

### ABOUT US



**PROJENIX PRIVATE LIMITED** is an ISO 9001:2015 & ISO 14001:2015 certified company which deals in MEP with all kind of HVAC projects, Pharma Clean Room HVAC, Puff Panel Projects, Cold Rooms, Electrical Projects, BMS and Annual Maintenance Contracts. It has the infrastructure and strong capabilities to undertake EPIC (Engineering, Procurement, Installation and Commissioning) projects and offering comprehensive Cleanroom and Industrial solutions. An experienced team of engineers placed strategically take care of the such small/large projects.

We have successfully installed and handed over various projects in Industrial Air Conditioning, Pharmaceutical, Laboratories, Hospitals, FMCGs, Hotels, Restaurants & Banquets. Our team has vide experience working with a verity if pharmaceutical applications for end to end facility solutions viz. Oncology, Vaccines, Hormones, Liquids Orals, OSD Tablet/Capsules, Ointments, API, Labs & Injectable.

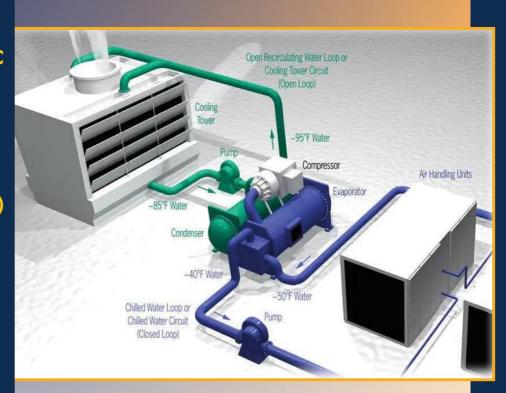
We are committed to a policy of continuous remarkable improvement and providing great Experience to our customers indeed. We focus only on providing the solutions, through sales, Engineering, Planning, Project and servicing of air conditioners.

We fulfill all requirements of a suitable MEP contractor which suits customer in all respect. Our contracting activities such as electrical, plumbing, fire-fighting and industrial projects plays an instrumental role in order to offer turnkey solutions, apart from execution of specialized industrial projects. We understand the importance and need of design before any product and hence company has a good skilled mind. The skilled manpower has a very good reach experience into HVAC and Refrigeration products.

Company has also forayed into the International Exports. Company has successfully supplied and designed HVAC projects & products into Africa, Bangladesh & Australia. Company is dedicated and committed to expanding and exponential growth in all mentioned areas...

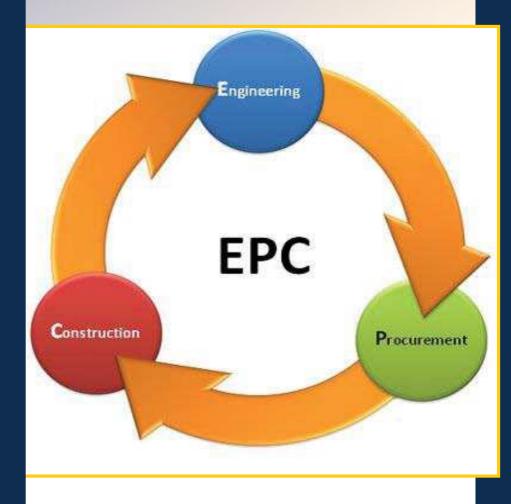
### SPECIALIZED SEGMENTS

- INDUSTRIAL HVAC
- PHARMACEUTICALS HVAC
- OT MODULE
- PROCESS COOLING
- VENTILATION
- COLD ROOMS
- ELECTRICAL PROJECTS
- BMS PROJECTS



### TURNKEY PROJECT CAPABILITIES

- HVAC & BMS CONTRACTING
- ENGINEERING
- PROCUREMENT
- INSTALLATION
- COMMISSIONING
- **VALIDATIONS**

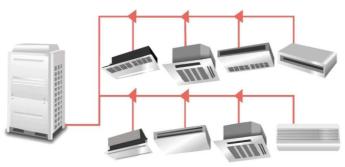


### **BUSINESS SEGMENTS**

### CHILLERS

- CENTRIFUGAL CHILLERS
- SCREW CHILLERS
- **✓** INVERTER SCROLL CHILLERS
- PROCESS CHILLERS





### VARIABLES MACHINES

- VRF / VRVS
- FREE MATCH ACS
- SIDE DISCHARGES ACS
- CASSETTE ACS
- SPLIT ACS / INVERTER ACS

### PACKAGE CENTRAL ACS

- **✓** INVERTER DUCTED & PACKAGE ACS
- **DUCTED SPLIT ACS**
- **♥** PACKAGE FLOOR MOUNTED ACS

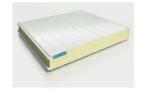


#### **MODULAR COLD ROOMS**









### REFRIGERATION

- O MODULAR COLD ROOMS
- OLOW TEMPERATURE FREEZERS
- BANANA RIPENING COLD ROOMS

### VENTILATION SOLUTIONS

- AIR WASHER SYSTEM
- FORCED DRAFT VENTILATION
- AIR HANDLING UNITS





**Projenix** provides a complete range of mechanical, electrical and plumbing for all HVAC, Refrigeration, Clean Room Solutions, Electrical & BMS segments:

#### AIR CONDITIONING

- Air Conditioning Plant (chilled water / Dx)
- Chilled / Condenser Water distribution system (primary/ secondary/tertiary pump and insulated piping, Cooling Tower, MS pipe, etc)
- Thermal & Acoustic Insulation of ducts, underdeck/ over-deck insulation.
- Power distribution boards, cabling and earthing.

