

Packaged ACs & Ducted Splits

Nothing comes close to its cooling. Or its wide range.

With more than 7 decades of experience in air conditioning, over a million tons installed and over 200 trained and dedicated dealers across the country, Blue Star has been the undisputed market leader in ducted systems, in India.

Blue Star's leadership has not been limited to sales, service, reach and range alone. The Company has driven major technological innovations in the field, resulting in unique products being introduced into the market over the past decades.

Blue Star was the first to introduce scroll technology into ducted systems over a decade ago. Then came the HiSen and HiPer Packaged ACs which were designed to cater specifically to high sensible heat and high ambient applications such as IT parks and server banks. Blue Star also pioneered the HiPer Green Packaged unit to be used in green building applications.

Blue Star has a wide range of air cooled and water cooled floor/ceiling mounted ductable ACs with various refrigerant options to suit customer needs.

Salient features



Highly efficient units with scroll compressors

50°C

Designed to work effectively even in ambient temperatures as high as 50°C

R410A Compatible with R410A eco-friendly refrigerant

The Ducted Systems Range

Air Cooled Packaged ACs

Blue Star is a pioneer in the manufacturing of floor-mounted Packaged ACs for over three decades now. These systems are popular in commercial applications due to their distinct advantages of service-friendliness and extended ducting capabilities.

In this range, the floor-mounted indoor unit houses the DIDW blower, coil, filter and compressor, while the outdoor unit houses the high-efficiency condenser and new-design propeller fan. The strategic design, which places the compressors in the proximity of the evaporator in the indoor unit, further enhances the efficiency of this system.

Water Cooled Packaged ACs

Where water is available in plenty, Blue Star's Water-cooled Packaged ACs offer higher efficiency than air cooled systems since water is a superior cooling medium compared to air. These systems come pre-charged and the unit comprises of the filter, blower, evaporator, compressor and water cooled condenser. These water cooled systems offer both higher efficiency as well as lower power consumption compared to air cooled systems.









Robust and reliable

Aesthetically superior

Service-friendly design





Air Cooled Ductable Splits

Where floor space is scarce but the AC unit can be housed above the false ceiling, ducted splits are the best choice. The indoor unit houses the evaporator, DIDW blower and filter in a compact powder-coated sheet metal unit, while the outdoor unit houses the compressor, the condenser and the new-design propeller fan.

Water Cooled Ductable Split Units

The water cooled ducted unit is another notable innovation from Blue Star. These units are perfectly suited for shopping malls, office complexes, service apartments, industrial airconditioning and any application with multiple tenants. The advantages of the water cooled unit are as follows:

- Independent control and billing is possible in multi-tenant premises.
- Units can be mounted within the tenant's place.
- Investment can be in phased manner, no need to lock capital.
- Aesthetically better as outdoor unit is not exposed unlike, in air cooled systems. Also refrigerant pipe limitation is taken care of as condensing unit need not be kept in open space and can be mounted near IDU within the building.
- New DSW-mini series units are available in smaller capacities: 1.5TR and 2TR







Product Line-Up

R3 Series

Appearance	Tonnage (TR)	4.3	6	9	12	18	24	
0 11	Air Cooled Packaged Air Conditioners with R410A		•	•	•	•		
	Air Cooled Ducted Split Air Conditioners with R410A	•	•	•	•	•	•	

R1/R2 Series

Appearance	Tonnage (TR)	3	5.5	8.5	8.75	11	16.5	17	22
0	Air Cooled Ducted Split Air Conditioners with R22	•	•	•	•	•		•	•
0	Air Cooled Ducted Split Air Conditioners with R407C	•	•	•	•	•		•	•
	Air Cooled Packaged Air Conditioners with R22		•		•	•	•		•
	Air Cooled Packaged Air Conditioners with R407C		•		•	•	•		•
	Water Cooled Ducted Split Air Conditioners with R22	•	•		•	•			
	Water Cooled Ducted Split Air Conditioners with R407C	•	•		•	•			
	Water Cooled Packaged Air Conditioners with R22		•			•	•		
	Water Cooled Packaged Air Conditioners with R407C		•			•	•		

DSW Mini - R1 Series

Appearance	Tonnage (TR)	1.5	2
	Water Cooled Ducted Split Air Conditioners Mini Series-R22	•	•

Features



Operation at Higher Ambients

The condenser in this new series of ducted systems is designed to operate effectively at higher ambient temperatures, up to 50°C, ensuring efficient cooling even in the harsh summer months, without tripping.



