ultraSilence® ELS The new ELS mono tube-dimension

The flush mounted fire protection solution

The versatile casing with metal back draught shutter can be used and fixed in almost any position. Discharge to the top, left, right or to the back. Likewise second room connection or flush toilet ventilation. According to the requirements on the construction site.

The flush mounted casing

is extremely adaptable regarding installation position and area of application.

It allows discharge to the top, left, right or to the back. With connection for second room and flush toilet ventilation. For any adaptation on the construction side.

Electrical connection

So very simple! Easy connection using the removable quick plug connector saves installation time on site.

The "mounting simplicity" with the flush casing

With ELS VA, the clever plasterboard adaptor, the casing can be inserted and fastened in installation walls or thin boards (e.g. plasterboards). Make a hole for flexible duct and power cable. Mark the square opening with the presspins at casing and cut it out. Everything fits in a few minutes.





Quiet.

26 dB(A)* for trickle ventilation at 35 m³/h and 35 dB(A) for general ventilation at 60 m³/h. This makes ultraSilence® ELS of Helios to the most quiet mono tube fans in relation to the air volume performance. More than 20 different ventilating fan applications – whether with motion sensor, humidity control etc. can be used effortlessly in the same surface or flush mounted casing. Fan unit 60 m³/h page 20

- for bathroom **or** toilet

Fan unit 100 m³/h page 21

- for bathroom **and** toilet

 for bathroom and toilet or kitchen

Unique + clever.

Helios offers filter change display and long-term filter for long cleaning intervals as standard. Effortless filter change. Just as the extremely practical, tool less "click" assembly. Helios offers the smart ELS-VA solution for very fast installation of the casing in covered shafts and plasterboards. The accessory program covers these and further assembly aids for which much time can be saved with the installation:

accessories for flush mounted casing, filter and switch.

page 23

Flat.

Very slim: ELS-GU, the depth of universal flush mounted casing is only 89 mm.

Now the installation space can be really shallow. The new ELS generation solves every positioning problem and is mounted in no time.

ultraSilence® dimensions

page 22

Simply the best.

The positioning of the ELS-casing is very easy. On the back side of the casing embedded turn-locked slots take up the mounting bracket which is vertically adjustable as well as in height and depth. Alternatively there are two predetermined breaking points for direct screw connection with elements provided by customer. The installation never was more convenient!

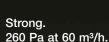


* (with ELS-GU at A_L =10 m² to DIN 18017 Pt. 3)

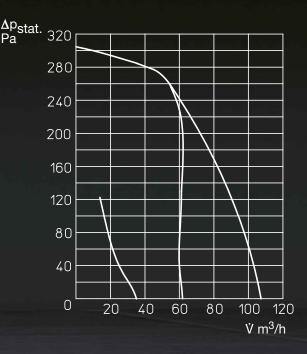


The new flush mounted casing ELS-GU in comparison with the previous casing.





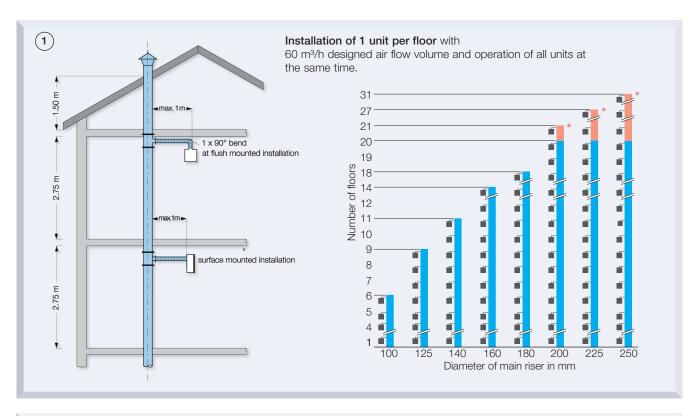
Thus ultraSilence® ELS achieves the highest pressure capacity of all times. This permits the smallest pipe cross sections with the main riser, reduces investment costs and increases the usable living space. Determination of diameters of main ducts page 16, 17

