

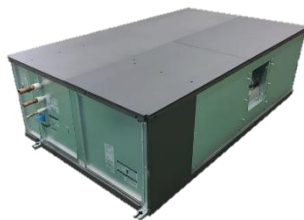
LG Split Compact DOAS

Engineering Brochure
ARND093/153/203DCR4

Split Compact Dedicated Outdoor Air System (DOAS) for Multi V™ System

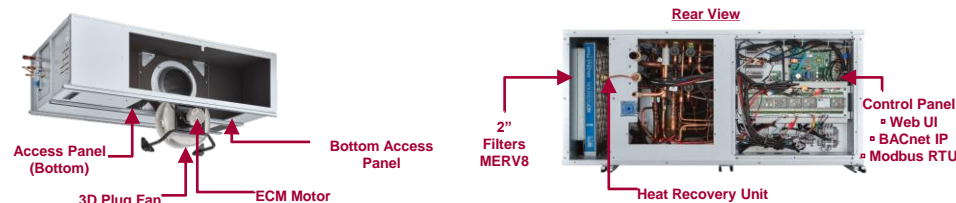
ARND093DCR4

ARND153DCR4/ARND203DCR4



Split Compact Dedicated Outdoor Air System

Structure Overview – Split Compact DOAS



A Breath of Fresh Air with LG DOAS

With the certified efficiency of VRF Multi V technology and new DOAS products, superior performance is provided.

In combination with Multi V Air cooled heat recovery outdoor units, LG split DOAS equipment is designed for the best solution possible.

LG split DOAS (Dedicated Outdoor Air System) units provide 100% outdoor air in heating, cooling, and dehumidification modes with 900, 1,500 and 2,000CFM. Working with LG VRF systems, the LG Split DOAS unit optimizes energy savings and performance.

Features and Benefits

- Perfect solution for any application requiring ceiling-mounted outdoor air treatment.
- Standard Heat Pump Operation Down to 14°F without pre-heater.
- Extended Heat Pump Operation Down to 10°F for 1,500 CFM unit (conditions apply).
- Integrates with Multi V 5 Systems
- Up to 4-modules combined to one Multi V 5 HR Outdoor Unit
 - 3D Plug Fan with EC Motor
 - Auto-Modulation for Designed Airflow Rate
 - Factory-embedded HR Unit
 - Features Modulating Hot Gas Reheat
 - Double water drainage structure.
 - Electric Preheater accessory available 10kW, 20kW
 - External 1" insulation included as standard. R-3.6
- Easy Configuration and Monitoring
- Easy Service and Maintenance: Bottom & Side Access

Split Compact DOAS Specification

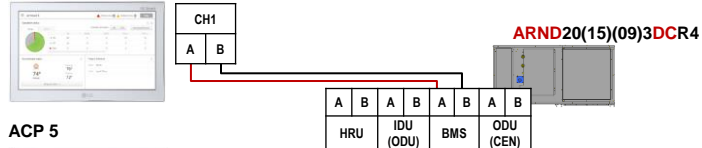
Unit Model No.	ARND093DCR4	ARND153DCR4	ARND203DCR4
Cooling Mode Performance			
Total Cooling Capacity (Btu/h)	70,000	120,000	143,100
Hot Gas Reheat Capacity (Btu/h)	13,000	24,000	30,000
Moisture Removal Capacity (lb. / h)	33.0	55.0	67
Heating Mode Performance			
Capacity (Btu/h) (Main Coil)	40,000	51,000	59,900
Entering Air			
Cooling Maximum (*F, D.B. / W.B.)	122 / 80	122 / 80	122 / 80
Heating Minimum (*F, D.B.)	14	(10') 14	14

Product Overview

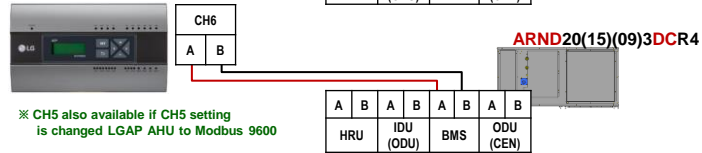
Space Controller Option:

- Microprocessor controller connectable via AC Smart or ACP central controller. Up to 16 units

