

Come inside to us,
Imagine future in us

We provide SAFETY and CLIMATE CONTROL protect from FIRE and WATER, HAZARDOUS GAS





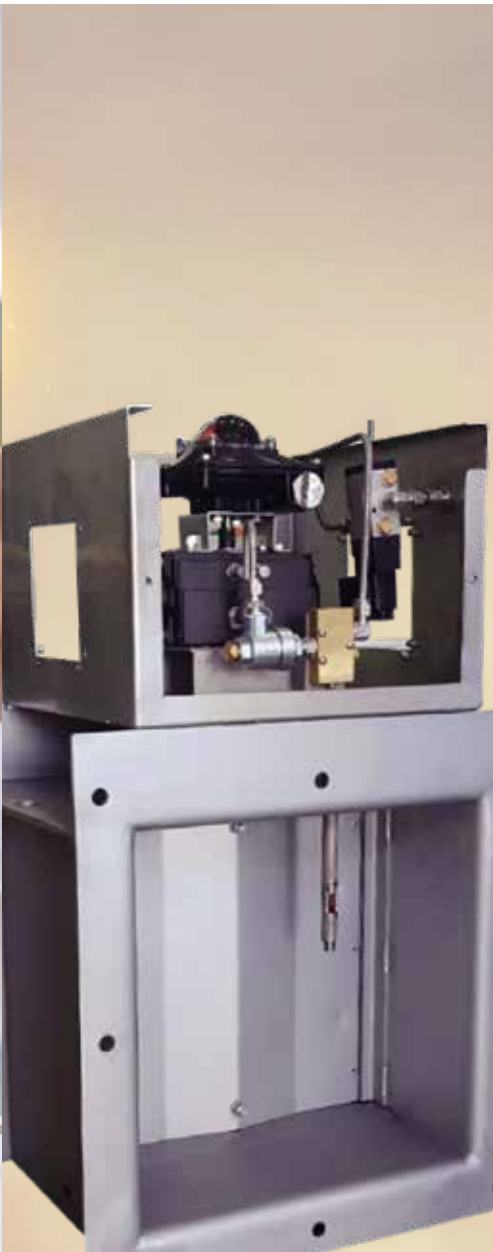
**PROPER
MANAGEMENT**

I will do my best to
be an honest
and reliable company.



**HUMAN RESOURCE
MANAGEMENT**

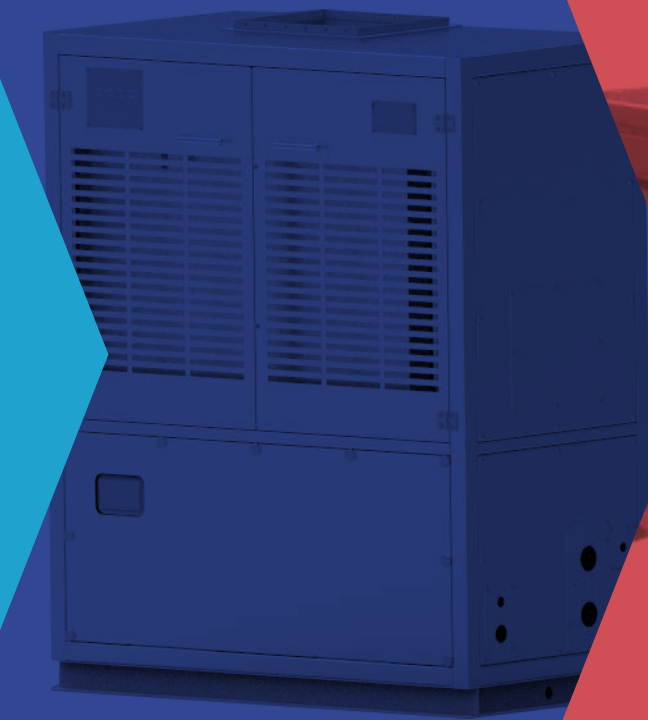
We will find and
cultivate talented
and talented people so
that we can share a bright
and precious future together.