### **VENTILATION**

- Forced ventilation systems including air washers.
- Exhaust systems, Life safety systems (smoke exhaust)
- Air Distribution systems with ducts (rectangular/ circular/oval)

#### **EXPERTISE OF CLEAN ROOM**

- Types / Classifications of Clean Room
- Temperature & Humidity Control
- Air Management, Contamination Control
- HVAC Low temperature & humidity, ISO class 4-8 with pressure differentials as per eGPM / eGLP.
- Complete Comprehensive solutions for HVAC Clean Room, Accessories including Pass Box, SS Furnitures, Filtration accessories etc.

#### **VALIDATIONS**

Projenix has framed SOPs for entire life cycle of a project process as design, Installation, commissioning, To adhere the stringent documentation of qualifications. We facilitate documentation on Design Qualifications (DQ), Installation Qualification (IQ), Operational Qualification (OQ) and Performance Qualification (PQ).



### AFTER SALES

All machinery equipment's including all kind of air conditioning & refrigeration systems depreciate with time and in turn, they are not properly maintained, they start depreciating in terms of efficiency, high power consumption and high wear and tear. This can be avoided by regularly maintenance. **PROJENIX** offers services through Trained Personals, Practising the nature of complaints, Preventive Services & Genuine Spares through

### CONTRACT MODULES:

#### • RISK PROTECTION CONTRACT (RPC):

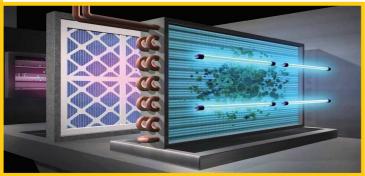
This comprehensive contract includes all labour, spares and consumables. It covers routine preventive maintenance and attending to breakdowns.

### • LABOUR MAINTENANCE CONTRACT (LBR):

This contract includes labour only for routine preventive maintenance and attending to breakdowns. Spares and consumables are separately charged for.

### • OPERATING CONTRACTS (OPR):

This is a pure labour contract. The operators are stationed for single, double, round the clock or 365 days shift, depending on the need. They regularly monitor operating status.





### SERVICE PRODUCTS

- SPARE PARTS
- AMC CONTRACTS
- OPERATION CONTRACTS
- REVAMP/RETROFITS

#### **UVC EMITTERS**

- UVC Lights are used for disinfecting drinking water, air, pharmaceutical products, etc.
- Normal cleaning and disinfecting may leave behind some residual contamination, which UVC can treat.
- Typical Uses of UVC emitters are in the AHU, ducted systems, cassette acs & FCU.





# LIST OF CUSTOMERS

# PHARMACEUTICAL INDUSTRIES / CLEAN ROOM

CUSTOMERS	LOCATION	CUSTOMERS	LOCATION
SHREE RAM HEALTHCARE PVT. LTD.	BADDI	DIP POLYPLAST	BADDI
NIPER	MOHALI	PARABOLIC DRUGS	DERABASSI
VACXIGEN LIFE SCIENCES	PAONTA SHAHIB	CHEMICAL RESOURSES	DERABASSI
CHARAK PHARMA	BADDI	MARC LABORATORIES LTD	BADDI
HUHTAMAKI PPL LIMITED	BADDI	OZONE PHARMACEUITICLAS LTD	BADDI
CIPLA LIMITED	ZIRAKPUR	GAG PHARMACEUITICLAS	BADDI
ZEON LIFE SCIENCES	PAONTA SHAHIB	CHIROS PHARMA	SOLAN
AKUMS LIFE SCIENCES	DERABASSI,	MEDIWELL BIOTECH	BADDI
PROCTER & GAMBLE (P&G)	BADDI	SOOD RISHI PAL (RP) INDUSTRIES	LUDHIANA
INDORAMA	KALAMB	NIXI LABORATORIES PVT. LTD.	KALAMB
CSIR	CHANDIGARH	CASCA REMEDIES PVT. LTD.	AMBALA
ALKON FORMULATION	BADDI	ALLCURE LIFESCIENCES LLP	YAMUNANAGAR

# **MECHANICAL / ELECTRICAL INDUSTRIES**

CUSTOMERS	LOCATION	CUSTOMERS	LOCATION
BHARAT ELECTRONICS LIMITED.	PANCHKULA	MIKADO CROP SCIENCES	BATHINDA
METLONICS INDUSTRIES PVT. LTD	MOHALI	POLYPLASTICS INDUSTRIES(INDIA) LTD.	CHENNAI
VIBRACOUSTIC INDIA PVT. LTD.	MOHALI	POLYPLASTICS INDUSTRIES(INDIA) LTD.	BHIWADI
SARASWATI PLASTOTECH INDIA PVT LTD	JAMMU	INDIAN OIL CORPORATION LTD(IOCL)	BATHINDA
AQUA FIBER INDUSTRIES	DERABASSI	POLYPLASTICS INDUSTRIES(INDIA) LTD.	YAMUNA-NAGAR
NABHA POWER PLANT (L&T)	RAJPURA	METRO MOTORS	AMBALA
SATIA INDUSTRIES LTD	MUKATSAR	BANSAL SPINNING MILLS	LUDHIANA
JINDAL STAINLESS STEEL	HISSAR	MORE	

