

MASTERVEIL

The art of invisible doors

MODELS

DESIGN400-2.5H-Horizontal-4 Fans

DESIGN400-2.5H-Horizontal-5 Fans

DESIGN450-2.5H-Horizontal-4 Fans

ELLIPS-2.5H-4 Fans



version 4 - C2



When you are looking for TOP Design, tailormade length and compact approach for your invisible door, this is the system of your choice.

Absolute architect's favorite lay-out while easy to integrate in the entrance.

For your comfort, different types of hot water batteries are available, as well as electrical heaters and also integrated connection with heatpump.

Exceptional asset for this range is the high performance and the slim design.

YOUR ADVANTAGES

- Create the ideal environment for your clients
- The best working conditions for your employees
- Ideal combination of design and optimal protection
- Stable temperature and/or better comfort
- Keep wrong influences outside
- Save money by reducing energy losses
- Stop influence from outside
- Moisture, dust, draught, flying insects are kept out
- Available in round or ellips design



CHARACTERISTICS

	Design400 V4	Design400 V5	Design 450E	Ellips
Mono-Phase	X	X	X	X
3 Phase (resistance)			X	
Tailor-made lenght	X	X	X	
Compact Design	X	X	X	X
High Pressure Airstop	X	X	X	
Extra Volume Model		X		X
Extra Heat Capacity		X		X
Temp. Difference 20-30°C	X	X	X	X
Preferred Width 2m20-3m	X	X		
Preferred Height 2m60	X	X	X	
Preferred Width 2m50			X	X
Preferred Height 3m				X

STEERING

TYPE	Design400 V4/V5	Design450E	Ellips
STRM-7120V	X		(X)
STRM-7120E		X	
PLXM			X

APPLICATION DOMAINS

COOL	DESIGN	FREEZERS	LOGISTICS & COMFORT	OUTSIDE	RETAIL
	X			X	

ESPECIALLY SUITABLE FOR

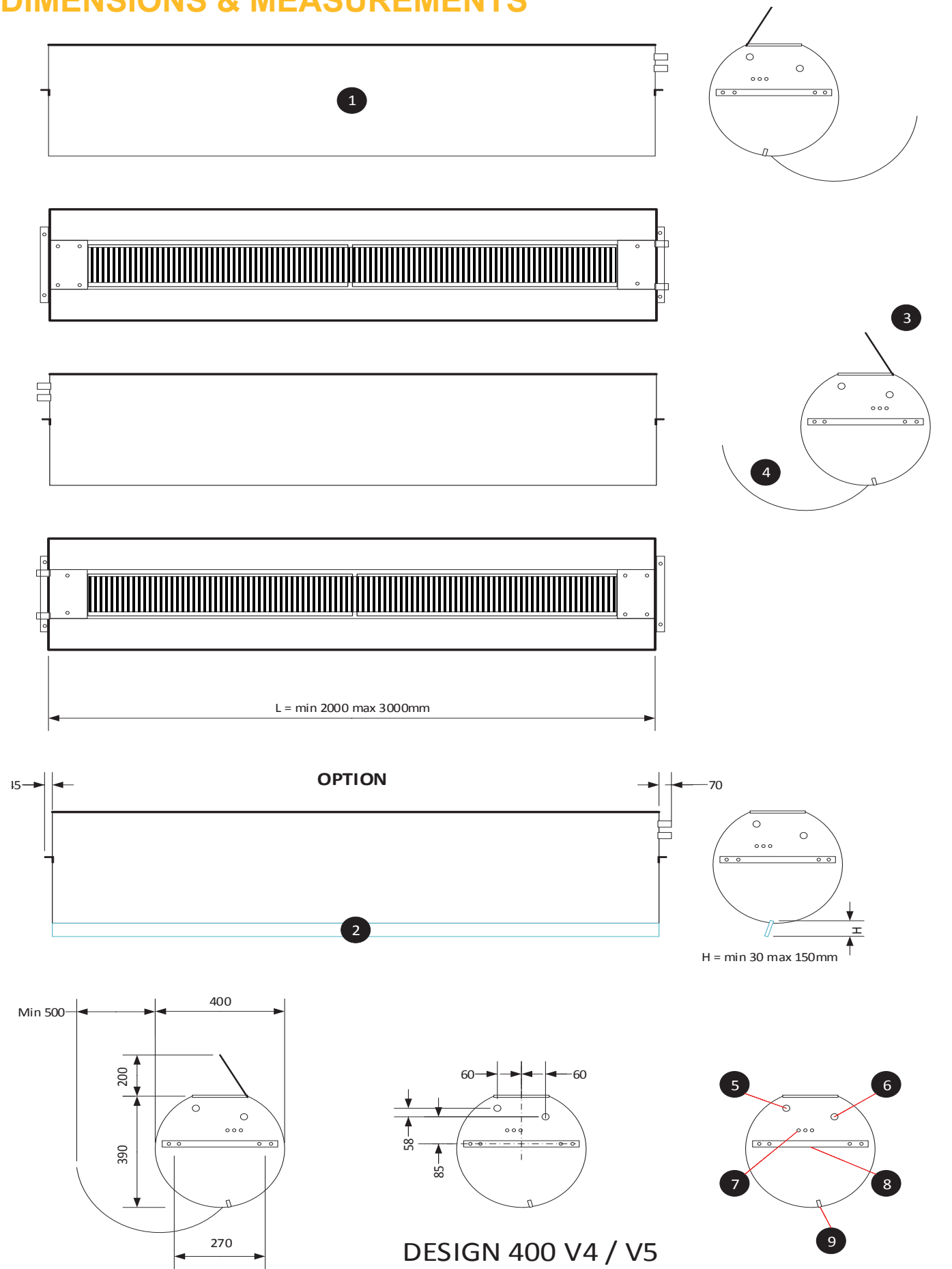
- Shops and supermarkets
- Entrance of office buidings
- Public buildings
- Hotels & Shoppingcentra