**QUALITY
MANAGEMENT**

We will contribute
to consumer satisfaction
through continuous
quality innovation.

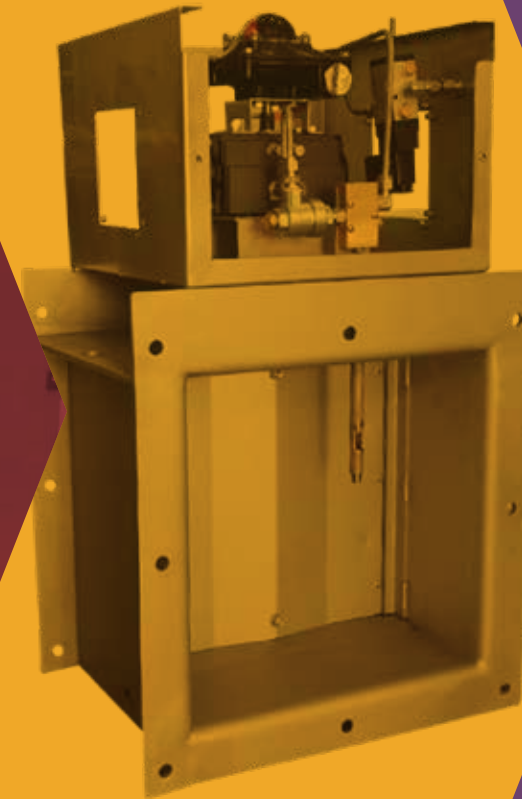
BARAMINTEC



**HVAC
System**



**Filtration
System**



Damper



Ventilator

**about customers first
and creates products for them.**



HVAC System Packaged Air Conditioner

BPA



WATER COOLED TYPE PACKAGE AIR CONDITIONER(SCU)

The Packaged Air Conditioner is all components fully installed and factory assembled.



AIR COOLED TYPE PACKAGE AIR CONDITIONER(INDOOR & OUTDOOR UNIT)

The Packaged Air Conditioner is all components fully installed and factory assembled.



COMPACT ALL-IN-ONE AIR CONDITIONER

BARAMINTEC provides compact all-in-one air conditioning systems for limited space in the vessel like a patrol ship. Compact all-in-one unit give available in a variety of capacity, and can be used several type of small space for the perfect indoor air conditioning.

Air Conditioner Data Sheet

SPECIFICATION		BPA-03	BPA-05	BPA-08
Cooling Capacity		10 kW	20 kW	30 kW
Power Source		440V x 60Hz x 3P		
Casing Material		Mild Steel with Powder Coating		
Refrigerant		R-404A, R-407C		
Compressor	Type	Hermetic Reciprocating (Evaporating temp. +5°C, Condensing temp. +45°C)		
	Model	MTZ032	MTZ064	MTZ100
	Power / Current	3.4 kW / 5.0 A	6.5 kW / 9.4 A	9.7 kW / 14.0 A
Condenser	Type	Shell and Tube (Cooling water inlet temp. +36°C, Condensing temp. +45°C)		
	Water Flow Rate	5.0 m3/h	6.3 m3/h	8.8 m3/h
	Pressure Drop	0.22 bar	0.27 bar	0.27 bar
	Fouling Factor	0.0001 m2hk/W		
Fan	Type	Centrifugal fan		
	Model	DDM 9-7	DDM 9-7	DDM 9-9
	Power Consumption	0.25 kW	0.55 kW	0.55 kW
	Air Volume	1,260 m3/h	1,260 m3/h	2,100 m3/h
Evaporator	Material	Copper tube / Aluminum fin		
Dimension	Grill type (L x W x H)	1000x600x1750	1000x600x1750	1200x700x1950
	Duct type (L x W x H)	1000x600x1500	1000x650x1500	1200x700x1700
Optional Item	Heater, Humidifier, Remote Panel			

