GENERAL PRODUCTS BROCHURE

COOLEX
COMFORT BEYOND EXPECTATIONS

Fan Coil Series

Concealed Ducted Split Series

Ducted Split Series

Commercial Condensing Units Series CCU

Rooftop Package Series

100% Fresh Air Rooftop Package Series

Air Cooled Scroll Water Chiller

Modular Air Handling Unit

Air Cooled Screw Water Chiller

Decorative Mini Split Units

COOLEX

السيف الذهبي
GOLDEN SAIF

Concealed Ducted Split Series
R-22/R-407C/R-410A 18-60 MBH

CONCEALED DUCTED SPLIT WITH HERMETIC COMPRESSOR TROPICAL

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex UL listed, high efficiency concealed ducted split units are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operation, rated according to AHRI 210/240.

1.5 TON	TO	5 TON	6
RANGE			
18 MBH	TO	60 MBH	Models

OUTSTANDING FEATURES

Indoor Unit:

- Compact design
- Low profile
- Low sound power level
- For ducted application
- 3 speed motors
- Easy maintenance
- Easy installation
- External terminal box
- Cleanable air filter

Outdoor Unit:

- High efficiency tropical design
- Galvanized heavy gauge panels, oven baked powder coated
- Designed to operate at severe ambient temperature up to 52°C without tripping coil guard protection
- External service valve with guage ports

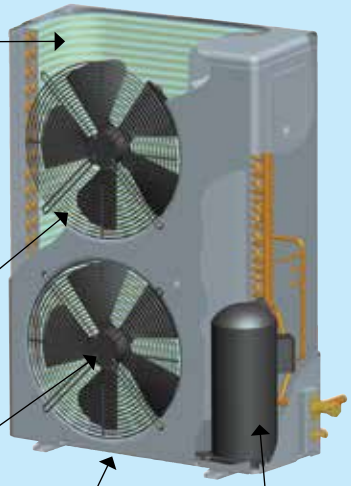
Options & Accessories:

- Wired Microprocessor Controller
- Wired digital thermostat
- Wireless remote controller
- 240 Volt controls
- Heat pump

STANDARD SPECIFICATIONS INDOOR & OUTDOOR UNIT

Condenser Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins. The assembled coils are factory leak tested under water at a pressure up to 700 [psig] for quality and leak free unit.

Condenser Fans
Axial type condenser fan are used which precisely match with extra strong fan motor to ensure efficient hot air dissipation.



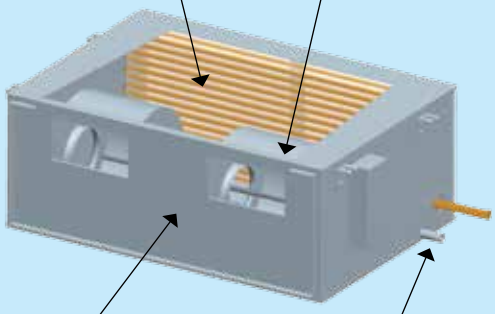
Condenser Fan Motor
The condenser fan motors are a 4/6 poles electric motor which directly drive the condenser fans confirming to BS/IES standards. They are totally enclosed air over type electric motors with built-in thermal protector class F insulation.

Unit Casing
The casing sheet metal is fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated.

Compressor
The compressors are high efficiency Scroll,hermetically sealed type. The compressors are equipped with internal motor protector and necessary accessories for safe operation.

Evaporator Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins. The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Blower Assembly
The units are provided with centrifugal fans which are statically and dynamically balanced, designed for low sound level operation.



Evaporator Blower Motor
The evaporator blower motor is directly drives the evaporator blower conforming to BS/IES standards it is open drip proof air over type electric motors with built-in thermal protector and permanently lubricated ball bearings class B insulation.

Drain Pan
The drain pan is fabricated from galvanized steel. The drain pan is powder coat painted and the outer surface is thermally insulated.

Concealed Ducted Split Inverter
CID Series R-410A 18-55 MBH

CONCEALED DUCTED SPLIT WITH ROTARY TROPICAL COMPRESSOR

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex UL listed, high efficiency concealed ducted split units DC Inverter are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operation, rated according to AHRI 210/240.

1.5 TON	TO	5 TON	6
RANGE			
18 MBH	TO	55 MBH	Models

OUTSTANDING FEATURES

Health:
- Fresh Air Intake
- Long Term Filter

Comfort:
- Anti-Cold-Air
- Follow Me
- Fast Cooling/Heating
- Auto Swing
- Independent Dehumidification
- 3D Air Flow

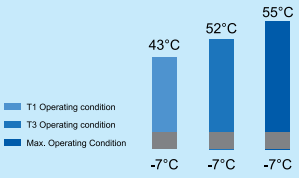
Reliability
- Self Diagnosis Function
- Low Ambient Cooling
- Intelligent Defrosting
- Fire-Proof Electric Box

Energy Saving
- Sleep Mode
- 180º Sive Wave Control
- Hydrophilic Aluminum Fin
- Full Process by DC Drive
- Heat pump

STANDARD SPECIFICATIONS INDOOR & OUTDOOR UNIT

OutDoor Unit

Up To 55°C Running
Enjoy excellent performance even under ambient temperature up to 55°C , suitable for T3 operating condition.



Multiple Protection
With Multiple Protection contents: High pressure protec tion,Low pressure protection,Compressor overloadding protection, High Ext. temperature protection,Phase protection (Phase-loss, phase-reverse),Over-heating protec-tion, Anti-freezing protection, Sensor failure alarm, Failure code display,etc.The compressor could well run in reasonable operation range.