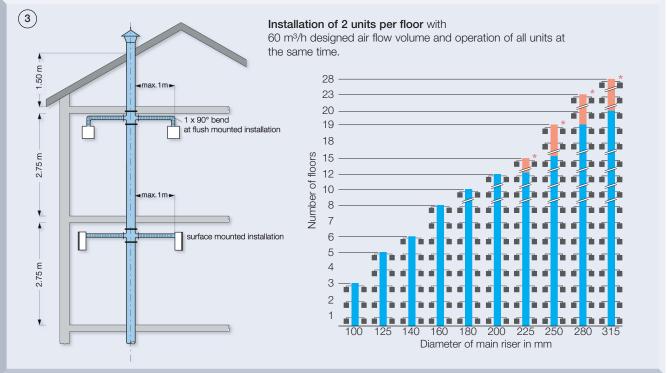




For easy design, the regulations from DIN 18017, Pt. 3 have been integrated in the diagrams below.

60 m³/h Bathroom or toilets





Assuming a room height of 2.75 m, a straight ducting without bends, a ducting length of max. 1.5 m from last unit to air extract above the roof as well as max. 60 Pa between ventilated room and exhaust opening, the required main riser diameter can be read from above's diagram.

They are valid for a designed air flow volume of 60 or 100 m³/h per unit and operation of all units at the same

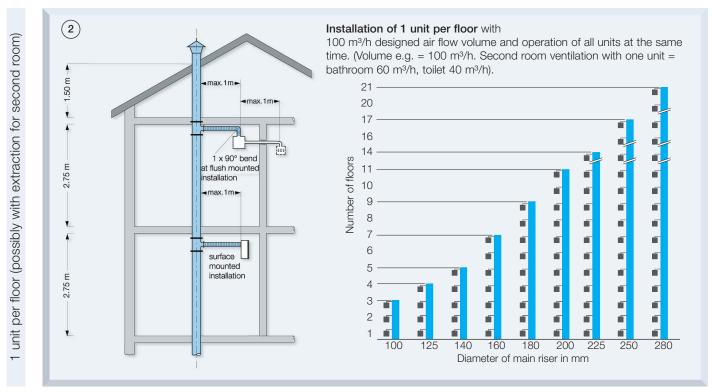
Copies of approvals are available on request. Approval No. Z-51.1-193.

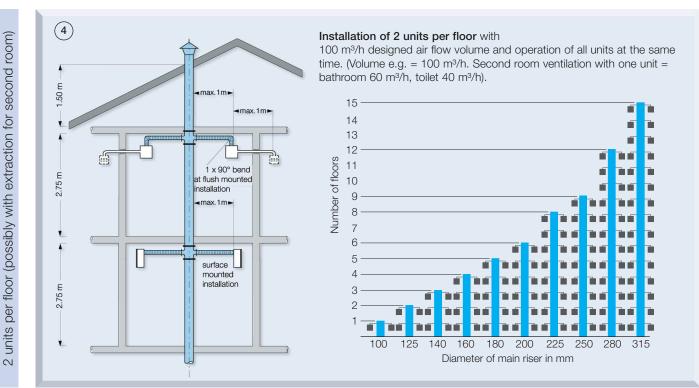
2 units per floor

^{*} if all fans operate the same time some noise increase maybe observed when operating in the red zone



100 m³/h One and two room ventilation





Example 1:

Type of room: bathroom/toilet $\dot{V}=60~\text{m}^3/\text{h}$ Units per floor: 1 Floor levels: 9

According to diagram ①
Main riser diameter: 125 mm

Main riser diameter: ?

Example 2:

Type of room: bathroom separated toilet with one unit or kitchen ventilation $\dot{V} = 100 \text{ m}^3\text{/h}$ (bathroom 60 m³/h and toilet 40 m³/h)

Units per floor: 2 Floor levels: 6 Main riser diameter: ?