HOTELS/RESTAURANTS/COMFORT APPLICATION /IT INDUSTRIES							
CUSTOMERS	LOCATION						
AVENUE SUPER MARTS (D MART)	PUNJAB						
MASTERS SALON	ZIRAKPUR						
SATGURU INFOTECH	MOHALI						
DISTRICT BUREAU OF EMPLOYMENT	LUDHIANA						
GRAND MARIAN HOTELS(P) LTD.	LUDHIANA						
HOTEL SWASTIK RESORTS	JAMMU						
KURUKSHETRA UNIVERSITY	KURUKSHETRA						
AAHANA DECOR PVT. LTD.	KARNAL						
MORE							

INTERNATIONAL BUSINESS PRESENC						
CITY	COUNTRY					
KENYA	EAST AFRICA					
UGANDA	EAST AFRICA					
RWANDA	EAST AFRICA					
MALI	WEST AFRICA					
DUBAI	UAE					
MAHE	SEYCHELLES					
MAURITIUS	EAST AFRICA					
TANZANIA	EAST AFRICA					
MORE						



# Air Cooled Ducted Split Air Conditioners - R3 Series

DESCRIPTION	UNITS	DSA361R3	DSA522R3	DSA661R3	DSA1021R3	DSA1321R3	DSA1	982R3	DSA	2642R3	
	TR	3	4.3	5.5	8.5	11	16	.5		22	
Nominal Cooling Capacity	Btu/Hr	36000	52000	66000	102000	132000	198	000	26	4000	
capacity	K.Cal/Hr	9070	13000	16630	25704	33264	499	900	66	528	
Refrigerant						R 410A					
Power supply (AC)	V/Ph/Hz	380/420V, 3 ph, 50Hz	230V,Single Ph, 50Hz AC				380/ 420 V, 3 ph, 5	0Hz			
External Finish					Pure Polyester Po	wer Coated GI Ste	el Housing				
Indoor Unit											
Dimensions (WXDXH)	mm	886 X 570 X 357	1245X730X310	1138X630X 482	1484X630X482	1839X630X482	2035X10	085X552	2112X1	003X864	
Power supply	V/Ph/Hz					230V,Singl	e Ph, 50Hz AC				
Type of Blower		Centrifugal Forward Curved, Double Inlet, Double Width									
	СМН	3040	2900	3740	5780	7480	115	560	14960		
Nominal Air Flow	CFM	1200	1700	2200	3400	4400	68	00	8	8800	
Air Filter				Nor	n Woven Polyeste	r Media Enclosed	by HDPE Mesh				
Controller					Microprocesso	or based with LCD	Display				
Net Weight	kg.	50	56	55	75	90	15	50	2	210	
Outdoor Unit											
Dimensions (WXDXH)	mm	1020X416X652	1020X416X925	1020X416X925	1320X416X925	1437X622X919	1437X622X919	1020X416X925	1437X622X919	1437X622X919	
Quantity per unit	No.	1	1	1	1	1	2 (11TR	+ 5.5TR)	2 (11TI	R + 11TR)	
Compressor Type		Rota	гу Туре			Herr	metically Sealed Sc	roll Type			
No. of Compressor/ODU		1	2	1	1	1	1			1	
Power Supply (AC)	V/Ph/Hz	380/420V, 3 Ph, 50HZ	Ph, 230V,Single Ph, 50Hz AC 380/ 420 V, 3 ph, 50Hz								
Condenser Type		<u> </u>			Air Cooled Fin	and Tube Heat Ex	changer				
Condenser Fan Type					P	ropeller Type					
Net Weight	kg	80	90	90	150	190	190	90	190	190	