Double Anti-Corrosion Technology
Galvanized metal with world-class pow-der spraying tech nology can improve the anti-corrosion ability of the hous ing of outdoor units three times, especially, in salty, moist surroundings.

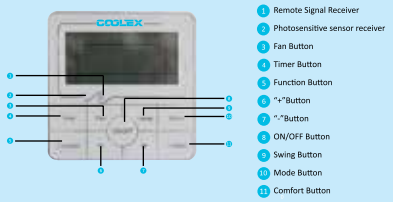
InDoor Unit

Wide Operation Range
The unit could operate perfectly between 52°C in hot summer and -15°C in cold winter making you feel like spring all year around, advanced system design and strict system matching and test.

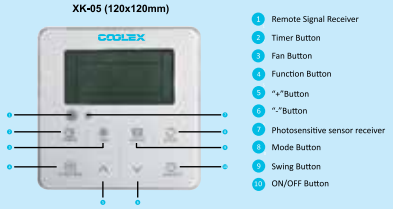
Fresh air Intake
Fresh air makes a healthy, confortable life.

Wired Controller

XK-04 (86x86mm)



XK-05 (120x120mm)



COOLEX

السيف الذهبي
GOLDEN SAIF

Ducted Split Series
R-22/R-407C/R-410A 48-340 MBH

DUCTED SPLIT WITH HERMETIC COMPRESSOR TROPICAL

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex Ducted Split Units can be used for cooling or heating with optional electrical heater, rated according to AHRI 340/360 and AHRI 210/240.

4 TON	TO	28 TON	11
RANGE			
48 MBH	TO	340 MBH	Models

OUTSTANDING FEATURES

Indoor Unit:

- Compact design
- Low profile
- Low noise Evaporator blower
- For ducted application
- Easy maintenance
- Easy installation
- Cleanable air filter
- Microprocessor based controller
- 240 Volt controls

Outdoor Unit:

- High efficiency tropical design
- Galvanized heavy gauge panels, oven baked powder coated
- Designed to operate at severe ambient temperature up to 52°C without tripping
- External service valve with gauge ports
- Low power consumption
- Low noise compressor and condenser fan

Options & Accessories:

- Wired digital thermostat
- Wireless remote controller
- Heat Pump
- Microprocessor control supporting different BMS protocols

STANDARD SPECIFICATIONS INDOOR & OUTDOOR UNIT

Condenser Fans
Axial type condenser fan are used which precisely match with extra strong fan motor to ensure efficient hot air dissipation.

Condenser Fan Motor
The condenser fan motors are a 4/6 poles electric motor which directly drive the condenser fans confirming to BS/IES standards. They are totally enclosed air over type electric motors with built-in thermal protector class F insulation.

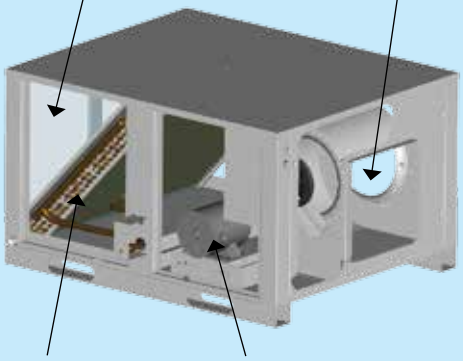
Condenser Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins. The assembled coils are factory leak tested under water at a pressure up to 700 [psig] for quality and leak free unit.

Unit Casing
The casing sheet metal is fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated.

Compressor
The compressors are high efficiency Scroll, hermetically sealed type. The compressors are equipped with internal motor protector and necessary accessories for safe operation.

Evaporator Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins. The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Blower Assembly
The units are provided with centrifugal fans which are statically and dynamically balanced, designed for low sound level operation.



Drain Pan
The drain pan is fabricated from galvanized steel. The drain pan is powder coat painted and the outer surface is thermally insulated.

Evaporator Blower Motor
The evaporator blower motor is Belt drives the evaporator blower conforming to BS/IES standards it is open drip proof air over type electric motors with built-in thermal protector and permanently lubricated ball bearings class B insulation.

COOLEX

السيف الذهبي
GOLDEN SAIF

Rooftop Package Series
R-22/R-407C/R-410A 048-480 MBH

PACKAGED AIR CONDITIONING UNITS
WITH HERMETIC COMPRESSOR
TROPICAL

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex UL listed High Efficiency Package Units (PNG) are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operations, rated according to AHRI 340/360 and AHRI 210/240.

4 TON	TO	40 TON	19
RANGE			
48 MBH	TO	480 MBH	Models

OUTSTANDING FEATURES

Superior Efficiency

- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

Controls

- Microprocessor Based Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance

- All units in the PNG series are Factory run tested.
- Produced in an ISO 9001-2000 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.
- UL listed, in accordance to UL 1995 & CSA C22.2 No.236-11.Certificate Number 20130301-SA33594

STANDARD SPECIFICATIONS

Condenser Fans
The fans are selected for optimum efficiency and maximum sound power reduction, propeller type and direct driven, upward discharge and provided with fan grille mounted on the casing.

Condenser Coils
The coils are built up seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins.
The assembled coils are factory leak tested under water at a pressure up to 700 psig for quality and leak free unit.

Condenser Fan Motor
Condenser fan motors are totally enclosed air-over type with class F insulation. The motors are provided with inherent thermal protection and auto rest type.

