



an EnerSys Company

COOLING EQUIPMENT PRODUCT CATALOGUE



VERSION 1.0

ISSUE DATE: 22 MARCH 2016

SUMMARY:

THIS DOCUMENT LISTS NETWORK BUILDING COOLING EQUIPMENT COMPONENTS OFFERED BY ICS INDUSTRIES.

About Us

ICS Industries offers a range of unique products for the support, maintenance and upgrade of existing equipment infrastructure and ordinary stand-alone solutions. Access to all parts and equipment is available through our Shop Division.

CONTACT DETAILS

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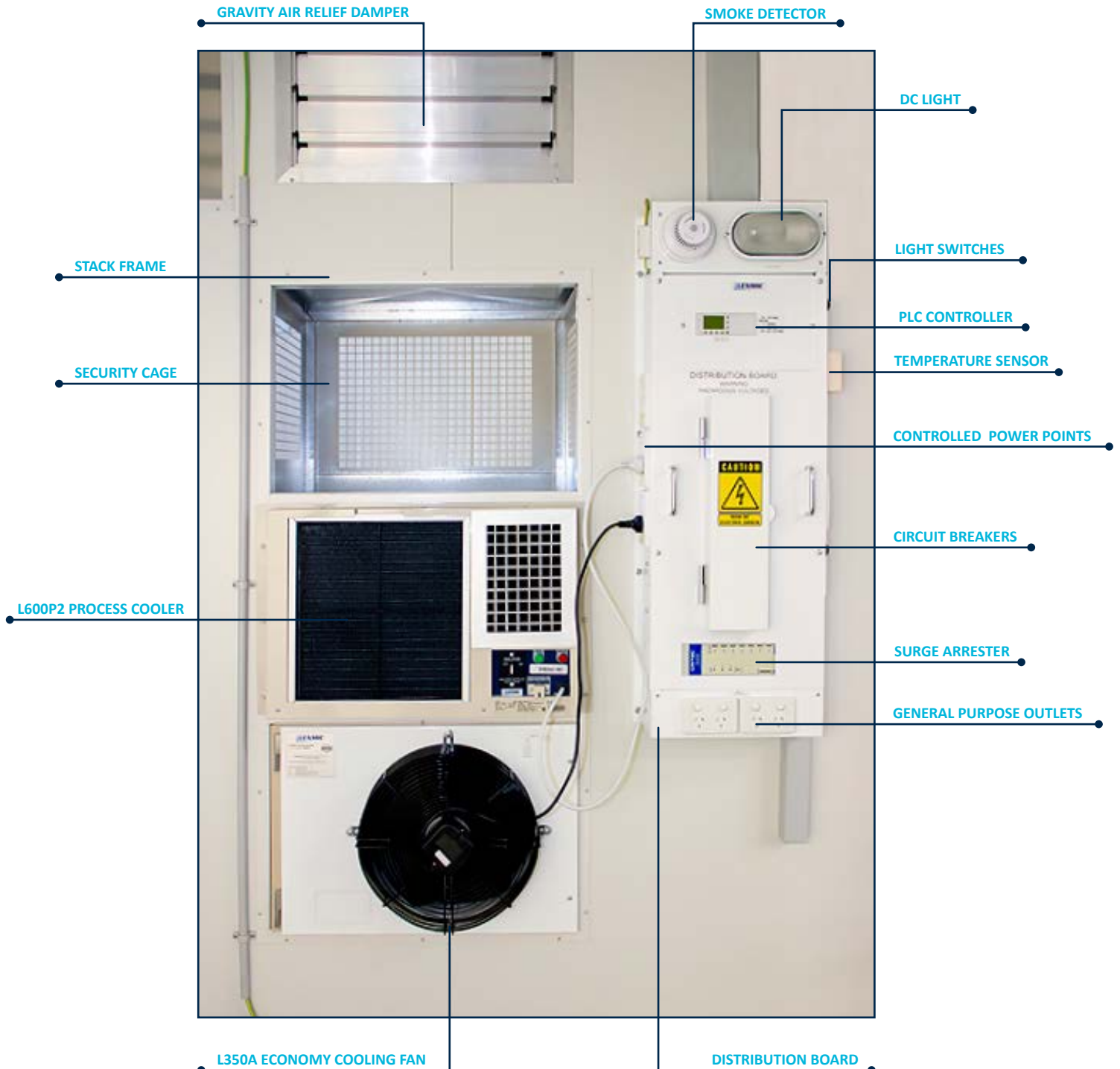
Shop Sales & Admin Support: Sue Ings and Hai To

