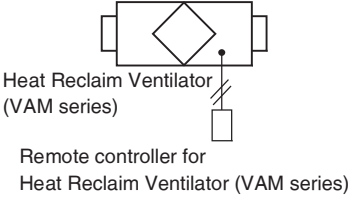
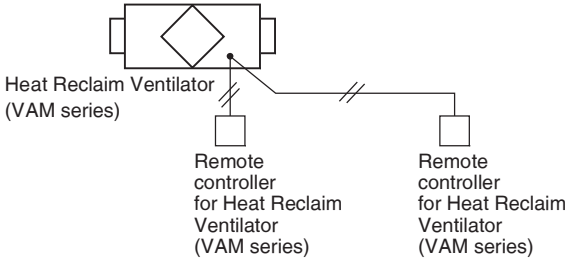
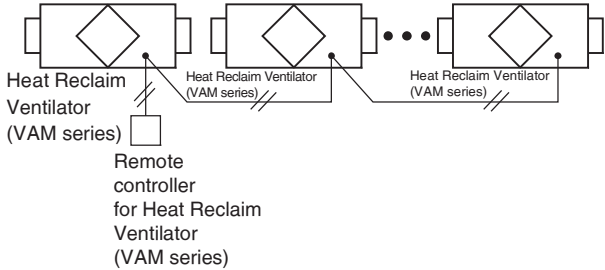
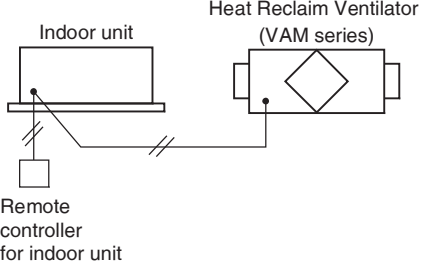
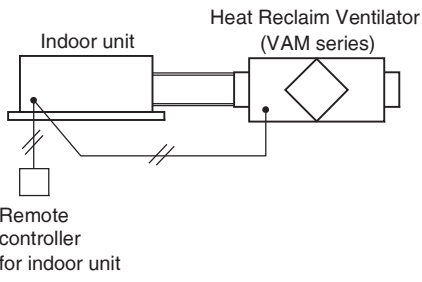
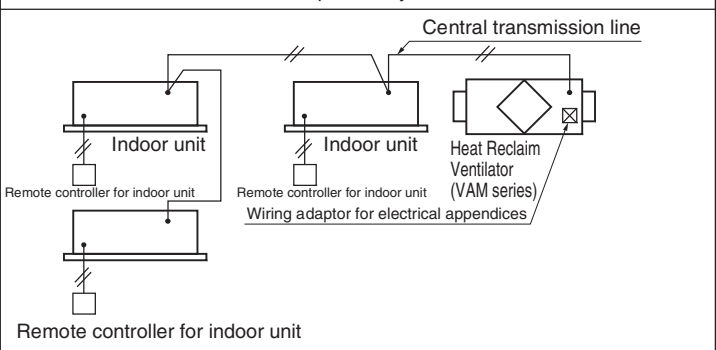
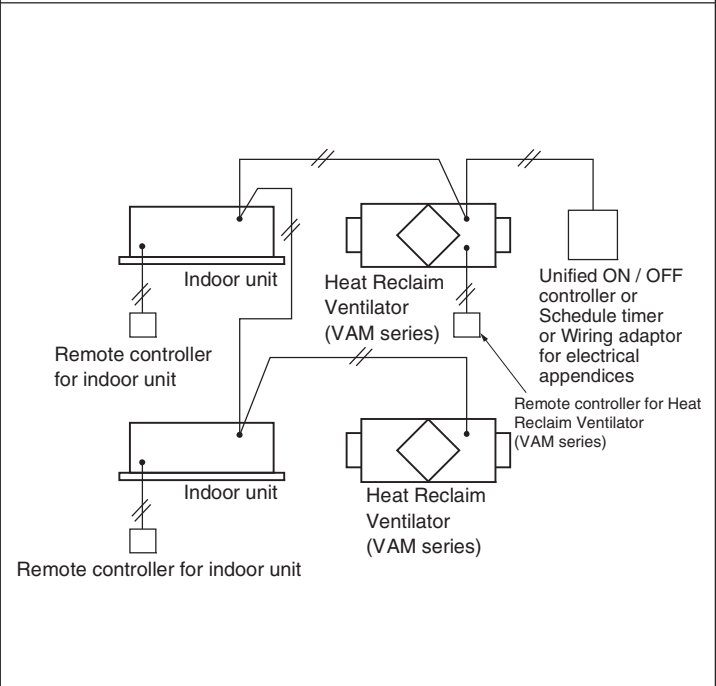
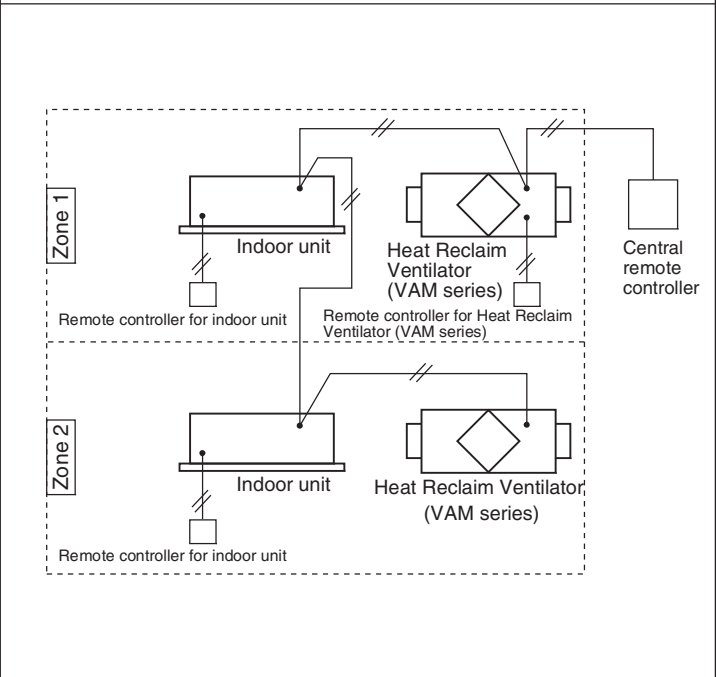


2.2 Basic Patterns

2.2.1 List of Control System

Control system	Purposes and applications	Description of system	Optional accessories required
Independent system	<p>Operation by main switch</p> <ul style="list-style-type: none"> Basic method to operate Heat Reclaim Ventilator (VAM series) The remote controller for Heat Reclaim Ventilator (VAM series) is installed on each Heat Reclaim Ventilator (VAM series) for its operation. 	 <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p>	BRC301B61 Liquid crystal remote controller
	<p>Control with two remote controllers</p> <ul style="list-style-type: none"> The Heat Reclaim Ventilator (VAM series) is operable from a place near the unit or a remote place and the selected control is indicated in the display. (Priority is on the last selection.) 	 <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p>	BRC301B61 Liquid crystal remote controller
	<p>Group control</p> <ul style="list-style-type: none"> Simultaneous control of multiple units installed in such as a spacious room is available. 	 <p>Heat Reclaim Ventilator (VAM series)</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p>	BRC301B61 Liquid crystal remote controller
Interlocked operation system with VRV systems and SkyAir series	<p>Single-group interlocked operation</p> <ul style="list-style-type: none"> The Heat Reclaim Ventilator (VAM series) operates whenever the indoor unit is in operation, and can also be operated independently with the remote controller for indoor unit, even if the indoor unit is not in operation. 	 <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p>	_____
	<p>Direct duct connection system</p> <ul style="list-style-type: none"> Within the same group, the remote controller for indoor unit can control the operation of both the indoor unit and Heat Reclaim Ventilator (VAM series) connected by duct. 	 <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p>	_____

Function	Nos. of the unit controlled and length of wiring	Cautions	Reference page
BRC301B61 <ul style="list-style-type: none"> • ON / OFF • Ventilation mode (Auto / Heat Exchange / Bypass) • Ventilating rate (High / Low) • Fresh up mode (ON / OFF) 	<ul style="list-style-type: none"> • One remote controller operates each Heat Reclaim Ventilator (VAM series). • Remote control wiring can be extended up to 500 m maximum. 	<ul style="list-style-type: none"> • The wire for remote controller is not included as standard accessories and should be arranged locally. • By connecting the adaptor printed circuit board, the operation signal can be taken out remotely. • "Fresh-up operation" is possible by external input. • The group control is not possible with the remote controller for Heat Reclaim Ventilator (VAM series). 	24
