rev_03 - September 2023

UNI EN ISO 9001 : 2015

COOLING UNIT FOR CONTROL PANELS - OUTDOOR APPLIANCE

IP65 - ODR series - models **4218 - 4225 - 4233**

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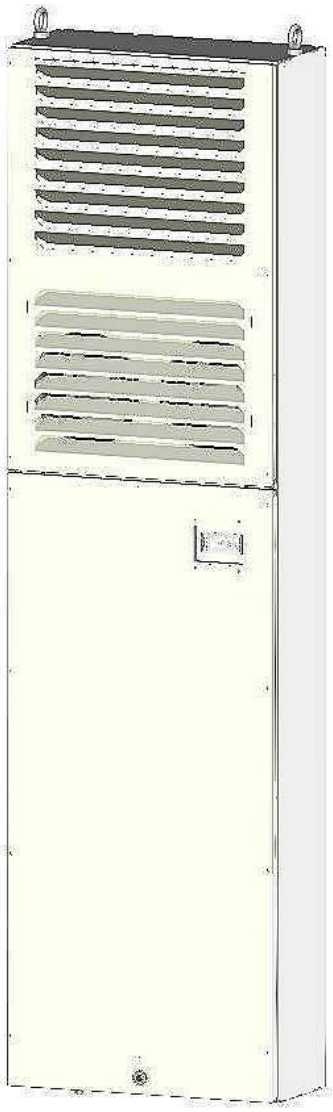
COOLING UNIT FOR OUTDOOR - ODR series – models 4218 - 4225 - 4233

Available on request:
- with AISI304-2B stainless steel carpentry - extension code _0X
- with AISI316-2B stainless steel carpentry - extension code _XX)
- with heat exchangers with cataphoresis treatment for use in marine environments or in environments with aggressive atmospheres - suffix code _CM.

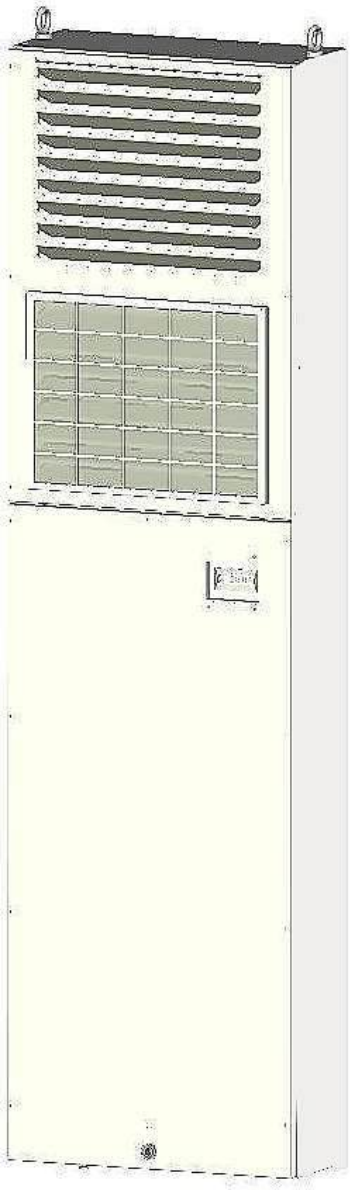
Electrical variants: H31 = 230V 1ph 50-60Hz - N33 = 400/460V 3ph 50/60Hz

eg. code ODR4233N33000007 ..... standard three-phase version painted textured RAL7035 carpentry
eg. code ODR4233H310X0X00 ..... single-phase variant with unpainted AISI304 2B carpentry
eg. code ODR4233N33XXXX00 ..... three-phase variant with unpainted AISI316 2B carpentry

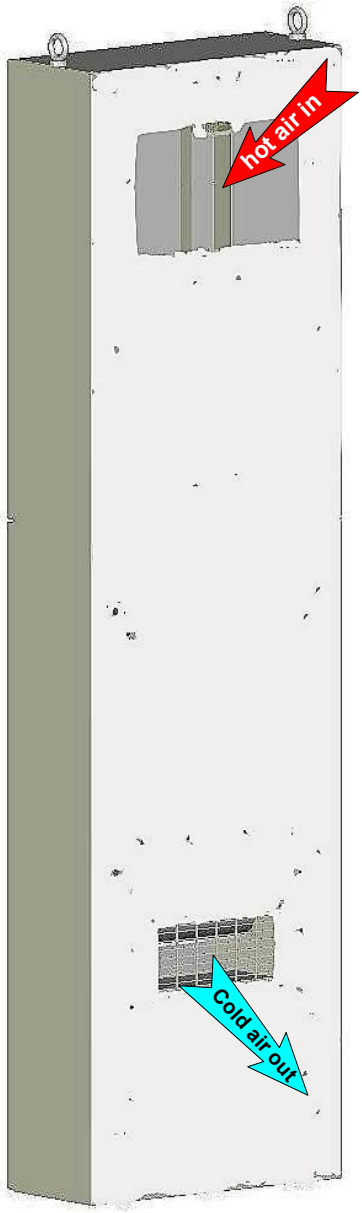
eg. code ODR4233H310X0X _CM ..... single-phase variant with unpainted AISI304 2B carpentry and exchangers with protective cataphoresis treatment