#### Specifications are subject to change without any notice.

### Air Cooled Packaged Air Conditioners - R3 Series

DESCRIPTION	UNITS	DPA661R3	DPA1021R3	DPA1321R3	DPA1	982R3	DPA20	642R3
	TR	5.5	8.5	11	16	5.5	2	2
Nominal Cooling Capacity	Btu/Hr	66000	102000	132000	198	000	264	000
	K.Cal/Hr	16630	25704	33264	49	900	665	528
Refrigerant				R41	0A			
Power supply	V/Ph/Hz			380/ 420	V, 3 ph, 50Hz, AC Su	pply		
External Finish			Pu	re Polyester Power Co	oated GI Steel Housi	ng		
Indoor Unit								
Dimensions (WXDXH)	mm	900 X 660 X 1700	1160 X 660 X 1700	1160 X 660 X 1700	1500 X 7-	48 X 1750	1500 X 93	30 X 1950
Power supply	V/Ph/Hz			380/420	V , 3 Ph, 50 Hz, AC Su	pply		
Type of Blower		Centrifugal forward curved, Double inlet, Double width						
N IA. El	CMH	3740	5950	7475	11215		14960	
Nominal Air Flow	CFM	2200	3500	4400	66	00	8800	
Air Filter			Non V	Voven Polyester Medi	a Enclosed by HDPE	Mesh		
Controller				Microprocessor base	ed with LCD Display			
Compressor Type				Hermetically Sea	aled Scroll Type			
No. of Compressor		1	1	1	1-	+1	1+	+1
Net Weight	kg.	195	250	270	4	40	50	00
Outdoor Unit								
Quantity per unit	No.	1	1	1	2 (11TR	+ 5.5TR)	2 (11TR	+ 11TR)
Dimensions (WXDXH)	mm	1020 X 416 X 925	1320 X 416 X 925	1437 X 622 X 919	1437 X 622 X 919	1020 X 416 X 925	1437 X 622 X 919	1437 X 622 X 919
Power Supply to motor(AC)	V/Ph/Hz	230V, 1 ph, 50Hz	415 V, 3 ph, 50Hz			230V, 1 ph, 50Hz		
Condenser Type				Air cooled Fin and Tu	ıbe Heat Exchanger			
Condenser Fan Type				Propelle	er Type			
Net Weight	kg	50	65	130	130	50	130	130

Specifications are subject to change without any notice.

# Water-Cooled Ducted Split Air Conditioners- R3 Series

DESCRIPTION	UNITS	DSW361R3	DSW661R3	DSW1322R3		
	TR	3	5.5	11		
Nominal Cooling Capacity	Btu/Hr	36,000	66,000	1,32,000		
	K.Cal/Hr	9,072	16,630	33,264		
Refrigerant			R 410A			
Power supply	V/Ph/Hz	3	80/ 420 V, 3 ph, 50Hz, AC Supp	ly		
External Finish		Pure Po	lyester Power Coated GI Steel I	Housing		
Indoor Unit						
Dimensions (WXDXH)	mm	886X570X357	1138X630X 485	1839X630X485		
Power supply	V/Ph/Hz		230V, Single Ph, 50Hz AC			
Type of Blower		Centrifugal F	orward Curved, Double Inlet, [	Oouble Width		
Nominal Air Flow	СМН	2040	2040 3740			
Nominal Air Flow	CFM	1200	2200	4400		
Air Filter		Non Woven	Polyester Media Enclosed by	HDPE Mesh		
Controller		Micr	oprocessor based with LCD Dis	splay		
Net Weight	kg.	50	55	90		
Condensing Unit						
Quantity per unit	No.	1	1	1		
Compressor Type		Hermetically sealed Rotary	Hermetically	Sealed Scroll		
No. of Compressors		1	1	2		
Dimensions (WXDXH)	mm	666X640X521 666X640X521 1		1056X640X521		
Power Supply	V/Ph/Hz	380/ 420 V, 3 ph, 50Hz, AC Supply				
Condenser Type			Water Cooled- Shell & Tube			
Cooling water required at 32 deg. C	USGPM	12	20	40		
Net Weight	kg	120	149	200		

Specifications are subject to change without any notice.

# Water-Cooled Packaged Air Conditioners- R3 Series

DESCRIPTION	UNITS	DPW661R3	DPW1322R3	DPW1983R3		
	TR	5.5	11	16.5		
Nominal Cooling Capacity	Btu/Hr	66,000	1,32,000	1,98,000		
	K.Cal/Hr	16,630	33,264	49,890		
Refrigerant			R 410A			
Power supply	V/Ph/Hz	3	80/ 420 V, 3 ph, 50Hz, AC Supp	ly		
External Finish		Pure Po	lyester Power Coated GI Steel I	Housing		
Dimensions (WXDXH)	mm	900X600X1700	1160X660X1700	1500X750X1750		
Type of Blower		Centrifugal F	orward Curved, Double Inlet, [	Oouble Width		
Name in all Air Flance	СМН	3740	7480	11210		
Nominal Air Flow	CFM	2200	4400	6600		
Air Filter		Non Wover	Polyester Media Enclosed by	HDPE Mesh		
Controller		Micr	oprocessor based with LCD Dis	splay		
Compressor Type			Hermetically Sealed Scroll			
Condenser Type		Water Cooled- Shell & Tube				
Cooling water required at 32 deg. C	USGPM	20 40 6		60		
Net Weight	kg	240	405	605		

Specifications are subject to change without any notice.

