

AIR COOLED

# Ducted Split Units



temperzone climate innovations



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 - 89.2kW37.1kW - 93.0kWp. 20

Heating Capacity

Cooling Capacity



Air Cooled Ducted Split Units Temperzone Features

### **Econex Inverter Ducted Split Features**



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





### **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**

outdoor coils for added coil protection



Standard on indoor and

### 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



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

R410A System

R32 System

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.



Air Cooled Ducted Split Units Inverter Technology Temperzone

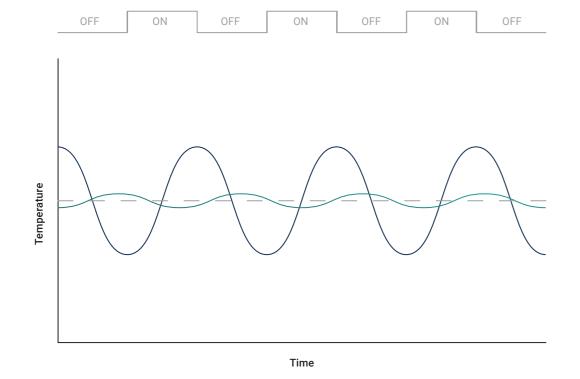
### Inverter Technology

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

### Improved **Comfort Control**

Fixed Speed

Set Point Temperature



### **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.



Temperzone

Air Cooled Ducted Split Units

#### Electronic Expansion Valves

### **Energy Saving Technology**

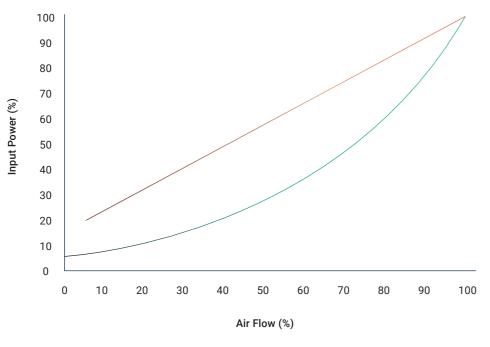
Intelligent system control technology offers leading energy efficiency with precision control of the air conditioners refrigeration system.

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.

AC Motor



**EC Motor** 

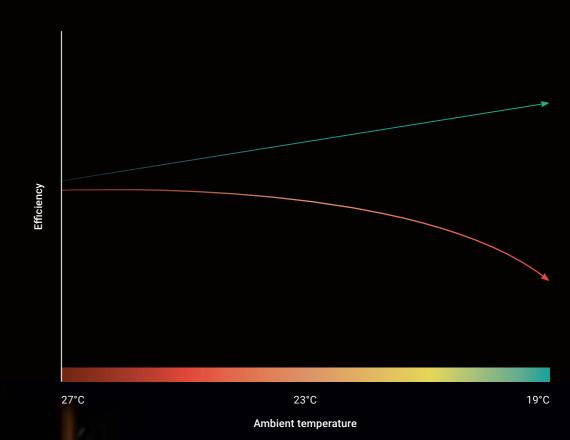


Versatile solution for offices and shops



# 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.

Accurator

EEV

### 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.



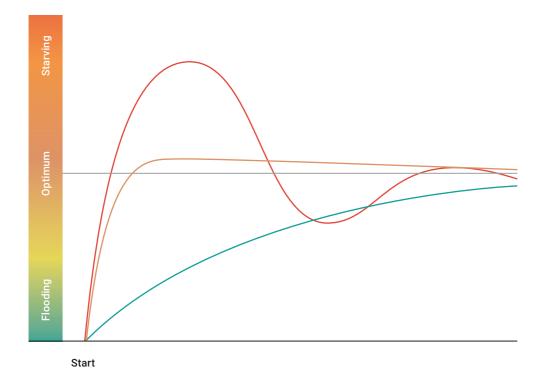
Starving (Traditional Underdamped)



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

Set airflow - auto / low / med / hi (customisable)

Key board and temperature locks

7 Day programmable time clock

Set temperature: 5°C ~ 50°C at 0.5°C increments

Remote sensor inputs

Programmable occupancy inputs

On demand override count down timer up to 12hrs

Filter monitor option (by hours)

Continuous or Intermittent fan operation

Connects to indoor (IUC) or outdoor (UC8) unit

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

Set airflow - auto / low / med / hi (customisable)