Front view
without air filter



Front view
with basket and
condenser air filter



Rear view

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Device description

- Outdoor appliance: it allows maintaining the IP65 degree of protection between the air conditioner and the electrical panel (it must be fixed to the wall using all the screws provided for coupling and the gasket between the air conditioner and the panel must be accurately positioned and adequately compressed). If the cabinet wall deforms under the thrust of the gasket it will be necessary to reinforce it with suitable longitudinal members.

- It can be installed on the door or side wall, outside the switchgear or completely built-in (no specific accessories are required for completely built-in installation). To make a semi-recessed installation, 110 mm approx., it is necessary to use the subframe cod. PAI1041110xx (the xx extension defines the paint color)

- Supply voltage: 230V 50Hz AC single-phase or 400V 50Hz / 460V 60Hz AC three-phase

- A 9-pole Wago quick connector facilitates connection to the power supply and signal networks

- The cooling process is governed by a digital electronic microprocessor thermostat, with integrated alarm functions, faulty probe, incorrect connection, over range, open doors, etc.

- In the event of a dirty filter and/or condenser, or a faulty fan or an out-of-range ambient temperature, a pressure switch and a thermoregulator probe protect the refrigerant circuit both against overpressure and against overtemperature.

- To signal evaporator fan failure or loss of refrigerant fluid a pressure switch (optional) for low pressure control can be installed

- A voltage-free contact of the blocking relay allows the signal to be re-launched
of alarm to the control PLC:
relay always energized during normal operation, de-energized in the event of anomaly or breakdown of the relay itself. Remote signaling connection via the 9-pin Wago connector.

- The speed of the condenser fan is electronically regulated to adjust the air consumption to the actual needs of the system.

- R 134a refrigerant fluid without CFC.

- The condensate produced by the cooling process is collected in a tank placed on the floor of the air conditioner
An automatic pump controlled by a level switch discharges the condensate outside, When, due to a blockage in the discharge line or a fault in the pump, the maximum admitted level is reached, a second level switch stops the cooling process and activates an alarm signal. The drain pump is itself a check valve and prevents outside ambient air from being drawn into the internal cooling circuit of the cabinet via the drain line

- Installation kit is supplyed complete with studs, washers, nuts, sealing gasket and lift eyebolts.

COOLING UNIT FOR OUTDOOR - **ODR series –** models **4218 - 4225 - 4233**

TECHNICAL FEATURES 230V 1~ 50-60Hz

ITEM CODE	**ODR**	**4218** H31	**4225** H31	**4233** H31
USEFUL COOLING OUTPUT				
L35 - L35 (50/60) L35 - L50 (50/60)	W W	**1.800 / 1.850** **1.420 / 1.560**	**2.500 / 2.680** **2.000 / 2.180**	**3.300/ 3.450** **2.480/ 2.660**
OPERATION FIELD				
ENVIRONMENTAL TEMPERATURE CABINET TEMPERATURE	°C °C	**- 10 ….. +55** **+25 ….. +45**		
VOLTAGE				
RATED VOLTAGE	V / Hz	**230V 50-60Hz 1~**		
CURRENT				
RATED CURRENT (FLA) (50/60) START UP CURRENT (LRA) (50/60)	A A	**5,5/5,8** **19/20,5**	**6,5/7,5** **24/25**	**8.4/8,8** **35/36**
POWER CONSUMPTION				
RATED L35 - L35 MAXIMUM L35 - L50	W W	**1.010 / 1.150** **1.180 / 1.380**	**1.190 / 1.600** **1.680 / 1.860**	**1.740 / 1.900** **1.920 / 2.230**
REFRIGERANT				
TYPE FILLING ADMISSIBLE PRESSURE	**R** g. kPa	**134a** **640** **2.400**	**134a** **800** **2.400**	**134a** **810** **2.400**
PROTECTION CATEGORY - EN 60529				
INTERNAL CIRCUIT EXTERNAL CIRCUIT	IP IP	**65** **44**		
FAN FLOW FREE MOUTH				
INTERNAL CIRCUIT EXTERNAL CIRCUIT	mc/h mc/h	**810** **1.050**	**810** **1.480**	
NOISE LEVEL				
MAXIMUM	dB (A)	**62**	**69**	
NET WEIGHT				
ACCESSORIES EXCLUDED	Kg	**84**	**88**	**92**
COLOR				
STANDARD	RAL	**7035 (Other colors aviable on request)**		
OVERALL DIMENSIONS				
WIDTH DEPTH (WITHOUT GRID) HEIGHT	mm. mm. mm.	**500** **220** **1.800**		
DUTY CYCLE				
	100 %			
ADJUSTMENT				
BUILT-IN DIGITAL ELECTRONIC THERMOSTAT	**Default factory settings: set =35 °C – Δt =5k**			