SPECIFICATION		BPA-10	BPA-15	BPA-20
Cooling Capacity		40 kW	50 kW	80 kW
Power Source		440V x 60Hz x 3P		
Casing Material		Mild Steel with Powder Coating		
Refrigerant		R-404A, R-407C		
Compressor	Type	Hermetic Reciprocating (Evaporating temp. +5°C, Condensing temp. +45°C)		
	Model	MTZ144	MTZ160	MTZ144 x 2
	Power / Current	14.9 kW / 20.3 A	17.3 kW / 23.5 A	14.9 kW / 20.3 A x 2
Condenser	Type	Shell and Tube (Cooling water inlet temp. +36°C, Condensing temp. +45°C)		
	Water Flow Rate	11.3 m3/h	12.5 m3/h	15.6 m3/h
	Pressure Drop	0.27 bar	0.23 bar	0.26 bar
	Fouling Factor	0.0001 m2hk/W		
Fan	Type	Centrifugal fan		
	Model	DDM 10-10	DDM 10-10 x 2ea	DDM 10-10 x 2ea
	Power Consumption	0.78 kW	0.78 kW x 2	0.78 kW x 2
	Air Volume	3,360 m3/h	6,300 m3/h	6,300 m3/h
Evaporator	Material	Copper tube / Aluminum fin		
Dimension	Grill type (L x W x H)	1400x750x2100	1600x900x2100	1700x900x2450
	Duct type (L x W x H)	1400x750x1800	1600x900x2000	1700x900x2000
Optional Item	Heater, Humidifier, Remote Panel			

HVAC System

Deck Unit type Air Conditioner

BDUA

BARAMINTEC produces a comprehensive range of seawater, freshwater or air-cooled units and also other tailored made unit to meet all owner's requirement of the marine, oil and gas, navy and process industries.

System

Air Conditioner

TOSHIBA, CARRIER, LG



Air Conditioner Data Sheet

SPECIFICATION		BDUA-30	BDUA-40	BDUA-50
Cooling Capacity		105 kW	140 kW	170 kW
Power Source		380V - 440V x 50/60Hz x 3P		
Casing Material		Mild Steel with Powder Coating		
Refrigerant		R-404A, R-407C		
Compressor	Type	Hermetic or Semi-Hermetic(Evaporating temp. +5°C, Condensing temp. +45°C)		
	Maker	Danfoss, Bitzer, Copeland		
	Power Input	Ab. 33kW	Ab. 46kW	Ab. 55kW
Condenser	Type	Shell and Tube (Cooling water inlet temp. +36°C, Condensing temp. +45°C)		
	Water Flow Rate	24.0 m3/h	32.0 m3/h	38.0 m3/h
	Pressure Drop	0.3 bar	0.3 bar	0.3 bar
	Fouling Factor	0.0001 m2hk/W		
Fan	Type	Centrifugal fan		
	Driving Mothod	Belt Driven or Direct coupling		
	Power Consumption	Ab. 10kW	Ab. 15kW	Ab. 15kW
	Air Volume	9000 - 11000 m3/h	12000 - 13000 m3/h	15000 - 16000 m3/h
Evaporator	Material	Copper tube / Aluminum fin		
Dimension	Grill type (L x W x H)	1800x1800x2000	1900x1900x2000	2500x2000x2000
Optional Item	Heater, Humidifier, Remote Panel, Air Filter(G3/G4/M5)			

Marine Applicable System Air Condition

Proposes replacement of the SS316L casing, and apply VCI coating of condenser coil for marine and offshore application. In addition, we provide several options for marine application such as additional drain pump and drain cover plate in ceiling type of indoor unit to avoid overflowing drain water during rolling or pitching of ship sailing. Junction Box of the IP66 grade.