According to diagram ④ Main riser diameter: 200 mm



Discharge to the back by means of accessory Two room venti-lation by means Discharge lateral, to the top, left or right Flush mounted casing for one or two room ventilation, without fire protection One room ventilation All casings generally approved by the DIBt with approval No. Z-51.1-193. Description Application ELS-ARS ELS-ZS1 **ELS-GU** Flush mounted casing without fire protection, For ventilation of bathroom or Ref. No. Ref. No. with airtight backdraught shutter. Spigot lateral, toilet, by means of accessory Ref. No. 8111 to the top (as delivered), rotatable to the left or set also for two room ventilation 8185 8186 right. Changeable by means of an accessory of bathroom and toilet. Flush set (-ARS, Ref. No. 8185) for discharge to the mounted installation in wall, back in any position. Quick plug connector for ceiling or shafts. Connection of electrical connection which is removable. Made 1 or 2 units to one single main from flame retardant polymer, fire class B 2. riser up to 20 floors possible. Reinsertable cover plate. Spigot diameter Fire protection can be establis-80 mm. hed by the use of fire damper. **ELS-GUBA** For ventilation of kitchens*, ELS-ARS ELS-ZS1 Flush mounted casing with fire protection Ref. No Ref. No. 8114 shutter K 90, casing made from flame retarbathroom or toilet. By means Ref. No. dent polymer fire class B 2, metal discharge of accessory set (-ZS, Ref. No. 8185 8186 spigot (to be connected to fire rated duc-8186) also for two room ventilating) with automatic backdraught shutter tion of bathroom and toilet. and shut-off with release of fusible link. Flush mounted installation in Discharge spigot lateral to the top (as delivered), ceiling or wall, as well as outside rotatable to the left or right. Changeable by of K 90-shafts suitably fire rated. means of an accessory set (-ARS, No. 8185) Connection of 1 or 2 units to for discharge to the back in any position. Reinone single main riser up to 20 sertable cover plate. Spigot diameter 80 mm. floors possible. Flush mounted casing for one room ventilation, with fire protection encasement **ELS-GUB** Flush mounted casing with fire protection Flush mounted installation in encasement K 90. For fitting into fire rated wall, ceiling and K 90 shafts Ref. No. 8112 wall, ceilings or partitions. Metal discharge suitably fire rated. Connection of spigot with automatic backdraught shutter 1 or 2 units to one single main riser up to 20 floors possible. and shut-off with release of fusible link. Discharge spigot lateral to the top (way of delivery), turnable to the left or right. Quick plug connector for electrical connection removable. Reinsertable cover for protection when plastering. Spigot diameter 80 mm. **ELS-GUBR** As ELS-GUB. As ELS-GUB, however discharge spigot to Ref. No. 8113 the back, rotatable by 90° into any position. For the shortest connection to the main line.

^{*} For apartment kitchens use of fan unit with 100 m³/h recommended. 1) Consisting of discharge unit for second room and spigot for second room (left, right or to the bottom applicable).



