

A TATA Product

60  
DIAMOND  
JUBILEE  
**VOLTAS LIMITED**



**NEW  
UNIQUE LCD  
CONTROLLER**

**Microprocessor-controlled  
Packaged & Ductable Split Units**

## THE VOLTAS INTELLISYS RANGE

The Voltas **INTELLISYS** range of Packaged and Ductable Split Units are designed to be the most **INTELLIGENT** and **COMPACT** systems, to cater to your total cooling requirements. Applications include offices, banks, departmental stores, entertainment centers, multiplexes, restaurants, fast food centers, residences, computer rooms, telephone exchanges, hospitals, auditoriums, conference halls, theatres, factories, control rooms, etc. Packaged & Ductable Split Units are available in both **Air-cooled** and **Water-cooled** options.

### • NINE POWERFUL FEATURES



#### **Energy Efficiency**

A range of sophisticated components such as a highly energy efficient compressor, internally grooved crosshatched copper tube coil with matched circuitry, and a microprocessor controller, result in a low power consumption.



#### **Low Noise, Compact Indoor & Outdoor Units**

Superior engineering coupled with technologically advanced components, ensure low noise levels, indoors and outdoors. Our new design IDUs and ODUs are more compact, saving valuable space.



#### **Higher False Ceiling Heights**

Low height IDUs enable higher false ceiling heights, improving the aesthetics.



#### **Equalization Of Compressor Runtime**

The Microprocessor Controller ensures equal running of compressors in multiple compressor units. This ensures a longer life for compressors.



#### **Space Saving**

The outdoor condensing unit, in a ductable split unit, is the most compact in the industry and can be placed on a ledge, terrace or a wall-mounted bracket. The indoor unit can be ceiling-suspended or loft-mounted, a unique advantage.



#### **Indoor Air Quality**

Special synthetic woven filters remove fine dust particles to give clean air at all times. The filters are easily removable and washable.



#### **Humidity Control**

A highly-efficient evaporator coil keeps the room humidity within the desired comfort range. Fine-tuning of humidity beyond this range can be provided as an option.



#### **Reliability**

Our manufacturing plants are equipped with the latest and sophisticated tooling and machinery, backed by a modern R&D facility. The products are best-in-class, designed specially for tropical conditions, with high levels of reliability.



#### **Voltas Countrywide After Sales Service**

A nationwide service network backs every unit. After the initial warranty period, Voltas offers annual service schemes. More than 90% of the customers have opted for these schemes. You cannot get a better insurance.

• CONTROL ROOMS •

• MULTIPLEXES •

• AUDITORIUMS •

**MICROPROCESSOR-BASED LCD CONTROLLER FOR DUCTABLE UNITS**

The microprocessor controller installed on all the units, offers you the following benefits:



**Energy saving** - auto switch-off of the condenser fans along with compressor.



**Self-Diagnosis function** - constant monitoring of errors with alarms.



**On / Off timer** - for setting the start and stop time.



**Motor protection device** - for protection from phase reversal, single phasing, overload and phase imbalances.



**Auto start mode** - for automatic start, after a power failure.



**Anti-recycle timer** - for starting the compressor after a set delay, to enhance its life.



**Inbuilt temperature sensor** - for precise control within  $\pm 1^\circ\text{C}$ .



**4 modes of operation** - Cool, Dry, Fan and Energy Save.



**Fan speed selection** - Low, Medium, High, Auto.



**Large LCD screen** - for easy readability.

**OPTIONAL**

- Programmable controller - with real-time clock and BMS compatibility.

