econex
nex gen R32 inverter

AIR COOLED

Ducted Split Units

temperzone
climate innovations

econex
nex gen R32 inverter

Econex, providing leading efficiency and sustainability

Econex Inverter Ducted Split

14.9kW - 35.0kW 14.8kW - 35.1kW

p .04

Large Capacity Ducted Split

38.5kW - 89.2kW 37.1kW - 93.0kW

p. 20

Heating Capacity

Cooling Capacity

Econex Inverter Ducted Split Features

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Econex Inverter Ducted Split units (14.8kW - 35.1kW)

R32

Inverter Compressor
Inverter compressor for superior part load performance

High Efficiency EC Fan
Custom select fan speeds or use 0-10VDC continuous speed

Multi Speed Fans
Multi speed condenser fans for better efficiency, control, and stable operation

Electronic Expansion Valve
Electronic expansion valves for greater control and efficiency.

Intelligent Unit Controller
Ensures the unit runs at its optimum efficiency and provides system operation data

Wide Temperature Operating Range
From -15°C to +52°C ambient

Corrosion Resistant Design
Marine grade surface protection and epoxy coated coil protection

Epoxy Coated Coils
Standard on indoor and outdoor coils for added coil protection

Low GWP Refrigerant
R32 refrigerant has a significantly lower GWP than R410A

New Compact Design
OSA 171-211 are more compact than previous units

New Intelligent De-ice
Quick & Efficient de-ice resulting in increased heating performance

BMS
BACnet™ or Modbus via RS485 (or TCP/IP option)
*BACnet is optional accessory

OSA 351 shown

Lower Global Warming Potential Air Conditioning

Leading the way in providing low GWP commercial R32 air conditioning solutions.

Lower global warming potential

With a smaller refrigerant charge and a GWP of 677, R32 refrigerant represents a 75-80% reduction in overall GWP per kW of cooling or heating when compared to R410A systems (GWP 2088)*.

Reducing future costs

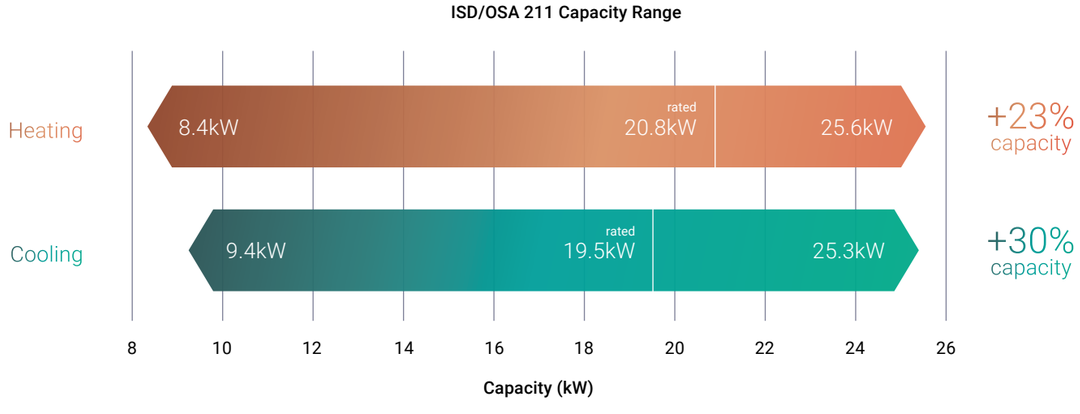
As higher GWP refrigerants face increasing cost due to emissions tax levies the specification of R32 systems will represent a significant reduction in the future costs associated with owning and maintaining these systems.

*published to AR4

High Performance Design

Extra capacity with very wide heating and cooling ranges

For versatile specification, all R32 ducted split systems offer a very wide heating and cooling capacity range enabling reliable comfort at times of peak load and increased energy savings under low load conditions.

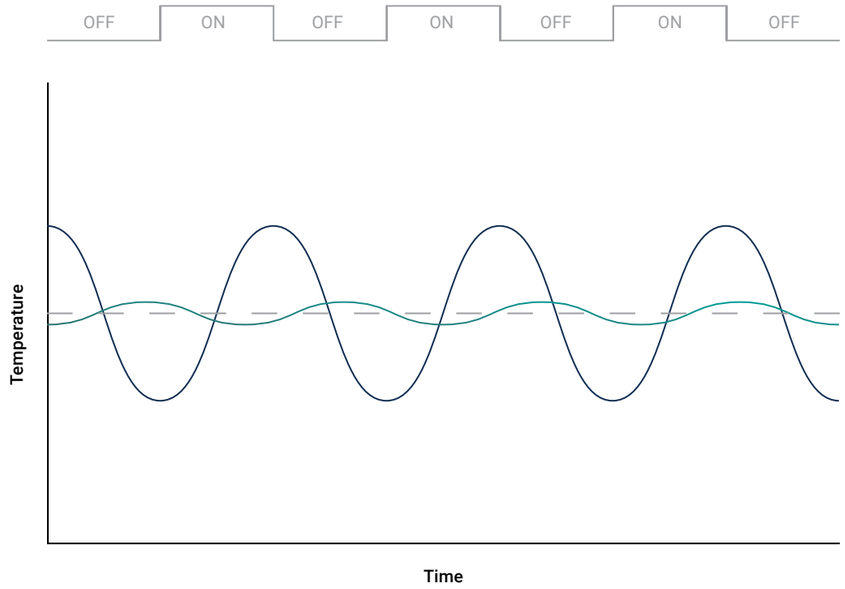


Extreme weather operation

Designed for the harshest conditions, these R32 ducted units are designed to operate in ambient temperatures from -15°C to 52°C to ensure you're always comfortable, whatever the weather.