set room Discharge lateral, to the top, Flush mounted casing for two room ventilation, with fire protection encasement Extraction s for second 1 One room ventilation All casings generally approved by the DIBt with approval No. Z-51.1-193. Decription Application **ELS-GUBZL** Flush mounted casing with fire protection Two room ventilation of bath-ELS-ZS encasement K 90 and spigot for second room and toilet. Ref. No. 8115 Ref. No. room on the left. Installation in wall, ceiling and 8186 Discharge spigot for main room lateral, to the K 90 qualified shafts suitably fire top (as delivered), rotatable to the left or right. rated. Connection of 1 or 2 units Metal discharge spigot with automatic backto one single main riser up to 20 draught shutter and shut-off with release of floors is possible. fusible link. Quick plug connector for electrical Fan unit with 100 m³/h recomconnection removable. Reinsertable cover plate mended. for protection when plastering. Spigot diameter 80 mm. **ELS-GUBZR** As ELS-GUBZL, As ELS-GUBZL **ELS-ZS** Ref. No. 8117 however spigot for second room on the right. Fan unit with 100 m³/h recom-Ref. No. mended. 8186 **ELS-GUBRZL** As ELS-GUBZL, Two room ventilation of **ELS-ZS** Ref. No. 8116 however discharge spigot to the back and bathroom and toilet. Ref. No rotatable by 90° into any position. Otherwise as ELS-GUBZL. 8186 Fan unit with 100 m³/h recommended. **ELS-GUBRZR** As ELS-GUBZR, Two room ventilation of bath-ELS-ZS room and toilet. however discharge spigot to the back and Ref. No. 8118 Ref. No. Otherwise as ELS-GUBZL. rotatable by 90° into any position. 8186 Fan unit with 100 m³/h recommended. Surface mounted casing ELS-GAP Surface mounted casing without fire For ventilation of bathroom or Ref. No. 8127 protection, with airtight backdraught shutter toilet. Surface mounted wall or installed in the discharge spigot, for any mounceiling installation. ting position by 90° rotatable. With quick plug For connection to one single connector for electrical connection. main riser up to two floors applicable. Made from polymer in white. Discharge spigot diameter 80 mm. Connection of 1 or 2 casings per floor possible. **ELS-GAPB** Surface mounted casing with fire protection For ventilation of apartment shutter K 90, metal discharge spigot with Ref. No. 8128 kitchens, bathroom or toilet. automatic backdraught shutter and shut-off Surface mounted wall or ceiling with release of fusible link. For any mounting installation. Connection of 1 or 2 position by 90° rotatable. With quick plug conunits to one single main riser up nector for electrical connection. Made from to 20 floors possible. flame retardant polymer, fire class B 2. Fan unit with 100 m³/h recom-Discharge spigot diameter 80 mm. mended.



Fan units with 60 m³/h air flow volume. For bathroom or toilet.

All fans generally approved by the DIBt with approval No. Z-51.1-193.

Decription

Application

possible accessories

ZNE No. 0342 ZNI No. 0343 Overrun timer

LV No. 1279
Electronic overrun
timer

FI S-V 60 Ref. No. 8131



Fan units with 60 m³/h air flow volume. Delivered complete with flat facia (white) and ultraSilence® technology. With permanent filter and filter control as standard. Integrated quick plug connector for electrical connection. Insulation class II, protection to IP 55, for installation in zone 1 of bathrooms. Maintenance free, energy saving ball bearing motor 230 V / 1 ph. / 50 Hz / 18 W. Sound levels: sound power 39 dB(A), sound pressure 35 dB(A).

For ventilation of shower, bathroom or toilet. Control manually via the light switch. The overrun which is necessary in windowless rooms is to be guaranteed by means of an overrun timer (accessory).

ZT No. 1277 Overrun timer wi variable run on tii 2 speed on/off switch 8

ELS-VN 60 Ref No 8137 As ELS-V 60, with added built-in overrun timer, run on time approx. 6 min., delayed start approx. 45 sec. (or none by manual

For ventilation of rooms as previously mentioned. With overrun function for windowless rooms. Control via the light switch.

ELS-VNC 60 Ref. No. 8143

As ELS-V 60, with added adjustable overrun and interval operation. Delayed start of 0 or 45 sec., run on time 6, 12, 18 or 24 min. and intervals of 4, 8, 12 or 24 hours manually adiustable.

Automatic, periodical ventilation of rooms with low user frequency (hotel, holiday homes). Individually adjustable run over times increase the comfort in the private area.

ELS-VP 60

Ref. No. 8149

As ELS-V 60, with added integrated motion sensor PIR, ventilates automatically when entering the room. Run on time approx. 6 min. Electrical connection is direct to the power supply with-out need for a switch.

