



Application

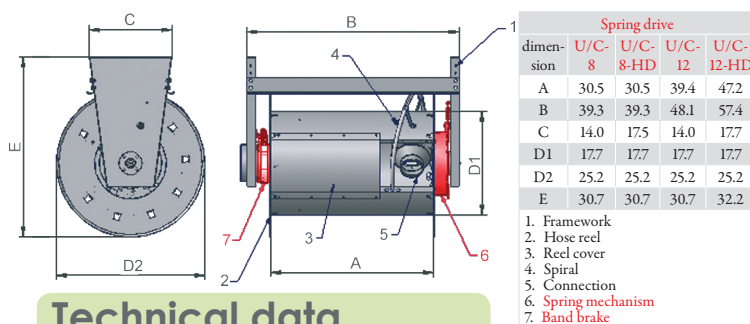
Reel Exhaust Extractors – type ALAN are designed for extraction the exhaust fumes, emitted by vehicle exhaust pipe during the engine tests, adjustment and diagnostics. They are applied in bus depots, garages and car service stations. Due to economic optimal air extraction volume and simple use, it captures the whole exhaust amount and removes them outside. The reel can be mounted both, directly under the ceiling or to the wall or to column by means of a bracket set. The extractor works with following fans produced by KLIMAWENT S.A.:

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

Structure

The reel exhaust extractor consists of a winding reel with the 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 hoses of diameters 4 (for cars), 5 (for vehicles of admissible total weight) or 6 inch (for trucks) and 8 inch (for special vehicles). Hose diameter selection is depended on the engine cubic capacity of the serviced vehicle and its rotational speed. For more precise selection contact KLIMAWENT S.A. In all extractor versions, the free overhang of the hose (entirely wound on the reel) is 5 feet up to 6,5 feet. 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,



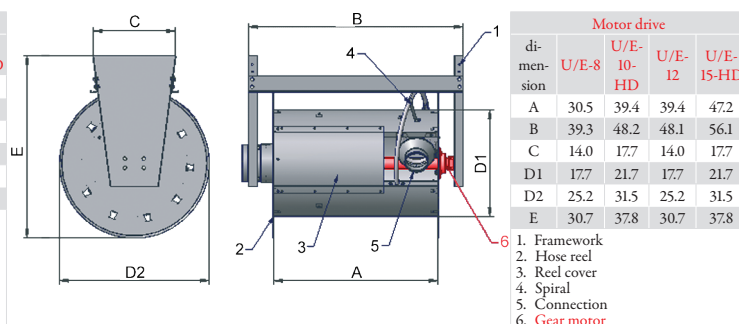
- ratchet device – which locks the hose in the required position (while it is being wound down),
 - rubber stopper – to be fixed on the hose, stops the hose after it is fully wound up onto the reel.
2. Type E – with electrical drive for “hose wind-UP/DOWN”. Inside the reel is located a gear-motor (of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

As option, both types can be equipped with a shut-off damper which automatically opens and closes during reeling/unreeling of the hose.

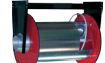
Therefore it is possible to apply a smaller fan when the reel extractors are connected to one main collecting ductwork, and the use coincidence factor is lower than 1.

CAUTION: For fans working with spring driven reel extractors type C use electrical equipment described in section “FANS”.

For fan working with motor driven reel extractors type E use the control unit – type ZE, additionally serving for reel control “hose wind-UP/DOWN”.



Technical data

	Type*	Equipped with a shut-off damper	Part.No	Maximum torque moment [Nm]	Maximum hose length [ft]	Hose	Fan	Weight of the device” [lb]
	ALAN-U/C-8	no	704O94	50	26.5	Each reel is adapted to be equipped with a hose of diameter Ø4, Ø5 or Ø6 inch.	The fans should be selected according to the hose diameter (see Table “Hose sets”).	48
	ALAN/P-U/C-8	yes	704O30	50				
	ALAN-U/E-8	no	704O13	40				
	ALAN/P-U/E-8	yes	704O31	40				
	ALAN-U/C-12	no	704O12	50	39.5			102
	ALAN/P-U/C-12	yes	704O32	50				
	ALAN-U/E-12	no	704O14	80				
	ALAN/P-U/E-12	yes	704O33	80				
	ALAN-U/C-8-HD	no	704O95	50	26.5	Each reel is adapted to be equipped with a hose of diameter Ø8 inch.		98
	ALAN-U/C-12-HD	no	703O62	100	39.5			150
	ALAN-U/E-10-HD	no	702O19	80	33.0			98
	ALAN-U/E-15-HD	no	703O65	100	49.5			150

* Prior the selection of the appropriate reel extractor, please contact KLIMAWENT S.A.