# Air Cooled Packaged Air Conditioners- Inverter Type

DESCRIPTION	UNITS	DPAI-601R3A	DPAI-961R3A	DPAI-1321R3A	DPAI-1982R3A	DPAI-2642R3A		
	НР	6.25	10	14	21	28		
Nominal Cooling Capacity	TR	5	8	11	16.5	22		
	Btu/Hr.	60000	96000	132000	198000	264000		
Refrigerant				R410A				
Power supply (AC)	V/Ph/Hz		415V, 3 phase, 50Hz					
External Finish			Pure	Polyester Power Coated G	l Stee			

INDOOR UNIT								
Dimensions								
Width	mm	900	1160	1160	1500	1500		
Depth	mm	660	660	660	750	930		
Height	mm	1700	1700	1700	1750	1950		
Weight of indoor unit	kg	185	235	250	410	480		
Power Supply (AC)			415V, Three Phase, 50 Hz					
Type of Blower			Centrifugal f	orward curved, double inle	t, double width			
Nominal Air flow	CFM	2200	3750	4400	6600	8800		
NUTHING AIL HOW	СМН	3740	6371	7470	11210	14940		
Compressor Quantity	No.	1	1	1	2 (11TR + 5.5TR)	2 (11TR + 11TR)		
Compressor type		Hermetically sealed	L Dotony DC Inventor	Hermetically Sealed	Hermetica	ally Sealed		
Compressor Type		nermentally sealed	r Kulai y DG IIIVel lei	Inverter Scroll	Inverter Scrol	ll + Fixed Scroll		
Air Filter			Non woven polyester media enclosed in HDPE mesh					
Controller		Innovative intelligent inverter controller with touch screen display						
Capacity Control				Stepless				

OUTDOOR UNIT								
Quantity	No.	1	1	1	2 ( 11TR + 5.5TR)	2 ( 11TR + 11TR)		
Dimensions								
Width	mm	1020	1320	1435	1435 +1020	1435 +1435		
Height	mm	925	925	947	947+925	947+947		
Depth	mm	416	416	635	635+416	635+635		
Weight	kg	50	65	130	130+50	130+130		
Power Supply (AC) to motor		230V, 1 ph, 50Hz	415V, 3 ph, 50Hz		230V, 1 ph, 50Hz			
Condenser Fan type		Propeller						

 $Specifications \ are \ subject \ to \ change \ without \ any \ prior \ notification \ due \ to \ continuous \ product \ improvement$ 

### Air Cooled Ducted Split Air Conditioners- Inverter Type

DESCRIPTION	UNITS	DSAI-601R3A/B	DSAI-961R3A/B	DSAI-1321R3A/B	DSAI-1982R3A/B	DSAI-2642R3A/B		
	HP	6.25	10	14	21	28		
Nominal Cooling Capacity	TR	5	8	11	16.5	22		
	Btu/Hr.	60000	96000	132000	198000	264000		
Refrigerant				R410A		•		
Power supply (AC)	V/Ph/Hz			415V, 3 phase, 50Hz				
External Finish			Pure	Polyester Power Coated G	Stee			
Capacity Control			Stepless					
INDOOR UNIT								

	INDOOR UNIT											
Dimensions												
Width	mm	1140	1485	1840	2035	2115						
Depth	mm	630	630	630	1085	1005						
Height	mm	485	485	485	555	865						
Weight of indoor unit	kg.	55	75	90	150	210						
Power Supply (AC)				215V, Single Phase, 50 Hz								
Type of Blower			Centrifugal f	orward curved, double inle	t , double width							
Naminal Air flaw	CFM	2200	3400	4400	6600	8800						
Nominal Air flow	СМН	3740	5770	7470	11210	14940						
Air Filter			Nonwoven p	oolyester media enclosed ir	HDPE mesh							
Controller			Innovative intelliger	nt inverter controller with t	ouch screen display							

			OUTDOOR UNIT								
Quantity	No.	1	1	1	2 ( 11TR + 5.5TR)	2 (11 TR + 11TR)					
Dimensions											
Width	mm	1020	1320	1320	1320+1020	1320+1320					
Height	mm	925	925	1495	1495+925	1495+947					
Depth	mm	416	416	416	416+416	416+635					
Weight	kg	95	125	155	155 + 95	155+155					
Compressor Quantity	No.	1	1	1	2 (11TR + 5.5TR)	2 (11TR + 11TR)					
Compressor type		Hermetica  v sealed	L Dotony DC Inventor	Hermetically Sealed	Hermetica	ally Sealed					
Compressor type		nermentally sealed	Rulary DC Inverter	Inverter Scroll	Inverter Scroll + Fixed Scroll						
Power Supply (AC) to motor		230V, 1 ph, 50Hz	415V, 3 ph, 50Hz		230V, 1 ph, 50Hz						
Condenser Fan type		Propeller									



### **Product Line-up: Indoor Units**

Appearance	Туре	0.6TR	0.8TR	1TR	1.3TR	1.5TR	1.6TR	1.7TR	2TR	2.3TR	2.5TR	2.8TR	3TR	3.2TR	4TR	5TR	6TR	8TR	10TR
=	Hi-Wall Units		•	•	•	•		•	•										
	Four-Way Cassettes			•	•	•		•	•	•		•		•	•	•			
	Compact Cassettes	•	•	•	•	•													
	One-Way Cassettes	•	•	•	•	•	•		•										
	Two-Way Cassettes	•	•	•	•	•		•	•										
	Floor Cum Ceiling Mounted Units					•			•				•		•	•			
-	Verticools								•	•		•		•	•				
	Concealed Splits		•	•	•	•			•										
	Ductable IDUs					•			•		•		•		•	•	•	•	
	Floor Mounted Packaged Units															•		•	•