AVAILABLE OPTIONS

Model		DESIGN 400V4	DESIGN 400V5	DESIGN 450E	Ellips
Drumposition	Horizontal	x	x	x	x
	Vertical				
	Double standing				
	Airlock	Opt	Opt	Opt	Opt
Drumdesign	Industrial				
	Round	x	x	x	x
	Compact	x	x	x	x
No. Fans		4	5	4	4
Heater	Electrical			x	
	H2O	x	x		x
	Heat pump	Opt	Opt		Opt
Filter	Flatfilter	x	x		
	Pleated filter				x
	Bagfilter				
Steeringpanel		STRM	STRM	STRM/EL	PLXM/STRM
Control	EC				
	Frequency				
	Modbus	x	x	x	x
	Transform	x	x	x	x
	Stepless				
	X-step	x	x	x	x
Heater parts	Freeze protect	Opt	Opt		Opt
	Zone valve	Opt	Opt		Opt
	Indoor sensor	x	x	x	x
	Outdoor sensor	Opt	Opt	Opt	Opt
	Thyristor				
Switcher	Mechanical	Opt	Opt	Opt	Opt
	Magnet	Opt	Opt	Opt	Opt
	Photosensor	Opt	Opt	Opt	Opt
Drum type	Galvanized				
	Aluzinc				
	RAL painted	x	x	x	x
	Stainless	Opt	Opt	Opt	Opt
Fanbox	Galvanized				
	Stainless				