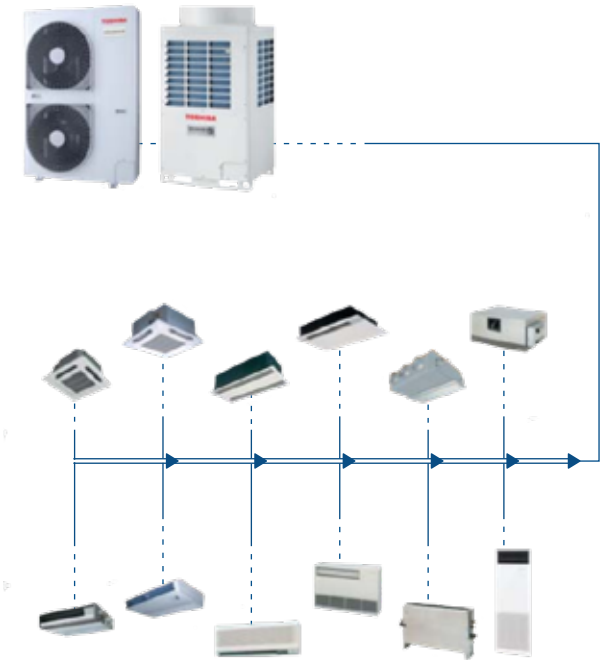
ALUMINUM HOUSING



MODIFICATION OF
STAINLESS STEEL
CASING



CONDENSER COIL
CORROSION PROTECTIVE
COATING



Client Satisfaction

System Air Conditioner can be used various types of indoor units with one of outdoor unit. Low power consumption and high efficiency of the cooling and heating performance can be meet customer's needs.

Filtration System

CHEMICAL & AIR FILTERS



Deep Bed Scrubber (DBS)

The Purafil Deep Bed Scrubber (DBS) is a highly effective, bulk media scrubber designed for controlled environments with medium-to-high contaminant gas levels. The DBS remedies the gases’ corrosive effects and meets stringent air quality standards set by the International Society of Automation (ISA).



Purafil Side Access Unit (PSA)

By means of high-efficiency media in unique formulations and delivery systems, the Purafil Side Access scrubber (PSA) targets general odor and corrosion control in commercial and industrial environments. It is designed to remove both particulate and gaseous pollutants.Using modular construction, the PSA easily handles high air flow capacities under both indoor and outdoor conditions.



Purafil Positive Pressurization Unit (PPU)

The Purafil Positive Pressurization Unit (PPU) and Corrosive Air System (CA) are self-contained, air scrubbing systems designed to provide pressurized and/or recirculated air, free of corrosive gases.

The PPU is recommended for controlled environments containing sensitive computer electronics and electrical equipment. Key application areas for the PPU are control room environments such as data centers, accommodation of the ships, pulp and paper mills, petrochemical plants, refineries, steel mills, process industries, and laboratories.

• Chemical Filtration System

This will prevent the ingress of harmful particulate and gas from air intake or internal generation and provides a better air quality by capturing particulate and removing virus, gas through filters.

• Chemical Filter

Chemical media offering the widest range to remove 230 types of pollutants, taking on consideration your air flow and pressure drop requirements and designed to meet the requirements of the marine, oil and gas, nuclear and process industries, medical, wastewater treatment plants, chemical storage, Electronics industry.

UL classified Class 1 or 2

- ISA Standard 71.04-1985 - Environmental Conditions for Process Measurement and Control Systems: Airborne Contaminants
- IEC Standard 60654-4 (1987-07) - Operating conditions for industrial-process measurement and control equipment Part 4: Corrosive and erosive influences
- IEC Standard 60721-3-3 (1994) - Classification of environmental conditions - Part 3-3: Classification of groups of environmental parameters and their severities - Stationary use at weather protected locations
- JEIDA Standard 29-1990 - Standard for Operating Conditions of Industrial Computer/Control System

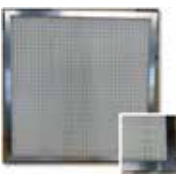
Air Filter

Removes solid particulates such as duct, pollen, mist mould and bacteria from the air and tested according to ASHRAE52.2/52.1 or ISO16890:2016_PM(EN779 & EN1822).