### Add-ons



Appearance	Туре
0	Cordless Remote Controller
ZY	Wired Contro <b>ll</b> er
24	Group Controller
<u>-</u>	WiFi-based Central Controller
	PC Monitoring System
	Keycard Contro <b>ll</b> er
	Tenant Bi <b>ll</b> ing System
	BMS Compatibility
FSA 1561 FSA 1580 FSA 1580 FSA 1580	Mobile App
	Remote Monitoring Service
	Data Concentrator

### **TECHNICAL SPECIFICATIONS - OUTDOOR UNITS**

#### **Outdoor Unit**



#### Notes:

- 1. Actual cooling capacities delivered are based on the following conditions: Indoor temperature: 27°CDB, 19°CWB; Outdoor temperature: 43°CDB; Piping length: 10m, Height difference: 0m.
- 2. Actual heating capacities delivered are based on the following conditions: Indoor temperature: 20°CDB; Outdoor temperature: 7°CDB, 6°CWB; Piping length: 10m, Height difference: 0m.

Specifications are subject to change due to continuous product improvement

\*The given sound level data are based on the measurements taken in an unechoic chamber and the actual sound levels may vary depending on the environmental noise conditions.

# **OUTDOOR UNITS**

#### **Technical Specifications:**



#### Note:

- Nominal cooling capacities are based on the following conditions:
  Indoor temperature: 27°CDB, 19°CWB; Outdoor temp.: 35°CDB, 25°CWB; Piping length: 10m, Height difference: 0m.
- Nominal heating capacities are based on the following conditions:
  Indoor temperature: 20°CDB; Outdoor temp.: 7°CDB, 6°CWB; Piping length: 10m, Height difference: 0m.
- 3. The values given in the table for noise levels are based on measurement taken in anechoic chamber and may vary as per the actual ambient noise conditions.
- 4. Specifications are subject to change without prior notice due to continuous product improvement.

# Air Cooled and Water Cooled Scroll Chillers

#### **Air Cooled Scroll Chillers**

Blue Star is a pioneer in manufacturing air cooled scroll chillers. These systems are popular in many commercial applications such as offices, hotels, hospitals, industries, etc. due to their distinct advantage of multiple refrigeration circuits with hermetic scroll compressors, compactness and service-friendliness. These chillers comprise of DX cooler, air cooled condenser with fan and multiple hermetic scroll compressors.



#### **Water Cooled Scroll Chillers**

Wherever water can be provided, Blue Star's water cooled scroll chillers offer higher efficiency than air cooled systems as water is a superior cooling medium compared to air. These chillers comprise of cooler, multiple hermetic scroll compressors and Shell & Tube water cooled condenser. Because of their higher efficiency, water cooled chillers consume lower power compared to air cooled systems.



249200318\_Scroll Chiller\_BrochureV13.indd 3 25-04-2018 14:56:29

# Air cooled R407C

Description		Unit			M	odel		
			XAC2S-010R2	XAC2S-024MAR2	XAC3S-036MAR2	XAC2YS-048AR2	XAC2YS-060R2	XAC2YS-080AR2
Nominal Cooling Capacity		TR	9.5	23	34	46	56	74
Refrigerant			R407C	R407C	R407C	R407C	R407C	R407C
Capacity Control		%	100,50	100,50	100,67,33	100,75,50,25	100,67,33	100,75,50,25
Nominal Dimension	Length	mm	1762	2234	3355	2900	2900	2900
	Width	mm	930	1147	1147	2040	2040	2040
	Height	mm	1513	1696	1696	2460	2460	2460
Net Weight/Unit (approx.)		Kg.	625	925	1375	2090	2200	2400
Power Supply					380-420V/	3Ph,50Hz AC		
No. of Compressors			2	2	3	4	3	4
No. of Refrigerant Circuit			2	2	3	2	2	2
Total Power Consumtion		kW	11.4	26.6	40.0	55.6	71.4	95.2
Fan	Quantity		2	2	3	2	3	4
	Dia.	mm	610	660	660	915	915	915
Condenser Coils	Face Area	Sq mtr. (Sq. ft.)	2.23 (24)	3.75 (40)	5.57 (60)	8.24 ( 88.7 )	8.24 ( 88.7 )	8.24 ( 88.7 )
	Rows		2	3	3	3	2+4	4
	Туре				3/8" OD Inner Groov	ed and Super Slit Fl	ns	
Cooler (shell & Tube type)	Qty		Twin Circuit	Twin Circuit	Three Circuit	Twin Circuit	Twin Circuit	Twin Circuit
Water Flow Rate	Min	USGPM	17	39	59	78	90	120
	Max	USGPM	33	78	117	144	180	240
Water Connection/Cooler	In/Out	No.	1	1	1	1	1	1
		Size	1-1/2"NB	3" NB	3" NB	4" NB	4" NB	4" NB