BRC301B61 <ul style="list-style-type: none"> • ON / OFF • Ventilation mode (Auto / Heat Exchange / Bypass) • Ventilating rate (High / Low) • Fresh up mode (ON / OFF) • Timer setting (ON / OFF) • Indication of filter cleaning signal • Digital indication of malfunction 	<ul style="list-style-type: none"> • Control of one Heat Reclaim Ventilator (VAM series) with two remote controllers • The maximum allowable total length of remote controller wiring is 500 m. 	<ul style="list-style-type: none"> • Same as operation from local place. • It is necessary to set the Master / Slave changeover switch in the remote controller. • Two remote controller operation is not available with simple remote controllers. 	24
	<ul style="list-style-type: none"> • Up to 16 Heat Reclaim Ventilator (VAM series) can be controlled with one liquid crystal remote controller. • The maximum total length of remote controller wiring is 500 m. • Control with two remote controllers is available. 	<ul style="list-style-type: none"> • Same as operation from local place. • Group control is not available with a simple remote controller. * All the settings of Heat Reclaim Ventilators (VAM series) in the same group are the same (However, it is possible to fix the individual setting by each unit.) 	25
<ul style="list-style-type: none"> • The Heat Reclaim Ventilator (VAM series) operates whenever the indoor unit is in operation. • Precool / preheat operation is also possible. • Various settings are available by adding the Heat Reclaim Ventilator (VAM series) remote controllers. 	<ul style="list-style-type: none"> • A maximum of 16 units of indoor unit and Heat Reclaim Ventilator (VAM series) can be controlled with the remote controller for indoor unit. (If they are in the same group) • Remote control wiring can be extended up to 500 m maximum. 	—————	25
	<ul style="list-style-type: none"> • A maximum of 16 units of indoor unit and Heat Reclaim Ventilator (VAM series) can be controlled the operation with the remote controller for indoor unit. • Remote control wiring can be extended up to 500 m maximum. 	<ul style="list-style-type: none"> • Make sure to set "ON" for direct ducting setting. • The Heat Reclaim Ventilator (VAM series) cannot be operated independently to prevent the dust, when the indoor unit is not in operation. However, if the fan of indoor unit is in operation, the Heat Reclaim Ventilator (VAM series) can be operated independently. 	25

Control system	Purposes and applications	Description of system	Optional accessories required
<p>Interlocked operation system with VRV systems and SkyAir series</p> <p>Interlocked operation with 2 or more groups</p>	<ul style="list-style-type: none"> When the Heat Reclaim Ventilator (VAM series) is interlocked to 2 or more groups of indoor units, the Heat Reclaim Ventilator (VAM series) operates if one of indoor unit in the groups is in operation. The Heat Reclaim Ventilator (VAM series) can also be operated independently with remote controller for indoor unit, even if the indoor unit is not in operation. 	 <p>Central transmission line</p> <p>Indoor unit</p> <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p> <p>Remote controller for indoor unit</p> <p>Wiring adaptor for electrical appendices</p> <p>Remote controller for indoor unit</p>	<p>KRP2A series</p> <ul style="list-style-type: none"> ◆ Wiring adaptor for electrical appendices <p>(One adaptor printed circuit board should be installed in either the Heat Reclaim Ventilator (VAM series) or the indoor unit.)</p>