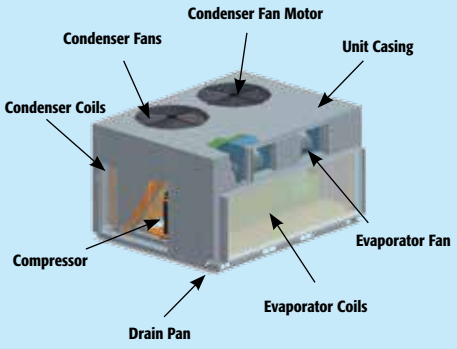
Compressor
The compressors are hermetic scroll type provided with crankcase heater, internal pressure relief valve which provides high pressure protection to the refrigerant system and rubber vibration isolators for quiet and efficient operation.
The compressors are equipped with internal motor protector for safe operation. The compressors are built to NF, VPE, CSA, & UL certification.

Evaporator Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins.
The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Evaporator Fan
The units are provided with centrifugal fans which are statically and dynamically balanced, designed for low sound level operation Belt driven.

Drain Pan
The drain pan is fabricated of galvanized steel. The drain pan is powder coat painted and the outer surface is thermally insulated.

Unit Casing
The casing sheet metal is fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated.
The unit is provided with an integral weather resistant control panel for outdoor application.
Panels and access doors are provided for inspection and access for all internal parts.



OPTIONAL SPECIFICATIONS

- Double skin for evaporator side
- Heat Pump
- Coil protection materials:
  a) Polyurethane pre-coat Aluminum fins with copper tubes
  b) Tinned copper tubes with copper fins
- Condenser coil guard
- Mesh around perimeter of condenser sections
- Stainless steel drain pan
- Double side drain connections
- Other types of filter: synthetic fiber media for flat filter, 2" or 4" flat filter, bag filter
- Mixing box
- Vibration isolation for the unit :
  a) Neoprene rubber pads
  b) 1" spring isolator
- Lockable door for the control panel
- Electric heaters
- Compressor circuit breaker
- Mild ambient (fan cycling) control
- Duct sensor
- Anti - ice thermostat
- Volt free contacts
- External overload
- Ultra violet light
- Dirty filter indication
- Fire alarm connection
- Economizer controller
- Microprocessor control supporting different BMS protocols

COOLEX

السيف الذهبي
GOLDEN SAIF

100% Fresh Air Rooftop Package
Series R-22/R-407C/R-410A 048-600 MBH

PACKAGED AIR CONDITIONING UNITS
WITH HERMETIC COMPRESSOR
TROPICAL

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex High Efficiency Fresh Air Package Units are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operations.

4 TON	TO	50 TON	15
RANGE			
48 MBH	TO	600 MBH	Models

OUTSTANDING FEATURES

Superior Efficiency
- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping
- Low noise, high static and efficiency Backward inclined fans

Controls
- Microprocessor Based Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance
- All Fresh Air Package Unit series are Factory run tested.
- Produced in an ISO 9001-2000 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.

STANDARD SPECIFICATIONS

Condenser Fans
The fans are selected for optimum efficiency and maximum sound power reduction, propeller type and direct driven, upward discharge and provided with fan grille mounted on the casing.

Condenser Coils
The coils are built up seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins.
The assembled coils are factory leak tested under water at a pressure of 700 psig for quality and leak free unit.

Condenser Fan Motor
Condenser fan motors are totally enclosed air-over type with class F insulation. The motors are provided with inherent thermal protection and auto rest type.

Compressor
The compressors are hermetic scroll type provided with crankcase heater, internal pressure relief valve which provides high pressure protection to the refrigerant system and rubber vibration isolators for quiet and efficient operation.
The compressors are equipped with internal motor protector for safe operation. The compressors are built to NF, VPE, CSA, & UL certification. leading compressors are provided with hot gas bypass system.

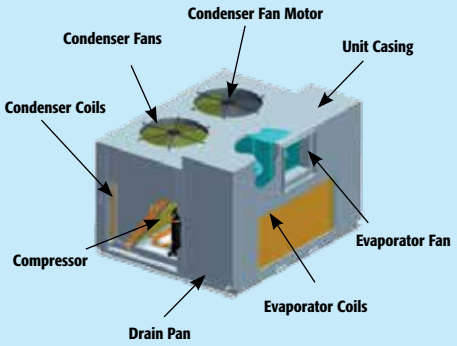
Evaporator Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed louvered hydrophilic fins.
The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Evaporator Fan
The units are provided with centrifugal Backward inclined fan which are statically and dynamically balanced, designed high efficiency for low sound level operation Belt driven.

Drain Pan
The drain pan is fabricated of galvanized steel. The drain pan is powder coat painted and the outer surface is thermally insulated.

Unit Casing
The casing sheet metal is fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated.
The unit is provided with an integral weather resistant control panel for outdoor application.
Panels and access doors are provided for inspection and access for all internal parts.

Bag Filter
The bag filters are synthetic fiber high efficiency capturing the smaller particulate from the air stream.



