

AIR CURTAIN

# PROTON HDC1





#### **AIR CURTAIN**



Air curtain is the unit specially designed for doorway and entrance opening. It prevents the infiltration of cooled air in winter and hot in summer. Air curtain saves the heat/cool air conditioning and prevents from insects and dust, thereby creates the correct indoor climate.





AIR CURTAIN

# PROTON HDC1

The scope of application of model PROTON HD C1 is commercial buildings. Specifically are: hotel lobbies, trade and office entrances. C1 is a unique solution for various types of the buildings.

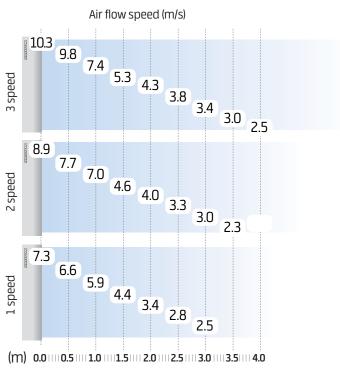


#### **VERTICAL AIR FLOW**



Electric heated air curtains can be installed horizontally only. Vertical mounting available on request.

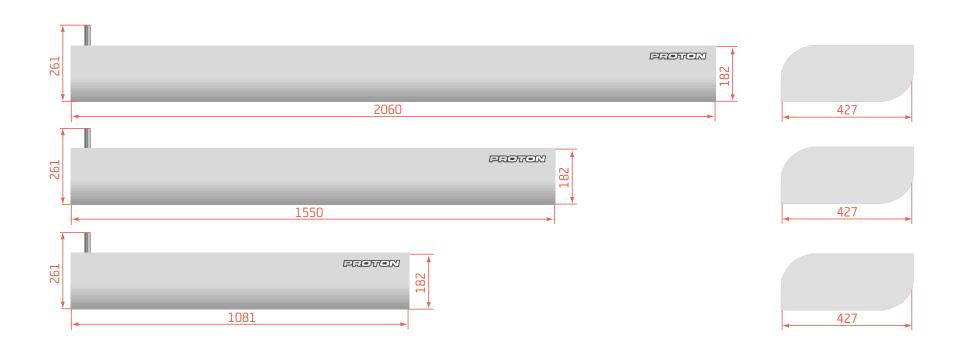
#### **HORIZONTAL AIR FLOW**



Air flow length (m/s)



## **DIMENSIONS**





#### **TECHNICAL CHARACTERISTICS**



WATER HEATING		HDC1-T-3510	HDC1-T-3515	HDC1-T-3520
Doorway width, max. (1 curtain)	mm	1000	1500	2000
Number of heat exchanger rows	R	2	2	2
Air capacity (1/2/3 speed)	m³/h	1200/1450/1900	1800/2200/2700	2200/2900/3400
Heating power <sup>1</sup>	kW	13.9	20.7	27.8
Air flow distance, max.	m	3.5	3.5	3.5
Volume of water in heat exchanger	dm³	0.9	1.3	1.6
Noise level <sup>2</sup>	dB	56	58	59
Temperature of heating medium, max.	°C	90	90	90
Operational pressure, max.	MPa	1.6	1.6	1.6
Connection stub pipe diameter	inch	3/4	3/4	3/4
Supply voltage of curtain	V/Hz	230/50	230/50	230/50
Rated current of curtain	A	1.3	1.5	1.6
Motor power	W	280	310	360
Ingress protection of motor	IP	20	20	20
Net weight	kg	22.3	29.1	35.3
Gross weight	kg	25.8	33.2	39.8
Net dimensions (WxHxL)	mm	1081x261x427	1550x261x427	2060x261x427
Gross dimensions (WxHxL)	mm	1135x310x495	1605x310x495	2115x310x495

 $<sup>^1</sup>$  Data are indicated for water temperature of 90/70 °C, and air temperature at the inlet of 18 °C.  $^2$  Measurment performed at 3 m from curtain.



