# DO MORE WITH LESS

### 1300 306 125 www.livezi.com.au





Livezi have been the leaders in residential multizone full temperature systems since the mid nineteen nineties.

Our 2012 product line-up represents the most sophisticated series of residential concealed ducted air conditioning systems ever released.

The typical livezi system sets a comfort target for each room of your home and unlike traditional systems it does not allow energy laden processed air to be pumped into any room once the comfort target is met.

Livezi Four Point Modulation is used to precisely match the output capacity of your air conditioning system to the heating or cooling requirement eliminating waste and improving comfort. Livezi is the only manufacturer to utilise Four Point Modulation, other leading brands modulate the refrigerant flow only resulting in large quantities of processed air being dumped into parts of your home. By taking this approach the surface temperature of the coil is often above the dew point of the air resulting in an inability to remove moisture and creating a muggy sensation within the home.

At the core of every livezi system is an advanced microprocessor driven control system providing a simple but informative interface for the home, advanced technical information for the air conditioning professional and a high end serial port for home/building automation integrators.

World-class technology developed for the Australian urban landscape.

The right technology for the right application: 180° Sine Wave Inverter Electronically Commutated Digital Scroll AC Synchronous DC Stepper

AUSTRALIAN OWNED

## **PERFORMANCE CHECKLIST**



Concealed multizone residential ducted systems are common in the United States, Spain, the Middle East and Australia. The style of architecture in these regions provide a ceiling cavity that can be used to distribute airflow throughout the home without the need for bulky wall hung units within each room. Australia's close proximity to Asia means that many ducted systems are being produced by companies that specialise in wall mount split systems, in many cases these systems have limited control over the indoor fan and often try to control the temperature of the home from one location. The checklist below will help you differentiate between each brand and make the best selection for your home:

	Leading Brand OPTIONS			
FEATURES	Brand 1	Brand 2	Livezi Inverter	Livezi Digital
Variable Refrigerant Flow	0 0 0 0		¥	¥
Variable Indoor Airflow (220 l/s ~ Full Speed)			<b>~</b>	¥
Zone Valve Modulation	0 0 0 0		¥	¥
Electronically Commutated Indoor Fan	0 0 0 0		×	<b>V</b>
Multiple sensor points for increased comfort and efficiency			<b>~</b>	¥
Individual zone temperature control			<b>~</b>	¥
Individual zone on/off control	9 9 9 9 9 9		<b>~</b>	¥
Individual room controls provide system wide access	• • •		<b>~</b>	¥
Can run on one room or the enfire home	0 0 0 0		¥	¥
Fully programmable 7 day multi-event timer for individual zones + whole system			✓	¥
Energy Saver Settings	• • • •		<b>v</b>	¥
Full Integration Ready: Home Automation, Building Automation, iPad			✓	¥
MEPS and Greenhouse Office Compliant	0 0 0 0		<b>~</b>	¥



Livezi uses the latest capacity control technologies to extend the operating envelope of our residential ducted systems to deliver an 80% increase in modulation.

## THE LIVEZI PRODUCT RANGE

The Livezi range consists of 2 series of outdoor units - horizontal discharge "Inverter compressor" and vertical discharge "Digital scroll compressor". Both the Inverter and the Digital range of products incorporate Electronically Commutated indoor fans to provide superior energy performance, not only at the snapshot condition required for Minimum Energy Performance Standard (MEPS) compliance, but right through the operating envelope.

### SELECTING THE RIGHT TECHNOLOGY

Traditionally Inverter technology has not been suited to concealed multizone ducted applications due to its inability to reduce capacity below 40% (over 80% of operating profile). Traditional systems overcome this problem by running the indoor fan at high flow rates and dumping excess air into part of the home. This strategy waists energy, sacrifices comfort and often results in the coil temperature being higher than the dew point of the air creating a muggy feeling within the home.

### LIVEZI INVERTER

Livezi couples Inverter compressor technology with Electronically Commutated fan technology to expand the operating envelope, allow the indoor airflow to match the way you live, reduce energy consumption and keep control of humidity. Livezi Inverter systems are designed specifically for single phase residential applications.

### **LIVEZI DIGITAL**

Livezi Digital systems have been specifically designed for larger homes. Digital scroll compressors provide greater resolution at low load providing a solution that can operate one room or many. Larger capacity means greater heat removal, it is for this reason that the Livezi Digital outdoor unit adapts a vertical discharge configuration.





**Inverter Outdoor Unit** 

**Digital Outdoor Unit** 

### CONNECT

At Livezi we recognise that your home is made up of rooms and your family is made up of individuals.