SHOP OPERATING HOURS (MON-FRI)

Office: 8:30am - 4:30pm AEDT
Warehouse: 8:30am - 3:30pm AEDT

Modular Cooling System

Overview



Cooling Equipment

Air Conditioning 240V-AC

L600P2 Process Cooler

ICS PART NO:

VAX0091

- Operates as a slave unit to cooling management systems.
- Supersedes MAY-180, MAY-220 and L600P.
- 6.1kW cooling capacity, 15A mains supply.
- Integrated alarm and wired control options.
- 24V-DC operating option.
- Return Air Temp (RAT) sensor.
- Indoor Coil Temp (ICT) sensor.
- DIP switches to allow bypassing of High Pressure Switch (HPS) and Return Air Temp (RAT).
- Expanded PCB with more surface mounted hardware and less wiring.
- PCB mounted RJ45 socket, Run and Fault Code lights.



Characteristics		Units	Cooling Only
Capacity (4)		Btu/hr	20470
		w	6000
Power input (4)		w	1920
EER (Cooling) or COP (Heating) (4)		WIW	3.13
Power supply		V	220-240
		Ph	1
		Hz	50
Rated current		A	8.8
Starting current		A	≤15
Recommended Circuit Breaker		A	Motor Protection 20
Evaporator fan type & quantity			Centrifugal x 1
Evaporator fan speeds	H/M/L	RPM	960
Evaporator air flow (1)	H/M/L	m3/hr	800
Evaporator sound power level (2)	H/M/L	dB(A)	80
Evaporator sound pressure level (3)	H/M/L	dB(A)	60
Condenser sound power level (2)	H/M/L	dB(A)	80
Condenser sound pressure level (3)	H/M/L	dB(A)	70
Dimensions (without frame)	WxHxD	mm	660x450x690
Net Weight		kg	70
Package dimensions	WxHxD	mm	740x510x795
Packaged weight		kg	75
Refrigerant type			R410A
Standard charge		kg	1.70
Outdoor Ambient Temperature Operating Range		Celsius	10° - 46°

(1) Airflow in ducted units; at nominal external static pressure.

(2) Sound power in ducted units is measured at air discharge.

(3) Sound pressure level measured at 1-metre distance from unit.

(4) Rating conditions in accordance to ISO 5151 and ISO 13253 (for ducted units).

Conditions:
Nominal cooling capacity: 10/00 (27/19//35/24)

Cooling Equipment

Air Conditioning 240V-AC

L600P2 Dip Switch Settings

Status	DS1	DS2	DS3	DS4
Factory Default Setting	OFF (up)	OFF (up)	OFF (up)	OFF (up)
OFF (up)	HPS engaged	RAT engaged	spare	spare
ON (down)	HPS bypassed	RAT bypassed	spare	spare



Run Light Operation

Status	Comments	RUN Light
OFF		OFF
Turned ON	When Compressor starts the ICT sensor reading is recorded by a Program Chip on the PCB [ICTcompon].	OFF
Running	Every 30sec after activation the ICT sensor reading is recorded [ICTactual].	OFF
Running	When [ICTactual] is 5° or more lower than [ICTcompon] then RUN light is activated.	ON
Turned OFF	[ICTcompon] & [ICTactual] records are cleared and the RUN program is reset.	OFF

Fault Light Operation

Status	Comments	Fault Light
Running	Under normal operation the Fault Code indicator light is not illuminated.	OFF
Not Running	If the Fault Code light is illuminated then this can be due to: <ul style="list-style-type: none"> HPS has activated RAT is shorted or disconnected (not bypassed) ICT is shorted or disconnected 	ON

Cooling Equipment

Air Conditioning 240V-AC

AC-INV SPLIT MHI 3.5KW & 5.0KW



			ICS PART NO: VAX0044	ICS PART NO: VAX0050
MHI Model:			SRK34ZMA-S	SRK50ZMA-S
Capacity	Cooling	kW	3.3	5.0
EER			3.79	3.23
Sound Level	Outdoor	dB(A)	60	61
Net Weight	Indoor	kg	9.5	9.5
	Outdoor		35	41
Refrigerant R410A	Quantity	kg	1.15	1.35
	Pre Charged To Pipe Length	m	15	