COOLING UNIT FOR OUTDOOR - **ODR series –** models **4218 - 4225 - 4233**

TECHNICAL FEATURES 400/460V 3~ 50/60Hz

ITEM CODE	**ODR**	**4218** N33	**4225** N33	**4233**N33
USEFUL COOLING OUTPUT				
L35 - L35 (50/60) L35 - L50 (50/60)	W W	**1.800 / 1.850** **1.420 / 1.560**	**2.500 / 2.680** **2.000/ 2.180**	**3.300/ 3.450** **2.480/ 2.660**
OPERATION FIELD				
ENVIRONMENTAL TEMPERATURE CABINET TEMPERATURE	°C °C	**- 10 ….. +55** **+25 ….. +45**		
VOLTAGE				
RATED VOLTAGE	V / Hz	**400/460V 50/ 60Hz 3 ~**		
CURRENT				
RATED CURRENT (FLA 50/60) START UP CURRENT (LRA 50/60)	A A	**2,2 / 2,3** **9,4 / 9,8**	**2,6 / 2,8** **13 / 15**	**3,2 / 3,4** **13 / 15**
POTENZA ASSORBITA				
RATED L35 - L35 (50/60) MAXIMUM L35 - L50 (50/60)	W W	**1.010 / 1.150** **1.180 / 1.380**	**1.190 / 1.600** **1.680 / 1.860**	**1.740 / 1.900** **1.920 / 2.230**
REFRIGERANT				
TYPE FILLING ADMISSIBLE PRESSURE	**R** g. kPa	**134a** **640** **2.400**	**134a** **800** **2.400**	**134a** **810** **2.400**
PROTECTION CATEGORY - EN 60529				
INTERNAL CIRCUIT EXTERNAL CIRCUIT	IP IP	**65** **44**		
FAN FLOW FREE MOUTH				
INTERNAL CIRCUIT EXTERNAL CIRCUIT	mc/h mc/h	**810** **1.050**	**810** **1.480**	
NOISE LEVEL				
MAXIMUM	dB (A)	**62**	**69**	
NET WEIGHT				
ACESSORIES EXCLUDED	Kg	**88**	**92**	**96**
COLOR				
STANDARD	RAL	**7035 (Other colors aviable on request)**		
OVERALL DIMENSIONS				
WIDTH DEPTH (WITHOUT GRID) HEIGHT	mm. mm. mm.	**500** **220** **1.800**		
DUTY CYCLE				
	100 %			
ADJUSTMENT				
BUILT-IN DIGITAL ELECTRONIC THERMOSTAT	**Default factory settings: set =35 °C – Δt =5k**			

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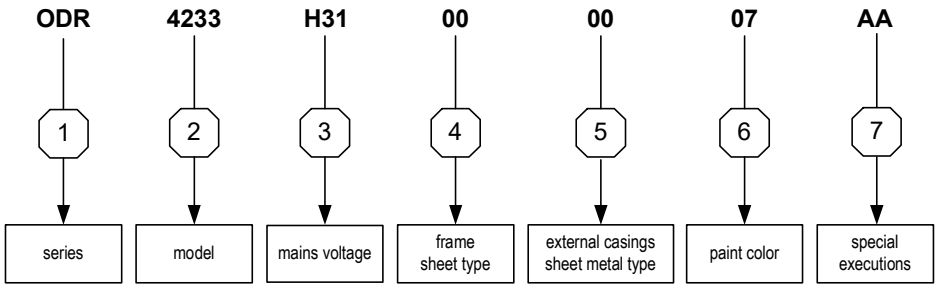
DESCRIZIONE DEL CODICE E DELLE VARIANTI - CODE AND VARIANTS DESCRIPTION



1	3 digit = series: eg. PXS / PSC / ODR / TXS, AW …..... etc.	see the catalog	
2	4 digit = model: eg. 4140 / 6160 / 5310 / 5401 ……. etc.	see the catalog	
3	3 digit = mains voltage: eg. H31- N31- N33 - …… etc.	see table in catalog	
4	2 digit = sheet metal type of the frame	Standard = galvanized steel	00
		on request AISI304 2B steel	0X
		on request AISI316 2B steel	XX
5	2 digit = sheet metal type of the external covers	standard painted carbon steel	00
		on request AISI304 2B steel	0X
		on request AISI316 2B steel	XX
6	2 digit = exterior casing paint color other non standard colors available on request: see table in catalog	standard paint RAL7035	07
		eg. non standard RAL7032	01
		for others colors see catalog	??
7	2 digit = custom executions on request	standard = blank	
		custom executions = TBD	??