AC Smart

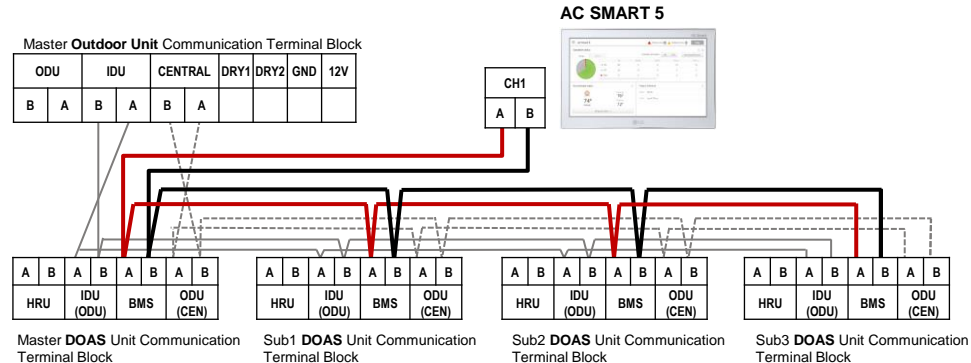


ACP 5



※ CH5 also available if CH5 setting is changed LGAP AHU to Modbus 9600

Network Setting Installation via Central Controller

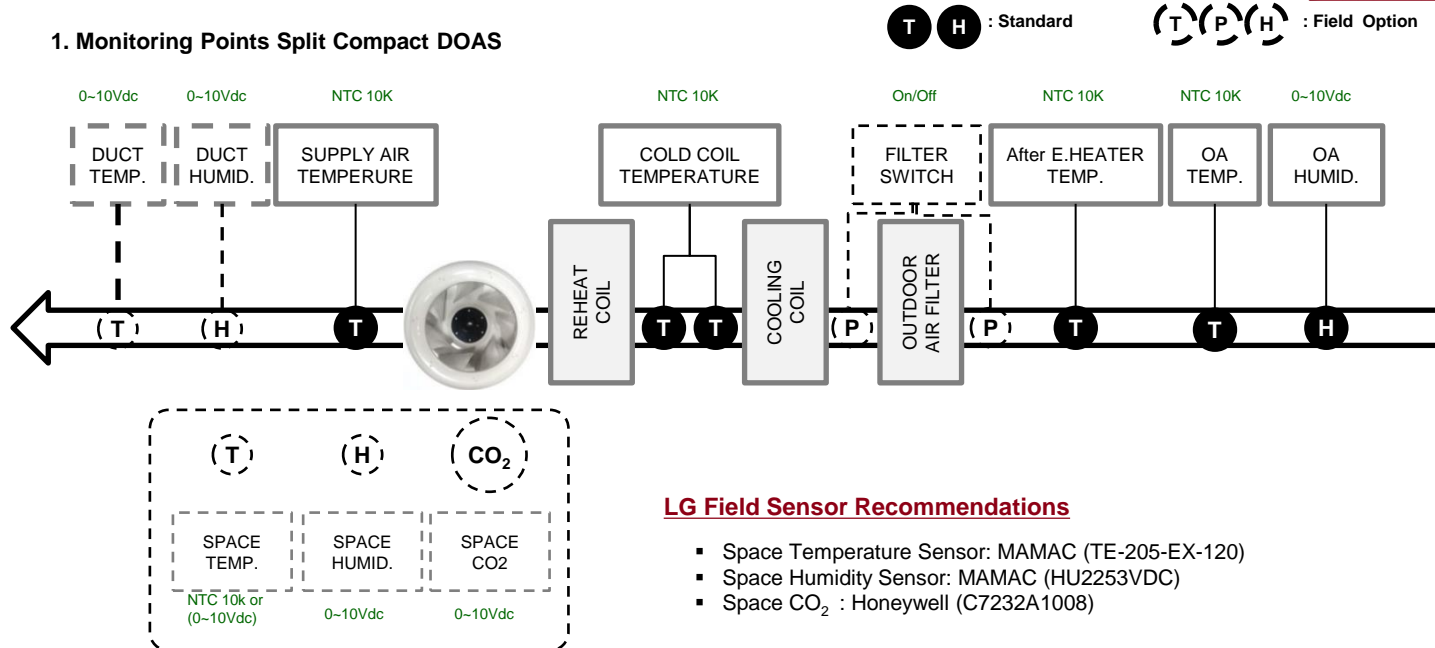


Product Overview

Monitoring Points:

Split Compact Dedicated Outdoor Air System

1. Monitoring Points Split Compact DOAS



LG Field Sensor Recommendations

- Space Temperature Sensor: MAMAC (TE-205-EX-120)
- Space Humidity Sensor: MAMAC (HU2253VDC)
- Space CO₂ : Honeywell (C7232A1008)

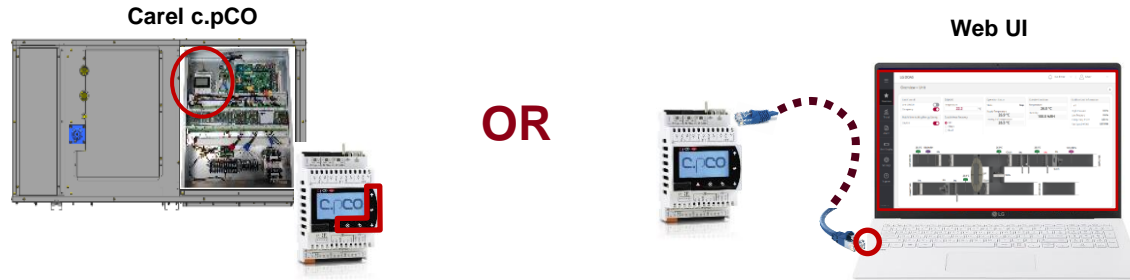
Product Overview

System Configuration Method:

You can configure your LG Split Compact DOAS via 2 methods:

- Utilizing the keypad of the provided Carel ® c.pCO controller in the control panel
- Utilizing the WEB UI via Ethernet connection. Web UI is included as standard.

Split Compact Dedicated Outdoor Air System



Diagnostics Tools:

