



MasterAria

The compact parametric solution for small AHUs and large fan coils

MasterAria is the first CAREL parametric solution for the control of small air handling units and large fan coils.

In a compact IP65 plastic box houses you find: a controller, a contactor (single phase 1.1 kW or three phase 4 kW), and an MCB with adjustable overload protector (0.1 to 10 A).

Many different accessories and sensors are available.

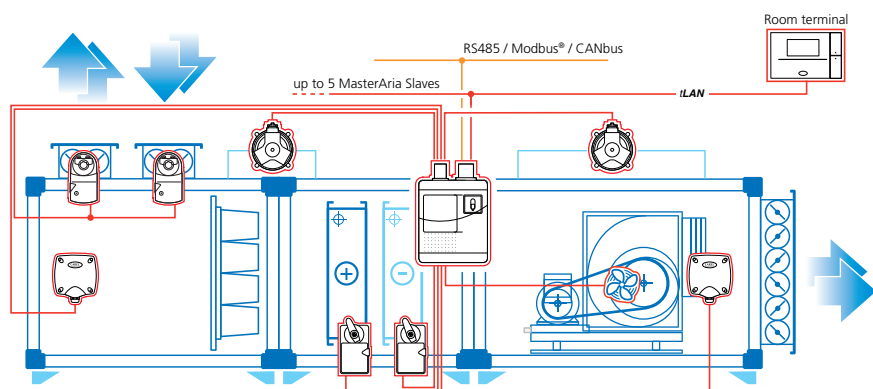
BMS integration (Modbus® RTU and on RS485) and e-drobus on CANbus are the solutions in terms of integration and interconnection.

CANbus in particular, the fast and reliable peer-to-peer bus derived directly from the automotive industry, allows the fan coil interconnections and control of up to 99 devices with the possibility to specify and set up the interrelation in terms of dependency and logic.

The programming key can be used to save your parameter configuration and download it to other devices.

The large and intuitive LCD, with integrated real time clock and room sensor, makes the programming and control of the units user-friendly and fast.

Using the embedded Master-Slave capability via the tLAN bus, one MasterAria can control up to 5 MasterAria slaves.



General hardware features:

- Single-phase version with 1.1 kW internal contactor;
- Three-phase version with 4 kW internal contactor;
- Internal MCB with adjustable overload protector;
- 3 configurable analogue inputs: air probe (room or return), main coil probe, secondary coil probe, outside air probe, supply air probe;
- 2 x 5 A resistive digital outputs for 3-speed fan control;
- 2 x 0 to 10 V analogue outputs and 2 x 5 A max digital outputs to drive the air and water modulating actuators;
- up to 6 configurable DI;
- remote installable user interface (max. 30 m with tLAN) with Master/Slave functions: one user interface for up to max. 6 MasterAria;
- customisable logo and polycarbonate;
- BMS integration with Modbus® Slave on optional RS485;
- e-drobus network on optional CANbus board (alternative to RS485) also for Slave-Slave connection up to 1 km.

General software features:

- fan coil management with automatic fan speed control;
- control of small AHUs: up to two modulating valves (0 to 10 V) and 1 ON/OFF damper, or 1 modulating valve and 1 modulating damper;
- return or room air temperature control;
- multifunction digital input: "occupancy", remote ON/OFF, window alarm, heating/cooling, economy, pump alarm, general alarm;
- freecooling and freeheating management with external air temperature;
- antifreeze functions with NTC sensor or with antifreeze thermostat on digital input.

Codes:

Codes	Power supply	Contactor	MCB adjustable (A)
CTEM70000*	single-phase	1,1 kW	0,1...10
CTEDB0000*	three-phase	4,0 kW	0,1...10

MCB code table:

10° code	MCB adjustable (A)	10° code	MCB adjustable (A)
0	0,1...0,16	5	1...1,6
1	0,16...0,25	6	1,6...2,5
2	0,25...0,40	7	2,5...4
3	0,40...0,63	8	4...6,3
4	0,63...1	9	6,3...10

Options:

Code	Description
HYPA001000	Remote ACQUA terminal for e-drofan
PSOPZKEY00	Programming key
PSOPZKEYA0	Programming key with power supply
HYKA000000	Adapter for e-drofan programming
HYVC000R00	e-drofan expansion card
HYSC00F0C0	CANbus serial board for e-drofan
HYSC00F0P0	RS485 serial board for e-drofan
NTC004HP02	HP NTC probes 40 cm
NTC010HP02	HP NTC probes 100 cm

Headquarters

CAREL S.p.A.
Via dell'Industria, 11
35020 Brugine - Padova (Italy)
Tel. (+39) 0499 716611
Fax (+39) 0499 716600
carel@carel.com - www.carel.com

Subsidiaries

CAREL Australia Pty Ltd
www.carel.com.au
sales@carel.com.au

CAREL China Ltd.
www.carelhk.com
sales@carelhk.com

CAREL Deutschland GmbH
www.carel.de
info@carel.de

CAREL Export
www.carel.com
carelexport@carel.com

CAREL France Sas
www.carelfrence.fr
carelfrence@carelfrence.fr

CAREL Italia
www.carel.it
carelitalia@carel.com

CAREL Sud America Ltda.
www.carel.com.br
carelsudamerica@carel.com.br

CAREL U.K. Ltd.
www.careluk.co.uk
careluk@careluk.co.uk

CAREL USA L.L.C.
www.carelusa.com
sales@carelusa.com

Affiliated Companies:

CAREL Korea Co. Ltd.
www.carel.co.kr
info@carel.co.kr

CAREL (Thailand) Co. Ltd.
www.carel.co.th
info@carel.co.th

www.carel.com

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