Livezi Connect is a flexible control platform that can be tailored to suit the needs of each individual within your family. Livezi Connect provides the choice of flow rate or temperature comfort targets (set-point) for each room.

If your preference is to set the flow rate you can adjust the position of the aerofoil zone from  $0\sim100\%$ . Should you prefer to have your room at a constant temperature a temperature target can be set.

Livezi Connect includes a number of energy settings that can be altered so you will be able to find the right compromise between comfort and conservation for your family.



Single sensor system



When Livezi Connect is operating with a temperature target in each room it uses a proprietary algorithm we call Airstream Mapping.

Livezi Connect is intelligent enough to understand the size of each room, how far from target the temperature is and what the cooling or heating capacity of the supply air is. It then calculates the precise requirement for each room and creates an Airstream Map to make sure that your home gets to target as fast as possible with the lowest amount of energy consumed.

Livezi Connect is the only system to use Four Point Modulation to deliver unparalleled p erformance.



### **CHATTERBOX**

Livezi recognises that the future home will include many technologies improving comfort, reducing energy use, improving health, providing services and enhancing the home experience.

At Livezi we believe that manufacturers of these technologies should allow the home owner the option of managing and controlling their home through a device they use everyday.

Livezi Chatterbox is an example of how advanced technology can be used to simplify rather than complicate.

Livezi Chatterbox provides a gateway for smart devices. If you would like to control your surroundings from your smart phone, tablet, PC or home automation system, a Livezi Chatterbox solution can be tailored to meet your exact requirements.

Livezi Chatterbox is integration ready We talk to anyone!





### LIVEZI CONTROL OPTIONS TO SUIT YOUR LIFESTYLE.

<b>*</b> 1000	456.3 kW	1,372.2 kw
		70.00
	87.4 kW	252.1 kW
	31.9 kW	90.6 kw
	176.1 kW	510.9 kw
		Vivezi

Air conditioning a home is an energy intensive task. We believe that the first step to reducing energy use is to make sure that your family understand where it is being used.

Each family decides to save energy in different ways, some will alter the setpoint of their refrigerator, some will lower the temperature of their hot water, some will not use the dryer. The main thing is that once you know where you are using energy and in what intensity you can decide where you would like to conserve.

Livezi chatterbox comes with built in energy monitoring for your air conditioner and additional channels for lighting, hot water, refrigerator, washing machine/dryer, pool pump and general power.



## YOUR SYSTEM



#### **SUPPLY AIR FLEXIBLE DUCT**

Supply air flexible ducts channel the conditioned air to each room or zone. Supply air ducting must be sufficiently insulated to a minimum value of RT1, to avoid any condensation forming inside the ceiling cavity. A higher insulation value of RT1.5 will provide greater energy efficiency of the system.



#### **AEROFOIL ZONE VALVE**

Livezi Four Point Modulation continuously adjusts the airflow rate to individual rooms eliminating over processing. This process also provides additional capacity to rooms where the target has not yet been met.



#### LIVEZI CONNECT CONTROL MODULES

The Livezi Connect control modules constantly monitor the demand from the living space, generating the Airstream Map.



#### **OUTDOOR UNIT**

Livezi Four Point Modulation continuously adjusts the refrigerant flow rate to the indoor heat exchanger to ensure heat transfer and humidity control is maintained.



#### LIVEZI CONNECT INTERFACE

Livezi provide a range of control options from the Retro through to Chatterbox.

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#### **SUPPLY/RETURN AIR PLENUMS**

When you purchase a Livezi you have purchased a system that delivers significant energy savings in a residential home, it is important that these gains are not lost by duct gain, leakage and infiltration. Livezi dealers make sure that the duct system is airtight and meets the BCA standard for your climate zone.

#### **AIR HANDLING UNIT (INDOOR UNIT)**

The air handling unit houses the indoor heat exchanger and the supply air fan. The air handling unit supplies the conditioned air through the supply air duct system into each zone. Modern systems incorporate variable speed fans that allow for a reduction in energy usage when full capacity is not required.

#### **RETURN AIR GRILLE**

The return air grille must be of adequate size to allow for the silent transfer of air from the house into the system. An integral filter cleans the air, enhancing indoor air quality for the occupants. Further, the filter protects the heat exchange coil from dust build up, which over time can reduce efficiency.



#### SUPPLY AIR DIFFUSERS

Supply air diffusers distribute the conditioned air into each room or zone in the home. It is imperative that the diffuser is shaped and angled to distribute air to all corners of the room, dispersing air evenly whilst avoiding direct angling towards occupants or sensors.