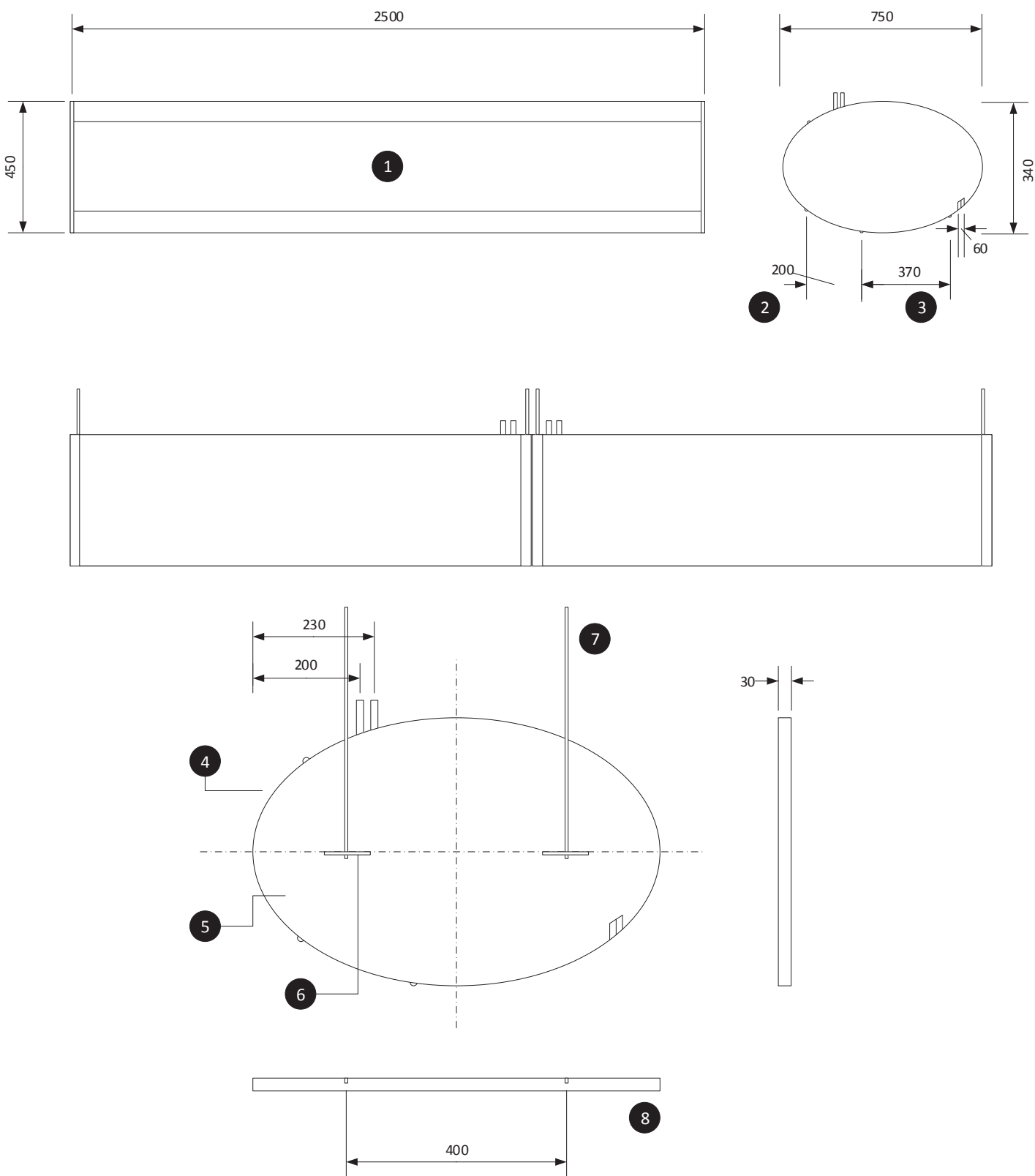
IN COMBINATION WITH HEATPUMP > SPECIAL STEERING PANEL

DIMENSIONS & MEASUREMENTS



1) Drum	3) Filter Hatches	5) Return DN 25	7) Power	9) Airflow 10 degrees
2) Outblow lip	4) Cover	6) Feed pipe DN25	8) Ceiling Mounting	

