

PRODUCT CATALOGUE



MANDIK®

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Fire-Fighting Technologies



FDMA (TPM 018/01)

Fire damper

EI120, EI90 (v_e, h_o i ↔ o)S



- Square dampers from 180 × 180 mm to 1 600 × 1 000 mm
- Round dampers from Ø 180 to 1 000 mm
- CE certified acc. to EN 15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EI 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, or electrical
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 200 Pa
- Can be used in explosion-hazardous environments



FDMB (TPM 075/09)

Fire damper

EI120, EI90 (v_e, h_o i ↔ o)S



- Square dampers from 160 × 160 mm to 0,5 m² (max. dimensions 1 000 × 500 mm)
- Round dampers from Ø 160 to 630 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EI 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, or electrical
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 200 Pa



FDMC (TPM 083/12)

Fire damper

EI60 (v_e, h_o i ↔ o)S



- Round dampers from Ø 100 to 400 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EI 60
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating electrical
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 200 Pa



FDMD (TPM 092/13)

Fire damper

EI120, EI90 (v_e, h_o i ↔ o)S

CE

- Round dampers from \varnothing 100 to 200 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EIS 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, or electrical
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 500 Pa



FDMS (TPM 092/13)

Fire damper

EI60 (v_e, h_o i ↔ o)S

CE

- Round fire damper - in diameters from 100 mm up to 630 mm
- CE certified acc. to EN 15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance EIS 60
- External casing leakage class min. C, internal leakage class 2 acc. EN 1751
- Cycling test in class C 10 000 acc. to EN 15650
- Corrosion resistant acc. to EN 15650
- Damper's actuating mechanism – electrical
- Maximum air speed – 12 m/s
- Pressure difference 1 200 Pa



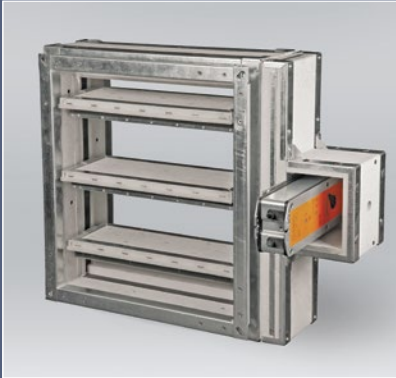
CFDM (TPM 118/16)

Fire damper

EI120, EI90, EI60 (v_e i ↔ o)S, EI120 (v_e, h_o i ↔ o)S

CE

- Round dampers 100, 125, 160, 200 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EIS 120
- Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 200 Pa



BSK-J

Fire damper

EI90 ($v_e, h_o i \leftrightarrow o$)S

CE

- Dimensions from 100 × 150 to 1 000 × 1 050 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EI S 90
- External casing leakage class B, Internal leakage class 2 acc. to EN 1751
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating electrical
- Maximum air speed through opened damper of 15 m/s and pressure difference 1 200 Pa



PSUM (TPM 006/99)

Multi-leaf fire shutter

Ex

- The fire shutter (without connecting ducts) in fire section dividing constructions prevents the spread of fire and smoke
- Fire resistance EI 90 DP1
- For vertical and horizontal fire dividing constructions
- Can be used in explosion-hazardous environments
- Dimensions from 200 × 215 mm to 600 × 815 mm
- Casing made of galvanized steel, the shutter blades made of calcium-silicate insulation material
- Cover grill coated by RAL 9010



PVM (TPM 052/05)

Fire valve

- Equipment preventing the spread of fire and smoke in ventilation and air-conditioning systems
- May be installed independently or serve for inflow and outflow of air
- Fire resistance E 90 / EW 90
- Diameter in mm: 100, 125, 160, 200
- Airflow volume from 20 to 300 m³/h
- Valve casing made of galvanized steel, body and valve plate



SMRF (TPM 091/13)

Duct silencer

CE

- Connection diameters from 80 to 500 mm
- Spiro design with blade sealing
- Fire resistance tested acc. to EN1366-1
- Tightness tested acc. to EN 12237
- Acoustic tested acc. to EN ISO 11691
- Fire resistance classified acc. to EN13501-3+A1 as EI30 without protective distance
- Maximum air speed of 12 m/s and pressure difference 1 500 Pa
- Insulation thickness 50 mm



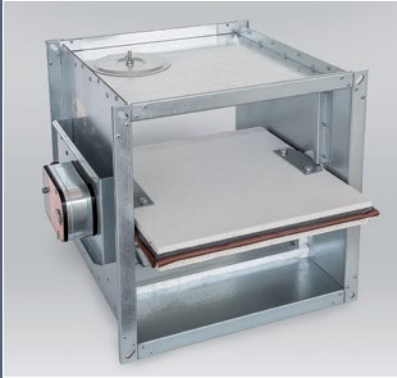
DM-S (TPM 095/13)

Fire Damper without thermal isolation E30 ($v_e, h_o, i \leftrightarrow o$)S

CE

- Round dampers from $\varnothing 100$ to 630 mm
- Completely made of galvanized steel
- Electrical actuating mechanism
- CE certified acc. to EN 15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to ES 30
- Maximum air speed through opened damper of 12 m/s and pressure difference 1 200 Pa

Smoke extraction technologies



SEDS (TPM 086/12)

Single smoke damper

CE

$E_{600} 90(v_e - i \leftrightarrow o) S1000 C_{300} AA$ single

- Square dampers from 180 × 180 mm to 1 600 × 1 000 mm
- CE certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as ES90/600, actuating AA for one Fire Compartment
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating by electrical actuator
- Max. air speed in the system of 15 m/s, allowed pressure up to 500 Pa, or under pressure up to - 1 000 Pa



SEDS-R

Single compartment smoke extraction damper with manual and automatic actuations

CE

$E_{600} 120(v_e - i \leftrightarrow o) S1500 C_{10000} MA$ single

- Round dampers with diameters from ø 100 to 630 mm
- CE certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as ES 90/600, actuating MA and AA for one Fire Compartment
- External Casing leakage class B, Internal leakage class 3 acc. to EN 1751
- Cycling test in class C 10 000 acc. to EN 12101-8
- Damper actuating by electrical actuator
- Max. air speed in the system of 15 m/s, allowed pressure up to 500 Pa, or under-pressure up to - 1500 Pa



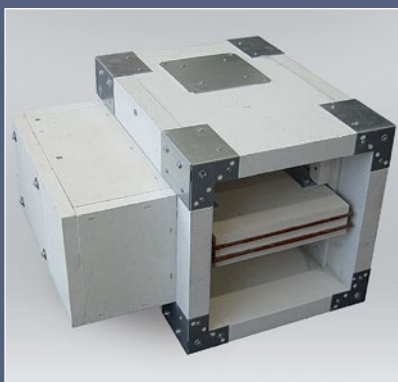
SEDS-L

Single compartment smoke extraction damper with manual and automatic actuations

CE

$E_{600} 120(v_e - i \leftrightarrow o) S1500 C_{10000} MA$ single

- Square dampers from size 200 × 200 mm to 1200 × 1200 mm
- CE certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as ES90/600, actuating MA and AA for one Fire Compartment
- External Casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Cycling test in class C 10 000 acc. to EN 12101-8
- Damper actuating by electrical actuator
- Max. air speed in the system of 12 m/s, allowed pressure up to 500 Pa, or under-pressure up to - 1500 Pa



SEDM (TPM 087/12)

Multi smoke damper

EI120(v_{ew} , v_{ed} , h_{ow} , h_{od} -i↔o)S1500C₁₀₀₀₀AA or MA multi



- Square dampers from 180 × 180 mm to 1 600 × 1 000 mm
- CE certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as EIS 120, HOT400/30, actuating AA/MA for multi Fire Compartment
- External casing leakage class B, Internal leakage class 2 acc. to EN 1751
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating by electrical actuator
- Max. air speed in the system of 15 m/s, allowed pressure up to 500 Pa, or under pressure up to -1500 Pa



MSD (TPM 109/15)

Multi smoke damper

EI120(v_{ew} , h_{ow} -i↔o)S1500C₁₀₀₀₀AA multi



- Square dampers from 160 × 180 mm to 1 500 × 800 mm
- Round dampers from ø 180 to 630 mm
- certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as EIS 120, actuating AA for multi Fire Compartment
- External casing leakage class C
- Internal leakage class 2 acc. to EN 1751
- Damper actuating by electrical actuator for smoke dampers Cycling test in class C 10000 acc. to EN 15650
- Damper actuating by electrical actuator with return spring and solenoid Cycling test in class C 10000 with no additional load
- Max. air speed in the system of 15 m/s, allowed pressure up to 500 Pa, or under pressure up to -1500 Pa



BRK-J (TPM 115/15)

Multi smoke damper

EI90 (v_{edw} , h_{odw} i ↔ o)S1000C₁₀₀₀₀HOT400/300AAmulti

- Square dampers from 100 × 150 to 1000 × 1050 mm
- Certified acc. to EN12101-8
- Tested in accordance with EN 1366-10
- Classified acc. to EN 13501-4+A1 as EIS90, HOT400/30, actuating AA for multi Fire Compartment
- External casing leakage class B, Internal leakage class 2 acc. to EN 1751
- Cycling test in class C 10000 acc. to EN 12101-8
- Damper actuating by electrical actuator
- Max. air speed in the system of 15 m/s, allowed pressure up to 500 Pa, or under pressure up to -1 000 Pa



Air Regulation Technologies



RPM-V (TPM 085/12)

Round variable airflow regulator

- For regulation of variable or constant airflow volume in HVAC systems
- Diameter from 80 to 630 mm
- Airflow volume from 35 to 5 800 m³/h
- Made of galvanized steel
- External casing leakage up to class C acc. to EN 1751
- Internal leakage up to class 3 acc. to EN 1751
- Each regulator is equipped with an airflow pressure probe and electrical actuating (Belimo LMV-D3 MP, or NMV-D3-MP, power supply 24 V, control power 0–10 V, or 2–10 V)



RPM-K (TPM 094/13)

Round constant airflow regulator

- For maintaining and regulation of constant airflow volume in HVAC systems
- Diameter from 80 to 400 mm
- Airflow volume from 100 to 4 000 m³/h
- External casing leakage up to class B acc. to EN 1751
- Casing and actuating mechanism made of galvanized steel, leaf made of aluminium, leaf axle, bearings and spring made of austenitic steel



RPMC-V (TPM 106/14)