Inverter Technology

Econex Inverter compressor technology delivers precise control of indoor air temperatures for superior year round comfort with leading energy efficiency.



Inverter Comfort Control

Fixed speed air conditioners are single speed on/off systems. Once the desired temperature is reached, they turn off, turning back on only when the temperature drops below or rises above a set level. This cycling between full or no capacity causes unnecessary waste of electricity and doesn't maintain a constant room temperature.

The use of variable capacity inverter compressors allow a precise load variation response for superior temperature control. The use of electronic expansion valves and variable speed indoor and outdoor fans further allows a more effective, and efficient, response to varying load conditions.

Energy efficient

Econex inverter compressors only use the amount of energy to suit the operating condition maximising your SEER performance.

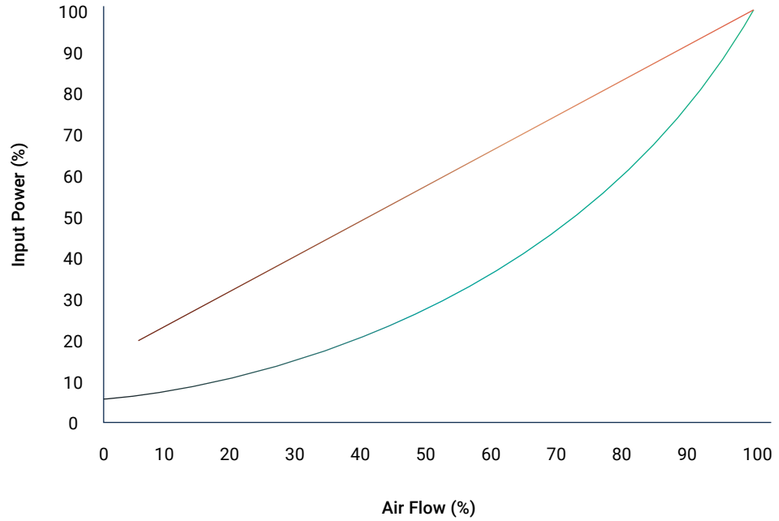
- Soft starting, using much less power at start up.
- Matching capacity to load avoids temperature fluctuation and reduces energy input power.
- Full inverter compressor range from 16-100% compressor speed.
- Reduced amount of start/stop for long life operation.

Energy Saving Technology

Intelligent system control technology offers leading energy efficiency with precision control of the air conditioners refrigeration system.

EC Fan Technology

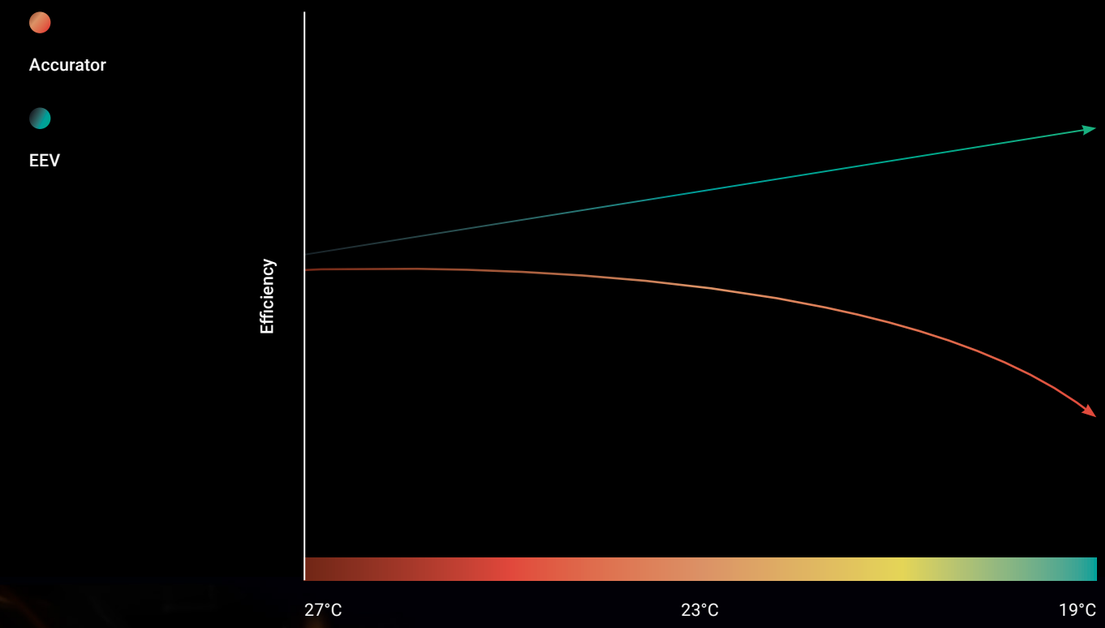
Our high-efficiency EC fan motors are up to 20% more energy efficient than Belt drive or AC motor alternatives and enable quiet operation with slow ramp-up and no sudden noise changes. Achieve precise comfort with custom select fan speeds or continuously variable fan speed control.



Versatile solution for offices and shops

Electronic Expansion Valves (EEV)

Temperzone Econex EEV's allow optimum control of superheat at varying load. They also provide increased efficiencies by lowering head pressure and optimum feeding of heat exchanger coils. EEV's control liquid saturation over the coils, which in turn increases the opportunity to absorb energy.



Benefits include:

- EEV's enable improved efficiency and reduced operating costs at part-load conditions.
- They also facilitate maximised energy savings during the shoulder seasons – periods in which air conditioning systems often run at part-load.

Durable Long Life Design

Econex ducted split units are designed to be highly durable and suited to the harshest environmental conditions.