OPTIONAL SPECIFICATIONS

- Double skin for evaporator side
- Coil protection materials:
  a) Polyurethane pre-coat Aluminum fins with copper tubes
  b) Tinned copper tubes with copper fins
- Condenser coil guard
- Pump down solenoid valve (PDS)
- Stainless steel drain pan
- Adjustable high and low pressure switch.
- Replaceable filter drier with mechanical shut off valve.
- Mixing box
- Vibration isolation for the unit :
  a) Neoprene rubber pads
  b) 1" spring isolator
- Lockable door for the control panel
- Electric heaters
- Compressor circuit breaker
- Mild ambient (fan cycling) control
- Duct sensor
- Anti - ice thermostat
- Volt free contacts
- External overload
- Ultra violet light
- Dirty filter indication
- Fire alarm connection
- Economizer controller
- Microprocessor control supporting different BMS protocols

Fan Coil Series
Low Static 200-1200 cfm

High Static 800-2000 cfm

COOLEX

السيف الذهبي
GOLDEN SAIF

COOLEX High Efficiency High & Low Static Fan Coil Units are highly efficient means of turning a water chiller, or hot water boiler into an efficient quiet air conditioning system with high performance,low power consumption, easy installation "and low noise operation for both commercial and residential applications applications."

FCL				8
RANGE				
200 CFM	TO	1200 CFM	Models	

FCH				6
RANGE				
800 CFM	TO	2000 CFM	Models	

OUTSTANDING FEATURES

- Compact design
- Low profile
- Low sound power level
- For ducted & Ducts free applications
- 3 speed motors
- Easy maintenance
- Easy installation
- External terminal box

Optional Features

- Chilled water coil (FCL series):

Two pipes system with 2,3 , or 4 rows cooling coils
Four pipe system with 2,3 ,rows cooling coils, and 1 row Heating coil

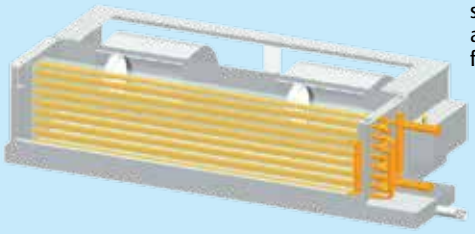
- Chilled water coil (FCH series):

Two pipes system with 3 rows cooling coils
Four pipe system with 2 rows cooling coils, and 1 row Heating coil
Left hand or Right Hand coil connections

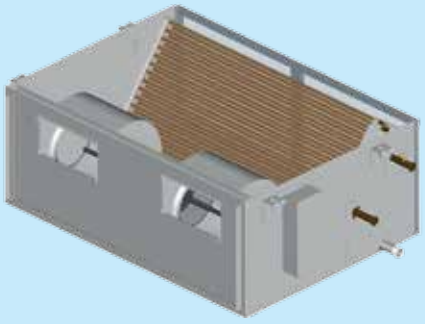
- Tinned copper fins
- Stainless steel drain pan with standard or extended length
- Electric heaters up to 5 kW capacity
- Nylon or Aluminum air filters
- Decorative wall mounted type Thermostats Operating mode: cooling or heating Controlling valve packages &
- Electric heater
- Control valves kits (2 way, 3 way, balancing, and ball valves)

STANDARD SPECIFICATIONS

Chilled Water Coils
High heat transfer efficiency coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically design louvered hydrophilic fins.
The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.



Blower Assembly
The units are provided with new designed low speed and Wide impellers centrifugal fan which are statically and dynamically balanced, designed for low sound level operation



Drain Pan
Drain Pan is constructed from a one piece painted galvanized sheet metal welded carefully to protect from leakage.
The insulation shall be special designed to be perfect

Blower Motor
Motors are of permanent split capacitor type of maximum efficiency and minimum noise with permanently lubricated, sealed sleeve bearings.
Smart construction design and insulation with good noise elimination effect make the unit most lowest noise level.

RA Air Handling Unit

1,100 - 44,000 cfm

CENTRAL STATION
AIR HANDLING UNIT

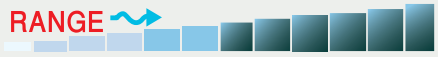
50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex Eurovent certified modular air handling unit design concept provides the flexibility to meet the rising demand of indoor air quality. The RA range can be manufactured to almost any configuration to meet customers' requirements.

13



1100 CFM TO 44,000 CFM Models

- Eurovent certified Air Handling Units series
- Applicable for Residential, Commercial, Industrial & Hygienic application
- Variety of applications (standard & Low cfm Applications, 100 % Fresh Air applications with Energy Recovery modules)
- Custom build AHU as per customer requirements
- Modular design provide flexibility to meet rising demand of better indoor air quality
- Using the best designed aluminum sections (Penta Post) to provide strength and rigidity to units sections
- Varity of sections, and components options available as per customers requirements
- High performance with air tight structure

Casing
Constructed of framed modules. For maximum rigidity and strength, structure frame is made of extruded anodized aluminum profile called "Penta-Post".

Panels
Constructed from double wall, sandwich type panels (25mm or 46mm thickness), with inner and outer panels different thicknesses as per requirements (0.8,1,1.2 mm thickness). For best thermal and acoustical performance, all panels injected with polyurethane foam insulation having density of 42 Kg / m^3 (Fiber glass insulation available as option)

Unit Base
RA provided with base under the unit as standard. The unit base is a fabricated, welded galvanized sheet metal base of high gage along the perimeter of the unit.

Intake / Mixing Box
RA equipped with heavy duty, multi blade, and low leakage damper to modulate and control the air flow.

Filters
Wide variety of air filtration system are available to choose from according to customer requirements:
- Pre filters 2" or 4" panel filter with aluminum washable media or 2" fiberglass / synthetic disposable media
- Vee Filter or Low velocity Filter
- Bag filter
- HEPA Filter
- Carbon Filter
- Electrostatic Filter

Coils
Variety of coils including chilled water, direct expansion (R134a,R407c,) and hot water coil are available to meet a wide range of applications requirements. Coil Comply to AHRI 410 standard.