The following design features have been included:

- Washable Air Filter
- Coalescer Filter (Salt Aerosol)
- Charcoal Filter
- Flammability Classification (UL 900) Filter
- HEPA Filter
- EMC Filter
- Non-toxicity Air Filter (Defence Standard 02-713/NES713)
- Air Intake Filters of Gas Turbines and Air Compressors
- Flame Proof Copper Wire Net
- Pyrocode Fire Block Panel (Flame Block) for Control Panel

Air Filter Media



Air Filter Unit with PDI



Air Filter Efficiency Chart

Filter Type	U.S. Standard						European Standards	ISO 16890:2016_PM				Particle Size Range, µm	Applications
	ASHRAE 52.2				ASHRAE 52.1		EN779 & EN1822	ISO Coarse	ISO ePM10	ISO ePM2.5	ISO ePM1		
	USA Efficiency	Particle Size Range			Test		European Efficiency	Average Efficiency ≥50%	Average Efficiency ≥50%	Mini. Efficiency ≥50%	Mini. Efficiency ≥50%		
	Class	0.3µm≤X≤10µm	1µm≤X≤10µm	3µm≤X≤10µm	Arrestance	Dust Spot	Class	0.3µm≤X≤10µm	0.3µm≤X≤10µm	0.3µm≤X≥2.5µm	0.3µm≤X≥1µm		
Pre Filter	MERV 1	-	-	>20%	>65%	>20%	G1					>10	Residential, light Pollen, dust mites
	MERV 2	-	-	>20%	>65%	>20%	G2	40%≤X≤30%					
	MERV 3	-	-	>20%	>70%	>20%							
	MERV 4	-	-	>20%	>75%	>20%							
Medium Filter	MERV 5			>20%	>80%	20%	G3	55%≤X≥45%				3.0 - 10	Industrial, dust, models, spores
	MERV 6	-	-	>35%	>85%	20-25%							
	MERV 7	-	-	>50%	>90%	25-30%							
	MERV 8	-	-	>70%	>92%	30-35%	G4	95%≤X≥60%				1.0 - 3.0	Industrial, Legionella, dust
	MERV 9	-	-	>85%	>95%	40-45%							
	MERV 10	-	>50%	>85%	>96%	50-55%	M5	60%≤X≤50%					
	MERV 11	-	>65%	>85%	>97%	60-65%							
	MERV 12	-	>80%	>90%	>98%	70-75%	M6	95%≤X≥65%	60%≤X≥50%				
	MERV 13	-	>90%	>90%	>98%	80-85%			F7		65%≤X≥95%	50%≤X≥65%	
Final Filter	MERV 14	>75%	>90%	>90%	>99%	90-95%	F8			75%≤X≥70%		0.3- 1.0	Hospitals, Smoke removal, bacteria
	MERV 15	>85%	>90%	>90%	>99%	>95%	F9			95%≤X≥80%			
	MERV 16	>95%	>95%	>95%	>100%	>99%	E10						
HEPA Filter		>99.95%		-	-	-	H13					<0.3	Clean rooms, Surgery, chem- bio, Viruses
		>99.95%-99.995%	-	-	-	-	U13-14						
		>99.9995%	-	-	-	-	U15						
		>99.99995%	-	-	-	-	U16						

Damper

Fire & Gas Damper

Model no : FGD, FGD6



Fire & Gas Damper

Manufactures fire dampers for heavy duty, aggressive process environments where integrity, strength and corrosion resistance are of primary importance. Designed and type approved for installation in ventilation ducts which penetrate a steel division to maintain integrity of that division rated A-0 to A-60; bulkhead or deck. The damper can be provided in accordance with the marine equipment directive.

Technical Information

Maximum Size	1400W x 1400H x 300D mm
Fire Rating	IMO FTP Code Part 3 and IMO 2010 FTP Code Part 3 for A-0 to A-60 bulkhead and deck divisions deck divisions
Leakage	Closed blade leakage to Class 3 EN1751 Case leakage to Class B EN1751
Approval	DNV-GL, Lloyds Register Verification, ABS, Korean Register
MED	Module B(ABS), Module D(Korean Register)
MED MRA	USCG

Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and flanges thickness



Transitions
Various options for fitting into circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Carbon Steel Galvanised steel Stainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option

Blades

Materials	Galvanised steel Stainless Steel 304L/316L
Thickness	Minimum 2 mm double skin Plug welded to solid shafts
Shafts	Ø19 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Side Seals	Stainless Steel 316L 0.25mm
Linkage	Stainless Steel 304/316L 6.0 mm thick link bars arranged to provide opposed blade motion
Blade Gasket	Fire retardant silicon

Control Options

Dampers can be operated electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close, open, or stay put on loss of power when fitted with an electric or pneumatic actuator.