#### **TECHNICAL CHARACTERISTICS**

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ELECTRIC HEATING		HDC1-E-3510	HDC1-E-3515	HDC1-E-3520
Doorway width, max. (1 curtain)	mm	1000	1500	2000
Air capacity (1/2/3 speed)	m³/h	1300/1550/2000	1900/2350/2900	2300/3100/3700
Heating power (1/2/3 stage)	kW	2.8/5.2/8.0	4.2/7.8/12.0	5.6/10.4/16.0
Air flow distance, max.	m	3.5	3.5	3.5
Noise level <sup>1</sup>	dB	57	59	60
Supply voltage of curtain	V/Hz	400/50	400/50	400/50
Rated current of curtain	A	12	18	24
Motor power	W	280	310	360
Ingress protection of motor	IP	20	20	20
Net weight	kg	23.2	30.2	36.9
Gross weight	kg	26.7	34.3	41.4
Net dimensions (WxHxL)	mm	1081x182x427	1550x182x427	2060x182x427
Gross dimensions (WxHxL)	mm	1135x310x495	1605x310x495	2115x310x495

 $<sup>^{\</sup>mathrm{1}}$  Measurment performed at 3 m from curtain.



#### **TECHNICAL CHARACTERISTICS**

WITHOUT HEATING		HDC1-F-3510	HDC1-F-3515	HDC1-F-3520
Doorway width, max. (1 curtain)	mm	1000	1500	2000
Air capacity (1/2/3 speed)	m³/h	1350/1600/2050	1950/2400/2950	2350/3150/3750
Air flow distance, max.	m	3.7	3.7	3.7
Noise level <sup>1</sup>	dB	58	60	61
Supply voltage of curtain	V/Hz	230/50	230/50	230/50
Rated current of curtain	A	1.3	1.5	1.6
Motor power	W	280	310	360
Ingress protection of motor	IP	20	20	20
Net weight	kg	20.1	26.6	32.6
Gross weight	kg	23.6	30.7	37.3
Net dimensions (WxHxL)	mm	1081x182x427	1550x182x427	2060x182x427
Gross dimensions (WxHxL)	mm	1135x310x495	1605x310x495	2115x310x495

<sup>&</sup>lt;sup>1</sup> Measurment performed at 3 m from curtain.



#### **ECOMATIC PRO**





#### **RTS10**

RTS 10 – is a panel for switching temperature and AC-fan rotation speeds.

- Convenient control of temperature with 1.0°C accuracy
- Temperature control range +5°C ... +30°C
- Manual mode of control of rotation speed of three-speed AC-fan
- Control of required temperature
- Noise reduction
- Operation at heating and cooling modes
- Possibility of operation with valve with actuator SRV2
- Protection class IP20
- Weight (net/gross) 0.19/0.23 kg
- Net dimensions (WxHxL) (85x130x42) mm
- Gross dimension (WxHxL) (90x133x50) mm

#### **RTS40**

**RTS 40** – is a programmable controller of temperature and AC-fan rotation speed.

- Programmability of temperature mode with accuracy up to 0.5°C
- Temperature control range+5°C ... +70°C
- Automatic and manual modes of control of rotation speed of three-speed AC-fan
- Week programmability 5+1+1
- Can be used with **RC30** remote controller
- Possibility of operation with door switch **DC230**
- Possibility to connect thermal sensor NTC65
- High level of energy savings
- Protection against indoor temperature drop lower than critical level
- Operation at heating and cooling modes
- MODBUS protocol
- Possibility of operation with valve with actuator SRV2
- Protection class IP20
- Weight (net/gross) 0.21/0.30 kg
- Net dimensions (WxHxL)- (138x94x36) mm
- Gross dimension (WxHxL) (156x120x46) mm



#### **ECOMATIC PRO**





#### SRV2

**SRV 2** – is a two-way valve with actuator allows to control the flow of coolant in automatic mode from a programmable controller **RTS 40** or mechanical remote control **RTS 10**.

- Valve Type Normally Closed
- Energy savings
- Protection class IP54
- Power supply 230 V/50 Hz
- Weight (net/gross) 0.42/0.46 kg
- Net dimensions (WxHxL) (90x105x40) mm
- Gross dimension (WxHxL) (105x100x70) mm

#### NTC65

NTC 65 – is a external thermal sensor. Checks indoor temperature and sends data to a programmable controller RTS 40.