STANDARD EQUIPMENT

1. Installation, use and maintenance manual
2. Installation kit that consisting:
   - trheaded studs, nuts, washers
   - sealing gasket
   - lifting eyebolts
3. Condensate draing kit that consisting:
   - Elbow hose connector
   - drain pipe
4. Test certificated
5. Warranty certificated

OPTIONAL EQUIPMENT	Item code
Subframe for semi-recessed installation 110 mm. RAL7035 painted	PAI 104111007
Optional accessory for signaling the cooling circuit low pressure alarm	PAF208009-1041
Basket to containing the filters for the filtration of the condenser cooling ambient air RAL7035painted	104122D107
Dust filter septum to filtering environ air of condenser cooling	050100-0415-0315-012
Oil resistant filter septum in aluminium sock to fltering environ air of condenser cooling	050320-0415-0315-010

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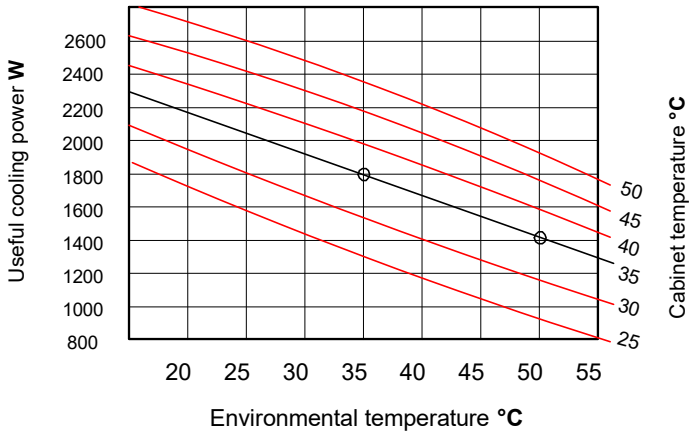
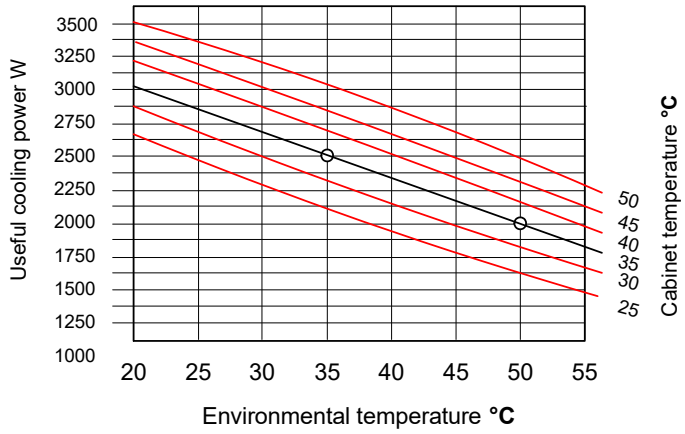
REFRIGERATING POWER DIAGRAMS DIN 3168

