

FEATURES / BENEFITS

- Low voltage design simplifies the installation process.
- Integrate Daikin VRV, SkyAir, ducted and duct-free Split Systems with third party building automation systems supporting the LonTalk® protocol.
- Gateway architecture delivers a fully scalable control interface for up to 64 Daikin indoor unit groups.
- XIF configuration file available at www.DaikinAC.com
- On board T1-T2 input enables forced shut-off of connected VRV air conditioning units.
- Combine with Daikin DCS302C71 Centralized Controller for low cost control backup in the event of BMS failure.
- Combine with Daikin DCS601C71 I-Touch Controller to implement advanced control features including system scheduling and temperature setpoint limitations.



Power:

Power supply (externally supplied)	24 VAC, 60Hz ±10%
Power consumption	5 watts maximum

Operating conditions:

Surrounding temperature	14° F to 104° F
Storage temperature	5° F to 122° F
Humidity (% Relative)	0% to 95% (non-condensing)
Dimensions (H x W x D)	10-1/4" x 6-5/8" x 1-15/16"
Weight / Material	3.3 lbs / Stainless Steel
Maximum number of systems	10 systems
Maximum number of indoor units	64 groups / 128 indoor units
Temperature Unit	Degrees Celsius (<i>Fixed</i>)

Connectivity:

DIII-Net x 1	VRV equipment communication
FT-X1 (78 Kbps Free Topology)	Interface to LonWork® network
T1-T2 Input	Forced off function
D-SUB 9 Pin Female Serial	Service and commissioning use

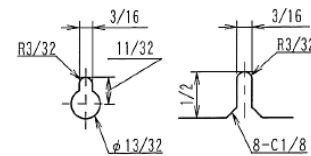
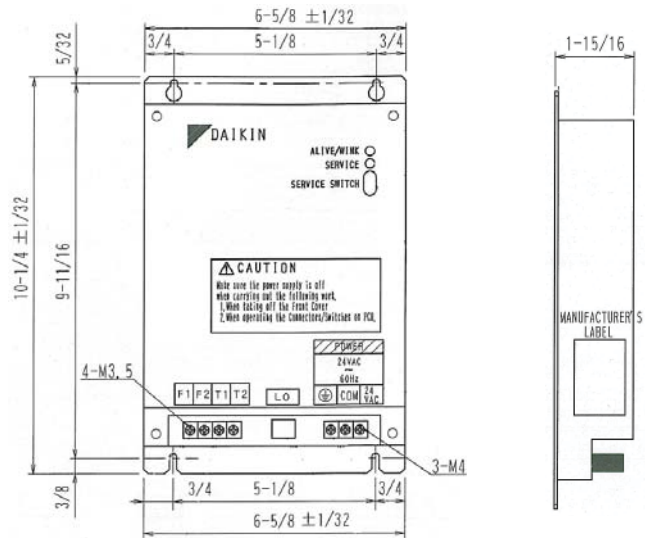
Options:

KRP928B2S	RA Interface Adapter for DIII-Net Multi-zone controls
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Certifications:

FCC Part 15 Subpart B Class A

Configuration and engineering for each project are necessary.



SPECIFICATIONS OF COMMUNICATIONS CABLING (DIII-NET)

TYPE	2-conductor, stranded, non-shielded copper cable / PVC or vinyl jacket
SIZE	AWG18-2
TOTAL LENGTH	Maximum wiring distance between units: 3,280 ft Maximum wiring length: 6,550 ft

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Daikin air conditioner monitoring and control points accessible through the DMS504C71

Check the appropriate box indicating the required integrated points for this project.

Function		Description
Monitoring points	ON / OFF Status	Monitors the start / stop status of the indoor unit.
	Operation Mode Status	Monitors whether the indoor unit is in the cooling, heating or fan mode.
	Temperature Setpoint	Reports the current temperature setpoint of the indoor unit.
	Room Temperature (Note 1)	Reports the current return air or room temperature of the indoor unit. (Note 1)
	Airflow rate	Reports the current fan speed setting of the indoor unit.
	Filter Indication Status	Reports the status of the filter maintenance icon on the indoor unit remote controller.
	Error Status	Monitors the indoor unit malfunction status.
	Error Code	Reports a specific malfunction code for an indoor unit in alarm state.
	Thermo Status	Reports whether the indoor unit is demanding heating or cooling capacity or if it is in a satisfied state.
	Forced Thermostat Off Status	Reports whether the indoor unit is forced to a satisfied state.
	Remote Controller ON / OFF Restriction Status	Indicates the restriction status of the indoor units remote controller ON / OFF button.
	Remote Controller Operating Mode Restriction Status	Indicates the restriction status of the indoor units remote controller operation mode button.
	Remote Controller Temperature Setpoint Restriction Status	Indicates the restriction status of the indoor units remote controller temperature setpoint buttons.
	System Forced OFF Setting Status	Monitors the system forced off status for all indoor units connected to the Lon gateway.
	Sub-group Control Operation Restriction Setting Status	Monitors the network variable input status for permission / prohibition of centralized control devices on the DIII-Net bus.
A/C Communication Status	Monitors the communication status of the indoor unit to the DIII-Net.	
Operation, configuration, and control points	ON / OFF Command	Starts and stops the indoor unit. (Note 2)
	Operating Mode	Sets the cooling / heating / ventilating / auto mode for the indoor unit. (Note 2)
	Temperature Setpoint	Commands the temperature setpoint for the indoor unit. (Note 2)
	Airflow Rate (Fan Speed)	Sets the fan speed (high, low) for the indoor unit. (Note 2)
	Filter Indicator Reset	Resets the filter maintenance indicator on the indoor unit.
	Forced Thermo OFF Setting	Forcibly stops all cooling or heating capacity for the indoor unit.
	Remote Controller ON / OFF Restriction Setting	Disables the operation of the indoor unit remote controller ON / OFF button.
	Remote Controller Operating Mode Restriction Setting	Disables the operation of the indoor unit remote controller MODE button.
	Remote Controller Temperature Setpoint Restriction Setting	Disables the operation of the indoor unit remote controller temperature setpoint buttons.
	System Forced OFF Setting	Forcibly stops / resets all indoor units that are under control of the Lon interface. Units cannot be started by a remote controller or centralized controller while in this state.
	Sub-group Control Restriction Setting	Network variable input to permit or prohibit the operation of Daikin centralized control devices on the DIII-Net bus.

Application Notes

= Control Items pertaining to the entire system

- Room temperature data (*SNVT_temp_p nvoSpaceTemp_nn*) by default is reported from the Daikin indoor units embedded return air thermistor. Depending upon the remote controller model and the manufacturing date of the indoor unit, this may be reconfigured to retrieve the room temperature value from the remote controller thermistor. During periods when the indoor unit is turned off or during certain operating modes that cycle off the fan including defrost operation, hot-start and system pressure equalization, the reported temperature may not accurately reflect the actual space temperature. For applications where this temperature value will be primary to system control including mode and temperature setpoint management, it is recommended that the Daikin remote temperature sensor (Part No. KRCS01-1B) is specified for each indoor unit or the remote controller is programmed to report room temperature through the gateway. Please consult Daikin AC for guidance with specific applications.
- The Daikin indoor unit maintains the settings for temperature, start / stop status, operating mode, air direction and fan speed in non-volatile memory each time they are changed. These settings will not be lost upon a power loss event.

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Daikin AC (Americas), Inc. ♦ 1645 Wallace Drive – Suite 110 ♦ Carrollton, TX 75006