The actuator will be selected following your technical needs :

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- ATEX Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, IECEx
- Design Temperature (from -60°C to + 70°C)
- IP level

Damper

Water Tight Damper

Model no : PWD, EWD, MWD



Water Tight Damper

Water Tight Damper is installed on water tight bulkhead and deck. The damper shuts off water which can flow through the duct of the scuttled vessel for the protection of lives and equipment. Airflow can be in either direction and installed in any orientation with either manual, electrical or pneumatic actuation.

Technical Information

Minimum Size	150W x 150H x 300~400D mm
Maximum Size	800W x 800H x 300~400D mm
Pressure test	A hydraulic completed with pressure gauge was used to ncrease the pressure in the damper. Damper successfully maintained water tight integrity up to 0.5~1barg.



Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and flanges thickness



Transitions
Various options for fitting into circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Stainless Steel 304/316L
Thickness	Minimum 4.0 mm Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Stainless Steel 304L/316L
Thickness	Minimum 3 mm Single skin Plug welded to solid shafts
Shafts	Ø19 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Linkage	Stainless Steel 304/316L 6.0 mm thick link bars arranged to provide opposed blade motion
Blade Gasket	Neoprene

Control Options

Dampers can be operated manually or with electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close, open, or stay put on loss of power when fitted with an electric or pneumatic actuator.

The actuator will be selected following your technical needs:

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- ATEX Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, IECEx
- Design Temperature (from -60°C to + 70°C)
- IP level

Damper

Weather Tight Damper

Model no : PWTD, EWTD, MWTD



Weather Tight Damper

Weather Tight Damper effectively prevents rainwater, snow, leaves, animals and other objects from entering into ductwork. Airflow can be in either direction and installed in any orientation with either manual, electrical or pneumatic actuation.

Technical Information

Minimum Size	150W x 150H x 300~400D mm
Maximum Size	2800W x 2800H x 300~400D mm
Pressure test	The water pressure shall be at least 0.2 N/mm2 (2 bar), and the nozzle shall be held at a distance of maximum 1.5 m from weather tight dampers

Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and
flanges thickness



Transitions
Various options for fitting into
circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Stainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Stainless Steel 304L/316L
Thickness	Minimum 2 mm Single skin Plug welded to solid shafts
Shafts	Ø19 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Linkage	Stainless Steel 304/316L 6.0 mm thick link bars arranged to provide opposed blade motion
Stopper Gasket	EPDM

Control Options

Dampers can be operated manually or with electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close, open, or stay put on loss of power when fitted with an electric or pneumatic actuator.

The actuator will be selected following your technical needs:

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- ATEX Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, IECEx
- Design Temperature (from -60°C to + 70°C)
- IP level

Damper

Gas Tight Shut-off Damper

Model no : PSD, ESD, MSD



Gas Tight Shut-off Damper

Gas Tight Shut-off Dampers are used to Shut-off and balance airflow rates in high pressure ductworks. Dampers meet international standards for rectangular and round ducts. In the open position, the blades face the direction of flow and do not cause a significant pressure loss. The Gas Tight Shut-off Dampers is used as a shut-off, gas and balancing damper in applications where tightness and reliability are important. Airflow can be in either direction and installed in any orientation with either manual, electrical or pneumatic. actuation.