Square variable airflow regulator

- For regulation of variable or constant airflow volume in HVAC systems
- Regulator dimensions from 200 × 100 to 1000 × 1000 mm
- Airflow volume from 90 to 43 000 m³/h
- External casing leakage up to class C acc. to EN 1751
- Internal leakage up to class 3 acc. to EN 1751
- Each regulator is equipped with an airflow pressure probe and electrical actuating (Belimo LMV-D3 MP, or NMV-D3-MP, power supply 24 V, control power 0–10 V, or 2–10 V)
- Made of galvanized steel



RPMC-K (TPM 105/14)

Square constant airflow regulator

- For maintaining and regulation of constant airflow volume in HVAC systems
- Regulator dimensions from 200 × 100 to 600 × 600 mm
- External casing leakage up to class C acc. to EN 1751
- Airflow volume from 250 to 12 000 m³/h
- Casing and actuating mechanism made of galvanized steel, leaf made of aluminium, leaf axle, bearings and spring made of austenitic steel



RKM (TPM 009/00)

Square regulation/adjustment damper



- For regulation of airflow inside the duct
- Manual or electrical actuating
- Can be used in explosion-hazardous environments
- Damper dimensions from 200 × 200 mm to 2 000 × 2 000 mm
- Damper actuating mechanical, or electrical
- Made of galvanized steel
- Leaf width always 100 mm
- Includes a flange for connection to the duct



RKTM (TPM 012/00)

Square tight regulation/adjustment damper



- For regulation and airflow cut off inside the duct
- Manual or electrical actuating
- Can be used in explosion-hazardous environments
- Damper dimensions from 200 × 200 mm to 2 000 × 1 600 mm
- Damper actuating mechanical, or electrical
- Made of galvanized steel
- Leaf width always 100 mm
- Includes a flange for connection to the duct



RKKM (TPM 030/03)

Round regulation/adjustment damper



- For regulation of airflow inside the duct
- Manual or electrical actuating
- Can be used in explosion-hazardous environments
- Diameter from 80 to 630 mm
- Damper actuating mechanical, or electrical
- Made of galvanized steel
- Includes a flange for connection to the duct, SPIRO design also available



RKKTM (TPM 031/03)

Round tight regulation/adjustment damper



- For regulation and airflow cut off inside the duct
- Manual or electrical actuating
- Can be used in explosion-hazardous environments
- Diameter from 80 to 630 mm
- Damper actuating mechanical, or electrical
- Made of galvanized steel
- Includes a flange for connection to the duct, SPIRO design also available



RKALM

Square regulation/adjustment damper

- For regulation of airflow inside the duct
- Manual or electrical actuating
- Damper dimensions from 200 × 200 mm to 2 000 × 2 000 mm
- Made of aluminium
- Leaf width always 100 mm
- Internal leakage class 2, 3 acc to EN 1751
- Coefficient of thermal transmission per blade up to 2,99 W/m².K
- Damper actuating mechanical, or electrical
- Includes a flange for connection to the duct

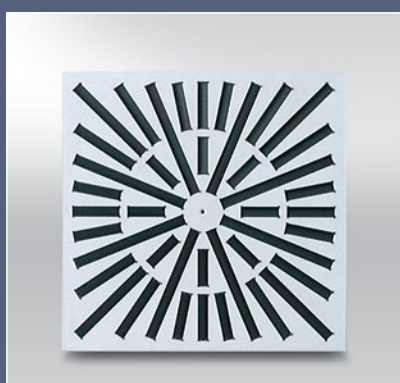
Distribution Elements



VVM (TPM 001/96)

Whirling air outflow outlet

- Installation into ceiling or suspended below ceiling
- For offices, cinemas, shopping centers, etc.
- Airflow volume from 55 to 1 200 m³/h
- Size A × B in mm: 300, 400, 500, 600, 625, 825
- Installation height from 2,6 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -14$ K
- Adjustable plastic blades for directing of airflow
- Galvanized plenum box
- Front panel coated by RAL 9010



VVDM (TPM 089/12)

Whirling air outflow outlet

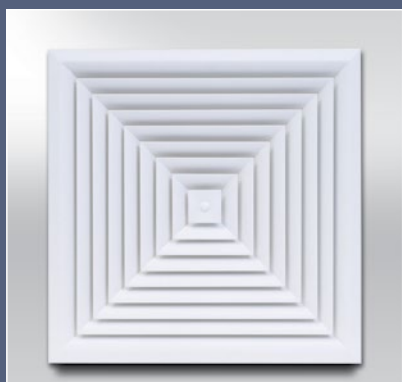
- Installation into ceiling or suspended below ceiling
- For offices, cinemas, shopping centers, etc.
- Airflow volume from 150 to 1 500 m³/h
- Size A × B in mm: 300, 400, 500, 600, 625, 825
- Installation height from 2,5 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -12$ K
- Adjustable plastic blades for directing of airflow
- Galvanized plenum box
- Front panel coated by RAL 9010



VVPM (TPM 007/99)

Whirling air outflow outlet with fixed blades

- Installation into ceiling or suspended below ceiling
- For offices, cinemas, shopping centers, etc.
- Airflow volume from 120 to 600 m³/h
- Size A × B in mm: 300, 400, 500, 600, 625
- Installation height from 2,6 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -14$ K
- Galvanized plenum box
- Front panel coated by RAL 9010