Automatic. PIR controlled ventilation without the need of a switch. Automatically switches on with room occupancy.

ELS-VF 60

Ref. No. 8161

As ELS-V 60, with added built-in electronic dynamic humidity sensor. With manual adjustable set point humidity level, the fan runs automatically until the room humidity is back to normal. Run on time approx. 6 min. and delayed start approx. 45 sec. when switched on/off manually.

Ideally for the prevention of damages due to humidity and mould in small, humidity polluted rooms. Automatically switches on with raised humidity.

Fan units with 2 speeds 60/35 m³/h. For bathroom or toilet.

ELS-V 60/35

Ref. No. 8133



Fan units with 2 speeds (60/35 m³/h) for trickle and boost ventilation. Delivered complete with flat facia (white) and ultraSilence® technology. With permanent filter and filter control as standard. Integrated quick plug connector for electrical connection. 230 V / 1 ph. / 50 Hz / 18/9 W. Sound levels: sound power 39/30 dB(A), sound pressure 35/26 dB(A)*,

Otherwise as ELS-V 60.

For ventilation of small rooms (shower, bathroom, toilet) with high polluted air. The low speed can be connected for continuous trickle operation. The high speed is then controlled manually via the light switch. Manual controlling of both speed steps with switch DSEL 2 possible. Run on time by using available accessory.

ELS-VN 60/35

Ref No 8139

As ELS-V 60/35, with added built-in overrun timer, run on time approx. 6 min., delayed start approx. 45 sec. (or none by mechanical adjustment).

As ELS-V 60/35. The built-in overrun timer causes extended operation on high performance level after manual switching off.

ELS-VF 60/35

Ref. No. 8163

As ELS-V 60/35, with added built-in electronic dynamic humidity sensor. Trickle and boost ventilation. With manual adjustable set point humidity level, the fan runs automatically on high speed until the room humidity is back to normal. High air flow with run on time approx. 6 min., delayed start approx. 45 sec. when switched on/off manually.

Ideally for the prevention of damage caused by humidity and mould in small, humidity polluted rooms. Automatic operation with raised humidity.

^{*} with A₁ = 10 m² equivalent absorption surface in combination with casing type ELS-GU, discharge lateral. To DIN 18017, Pt. 3, edition 1990, digit 6.2.4 footnote 3.



Fan units with 100 m³/h air flow volume. For bathroom and toilet or kitchen.