Lower Running Cost

The high-efficiency fan used in these systems is specially designed with blades that offer better air flow. This, along with more coil face area, helps in reducing the condensing temperature, thereby lowering power consumption and running cost.



Service-friendly Design

The design of the outdoor unit in the ducted system range is such that it offers easy access to the compressors and the control panel on the side. And the fan motor assembly on the front panel is also easily removable for repair. The condenser coil is much easier to clean as well.



Scroll Compressor-driven

Due to their inherent design characteristics, scroll compressors have very high volumetric efficiency. They are ideal for air conditioning applications where the compression ratio is not very high. All Blue Star Packaged ACs and Ducted Splits use scroll compressors.



All units are controlled by microprocessor-based controllers with the following features:

- Seven-segment LCD display
- Auto restart after power failure
- Fault display
- Run-time equalisation
- Non-volatile memory
- Touch-key on/off switch
- Single-phasing and phase reversal protection
- Time delay for compressor operation
- Accurate temp. control +/- 1°C
- Provision for fire alarm input



Blue Fin Condenser and Corrosion-resistant Body

All units have special blue fins and are made of galvanised sheets, which are powder-coated after fabrication, making them corrosion-resistant while looking elegant, improving overall life of the system.





















Wide Voltage Range of Operation

The ducted systems can function across a wide voltage range of 360 - 440 V, making them a rare breed.



Wide voltage range



Multi-compressor Advantage

Most of these ducted systems use more than one compressor. This gives them the advantage of high part-load efficiencies, since the entire evaporator surface is available to the system even during part-load conditions.



Run-time Equalisation

The intelligent controller ensures that all compressors (in multi-compressor units) run for equal number of hours, thus ensuring equal wear.



Lower Noise Levels

The outdoor units of these ducted systems are fitted with bird-wing design and high-efficiency fans. This lowers the noise levels significantly.





Hydrophilic Coating

The aluminium fins used on the evaporator coil have a hydrophilic coating. This coating helps retain the moisture on the fins from where they drain to the bottom by gravity. This helps reduce the moisture carry-over with the supply air.



DIDW Blower Design

These systems use advanced DIDW type centrifugal blowers with forward curved blades, which offer higher air throw.



Efficient Air Filters

Air filters made of non-woven polyester media enclosed in HDPE mesh are provided. These are efficient and can be cleaned easily.

Advantage Blue Star

Seven Decades of Experience

Over 7 decades of experience in the air conditioning field makes Blue Star the undisputed market leader in ducted systems.

State-of-the-art Production Facilities

Blue Star has 7 world-class manufacturing facilities across the country to produce various HVAC products starting from small room ACs to big Chillers. These factories are equipped with the latest automated machine tools and quality control systems, manned by experienced engineers. Blue Star also has an experienced R&D team to develop world-class products for its customers.

Cooling Solutions Made Easy

Blue Star's engineers offer optimal air conditioning solutions for various air conditioning needs of customers. The process starts from cooling load calculations to well designed air-distribution systems and equipment layouts before even embarking on a project.

Superior Project Management

Air conditioning of commercial spaces requires meticulous planning and timely execution as it involves coordination with architects, interior designers, consultants and various other professional agencies. Blue Star with its well trained dealers offers solutions for quality and timely execution of air conditioning projects for various applications.

After Sales Support

Blue Star provides after sales service through offices spread across 17 cities. There is also a network of well trained dealers across the country to take care of customers' service needs. The wide network and well trained service personnel ensure that customers enjoy their air conditioning without any interruption.