Technical Information

Minimum Size	100W x 100H x 200~300D mm
Maximum Size	2800W x 2800H x 200~300D mm
Pressure Test	Closed blade leakage to Class 3 EN1751 Case leakage to Class B EN1751



Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and
flanges thickness



Transitions
Various options for fitting into
circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Carbon Steel Galvanized steel Stainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Galvanized steel Stainless Steel 304L/316L
Thickness	Minimum 2 mm double skin Plug welded to solid shafts
Shafts	Ø19 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Side Seals	Stainless Steel 316L 0.25mm
Linkage	EStainless Steel 304/316L 3~6.0 mm thick link bars arranged to provide opposed blade motion
Blade Gasket	Fire retardant silicon

Control Option

Dampers can be operated manually or with electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close, open, or stay put on loss of power when fitted with an electric or pneumatic actuator.

The actuator will be selected following your technical needs:

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- ATEX Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, IECEx
- Design Temperature (from -60°C to + 70°C)
- IP level

Damper

Volume Control Damper / Modulating Damper

Model no : PVD, EVD, MVD



Volume Control / Modulating Damper

Volume Control Dampers are used to balance airflow rates in high pressure ductwork. Dampers meet international standards for rectangular and round ducts. In the open position, the blades face the direction of flow and do not cause a significant pressure loss. The Volume Control Dampers is used as a balancing damper in applications where reliability is important. The Volume Control Dampers can be offered with powered actuators for modulating control with either electric or pneumatic position actuators that can be connected at the control system for closed loop control.

Technical Information

Minimum Size	100W x 100H x 200~300D mm
Maximum Size	2800W x 2800H x 200~300D mm

Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and
flanges thickness



Transitions
Various options for fitting into
circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Carbon Steel Galvanized steel Gtainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Galvanized steel Stainless Steel 304L/316L
Thickness	Minimum 1.5 mm double skin Plug welded to solid shafts
Shafts	Ø12.7 or 19mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Linkage	Stainless Steel 304/316L 3~6.0 mm thick link bars arranged to provide opposed blade motion

Control Options

Dampers can be operated manually or with electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close, open, or stay put on loss of power when fitted with an electric or pneumatic actuator.

The actuator will be selected following your technical needs:

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- ATEX Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, IECEx
- Design Temperature (from -60°C to + 70°C)
- IP level



Damper

Non-Return Damper

Model no : NRD



Non-Return D

Non-Return Dampers are used in offshore and marine applications to prevent backflow throughventilation ductwork system. The Non-Return Dampers do not need an actuator or motor. Non-Return Dampers can be installed in rectangular or circular ducts, horizontally or vertically. If required, they can easily be set by adjusting the weight of each damper/installation. When the blades are in the open position, the device does not cause significant pressure loss, noise or flow disturbance.

Technical Information

Minimum Size	100W x 100H x 200~300D mm
Maximum Size	2800W x 2800H x 200~300D mm

Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and flanges thickness



Transitions
Various options for fitting into circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Carbon Steel Galvanized steel Stainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Galvanized steel Stainless Steel 304L/316L
Thickness	Minimum 1.2 mm Plug welded to solid shafts
Shafts	Ø13 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Linkage	Stainless Steel 304/316L 3mm thick link bars arranged to provide opposed blade motion

Control Options

Spring or Weight kits are available between 50-300 Pa for the NRD. These are simple mechanisms that have no closed loop control.



Damper

Pressure Relief Damper

Model no : PRD



Pressure Relief D

Pressure relief dampers are used in offshore and marine applications to prevent backflow through ventilation ductwork system. The pressure relief dampers do not need an actuator or motor. Pressure relief dampers can be installed in rectangular or circular ducts, horizontally or vertically. If required, they can easily be set by adjusting the weight of each damper/installation. When the blades are in the open position, the device does not cause significant pressure loss, noise or flow disturbance.

Technical Information

Minimum Size	100W x 100H x 200~300D mm
Maximum Size	2800W x 2800H x 200~300D mm



Mechanical Options

The following options can be incorporated if required.



Thickness
Increased casing and flanges thickness



Transitions
Various options for fitting into circular ductwork



Machine parts
Earth bosses

Materials of Construction

Casing and Flanges

Materials	Carbon Steel Galvanized steel Stainless Steel 304/316L
Thickness	Minimum 3.0 mm Thickness's following SOLAS (3.0-5.0 mm) Fully welded Flange drilling detail to ISO 15138 standard. Custom flanges as option.