Sleep, ECO, Dry, and Quiet functions

7 Day programmable time clock

Set temperature: 16°C ~ 30°C at 0.5°C increments

Auto start after power failure

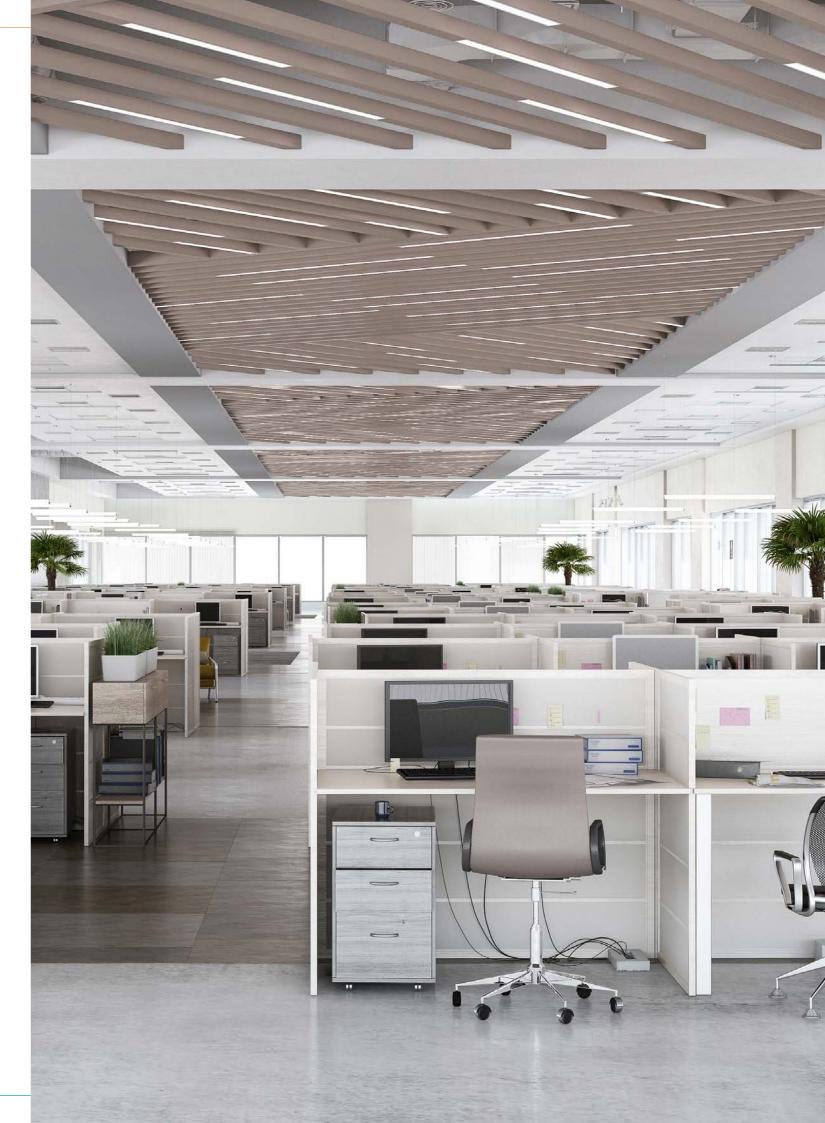
Backlit screen - red in heating, blue in cooling

On demand override count down timer up to 4hrs

Zone control capable with temperzone zone kit

Connects to indoor (IUC) or outdoor (UC8) unit

Continuous or Intermittent fan operation

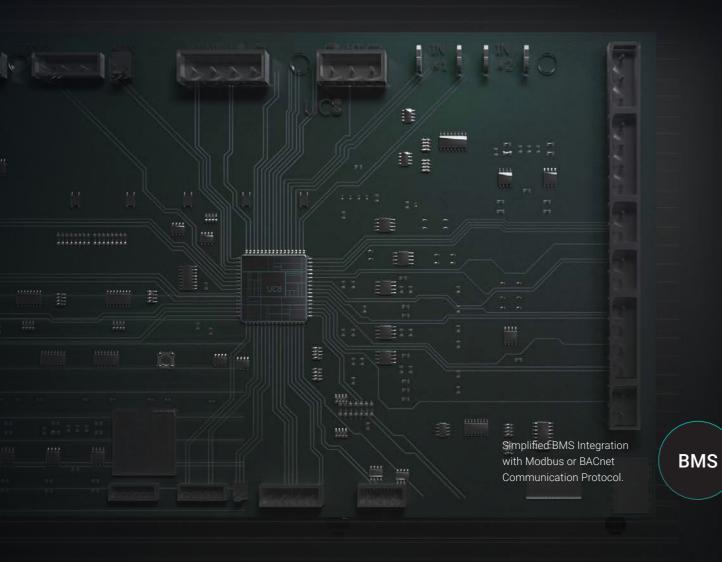


### **BMS** Connectivity

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.