Air Cooled Ducted Split Air Conditioners - R1/R2 Series

Air Cooled	Ducted	l Split Air	Conditio	ners - R1	R2 Series	5			
DESCRIPTION	UNITS	DSA361R1/R2	DSA661R1/R2	DSA1021R1/R2	DSA1052R1/R2	DSA1322R1/R2	DSA1321R1/R2	DSA2042R1/R2	DSA2642R1/R2
	TR	3.0	5.5	8.5	8.75	11.0	11.0	17.0	22.0
Nominal Cooling	Btu/Hr	36,000	66,000	102,000	105,000	132,000	132,000	204,000	264,000
Capacity	kCal/Hr	9,072	16,632	25,704	26,460	33,264	33,264	51,408	66,528
Refrigerant					R1 Series: R 22; F	2 Series: R 407C			
Power Supply (AC)					380/420 V, 3	PH, 50 Hz			
External Finish				Pure	Polyester Powder	Coated GI Steel Ho	using		
Indoor Unit									
Dimensions	WxDxH (mm)	950x575x380	1175x635x460	1500x635x460	1500x635x460	1860x635x460	1860x635x460	2035x1085x550	2135x1215x690
Power Supply (AC)				1	380/420 V, 3	PH, 50 Hz		1	1
Type of Blower				Centrifu	gal Forward Curve	d, Double Inlet, Do	uble Width		
	СМН	2040	3740	5780	5950	7480	7480	11560	14960
Nominal Air Flow	CFM	1200	2200	3400	3500	4400	4400	6800	8800
Capacity Control		0,100%	0,100%	0,100%	0, 50%,100%	0, 50%,100%	0,100%	0, 50%,100%	0, 50%,100%
Air Filter				Non-wo	ven Polyester Medi	a Enclosed by HDI	PE Mesh	1	
Controller				N	licroprocessor Bas	ed with LCD Displa	ıy		
Outdoor Unit									
No of ODUs	Per Unit	1	1	1	1	2	1	2	2
Compressor Type		Recip			Hermetical	ly Sealed Scroll		1	
No of Compressors/ODU		1	1	1	2	1	1	1	1
Dimensions	WxDxH (mm)	1020x420x690	1020x420x950	1190x550x950	1435x635x950	1020x420x935	1435x635x950	1190x550x950	1435x635x950
Power Supply (AC)					415 V, Three	e Phase, 50 Hz			
Condenser Type					Air-coole	ed FTHX			
Condenser Fan Type					Prop	peller			
Indoor Unit Weight	kg	50	55	85	85	105	105	150	210
Outdoor Unit Weight	kg/ODU	80	90	160	170	90	190	160	190

Air Cooled Packaged Air Conditioners - R1/R2 Series

DESCRIPTION	UNITS	DPA661R1/R2	DPA1052R1/R2	DPA1322R1/R2	DPA1321R1/R2	DPA1983R1/R2	DPA2642R1/R2			
	TR	5.5	8.75	11.0	11.0	16.5	22.0			
Nominal Cooling	Btu/Hr	66,000	105,000	132,000	132,000	198,000	264,000			
Capacity	kCal/Hr	16,632	26,460	33,264	33,264	49,896	66,528			
Refrigerant			R1 Series: R 22; R2 Series: R 407C							
Power Supply (AC)			380/420 V, 3 PH, 50 Hz							
External Finish				Pure Polyester Powder	Coated GI Steel Housing	3				
Indoor Unit										
Dimensions	WxDxH (mm)	900x660x1700	1160x660x1700	1160x660x1700	1160x660x1700	1500x750x1750	1500x930x1950			
Type of Blower			Cen	trifugal Forward Curved	, Double Inlet, Double W	/idth				
	СМН	3740	5950	7475	7475	11210	14950			
Nominal Air Flow	CFM	2200	3500	4400	4400	6600	8800			
Power Supply (AC)				415V, Three Ph	ase, 50 Hz					
External Finish				Pure Polyester Powder	Coated GI Steel Housing					
Compressor Type				Hermetically S	ealed Scroll					
No of Compressors Unit		1	2	2	1	3	2			
Capacity Control		0,100%	0, 50%,100%	0, 50%,100%	0,100%	0, 33%,66%,100%	0, 50%,100%			
Air Filter			No	n-woven Polyester Mide	a Enclosed by HDPE Me	sh				
Controller 🛛				Microprocessor Base	ed with LCD Display					
<mark>Outdoor Uni</mark> t										
No of ODUs	Per Unit	1	2	2	1	3	2			
Dimensions	WxDxH (mm)	1020x420x950	1020x420x950	1020x420x950	1435x635x950	1020x420x950	1435x635x950			
Power Supply (AC)				230 V, Single P	hase, 50 Hz		·			
Condenser Type				Air-coole	d FTHX					
Condenser Fan	Туре			Prop	eller					
Indoor Unit Weight	kg	195	250	270	260	430	500			
Outdoor Unit Weight	kg/ODU	50	50	50	130	50	130			

Air Cooled Packaged Air Conditioners - R3 Series

DESCRIPTION	UNITS	DPA721R3	DPA1081R3	DPA1442R3	DPA1441R3	DPA2163R3	DPA2882R3		
Neminal Casling	TR	6.0	9.00	12.0	12.0	18.0	24.0		
Nominal Cooling	Btu/Hr	72,000	108,000	144,000	144,000	216,000	288,000		
Capacity	kCal/Hr	18,144	27,216	36,288	36,288	54,432	72,576		
Refrigerant				R 4	10A				
Power Supply (AC)				380/420 V, 3	PH, 50 Hz				
External Finish				Pure Polyester Powder	Coated GI Steel Housir	ng			
Indoor Unit									
Dimensions	WxDxH (mm)	930x660x1700	930x660x1700	1260x760x1700	1260x760x1700	1500x835x1830	1500x930x1950		
Type of Blower			Cen	trifugal Forward Curve	d, Double Inlet, Double	Width			
	СМН	4080	6120	8155	8155	12230	16310		
Nominal Air Flow	CFM	2400	3600	4800	4800	7200	9600		
Power Supply (AC)				415V, Three Ph	ase, 50 Hz				
Compressor Type				Hermetically Se	aled Scroll				
No of Compressors Unit		1	1	2	1	3	2		
Compressor Configuration		Solo	Solo	Tandem	Solo	Tandem+Solo	Tandem		
No of Circuits		1	1	1	1	2	1		
Capacity Control		0,100%	0,100%	0, 50%,100%	0,100%	0, 33%, 66%,100%	0, 50%,100%		
Air Filter			Non-v	woven Polyester Media	Enclosed by HDPE Mes	h	- -		
Controller				Microprocessor Based	l with LCD Display				
Outdoor Unit									
No of ODUs	Per Unit	1	1	1	1	2 (1x12TR + 1x6TR)	2		
Dimensions	WxDxH (mm)	1020x420x950	1190x550x950	1435x625x950	1435x625x950	1435x625x950 1020x420x950	1435x625x950		
Power Supply (AC)			230 V, Single Phase, 50 Hz						
Condenser Type				Air-cooled	FTHX				
Condenser Fan	Туре		Propeller						
Indoor Unit Weight	kg	200	250	300	300	500	580		
Outdoor Unit Weight	kg/ODU	50	80	92	92	92 + 50	92		

Air Cooled Ducted Split Air Conditioners -R3 Series

DESCRIPTION	UNITS	DSA522R3	DSA721R3	DSA1081R3	DSA1441R3	DSA1442R3	DSA2162R3	DSA2882R3
	TR	4.3	6.0	9.00	12.0	12.0	18.0	24.0
Nominal Cooling Capacity	Btu/Hr	51,000	72,000	1,08,000	1,44,000	1,44,000	2,16,000	2,88,000
cupacity	Kcal/Hr	13,000	18,144	27,216	36,288	36,288	54,432	72,576
Refrigerant			·		R 410A			
Power Supply		230V, Single Phase, 50Hz, AC			380/420 V, 3 Ph, 50H:	z, AC		
External Finish				Pure Polyes	ster Powder Coated G	al Steel Housing		
Indoor Unit								
Dimensions	WxDxH (mm)	1245X730X310	1175X635X460	1500X635X460	1860X635X460	1860X635X460	2035X1085X550	2135X1215X690
Power Supply				230\	/, Single 1 Ph, 50 Hz, a	ac supply		
Type of Blower				Centrifugal For	ward Curved, Double	Inlet, Double Widtl	<u>ו</u>	
	СМН	2700	3740	5780	7480	7480	11560	14940
Nominal Air Flow	CFM	1600	2200	3400	4400	4400	6800	8800
Capacity Conrol		0,50%,100%	0, 100%	0, 100%	0, 100%	0, 50%, 100%	0, 50%, 100%	0, 50%, 100%
Air Filter				Non_woven P	olyester Media Enclo	sed by HDPE Mesh		
Controller				Micro	processor Based with	LCD Display		
Out Door Unit								
No of ODUs	Per Unit	1	1	1	1	2	2	2
Compressor Type					Hermetically Sealed S	Scroll		
No of Compressors/ODU		2	1	1	1	1	1	1
Dimensions	WxDxH (mm)	1020 X 420 X 950	1020x420x950	1190x550x950	1435x625x950	1020x420x950	1190x550x950	1435x625x950
Power Supply		230V, Single Phase, 50Hz, AC			380/420 V, 3 Ph, 50H	z, AC		
Condenser Type					Aircooled FTHX			
Condenser Fan Type					Propeller Type			
Indoor Unit Weight	kg	56	55	85	105	105	150	210
Out Door Unit weight	kg/ODU	90	95	160	190	95	160	190

