| | | | |
|---|---|---|---|
| Job Name: | | Location: | |
| Purchaser: | | | |
| Engineer: | | | |
| Submitted To: | | For: ☐ Reference ☐ Approval ☐ Construction | |
| Submitted By: | | Date: | |
| Unit Designation: Schedule #: | | Model No.: | |

## FEATURES / BENEFITS

- 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

- Combine with Daikin DCS302C71 Centralized Controller for low cost control backup in the event of BMS failure.

- Lockable enclosure protects sensitive equipment and prohibits tampering.
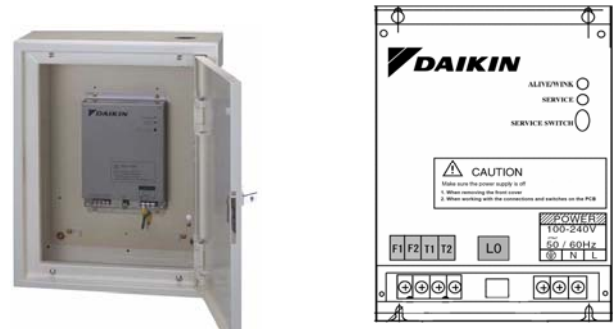
**Power:**

| Power supply (externally supplied) | 100 – 240 VAC, 50/60Hz |
|---|---|
| Power consumption | 5 watts maximum |

**Operating conditions:**

| Surrounding temperature | 14° F to 122° F |
|---|---|
| Storage temperature | -4° F to 140° F |
| Humidity (% Relative) | 0% to 95% (non-condensing) |
| Dimensions (H x W x D) | 19-11/16" x 15-3/4" x 7-7/8" (Factory supplied enclosure) |
| Maximum number of systems | 10 systems |
| Maximum number of indoor units | 64 groups / 128 indoor units |
| Temperature Unit | Degrees Celsius (*Fixed*) |
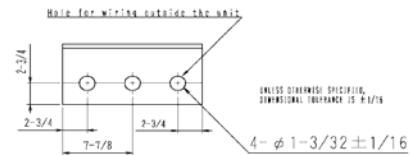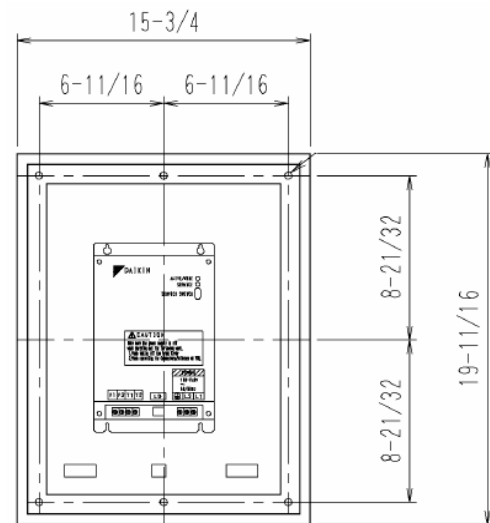
**Connectivity:**

| DIll-Net x 1 | AC equip. communication line |
|---|---|
| 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 |
|---|---|

**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 DMS504B71**

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

1.  Room temperature data (***SNVT_temp_p nvoSpaceTemp_nn***) is reported from the Daikin indoor units embedded return air thermistor. This applies to all VRV indoor units styles and capacities. During periods when the indoor unit is turned off or during certain operating modes that cycle the fan off 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 and installed within the occupied space.

2.  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**

*SDS DMS504B71 10-08*　　　　　　　　　　　　　　　　　　　　　　　　　　　　　*www.daikinac.com*

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