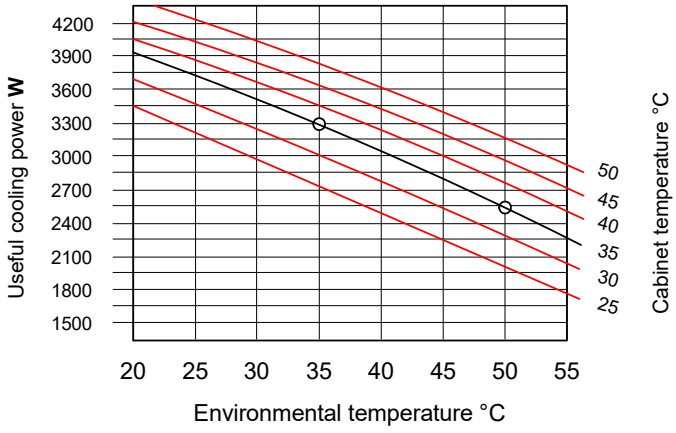
mod. ODR_4218



mod. ODR_4225



mod. ODR_4333



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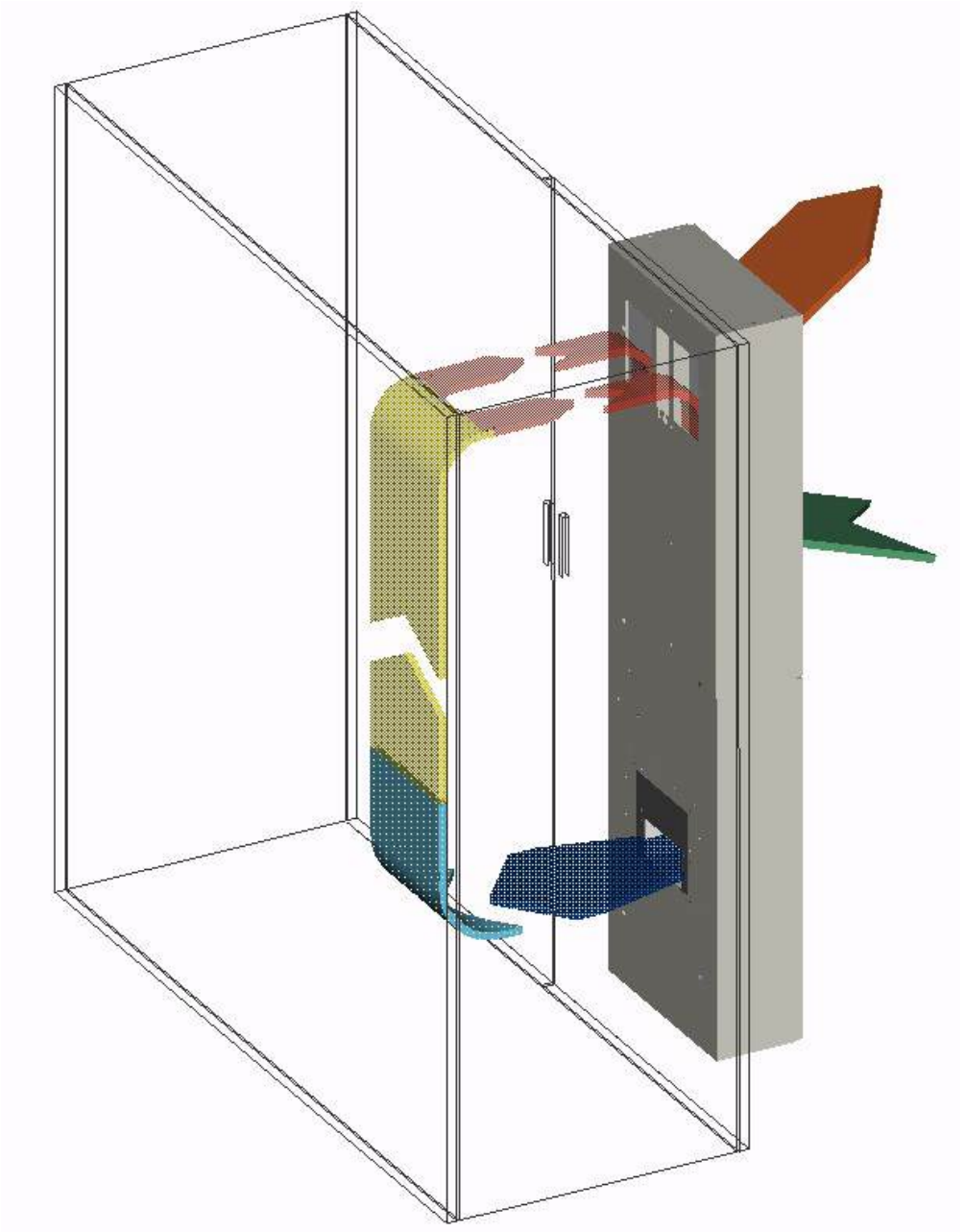
VENTILATION FLOWS:

The large distance between the panel's ventilation openings ensures uniform temperature distribution, preventing the formation of heat pockets.
The flow of air expelled from the condenser, directed upwards, does not disturb the personnel working near the equipment.
The room air intake grill, removable by click, is designed to accommodate a filtering septum



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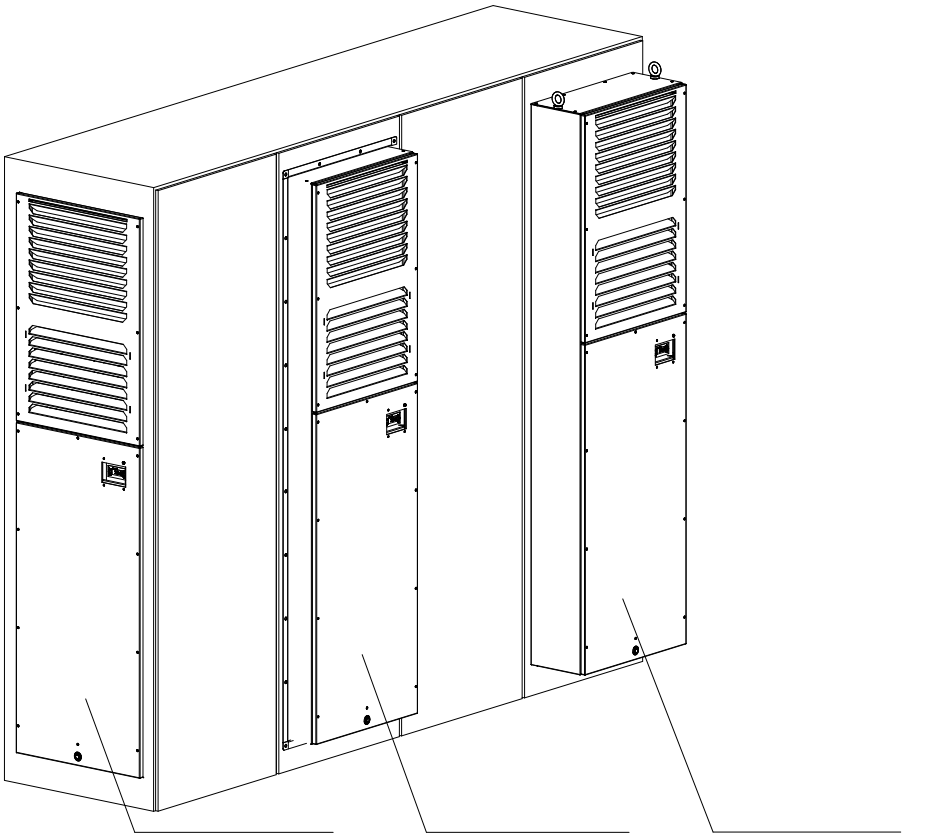
OVERALL DIMENSIONS ACCORDING TO THE TYPE OF INSTALLATION:

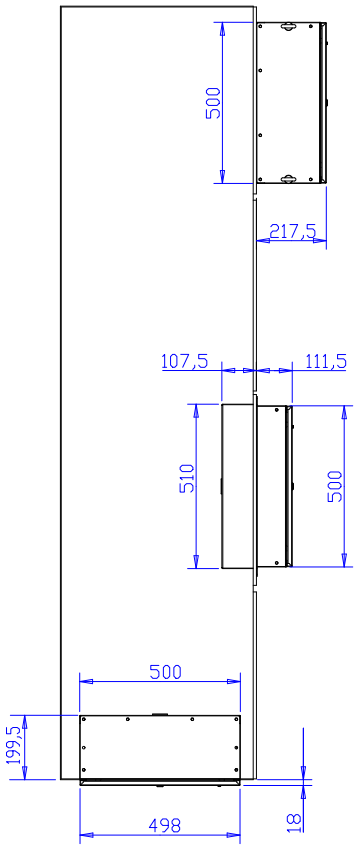
Installation	External	Internal
STANDARD – TOTALLY OUTSIDE THE CABINET	220	----------
STANDARD TOTALLY RECESSED IN THE CABINET	20	200
OPTIONAL SEMIRECESSED WITH CARTER PAI 4233-100	112	108



Standard version
fully recessed
in the cabinet

With casing accessory
code PAI1041-110
cashed 110 mm into cabinet

Standard version
completely outside
of the cabinet



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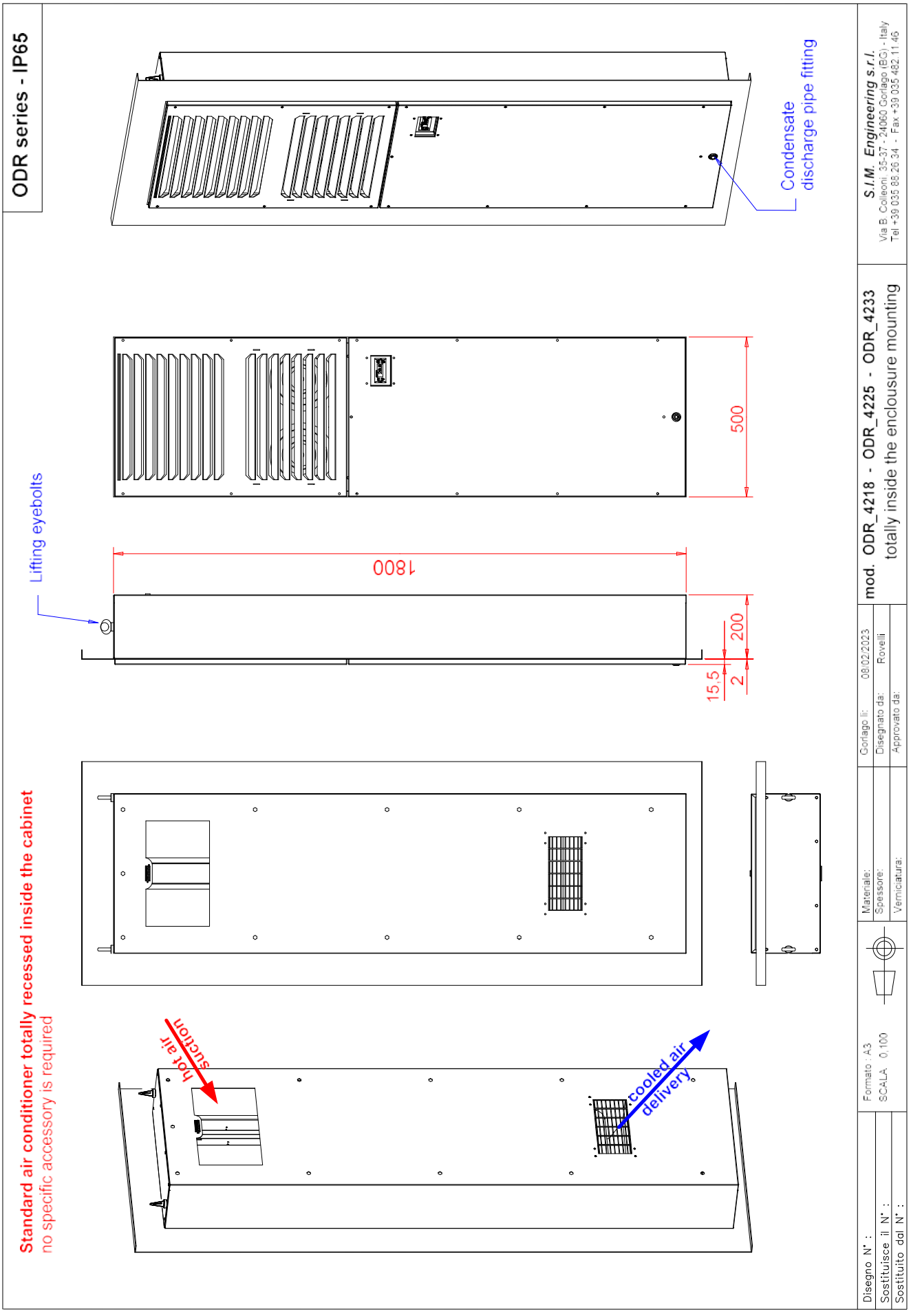
STANDARD VERSION - OUTSIDE THE CABINET INSTALLED