** Weight without the hose.



exhaust extractors - hose reels - ALAN

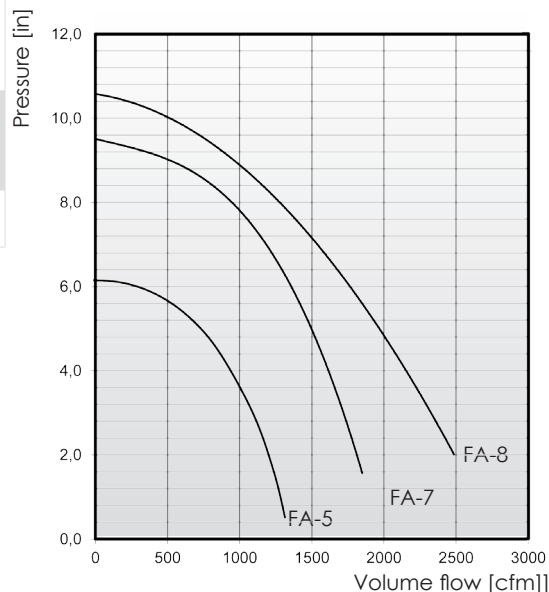
Built-on fans - mounted directly to the reel extractor

Type	Part No	Supply voltage- [V]; 60 Hz	Inlet / outlet diameter [inch]	Motor rate [HP]	Acoustic pressure level [dB(A)]*	Weight [lb]
FA-5-1	704W16	120	6.3/6.3	1	55	37.4
FA-5-3	704W17	3x208-230/460, 1 HP				
FA-7-1	704W18	120	6.3/8	2	72	52.8
FA-7-3	704W19	3x208-230/460, 2 HP				
FA-8-3	704W20	3x208-230/460, 3 HP	6.3/8	3	74	68.2

* Noise level measured from distance of 16 feet.

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

Flow charts



Rubber stoppers

Type	Part No	Internal diameter [inch]
ZO-100	804K40	4
ZO-125	804K41	5
ZO-150	804K42	6
ZO-200	804K39	8

Applied in spring driven exhaust extractors, fastened on the flexible hose

Wall bracket set

Type	Part No	Length[inch]	Weight of the set [lb]
L860	817W33	31.5	26.4

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

Hose sets

Type	Part No	Hose diameter [inch]	Weight [lb]	Hose length [ft]	Recommended volume flow [cfm]	Maximum vacuum [in w.g.]	Application with a vehicle category **	Fans to operate with
ZW-8/100	828P64	4	11.5	26.3	235.4	4.4	SO	FA-5, WPA-5-E-UL, WPA-5-D-UL
ZW-8/125	828P65	5	14.1	26.3	412.0	4.8	SD	FA-5, WPA-5-E-UL, WPA-5-D-UL
ZW-8/150	828P66	6	16.7	26.3	882.9	6.0	SC	FA-7, WPA-7-E-UL, WPA-7-D-UL
ZW-8/200	828P80	8	22.9	26.3	1177.2	4.0	PS	FA-7, WPA-7-E-UL, WPA-7-D-UL
ZW-10/200	828P81	8	28.2	32.8	1177.2	4.8	PS	FA-7, WPA-7-E-UL, WPA-7-D-UL
ZW-12/100	828P67	4	17.2	39.4	235.4	6.0	SO	FA-5, WPA-5-E-UL, WPA-5-D-UL
ZW-12/125	828P68	5	20.9	39.4	412.0	6.4	SD	FA-7, WPA-7-E-UL, WPA-7-D-UL
ZW-12/150	828P69	6	32.6	39.4	882.9	8.0	SC	FA-8, WPA-8-E-UL, WPA-8-D-UL
ZW-12/200	828P82	8	33.7	39.4	1177.2	6.0	PS	FA-8, WPA-8-E-UL, WPA-8-D-UL
ZW-15/200	828P83	8	41.8	49.2	1177.2	7.6	PS	FA-8, WPA-8-E-UL, WPA-8-D-UL

The hose-assembly consists of a hose – type G-EX1 of thermal resistance up to +302°F (intermittent up to +392°F), 2 hose clamps, rubber clamp cover and reducer suitable to hose diameter. On demand we deliver hose sets of hoses of increased thermal resistances.

* Flow resistances – were measured when the hose is completely wound onto the reel.

** SO – car, SD – medium size vehicle, SC truck, PS – special vehicle.

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 system provides switch ON/OFF of the fan and as well as operates the reel as “hose wind-UP/DOWN” by means of pushbuttons. Depending on the motor power rate, the control unit is equipped with an appropriately selected motor switch. Additionally, the system is equipped with a short-circuit and thermal protection. The motor disconnecter protects the motor when it got blocked while the start-up, during the overload, short-circuit and during the non-complete-phase operation (three-phase motors).

Suction nozzles

Suction nozzles and suction stands – for application with the Reel Exhaust Extractor – are described on separate catalogue card at the end of this section.