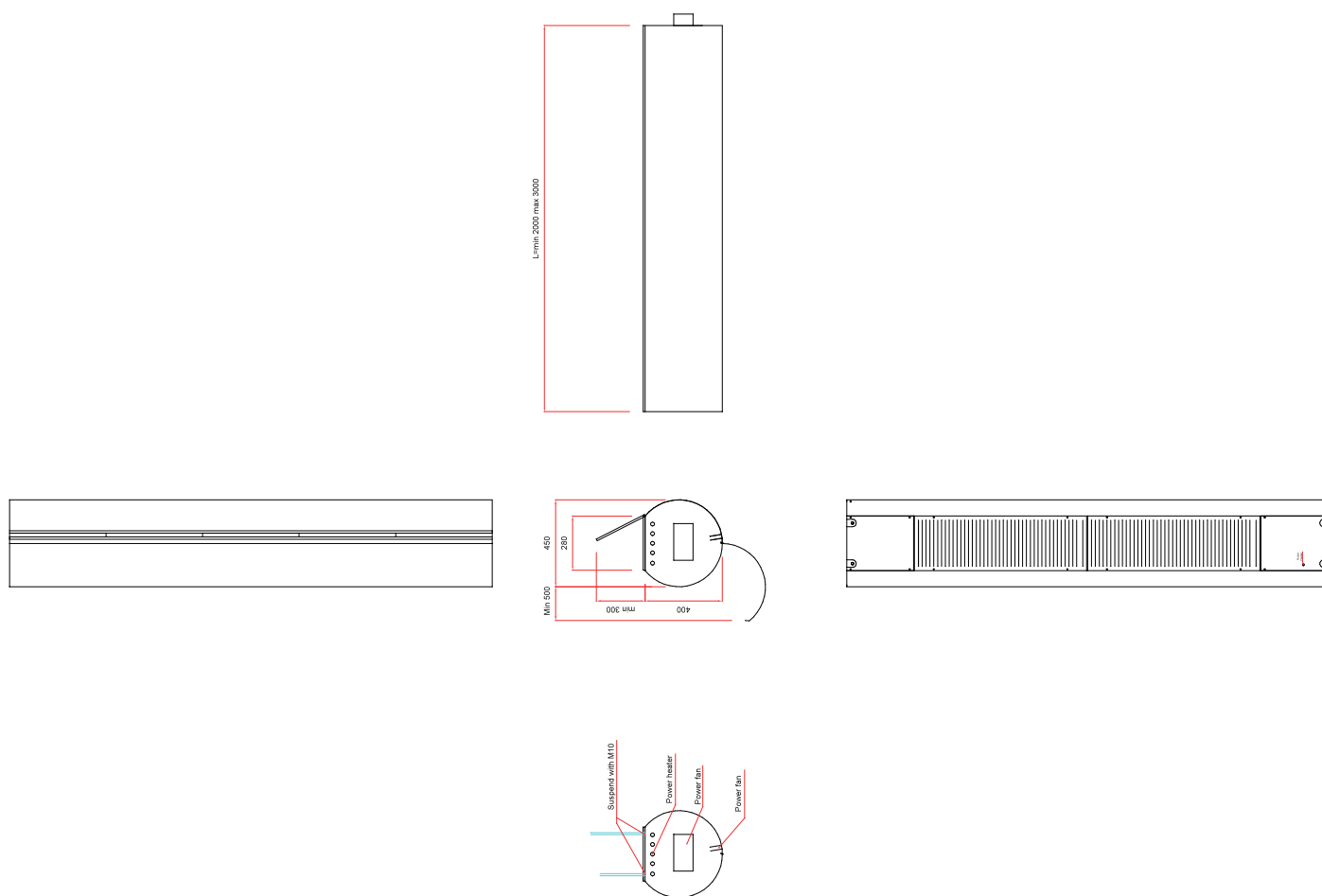
DIMENSIONS & MEASUREMENTS



ELLIPS

1) Intake grid	3) Inspection Hatch	5) Corner of AC	7) Thread Bars
2) Filter Hatch	4) Grid	6) Brackets	8) Gable, to put on after thread bars are tightened

DIMENSIONS & MEASUREMENTS



DESIGN450E



TECHNICAL DATA

Type	Scan name	Dimension DxH	Drum-length	Type_of_fan	Fan model	Voltage	kW	Am-père	Freq
Design 400V4	Hängande Kompakt 400V	Ø400	Custom made	Double inlet radial	4	230	0,92	4,6	50
Design 400V5	Hängande Kompakt 400VF	Ø400	Custom made	Double inlet radial	4	230	1,15	5,75	50
Design 450E	Hängande Kompakt 450E	Ø450	Custom made	Double inlet radial	4	230	0,92	4,6	50
Ellips	Ellipsen	750/450	Custom made	Double inlet radial	6	230	0,7	6,8	50

Type	Water heated	Electrical heated	Heating	Ambi	Enviroment	Weight kg	Ral	Other colours	Inbuild	Stainless
Design 400V4	22	-	H2O/Heat-Pump	Yes	40 /-25	85	9010	Opt	Opt	Opt
Design 400V5	26		H2O/Heat-Pump	Yes	40 /-25	90	9010	Opt	Opt	Opt
Design 450E	-	15kW	El.	Yes	40 /-25	80	9010	Opt	Opt	Opt
Ellips	36	-	H2O	Yes	40 /-25	+115	9010	Opt	-	Opt

Type	Nr Fans	Condensator µF	IP	Motor-protect	Volume m³/h (WP)	Rotation
Design 400V4	4	5	44	Ext	2500	2000
Design 400V5	5	5	44	Ext	3000	2000
Design 450E	4	5	44	Ext	2500	2000
Ellips	4	6,3 / 450V	20	On demand	6000	1200