ALCM (TPM 003/97)

Anemostat diffuser

- Installation into ceiling or suspended below ceiling
- For offices, cinemas, restaurants, shopping centers, etc.
- Airflow volume from 110 to 1 800 m³/h
- Size A × B in mm: 250, 300, 400, 500, 600, 625
- Installation height from 2,6 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -8$ K
- Supplied air is separated into four sides perpendicular one to each other
- Galvanized plenum box
- Front panel coated by RAL 9010



ALKM (TPM 005/99)

Round Anemostat diffuser

- Installed into ceiling or suspended below ceiling
- For offices, cinemas, restaurants, shopping centers, etc.
- Airflow volume from 110 to 1800 m³/h
- Diameter in mm: 250, 300, 400, 500, 600, 625
- Installation height from 2,6 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -8$ K
- Supplied air is separated into four sides perpendicular one to each other
- Galvanized plenum box
- Front panel coated by RAL 9010



VASM (TPM 017/01)

Whirling anemostat with adjustable blades

- Installed into lowered ceiling or suspended below ceiling
- For industrial environment – manufacturing halls, warehouses, shopping centers, etc.
- Airflow volume from 350 to 2 400 m³/h
- Diameter in mm: 315, 400, 630
- Installation height over 3,8 m
- For heating with $\Delta t_p \leq 15$ K and cooling with $\Delta t_p \leq -10$ K
- Change of air outflow direction (vertical, diagonal, horizontal) possible
- Remote change of air outflow possible by using of BELIMO actuator
- High induction of air supply in ventilated space
- Galvanized plenum box
- Front panel coated by RAL 9010



VAPM (TPM 010/00)

Whirling anemostat with fixed blades

- Option of setting heating/cooling using slide out by mid section
- Installed into lowered ceiling or suspended below ceiling
- For offices, cinemas, restaurants, shopping centers, etc.
- Diameter, or A × B dimension in mm: 125, 160, 200, 250, 315, and 400
- Airflow volume from 30 to 900 m³/h
- Installation height from 2,6 to 4,0 m
- For heating and cooling with $\Delta t_p \leq -10$ K
- High induction of air supply in ventilated space
- Galvanized plenum box
- Front panel coated by RAL 9010



VAPM-L (TPM 082/11)

Whirling anemostat with fixed blades – linear

- Installation to aprons, ledges, steps, or stairs
- For offices, cinemas, restaurants, shopping centers, etc.
- Dimensions related with amount of outlets 1–6
- Airflow volume from 6 to 100 m³/h
- Installation height from 15 to 30 mm above the floor
- For heating and cooling with $\Delta t_p \leq 5$ K
- Possibility of additional whirling equipment addition
- Galvanized plenum box
- Front panel coated by RAL 9010



EKOBOX (TPM 037/04)

Plenum box for front panels

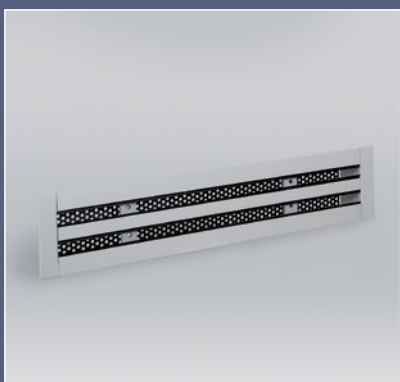
- Standard, or optionally with possibility of airflow setting in case of installed front panel
- Size A × B in mm: 250, 300, 400, 500, 600
- Economic design for air supply
- Horizontal installation with adjustable flap
- Determined for square front panels type VVM, VVPM, VVDM, ALCM and ALKM
- Galvanized steel



TVOM, TVPM (TPM 028/03)

Dish valve

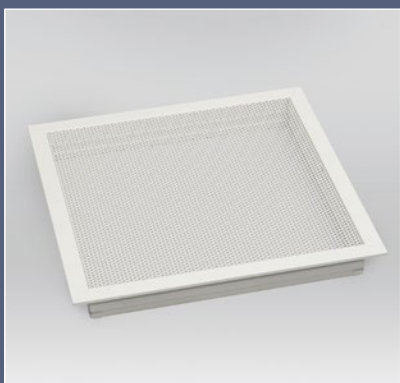
- For exhaust (TVOM) and supply (TVPM) of air from toilets, bathrooms and other smaller spaces, installed into lowered ceilings
- Airflow volume from 20 to 250 m³/h
- Diameter in mm: 100, 125, 160, 200
- Made of steel, RAL 9010 coated



SDL (TPM 110/15)

Slot diffuser linear

- For supply and removal of air
- Steady air stream across the entire length of the vent
- Number of slot outlets from 1 to 6
- Variable lenght
- Anodized aluminum profile. Alternatively, electrostatic painting. The fins are made of black or white plastic.



DVCM

Air diffuser with perforated front plate intended for air supply or air exhaust, with excellent out-look when installing into suspended ceiling with square gypsum sound attenuating cassettes.