possible accessories All fans generally approved by the DIBt with approval No. Z-51.1-193 and meets Document F of the building regulations. Decription Application ZT No.1277 Overrun timer w variable run on t Š § § Fan units with 100 m3/h air flow volume. Simultaneous ventilation of bath-FI S-V 100 room and toilet (flush mounted). Delivered complete with flat facia (white) and Ref. No. 8132 ultraSilence® technology. With permanent filter Ventilation of kitchen apartand filter control as standard. Integrated quick ments. Overrun function by plug connector for electrical connection. accessories possible. Insulation class II, protection to IP 55, for installation in zone 1 of bathrooms. Maintenance free, energy saving ball bearing motor 230 V / 1 ph. / 50 Hz / 34 W. Sound levels: sound power 51 dB(A), sound pressure 47 dB(A)*. **ELS-VN 100** As ELS-V 100, with added built-in overrun Simultaneous ventilation of bath-Ref No 8138 timer, run on time approx. 6 min., delayed room and toilet. Ventilation of start approx. 45 sec. (or none by manual kitchen apartments. adjustment). ELS-VNC 100 As ELS-V 100, with added adjustable over-Automatic, periodical ventilation run and interval operation. of rooms (also covering second Ref No 8144 Delayed start of 0 or 45 sec., run on time 6. room ventilation) with low user 12, 18 or 24 min. and intervals of 4, 8, 12 frequency (hotel, holiday homes). or 24 hours manually adjustable. Individually adjustable run over times increase the comfort in the private area. Automatic, PIR controlled venti-**ELS-VP 100** As ELS-V 100, with added integrated motion Ref. No. 8150 sensor ventilates automatically when entering lation without the need of a the room. Run on time approx. 6 min. switch. Automatically switches Electrical connection is direct to the power on with room occupancy. supply without need for a switch. Fan units with 100/60 m³/h and 100/60/35 m³/h air flow volume. For bathroom and toilet or kitchen. ELS-VN 100/60 Simultaneous ventilation of bath-Fan units with 2 speeds (100/60 m³/h) for Ref. No. 8141 trickle and boost ventilation and built-in room and toilet (flush mounted). overrun timer. Run on time approx. 6 min.. Ventilation of kitchen apartments. delayed start approx. 45 sec. (or none by The low speed can be connecmechanical adjustment). Delivered complete ted for continuous trickle operawith flat facia (white) and ultraSilence® technotion. The high speed is controllogy. With permanent filter and filter control as led manually via the light switch. standard. 230 V / 1 ph. / 50 Hz / 18/9 W. Manual controlling of both Sound levels: sound power 34/18 dB(A), speed steps with switch DSEL 2 sound pressure 47/35 dB(A)*. possible. Otherwise as ELS-V 100. ELS-V 100/60/35 As ELS-V 100, with 3 speeds (100/60/35 m³/h) The slow or medium speed can for trickle and boost ventilation. be connected for continuous DSEL 3 Ref No 8136 230 V / 1 ph. / 50 Hz / 34/18/9 W. operation and be switched by Ref. No. Sound levels: sound power 51/39/30 dB(A), means of DSEL 2. Manual ope-1611 ration by means of DSEL 3. sound pressure 47/35/26 dB(A)*. ELS-VF 100/60/35 Fan units with 3 speeds (100/60/35 m³/h) for Ideal for the prevention of or trickle and boost ventilation and with built-Ref No 8166 damage caused by humidity DSFL 3 in electronic dynamic humidity sensor. and mould in small, humidity Ref. No. 230 V / 1 ph. / 50 Hz / 34/18/9 W. polluted rooms. Automatic 1611 Sound levels: sound power 51/39/30 dB(A), operation with raised humidity. sound pressure 47/35/26 dB(A)*. Otherwise as ELS-VF 60/35.

^{*} with $A_L = 10$ m 2 equivalent absorption surface in combination with casing type ELS-GU, discharge lateral. To DIN 18017, Pt. 3, edition 1990, digit 6.2.4 footnote 3.

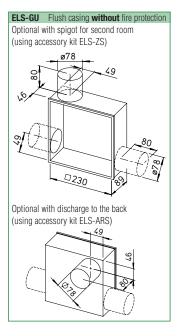


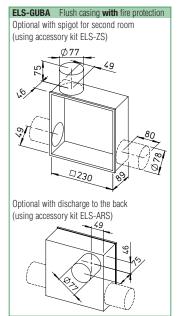
included with fan unit in delivery set for final fix

Dimensions in mm

■ Flush mounted casing

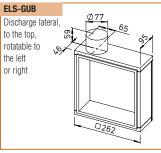
 Flush mounted casing for one and two room ventilation





■ Flush mounted casing

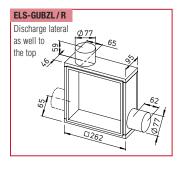
- for one room ventilation
- with fire protection encasement

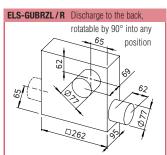




■ Flush mounted casing

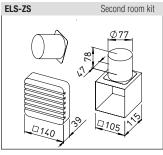
- for two room ventilation
- with fire protection encasement

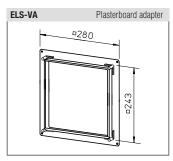




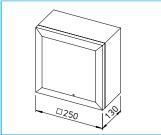
■ Accessories

- for flush mounted casing





ultraSilence® surface mounted unit

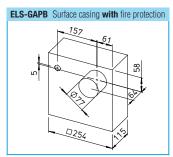


Dimensions in mm

■ Surface mounted casing

 with and without fire protection







Accessories for flush mounted casing

ELS-ZS

Ref. No. 8186



ELS-ZAS Ref. No. 8184

ELS-ARS



Ref. No. 8185



ELS-WCS Ref. No. 8191



Second room spigot ELS-ZAS, optional applicable on the right or on the left, nom. dia. 75/80 mm.