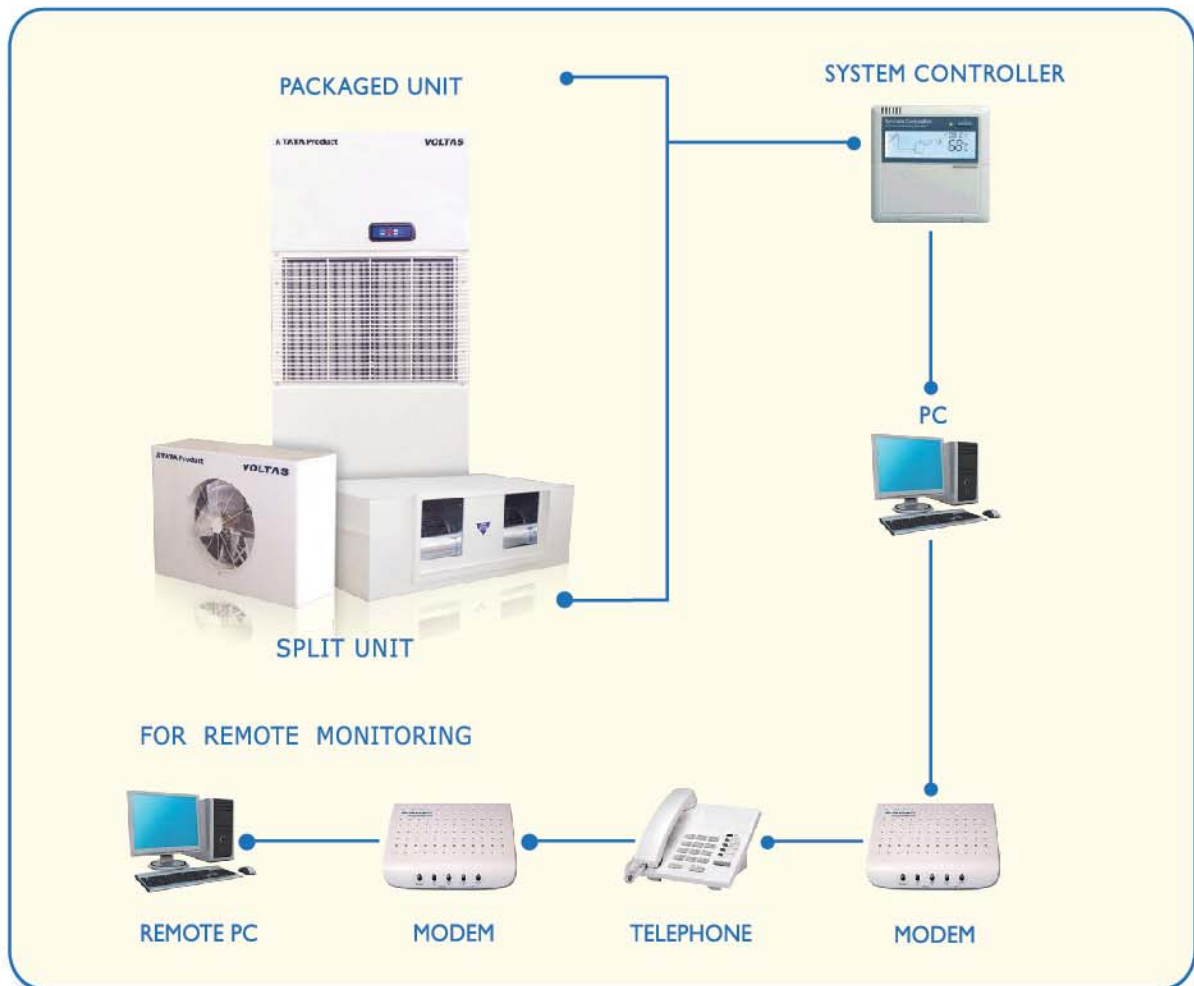
**PACKAGED UNITS**

Self-Diagnosis function, Auto-start mode, Energy saving, Motor protection device, Anti-recycle timer, Inbuilt temperature sensor and Programmable controller as mentioned above, but with LED display.