- Sizes A × B in mm: 250, 300, 400, 500, 550
- Installation height from 2,6 to 4,0 m
- For heating and cooling
- Galvanized plenum box
- Front panel – standardly powder coated in RAL 9010



VPVM (TPM 013/01)

Large area vent

- For supply of air to work areas in offices, industrial buildings, laboratories with high temperature demand or dangerous air pollution – small speeds of air flow in work areas
- Airflow volume from 500 to 8 100 m³/h
- For supply of air colder by 1 to 3 °C than surrounding temperature
- Round, wall mounted or corner design options
- Supply of air in space widens out from the floor utilizing convection streams
- Made of stainless steel, or RAL 9010 coated surface



KMM (TPM 002/96)

Covering/protection grille

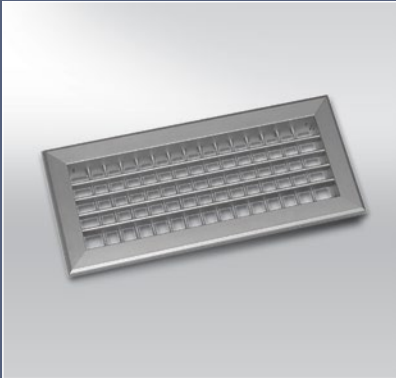
- For covering of gaps and outlets on ducts, preventing entry of objects
- Effective surface area approx. 78 %
- Made of steel, RAL 9010, or 9006 coated
- Round or square shape



SMM, SMPM (TPM 014/01, TPM 035/04)

Wall mounted grilles

- Made of anodized aluminum or galvanized steel
- Independent wall grilles (SMM) and band wall grilles (SMPM) for placement in four-sided duct or onto wall
- Supply and extraction of air in cinemas, shopping centers, halls, garages, etc.
- Airflow volume from 100 to approximately 5 000 m³/h



VNM (TPM 015/01)

Adjustable vent

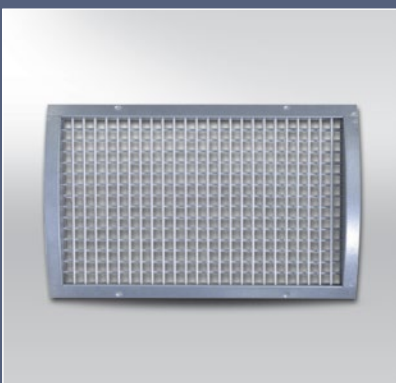
- Made of anodized aluminum or galvanized steel
- For placement in four-sided duct or onto the wall
- Adjustable airflow direction by setting of variable leaf angle
- Supply and extraction of air in cinemas, shopping centers, halls, garages, etc.
- Air flow volume from 100 to approximately 5 000 m³/h
- Elective regulation device for airflow and pressure loss setting



SVM (TPM 016/01)

Wall vent

- Made of anodized aluminum or galvanized steel
- For placement in four-sided duct or onto the wall
- Adjustable airflow direction by setting of variable leaf angle
- Supply and extraction of air in cinemas, shopping centers, halls, garages, etc.
- Airflow volume from 100 to approximately 5 000 m³/h
- Elective regulation device for airflow and pressure loss setting



VNKM (TPM 034/04)

Adjustable vent for round duct

- For placement onto round duct
- Supply and extraction of air in cinemas, shopping centers, halls, garages, etc.
- Airflow volume from 100 to approximately 5 000 m³/h
- Adjustable airflow direction by setting of variable leaf angle
- Elective regulation device for airflow and pressure loss setting
- Vent frame made of galvanized steel; blades are made of aluminum profiles



RAG45 (TPM 107/15)

Grille with blades in 45 °

- Extraction of air in cinemas, shopping centers, halls, garages, hotel rooms, etc.
- For placement in rectangular duct or onto the wall
- Air flow volume from 100 to approximately 5 000 m³/h
- Elective regulation device for airflow and pressure loss setting
- Made of anodized aluminum



VNMI (TPM 111/15)

Inox adjustable vent

- Supply and extraction of air in cinemas, shopping centers, halls, garages, etc.
- For placement in four-sided duct or onto the wall
- Air flow volume from 100 to approximately 5 000 m³/h
- Elective regulation device for airflow and pressure loss setting
- Made of stainless steel sheet



DDM II (TPM 072/08)

Long-reach nozzle

- Air distribution over long distances
- Intended for placement into wall or ceiling
- For large halls, theaters, concert halls
- Airflow volume from 40 to 2 400 m³/h
- Diam. in mm: 100, 125, 160, 200, 250, 315, and 400
- For heating with $\Delta t_p \leq 25$ K and cooling with $\Delta t_p \leq -14$ K
- Manual or electrically actuated readjustment of airflow direction ($\pm 25^\circ$)
- High output speed for airflow
- Coated by RAL 9010



PDZM (TPM 079/10)

Rain protection louvre

- For air supply and exhaust
- Hidden fixing, or openings for fixing screws in corners
- Reinforcement and installation frame, or in-built (inset) frame
- Dimensions from 200 × 200 to 2 000 × 2 000 mm
- Bird and insect protection net available
- Fitting with G2 filter possible
- Frames and lamellae made of galvanized steel as basic design
- Coating by elective RAL available

Other HVAC Components



TVM (TPM 003/96)

Damping pad

- The damping pad is used to restrict the transfer of dynamic forces created by fan vibrations from units
- Pads are determined for ducts in Group 1
- Width of pad flange 30 mm
- Round or square shape



NKTM (TPM 090/13)