<p>Collective / individual control</p> <p>Centralized control system</p>	<p>[Unified ON / OFF Controller]</p> <ul style="list-style-type: none"> A maximum of 16 groups can be controlled of "ON / OFF" with one controller, and up to four controllers can be installed in one system. <p>[Schedule Timer]</p> <ul style="list-style-type: none"> One schedule timer can control the weekly schedule of up to 128 units. <p>[Wiring adaptor for electrical appendices]</p> <ul style="list-style-type: none"> One adaptor printed circuit board can control up to 64 groups collectively. 	 <p>Indoor unit</p> <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p> <p>Remote controller for indoor unit</p> <p>Unified ON / OFF controller or Schedule timer or Wiring adaptor for electrical appendices</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p>	<p>DCS301BA61</p> <ul style="list-style-type: none"> ◆ Unified ON / OFF Controller <p>(up to 4 controllers)</p> <p>DST301BA61</p> <ul style="list-style-type: none"> ◆ Schedule timer <p>KRP2A series</p> <ul style="list-style-type: none"> ◆ Wiring adaptor for electrical appendices <p>(not possible to use together with other centralized control equipment)</p> <p>* One of the above controller should be installed in indoor unit. (However, only KRP2A62 can also be installed in Heat Reclaim Ventilator (VAM series).)</p>
<p>Zone control system</p> <p>Centralized control system</p>	<ul style="list-style-type: none"> The Central remote controller can control the zone operation of the several groups of the units collectively. Central remote controller can control the independent operation of Heat Reclaim Ventilator (VAM series) in each zone. 	 <p>Zone 1</p> <p>Indoor unit</p> <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p> <p>Remote controller for indoor unit</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for Heat Reclaim Ventilator (VAM series)</p> <p>Central remote controller</p> <p>Zone 2</p> <p>Indoor unit</p> <p>Indoor unit</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Heat Reclaim Ventilator (VAM series)</p> <p>Remote controller for indoor unit</p> <p>Remote controller for indoor unit</p>	<p>DCS302CA61</p> <ul style="list-style-type: none"> ◆ Central remote controller

Function	Nos. of the unit controlled and length of wiring	Cautions	Reference page
<ul style="list-style-type: none"> The Heat Reclaim Ventilator (VAM series) operates of one of the indoor units connected to the central control transmission line is in operation. The various setting for the operation of Heat Reclaim Ventilator (VAM series) should be set with the remote controller for the indoor unit. 	<ul style="list-style-type: none"> A maximum of 64 groups of the units can be controlled. The central control transmission line can be extended up to 1000 m maximum. 	<ul style="list-style-type: none"> No direct duct connection is possible. Set "ON" for collective zone interlock setting. 	26