## • MONITORING AT YOUR FINGER TIPS •

### The VSCADA System

- The Voltas Supervisory Control and Data Acquisition System (VSCADA) enables link-up of all the packaged and / or ductable split units in a building, to a Personal Computer.
- This enables Operation and Monitoring of each unit from the PC.
- Remote Monitoring from anywhere on the globe is also possible through a modem link-up.



• DEPARTMENTAL STORES •

• SHOPPING MALLS •

• BANKS •

**TECHNICAL DATA - DUCTABLE SPLIT UNITS**
**SCROLL COMPRESSOR UNITS - R22 / R407C**

Nominal TR	4.25 TR	5.5 TR	5.5 TR	8.5 TR	8.75 TR	11 TR	11 TR	17 TR	22 TR
No. of Compressors	1	1	1	1	2	2	1	2	2

**EVAPORATOR UNITS**

Model									
ACDEU	425CZGIM	55CZGIM	55CCGIM	85CZGIM	85C2ZG	110CZGIM	110C1ZGIM	170CZGIM	220CKGIM
Airflow in CFM	2000	2200	2200	3400	3400	4400	4400	6800	8800
Evaporator Fan	Centrifugal Forward Curved Fan, Double Inlet Double Width								
Power Supply	230 V - 1 PH - 50 Hz								
Length (mm)	1228	1228	1175	1508	1508	1906	1906	2150	2100
Depth (mm)	665	665	620	795	795	750	750	825	1240
Height (mm)	404	404	370	404	404	470	470	520	640
Bare weight (kg)	65	65	55	100	100	125	125	180	220

**AIR-COOLED CONDENSING UNITS**

Model									
ACDCUSC	425YGIM	55GNIM	55GNIM	875DGIM	2875YG	55GNIM	110DGNIM	875DGIM	110DGNIM
ACDCUSC		55YGNIM	55YGNIM	875YGIM		55YGNIM	110YGNIM	875YGIM	110YGNIM
ACDCUSC		55GNIMR407	55GNIMR407	875DGR407IM		55GNIMR407	110DR407NIM	875DGR407IM	110DR407NIM
Condenser fan	Propeller								
Power Supply	415 V - 3 PH - 50 Hz								
No. of Units	1	1	1	1	1	2	1	2	2
Bare weight (kg)	115	130	130	160	162	130	180	160	180
Length (mm)	1320	1320	1320	1320	1320	1320	1650	1320	1650
Depth (mm)	460	460	460	460	460	460	475	460	475
height (mm)	750	750	750	960	960	750	960	960	960

**WATER-COOLED CONDENSING UNITS**

Nominal TR		5.5 TR	5.5 TR	8.75 TR		11 TR		17 TR	
Model									
ACDCUWSC		55IM	55IM	875DIM		55IM		875DIM	
ACDCUWSC		55R407IM	55R407IM	875DR407IM		55R407IM		875DR407IM	
Power Supply	415 V - 3 PH - 50 Hz								
No. of Units		1	1	1		2		2	
Bare weight (kg)		120	120	190		120		120	
Length (mm)		900	900	900		900		900	
Depth (mm)		665	665	665		665		665	
Height (mm)		615	615	615		615		615	

**NOTES**

- 1) Product design and innovation are a continuous process in voltas and hence the above specifications are subject to change without notice
- 2) The nominal capacities mentioned are at the rating conditions of 27 deg C dbt / 19 deg C wbt, and outdoor conditions of 35 deg C dbt for air cooled condensers and condensing units.  
For water cooled condensing units and package units the ratings are at water inlet temperature of 29.4 deg C and rated water flow.
- 3) Air cooled ductable units of capacities 1.5 tr, 2 tr, 2.5 tr, 3 tr & 4 tr and water cooled ductable units of 3 tr & 4 tr are also available. The details for the same can be given upon request.