# New Air Cooled Modular Range

Description		Unit		Model	
			XAC4S-048MAR2	XAC5S-060MAR2	XAC6S-072MAR2
Nominal Cooling Capacity		TR	46	56	68
Refrigerant			R407C	R407C	R407C
Capacity Control		%	100,75,50,25	100,80,60,40,20	100,84,67,50.33,17
Nominal Dimension	Length	mm	4488	5609	6730
	Width	mm	1147	1147	1147
	Height	mm	1696	1696	1696
Net Weight/Unit (approx.)		Kg.	1850	2300	2750
Power Supply				380 - 420V/3Ph, 50Hz AC	
No. of Compressors			4	5	6
No. of Refrigerant Circuit			4	5	6
<b>Total Power Consumtion</b>		kW	4	5	6
Fan	Quantity		660	660	660
	Dia.	mm			
Condenser Coils	Face Area	Sq mtr. (Sq. ft.)	7.5 (80)	9.32 (100)	11.14 (120)
	Rows		3	3	3
	Туре			3/8" OD Inner-Grooved and Super Slit Fin	S
Cooler (shell & Tube type)	Qty		2	2	2
Water Flow Rate	Min	USGPM	39	39	59
	Max	USGPM	156	195	234
Water Connection/Cooler	In/Out	No.	2	2	2
		Size	3"NB	3"NB	3"NB

#### **Rating Conditions**

- 1. Cooler Leaving Temp 6.7°C (44°F) and Cooler Entering Temp 12.2°C (54°F)
- 2. Cooler Fouling Factor 0.0001°F.ft2.hr/Btu
- 3. 35°C (95°F) Ambient Temperature
- ${\it \# Specifications \ are \ subject \ to \ change \ due \ to \ continuous \ product \ development}$

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# Water cooled R22

Description		Unit			Model				
			XWC2S-011	XWC2S-026A	XWC3S-039A	XWC4S-052A	XWC4S-085A		
Nominal Cooling Capacity		TR	11.5	26	39.0	52.0	85.0		
Refrigerant			R22	R22	R22	R22	R22		
Capacity Control		%	100,50	100,50	100,67,33	100,75,50,25	100,75,50,25		
Nominal Dimension	Length	mm	1700	2250	2250	2250	2496		
	Width	mm	550	1234	1234	1333	1375		
	Height	mm	1455	1607	1956	1956	2087		
Net Weight/Unit (approx.)		Kg.	650	960	1350	1780	2510		
Power Supply			380-420V/3Ph,50Hz AC						
No. of Compressors			2	2	3	4	4		
No. of Refrigerant Circuit			2	2	3	4	4		
Condenser Water Flow Rate	Min	USGPM	28.6	67.6	101.4	135.2	221		
	Max	USGPM	38.5	91	136.5	182	297.5		
Cooler (shell & Tube type)	Qty		Twin Circuit	Twin Circuit	Three Circuit	2#Twin Circuit	2#Twin Circuit		
Cooler Water Flow Rate	Min	USGPM	17	39	59	78	128		
	Max	USGPM	33	78	117	156	255		
Water Connection/Cooler	In/Out	No.	1	1	1	1	1		
		Size	1-1/2" NB	3"NB	3"NB	3" NB	4" NB		

# Water cooled eco-friendly range

Description		Unit			Мо	del			
			XWC2S-011R2	XWC2S-026AR2	XWC3S-039AR2	XWC4S-052AR2	XWC2YS-065AR3	XWC4S-085AR2	
Nominal Cooling Capacity		TR	11.0	25.5	38.0	51.0	65.0	84.0	
Refrigerant			R407C	R407C	R407C	R407C	R410A	R407C	
Capacity Control		%	100,50	100,50	100,67,33	100,75,50,25	100,75,50,25	100,75,50,25	
Nominal Dimension	Length	mm	1700	2250	2250	2250	2500	2496	
	Width	mm	550	1234	1234	1333	1229	1375	
	Height	mm	1455	1607	1956	1956	1607	2087	
Net Weight/Unit (approx.)		Kg.	650	960	1350	1780	1450	2510	
Power Supply			380-420V/3Ph,50Hz AC 400 V(+/-10%), 3 80-420V/3Ph,50Hz AC PH., 50HZ 50Hz AC						
No. of Compressors		No.	2	2	3	4	4	4	
No. of Refrigerant Circuit		No.	2	2	3	4	2 (Tandem)	4	
Condenser Water Flow Rate	Min	USGPM	28.6	67.6	101.4	135.2	130	221	
	Max	USGPM	38.5	91	136.5	182	240	297.5	
Cooler (shell & Tube type)	Qty		Twin Circuit	Twin Circuit	Three Circuit	2#Twin Circuit	Twin Circuit	2#Twin Circuit	
Cooler Water Flow Rate	Min	USGPM	17	39	59	78	90	128	
	Max	USGPM	33	78	117	156	190	255	
Water Connection/Cooler	In/Out	No.	1	1	1	1	1	1	
		Size	1-1/2" NB	3" NB	3" NB	3" NB	4" NB	4" NB	

#### **Rating Conditions**

- 1. Cooler Leaving Temp 6.7°C (44°F) and Cooler Entering Temp 12.2°C (54°F)
- 2. Cooler Fouling Factor 0.0001°F.ft2.hr/Btu
- 3. Condenser Entering Water Temp 29.44°C (85°F) 4. Condenser Fouling Factor 0.00025°F.ft2.hr/Btu
- # Specifications are subject to change due to continuous product development

### Blue Star Inverter Scroll Chillers - An Innovative Design

The Blue Star Inverter Scroll Chiller is a hybrid system designed with a variable capacity inverter scroll compressor combined with multiple fixed speed scroll compressors. The advanced controllers use unique logic which optimizes the workings of the required number of fixed speed compressors and inverter compressor at various load conditions.