Type	H2o_in °C	H2o_out °C	Design	Pressure drop	Water flow l/s	Filter	Connection	Steering
Design 400V4	60	40	Circle 400	7	0,28	flatfilter EU3	DN25	STRM
Design 400V5	60	40	Circle 400	8	0,31	flatfilter EU4	DN25	STRM
Design 450E	-	-	Circle 450	-	-	flatfilter EU3	-	STRM/EL
Ellips	60	40	Ellips	On demand	On demand	Panelfilter G4		STRM/PLXM

TECHNICAL SPECIFICATIONS DAIKIN

Outside unit:	Steering panel:
ERQ125A7W1B - 3F+N - 400V - 11,9 A	EKEQFCBAV3 - 1F+N - 230V - 0,2 A

		DAIKIN
Air	Capacity	14,7kW
	Flow rate	2500 m³/h
	Temperature in	15°
	Temperature out	32,5°
	Pressure drop	39Pa
	Velocity	2,0 m/s
R410a	Condense temperature	46°
	Op. Pressure	2,7MPa
	Flow rate	0,10kg/s

		DAIKIN
Dimension	Width	1800mm
	Height	200mm
	Tube rows	2
	Fin pitch	1,8mm
	Liquid Passes	10
	Connection number	DN 1x12/1x12
	Surface	0,36/21m²
	Weight-Volume	25/3kg/l
	Tube material	Copper
	Lamela	Aluminium
Material	Heater material	Copper
	Casing material	Galvanized

MOUNTING INFO

- Place the air curtain inside.
- Make sure that the air curtain has a free intake.
- Make sure that the air curtains have a free outblow.
- Position the outblowmouth close to the door.
- The airstream needs to touch the ground with a restricted re-circulation zone.
- In critical applications, space between wall and air curtain must be protected .
- By preference, use a minimal overlap of 10cm on each side.
- Place the underside of the air curtain as close as possible to the upper side of the door.
- Keep a distance between wall and drum for about 10cm.
- Free outblow is necessary, check door mechanism,...
- In case drum needs to be placed close to the wall, make sure that you have free flow without deviation through objects
- Adjust appropriate speed
- Consider the comfort of people that go through the door.
- Consider air balance or small overpressure.
- Evaluate alternatives like side blowing.
- Consider comfort options like electrical/water heater/heat pump.
- Check how many people that are in direct/indirect airstream.
- Keep in mind that air curtains are not 100% solution.
- Check capacity to compensate remaining losses.
- Fluent access to equipment & filters.
- Easy exchange parts must be foreseen.

ARRANGEMENT & MOUNTING

! INSTALLATION CAN ONLY BE EXECUTED BY CERTIFIED & SKILLED TECHNICIANS !

Mount the Design 400/450 unit horizontally in a weather-protected place. Make sure that the fan is protected against vibration and shocks. Supply open inlet and discharge openings with guards according to valid regulations. Also make sure the drive motor is sufficiently vented. The permitted maximum temperature through the fan should be 40°C. If the surrounding air is 40°C and you put the air through the heater it will be a higher temperature !!!

The Design400/450 fans unit has an internal automatic thermocontact (by normal temperature it will restart automatically)

IF overheated you must reset the Design400/450 fan on the steering panel in order to restart.

The Ellips will fan will automatically restart once it has cooled.

The fan is designed for continuous use. Its rotation speed can be regulated with external equipment by changing the current supply. It is not designed for operation with flammable, hazardous or explosive gases, polishing dust, flour etc.

Intake air can NOT contain aggressive (cleaning) products.