Fan
Double inlet width centrifugal fan as standard. All fans are belt-driven by motors and the impellers are keyed to the shafts and all fans statically and dynamically balanced (Forward curved, Backward inclined curved, Aerofoil Profile, Plug Fan)
Fan motors are totally enclosed fan cooled (TEFC), foot mounted, 2 or 4 poles, IP55 protected and class – F insulated

Energy Recovery
Energy recovery systems typically incorporate heat exchange equipment to reduce energy costs:
- Energy Recovery Wheel
- Plate Heat Exchanger
- Heat Pipe
- Run around coil

Steam Humidifier
- Immersed Electrode Humidifier
- Immersed Heater Humidifier
- Air Washer (Adiabatic)

Available also variety of options as per customer requirements:
- Electric heaters
- SOUND ATTENUATORS
- Spring isolator
- Inlet guide vanes for VAV control.
- Two speed motor.
- Plenum section.
- Discharge motorized damper.
- Discharge Back draft damper.
- Bulkhead Lamp

COOLEX

السيف الذهبي
GOLDEN SAIF

Air Cooled Scroll Water Chiller Series R-22/R-407C/R-410A

03 - 100 TR (11 kW to 352 kW)

50 Hz

RESIDENTIAL AND COMMERCIAL AIR COOLED SCROLL WATER CHILLER

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex ACL, THAC, DHAC, ACC Air cooled chiller series is a high efficiency series designed to be suitable for gulf harsh environment with optimum performance where it has been designed for a higher efficiency, low power consumption, easy installation and low noise operation and also to provide central cooling for residential and commercial application with the high reliability.

03 TON	TO	100 TON	62
RANGE			
11 kW	TO	352 kW	Models

OUTSTANDING FEATURES

- Designed for Residential and Commercial applications
- Designed conform to ASHRAE 15-2016 (Safety Standard for Refrigeration Systems).
- Performance Data are rated in accordance to AHRI standard 550/590.
- Painted panel Salt Spray test in accordance to ASTM B-117 Salt Spray (Fog) Testing.
- Steel Sheet panels lock forming quality conforming to ASTM A653-CS Type B G90.
- Control panel design is equivalent to NEMA 4 (IP55 - Weather proof and dust free).
- Internal power Connection High Voltage & control wire cables identification & markers As per NEC standard.
- Complete wired control panel with advanced Microprocessor controller matching with Building Management System.
- High efficiency scroll hermetic compressors.
- Low noise aerodynamic design condenser fan, direct drive with rolled for venture design to eliminate short circuiting of airflow.
- All fans are propeller type with aerodynamic design, top discharge & provided with protective grill.
- All fan motors are Totally Enclosed Air Over(TEAO) type with class "F" winding insulation, ball bearing & inherent thermal protection of automatic reset.
- Thermostatic expansion valve as standard accessories.
- Easy service accessibility
- All major service components are close to the unit edge for safe and easy maintenance.

STANDARD FEATURE

HERMETIC SCROLL COMPRESSORS

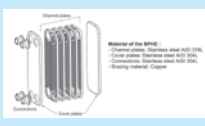
Scroll Compressor has proven to be the most reliable, most efficient and quietest compressor technology available today. Compressors have 50% fewer moving parts, which increases reliability and reduces sound levels. They also operate without suction valves, for added reliability and ease of maintenance.

CONDENSERS COIL

The coils built up from copper tube expanded into Hydrophilic aluminum fins. Assembled coils are factory leak tested under water at a pressure of 450 psig (R-22/ R-407C) & 700 psig (R-410A) for quality and leak free unit. They also undergo dry chemical cleaning after Manufacturing for optimum system cleanness

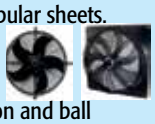
DX BRAZED PLATE HEAT EXCHANGER (BPHE) COOLER

High efficiency brazed plate heat exchanger. Plates are brazed at all contact points, ensuring optimal heat transfer efficiency and pressure resistance. The plates are designed to provide the longest possible life times.



DX SHELL AND TUBE HEAT EXCHANGER (S&T) COOLER

High efficiency DX shell & tube type cooler with removable "U" shape bundled tubes are made of internally grooved copper tubes expanded into heavy steel tubular sheets.



CONDENSER FAN MOTOR

All condenser fan motors are totally enclosed air over type (TEAO) with class "F" winding insulation and ball bearings for high ambient application. The motors shall be three phase with inherent thermal protection of automatic reset type.

UNIT CASING (CABINET)

The unit casing are perfectly designed to eliminate the corrosion problem usually associated with outdoor equipment.

CONTROL PANEL

The control panel design is equivalent to NEMA 4 (IP55) with hinged door for easy access ensuring dust and weatherproof construction. The control voltage is 240V-1Ph-50Hz. The electrical controls used in the control panel are reliable in operation at high ambient conditions (Up to 70°C) for a long period.