Non-return damper, overpressure damper

- Dimensions from 200 × 200 to 1 400 × 1 400 mm
- Max. pressure difference 1 500 Pa, max. airspeed inside the duct 12 m/s
- Mechanical damper used for air backflow effect elimination
- Damper complete made of galvanized steel



DM-E (TPM 084/12)

Evacuative (decompression) damper

- Dimensions from 100 × 100 to 1 200 × 600 mm, round \varnothing 100 – 630 mm
- Max. pressure difference 1 200 Pa, max. airspeed inside the duct 12 m/s
- Damper for opening of Smoke extraction duct and overpressure release
- Damper complete made of galvanized steel, always equipped by el. actuator
- Fire classification as E30 ve, ho (i→o)S acc. to EN 13501-3



SMR (TPM 112/15)

Silencer

- Connection diameters from 80 to 800 mm
- Spiro design with blade sealing
- Maximum air speed of 12 m/s and pressure difference 1 500 Pa
- Insulation thickness 50 mm or 100 mm

Air-Handling Units



Air-handling unit MANDIK



- Modular air handling units are intended for central distribution and conditioning of air in industrial, residential and commercial applications. They feature high efficiency of air distribution and conditioning. They offer air flow volume from 500 to 100 000 m³/h. They are completely designed and certified in a unique frameless casing. High design variability allows the customized solutions.
- Modular AHU Mandík were successfully tested and certified with regards to Eurovent, RLT and ErP regulations.
- They were tested in "TUV Sud" laboratory.
- Mechanical strength of casing: D1 (M)
- Class leakages casing: L1 (M)
- Filter bypass leakage: 0.5% - F9 (M)
- Thermal transmittance: T3
- Thermal bridging of the casing: TB2
- Certified by Eurovent, with possibility to design AHU in particular energy classes up to "A+" and ability to issue „Energy efficiency label“



Air handling unit MANDIK with heat pump



- Airflow volume from 500 to 25 000 m³/hod
- Based on Range M and P
- Member of RLT, the possibility of the proposal in the energy classes up to A+
- Certified acc. 2004/108/ES (EMC) and 2006/95/ES (LVD)
- Integrated refrigeration cycle with or without reversible operation
- Environmentally friendly refrigerant R410A or R407C
- Comfort operation control by means of the Siemens Climatix controller
- Attention paid to high quality of proven and certified purchased components



MaR

Control system

- System design for any variant of the Mandík air handling unit assembly
- Comfort operation control by means of the Siemens Climatix controller
- Certified acc. 2004/108/ES (EMC) and 2006/95/ES (LVD)
- Extensive communication functions – collaboration with most of the superior systems
- Easy control and full service setting by means of the display and push-buttons on the controller
- Metallic or plastic switchboards depending on the air handling unit configuration



Compact air handling unit

MANDIK CPV



- Air-handling unit for air transport and air treatment in air-conditioning systems
- Range CPV 12 – CPV 60
- Airflow volume from 500 to 6800 m³/hod
- Member of RLT
- Units fulfill requirements acc.to EN 13 053
- Fulfill requirements of EcoDesign 2016 and 2018
- Mechanical performance of casing acc. to EN 1886
- Indoor design
- Equipment type Plug&Play – integrated Control system
- Counterflow heat exchanger
- Heat exchanger (water, electrical, condensator)
- EC fans with high efficiency



AIR-CONDITIONER MANDIK KFR

CE

- heating, cooling and dehumidification of the air in the room of the surface up to 23 m²
- low operational costs, due to inverter technology
- cleaning of the supplied air with highly effective filtration
- Energy class A++ for cooling, A+ to A+++ for heating

Industrial Heating



HELIOS Manual 15/11

Infra-red radiant heater – gas fired



- Burning natural gas (G20), propane (G31), propane-butane (G30/G31)
- Heat output from 6,2 to 90 kW
- Several construction designs
- Differentiated by heat output, design of burner box, reflector construction and shape of heating tubes
- Option of single stage, or double stage burner design
- Own control box OI, OID or possibility of SIEMENS central regulation system connection



MONZUN (TPM 040/05)

Hot-air unit – gas fired



- VH model (with axial fan) or CV (with radial fan)
- Burning natural gas (G20), propane (G31), propane-butane (G30/G31)
- Heat output from 6,5 to 92,8 kW with air flow volume from 550 to 9 000 m³/h
- Wall-mounted or hanged below the ceiling
- Available as: single stage, double stage and modulated output (continuous output regulation)
- Control boxes OM, OMD, Remon or possibility of SIEMENS central regulation system connection



MONZUN – RTI (TPM 041/05)

Gas fired hot-air unit equipped by mixing chamber



- VH RTI model (with axial fan) or CV RTI (with radial fan)
- Burning natural gas (G20), propane (G31), propane-butane (G30/G31)
- Available as: single stage, double stage and modulated output (continuous output regulation)
- Control boxes OM, OMD, Remon or possibility of SIEMENS central regulation system connection
- Control of mixing chamber manual or servo actuated – setting of outside and inside air intake 0 – 100 %
- Heat output from 6,5 to 92,8 kW with air flow volume from 550 to 8 000 m³/h



MONZUN – EUROKLIM (TPM 043/05)

Gas fired hot-air unit without fan
(determined for HVAC assemblies)