<p>Collective / Individual operation [Unified ON / OFF controller]</p> <ul style="list-style-type: none"> Each group can be controlled of "ON / OFF" individually. Each 16 groups can be controlled "ON / OFF" collectively. The power supply terminal for the schedule timer is provided. <p>[Schedule timer]</p> <ul style="list-style-type: none"> The schedule timer can control collectively the operation "ON / OFF" twice a day by weekly. Back-up power supply for 48 hours is provided, when the power failure is occurred. <p>[Wiring adaptor for electrical appendices]</p> <ul style="list-style-type: none"> The Heat Reclaim Ventilator (VAM series) can be controlled "ON / OFF" collectively by external input. 	<ul style="list-style-type: none"> A maximum of 64 groups connected by the central transmission line can be controlled. The central transmission line can be extended up to 1000 m maximum. 	<ul style="list-style-type: none"> When you use the central remote controller, no direct duct connection is possible. <p>[Unified ON / OFF controller]</p> <ul style="list-style-type: none"> Each group should be set the group number. (It cannot be set with the remote controller for Heat Reclaim Ventilator (VAM series).) The power must be supplied. <p>[Schedule timer]</p> <ul style="list-style-type: none"> When you use the schedule timer alone, it is necessary to supply the power of DC16V, which can be supplied from the printed circuit board of the unit. (from CX11A in case of Heat Reclaim Ventilator (VAM series)) <p>[Wiring adaptor for electrical appendices]</p> <ul style="list-style-type: none"> Wiring adaptor for electrical appendices cannot be used with other central remote controller. (It can be installed in the either indoor unit or Heat Reclaim Ventilator (VAM series).) Only KRP2A62 can be installed in the Heat Reclaim Ventilator (VAM series). 	26
<p>The interlocked operation [Multi function centralized control equipment]</p> <ul style="list-style-type: none"> It can control the operation "ON / OFF" individually or collectively. The several group of the units can be controlled collectively by zone. It can control the interlocked operation of the indoor units and the Heat Reclaim Ventilator (VAM series) in the same zone. The electrical terminal for the schedule timer is provided. 	<ul style="list-style-type: none"> A maximum of 64 groups connected by the centralized transmission line can be controlled. The central transmission line can be extended up to 1000 m maximum. 	<ul style="list-style-type: none"> The initial setting with remote controller for indoor unit is needed. (The collective zone interlock setting should be "ON".) However, if there is no indoor unit in the same zone (only Heat Reclaim Ventilator (VAM series)), the initial setting is not required. When you use the central transmission line, no direct duct connection is possible. <p>[Multi function centralized control equipment]</p> <ul style="list-style-type: none"> Each group should be set the group number for central control. (It cannot be set with the remote controller for Heat Reclaim Ventilator (VAM series).) The power supply is needed. 	27