### **PRODUCT RANGE:**





### **Key Features:**

The following components have been carefully designed and selected to deliver optimum cooling, maximum efficiency and high system reliability:

- Inverter & Fixed speed scroll compressors
- Inverter drives
- Intelligent controller
- High efficiency heat exchangers



### **Technical Specifications**

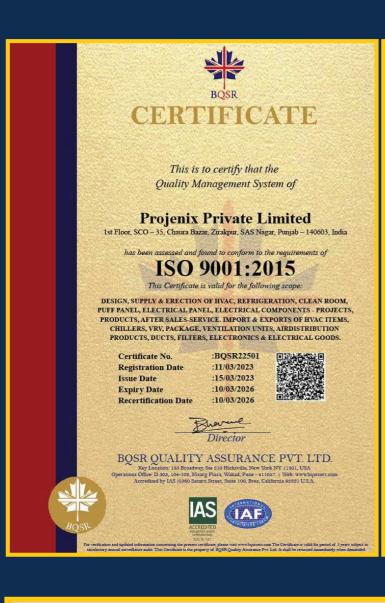
DESCRIPTION	UNITS	XAC2VS-012MR3	XAC2VS-024MR3	XAC2VS-036MR3	XAC2VS-048MR3	XAC2VS-060MR3	XAC2VS-072MR				
Nominal Cooling Capacity	TR	12	24	36	48	60	72				
Quantity of Compressors	Nos.	2	2	3	4	5	6				
Туре				Hermetically Sealed Scroll							
Motor Type			Refrigerant Cooled , 3 Ph, 2 Pole Squirrel Cage Induction Motor								
Operating Speed	RPM			2900							
Electrical Power Supply			400V(+/-10%), 3Ph,50Hz								
Condenser											
Tube Material			Copper								
Fin Material			Aluminium								
Quantity of Fan	Nos.	1	2	3	4	5					
Condenser Fan Motor Details											
Туре				Totally Enclosed, Pad Mounted							
Quantity	Nos.	1	2	3	4	5	6				
Speed	RPM			910							
Airflow Quantity	CFM	9000	18000	27000	36000	45000	54000				
DX Cooler											
Tube Material				Copper							
Water Connection Size In/Out	mm	50		80							
No. of Refrigerant Circuit	Nos.	2	2								
Overall Dimensions											
Length	mm	1285	2500	3700	5000	6200	7400				
Width	mm	1050									
Height	mm			1917							

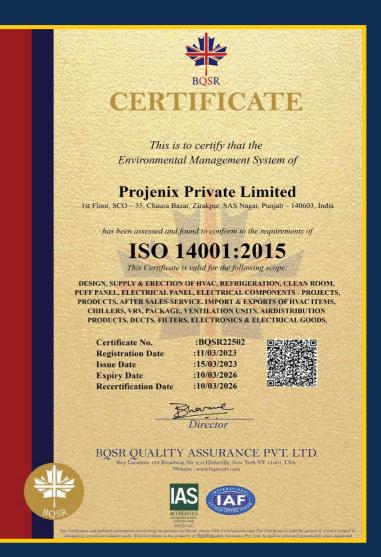
Note: PI refer GA drawings for exact dimension

### **Technical Specifications**

DESCRIPTION	UNITS	XWC2VS-013AR3	XWC2VS-026AR3	XWC2YVS-039AR3	XWC2YVS-052AR3	XWC2YVS-065AR3	XWC3YVS-078AR3					
Nominal Cooling Capacity	TR	13	26	39	52	65	78					
Quantity of Compressors	Nos.	2	2	3	3	3						
Туре			Hermetically Sealed Scroll									
Motor Type			Refrigerant Cooled , 3 Ph, 2 Pole Squirrel Cage Induction Motor									
Operating Speed	RPM		2900									
Electrical Power Supply		400V(+/-10%), 3Ph, 50Hz										
Flooded - Condenser												
Tube Material			Copper									
No. of Pass (Water Side)	Nos.	4	4	2	2	2	2					
No. of Refrigerant Circuit	Nos.				2							
DX Cooler												
Tube Material				Integral Finned Copper Tubes								
No. of Pass (Ref. Side)	Nos.	4	2	2	2	2						
No. of Refrigerant Circuit	Nos.	2	2	2	2	2						
Overall Dimensions (Approx)												
Length	mm	2340	2340	2340	2650	2650	2650					
Width	mm	1000	1065	1065	1065	1065	1075					
Height	mm	1275	1450	1450	1600	1600	1700					

Note: PI refer GA drawings for exact dimensions







FOR MORE INFORMATION, PLEASE CONTACT PROJENIX.

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