Blades

Materials	Galvanized steel Stainless Steel 304L/316L
Thickness	Minimum 1.2 mm Plug welded to solid shafts
Shafts	Ø13 mm continuous solid shaft in Stainless Steel 304/316L
Bearings	Oil impregnated sintered bronze. Low temperature - 55°C and low leakage bearing assembly option available
Linkage	Stainless Steel 304/316L 3mm thick link bars arranged to provide opposed blade motion

Control Options

Spring or Weight kits are available between 50-300 Pa for the PRD. These are simple mechanisms that have no closed loop control.

Ventilators

Products



Air Intake Trunk

Air Intake Trunk is a structure composed by installing a water catcher at the air Intake. It is mainly installed on the on-board deck to separate the water flowing into the engine fan room or the area where the fan is operated, and provide a high quality of fresh air.

Product Features

- Easy to install
- Structure that can supply a large amount of fresh air to a specific area
- Excellent separation efficiency of incoming water
- Excellent water separation efficiency and low pressure
- Possible to reduce noise by installing insulation inside the trunk

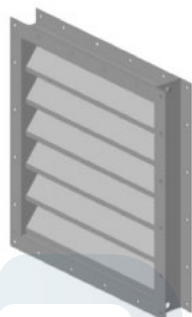


Water Catcher(Mist Eliminator)

It has been designed that Water Catcher and filters should be installed in system air intakes, where a 'high' degree of moisture and dust removal is required to supplement the 'weather protection' performance of louvers.

Product Features

- High efficiency of water separation
- Low pressure drop
- EN13030 Test Report for ABS and Stainless steel profiles
- 1 stage : Water Catcher
- 2 stage : Water Catcher + Air Filter
- Option : Weather Tight Cover



Fixed Louver

offer a large ranger of stainless steel high efficiency weather louvers designed primarily for offshore and petro-chemical industries. The louvers are well suited to ventilation and power generation air intake and exhaust applications as well as louver cladding systems.

Product Features

- Easy to install
- Low pressure drop
- EN13030 Test Report for pressure drop and rainwater penetration
- Weather tight cover can be assembled
- Several material can be applied



Mushroom Head

Structures necessary to supply fresh air or exhaust air to a specific area.

Product Features

- Can be combined with motor fan
- Excellent efficiency structure that inflows fresh air or discharges contaminated air into the space specified in a specific area
- Excellent efficiency structure that inflows fresh air or discharges
- Strong against wind speed due to circular structure



Gooseneck Ventilator

Gooseneck Air Ventilation has the characteristics of reasonable structure, convenient opening and closing, beautiful appearance, complete specifications, good ventilation effect, and reliable weather-proof.

Product Features

- Installation to prevent ingress of internal foreign matter
- Weather tight cover can be combined
- Beautiful shape with circular type



Zet Hood

A product that is vertically installed in a specific area and has a function to remove internal odors to the outside.

Product Features

- Product to remove specific smell or gas to the outside
- Drain installation to filter out rainwater with outdoor air and vertical installation structure
- Mesh installation to prevent the inflow of internal foreign matter
- Beautiful shape with circular type of strong structure



Sand Trap

The sand trap louver is used as pre-filter for the protection of air conditioning plants in areas exposed to extreme levels of industrial pollution. It has a degree of separation of sand and large dust particles, even in cases of high dust concentrations.

Product Features

- Easy to install
- Low pressure drop
- Excellent separation efficiency

CERTIFICATION



We will run on
without interruption.



MED B



MED D



DNV-GL A-0



DNV-GL A-60



LRA-0



LR A-60



ABS A-0&60MA



ABS A-0&60DA



KRA-0



KRA-60



BV A-0&60



DNV-GL Hose test
Weather Tight Damper



LR WTD Test



KR SOC
CHEMICAL FILTER



PATENT for WTD



PATENT for CHEMICAL
FILTRATION SYSTEM



EN13030 TEST REPORT



EN13030 TEST REPORT



EN13030 TEST REPORT

Customer