MICROPROCESSOR CONTROL

The advanced microprocessor controller is designed with the latest technology to give the best performance of the chiller and to ensure its efficiency and reliability.capable to communicate with the building management system (BMS) open protocols like BacNet, LON, Modbus through optional gateway interfaces

COOLEX

السيف الذهبي
GOLDEN SAIF

ACSC Series Air Cooled Chiller With Screw Compressor R-134a

80 TR to 500 TR (282 kW to 1760 kW)

50/60 Hz

COMMERCIAL AND INDUSTRIAL AIR COOLED SCREW WATER CHILLER

COOLEX

السيف الذهبي
GOLDEN SAIF

AIR COOLED COOLEX CHILLER SCREW COMPRESSOR (ACSC) design to be suitable for gulf's extremely high climatic conditions. ACSC series chillers were designed and manufactured to provide central cooling for commercial and industrial applications with the optimum performance, high efficiency, low power consumption, reliability, easy installation, minimal sound operation and vibration ideal for noise sensitive environment. Each unit is fully charge with R-134A refrigerant, fully factory tested and is ready for installation.

80 TON	TO	500 TON	30
RANGE			
282 kW	TO	1,760 kW	Models

OUTSTANDING FEATURES

- Designed conform to ASHRAE 15-2016 (Safety Standard for Refrigeration Systems).
- Performance Data are rated in accordance to AHRI standard 550/590.
- Painted panel Salt Spray test in accordance to ASTM B-117 Salt Spray (Fog) Testing.
- Steel Sheet panels lock forming quality conforming to ASTM A653-CS Type B G90.
- Control panel design is equivalent to NEMA 4 (IP55 - Weather proof and dust free).
- Internal power Connection High Voltage & control wire cables identification & markers As per NEC standard.
- Complete wired control panel with advanced Microprocessor controller matching with Building Management System.
- Compressors are part winding start and star-delta start.
- Low noise aerodynamic design condenser fan, direct drive with rolled for venture design to eliminate short circuiting of airflow.
- All fans are propeller type with aerodynamic design, top discharge & provided with protective grill.
- All fan motors are Totally Enclosed Air Over(TEAO) type with class "F" winding insulation, ball bearing & inherent thermal protection of automatic reset.
- Electronic expansion valve as standard accessories.
- Economizer operation is a standard feature for selected models to optimize cooling capacity.
- Liquid injection valve
- All major service components are close to the unit edge for safe and easy maintenance.

STANDARD FEATURE

SEMI HERMETIC SCREW COMPRESSOR

Semi-hermetic screw compressor has the latest and advanced 5:6 Patented Screw Rotor Profile designed to ensure high capacity and efficiency in all operating conditions. Screw compressors feature simple and robust construction by elimination of some components. Without these components, screw compressors run with low noise level, minimized vibration, high reliability and durability.

CONDENSERS COIL

The coils built up from copper tube expanded into aluminum hydrophilic fins. Assembled coils are factory leak tested under water at a pressure of 450 psig for quality and leak free unit. They also undergo dry chemical cleaning after Manufacturing for optimum system cleanness

SHELL AND TUBE HEAT EXCHANGER

High efficiency DX shell & tube type evaporators. DX Evaporator optimized for use with R134A. The tube bundle, directly welded to the shell, is non-removable. Evaporators can guarantee an elevated thermal performance through a perfect counter-current flow, and the reduction of by-pass flow. The water connections are placed horizontally, right or left side when facing the refrigerant inlet header.

CONDENSER FAN MOTOR

All condenser fan motors are totally enclosed air over type (TEAO) with class "F" winding insulation and ball bearings for high ambient application. The motors shall be three phase with inherent thermal protection of automatic reset type.

UNIT CASING (CABINET)

The unit casing are perfectly designed to eliminate the corrosion problem usually associated with outdoor equipment.

CONTROL PANEL

The control panel design is equivalent to NEMA 4 (IP55) with hinged door for easy access ensuring dust and weatherproof construction. The control voltage is 240V-1Ph-50Hz. The electrical controls used in the control panel are reliable in operation at high ambient conditions (Up to 70°C) for a long period.

MICROPROCESSOR CONTROL

Microprocessor controller with an attractive user-friendly interface to fully manage the unit's operation and safety. The advanced microprocessor controller is designed with the latest technology to give the best performance of the chiller and to ensure its efficiency and reliability. Capable to communicate with the building management system (BMS) open protocols like BACnet, Modbus through optional gateway interfaces.

SPU Series Packaged Air Conditioners R-410A 35 - 100 TR

High Capacity Packaged Units with tropical Hermetic Compressor

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

The new series of Coolex Package Units SPU air conditioner are designed and manufactured to provide comfort cooling for commercial and industrial applications with the optimum performance, high efficiency, reliability, ease of service & maintenance.

35 TON	TO	100 TON	15
RANGE			
420 MBH	TO	1200 MBH	Models

OUTSTANDING FEATURES

Superior Efficiency
- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

Quiet operation
- Low noise level compressors, condenser fans and evaporator blower
- Compact physical footprint
- Special designed refrigerant piping in addition to the insulation for the evaporator section.

Controls
- Microprocessor Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance

All units in the SPU series are :
- Factory run tested.
- Produced in an ISO 9001-2015 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.
- AHRI rated cooling coils

STANDARD FEATURE

COMPRESSORS

The compressors are hermetic scroll type provided with crankcase heater, internal pressure relief valve which provides high pressure protection to the refrigerant system and rubber vibration isolators for quiet and efficient operation. The compressors are equipped with internal motor protector for safe operation. The compressors are built to NF, VPE, CSA, & UL certification.

CONDENSERS COIL

The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed pre coated aluminum louvered fins. The assembled coils are factory leak tested under water at a pressure of 700 psig for quality and leak free units.

Evaporator Coils

The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed pre coated aluminum louvered fins. The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Evaporator Blower Motor

Motors are totally enclosed fan cooled (TEFC) type with class F insulation for weather protection with permanently lubricated bearings and automatic thermal protection.