AC-INV SPLIT MHI 6.3KW & 7.1KW



			ICS PART NO: VAX0088	ICS PART NO: VAX0089
MHI Model:			SRK63ZMA-S	SRK71ZMA-S
Capacity	Cooling	kW	6.3	7.1
EER			3.58	3.29
Sound Level	Outdoor	dB(A)	62	66
Net Weight	Indoor	kg	16	
	Outdoor		57	
Refrigerant R410A	Quantity	kg	1.8	
	Pre Charged To Pipe Length	m	15	

AC-INV SPLIT MHI 8.0KW



			ICS PART NO: VAX0108
MHI Model:			SRK80ZMA-S
Capacity	Cooling	kW	8.0
EER			3.40
Sound Level	Outdoor	dB(A)	69
Net Weight	Indoor	kg	16
	Outdoor		63
Refrigerant R410A	Quantity	kg	2.2
	Pre Charged To Pipe Length	m	15

Cooling Equipment

Air Conditioning 48V-DC

DC Split System 48V 4.0kW

ICS PART NO:

VAX0140

The split system is a 4KW, 48V-DC split system air conditioner used to control the temperature of a base station. Its compressor has multistage speed regulation function, ensuring small temperature fluctuation within the base station, low frequency and excellent energy saving.



Parameter		DC40	
Dimensions, Weight & Mount		Indoor Unit	Outdoor Unit
External Dimensions (Height x Width x Depth)	mm	295 x 900 x 215	700 x 870 x 310
External Dimensions (Height x Width x Depth) With Flange		\	\
Weight	kg	13	50
Mounting Method		Wall mounted	Wall/Floor Mounted
Application		Indoor	Outdoor
Environmental Protection & Performance			
Working Temperature Range	C°	-55 to +55	-55 to + 55
Protection from Dust, Water and Wind Driven Rain		\	IP X5
Refrigerant		R134a	R134a
RoHS Compliant		Yes	Yes
Cooling/Heating Capacity			
Cooling Capacity @ L35/L35	W	4330	
Heating Capacity (Optional)		\	
Power Consumption			
Power Consumption @ L35/L35	W	1042	
Rated Current @ L35/L35	A	21.70	
Airflow			
Internal Airflow	m³/h	1100	/
Power Supply			
Power Supply Range	V, DC	-44 ~ -58	
Rated operating voltage - Controller	V, DC	-48	
Rated operating voltage - Cooling/Heating System	V, DC	-48	
Key Components			
Controller		Envicool	Envicool
Fans		Telecom Level	Telecom Level
Compressor		Telecom Level	Telecom Level
External Materials			
Sheet Metal Parts (Optional)		HIPS	SGCC + Powder Painting
Colour (Optional)		White	RAL 7035

Cooling Equipment

Fresh Air Cooling

ECONOMY COOLING FAN L350A

- 240V-AC Fan motor works within a range of 220-240 volts
- High capacity air-flow, positive pressure cooling
- Low power consumption, 135 watts, very efficient
- Large total area-mass filters delivering long intervals between filter maintenance

* Replacement filter kits available – ICS Part No: VAK0005



ICS PART NO:

VAM0001

**Product flyer available*

ECONOMY COOLING FAN L350A-DC

- 48V-DC Fan motor works within a range of 36-57 volts
- Low power consumption, 86 watts, very efficient
- High capacity air-flow, positive pressure cooling
- Large total area-mass filters delivering long intervals between filter maintenance

* Replacement filter kits available – ICS Part No: VAK0005



ICS PART NO:

VAM0004

**Product flyer available*

L400A DOOR INCLUDING 400MM FAN

- Used to increase capacity of existing L350A



ICS PART NO:

VAM0007

ECONOMY COOLING FAN L350A-VERTICAL

- Vertical mounting
- 240V-AC operation
- Fresh Air fan with Very Large Filter Area

* Replacement filter kits available – ICS Part No: VAK0005



ICS PART NO:

VAM0002

ECONOMY COOLING FAN WITH 48V TO 240V-AC INVERTER

- 240V-AC Fan motor works within a range of 220-240 volts
- High capacity air-flow
- 48V-DC inverter to 240V-AC – ICS Part No: VAX0026



ICS PART NO:

VAK0006

Cooling Equipment

Fresh Air Cooling

MODIFIED 48V-DC INVERTER MODULE

- Used with Kentrox Control Technology Solution



NO IMAGE
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ICS PART NO:

VAX0092

L350A REPLACEMENT FILTER KIT

- Contains full set of replacement filters for L350A
- Moisture resistant cardboard frame
- Camfill Farr Filters



ICS PART NO:

VAK0005

FAN ADAPTER KIT FOR FSU404 TO L350

- Designed to quickly and easily replace an existing FSU404 DC Emergency Fan with a standard Lenmic L350 fan
- Includes:
 - 240V-AC x Ø 350mm Axial Fan
 - Camfil Farr Filters



ICS PART NO:

VAK012

REPLACEMENT FAN MOTOR FOR L350A

- Fan AC Axial 350 / 240V AC
- Replacement fan motor shroud for L350A Economy Cooling Fan
- Four point mounting for easy install



ICS PART NO:

VAX0034

MOTORIZED DAMPER

- Suitable for 600mm x 300mm opening



ICS PART NO:

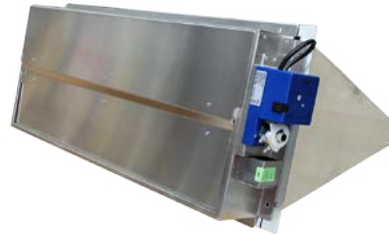
VAM0151

Cooling Equipment

Fresh Air Cooling

ECO CONTROLLED AIR RELIEF VENT

- Motorised damper suitable for 4U + AR stack frame



ICS PART NO:

VAM0150

AIR DAMPER

- 3 x Free-Moving Swing Louvres (gravity close)
- Operated by Exhaust Draft
- Suitable for 300mm x 600mm opening

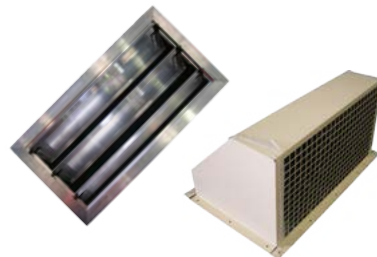


ICS PART NO:

VAX0015

HOOD & NON-RETURN DAMPER

- Kit Includes:
1 x VAX0015 and 1 x VAX0018
- Available in 3 colours:
PB - Paper Bark
PE - Pale Eucalypt
SM - Surf Mist



ICS PART NO:

VAK0003

HOOD AIR OUTLET T-TYPE

- 415mm (H) x 645mm (W) x 330mm (D)
- Available in 3 colours:
PB - Paper Bark
PE - Pale Eucalypt
SM - Surf Mist

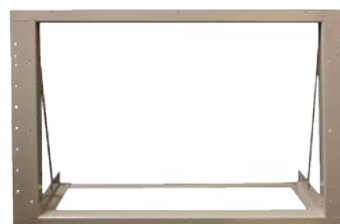


ICS PART NO:

VAX0018

L600P MULTIWALL MOUNTING FRAME (SINGLE)

- Suitable for L350 Fans and L600P Process Coolers
- Wide flange allowing install to brick and timber walls
- Support base to aid installation



ICS PART NO:

VAX0094

Cooling Equipment

Stackframes & Security Cages

L600P MOUNTING FRAME (SINGLE)

- Single mounting frame for L600P
- For installation of L600P and L350A Economy Cooling Fan



ICS PART NO:

VAX0043

L600P SECURITY CAGE (SINGLE)

- Single security cage for L600P, also suitable for L350 Fans
- Supplied flat packed (*assembly required*)
- Available in 3 colours:
 - PB - Paper Bark
 - PE - Pale Eucalypt
 - SM - Surf Mist



ICS PART NO:

VAX0042

L600P MOUNTING FRAME (2-STACK)

- Two-stack mounting frame suitable for L600P
- For installation of L600P and L350A Economy Fan

* Blanking plate available



ICS PART NO:

VAX0032

L600P SECURITY CAGE (2-STACK)

- Two-stack security cage for L600P, also suitable for L350 Fans
- Supplied flat packed (*assembly required*)
- Available in 3 colours:
 - PB - Paper Bark
 - PE - Pale Eucalypt
 - SM - Surf Mist



ICS PART NO:

VAX0031

L600P MOUNTING FRAME (3-STACK)

- L600P 3-stack mounting frame
- For installation of L600P and L350A Economy Cooling Fan

* Blanking plates available (x 2)



ICS PART NO:

VAX0007

Cooling Equipment

Stackframes & Security Cages

L600P SECURITY CAGE (3-STACK)

- L600P security cage, also suitable for L350 Fans
- Supplied flat packed (*assembly required*)
- Available in 3 colours:
 - PB - Paper Bark
 - PE - Pale Eucalypt
 - SM - Surf Mist

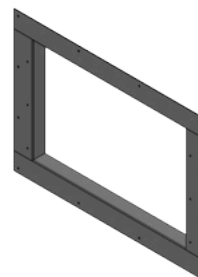


ICS PART NO:

VAX0008

L600P MOUNTING FRAME / SINGLE 80MM TRIM

- To be used in older SCAX huts with hollow wall frames
- Single 80mm trim



ICS PART NO:

VAX0043A

L600P 4U + AR WALL CHASSIS

- Internal and external 4U + AR stackframe
- For installation of L600P and L350A Economy Cooling Fan



ICS PART NO:

VAX0103

L600P 4U + AR SECURITY CAGE

- L600P security cage
- Also suitable for L350A Economy Cooling Fans
- Available in 3 colours;
 - PB - Paper Bark
 - PE - Pale Eucalypt
 - SM - Surf Mist



ICS PART NO:

VAX0104

L600P 3U TO 4U + AR KIT

- Extends 3U security cage to 4U
- Available in 3 colours;
 - PB - Paper Bark
 - PE - Pale Eucalypt
 - SM - Surf Mist



ICS PART NO:

VAX0106

Cooling Equipment

Stackframes & Security Cages

SPLIT AIR-CON CAGE

- Security Cage designed to suit 6.3kW and 7.1kW SRK Series Mitsubishi Split Air-con
- Galvanised heavy duty steel construction



ICS PART NO:

HAX0062

SPLIT AIR-CON CAGE

- Security Cage designed to suit 6.3kW and 7.1kW SRK Series Mitsubishi Split Air-con
- Available in 3 colours;
PB - Paper Bark
PE - Pale Eucalypt
SM - Surf Mist



ICS PART NO:

HAX0038

SPLIT AIR-CON CAGE

- Security Cage designed to suit 8kW SRK Series Mitsubishi Split Air-con
- Available in 3 colours;
PB - Paper Bark
PE - Pale Eucalypt
SM - Surf Mist



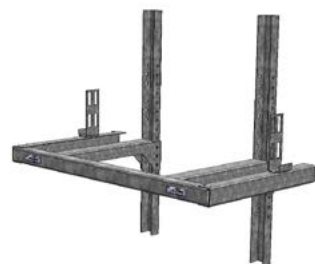
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ICS PART NO:

HAX0096

AIR-CON ODU WALL MOUNT FRAME

- Manufactured from rustproof galvanised steel
- Designed for use with Mitsubishi Heavy industries (MHI) SRK series air-conditioner outdoor units
- Designed for use with either a HAX0062 Galvanised Single Cage or a powder coated HAX0038 or HAX0096 cage



ICS PART NO:

HAX0260

BLOCKOUT PANEL

- Block out panel for L600P and L350A
- Covers any standard ICS stackframe hole



ICS PART NO:

VAX0011

Cooling Equipment

Blockout & Cooling Management

BLOCKOUT WALL KIT

- Pair of Sheets (50cm x 100cm) with 25mm depth of insulation.
- Supplied as 2 x sheets, colour of inside sheet is off white. Outside sheet available in 3 colours:
PB - Paper Bark
PE - Pale Eucalypt
SM - Surf Mist
- Wall infill for Email Weatherwall air-conditioners



ICS PART NO:

VAK0001

L600P MECHANICAL THERMOSTAT POWER SUPPLY CONTROL MODULE

- Basic Thermostat Control for operating one Process Cooler in an Enclosure
- Operates L600P in absence of PLC Control
- Option to wall mount