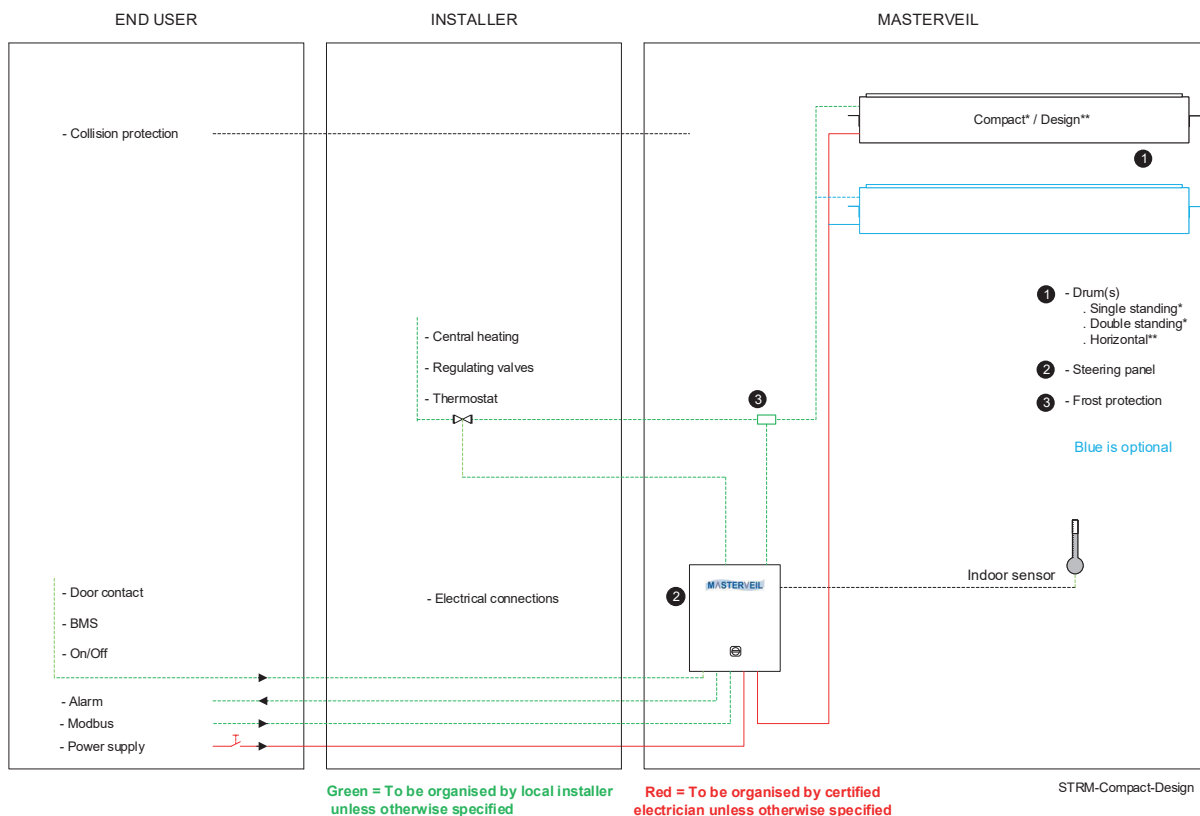
We decline all responsibility for any errors and for the accuracy of the information provided.