CONDENSER FAN MOTOR

Motors are totally enclosed air-over type with class F insulation for weather protection with permanently lubricated bearings and automatic thermal protection.

UNIT CASING (CABINET)

Panels are fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated. The unit is provided with an integral weather resistant control panel for outdoor application. Panels and access doors are provided for inspectionand access for all internal parts.

"The evaporator section is double skin insulated from all sides with 1"" thick fiber glass insulation for a better indoor air quality."

CONTROL PANEL

The control panel enclosure is fabricated out of heavy gauge sheet steel powder coated bake finished. Internal power and and control wiring is neatly routed, properly anchored and all wires are identified with cable markers as per NEC standard applicable to HVAC units.

Major components used in the control panel are UL approved.

MICROPROCESSOR BASED CONTROLLER
- Anti-recycling timing device
- Compressor lock out function
- Balance loading of compressors
- Compressors lead-lag operation
- Pump down option
- Fault diagnostics
- Indicator lights for high & low pressure safety

Variable Refrigerant Flow
CIV Series R-410A 86 - 154 MBH

50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

COOLEX High Efficiency and latest VRF generations product was designed and manufactured to offer the solutions for hospitals, offices,villa shops and other applications under high ambient conditions, compressors are all inverter type match to DC brushless fan motors.

8 HP	TO	64 HP	15
RANGE			
86 MBH	TO	154 MBH	Models

OUTSTANDING FEATURES

Health:
- Fresh Air Intake
- Long Term Filter

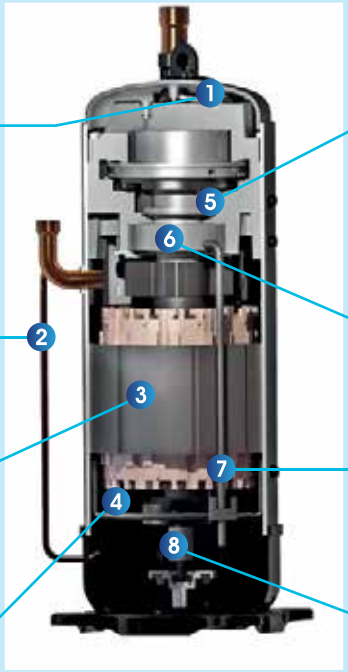
Comfort:
- Anti-Cold-Air
- Follow Me
- Fast Cooling/Heating
- Auto Swing
- Independent Dehumidification
- 3D Air Flow

Reliability
- Self Diagnosis Function
- Low Ambient Cooling
- Intelligent Defrosting
- Fire-Proof Electric Box

Energy Saving
- Sleep Mode
- 180º Sive Wave Control
- Hydrophilic Aluminum Fin
- Full Process by DC Drive
- Heat pump

STANDARD FEATURE

DC Inverter Compressor



Pressure relief valve structure

Improving the partial load efficiency, adapt to thet-ransformer ratio working condition, improving the compressor performance.

Dynamic oil balance structure

Oil balance tube implementation parallel compres-sor and oil quantity dynamic equilibrium, ensuring the reliability of several paralleledcompressors.

High efficiency motor configuration

Using high quality material concentrated stator, cooperate with neodymium magnet rotor, having outstanding efficiency.

High pressure cavity structure

Large exhaust buffer volume,reducing the air flow noise and vibration of the runtime.

The intermediate pressure servo mechanism

According to the operation pressure among dy-namic adjusting middle pressure, has realized the axial flexible, optimization of dynamic vortex disk meshing, improve product performance.

High reliability of the bearing

Adopt cylinder bearing and self-aligning ball bear-ing bearing group, improving the reliability of the compressor.

Internal oil circulation structure

Lubricating oil to achieve internal circulation, reducing heat loss, decreasing the rate of spitting oil, improve the efficiency and reliability.

Positive displacement gear oil pump

Positive displacement gear oil pump to ensure the high and low frequency can satisfy the oil supply, improving the reliability of the compressor.

Commercial Condensing Units Series CCU

380 to 1500 MBH (32 to 125 TR)

COOLEX

السيف الذهبي
GOLDEN SAIF

The new series of Commercial Condensing Units air conditioner are designed and manufactured to provide comfort cooling for commercial and industrial applications with the optimum performance, high efficiency, reliability, ease of service & maintenance.

32 TON	TO	125 TON	5
RANGE			
380 MBH	TO	1500 MBH	Models

OUTSTANDING FEATURES

Superior Efficiency

- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

Quiet operation

- Low noise level compressors and condenser fans.
- Compact physical footprint
- Special designed refrigerant piping.

Controls

- Microprocessor Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance

All units in the CCU series are :

- Factory run tested.
- Produced in an ISO 9001-2015 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.

STANDARD SPECIFICATIONS

Unit Casing
Panels are fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated. The unit is provided with an integral weather resistant control panel for outdoor application. Panels and access doors are provided for inspection and access for all internal parts.

Compressor
The compressors are hermetic scroll type provided with crankcase heater, internal pressure relief valve which provides high pressure protection to the refrigerant system and rubber vibration isolators for quiet and efficient operation. The compressors are equipped with internal motor protector for safe operation. The compressors are built to NF, VPE, CSA, & UL certification.

Condenser Coils
The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed pre coated aluminum
louvered fins. The assembled coils are factory leak tested under water at a pressure of 700 psig for quality and leak free units.