ICS PART NO:

EFM0004

L350A CONTROL MODULE FOR LS1

- 10A, 24V-DC control contactor
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors
- Fitted into an internal tray in the L350A fan or mounted to the wall close to the supply outlet



ICS PART NO:

VAX0098

L350A REMOTE MODULE RM1A

- L350A Remote module RM1A
- 10A, 24V-DC control contactor
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors
- Fitted into an internal tray in the L350A fan or mounted to the wall close to the supply outlet



ICS PART NO:

VAM0120

L350A REMOTE MODULE RM1B

- 10A, 24V-DC control contactor
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors
- Fitted into an internal tray in the L350A fan or mounted to the wall close to the supply outlet
- External temperature sensor probe



ICS PART NO:

VAM0121

Cooling Equipment

Cooling Management

L350A REMOTE MODULE RM1C

- Suitable for A281_3A & A281_3D
- Includes External Temp Sensor and LoopOut
- Used to make / break main supply to a room air conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.



ICS PART NO:

VAM0122

L350A REMOTE MODULE RM1D

- Includes External Temp Sensor, LoopOut and CT
- Used to make / break main supply to a room air conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors
- Includes Current Sensor to provide fan run signal to PLC



ICS PART NO:

VAM0123

L350A REMOTE MODULE RM1E

- Includes External Temp Sensor, Loopout, CT and Inverter
- Designed to interface with LS1 or LS4 Control Managers



ICS PART NO:

VAM0124

L350A REMOTE MODULE TO SUIT TANDEM FANS

- Remote module to suit Tandem Fans c/w Remote Ext TS
- 10A, 24V-DC control contactor
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors
- Able to control up to 2 x VAK0012 L350A Fans



ICS PART NO:

VAM0126

240V-15A CONTROL MODULE RM3A, WALL MOUNT

- Used to make / break main supply to a room air conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.
- Wall Mount



ICS PART NO:

VAM0130

Cooling Equipment

Cooling Management

240V-15A CONTROL MODULE RM3B, WALL MOUNT

- Includes Current Sensor to provide AC run signal to PLC
- Used to make / break main supply to a room air conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.



ICS PART NO:

VAM0131

240V-20A CONTROL MODULE RM3C, WALL MOUNT

- Used to make / break main supply to a room air conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.



ICS PART NO:

VAM0132

RM3D & RM3C & CURRENT SENSOR

- 240V-20A Control Module RM3D, wall mounted
- Includes Current Sensor to provide AC run signal to PLC
- Used to make / break main supply to a room air-conditioner under the control of the Alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.



ICS PART NO:

VAM0133

24V-DC CONTROL MODULE RMS1 FOR MHI SPLIT A-C

- Wall Mount for MHI Split-AC
- Connects to an LS1 or an LS4 via a CAT5 Cable with RJ-45 connectors
- Contains MHI control module to start/stop air-conditioner via CNT Controls for elegant control



ICS PART NO:

VAM0134

240V-20A CONTROL MODULE, RMS2 FOR NON MHI SPLIT

- Wall Mount for NON MHI Split
- Used to make / break main supply to an air conditioner under the control of the alpha 2 PLC program
- Connects to the LS1 or LS4 via a Cat5e patch cable with RJ-45 connectors.



ICS PART NO:

VAM0135

Cooling Equipment

Cooling Management

L350A-DC REMOTE MODULE RM4A

- Includes External Temp Sensor and Loopout
- 48V-DC Module
- Wall mounted
- Controls ICS 48V-DC L350A-DC Fan, ICS Part No: VAM0004



ICS PART NO:

VAM0140

L350A-DC REMOTE MODULE RM4B

- Includes External Temp Sensor, LoopOut and CT



ICS PART NO:

VAM0141

INVERTER 48V-DC 240VAC AUTO CHANGE OVER - WALL MOUNT

- Suitable for wall mounting directly under an ICS Distribution Board or other clear spaces
- Designed to operate L350A Fan in mains failure situations
- Suitable with eJV Cooling Systems operating A2E81_3 & A2E82_3 PLC software programs



ICS PART NO:

VAX0120



an EnerSys Company

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