## TECHNICAL DATA - PACKAGED UNITS

### SCROLL COMPRESSOR UNITS - R22 / R407C

Nominal TR	5.5 TR	8.5 TR	11 TR	16.5 TR	17 TR	22 TR
Model: Water Cooled						
ACDPUWSC	55	875D	110	-	170CD	220CD
ACDPUWSC	55Y	875DR407	2110YMNATU		170CDR407	220CDR407
ACDPUWSC	55R407		110R407			
No of Compressors	1	1	2	-	2	2
Bore weight (kg)	280	320	400	-	500	600
Model: Air-cooled						
ACDPUASC	55	875D	110	-	170CD	220CD
ACDPUASC	55Y	875DR407	2110YMNATU		170CDR407	220CDR407
ACDPUASC	55R407		110R407			
No of Compressors	1	1	2	3	2	2
Bare weight (kg)	280	300	400	500	500	600
Airflow in CFM	2200	3400	4400	6600	6800	8800
Evaporator fan	— Centrifugal Forward Curved, Double Inlet Double Width —					
Power Supply	415V • 3PH • 50Hz					
Length (mm)	900	900	1220	1490	1490	2040
Depth (mm)	660	660	740	745	745	745
Height (mm)	1850	1850	1750	1790	1790	1790

### AIR-COOLED CONDENSER

Model	ACDC55N	ACDC875	ACDC55N	ACDC55N	ACDC875	ACDC110N
Condenser fan	Propeller					
Power Supply	230V - 1PH - 50Hz					
No. of Units	1	1	2	3	2	2
Bare weight (kg)	65	90	65	65	90	120
Length (mm)	1320	1320	1320	1320	1320	1650
Depth (mm)	460	460	460	460	460	475
Height (mm)	750	960	750	750	960	960

#### NOTES

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WESTIN



TOWN CENTER



TCS

SCHOOLS

MULTIPLEXES

IT PARKS

• FEW OF OUR INSTALLATIONS •



MARUTI SUZUKI



P & M MALL



PUMA STORE



VISA STEEL



RAYMOND



MCDONALD'S



APOLLO HOSPITALS



JINDAL POWER STATION



KHYBER RESTAURANT



AXIS BANK



CINEMAX



ULTRATECH CEMENT

# SPECTRUM OF HVAC PRODUCTS & SYSTEMS



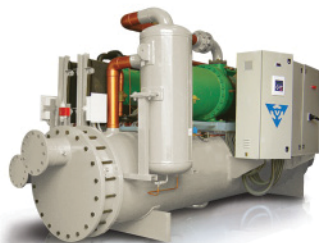
PACKAGED & DUCTABLE SPLIT UNIT



VARIABLE REFRIGERANT FLOW SYSTEM (VRF)



ENERGY EFFICIENT AIR COOLED SCREW CHILLER



ENERGY EFFICIENT WATER COOLED SCREW CHILLER



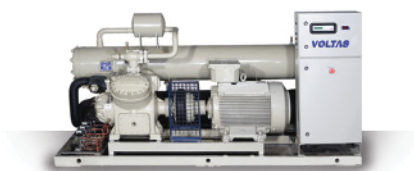
AIR COOLED SCROLL CHILLER



WATER COOLED SCROLL CHILLER



AIR COOLED RECIPROCATING CHILLER



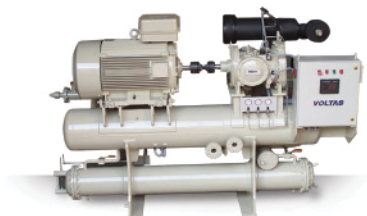
WATER COOLED RECIPROCATING CHILLER



DOUBLE EFFECT VAM



CO-GEN VAPOUR ABSORPTION MACHINE (VAM)



PROCESS REFRIGERATION PACKAGE



IAQ & ENERGY REDUCTION SYSTEM



WATER COOLED CENTRIFUGAL CHILLER



STP EA ODOUR / H<sub>2</sub>S REMOVAL SYSTEM



AIR HANDLING UNIT

## VOLTAS

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