CE

- Without fan
- Burning natural gas (G20), propane (G31), propane-butane (G30/G31)
- Design options – indoor/galvanized /outdoor
- Designed for heat output modulation (continuous regulation from min. to max. value)
- Heat output from 6,5 to 92,8 kW with air flow volume from 550 to 8 000 m³/h
- Equipped by flanges for HVAC duct connection on intake/out-take side



MONZUN – TE (TPM 063/07)

Hot-water air heater

CE

- Available in three sizes, from single to four row heating coils
- On-wall or under-ceiling mounting
- Connection of mixing chamber and other accessories possible
- Heat output from 9,6 to 88,7 kW with air flow volume from 1 500 m³/h to 7 800 m³/h
- Water Heated:
 - $t_{\max} = 100\text{ }^{\circ}\text{C}$, $p_{\max} = 1,4\text{ MPa}$



Monzun – TEC (TPM 063/07)

Air heater with cooling capability

CE

- Available in three sizes, from three to four row heating coils
- Thermal heat output from 24,8 to 68,8 kW And Airflow volume from 1500 to 4000 m³/h
- Cooling power from 6,2 to 20,9 kW And Airflow volume from 1 500 m³/h bis 4 000 m³/h
- Wall design



EXHAUST/COMBUSTION

AIR SUPPLY FITTINGS (TPM 047/05)

CE

- Certified system for Combustion Air supply and Exhaust (chimney flues and fittings)
- Horizontal or vertical installation
- Stainless steel \varnothing 80 – 150 mm
- Aluminium based alloy \varnothing 80 – 150 mm



STRATIFIER (TPM 048/05)

Ceiling fan

CE

- Three sizes depending on required air output
- Increases economy of heating in combination with hot-air heating units



AIRSTREAM (TPM102/14)

Gate curtain

CE

- Two sizes based on the air output
- Gate curtain is device intended to separate indoor and outdoor environment in gates of industrial buildings

Special Applications



PKTMB – 120

Fire damper resistant against seismic events, effects of high pressure and higher airflow velocity



- Min. dimensions 200 × 200 × 450; max. dimensions 1 400 × 1 000 × 450 mm (square cross-section only, round adapter available)
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance EIS 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, electrical, pneumatical, or combination
- Pneumatic control facilitates direct connection to SWAGELOK system
- Plain bearings – maintenancefree design resistant to high-level seismic stresses
- Max. airflow 20 m/s
- Max. pressure difference 6 600 Pa (inner pressure / external pressure – dynamic pressure)
- Turbulent flow inside the duct is permissible, the damper can be operated (opened, closed) under airflows up to 20 m/s, pressure up to 6 600 Pa and concurrent seismic event (EDB, APC)
- Seismic resistance defined as per RRS (EDB, APC) applicable to the site – tested to peak acceleration above 10 G
- Minimum service life 40 years



PKTMF – 120

Fire damper resistant against seismic events, effects of high pressure and higher airflow velocity



- Min. dimensions 200 × 200 × 375 mm; max. dimensions 1 600 × 800 × 375 mm (square cross-section only, round adapter available)
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance EIS 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, electrical, pneumatical, or combination
- Pneumatic control facilitates direct connection to SWAGELOK system
- Plain bearings – maintenance-free design resistant to high-level seismic stresses
- Max. airflow 12 m/s
- Max. pressure difference 7 500 Pa (inner pressure / external pressure – static pressure on closed damper blade)
- Seismic resistance defined as per RRS (EDB, APC) applicable to the site – tested to peak acceleration above 12 G
- Minimum service life 40 years



PKTMJ – 90/120

Fire damper resistant against seismic events, effects of high pressure and higher airflow velocity

CE

- Min. dimensions 200 × 200 × 375 mm; max. dimensions 1 600 × 1 000 × 375 mm, round ø 180 – 1 000 mm
- CE certified acc. to EN15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- Fire resistance up to EIS 120
- External casing leakage class C, Internal leakage class 2 acc. to EN 1751
- Corrosion resistant acc. to EN 15650
- Cycling test in class C 10000 acc. to EN 15650
- Damper actuating mechanical, electrical, pneumatical, or combination
- Pneumatic control facilitates direct connection to SWAGELOK system
- Plain bearings – maintenancefree design resistant to high-level seismic stresses
- Max. airflow 15 m/s
- Max. pressure difference 2 500 Pa (inner pressure / external pressure – dynamic pressure)
- Seismic resistance defined as per RRS (EDB, APC) applicable to the site – tested to peak acceleration above 5 G
- Minimum service life 40 years
- Suitable for explosion-risk environments, Zone 1 and Zone2



NKTMJ

Non-Return/Back draft Damper resistant against seismic events, effects of high-pressure and to higher airflow velocity

- Min. dimensions 200 × 200 × 210; max. dimensions 2 000 × 2 000 × 210 mm (square cross-section only, round adapter available)
- Only mechanical variant
- Plain bearings, maintenance-free design
- External casing leakage class C, Internal leakage class 3 acc. to EN 1751
- Max. airflow 25 m/s
- Variant with, or without counterweight
- Mechanism installed externally of the damper axis and airflow direction
- Pressure difference up to 7 500 Pa (internal vs. external pressure)
- Carbon steel painted, galvanized, or stainless steel – casings made of 3 mm sheets, tight seam welds
- Radioactive aerosol impact allowed – decontaminable
- Seismic resistance defined as per RRS (EDB, APC) applicable to the site – tested to peak acceleration above 10 G
- Min. service life 40 years, maintenance interval 10 000 hours