For casing types ELS-GU, -GUBA

of plenum box and second room

Second room kit, consisting

and -GUB..Z..

spiaot.

Adaption kit for discharge to the back, consisting of diverter and rivets (for metal spigot of type ELS-GUBA).

For discharge to the back with all flush mounted casings without fire protection encasement.

Toilet extraction kit,

consisting of bend 90° with Ø 50 mm, stepped spigot Ø 40 / Ø 30 mm and cap For types -GU and -GUBA.

ELS-MHU

Ref. No. 8187



ELS-MB Ref. No. 8188 (fig. n/a)

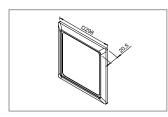
ELS-VA

Ref. No. 8189



ELS-AGR

Ref. No. 8193



Universal mounting bracket,

for flush mounted casing for fixing on walls, in shafts and false ceilings. Adjustable vertically, in height and perpendicular.

Mounting holder, for integration in plasterboard systems in connection with system elements of plasterboard suppliers.

For all flush mounted casings.

Plasterboard adapter,

for room-sided casing insertion in covered shafts and plaster-

For types -GU and -GUBA.

Spacer frame,

to be fixed between wall and facia, if the flush mounted casing protrudes past the plaster. Covers up to 15 mm.

Filters and switches

ELF-ELS

Ref. No. 8190

ELF-ZS

Ref. No. 0557



DSEL 2 Ref. No. 1306



DSFL 3 Ref. No. 1611



Spare permanent filter for ELSfan-units, can be cleaned in dishwasher (contents: 2 pcs.)

Spare filter, for second room plenum box ELS-ZS (contents: 5 pcs.)

Two speed on/off switch

Reverse and on/off switch of ELSfans with 2 speeds. Room light can be wired in parallel. For flush mounted installation. 230 V / 1 ph. / 50/60 Hz, I max. 3 A (ind.), IP 30 W 80 x H 80 x D 15 mm

Three speed and operation

switch with 0 position for the control of ELS-fans with 3 performance levels. Room light can not be wired in parallel. For flush mounted installation. 230 V / 1 ph. / 50/60 Hz, I max. 3 A (ind.), IP 30 W 80 x H 80 x D 23 mm

ZNE

Ref. No. 0342

ZNI

Ref. No. 0343



Z۷ Ref. No. 1279



ZT Ref. No. 1277

Electronic overrun timer ZNE,

with stepless adjustable run on time 0 to 21 min. Delayed start (approx. 45 sec.) which can be switched off.

230 V / 1 ph. / 50/60 Hz, I max. 0.8 A (ind.), I min. 0.05 A, IP 40, W 17 x H 37 x D 13 mm Electronic interval switch ZNI,

with adjustable time intervals (0, 4, 8, 12, 24 hours) and run on times. Otherwise as ZNE.

Electronic overrun timer,

with stepless adjustable run on time (4-15 min.) and operation switch with on/off and run on time and continuous operation. Installation in 35 mm rail. 230 V / 1 ph. / 50/60 Hz, I max. 2.1 A (ind.), IP 20 W 18 x H 93 x D 67 mm

Thermal electric overrun timer,

run on time depends on the time the fan has been running, run on time approx. 2 to 12 min. 230 V / 1 ph. / 50/60 Hz, I max. 4 A (ind.), IP 20 W 32 x H 40 x D 14 mm