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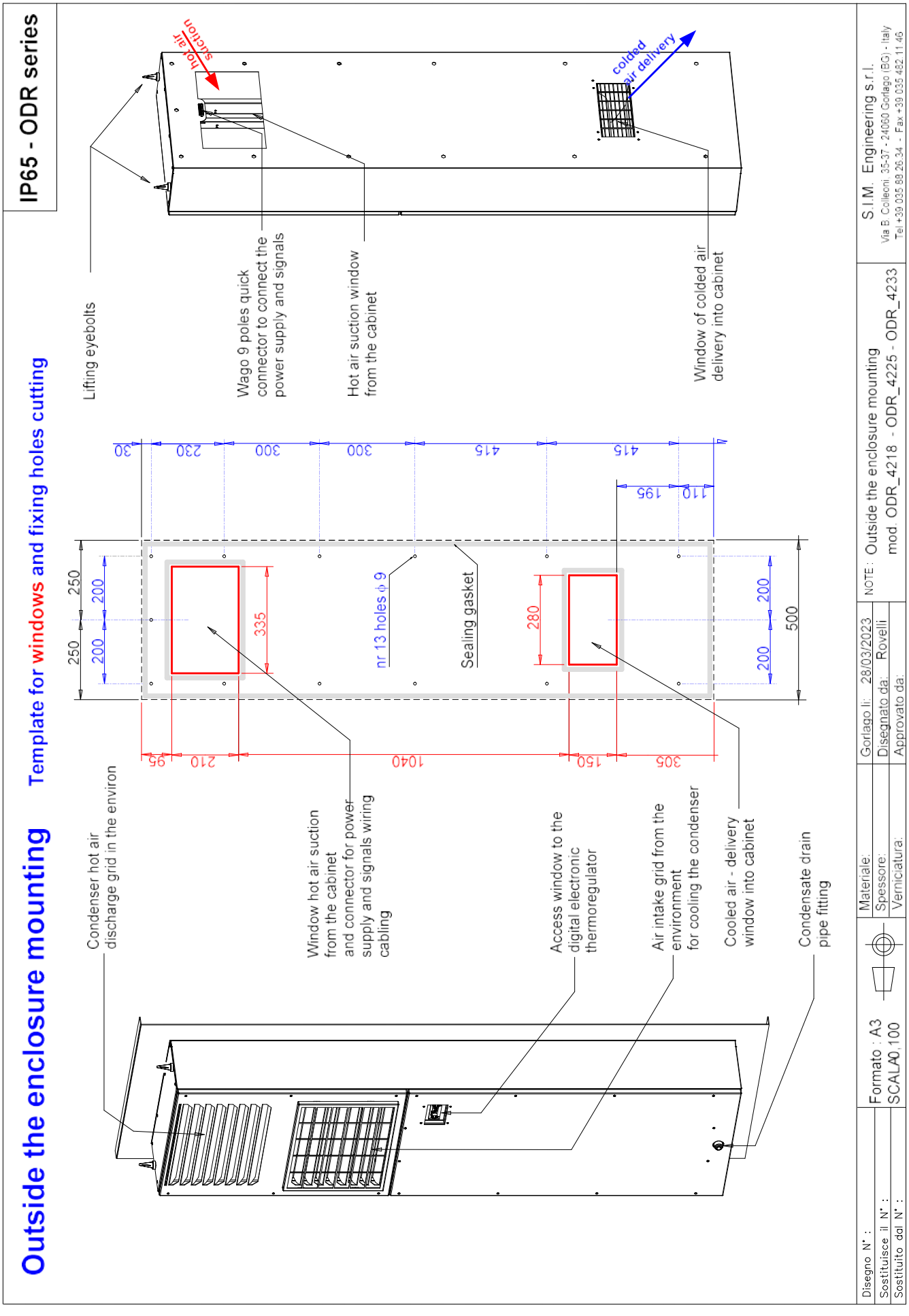
OUTSIDE THE CABINET INSTALLED DESCRIPTION AND CUT-OUT TEMPLATE