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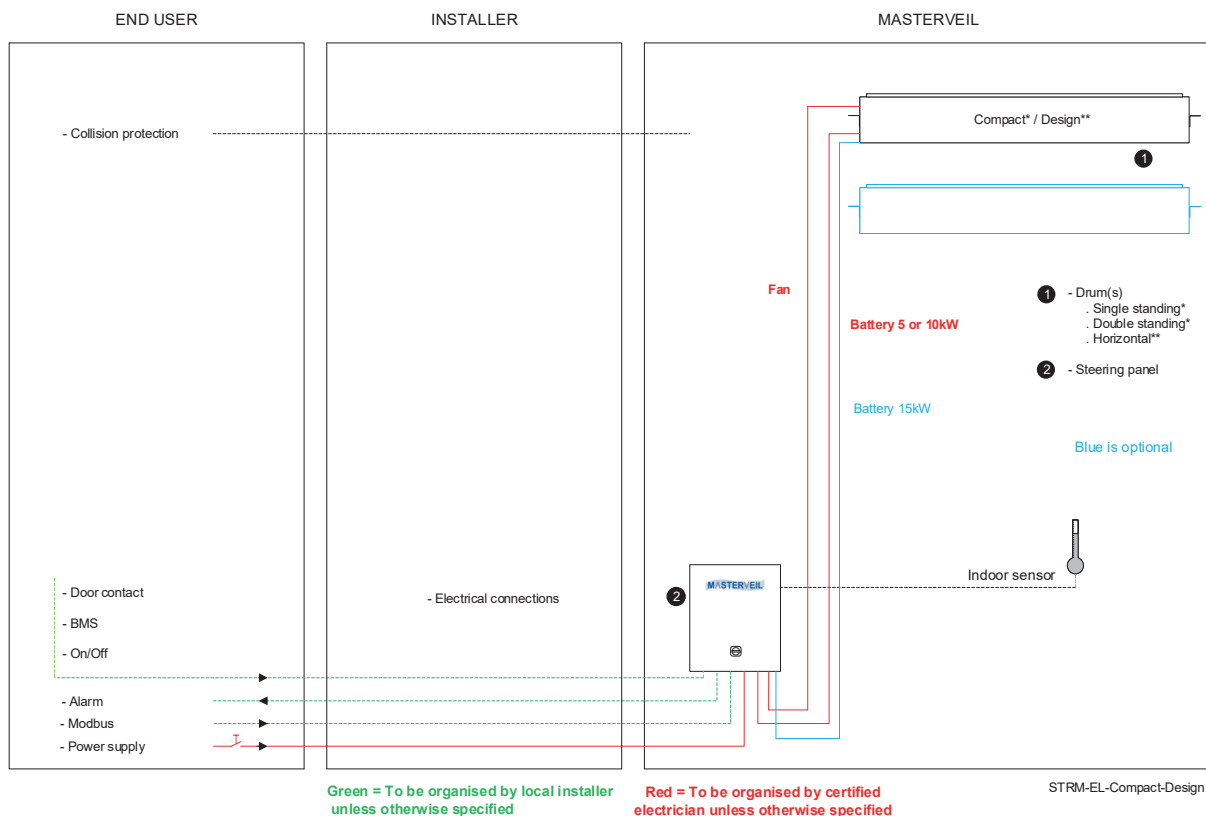
Minor adaption can occur depending on regulations, versions, ...

! IN CASE OF QUESTIONS CONTACT THE DEALER OR A CERTIFIED PARTNER !

