	-	-	34,6	36,4	38,2	40,0	41,8	43,6	45,4	47,2	49,0	50,8	52,6	54,4	56,1	58,0	59,7	61,5	63,3	65,1	66,9
700	kg	-	-	34,4	36,3	38,1	40,0	41,9	43,7	45,6	47,5	49,3	51,2	53,1	54,9	56,8	58,7	60,5	62,4	64,3	66,1	68,0	69,9
750	kg	-	34,0	36,0	37,9	39,9	41,8	43,7	45,7	47,6	49,6	51,5	53,4	55,4	57,3	59,3	61,2	63,1	65,1	67,0	69,0	70,9	72,8
800	kg	33,6	35,6	37,6	39,6	41,6	43,6	45,6	47,6	49,6	51,7	53,7	55,7	57,7	59,7	61,7	63,7	65,7	67,7	69,7	71,8	73,8	75,8

Rf-t Rf-Technologies
AMS AIR MOVEMENT SUPPLIES

Sample order



1. product
2. number of individual dampers in width
3. number of individual dampers in height
4. total width of the battery
5. total height of the battery
6. mechanism type
7. option: uni/bipolar switches

Approvals and certificates

All our dampers are submitted to a number of tests by official test institutes. Reports of these tests form the basis for the approvals of our dampers.

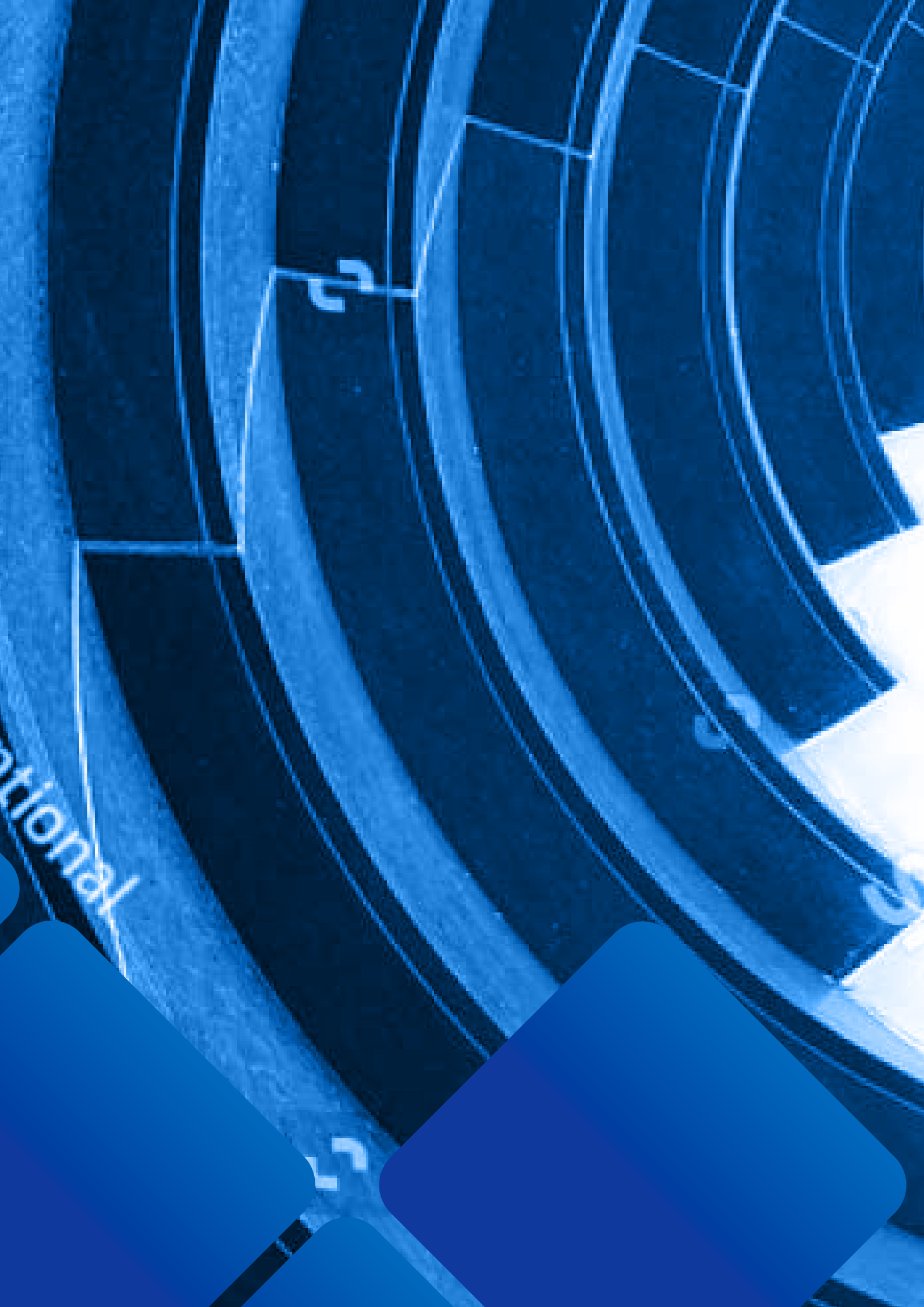
CE 0749 — BCCA-0749-CPR-BC1-606-0464-15650.03-0464

NF 537 CLAPETS RÉSISTANT AU FEU VOLETS RÉSISTANT AU FEU — 18.12

SP Certifiering — SC0652-15

The NF-label guarantees: conformity with the standard NF S 61-937 Parts 1 and 5: “Systèmes de Sécurité Incendie Dispositifs Actionnés de Sécurité”; conformity with the national decree of March 22, 2004, changed on 14 March 2011 for the classification of fire resistance; the values of the characteristics mentioned in this document. Organisme Certificateur: AFNOR Certification, 11 Rue Francis de Pressensé, F93571 La Plaine Saint-Denis Cedex; Website: http://www.afnor.org http://www.marque-nf.com; Phone: +33 (0)1.41.62.80.00, Fax: +33 (0)1.49.17.90.00, Email: certification@afnor.org

If the product is manipulated in any other way than described in this manual, Rf-Technologies will decline any responsibility and the guarantee will expire!



AMS/Rf-t Partnership

AMS AIR MOVEMENT SUPPLIES /

Rf-t Rf-Technologies

AMS Air Movement Supplies has teamed up with **Rf-Technologies**, one of the largest manufacturers in Europe, to promote their extensive range of CE marked fire and smoke rated dampers.

The company employs 170 people in its two sites in Belgium (headquarters) and Slovakia. **Rf-Technologies** solutions are designed and approved for all types of walls: vertical and horizontal, in concrete or lightweight materials. They are compliant with the most stringent local and European standards. In it's pioneering role in the field of compliance with international standards, **Rf-Technologies** has been testing it's products according to the European test criteria since 2004.

This union of resources between **AMS** and **Rf-t** will offer more choice than any other supplier or distributor in Ireland and the UK. **Rf-t** are the first to bring intelligent motors to the Irish market, eliminating the need for an additional field module. It's wiring, along with many other progressive features, has erased the need for costly engineers.

For any queries, please contact us at s**ales@airmovementsupplies.ie**.

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Ph: +353 1 463 4300

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— Chris Grosser