Condenser Fans
Condenser air fan is of the propeller type, aluminum blade with a direct drive motor upward discharge and provided with fan grille mounted in casing.

Condenser Fan Motor
Motors are totally enclosed air-over type with class F insulation for weather protection with permanently lubricated bearings and automatic thermal protection.

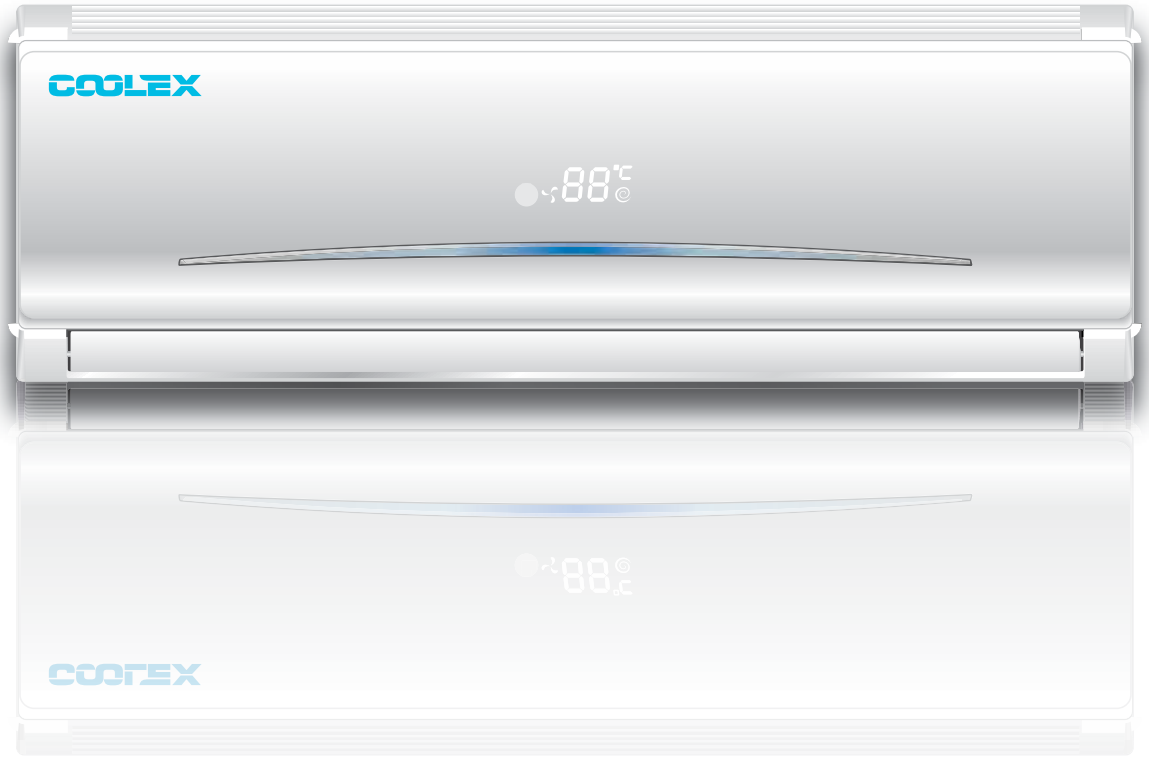
Condenser Coil Guard
Protect the condenser coil from physical damage.

Refrigerant Circuit
CCU series comes complete, as standard, with properly sized refrigerant lines including suction and liquid isolation valve,sight glass, filter drier, automatic high and lowpressure switch using R410A Refrigerant.

Microprocessor Controller
To achieve precise control and safety functions of the condensing units.

Control Panel
The control panel enclosure is fabricated out of heavy gauge sheet steel powder coated bake finished. Internal power and control wiring is neatly routed, properly anchored and all wires are identified with cable markers as per NEC standard applicable to HVAC units.
Major components used in the control panel are UL approved. External overload relay will be provided for compressor.

Decorative Mini Split Units



50/60 Hz

COOLEX

السيف الذهبي
GOLDEN SAIF

Coolex Decorative Mini split units are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operation.

1 TON	TO	3 TON	5
RANGE			
12 MBH	TO	36 MBH	Models

SPECIFICATIONS

ColdCatalyst Filter
Eliminate formaldehyde and other volatile organic compounds (VOCs) as well as harmful gases and odors.

Air Swing
Equipped with vertical louvers motor for proper air distribution.

Anti-Rust Cabinet
With this technique, the cabinet is well protected from being rusted.

Low Noise Airflow System
Without decreasing the airflow volume and capacity output, large diameter cross flow fan can bring down the indoor unit noise level by lowering the fan speed.

Turbo Operation
With this function, the air conditioner will maximize the output of cooling or heating capacity, make the room cool down or heat up rapidly, and attain the desired temperature in the shortest time.

Sleep Mode
This function enables the air conditioner to automatically increase (cooling) or decrease (heating) 1°C per hour for the first two hours, then holds steady for the next 5 hours, after that it will switch off. This characteristic maintains both energy saving and comfort in night operation.

Auto-Restart
If the air conditioner breaks off unexpectedly due to the power cut, it will restart with the previous function setting automatically when the power resumes.

Authorised Distributor in Oman

السيف الذهبي
GOLDEN SAIF

Golden Saif Construction and Development Co LLC

Al Romelah Street 41, Al Wattayah
Muscat, Sultanate of Oman

M: +968 9679 2801
M: +968 9679 2806
T: +968 2272 2541

Sales@goldensaif.com

www.goldensaif.com

www.coolex.com.kw