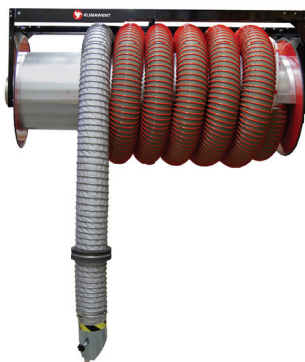


## ALAN-HD-N – reel exhaust extractor



### Purpose

Reel exhaust extractors – type ALAN-HD-N are designed for efficient extraction the exhaust fumes, emitted by vehicle exhaust pipes during the engine tests, adjustment and diagnostics. They are applied in depots, truck garages and service stations for: large vehicles, building construction machines and special vehicles. Due to economic optimal air extraction volume and simple use, they capture the whole exhaust amount and removes it outside. The reel extractors can be mounted both, directly under the ceiling or to the wall or to column by means of wall brackets. The extractor works with following fans produced by KLIMAWENT:

- built-on fans – type FA/HD – mounted directly to the device,
- fans – type WPA-E-N – mounted independently on the wall bracket,
- roof fans – type WPA-D-N.

### Structure

The reel exhaust extractor consists of a winding reel with the (wound on) exhaust hose with a nozzle to connect at the vehicle exhaust pipe. The nozzle draws in the ambient air, mixes it with the exhaust fumes decreasing their temperature. Exhaust extractors are adapted for a hose of diameters 200 mm (to be wound on). In all extractor versions, the free overhang of the hose (entirely wound on the reel) is 1,5 to 2 m. The devices are produced with two sorts of reel drive:

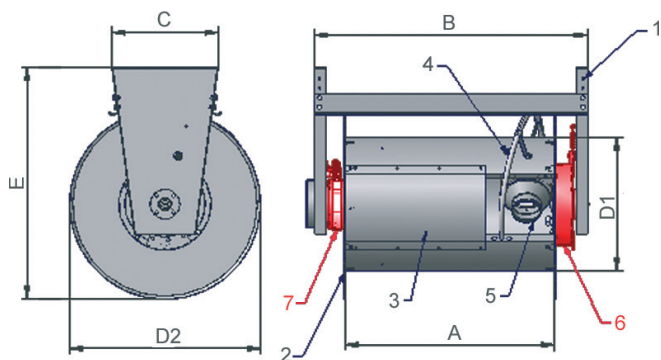
1. Type C – spring drive for hose reeling. The hose is wound down manually and reeled up automatically, upon the force of a spring mechanism. To the equipment set belong following elements:

- band brake – to slow down the hose speed during winding-up,
  - ratchet device – which locks the hose in the required position (while it is being wound down),
  - rubber stopper – to be fixed on the hose, stops the hose after it is fully wound up onto the reel.
2. Type E – with electrical drive for "hose wind-UP/DOWN". Inside the reel is located a gear-motor (of small motor power and low rotations).

#### NOTE:

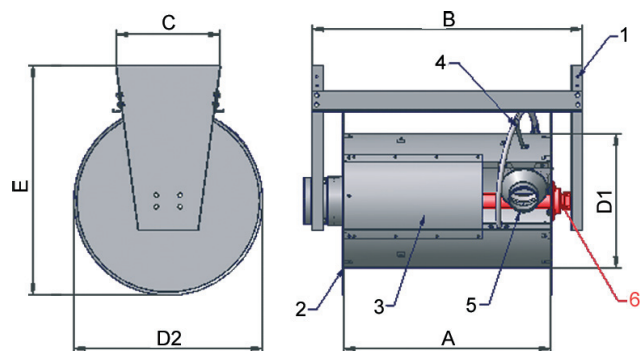
1. For fans working with spring driven reel extractors type C use electrical equipment described in the present catalogue, Section FANS. For fans, working with motor driven reel extractors type E, use the control unit – type ZE, additionally serving for reel control "hose wind-UP/DOWN".
2. For standard applications, we offer ZW hose sets of thermal resistance 150°C (short duration 200°C).
3. On demand of Customer, we deliver hose sets of increased thermal resistance.

# ALAN-HD-N



Dimension	Spring drive	
	U/C-8-HD-N	U/C-12-HD-N
A	775	120
B	1000	1465
C	455	455
D1	550	550
D2	820	820
E	965	965

1. Framework  
 2. Hose reel  
 3. Reel cover  
 4. Spiral  
 5. Connection  
 6. Spring mechanism  
 7. Brake



Dimension	Motor drive		
	U/E-10-HD-N	U/E-15-HD-N	U/E-22-HD-N
A	1000	1200	2000
B	1225	1425	2240
C	455	455	455
D1	550	550	550
D2	820	820	820
E	965	965	965

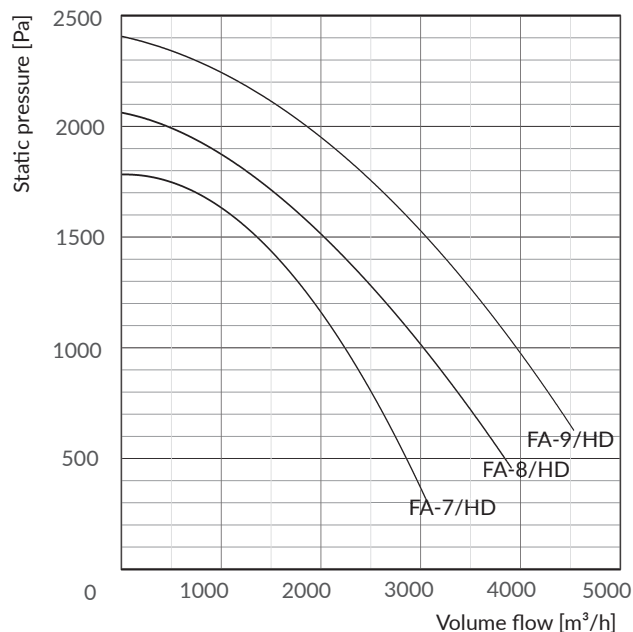
1. Framework  
 2. Hose reel  
 3. Reel cover  
 4. Spiral  
 5. Connection  
 6. Gear motor