# Easy Installation and Maintenance Design

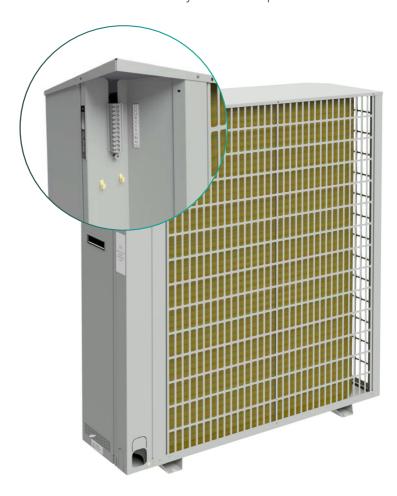
Wiring and pipe access is made easy and convenient with a new removable corner access panel for electrical and piping access.

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.



Temperzone Air Cooled Ducted Split Units

Advanced Zone Control

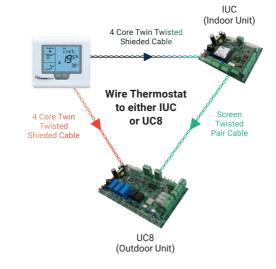
### Intuitive Unit Controllers

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)

Indoor Unit

Controller (IUC)

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

Control inputs via pluggable screw terminal blocks

Operates with 12Vdc or 24Vac thermostats

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 Modbus BMS connection
Remote start/stop input
DRED Compatible



Accepts 0-10V Signal BMS for airflow

Remote On / Off available

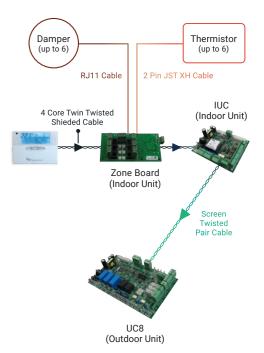
### Advanced Zone Control\*

\*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



19

Air Cooled Ducted Split Units Temperzone

#### Features

Large Capacity Ducted Split units

(37.1kW - 93.0kW)

## Large Capacity Ducted Split Features



### 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 fans that precisely adjust airflow to change in

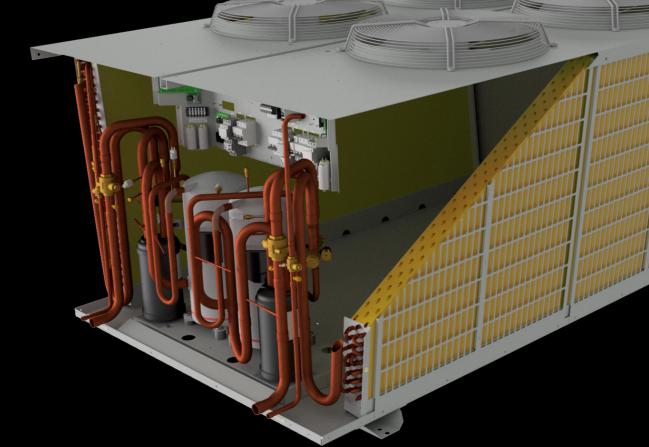


### Vertical or Horizontal

Supply Air Versatile solutions with multiple supply air options



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.



### EC Plug Fan\*

static pressure.



Air Cooled Ducted Split Units Better Performing Systems Temperzone

## 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.

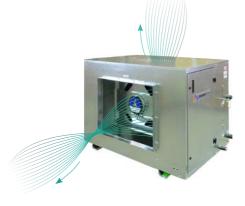
### **Dual Refrigeration Systems**

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.



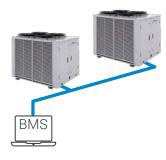
### **UC6 Service** Interface tool\*

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	<ul><li>ISD/OSA 171</li></ul>	<ul><li>ISD/OSA 211</li></ul>	<ul><li>ISD/OSA 251</li></ul>	<ul><li>ISD 351/OSA 352</li></ul>
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	Large	e Cap	acity	Rang	ge	
	Optio	ons &	Feat	ures		
Optional	o p a					
<b>—</b>						
Not Applicable						
Model	● ISD/OSA 380	ISD/OSA 465	●ISD/OSA 570	● ISD/OSA 670	●ISD/OSA 840	SISD/OSA 9
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						