RKT MJ

Multi-leaf regulation damper resistant against seismic events, effects of high-pressure and to higher airflow velocity. Usable as insulating damper, tight insulating damper, low overpressure damper



- Min. dimensions 250 × 250 × 210; max. dimensions 2 000 × 2 000 × 210 mm (square cross-section only, round adapter available)
- Damper actuating mechanical, electrical, pneumatical, or combination – possible usage of additional limit switches
- Plain bearings, maintenance-free design
- External casing leakage class C, Internal leakage class 3,4 acc. to EN 1751
- Max. airflow 25 m/s
- Contra-rotating aerodynamic blades
- Actuation mechanism installed externally of the damper axis and airflow direction
- Pressure difference up to 7500 Pa (internal vs. external pressure)
- Carbon steel painted, galvanized, or stainless steel – casings made of 3 mm sheets, tight seam welds
- Radioactive aerosol impact allowed – decontaminable
- Seismic resistance defined as per RRS (EDB, APC) applicable to the site – tested to peak acceleration above 10 G
- Min. service life 40 years, maintenance interval 10 000 hours

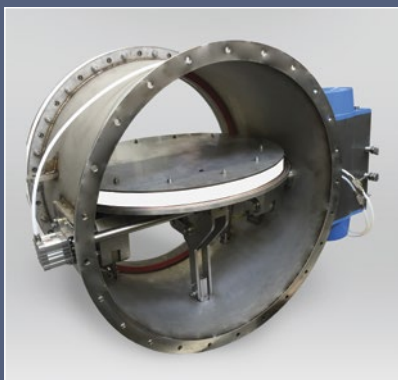


TVMJ

Damping pad

Components to avoid transfer of noise and vibrations in the ducting systems, compensate the length, or another changes caused by temperature oscillation as same as by the next parameters of transported medium, or impacts of surrounding environment. Usable for compensation of thermal dilatations, erection work imprecisions and unexpected loads acting to the flanges of components solidly connected with dividing constructions. Usable for high-pressures and high temperatures, seismic resistant above peak accelerations of 30 G.

- Min. dimensions 100 × 100 up to 2500 × 2500 mm with variable length
- Length (installation) 60 – 600 mm, longer on order
- External leakage rate class C, or D acc. to EN 1751
- Usable up to pressure, or underpressure 7 kPa
- Flat, or profiled flanges with variable drilling pattern
- Variable height of flanges
- Material of flanges stainless steel, carbon steel painted, or galvanized steel
- Material of fabric on basis of PTFE, Silicone, Silicone-Glass fiber, PVC, or combinations in layers
- Suitable acc. VDI 6022 and DIN 4102 B1/B2
- Fabrics with Fire Resistance up to 500 °C
- Decontaminable surface



PKTMC-180

Pressure-proof fire damper

- Dimensions min. \varnothing 200, max. 800 mm (circular design only, extension fitting to square duct possible)
- Stainless Steel - Body Thickness 3 – 6 mm, welded construction with passivation
- Possible use as a fire damper, a pressure valve with fire resistance, a tight – pressure resistant valve, a control damper, a heat and smoke extraction damper – single, or a combination of
- Electric actuator (AUMA, Bernard Controls, ROTORK) or pneumatic actuator (STASTO-VALBIA), use of limit switches (Petercem, Telemecanique, Honeywell)
- Max. air velocity 35 m/s
- Pressure difference max. 23 kPa (inside/outside of duct – dynamic pressure when the damper safely opens/ closes)
- Turbulent flow inside the duct in front of the damper is possible
- Seismic resistance – tested for peak accelerations higher than 30 G
- Tested according to EN 1366-2, Classified according to EN 13501-3, CE certified according to EN 15650
- Fire classification EI 180 ve, h_o (i ↔ o) S
- Can be installed inside rigid wall, ceiling, onto solid walls, ceilings with additional insulation and duct installation with insulation by stone wool
- Pressure tightness class "D" according to EN 12266-1 (leakage max. 6 l / min at 1.1 bar)
- Operable at temperatures up to 220 °C (flap leaf is still able to open/close)
- Safe cycles without loss of leakage / fire resistance of at least 20,000
- Usable in a magnetic field of up to 126 mT
- Radiation resistance up to 3.35 MGy
- Suitable for explosion hazardous areas Ex II class 3 / 3G.c IIB + H2 TX
- Radioactive aerosol infestation is allowed, it is de-contaminable item
- Lifetime of 40 years
- Low Voltage and Electromagnetic Compatibility Certificates available
- IP protection of actuators / pneu-actuators / limit switches is 65



MANDÍK type M and P (TPM 088/12)

Air-handling unit – seismic

CE

- Airflow volume from 800 to 100 000 m³/h
- Instrumentation and Control based on Siemens and CAREL governing systems platforms
- Comfort operation control by means of the Siemens Climatix controller
- Unit casing in accordance with requirements of EN 1886
- Indoor and Outdoor variant available
- Compliance with the requirements given by VDI 6022 and EN13053+A1 for sanitary and clean environments
- Seismic resistant design

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