## Technical data

	Type <sup>1</sup>	Equipped with a shut-off damper	Part no.	Maximum torque [Nm]	Maximum hose length [m]	Hose	Fan	Weight of the device <sup>2</sup> [kg]
	ALAN-U/C-8/HD-N	no	805074	50	8	Each reel is adapted to be equipped with a hose of diameter Ø200 mm.	The fans should be selected according to the hose diameter (see Table HOSE SETS).	68
	ALAN-U/C-12-HD-N	no	805075	100	12			90
	ALAN-U/E-10-HD-N	no	805085	80	10			65
	ALAN-U/E-15-HD-N	no	805086	100	15			69
	ALAN-U/E-22-HD-N	no	805087	120	22			95


1. Prior the selection of the appropriate size of reel extractor, please contact KLIMAWENT S.A.  
 2. Values of weight are given without the hose.

## Flow charts



# ALAN-HD-N


## Built-on fans (mounted directly to the reel extractor)

	Type	Part no.	Supply voltage [V]; 50 Hz	Inlet/outlet diameter [mm]	Motor rate [kW]	Acoustic pressure level [dB(A)] <sup>1</sup>	Weight [kg]
	FA-7-1/HD	804W77	230	200/200	1,1	72	24
	FA-7-3/HD	804W78	3x400	200/200	1,1	72	24
	FA-8-3/HD	804W79	3x400	200/200	1,5	74	31
	FA-9-3/HD	804W80	3x400	200/200	2,2	77	38

1. Noise level measured from distance of 5 m.


For other fans – flange type fans WPA-E-N or roof fans WPA-D-N – see catalogue FANS.

## Rubber stoppers

	Type	Part no.	Internal diameter [mm]
	ZO-200	804K39	200


Applied in spring driven reel extractors, fastened on the exhaust hose.

## Wall bracket

	Type	Part no.	Length [mm]	Weight of the set [kg]
	L860	817W33	800	12

A set – to install the reel extractor to the wall or a column.

## Hose sets

	Type	Part no.	Hose diameter [mm]	Weight [kg]	Hose length [m]	Recommended volume flow [m <sup>3</sup> /h]	Flow resistance <sup>1</sup> [Pa]	Thermal resistance [°C]	Fans to operate with
	ZW-8/200	828P80	200	10,4	8	2000	1000	150 <sup>2</sup>	FA-7/HD, WPA-7-E-N, WPA-7-D-N
	ZW-10/200	828P81	200	12,8	10	2000	1200	150 <sup>2</sup>	FA-7/HD, WPA-7-E-N, WPA-7-D-N
	ZW-12/200	828P82	200	15,3	12	2000	1500	150 <sup>2</sup>	FA-8/HD, WPA-8-E-N, WPA-8-D-N
	ZW-15/200	828P83	200	19	15	2000	1900	150 <sup>2</sup>	FA-9/HD, WPA-9-E-N, WPA-9-D-N <sup>3</sup>
	ZW-22/200	828P84	200	28,1	22	2000	2100	150 <sup>2</sup>	WPA-10-E-N, WPA-10-D-N <sup>3</sup>


1. Flow resistances concern to the hose completely wound onto the reel.

2. Hose of thermal resistance 150°C (short duration 200°C).

3. Data for fans – see Section FANS.

## Control units for reel exhaust extractor type E

ZE-ALAN control unit is for installing in a garage or other room indicated by User. The unit provides switch ON/OFF of the fan through a motor protective switch and as well as operates the reel as "hose wind-UP/DOWN" by means of buttons. Depending on the motor power rate, the control unit is equipped with an appropriately selected motor protective switch. Additionally, the unit is equipped with a short-circuit and thermal protection. The motor disconnecter protects the motor when it gets blocked while starting-up, during the overload, short-circuit and during the non-complete-phase operation (three-phase motors).

	Type	Part no.	Supply voltage [V]; 50 Hz	Motor rate [kW]	Current range [A]	Fans to operate with
	ZE-ALAN-U/E-10-1	816Z33	230	1,1	6,3-10	FA-7-1/HD, WPA-7-D-1-N, WPA-7-E-1-N
	ZE-ALAN-U/E-4-3	816Z34	3x400	1,1 i 1,5	2,5-4,0	FA-7-3/HD, FA-8-3/HD, WPA-7-D-3-N, WPA-8-D-3-N, WPA-7-E-3-N, WPA-8-E-3-N
	ZE-ALAN-U/E-6,3-3	816Z35	3x400	2,2	4-6,3	FA-9-3/HD, WPA-9-E-N, WPA-9-D-N
	ZE-ALAN-U/E-10-3	816Z38	3x400	3,0	6,3-10	WPA-10-E-N, WPA-10-D-N

## Nozzles

Nozzles and suction stands – for application with the exhaust extractor – are described on separate catalogue card and they are additional equipment.