24

Air Cooled Ducted Split Units **Technical Specifications** 

# Econex Inverter Range Technical Specifications



ndoor Unit	ISD 171LYX	ISD 171LYX	ISD 211LYX	● ISD 251LYX	● ISD 351LYX
Outdoor Unit	OSA 171RLSF	OSA 171RLTF	OSA 211RLTF	OSA 251RLTF	OSA 352RLTFV
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)	32 .7 (13.5 ~37.1)
Net Cooling Capacity*2	14.5	14.5	19	22.5	31.5
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)	31.3 (12.0~35.3)
EER/COP					
EER / AEER Cooling	3.15 / 3.12	3.26 / 3.23	3.15 / 3.13	3.19 / 3.17	3.14 / 3.13
COP / ACOP Heating	3.28 / 3.25	3.42 / 3.39	3.57 / 3.54	3.48 / 3.45	3.36 / 3.35
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	17 / 12 / 17
Max Run Amps - Total System (A/ph)	35 —————	15 / 11 / 11	23 / 14.5 / 15.5	24 / 15.5 / 15.5	30.5 / 21 / 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					
Туре	Foward Curved				
Motor	EC Fan				
	3823	inal Cooling Capacity at AS conditions. Cooling Capacity at AS/NZ	3	leating Capacity (reverse cyc 823 conditions. ower source includes voltag	ele units only) at AS/NZS

an allowance for indoor fan motor heat loss.

\*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	<ul><li>OSA 171RLSF</li></ul>	OSA 171RLTF	OSA 211RLTF	OSA 251RLTF	OSA 352RLTFV
Airflow (I/s)					
Nominal*5	800	800	1050	1300	1700
Installation (m)					
Max Vertical Separation	20				
Pre-charge Line Length	15				10
Max Line Length	60				90
Pipe Sizes - Suction / Liquid (mm 0D)	19 / 9.5			22 / 13	28 / 13
Finish					
Indoor Unit / Outdoor Unit	Zinc Galvanised Ste	eel / Grey Polyester F	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
Notes Continued:	Compliance: AS/NZS 3823.2:2013 Minin	num Energy Performance s		and specifications are subject to the manufacturer's ongo	

AS/NZS 60335.2.40:2019 Safety of Electrical Appliances

AS 4506:2005 Powder coat salt spray Class D High Marine

AS/NZS 61000.6.8:2021 EMC standard

development programme.

## Large Capacity Range Technical Specifications

	ECO	ECO		ECO	
ndoor 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 570RKTE
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* <sup>3</sup>	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 \	/AC 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					
Туре	Fixed x2 (Fixed + D	igital)* <sup>7</sup>	Fixed x2	Fixed + Digital	Fixed x2
	R410A				
ndoor Air Fans					
Туре	Foward Curved	Backward Curved	Foward Curved	Backward Curved	Foward Curve
Motor	EC	EC Plug	Belt Drive	EC Plug	Belt Drive
	3823 *2 Net	ninal Cooling Capacity at AS 3 conditions. Cooling Capacity at AS/NZ Illowance for indoor fan mot	3 S 3823 includes *4 F	Heating Capacity (reverse cy 3823 conditions. Power source includes voltag Supply air flow at Nominal Co	ge limits.

stated above.

	ECO	ECO		ECO	
door Unit	ISD 380KBY	ISD 380KB-P		● ISD 570-P	ISD 570KB
utdoor Unit	OSA 380RK IB(G)	OSA 380RKTB(	G) OSA 465RKTVB	OSA 570RKTBG	OSA 570RKTB
irflow (l/s)					
Nominal* <sup>5</sup>	2100	2100	2550	3100	3100
stallation (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 0D)	22 / 13			(28 or 35)*6 / 13	
Indoor Unit / Outdoor Unit	Zinc Galvanised Ste	eel / Grey Polyester	Powder Coat		
	Zinc Galvanised Ste	eel / Grey Polyester	Powder Coat		
Indoor Unit / Outdoor Unit	Zinc Galvanised Ste	eel / Grey Polyester	Powder Coat		
Indoor Unit / Outdoor Unit perating Range		eel / Grey Polyester	Powder Coat		
Indoor Unit / Outdoor Unit  perating Range  Cooling  Heating  verall Dimensions (mm)	-10°C to 52°C -15°C to 25°C	eel / Grey Polyester			
Indoor Unit / Outdoor Unit  perating Range  Cooling  Heating	-10°C to 52°C	eel / Grey Polyester		1650 x 1150 x 134	5
Indoor Unit / Outdoor Unit  perating Range  Cooling  Heating  verall Dimensions (mm)	-10°C to 52°C -15°C to 25°C	eel / Grey Polyeste	1565 x 1210 x 1200	1650 x 1150 x 1345 1480 x 1345 x 175	
Indoor Unit / Outdoor Unit  perating Range  Cooling Heating  verall Dimensions (mm)  Indoor - W x H x D  Outdoor - W x H x D	-10°C to 52°C -15°C to 25°C 2315 x 705 x 830	eel / Grey Polyeste	1565 x 1210 x 1200		
Indoor Unit / Outdoor Unit  perating Range  Cooling  Heating  verall Dimensions (mm)  Indoor - W x H x D	-10°C to 52°C -15°C to 25°C 2315 x 705 x 830	eel / Grey Polyester	1565 x 1210 x 1200		

matched to digital outdoor unit,

development programme.