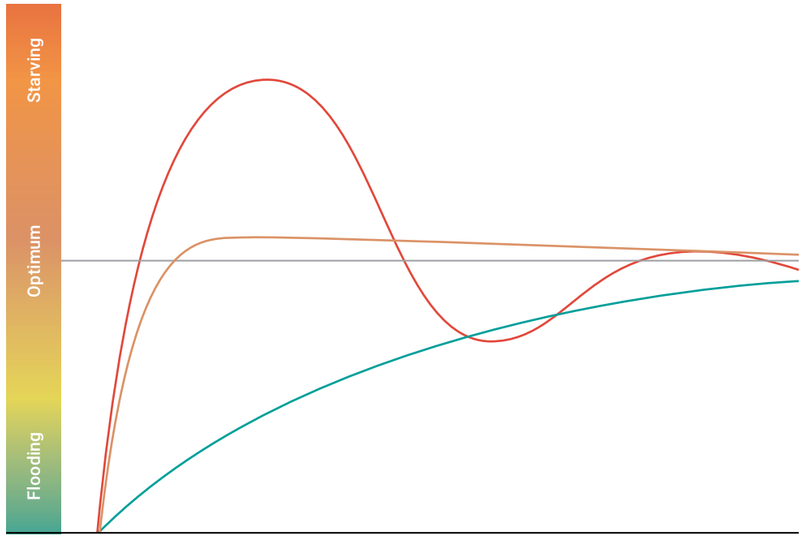
Adaptive Valve Regulation

Temperzone's proprietary Adaptive Valve Regulation system (AVR) ensures that Temperzone inverter air conditioning systems run more efficiently and enjoy a longer operational life. AVR maximises efficiency in both heating and cooling cycles by regulating refrigerant flow capacity, allowing the system to maintain stability and efficiency over the full range of operating conditions.

Starving (Traditional Underdamped)

Ideal (AVR)

Prolonged Flooding (Traditional Overdamped)



AVR also prevents:

- Prolonged flooding (oil washed out of the system), which leads to seized bearings and compressor damage.
- Improves Compressor Lifecycle.
- Starving, which leads to HP/LP trips and reduced EER / Duty. Continuous starving leads to compressor motor overheat.

Intelligent De-ice

New intelligent de-ice enables improved heating performance in colder conditions. Optimised coil circuitry and new controller logic results in fast and more effective de-ice.

Econex de-ice is designed to support the full turn down of the compressor and de-ices from the top to the bottom of full height coil circuits. Utilising a highly balanced split circuit coil design prevents excess pressure drop as the refrigerant changes phase.

Allows:

- Capacity during de-ice to be controlled to 10 °C condensing temps.
- Aim to melt ice, not evaporate water. Evaporating water requires 6.75 more energy than melting ice.
- Econex de-ice at a low capacity which is more efficient, and takes similar time as traditional de-ice.
- Operation is extended up to 50 minute intervals between de-ice cycles, up from 35 min.
- Better capacity control allows better room temp control under part load conditions.

Convenient Control

From advanced commercial controllers to stylish touch screen controllers, Temperzone has a control option to suit your space and application.

TZT-100

Temperzone's TZT-100 thermostat is an advanced controller suited to commercial environments. It delivers comprehensive control for your system not available with other thermostats.

Features

Modes – cool / cool-dry / heat / auto-dry / auto	Programmable occupancy inputs
Set airflow - auto / low / med / hi (customisable)	On demand override count down timer up to 12hrs
Key board and temperature locks	Filter monitor option (by hours)
7 Day programmable time clock	Continuous or Intermittent fan operation
Set temperature: 5°C ~ 50°C at 0.5°C increments	Connects to indoor (IUC) or outdoor (UC8) unit
Remote sensor inputs	

SAT-3

Temperzone's SAT-3 thermostat is a cost effective solution for residential and commercial environments. It delivers comprehensive control of your ducted air conditioning system and advanced comfort settings.