## LIVEZI 180° DC INVERTER

SYSTEM MOD	DEL	H-IV-7	H-IV-11	H-IV-15
INDOOR UNI	r Model	H-VAV-7 H-VAV-11		H-VAV-15
OUTDOOR UN	NIT MODEL	H-INV-7	H-INV-11	H-INV-15
Nett Cooling Cap	acity (kW)	7	10.5	15.2
Nett Heating Capa	acity (kW)	7.8	11	16.5
Air Flow High (l/	s)	500	880	1178
Air Flow Low (l/s	5)	220	220	220
ELECTRICAL	DATA	ONE PHASE	ONE PHASE	ONE PHASE
Power Supply		240 Volts ~ 1 Phase ~ 50 Hz	240 Volts ~ 1 Phase ~ 50 Hz	240 Volts ~ 1 Phase ~ 50 Hz
Recommended of	circuit breaker size (A)	20	25	32
Electrical Input C	ooling (kW)	2.09	3.26	4.52
EER		3.35	3.2	3.36
Electrical Input H	eating (kW)	2.17	3.2	4.98
COP		3.59	3.44	3.31
OUTDOOR SC	UND LEVEL			
Sound Pressure	dB(A)	58	62	64
DIMENSIONS	5			
Outdoor Unit	Length (mm)	895	990	940
	Width (mm)	313	354	360
	Height (mm)	862	966	1245
	Weight (kg)	70	79	122
Indoor Unit	Length (mm)	856	1200	1400
	Width (mm)	808	808	808
	Height (mm)	400	400	400
	Weight (kg)	51	71	84
PIPING SPEC	IFICATIONS			
Maximum Pipe	Length (m)	25	30	50
Maximum Vertic	al Length (m)	10	20	25
Pipe Sizes (mm)	Gas	15.9	15.9	19
	Liquid	9.5	9.5	9.5
Pre-Charge Pipe	e Length (m)	15	15	15
Compressor Sof	t Starter	YES	YES	YES
Supply Air Plenu	ım (mm)	305 x 225	905 x 255	1105 x 255
Return Air Plenu	ım (mm)	515 x 345	1000 x 345	1200 x 345

## LIVEZI DIGITAL

SYSTEM MOD	EL	H-DV-18	H-DV-20	H-DV-23
INDOOR UNIT	MODEL	H-VAV-18	H-VAV-20	H-VAV-23
OUTDOOR UN	IT MODEL	H-DIG-18	H-DIG-20	H-DIG-23
Nett Cooling Capa	city (kW	18.0	20.0	22.9
Nett Heating Capa	city (kW)	18.5	20.6	23.5
Air Flow High (l/s	)	1180	1310	1440
Air Flow Low (l/s)	)	220	220	220
ELECTRICAL I	DATA	ONE PHASE	THREE PHASE	THREE PHASE
Power Supply		240 Volts ~ 1 Phase ~ 50 Hz	415 Volts ~ 3 Phase ~ 50 Hz	415 Volts ~ 3 Phase ~ 50 Hz
Recommended ci	rcuit breaker size (A)	40	20	25
Electrical Input Co	ooling (kW	5.55	6.20	7.30
EER		3.24	3.23	3.14
Electrical Input He	ating (kW)	5.00	5.60	6.50
СОР		3.66	3.64	3.62
OUTDOOR SO	UND LEVEL			
Sound Pressure of	dB(A)	65	65	65
DIMENSIONS				
Outdoor Unit	Length (mm)	1320	1320	1320
	Width (mm)	620	620	620
	Height (mm)	975	975	975
	Weight (kg)	149	150	151
Indoor Unit	Length (mm)	1400	1400	1400
	Width (mm)	808	808	808
	Height (mm)	400	400	490
	Weight (kg)	84	85	89
PIPING SPECI	FICATIONS			
Maximum Pipe	Length (m)	60	60	60
Maximum Vertica	l Length (m)	20	20	20
Pipe Sizes (mm)	Gas	19	22.2	25.4
	Liquid	9.5	12.7	12.7
Pre-Charge Pipe	Length (m)	15	15	15
Compressor Soft	Starter	YES	Optional	Optional
Supply Air Plenur	m (mm)	1105 x 255	1105 x 255	740 x 305
Return Air Plenur	m (mm)	1200 x 345	1200 x 345	1205 x 410

## LIVEZI PEACE OF MIND WARRANTY

There are many components that make up a complete ducted air conditioning installation. Plant, zoning system, duct work, supply air diffusers and installation labour. Livezi provides a comprehensive 5 year warranty on not only the plant but also the zoning system including motorised dampers.

This ensures that all the electronic and mechanical components of the system are covered.

TO FIND OUT MORE ABOUT OUR WARRANTY POLICY VISIT http://www.livezi.com.au/pages/care.html



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