## Large Capacity Range Technical Specifications

	ECO		ECO	ECO
ndoor Unit	● ISD 670-P	<ul> <li>ISD 670KB</li> </ul>	ISD 840KBX-P	<ul><li>ISD 950KBX-P</li></ul>
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* <sup>2</sup>	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	l	JC6	UC8	x2 / IUC
Compressor	Digital L Eivad	Fixed (x2)	Digital + Fixed	
Type	Digital + Fixed			
Refrigerant ————————————————————————————————————		R	410A	
ndoor Air Fans				
Туре	Backward Curved	Forward Curved	Backwa	ard Curved
Motor	EC Plug	Belt Drive	EC	C Plug
	3823 cond	ooling Capacity at AS/NZS iitions. g Capacity at AS/NZS 3823 in:	at AS/NZS	apacity (reverse cycle units or 3823 conditions. rce includes voltage limits.

an allowance for indoor fan motor heat loss.

la do o e l la it	ECO	■ ICD 670VB	ECO	ECO
Indoor Unit Outdoor Unit	<ul><li>ISD 670-P</li><li>OSA 670RKTBG</li></ul>	<ul><li>ISD 670KB</li><li>OSA 670RKTB</li></ul>	<ul><li>ISD 840KBX-P</li><li>OSA 840RKTBG</li></ul>	<ul><li>ISD 950KBX-P</li><li>OSA 950RKTBG</li></ul>
outdoor offic	OSA U/UNRIDG OSA U/UNRID		OSA 040NKTBG	OSA FJORRIDG
Airflow (I/s)				
Nominal* <sup>5</sup>	·	3600	4500	5000
Installation (m)				
Max Vertical Separation			20	
Pre-charge Line Length	·		10	
Max Line Length	6	0 / 90		90
Pipe Sizes - Suction / Liquid (mm 0D)	(28 oi	r 35)* <sup>6</sup> / 13	35	5 / 16
Finish				
Finish Indoor Unit / Outdoor Unit		Zinc Galvanised Steel /	Grey Polyester Powder (	Coat
	1	Zinc Galvanised Steel /	Grey Polyester Powder (	Coat
Indoor Unit / Outdoor Unit	1	Zinc Galvanised Steel /	Grey Polyester Powder (	Coat
Indoor Unit / Outdoor Unit	1	Zinc Galvanised Steel /		Coat
Indoor Unit / Outdoor Unit Operating Range	1	C to 52°C		
Indoor Unit / Outdoor Unit  Operating Range  Cooling	1	C to 52°C	-10°C	
Indoor Unit / Outdoor Unit  Operating Range  Cooling  Heating	1	C to 52°C	-10°C	
Indoor Unit / Outdoor Unit  Operating Range  Cooling	-10°	C to 52°C	-10°C	
Indoor Unit / Outdoor Unit  Operating Range  Cooling  Heating  Overall Dimensions (mm)	-10°	C to 52°C -15°0	-10°C C to 25°C 2220 x 1070 x 1320	to 46°C
Indoor Unit / Outdoor Unit  Operating Range  Cooling  Heating  Overall Dimensions (mm)  Indoor - W x H x D	-10°	C to 52°C -15°C 1150 x 1345	-10°C C to 25°C 2220 x 1070 x 1320	2220 x 1280 x 1320
Indoor Unit / Outdoor Unit  Operating Range  Cooling  Heating  Overall Dimensions (mm)  Indoor - W x H x D  Outdoor - W x H x D	-10°	C to 52°C -15°C 1150 x 1345	-10°C C to 25°C 2220 x 1070 x 1320	2220 x 1280 x 1320
Indoor Unit / Outdoor Unit  Operating Range  Cooling  Heating  Overall Dimensions (mm)  Indoor - W x H x D	-10°	C to 52°C -15°C 1150 x 1345	-10°C C to 25°C 2220 x 1070 x 1320	2220 x 1280 x 1320

Capacity conditions stated above.

without notice due to the manufacturer's ongoing research and development programme.





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