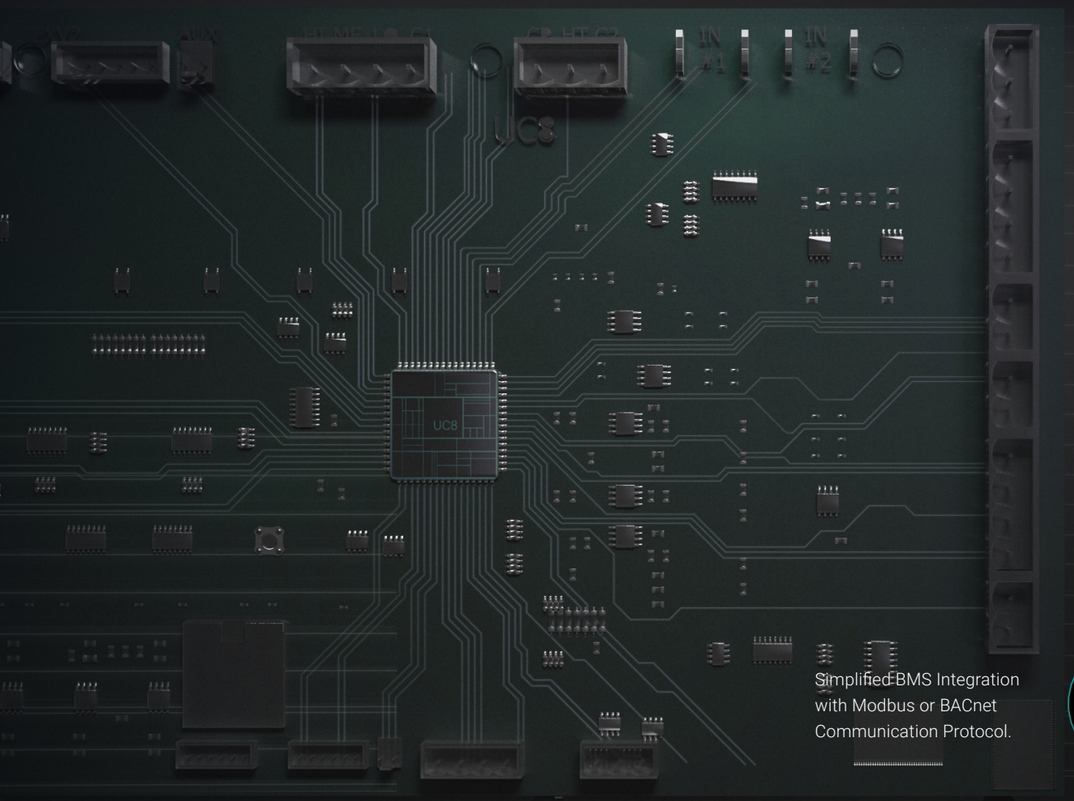
Features

Modes – cool / dry / heat / auto	Backlit screen - red in heating, blue in cooling
Set airflow - auto / low / med / hi (customisable)	On demand override count down timer up to 4hrs
Sleep, ECO, Dry, and Quiet functions	Zone control capable with temperzone zone kit
7 Day programmable time clock	Connects to indoor (IUC) or outdoor (UC8) unit
Set temperature: 16°C ~ 30°C at 0.5°C increments	Continuous or Intermittent fan operation
Auto start after power failure	

BMS Connectivity

Econex ducted split unit's can connect into a BMS for control and operation.

- Through the outdoor unit via the UC8's Modbus/RS485 port with multi-unit control capability.
- Through the indoor unit via the IUC's Modbus/RS485 port for centralised 0-10Vdc fan speed control.
- Up to 99 units can be connected on a common RS458 bus in daisy chain design.
- Daisy chain wiring saves on amount of wiring and required labour time.
- BMS communication cable (2-wire shielded).
- Maximum cable length of 1000m.



Simplified BMS Integration with Modbus or BACnet Communication Protocol.

BMS

Easy Installation and Maintenance Design

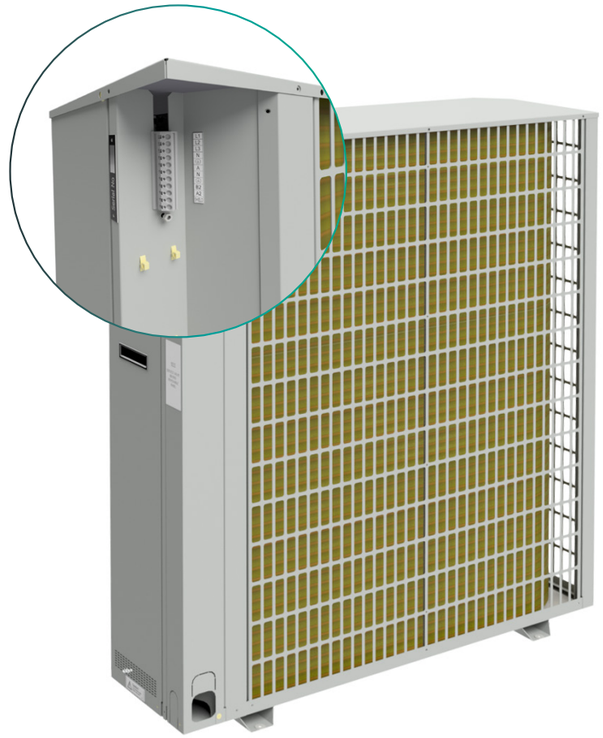
Wiring and pipe access is made easy and convenient with a new removable corner access panel for electrical and piping access.

Easy wiring terminal access

Installer electrical access has been improved with connections more easily accessed through the corner panel. Outdoor units are fully wired and the main power supply along with communication connections can be wired directly within the panel. The corner panel allows easy installer piping access, pipework is now also accessed lower on the unit.

Slimline outdoor unit design

To allow for installation flexibility and space savings the OSA 171 and OSA 211 outdoor units are only 425mm deep while the OSA 251 is 462mm deep.



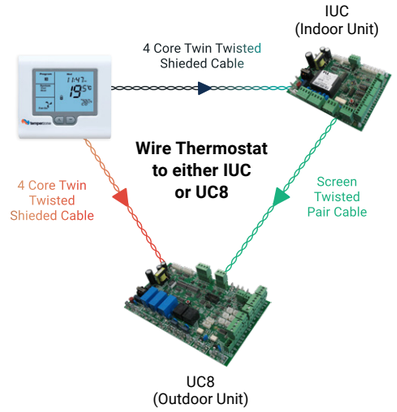
Intuitive Unit Controllers

Econex Ducted Split units feature Temperzone outdoor (UC8) and indoor (IUC) unit controllers with powerful features enabling flexible solutions to meet various building requirements.

Simple System Wiring

Installers have the flexibility to be able to wire the thermostat to either the Indoor (IUC) or Outdoor Unit (UC8) - whichever is more convenient.

- 1 shielded twisted pair cable between UC8 & IUC.
- Thermostat uses twin twisted pair shielded cable to connect to either the IUC or UC8.



Outdoor Unit Controller (UC8)

Temperzone's intelligent UC8 outdoor unit controller has been designed to deliver efficient and precise system control under all conditions.

Features

Display for system error / fault reporting	Accepts Modbus BMS connection
Control inputs via pluggable screw terminal blocks	Remote start/stop input
Operates with 12Vdc or 24Vac thermostats	DRED Compatible

Indoor Unit Controller (IUC)

Temperzone's IUC makes it easier to deliver efficient control via communications with the Outdoor Unit.

Features

Thermostats can be connected to the IUC via an easy access terminal block within the indoor unit.	Accepts 0-10V Signal BMS for airflow
	Remote On / Off available

Advanced Zone Control*

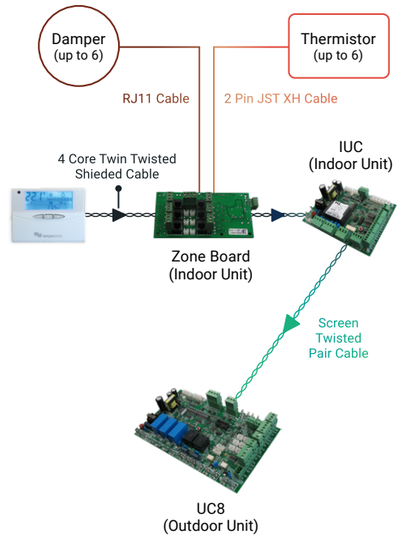
***Important note: when designing a zoned system, the smallest zone must meet the minimum space requirements for R32 refrigerant.**

Offering a simple and elegant solution to the challenge of multi-zone temperature requirements, Temperzone ducted air conditioning systems enable the comfort levels of designated spaces to be individually set and maintained via one concealed common unit.

Simple Zone System Wiring

Using the optional zone relay board which is installed in the indoor unit, dampers and sensors are easily wired into the system where they can communicate with the temperzone controller and outdoor unit for precise zone temperature and airflow control.

- 1 shielded twisted pair cable between UC8 & IUC.
- SAT-3 uses twin twisted pair shielded cable to connect to either Zone Board.
- Simple plug in wiring to dampers and temperature sensors



SAT-3 Zone Control System

Features

Set up to 6 Independent zones
Push-button controller option (SAT-3)
Additional wall controller option
Individual zone temperature control
Set airflow for each zone
7 day time clock operation
Operating schedule setup for individual zones

Large Capacity Ducted Split Features

Large Capacity Ducted Split units (37.1kW - 93.0kW)

R410A

Digital Compressor*
Enable 20-100% continuous system modulation for a wide capacity range and better humidity control at low capacity.

High Efficiency EC Fan*
Can be controlled either as a speed or by 0-10VDC.

Multi Speed Fans
Multi speed condenser fans for better efficiency, control, and stable operation

Electronic Expansion Valve*
Electronic expansion valves for greater control and efficiency.

Intelligent Unit Controller
Ensures the unit runs at its optimum efficiency and provides system operation data

Wide Temperature Operating Range**
From -15°C to +52°C ambient

Corrosion Resistant Design
Marine grade surface protection and epoxy coated coil protection

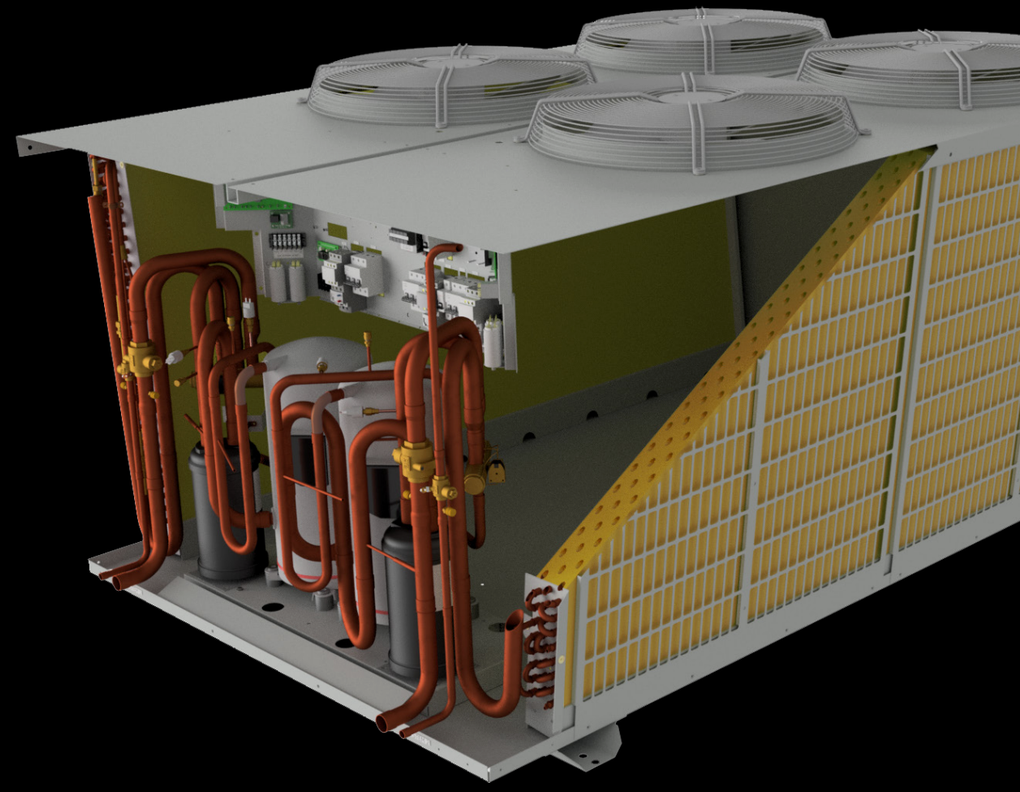
Epoxy Coated Coils
Standard on indoor and outdoor coils for added coil protection

Dual Independent Refrigeration Systems
Two independent refrigeration systems to increase efficiency.

EC Plug Fan*
EC plug fans that precisely adjust airflow to change in static pressure.

Vertical or Horizontal Supply Air
Versatile solutions with multiple supply air options

BMS
BACnet™ or Modbus via RS485 (or TCP/IP option)
*BACnet is optional accessory



*Feature not applicable to all units, refer to specification tables.

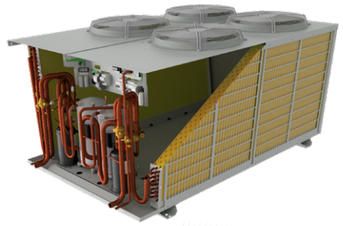
**OSA 840 & 950 from -10°C to +46°C ambient.

Better Performing Large Capacity Ducted Split Systems

When it comes to large capacity Ducted Split systems nothings better than Temperzone's efficient, durable and comprehensive range.

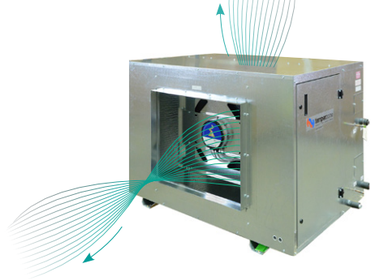
Dual Refrigeration Systems

These ducted split systems have two independent refrigeration circuits to provide the flexibility and economy of two stage operation, i.e. utilising one or two circuits as conditions vary, plus the advantage of staggered starting.



Vertical or Horizontal Airflow

Having the option to choose from either vertical or horizontal supply air discharge configurations provides the flexibility required when designing for various commercial air conditioning installations.

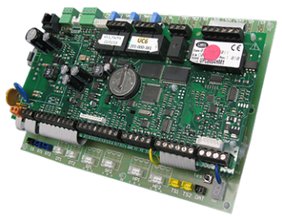


High Static EC Plug Fans*

Improved efficiency and comfort through the supply of exact airflow requirements with variable airflow technology. Up to 50% more efficient than belt driven fans, and 20% more efficient than AC fans.

Intelligent UC6 or UC8 Controller*

Temperzone's intelligent outdoor unit controller (UC) has been designed to deliver efficient and precise system control under all conditions. 7 segment LED display to indicate faults and running conditions.



*Feature not applicable to all units, refer to specification tables.

Variable Capacity Compressors*

ECO units feature a variable capacity digital compressor and a fixed speed compressor allowing efficient close control with 20-100% continuous system capacity modulation. These systems also provide better humidity control at low capacity.

Electronic Expansion Valves*

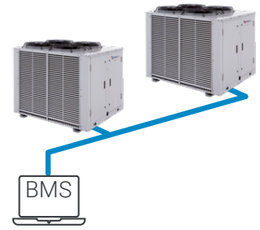
EEV's allow optimum control of superheat at varying load for outstanding comfort with indoor air temperature and humidity control. They also provide increased efficiencies by lowering head pressure and optimum feeding of heat exchanger coils.

UC6 Service Interface tool*

Many operating status conditions (including history) can be determined, without gauges, simply by using the optional UC6 Service Interface graphical display tool.

BMS Connectivity

Units featuring UC6 or UC8 controller are BMS compatible via digital and analogue signals or via Modbus. EC motors can be controlled variably by a 0–10 volt DC signal that can be supplied by the BMS system.



TZT-100

Temperzone's TZT-100 thermostat is an advanced controller suited to commercial environments. It delivers comprehensive control for your system not available with other thermostats.

WiFi Service Utility Tool

WiFi Service Utility (WSU) is a portable control interface that plugs directly into the UC6, UC7 & UC8 board. Monitor a wide range of operational parameters, view fault logs and control the unit. It has a built in WiFi network for local wireless access from a smartphone, tablet or notebook PC.

*Feature not applicable to all units, refer to specification tables.

● Standard

□ Optional

Econex Inverter Range Options & Features

The range of available temperzone options allows you to completely customise your unit, giving you flexibility and ultimate control.

Model	ISD/OSA 171	ISD/OSA 211	ISD/OSA 251	ISD/OSA 351
Features				
Inverter Compressor	●	●	●	●
BMS Connection	●	●	●	●
EC Fan Motor - supply air	●	●	●	●
Custom Select Fan Speed settings	●	●	●	●
0-10VDC Fan Speed Control	●	●	●	●
Intelligent De-ice	●	●	●	●
Variable Speed Condenser Fans	●	●	●	●
Electronic Expansion Valve	●	●	●	●
Separable Indoor Unit	●	●	●	–
Self Diagnostics				
LED Display for faults and running conditions	●	●	●	●
Filters				
EU4/G4 Rated (NZ only)	□	□	□	□
Controller Options				
TZT-100	□	□	□	□
SAT-3	□	□	□	□
Zone Control (SAT-3)	□	□	□	□

● Standard

□ Optional

– Not Applicable

Large Capacity Range Options & Features

Model	ISD/OSA 380	ISD/OSA 465	ISD/OSA 570	ISD/OSA 670	ISD/OSA 840	ISD/OSA 950
Features						
Fixed Speed Compressor (x2)	●	●	●	●	–	–
Fixed Speed + Digital Compressor	●	–	●	●	●	●
Variable Speed Condenser Fans	●	●	●	●	●	●
0-10VDC Fan Speed Control	●	–	●	●	●	●
Electronic Expansion Valve	●	●	●	●	●	●
BMS Connection	●	●	●	●	●	●
Supply Air						
EC Plug Fan	●	–	●	●	●	●
EC Fan Motor	●	–	–	–	–	–
AC Fan Motor (belt drive)	–	●	●	●	–	–
Horizontal Discharge	●	●	●	●	●	●
Vertical Discharge	●	●	●	●	●	●
Self Diagnostics						
LED Display for faults and running conditions	●	●	●	●	●	●
Filters						
EU4/G4 Rated	□	□	□	□	□	□
Controller Options						
TZT-100	□	□	□	□	□	□
UC6 Service Interface tool	□	□	□	□	–	–