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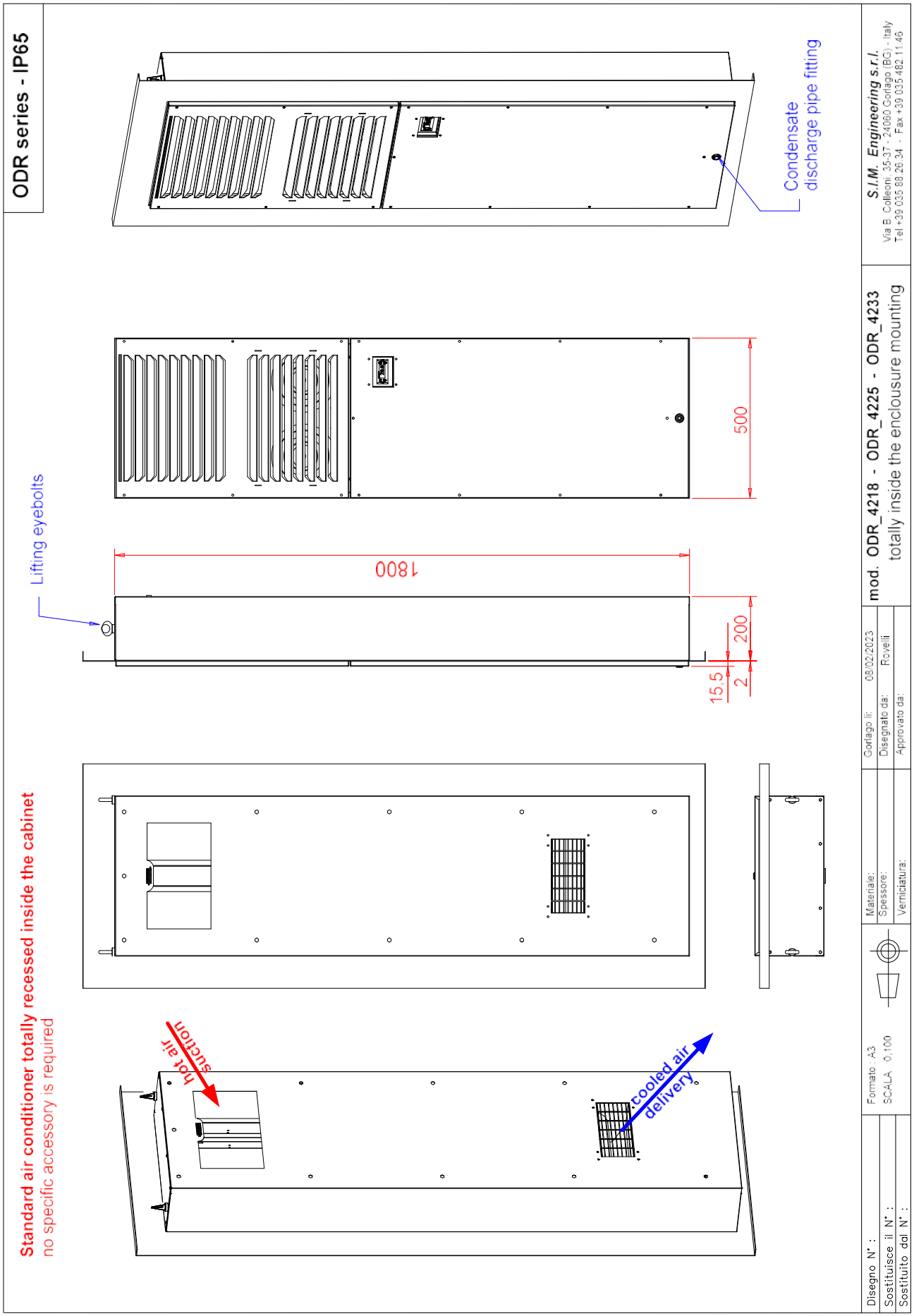
STANDARD VERSION - INSTALLED TOTALLY RECESSED INSIDE THE CABINET



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STANDARD VERSION - INSTALLED TOTALLY INSIDE THE CABINET
DESCRIPTION AND CUT-OUT TEMPLATE