- High accuracy
- Possibility to connect a number of sensors for large buildings
- Possibility to use in explosive buildings
- Protection class IP65
- Weight (net/gross) 0.09/0.10 kg
- Net dimensions (WxHxL) (65x128x42) mm
- Gross dimension (WxHxL) (70x150x50) mm



#### **ECOMATIC PRO**



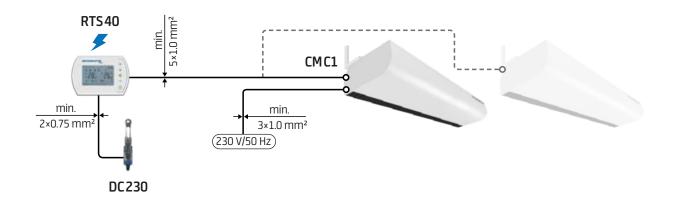
#### DC230

**DC230** – is a device designed for automatic turn on of the mechanism (a curtain) when a moving part (door) reaches a certain place.

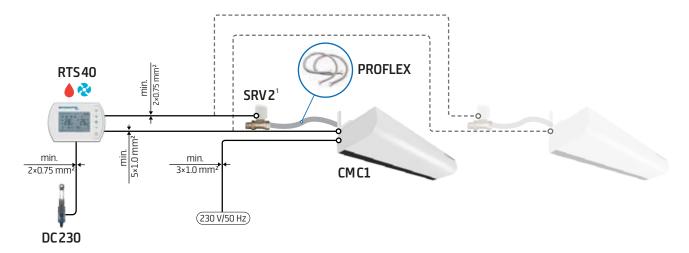
- Control of door position of other moving elementsSupply of signal to on/off the curtain PROTON HD C1
- Protection grade of the casing is IP65
- Mechanical wear-resistance is 1 000 000 hours



### **CONTROL SOLUTIONS**



PROTON HD C1	SKU
◆ HD C1-E-3510	<b>5</b> 210 001
◆ HD C1-E-3515	<b>5</b> 210 002
➡ HD C1-E-3520	<b>5</b> 210 003

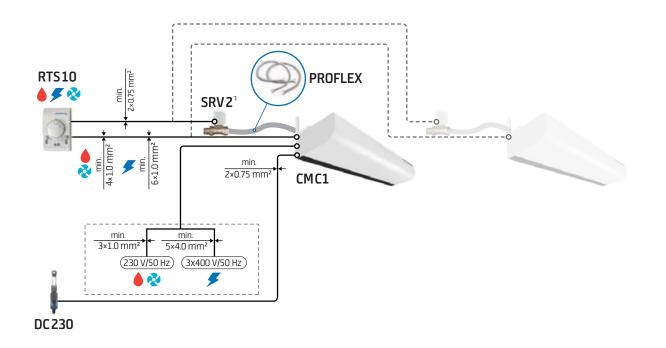


PROTON HD C1		SKU	
◆ HD C1-F-3510	<b>⊗</b>	210 007	
◆ HD C1-F-3515	<b>&amp;</b>	210 008	
➡ HD C1-F-3520	<b>⊗</b>	210 009	
➡ HD C1-T-3510	•	210 004	
← HD C1-T-3515	•	210 005	
➡ HD C1-T-3520	•	210 006	

<sup>&</sup>lt;sup>1</sup> For HD C1-T-35.



### **CONTROL SOLUTIONS**

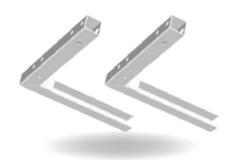


<sup>&</sup>lt;sup>1</sup> For HD C1-T-35.

PROTON HD C1	SKU
➡ HD C1-E-3510	<b>5</b> 210 001
➡ HD C1-E-3515	<b>5</b> 210 002
➡ HD C1-E-3520	<b>5</b> 210 003
➡ HD C1-F-3510	<b>2</b> 10 007
← HD C1-F-3515	<b>210 008</b>
← HD C1-F-3520	<b>2</b> 10 009
➡ HD C1-T-3510	<b>a</b> 210 004
← HD C1-T-3515	<b>a</b> 210 005
← HD C1-T-3520	<b>1</b> 210 006



#### **ACCESSORIES**



#### **CMC1** MOUNTING CONSOLE

The mounting console is designed for mounting the PROTON HD C1 curtains. Original and patented construction enables to fix the curtains horizontally and vertically. Compact size and workability of the construction guarantee safe operation of PROTON HD C1.

HD C1-3510 — 2 pcs.

HD C1-3515 — 3 pcs.

HD C1-3520 — 3 pcs.



#### **PROFLEX** FLEXIBLE HOSES

Corrosion-proof flexible hoses are used to connect various water-consuming equipment.



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