Water Cooled Packaged Air Conditioners - R1/R2 Series DSW Mini - R1 Series

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DESCRIPTION	UNITS	DPW661R1/R2	DPW1322R1/R2	DPW1983R1/R2		
	TR	5.5	11.00	16.5		
Nominal Cooling Capacity	Btu/Hr	66,000 132,000		198,000		
Capacity	Kcal/Hr	16,632	33,264	49,896		
Refrigerant		R1 Ser	ies: R 22; R2 Series:	R 407C		
Dimensions	WxDxH (mm)	900x660x1700	1160x660x1700	1500x750x1800		
Type of Blower		Centrifugal	Forward Curved, D Double Width	ouble Inlet,		
	СМН	3740	7475	11210		
Nominal Air Flow	CFM	2200	4400	6600		
Cooling Coil		Inner Groove	ed Copper Tubes w	ith Al Slit Fins		
Electrical Power Supply		380/420V,	Three Phase, 50 Hz	, AC Supply		
External Finish		Pure Polyeste	r Powder coated Gl	steel housing		
Capacity Control		0,100%	0,50%, 100%	0,33%, 66%, 100%		
Air Filter		Non-woven Poly	ster Media Enclose	d by HDPE Mesh		
Controller		Microproc	essor Based with L	CD Display		
Compressor type		Her	metically Sealed Se	croll		
No of compressors/Unit		1	2	3		
Condenser Type		Shell & Tube Type				
Cooling water required at	USGPM	20	40	60		
32 deg. C	СМН	4.5	9.1	13.6		
Unit Weight	kg	240	405	605		

DESCRIPTION	UNITS	DSW181R1	DSW241R1
Naminal Caalin n	TR	1.5	2
Nominal Cooling Capacity	Btu/Hr	18000	24000
Capacity	kCal/Hr	4536	6048
Refrigerant		R-	22
Dimensions	WxDxH (mm)	1160x6	75x550
Type of Blower			rward Curved, Double Width
Name in all Alindana	СМН	890	1275
Nominal Airflow	CFM	525	750
Cooling Coil			
Electrical Power Supply	V/Ph/Hz	230 V, 1 Ph, 50	Hz, AC Supply
External Finish		Pure Polyester F Steel H	
Air Filter			olyster Media HDPE Mesh
Controller			or Based with isplay
Compressor Type		Rot	ary
Condenser Type		Shell &	& Tube
Water Inlet and Outlet	mm	25.4	BSP
Sizes	inch	1	
Cooling Water Flow	USGPM	4.5	6
Requirement (@32 ° C)	СМН		
Unit Weight	kg	124	127

Water Cooled Ducted Split Air Conditioners - R1/R2 Series

DESCRIPTION	UNITS	DSW361R1/R2	DSW661R1/R2	DSW1052R1/R2	DSW1322R1/R2
Nominal Cooling	TR	3.0	5.5	8.75	11.0
Capacity	Btu/Hr	36,000	66,000	105,000	132,000
	kCal/Hr	9,072	16,632	26,460	33,264
Refrigerant			R1 Series: R 22; R2 Series: R 407C		
Power Supply (AC)			380/420 V, 3 PH, 50 Hz		
External Finish		Pure P	olyester Powder Coated GI Steel H	Housing	
Indoor Unit					
Dimensions	WxDxH (mm)	950x575x380	1175x635x460	1500x635x460	1860x635x460
Type of Blower		Centrifuga	Forward Curved, Double Inlet, D	ouble Width	
Nominal Air Flow	СМН	2040	3740	5950	7480
	CFM	1200	2200	3500	4400
Power Supply (AC)			230 V, 1 Ph, 50 Hz		
Capacity Control		0,100%	0,100%	0, 50%,100%	0, 50%,100%
Air Filter		Non-wove	en Polyester Media Enclosed by H	DPE Mesh	
Controller		М	icroproessor Based with LCD Disp	blay	
Condensing Unit					
No of cds. units	per Unit	1	1	1	1
Compressor Type		Recip		Hermetically sealed Scroll	
No of Compressors/ Unit		1	1	2	2
Dimensions	WxDxH (mm)	800x655x545	800x655x545	1170x640x630	1170x640x630
Power Supply (AC)			415 V, Three Phase, 50 Hz		
Condenser Type					
Cooling water	USGPM	11	20	31	40
required at 32°C	СМН	2.5	4.5	7	9.1
Indoor Unit Weight	kg	50	55	85	110
Outdoor Unit Weight	kg/ODU	130	156	215	215

Specifications are subject to change due to continuous product development.

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