Econex Inverter Range Technical Specifications

econex
nex gen R32 inverter

Indoor Unit	ISD 171LYX	ISD 171LYX	ISD 211LYX	ISD 251LYX	ISD 351LYX
Outdoor Unit	**OSA 171RLSF**	**OSA 171RLTF**	**OSA 211RLTF**	**OSA 251RLTF**	**OSA 351RLTF**
Capacity (kW)					
Nominal Cooling Capacity*[1]	14.8 (8.6~18.5)	14.8 (8.6~18.5)	19.5 (9.4~25.3)	23.3 (13.3~29.5)	35.1 (15.0~43.0)
Net Cooling Capacity*[2]	14.5	14.5	19	22.5	33.8
Heating Capacity*[3]	14.9 (7.0~18.3)	14.9 (7.0~18.3)	20.8 (8.4~25.6)	23.3 (10.4~29.2)	35.0 (12.5~40.7)
EER/COP					
EER / AEER Cooling	3.15 / 3.12	3.26 / 3.23	3.15 / 3.13	3.19 / 3.17	3.29 / 3.27
COP / ACOP Heating	3.28 / 3.25	3.42 / 3.39	3.57 / 3.54	3.48 / 3.45	3.59 / 3.57
Power					
Power Supply*[4]	1 Phase 220 - 240V	3 phase 380 - 415 VAC 50 Hz			
Run Amps - Total System (A/ph)	21	9 / 6.5 / 6.5	13 / 9 / 10	16 / 10 / 10.5	23 / 14 / 14
Max Run Amps - Total System (A/ph)	35	15 / 11 / 11	23 / 14.5 / 15.5	24 / 15.5 / 15.5	37 / 24 / 24
Indoor Fan Full Load Amps (A)	3.5	3.5	6	6	10
Controller	UC8 / IUC				
Compressor					
Type	DC Inverter				
Refrigerant	R32				
Indoor Air Fans					
Type	Foward Curved				
Motor	EC Fan				

Notes:
*[1] Nominal Cooling Capacity at AS/NZS 3823 conditions.
*[2] Net Cooling Capacity at AS/NZS 3823 includes an allowance for indoor fan motor heat loss.
*[3] Heating Capacity (reverse cycle units only) at AS/NZS 3823 conditions.
*[4] Power source includes voltage limits.
*[5] Supply air flow at Nominal Cooling Capacity conditions stated above.

Indoor Unit	ISD 171LYX	ISD 171LYX	ISD 211LYX	ISD 251LYX	ISD 351LYX
Outdoor Unit	**OSA 171RLSF**	**OSA 171RLTF**	**OSA 211RLTF**	**OSA 251RLTF**	**OSA 351RLTF**
Airflow (l/s)					
Nominal*[5]	800	800	1050	1300	1900
Installation (m)					
Max Vertical Separation	20				
Pre-charge Line Length	15				10
Max Line Length	60				90
Pipe Sizes - Suction / Liquid (mm OD)	19 / 9.5			22 / 13	28 / 13
Finish					
Indoor Unit / Outdoor Unit	Zinc Galvanised Steel / Grey Polyester Powder Coat				
Operating Range					
Cooling	-10°C to 52°C				
Heating	-15°C to 25°C				
Overall Dimensions (mm)					
Indoor - W x H x D	1280 x 430 x 785		1470 x 430 x 785	1630 x 430 x 785	2020 x 435 x 698
Outdoor - W x H x D	1120 x 965 x 425		1155 x 1270 x 425	1335 x 1385 x 425	1595 x 1335 x 840
Weight (kg)					
Nett - Indoor / Outdoor	68 / 101	68 / 105	86 / 129	89 / 161	124 / 254
Shipping - Indoor / Outdoor	78 / 111	78 / 115	97 / 136	101 / 168	140 / 266

Materials and specifications are subject to change without notice due to the manufacturer's ongoing research and development programme.

Large Capacity Range Technical Specifications

	ECO	ECO		ECO	
Indoor Unit	ISD 380KBY	ISD 380KB-P	ISD 465KB	ISD 570-P	ISD 570KB
Outdoor Unit	OSA 380RKTB(G)	OSA 380RKTB(G)	OSA 465RKTVB	OSA 570RKTBG	OSA 570RKTB
Capacity (kW)					
Nominal Cooling Capacity*[1]	8.0 - 37.6	7.5 - 37.1	44.6	11.3 - 56.6	56.1
Net Cooling Capacity*[2]	36.4	35.9	42.6	55.0	54.0
Heating Capacity*[3]	38.8 (7.2 - 35.9)*[7]	38.5 (7.1 - 35.7)*[7]	44.0	10.6 - 53.4	55.9
EER/COP					
EER / AEER Cooling	3.26 / 3.21	3.20 / 3.15	2.98 / 2.95	3.27 / 3.26	3.10 / 3.09
COP / ACOP Heating	3.46 / 3.44	3.43 / 3.41	3.53 / 3.51	3.48 / 3.46	3.37 / 3.35
Power					
Power Supply*[4]	3 phase 380 - 415 VAC 50 Hz				
Run Amps - Total System (A/ph)	16 / 20 / 20	17 / 22 / 17	31 / 26 / 25	34 / 28 / 27	38 / 33 / 32
Max Run Amps - Total System (A/ph)	21 / 25 / 25	22 / 27 / 22	43 / 37 / 37	44 / 38 / 37	47 / 42 / 41
Indoor Fan Full Load Amps (A)	6 (x2)	2.5 (x2)	6.2	5.7	11.0
Controller	UC6				
Compressor					
Type	Fixed x2 (Fixed + Digital)*[7]		Fixed x2	Fixed + Digital	Fixed x2
Refrigerant	R410A				
Indoor Air Fans					
Type	Foward Curved	Backward Curved	Foward Curved	Backward Curved	Foward Curved
Motor	EC	EC Plug	Belt Drive	EC Plug	Belt Drive

Notes:
*[1] Nominal Cooling Capacity at AS/NZS 3823 conditions.
*[2] Net Cooling Capacity at AS/NZS 3823 includes an allowance for indoor fan motor heat loss.
*[3] Heating Capacity (reverse cycle units only) at AS/NZS 3823 conditions.
*[4] Power source includes voltage limits.
*[5] Supply air flow at Nominal Cooling Capacity conditions stated above.

	ECO	ECO		ECO	
Indoor Unit	ISD 380KBY	ISD 380KB-P	ISD 465KB	ISD 570-P	ISD 570KB
Outdoor Unit	OSA 380RKTB(G)	OSA 380RKTB(G)	OSA 465RKTVB	OSA 570RKTBG	OSA 570RKTB
Airflow (l/s)					
Nominal*[5]	2100	2100	2550	3100	3100
Installation (m)					
Max Vertical Separation	20				
Pre-charge Line Length	10				
Max Line Length	60		30 or 60*[6]	60 / 90	
Pipe Sizes - Suction / Liquid (mm OD)	22 / 13			(28 or 35)*[6] / 13	
Finish					
Indoor Unit / Outdoor Unit	Zinc Galvanised Steel / Grey Polyester Powder Coat				
Operating Range					
Cooling	-10°C to 52°C				
Heating	-15°C to 25°C				
Overall Dimensions (mm)					
Indoor - W x H x D	2315 x 705 x 830		1565 x 1210 x 1200	1650 x 1150 x 1345	
Outdoor - W x H x D	1480 x 1420 x 1710		1480 x 1270 x 1790	1480 x 1345 x 1755	
Weight (kg)					
Nett - Indoor / Outdoor	203 / 458	169 / 458	277 / 445	333 / 511	333 / 511
Shipping - Indoor / Outdoor	226 / 511	195 / 511	300 / 490	380 / 565	380 / 565

Notes Continued:
*[6] Extra suction accumulation required.
*[7] ( ) Bracketed figure is performance when matched to digital outdoor unit, ie OSA 380RKTBG.

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Large Capacity Range Technical Specifications

	ECO		ECO	ECO
Indoor Unit	ISD 670-P	ISD 670KB	ISD 840KBX-P	ISD 950KBX-P
Outdoor Unit	OSA 670RKTBG	OSA 670RKTB	OSA 840RKTBG	OSA 950RKTBG
Capacity kW				
Nominal Cooling Capacity*[1]	13.1 - 65.5	65.9	84.6 (16.9~84.6)	93.0 (18.6~93.0)
Net Cooling Capacity*[2]	63.0	62.8	81.3	89.8
Heating Capacity*[3]	12.4 - 62.0	62.8	78.4	89.2
EER/COP				
EER / AEER Cooling	3.07 / 3.06	2.97 / 2.96	3.20 / 3.19	3.11 / 3.10
COP / ACOP Heating	3.43 / 3.41	3.47 / 3.45	3.68 / 3.67	3.51 / 3.50
Power				
Power Supply*[4]	3 phase 380 - 415 VAC 50 Hz			
Run Amps - Total System (A/ph)	34 / 39 / 33	38 / 43 / 38	55 / 46 / 46	66 / 55 / 55
Max Run Amps - Total System (A/ph)	45 / 50 / 44	50 / 54 / 48	74 / 64 / 64	84 / 74 / 74
Indoor Fan Full Load Amps (A)	5.7	11.0	4.6 (x2)	9.2 (x2)
Controller	UC6		UC8 x2 / IUC	
Compressor				
Type	Digital + Fixed	Fixed (x2)	Digital + Fixed	
Refrigerant	R410A			
Indoor Air Fans				
Type	Backward Curved	Forward Curved	Backward Curved	
Motor	EC Plug	Belt Drive	EC Plug	

Notes:
*[1] Nominal Cooling Capacity at AS/NZS 3823 conditions.
*[2] Net Cooling Capacity at AS/NZS 3823 includes an allowance for indoor fan motor heat loss.
*[3] Heating Capacity (reverse cycle units only) at AS/NZS 3823 conditions.
*[4] Power source includes voltage limits.

	ECO		ECO	ECO
Indoor Unit	ISD 670-P	ISD 670KB	ISD 840KBX-P	ISD 950KBX-P
Outdoor Unit	OSA 670RKTBG	OSA 670RKTB	OSA 840RKTBG	OSA 950RKTBG
Airflow (l/s)				
Nominal*[5]	3600		4500	5000
Installation (m)				
Max Vertical Separation	20			
Pre-charge Line Length	10			
Max Line Length	60 / 90		90	
Pipe Sizes - Suction / Liquid (mm OD)	(28 or 35)*[6] / 13		35 / 16	
Finish				
Indoor Unit / Outdoor Unit	Zinc Galvanised Steel / Grey Polyester Powder Coat			
Operating Range				
Cooling	-10°C to 52°C		-10°C to 46°C	
Heating	-15°C to 25°C			
Overall Dimensions (mm)				
Indoor - W x H x D	1650 x 1150 x 1345		2220 x 1070 x 1320	2220 x 1280 x 1320
Outdoor - W x H x D	1480 x 1390 x 1755		1680 x 1210 x 2310	
Weight (kg)				
Nett - Indoor / Outdoor	282 / 541	350 / 541	351 / 575	401 / 579
Shipping - Indoor / Outdoor	329 / 580	397 / 580	376 / 606	426 / 610

Notes Continued:
*[5] Supply air flow at Nominal Cooling Capacity conditions stated above.
*[6] Extra suction accumulation required.

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