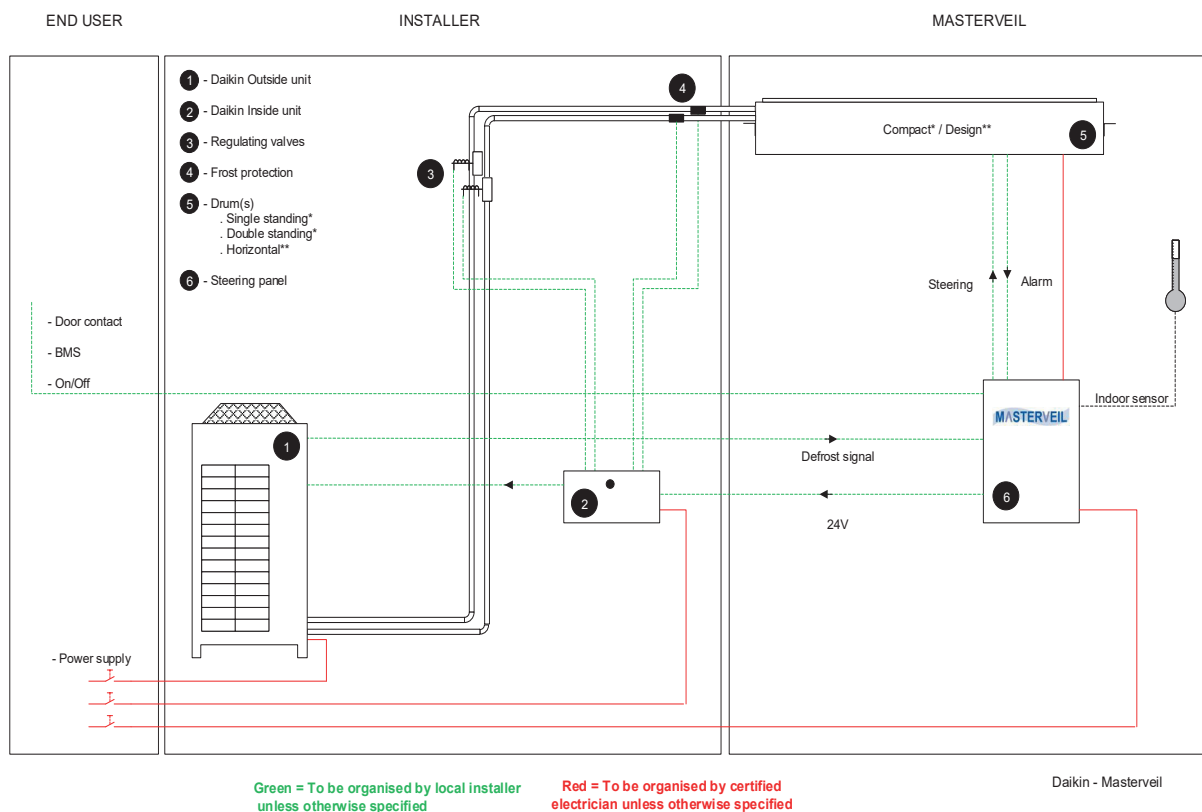
GRAPHICAL PRESENTATION - STRM



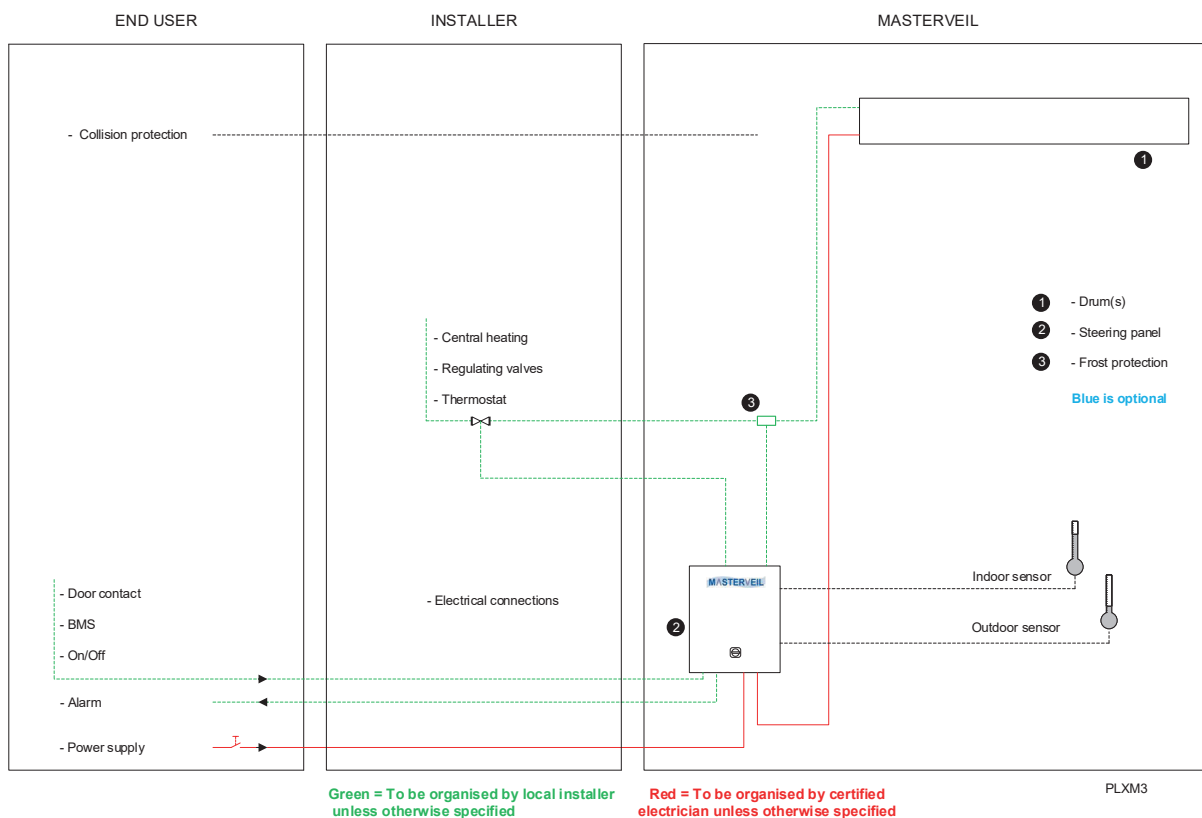
GRAPHICAL PRESENTATION - STRM_EL



GRAPHICAL PRESENTATION - HEATPUMP DAIKIN



GRAPHICAL PRESENTATION - PLXM³







MASTERVEIL

The art of invisible doors



Invisible doors



Freezer solutions



Humidification



Dehumidification

MASTERVEIL CERTIFIED PARTNER

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